Mode Choice and Perceptions of the Built Environment in Watts and Jordan Downs

PROJECT LEAD	Dustin Khuu
FACULTY SUPERVISOR	Martin Wachs
CLIENT NAME	Los Angeles Department of Transportation

A comprehensive project submitted in partial satisfaction of the requirements for the degree Master of Urban and Regional Planning.

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UCLA Institute of Transportation Studies

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DISCLAIMER

This report was prepared in partial fulfillment of the requirements for the Master in Urban and Regional Planning degree in the Department of Urban Planning at the University of California, Los Angeles. It was prepared at the direction of the Department and of the City of Los Angeles, Department of Transportation (LADOT) as a planning client. The views expressed herein are those of the authors and not necessarily those of the Department, the UCLA Luskin School of Public Affairs, UCLA as a whole, or the client.

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Faculty Advisor:

MARTIN WACHS
Professor Emeritus
UCLA Luskin School of Public Affairs

Clients:

DAVID SOMERS
Supervising Transportation Planner, LADOT

PAMELA LEE
Transportation Planning Associate, LADOT

BABAK DORJI
Transportation Planning Associate, LADOT

Outreach Support:

ARELI GARCIA
Los Angeles City Council District 15

PAMELA PAIGE
City of Los Angeles Housing Authority
Workforce Development

JACQUELYN BADEJO
Watts Neighborhood Council

MADELINE BROZEN
UCLA Lewis Center for Regional Policy Studies

ALEJANDRA MARTINEZ
UCLA Lewis Center for Regional Policy Studies

SPECIAL THANKS TO:

UCLA Institute of Transportation Studies

UCLA Lewis Center for Regional Policy Studies

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EXECUTIVE SUMMARY

The Jordan Downs housing development is a public housing complex in the Watts neighborhood of Los Angeles. In accordance with the Jordan Downs Relocation Plan undertaken by the City of Los Angeles Housing Authority, the housing complex is currently being re-designed and relocated to an adjacent property. This relocation presents a rare opportunity for the Los Angeles Department of Transportation (LADOT) to address transportation equity concerns in the design of surrounding roads and sidewalks. The purpose of this project was to answer the following two research questions:

1. What built environment factors influence perceptions of mode choice for residents of Jordan Downs and the surrounding Watts community?
2. How can LADOT best implement transportation investments to best address these perceptions?

Data were gathered through a combination of field observations, surveys, interviews, and review of Census data, collision data, and analyses from prior community studies performed in the neighborhood. Census data found that the median age of residents of Watts was 21 years old and that there is a high concentration of schools in the neighborhood. Findings from prior studies conducted in Watts, such as the Watts Community Studio (2013), show that what residents enjoy in the community are its services and amenities, community support, and the perception that the neighborhood is improving. Ongoing challenges they identified were violence/ danger, drugs and gang presence, and issues of cleanliness on the streets. Survey results for this study show that respondents did not walk, bicycle, or use transit more often because the "streets do not feel safe or comfortable." Respondents also frequently cited the safety of children in the community and the presence of speeding motor vehicles as a major concern. Collision data from 2011-2017 revealed that the majority of the 402 collision victims were 1) pedestrians and 2) bicyclists. The majority of the victims were under the age of 24 (248 victims, 61.7%).

Based on these findings, I developed a Mobility Needs Assessment Toolkit and created a set of recommendations that LADOT should pursue in order to improve user perceptions of the built environment in Watts:

A. Identify deteriorating roadway infrastructure, fix potholes and other damaged infrastructure for motor vehicles and bicycles while incorporating green street principles to enhance environmental sustainability.
B. Create a comprehensive Safe Routes to School Program for children
C. Implement traffic calming measures into streetscape plans on high priority corridors.
D. Improve bus shelters.
E. Provide better lighting to improve safety.
F. Create a more connected bicycle network.
G. Pilot test new shared mobility programs to provide greater access to shared bicycles and scooters.

INTRODUCTION

The Jordan Downs housing development is a public housing complex in the Watts neighborhood of Los Angeles. In accordance with the Jordan Downs Relocation Plan undertaken by the City of Los Angeles Housing Authority (HACLA), the housing complex is currently being re-designed and relocated to an adjacent property (H. A. City of Los Angeles 2018). Additionally, through an interagency collaborative grant application in 2017 known as Watts Rising, the Watts community was awarded an implementation grant of $35 million from the Transformative Climate Communities (TCC) program. The implementation grant will "fund the construction of affordable homes as part of the Jordan Downs redevelopment, numerous new green spaces and plans to improve home energy efficiency and renewable energy use. It will also support local workforce development and an expansion of the "Safe Passage Program" which will improve safety for children walking to school" (California Strategic Growth Council 2018).

The scale of investment in housing, green space, workforce development, and increasing overall environmental sustainability, presents the City of Los Angeles Department of Transportation (LADOT) with an opportunity to also pursue transportation investments in the community. This study assesses how well the existing public rights-of-way (ROW) currently provide access and mobility to people who walk, bicycle, use transit, or use forms of new mobility within Jordan Downs and the surrounding Watts community. Through a combination of community surveys, interviews, analysis of collision data, and prior studies, I identify current barriers to choosing certain transportation modes for members of the community, and recommend transportation improvements to specific areas based on community concerns.

BACKGROUND & PURPOSE

Background

The community of Watts has a long legacy of socioeconomic inequality. The Jordan Downs public housing development has suffered from the same problems of inadequate housing quality and government neglect that affected public housing projects throughout the US.

Under the Jordan Downs Urban Village Specific Plan, a new Jordan Downs development is currently being constructed on an adjacent lot, increasing the housing capacity from 700 public housing units to 1,400 mixed-income units (City of Los Angeles 2013). As part of the Jordan Downs Relocation Plan, HACLA has guaranteed housing spots to all residents of the current Jordan Downs to avoid any displacement.

Under the Jordan Downs Relocation Plan conducted by HACLA, the full 109-acre build-out of the development will include 1,400 mixed-income housing units, public facilities, open space, a retail center, and new public roads running through the development. This development of new public rights-of-way (ROW) will present opportunities for LADOT to improve perceptions of the built environment that may influence mode choice, through this process of community-driven street design.

Purpose

Demographic data and historical context of the Watts community show that this neighborhood has been historically disadvantaged through concentrations of poverty and access to educational and economic opportunities. Today, the community continues to experience high levels of socioeconomic inequality. The recent TCC grant award and the redevelopment of the new Jordan Downs is an opportunity for public agencies like LADOT to understand current concerns facing the community, and explore ways to pursue future funding opportunities to implement improvements that can provide the greatest benefit to residents.

The findings of this study will aid LADOT in their understanding of current community concerns relating to transportation and urban design. There is extensive literature on urban design factors that influence user perception and travel behavior, as well as the role of accessibility in transportation equity. The findings of this research will utilize these two topics and apply urban design and community engagement strategies to identify mobility and accessibility barriers to communities that have been disadvantaged.

This research project consists of two research questions:

1. What built environment factors influence perceptions of mode choice for residents of Jordan Downs and the surrounding Watts community?
2. How can LADOT implement transportation investments to best address these perceptions?

I address Research Question 1 using primary data such as surveys, interviews,, field observations Census data, collision data, and findings from prior studies.

Research Question 2 is addressed using the literature review to suggest possible funding strategies for implementation of recommended improvements. Planning and policy documents that were reviewed and applied include the Jordan Downs Relocation Plan, the Jordan Downs Urban Village Specific Plan, and transportation plans relevant to the study area, Senate Bill 535, the TCC Funding Guidelines, the Affordable Housing and Sustainable Communities Program (AHSC) Funding Guidelines.

COMMUNITY PROFILE

Watts, Los Angeles

The neighborhood of Watts covers 2.12 square miles and is located in the southern region of Los Angeles. Figure 1 shows the Watts community in pink, and highlights the location of the Jordan Downs site located in the northeast portion of the neighborhood.

Figure 1 shows how the community is serviced by existing transit. The Metro Blue Line 103 St/Watts station is located on 103 St and Grandee St in the commercial center of Watts. Bus lines include the DASH Watts Line and Metro 612, 117, and 254.

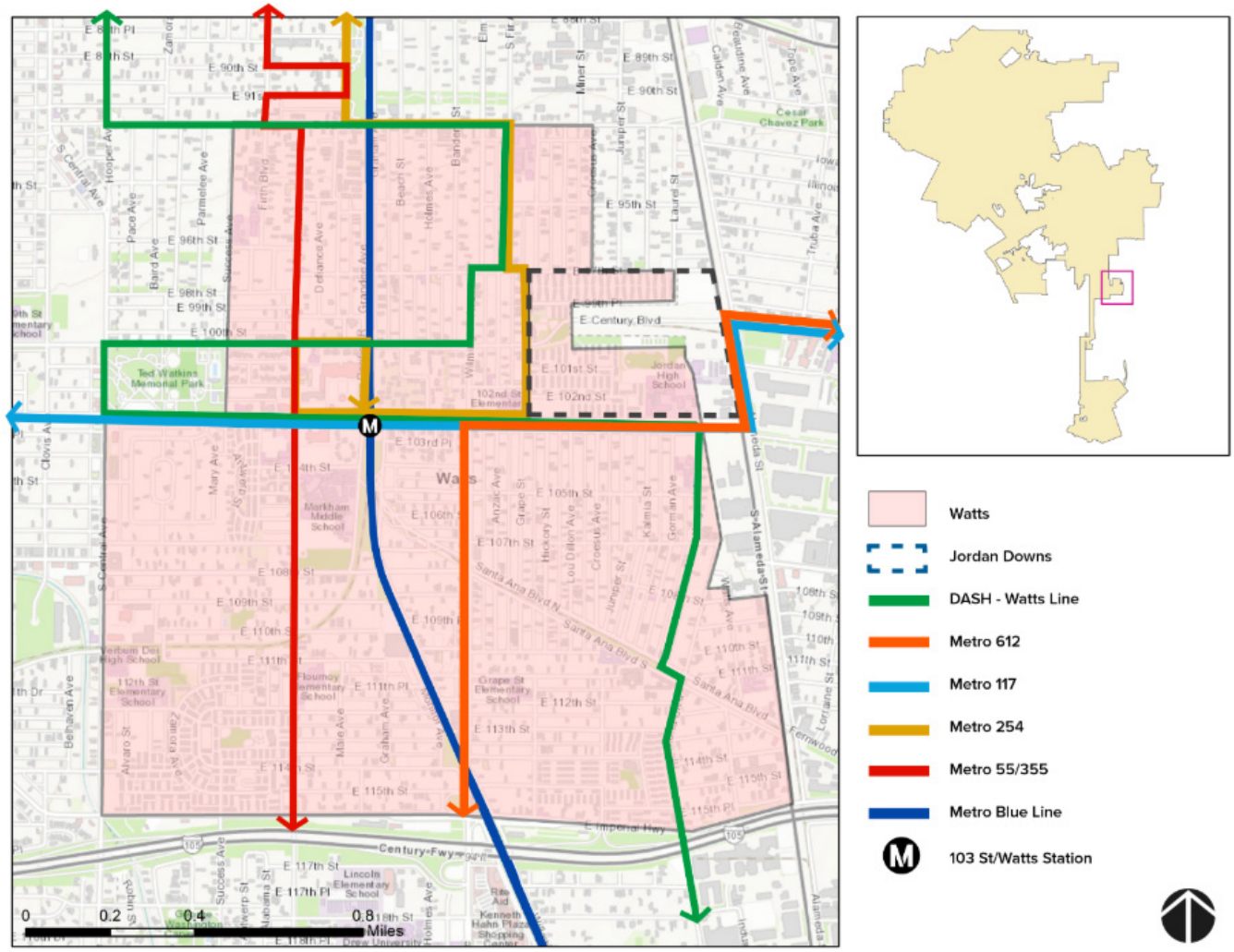

Figure 1. Context map of Watts and Jordan Downs.

Stakeholders

Major stakeholders associated with the Watts community were identified as the following:

US Congressional District 43: Congresswoman Maxine Waters
US Congressional District 44: Congresswoman Nanette Diaz Barragán
California Assembly District 64: Assemblymember Mike A. Gipson
California Senate District 35: Senator Steven Bradford
LA County Supervisorial District 2: Supervisor Mark Ridley-Thomas
City of Los Angeles, Council District 15: Councilmember Joe Buscaino

- **Watts Neighborhood Council**
- **Watts Gang Task Force**
- **Watts:Reimagined**
- **Housing Authority of the City of Los Angeles**
- **City of Los Angeles Police Department**
- **Los Angeles Unified School District**
- **Los Angeles Police Department**

Demographic data in Figure 2 compiled from the community planning initiative Watts: Reimagined, provides a Watts community profile.

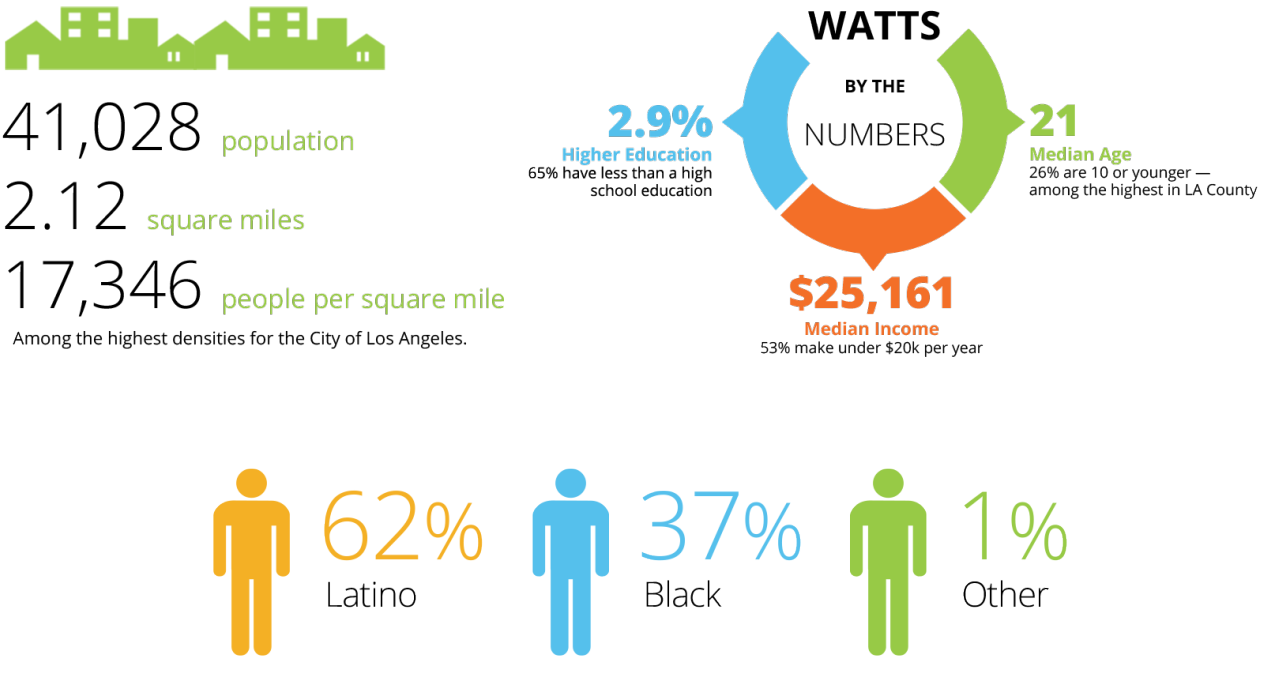

Figure 2. Demographics of Watts. Source: Watts:Reimagined

The population density of Watts is **17,346 people per square mile**, which ranks #27 among densest neighborhoods in Los Angeles region (Los Angeles Times n.d.). Latino/Hispanics make up 62% of the population, and 37% of the population is Black/ African American. The median household income is **$25,161**, and the median age is **21 years old**. A comparison of the demographics of Jordan Downs and the rest of Los Angeles County is presented in the Analysis section.

Jordan Downs

The Jordan Downs housing development is located on the northeast section of the Watts neighborhood. The entire development is located in Census Block Group **060372421001**. The graphs below provide a summary of the demographics of the Block Group.

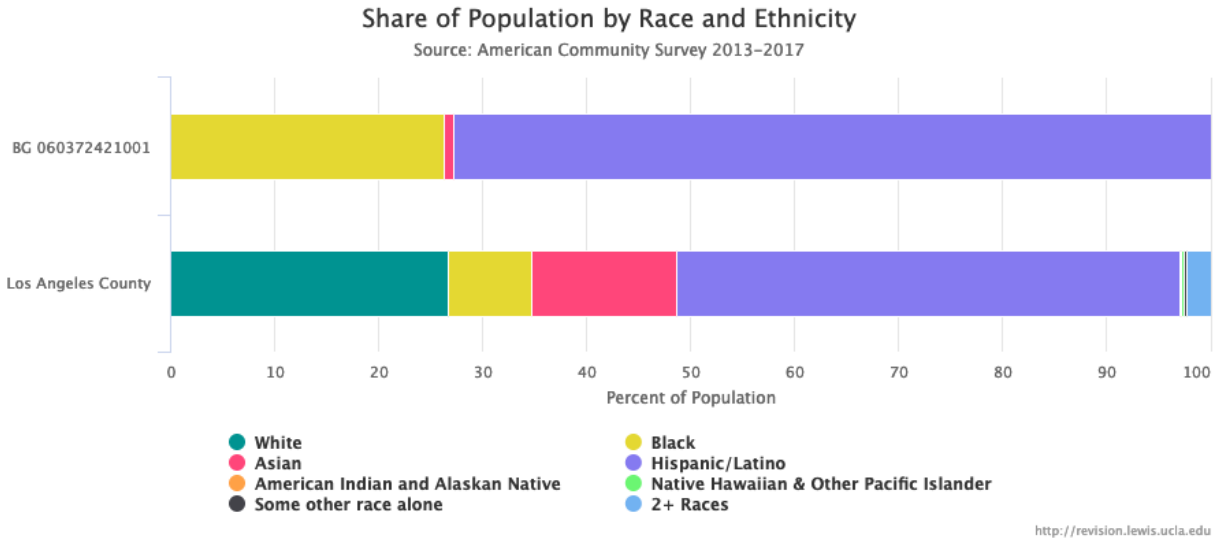

Figure 3. Source: UCLA Lewis Center.

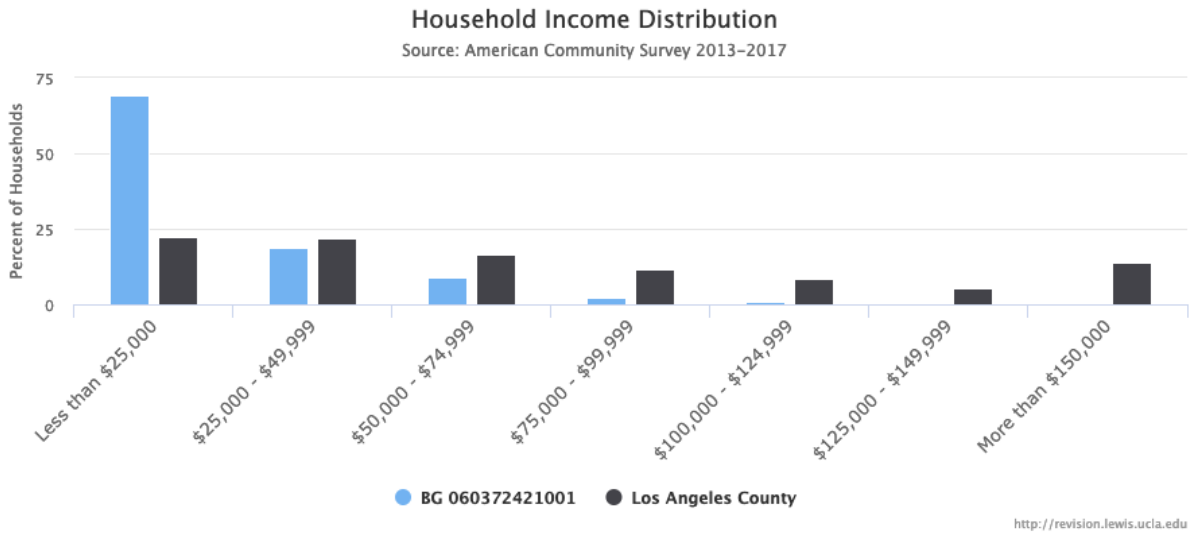

Figure 4. Source: UCLA Lewis Center.

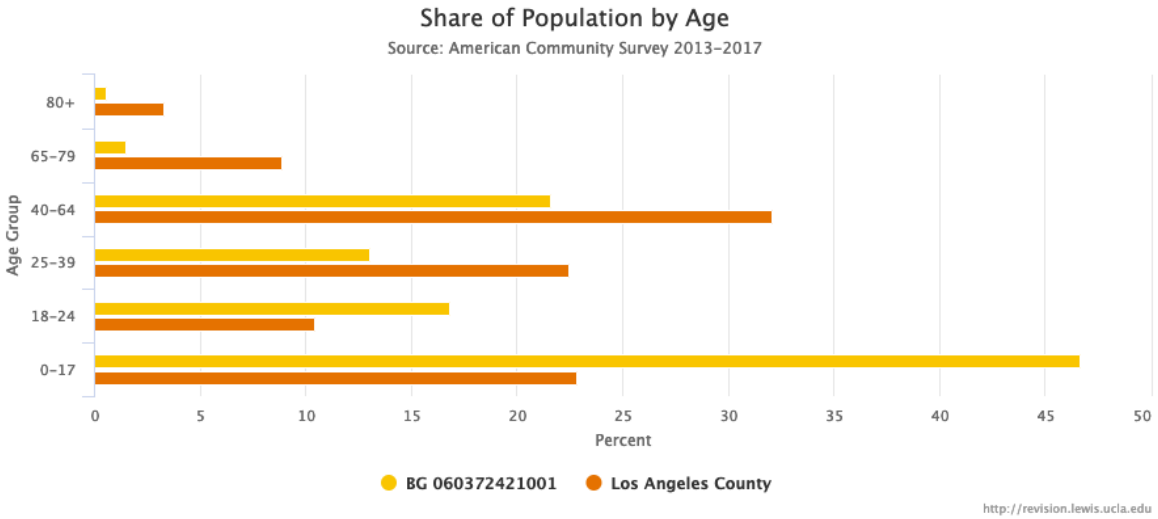

Figure 5. Source: UCLA Lewis Center.

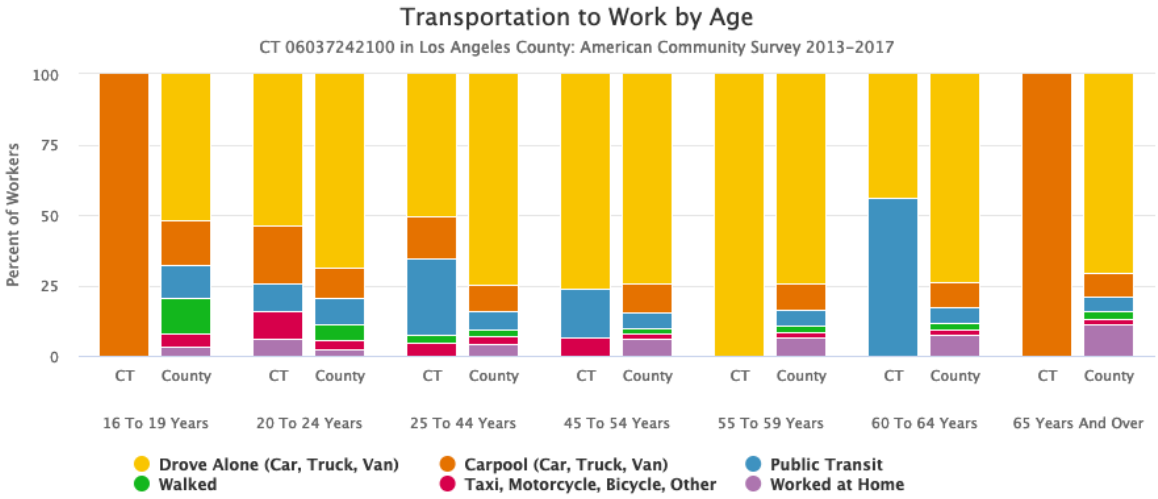

Figure 6. Source: UCLA Lewis Center.

The Block Group that includes Jordan Downs is considered a low-income area, with over half of the Block Group's household earning less than $25,000 annually. The Block Group includes 67.1% of households living under the poverty level, compared to 17.8% for Los Angeles County.

The residents in the Block Group are young compared to the rest of Los Angeles County. Over 45% of the population are under the age of 18, compared to roughly 23% for Los Angeles County.

Modal splits for journeys to work by residents of the Block Group vary depending on the age group.

Single occupancy vehicles were the most widely used mode for residents aged 20 - 59 years old. However, when compared to the rest of Los Angeles County, rates of driving alone are lower in every age group with the exception of those between 55 - 59 years old.

Public transit was most used most heavily by residents in the Block Group between 60 - 64 years old, accounting over 50% of their work trips. Carpooling is used only by residents aged 16 - 19 years old, and those 65 and over.

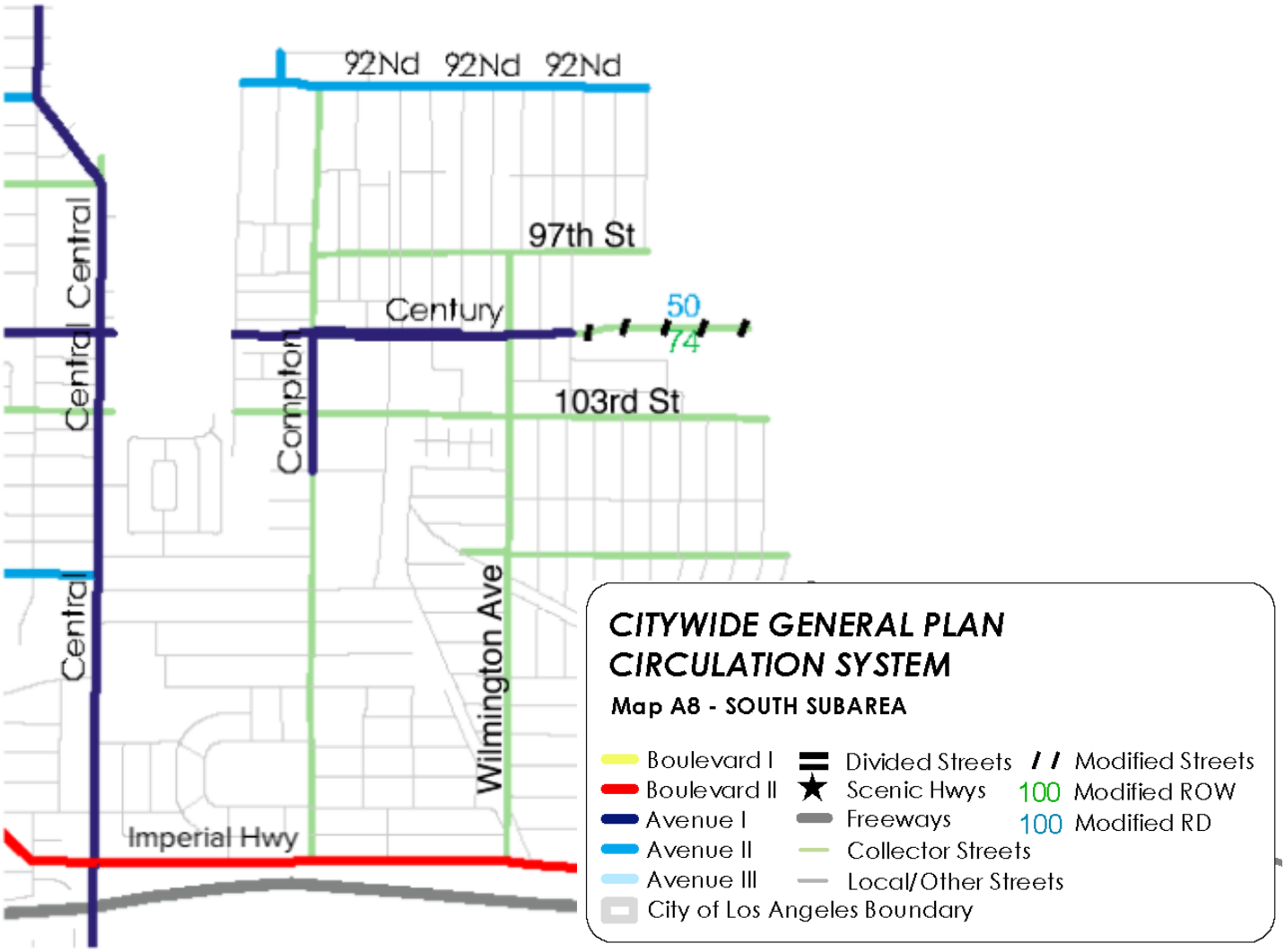

Figure 7. Source: City of Los Angeles General Plan.

Corridor	Average Daily Traffic
Wilmington Ave	5,320
103rd St	5,934
Century Blvd	10,117
Compton Ave	14,669
Central Ave	35,242
Imperial Hwy	35,669

Table 1. Average Daily Traffic of major corridors in Watts.

Existing Traffic Patterns

Under the City of Los Angeles' Circulation Plan Element of the General Plan, Watts consists of one Boulevard II streets, two Avenue I streets, one Avenue III street, and five Collector streets (see Figure 7). Table 1 provides ADT figures for major corridors in Watts.

Disadvantaged Community

The Community Profile of Watts is consistent with common definitions of disadvantaged communities, which I define for this study as a community with populations that have experienced historic or current socioeconomic deprivations. This is a community with high percentages of low-income, Black, Latino, and youth populations. While the community has received a lot of attention and investment, such as access to the Metro Blue Line, a dedicated Watt DASH bus line, and numerous community planning studies that will be referenced in this study, these studies and investments have not resulted in improved quality of life with respect to metrics such as employment, income, educational attainment, and public health risks.

As the Literature Review will describe, Watts has experienced historic socioeconomic disadvantages, and these disadvantages still persist. It is because of these that I classify the Watts community as a disadvantaged community.

LITERATURE REVIEW

History and Context

Housing Inequality in Los Angeles

Extensive research has been done on the legacy of redlining and the persistence of segregation and socioeconomic inequality in the US. During the 1930's, Watts and South Los Angeles experienced housing discrimination through this institutional practice (see Figure 8). The Home Owners Loan Corporation (HOLC), Federal Housing Administration, and Federal Home Loan Board Bank (FHLBB) created a set of national standards for assessing mortgage risk at the neighborhood level. Neighborhoods were graded on a letter grade of A to D. While these governmental organizations claimed to assess neighborhood mortgage risk based on objective criteria, in reality these risk maps showed a strong correlation between risk and race. Neighborhoods that contained minority groups such as African American, Mexican American, Asian, and in some cases Slav, Jewish, and Italian populations, were rated D and colored red on the HOLC maps (Reft 2017).

The direct effect of redlining neighborhoods was the denial of government subsidized home loans, leading to suburban white flight out of the inner cities to the suburbs, and the subsequent disinvestment in redlined neighborhoods as jobs and wealth left the inner cities. An indirect effect of redlining was that through the practice of only offering subsidized homeownership to whites, minority groups in the inner-city were denied access to transferrable wealth. Additionally, Los Angeles had racially restrictive covenants which restricted minorities from buying or renting property in certain areas. Coupled with growing disinvestment from white flight, minority groups, particularly the Black and Latino populations, lived in increasingly segregated neighborhoods that were and continue to be underserved by employment opportunities and access to resources. Minority groups continue to suffer from discrimination in rental housing that perpetuates segregation and concentrations of poverty, and leaves these households vulnerable to gentrification and displacement that can occur in historically low-income areas.

Environmental Justice

Today, Watts sits at the interchange of the Long Beach Freeway (I-710) and Century Freeway (I-105), and is also adjacent to the Alameda Corridor, which is a freight rail facility serving the Ports of Long Beach and Los Angeles. Studies of negative externalities from port activities have shown that freight corridors like I-710 carry thousands of trucks per day, some 94% of trucks running through the corridor. Their diesel engines emit particulate matter that is responsible for 70% of the community's lifetime cancer risk from toxic air pollutants (Lee et al. 2009). While environmental justice concerns about the adjacent freeways will not disappear in the near future, there is currently growing concern by policymakers in Los Angeles about addressing past injustices in conjunction with creating policies to address climate change and reduce greenhouse gas emission (GHGs). Significant reduction in freeway-related air pollution will need to be addressed at a much larger regional and even national scale using policies such as congestion pricing or electrifying freight and goods movement. At the local scale fin the Watts community, mitigation efforts such as urban greening projects to improve air quality can help provide some benefit to the local community.

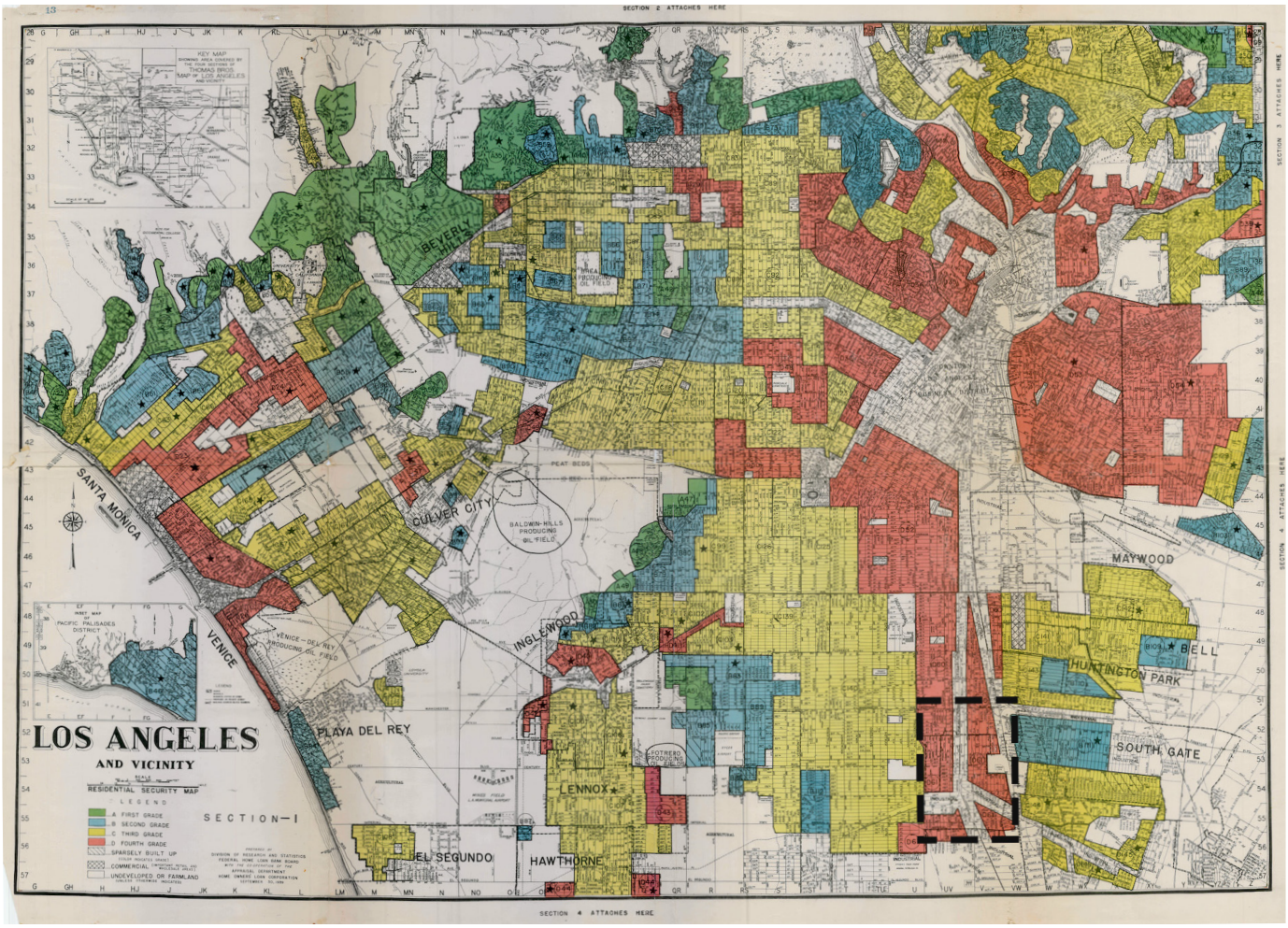

Figure 8. HOLC map, 1939. The Watts neighborhood identified in the box.
Source: urbanoasis.org

Funding for Jordan Downs and Future Investment

The State of California launched a Cap and Trade program in 2013, which sets limits on allowable GHG emissions levels from industries. Industries which emit levels of GHGs above an established threshold can buy polluting permits from other industries through an auction.

In 2012, then California Governor Jerry Brown signed Senate Bill 535 (SB 535) into law, which sought to use revenue from the State's Cap and Trade program to fund projects that will directly benefit disadvantaged communities. The California Environmental Protection Agency (CalEPA) is responsible for identifying these disadvantaged communities as areas that may include, but are not limited to:

- "Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation.
- Areas having concentrations of people who are of low-income, high unemployment, low levels of home ownership, high rent burden, sensitive populations, or low levels of educational attainment" (Rodriguez and Brown, 2017).

The CalEPA used the California Communities Environmental Health Screening Tool 3.0 (CalEnviroScreen) to assess the California census tracts that would meet the criteria for disadvantaged communities. According to the CalEnviroScreen 3.0 database, the Jordan Downs Census tract: **6037242100**, falls in the 95-100th percentile range of disadvantaged communities (see Table 2). The Census tract falls in the 95th percentile of pollution burden, 100th percentile in Education, 90th percentile in unemployment, and 97th percentile in housing burden. The surrounding Watts Census tracts also fell within the 91-100 percentiles (CalEnviroScreen 3.0, 2018).

The data shown in Table 3 demonstrate that the location of Jordan Downs is considered a highly disadvantaged community, scoring in the 95-100th percentile range. Overall, the 90002 zip code covering the Watts neighborhood is also considered a highly disadvantaged community that is disproportionately affected by a range of pollutants and health disparities listed below in Table 2. This community is severely disadvantaged with issues ranging from environmental justice to economic disinvestment, and is a candidate to apply for cap and trade funds to help implement projects that can improve the community and bring back investment.

The Jordan Downs housing development has been awarded grant funding in prior cycles of the Affordable Housing Sustainable Communities program. LADOT hopes to pursue additional funding opportunities for transportation improvements in future cycles. What remains to be explored is the types of transportation investment from LADOT which would be appropriate for Jordan Downs When addressing transportation equity conflict with meeting sustainability goals.

CalEnviroScreen 3.0: Jordan Downs Disadvantaged Community Score			
Pollution Burden Percentile:	95	**Hazardous Waste:**	81
Population Characteristics Percentile:	96	**Impaired Water:**	0
Ozone:	40	**Solid Waste:**	95
PM 2.5:	82	**Asthma:**	89
Diesel:	76	**Low Birth Weight:**	74
Pesticides:	0	**Cardiovascular Disease:**	92
Toxic Releases:	84	**Education:**	95
Traffic:	59	**Linguistic Isolation:**	35
Drinking Water:	88	**Poverty:**	100
Cleanups:	96	**Unemployment:**	90
Groundwater Threats:	75	**Housing Burden:**	97

Table 2. Scoring of each criterion for the Jordan Downs Census tract (CalEnviroScreen 3.0).

Census Tract	CalEnviroScreen 3.0 Score	CalEnviroScreen 3.0 Percentile Range	Pollution Burden Percentile	Population Characteristics Percentile	Total Population	California County	Approximate Zip Code
6037535400	74.46	**95-100% (highest scores)**	97.41	97.96	3495	Los Angeles	90002
6037242100	68.88	**95-100% (highest scores)**	95.48	96.41	2714	Los Angeles	90002
6037535200	64.19	**95-100% (highest scores)**	82.25	99.77	5820	Los Angeles	90002
6037242200	64.03	**95-100% (highest scores)**	90.06	96.9	6554	Los Angeles	90002
6037242300	59.66	**95-100% (highest scores)**	78.05	98.89	4586	Los Angeles	90002
6037243000	57.76	**95-100% (highest scores)**	91.95	87.12	6769	Los Angeles	90002
6037242000	54.46	**90-95%**	75.37	95.81	3938	Los Angeles	90002
6037240700	53.89	**90-95%**	75.78	94.69	6161	Los Angeles	90002
6037535102	53.36	**90-95%**	69.45	97.06	4517	Los Angeles	90002
6037240800	52.05	**90-95%**	77.25	90.84	4377	Los Angeles	90002
6037240010	51.88	**90-95%**	73.69	93.25	3673	Los Angeles	90002
6037240020	51.73	**90-95%**	65.26	97.04	5055	Los Angeles	90002

Table 3. List of Disadvantaged Communities under the area code 90002.
The highlighted Census tract is the location of Jordan Downs
(CalEnviroScreen 3.0).

Affordable Housing and Sustainable Communities Program

The **Affordable Housing and Sustainable Communities Program (AHSC)** is a statewide grant funding program designed to invest cap and trade funds in projects that reduce GHGs, specifically projects that "support more compact, infill development patterns, [and] encourage active transit usage" (FY 2017-2018 AHSC Program Guidelines 2018), with "active transit" referring to human-powered modes of transportation, such as walking or bicycling. The AHSC is administered by the California Strategic Growth Council, and provides grants and/or loans for projects that benefit disadvantaged communities. The AHSC guidelines, summarized in Table 3, provide a detailed list of project types that qualify for funding.

The Jordan Downs housing development meets the criteria established for a Transit Oriented Development (TOD) project area, which are to:

1. Include at least one (1) Transit Station/Stop served by **High Quality Transit** at the time of application submittal
2. Include an **Affordable Housing Development** located no farther than one-half mile from a Transit Station/Stop served by High Quality Transit.
3. Include **Capital Projects** or **Program Costs**

The Jordan Downs community is served by the Metro Blue Line, which is a light rail transit (LRT) line that qualifies as "High Quality Transit." The Blue Line Watts/103 St Station is the closest station that serves the community, and both the old and new Jordan Downs are within the one-half mile of the station.

The potential improvements suggested by this study will involve **Capital Projects** eligible for funding under the **Sustainable Transportation Infrastructure (STI)** and **Transportation-Related Amenities (TRA)**. Appendix F shows a list of types of capital projects that qualify for potential funding under the STI and TRA categories and provides a guide to the types of transportation improvements LADOT can attempt to pursue after assessing the barriers to mobility and accessibility identified by this project.

Transformative Climate Communities Program

The **Transformative Climate Communities (TCC)** Program is another statewide program administered by the California Strategic Growth Council. The TCC Program also allocates cap and trade funds for planning or implementation projects that benefit disadvantaged communities. In addition to pursuing GHG reduction, the goals of TCC funded projects include: maximizing additional community benefits, avoiding displacement, and incorporating comprehensive community engagement (Final Guidelines: 2018 Transformative Climate Communities Program 2018).

The TCC Final Guidelines provide a list of eligible funding elements under the categories:

- Projects 2.1 Active Transportation
- Projects 2.2 Transit and Rail Access
- Projects 2.3 Car Sharing and Mobility Enhancement

The list of eligible improvement under these three categories in Appendix x, is a guide for the types of transportation investments that LADOT can pursue after this study identifies improvements eligible for grant funding.

Assessing Transportation Barriers and User Perception

I define transportation equity as the fairness of mobility and access to goods and services for people of all socioeconomic backgrounds. Residents of Watts should have the same access to high quality transportation investments that allow users of all modes to travel safely to where they need to go. It is worth noting that the Watts community has access to high quality rail service from the Blue Line, and the community has had the attention of planners and policymakers over the decades since the aftermath of the Watts Riots in 1965. However, other types of investment in infrastructure, such comfortable bus shelters, bicycle lanes, or shared mobility services are either lacking or are not benefiting the community when it is compared to higher-income areas of the City. These concerns will be discussed further in the Analysis section.

Transportation planners have a responsibility to improve transportation equity, especially after planning policies in the past that have led to a legacy of with economic inequality in Los Angeles. Litman (2014) has written a guidebook on evaluating transportation equity, and understanding how to classify different types of inequities. He distinguishes the difference between evaluating transportation equity based on mobility versus evaluating based on access.

Mobility-based planning is typically measured by traffic speed and roadway level of service (LOS). However, travel volume does not necessarily indicate the level of transportation equity being achieved.

For instance, the barrier effect (Litman 2014) occurs when street designs that facilitate greater traffic speeds are implemented, and end up degrading the LOS for pedestrians and bicyclists. Table 5 summarizes the differences between mobility- and accessibility-based evaluations. Litman argues that mobility is seldom an end in itself, and that the goal of most transportation activity is accessibility, which refers to people's ability to reach desired services and activities. Accessibility-based analysis incorporates factors that mobility analysis does not, by recognizing: important roles that non-motorized and public transport can play in an efficient and equitable transport system, and considers impacts such as the barrier effect and dispersed development on accessibility (Litman 2014).

Litman's compilation of research that distinguishes the differences between mobility and accessibility serves as a guide to the goals of this study. Answering the research questions will address barriers to access, which may involve greater mobility, but it is important to keep in mind that the end goal should be greater access for members of Jordan Downs and the Watts community.

	Mobility	Accessibility
Definition of *Transportation*	Vehicle travel	Ability to obtain desired services and activities
Measurement units	Vehicle-miles/kms	Trips, generalized costs
Modes considered	Automobile, truck and transit	Non-motorized, motorized, mobility substitutes
Common indicators	Vehicle traffic speeds, roadway Level of Service, costs per vehicle-mile	Quality of available transport options, average trip distances, costs per trip
Favored transportation improvement strategies	Roadway and parking facility expansion	Improvements to various modes, transport demand management, smart growth development policies

This table compares mobility- and accessibility-based transport planning.

Table 4. Comparison of mobility- and accessibility-based planning (Litman 2014).

User Perceptions of the Built Environment

Good transportation design is integrated with the surrounding environment and facilitates pedestrian access with the public realm. Literature addresses design factors that influence the level of comfort for pedestrians in the public realm, which can be measured based on Pedestrian Level of Service (PLOS). Jaskiewicz (2000) created nine pedestrian evaluation measures that influence the PLOS of a corridor: enclosure/definition, complexity of path network, building articulation, complexity of spaces, overhangs/awnings/varied roof lines/buffer, shade trees, transparency, physical components/condition.

Similarly, Gallin (2001) created a system of measurements that quantify PLOS. Gallin defines "pedestrian-friendliness" as the factors that affect mobility, comfort, and safety. He found that there are 11 main factors that affect PLOS: path width; surface quality; obstructions and crossing opportunities; support facilitates; connectivity; path environment; potential for vehicle conflict (per km); pedestrian volume; mix of path users (by mode); and personal security. The model contains an assessment sheet which can be found in Appendix B, that includes a point system for rating each of these 11 factors. The total score is used to determine the letter grade of PLOS, ranging from LOS A to E. Gallin's model for assessing PLOS will serve as a guide to using quantifiable information to determine qualitative factors like pedestrian safety and comfort of the built environment.

Active transportation, which refers to human-powered modes of travel such as walking, bicycling, scootering, and skateboarding, are receiving increasing attention in the City of Los Angeles. Initiatives such as Los Angeles Vision Zero study and identify areas in the City which high rates of bicycle and pedestrian collision and provide funding for implementation of infrastructure improvements.

Investments in active transportation infrastructure play a large role in eligible funding for the AHSC and TCC grants. According to Gallin's metrics, street design that accommodates active transportation modes contribute to good PLOS and diminishes the barrier effect by slowing down vehicle speeds. This increases perceptions of safety and comfort.

Summary and further research

The literature review provides insight into the historical factors that have led to the South Los Angeles region becoming socioeconomically segregated and disadvantaged. This legacy of segregation, continuing disinvestment, and environmental justice concerns have led the Watts community to suffer from continuing socioeconomic disparities. Under SB 535, the classification of the Census tracts in Watts as a disadvantaged community serves as an opportunity for public agencies in the City of Los Angeles to begin addressing decades of disinvestment. LADOT intends to apply for AHSC and TCC grant funding in future cycles to implement mobility and accessibility improvements around Jordan Downs and Watts.

The literature review also discussed urban design factors influencing transit ridership and bicycle mode utilization, and will help to determine appropriate design recommendations based on the data collected.

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METHODOLOGY

Demographic Data

Demographic data provide a baseline of existing conditions of the study area, and will help address transportation needs in the community. Watts: Imagined has included demographic information about Watts in their prior studies. The American Community Survey (ACS) data used to establish this baseline include mode of transportation to work, median household income, median age, and racial composition of the study area. These data were used to establish a community profile

Survey Data

The majority of the primary data for this study come from surveys of members of the Watts and Jordan Downs community. The survey data provide qualitative data about the respondent's perception about using certain modes of transportation in the community.

Survey questions were designed in order to understand: 1) whether the respondents used certain modes of transportation within the last year; 2) how often they used those modes; 3) how satisfied they felt about using those modes in their neighborhood; 4) and what prevents them from using those modes more often.

Transportation modes that were asked about included:

1. Public transit
2. Biking/scooter sharing
3. Walking
4. Driving

In addition to multiple choice questions exploring attitudes about each mode, an open-ended question asked: "What major improvements to the local streets and sidewalks would you most like to see in the neighborhood, and why?" This allowed respondents to describe specific details that they were not able to express in the multiple choice questions, and they help LADOT understand what the top priorities were for respondents. Demographic information such as ethnicity, gender identity, and age were also asked as optional questions to find correlations between certain groups and mode perception. The full survey questions are found in Appendices B and C.

Surveys were printed in both English and Spanish and distributed through two formats: a direct mailing service and at community events and through organizations.

Addresses for the direct mailing service were obtained from publicly available data through the Zone Information and Map Access System (ZIMAS), which is available from the City of Los Angeles.. Submission options for the mail-in surveys included an online option through a hyperlink and QR code, or mailing the survey back to a return address. Postcards were printed on 4.25x5.5-inch paper without questions, and included instructions to complete the survey online. These postcards were distributed at the Watts Public Library and the Watts Community Center.

Surveys were also distributed in-person through a variety of community engagement methods. Outreach was conducted at the Watts Gang Taskforce meeting. Staff from various community organizations provided direct assistance with the project to help facilitate outreach and survey participation. Hard copies of the surveys were filled out by the respondents and collected in-person.

Community organizations which assisted with the project include:

- City of Los Angeles 15th Council District, Watts District Office
- Housing Authority of the City of Los Angeles, Workforce Development
- Watts Neighborhood Council
- Watts Gang Taskforce

Announcements about the project surveys were presented at community meetings held by the Watts Neighborhood Council and the Watts Gang Taskforce.

Interview Data

Interviews participants were recruited from survey responses. An original question on the survey asked if the respondent would be interested in participating in a focus group meeting. Interested participants were then contacted in May 2019 to set up a meeting date. However, due to scheduling challenges, holding a focus group meeting with all interested participants was not possible, so phone interviews were set up with those who were available. Because interview participants had already responded to surveys, the interview data are meant to serve as supplementary to survey responses.

Collision Data

Collision data from the Statewide Integrated Traffic Records System (SWITRS) for crashes that occurred in the study area between 2011 and 2017 were collected to analyze transportation safety in the public right-of-way. SWITRS is a California statewide database about collisions from police reports at the scene. The collision data collected include vehicle, pedestrian, and bicyclist collisions within the study area from 2011-2017. Collision information from the data include collision severity, type of collision, number of collisions per week for a defined area, type of roadway violation, demographics of the collision victim, and where the collision occurred. The presence of pedestrian and bicycle collisions was important when assessing transportation concerns relating to public safety.

Prior Studies from Watts

Prior studies including earlier outreach efforts, charrettes, streetscape studies, and public workshops in Watts and Jordan Downs were reviewed to determine what had been said concerning community needs and opportunities for investment. These studies include:

- Jordan Downs Urban Village Specific Plan
- Watts Community Studio Report (2013)
- Watts Charrette Report (2014)
- Watts Green Streets (2012)

These prior studies provide findings that were used as secondary data by this project to understand what community members have voiced as concerns in the past.

DATA

Census Data

Based on U.S. Census Data collected from the 2017 ACS, the median income for the Watts neighborhood is $25,161, compared to a median income of $61,015 for Los Angeles County. The median age of Watts residents is 21 years old, compared to Los Angeles County.

Watts Demographics Compared to Los Angeles County		
	Block Group 060372421001	**Los Angeles County**
Latino/Hispanic	73%	47.7%
Black/African American	26%	8.7%
Median Income	$34,000	$61,015
Median Age	19.4	36

Table 5. Source: U.S. Census

Table 5 shows the demographic profile of the Jordan Downs, classified by block group 060372421001. As referenced in the literature review, the Census tracts of Jordan Downs and the surrounding Watts community are classified as disadvantaged communities under CalEnviroScreen. The median household income is $25,161, with 65% of resident having less than a high school education. The community is 62% Latino and 37% Black.

Field Observations

Field observations for the study validate the data found from surveys, Census data, and collision data. On weekday afternoons, the streets become noticeably more crowded with young students leaving school. There are currently 17 schools located within the Watts neighborhood boundaries of 2.12 square miles, which are displayed in Figure 9. These schools range from public elementary schools, middle schools, high schools, and private schools and academies.

The Watts neighborhood is home to the following schools:

Elementary Schools	1	Lovelia P. Flournoy Elementary
	2	112th Street Elementary
	3	Compton Avenue Elementary
	4	Ninety-Sixth Street Elementary
	5	Ninety-Second Street Elementary
	6	Weigard Avenue Elementary
	7	Ritter Elementary
	8	Grape Street Elementary
	9	Florence Griffith Joyner Elementary
Middle Schools	10	Markham Middle School
	11	Verbum Dei High School
High Schools	12	David Starr Jordan High School
Other	13	Resolute Academy Charter School
	14	San Miguel Catholic School
	15	Ámino College Preparatory Academy
	16	Dorothy V. Johnson Community Day
	17	College Bridge Academy - Watts

Table 6. Inventory of schools located within Watts.

103 St/Wilmington Ave. A noticeable increase in children on the street during weekday afternoons.

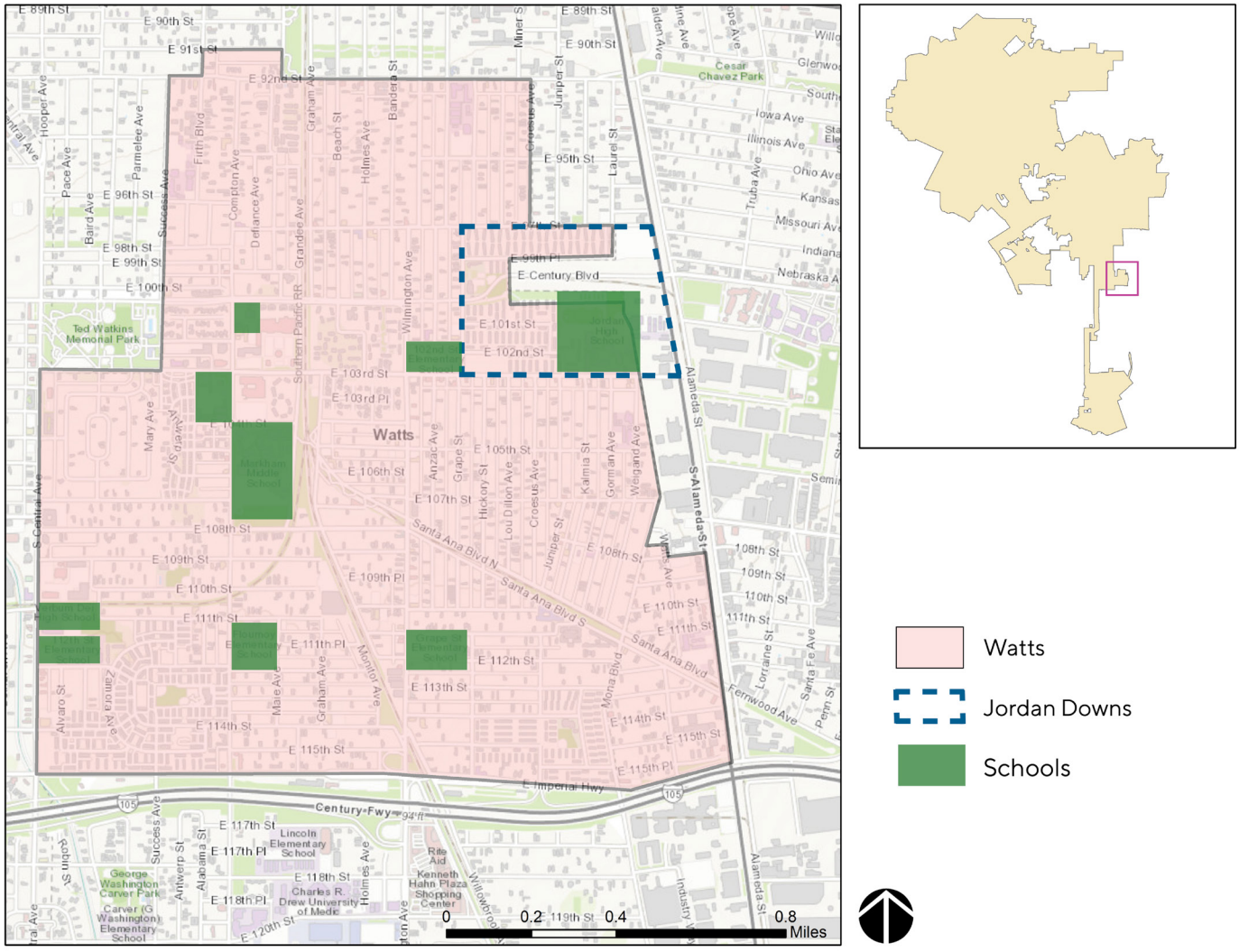


Figure 9. Location of schools in Watts.

Collision Data

Collision data were extracted from UC Berkeley's Transportation Injury Mapping System (TIMS), which uses data collected from SWITRS. Collision data used in this study are specifically from the California Active Transportation Program (ATP) database, which specifically looks at crashes that involve bicyclists and pedestrians.

According to the data from 2011-2017, there were 402 collisions involving bicyclists or pedestrians within the study area. Demographic data shows that 61.7% of victims from vehicular collisions that took place within the study area were under 24 years old. Field observations have also showed that the neighborhood consists of a high concentration of elementary, middle, and high schools. During the afternoon on each weekday, the streets in the neighborhood become noticeably more crowded with young students leaving school and walking on the sidewalks. The data show that most of the collisions occur between 3 PM - 9 PM (see Figure 11).

Figure 10 shows where the highest concentrations of pedestrian and bicycle collisions took place within the Study Area. Notably, the intersections of **103 St/ Compton Ave, 108 St/Central Ave,** and **107 St/ Wilmington Ave** had a high number of collisions. Urban design features of those intersections were reviewed in the Analysis phase.

Figure 10. Heat map of collisions within the Study Area. Source: SWITRS, UC Berkeley TIMS.

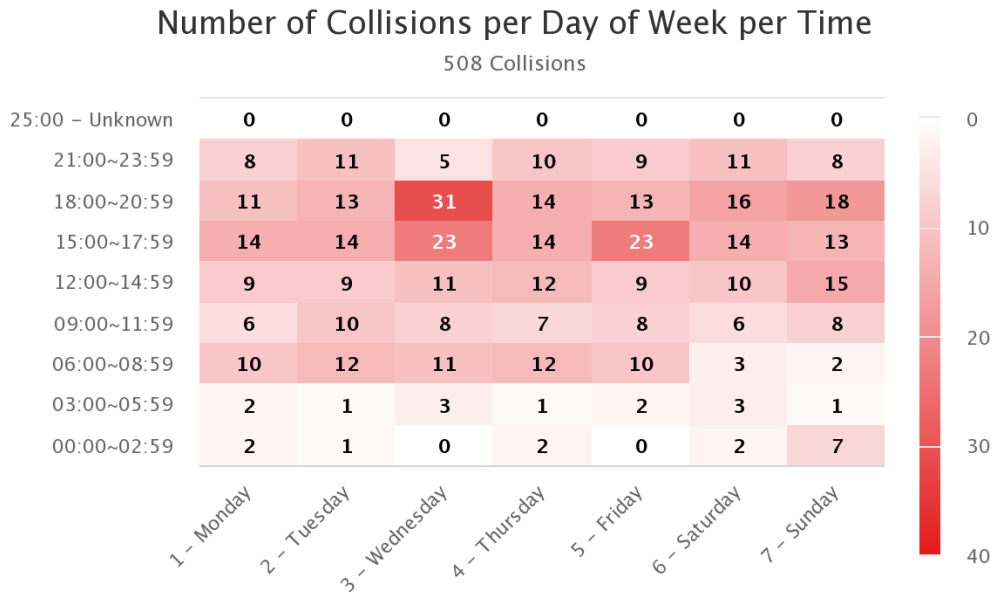


Figure 11. Frequency of collisions during time of day.
Source: SWITRS, UC Berkeley TIMS.

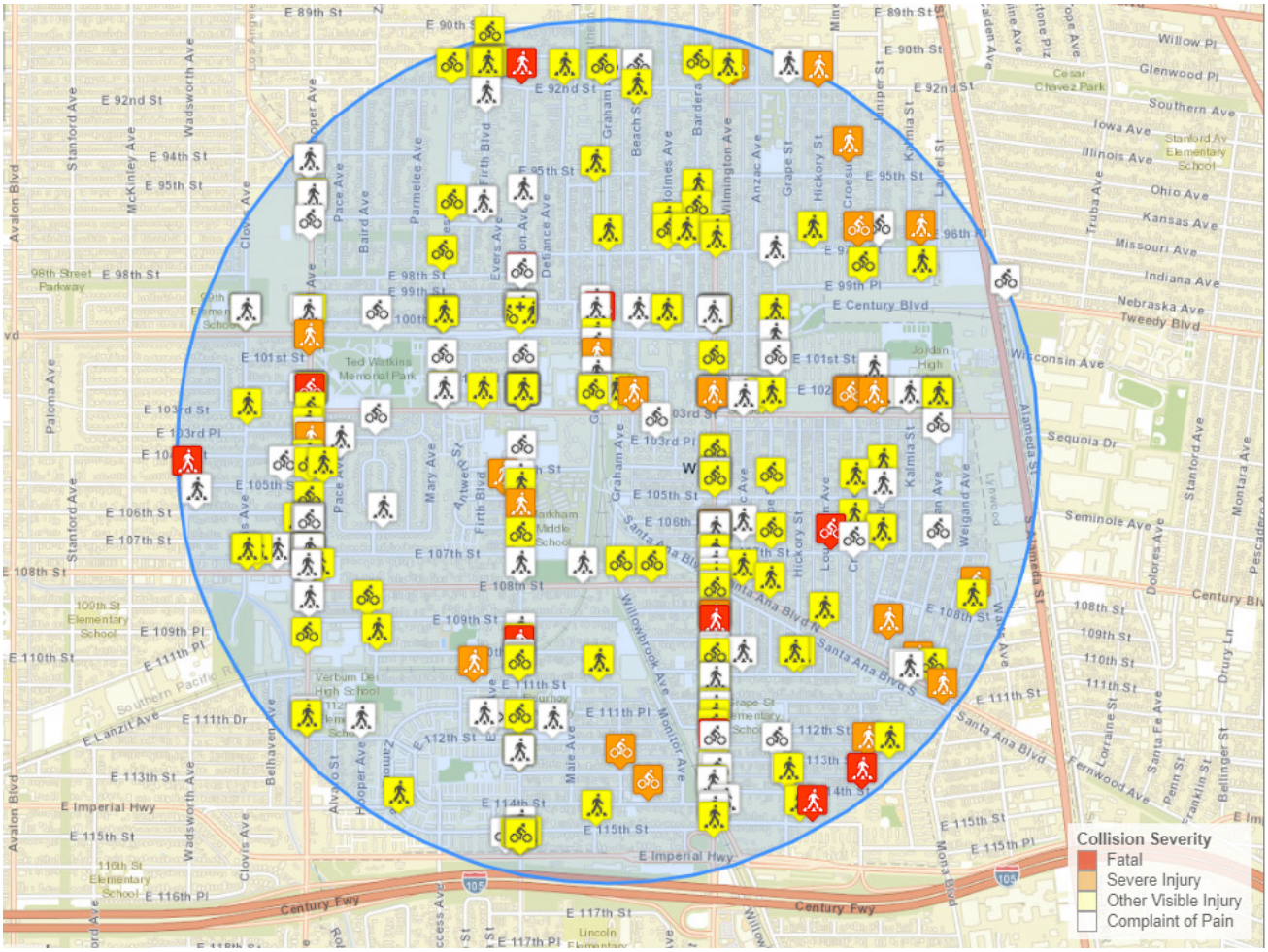


Figure 12. Collision severity of pedestrian and bicycle crashes.
Source: SWITRS, UC Berkeley TIMS.

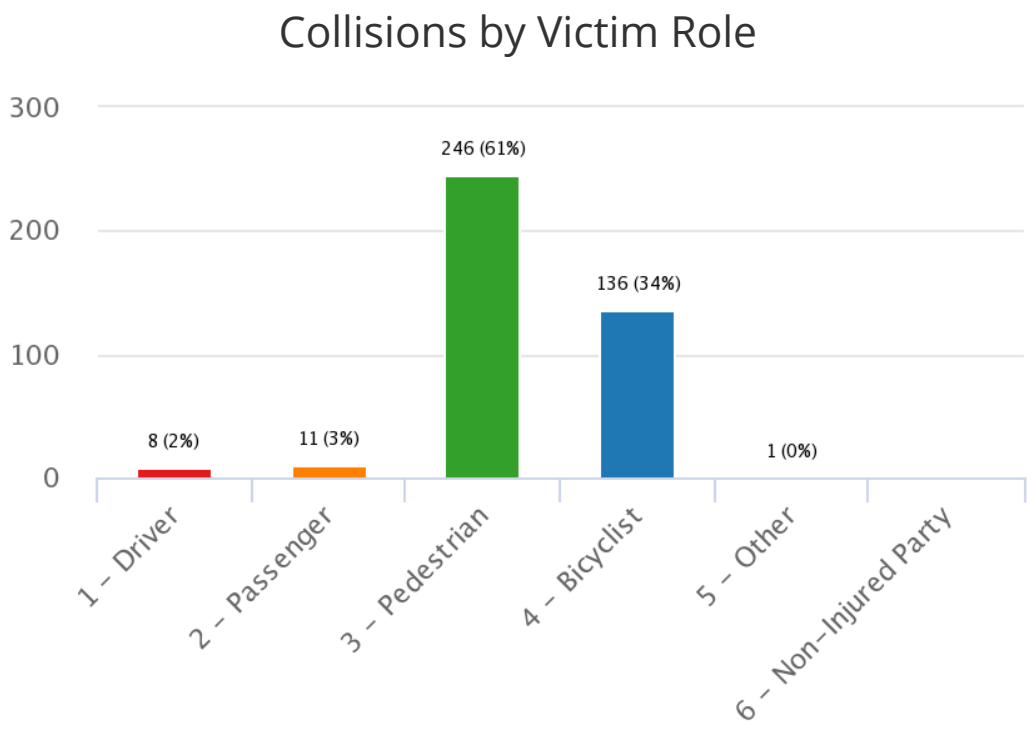


Figure 13. Most victims in collisions are pedestrians, followed by cyclists. Source: SWITRS, UC Berkeley TIMS.

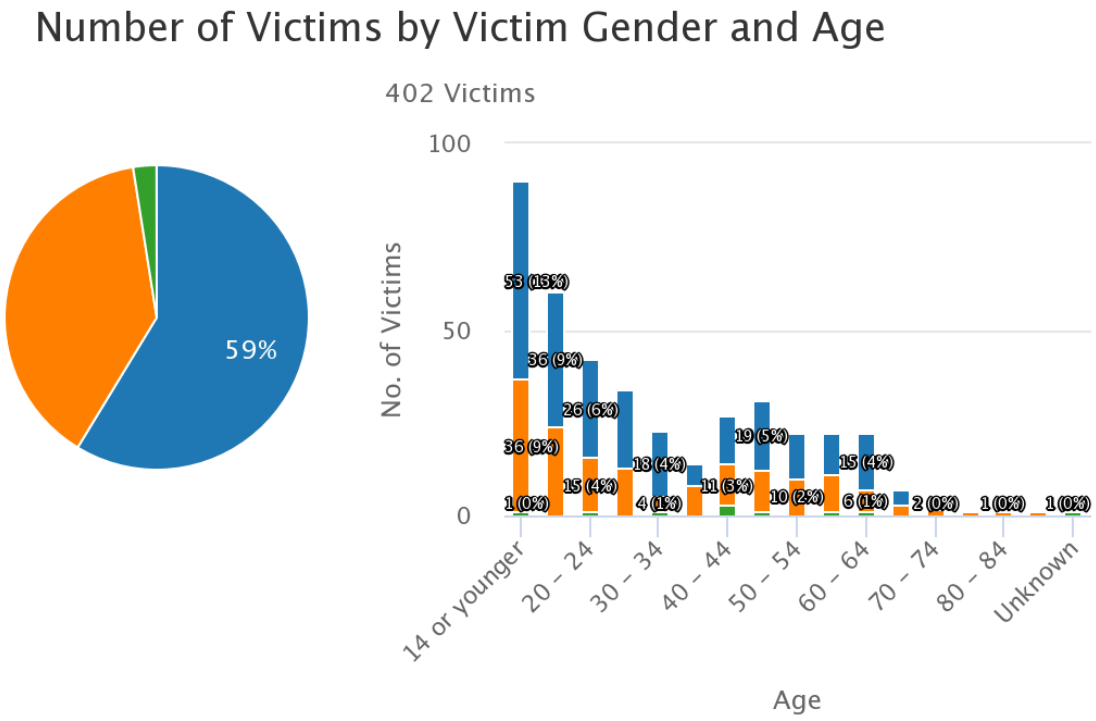


Figure 14. Majority of victims are under the age of 24, and most are younger than 14. Source: SWITRS, UC Berkeley TIMS.

Type of Violation	Description	Count	%
21950	Driver must yield to pedestrian right of way in a crosswalk.	82	32.8%
21954	Pedestrian yield, upon roadway outside crosswalk.	56	22.4%
22350	Unsafe speed for prevailing conditions (use for all prima facie limits).	24	9.6%
Other	21654 (1) 21657 (1) 22102 (1) 22451 (2) (16)	21	8.4%
21956	Walking on roadway, other than pedestrian's left edge.	18	7.2%
21955	Jaywalking, between signal-controlled intersections.	9	3.6%
22106	Starting or backing while unsafe.	8	3.2%
22450	Stop sign, failure to stop at limit line, crosswalk, or entrance to intersection.	7	2.8%
21456	Walk' pedestrian failure to yield right-of-way to vehicles already in crosswalk.	5	2.0%
21650	Right half of roadway, failure to drive on.	4	1.6%
21952	Sidewalk, failure to yield to pedestrian on.	3	1.2%
21453	Red or Stop, vehicles stop at limit line or X-walk. When making right turn at a red light/stop sign driver required to yield to any vehicle approaching so closely as to constitute an immediate hazard.	2	0.8%
21953	Pedestrian yield, if protected crossing available.	2	0.8%
22100	Right or left turn at intersection, improper position.	2	0.8%
23152	Under influence of alcohol, drug, or combination, while driving a vehicle.	2	0.8%
21655	Certain vehicles (22406) using left lane(s), or passing in lane other than adjacent to right lane. Trailer buses allowed in HOV lane.	1	0.4%
21658	Laned roadways (2 or more lanes in direction of travel), straddling or changing when unsafe.	1	0.4%
21663	Driving on sidewalk, except when permitted.	1	0.4%
21804	Public or private property, yield to approaching traffic so close as to constitute an immediate hazard.	1	0.4%
22107	Unsafe turn with/without signaling.	1	0.4%

Table 7. Collisions by Violation Type. Source: SWITRS, UC Berkeley TIMS.

Table 7 shows that most of the collisions in the study area involve the driver not yielding to pedestrians crossing in a crosswalk. This statistic will be important when identifying possible design recommendations in the Analysis phase.

Survey and Interview Data

After distributing through a direct mailing service, and through in-person presentations at community meetings and distribution at the Jordan Downs community center, a total of **96 surveys** (71 English responses, 25 Spanish responses) were received. With a neighborhood population of **41,028**, the sample pool of survey responses yields a **90% confidence level**, with an **8.5% margin of error**.

The direct mailing service sent surveys to 915 randomized addresses in the study area. A total of 28 responses were received as a result of the mailing service, yielding a response rate of 3%. The full list of survey responses are listed in Appendix A.

The number of responses from each submission method are summarized in Table 8:

Submission Method	Number of Responses
Online (English)	16
Online (Spanish)	2
Mail-in (English)	6
Mail-in (Spanish)	4
In-person (English)	49
In-person (Spanish)	19
Total	**96**

Table 8. Survey responses by distribution method.

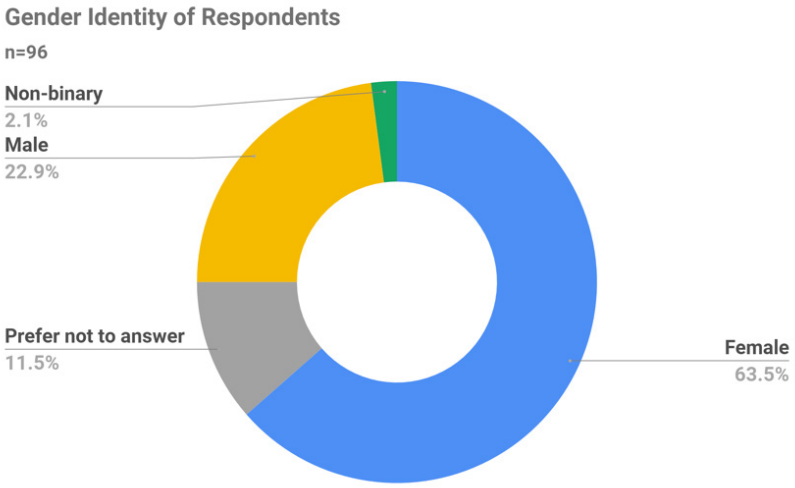


Figure 15. Most survey respondents were female.

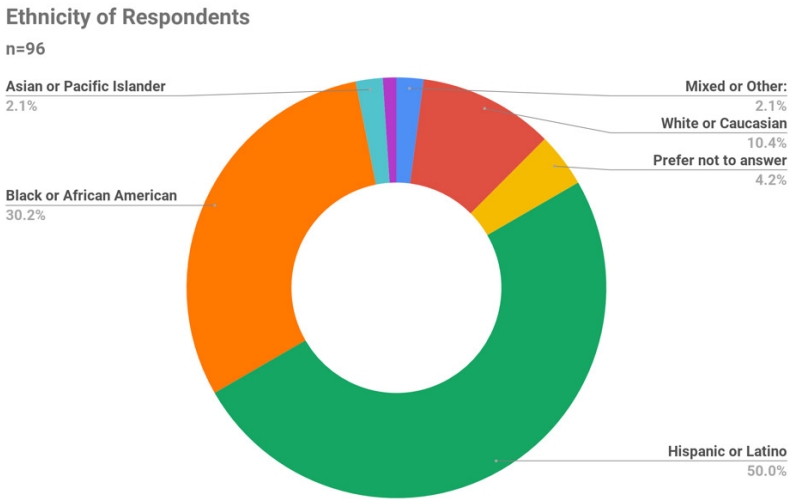


Figure 16. Most survey respondents were Hispanic/Latino or Black/African American.

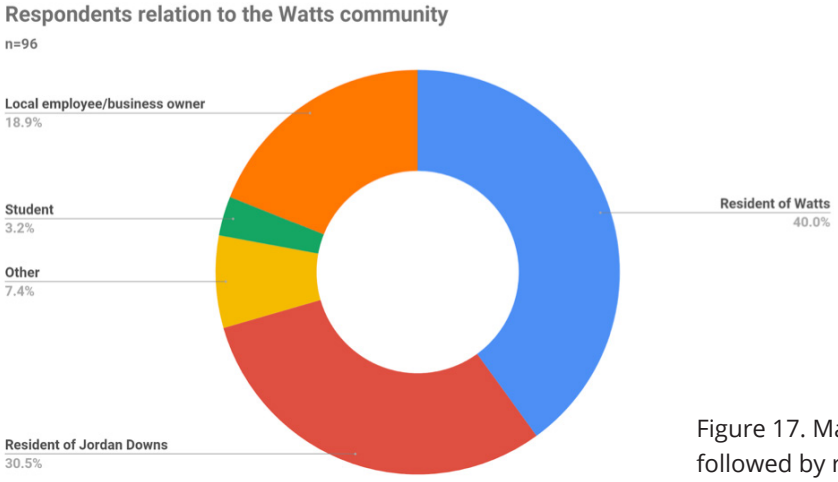


Figure 17. Majority of respondents were residents of Watts, followed by residents specifcally from Jordan Downs.

Public Transit

A majority of survey respondents have used public transportation within the last year. Of the respondents who have used public transportation, a majority of the respondents used public transportation every day. The highest barrier that prevented respondents from using transit more often was that the **streets do not feel safe or comfortable**.

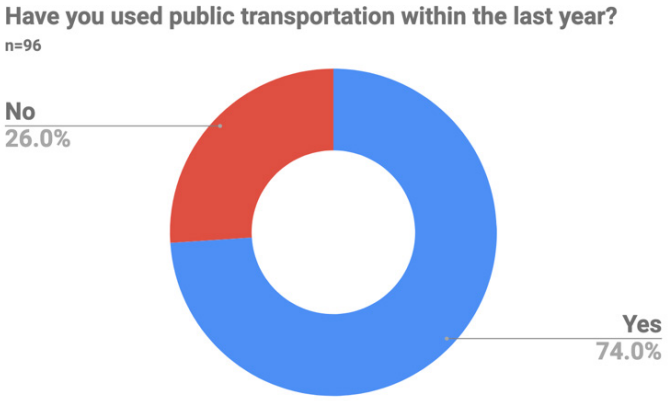


Figure 18. Majority of survey respondents have used public transit in the past year.

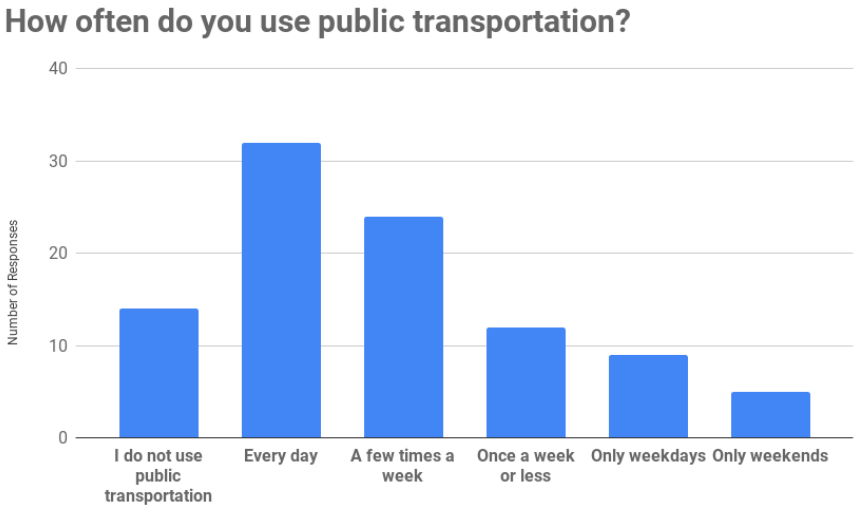


Figure 19. Most respondents use transit every day or very frequently.

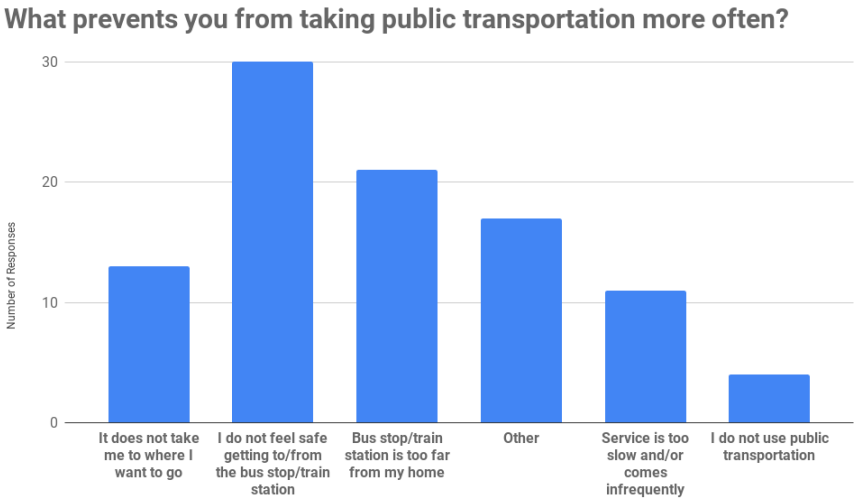


Figure 20. Most transit riders do not feel safe or comfortable getting to the transit stop.

Bicycling and Scooter Use

A majority of survey respondents had not ridden either a bicycle or scooter within the last year, while 43.3% had ridden at least one or both. The major reason that prevents respondents from riding more often was that the **streets do not feel safe or comfortable**. The second-most cited barriers were that they **cannot afford, or do not have access to a scooter account** and that there were **not enough bike lanes**. This indicates a possible demand for traveling by bike or scooter in the community, but access to these modes is limited by insufficient bicycle lanes, as well as financial barriers to new forms of shared mobility like dockless scooter and bike share.

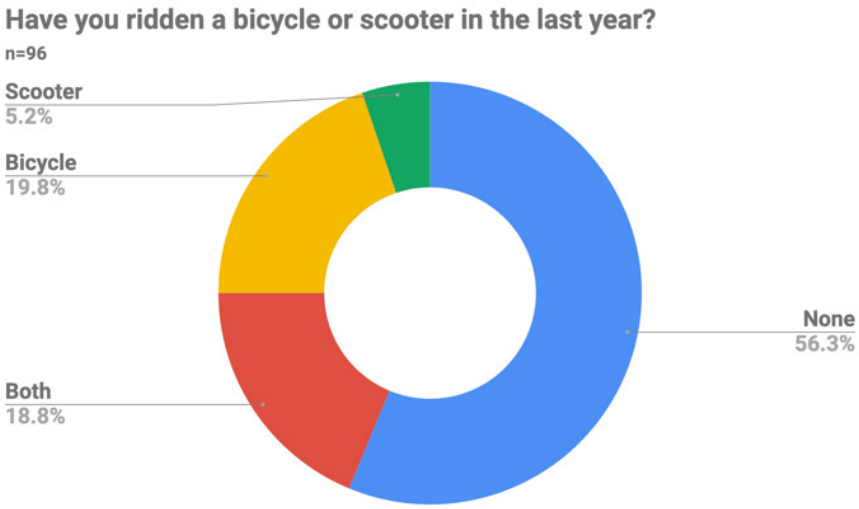


Figure 21. Less than half of respondents have ridden a bicycle or scooter in the past year.

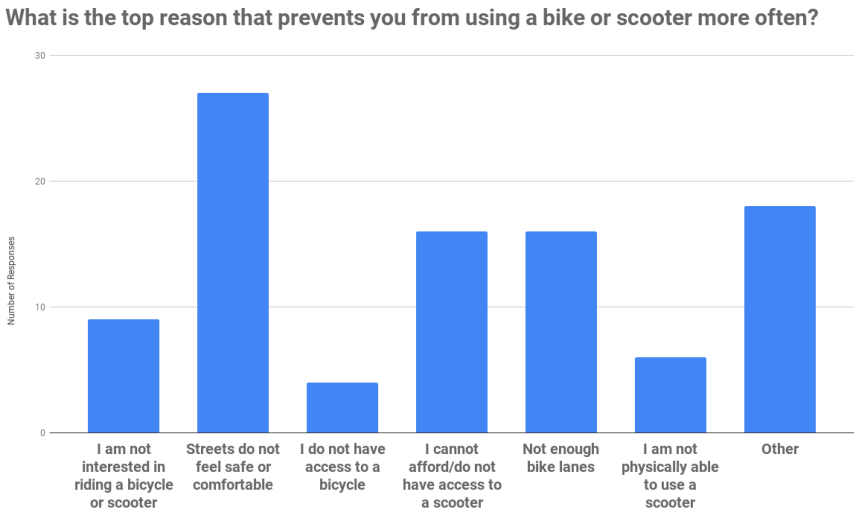


Figure 22. Respondents did not feel safe or comfortable biking or scootering.

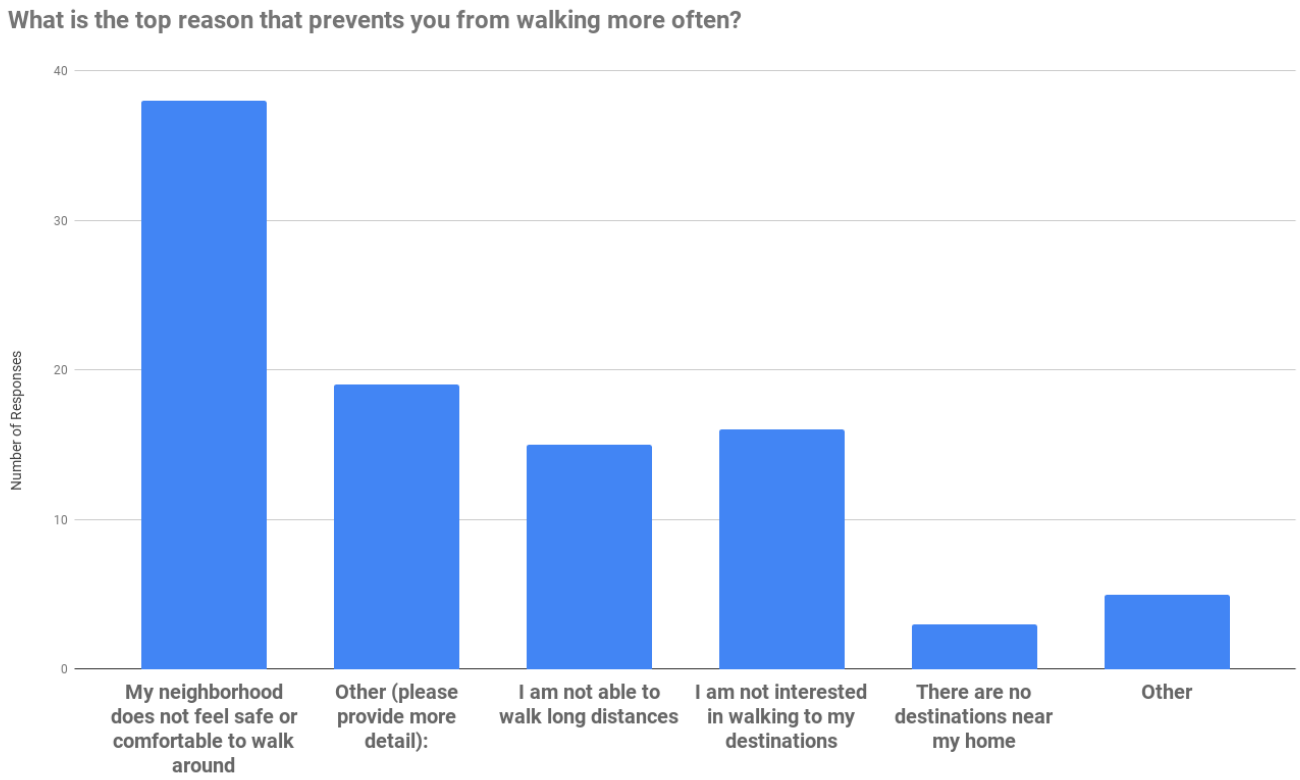


Figure 23. Most respondents did not feel safe or comfortable walking the streets in Watts.

Walking

Most respondents cited that they do not walk more often in their neighborhood because their **neighborhood does not feel safe or comfortable to walk around**, indicating that there could be a demand for walking to local destinations, but other modes are chosen instead because of perceptions of safety and comfort.

Driving

Among survey respondents, a majority had driven within the last year. However, 40.6% of respondents did not drive a car within the last year. This is a high percentage of non-drivers, considering that 74.6% of people in Los Angeles County commute to work by driving alone and another 9.3% carpool.

It is also worth noting that among Spanish survey responses, the majority of respondents (60%) had NOT driven a car within the past year. They are mostly reliant upon other means of travel.

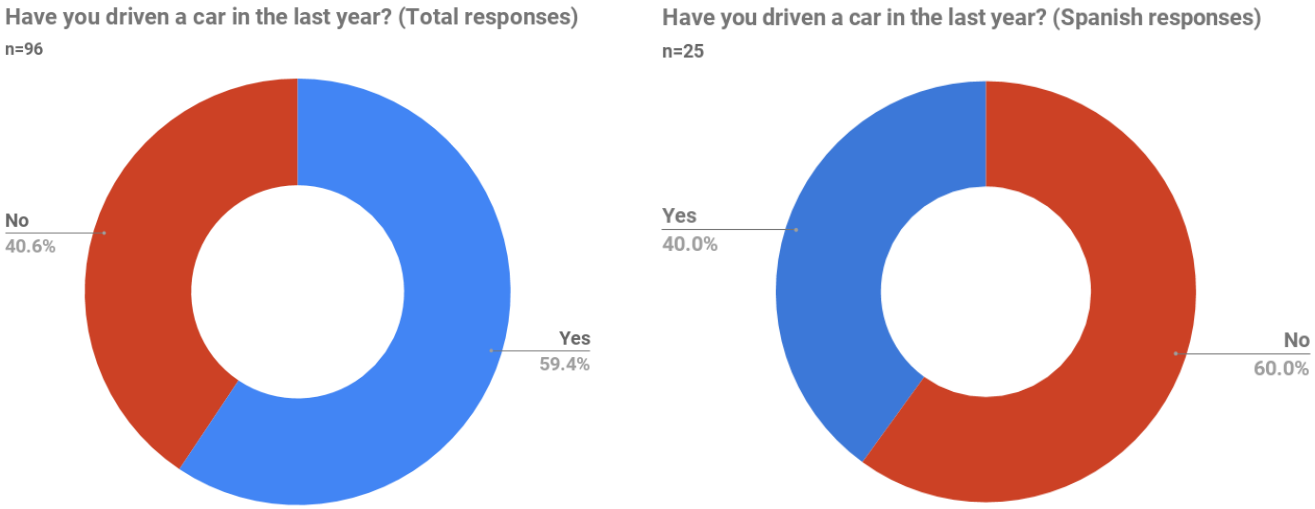


Figure 24. Number of respondents who had not driven a car is high for LA County. Number is even higher for Spanish-speaking respondents.

Figure 25. Most commonly cited words in survey responses.

Open-Ended Question

The open-ended question of the survey asked:

What major improvements to the local streets and sidewalks would you most like to see in the neighborhood, and why?

Figure 25 shows a summary of key words and phrases that were used by respondents in the survey responses. The scale of the words corresponds to the number of times they appeared in the survey responses. The full word count is listed in Appendix D.

Potholes were the most commonly cited area of improvement for LADOT to address. This can be expected, given that the majority of survey respondents had driven an automobile within the past year.

Word	Times mentioned
potholes	15
street	11
Wilmington	10
Grape [St]	7
Compton [Ave]	5
sidewalks	4
bumps	3
speed	3

Table 9. Most commonly references words in survey responses.

Interview Data

Phone interviews were conducted with three residents of Watts. The names of the participants are kept anonymous, but all three were female residents between the ages of 18 – 64. One participant was a resident of Jordan Downs, while the other two lived in other parts of Watts.

All three women spoke about **feelings of being unsafe in the community**. The most common concern were feelings that the streets were **dangerous due to criminal activity**. Two of the women spoke about feeling threatened and vulnerable of being robbed when they waited bus stops. The second cited concern about safety was **collisions with speeding vehicles**, followed by concerns with **inaccessible crossings**.

The resident of Jordan Downs mentioned that her and her son have been threatened by people with knives and guns in the six years that they have lived in Watts. Bus stops she uses frequently are at **103 St/Grandee Ave** and **97 St/Grape St,** both of which she cited as having **insufficient lighting and security**. She now restricts her travel in the neighborhood to only the hours between 9am – 5pm because the lack of street lighting and lack of security make her feel unsafe during night hours. She also does not own an automobile, and so depends on public transit for her mobility.

One resident of Watts described herself as a single mother with five children. She is constantly worried about her **children's safety** whenever they leave the home. She is worried about either crime happening on the street, or her children being hit by automobiles. She cited the many elementary and middle schools in the community, with the high frequency of **cars speeding and ignoring traffic lights or stop signs** that pose a safety risk to the children of the community. She cited **Compton Ave** as the street, between 103 St and Imperial Hwy as the section of the neighborhood with the most speeding vehicles. She strongly voiced the need for **more crossing guards** at intersections near schools. The resident also mentioned wanting to take her children on bike rides to the nearby Ted Watkins Memorial Park more often, but her concern about vehicular collisions as a deterrent.

The second resident of Watts cited that she was hit by a car as she was walking around in her neighborhood a few years ago. The collision happened at night, and she cited the combination of **insufficient lighting** and a distracted driver as the cause. Because of the collision, she no longer feels comfortable exploring her neighborhood by walking. She also has a bicycle, but is **reluctant to bike more often** in her neighborhood because she is scared of being hit by drivers. When asked about bike lanes, she cited that she is conflicted, because although she supports bicycle infrastructure to keep cyclists safe, she is concerned about the correlation between **bicycle lanes and gentrification**. She would like to see improvements to pedestrian and transit rider safety because they are bigger priorities to the Watts community. The resident is also concerned with the **lack of crosswalk**s to cross streets with high traffic volumes. She specifically cited **92 St/Graham Ave** as an intersection that is hard to cross. In order to cross safely without a crosswalk, she has to wait for the rail crossing gates to descend so that cars are forced to stop before she can cross. The resident lived one block away from Colonel Leo Washington Park, just north of the Watts boundary, but does not visit the park by walking because crossing 92 St feels so dangerous.

Main takeaways from the interviews confirm the survey data that feelings of safety and comfortable are the primary transportation issues in the community. Sources of these concerns range from crime to vehicular collisions. Overall attitudes about living in the community were generally positive. Residents are proud of living in Watts, but want the community to be safer for them and their families. They showed a desire to be informed about issues happening in their community and want to have a clear avenue to voice their concerns to the appropriate agencies. However, they do not want improvements to their community to lead to gentrification, and hope to be able to stay and enjoy those benefits.

Alma Reaves Woods - Watts Branch Library. 103 St and Compton Ave.

Insights from Prior Studies

Prior Community Workshops

The following studies and report were reviewed to provide additional data on existing community concerns:

- Jordan Downs Urban Village Specific Plan (2013)
- Watts Community Studio Report (2013)
- Watts Charrette Report (2014)
- Watts Green Streets (2012)

Based on prior studies and workshops done in Watts, a majority of the residents feel that their community is in need of investment. According to the Watts Charrette Report in 2014, residents view 103rd St as the neighborhood's "Main Street," and thus would like to see more commercial activity and greater walkability along the corridor (Creative Housing Associates and Grant Housing Corporation 2014). With the location of the Metro Blue Line Station, the MLK Shopping Center, Watts Public Library, and Council District 15 Watts District Office all located along 103 St, this corridor is the commercial and civic heart of the community.

Councilmember Joe Buscaino's Council District 15 office conducted the Watts Community Studio Report in 2013. The report was conducted through surveys aimed at residents and business owners of Watts, in order to learn more about the community's priorities. The report found that the Top 10 Challenges facing residents were:

1. Violence/Danger
2. Gangs/Drugs
3. Dirty (needs cleanup)
4. Unemployment/Jobs
5. Non-existing Youth Programs
6. Racial Division/No unity
7. Everything/General Improvement
8. Limited Resources
9. Education
10. Need Increased Police

The top neighborhood priorities cited (based on survey questions) were:

1. Employment (65%)
2. Physical Activities (60%)
3. Neighborhood Cleanliness (57%)
4. Enforcement (54%)
5. Social Activities (52%)
6. Culture (52%)
7. Transportation (50%)
8. Housing (50%)
9. Government (50%)

It is notable that transportation was a not a high-ranking priority for the community. This is because the community survey question only included the subcategories of public transportation, parking availability, traffic light, and affordable transportation (City of Los Angeles, C.D. 15 Joe Buscaino, 2013). These subcategories are typical

103 St and Compton Ave.

of the major issues residents think about when asked about overall transportation issues, but they do not cover the issues of street design on user perception. Many of the ongoing concerns voiced at neighborhood meetings also involved the safety of the community's youth and the risk of vehicle collisions or gang activity. Recommendations for LADOT will need to include design improvements to address these safety concerns for the community's youth (City of Los Angeles, C.D. 15 Joe Buscaino, 2013).

Prior Streetscape Studies

Watts Green Streets

In the Watts Green Streets (2012) plan that was submitted as part of the Watts Rising TCC Grant application, 103rd St was cited for streetscape improvements from Central Ave to Grape St. The objectives of the Watts Green Streets plan are to "directly support economic development, housing and job-creation goals for Watts. The project segments link public parks, key civic sites such as the public library, post office, public transit bus stops and the major hub at the Blue Line Station" (State of California Rivers & Mountains Conservancy 2012).

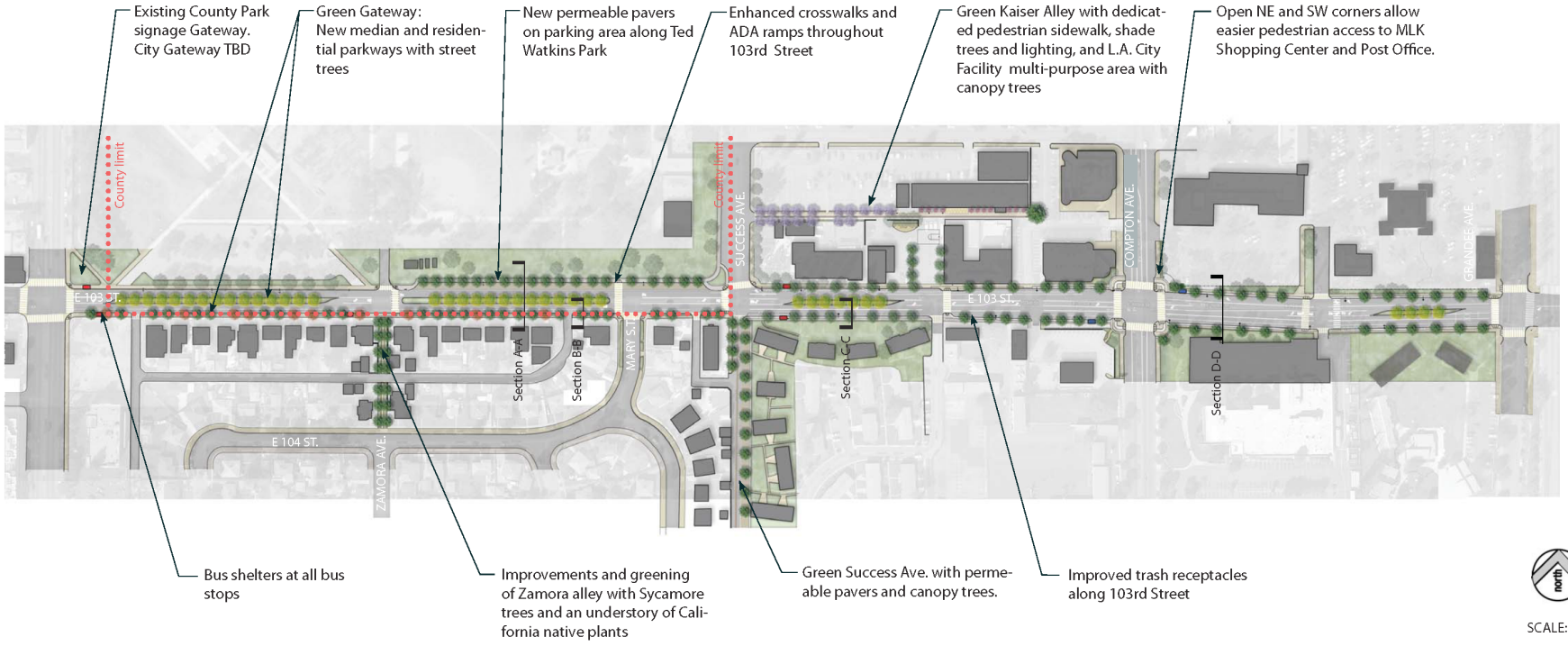
According to the Watts Charrette Report in 2014, residents view 103rd St as the neighborhood's "Main Street," and thus would like to see more commercial activity and greater walkability along the corridor.

Proposed Green Street improvements along 103rd St include:

- Bus shelters at all bus stops to provide comfort to riders
- Improved trash receptacles
- New median and residential parkways with street trees
- New permeable pavers on parking area along Ted Watkins Park
- Enhanced crosswalks and ADA ramps throughout 103 St
- Improvements and greening of trees and an understory of California native plants
- Green Success Ave with permeable pavers and canopy trees
- Open northeast and southwest corner of 103 St/ Compton Ave to allow easier pedestrian access to the MLK Shopping Center and Post Office
- Existing County Park signage Gateway (for adjacent Ted Watkins Memorial Park)

Figures Figure 26 Figure 27 provide a site plan of proposed improvements along 103 St through a site plan and cross-section. The new improvements would aim to enhance perceptions of safety and comfort for pedestrians and transit riders through bus stop improvements and urban greening projects. These urban greening projects serve multiple benefits by double the existing tree canopy in the neighborhood and help to restore the natural ecosystem with the utilization of native plants.

(B) - 103RD STREET PROPOSED IMPROVEMENTS (CENTRAL TO TRAIN STATION)



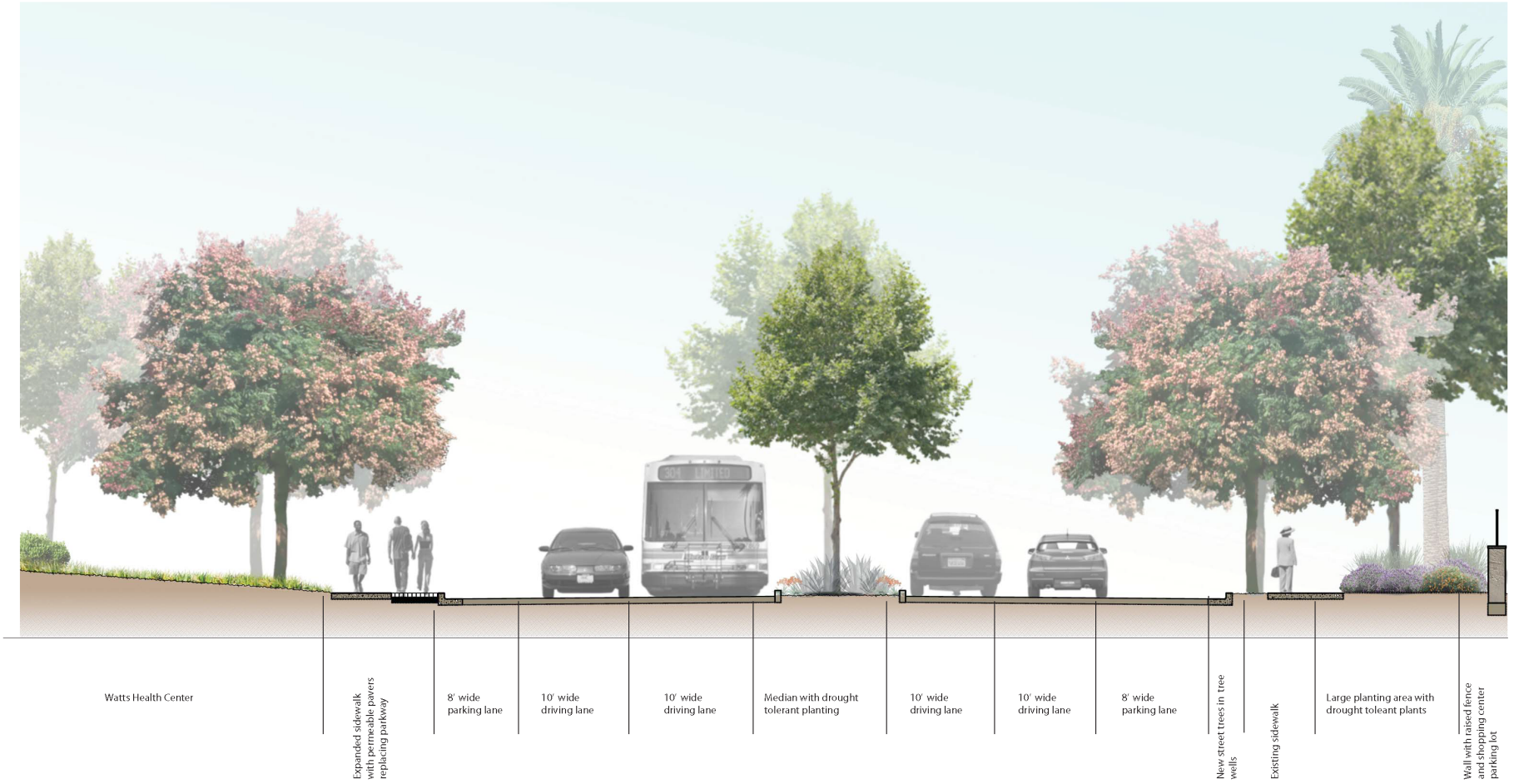
SCALE: NTS

LEGEND

SYMBOL	ITEM	QTY.
	Existing Trees to remain	11
	New Street Trees	145
	New Litter Bins	41
	New Pedestrian Light	95
	Existing Bus Shelters	2
	New Bus Shelters	5

Figure 26. Proposed Green Street on 103 St. Source: Watts Green Streets - State of California Rivers & Mountains Conservancy.

(B) - 103RD STREET PROPOSED IMPROVEMENTS - STREET SECTIONS



SECTION D-D

Plant recommendations include drought tolerant and L.A. River Masterplan species

Figure 27. Proposed Green Street on 103 St. Source: Watts Green Streets - State of California Rivers & Mountains Conservancy.

Great Streets: Wilmington Ave

In 2016, Watts:Reimagined won the 2016 Los Angeles Great Streets Challenge for Wilmington Ave. The project area, which was on Wilmington Ave, between 103rd St and Imperial Hwy, included a stated goal of leading: *"a radical and positive transformation in Watts aligned with citywide plans for sustainability, public health and green space, infrastructure investment, transit oriented development (especially affordable housing), and support for private investment focused on the underserved community"* (City of Los Angeles, Great Streets, 2017).

In the survey responses, Wilmington Ave was cited the most in the open-ended question about roadway improvements. The quality of the infrastructure is noted to be deteriorating, and safety concerns have been cited for children using the street.

Concerns cited along Wilmington in the Great Streets report were:

- Broken sidewalks
- Narrow sidewalks
- Long distance between crossings
- Regular flooding
- Missing ADA ramps
- Broken/unused telephone boxes
- Excess harscape in the public ROW

Improvements included in the conceptual redesign of Wilmington Ave from Imperial Hwy to 103 St include:

- 296 street trees
- 1.8 miles of sidewalk and commuter pathways
- 0.4 acres of public plazas
- 49 new pedestrian facilities, such as ADA ramps and crosswalks

Figure 28 shows a conceptual design for a new Wilmington Ave streetscape plan.

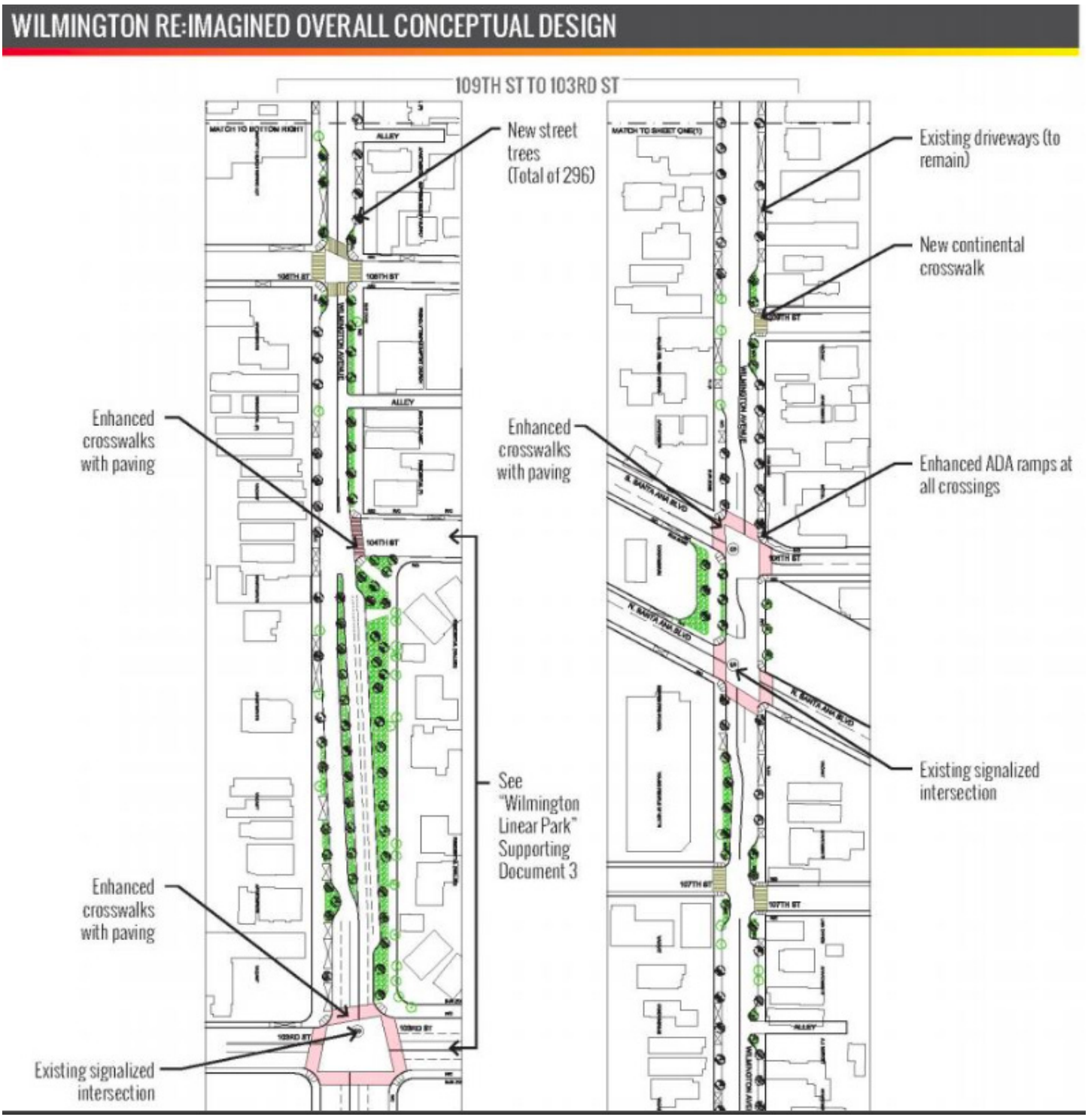


Figure 28. Proposed redesign of Wilmington Ave.
Source: Watts Wilmington Final Report - City of Los Angeles Great Streets.

FINDINGS & ANALYSIS

Findings

Findings from the survey responses and interviews show that variuos preceptions of the built environment prevented them from taking transit, bicycling, and walking more often. These perceptions were caused on many reasons, but the lack of comfort and safety were cited as the main reasons they do not use these modes more often.

User perceptions of comfort and safety can be caused by many features of the built environment. Not all of these are specifically attributed to urban design, which is why the open-ended questions and interviews were used to provide more specific detail. The preliminary findings for perceptions concerning each mode of transportation are described below.

Cited issues for improvement

Responses to the open-ended survey question cited the need for improvements on **Wilmington Ave**, a **more connected bicycle network**, and **concerns about safety and comfort on neighborhood streets**, particularly with concern for the community's **youth, senior, and disabled populations**.

> *"Wilmington Avenue needs to be repaired far more than other streets and also widened in the Watts/[Willowbrook] area. It is not safe to have children walking on small sidewalks that are so close to a Main Street, and as far as the widespread of the street goes, it certainly needs to be wider than a one-way road."*

> *"Need improvements on the street on Grape 97 - 99 Place. Speed bumps on Grape 97 - 99 Place. Cross guard on Grape close to the light. Major streets along Grape need improvements and cleaning."*

> *"Need improvements on the street on Grape 97 - 99 Place. Speed bumps on Grape 97 - 99 Place. Cross guard on Grape close to the light. Major streets along Grape need improvements and cleaning."*

> *"I live on 105 St and I would like to see speed bumps to protect kids from speeding drivers "*

> *"More cross guards on duty. Stop signs and disabled parking signs for the disabled, and seniors."*

> *"I would like to see more safe zones for families and kids so they can enjoy the neighborhood."*

> *"Prioritize 101, 103, and Grape St because those are the main streets in the neighborhood."*

Transit experience

The vast majority (74%) of respondents stated that they have used public transportation within the past year, but most respondents cited that they used public transportation **every day** and a **few times a week**, which is far more than the typical Los Angeles resident. Most riders cited that their nearest transit stop was 11-20 minutes away by walking. The top two barriers that prevented transit riders from using transit more often was **1) the neighborhood does not feel safe or comfortable**; and **2) transit service does not reach the destinations they need to access**.

Respondents who referenced transit improvements cited the need for **cleaner bus stops and adequate drainage, especially during rains**.

> *"No flooding during rains, no foul raw sewage odors, clean bus stops free of urine, fecal matter, homeless people in need, no broken glass, durable attractive trash cans, more visible officers, restroom at platforms, trains are more reliable."*

> *"Compton Ave and 105 St because when it rains we cannot cross the street and the cars always splash us. The sidewalks are always dirty."*

There are also concerns about **inadequate bus service** in the community, particularly with the Metro 254. One respondent hoped that there could be an LADOT DASH bus on 97th St or Alameda.

> *"Being able to walk the streets safer. I wish the 254 ran more often than once an hour."*

> *"[I hope that there can be] a Dash bus on 97th St, because I leave at 4:30am to walk to Century Blvd and Grape St to take the 254. Put more transit on 97th and Alameda."*

Pedestrian experience

A large number of residents reported that the greatest barrier that prevented them from walking more often was that the neighborhood "does not feel safe or comfortable to walk around." Perceptions of safety and comfort ranged from **insufficient lighting, criminal activity, and vehicular traffic**.

> *"Street lights and safe pedestrian crossing! I live near a park that I would go to more often, but it's so unsafe and scary to cross the street to get there, that I just don't. It's something I'm working on getting done by contacting the city and county but it has already been denied."*

> *"More police presence for gangs, robberies, burglaries, and for general peace in the neighborhood."*

> *"The streets are outdated. Cracks on the street, potholes, trash and more. I would like for our infrastructure to be updated to improve our community and create jobs."*

Driving experience

Most respondents owned their own vehicle and drove alone, and potholes were the top issue raised in the open-ended question. Respondents who cited the **potholes** and that **aging street infrastructure** was a major priority of transportation improvement in the neighborhood. Additionally, when asked about their attitudes towards driving, the most popular response was that they enjoy driving, and it was also the most convenient way to get around. The second most popular attitude was that they "did NOT enjoy driving, but it is the most convenient way to get around." This signals that there is a desire to use other modes if they were more convenient.

New bicycle lanes on Century Blvd. Site of new Jordan Downs development.

Bicycling/scooter experience

Most respondents were not interested in bicycling or using scooters, but for those who were interested the greatest barrier to them using these modes more often is that the **neighborhood does not feel safe or comfortable**. This could also be a result of the presence of potholes cited in the surveys, or the lack of safe bicycle infrastructure design that leads to the high rates of bicycle and pedestrian collisions. Excessive potholes or poor-quality roads can affect the ability of bicyclists to navigate the roads safely. Design measures such as dedicated bicycle lanes decrease the rates of vehicular collisions. Therefore, a high rate of collisions in the area could lead to users' perceptions of safety when wanting to use bikes or scooters.

The second reason they do not use bicycles or scooters more often is that they either **do not have access, or cannot afford bicycles or a scooter account**. This could signal an opportunity to introduce new shared mobility services to the community. Because Watts is a predominantly low-income community, equitable access to new forms of mobility is an issue to be explored.

Figure 29 shows the current bikeway network in the neighborhood, as well the new painted bike lanes on Century Blvd that are a part of the new Jordan Downs development. These new bike lanes were implemented as part of the Watts Rising grant application, which was awarded funding from the TCC Round 1 in 2018.

New bicycle lanes on Century Blvd. Site of new Jordan Downs development.

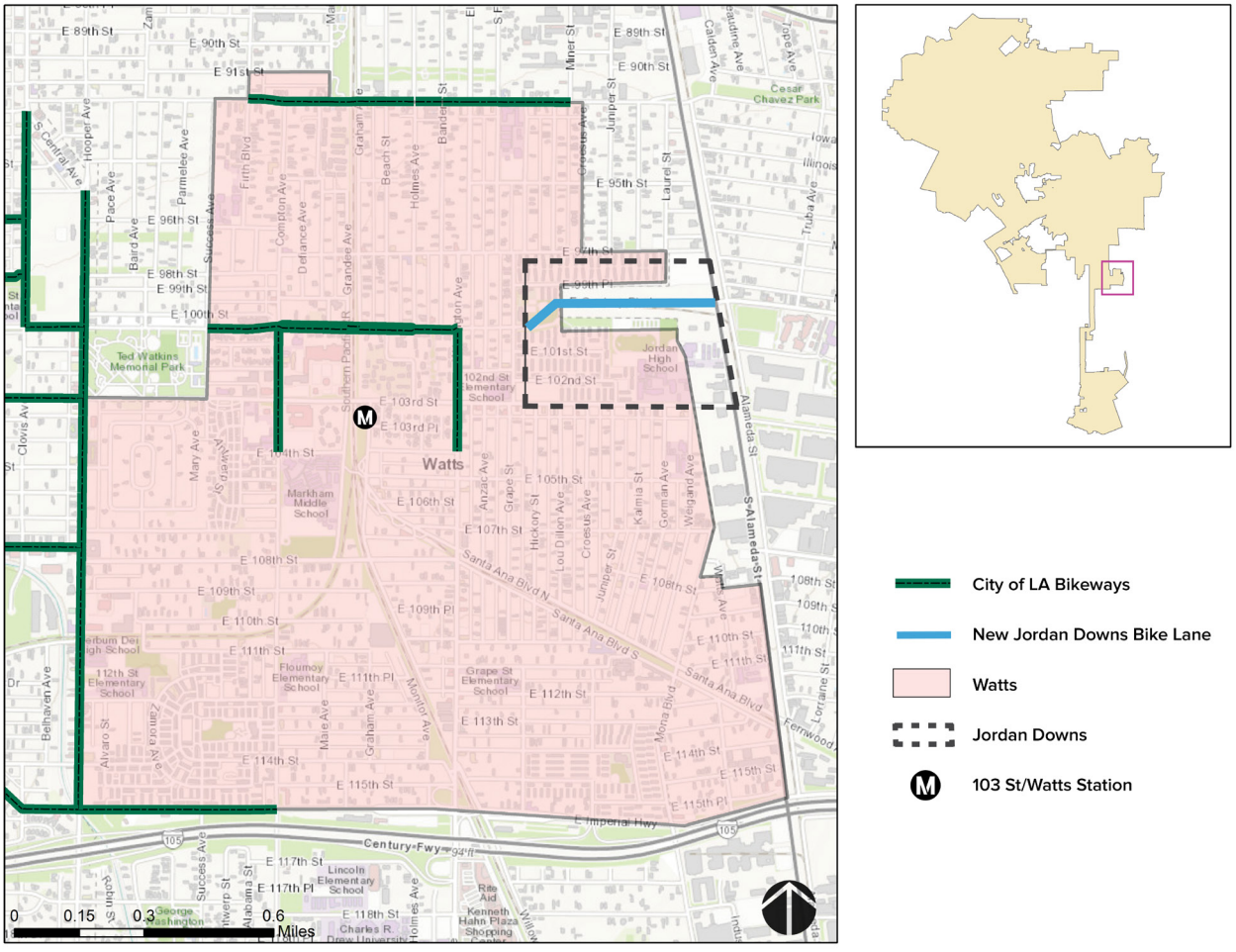


Figure 29. Bikeway Map of Watts.

Analysis

The Analysis section of this study is composed of two metrics:

1. Greatest Benefit to the Community
2. Grant Eligibility

Analysis section measures Greatest Benefit to the Community based on the data gathered through survey responses, interviews, and collision data to provide insight into transportation concerns for the community. Measuring the Grant Eligibility were based on eligible projects in the AHSC and TCC funding guidelines referenced in the Literature Review.

Greatest Benefit to the Community

Findings from the surveys, interviews, Census data, and collision data help identify which transportation concerns are a priority for the community. The survey responses show that major barriers to walking, bicycling, and transit use are not feeling safe or comfortable on the neighborhood streets. Feelings of safety and comfort can be caused by issues unrelated to transportation, but the collision data and responses to the open-ended question provide greater insight into specific issues of safety and comfort affecting users.

From Figure 25 the keywords used by survey respondents include issues of **speeding, dangerous or insufficient crosswalks**, and **concerns about vehicular safety affecting children** in the community. Collision data in cited in this study also show that bicycle and pedestrian collisions involving victims **under the age of 24** have been an issue in the community. Other user perceptions include **insufficient street lighting**, and **neighborhood cleanliness** such as trash and the persistence of vacant lots.

The sample of quoted concerns identified by survey respondents provides insight into the community's priorities concerning improvements to the public ROW. If LADOT is hoping to implement transportation improvements based on greatest benefit to the community, these survey results provide a guide to the community's top concerns.

In addition, the collision data show and attendance at community meetings show that bicyclist and pedestrian collisions are a concern for the community, and the age of the victims of these collisions is largely under 24.

Grant Eligibility

Based on the combination of greatest barriers identified to walking, bicycling/scootering, and transit use, and the top concerns voiced by survey respondents in the open-ended question, a list of improvements was identified based on Grant Eligibility. Eligibility was determined by how these barriers and neighborhood concerns affect eligibility for grant funding from the TCC and AHSC according to funding guidelines referenced in the Literature Review.
An important note: The funding guidelines identified are only approved for the TCC Round 2 and the AHSC Round 4 cycles. Future funding guidelines are subject to change.

i. Transformative Climate Communities

According to the TCC Round 2 Final Guidelines, transportation improvements to the community can fall under the Transit Access and Mobility Strategy, which is comprised of three project categories: 1) Active Transportation; 2) Transit & Rail Access; and 3) Car Sharing & Mobility Enhancement. Based on the analysis community concerns to the mode choice and street design, fundable improvements that are applicable to the community are highlighted in green in the Appendix E, which include:

- Installation of new or improved walkways that improve mobility and access of pedestrians
- Installation of new or improved bikeways that improve mobility and access of cyclists
- Installation of new or improved pedestrian crossings and over-crossings
- Non-capacity increasing streetscape improvements, including, but not limited to the

installation of lighting, signage, or other related amenities for pedestrians, cyclists and transit riders
- Street crossing enhancements including nstallation of accessible pedestrian signals
- Traffic calming projects including development of curb extensions, roundabouts, median islands, "road diets," lane narrowing projects
- Signage and way-finding markers
- Installation of traffic control devices to improve safety of pedestrians and bicyclists
- Street furniture (e.g. benches, shade structures, etc.)
- Bicycle repair kiosks
- Publicly accessible bicycle parking
- Bike sharing infrastructure and fleet
- Development and/or improvement of transit facilities or stations
- Transit Signal Priority technology systems
- Development or improvement of shelters or waiting areas at transit station/stops
- Station area signage
- Urban greening

ii. Affordable Housing and Sustainable Communities Program:

Community priorities in transportation investments can be eligible for AHSC grant funding under two of four eligible program costs: 1) Sustainable Transportation Infrastructure (STI); and 2) Transportation-Related Amenities (TRA). Eligible cost examples that either STI or TRA eligibility area identified in Appendix F, which include:

- New or expanded context sensitive bike paths or lanes (Class I, Class II, or Class IV)
- Non-motorized urban trails that provide safe routes for travel between residences, workplaces, commercial centers, and schools
- New walkways that improve mobility/access of pedestrians
- Non-capacity increasing streetscape improvements, including but not limited to:
  - o Installation of lighting
  - o Installation of signage and way-finding markers
  - o Other related amenities for pedestrians, cyclists and transit riders
  - o Installation of new improved pedestrian crossings or over-crossings
  - o Benches or "street furniture"
  - o Street crossings enhancements including accessible pedestrian signals
  - o Traffic calming projects, including development of:
    - o Curb extensions
    - o Roundabouts
    - o Median islands / road diets
    - o Lane narrowing projects
- New or expanded bike share program
- Publicly accessible bicycle parking
- Bicycle repair kiosks
- Capital or operational expenditures that increase transit mode share such as bus shelters/transit waiting areas and bicycle carrying structures on public transit
- Distribution of vouchers for free or reduced transit fares

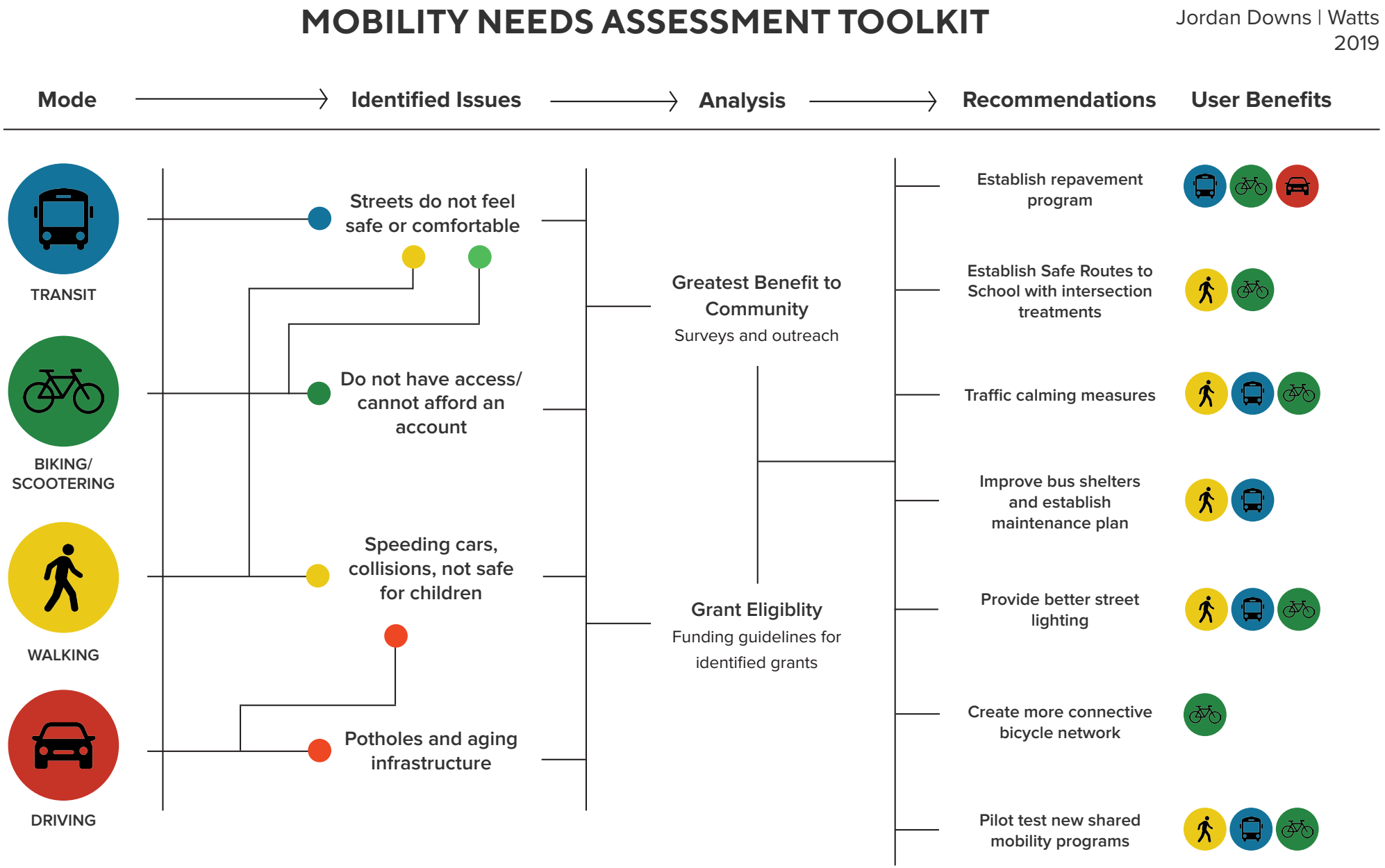


Figure 30: Mobility Needs Assessment Toolkit.

RECOMMENDATIONS

The Analysis section synthesized possible improvements for LADOT to implement for the study area based on:

1. Greatest Benefit to the Community
2. Grant Eligibility

Eligible transportation improvements in both the TCC and AHSC grant programs have been identified and highlighted in Appendices E and F. The Recommendations come with a **Mobility Needs Toolkit** in Figure 30 for how these Recommendations were reached. This Toolkit is meant to help LADOT study mode choice in different communities throughout Los Angeles. Based on the eligible projects, and understanding of what the community has voiced as their greatest transportation priorities, the following recommendations are proposed for the Watts community:

A. Identify deteriorating roadway infrastructure to fix potholes or other right-of-way infrastructure for both vehicles and bicyclists, all while incorporating green street principles to enhance environmental sustainability.

The most common cited issue for improvement in the survey data was the presence of potholes on neighborhood streets. However, during field visits to determine which roads should be cited for repavement, empirical observation showed that general roadway quality in Watts did not show presence of potholes or deteriorated roadway. The pavement on Wilmington Ave was old and had cracks, but potholes that would disrupt the driving experience were not present.

The discrepancy between survey responses and field observations could warrant further outreach with the community to identify where these roadway improvements should be prioritized. LADOT can also begin to create a program for community-driven prioritization of roadway improvements, which can address issues from repairing cracked or broken sidewalks, street lights, or adding ADA-compliant ramps. Case Study: The City of Oakland's Complete Streets Paving Program (2019-2021) offers a precedent for creating roadway improvement metrics through a lens of social equity. The program prioritizes street improvement projects based on calculating a Pavement Condition Index (PCI), which is based two metrics: **street condition** and **underserved populations**. The City of Oakland defines underserved populations as: *a population and/or community that have experienced historic or current disparities. This definition includes people of color, low-income households, people with disabilities, households with severe rent burden, people with limited English proficiency, and youth/seniors*

B. Create a comprehensive Safe Routes to School Program to address safety for children

Data gathered from survey responses and collision data show a need for pedestrian safety, especially for children. To address this issue, LADOT should continue implementing Vision Zero next steps to work with LAUSD to create complete individualized Safe Routes to School (SRTS) Plans for LAUSD schools within the City.

According to the Safe Routes to School Strategic Plan, two elementary schools within Watts, **112 St Elementary** and **Flournoy Elementary**, fall within the **LAUSD Top 50 Schools with the highest need** (City of Los Angeles 2013), which were calculated based on:

1. Number of vehicle-pedestrian/bike collisions
2. Number of students who live within a quarter-mile from school
3. Number of students eligible for Free-Reduced Price Meals
4. Lack of prior state/federal SRTS funding

Having schools in the Watts community fall under these criteria further demonstrates the priority of child safety in the community.

While it will take time to create individualized SRTS plans, improvements for LADOT to consider in the short term would include: improve crossings at identified intersections and median refuge islands

and intersection enhancements, more crosswalk guards, upgrading curb cuts for ADA-compliance, and traffic calming measures, which are discussed in Recommendation C.

C. Implement traffic calming measures into streetscape plans on high priority corridors

Prior studies in the Watts community provided conceptual plans for streetscape enhancements along two major corridors. While these studies include detailed plans for improvement, LADOT should conduct extensive outreach of these plans before moving forward, as community concerns or priorities may have changed over time. However, survey data did show concern for pedestrian safety on Wilmington Ave.

Streetscape improvements were identified for **103rd St** in *Watts Rising* and *LA Green Streets* studies. This corridor has been cited in previous community studies as being the "heart of Watts," due to the concentration of commercial activity, civic institutions, and bus stops and Blue Line rail station. Field observations also showed that the bus stops along 103rd St have the greatest number of pedestrians or transit riders waiting. Streetscape improvements should enhance perceptions of safety and comfort for pedestrians and transit riders.

Wilmington Ave was the top-cited corridor for improvement among survey respondents, both for its aging roadway infrastructure and concern about speeding vehicles and children's safety. In addition to repavement, issues cited in the Wilmington Great Streets conceptual design plan, such as missing street trees, long distance between pedestrian crossings, narrow and broken sidewalks, excess hardscape in the public ROW, and missing ADA ramps need to be addressed. Implementation of the Wilmington Great Streets project is also identified as a milestone implementation by 2025 in the *LA Green New Deal: Sustainable City pLAn* (2019).

D. Improve bus shelters

Survey responses relating to transit referenced the issue of **bus stop cleanliness** and **inadequate drainage during storms**, which negatively impact transit riders waiting at these stops. In order to improve perceptions of safety and comfort for transit riders, LADOT should implement bus stop enhancements that would include: installing bus shelters where they currently do not exist or adding seating to highly-frequented bus stops, providing regular maintenance of these shelters, and ensuring proper drainage.

The bus stops around the MLK shopping center and the Watts/103rd St Blue Line station see the most transit activity and do include bus shelters. However, bus stops along some parts of 103rd St, Century Blvd, and Compton Ave lack bus shelters or seating. A survey respondent specifically cited the bus stops on Compton Ave/105th St as an intersection in need of improvement. According to the response, Compton Ave floods during the rain, and transit riders are unable to cross the street. Additionally, cars driving through the flooded streets splash transit riders waiting at the bus stop. LADOT should conduct a study into drainage issues along Compton Ave.

E. Provide better lighting to improve safety

Given that the community has cited the presence of violence, danger, and gang activity as major issues in Watts (City of Los Angeles, C.D. 15 Joe Buscaino, 2013), addressing the perceptions of safety and comfort for pedestrians is seen as a very high priority in this community. Issues of inadequate street lighting were cited multiple times in survey responses.

One survey respondent noted that insufficient lighting and perceptions of safety prevented them from accessing a nearby park more often.

> *"Street lights and safe pedestrian crossing! I live near a park that I would go to more often, but it's so unsafe and scary to cross the street to get there, that I just don't. It's something I'm working on getting done by contacting the city and county but it has already been denied."*

There are likely many more instances people in this community limiting their trips due to safety perceptions. While issues of gang activity and violence are broader issues outside the scope of transportation, LADOT can implement design measures in the public ROW to enhance the

perceptions of safety through better lighting and sidewalk environments. These design measures can also help to deter violent incidents from occurring due to increased visibility of the public realm.

F. Create a more connective bicycle network

Given the fears of perceived gentrification, LADOT should conduct further outreach to see if bicycle infrastructure is a priority for the community. However, survey data in this study shows that 43.7% of respondents had ridden a bicycle or scooter within the last year. Collision data showed a number of collisions involving a bicyclist within the Watts community. According to SWITRS data, most of the collisions involving a bicyclist occurred on major commercial corridors and collector streets, such as **103rd St, Compton Ave,** and **Century Blvd**. Figure 12 also shows that a high concentration of collisions involving a bicyclist happen along **Wilmington Ave**, which further illustrates the need for streetscape improvements along the corridor.

Additionally, the current bikeway network in Watts is fragmented, with lanes only on Century Blvd, Compton Ave, and Wilmington Ave. The bike lanes on Compton Ave and Wilmington Ave do not extend south of 104th St, after which bicyclists are forced to ride in mixed traffic along narrow streets. Watts Rising — the TCC grant proposal and was awarded funding — and Watts Green Streets both envision a community having more multimodal infrastructure along newly built streets. The extension of Century Blvd through the new Jordan Downs development already includes Class II bike lanes. In order to be consistent with these goals and to improve safety, LADOT should complete the bicycle network.

G. Pilot test new shared mobility programs to provide greater access to bicycles and scooters

Survey data showed that one of the main barriers to respondents being able to bike or scooter more often was not having access or not being able to afford a scooter account. This indicates a desire to use new forms of shared mobility, but financial constraints and the general lack of availability of these modes present barriers.

Technology companies such as Lime, Bird, Jump (Uber), and Lyft, offer dockless scooters and bikes in selected areas in the City of Los Angeles. However, many parts of South LA do not have adequate access of these modes on their sidewalks. Jump and Lime have very few scooters or bikes available in Watts, while Bird and Lyft do not service these areas with scooters at all. Currently, LADOT sets regulations of dockless mobility companies the public ROW within the City of Los Angeles. Through its one-year dockless permit requirements, companies must submit an Equity Plan, which needs to include: 1) Detailed criteria of [pricing] plans offered, including a cash option, non-smartphone option, and a low-income plan; 2) Plan for low-income customers that include waiving any hold deposits and unlimited free trips under 30 minutes; and 3) A plan to verify low-income status (City of Los Angeles, Dockless Mobility). Each dockless company currently has its own Equity Plan, but LADOT should pursue regulations that would ensure geographic equity of where these companies place dockless devices.

LADOT can also explore providing its own forms of shared mobility to the community. The agency should explore the feasibility of piloting LA*now* on-demand shared-ride service to the Watts community. Currently, the service area only includes Palms, Mar Vista, Venice, and Del Rey. Additionally, BlueLA electric car sharing would could be beneficial to the Watts community, given that a large number of residents have not driven a car. Providing automobility through a low-emissions shared vehicle could be strategy to increase access that are still eligible for AHSC or TCC funding.

Analysis into the Watts community has shown lower rates of vehicle ownership, low median income, and high transit usage. Investing in new forms of mobility can greatly benefit the community. Creating more access to these new modes will benefit Watts residents by increasing their mobility and offering more choices of ways to move around, especially for those without automobiles and the transit-dependent.

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CONCLUSION

The Watts neighborhood has a rich history and residents who are invested in improving the quality of life in their neighborhood. This is evident in the level of citizen engagement at the weekly Watts Gang Taskforce and City Council District 15 meetings. The development of the new Jordan Downs mixed-use project and the recent TCC grant funding are transforming and bringing new investment to the community. The findings and recommendations of this study will help LADOT understand current transportation issues affecting the community.

This study has provided insight into the influence of built environment perceptions on barriers to choosing certain modes of transportation. I discovered that the biggest barrier to users walking, bicycling, scootering, or taking transit more often was that streets in the community do not feel safe or comfortable. This perception was further validated by collision and Census data. Collision data that show the number of vehicular collisions with bicyclists and pedestrians in the area, including the high percentage of victims being under the age of 24. Census data also show that the median age in Watts is 21, and residents under 18 in Jordan Downs makeup 45% of the population, which is the highest of any age group.

Other key findings were reported for each mode. Transit riders cited cleanliness and the presence of trash at bus stops and street drainage issues affecting their experience during the rain. Inadequate bus service on the Metro 254 and a need for DASH service along 97th St and Alameda Ave were also cited. Perceptions of bicycling and scootering also signaled that there was a desire to have greater access to these modes, but financial barriers to shared mobility accounts and limited bicycle lanes prevented some respondents from using these modes more often.

These recommendations can help improve the built environment that may inhibit people in the Watts community from choosing certain modes. Findings from the data show a large concern about the safety of the community's youth and senior population. In addition to addressing the needs of these populations, the set of recommendations also addresses the overall need to enhance the perceptions of safety and comfort for users of all modes. By understanding how the built environment may influence how people travel in this community, it is my intent to shed light on how LADOT can help improve overall transportation concerns in the community, and therefore help to improve accessibility for all users.

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APPENDICES

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APPENDIX A

MATRIX OF SURVEY RESPONSES

ALL SURVEY RESPONSES

Response ID	Language Response	Have you used public transportation on within the last year?	If yes, how often do you use public transportation?	How long does it take to walk from your house to your nearest bus/train station?	How would you rate the experience walking to your nearest bus/train station?	What prevents you from taking public transportation more often? (pick 1 or the most important reason)		Have you ridden a bicycle or scooter in the last year? (circle all that apply)	If yes, how often do you bike or scooter?	How would you rate your experience using bike or scooters in your neighborhood?	What is the top reason that prevents you from using a bike or scooter more often? (Pick 1 or the most important reason)		How satisfied are you with the experience of walking in your neighborhood?		What is the top reason that prevents you from walking more often? (Pick 1 or the most important reason)		Have you driven a car in the last year?	If yes, which of the following statements best describes why you choose to drive?		What major street and sidewalk improvements would you most like to see in your neighborhood, and why?	Which best describes you in the options below?		What best describes your ethnicity? (optional)		What best describes your gender identity? (optional)	What best describes your age category? (optional)
		Response	Response	Response	Response	Response	Other (please explain in more detail)	Response	Response	Response	Response	Other (please provide more detail)	Response	I never walk in my neighborhood (please explain in more detail):	Response	Other (please provide more detail):	Response	Response	Other (please provide more detail):	Open-Ended Response	Response	Other (please specify)	Response	Mixed or Other:	Response	Response
1	English	Yes	I do not use public transportation	1 - 5 minutes	Satisfied	It does not take me to where I want to go		None	I do not use bikes or scooters	I do not use bikes or scooters	I am not interested in riding a bicycle or scooter		Dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		Cracks and holes filled.	Resident of Watts		Mixed or Other:	Asian white	Female	25-34
2	English	Yes	Every day	1 - 5 minutes	Satisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	Streets do not feel safe or comfortable		Satisfied		Other (please provide more detail):	Ok husband not well	No	I have not driven a car in the last year		Fence around senior complex we live in. No more street vendors for food or phone's. Cars not driving fast thru parking spaces at grocery store go around it is dangerous and we have come close to being hit a few times.	Resident of Watts		Mixed or Other:	Black white Cherokee indian	Female	65+
3	English	Yes	A few times a week	1 - 5 minutes	Very satisfied	Bus stop/train station is too far from my home		Both	A few times a week	Very satisfied	Streets do not feel safe or comfortable		Very satisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I enjoy driving		n/a	Resident of Watts		White or Caucasian		Female	25-34
4	English	No	I do not use public transportation	I do not use public transportation	I do not use public transportation	Other	I drive	None	I do not use bikes or scooters	I do not use bikes or scooters	Streets do not feel safe or comfortable		I never walk in my neighborhood (please explain in more detail):	n/a	Other (please provide more detail):	n/a	Yes, my own car	I enjoy driving		n/a	Resident of Jordan Downs		Prefer not to answer		Female	65+
5	English	Yes	Every day	6 - 10 minutes	Neither satisfied nor dissatisfied	Service is too slow and/or comes infrequently		None	I do not use bikes or scooters	I do not use bikes or scooters	Streets do not feel safe or comfortable		Neither satisfied nor dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, someone else's car	I do NOT enjoy driving, but it is the most convenient way to travel			Other	Resident of Watts and Jordan Downs	Prefer not to answer		Female	25-34
6	English	Yes	Once a week or less	6 - 10 minutes	Satisfied	I do not use public transportation		None	I do not use bikes or scooters	I do not use bikes or scooters	I do not have access to a bicycle		Neither satisfied nor dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I enjoy driving		Wilmington Because it's the Main Street to the freeway and Century from the Jordan Downs going west because it leads straight the the airport.	Resident of Watts		Hispanic or Latino		Female	25-34
7	English	Yes	Only weekdays	11 - 20 minutes	Neither satisfied nor dissatisfied	Service is too slow and/or comes infrequently		None	I do not use bikes or scooters	I do not use bikes or scooters	Streets do not feel safe or comfortable		Neither satisfied nor dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, someone else's car	I enjoy driving		more crosswalks at busy intersections, pot hols filled or just major street repairs	Student		Hispanic or Latino		Female	18-24
8	English	Yes	Only weekdays	11 - 20 minutes		I do not feel safe getting to/from the bus stop/train station		Bicycle	Once a week or less	Very dissatisfied	Streets do not feel safe or comfortable		Neither satisfied nor dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, someone else's car	I do NOT enjoy driving, but it is the most convenient way to travel		Street lights and safe pedestrian crossing! I live near a park that I would go to more often, but it's so unsafe and scary to cross the street to get there, that I just don't. It's something I'm working on getting done by contacting the city and county but it has already been denied	Resident of Watts		Hispanic or Latino		Female	18-24
9	English	Yes	I do not use public transportation	11 - 20 minutes	Neither satisfied nor dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	Neither satisfied nor dissatisfied	I am not interested in riding a bicycle or scooter		I never walk in my neighborhood (please explain in more detail):	Not many walk around my area.	My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I enjoy driving		All of Wilmington Avenue be FIXED. There are so many potholes that the city just fill with cement. They need to redo the streets completely from the Watts town to the Wilmington of Compton city.	Resident of Watts		Prefer not to answer		Female	25-34
10	English	Yes	Once a week or less	6 - 10 minutes	Dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	I am not interested in riding a bicycle or scooter		Very dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, someone else's car	I enjoy driving		Better stop signs, more bicycle lanes, speed bumps on Beach street	Resident of Watts		Hispanic or Latino		Female	25-34
11	English	Yes	Every day	6 - 10 minutes	Satisfied	It does not take me to where I want to go		None	I do not use bikes or scooters	I do not use bikes or scooters	I am not interested in riding a bicycle or scooter		Satisfied		I am not able to walk long distances		No	I have not driven a car in the last year		All of them from Alameda to wilimgton century. Ect	Resident of Jordan Downs		Black or African American		Female	45-64
12	English	Yes	Once a week or less	11 - 20 minutes	Satisfied	It does not take me to where I want to go		None	I do not use bikes or scooters	Neither satisfied nor dissatisfied	I am not interested in riding a bicycle or scooter		Satisfied		Other (please provide more detail):	I have a car	Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		All the potholes around the Watts area.	Resident of Jordan Downs		Black or African American		Female	45-64
13	English	Yes	Once a week or less	1 - 5 minutes	Very satisfied	Other	I JUST DO NOT USE IT LIKE I DID . I AM MUCH OLDER	None	I do not use bikes or scooters	I do not use bikes or scooters	I am not interested in riding a bicycle or scooter		Neither satisfied nor dissatisfied		I am not able to walk long distances		Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		POTHOLES ARE GETTING BAD AND STREET NEEDS PAVED	Resident of Watts		Black or African American		Female	65+
14	English	No	I do not use public transportation	I do not use public transportation	I do not use public transportation	I do not use public transportation		Bicycle	Once a week or less	Neither satisfied nor dissatisfied	Streets do not feel safe or comfortable		Neither satisfied nor dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		DEDICATED SAFE BIKELANE	Local employee/business owner		Prefer not to answer		Prefer not to answer	Prefer not to answer
15	English	Yes	Once a week or less	11 - 20 minutes	Neither satisfied nor dissatisfied	Service is too slow and/or comes infrequently		Bicycle	Once a week or less	Dissatisfied	Streets do not feel safe or comfortable		Neither satisfied nor dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		Streets near Jordan High School, Weigand elementary school and around the 130rd Blue Line station	Local employee/business owner		Hispanic or Latino		Female	25-34
16	English	Yes	Every day	11 - 20 minutes	Dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	I cannot afford/do not have access to a scooter		Dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I enjoy driving		Wilmington Avenue needs to be repaired far more than other streets and also widened in the Watts/Willow-brook area. It is not safe to have children walking on small sidewalks that are so close to a Main Street, and as far as the widespread of the street goes, it certainly needs to be wider than a one-way road. Thank you:	Resident of Watts		Black or African American		Female	18-24
17	English	Yes	Every day	11 - 20 minutes	Very satisfied	It does not take me to where I want to go		Both	Every day	Very dissatisfied	Not enough bike lanes		Very satisfied		Other (please provide more detail):	n/a	Yes, my own car	I enjoy driving		n/a	Local employee/business owner		Black or African American		Prefer not to answer	45-64
18	English	Yes	Every day	11 - 20 minutes	Very satisfied	Bus stop/train station is too far from my home		Both	A few times a week	Dissatisfied	Not enough bike lanes		Dissatisfied		I am not able to walk long distances		No	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Resident of Jordan Downs		White or Caucasian		Prefer not to answer	35-44
19	English	Yes	Every day	11 - 20 minutes	Satisfied	Bus stop/train station is too far from my home		Both	Every day	Very satisfied	I cannot afford/do not have access to a scooter		Dissatisfied		Other (please provide more detail):	n/a	Yes, my own car	Other (please provide more detail):	n/a	n/a	Resident of Watts		White or Caucasian		Male	18-24
20	English	No	Every day	1 - 5 minutes	Satisfied	Bus stop/train station is too far from my home		Both	Every day	Very satisfied	I cannot afford/do not have access to a scooter		Very dissatisfied		Other (please provide more detail):	n/a	No	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Resident of Jordan Downs		Black or African American		Female	25-34
21	English	Yes	Every day	11 - 20 minutes	Satisfied	It does not take me to where I want to go		Bicycle	A few times a week	Very dissatisfied	I cannot afford/do not have access to a scooter		Satisfied		I am not able to walk long distances		Yes, my own car	I have not driven a car in the last year		n/a	Resident of Jordan Downs		White or Caucasian		Male	25-34
22	English	Yes	A few times a week	6 - 10 minutes	Dissatisfied	Bus stop/train station is too far from my home		Both	Every day	Very dissatisfied	I cannot afford/do not have access to a scooter		Very dissatisfied		My neighborhood does not feel safe or comfortable to walk around		No	I enjoy driving		n/a	Local employee/business owner		Hispanic or Latino		Prefer not to answer	45-64
23	English	No	A few times a week	6 - 10 minutes	Satisfied	Other	n/a	Both	A few times a week	Very satisfied	Not enough bike lanes		Very satisfied		I am not interested in walking to my destinations		Yes, my own car	I enjoy driving		n/a	Resident of Jordan Downs		White or Caucasian		Male	18-24
24	English	Yes	Once a week or less	1 - 5 minutes	Satisfied	I do not feel safe getting to/from the bus stop/train station		Both	Every day	Very dissatisfied	Not enough bike lanes		Satisfied		My neighborhood does not feel safe or comfortable to walk around		No	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Resident of Watts		Black or African American		Female	65+
25	English	No	Only weekdays	6 - 10 minutes	Neither satisfied nor dissatisfied	Bus stop/train station is too far from my home		Both	Once a week or less	Satisfied	Not enough bike lanes		Very dissatisfied		Other (please provide more detail):	n/a	Yes, my own car	I enjoy driving		n/a	Resident of Jordan Downs		Hispanic or Latino		Female	45-64
26	English	No	Once a week or less	1 - 5 minutes	Very satisfied	It does not take me to where I want to go		Both	Only weekdays	Neither satisfied nor dissatisfied	Streets do not feel safe or comfortable		Satisfied		Other (please provide more detail):	n/a	Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Local employee/business owner		Asian or Pacific Islander		Female	45-64
27	English	Yes	Every day	11 - 20 minutes	Very satisfied	Bus stop/train station is too far from my home		Scooter	A few times a week	Dissatisfied	I cannot afford/do not have access to a scooter		Satisfied		I am not able to walk long distances		Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Resident of Jordan Downs		Hispanic or Latino		Non-binary	18-24
28	English	Yes	Once a week or less	1 - 5 minutes	Very satisfied	Bus stop/train station is too far from my home		Bicycle	A few times a week	Dissatisfied	I cannot afford/do not have access to a scooter		Dissatisfied		I am not interested in walking to my destinations		No	I have not driven a car in the last year		n/a	Resident of Jordan Downs		Black or African American		Prefer not to answer	18-24
29	English	No	Only weekdays	11 - 20 minutes	Satisfied	It does not take me to where I want to go		Both	A few times a week	Very satisfied	I cannot afford/do not have access to a scooter		Satisfied		I am not interested in walking to my destinations		Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Resident of Jordan Downs		Hispanic or Latino		Male	25-34
30	English	Yes	Every day	11 - 20 minutes	Very satisfied	Bus stop/train station is too far from my home		Bicycle	Once a week or less	Very satisfied	Not enough bike lanes		Very satisfied		I am not interested in walking to my destinations		No	I enjoy driving		n/a	Resident of Watts		White or Caucasian		Prefer not to answer	Under 18
31	English	Yes	A few times a week	11 - 20 minutes	Satisfied	Bus stop/train station is too far from my home		Scooter	Every day	Dissatisfied	Not enough bike lanes		Satisfied		Other (please provide more detail):	n/a	Yes, my own car	I have not driven a car in the last year		n/a	Local employee/business owner		Black or African American		Male	Prefer not to answer
32	English	Yes	A few times a week	6 - 10 minutes	Satisfied	Bus stop/train station is too far from my home		None	I do not use bikes or scooters	Dissatisfied	Not enough bike lanes		I never walk in my neighborhood (please explain in more detail):	n/a	Other (please provide more detail):	n/a	No	I have not driven a car in the last year		n/a	Other	n/a	White or Caucasian		Female	18-24
33	English	Yes	Every day	11 - 20 minutes	Satisfied	I do not feel safe getting to/from the bus stop/train station		Bicycle	Every day	Very satisfied	I cannot afford/do not have access to a scooter		Dissatisfied		I am not interested in walking to my destinations		Yes, my own car	I enjoy driving		n/a	Local employee/business owner		Black or African American		Male	25-34
34	English	No	Only weekends	6 - 10 minutes	Neither satisfied nor dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I am not physically able to use a scooter			Neither satisfied nor dissatisfied		I am not interested in walking to my destinations		No	I have not driven a car in the last year		n/a	Local employee/business owner		Black or African American		Male	35-44
35	English	No	Only weekdays	1 - 5 minutes	Neither satisfied nor dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	Satisfied	I cannot afford/do not have access to a scooter		Satisfied		My neighborhood does not feel safe or comfortable to walk around		No	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Resident of Watts		Black or African American		Non-binary	35-44
36	English	Yes	Every day	6 - 10 minutes	Satisfied	It does not take me to where I want to go		Bicycle	A few times a week	Very dissatisfied	I cannot afford/do not have access to a scooter		Neither satisfied nor dissatisfied		I am not able to walk long distances		Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Local employee/business owner		White or Caucasian		Female	45-64
37	English	No	Only weekdays	11 - 20 minutes	Satisfied	Other	n/a	Both	Only weekends	Neither satisfied nor dissatisfied	Streets do not feel safe or comfortable		Satisfied		I am not interested in walking to my destinations		Yes, someone else's car	I have not driven a car in the last year		n/a	Local employee/business owner		American Indian or Alaska Native		Prefer not to answer	45-64
38	English	Yes	Every day	11 - 20 minutes	Very dissatisfied	Bus stop/train station is too far from my home		Bicycle	Every day	Very dissatisfied	I am not physically able to use a scooter		Very dissatisfied		Other (please provide more detail):	n/a	No	I have not driven a car in the last year		n/a	Other	n/a	Black or African American		Female	45-64
39	English	Yes	Only weekdays	20+ minutes	I do not use public transportation	I do not feel safe getting to/from the bus stop/train station		Scooter	A few times a week	Dissatisfied	Streets do not feel safe or comfortable		Dissatisfied		I am not interested in walking to my destinations		No	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Local employee/business owner		Black or African American		Male	18-24
40	English	No	Once a week or less	11 - 20 minutes	I do not use public transportation	It does not take me to where I want to go		Both	Only weekdays	Very satisfied	I am not physically able to use a scooter		Satisfied		My neighborhood does not feel safe or comfortable to walk around		No	I have not driven a car in the last year		n/a	Resident of Watts		Hispanic or Latino		Female	35-44
41	English	Yes	A few times a week	1 - 5 minutes	Satisfied	It does not take me to where I want to go		Both	A few times a week	Satisfied	Streets do not feel safe or comfortable		Very satisfied		I am not able to walk long distances		Yes, my own car	I have not driven a car in the last year		n/a	Local employee/business owner		White or Caucasian		Male	35-44
42	English	No	I do not use public transportation	6 - 10 minutes	Neither satisfied nor dissatisfied	It does not take me to where I want to go		Both	A few times a week	Very satisfied	I cannot afford/do not have access to a scooter		Satisfied		I am not interested in walking to my destinations		No	Other (please provide more detail):	No license	n/a	Resident of Watts		Hispanic or Latino		Male	18-24
43	English	No	Only weekdays	1 - 5 minutes	Very satisfied	Other	n/a	Scooter	Once a week or less	Satisfied	Streets do not feel safe or comfortable		Very satisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Resident of Watts		Black or African American		Female	25-34
44	English	No	Only weekends	1 - 5 minutes	I do not use public transportation	Other	My boyfriend has a car to get where I need to go	None	I do not use bikes or scooters	I do not use bikes or scooters	Other	I'm a busy mom and don't have time for a bike or scooter	I never walk in my neighborhood (please explain in more detail):	n/a	I am not interested in walking to my destinations		No	I have not driven a car in the last year		I think that they should fix all the potholes on the street. I also think they should have neighborhood watch and people should look out for each other no matter what.	Resident of Watts		Hispanic or Latino		Female	18-24
45	English	No	Every day	6 - 10 minutes	Dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	n/a	Satisfied		My neighborhood does not feel safe or comfortable to walk around		No	I have not driven a car in the last year		n/a	Resident of Watts		Black or African American		Female	18-24
46	English	No	I do not use public transportation	11 - 20 minutes	I do not use public transportation	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	n/a	Very satisfied		Other (please provide more detail):	n/a	No	I have not driven a car in the last year		n/a	Local employee/business owner		Hispanic or Latino		Female	18-24
47	English	No	I do not use public transportation	1 - 5 minutes	I do not use public transportation	Other	I have a car	None	I do not use bikes or scooters	I do not use bikes or scooters	Other	I have a car	I never walk in my neighborhood (please explain in more detail):	I have a car	Other (please provide more detail):	I have a car	Yes, my own car	I enjoy driving		Potholes being fixed	Local employee/business owner		Black or African American		Female	18-24
48	English	Yes	Every day	1 - 5 minutes	Very satisfied	Bus stop/train station is too far from my home		Both	A few times a week	Satisfied	I cannot afford/do not have access to a scooter		Very satisfied		I am not able to walk long distances		Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Resident of Jordan Downs		Black or African American		Female	18-24
49	English	No	I do not use public transportation	I do not use public transportation	I do not use public transportation	Other	I have my own transportation	None	I do not use bikes or scooters	I do not use bikes or scooters	Other		Very satisfied		Other (please provide more detail):	n/a	Yes, my own car	I do NOT enjoy driving, but it is the most convenient way to travel		There are pot holes all over the place	Local employee/business owner		Black or African American		Female	45-64
50	English	Yes	Only weekends	11 - 20 minutes	Very satisfied	Other	A car travels faster between locations	Bicycle	Only weekends	Dissatisfied	Streets do not feel safe or comfortable		Very satisfied		Other (please provide more detail):	The time it takes to walk to an event with a scheduled start	Yes, my own car	I enjoy driving		Educate residents against stopping indefinitely in the center of the street	Local employee/business owner		Asian or Pacific Islander		Male	45-64
51	English	No	I do not use public transportation	6 - 10 minutes	Very satisfied	It does not take me to where I want to go		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	I don't have a bike	Satisfied		Other (please provide more detail):	Busy schedule	Yes, my own car	I enjoy driving		n/a	Other	n/a	Hispanic or Latino		Male	45-64
52	English	Yes	Every day	1 - 5 minutes	Neither satisfied nor dissatisfied	Other	n/a	Bicycle	Once a week or less	Neither satisfied nor dissatisfied	Other	n/a	Neither satisfied nor dissatisfied		I am not interested in walking to my destinations		Yes, someone else's car	I enjoy driving		n/a	Resident of Jordan Downs		Black or African American		Male	18-24
53	English	Yes	A few times a week	11 - 20 minutes	Satisfied	I do not feel safe getting to/from the bus stop/train station	Not safe at night.	None	I do not use bikes or scooters	I do not use bikes or scooters	I cannot afford/do not have access to a scooter		Dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I enjoy driving		A smoking zone	Resident of Jordan Downs		Black or African American		Female	45-64

ALL SURVEY RESPONSES

Response ID	Language Response	Have you used public transportation on within the last year?	If yes, how often do you use public transportation?	How long does it take to walk from your house to your nearest bus/train station?	How would you rate the experience walking to your nearest bus/train station?	What prevents you from taking public transportation more often? (pick 1 or the most important reason)	Other (please explain in more detail)	Have you ridden a bicycle or scooter in the last year? (circle all that apply)	If yes, how often do you bike or scooter?	How would you rate your experience using bike or scooters in your neighborhood?	What is the top reason that prevents you from using a bike or scooter more often? (Pick 1 or the most important reason)	Other (please provide more detail)	How satisfied are you with the experience of walking in your neighborhood?	I never walk in my neighborhood (please explain in more detail):	What is the top reason that prevents you from walking more often? (Pick 1 or the most important reason)	Other (please provide more detail):	Have you driven a car in the last year?	If yes, which of the following statements best describes why you choose to drive?	Other (please provide more detail):	What major street and sidewalk improvements would you most like to see in your neighborhood, and why?	Which best describes you in the options below?	Other (please specify)	What best describes your ethnicity? (optional)	Mixed or Other:	What best describes your gender identity? (optional)	What best describes your age category? (optional)
		Response	Response	Response	Response	Response		Response	Response	Response	Response		Response		Response		Response	Response		Open-Ended Response	Response		Response		Response	Response
54	English	Yes	Every day	1 - 5 minutes	Neither satisfied nor dissatisfied	I do not feel safe getting to/from the bus stop/train station		Both	Once a week or less	Very dissatisfied	Streets do not feel safe or comfortable		Very dissatisfied		My neighborhood does not feel safe or comfortable to walk around		No	I have not driven a car in the last year		n/a	Resident of Jordan Downs		Hispanic or Latino		Female	Under 18
55	English	Yes	Only weekends	1 - 5 minutes	Very satisfied	Other	n/a	None	I do not use bikes or scooters	I am not physically able to use a scooter			Very satisfied		Other (please provide more detail):	n/a	Yes, my own car	I enjoy driving		n/a	Other	n/a	Hispanic or Latino		Female	35-44
56	English	Yes	Once a week or less	1 - 5 minutes	Very satisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	I don't own either	Very dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, someone else's car	I do NOT enjoy driving, but it is the most convenient way to travel		More updated cameras and lights and more police patrol	Resident of Jordan Downs		Hispanic or Latino		Male	25-34
57	English	Yes	Every day	1 - 5 minutes	Very satisfied	I do not feel safe getting to/from the bus stop/train station		Both	A few times a week	Very satisfied	Not enough bike lanes		Neither satisfied nor dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I enjoy driving		I would like to see more safe zones for families and kids so they can enjoy the neighborhood	Resident of Watts		Hispanic or Latino		Female	18-24
58	English	Yes	Every day	11 - 20 minutes	Satisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	n/a	Neither satisfied nor dissatisfied		I am not interested in walking to my destinations		Yes, someone else's car	I do NOT enjoy driving, but it is the most convenient way to travel		n/a	Resident of Watts		Hispanic or Latino		Male	18-24
59	English	No	I do not use public transportation	6 - 10 minutes	Neither satisfied nor dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	n/a	Satisfied		I am not interested in walking to my destinations		Yes, my own car	I enjoy driving		n/a	Resident of Watts		Black or African American		Female	35-44
60	English	No	Only weekends	1 - 5 minutes	Very satisfied	I do not use public transportation		Scooter	Once a week or less	Very satisfied	Not enough bike lanes		Satisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I have not driven a car in the last year		n/a	Local employee/business owner		Black or African American		Female	18-24
61	English	Yes	Every day	11 - 20 minutes	Satisfied	I do not feel safe getting to/from the bus stop/train station		Bicycle	Once a week or less	Satisfied	Streets do not feel safe or comfortable		Satisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I enjoy driving		n/a	Resident of Watts		Black or African American		Male	25-34
62	English	No	I do not use public transportation	6 - 10 minutes	I do not use public transportation	I do not use public transportation		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	I used to bike in high school. Bike theft made me feel unsafe.	Neither satisfied nor dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I enjoy driving		The streets are outdated. Cracks on the street, potholes, trash and more. I would like for our infrastructure to be updated to improve our community and create jobs.	Other	Resident of South LA	Hispanic or Latino		Male	18-24
63	English	Yes	Once a week or less	1 - 5 minutes	Satisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	I do not have access to a bicycle		Satisfied		I am not interested in walking to my destinations		Yes, my own car	I enjoy driving		Fix potholes in alleys Excess parking of cars inside neighborhoods Illegal dumping in alley More neighborhood watch	Resident of Watts		Black or African American		Female	65+
64	English	Yes	Only weekdays	11 - 20 minutes	Satisfied	Bus stop/train station is too far from my home		Bicycle	Once a week or less	Satisfied	Not enough bike lanes		Satisfied		Other (please provide more detail):	n/a	Yes, my own car	I enjoy driving		n/a	Resident of Jordan Downs		Black or African American		Male	45-64
65	English	Yes	A few times a week	1 - 5 minutes	Satisfied	Other	I need my car for work	Bicycle	Only weekends	Neither satisfied nor dissatisfied	Streets do not feel safe or comfortable		Neither satisfied nor dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes, my own car	I enjoy driving		Potholes (too many deep holes) Traffic (single lanes) Illegally parked vehicles	Local employee/business owner		Hispanic or Latino		Male	35-44
66	English	Yes	Once a week or less	11 - 20 minutes	Satisfied	Other	I have injuries and no power chair yet	None	I do not use bikes or scooters	Neither satisfied nor dissatisfied	Other	I used to ride more than 24 miles 2x a week, but no longer due to pains and injuries. Also got constant flat tires.	Neither satisfied nor dissatisfied		Other (please provide more detail):	Injuries and disabilities	No	I have not driven a car in the last year		No flooding during rains, no foul raw sewage odors, clean bus stops free of urine, fecal matter, homeless people in need, no broken glass, durable attractive trash cans, more visible officers, restroom at platforms, trains are more reliable.	Resident of Watts		Hispanic or Latino		Female	45-64
67	English	Yes	A few times a week	11 - 20 minutes	Satisfied	Bus stop/train station is too far from my home		None	I do not use bikes or scooters	I do not use bikes or scooters	I am not physically able to use a scooter		I never walk in my neighborhood (please explain in more detail):	n/a	I am not able to walk long distances		No			Need improvements on the street on Grape 97 - 99 Place. Speed bumps on Grape 97 - 99 Place. Cross guard on Grape close to the light. Major streets along Grape need improvements and cleaning.	Resident of Jordan Downs		Black or African American		Female	65+
68	English	Yes	Every day	1 - 5 minutes	Satisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	I am not physically able to use a scooter		Dissatisfied		My neighborhood does not feel safe or comfortable to walk around		No	I have not driven a car in the last year		Being able to walk the streets safer. I wish the 254 ran more often than once an hour.	Resident of Jordan Downs		White or Caucasian		Female	45-64
69	English	Yes	A few times a week	6 - 10 minutes	Neither satisfied nor dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	Neither satisfied nor dissatisfied	Streets do not feel safe or comfortable		Very dissatisfied		My neighborhood does not feel safe or comfortable to walk around		No	I have not driven a car in the last year		More police presence for gangs, robberies, burglaries, and for general peace in the neighborhood	Resident of Jordan Downs		Hispanic or Latino		Male	45-64
70	English	Yes	A few times a week	11 - 20 minutes	Neither satisfied nor dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	Streets do not feel safe or comfortable		Neither satisfied nor dissatisfied		I am not able to walk long distances		No	Other (please provide more detail):	n/a	n/a	Resident of Watts		Black or African American		Female	45-64
71	English	Yes	A few times a week	6 - 10 minutes	Satisfied	Other	Sometimes it is not on time	None	I do not use bikes or scooters	I do not use bikes or scooters	Streets do not feel safe or comfortable		Satisfied		I am not able to walk long distances		Yes, someone else's car	I do NOT enjoy driving, but it is the most convenient way to travel		For pickup in the development mostly for seniors, and more cross guards on duty. Stop signs and disabled parking signs for the disabled, and seniors.	Resident of Jordan Downs		Black or African American		Female	65+
72	Spanish	Yes	Every day	6 - 10 minutes	Neither satisfied nor dissatisfied	Bus stop/train station is too far from my home		Bicycle	A few times a week	Dissatisfied	Not enough bike lanes		Very dissatisfied		I am not interested in walking to my destinations		No	I do NOT enjoy driving, but it is the most convenient way to travel		Compton and 106	Resident of Watts		Hispanic or Latino		Female	45 - 64
73	Spanish	Yes	Every day	6 - 10 minutes	Satisfied	Service is too slow and/or comes infrequently		Bicycle	Only weekends	Very dissatisfied	Streets do not feel safe or comfortable		Satisfied		My neighborhood does not feel safe or comfortable to walk around		Yes	I do NOT enjoy driving, but it is the most convenient way to travel		97 y grape	Resident of Jordan Downs		Hispanic or Latino		Female	35 - 44
74	Spanish	Yes	A few times a week	1 - 5 minutes	Very satisfied	Service is too slow and/or comes infrequently		None	I do not use bikes or scooters	I do not use bikes or scooters	I am not interested in riding a bicycle or scooter		Satisfied		There are no destinations near my home		No	I have not driven a car in the last year	n/a	103 St	Other		Hispanic or Latino		Female	35 - 44
75	Spanish	Yes	A few times a week	11 - 20 minutes	Satisfied	I do not feel safe getting to/from the bus stop/train station		Bicycle	Every day	Neither satisfied nor dissatisfied	Streets do not feel safe or comfortable		Very dissatisfied		My neighborhood does not feel safe or comfortable to walk around		No	Other	n/a	Compton Ave and 105 St because when it rains we cannot cross the street and the cars always splash us. The sidewalks are always dirty.	Resident of Watts		Hispanic or Latino		Prefer not to answer	45 - 64
76	Spanish	Yes	Every day	6 - 10 minutes	Very satisfied	Bus stop/train station is too far from my home		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	n/a	Very satisfied		My neighborhood does not feel safe or comfortable to walk around		No	Other		105 St and Wilmington have very bad streets and dirty sidewalks	Resident of Watts		Hispanic or Latino		Prefer not to answer	45 - 64
77	Spanish	Yes	Every day	11- 20 minutes	Satisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	Satisfied	Not enough bike lanes		Satisfied		There are no destinations near my home		No	I have not driven a car in the last year		n/a	Resident of Watts		Hispanic or Latino		Female	45 - 64
78	Spanish	Yes	A few times a week	1 - 5 minutes	Neither satisfied nor dissatisfied	Bus stop/train station is too far from my home		None	I do not use bikes or scooters	I do not use bikes or scooters	Streets do not feel safe or comfortable		Neither satisfied nor dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes	I do NOT enjoy driving, but it is the most convenient way to travel		Compton and Central are in bad condition with potholes and cracks in the sidewalks	Student		Hispanic or Latino		Female	45 - 64
79	Spanish	Yes	Every day	6 - 10 minutes	Satisfied	Service is too slow and/or comes infrequently		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	n/a	I never walk in my neighborhood (please explain in more detail):		Other	n/a	No	I have not driven a car in the last year		n/a	Student		Hispanic or Latino		Prefer not to answer	45 - 64
80	Spanish	No	I do not use public transportation	20+ minutes	Satisfied	Other	I have no need	None	I do not use bikes or scooters	I do not use bikes or scooters	Other	Don't use either	Satisfied		Other	I walk to my English classes	Yes	I do NOT enjoy driving, but it is the most convenient way to travel	n/a	Prioritize 101, 103, and Grape St because those are the main streets in the neighborhood	Resident of Jordan Downs		Hispanic or Latino		Female	45 - 64
81	Spanish	Yes	A few times a week	6 - 10 minutes	Satisfied	Service is too slow and/or comes infrequently		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	n/a	Very satisfied		I am not able to walk long distances		No	Other		Very well maintained streets with no potholes	Resident of Watts		Hispanic or Latino		Female	45 - 64
82	Spanish	No	I do not use public transportation	I do not use public transportation	I do not use public transportation	It does not take me to where I want to go		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	My works is very far away	Very dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes	It is the most convenient way to travel		Too many potholes on the street.	Resident of Watts		Hispanic or Latino		Female	25 - 34
83	Spanish	Yes	A few times a week	6- 10 minutes	Dissatisfied	I do not feel safe getting to/from the bus stop/train station		Bicycle	Once a week or less	Dissatisfied	Streets do not feel safe or comfortable		Very dissatisfied		My neighborhood does not feel safe or comfortable to walk around		No	I have not driven a car in the last year		Compton Ave, 104 St, elementary schools and Markham Middle School.	Resident of Watts		Hispanic or Latino		Female	35 - 44
84	Spanish	Yes	A few times a week	20+ minutes	Satisfied	Service is too slow and/or comes infrequently		None	I do not use bikes or scooters	I do not use bikes or scooters	Not enough bike lanes		Satisfied		My neighborhood does not feel safe or comfortable to walk around		No	I have not driven a car in the last year		Cars speed too much on 104 St and Wilmington. They drag race too much. It is very unsafe. People get together to drink in public.	Resident of Watts		Hispanic or Latino		Female	45 - 64
85	Spanish	Yes	A few times a week	6 - 10 minutes	Very satisfied	Bus stop/train station is too far from my home		Bicycle	Only weekends	Very satisfied	Not enough bike lanes		Satisfied		There are no destinations near my home		Yes	It is the most convenient way to travel		Wilmington and 120 close to the Martin Luther King shopping center, the road has many potholes.	Resident of Jordan Downs		Hispanic or Latino		Female	45 - 64
86	Spanish	Yes	Every day	20+ minutes	Satisfied	Service is too slow and/or comes infrequently		None	I do not use bikes or scooters	I do not use bikes or scooters	Other	n/a	I never walk in my neighborhood (please explain in more detail):		Other	n/a	No						Hispanic or Latino		Female	
87	Spanish	Yes	A few times a week	20+ minutes	Neither satisfied nor dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	Streets do not feel safe or comfortable		I never walk in my neighborhood (please explain in more detail):		My neighborhood does not feel safe or comfortable to walk around		No	I have not driven a car in the last year		n/a	Resident of Jordan Downs		Hispanic or Latino		Female	45 - 64
88	Spanish	Yes	Every day	6 - 10 minutes	Satisfied	Other	Nothing prevents me	None	I do not use bikes or scooters	I do not use bikes or scooters	Not enough bike lanes		Satisfied		My neighborhood does not feel safe or comfortable to walk around		No	I have not driven a car in the last year		I live on 105 St and I would like to see speed bumps to protect kids from speeding drivers	Resident of Watts		Hispanic or Latino		Female	45 - 64
89	Spanish	Yes	A few times a week	11 - 20 minutes	Very dissatisfied	Service is too slow and/or comes infrequently		None	I do not use bikes or scooters	I do not use bikes or scooters	I do not have access to a bicycle		Satisfied		My neighborhood does not feel safe or comfortable to walk around		Yes	It is the most convenient way to travel		n/a	Resident of Jordan Downs		Hispanic or Latino		Female	45 - 64
90	Spanish	Yes	A few times a week	6 - 10 minutes	Dissatisfied	Bus stop/train station is too far from my home		None	I do not use bikes or scooters	Satisfied	I do not have access to a bicycle		Satisfied		I am not able to walk long distances		Yes	I enjoy driving		n/a	Resident of Jordan Downs		Hispanic or Latino		Female	45 - 64
91	Spanish	No	I do not use public transportation	I do not use public transportation	I do not use public transportation	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	I am not interested in riding a bicycle or scooter		Very dissatisfied		I am not interested in walking to my destinations		Yes	It is the most convenient way to travel		n/a	Resident of Jordan Downs		Hispanic or Latino		Female	45 - 64
92	Spanish	Yes	A few times a week	11 - 20 minutes	Very satisfied	Bus stop/train station is too far from my home		None	I do not use bikes or scooters	I do not use bikes or scooters	Streets do not feel safe or comfortable		I never walk in my neighborhood (please explain in more detail):		Other	I leave my car in the parking lot of Metro	Yes	I enjoy driving	n/a	Potholes on Wilmington between 108 and Imperial	Resident of Watts		Hispanic or Latino		Female	35 - 44
93	Spanish	Yes	Every day	6 - 10 minutes	Dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	I cannot afford/do not have access to a scooter		Satisfied		I am not able to walk long distances		No	Other		Wilmington	Resident of Watts		Hispanic or Latino		Male	45 - 64
94	Spanish	Yes	A few times a week	1 - 5 minutes	Satisfied	Service is too slow and/or comes infrequently		None	I do not use bikes or scooters	I do not use bikes or scooters	Streets do not feel safe or comfortable		Very dissatisfied		My neighborhood does not feel safe or comfortable to walk around		Yes	I do NOT enjoy driving, but it is the most convenient way to travel	I do not drive because I have no license. I rely on the bus.	The streets in front of the park are very bad	Resident of Watts		Hispanic or Latino		Female	45 - 64
95	Spanish	Yes	Every day	11- 20 minutes	Dissatisfied	Other	I live on 97th and Grape and there is no Dash bus here. There is the 254 bus on Grape and Century Blvd that runs every hour.	None	I do not use bikes or scooters	I do not use bikes or scooters	I am not interested in riding a bicycle or scooter		Dissatisfied		Other	It would be good to put a bus closer to Alameda because the only bus is the 254. It does not run on Sundays.	No	Other	n/a	That there is a Dash bus on 97th St, because I leave at 4: 30am to walk to Century Blvd and Grape St to take the 254. Put more transit on 97th and Alameda.	Resident of Jordan Downs		Hispanic or Latino		Female	45 - 64
96	Spanish	Yes	Every day	6 - 10 minutes	Dissatisfied	I do not feel safe getting to/from the bus stop/train station		None	I do not use bikes or scooters	I do not use bikes or scooters	I cannot afford/do not have access to a scooter		Satisfied		I am not able to walk long distances		No	Other		Wilmington	Resident of Watts		Hispanic or Latino		Male	45 - 64

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APPENDIX B

SURVEY (ENGLISH)

SURVEY ABOUT TRANSPORTATION CHOICES in WATTS and JORDAN DOWNS

Dustin Khuu is a current graduate student conducting a study to better understand your neighborhood's transportation needs in Watts and Jordan Downs. Please take 2 minutes to share your experiences getting around in the area. Your answers will help Dustin and his client, the City of Los Angeles Department of Transportation (LADOT), identify current issues concerning residents of Watts and Jordan Downs. **All responses will be completely anonymous, except for respondents who choose to be contacted to participate in a potential future focus group.** Thank you for your time! Your responses will be greatly appreciated.

For any questions, please contact Dustin at **dustinkh@ucla.edu**.

There are 2 ways to submit this survey:

1. Complete the survey questions and mail back to:

UCLA Institute of Transportation Studies
Attn: Dustin Khuu
3320 Public Affairs Building
Los Angeles, CA 90095

OR

2. Complete the survey online by going to:
www.surveymonkey.com/r/wattsmobility

Or simply scan this QR code with a smart phone camera to access the survey instantly!

SURVEY QUESTIONS

1. Have you used public transportation within the last year?
   - ☐ Yes
   - ☐ No

2. If yes, how often do you use public transportation?
   - ☐ Every day
   - ☐ A few days a week
   - ☐ Once a week or less
   - ☐ Only weekdays
   - ☐ Only weekends

3. How long does it take to walk from your house to your nearest bus stop/train station?
   - ☐ 1 - 5 minutes
   - ☐ 6 - 10 minutes
   - ☐ 11 - 20 minutes
   - ☐ 20+ minutes

4. How would you rate the experience walking to your nearest bus stop/train station?
   - ☐ Very satisfied
   - ☐ Somewhat satisfied
   - ☐ Neither satisfied nor disatisfied
   - ☐ Somewhat dissatisfied
   - ☐ Very dissatisfied
   - ☐ I do not use public transportation

5. What prevents you from taking public transportation more often? (pick 1 or most important reason)
   - ☐ Bus stop/train station is too far
   - ☐ Does not go where I need to go; or service is not good enough
   - ☐ Streets do not feel safe or comfortable
   - ☐ Other: (please provide more detail):

6. Have you ridden a bicycle or scooter in the last year?
☐ Bike ☐ Scooter ☐ Both ☐ None

7. If yes, how often do you bike or scooter?
☐ Every day
☐ A few days a week
☐ Once a week or less
☐ Only weekdays ☐ Only weekends

8. How would you rate your experience using bikes or scooters in the neighborhood streets?
☐ Very satisfied
☐ Somewhat satisfied
☐ Neither satisfied nor disatisfied
☐ Somewhat dissatisfied
☐ Very dissatisfied
☐ I do not bike or scooter

9. What is the top reason that prevents you from using a bike or scooter more often?
(pick 1 or the most important reason)
☐ Not enough bike lanes
☐ I cannot afford a bike or scooter account
☐ I am not physically able to use a bike or scooter, or I have no interest
☐ Streets do not feel safe or comfortable
☐ Other (please provide more detail):

10. How satisfied are you with the experience of walking in your neighborhood?
☐ Very satisfied
☐ Somewhat satisfied
☐ Neither satisfied nor dissatisfied
☐ Somewhat dissatisfied
☐ Very dissatisfied
☐ I do not walk to my destinations

11. What is the top reason that prevents you from walking more often?(pick 1 or the most important feature)
☐ I am not able to walk long distances
☐ I have no interest in walking to my destinations
☐ Streets do not feel safe or comfortable
☐ Other (please provide more detail:

12. Have you driven a car in the last year?
☐ Yes, my own car ☐ Yes, someone else's car
☐ No, I have not driven a car in the last year

13. If yes, which of the following statements best describes why you choose driving?
☐ It is also the most convenient way to travel
☐ I do NOT enjoy driving, but it is the most convenient way to travel
☐ I have not driven a car within the last year
☐ Other (please provide more detail:

14. What major improvements to the local streets and sidewalks would you most like to see in the neighborhood, and why? (please descibe in detail)

15. Which best describes you in the options below?
☐ Resident of Jordan Downs
☐ Resident of Watts
☐ Local employee/businessowner
☐ Student
☐ Other:

16. Would you be interested in participating in a focus group discussion to share more details about your current transportation choices? Selected participants will receive a $25 gift card and the meeting will be held in Jordan Downs in March. **If yes, please provide first name and best way to contact you:**

Demographic information
(these responses are completely optional)

17. What best describes your ethnicity? (check all that apply)
☐ White
☐ Hispanic or Latino
☐ Black or African American
☐ Asian or Pacific Islander
☐ Native American or Alaskan
☐ Mixed or Other:

18. What best describes your gender identity?
☐ Female
☐ Male
☐ Non-binary
☐ Prefer not to answer

19. What best describes your age category?
☐ Under 18
☐ 18 - 24
☐ 25 - 34
☐ 35 - 44
☐ 45 - 64
☐ 65+

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APPENDIX C

SURVEY (SPANISH)

Encuesta sobre opciones de transporto en Watts y Jordan Downs

Por favor danos sus opiniónes!

Dustin Khuu es un estudiante de posgrado en UCLA conduciendo un estudio para mejor entender las necesidades del transporte en su vecindario, Watts y Jordan Downs. Por favor tome 2 minutos para compartir su experiencia navegándose en el área. Su respuesta ayudará a Dustin y su cliente, El Departamento de Transportación de la Ciudad De Los Ángeles (LADOT), identificar problemas presentes afectando los residentes de Watts y Jordan Downs. **Todas las respuestas son completamente anónimas, con la excepción de los residentes quienes escojan ser contactados para participar en grupos de enfoque futuros.**

Si tiene cualquier pregunta, por favor contacte Dustin a **dustinkh@ucla.edu**.

Hay dos maneras de entregar esta encuesta:

1. Complete las preguntas de la encuesta y devuélvela por correo a:

UCLA Institute of Transportation Studies
Attn: Dustin Khuu
3320 Public Affairs Building
Los Angeles, CA 90095

O

2. Complete la encuesta por navegando a esta página de web:
www.surveymonkey.com/r/wattstransporto

O simplemente escanea este código QR con la cámara de su celular inteligente para obtener acceso a la encuesta instantáneamente:

PREGUNTAS

1. ¿Ha usado transportación pública en el último año?
   - ☐ Si
   - ☐ No

2. Si es Sí, ¿con qué frecuencia usa transportación pública?
   - ☐ Todos los días
   - ☐ Algunos días a la semana
   - ☐ Una vez por semana o menos
   - ☐ Solo entre semana
   - ☐ Solo los fines de semana

3. ¿Cuánto tiempo se tarda en caminar de su casa hasta la parada de autobús/estación de tren más cercana?
   - ☐ 1 - 5 minutos
   - ☐ 11 - 20 minutos
   - ☐ 6 - 10 minutos
   - ☐ 20+ minutos

4. ¿Cómo calificaría la experiencia caminando a su estación de tránsito más cercana?
   - ☐ Muy satisfecha/o
   - ☐ Algún tanto satisfecha/o
   - ☐ Ni satisfecha/o ni insatisfecha/o
   - ☐ Algún tanto insatisfecha/o
   - ☐ Muy insatisfecha/o
   - ☐ Yo no uso transportación pública

5. ¿Que le impide tomar transportación pública más seguido? (escoja una, o la razón más importante)
   - ☐ La parada de autobús/estación de tren está demasiado lejos de mi casa
   - ☐ El tránsito no va a donde necesito ir
   - ☐ El servicio es demasiado lento y viene con poca frecuencia
   - ☐ No me siento segura/o yendo y viniendo en tránsito
   - ☐ Otro (por favor de más detalle):

6. ¿Ha usado una bicicleta o scooter/escúter en el último año? (Circule todo lo que le corresponda)

- ☐ Si, bicicleta
- ☐ Ambos
- ☐ Si, scooter/escúter
- ☐ Ninguno

7. Si es Sí, ¿qué tan seguido va en bicicleta o en scooter/escúter?

- ☐ Todos los días
- ☐ Algunos días a la semana
- ☐ Una vez por semana o menos
- ☐ Solo entre semana
- ☐ Solo los fines de semana

8. ¿Cómo calificaría su experiencia usando una bicicleta o escúter/scooter en su vecindario?

- ☐ Muy satisfecha/o
- ☐ Algún tanto satisfecha/o
- ☐ Ni satisfecha/o ni insatisfecha/o
- ☐ Algún tanto insatisfecha/o
- ☐ Muy insatisfecha/o
- ☐ No uso ni bicicleta ni escúter/scooter

9. ¿Cuál es la razón principal que le previene a usted usar una bicicleta o escúter/scooter más seguido? (escoja una, o la razón más importante)

- ☐ No hay suficientes carriles de bicicleta
- ☐ Yo no tengo acceso a una bicicleta
- ☐ Yo no puedo tomar el costo de/no tengo acceso a un escúter/scooter
- ☐ No soy capaz físicamente de usar una bicicleta o un escúter/scooter
- ☐ No estoy interesada/o en usar una bicicleta o un escúter/scooter
- ☐ Las calles no se sienten seguras o cómodas
- ☐ Otra: (por favor de más detalle)

10. ¿Qué tan satisfecha/o está usted con la experiencia de caminar en su vecindario?

- ☐ Muy satisfecha/o
- ☐ Algún tanto satisfecha/o
- ☐ Ni satisfecha/o ni insatisfecha/o
- ☐ Algún tanto insatisfecha/o
- ☐ Muy insatisfecha/o
- ☐ Nunca camino en mi vecindario

11. ¿Cuál es la razón principal que le previene caminar más seguido? (escoja una, o la característica más importante)

- ☐ No hay destinos a donde pueda caminar de mi casa
- ☐ Yo no puedo caminar largas distancias
- ☐ Yo no estoy interesada/o en caminar a mis destinos
- ☐ Mi vecindario no se siente seguro o cómodo para andar de pie
- ☐ Otra: (por favor de más detalle):

12. ¿Has manejado un carro en el último año?

- ☐ Si
- ☐ No

13. Si es Sí, ¿cuál de las siguientes declaraciones mejor describen porque usted escoge manejar?

- ☐ Manejar es un modo conveniente de viajar
- ☐ Me gusta manejar
- ☐ No me gusta manejar, pero es la manera más conveniente de viajar
- ☐ Yo no he manejado un carro en el último año
- ☐ Otra: (por favor de más detalle):

14. ¿Cuáles calles principales y mejoramiento de banquetas más le gustarían ver en su vecindario, y por qué?

15. ¿Que mejor te describe en las opciones que siguen:

- ☐ Residente de Jordan Downs
- ☐ Residente de Watts
- ☐ Empleado local/dueño de negocio
- ☐ Estudiante
- ☐ Otra:

16. ¿Estaría interesada/o en participar en una discusión de grupo de enfoque para compartir más detalles del presente sobre de sus decisiones acerca del transporte? Los participantes seleccionados recibirán una tarjeta de regalo de $25 y la junta sería este marzo en Jordan Downs. **Si es Sí, por favor dé su primer nombre y la mejor manera de contactarla/o:**

Información Demográfica

(estas respuestas son completamente opcional)

17. ¿Cual mejor describe su etnicidad?

- ☐ Blanca/o
- ☐ Hispana/o o Latina/o
- ☐ Negra/o o Afroamericana/o
- ☐ Asiática/o o Isleña/o Pacifico
- ☐ Nativa/o Americana/o o de Alaska
- ☐ Mezclada/o o Otro:

18. ¿Cual mejor describe su identidad de género?

- ☐ Hembra
- ☐ Macho
- ☐ Sin binario
- ☐ Prefiero no responder

19. ¿Cual mejor describe su categoría de edad?

- ☐ Menos de 18
- ☐ 18 - 24
- ☐ 25 - 34
- ☐ 35 - 44
- ☐ 45 - 64
- ☐ +65

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APPENDIX D

WORD CLOUD LIST

Word	Times referenced	Word	Times referenced	Word	Times referenced
street	11	something	1	create	1
Wilmington	10	dangerous	1	patrol	1
potholes	9	wilimgton	1	STREET	1
streets	9	residents	1	school	1
Grape	7	certainly	1	alley	1
neighborhood	5	community	1	clean	1
Compton	5	DEDICATED	1	odors	1
sidewalks	4	restroom	1	stops	1
around	4	reliable	1	glass	1
close	4	officers	1	urine	1
many	4	homeless	1	fecal	1
Potholes	3	flooding	1	drink	1
parking	3	vehicles	1	leave	1
Street	3	together	1	front	1
signs	3	shopping	1	safer	1
bumps	3	speeding	1	guard	1
speed	3	Imperial	1	Cross	1
holes	3	presence	1	light	1
cross	3	cleaning	1	Major	1
like	3	crossing	1	along	1
need	3	straight	1	gangs	1
city	3	stopping	1	peace	1
safe	3	outdated	1	Speed	1
live	3	families	1	don’t	1
just	3	BIKELANE	1	major	1
bad	3	POTHOLES	1	scary	1
improvements	2	children	1	FIXED	1
elementary	2	repaired	1	store	1
disabled	2	visible	1	Fence	1

Alameda	2	dumping	1	leads	1
seniors	2	Illegal	1	going	1
updated	2	durable	1	times	1
Century	2	Traffic	1	Downs	1
unsafe	2	schools	1	Beach	1
people	2	Markham	1	place	1
always	2	transit	1	fixed	1
School	2	protect	1	wider	1
Avenue	2	drivers	1	Thank	1
Cracks	2	Central	1	enjoy	1
Jordan	2	general	1	zones	1
center	2	working	1	PAVED	1
police	2	getting	1	NEEDS	1
lights	2	repairs	1	small	1
matter	2	bicycle	1	130rd	1
filled	2	already	1	cans	1
watch	2	bicycle	1	foul	1
dirty	2	already	1	Need	1
Watts	2	grocery	1	free	1
needs	2	driving	1	deep	1
Place	2	phone's	1	race	1
lanes	2	complex	1	drag	1
often	2	vendors	1	well	1
think	2	airport	1	main	1
trash	2	freeway	1	King	1
rains	2	Educate	1	Blvd	1
also	2	smoking	1	take	1
walk	2	one-way	1	Dash	1
area	2	cameras	1	wish	1
road	2	improve	1	hour	1
park	2	Streets	1	able	1
Cars	2	century	1	Stop	1

Main	2	GETTING	1	duty	1
97th	2	Weigand	1	look	1
it’s	2	widened	1	done	1
much	2	walking	1	It’s	1
cars	2	station	1	town	1
near	2	inside	1	stop	1
kids	2	Excess	1	redo	1
get	2	trains	1	fill	1
Ave	2	sewage	1	hols	1
bus	2	parked	1	thru	1
far	2	single	1	fast	1
see	2	broken	1	food	1
pot	2	People	1	come	1
Watts/Willowbrook	1	Martin	1	busy	1
infrastructure	1	public	1	west	1
neighborhoods	1	Middle	1	zone	1
intersections	1	Luther	1	jobs	1
indefinitely	1	cracks	1	goes	1
development	1	alleys	1	SAFE	1
attractive	1	splash	1	High	1
maintained	1	guards	1	Blue	1
Prioritize	1	mostly	1	Line	1
burglaries	1	pickup	1	raw	1
pedestrian	1	county	1	Put	1
contacting	1	Better	1	ran	1
completely	1	cement	1	I’m	1
crosswalks	1	denied	1	hit	1
widespread	1	spaces	1	fix	1
platforms	1	senior	1	can	1
Illegally	1	create	1	BAD	1

APPENDIX E

TCC FUNDING GUIDELINES

Applicable improvements highlighted in green.

Active Transportation	
Eligible Categories	**TCC Fundable Elements**
Construction of new bike paths or lanes (Class I, Class II, or Class IV)	• **New or expanded context sensitive bike paths or lanes (Class I, Class II, or Class IV)4*** • **Non-motorized urban trails that provide safe routes for travel between residences, workplaces, commercial centers, and schools** • Bicycle carrying structures on public transit

Construction of new pedestrian facilities	• **New walkways that improve mobility/access of pedestrians***
	• **Non-capacity increasing streetscape improvements, including but not limited to:**
	  ○ **Installation of lighting**
	  ○ **Installation of signage and way-finding markers**
	  ○ **Other related amenities for pedestrians, cyclists and transit riders** **Installation of new/improved pedestrian crossings or over-crossings**
	• **Benches or "street furniture"**
	• **Street crossing enhancements including accessible pedestrian signals**
	• **Traffic calming projects, including development of:**
	  ○ **Curb extensions**
	  ○ **Roundabouts**
	  ○ **Median islands / road diets**
	  ○ **Lane narrowing projects**

Purchase of bicycles and/or purchase and installation of infrastructure in support of new or expanded bike share	• **New or expanded bike share program*** • **Publicly accessible bicycle parking** • **Bicycle repair kiosks** • Bicycle carrying structures on public transit

Transit & Rail Access	
Eligible Categories	**TCC Fundable Elements**

New or Expanded Service	• Operation of new or expanded transit service*
	• Enhanced or expanded transit service by supporting construction or implementation of:
	  ○ New or expanded bus or intercity commuter services, and urban rail projects
	  ○ New or expanded water-borne transit (ferry)
	  ○ Expanded intermodal transit facilities
	  ○ Equipment acquisition, fueling, and maintenance, and other costs to operate those services or facilities
	• Operation of alternative transportation services
	• **Capital or operational expenditures that increase transit mode share such as bus shelters/transit waiting areas and bicycle carrying structures on public transit**

Technology Conversion	• Purchase or replacement of zero-emission or low-emission vehicles* • Purchase, construction, and/or installation of infrastructure, equipment, or facilities to support zero-emission or low-emission vehicles

New Service and Technology Conversion	● Purchase of zero-emission or low-emission vehicles and equipment in support of new expanded/enhanced transit service*
Fuel or Energy Reductions	● Purchase, construction, and/or installation of solar panels for transit facilities in support of new expanded/enhanced transit service* ● Implementation of system or efficiency improvements that result in fuel reductions from existing transit services, including projects that reduce transit VMT and idling*
Increased Ridership	● **Distribution of vouchers for free or reduced transit fares*** ● Implementation of system or efficiency improvements that result in increased ridership for existing routes, including project elements that increase service levels, reliability, or decrease travel time, including:* ○ Rail, bus, and ferry integration implementation ■ Integrated ticketing/scheduling systems and related capital investments ■ Projects enabling/enhancing shared-use corridors without net air pollution increases ■ Related planning efforts focused on integrated service without requiring major capital investment ■ Other service integration initiatives ■ Bus rapid transit or rail service and other bus and ferry transit investments ■ Vanpool services operated as public transit ■ Operating agreements, schedules, and minor capital investments to increase ridership ■ Efforts to improve existing rail service effectiveness with a focus on improved operating agreements, schedules, and capital investments that increase ridership ● Purchase and construction of active transportation facilities that connect to stops/stations and encourage transit ridership*

Car Sharing & Mobility Enhancement	
Eligible Categories	**TCC Fundable Elements**
Purchase or lease of advanced vehicle technology types to be used for car sharing, vanpooling, ride-sharing and other mobility options	Advanced technologies may include but are not limited to: ● Plug-in hybrid electric vehicles* ● Battery electric vehicles* ● Fuel cell electric vehicles* ● Purchase, construction, and/or installation of infrastructure, equipment, or facilities to support advanced technology vehicles ● Electric vehicle supply equipment (EVSE) – Level 2 or Level 3 Electric bicycles – Class 1 or Class 2 ● Education about the car scrap and replacement incentives program for new or used hybrid, plug-in hybrid, or zero-emission vehicle (ZEV) replacement

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APPENDIX F

AHSC FUNDING GUIDELINES

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Applicable improvements highlighted in green.

Eligible Cost Examples	STI	TRA
Installation of new or improved walkways that improve mobility and access of pedestrians	X	
Installation of new or improved bikeways that improve mobility and access of cyclists	X	
Installation of new or improved pedestrian crossings or over-crossings	X	
Non-capacity increasing streetscape improvements, including, but not limited to the installation of lighting, signage, or other related amenities for pedestrians, cyclists and transit riders		X
Street crossing enhancements including installation of accessible pedestrian signals	X	
Traffic calming projects including development of curb extensions, roundabouts, median islands, "road diets," lane narrowing projects	X	
Signage and way-finding markers		X
Installation of traffic control devices to improve safety of pedestrians and bicyclists	X	
Street furniture (e.g. benches, shade structures, etc.)		X
Bicycle repair kiosks		X
Publicly accessible bicycle parking		X
Bike sharing infrastructure and fleet	X	
Bicycle carrying structures on public transit		X
Development of a dedicated bus lanes as part of a BRT project	X	
Development and/or improvement of transit facilities or stations	X	X
Transit related equipment to increase service or reliability	X	
Transit Signal Priority technology systems	X	
Real-time arrival/departure information systems		X
Installation of at-grade boarding infrastructure	X	
Development or improvement of shelters or waiting areas at transit station/stops		X
Transit ticket machine purchase or improvements		X
Transit passenger amenities - e.g. Wi-Fi access		X
Transit Vehicle Procurement for service expansion	X	
Station area signage		X
Energy Efficiency and Renewable Energy	X	X
Water Efficiency	X	X
Urban Greening	X	X

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APPENDIX G

ADT REPORTS

City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South WILMINGTON AV

East/West 102ND ST

Day: FRIDAY Date: May 9, 2008 Weather: SUNNY

Hours: 7-10AM 2-5PM Chekrs: LEE

School Day: YES District: SOUTHERN I/S CODE 2394

	N/B	S/B	E/B	W/B
DUAL-WHEELED	92	38	0	5
BIKES	7	2	0	4
BUSES	0	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	227	7.45	124	7.30	0	7.00	35	7.45
PM PK 15 MIN	194	4.30	105	2.45	0	2.00	25	2.45
AM PK HOUR	668	7.30	423	7.00	0	7.00	103	7.15
PM PK HOUR	699	4.00	359	2.15	0	2.00	65	2.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	534	114	648
8-9	0	444	48	492
9-10	0	397	16	413
2-3	0	535	46	581
3-4	0	599	22	621
4-5	0	669	30	699
TOTAL	0	3178	276	3454

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	33	390	0	423
8-9	25	220	0	245
9-10	9	181	0	190
2-3	34	316	0	350
3-4	18	309	0	327
4-5	11	320	0	331
TOTAL	130	1736	0	1866

TOTAL

N-S
1071
737
603
931
948
1030
5320

XING S/L

Ped	Sch
8	11
12	3
5	2
6	0
7	10
17	2
55	28

XING N/L

Ped	Sch
5	2
4	2
1	0
11	3
0	4
19	2
40	13

EASTBOUND Approach — **NONE**

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
2-3	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach — **102ND ST**

Hours	Lt	Th	Rt	Total
7-8	64	0	27	91
8-9	40	0	17	57
9-10	16	0	9	25
2-3	36	0	18	54
3-4	24	0	14	38
4-5	14	0	10	24
TOTAL	194	0	95	289

TOTAL

E-W
91
57
25
54
38
24
289

XING W/L

Ped	Sch
0	0
0	0
0	0
0	0
0	0
0	0
0	0

XING E/L

Ped	Sch
44	49
24	11
22	6
33	13
11	19
13	3
147	101

(Rev Oct 06)

City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Bet Grandee Ave & Compton Ave

East/West E 103rd St

Day: Thursday Date: 09/20/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	0	30	63
BIKES	0	13	27	37
BUSES	0	0	40	53

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	5	7.45	31	9.30	154	7.45	202	7.45
PM PK 15 MIN	10	17.00	54	16.15	183	17.15	135	15.30
AM PK HOUR	15	7.45	100	8.45	477	7.15	679	7.15
PM PK HOUR	26	17.00	195	16.15	683	17.00	500	15.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	2	1	3	6
8-9	2	6	5	13
9-10	4	3	5	12
15-16	6	5	12	23
16-17	4	4	14	22
17-18	4	4	18	26
TOTAL	22	23	57	102

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	4	3	43	50
8-9	11	5	74	90
9-10	13	2	77	92
15-16	21	3	123	147
16-17	19	2	155	176
17-18	23	1	146	170
TOTAL	91	16	618	725

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
56	22	27	14	13
103	26	9	16	5
104	28	4	11	1
170	36	22	35	13
198	21	23	25	5
196	27	4	22	6
827	160	89	123	43

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	31	394	4	429
8-9	81	262	12	355
9-10	69	236	9	314
15-16	128	415	9	552
16-17	148	488	5	641
17-18	145	535	3	683
TOTAL	602	2330	42	2974

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	7	606	26	639
8-9	19	420	42	481
9-10	5	356	69	430
15-16	9	414	77	500
16-17	2	402	86	490
17-18	1	359	60	420
TOTAL	43	2557	360	2960

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1068	2	0	5	1
836	0	2	20	0
744	0	1	25	6
1052	0	0	15	4
1131	0	0	21	6
1103	2	1	9	1
5934	4	4	95	18

24 Hours Traffic Volume

City of Los Angeles

Department of Transportation

Counter	KENT/LAVEDIA
Date	01/31/13
Start Time	12 AM

Location	**CENTURY BL AT COMPTON AV**	**Day of Week**	THURSDAY	**Prepared**	02/01/13
Direction	E/W STREET	**DOT District**	CENTRAL	**By**	LW
Serial Number	RD23084 D	**Weather**	CLEAR		

	NORTHBOUND or WESTBOUND					SOUTHBOUND or EASTBOUND					
Time	1ST QTR	2ND QTR	3RD QTR	4TH QTR	HOUR TOTAL	1ST QTR	2ND QTR	3RD QTR	4TH QTR	HOUR TOTAL	**TOTAL**
12 AM	9	14	18	9	50	16	5	12	3	36	86
1 AM	12	16	7	6	41	5	4	4	5	18	59
2 AM	4	8	2	9	23	4	4	3	1	12	35
3 AM	3	5	6	5	19	6	6	3	5	20	39
4 AM	1	5	6	4	16	8	6	11	13	38	54
5 AM	6	9	11	19	45	6	15	27	17	65	110
6 AM	19	21	37	47	124	35	48	62	66	211	335
7 AM	66	78	112	117	373	88	115	106	135	444	817
8 AM	70	68	59	64	261	108	59	63	65	295	556
9 AM	65	59	73	61	258	57	56	44	26	183	441
10 AM	61	64	59	52	236	26	64	55	48	193	429
11 AM	79	63	73	77	292	51	64	68	57	240	532
12 NN	77	57	78	72	284	69	57	62	70	258	542
1 PM	82	76	73	71	302	45	54	74	61	234	536
2 PM	70	82	94	103	349	73	73	81	89	316	665
3 PM	108	119	106	126	459	84	84	71	69	308	767
4 PM	117	113	106	116	452	74	87	67	91	319	771
5 PM	125	120	136	149	530	86	74	95	94	349	879
6 PM	139	125	112	112	488	90	93	81	61	325	813
7 PM	100	104	76	59	339	67	57	41	60	225	564
8 PM	48	65	55	46	214	41	47	49	48	185	399
9 PM	51	51	46	47	195	44	53	26	34	157	352
10 PM	40	26	25	21	112	27	23	23	16	89	201
11 PM	19	29	10	19	77	16	16	17	9	58	135

FIRST 12-HOURS PEAK QUARTER COUNT	**117**	7 AM	4TH	**135**	7 AM	4TH
LAST 12-HOURS PEAK QUARTER COUNT	**149**	5 PM	4TH	**95**	5 PM	3RD
24 HOUR VEHICLES TOTAL		5,539			4,578	**10,117**
TOTAL VEHICLES STANDARD DEVIATION (STD)	[+,-]	158.65		[+,-]	122.07	274.91

PEAK HOURS VOLUME

	NORTH or WEST BOUND		SOUTH or EAST BOUND		BOTH DIRECTIONS	
	PEAK HOUR	VEHICLE VOLUME	PEAK HOUR	VEHICLE VOLUME	PEAK HOUR	VEHICLE VOLUME
First 12H Peak	7 AM	373	7 AM	444	7 AM	**817**
Last 12H Peak	5 PM	530	5 PM	349	5 PM	**879**
First 12H Peak STD	[+,-]	124.43	[+,-]	131.71	[+,-]	252.04
Last 12H Peak STD	[+,-]	141.70	[+,-]	92.15	[+,-]	231.48

Prepared by NDS/ATD

VOLUME

Compton Ave & 99th St

Day: Tuesday
Date: 5/2/2017

City: Los Angeles
Project #: CA17_5244_138

DAILY TOTALS	NB	SB	EB	WB	Total
	7,881	6,391	224	173	14,669

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	18		20		0		1		39		12:00	109		82		6		2		199	
00:15	19		16		0		0		35		12:15	109		83		3		4		199	
00:30	19		12		0		1		32		12:30	100		83		3		2		188	
00:45	19	75	7	55	1	1	0	2	27	133	12:45	118	436	86	334	4	16	4	12	212	798
01:00	14		13		1		0		28		13:00	118		97		1		2		218	
01:15	19		8		0		0		27		13:15	124		79		2		5		210	
01:30	11		7		1		0		19		13:30	111		112		3		5		231	
01:45	11	55	8	36	0	2	0		19	93	13:45	97	450	93	381	3	9	2	14	195	854
02:00	10		5		1		0		16		14:00	117		94		1		4		216	
02:15	9		8		0		0		17		14:15	114		97		1		1		213	
02:30	6		4		2		0		12		14:30	130		103		4		3		240	
02:45	11	36	4	21	0	3	1	1	16	61	14:45	144	505	145	439	6	12	5	13	300	969
03:00	10		7		0		0		17		15:00	152		100		4		2		258	
03:15	15		8		0		0		23		15:15	130		113		6		2		251	
03:30	5		6		0		0		11		15:30	104		81		4		5		194	
03:45	3	33	10	31	0		0		13	64	15:45	136	522	129	423	4	18	3	12	272	975
04:00	10		8		0		0		18		16:00	147		90		1		3		241	
04:15	12		11		0		1		24		16:15	170		96		5		4		275	
04:30	18		23		0		0		41		16:30	166		124		4		4		298	
04:45	17	57	19	61	0		0	1	36	119	16:45	136	619	116	426	8	18	2	13	262	1076
05:00	20		21		0		0		41		17:00	143		107		5		1		256	
05:15	28		40		0		1		69		17:15	140		108		7		6		261	
05:30	28		47		0		1		76		17:30	149		97		5		2		253	
05:45	33	109	50	158	1	1	0	2	84	270	17:45	126	558	101	413	2	19	1	10	230	1000
06:00	41		36		1		0		78		18:00	165		104		4		1		274	
06:15	73		69		0		1		143		18:15	140		101		8		5		254	
06:30	89		62		0		2		153		18:30	133		102		5		1		241	
06:45	92	295	72	239	1	2	0	3	165	539	18:45	117	555	117	424	4	21	2	9	240	1009
07:00	132		74		2		1		209		19:00	108		111		1		4		224	
07:15	129		110		1		3		243		19:15	93		106		3		3		205	
07:30	158		117		6		1		282		19:30	109		79		1		3		192	
07:45	173	592	140	441	7	16	5	10	325	1059	19:45	104	414	87	383	5	10	2	12	198	819
08:00	145		131		7		1		284		20:00	116		94		1		0		211	
08:15	141		96		2		3		242		20:15	91		72		4		3		170	
08:30	109		85		7		3		204		20:30	89		70		2		3		164	
08:45	96	491	90	402	3	19	2	9	191	921	20:45	89	385	74	310	1	8	5	11	169	714
09:00	99		73		1		1		174		21:00	82		69		3		3		157	
09:15	75		85		2		1		163		21:15	79		64		4		1		148	
09:30	100		73		2		3		178		21:30	77		53		1		3		134	
09:45	83	357	70	301	2	7	5	10	160	675	21:45	61	299	63	249	2	10	2	9	128	567
10:00	97		77		2		2		178		22:00	58		38		2		1		99	
10:15	75		81		2		3		161		22:15	45		45		3		1		94	
10:30	104		81		3		3		191		22:30	50		41		2		0		93	
10:45	76	352	75	314	3	10	1	9	155	685	22:45	34	187	34	158	2	9	1	3	71	357
11:00	110		79		5		1		195		23:00	36		22		0		0		58	
11:15	99		78		3		2		182		23:15	34		24		0		0		58	
11:30	90		79		4		1		174		23:30	26		20		0		1		47	
11:45	78	377	75	311	1	13	3	7	157	708	23:45	26	122	15	81	0		0	1	41	204
TOTALS		2829		2370		74		54		5327	TOTALS		5052		4021		150		119		9342
SPLIT %		53.1%		44.5%		1.4%		1.0%		36.3%	SPLIT %		54.1%		43.0%		1.6%		1.3%		63.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	7,881	6,391	224	173	14,669

AM Peak Hour	07:30	07:15	07:45	09:30	07:15	PM Peak Hour	15:45	14:30	16:45	12:45	16:15
AM Pk Volume	617	498	23	13	1134	PM Pk Volume	619	461	25	16	1091
Pk Hr Factor	0.892	0.889	0.821	0.650	0.872	Pk Hr Factor	0.910	0.795	0.781	0.800	0.915
7 - 9 Volume	1083	843	35	19	1980	4 - 6 Volume	1177	839	37	23	2076
7 - 9 Peak Hour	07:30	07:15	07:45	07:45	07:15	4 - 6 Peak Hour	16:00	16:30	16:45	16:00	16:15
7 - 9 Pk Volume	617	498	23	12	1134	4 - 6 Pk Volume	619	455	25	13	1091
Pk Hr Factor	0.892	0.889	0.821	0.600	0.872	Pk Hr Factor	0.910	0.917	0.781	0.813	0.915

24 Hours Traffic Volume

City of Los Angeles

Department of Transportation

Counter	HUGO/LAVEDIA
Date	03/01/12
Start Time	12 AM

Location	**CENTRAL AV AT 112 th ST**	**Day of Week**	THURSDAY	**Prepared**	03/12/12
Direction	N/S STREET	**DOT District**	CENTRAL	**By**	AMS
Serial Number	RD97574 D	**Weather**	CLEAR		

	NORTHBOUND or WESTBOUND					SOUTHBOUND or EASTBOUND					
Time	1ST QTR	2ND QTR	3RD QTR	4TH QTR	HOUR TOTAL	1ST QTR	2ND QTR	3RD QTR	4TH QTR	HOUR TOTAL	**TOTAL**
12 AM	58	51	40	44	193	36	35	31	32	134	327
1 AM	32	49	41	30	152	42	35	27	26	130	282
2 AM	50	34	25	36	145	22	26	36	19	103	248
3 AM	29	33	39	25	126	23	34	35	27	119	245
4 AM	25	34	40	42	141	32	51	62	66	211	352
5 AM	68	64	72	97	301	72	98	160	136	466	767
6 AM	113	183	223	228	747	150	180	236	205	771	1518
7 AM	335	415	407	363	1520	234	288	307	311	1140	2660
8 AM	343	304	284	241	1172	237	260	208	211	916	2088
9 AM	261	219	248	198	926	183	177	238	200	798	1724
10 AM	198	215	211	229	853	200	176	219	210	805	1658
11 AM	244	223	229	250	946	205	183	217	211	816	1762
12 NN	219	235	265	230	949	247	238	220	239	944	1893
1 PM	265	257	234	248	1004	262	224	225	229	940	1944
2 PM	282	285	280	293	1140	222	261	277	307	1067	2207
3 PM	321	326	311	342	1300	300	302	283	300	1185	2485
4 PM	326	290	322	299	1237	301	282	309	299	1191	2428
5 PM	328	342	318	295	1283	303	284	288	298	1173	2456
6 PM	343	311	262	308	1224	291	275	215	240	1021	2245
7 PM	296	272	274	194	1036	240	226	165	167	798	1834
8 PM	237	231	211	202	881	157	173	175	123	628	1509
9 PM	166	193	172	138	669	147	148	118	92	505	1174
10 PM	133	130	153	105	521	99	110	80	65	354	875
11 PM	81	72	94	61	308	79	71	52	51	253	561

FIRST 12-HOURS PEAK QUARTER COUNT	**415**	7 AM	2ND		**311**	7 AM	4TH	
LAST 12-HOURS PEAK QUARTER COUNT	**343**	6 PM	1ST		**309**	4 PM	3RD	
24 HOUR VEHICLES TOTAL		18,774				16,468	**35,242**	
TOTAL VEHICLES STANDARD DEVIATION (STD)	[+,-]	432.04			[+,-]	372.78	798.72	

PEAK HOURS VOLUME

	NORTH or WEST BOUND		SOUTH or EAST BOUND		BOTH DIRECTIONS	
	PEAK HOUR	VEHICLE VOLUME	PEAK HOUR	VEHICLE VOLUME	PEAK HOUR	VEHICLE VOLUME
First 12H Peak	7 AM	1,520	7 AM	1,140	7 AM	**2,660**
Last 12H Peak	3 PM	1,300	4 PM	1,191	3 PM	**2,485**
First 12H Peak STD		[+,-] 463.98		[+,-] 363.11	[+,-]	821.68
Last 12H Peak STD		[+,-] 304.86		[+,-] 315.95	[+,-]	616.13

Prepared by NDS/ATD

VOLUME

Grandee Ave & Imperial Hwy

Day: Thursday
Date: 10/26/2017

City: Los Angeles
Project #: CA17_5705_036

DAILY TOTALS	NB	SB	EB	WB	Total
	0	749	16,755	18,195	35,699

AM Period	NB	SB		EB		WB		TOTAL		PM Period	NB	SB		EB		WB		TOTAL	
00:00	0	1		51		57		109		12:00	0	7		172		219		398	
00:15	0	3		33		52		88		12:15	0	8		184		169		361	
00:30	0	2		29		42		73		12:30	0	13		207		202		422	
00:45	0	1	7	29	142	29	180	59	329	12:45	0	13	41	170	733	228	818	411	1592
01:00	0	2		24		28		54		13:00	0	11		176		212		399	
01:15	0	1		29		35		65		13:15	0	7		177		204		388	
01:30	0	2		22		37		61		13:30	0	14		195		216		425	
01:45	0	4	9	19	94	40	140	63	243	13:45	0	11	43	183	731	219	851	413	1625
02:00	0	2		15		28		45		14:00	0	16		245		205		466	
02:15	0	2		21		19		42		14:15	0	15		246		231		492	
02:30	0	1		17		24		42		14:30	0	10		326		242		578	
02:45	0	0	5	22	75	23	94	45	174	14:45	0	14	55	366	1183	283	961	663	2199
03:00	0	1		22		17		40		15:00	0	14		341		217		572	
03:15	0	1		19		26		46		15:15	0	7		377		269		653	
03:30	0	1		28		26		55		15:30	0	8		393		274		675	
03:45	0	5	8	30	99	27	96	62	203	15:45	0	15	44	402	1513	299	1059	716	2616
04:00	0	3		31		22		56		16:00	0	11		407		259		677	
04:15	0	5		38		27		70		16:15	0	14		433		283		730	
04:30	0	5		59		53		117		16:30	0	13		408		267		688	
04:45	0	7	20	51	179	53	155	111	354	16:45	0	8	46	406	1654	280	1089	694	2789
05:00	0	10		69		57		136		17:00	0	15		401		255		671	
05:15	0	12		74		97		183		17:15	0	15		428		282		725	
05:30	0	9		98		188		295		17:30	0	9		417		284		710	
05:45	0	8	39	95	336	230	572	333	947	17:45	0	13	52	452	1698	265	1086	730	2836
06:00	0	4		116		241		361		18:00	0	12		411		240		663	
06:15	0	13		122		324		459		18:15	0	9		405		268		682	
06:30	0	12		128		376		516		18:30	0	8		390		246		644	
06:45	0	17	46	171	537	416	1357	604	1940	18:45	0	7	36	368	1574	253	1007	628	2617
07:00	0	20		170		352		542		19:00	0	10		330		234		574	
07:15	0	25		241		420		686		19:15	0	3		296		227		526	
07:30	0	27		257		414		698		19:30	0	3		285		192		480	
07:45	0	13	85	279	947	396	1582	688	2614	19:45	0	4	20	209	1120	230	883	443	2023
08:00	0	16		265		421		702		20:00	0	5		177		183		365	
08:15	0	9		216		356		581		20:15	0	6		137		162		305	
08:30	0	10		171		359		540		20:30	0	3		141		173		317	
08:45	0	5	40	158	810	359	1495	522	2345	20:45	0	6	20	108	563	150	668	264	1251
09:00	0	7		148		275		430		21:00	0	5		121		158		284	
09:15	0	7		144		275		426		21:15	0	4		111		216		331	
09:30	0	10		143		237		390		21:30	0	9		105		211		325	
09:45	0	6	30	135	570	195	982	336	1582	21:45	0	4	22	84	421	184	769	272	1212
10:00	0	6		153		192		351		22:00	0	4		95		133		232	
10:15	0	3		148		193		344		22:15	0	3		70		125		198	
10:30	0	10		162		180		352		22:30	0	4		90		114		208	
10:45	0	6	25	164	627	205	770	375	1422	22:45	0	2	13	57	312	91	463	150	788
11:00	0	10		174		218		402		23:00	0	1		56		68		125	
11:15	0	12		118		221		351		23:15	0	1		52		75		128	
11:30	0	11		175		211		397		23:30	0	0		57		74		131	
11:45	0	6	39	170	637	178	828	354	1504	23:45	0	2	4	35	200	73	290	110	494
TOTALS			353		5053		8251		**13657**	**TOTALS**			396		11702		9944		**22042**
SPLIT %			2.6%		37.0%		60.4%		**38.3%**	**SPLIT %**			1.8%		53.1%		45.1%		**61.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	749	16,755	18,195	35,699

AM Peak Hour		06:45	07:15	07:15	**07:15**	**PM Peak Hour**		13:30	17:15	15:30	**17:00**
AM Pk Volume		89	1042	1651	**2774**	**PM Pk Volume**		56	1708	1115	**2836**
Pk Hr Factor		0.824	0.934	0.980	**0.988**	**Pk Hr Factor**		0.875	0.945	0.932	**0.971**
7 - 9 Volume	0	125	1757	3077	**4959**	**4 - 6 Volume**	0	98	3352	2175	**5625**
7 - 9 Peak Hour		07:00	07:15	07:15	**07:15**	**4 - 6 Peak Hour**		17:00	17:00	16:45	**17:00**
7 - 9 Pk Volume	0	85	1042	1651	**2774**	**4 - 6 Pk Volume**	0	52	1698	1101	**2836**
Pk Hr Factor	0.000	0.787	0.934	0.980	**0.988**	**Pk Hr Factor**	0.000	0.867	0.939	0.969	**0.971**

2019

DUSTIN KHUU

UCLA Luskin School of Public Affairs
Master of Urban and Regional Planning, 2019

Email
dustinkh@ucla.edu