



2016 Sustainability Progress Report

Building a better tomorrow MAY 2017



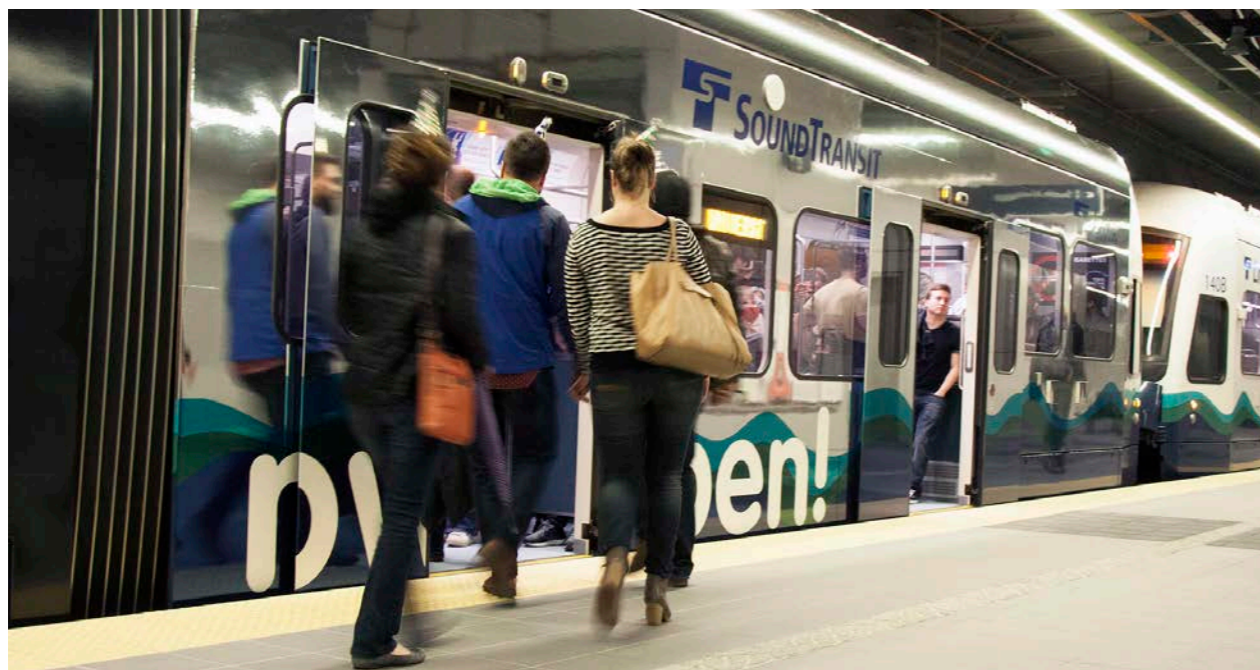
2016

Sustainability

What does sustainability mean to Sound Transit?

Sustainability is about making long-term investments and choices that keep the region's environment, communities and economy healthy. For Sound Transit, sustainability is about fulfilling the agency's mission as a provider, as well as how that mission is accomplished. Sound Transit organizes its sustainability efforts to:

- Help **people** move freely and affordably by providing regional transit.
- Promote stewardship to conserve the **planet's** natural environment.
- Support local economic **prosperity** by enabling residents and businesses to save time and money.



Sound Transit implements sustainability through a robust **Environmental and Sustainability Management System (ESMS)**. This system holds the agency accountable for controlling potential environmental impacts, achieving annual environmental and sustainability targets, and demonstrating continual improvement in performance. Since 2007 Sound Transit has been among a select number of transit agencies nationwide to achieve international ISO 14001 certification of its ESMS.

Key Accomplishments

In 2016 Sound Transit achieved a number of important sustainability achievements that leverage social, environmental and financial benefits for the region's future. The agency:

- Significantly improved the region's environment by increasing transit ridership and efficiency. Sound Transit provided nearly 43 million rides and used less energy to move each passenger. Fleet energy use across Sound Transit's services became nine percent more energy efficient per passenger mile traveled in 2016.
- Expanded its ability to improve regional quality of life with the voter approved Sound Transit 3 ballot initiative, which will build out a 116-mile regional transit system over the next 25 years. The capital expansion plan will enable even more people to travel affordably on reliable, environmentally friendly transit.
- Ensured green building and infrastructure is part of all capital projects and established funding for resource efficiency projects.
- Installed the agency's first solar power array at Link light rail's Angle Lake Station.
- Significantly reduced air pollution emissions from Sounder and ST Express bus services, while maintaining a strong record for environmental compliance across the agency.
- Continued a financial commitment to sustainability by executing \$500 million in environmentally friendly 'green' bonds – less than one year after completing the largest sale of municipal green bonds (\$1 billion) worldwide.



Transit is sustainable

RIDING TRANSIT

Improving regional quality of life

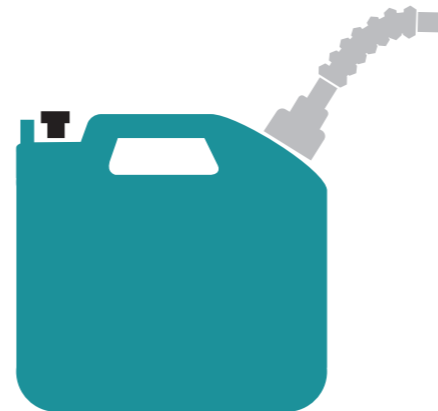
Sound Transit's mission to build, operate and expand the regional transit system is essential to Central Puget Sound's sustainable future. Sound Transit promotes sustainability by developing the regional transit system and fostering smart growth.

The agency's capital expansion plan enables more people to travel affordably and reliably on environmentally friendly buses and trains throughout the region's growing communities. Expanding mass transit services benefits everyone by reducing the number of cars on the road, which decreases air and water pollution, among other benefits.

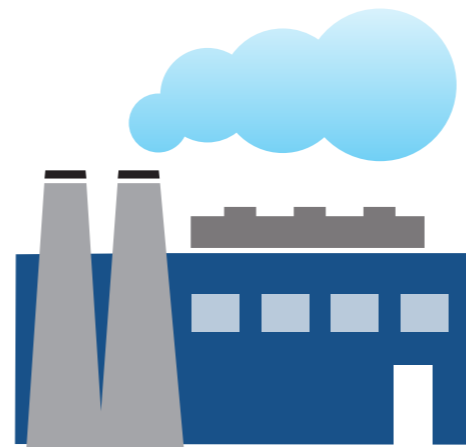
SAVES TIME



SAVES FUEL



SAVES MONEY



IMPROVES AIR QUALITY

People

Help people move freely and affordably by providing regional transit

Significantly growing ridership

More people than ever in Central Puget Sound are choosing transit to get to where they need to go. With the opening of three new Link light rail stations, nearly 43 million rides were taken on Sound Transit trains and buses in 2016, a 23 percent systemwide increase over 2015 ridership rates.

“Every time someone chooses Link, Sounder or ST Express, they are helping our region’s economy and the environment.”

Dave Somers, Board Chair and Snohomish County Executive

ALL TIME DAILY BOARDING RECORD▶

+23% RIDERSHIP GROWTH SINCE 2015

+71% RIDERSHIP GROWTH SINCE 2011

+66% INCREASE IN LIGHT RAIL RIDERSHIP DECEMBER 2015 - 2016

101,000



SOUND TRANSIT 3 MEASURE APPROVED

Approving historic Sound Transit expansion

In November 2016 voters gave Sound Transit the green light to improve and expand transit services, which will improve the region’s quality of life.

“The people in Central Puget Sound have made an historic commitment to a true regional mass transit network that connects our major job centers and residential communities with service that will be fast and reliable,” said Sound Transit Chief Executive Officer Peter Rogoff.

The voter approval of the Sound Transit 3 measure will bring light rail to Everett, Tacoma, downtown Redmond, Kirkland, Issaquah, Ballard and West Seattle; establish bus rapid transit on Interstate 405; and extend commuter rail’s south line.

Ensuring affordable communities

Sound Transit took further steps this year to ensure light rail is part of vibrant and affordable neighborhoods. In July the Sound Transit Board approved the sale of land adjacent to the Capitol Hill light rail station for affordable housing.

“Including affordable housing near the light rail station in the heart of Capitol Hill ensures that the neighborhood remains economically diverse and inclusive for all,” said Sound Transit Board Member and Seattle Mayor Ed Murray. “More people will be able to live with access to jobs, transit options and educational opportunities.



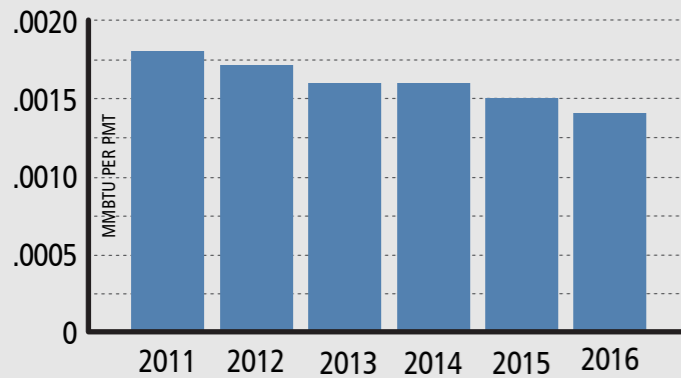
People

Help people move freely and affordably by providing regional transit

MOVING MORE PEOPLE EFFICIENTLY

All services continue to operate more efficiently by carrying more passengers while using less fuel every year.

FLEET ENERGY USE*



* Data normalized by passenger miles traveled.

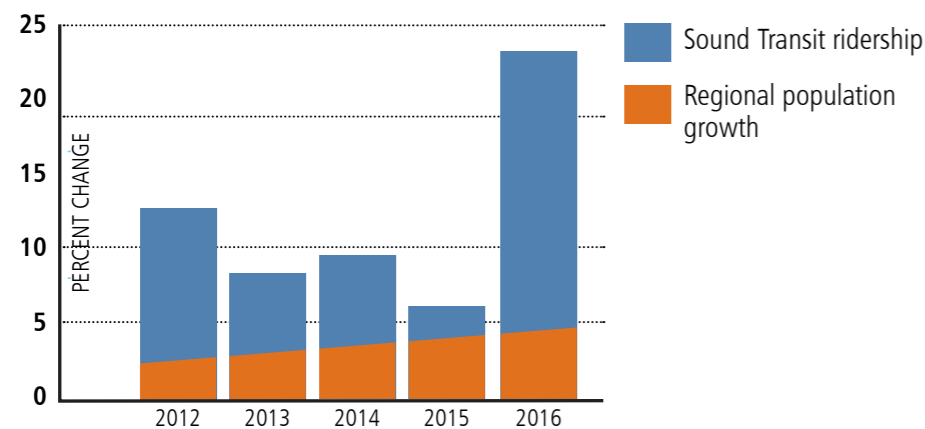


Receiving bike-friendly business certification

Sound Transit is now a League of American Bicyclists-recognized Gold level Bicycle Friendly Business!™ Sound Transit joins a cutting-edge group of nearly 1,300 businesses, government agencies and Fortune 500 companies across the United States that are transforming the American workplace.

“The business community’s investment in bicycling is playing a central role in making the country a safer, happier and more sustainable place to live and work,” said Bill Nesper, deputy director for Programs & Operations at the League of American Bicyclists.

RIDERSHIP INCREASING FASTER THAN REGIONAL POPULATION GROWTH



Promoting nonmotorized access to increase transit ridership

In 2016 Sound Transit continued to build on its work improving parking, pedestrian and bike accessibility and transit connections at several stations and facilities.

- At the University of Washington Station, a new bridge over Montlake Boulevard supports safe pedestrian and bicycle access to the new Link light rail station and bus connections.
- Across the ST system, there are now more than 1,600 bicycle parking spaces, of which more than 550 are secured bicycle parking spaces.
- There are now 213 carpool parking permits in circulation at Angle Lake Station and eight other park-and-ride facilities.

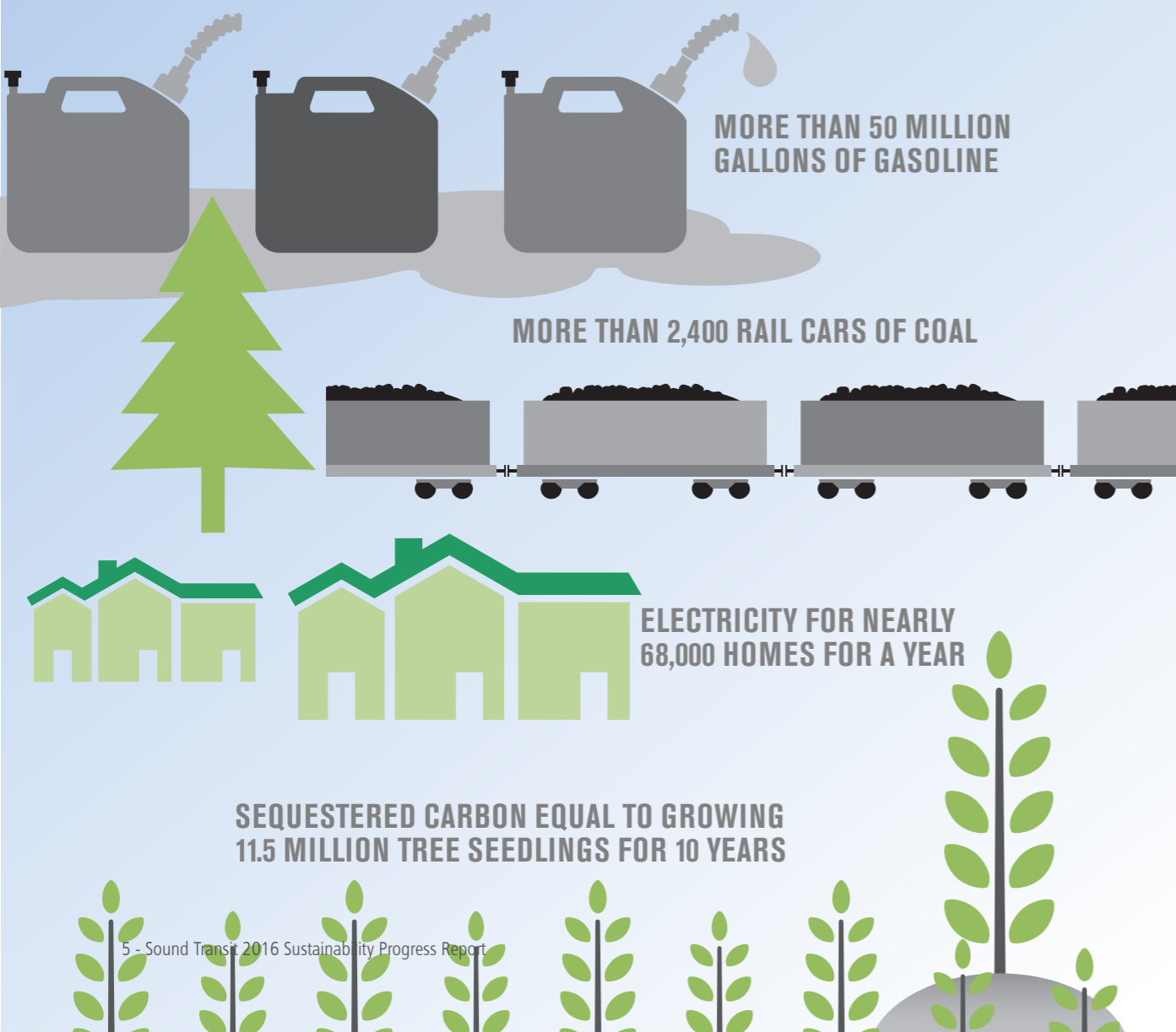
Planet

Promote stewardship to conserve the planet's natural environment

Increasing environmental benefits

Sound Transit and partner services provide tangible environmental benefits for the regional's growing communities. When people choose transit instead of driving alone, they reduce air pollutant emissions, among other benefits.

Passengers taking Sound Transit instead of driving divert more than 445,000 tons of greenhouse gas emissions annually. This is equivalent to saving:

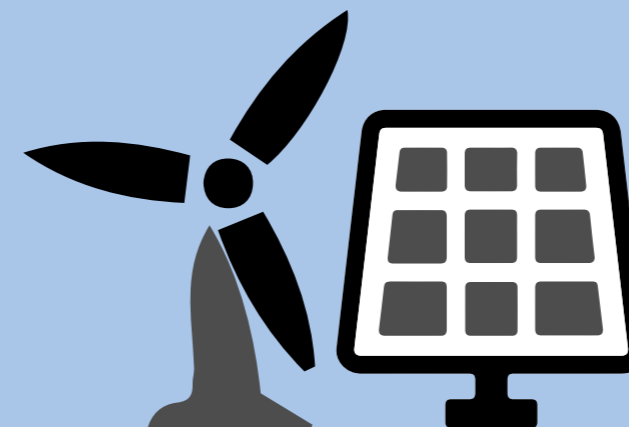


Making progress on the Sustainability Plan's short-term goals

- Reduce greenhouse gas emissions per vehicle by 5 percent.*
- Reduce vehicle pollution by 15 percent.*
- Decrease total energy use by 5 percent for all facilities built before 2015.
- ◐ Divert 40 percent of office waste to recycling or compost.
- Recycle 90 percent of construction and demolition materials.

○ Work needed
 ◐ On track
 ● Goals met
 * Data normalized by passenger miles traveled.

USING RENEWABLE ENERGY



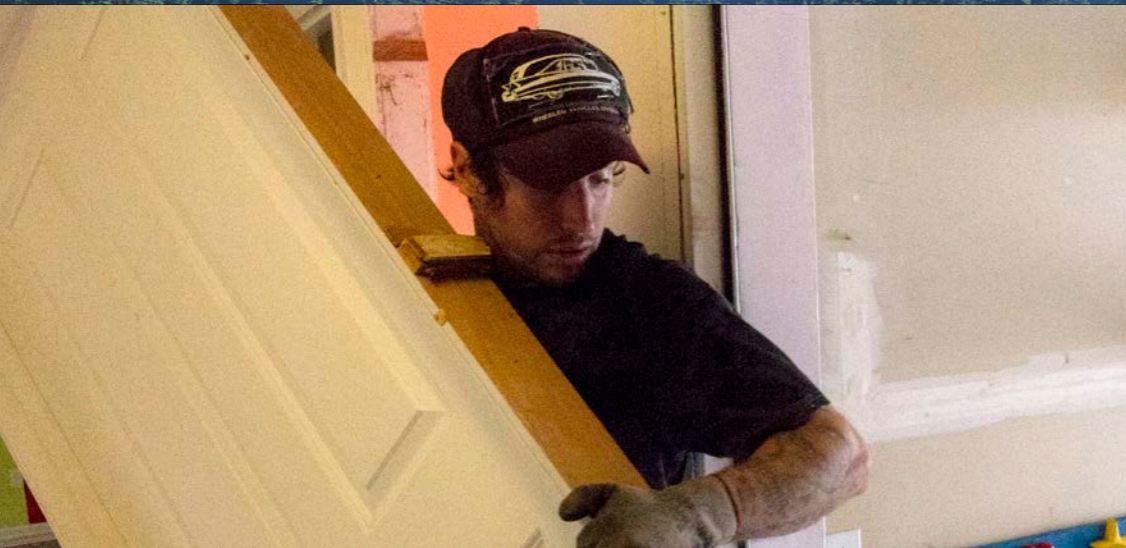
81%
OF SOUND TRANSIT'S
ELECTRICITY COMES FROM
RENEWABLE SOURCES



The Angle Lake Link light rail station opened in September 2016 and includes 64 kilowatts of solar power systems installed on top of the garage and the platform canopy.

Planet

Promote stewardship to conserve the planet's natural environment



Salvaging building materials

When Sound Transit has to take down buildings to make way for new transit stations, the agency tries to salvage and recycle as much of the structure as possible, from concrete and bricks to moldings and doors – materials that would otherwise go into landfills. Along the future East Link light rail route, three local salvage companies removed items for reuse from more than 40 properties including doors, cabinets, fixtures, lighting and appliances.



Reducing construction pollution

Sound Transit took major steps to reduce local air quality impacts from construction by prohibiting the highest-polluting construction equipment and vehicles from construction sites. Restricting the oldest equipment (EPA Tier 0 and Tier 1) will reduce the emissions of particulate matter and improve regional air quality, local health and worker safety. These equipment restrictions are being implemented on construction projects including East Link and Lynnwood Link. This is Sound Transit's first step toward becoming a leader in regional construction pollution reduction.

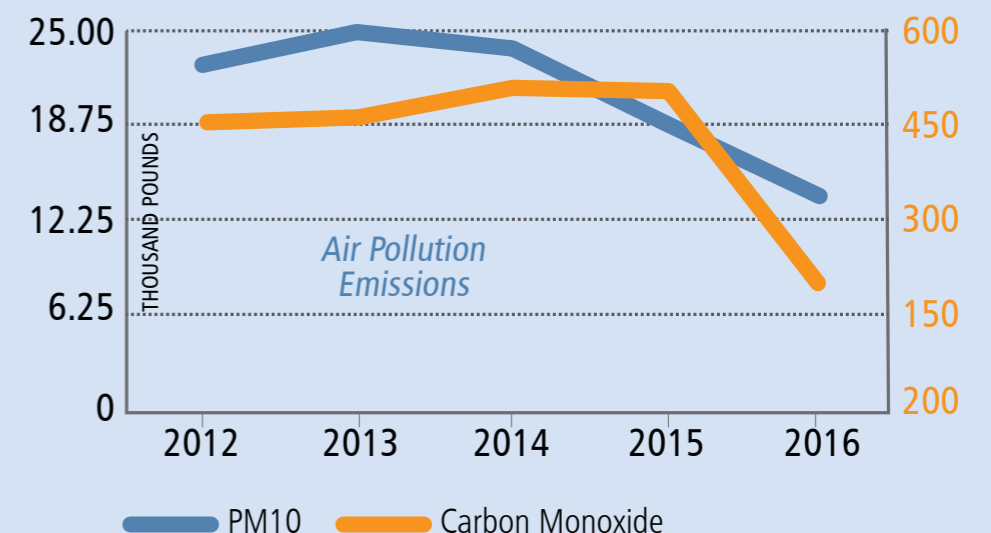


Making Sounder cleaner

In 2016 Sound Transit retrofitted three additional Sounder locomotive engines to newer engines that have better emissions control technology. Eleven of the 14 Sounder trains now have upgraded engines; the remaining three engines will receive upgrades in 2017. Upgraded locomotive engines contributed to a 13.5 percent decrease in the agency's emissions of particulate matter (PM10) air pollutants – a leading cause of respiratory disease.



ST EXPRESS AND SOUNDER AIR POLLUTION REDUCTION



Prosperity

Support local economic prosperity by enabling residents and businesses to save time and money

Connecting riders to more opportunities

Sound Transit opened three new light rail stations in 2016: Capitol Hill, University of Washington and Angle Lake stations. The opening of these stations further connects riders to new amenities, services and large regional employers, including the University of Washington and Alaska Airlines.

"Thousands of commuters will now be able to get to their destinations on time, every time, even as our population grows... we are creating the reliable mass transit system our region needs."

Dow Constantine, King County Executive

3 THREE STATIONS

27 HOSPITALS
COMMUNITY CENTERS

5 COLLEGES AND UNIVERSITIES

9 SPORTS AND CULTURAL VENUES
15 PRIMARY AND SECONDARY SCHOOLS



\$500 million

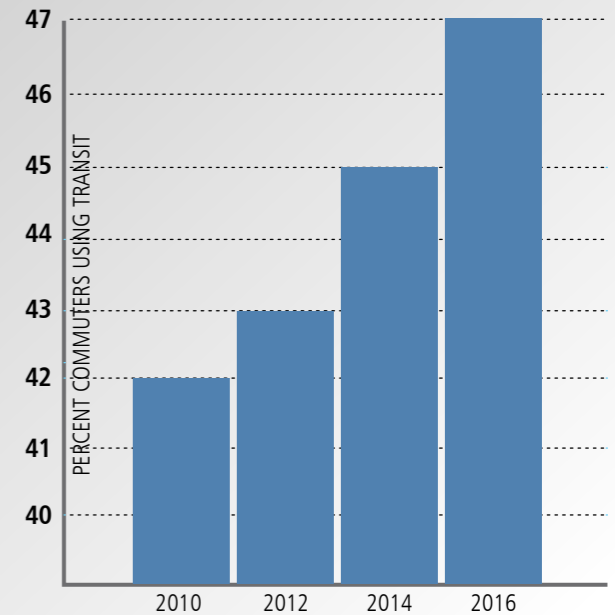
GREEN BONDS TO HELP FUND REGIONAL TRANSIT PROJECTS

Saving taxpayer dollars with green bonds

Sound Transit sold nearly \$500 million in green bonds to help fund its regional transit expansion projects at a rate significantly lower than the average cost of borrowing funds over the next 30 years.

"Every dollar we save in borrowing costs is one less dollar the taxpayers must pay to build our future transit system," said Sound Transit Chief Executive Officer Peter Rogoff, referring to the agency's second sale of green bonds. The transaction also cemented the agency's reputation as the largest municipal issuer of green bonds in the country and one of the world's most preeminent. Establishing investments that advance environmental sustainability is a rising trend in the financial industry.

47%* OF DOWNTOWN SEATTLE COMMUTERS RIDE TRANSIT



* Downtown Seattle Association

Creating a resilient transit system

Sound Transit is ensuring that the agency's services and infrastructure can withstand a variety of natural hazards that are intensifying as a result of climate change. Planning and designing an expanding transit system provides a unique opportunity to integrate climate resilience into long-term planning, design and risk management in order to minimize costly future repairs, retrofits and service disruptions.

Current climate change impacts include flooding, storm surges, and landslides, which already contribute to service disruptions and increased maintenance and

operating costs. In 2015 the agency developed a Climate Adaptation Strategy, which began implementation in 2016. Some key actions accomplished in 2016 included efforts to:

- Review available guidance for climate-resilient design.
- Consider future riparian and sea level rise-induced flooding in planning decisions.
- Initiate the inclusion of extreme weather event information in asset management systems and tracking.
- Begin incorporating climate change impacts into emergency management planning.

Prosperity

Support local economic prosperity by enabling residents and businesses to save time and money

Expanding ORCA LIFT to all Sound Transit services

Sound Transit provided discounted transit services to more income-qualified riders in 2016 by expanding the ORCA LIFT program, which was only available on Sound Transit Link light rail and King County Metro bus routes.

“More people in our region can afford to get to work, school and services each day now that ORCA LIFT cards work on all Sound Transit trains, buses and light rail. By making transit service accessible to all, we’re better connecting people to opportunity.”

Dow Constantine, King County Executive

39,000 PASSENGERS USED ORCA LIFT IN 2016



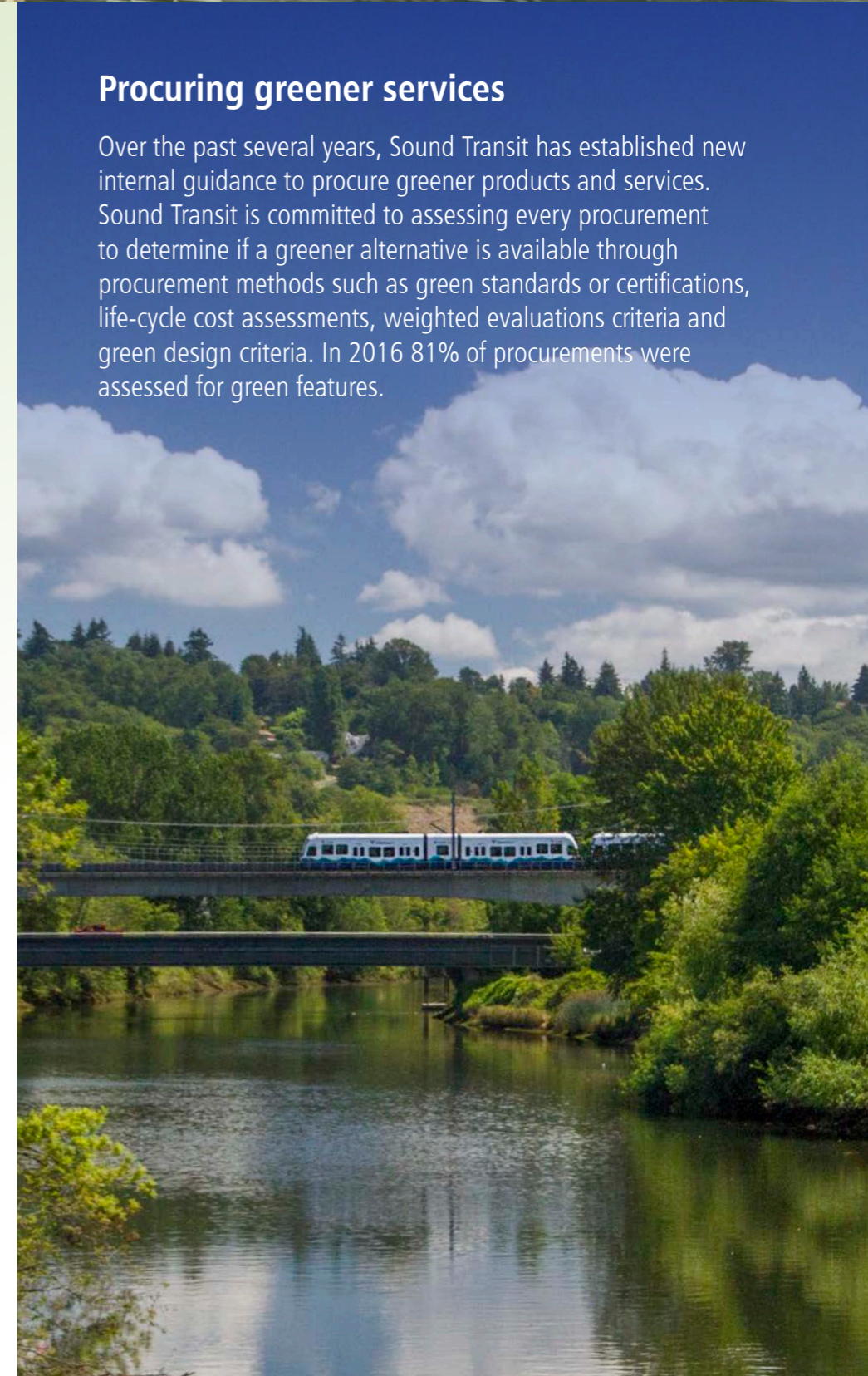
Exceeding goals for contracting with disadvantaged and small businesses

Sound Transit continues to exceed goals for contracting with disadvantaged business enterprises and small businesses (DBE/SBs) involving people of color and women. The agency’s DBE participation in federally funded Sound Transit projects in 2016 exceeded its three-year goals by attaining a 14.6 percent engagement rate compared to a goal of 12.4 percent. Overall, the commitment of Sound Transit and its contracting partners to maximize the use of DBEs and other small businesses led to more than \$48 million in DBE construction contracts in 2016.

“Sound Transit’s diversity initiatives go beyond requirements,” said Sound Transit CEO Peter Rogoff. “These programs and initiatives are putting people to work and improving lives. Sound Transit remains committed to doing all we can to help level the playing field and give disadvantaged business enterprises tools and resources to compete fairly for federally funding contracts.”

Procuring greener services

Over the past several years, Sound Transit has established new internal guidance to procure greener products and services. Sound Transit is committed to assessing every procurement to determine if a greener alternative is available through procurement methods such as green standards or certifications, life-cycle cost assessments, weighted evaluations criteria and green design criteria. In 2016 81% of procurements were assessed for green features.



Key performance indicators

Sound Transit's Sustainability Division coordinates across the agency to set sustainability goals and annually monitor, measure and report on progress. The division also works with agency leaders to prioritize staff efforts and financial investments that integrate sustainability into everyday business.



Measuring progress on the 2015 Sustainability Plan's Priorities

Key performance indicators



Work needed



On track



Goals met

● Increase revenue fleet fuel efficiency and reduce vehicle pollution.

14 percent reduction in total fleet energy use since 2014.*

12 percent reduction in total greenhouse gas emissions since 2014 (Goal: 5 percent by 2017).*

20-66 percent reduction in criteria air pollutants since 2014, depending on pollutant (Goal: 15 percent by 2017).*

More than 445,000 tonnes of CO₂e of regional greenhouse gas emissions savings from Sound Transit ridership.

* Data normalized by passenger miles traveled

● Optimize facility energy efficiency and clean energy generation.

81 percent of electricity or energy consumption from renewable sources.

15 percent reduction in facility energy use (Goal: 15 percent reduction in buildings built before 2015).

○ Reduce construction pollution.

Five General Contractor/Construction Manager and Design Build contracts include Sustainable Practice Plans.

One fineable other compliance violations related to storm water treatment out of 25 permits issued.

80 percent or higher recycling rate for construction and demolition materials.

○ Make informed decisions that consider environmental and social impacts.

12 formal total cost of ownership analyses performed.

Four major project and procurement reports that include sustainability topics.

○ Advance sustainability in early planning and design.

Seven major capital projects include budgets for sustainable design, green infrastructure, access and transit-oriented development readiness.

Four new external partnerships to enhance sustainable planning (not including partner agencies and jurisdictions).

NA - percent increase of required sustainable design and green infrastructure features in design criteria. Design criteria not updated in 2016.

○ Increase system resilience to climate change and extreme weather.

Seven of ten Climate Adaptation Strategy actions completed.

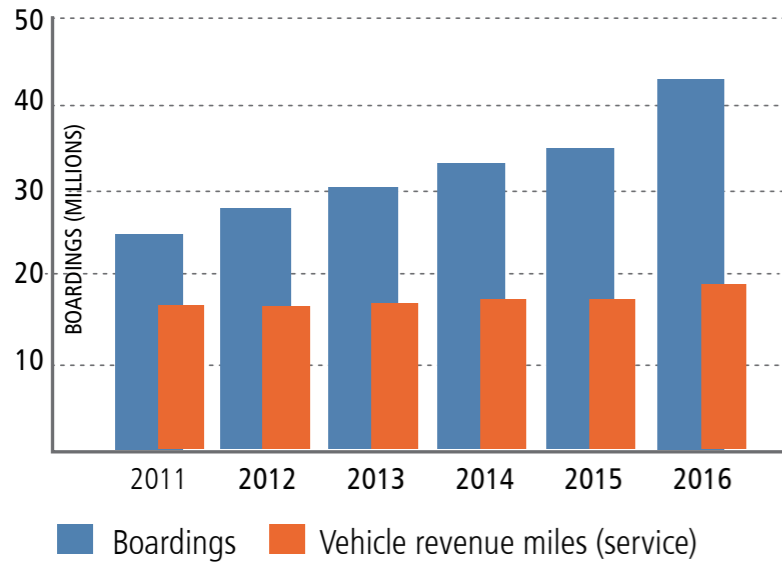
○ Procure and use green products and services.

81 percent of agency procurements assessed for green methods and features (Goal: 100 percent by 2017).

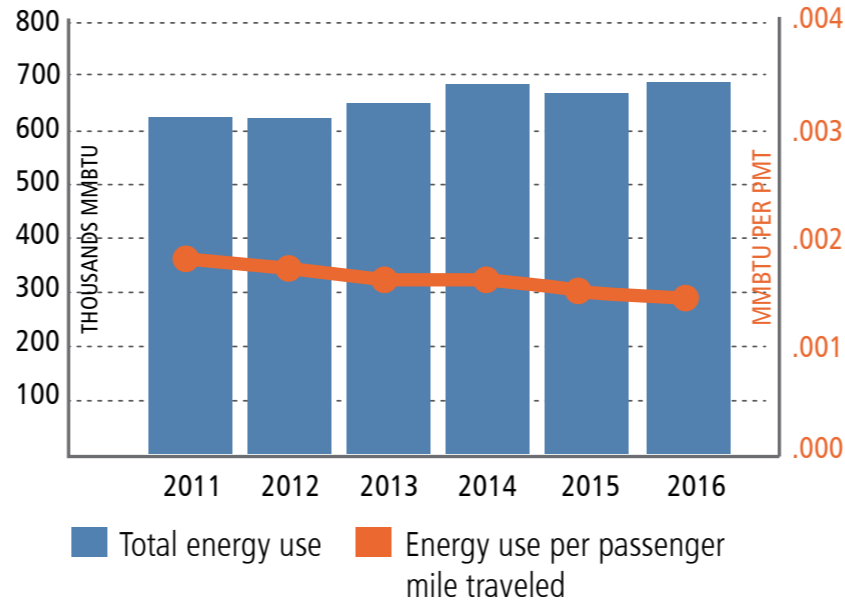
48 percent of new procurements include green methods and features (Goal: 50 percent by 2017).

Trends

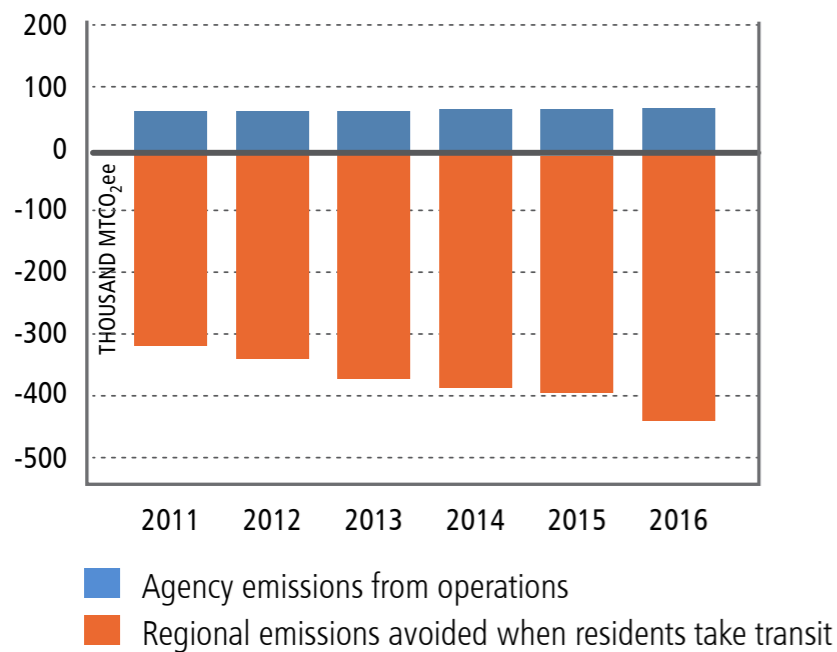
BOARDINGS AND SERVICE



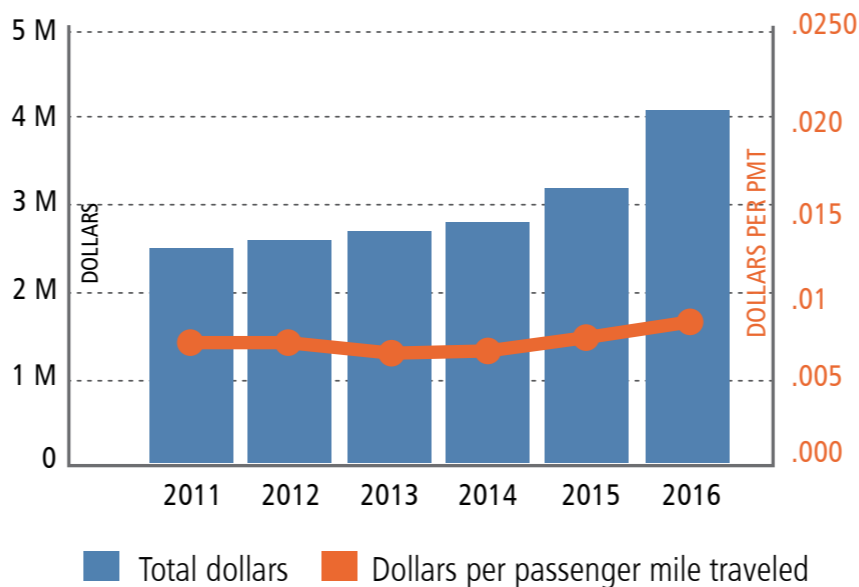
REVENUE FLEET ENERGY USE



GREENHOUSE GAS EMISSION



UTILITY COSTS



Continual improvement

The agency's sustainability performance has improved each year, but more can always be done to build on existing accomplishments. In the next year, the agency will focus its sustainability efforts to

- Update our Environmental and Sustainability Management System to the 2015 version of the ISO 14001 standard.
- Determine how to implement our expanded commitment to integrating green building and infrastructure into capital expansion projects, including the application of third-party certifications.
- Develop a strategy for the agency's Efficiency and Sustainability Fund to drive resource conservation and cost efficiencies in operations and maintenance across the existing and developing system.
- Implement strategies to improve the environmental footprint of construction with a focus on reducing air pollution by the dirtiest construction equipment types.
- Continue to focus on implementing resource efficiency projects in the existing transit system.

2016 Sustainability Targets *Sound Transit Year in Review*

People

- ✓ Achieve Bicycle-Friendly BusinessSM program certification.
- ✓ Develop a sustainability-focused peer recognition program.
- ✓ Evaluate electric vehicle charging services at customer facilities.
- Integrate sustainability into recruitment and other staffing activities.*

Planet

- Implement energy efficiency projects at three major facilities.*
- ✓ Work with partner agencies to reduce air pollution from construction.
- ✓ Monitor three sustainable practice plans for construction projects.
- Start data baseline for green concrete use.**
- ✓ Propose approaches and practices to achieve renewable energy and carbon neutrality goals.
- ✓ Develop dashboard for sustainability reporting.
- ✓ Formalize spill response activities into emergency response protocols.
- ✓ Increase waste diversion activities.
- ✓ Update ST Express and Sounder Fuel Efficiency Strategy.

Prosperity

- ✓ Educate staff on green procurement procedures and related guidelines.
- ✓ Conduct sustainability analysis for ST3.
- Conduct staff outreach to disseminate Total Cost of Ownership policy and procedures.*
- ✓ Implement Climate Adaptation Strategy initiatives.
- ✓ Participate in the Puget Sound Regional Council's Regional Climate Adaptation Collaborative.

* These partially completed targets are on track for finalization in 2017.

** This target is on hold until initiation of Lynnwood Link construction.

2017 Sustainability Targets

Supporting people, planet and prosperity

- Update the Environmental and Sustainability Management System to the new ISO 14001 standard.
- Initiate Sound Transit Efficiency and Sustainability Fund.
- Formalize Sustainability Program funding and work plan for capital expansion projects.
- Formalize agency utility conservation program.
- Approve building salvage process and procedures.
- Implement clean diesel construction equipment standards for Lynnwood Link where feasible.
- Broaden annual Sustainability Report to include social and economic metrics.
- Evaluate electric bus feasibility for Sound Transit.

2017

