

2011 Sustainability Plan - Progress Report

Summary

In the 2011 Sustainability Plan, Sound Transit committed to reducing its environmental footprint while fulfilling its mission to plan, build, and operate a regional transit system that supports communities and the local economy. This document summarizes the 2011 Sustainability Plan's key successes and opportunities and assesses Sound Transit's progress toward its initial, long-term sustainability targets.

This document is presented in three sections. The first section (pages 1 - 3) provides a summary of Sound Transit's Sustainability Plan, current progress on each long-term goal and key accomplishments and challenges. Pages 4 and 5 provide a list of achievements regarding Sound Transit's 2012-2014 short-term goals, along with explanations for goals not yet met. Finally, the appendix, starting on page 6, provides a detailed overview of each long-term goal, the goal's associated short-term activities, and the metrics collected to measure progress on these goals.

Progress on Sustainability Priorities and Targets

Sound Transit is on track to meet most of its initial long-term sustainability targets. Sound Transit has implemented its 2011 Sustainability Plan by advancing sustainability initiatives to develop near-term resource conservation strategies and make targeted resource efficiency-related investments, focusing on time-sensitive design and construction efforts and prioritizing high-impact activities.

Table 1. Summary of Sound Transit's Priorities and Progress on Long-Term (2030) Targets

Key		✓ <i>On track toward meeting long-term target (green)</i>
		✦ <i>Continued focus needed to stay on track toward and reach long-term target (yellow)</i>
		◆ <i>Significant work required to move in direction of and achieve long-term target (orange)</i>
Area	Priority	Long-Term Target
People	Ride	✓ Transit services, ridership and market share are expanded.
	Live	✦ Pedestrian, bicycle, rideshare and connecting transit access is improved at all Sound Transit stations and facilities.
		✦ Customer experience and amenities are improved at all stations.
	Advocate	✓ Transit-oriented development projects are established at all applicable Central Link properties owned by Sound Transit.
Planet	Save Energy	✓ All fleets deploy the most fuel-efficient, clean and cost-effective vehicles that optimize the use of proven technology.
		✦ 40% of greenhouse gas emissions are reduced (per vehicle revenue mile).
		◆ Electricity use is carbon neutral.
	Protect Ecosystems	◆ 1% of indoor and outdoor water use is reduced (per vehicle revenue mile) on average per year.
		✓ Total ecosystem functions are improved.
	Use Less, Buy Green	✦ Low impact development (LID) treats 100% of stormwater in new facilities.
		◆ 100% of the waste stream is diverted from landfills.
		✓ 100% of purchases are assessed for environmentally preferable products.
Prosperity	Engage	◆ Sound Transit is a "paperless office."
	Connect	✓ The ST2 Plan for regional transit is completed, and the system is operated and maintained at maximum efficiency.
	Streamline	✦ Operational efficiency and financial savings are maximized by fully evaluating economic, environmental, and social costs.
	Engage	✓ Sound Transit maintains a highly-skilled workforce that actively contributes to sustainability solutions.

Key Accomplishments to Date

Since 2012, Sound Transit has made key **accomplishments** in the following areas:

➤ **Providing sustainability leadership.**

- On track to meet nearly 50% (8 of 17) of its long-term 2030 targets, as shown in Table 1. Sound Transit expects to meet the remaining targets with continued work.
- Accomplished more than 70% of the 2011 Sustainability Plan short-term goals and more than 80% of the annual targets since 2012.
- Recertified Sound Transit's Environmental and Sustainability Management System (ESMS) to the ISO 14001 standard. Formed an ESMS Steering Committee, which holds the agency accountable for achieving annual targets, reducing environmental impacts, and demonstrating continuous improvement.
- Maintained Gold-level recognition for the American Public Transportation Association's Sustainability Commitment that marks sustainability achievements.



➤ **Making the region cleaner and greener. (*Ride; Save Energy; Protect Ecosystems*)**

- Offset more than 380,000 tons of regional emissions by supporting transit-friendly development, providing congestion relief, and offering mass-transit options, which carry 17% more riders for 20% more miles annually than in the baseline year of 2010.
- Initiated sustainability best management practices for Link light rail construction contracts at the University District Station and four East Link Stations.
- Improved air quality through fleet management and energy efficiency, by purchasing diesel-hybrid buses, upgrading two Sounder engines, and installing wayside power to reduce idling.
- Developed approaches for integrating sustainability considerations into early planning processes and refining approaches for final design.
- Protected natural habitats by creating or restoring three acres of wetlands for every acre altered and by receiving zero environmental permit violations across all projects.

➤ **Developing plans and policies. (*Save Energy; Protect Ecosystems; Use Less, Buy Green*)**

- Developed near-term resource conservation strategies for water, waste, bus fuel use, and facility energy use. Drafting a renewable energy strategy in 2014/2015 to reduce Sound Transit's emissions.
- Improved Sustainability Design Criteria to require sustainable practices, such as LED lighting, assessment of renewable energy options, sustainable landscaping, and low-impact stormwater management.
- Adopted a Transit-Oriented Development Program Strategic Plan update in 2014 to increase transit ridership—and reduce environmental impacts—by fostering transit-supportive land use and development within walking distance of Sound Transit facilities.
- Adopted a Green Procurement and Utilization Policy to strengthen the agency's commitment to purchasing and using environmentally preferable products and services.
- Developed and adopted a Total Cost of Ownership Policy in 2014 that will enable agency decisions to incorporate the value of durability, operations and maintenance considerations that reduce costs over time

Performance Challenges

Sound Transit has made considerable progress toward reducing its environmental footprint by reprioritizing actions and developing near-term plans and policies to guide action. However, the agency is not on track to meet the targets noted below. These areas will be addressed in Sound Transit's Sustainability Plan update process.

➤ **Achieving carbon neutrality.** (*Save Energy*)

- The North Link, East Link, and South Link light rail expansions will have a positive regional impact for mobility and reduce greenhouse gas (GHG) emissions by increasing transit ridership. However, Sound Transit's GHG emissions will rise as the expansion will mostly occur in the geographic service territory of Puget Sound Energy and Snohomish County Public Utility District, which are more carbon-intensive energy sources than Seattle City Light. Sound Transit began work on its Renewable Energy Strategy in fall 2014.

➤ **Diverting more waste.** (*Use Less, Buy Green*)

- Sound Transit has implemented a Waste Management Plan and coordinated a *Think Before You Throw* waste reduction campaign. Despite these efforts, the agency's annual diversion rate has remained relatively constant around 30-32%. Other local jurisdictions that share the ambitious goal to achieve zero waste have achieved higher diversion rates. For example, the City of Seattle had a 56 percent diversion rate in 2012, and King County had a 52 percent diversion rate in 2011.

Progress on 2012-2014 Sustainability Initiatives

Ride

- ✓ Target new ridership growth through market research.
- ☐ Quantify how transit-oriented development and improved station access enhance ridership. *The 2014 Transit-Oriented Development Program Strategic Plan will help address this initiative.*
- ✓ Continue to implement Customer Service, Security and Safety programs.
- ✓ Continue to implement Communications Plan.

Live

- ✓ Increase local and state advocacy for transit-compatible land use and zoning.
- ☐ Establish development agreements with partner jurisdictions to enhance station access and amenities.
- ☐ Develop and implement Bicycle Plan.
- ✓ Develop and implement Parking and System Access Strategy.
- ✓ Continue to implement Transit-Oriented Development Strategic Plan.

Advocate

- ✓ Increase collaboration with partner transit agencies and jurisdictions on sustainability policies and practices.
- ✓ Establish a cross-departmental team to collaborate on environmental community outreach and develop compelling and consistent messages.
- ✓ Integrate sustainability messaging into all applicable marketing, public and community outreach materials.
- ✓ Continue to advocate for federal, state and local funding sources for transit expansion projects.

Save Energy

- ✓ Develop and implement an energy management strategy.
- ✓ Continue to develop and implement fuel reduction strategies for Sounder commuter rail, ST Express buses and the non-revenue vehicle fleet.

Protect Ecosystems

- ✓ Develop and implement a water conservation strategy.
- ✓ Continue to implement wetland mitigation program and develop a comprehensive vegetation management plan.

Use Less, Buy Green

- ☐ Eliminate the use of harmful toxics and pesticides. *The agency needs to develop a baseline of harmful toxics prior to enhancing reduction efforts.*
- ✓ Develop and implement a waste management plan.
- ☐ Develop and implement a paper reduction strategy. *The Waste Management Strategy identified paper use as a low priority area of focus, as paper use has a substantially lower impact compared to other areas of agency resource use.*
- ✓ Continue to develop and implement an environmentally preferable purchasing policy.

Connect

- ✓ Incorporate sustainability criteria into service alignment and early planning processes.
- ✓ Evaluate future transit base sites to maximize service and operational efficiencies.
- ✓ Continue to implement the ST2 Plan.
- ✓ Continue to implement Service Planning program.

Streamline

- Integrate Total Cost of Ownership into financial and budget analyses. *Sound Transit developed a Total Cost of Ownership Policy in 2014. Policy implementation will begin in 2015.*
- ✓ Integrate the Sustainability Plan's priorities into the Asset Management Program that is under development.
- Develop a dedicated source of funding for Sustainability Plan implementation. *The agency's Senior Management Team developed and reviewed various funding proposals in 2012-2013. Agency leadership determined not to implement a stand-alone fund for sustainability and keep funding integrated into the existing annual agency budgeting process.*
- Ensure climate change impacts are addressed in Risk Management, Safety and Security Plans. *The agency completed the Sound Transit Climate Risk Reduction Project, using grant funding from the Federal Transit Administration (FTA), in August 2013. FTA has yet to release the report. Agency implementation will begin in 2015.*
- ✓ Use the Design Criteria Manual Sustainability Checklist for all major projects over \$2 million.
- ✓ Develop project-specific sustainability design and construction plans, including North Link and South Link projects.
- ✓ Incorporate sustainability measures from the Design Criteria Manual into relevant guide specifications, including landscaping and lower impact development specifications.
- ✓ Require all new buildings to be built to LEED Silver standards.
- ✓ Evaluate effectiveness of sustainability measures during design and construction for future projects.
- ✓ Strengthen sustainability language in contracts.
- ✓ Continue to meet aggressive goals for contracting with small and MWBE/DBE businesses.

Engage

- Educate 100% of staff to implement the Sustainability Plan. *All departments received training. Approximately 80% of staff was reached.*
- ✓ Integrate Sustainability Plan into staff performance reviews.
- ✓ Improve employee access to and participation in sustainability-oriented trainings.
- ✓ Identify opportunities to enhance staff well-being through existing benefit programs.
- Develop and implement department-specific strategies for resource conservation in day-to-day office activities. *In 2012-2014, the agency focused on raising staff awareness via an agencywide Think Before You Throw waste reduction campaign. Department-specific strategies are yet to be developed, as strategic planning identified this initiative as a low priority area of focus in achieving resource conservation efforts.*

Sustainability Plan Progress Report – Appendix

RIDE | Provide safe, secure and reliable transportation choices.

Mobility is the centerpiece of Sound Transit’s mission to provide a public transit system that offers safe, affordable, reliable, accessible and comfortable access throughout the Central Puget Sound.

Progress toward Long-Term Targets

Since 2010, ridership has increased by 30% and is expected to substantially increase with the opening of three new Link light rail extensions to the north, south and east by 2023. Sound Transit has continued to provide safe and reliable service, carrying riders 33% more miles since 2010 with more than 105 million boardings.

- **Transit services, ridership and market share are expanded.** ✓ ON TRACK
 - Earned voter approval in 2008 for the Sound Transit 2 ballot measure to build 36 additional miles of Link light rail and expand ST Express bus and Sounder commuter rail service.
 - Hit a historic milestone in 2013 by exceeding 30 million boardings in one year.
 - Making targeted investments, via Sound Transit 2 projects, in the urban centers that are expected to grow as the region’s population increases by more than 20% in the next 20 years.

2012-2014 Initiatives

- ✓ Target new ridership growth through market research.
- Quantify how transit-oriented development and improved station access enhance ridership. *The 2014 Transit-Oriented Development Program Strategic Plan will help address this initiative.*
- ✓ Continue to implement Customer Service, Security and Safety programs.
- ✓ Continue to implement Communications Plan.

Performance Measures

Metrics	2010	2011	2012	2013
Passenger miles traveled (TCR)	308,645,765	343,151,851	367,667,323	411,817,127
Boardings (reported to APTA and NTD as unlinked passenger trips)	23,404,741	25,992,868	27,966,337	30,317,984
Vehicle revenue miles (APTA, TCR)	15,607,462	15,667,652	15,649,079	15,949,346
Vehicle revenue hours (TCR)	738,633	732,393	733,992	748,363
Average on-time performance across services	94.1%	93.2%	94.0%	94.5%
Number of Regional Reduced Fare Permits	46,559	33,846	32,607	29,712
Percent of ORCA cards sold as Regional Reduced Fare Permits	13%	10%	10%	9%

LIVE | Support healthy, diverse, transit-oriented communities.

Sustainable transit communities are walkable, bike-friendly neighborhoods served by regional transit. Transit-oriented developments have a healthy balance of jobs, housing, building types, incomes, parks and green infrastructure.

Progress toward Long-Term Targets

Work is underway to implement transit-oriented development at Sound Transit station areas and study pedestrian, bike, rideshare and connecting transit access at stations.

- **Pedestrian, bicycle, rideshare and connecting transit access is improved at all Sound Transit stations and facilities.** ✦ CONTINUED FOCUS
 - Adopted a System Access Policy in 2013 and completed four parking pilot projects in 2014 to test strategies for managing parking more efficiently to improve customer access.
 - Initiated a Non-Motorized Access Study in 2014 to target pedestrian, bicycling and connecting transit improvements.
 - Issued a 2014 Board Motion to increase integration between King County Metro Transit and Sound Transit to jointly sync future service planning to better serve area customers.
 - Contributed to the development of and served on the Board of Directors for the nonprofit Puget Sound Bike Share—now called *Pronto!* and slated to open in fall 2014.
 - Launched a public educational campaign in 2013—called “Make biking part of your equation”—to promote bicycling to transit, via a Federal Transit Administration grant.
- **Customer experience and amenities are improved at all stations.** ✦ CONTINUED FOCUS
 - Installed improved wayfinding signage at all Link light rail stations in 2012.
 - Amended design criteria to improve signage across new Sound Transit properties.
 - Selected a set of alternatives for further environmental review for Sounder commuter rail Sumner and Puyallup Stations. These projects will improve station access for Sounder commuter rail riders, focusing on pedestrian, bicyclist, vehicle access and parking garage improvements.
- **Transit-oriented development projects are established at all applicable Central Link properties owned by Sound Transit.** ✓ ON TRACK
 - Adopted a Transit-Oriented Development (TOD) Program Strategic Plan update in 2014 that strengthens the agency’s commitment to increase transit ridership by fostering positive land use and development within walking distance of Sound Transit facilities.
 - Advanced TOD projects at applicable Central Link light rail parcels near Mt. Baker Station, Othello Station and Columbia City stations.
 - Provided TOD technical and planning support to partner jurisdictions, including participating in several TOD assessments conducted by cities along the ST2 corridors.

2012-2014 Initiatives

- Increase local and state advocacy for transit-compatible land use and zoning.
- Establish development agreements with partner jurisdictions to enhance station access and amenities.
- Develop and implement Bicycle Plan.
- ✓ Develop and implement Parking and System Access Strategy.
- ✓ Continue to implement Transit-Oriented Development Strategic Plan.

Performance Measures

Metrics	2010	2011	2012	2013
Bicycle counts	558	685	697	296

ADVOCATE | Increase community support for transit investments and services.

Sound Transit strives to translate awareness about the benefits of transit and sustainability into action to maintain support for the agency's transit investments and services.

Progress toward Long-Term Targets

Sound Transit has worked to engage local residents, businesses and government partners in supporting public transit investments that expand and enhance mobility in the Puget Sound. The agency's customer satisfaction has also remained stable.

- **A strong majority of regional leaders and residents recognize the benefits of transit system expansion.** ✓ ON TRACK
 - Completed a telephone survey in June 2014, which reflected that 69% of voters have a favorable opinion of Sound Transit (up from 67% in 2010), 85% of voters support expanding the regional transit system, and 75% of voters support legislative action to expand Sound Transit's local revenue authority.
 - Worked to ensure passage by the House of Representatives of a transportation package that included funding for Sound Transit and other transit agencies.
 - Collaborated with other Puget Sound transit agencies to send a letter in January 2014 to the congressional delegation urging their membership in the Public Transportation Caucus of the U.S. House of Representatives.
 - Continued to actively engage local jurisdictions and advocates through public meetings, briefings and council presentations to provide information on Sound Transit projects, services and planning work.
 - Issued a 2014 Board Motion to increase joint planning and integration with King County Metro to create greater operating efficiencies and enable future service expansion.
 - Created standardized language to use when communicating about Sound Transit's environmental and sustainability efforts, such as the agency's positive impact on regional job creation and the region's air and water quality.
 - Retained a "B+" grade on overall customer satisfaction.
 - Showcased sustainability accomplishments at the 2013 Rail~Volution conference.

2012-2014 Initiatives

- ✓ Increase collaboration with partner transit agencies and jurisdictions on sustainability policies and practices.
- ✓ Establish a cross-departmental team to collaborate on environmental community outreach and develop compelling and consistent messages.
- ✓ Integrate sustainability messaging into all applicable marketing, public and community outreach materials.
- ✓ Continue to advocate for federal, state and local funding sources for transit expansion projects.

Performance Measures

Metrics	2010	2011	2012	2013
Favorability rating	67%	65%	65%	65%
Customer satisfaction	B+ Grade	B+ Grade	B+ Grade	B+ Grade
Percent of customers who believe taking Sound Transit is a good way to help the environment				
Strongly agree	74%	68%	66%	68%
Somewhat agree	21%	24%	26%	26%

SAVE ENERGY | Reduce energy use, greenhouse gas emissions and air pollution.

Sound Transit is committed to cutting air pollution and greenhouse gas emissions by reducing energy use through conservation and efficiency. Fuel and electricity use represent the agency's major sources of greenhouse gas emissions, air pollution and operating expenses.

Progress toward Long-Term Targets

Sound Transit has purchased clean, efficient new vehicles, though continued work is needed to reduce greenhouse gas emissions and determine the agency's direction on pursuing carbon-neutral electricity. The agency has reduced its energy use and greenhouse gas emissions per boarding by over 16% since 2010. Sound Transit remains committed to implementing fuel efficiency programs and engine upgrades for its ST Express bus, Link light rail and Sounder commuter rail fleets.

- **All fleets deploy the most fuel-efficient, clean and cost-effective vehicles that optimize the use of proven technology.** ✓ **ON TRACK**
 - Purchased diesel-hybrid buses, in place of conventional diesel buses, to fulfill bus orders as part of the ST Express bus fleet replacement program and ST2 service additions. Grants were received for all incremental costs of purchasing diesel-hybrid over conventional diesel.
 - Developed Bus Fleet Fuel Efficiency Strategies in 2012.
 - Reduced fuel consumption and right-sized vehicles for the Non-Revenue Vehicle fleet.
 - Upgraded two Sounder locomotives to less polluting Tier 3 engines, which analyses from the Environmental Protection Agency estimate will save about \$2 million annually in local health costs from the reduced need for hospital visits for respiratory conditions, which regional diesel emissions intensify.
 - Installed electric wayside power units in 2013 at the Sounder commuter rail Lakewood Layover Yard to allow the locomotive's diesel Head End Power units to use electricity to heat and power the cars during layover, which reduces diesel and air pollutants.
 - Implemented a pilot project, using a grant obtained from the Federal Transit Administration, to test a system on three Central Link light rail vehicles that enables the capture and reuse of energy from the existing regenerative braking systems on the trains.
 - Conducted ST Express bus eco-driving pilot program in 2014.
 - Researched wayside energy storage potential for East Link light rail in 2014.
- **40% of greenhouse gas emissions are reduced (per vehicle revenue mile).** ✦ **CONTINUED FOCUS**
 - Increased greenhouse gas emissions by 5% per vehicle revenue mile over four years (2010-2013).
 - Implemented fleet fuel efficiency and electricity efficiency programs, described in *Save Energy* sections, which contribute to reducing the agency's greenhouse gas emissions.
- **Electricity use is carbon neutral.** ◆ **SIGNIFICANT WORK**
 - Developed a Renewable Energy Strategy in 2014.
 - Finalized the agency's Facility Energy Strategy in 2014, aspects of which have been implemented.
 - Implemented energy efficiency retrofits at four facilities in 2013, saving 10-26% energy in just six months from upgrades made to Union Station, Federal Way Transit Center and Kent and Auburn Stations.
 - Completed a Utility Management Study in 2013 to assess options for monitoring and managing energy usage.

- Planned over 100 kilowatts of solar power arrays for installation by 2023 at ST2 Link light rail facilities.
- Updated the agency's Design Criteria Manual in 2012 to require LED lights, daylighting, energy budgets and evaluation of alternative energy technology.

2012-2014 Initiatives

- ✓ Develop and implement an energy management strategy.
- ✓ Continue to develop and implement fuel reduction strategies for Sounder commuter rail, ST Express buses and the non-revenue vehicle fleet.

Performance Measures

Metrics	2010	2011	2012	2013	2010-2013
Energy use per boarding (<i>APTA</i>)	0.0287	0.0280	0.0250	0.0241	-16%
Energy use per vehicle revenue mile (<i>APTA</i>)	0.057	0.0452	0.0452	0.0459	6%
GHG emissions per boarding (<i>APTA, TCR</i>)	0.0020	0.0019	0.0017	0.0016	-18%
GHG emissions per vehicle revenue mile (<i>APTA, TCR</i>)	0.0030	0.0031	0.0031	0.0031	5%
Electricity from renewable sources	84%	78%	88%	86%	+2%

PROTECT ECOSYSTEMS | Protect natural habitats and conserve water resources.

Sound Transit preserves wetlands, streams, native plants and wildlife by lessening ecosystem impacts from construction of the regional transit system. The agency focuses on using native vegetation, reducing water use and using low impact development to reduce stormwater runoff to local streams, lakes and Puget Sound.

Progress toward Long-Term Targets

Sound Transit has implemented a number of water conservation measures, created and restored wetlands as part of the agency's construction projects, and started to incorporate lower impact development approaches to stormwater management in new facilities.

- **1% of indoor and outdoor water use is reduced (per vehicle revenue mile) on average per year.** ◆ **SIGNIFICANT WORK**
 - Increased water use by 25% per vehicle revenue mile from 2010 to 2013.
 - Developed a Near-Term Water Use Reduction Strategy to prioritize actions the agency may take to conserve water use at existing and future transit facilities.
 - Designed a comprehensive rainwater harvesting system to provide nearly 100% of the South 200th Link Extension Angle Lake Station's irrigation needs.
 - Completed water audits at six facilities to determine how to conserve water use and costs.
 - Implemented water conservation measures at Overlake Transit Center and Lakewood Station, two of the agency's highest users of water for irrigation purposes.
 - Updated the agency's Design Criteria Manual to require water budgets and sustainable landscaping, including use of drought-tolerant plants, to reduce the water needs of future transit facilities.

- **Total ecosystem functions are improved.** ✓ **ON TRACK**
 - Consistently created or restored three times the acreage of wetlands affected by Sound Transit construction.
 - Received zero environmental permit violations across all construction projects.
 - Accepted gold awards from King County for exemplary compliance with wastewater requirements for University Link construction.
 - Received the Washington State Department of Ecology's highest award for environmental impact mitigation for Everett-Seattle Sounder commuter rail to restore 380 acres of unused farmland into a salt march and salmon habitat.
 - Participated in King County's in-lieu fee program for Northgate Link Extension in 2013. Sound Transit compensated King County to expand an existing restoration effort instead of completing a separate, smaller mitigation project to provide a larger regional ecosystem benefit.
 - Partnered with Metro Parks Tacoma to lessen environmental impacts from South Tacoma and Lakewood Sounder commuter rail expansion. This restoration of McKinley Park included a new stream channel and boardwalk around the site.
 - Established native vegetation along the South Sounder right-of-way to lower maintenance costs for vegetation management and curb the growth of non-native, noxious species.

- **Low impact development treats 100% of stormwater in new facilities.** ✨ **CONTINUED FOCUS**
 - Revised the Design Criteria Manual to incorporate the Department of Ecology's recent requirements on use of low impact development techniques to stormwater management.
 - Completed low impact development designs for stormwater treatment systems as feasible for all East Link light rail segments.
 - Developed a facility Stormwater Management Plan and updated it in 2014 to incorporate low impact development maintenance practices for facilities.

2012-2014 Initiatives

- ✓ Develop and implement a water conservation strategy.
- ✓ Continue to implement wetland mitigation program and develop a comprehensive vegetation management plan.

Performance Measures

Metrics	2010	2011	2012	2013
Water use per boarding (APTA)	0.0011	0.0010	0.0010	0.0011
Water use per vehicle revenue mile (APTA)	0.0017	0.0017	0.0018	0.0021
Number of native plantings	15,327	1,770	2,113	2,504
Wetland mitigation ratio	3:1	3:1	3:1	3:1

USE LESS, BUY GREEN | Reduce materials consumption and increase recycling and environmentally preferable procurement.

Sound Transit is committed to using environmentally preferable goods and services, including design and construction, and to reducing and preventing waste through reuse, recycling and composting.

Progress toward Long-Term Targets

Sound Transit implemented a Green Procurement and Utilization Policy and diverted about 30% of its waste stream to recycling and composting. The Waste Management Plan identified paper reduction as a low priority area of focus, as paper use has a substantially less environmental impact compared to other areas of resource use, such as fuel use and electricity.

- **100% of the waste stream is diverted from landfills.** ◆ **SIGNIFICANT WORK**
 - Maintained a fairly consistent waste diversion rate of 30-32% from 2011-2013.
 - Finalized a comprehensive Waste Management Plan and implemented its priorities, including ensuring compliance with state and federal waste and hazardous materials requirements and municipal waste, recycling and composting ordinances.
 - Completed an agencywide *Think Before You Throw* waste reduction campaign to clarify recycling and composting practices for staff by presenting information at agency all-staff meetings, putting up simple signage and installing recycling bins in conference rooms
 - Began a bathroom composting program in all three Seattle office buildings.
 - Revised construction specifications to require 80% salvage and recycling of materials from construction demolition projects.
 - Implemented recycling programs for printer and copier toners, end-of-life computers, monitors, printers and electronic peripherals.
 - Increased the amount of waste diverted to recycling and composting by 6 percentage points from 25% in 2010 to 31% in 2013.

- **100% of purchases are assessed for environmentally preferable products.** ✓ **ON TRACK**
 - Developed and received executive approval on a Sound Transit administrative Green Procurement and Utilization Policy, which applies to all agency procurements, including design and construction services, and provides further direction to staff on environmentally preferable procurement and utilization.
 - Improved the Design Criteria Manual and construction specifications to require some use of more environmentally preferable materials and include consideration of additional sustainability measures, such as more environmentally friendly concrete during construction.
 - Switched to ENERGY STAR computer models that use electricity more efficiently and contain some post-consumer recycled plastic.
 - Inventoried goods and services procurements to determine areas of opportunity for environmentally preferable procurement.

- **Sound Transit is a “paperless office.”** ◆ **SIGNIFICANT WORK**
 - Set double-sided printing and copying as the standard for agency multifunction printers.
 - The Waste Management Strategy identified paper use as a low priority area of focus, as paper use has a substantially lower impact compared to other areas of agency resource use.

2012-2014 Initiatives

- Eliminate the use of harmful toxics and pesticides. *The agency needs to develop a baseline of harmful toxics prior to enhancing reduction efforts.*
- ✓ Develop and implement a waste management plan.
- Develop and implement a paper reduction strategy. *The Waste Management identified paper use as a low priority area of focus, as paper use has a substantially lower impact compared to other areas of agency resource use.*
- ✓ Continue to develop and implement an environmentally preferable purchasing policy.

Performance Measures

Metrics	2010	2011	2012	2013
Pounds of landfilled waste per boarding (APTA)	0.0444	0.0349	0.0366	0.0364
Pounds of landfilled waste per vehicle revenue mile (APTA)	0.0666	0.0557	0.0655	0.0691
Percent of waste stream diverted to recycling/composting (APTA)	25%	32%	30%	31%
Number of pesticides used	32	29	28	27
Reams of paper used	9,894	9,631	13,802	14,426

CONNECT | Provide the mobility necessary for strong economic growth by connecting regional urban centers.

Public transit contributes to a region's economic health by providing access to desired destinations and employment opportunities and leveraging private sector activity that creates jobs.

Progress toward Long-Term Targets

Sound Transit is connecting the region by creating transit for the Central Puget Sound, via the Sound Transit 2 voter-approved ballot initiative and the 2014 update to the Long-Range Plan. One measure of transit's regional impact is that since 2010, the share of downtown Seattle commuters using transit has increased from 39% to 43%.

- The ST2 Plan for regional transit is completed, and the system is operated and maintained at maximum efficiency.** ✓ ON TRACK
 - Advancing final design and, in some cases, construction on time for ST2 Link light rail extensions north, east and south of Seattle. Major Sounder commuter rail and ST Express bus station improvements have also been completed. The fully completed ST2 Plan approved by votes in 2008 will extend the regional transit system to serve nearly 50% of the region's current population and employment centers.
 - Started the planning process for the next phase of future transit expansion, via a Board directive and as an indication of planning success on ST2. In 2014, Sound Transit updated its Long-Range Plan, which provides the vision for how the transit system should grow after current ST2 voter-approved projects are completed in 2023.
 - Integrated sustainability considerations into early planning processes, including the Long-Range Plan, System Plan and Lynnwood Link Extension.

2012-2014 Initiatives

- ✓ Incorporate sustainability criteria into service alignment and early planning processes.
- ✓ Evaluate future transit base sites to maximize service and operational efficiencies.
- ✓ Continue to implement the ST2 Plan.
- ✓ Continue to implement Service Planning program.

Performance Measures

Metrics	2010	2011	2012	2013
Percent of household budget spent on transportation (<i>source BLS</i>)	15.2%	15.4%	15.35%	15.7%
Average annual savings from public transit use (<i>source APTA</i>)	\$11,185	\$11,901	\$11,887	\$11,604
Time per year in traffic (<i>source TTI</i>)	44	44	48	48

STREAMLINE | Incorporate sustainability into agency decision-making processes.

Sound Transit optimizes transit services by effectively leveraging resources and ensuring that agency processes thoroughly evaluate and incorporate social, environmental and financial impacts.

Progress toward Long-Term Targets

Many strides have been made to formally integrate sustainability into agency activities and decision-making processes, from design to purchasing and contracting. Sound Transit increasingly considers sustainability in all aspects of agency business, while retaining a focus on cost effectiveness. Operating expenses have increased by 11% per revenue mile, but decreased by 12% per boarding.

- **Operational efficiency and financial savings are maximized by fully evaluating economic, environmental and social costs.** ✦ **CONTINUED FOCUS**
 - Lowered operating expenses per boarding by 12% since 2010.
 - Advanced a Total Cost of Ownership Policy to ensure that long-term maintenance and operations costs are formal parts of the agency's decision-making process.
 - Began development and implementation of an agencywide Continuous Process Improvement program to add capacity to business systems and processes. This program will help the agency improve effectiveness and efficiency, save time and resources, and improve interdepartmental relations.
 - Required green building and infrastructure as part of the agency's Design Criteria Manual for all major capital projects in 2012.
 - Included Leadership in Energy and Environmental Design (LEED) Silver certification for two Link light rail projects—Angle Lake Station and the Maintenance of Way Facility—in 2013-2014.
 - Integrated sustainable practices into Link light rail construction contracts for Northgate Link Extension and East Link in 2013-2014.
 - Achieved recertification to the international standard ISO 14001 for the agency's Environmental and Sustainability Management System.
 - Included sustainability criteria for new project and position requests in annual budgeting process in 2014.
 - Completed a Federal Transit Administration funded assessment of agency resiliency to climate change impacts in 2013.

2012-2014 Initiatives

- Integrate Total Cost of Ownership into financial and budget analyses. *Sound Transit developed and adopted a Total Cost of Ownership Policy in 2014. Policy implementation will begin in 2015.*
- ✓ Integrate the Sustainability Plan's priorities into the Asset Management Program that is under development.
- Develop a dedicated source of funding for Sustainability Plan implementation. *The agency's Senior Management Team developed and reviewed various funding proposals in 2012-2013. Agency leadership determined not to implement a stand-alone fund for sustainability and keep funding integrated into the existing annual agency budgeting process.*
- Ensure climate change impacts are addressed in Risk Management, Safety and Security Plans. *The agency completed the Sound Transit Climate Risk Reduction Project, using grant funding from the Federal Transit Administration (FTA), in August 2013. FTA has yet to release the report.*
- ✓ Use the Design Criteria Manual Sustainability Checklist for all major projects over \$2 million.
- ✓ Develop project-specific sustainability design and construction plans, including North Link and South Link projects.
- ✓ Incorporate sustainability measures from the Design Criteria Manual into relevant guide specifications, including landscaping and lower impact development specifications.

- ✓ Require all new buildings to be built to LEED Silver standards.
- ✓ Evaluate effectiveness of sustainability measures during design and construction for future projects.
- ✓ Strengthen sustainability language in contracts.
- ✓ Continue to meet aggressive goals for contracting with small and MWBE/DBE businesses.

Performance Measures

Metrics	2010	2011	2012	2013	2010-2013
Operating expenses per boarding					
Sunder	\$13.78	\$12.31	\$11.81	\$12.18	-12%
Central Link	\$6.55	\$6.26	\$6.09	\$5.57	-15%
Tacoma Link	\$3.88	\$3.54	\$3.77	\$3.89	0%
ST Express	\$7.44	\$6.62	\$6.52	\$6.36	-15%

ENGAGE | Enhance staff participation in sustainability initiatives.

Engaging staff ensures that employees may become active participants in the solutions outlined in Sound Transit’s Sustainability Plan. Employee well-being is also crucial to helping Sound Transit retain a workforce that contributes to a healthier, more productive community.

Progress toward Long-Term Targets

Over 80 staff directly participate in implementing the agency’s internationally certified (ISO 14001) Environmental and Sustainability Management System (ESMS). Sound Transit has consistently met at least 70% of its annual sustainability targets. All new employees are trained on the agency’s ESMS, and existing staff receive ESMS General Awareness Training at least once every three years.

- **Sound Transit maintains a highly-skilled workforce that actively contributes to sustainability solutions.** ✓ ON TRACK

 - Involved over 80 staff in agency ESMS committees and technical working groups to advance policy recommendations and accomplish Sound Transit’s annual sustainability targets.
 - Presented on the ESMS at all New Employee Orientations and completed ESMS General Awareness Training as a refresher to approximately 80 percent of staff.
 - Updated the agency’s ESMS procedures and formally integrated them into agency processes to increase staff visibility and awareness.
 - Improved the internal website for the ESMS to improve staff access to environmental compliance and sustainability policies, procedures, training materials, events and contact information.
 - Conducted more than 25 events via a sustainability speaker series and tours of local businesses and governments focused on sustainable building and infrastructure.
 - Received the American Heart Association’s gold recognition in 2012 and platinum recognition in 2013 as a Fit-Friendly Worksite. The agency’s employee Wellness Program focuses on enhancing health and quality of life, with activities such as a staff bike-to-work commute challenge, lunchtime cooking classes and financial planning seminars.

2012-2014 Initiatives

- Educate 100% of staff to implement the Sustainability Plan. *All departments received training. Approximately 80% of staff was reached.*
- ✓ Integrate Sustainability Plan into staff performance reviews.
- ✓ Improve employee access to and participation in sustainability-oriented trainings.
- ✓ Identify opportunities to enhance staff well-being through existing benefit programs.
- Develop and implement department-specific strategies for resource conservation in day-to-day office activities. *In 2012-2014, the agency focused on raising staff awareness via an agencywide Think Before You Throw waste reduction campaign. Department-specific strategies are yet to be developed, as strategic planning identified this initiative as a low priority area of focus in achieving resource conservation efforts.*

Performance Measures

Metrics	2010	2011	2012	2013
Percent of annual sustainability targets met	81%	71%	80%	88%