



Board Report

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EXECUTIVE MANAGEMENT COMMITTEE SEPTEMBER 19, 2019

SUBJECT: UNDERSTANDING HOW WOMEN TRAVEL

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE status report on How Women Travel Study (Attachment B).

ISSUE

Although women comprise over half of all transit ridership in Los Angeles County, their mobility needs, concerns, and preferences have not been critically accounted for in the way our transportation systems are planned. In seeking to understand how women travel, Metro is taking an important first step towards easing the disproportionate efforts women put in to making the transportation system work for them by identifying mobility barriers and challenges women face.

BACKGROUND

Metro's Women and Girls Governing Council found that Metro either does not collect or when collected, does not disaggregate its data by gender to understand the unique travel patterns and preferences of women. Metro has limited information on how women travel, which limits the consideration of women's unique needs during planning, design, and operation of our system. Historically, transportation planning is seen as gender neutral, it equally benefits both men and women and that there are no significant differences between mobility needs and patterns. In reality, women experience mobility differently.

The purpose of gathering & analyzing gender-disaggregated data (separating data by gender) is to have access to Metro/Los Angeles County-specific research and data that really reflects how women travel to make informed decisions and ensure that applicable departments at Metro are utilizing gender specific data to implement service changes and improvements. This study explored the experiences of women traveling by Metro through an analysis of existing data sources, such as on-board surveys, and innovative new data sources.

DISCUSSION

The core finding of all existing evidence is that women are responsible for a disproportionate share of the household's transportation burden while at the same time having more limited access to available means of transportation. According to a number of studies, gender differences in travel patterns are mainly accounted for by the division of roles in the labor market and in the family, which affects women's employment conditions, income levels and mobility needs. Many studies have shown that, in addition to the persistent gender wage gap, women pay more for goods and services than men. Transportation is no different. The "pink tax" does not only apply to the added cost of finding safe means of travel at night, it includes all the ways that women put in extra time and effort to make transportation work for them.

The findings from Understanding How Women Travel about women's mode choices, how likely they are to travel with others in their care, and their complex trip-chaining patterns could all inform adjustments to Metro's fare policy to make it more equitable towards women and more cost-competitive with driving and carpooling. The findings about women's trip purposes and primary responsibility for household errands could all inform the way transit vehicles, transit stations, and bus stops are designed, so that space for traveling with others and carrying bags and other belongings could be better accommodated. Findings about when women are traveling, and average trip lengths could inform new service offerings that meet a mid-day peak travel demand and provide better direct connections over long distances while minimizing transfers.

Study Methods

A comprehensive and creative approach was required to understand how and why women travel in Los Angeles County. Framed by core social justice principles and methods, the project team used both conventional and innovative data collection methods that effectively captured "hard-to-reach" populations and embodied the project's intersectional approach to gender.

Conventional methods that provide quantitative findings about women's travel behavior included:

- Analysis of nine **existing data sources** from Metro and the National Household Travel Survey revealed gendered preferences and trends in travel behavior and transit ridership
- Understanding **How Women Travel survey** completed by 2,600 respondents, oversampling women and transit riders
- Three **focus groups** allowed for open conversation around sensitive topics and added nuance to our understanding of gender differences in travel

Innovative methods that offer qualitative findings about the experience of women traveling by Metro included:

- Over 100 hours of **participant observations** on 19 Metro routes provide insight into how women are using Metro's services
- Three **participatory workshops** creatively engaged the most loyal - and most vulnerable-core Metro riders: women with disabilities, women experiencing homelessness, and women who are immigrants
- Three **pop-up engagements** at key metro rail stations expanded our data collection to catch every-day riders, in the process of using Metro's services, to hear what makes their ride easy

or difficult

Study Highlights

Overall Travel Behavior Trends - Exploring women's overall travel patterns on all modes allows Metro to have a better understanding of women's trip-making patterns. By looking at the travel choices women are making outside the Metro system, Metro can better understand existing gaps in service and increase the attractiveness of transit as an option by aiming to serve the primary travel preferences and patterns exhibited by women regardless of mode.

- Across all modes, more women are making many trips (7 or more) per day than men and more women than men are not making any trips per day. This means women may experience more exposure to travel burdens (cost, stress, or safety risks), or may be more likely to be isolated or disconnected from the opportunities that travel affords.
- Women in Los Angeles also make shorter trips than men, which is potentially driven by workforce participation rates, location of employment opportunities, and taking household-serving trips that tend to be more localized.
- Women are more likely to live in a car-free or car-light household.
- Women in Los Angeles make shorter trips than men, women's trips have more varied destinations and are more likely to serve the needs of someone else.
- Women are more likely to trip chain or make more stops along the way and have an additional travel peak at around 2pm in addition to the morning and evening peaks.

Overall Transit Travel Behavior Trends - Metro has an opportunity to improve services for women already riding the system. Currently, more than half of all bus and rail riders are women. The burdens (time and financial) and safety risks of transit travel, as well as the benefits of transit travel, are more pronounced for women, as they make up the majority of Metro's customers and as they ride transit frequently.

- Women account for a larger share of Metro bus and rail ridership now than they did in 2010, while male ridership has decreased.
- Almost 90% of all female riders who use the system, ride more than three days per week.
- 57% of women bring their children on transit.
- Women ride transit because they do not have a car, because they want to avoid traffic, or because they do not have a license. Two of these three reasons indicate that women who ride transit do so because they have fewer transportation options and may have less access to economic opportunities as a result.

- Women in Los Angeles are also more likely than men to travel mid-day, with a travel peak around 2 PM when transit service may be reduced.
- Women are more likely than men to use TNCs for trips that transit does not serve.
- Women are more likely than men to take short transit trips, with trips under 10 miles accounting for 74% of women's transit travel and 67% of men's.

These travel behavior findings point towards many opportunities to adjust the services provided by Metro to better meet the travel needs expressed by those who are using transit.

Safety - Women feel unsafe on public transit, and it is impacting how often they ride, when they ride, and if they ride at all. Among women, safety on transit is a top concern voiced across every mode of data collection, and their concerns center around harassment and personal security, as well as physical safety and design of vehicles, stations, and stops.

- Based on the How Women Travel survey, the top reason that women find it difficult to ride transit is they do not feel it is safe. While 60% of female riders who participated in the survey feel safe riding Metro during the day, that number plummets to just 20% at night. Safety perceptions for waiting and walking to the stop or station were even lower.
- Two-thirds of female riders believe there are too few transit police on board the system; however, in our conversations during focus groups, workshops, and pop-up events, it was clear that riders have a more complex view of security staffing. Some felt that police were slow to react or ineffective when issues did arise, while others felt that police were too aggressive or too quick to brandish weapons.
- 1/4 of women bus riders and 1/3 of women rail riders report experiencing sexual harassment in the past six months.
- When asked what would make them feel safer on Metro, both current and previous riders cited "lighting" and "other people nearby."

Studies have shown that transit agencies should adopt a "whole journey" approach to improve safety on transit focusing on the safety measures for riders walking to and from a bus/station stop, park and rides, bus stop locations, waiting for and riding the bus/trains. The fear of being victimized influences women's transit behavior. Over and over, participants in the workshops and pop-ups pointed to problems that could be solved by a deeper investment in lighting, more human solutions rather than technological solutions (people vs. CCTV), more frequent service to produce shorter wait times, and other solutions at stops and stations. Participants in the study asked for additional amenities, such as lighting at stops and along pedestrian access routes, and more frequent service that would shorten long wait times at dark bus stops.

Access - Access concerns voiced by women include physical design of transit spaces, physical design of sidewalks and roads used to get to transit stops or stations, financial ability to pay for transit trips for themselves and those in their care, the challenges of traveling with children, and the travel needs of women with disabilities.

- Low-income women in Los Angeles carry a disproportionate financial burden when it comes to travel. For women in poverty, transit fares comprise a greater share of disposable income than for those who have higher household incomes.
 - They are less likely to have the upfront cost of a monthly pass on hand.
 - They are more price sensitive to the cost of a single transit trip, so are less likely to buy a monthly pass unless they are certain it will be financially beneficial
- 37% of current female bus riders and 23% of current female rail riders received a discount on their fare.
- The physical design of vehicle and stop/station spaces also create access challenges for women. Women were observed in our study traveling with bags, carts, and strollers. Negotiating the space on transit vehicles and at stops and stations appeared to be a challenge.
- Only 20% of female riders with children say that taking their kids on transit is easy.
- From women with disabilities, we heard that Access Services is a critical resource, but operates in a way that devalues women's time - hours could be expended on a single trip for a single purpose.

Reliability - For women in Los Angeles who rely on Metro to get to work, go to doctor's appointments, and pick kids up from school, reliable transit service is a lifeline. When headways are long, and real time information is unreliable, women's safety concerns are amplified and women who have the financial ability to switch to a different mode, such as ridehailing, do so. Others who do not have that luxury simply endure the exposure and stress of added wait times.

- The top three complaints filed by Metro bus riders to our customer care centers are all related to reliability: pass-ups, no-shows and late buses.
- Most of the women who participated in participatory design workshops expressed frustration with late buses, expressing that they could not depend on the transit system to get them to where they needed to go on time. When a bus is late and they miss transfers, long-distance trips become even lengthier.

Women's top requested improvements are: direct service, expanded bus priority lanes, and buses at least every 15 minutes.

For women who rely on transit, an unreliable system has real consequences. A late train can mean daycare fines, a pass-up can mean a missed medical appointment, and infrequent early morning or late night service can limit employment opportunities.

Convenience & Comfort - Comfort and convenience are important considerations in order to build a system that women want to use, enjoy using, and would continue using even as they have other options available to them. Reliability issues render the system usable or not; comfort and convenience issues render the system pleasant or not.

- Fewer than 40% of female riders surveyed for this study feel that transit is comfortable or that transit vehicles have the space they need for their belongings.
- 44% - of women's transit trips are longer than an hour.
- Over half of women who were bus riders but stopped riding said their top reason for not riding was because it took too long/was too slow.
- Fewer than 40% of female riders feel that transit is comfortable or that transit vehicles have the space they need.
- Half of female riders who responded to our survey described Metro operators as courteous, and less than one-third felt that other riders were courteous.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Recommendation supports strategic plan goal #2. Goal 2 is to deliver outstanding trip experiences for all users of the transportation system.

NEXT STEPS

This report is the first step in Metro's process to better understand and better serve the needs and preferences of female riders. The research and findings from this report can serve as baseline data to inform the development of a gender action plan. A gender action plan's objective is to ensure that policy, programs and activities include a gender perspective and to promote the considerations of gender issues at all levels. Based on the findings from the study, recommended areas of action include safety, fare policy, vehicle, station and stop design and services provided by time of day. Development of a Gender Action Plan would help to articulate the immediate opportunities and long-term goals that would create a system that better serves women. Staff will work with appropriate departments to explore feasibility of next steps included in the report. Staff will be presenting study findings at industry conferences.

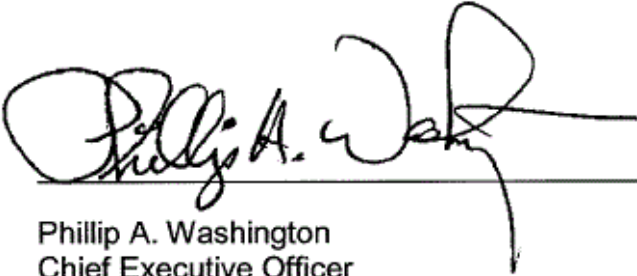
ATTACHMENTS

Attachment A - Understanding How Women Travel Report Executive Summary

Attachment B- Understanding How Women Travel Links

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UNDERSTANDING HOW WOMEN TRAVEL

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Metro



EXECUTIVE SUMMARY

Why study women's travel?

Mobility – or one's ability to get around – shapes the opportunities we can reach, and the way we interact in and with our communities. Although women comprise over half of all transit ridership in Los Angeles County, their mobility needs, concerns, and preferences have not been critically accounted for in the way our transportation systems are planned. As a result, women tend to bear outsized burdens and risks in the course of their daily travel.


Despite these conditions, women continue to make their way through a mobility environment that has not been designed with them in mind, navigating the transportation networks to get to school, to work, to run errands for and with their families. Many studies have shown that, in addition to the persistent gender wage gap, women pay more for goods and services than men. Transportation is no different. The “pink tax” does not only apply to the added cost of finding safe means of travel at night: it includes all the ways that women put in extra time and effort to make transportation work for them.

In seeking to understand how women travel, Metro is taking an important first step towards easing the disproportionate efforts women put in to making the transportation system work for them.

What is this study?

Understanding How Women Travel is an effort to understand the unique and diverse mobility needs of women in LA County. For the first time in Metro's history, this study explored the experiences of women traveling by Metro through an analysis of existing data sources, such as on-board surveys, and innovative new data sources, such as ethnography in buses and trains.

Initiated by Metro's Women and Girls Governing Council and endorsed by Metro CEO Phil Washington, *Understanding How Women Travel* will form the foundation on which Metro can develop a Gender Action Plan for the future.

The background of the page is a photograph of the interior of a public transit vehicle, such as a bus or train. The perspective is from the side of the aisle, looking down the length of the vehicle. Several passengers are visible, some sitting on seats and others standing. A man in a plaid shirt is standing in the middle ground, holding onto a vertical pole. The lighting is somewhat dim, with overhead lights providing illumination. The overall tone is muted and documentary.

“ The gender data gap isn’t just about silence. These silences, these gaps, have consequences. They impact women’s lives every day.”

CAROLINE CRIADO-PEREZ, INVISIBLE WOMEN



Photo source: Metro

Study Background

In an initiative led by Metro’s Women and Girls Governing Council, CEO Phil Washington adopted several gender-specific equity initiatives in 2018 to improve women and girls’ experiences on Metro.

Metro collects and analyzes many different datasets to inform a variety of planning and operations decisions. Some data, such as the On-Board Survey, includes gender information. Other Metro data, such as ridership counts, do not. Even in cases where gender information is collected, the agency has never disaggregated its data analysis by gender to understand the unique travel patterns and preferences of women. Despite the known gender disparities in travel behaviors, the data and analysis that inform the most important transportation planning decisions at Metro remain gender neutral. The Women and Girls Governing Council identified this gap in Metro’s work and recommended the development of this study.

This groundbreaking study is a broad, intersectional effort to identify mobility barriers and challenges that women face. This study analyzes existing data sets and activates five primary data collection methodologies to fill gaps in the existing quantitative data sets and to connect with core transit rider groups that may be difficult to reach through conventional methods. *Understanding How Women Travel* provides a foundation of knowledge upon which Metro can actively work toward enhancing the quality of the travel experience for women in LA County.

This study builds on several recent and ongoing efforts both to expand and improve Metro services and help ensure equitable outcomes for LA County

residents. These efforts include the massive infrastructure expansions planned with Measure M (and Measure R) funds and participation with County transit operators in the Ridership Growth Action Plan that will feed into the NextGen Bus Restructuring study currently underway. At the same time, Metro has taken strides to be a better neighbor for the County’s most vulnerable populations, including: partnering with Peace Over Violence in the “It’s Off Limits” and “Speak Up” campaigns to address sexual harassment on Metro services, providing outreach and services to Metro’s homeless customers, actively promoting the human trafficking hotline, providing transit passes to foster youth through Youth on the Move, and making low-income fares easier to access through the Low-Income Fare is Easy program.

Metro’s goal for this initiative of gathering and analyzing gender-disaggregated data is to have access to Metro/Los Angeles County-specific research and data that really reflects how women travel to make informed decisions and ensure that applicable departments at Metro are utilizing gender specific data to implement service changes and improvements. Metro has limited information on how women travel, which limits the consideration of women’s unique needs during planning, design, and operation of our system. Further research is needed to ensure that women’s issues are at the forefront of policy making. This will result in better information for the NextGen Study and Long-Range Transportation Plan and will lead to better, more effective and more integrated solutions to address the mobility needs of current and potential female riders.



Why should LA Metro study women's travel?

For a long time, women's needs have been lost because they haven't been measured. The core finding of all existing evidence is that women are responsible for a disproportionate share of the household's transport burden while at the same time having more limited access to available means of transport. Women use the Metro system more. Women are a larger portion of the population. Women have different travel patterns than men and have different commute demands. While these findings are universal based on our literature review, this study references LA County-specific data to justify the business need for service improvements. The minimal attention paid to gender differences is in part due to the lack of statistics that show the differences in how women and men travel. For this reason, it is hard to understand gender differences in making trips, trip frequency, distance traveled, and mobility related challenges in accessing services and employment.

Without further research into gender specific concerns, we will only continue to receive glimpses of the overall issues women face. Furthermore, while some agencies

like Transport for London have conducted a needs assessment of women's travel patterns, the majority (unfortunately) still remain reactive. We have limited information on how women travel, which limits the consideration of women's unique needs during planning, design, and operation of our system. Today, fear and safety concerns stifle and constrict access to destinations for many female Angelenos. The "pink tax" increases women's travel costs because systems and services do not meet their safety needs, and women substitute with more expensive options to fill the gaps. Women's stories of harassment and assault have upended the way that we think about public space, including the space that we share on trains, buses, and sidewalks. In holding ourselves responsible for those transportation spaces, we redefine what an inclusive mobility network could look like in the future.

In order to reach the goal of having world-class transportation systems that meet the needs of all Angelenos, we first need to understand the ways in which women travel, how those patterns differ, and what types of solutions might have the biggest effect in reducing the travel burdens faced by women. This study is the first major undertaking by a US transportation agency to research, analyze, and publish the findings from such an effort.



Photo source: Metro



Methods

A comprehensive and creative approach was required to understand how and why women travel on transit and using other modes in Los Angeles County—and prompted a consideration of both existing and new data. Framed by core social justice principles and methods, both traditional and non-traditional data collection methods were used to effectively capture “hard-to-reach” populations and embody the project’s intersectional approach to gender.

Understanding How Women Travel includes:

- 1 Conventional methods that provide statistics about women’s travel behavior
 - » Analysis of nine **existing data sources** from Metro and the National Household Travel Survey revealed gendered preferences and trends in travel behavior and transit ridership
 - » *Understanding How Women Travel* **survey** reached 2,600 respondents, oversampling women and transit riders
 - » Three **focus groups** allowed for open conversation around sensitive topics and added nuance to our understanding of gender differences in travel
- 2 Innovative methods that offer qualitative findings about the experience of women traveling by Metro
 - » Over 100 hours conducting **participant observations** on 19 Metro routes offered insight into how women are using Metro’s services
 - » Three **participatory workshops** creatively engaged the most loyal – and most vulnerable – core Metro riders: women with disabilities, women experiencing homelessness, and women who are immigrants with varying documentation status
 - » Three **pop-up engagements** expanded our data collection to catch every-day riders, in the process of using Metro’s services, to hear what makes their ride easy or difficult

Findings

Together, these methods reveal rich and significant findings about how women travel. This report organizes findings according to five themes:

- 1 **Travel Behavior Trends**, including overall travel trends and transit-specific travel trends
- 2 **Safety**, including sexual harassment and crime, physical safety and injuries, presence of staff to manage safety concerns, and other issues that exacerbate safety concerns
- 3 **Access**, including financial access, physical access, and Access services
- 4 **Reliability**, including headways, real-time information, pass-ups, and service times
- 5 **Convenience & Comfort**, including the investment of time, cleanliness, customer service, and station and vehicle design

Each of these key themes are summarized on the following pages.



Metro's Vision Statement includes "increased prosperity for all by removing mobility barriers."

With women comprising more than half of Metro's existing riders, and more than half the population in Los Angeles County, a key component of achieving the agency's vision is to understand the mobility barriers to economic opportunity that women currently face.

↑ Exit
Civic Center Way/3rd St





Travel Behavior Trends

Through the analysis in this report, key trends emerge that differentiate women's travel patterns from men's travel patterns, across all modes.

- » Across all modes, more women are making many trips (7 or more) per day than men and more women than men are not making any trips per day. This means women may experience more exposure to travel burdens (cost, stress, or safety risks), or may be more likely to be isolated or disconnected from the opportunities that travel affords.
- » Women in Los Angeles also make shorter trips than men, which is potentially driven by workforce participation rates, location of employment opportunities, and taking household-serving trips that tend to be more localized.
- » Women's trips are more varied to a broader spread of destinations, and are more likely to primarily serve the needs of someone else.
- » Women are more likely to live in a car-free or car-light household, take more trips with other people, and take fewer single-occupant car trips than men.
- » Women are also more likely to carpool or get a ride from a family member or friend if they don't have a driver's license.

These findings show that women may need to adjust their own schedule and travel needs to accommodate others, and in doing so, give up some of their own autonomy and control over when and how they travel.

Despite these challenges and tradeoffs, women show ingenuity in arranging their schedules to meet their travel needs.

- » Women are more likely to trip-chain, or make stops along the way to other destinations, and describe consolidating all their errand trips into one day where they will have access to a vehicle.
- » Women in Los Angeles are also more likely than men to travel mid-day, with a travel peak around 2 PM when transit service may be reduced.

In addition to these overall travel trends, some clear patterns emerge for women who ride transit. Currently, more than half of all bus riders are women, and more than half of all rail riders are women. The burdens and risks of transit travel, as well as the benefits of transit travel, are more pronounced for women, as they make up the majority of Metro's customers and as they ride transit frequently.

- » Among female riders, almost 90% ride the system more than three days per week.
- » 57% of women bring their children on transit.
- » Women ride transit because they do not have a car, because they want to avoid traffic, or because they do not have a license. Two of these three reasons indicate that women who ride transit do so because they have fewer transportation options, and may have less access to economic opportunities as a result.

Still, many women do use transit to access economic opportunity.

- » Over 85% of women riders use Metro to travel to work or school, and of those women, 32% also use Metro to run errands or complete recreational trips.

Among people who make household serving trips most frequently, these trips comprise the same share for women whether they use transit or not; for men, the share of household-serving trips declines if they are transit users. This shows that while men are more likely to find alternatives to using transit to complete household-serving trips (using a different mode or taking fewer trips), women are less likely to find an alternative, and instead work to make the transit system work for their needs.

Although the rate of adoption for TNCs like Uber and Lyft is the same for men and women, women are more likely than men to report that their transit use has stayed the same as they have also begun to use TNCs.

- » Women are more likely than men to say they use TNCs for trips that transit does not serve, while men are more likely to say they use TNCs to reach a transit stop or station. The trips that are not served by transit may be related to time or location, as women's needs differ from men's needs by both time of day and location.

These travel behavior findings point towards many opportunities to adjust the services provided by Metro to better meet the travel needs expressed by those who are using transit. Development of a Gender Action Plan – or a tactical plan to implement policy, design, and service changes throughout the agency – would help to articulate the immediate opportunities and

long-term goals that would create a system that better serves women. Adjustments to services, vehicle design, and policy would help minimize the time, cost, safety, and physical burdens of riding transit for the more than half of all riders who are women.

- » The findings from *Understanding How Women Travel* about women's mode choices, how likely they are to travel with others in their care, and their complex trip-chaining patterns could all inform adjustments to Metro's fare policy to make it more equitable towards women and more cost-competitive with driving and carpooling.
- » Findings about women's trip purposes and primary responsibility for household errands could all inform the way transit vehicles, transit stations, and bus stops are designed, so that space for traveling with others and carrying bags and other belongings could be better accommodated.
- » Findings about when women are traveling and average trip lengths could inform new service offerings that meet a mid-day peak travel demand and provide better direct connections over long distances while minimizing transfers.

Adjustments to services, vehicle design, and policy would help minimize the time, cost, safety, and physical burdens of riding transit for the more than half of all riders who are women.

Safety

Women feel unsafe on public transit, and it is impacting how often they ride, when they ride, and if they ride at all. Among women, safety on transit is a top concern voiced across every mode of data collection, and their concerns center around harassment and personal security, as well as physical safety and design of vehicles, stations, and stops. These concerns collectively obstruct women's freedom of movement.

- » Women report accidents and injuries on Metro at a higher rate than men. Two-thirds of all complaints about accidents and injuries on Metro Rail or Metro buses were made by women.
- » While 60% of female riders who participated in our survey feel safe riding Metro during the day, that number plummets to just 20% at night. Safety perceptions for waiting and walking to the stop or station were even lower.

- » Concerns about safety are causing riders to alter their behavior – to consider their clothing choices, to change their routes or take routes that may be longer or more costly, to avoid taking a trip at all, or for those who have other options, simply not ride transit because they prefer the safety of a car.

The concerns that emerged in the survey are substantiated by the numerous stories our project team heard from women during the focus groups, participatory workshops, and pop-up events. Women we spoke with have endured sexual harassment and witnessed violent acts while on transit. These concerns are also borne out in the Metro crime data and reports of sexual harassment.

We asked women what would make them feel safer on transit.

- » Both current and prior riders agreed that more lighting at stops and along approaches to stations and the presence of security staff nearby would help them feel safer.
- » Current riders cited having transit police nearby.
- » Previous riders cited security cameras.
- » Two-thirds of female riders believe there are too few transit police on board the system.
- » During focus groups, workshops, and pop-up events, it was clear that riders have a more complex view of security staffing. Some felt that police were slow to react or ineffective when issues did arise, while others felt that police were too aggressive or too quick to brandish weapons.
- » Literature review studies showed that women generally preferred the presence of staff over technological solutions such as CCTV or alarms buttons.
- » The effect of bus operators on women’s perceptions of safety also emerged as a key theme. Women described having empathy for operators, who must perform many jobs at once, but also expressed their frustration that no one is expected to step in to manage conflict between passengers.

Similarly, women expressed empathy around how Metro responds to the needs of people experiencing homelessness and people who need additional mental health resources, but at the same time perceived

these populations to be contributors to the concern about riders’ unpredictable behavior on transit.

Over and over, participants in our study pointed to problems that could be solved by a deeper investment in the presence of security staff. Analysis of existing data sets revealed a preference for having transit police nearby, and further investigation through our qualitative methods showed an interest in more security staff of all types, including non-law enforcement staff.

These safety findings underscore the burden and stressors experienced by women using the transit system.

These safety findings encapsulate the need to adjust safety and security strategies, and focus time and attention on this issue in order to address the largest concerns voiced by women. Despite Metro’s investment in law enforcement over the years, safety is still a prevalent issue. Participants in our study asked for additional amenities, such as lighting at stops and along pedestrian access routes, and more frequent service to shorten long wait times at dark bus stops. These ideas and strategies also emerged in the literature review, demonstrating consistency in safety concerns and improvement ideas between other

studies and this Metro study. Creation and articulation of strategies to address safety in a Gender Action Plan would be a critical first step towards addressing these concerns. In addition, adjustments to services provided by time of day, approaches to staffing and security, and station/vehicle design changes could also help address the many safety concerns that emerged in this study.

Access

Access concerns voiced by women include physical design of transit spaces, financial ability to pay for transit trips for themselves and those in their care, the challenges of traveling with children, and the travel needs of women with disabilities. After safety, this set of concerns were major contributors to the decisions women made about their travel choices and how they do or do not use transit to help meet their travel needs.

Access needs are substantially different for women compared to men, as a result of physical differences and preferences, household responsibilities and the burden of schlepping associated with those responsibilities, and the disproportionate impact on women who have disabilities. The physical demands of traveling are compounded when one’s needs vary even the slightest bit from the design

standard of a healthy, fit, young man. Add a stroller or a wheelchair or children or years of age, and the system works substantially worse for its riders.

Vehicle access issues disproportionately affect women.

- » Women who ride Metro are less likely to have access to a vehicle than male riders, and former female Metro riders' top response for why they used to ride transit was "I didn't own a car."

Financial access also disproportionately affects women. Low-income women, in particular, carry a disproportionate financial burden when it comes to travel.

- » Female Metro riders live below the poverty line at greater rates than male riders. 59% of female bus riders are below the poverty line, compared to 50% of male bus riders. 34% of female rail riders are below the poverty line, compared to 26% of male rail riders.
- » Low-income women in Los Angeles reported spending more 40% on ridehailing services, 28% more on transit for themselves, and 90% more on transit for others compared to higher-income women.
- » Women are more likely to be frequent riders, and although a monthly or weekly pass may save money in the long run, women reported that the up-front cost is too expensive.
- » Women seem to prefer cash for its flexibility, as TAP cards are attached to only one individual and cannot be used to pay for children that may be accompanying an adult rider.
- » Women comprise the majority of bus riders, and we heard from many women who do not take the train at all. Women bus riders reported that TAP cards are difficult to obtain and reload.
- » Women traveling with children reported that kids' fares are confusing to understand.

The physical design of vehicle and stop/station spaces also create access challenges for women.

- » Older women and women traveling with children had a difficult time maneuvering with strollers and carts on the bus. Only 20% of female riders with children say that taking their kids on transit is easy.
- » Women were observed in our study traveling with bags, carts, and strollers. Negotiating the






space on transit vehicles and at stops and stations appeared to be a challenge. Many women stored bags on the seats next to them or in the aisle, and relied more heavily on elevators and escalators to travel between the street level and the platform.

- » From women with disabilities, we heard that Access Services is a critical resource, but operates in a way that devalues women's time – hours and even an entire day could be expended on a single trip for a single purpose.
- » Based on data from the National Household Travel Survey, 9% of women reported using a mobility assistance device compared to 7% of men, and 7.5% of women reported that their medical condition limits their travel, compared to 5.5% of men.
- » Women are likely to be more dependent on Access Services because of differences in mobility, disability, and licensing, and will therefore be subject to the impacts of Access Services more than men.

The findings related to access demonstrate that the burdens of traveling are compounded by the everyday facets of women's lives: the financial burden of living in one of the most expensive cities in the country, the physical challenges faced by women with disabilities while traversing public spaces not built for them, and the responsibility women have for transporting children from place to place. The barriers to easy transit access amount to a "pink tax" on women, in the form of higher time costs for women who must maneuver the Metro system despite the challenges they face, or for women who must simply find another, more expensive, mode in order to carry out their everyday responsibilities. These costs fall disproportionately on women with children, women with disabilities, and low-income women, who report spending more than higher income women on transportation for themselves and their families. In order to reduce this "pink tax" and improve access for women across all the dimensions discussed above, Metro can consider adjustments to fare policies, services by time of day, and the design of stations, stops, and vehicles. These steps can be developed more thoroughly and specifically through a Gender Action Plan.

Reliability

Reliable transit service means that schedule information is easily accessible, real-time updates are accurate, buses and trains run frequently throughout the day and night on weekdays and weekends, and



“The share of women in the labor market has dramatically increased, but women are also still responsible for much of the unpaid labor associated with household tasks – and it’s difficult to accomplish both with transit.”

DR. EVELYN BLUMENBERG

Photo source: Metro






buses and trains arrive when expected. For women in Los Angeles who rely on Metro to get to work, go to doctor's appointments, and pick kids up from school, reliable transit service is a lifeline.

- » The top three complaints filed by female Metro bus riders are all related to reliability – pass-ups, no shows, late buses, and unreliable or absence of real-time information.
- » At our pop-up events, in the focus groups, and in the participatory workshop discussions, we heard time and time again stories of women stuck waiting for a late bus, of being passed up and waiting an hour for the next bus, and of unreliable real-time information on station signs and cell phone apps.

For women who rely on transit, an unreliable system has real consequences. A late train can mean daycare fines, a pass-up can mean a missed medical appointment, and infrequent early morning or late night service can limit employment opportunities.

These experiences cause women to alter their travel behavior – sometimes leaving hours ahead of time due to unreliable service, using ridesharing services instead of transit due to infrequent service at night, carrying a flashlight to ensure that they are not passed up by operators while waiting in the dark, or even sleeping at the bus stop because service does not start running until several hours after they get off work.

The primary concerns related to reliability are concerns in and of themselves, and exacerbate safety concerns. When headways are long, and real time information is unreliable, women's safety concerns are amplified and women who have the financial ability switch to a different mode, such as ridehailing. Others who do not have that luxury simply endure the exposure and stress of added wait times. Real time information and tools designed to help ease the stress of waiting for infrequent service often fail. These challenges become even more difficult when traveling with children or trip-chaining, or for women with jobs or household responsibilities



that require travel during mid-day, late night or early morning periods, or on the weekends.

For women who rely on transit, an unreliable system has real consequences. A late train can mean daycare fines, a pass-up can mean a missed medical appointment, and infrequent early morning or late night service can limit employment opportunities. Reliability issues can render a system unusable for women, render the stressors they experience intolerable, and exacerbate women's safety concerns. Reliability issues also place a disproportionate burden on women living in poverty and those who are dependent on transit. For these women, other options for travel may be limited and the consequences of being late may be more costly.

Reliability issues exacerbate women's safety concerns and financial burdens.

The reliability findings point to service improvements that would clearly reduce the time burden for women who rely on Metro and improve safety concerns as well. Workshop and pop-up participants pointed to increased bus and train service as a strategy that would improve women's safety and comfort. Service that is specifically timed to meet the travel needs and preferences of women would directly address the issues of infrequent service and long wait times. Women reported that more mid-day service would help them complete errands and pick up children. They also reported feeling especially vulnerable waiting for long periods late at night, and affordable late-night travel options would help those who work night shifts. Increased service would also reduce issues of overcrowding and improve dependability, safety and comfort. Metro can articulate reliability and service improvements through the development of a Gender Action Plan.

Convenience & Comfort

Convenience and comfort are important considerations in order to build a system that women want to use, enjoy using, and would continue using even as they have other options available to them. Reliability issues render the system usable or not; comfort and convenience issues render the system pleasant or not. For women on transit, issues of convenience and comfort are inextricably linked to issues of access, safety, and reliability.

Many women we spoke with for this study recognized and embraced the convenience inherent in taking

transit. They described the stresses of driving in Los Angeles due to traffic and parking, and the relief they felt from those stressors by taking transit. They characterized Metro as a "lifeline" that enabled them to access work, health care, school, and errands, when they did not have a vehicle available or were unable to drive.

However, many women described another type of inconvenience – the investment of time they had to make in order to ride transit – whether it was a daily commute that started very early in the morning or a trip that involved several transfers just to reach Union Station.

Issues of comfort on transit can run the gamut from the physical comfort of waiting for and riding transit, to the emotional comfort that can come from positive interactions and communal experiences in a public setting like riding transit.

- » Fewer than 40% of female riders surveyed for this study felt that transit is comfortable or that transit vehicles have the space they need for their belongings.
- » In our observations and discussions with women about the Metro system, it became clear that lack of space for carts, strollers and bags on buses, lack of shade at stops, dirty stops and stations, and push buttons and pull-cords located too high all contributed to women's discomfort on Metro.
- » While we observed that women were hesitant to sit next to men they did not know, when women sat next to each other, they often struck up conversations and many noted a sense of community they felt on transit.

If they have limited transportation choices, a transit system that is not comfortable or convenient makes the trips we know women are taking more than men – household-serving errands and trips to transport someone else – the most difficult.

- » Women also described negative interactions with other riders and operators, and instances where they experienced a lack of etiquette among riders, causing discomfort.
- » Half of female riders who responded to our survey described Metro operators as courteous, and less than one-third felt that other riders were courteous.

The findings related to comfort and convenience directly connect to the choice some women make when deciding to take transit or not. For most women, a comfortable and convenient transit system would allow them to wait for their bus in the shade, easily load their TAP card or charge their phone while they wait, and provide ample space for their grocery bags, their strollers, or their walkers. Also, the operator will greet them, and another rider may offer their seat. When they sit down, they don't feel trapped by the person sitting next to them. A system map with transfer information is easy to read from their seat. When it's time to get off the bus, the push button is easy to reach and they are able to stand and move down the aisle to the back door with ease. They alight easily and their destination is just a short distance away.

For women on transit, issues of convenience and comfort are inextricably linked to **issues of access, safety, and reliability.**

Whether the policy that states strollers must be folded on the bus, or the lack of space on board for multiple grocery bags, inconveniences and discomforts are present throughout the Metro system. When women have a choice in transportation, they are more likely to pick the one that offers the most comfort and convenience, if they can afford to. If they have limited transportation choices, a transit system that is not comfortable or convenient makes the trips taken disproportionately by women the most difficult. In order to attract more women to transit and better serve current female riders, Metro can prioritize changes to make these trips comfortable and convenient by providing customer service, station and stop amenities, vehicle designs, and policies that respond to how women travel and use the system.



Photo source: Metro



Photo source: Metro



Photo source: Metro

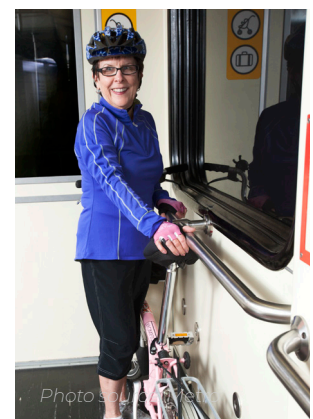


Photo source: Metro



Next Steps

This report is the first step in Metro's process to better understand and better serve the needs and preferences of women riders. With the findings from this study, Metro is equipped to begin considering policy, design, and service improvements that can improve the travel experience for women.

Create a Gender Action Plan

Metro can create a Gender Action Plan to pivot from research findings into actionable changes. Adopting a Gender Action Plan would allow Metro to align goals from its work, such as transit operations, systemwide planning, setting fares, and designing stops and stations, along with other initiatives to introduce new changes specifically intended to improve travel experiences for women.

The Gender Action Plan will focus on the following:

Staffing and Safety

Safety is a key concern for women who ride Metro and women who don't. Metro can reassess the approach to staffing, scheduling, operations, communications, and the design of space throughout the Metro system to create an environment that prioritizes safety and customer service, reduces sexual harassment, and encourages women to report instances of harassment.

Fare Policies

From traveling with children to making household trips on the bus, the disproportionate burden that women carry in their everyday travel is amplified for lower-income women. Metro can ease this burden by exploring fare options that accommodate families and provide affordable options for trip-chaining, such as fare-capping that can minimize the daily financial burden on lower-income women.



Station, Stop, and Vehicle Design

Women's challenges in navigating buses, trains, stops, and stations are common, and can be exacerbated for older women or women with disabilities. Metro can investigate changes to station, stop, and vehicle designs to address the needs and concerns of women for elements like pull cords, push buttons, seating configurations, and elevator locations. Some design concerns can also be addressed with policy changes, such as Metro's stroller policy.

Services Provided by Time of Day

Women are traveling just as often during the midday period as they are during morning and afternoon peak periods, and often trip-chaining. Women with disabilities sometimes dedicate an entire day to making a single trip because Access services and fixed-route services do not run the direct routes or times they need. Metro can evaluate services provided by time of day to understand how services can be adjusted to meet women's travel needs.

Future Investments

In addition to the five steps identified above, Metro should consider the implications of this study on future investments. As the largest transportation provider in Los Angeles County, Metro is positioned to shape the region's future of transportation technology.

Innovation already infiltrates Metro's many offered services, from e-bikes in the Metro Bike Share fleet to the new MicroTransit pilot. As travel modes and trends shift, Metro's opportunities for investment and experimentation will expand, and should take into account the needs, preferences, and concerns of women.

Through ongoing, intentional data collection and analysis, Metro can continue to gain a better understanding of the nuances and differences within the diverse and heterogeneous population of women riders. Connecting this understanding to future planning and service changes will enable Metro to build off this groundbreaking study and progress towards a system that truly meets everyone's needs.



As travel modes and trends shift, Metro's opportunities for investment and experimentation will expand, and should take into account the needs, preferences, and concerns of women.

Full Report Link

http://libraryarchives.metro.net/DB_Attachments/2019-0294/UnderstandingHowWomenTravel_FullReport_FINAL.pdf

Appendix A – Literature Review

http://libraryarchives.metro.net/DB_Attachments/2019-0294/HWT_AppendixA_FINAL.pdf

Appendix B – Data Collection Statistics

http://libraryarchives.metro.net/DB_Attachments/2019-0294/HWT_AppendixB_FINAL.pdf

Appendix C – HWT Survey

http://libraryarchives.metro.net/DB_Attachments/2019-0294/HWT_AppendixC_FINAL.pdf

Appendix D – HWT Focus Group Guide

http://libraryarchives.metro.net/DB_Attachments/2019-0294/HWT_AppendixD_FINAL.pdf

Appendix E – Ethnographic Methods

http://libraryarchives.metro.net/DB_Attachments/2019-0294/HWT_AppendixE_FINAL.pdf

Appendix F – Participant Observation Tool

http://libraryarchives.metro.net/DB_Attachments/2019-0294/HWT_AppendixF_FINAL.pdf