

LONG RANGE TRANSPORTATION PLAN: VALUES (DRAFT FRAMEWORK)

1. What is the Values chapter?

- This section presents the statement of values that influence/guide the LRTP's policy and investment decisions.

Those principles, norms and cultural values include the four Guiding Principles developed at the onset of the LRTP Update process, which serve as requirements for the LRTP approach and outcomes:

- Public engagement and analytical rigor—undertaking broad and strategic public engagement is vital to creating a plan that reflects our diverse public and stakeholders, necessitating that decision-making be guided by the input received, along with strong technical work to illustrate a range of possible futures and corresponding outcomes;
- Equity, environment and health—creating a comprehensive transportation plan enables mobility and access and therefore has a powerful role to play in promoting equity, enhancing the environment and improving public health, all of which would be instilled into every aspect of the LRTP;
- Innovations, resiliency, and adaptability—reinforces the importance of a flexible and adaptable plan to address a range of innovations, which ensures that the plan can withstand these and other major changes, along with emphasizing the significance of maintaining a state of good repair and service; and
- Financial discipline and economic development—stresses the need to balance building significant, new transportation facilities with assuring funding to maintain a high operating standard and state of good repair, and recognizes the fundamental role a holistic multi-modal transportation network has in facilitating economic prosperity.
 - The LRTP must be financially constrained per requirements for SCAG's RTP/SCS

2. What does this chapter address?

- Goals and Policies
 - Vision 2028 provides goals and outcomes
 - Unify past policies and future objectives
 - Require discretionary consistency
- Performance Metrics
 - Measurable
 - Evaluate existing conditions
 - Forecast future impacts
 - Function and implementation specific
- Past Performance Measure Adoption

- Measure M: Metro Board adopted a performance framework in December 2015 for all LRTP projects. Performance Metric themes include:
 - Mobility
 - Accessibility
 - Economy
 - Safety
 - Sustainability & Quality of Life

3. What are the Purposes of Values Driven Performance for the LRTP?

Values Driven Performance establishes a framework for developing the plan and monitoring the effectiveness of the implementation.

- *Address stated goals:* A performance measure may quantify, with a measurable result or score, a project’s impact on vehicle miles traveled (VMT). However, a single number is not informative unless it is tied to an agency goal and objective. The goal and objective helps inform whether a positive or negative number is desired. Additionally, a target or criteria can help Metro determine how big of an impact is desired.
- *Focus on system-level impacts.* The framework is intended to serve as a systemwide sample of key performance indicators. It is not intended to be an exhaustive list of all measures of interest. Metro considers many additional variables when evaluating the performance of specific projects, programs, or modal interests.
- *Help Metro Track Progress:* Performance measures will help Metro in benchmarking systemic progress toward regional goals, providing transparency and accountability to taxpayers and regional stakeholders.

4. What do we mean by “performance?”

Performance measures, performance metrics, and criteria are often used interchangeably. While there is a lot of overlap, there are subtle but important differences:

Term	Definition	Example
Performance Measure	A quantifiable measure of impact	Vehicle miles traveled (VMT)
Performance Metric	The quantified value of the LRTP’s impact	Recommended projects will decrease VMT by 3% compared to baseline
Criteria/Target	The threshold or standard level of performance the LRTP seeks to meet	A preferred scenario should decrease VMT by 5% compared to baseline

5. How is a Performance Framework structured?

LRTP performance framework is organized around goals (what do we want to achieve?), objectives (how do we address our goals?), and performance measures (how do we track and measure success?):

- **Goals** (“What do we want to achieve?”) drawn from the service-oriented goals of *Vision 2028*.

- **Objectives** (“How should we address our goals?”) drawn from public input gathered through the outreach phase of the LRTP, as well as objectives from countywide planning efforts, statutory requirements, and *Vision 2028* initiatives.
- **Performance Measures** (“How do we track and measure success?”) drawn from *Vision 2028*, the US Department of Transportation’s Transportation Performance Management rulemaking, Metro’s the LRTP/Measure M Performance Framework, the *SCAG 2016 Regional Transportation Plan/Sustainable Communities Strategy*, and other Metro plans and programs.

6. What is the purpose of scenario testing and how does it use performance?

The primary purpose of scenario testing is to understand the benefits and drawbacks of each, in addition to identifying areas where more effort may be needed in future planning cycles to achieve ambitious targets. Evaluating combinations of different transportation investment alternatives, including alignment options with complementary land use growth patterns will assist policymakers, planners, and the public at large to make investment related decisions.

Scenarios considered:

- High-Frequency Transit
- Congestion Pricing, including mileage-based user fee, cordon pricing and corridor pricing
- Enhanced Active Transportation
- Innovative Transportation
- TOC Infill

7. What is Set Forth in the Metro Vision 2028 Strategic Plan?

- Metro’s five vital and bold goals
 - Provide high-quality mobility options that enable people to spend less time traveling.
 - Deliver outstanding trip experiences for all users of the transportation system.
 - Enhance communities and lives through mobility and access to opportunity.
 - Transform LA County through regional collaboration and national leadership.
 - Provide responsive, accountable, and trustworthy governance within the Metro organization.
- Metro’s mission is to provide a world-class transportation system that enhances quality of life for all who live, work, and play within LA County.
- Metro’s vision is composed of three elements:
 - Increased prosperity for all by removing mobility barriers;
 - Swift and easy mobility throughout LA County, anytime; and
 - Accommodating more trips through a variety of high-quality mobility options
- Action matrix identifies path forward toward implementation of Vision 2028:
 - Adopt performance metrics and incorporate them into practices at Metro
 - Develop performance metrics specific to the Bus Rapid Transit Vision and Principles Study
 - Build an asset management practice
 - Define guidelines for performance outcomes of full transportation network
 - Update performance measures related to security
 - Develop performance measurement/continuous improvement program related to customer satisfaction
 - Develop program of rigorous performance management and continuous improvement across Metro, including the allocation of staff and financial resources
 - Establish baseline for system performance

8. What role does Equity play in the Values Framework?

Metro introduced the Equity Platform in February 2018 as a basis to actively lead and partner in addressing and overcoming disparities in accessing opportunity. Metro has committed to incorporating equity principles into, and pursuing equitable outcomes emerging from, everything we do. The Equity Platform is comprised of four pillars:

- **Define and Measure:** define equity and develop performance metrics that allow us to determine whether equity, as defined, is being meaningfully achieved as part of Metro’s actions;
- **Listen and Learn:** establish the crucial connection between Metro and the larger LA County community in carrying out the principles of the Platform;
- **Focus and Deliver:** implement actions and programs that carry out Equity Platform objectives and principles; and
- **Train and Grow:** recognize that significant commitments will be needed from within the Metro organization to understand, embrace and maximize equity advancements.

Implementation of the four Equity Platform pillars illustrates how values guide Metro, and will be ongoing.

The “Define and Measure” pillar embraces the key task of defining “equity” in the transportation realm — and where transportation intersects with other disciplines. This must be matched with performance metrics that allow us to determine whether equity, as defined, is being meaningfully achieved as part of Metro’s actions. It is essential that equity definitions and metrics be done in a collaborative environment, to include those voices which may not have been previously sought at the forefront of Metro-driven decisions. Efforts include:

1. Work with the Policy Advisory Council (PAC) to define “opportunity gaps” —
2. Construct and apply equity-driven performance metrics in key Metro initiatives

In the meantime, include appropriate metrics in both the evaluation and recommendations of major initiatives.

The “Listen and Learn” pillar in the Equity Platform establishes the crucial connection between Metro and the larger Los Angeles County community in carrying out the principles of the Platform. The following elements have been initiated or are in progress:

1. Establish new partnerships with Community Based Organizations (CBOs).
2. Establish Equity Advisory avenues.

Realizing Equity

The “Focus and Deliver” pillar addresses the need to implement actions and programs that carry out Equity Platform objectives and principles. Examples of on-going and future initiatives include, but are not limited to:

- NextGen
- Women and Girls Governing Council:
- LRTP

- Disadvantaged Business Enterprise/Veterans Business Enterprise assistance
- Career Pathway initiatives, including the proposed Transportation School
- Explore other assistance to resource-challenged local jurisdictions in Los Angeles County,

The “Train and Grow” pillar recognizes that implementing the Equity Platform effectively will require significant commitments within the Metro organization to understand, embrace, and maximize equity advancements in the other pillars. Commitments include:

- Pursue senior-/executive-level training program in racial equity.
- Work with foundations on possible training/seminars geared to Metro-related focus areas.
- Host workshop on technical best practices for equity measurement and analysis.

9. What are the key issues influencing access to opportunity?

The framework explores the relationship between demographic factors (independent variable) and opportunity factors (dependent variable).

The Values Framework attempts to understand the correlation between opportunity gaps and demographic factors, to identify where in the county these communities are concentrated, as identified in the Baseline Understanding Framework.

	Demographics (Risk Factors)
Opportunity Factors (Outcomes)	<ul style="list-style-type: none"> • Are there gaps in outcomes? • If so, where are the disparities concentrated?

Equity Risk Factors

It is difficult to measure equity because it means different things to different people. Inequity, or gaps in opportunity, is easier to quantify. Demographic factors are important determinants of inequity in LA County and are identified in the table below.

<i>Demographics (Risk Factors)</i>
• Income (< \$35,000 annually)
• Race (Non-white)
• Family structure (Single-parent household)
• Car ownership (Zero-car household)
• English speaking (Limited English household)
• Housing tenure (renter)

- Birthplace (Foreign-born)
- Age (Under 18 or over 65)
- Disability (Household with at least one person with a disability)
- Gender (Female)

Several of these demographic factors are more strongly correlated with low access to opportunity. Communities with the highest non-white, low-income and zero-car populations are at the greatest risk for overall lack of opportunity and, therefore, face the greatest inequities. These demographic factors are described in greater detail in the *Baseline Understanding* section.

Access to Opportunity

Opportunity Factors are outcomes that are affected by demographic factors. Data on Opportunity Factors can show the opportunity gaps that exist within various communities, which includes access differences, cost of living rates or other disproportionate impacts, as compared to the County average. Below is a list of Opportunity factors that could help identify communities with greater risk(s) and/or larger opportunity gaps, when looking at more specific metrics within each factor:

Opportunity Factors

- Jobs/Employment
- Housing
- Education
- Public Health
- Environment Quality
- Safety/Security

10. What Demographic Factors face the greatest opportunity challenges?

Each demographic factor is important to track over time, but some appear to be more strongly correlated with low access to opportunity. For example, neighborhood unemployment rates tend to increase as their concentrations of low-income, non-white, single parent, and renter populations increase. Overall, this analysis suggests that communities with the greatest risk for overall lack of opportunity are the highest concentrations of the following populations:

- **Low-income;**
- **Non-white; and**
- **Zero-car.**

Together, communities with large concentrations of low-income, non-white and zero-car households show opportunity gaps well over the county average. Note that many of the above demographic factors are correlated with one another, so by focusing specifically on these three factors, we capture larger concentrations of other demographic factors as well. Stakeholders on the PAC Equity Working Group agreed that these three demographic factors are critical to defining opportunity and identifying Equity Focus Communities (EFCs).

Figure 4-1 Concentration of Low-Income Households

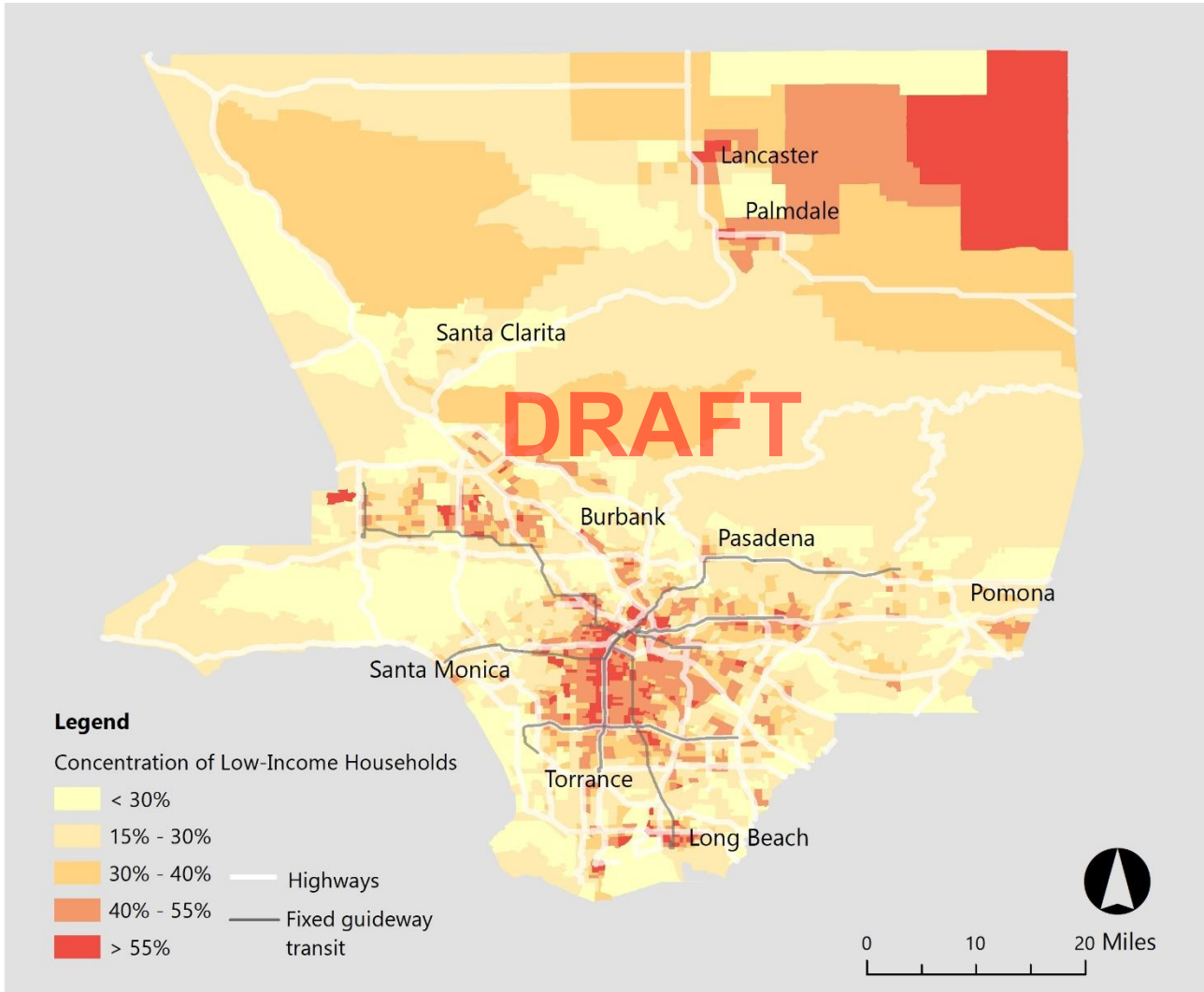


Figure 4-2 Concentration of Non-White Population

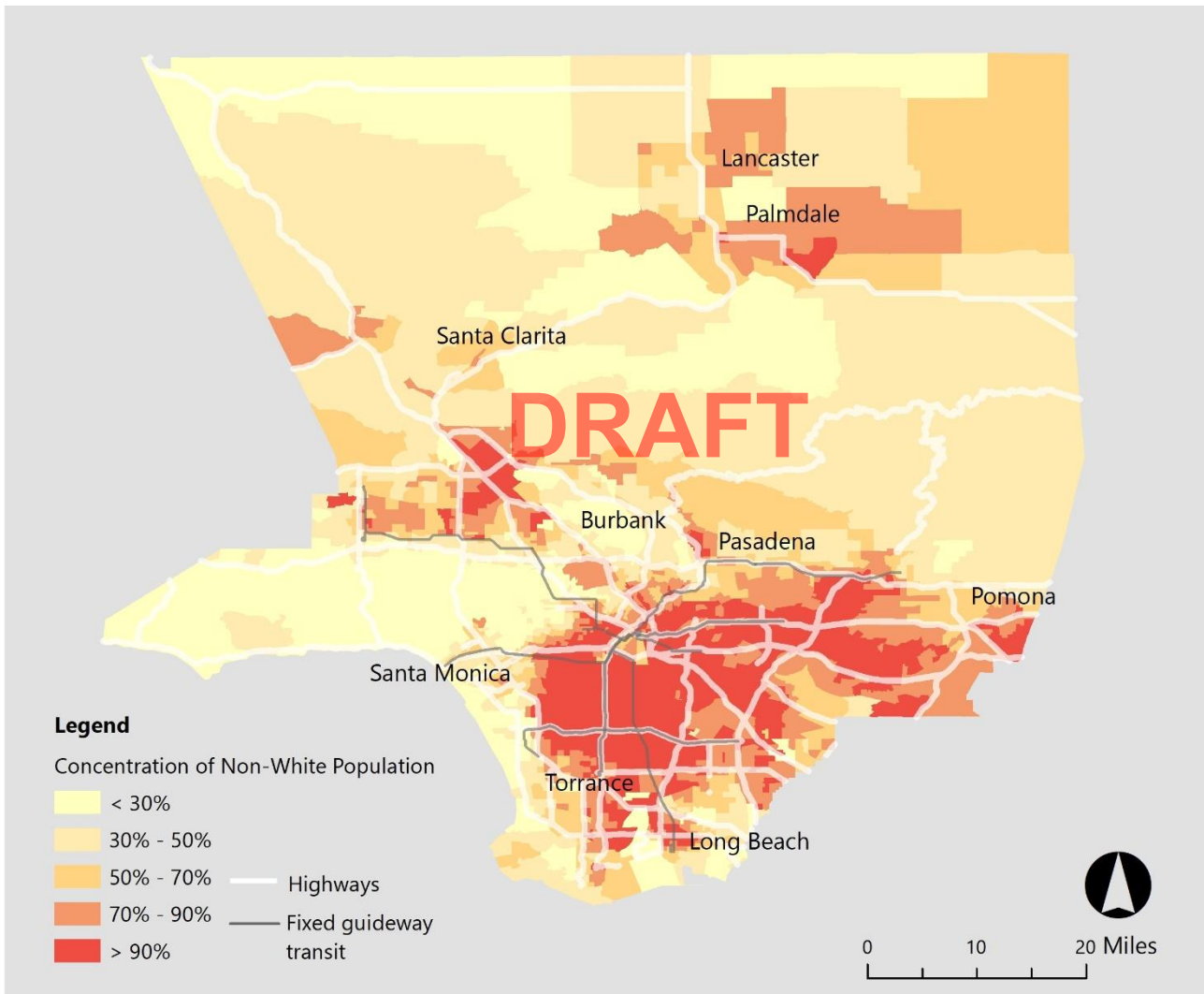
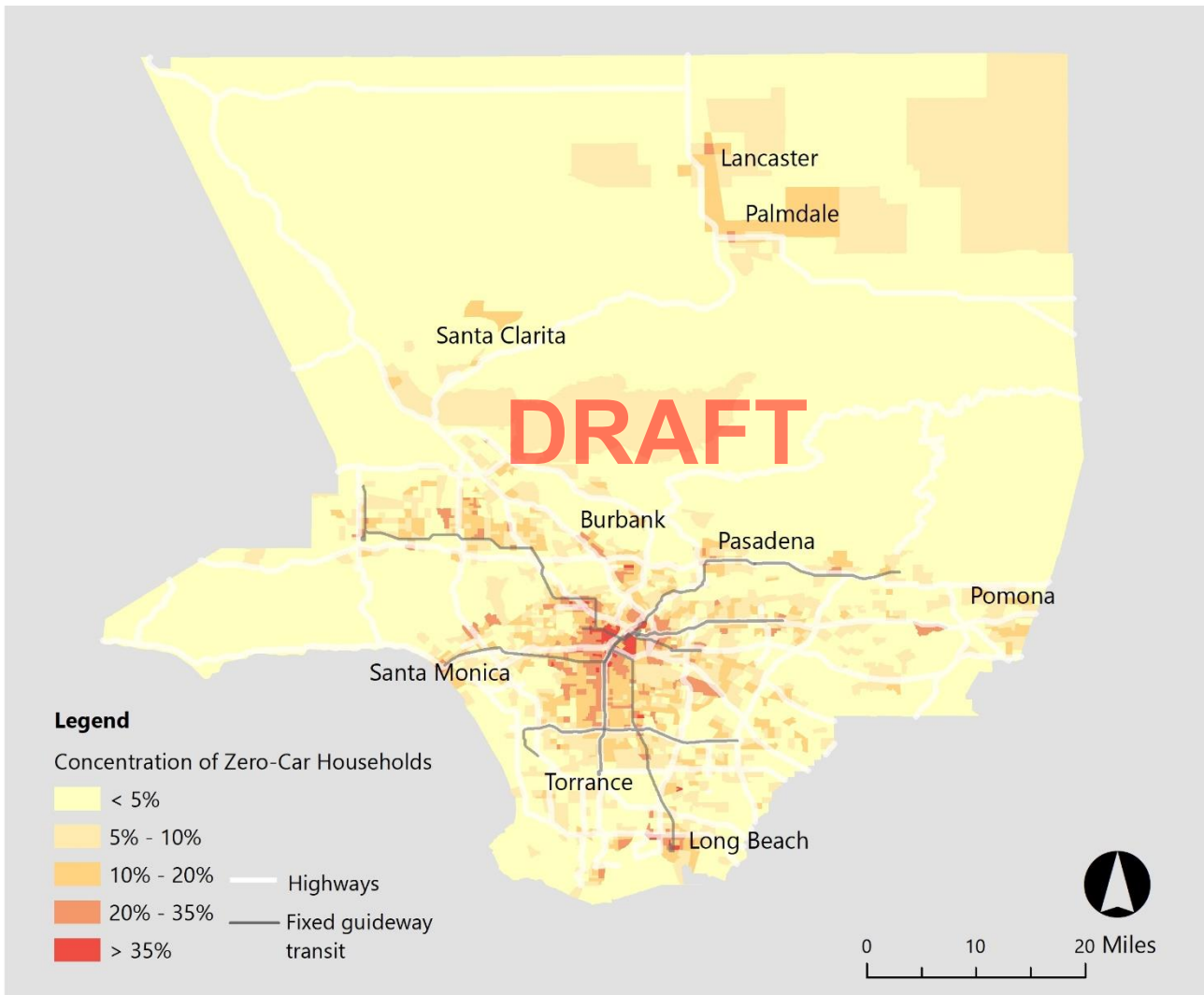


Figure 4-3 Concentration of Zero-Car Households



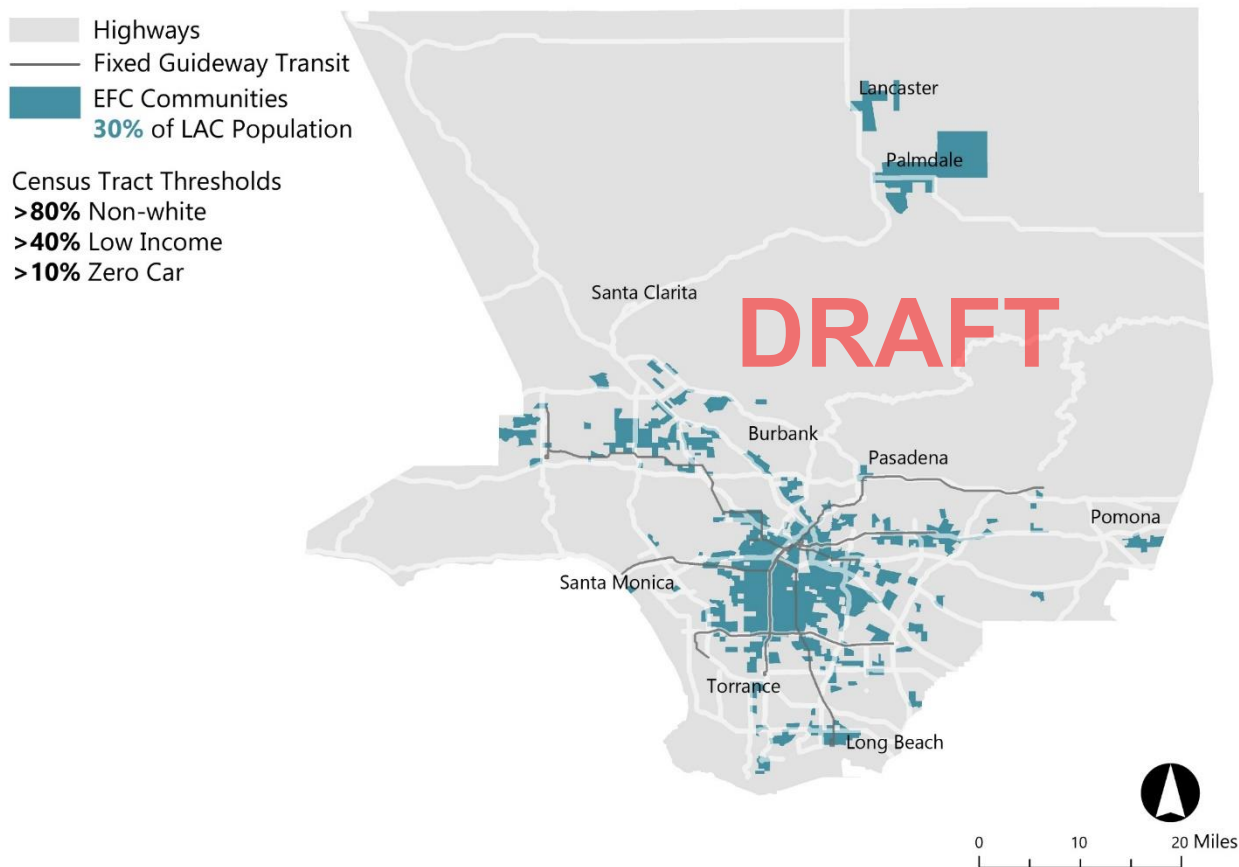
Equity Focus Communities (EFCs)

Equity focus communities (EFCs) are those communities most heavily impacted by gaps in inequity throughout the County. The transportation performance of EFCs can be evaluated by setting a threshold of census tracts in the County. A 30% threshold was presented to PAC and is presented as a draft in Figure 4. The 30% threshold represents approximately 3 million people in LA County and is distinguished by:

- More than 40% of the census tracts having low-income households over the County average; and
- Either more than 80% of the census tracts having non-white populations over the County average; or
- More than 10% of the census tracts having zero-car households over the County average.

Most of the other demographic factors are strongly correlated with these three factors.

Figure 4-4 Equity-Focus Communities



11. Why develop consensus for LRTP Performance Measures?

Consensus is a necessary element for the LRTP, to be able to reflect the priorities of the community and support attainment of desired performance outcomes for the multimodal transportation system. Public engagement for the LRTP will include stakeholder feedback on the Values, including the performance measures.

Metro is working internally and externally to build consensus on performance for the updated LRTP.

When complete, this section of the LRTP will deliver the following:

- Establish overall performance measures that measure and forecast the impacts (positive and negative) for transportation investments;
- Establish an evaluation of the existing transportation network, utilizing the same performance criteria;
- Define Equity for purposes of the LRTP, and for project specific purposes; and
- Identify which performance impacts are Metro controlled, and which are partnership-driven.

Performance measures serve as a basis for comparing alternative improvement strategies and for tracking performance over time. The selection of performance measures is a critical selection that will guide future policies and investment strategies. Therefore, the Metro Board must adopt and embrace the performance measures, as part of the LRTP update, to align Board adopted goals with stakeholder priorities.

Draft Performance Measures

A draft performance framework was shared with PAC in April. The framework included each of the five Vision 2028 goals, system performance objectives, and draft performance measures as displayed below in Figure 5.

Performance measures specific to EFCs are identified in Goal 3 (Enhance communities and lives through mobility and access to opportunity), Performance Objective 5 (Promote access to opportunity in Equity Focus Communities).

Figure 5. Draft Performance Measures

Vision 2028 Goals	#	System Performance Objectives	DRAFT Performance Measures
Goal 1: Provide high-quality mobility options that enable people to spend less time traveling	1	Optimize the speed, reliability and performance of the transportation system	Travel time by mode
			Travel time reliability by mode
	2	Provide high-quality mobility options for all	Percent of households and jobs within 10-minute walk or roll of high-quality transit
			Transit competitiveness (vs. driving) in key travel markets
Person travel hours in non-SOV modes			
Goal 2: Deliver outstanding trip experiences for all users of the transportation system	3	Improve transportation system safety and security	Active transportation mode share
			Collisions by mode by severity
			Miles of protected bicycle pathways and sidewalks within ½ mile of high quality transit
	4	Maintain a high level of customer satisfaction	Part I & II crimes reported on Metro transit system
Goal 3: Enhance communities and lives through mobility and access to opportunity	5	Promote access to opportunity in Equity Focus Communities	Customer satisfaction with Metro bus, rail, and Express Lanes systems
			Travel time by mode in EFCs
			Percent of Equity Focus Community (EFC) households within 10-minute walk or roll of high quality transit
			Collisions by mode and severity in EFCs
			Miles of protected bicycle pathways and sidewalks within ½ mile of high quality transit in EFCs
			Affordable housing within ½ mile of high quality transit in EFCs
			Percent of household income spent on combined transportation and housing costs in EFCs
			Air quality pollutants in EFCs
	6	Reduce household costs spent on transportation and housing	Percent of activity centers in EFCs within 10-minute walk or roll of high quality transit
			Percent of roads and highway bridges in good and fair condition in EFCs
	7	Promote economic vitality	Affordable housing within ½ mile of high quality transit
			Jobs within 1/2 mile of high quality transit
			Percent of household income spent on combined transportation and housing costs
8	Improve environmental	Regional economic growth attributable to transportation investments	
		Regional jobs attributable to transportation investments	
			GHG emissions

		quality and resilience	Air quality pollutants
	9	Enhance public health and quality of life	Percent of activity centers within 10-minute walk or roll of high quality transit
			Active transportation mode share
Goal 4: Transform LA County through regional collaboration and national leadership	10	Manage roadway congestion	Vehicle hours of delay per capita
			Vehicle miles traveled per capita
			Total person throughput
			Average roadway incident clearance time
	11	Increase share of travel by non-SOV modes	Annual transit trips
			SOV mode share
	12	Support efficient goods movement	Truck vehicle hours of delay
Truck travel time reliability			
Goal 5: Provide responsive, accountable, and trustworthy governance within Metro	13	Maintain a state of good repair of transportation assets	Percent of roads and highway bridges in good and fair condition
			Percent of backlog to state-of-good-repair funding needs to address transit assets past useful life
	14	Ensure accountability through transparent reporting practices	Progress toward project completion compared to financial forecast
			Legal and policy reports issued on time

Appendix 4A includes draft performance metrics and data sources for the measures.

Appendix

4A. Proposed LRTP Performance Metrics

Vision 2028 Goals	#	System Performance Objectives	DRAFT Performance Measures	Performance Metric Description	Modes measured	Data Source
Goal 1: Provide high-quality mobility options that enable people to spend less time traveling	1	Optimize the speed, reliability and performance of the transportation system	Travel time by mode	Average AM and Midday travel time (in minutes) by mode	auto, truck, rail, bus, bike, walk	Metro Travel Demand Model (2017)
			Travel time reliability by mode	% variation in AM and Midday travel time (in minutes) by mode	auto, truck, transit	Metro Arterial Performance Monitoring Tool Metro Service Planning and Analysis group
	2	Provide high-quality mobility options for all	Percent of households and jobs within 10-minute walk or roll of high-quality transit	Percent of households and jobs within 10-minute walk or roll of high-quality mobility options		Metro Service Planning Data; Metro Travel Demand Model (2017); US Census Bureau ACS (2017) and Census Transportation Planning Products
			Transit competitiveness (vs. driving) in key travel markets	Ratio of transit travel time to auto travel time between zonal pairs		Data from Metro NextGen Bus Study
			Person travel hours in non-SOV modes	Person travel hours for transit, HOV, bicycling, and walking	HOV, transit, biking, walking	Metro Travel Demand Model (2017)
			Active transportation mode share	% of trips made by bicycle or walking	Bike, walk	California Household Travel Survey (2012); National Household Travel Survey (2017); US Census Bureau ACS (2017)
	3	Improve transportation system safety and security	Collisions by mode by severity	Number of fatal and severe collisions involving autos, trucks, bicycles, and pedestrians	auto, bike, walk, truck	Statewide Integrated Traffic Records System (SWITRS)
Miles of protected bicycle pathways and sidewalks within ½ mile of high quality transit			Miles of protected bicycle pathways and sidewalks within ½ mile of high quality transit		Metro GIS data (2018); LA County Dept. of Parks and Rec.	

		Part I & II crimes reported on Metro transit system	Part I & II crimes reported on Metro transit system		LA Police Dept; LA Sheriffs Dept.; Long Beach Police Dept.	
	4	Maintain a high level of customer satisfaction	Customer satisfaction with Metro bus, rail, and Express Lanes systems	Customer satisfaction with Metro bus, rail, and Express Lanes systems	Bus, Rail, HOV/ Express Lanes	Metro Customer Satisfaction Survey
Goal 3: Enhance communities and lives through mobility and access to opportunity	5	Promote access to opportunity in Equity Focus Communities	Travel time by mode in EFCs	Average AM and Midday travel time (in minutes) by mode for trips originating in EFCs	SOV, HOV, truck, transit, bike, walk	Metro Travel Demand Model (2017)
			Percent of Equity Focus Community (EFC) households within 10-minute walk or roll of high quality transit	Percent of Equity Focus Community (EFC) households within 10-minute walk or roll of high quality transit		Metro Service Planning Data; Metro Travel Demand Model (2017); US Census Bureau ACS (2017) and Census Transportation Planning Products
			Collisions by mode and severity in EFCs	Number of fatal and severe collisions located in EFCs involving autos, trucks, bicycles, and pedestrians	SOV, HOV, truck, transit, bike, walk	Statewide Integrated Traffic Records System (SWITRS)
			Miles of protected bicycle pathways and sidewalks within ½ mile of high quality transit in EFCs	Miles of protected bicycle pathways and sidewalks within ½ mile of high quality transit in EFCs		Metro GIS data (2018); LA County Dept. of Parks and Rec.
			Affordable housing within ½ mile of high quality transit in EFCs	Federal, State, and County-Administered Affordable Housing Units in EFCs within 1/2 mile of high quality transit		California Housing Partnership Corporation - LA County Annual Housing Outcome Report (2018)

		Percent of household income spent on combined transportation and housing costs in EFCs	Percent of household income spent on combined transportation and housing costs in EFCs		US Census Bureau ACS (2017), Metro Travel Demand Model (2017)	
		Air quality pollutants in EFCs	Grams of quality criteria pollutants in EFCs (Ozone, Particulate Matter, NO _x , SO _x , CO)		South Coast Air Quality Management District Metro Travel Demand Model & ARB EMFAC CalEnviroscreen (tract-level). EPA EJScreen.	
		Percent of activity centers in EFCs within 10-minute walk or roll of high quality transit	Percent of activity centers in EFCs within 10-minute walk or roll of high quality transit		LA County Location Management System, Metro Travel Demand Model (2017)	
		Percent of roads and highway bridges in good and fair condition in EFCs	Percent of roads and highway bridges in good and fair condition in EFCs		Pavement management system (Caltrans)	
	6	Reduce household costs spent on transportation and housing	Affordable housing within ½ mile of high quality transit	Federal, State, and County-Administered Affordable Housing Units within 1/2 mile of high quality transit		California Housing Partnership Corporation - LA County Annual Housing Outcome Report (2018)
			Percent of household income spent on combined transportation and housing costs	Percent of household income spent on combined transportation and housing costs		US Census Bureau ACS (2017), Metro Travel Demand Model (2017)
	7	Promote economic vitality	Jobs within 1/2 mile of high quality transit	Jobs within 1/2 mile of high quality transit		US Census Bureau's: - Longitudinal Employer-Household Dynamics - Census Transportation Planning Products Metro Service Planning data

		Regional economic growth attributable to transportation investments	Regional economic growth attributable to transportation investments		Regional Economic Models Inc (REMI) TranSight	
		Regional jobs attributable to transportation investments	Regional jobs attributable to transportation investments		Regional Economic Models Inc (REMI) TranSight	
	8	Improve environmental quality and resilience	GHG emissions	Tons of carbon dioxide equivalent (CO ₂ e)		Metro Travel Demand Model and ARB EMFAC CalEnviroscreen (tract-level). EPA EJScreen.
			Air quality pollutants	Grams of quality criteria pollutants (Ozone, Particulate Matter, NO _x , SO _x , CO)		South Coast Air Quality Management District Metro Travel Demand Model and CARB's Emissions Factor Model (EMFAC) CalEnviroscreen (tract-level). EPA EJScreen.
	9	Enhance public health and quality of life	Percent of activity centers within 10-minute walk or roll of high quality transit	Percent of activity centers within 10-minute walk or roll of high quality transit		LA County Location Management System. Metro GIS data (2018), Metro Travel Demand Model (2017)
			Active transportation mode share	% of trips made by bicycle or walking	Bike, walk	California Household Travel Survey (2012) National Household Travel Survey (2017) US Census Bureau ACS (2017)
Goal 4: Transform LA County through regional collaboration and national leadership	10	Manage roadway congestion	Vehicle hours of delay per capita	Vehicle hours of delay per capita		Metro Travel Demand Model (2017)
			Vehicle miles traveled per capita	Vehicle miles traveled per capita		Metro Travel Demand Model (2017)
			Total person throughput	Total person throughput = (PMT/PHT) X (PMT/VMT)		Metro Travel Demand Model (2017)
			Average roadway incident clearance time	Average roadway incident clearance time		California Highway Patrol

	11	Increase share of travel by non-SOV modes	Annual transit trips	Annual transit trips		Metro Travel Demand Model (2017)
			SOV mode share	SOV mode share	SOV	Metro Travel Demand Model (2017) National Household Travel Survey (2017)
	12	Support efficient goods movement	Truck vehicle hours of delay	Truck vehicle hours of delay	Truck	Metro Travel Demand Model (2017)
			Truck travel time reliability	% variation in AM and Midday truck travel time (in minutes)	Truck	Metro Arterial Performance Monitoring Tool Metro Service Planning and Analysis group
Goal 5: Provide responsive, accountable, and trustworthy governance within Metro	13	Maintain a state of good repair of transportation assets	Percent of roads and highway bridges in good and fair condition	Percent of roads and highway bridges in good and fair condition		Caltrans Division of Maintenance Office of Pavement Management (PaveM); FHWA Highway Performance Monitoring System (HPMS)
			Percent of backlog to state-of-good-repair funding needs to address transit assets past useful life	Percent of backlog to state-of-good-repair funding needs to address transit assets past useful life		Metro Transit Asset Management (TAM) Plan
	14	Ensure accountability through transparent reporting practices	Progress toward project completion compared to financial forecast	% of projects delivered on-time and on-budget		Metro Office of Management and Budget, Metro Financial Forecast
			Legal and policy reports issued on time	Percent of legal and policy reports issued on time		Metro Office of Management and Budget, Management Audit Services Division (MASD)

Note: Metro's Office of Extraordinary Innovation is currently exploring the acquisition of big data sources. Any future big data acquisition will be used for validation of these metrics and may be incorporated into future methodologies and evaluations.