



SEPTA's Budget Neutral Approach to Sustainability

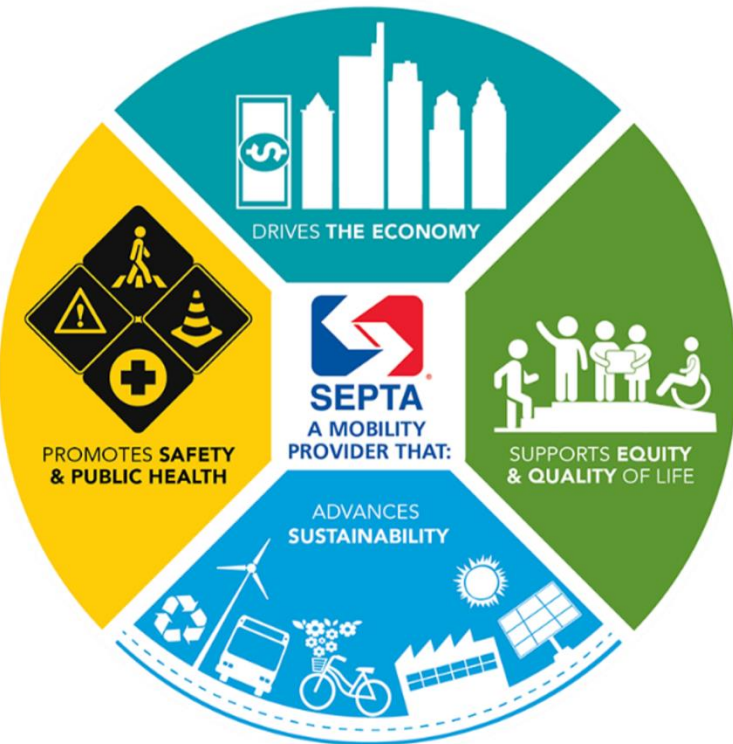
Erik Johanson, Chief Innovation Officer

November 19, 2020

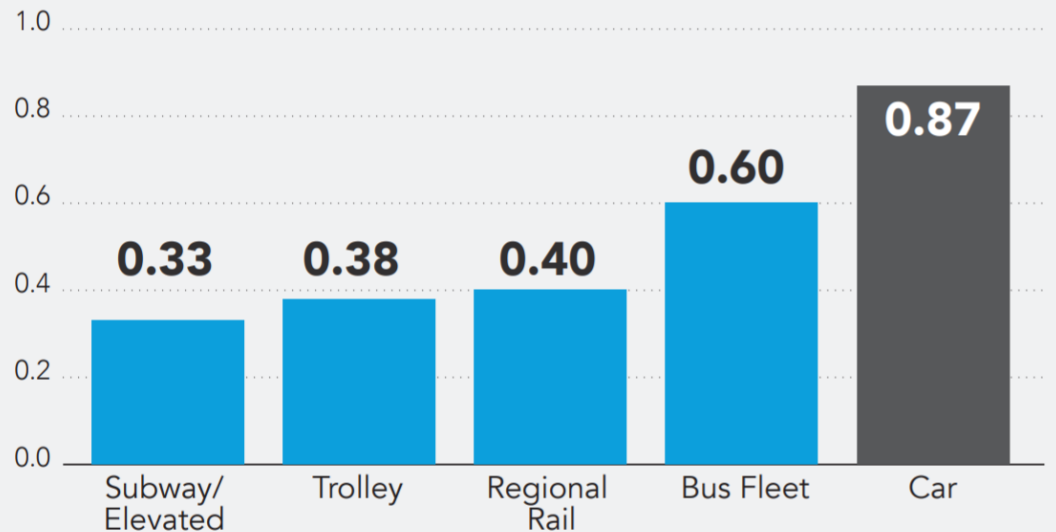


SEPTA's Value Proposition

Transit Is Inherently Sustainable



LOWER PER PASSENGER MILE GHG EMISSIONS



SEPTA's Sustainability Program



Award-Winning *SEP-TAINABLE*



*Governor's Award for
Environmental
Excellence*

COMMONWEALTH AWARD



10thousandFriends
OF PENNSYLVANIA

LEADING THE WAY ON SMART GROWTH





NATURAL ENVIRONMENT

Transit is inherently sustainable.
Initiatives to improve performance expands this environmental dividend.

HEALTHY COMMUNITIES & WORKFORCE

Transit is equitable.
Initiatives to support healthy communities and our workforce reinforce social well-being.

ECONOMIC VITALITY

Transit drives the economy.
Initiatives that support economic vitality help to leverage the region's density and productivity.

“BUDGET NEUTRAL” APPROACH

(I.E., NO SET BUDGET
FOR SUSTAINABILITY)

- **Off-Budget Financing** (Power Purchase Agreements, Energy Performance Contracts, Public-Private Partnerships)
- **Grant Funding** (FTA LoNo, CMAQ/DERA, PEDA)
- **Core Business** (Embedding Sustainability into Capital + Operations)



Energy Action Plan

Comprehensive Budget-Neutral Plan to Reduce Energy & GHG

WAYSIDE STORAGE (GRANTS, P3)

The New York Times
In Philadelphia, Batteries on Transit
System Power More Than Just the
Trains
January 22, 2016



BATTERY-ELECTRIC BUSES (FTA LONO GRANTS)



SEPTA 2018 ENERGY ACTION PLAN
A Strategy to Reduce Energy Consumption
& GHG Emissions

February 2018

ON-SITE, ROOFTOP SOLAR (PPA)



OFF-SITE, UTILITY SCALE SOLAR (VIRTUAL PPA)



SOLAR + BATTERY-POWERED SIGNAL SYSTEM (FTA GRANT)

- Partially Funded Through Federal Climate Resilience Initiative
- 48 Hours of Back-Up Power In the Event of Signal Power Failure
- Avoids Rippling 12-Minute Average Delay from Each Outage
- Zero Signal Power Failures Since Pilot Installation in 2018
- Now Under Construction: Three More Lines (Ultimate Goal: Full Regional Rail Buildout)
- Potential to Become Primary Power in the Future

