SURVEY TO SUPPORT METRO'S EQUITY FRAMEWORK | REPORT ON FINDINGS

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EnviroMetro
LOS ANGELES' COALITION FOR GREEN
EQUITABLE & HEALTHY TRANSPORTATION

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Executive Summary

Background

EnviroMetro, a coalition of organizations with a commitment to realizing green and equitable transportation outcomes in Los Angeles County, conducted a short survey inviting Angelenos to share their perspectives on public transportation issues in Los Angeles County.

The Los Angeles Metropolitan Transportation Authority (Metro) is currently engaged in a process to define an equity framework for prioritizing future transportation investments. Metro currently uses a definition of equity associated with geography, not race, ethnicity, or income - Metro distributes equivalent resources to the various subregions in Los Angeles County based on population estimates. There is an abundance of research and data showing us that there are severe disparities in wealth, health outcomes, climate change burdens, and access to opportunities (jobs, education, housing, etc.) throughout the region.

The survey aimed to identify the respondents' transportation priorities to help close equity gaps in LA County and build on findings reported in Metro's quality of life survey. These results should serve as a data point in building the equity framework. Furthermore, because this survey oversampled carless individuals it offers valuable insight into what transit dependent communities identify as top priorities for a more equitable transit system.

Key Findings

Angelenos who responded to the survey want to see a framework that **values bus infrastructure and bus riders**, with investment into **more frequent and reliable bus service** and **first-last mile infrastructure**.

When asked open-endedly, survey respondents wrote that they want to see a prioritization of Metro investments in:

Photo: Sahra Sulaiman/Streetsblog L.A.

(1) More frequent, more reliable, and improved bus services from LA Metro (56%)
(2) More frequent and improved rail service (17.8%)
(3) Reduced fares (15.1%)

We conclude this top priority in bus service and bus infrastructure from the frequency in which the following ideas were expressed by the respondents: increased frequency and timeliness of bus service, real bus rapid transit options, cleaner buses and bus stops, and better bus infrastructure at bus stops, like shelters, shade structures, and places to sit.

Next, when asked what kind of investments they would like to see to address those gaps in bus infrastructure, they responded:

(1) Shade structures at stops (72.7%)
(2) Places to sit down at stops (72.7%)
(3) Trees and other greening at stops (63.6%)
(4) Safer routes to bus stops (62.7%)

Photo: Niall Huffman

Recommendations

Metro is in the process of updating its Long Range Transportation Plan, which provides Metro a key opportunity to identify existing gaps and high needs for transportation investment. The LRTP is essentially a spending blueprint for Metro, a guide for how Metro will spend our transportation dollars, which includes revenues from Measures M and R, Propositions A and C, as well as state and federal dollars. Results from this survey stressed the demand for **investments in the existing bus network** through:

1) More frequent, affordable, and reliable service
2) Dedicated bus-only lanes, or bus rapid transit
3) Cleaner busses and bus stops
4) Better infrastructure at bus shelters that provides adequate shading, shelters, and places to sit

Based on these survey results, EnviroMetro recommends that Metro make investments in the near-term that support the above list.

Survey Methodology & Detailed Results

Overview

Data collection was done through surveys conducted in the fall of 2017. A total of 323 responses were obtained through two methods of convenience sampling: online and in person Spanish language surveys. LA County has a population size of 10.17 million; this sample size gives us a margin of error plus or minus 5.45 percent with a 95 percent level confidence.

The EnviroMetro survey was made available on Google Forms on July 10, 2017 and was closed on August 18, 2017. We received 84 reponses. Responses were solicited via the EnviroMetro electronic mailing list; Twitter, including the EnviroMetro twitter account and retweets / tags by other organizations, including LACBC and Climate Resolve; and through a boosted Facebook post by BikeSGV.

The survey was also translated into Spanish by request of EnviroMetro core team organization COFEM (Consejo de Federaciones Mexicanas en Norteamérica). Three groups of COFEM *Promotores* took

printed surveys to different events they tabled from August through September of 2017. The printed Spanish survey differed from the online English survey in two ways:

1. It did not include the following question: “Number of children (under 18 years old) in your home?” So this question was omitted from the analysis presented below.
2. The question “What are some improvements that you would like to see made to your bus stop(s)? Choose as many as you want” included pictures for each answer choice.

The teams of *Promotores* reached 239 people, for a total of 323 respondents to both the English and Spanish surveys.

Respondents were asked to identify the issues surrounding public transportation that they believe are the most important and should be prioritized by Metro. In order to have a better understanding of the respondents, we also recorded information about their demographics, transit use, and car ownership. Copies of both surveys are attached in the appendix.

Transportation Priorities Results

Open-Ended Responses

The survey included two open-ended questions.The first question on both surveys asked respondents to write in what transportation investments they would like to see Metro prioritize over the next 30 years (English) or what transportation issues were most important to them (Spanish). The third question on both surveys asked respondents to write in what other issues they think Metro should be prioritizing. We looked at each response to questions 1 and 3 and categorized each response as addressing one or more of the following transportation issues:

1. More frequent, reliable, and improved bus service (includes comments calling for on time and reliable service, more frequent service, bus rapid transit, cleaner buses and bus stops and bus infrastructure such as shading and seating at stops)
2. First-last mile or AT infrastructure
3. More frequent and improved rail service
4. Environment
5. Schools / students
6. Safety / security
7. Equity (includes comments about prioritizing low-income and underserved communities, preventing displacement and creating affordable housing)
8. Customer service
9. Reduced fares
10. Miscellaneous

Photo: Meghan McCarty/KPCC

Transportation issues		**English**		**Spanish**		**Combined**
Total responses		*160*		*178*		*338*
More frequent, reliable, and improved bus service	66	41.3%	124	69.7%	190	***56.2%***
First-last mile or AT infrastructure	47	29.4%	1	0.6%	48	***14.2%***
More frequent and improved rail service	43	26.9%	17	9.6%	60	***17.8%***
Environment	10	6.3%	2	1.1%	12	***3.6%***
Schools / students	3	1.9%	3	1.7%	6	***1.8%***
Safety / security	27	16.9%	18	10.1%	45	***13.3%***
Equity issues (includes reduced fares)	20	18.1%	0	0.0%	20	***5.9%***
Reduced fares	9	5.6%	42	23.6%	51	***15.1%***
Customer service	4	2.5%	27	15.2%	31	***9.2%***
Miscellaneous	14	8.8%	19	10.7%	33	***9.8%***

Table 1: Frequency at which certain transportation issues appeared in open-ended comments left by respondents. Highlighted green are the three most frequent responses for each respondent category.

Although these questions were open-ended and thus received a wide range of responses, it is worthwhile to see the patterns that emerge about general transportation issues that people are concerned about. We acknowledge that this question does not speak to the importance of one transportation issue over another, but to the frequency in which an issue appears amongst comments given by survey respondents.

There were some noticeable similarities and differences in priorities among each group of responses. For each group of respondents, the major concerns were for more frequent, reliable and improved bus service. It was a concern for nearly 70% of those who completed the Spanish survey and 41% of those who completed the English survey. For those who filled out the English survey, the second most frequent issue that appeared was the need for walking and biking infrastructure. For those who filled out the Spanish survey it was the need to make fares more affordable.

One interesting occurrence is that about 15% of the comments in Spanish were comments on “customer service.” Comments in this category centered around discriminatory behavior of bus operators. Here are a few illustory examples (translated):

- “The buses don't come on time and some drivers are very rude with people from the community.”
- “There have been times when the drivers don't stop and they pass by the bus stop.”
- “Sometimes they [bus drivers] give you information only if they feel like it. They [bus drivers] should be bilingual.”

Multiple Choice Responses

Participants were also asked to think about their bus stop(s) and choose, from a list of six, some improvements that they would like to see made to their stops. The table below shows the improvements that folks most wanted to see for their bus stops. For those who completed the Spanish survey, places to sit down at the stop and shelter/shade structures at the stop were the most chosen improvements. For those who completed the English survey, safer routes for biking and walking to the bus stop, trees or other greening, and shelter/shade structures were the most chosen. The figure below the table shows the improvements most chosen by both groups of survey respondents.

Bus Stop improvements	**English**		**Spanish**		**Combined**	
Total Responses		84		224		308
Safer route for biking and walking to the stop	70	83.3%	123	54.9%	193	***62.7%***
Bus shelter or other shade structure at the stop	56	66.7%	168	75.0%	224	***72.7%***
Places to sit down at the stop	45	53.6%	179	79.9%	224	***72.7%***
Public art / beautification at the stop	29	34.5%	113	50.4%	142	***46.1%***
Trees or other greening at the stop	56	66.7%	140	62.5%	196	***63.6%***
Other	14	16.7%	29	12.9%	43	***14.0%***

Table 6: Improvements people want to see made to their Bus Stop(s). Highlighted green are the three most frequent responses for each respondent category.

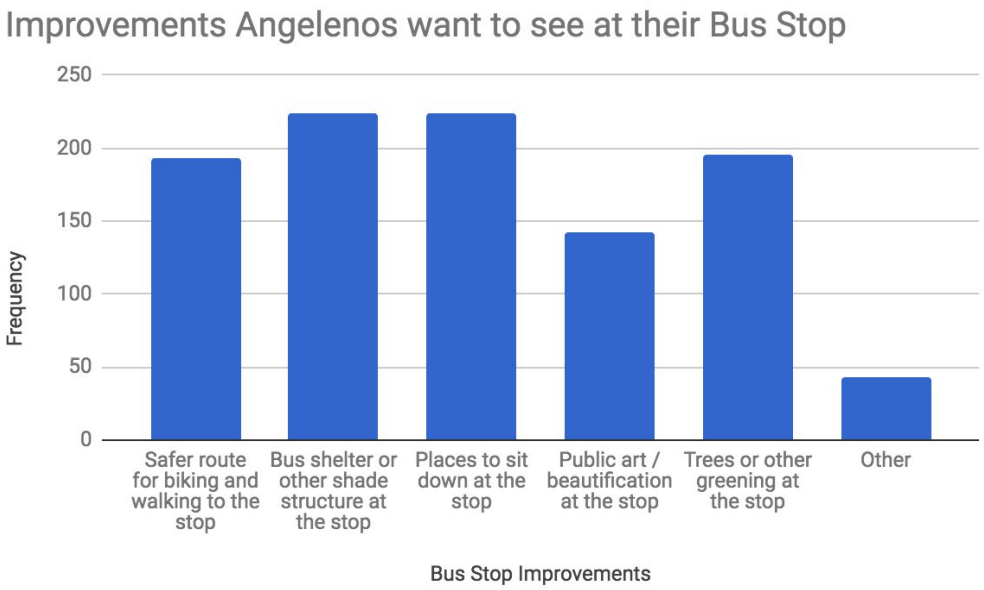

Figure 1: Improvements Angelenos want to see at their Bus Stop

Demographics

Age

The majority of respondents were between the ages of 31 and 45 years old. The median age in Los Angeles County is 36 years old, according to the American Community (ACS) Survey 2105 estimates. Only about two percent of respondents were between 16 and 18 years old and nearly 20% were 65 and older. This percentage was heavily skewed by participants in the Spanish survey, as approximately 27% of them were 65 and older, where only 1% of participants in the English survey were 65 and older.

Age Range	**English**		**Spanish**		**Combined**	
Total Responses	84		231		315	
16-18	1	1.2%	4	1.7%	5	***1.6%***
19-30	25	29.8%	28	12.1%	53	***16.8%***
31-45	38	45.2%	57	24.7%	95	***30.2%***
46-54	12	14.3%	44	19.0%	56	***17.8%***
55-64	7	8.3%	36	15.6%	43	***13.7%***
65+	1	1.2%	62	26.8%	63	***20.0%***

Table 7: Age breakdown of respondents

Map of Respondents by City/Zip code

Responses to the survey came from all over the county, from Palmdale to Long Beach and from Northridge to Claremont. Because many surveys were collected in bulk at neighborhood events by COFEM Promotores, location data is heavily skewed to the location of the tabling events in Central Los Angeles and San Gabriel Valley.

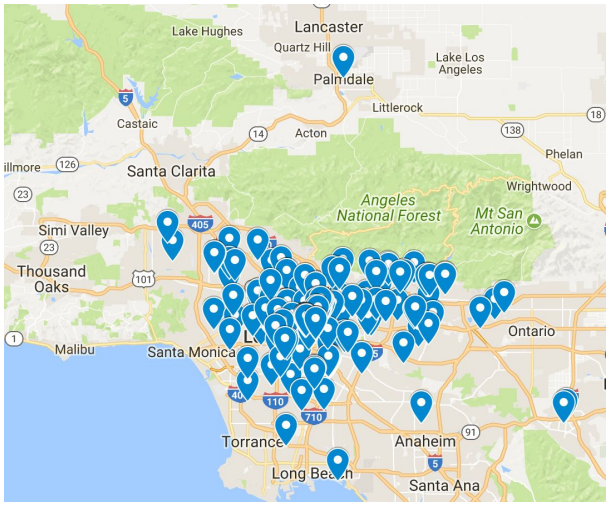

Figure 2: Map of the geographical distribution of respondents can be found here: http://bit.ly/respondentmap.

Ridership

Respondents were asked to list the number of times each week that they take a Metro bus or train. Just over one-third of respondents take the bus or train between four and eight times per week. Almost 27% of respondents ride Metro only three times or less per week and 18% of respondents ride Metro 9-15 times per week. Almost 20% ride Metro more than 15 times per week. The primary reason cited for using public transportation is as a means to travel to work (41%). Using public transportation for recreational purposes and for visiting the doctor are nearly tied at 29% and nearly 30% respectively.

Weekly ridership (bus or train)	**English**		**Spanish**		**Combined**	
Total Responses	84		222		306	
Less than 3	34	40.5%	47	21.2%	81	***26.5%***
4-8	30	35.7%	79	35.6%	109	***35.6%***
9-15	14	16.7%	47	21.2%	61	***19.9%***
More than 15	6	7.1%	49	22.1%	55	***18.0%***

Table 2: Most people take the bus between 4 and 8 times per week. Highlighted green is the top most frequent response for each respondent category.

Primary reason for taking public transit	**English**		**Spanish**		**Combined**	
Total Responses	84		216		300	
Go to work	45	53.6%	79	36.6%	124	***41.3%***
Go to school	5	6.0%	49	22.7%	54	***18.0%***
Visit the doctor	4	4.8%	85	39.4%	89	***29.7%***
Recreation	34	40.5%	53	24.5%	87	***29.0%***
Go to the supermarket and other household activities	4	4.8%	58	26.9%	62	***20.7%***

Table 3: Most people use public transportation for traveling to work and recreational activities. Highlighted green is the top most frequent response for each respondent category.

Vehicle Ownership

About 74% of respondents to the online survey own a vehicle, while about 65% of those who completed the printed survey do not own a car.

Owns a vehicle	**English**		**Spanish**		**Combined**	
Total Responses	84		235		319	
Yes	62	73.8%	83	35.3%	145	***45.5%***
No	22	26.2%	152	64.7%	174	***54.5%***

Table 4: Vehicle Ownership

Approximately 8% of the respondents who don't own a vehicle ride Metro three times or less. That percentage jumps to almost 49% for those who own a vehicle. For those who take Metro more than 15 times per week, only 5% of them own a vehicle. The table below shows the difference in weekly ridership between those who own a vehicle and those who don't own a vehicle. We could surmise from this information that those who don't own a car are a more transit-dependent population.

Weekly Ridership (bus or train)	**No Car**		**Car**		**Difference**
Total Responses	164		139		--
Less than 3	13	7.9%	68	48.9%	41.0%
4-8	61	37.2%	46	33.1%	4.1%
9-15	42	25.6%	18	12.9%	12.7%
More than 15	48	29.3%	7	5.0%	24.3%

Table 5: Ridership increases when participants do not own a vehicle.

Possible Limitations & Further Study

This study represents the collective responses of 323 participants. The survey respondents either completed a Spanish or English survey, which had slight variances between the two options. Due to the modification of questions in the surveys and potentially different contexts presented when translating materials, the multiple survey languages may have skewed the results.

Some of the surveys in Spanish were completed by the respondents. Others were completed by the *promotores* on behalf of a respondent. The online survey in English had a built-in error checking mechanism that did not allow the respondent to skip questions and submit an incomplete response. The printed surveys in Spanish lacked this, so not all of the handwritten surveys were filled in completely. Additionally, question 2, a multiple choice grid that asked respondents to "Please rank from 1 to 6 (low to high) what you think should be Metro's priorities in the update of the Long Range Transportation Plan" was filled out incorrectly or not filled out at all in all of the handwritten Spanish surveys, so it was disregarded for the analysis of the 239 printed surveys. By presenting survey respondents with different options, such as language choice (English/Spanish), survey format (online/written), and response format

(individual/representative), this survey represents responses from a wide variety of Angelenos. While these multiple options may have skewed the results, the survey structure aimed to represent as many Angelenos as possible.

The gaps presented in this section should not disqualify the findings presented in this report, but rather demonstrate the need for more robust community engagement to determine where Angelenos want to see future transportation investments. Future research should adopt an equity-based approach by collecting responses from those who speak other-than-English and have varying literacy levels and technical proficiencies. Furthermore, it is recommended that future studies are large enough to have statistical significance and include an open-ended response component to allow community voices to frame investment priorities that may not be represented in Metro's existing annual Quality of Life Report.

Statements of Support for the Findings

1. "UCLA predicts that Angelenos in every corner of the county will experience a greater number of days above 95 degrees Fahrenheit over the next 20 to 30 years. This means that bus and rail transit riders are feeling the impacts of extreme heat – cramps, heat strokes, dehydration – as they walk to and from the bus or rail station, especially the elderly, children and riders already suffering from respiratory illnesses. As we seek to get more Angelenos to take transit rather than drive alone, Metro needs to prioritize urban greening, tree canopy, and bus shelters to protect current and future riders from heat (and rain)." - *Fernando Cazares, Senior Program Manager–Climate Smart Cities, Los Angeles, Trust for Public Land*

2. "Vulnerable communities need shelters and shade structures at bus stops now more than ever. The urban heat island effect in Los Angeles is greater than any other urban area in California, and getting worse every year. We are experiencing more extreme heat, making it more difficult and dangerous for Angelenos to use public and active transportation by contributing to worsened air quality and increasing the risk for cardiovascular disease. Providing shade structures and shelter are a crucial step to mitigating the harms caused by high temperatures and will encourage riders to continue using public transportation." - *Jacqueline Illum, Senior Policy Analyst, Community Health Councils*

3. "Safe, comfortable, and cool routes to walk and bike to public transit stops remain few and far between in Los Angeles County. Fortunately, creating networks of people-friendly streets to transit can be realized at relatively low cost, if prioritized, via existing regional and state transportation funding streams." - *Wesley Reutimann, Executive Director, Bike San Gabriel Valley*

4. "Dedicated bus lanes would make public transit more time competitive with driving. We should be rewarding and encouraging such sustainable transportation behavior that helps to unclog our streets and clean our urban air." - *Bryn Lindblad, Associate Director, Climate Resolve*

5. “In order for our region to become more sustainable, Metro’s investments should transform neighborhoods and not just the transit system. This is particularly true in low income communities of color which lack even the most basic amenities such as sidewalks, crosswalks, and green space. By aligning its priorities with the needs of these communities, Metro can become a force in creating a more equitable region.” - *Andres Ramirez, Clean Energy Director, Pacoima Beautiful*

6. “Our communities have been very clear: we need more routes that run more frequently and investments in the existing bus network to guarantee that all LA Metro riders, regardless of where they live, receive the same experience.” - *Omar Gomez, Program Manager, Nature For All*

Credits

The survey analysis and report materials were completed by Climate Resolve. The survey was translated to Spanish and the in-person survey responses were collected by COFEM. Both organizations are members of the EnviroMetro Core Team.