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TO: BOARD OF DIRECTORS

THROUGH: PHILLIP A. WASHINGTON *PAW*
CHIEF EXECUTIVE OFFICER

FROM: THERESE W. MCMILLAN *TW*
CHIEF PLANNING OFFICER

SUBJECT: 2017 SUSTAINABILITY ANNUAL REPORT UPDATE

ISSUE

On February 15, 2017, the Ad Hoc Sustainability Committee asked staff to provide updates on the development of sustainability performance metrics. This board box provides an update on the development of performance metrics for the agency's Countywide Sustainability Annual Report in 2017.

DISCUSSION

In 2015, Metro released its first Sustainability Annual Report, which stemmed from implementation actions in Metro's 2012 Board-approved Countywide Sustainability Planning Policy (CSPP). The Sustainability Annual Report included case studies and sustainability performance metrics. Since 2015, the Ad Hoc Sustainability Committee requested expanded performance metrics and ongoing updates. The Committee indicated that the performance metrics in the report should be revised and updated to consider equity issues. Metro has engaged a consultant team to research best practices and meaningful metrics to fulfill the Committee's direction. Staff has provided periodic updates on this effort to the Ad Hoc Sustainability Committee and this report is to update the Board on current status. Of note, work on sustainability metrics is intended to inform the upcoming Long Range Transportation Plan as discussed further below.

The project team conducted research and gathered input from stakeholders regarding transportation-related sustainability metrics in use at other transit agencies, metropolitan planning organizations, and other nongovernmental entities. Research included interviews and literature review. The team identified best practices metrics currently in use by various agencies and organizations for tracking sustainability practices and outcomes. The team also facilitated a

stakeholder meeting to share research findings and to solicit input on the types and attributes of sustainability metrics for Metro to track and report.

On June 14, 2017, staff presented to the Ad Hoc Committee on the best practices research and categories of policy themes for performance metrics. The categories underscore sustainability principles in Metro's 2012 Countywide Sustainability Planning policy. These policy theme categories are:

- mobility and access
- environment, health and safety
- and community, economy, and equity

Findings

Selection Criteria

Multiple criteria were applied in selecting an appropriate set of countywide sustainability metrics. The criteria are based on input from stakeholders and recommendations from the project team's research. The following were considered in selecting the metrics:

- Data considerations such as source, availability, calculation feasibility, costs and staff resources
- Measurable trend (ability to be compared over time, frequency of data updates)
- Comparable with other agencies (can be compared with others that track these metrics)
- Agency goals (countywide in scale, relevant to Metro's priorities and goals, connected to principles and priorities in the Countywide Sustainability Planning Policy, can be applied in agency decision-making, agency may have authority or influence over impacts)
- Stakeholder input, including recommendations from group and individual meetings, written feedback, and other discussions

Equity Considerations

In addition to the equity category noted above in the policy theme categories, applying an equity lens to other metrics will also be important in analyzing metrics. For example: Are there differences in transit accessibility according to household income levels? Are there differences in exposure to air pollution by race and ethnicity? Relevant characteristics for inclusion in analyses may include the following:

- Household vehicle ownership (including percentage of households without a vehicle)
- Disadvantaged communities (geographic), as designated using CalEnviroScreen 3.0
- Household income
- Race and ethnicity
- Age (particularly children and the elderly)
- Language (particularly Limited English Proficiency)

- People living with disabilities

Metrics Recommended for Further Consideration and Analysis

Using the selection criteria listed above, a first cut of performance metrics has been developed. Attachment A - Metrics Overview shows 21 proposed metrics with preliminary assessment on suitability. Best practices research presented to the Committee on June 14, 2014 recommended selecting about 10 metrics total; therefore the list in Attachment A will be honed to 10 to 12 metrics following Committee input and an additional stakeholder meeting. Attachment A includes some of Metro's existing metrics, modifications to existing metrics, and new metrics. For each metric, additional information is provided: policy theme category; topic area; other agencies that use the metric (or similar); relevance to Metro's sustainability goals; stakeholder priority; and applicable equity lens.

NEXT STEPS

With input from the Board and agency staff, the project team will reduce metrics from Attachment A to between 10 and 12. Further, the project team will then analyze data for selected metrics and work with staff and stakeholders to create a framework for performance targets. A key consideration at this juncture will be how this effort integrates with the larger system performance metric analysis that will be part of Metro's Long Range Transportation Plan (LRTP). Among other tasks, the upcoming LRTP will direct significant attention to coordinating performance metrics and measurement across several transportation-related objectives, including sustainability, to ensure that such considerations are integrated into the overall Metro portfolio, including investment decisions.

At the next report, staff will review refined sustainability performance metrics and begin discussion on performance target frameworks. This project concludes in March 2018 and staff will provide a final report and recommendations to the Metro Board at that time.

Attachment A – Metrics Overview

Metric	Category	Topic Area	Example Agency	Relevance to Metro Goals	Stakeholder Input (Priority among stakeholders (initial)	Equity "Slicer," if applicable
Vehicle miles traveled (VMT), daily totals (existing metric)	Mobility & Access	General mobility, demand, capacity & reliability	MTC (SF Bay Area), http://www.vitalsigns.mtc.ca.gov/	H	H - compare VMT to travel	N/A
Commute mode choice	Mobility & Access	Mobility and ridership by mode	MTC (SF Bay Area), http://www.vitalsigns.mtc.ca.gov/	H	H - multi-modal important	Income
Average trip length (miles) and times (minutes), by mode (existing metric, with modification)	Mobility & Access	General mobility, demand, capacity & reliability	SANDAG, The Regional Comprehensive Plan 2012-2013 Biennial Performance Monitoring Report; San Diego Forward The Regional Plan Appendix S: Performance Monitoring	H	N/A	N/A
Travel time reliability (buffer time index)—time beyond average travel time needed to ensure on-time arrival	Mobility & Access	General mobility, demand, capacity & reliability	MTC (SF Bay Area), http://www.vitalsigns.mtc.ca.gov/	H	N/A	N/A
Transit ridership (annual boardings for all transit providers in county)	Mobility & Access	Mobility and ridership by mode	MTC (SF Bay Area), http://www.vitalsigns.mtc.ca.gov/	H	H - multi-modal important	Income, Age
Percent of county's population within a half-mile radius of a transit station (existing metric, with modification) or Transit Connectivity Index (number of bus routes and train stations within 1/8-mile of each Census block group, scaled by frequency of service)	Mobility & Access	General mobility, demand, capacity & reliability	WMATA (Washington, D.C.), 2016 Metro Sustainability Report	H	H - multi-modal important	Disadvantaged communities (CalEPA), Low-income communities
Percent of county's jobs within a half-mile radius of a transit station (existing metric, with modification) or Transit Access Shed (sum of geographic area accessible within 30 minutes by public transit, including 1/4-mile walking buffer around each transit stop)	Mobility & Access	General mobility, demand, capacity & reliability	WMATA (Washington, D.C.), 2016 Metro Sustainability Report	H	H - employment access	Wage/Salary Levels
Shared mobility—number of car-share and bicycle-share vehicles available within a half-mile radius of a transit station	Mobility & Access	Mobility innovations, new technologies, and system connections	N/A	H	H - shared mobility	Disadvantaged communities (CalEPA), Low-income communities
Greenhouse gas emissions from transportation and goods movement in Los Angeles County, daily total (existing metric, with modification)	Environment, Health & Safety	Air pollution, emissions, heat, and health	N/A	H	N/A	N/A
Combined criteria air pollutant emissions from transportation and goods movement in Los Angeles County	Environment, Health & Safety	Air pollution, emissions, heat, and health	SANDAG, The Regional Comprehensive Plan 2012-2013 Biennial Performance Monitoring Report; San Diego Forward The Regional Plan Appendix S: Performance Monitoring	H	H - but also NOx,Ozone	N/A
Percent of polluted stormwater treated or managed on-site through green infrastructure	Environment, Health & Safety	Water, stormwater, and ecosystem health	City of Seattle, Moving the Needle Report 2017	H	H	N/A
Injuries and fatalities from traffic collisions per 100,000 people in Los Angeles County	Environment, Health & Safety	Safety by mode (e.g., transit, driving, active transportation)	MTC (SF Bay Area), http://www.vitalsigns.mtc.ca.gov/	H	N/A	Disadvantaged communities (CalEPA), Low-income
Percent of roadway miles with sidewalks and other infrastructure for people walking	Environment, Health & Safety	Safety by mode (e.g., transit, driving, active transportation)	Chicago Metropolitan Agency for Planning, regional comprehensive bicycle and pedestrian plan	H	H	Disadvantaged communities (CalEPA), Low-income communities
Percent of roadway miles with lanes, signage, or other infrastructure for people biking	Environment, Health & Safety	Safety by mode (e.g., transit, driving, active transportation)	Chicago Metropolitan Agency for Planning, regional comprehensive bicycle and pedestrian plan	H	H	Disadvantaged communities (CalEPA), Low-income communities
Percent of vehicles owned in region that run on electricity or other cleaner fuels	Environment, Health & Safety	Air pollution, emissions, heat, and health	SANDAG, The Regional Comprehensive Plan 2012-2013 Biennial Performance Monitoring Report; San Diego Forward The Regional Plan Appendix S: Performance Monitoring	H	N/A	N/A
Portion of transportation infrastructure assessed for vulnerability to climate change impacts, including extreme heat and forecasted sea level rise	Environment, Health & Safety	Air pollution, emissions, heat, and health	N/A	H	N/A	Disadvantaged communities (CalEPA), Low-income communities
Percent of household income spent on transportation and housing combined (Housing and Transportation Affordability Index), by income group	Community, Economy, and Equity	Affordability (including transportation and housing)	MTC (SF Bay Area), http://www.vitalsigns.mtc.ca.gov/	H	H	Disadvantaged communities (CalEPA), Low-income communities

Metric	Category	Topic Area	Example Agency	Relevance to Metro Goals	Stakeholder Input (Priority among stakeholders (initial)	Equity "Slicer," if applicable
Percent of county population living within a disadvantaged community, as designated by CalEPA based on CalEnviroScreen 3.0	Community, Economy, and Equity	Accessibility and livability (e.g., jobs, schools, services, amenities)	N/A	H	H - comprehensive of many health/social/EJ factors	Income
Percent of residents living within 1/2 mile walk or 3-mile bike to parks and open spaces	Community, Economy, and Equity	Accessibility and livability (e.g., jobs, schools, services, amenities)	SCAG, Regional Transportation Plan/Sustainable Communities Strategy 2016-2040, Appendix: Performance Measures	H	H	Disadvantaged communities (CalEPA), Low-income communities
Percent of funding for mobility projects serving disadvantaged and/or low-income communities	Community, Economy, and Equity	Regional economy and goods movement	N/A	H	H - access for low-income households; ROI for mobility projects	Disadvantaged communities (CalEPA), Low-income communities
Energy efficiency of goods movement in the region (energy use per container/TEU moved)	Community, Economy, and Equity	Regional economy and goods movement	MTC (SF Bay Area), http://www.vitalsigns.mtc.ca.gov/	L	N/A	N/A