



Sustainability Financing in New Capital Projects

APTA August 2017



Sustainability Funding for Capital Projects

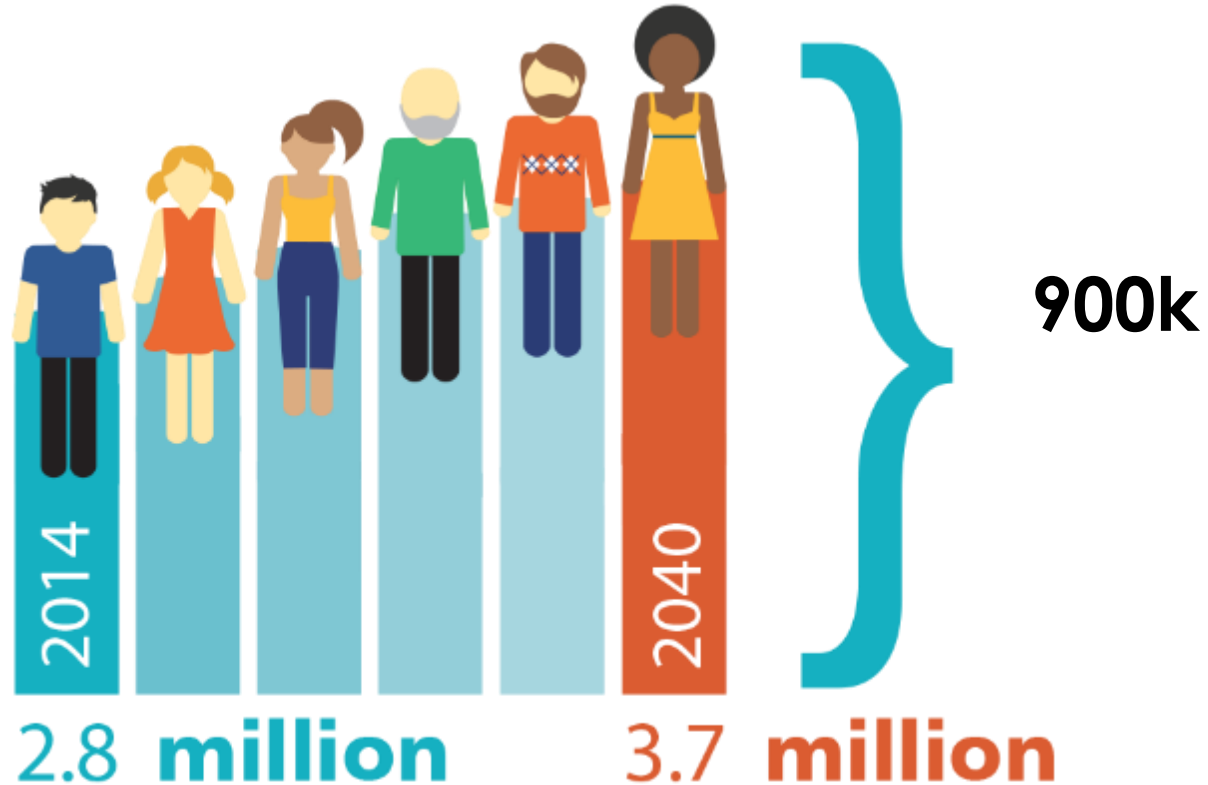
- Who we are
- Sustainability mission
- The challenge
- Building support – the long game
- The proposal
- The outcome

Who are we?

- Est. 1996
- Washington State - Puget Sound
- Regional – multi-modal
 - ST Express bus
 - Sounder commuter rail
 - Link light rail
- 54 Cities
- 3 Counties



More (**and more**) people call our region home



SOUND TRANSIT 3

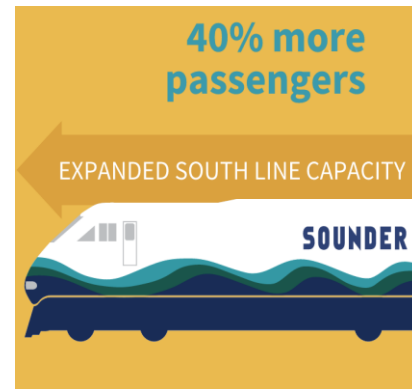
62 MILES OF LIGHT RAIL



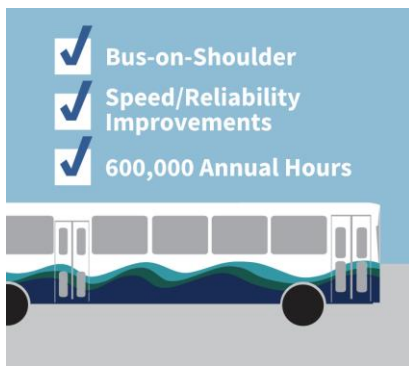
38 MILES OF BRT



+ COMMUTER RAIL TRIPS



+ EXPRESS BUS SERVICES



IMPROVED ACCESS



KEY

PROPOSED ST3 PROJECTS

- Link Light Rail
- Bus Rapid Transit
- Sounder Rail
- Proposed shoulder-running buses / speed and reliability improvements
- Environmental study
- Future investment study

CURRENT AND PLANNED SERVICE

- Link Light Rail
- Sounder Rail
- ST Express Bus

STATIONS

- New Station
- New station / added parking
- Improved station
- Major rail transfer

NOTE: All existing rail stations are operational.



SOUND TRANSIT 3

Sustainability mission

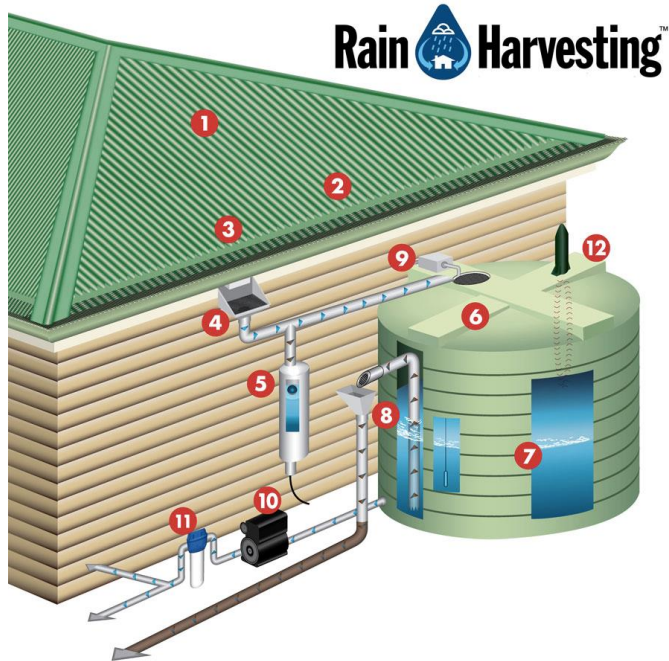
Sustainable Business Practices will be integrated into agency planning, design, construction and operations – Sound Transit Board, 2007

Our challenge



SHOW
ME THE
MONEY

Our challenge: Budgets and timing



Building Support: 2015 Sustainability Plan






Major capital project budgets incorporate sustainability considerations.

- Include provisions in System Plan budget for sustainable design and green infrastructure, system access and Transit Oriented Development (TOD) readiness.

Building support 7+ Years of proven leadership



Building support: Meeting 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.

Building support 7+ Years of proven leadership



\$1.5B in green bonds

Building support: Green building



- Angle Lake Station:
LEED Gold
- 65KW solar power





大波の関ヶ原
1831年

葛飾屋

Building support: Program sponsors

Board of Directors

CEO

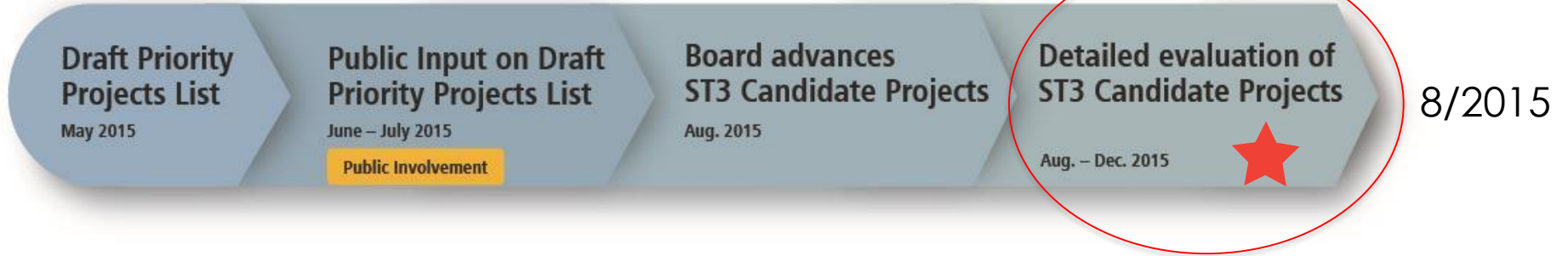
Executive Leadership Team

CFO & Planning Director

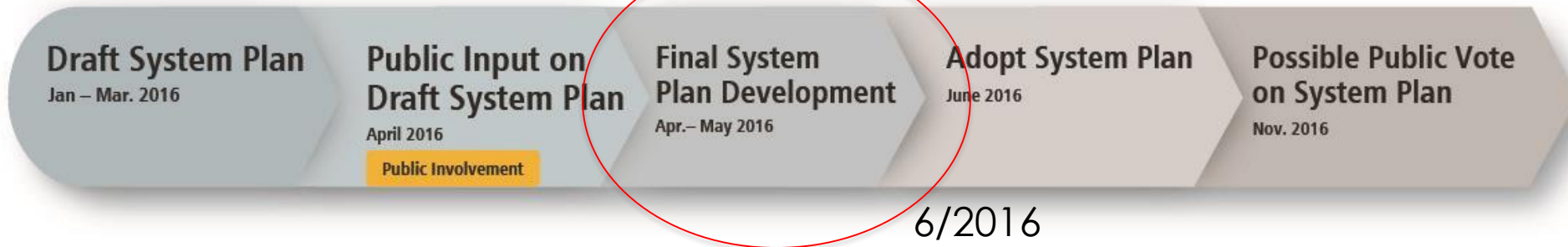
Sustainability
Steering Committee

The challenge

2015



2016



Devil is in the details



Included green building and infrastructure goals in

- Long range plan – goals & EA
- ST3 Plan goals

Creating the allowance

Estimated a \$ amount

- Per station - 4-5 sustainability measures currently optional in design criteria
- Per mile of guideway

Base project costs include existing sustainability requirements in design criteria

Cost Estimates: project templates

SOUND TRANSIT 3

N-01: Everett Station to North Everett LRT

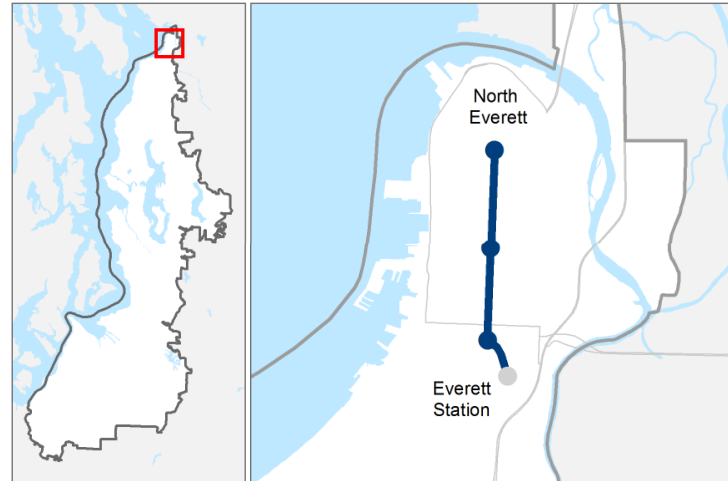
Project Number	N-01
Subarea	Snohomish
Primary Mode	Light Rail
Facility Type	Corridor
Length	2.1 miles
Version	ST Board Workshop
Date Last Modified	11-25-2015

SHORT PROJECT DESCRIPTION

This project would extend light rail 2.1 miles from Everett Station to North Everett with three stations, with an elevated alignment generally along Broadway.

Note: The elements included in this representative project will be refined during future phases of project development and are subject to change.

PROJECT AREA AND REPRESENTATIVE ALIGNMENT



In Millions of 2014\$

Cost Estimates

ITEM	COST	COST WITH RESERVE
Agency Administration	\$38.21	\$40.89
Preliminary Engineering & Environmental Review	\$19.99	\$21.39
Final Design & Specifications	\$39.29	\$42.04
Property Acquisition & Permits	\$53.94	\$57.72
Construction	\$400.76	\$428.82
Construction Management	\$35.36	\$37.84
Third Parties	\$8.06	\$8.62
Vehicles	\$79.50	\$85.07
Contingency	\$39.29	\$42.04
Total	\$714.41	\$764.42

Design Basis:

The costs expressed above include allowances for TOD planning and due diligence, Sustainability, Bus/rail integration facilities, and Non-Motorized Access. These allowances, as well as the costs for Parking Access included above, are reflected in the following table. Property acquisition costs are not included in the table below, but are included within the total project cost above.

ITEM	COST	COST WITH RESERVE
TOD planning and due diligence	\$0.54	\$0.58
Sustainability	\$8.84	\$9.46
Parking access	N/A	N/A
Non-motorized (bicycle/pedestrian) access	\$15.38	\$16.45
Bus/rail integration facilities	N/A	N/A

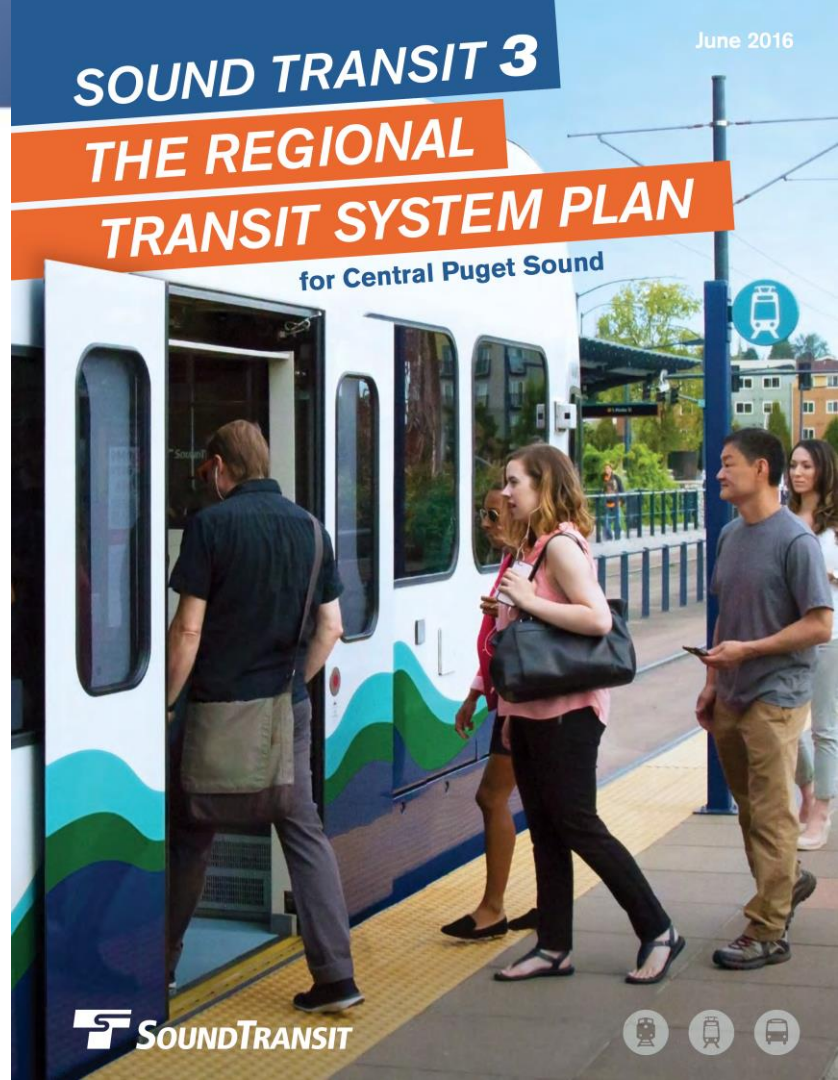
The outcome

**\$105M Green building
and infrastructure allowance**

\$1.2B Access Fund

\$20M Affordable TOD

\$12M TOD per project





BHAGS

Big Hairy Audacious Goals

How do we implement?

For more @ ST Sustainability
soundtransit.org/sustainability

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