



## Board Report

---

**File #:** 2018-0422, **File Type:** Informational Report

**Agenda Number:**

---

**EXECUTIVE MANAGEMENT COMMITTEE  
JULY 19, 2018**

**SUBJECT: 2018 ENERGY AND RESOURCE REPORT**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

RECEIVE AND FILE status report on 2018 Energy and Resource Report (Attachment A).

**ISSUE**

Metro reports its sustainability performance on an annual basis through the Energy and Resource (E&R) Report which updates agency progress on predefined performance metrics and identifies trends. The 2018 E&R Report provides an update to the 2017 E&R Report by presenting sustainability performance data for calendar year 2017. The Report has been reviewed by the Metro Sustainability Council.

**BACKGROUND**

In 2009, Metro became a founding member of the American Public Transportation Association (APTA) Sustainability Commitment, which “recognizes members who commit to becoming more sustainable in their operations and practices.” Signatories to the APTA Sustainability Commitment are required to quantify and report annually on a series of key performance metrics and to track performance against each metric over time. The commitment establishes the following sustainability metrics:

- (1) Unlinked Passenger Trips
- (2) Vehicle Miles Traveled
- (3) Operating Expenses
- (4) Criteria Air Pollutant Emissions
- (5) Greenhouse Gas Emissions
- (6) Greenhouse Gas Displacement

(7) Energy Use

(8) Water Use

(9) Total Solid Waste

(10) Diversion from Landfill

## **DISCUSSION**

The 2018 E&R Report marks Metro's ninth annual report since 2010 when the agency began reporting its environmental compliance and sustainability performance. The report is intended to communicate two things:

1. The performance metrics serve to quantify Metro's sustainability performance across ten key indicator areas (Table 1). Since 2012, many of the indicator areas are trending positively, largely due to institutional best practices, such as the now agency-wide Environmental Management System first piloted in 2007. Metro continues to operate one of the cleanest fleets in the nation with emissions nearly cut in half since 2012. Overall water use and greenhouse gas emissions are down since 2012, and Metro continues to displace more emissions than it produces by encouraging and enabling use of public transit. However, evaluating year-over-year performance reveals areas where additional focus is needed as the agency continues to retool, reenergize, and prepare for the next phase of transit expansion.
2. The Highlight sections in this report provide insight into how sustainability is adopted as a core value at Metro. This is key as the next generation of transit expansion is planned, built, operated and maintained in a way that does not just avoid negative impacts to the environment, but encourages positive and restorative changes to communities and the economy. For example, features like Green Procurement and Sustaining Creativity (pages 24 and 42 in the report) illuminate how principles of sustainability have become embedded into decision making and are reinforced through training and cross-departmental collaboration. Another feature on Environmental Justice (page 18) highlights how Metro's construction pollution reduction policies and transit planning address long-term environmental equity.

Additional highlights in this year's report include:

- Electric vehicle pilot - purchase of 10 Chevy Bolts as part of a pilot to reduce emissions from non-revenue vehicle fleet. By 2019 over 15% of Metro's non-revenue sedan fleet will be battery electric vehicles (BEVs).
- Growing a Greener Workforce - cross-departments and community partnership to raise awareness on principles and best practices in sustainability. Over 480 Metro and community members received certifications for G-PRO and Envision rating systems.

Table 1 - Performance Metrics Summary

Performance Metrics	2012	2013	2014	2015	2016	2017	Trends	
							Since 2016	Since 2012
<b>OPERATIONAL EFFICIENCY</b>								
Unlinked Passenger Trips (per Capita x 100)	4,752	4,757	4,649	4,377	4,111	3,904	-5.0%	-17.8%
Vehicle Miles Traveled (per Capita x 100)	78.7	78.7	78.8	79.4	79.3	78.8	-0.6%	0.1%
Operating Expenses (Dollars per Vehicle Revenue Mile)	\$10.91	\$10.97	\$10.88	\$11.08	\$12.22	\$13.64	11.6%	25.0%
<b>AIR QUALITY</b>								
Criteria Air Pollutant Emissions (Short Tons per 100,000 Vehicle Revenue Miles)	70.2	60.1	56.9	50.8	34.7	40.9	17.9%	-41.7%
<b>CLIMATE</b>								
Greenhouse Gas Emissions (Pounds CO <sub>2</sub> e per Vehicle Revenue Mile)	8.61	8.37	6.85	6.72	6.68	6.74	0.8%	-21.7%
Greenhouse Gas Displacement (Net Emissions, MT CO <sub>2</sub> e)	-4,069	-3,933	-86,433	-73,827	-57,461	-40,758	-29.1%	901.6%
<b>ENERGY</b>								
Energy Use (MJ per Vehicle Revenue Mile)	55.7	57.6	57.2	56.6	55.3	55.6	0.6%	-0.2%
<b>WATER</b>								
Water Use (Gallons per Vehicle Revenue Mile)	2.96	3.33	2.48	2.15	1.74	2.11	21.3%	-28.7%
<b>WASTE</b>								
Total Solid Waste (Tons per 100,000 Vehicle Revenue Miles)	7.52	7.83	7.44	7.73	7.68	9.57	24.6%	27.3%
Diversion from Landfill (% Diverted)	48%	26%	25%	21%	21%	28%	34.6%	-41.7%

**FINANCIAL IMPACT**

This report does not have any financial or budget impacts.

**NEXT STEPS**

In addition to the 2018 E&R Report, staff is developing a Technical Appendix that will be made available online. The purpose of the Technical Appendix is to increase transparency by providing current and historical data used to develop performance metrics used in the report.

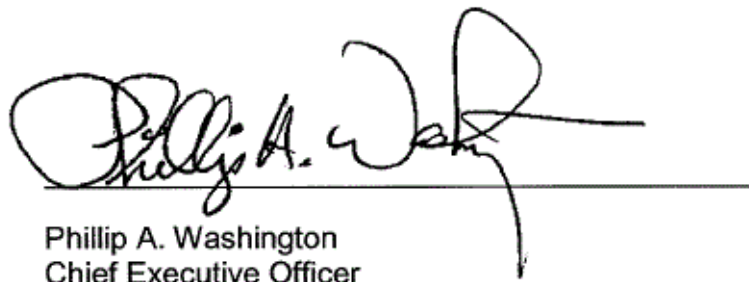
Staff will take the information from the 2018 E&R report and will refine the workplans developed to implement environmental and sustainability programs and initiatives for Metro.

**ATTACHMENTS**

Attachment A - 2018 Energy and Resource Report

Prepared by: Cris Liban, Executive Officer, Environmental Compliance and Sustainability (213) 922-2471

Reviewed by: Richard Clarke, Chief Program Management Officer (213) 922-7557



Phillip A. Washington  
Chief Executive Officer