

# People-Focused Service Design & Marketing

Prepared for Citizens Advisory Council  
February 27, 2018



Primary questions to answer as we understand them

1. Who rides Metro?
2. Keeping in mind impact on customers, how does Metro make operational decisions?
3. What types of riders is Metro trying to attract in the future?
  - What is Metro doing to attract those riders?

**Who rides Metro today?**

# Some examples of the resources we use to understand our riders



**Semi-Annual  
On-Board Survey**  
Census of Riders  
n=~15,000

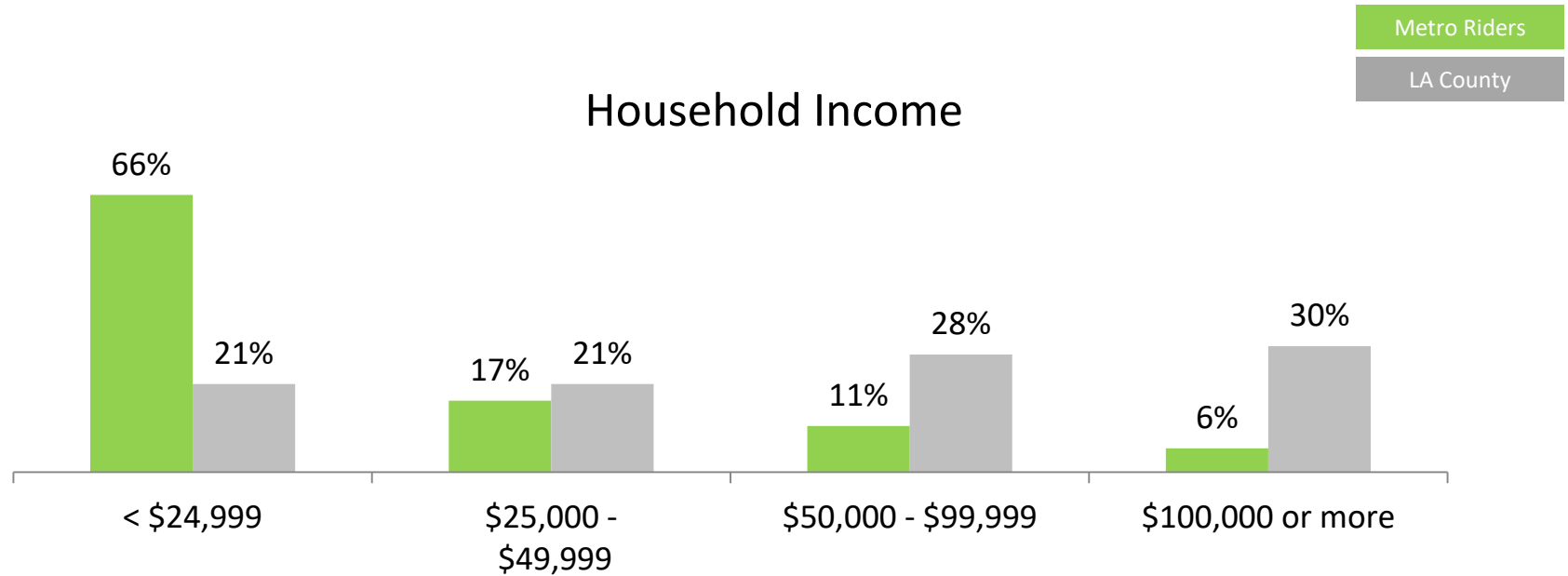


**US Census**  
including  
American Communities  
Survey  
& Journey to Work

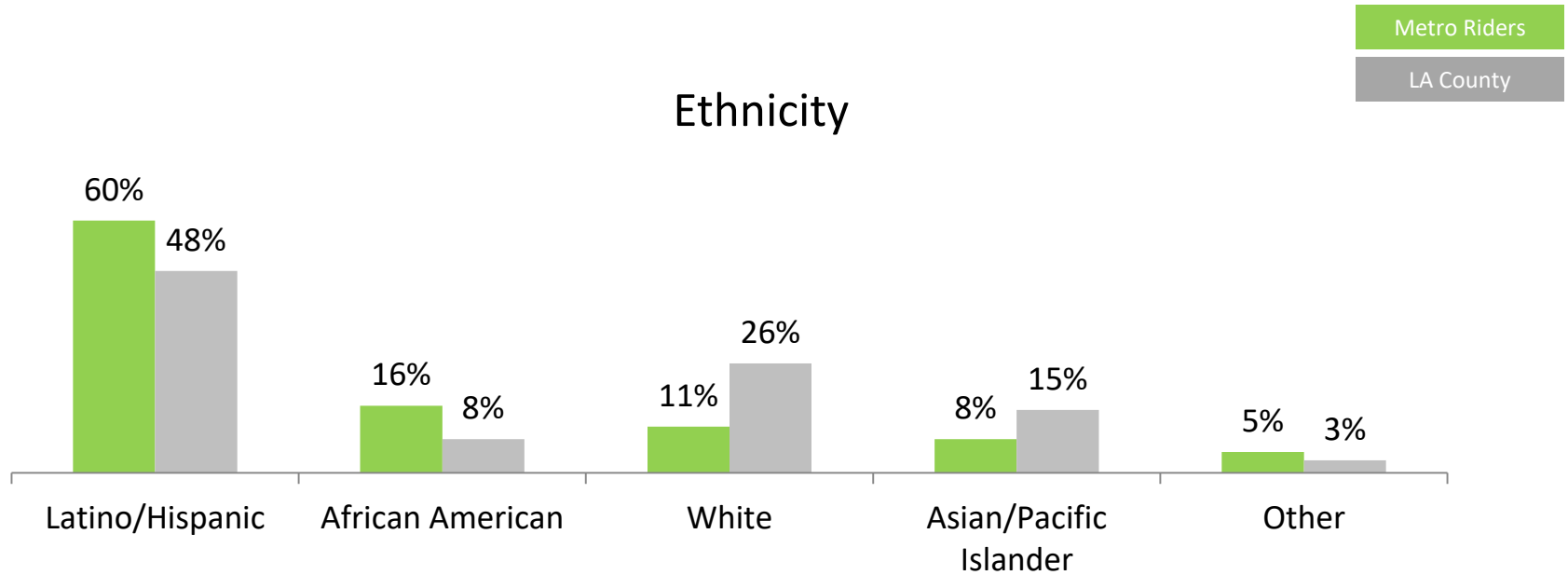


**Understanding How  
Women Travel Study**  
(In Progress)

# Two thirds of Metro Riders earn less than \$25,000 household income

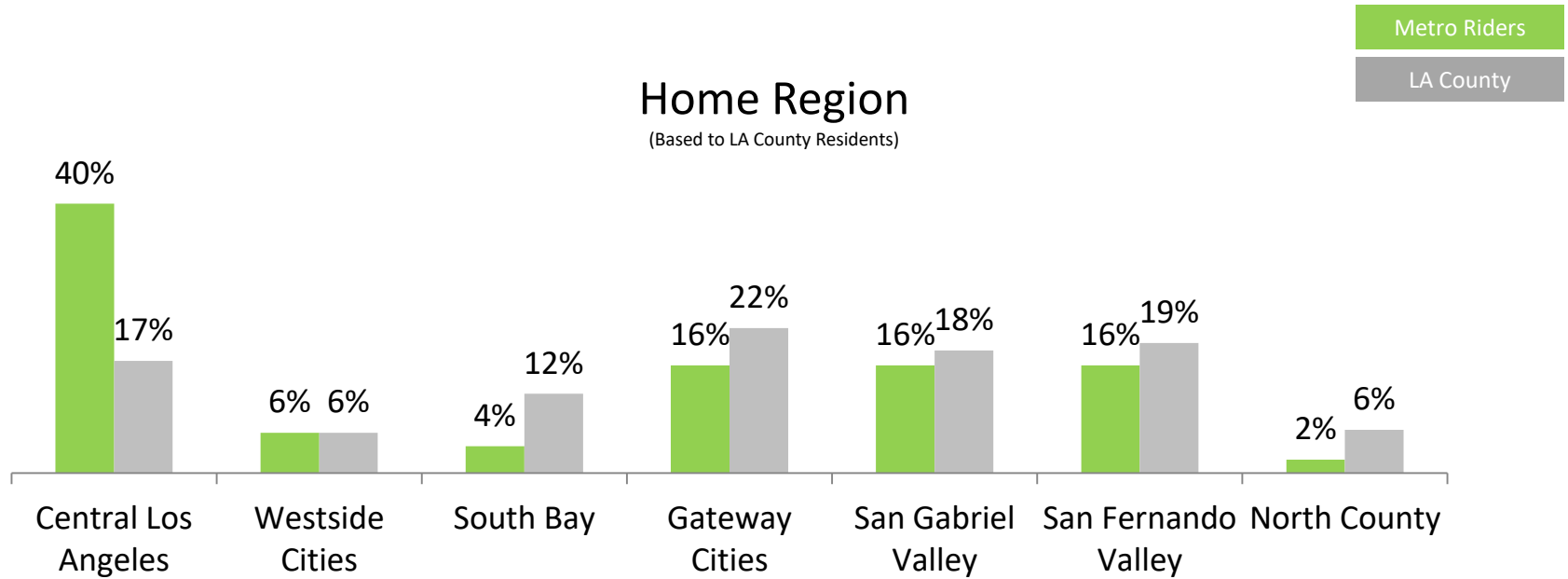


# Metro Riders are more likely to be Latino or African American And less likely to be White or Asian

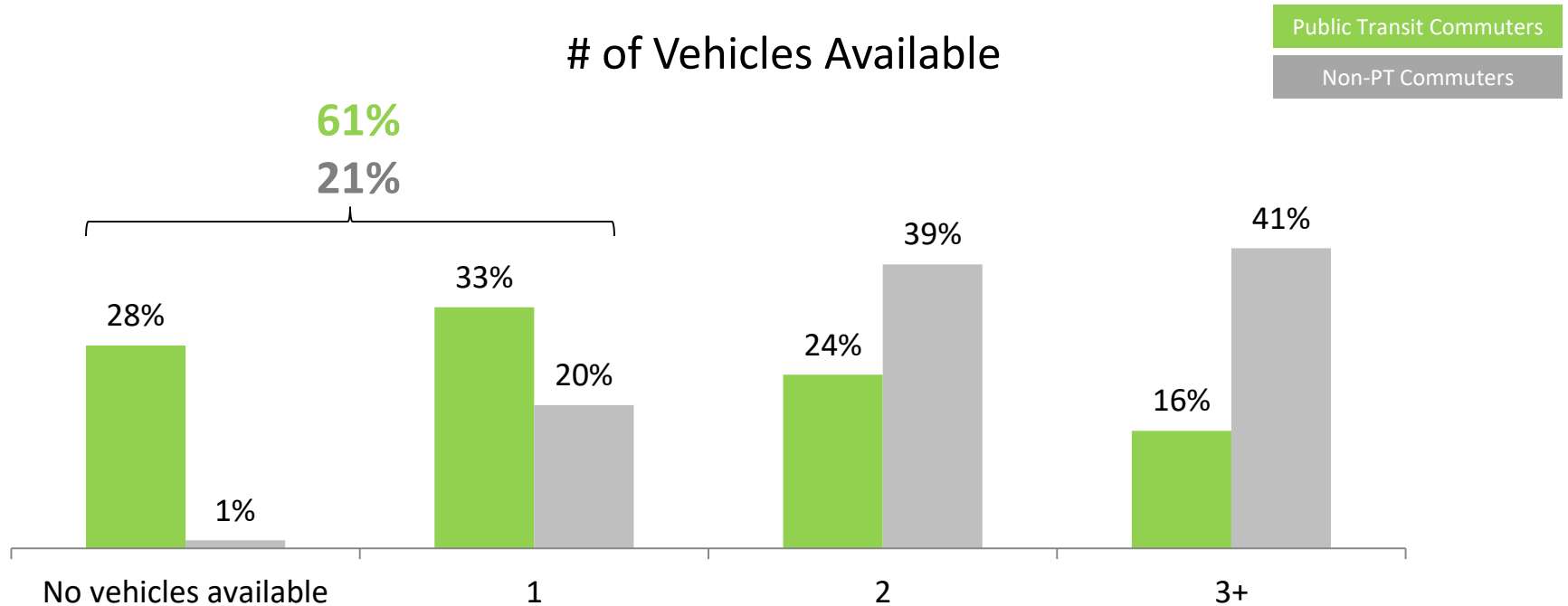


# Metro Riders are much more likely to live in Central Los Angeles

## And less apt to live in South Bay, North County, or Gateway Cities

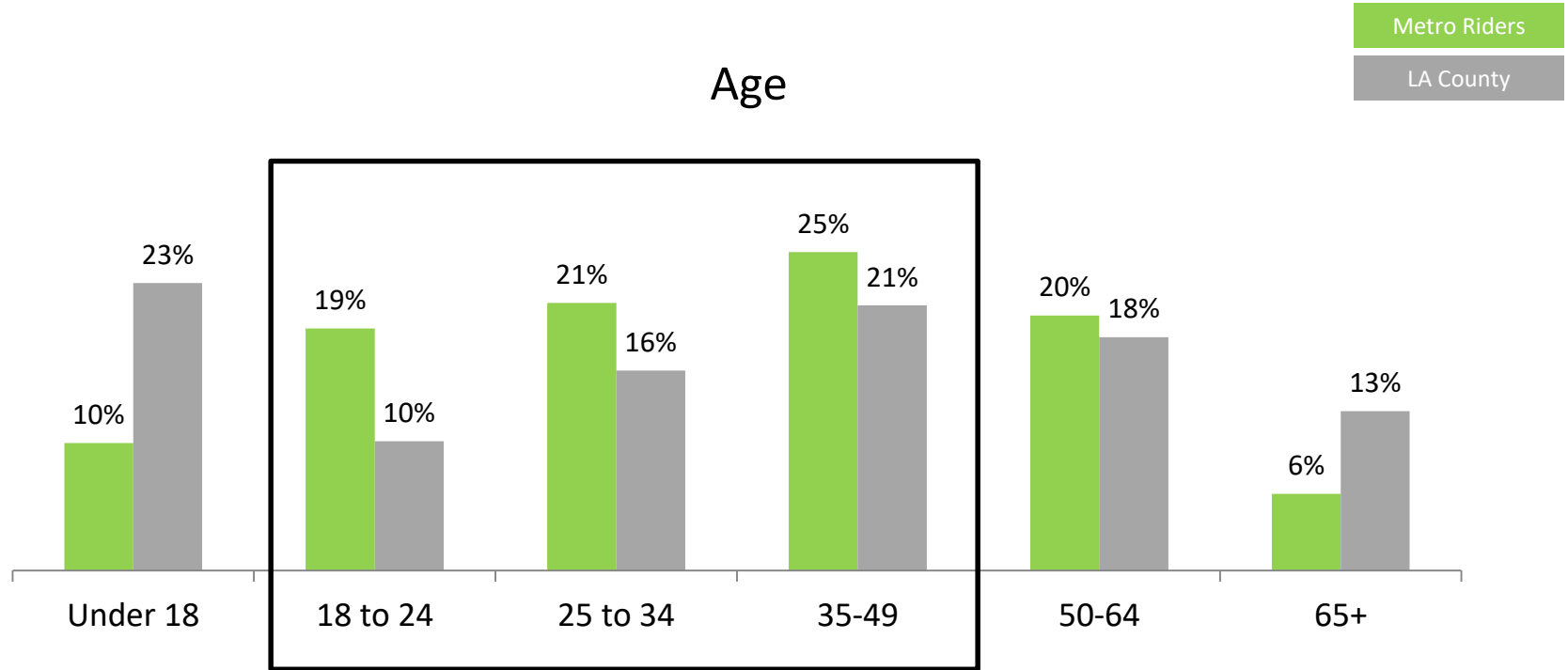


# Public transit commuters are more likely to be carless or “car-lite”

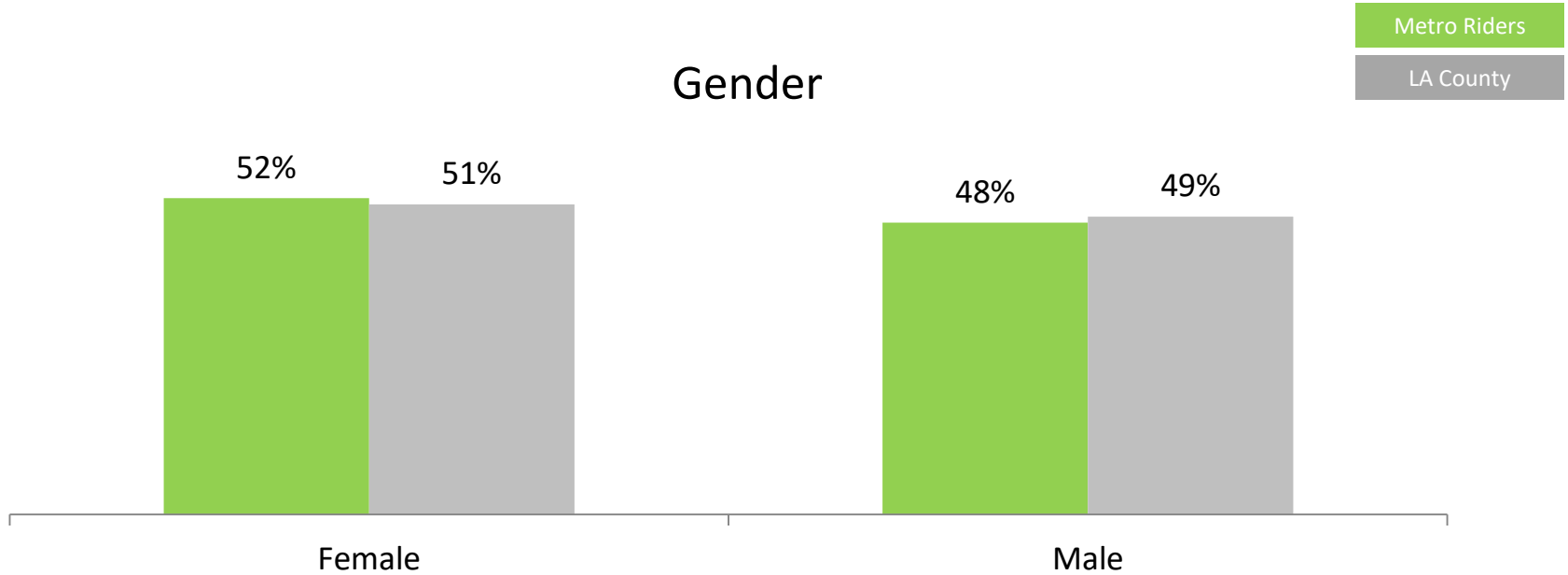




# Metro Riders skew towards young adults to middle age



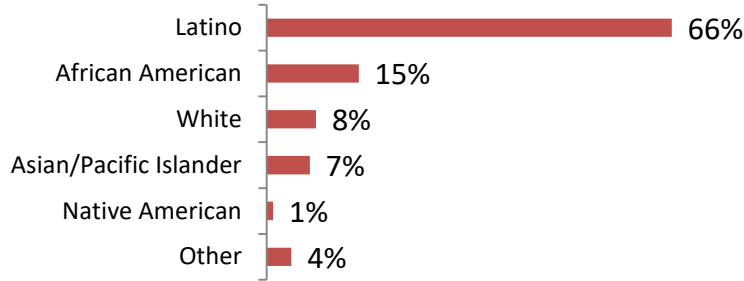
# Metro Riders closely mirror the county in gender



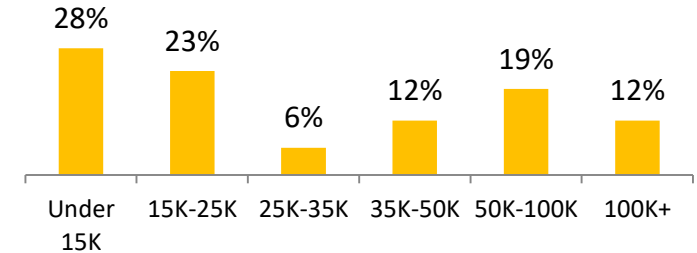
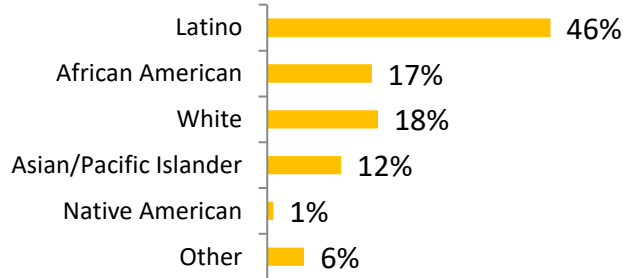
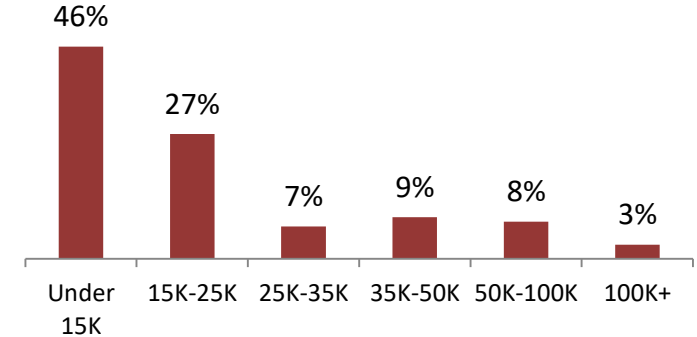
# Bus riders are more likely to be Latino, lower income



## Ethnicity



## Income



Keeping in mind impact on consumers, how does Metro make operational decisions?

# Metro Bus Service Planning 101

- 2,400 buses are required to operate weekday peak service.
  - Metro operates the largest CNG fleet in the Nation.
- Buses travel 254,000 miles each weekday.
  - Line 460 (Disneyland) is the longest line at 40.3 miles
- Metro maintains 15,000 bus stops.
  - Metro does not maintain or own bus shelters or benches.
- There are 14 bus divisions.
  - Three of these divisions are operated by Metro contractors.
- Service is planned under the Board approved *Transit Service Policy*, and overseen by the Service Councils.
  - There are five Service Councils totaling 45 members.

## “Transit Service Policy” Facts

The document lists policies and standards that are used to guide service.

- Maximum headway standards (frequency) of buses are stated; for example, the Rapid lines should operate every 20 minutes or better in the peak periods.
- Bus loads should not exceed 1.30% of a seated load; for example, a 40 foot New Flyer bus seats 36, therefore the maximum load is scheduled in the peak period to 47 (11 standees).
  - Passenger loads are monitored by automated passenger counters.
- Service changes can be made every six months per the SMART contract; a Public Hearing is not required unless the change exceeds 25% of the route miles or scheduled service.
  - Travel time (running time) and passenger loads are monitored by automated passenger counters.
- The Service Councils approve all changes in service, and conduct a public hearing if required.

# Patrons with Ambulatory Issues

Metro operates an all low-floor fleet with three (3) wheelchair position tie-downs.

- In January 2019, an average of 80,000+ wheelchair boardings occurred (9% of total boardings).
- Operators report each boarding as well as pass-up.
  - 2,000 pass-ups (2% of total boardings) occurred in January.
- CEO Phil Washington personally monitors the monthly report of wheelchair boarding and pass-up activity by line.
  - If a line reaches pass-ups of 5% of the total boardings, service may be added in specific time periods where the pass-ups have occurred.
    - Line 117 (Century Bl) serves both the Metro Blue and Green Lines as well as the Rancho Los Amigos Medical Center on Imperial Hwy. Extra trips have been added, as well as Metro funds Access Services to operate dedicated vans to serve the connecting rail stations for patrons destined to the Hospital.

## Monitoring Equity When Planning/Changing Bus Service

In accordance with FTA's Requirements, a Title VI Equity Analysis (originally part of the Civil Rights Act) must be performed on all proposed major service or fare changes prior to its implementation. What does this mean?

- If a bus service was to change 25% or more (hours/miles), a Title VI analysis must be completed and presented to the Service Council prior to a Public Hearing. Depending on the outcome of the analysis, the report findings will also require Board approval.
- Does the change have a Disparate Adverse Impact on members of a group identified by race, color or nation origin?
- Does the change have a Disproportionate Burden that affects low income populations more than non-low income populations?
- The Board has the discretion to accept/reject any negative findings.



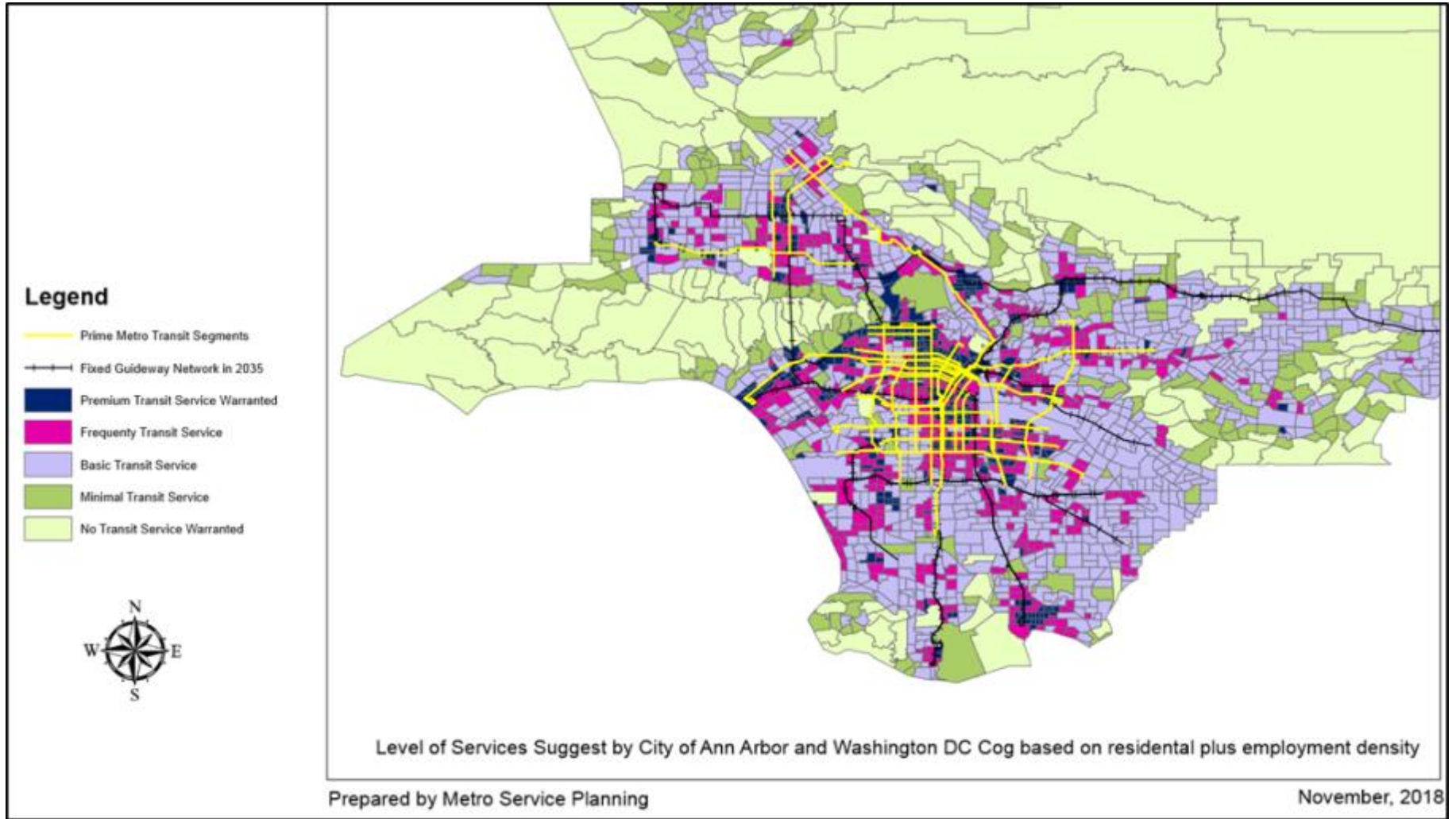
# How is NextGen Reviewing System wide Equity?

- Ten (10) workshops have been held throughout the Metro service area, which include:
  - Compton
  - San Gabriel
  - Torrance
  - Downtown Los Angeles
  - Bell
  - West Hollywood
  - Pacoima
  - Pasadena
  - Inglewood
  - Van Nuys
- Eight (8) additional workshops will be conducted in late February and March at smaller locations which include faith based and senior centers.
- Land Based Data (Cell Phone Data) is a revolutionary method used to identify new travel patterns of the Metro service area.
- TAP data is being studied to better understand existing users of the system.
- Metro Service Planning has developed it's own *Transit Propensity Score* to further understand the travel needs of many communities.

## Transit Propensity Score

- Purpose of the Scoring is to indicate those census tracts that are likely to respond positively to the provision of transit service
- Theory – there are physical, locational, and socio-economic factors that can predict the use of transit
- Most models rely on the supply of transit service to make such predictions
  - Assumption is logical on its face; because a frequent, reliable, transit service close to my point of origin is a significant consideration
  - In general that works, but we know our customers are not all the same
  - Population and Employment densities (see next slide) are good predictors

# Population / Employment Density & Transit



# Metro's Propensity Score

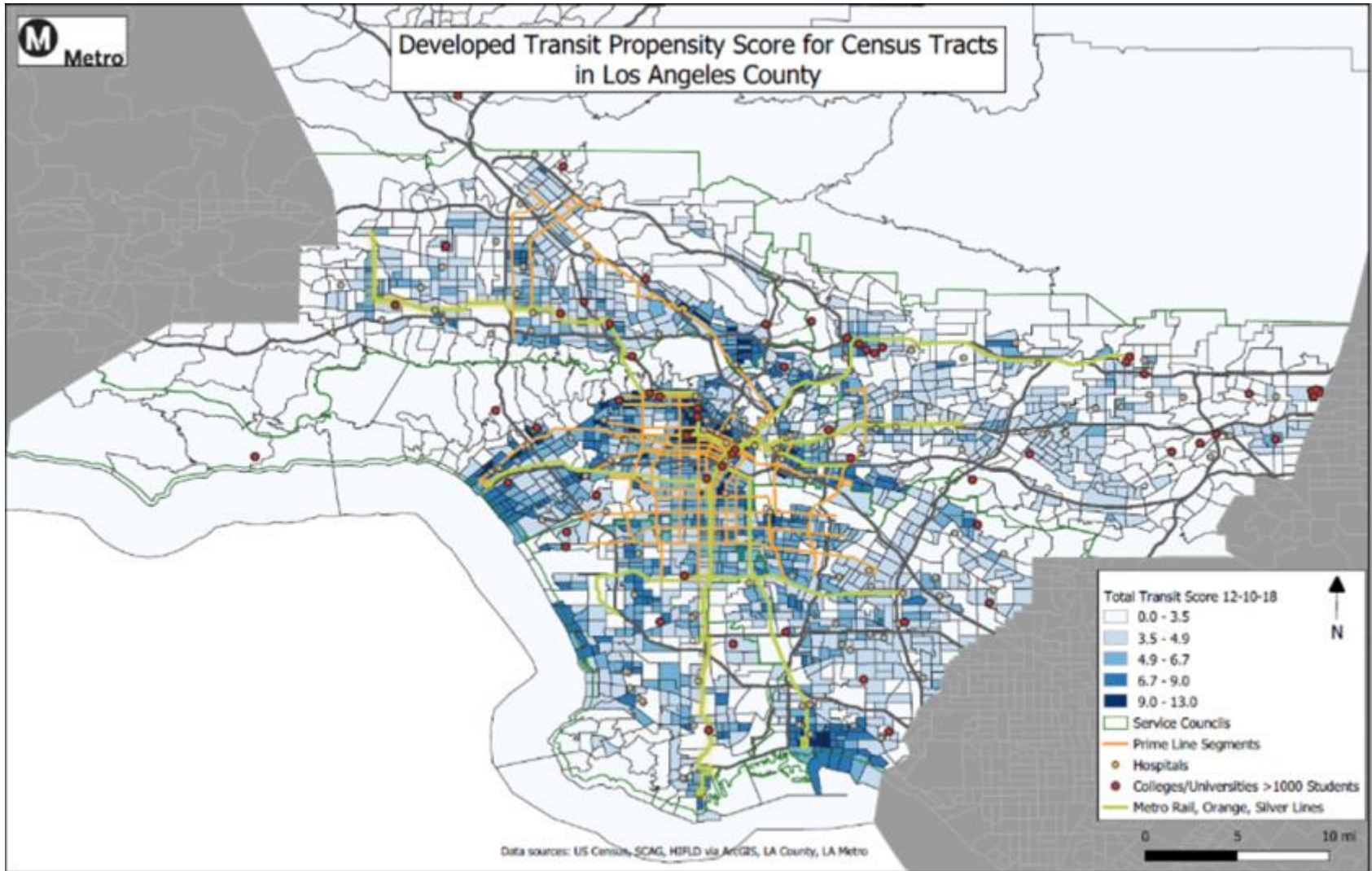
- Based on three elements: Demand, Market Segments, Built Environment (All characteristics are by 2010 census tracts)
- Factors related to **Demand** for service (30% weight): Population and employment densities, including seniors, persons aged 18-34 (millennials), and persons that are attending grades K-12.
- Factors related to **Market Segments**: Commuters, Transit Dependent, Choice (**30% weight**)
  - **Commuters** - ages 35-54, and 55 years or older, have a higher education above 12<sup>th</sup> grade, and incorporate many single individuals.
  - **Transit dependents** - comprised of individuals with zero cars available, lower income, ages 10-19, ages 55+, single mothers, and individuals with disabilities
  - **Choice riders**, comprised of individuals between the ages of 20-34, have higher education beyond 12<sup>th</sup> grade, and are single (no children).
- Factors related to the **Built Environment (40% weight)**
  - Street intersections (how walkable is the census tract? Are customers confronted with cul-de-sacs or walls)
  - Square footage of built development
  - Housing density



# 19 Measures Used to Create the Score

- Population per Acre
- Employment per Acre
- School Enrollment per Acre (includes Elementary, Middle, and High Schools)
- School Age Students (age 10 -19) per Acre
- University population (includes enrollment and employment)
- Population with a bachelor's degree or higher per Acre
- Poverty / Low Income Households per Acre
- Zero Car Households per Acre
- Home-Based Shopping Trips per Acre
- Seniors over 55 as of 2010 per Acre
- Individuals Aged 20 to 34 per Acre
- Walkability of the Census Tract (either a score of 0 or a 5)
- Square feet of occupiable space per Acre
- Single Mothers per Acre
- Disabled population per Acre
- Housing units per Acre
- Individuals Aged 35 to 54 per Acre
- Non-Industrial Employment per Acre

# Census Tracts and Propensity Score



# Who do we want to ride Metro in the future?

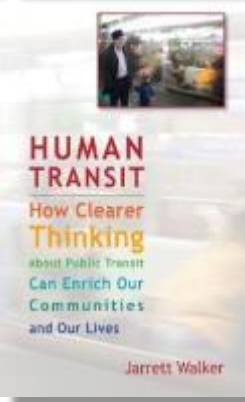
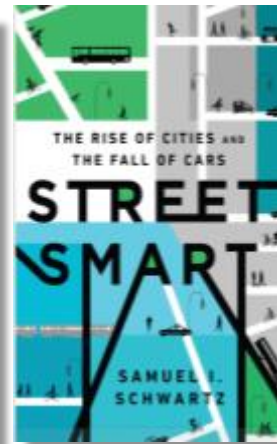
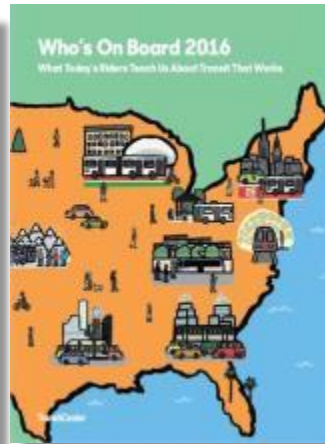
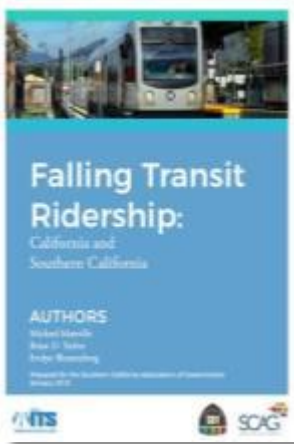
(And how are we going to get them on board?)

We'd love for everyone in LA County to ride, but not everyone will





In order to know who to target to grow ridership, we need to first be clear on what drives ridership



**M Metro Interactive Estimated Ridership Stats**

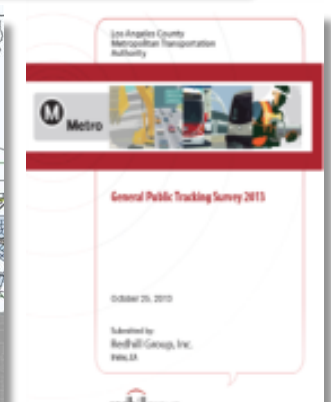
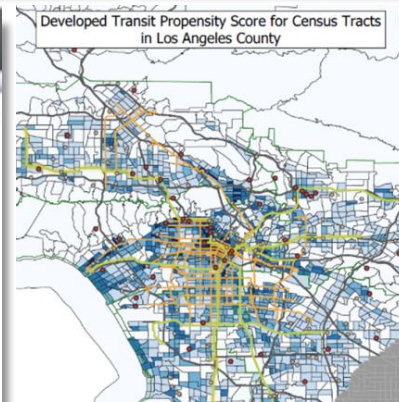
Fixed Year:  Year:  Period:  Submit

This tool will allow you to view Monthly Ridership data, Line level trends, and Historical Information. Click on the (Details) button in each section to view the individual Line stats (the example that Line, Expo Line, and Gold Line is flat). Please note that Ridership data is available approx. 10 days after the end of the prior month.

Estimated ridership for special events such as, Old-Arnie, performances, and sporting events are not reflected in the monthly estimates.

NA: Data not available

Systemwide (Bus and Rail)					
Line Type	Estimated Ridership	Average Passenger Miles	Key Count	Total Estimated Ridership	Total Passenger Miles
Metrolink	1,120,044	1,782,000	22	17,044,412	111,001,311
Metrolink	961,899	1,690,190	21	1,690,190	24,794,076
Metrolink	628,649	1,020,190	0	1,020,190	10,998,910
<b>Total</b>	<b>N/A</b>	<b>N/A</b>	<b>21</b>	<b>18,754,692</b>	<b>146,792,297</b>
All Rail					
Line Type	Estimated Ridership	Average Passenger Miles	Key Count	Total Estimated Ridership	Total Passenger Miles
Metrolink	961,899	1,690,190	21	1,690,190	24,794,076



# We've identified five key drivers of Metro ridership



**Access to Fast, Frequent, Reliable Service**

**High Density Around Transit**

**Composition of Reachable Customer Base**

**Car Ownership (or lack thereof)**

**Metro Brand Health & Perceptions**



List of drivers is not exhaustive

# Ridership drivers are the foundation of our marketing strategies

Examples below:

MARKETING STRATEGIES

Target Hyper-Focused Areas of Good Service	Be top-of-mind + create strong emotional relationship w/ current customer demographic	Maximize Transit Mode Share of Currently Carless	
Increase Business/School Partnerships in Areas of Good Service	Target super commuters	Reduce # of Cars Per Household	Improve Perceptions of Metro Bus
Promoting New Line Openings (e.g. Crenshaw/LAX Line)	Identify attitudinally-defined growth target	Develop Pro-Transit Youth	Improve and Maintain Metro Brand Health

DRIVERS

Access to Fast, Frequent, Reliable Service	High Density Around Transit	Composition of Reachable Customer Base	Car Ownership (or lack thereof)	Metro Brand Perceptions
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Marketing can only do so much.  
Delivering reliable, high-quality  
transportation is key.

Implementing Metro's Vision 2028 Strategic  
Plan will be key to growing ridership.

It contains goals like:

1. Provide high-quality mobility options that enable people to spend less time traveling
2. Deliver outstanding trip experiences for all users

