

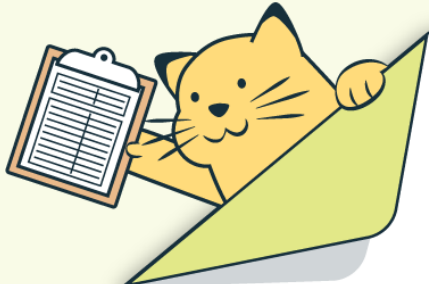
# Sound Transit's EnergyCAP Success Story



Jaime Cervantes

Program Manager of Operations Utilities // Sound Transit





# Agenda

- ✓ About Sound Transit
- ✓ Life before EnergyCAP
- ✓ Why EnergyCAP?
- ✓ EnergyCAP implementation
- ✓ Report Designer BI dashboards
- ✓ Secrets to success
- ✓ Q&A

# About Sound Transit

Headquarters: Seattle, WA 1,400 employees

The agency you know today as Sound Transit – officially known as the Central Puget Sound Regional Transit Authority – began in 1993 as a joint effort by the Snohomish, King, and Pierce county governments in western Washington state.

**Mission:** "We plan, build and operate express buses, light rail, and commuter train services for the central Puget Sound Region so that people can get to where they're going, safely and economically."

With voter approval in 1996, 2008 and 2016, **Sound Transit is building the most ambitious transit expansion in the country.**

## Did you know?

Encompassing more than 1,000 square miles, the Sound Transit District is bigger than the state of Rhode Island and is home to more than 40% of Washington's population.

It includes 53 cities and extends from Everett in the north, to Issaquah and Sammamish in the east, and DuPont in the south.

## Home of major corporations:

- Amazon
- Starbucks
- Boeing
- Microsoft
- Costco

### SOUND TRANSIT DISTRICT



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# Sound Transit modes of transportation

## Link Light Rail:

*Offers fast and reliable travel times 20 hours a day, 7 days a week*

- Four-car light rail train carries approximately 600-800 passengers
- Our partner agency King County Metro operates the Link
- Line One—100% carbon free
- Line Two
- T-Line street-level light rail in Tacoma
- An extension to Tacoma Community College is expected to open in 2039-2041
- 2046 will be our last expansion project

## Sounder Commuter Rail:

*Connects communities north and south of Seattle*

- N Line—seats between 300-450 passengers
- S Line—have seating for about 950 passengers
- Trains travel at speeds up to 79mph
- S-Line trains will extend from 7 to 10 cars, and new stations at Tillicum and DuPont will open in 2045

## ST Express Buses:

- ST Express buses run on long-range, limited-stop routes serving major population and employment centers throughout the region.
- ST Express routes are intended as interim services while we build new light rail and bus rapid transit.
- As those services expand, Sound Transit will periodically re-evaluate ST Express routes.

## Stride Bus Rapid Transit (BRT):

- Starting in 2026, we'll open our first BRT lines. Stride will provide fast, frequent and reliable bus connections to communities along the I-405 and SR 522 corridors.
- By 2050 our fleets will be 100% carbon free, including NRV vehicles.

## In 2023, our total ridership was over 37 million.

- More openings this year!
  - Lynnwood Link Extension (8/30/24)
- 2026 World Cup

## Sound Transit Current Service

- Link light rail**
- Link 1 Line** (Northgate–Angle Lake)
- Link T Line** (Tacoma Dome–St Joseph)
- Sounder trains**
- Sounder N Line** (Everett–Seattle)
- Sounder S Line** (Lakewood–Tacoma–Seattle)
- ST Express buses**
- Bold = Route terminus**
- Dashed = Limited Service**
- Park & Ride**
- Ferry Terminal**
- Sea-Tac Airport**
- Amtrak**



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March 2024

## Sound Transit future service

- Link light rail**
- Future service:**
- 2 Line** Mariner–Redmond
- 3 Line** Everett–West Seattle
- 4 Line** South Kirkland–Issaquah
- T Line** Tacoma Dome–Tacoma Community College
- In service:**
- Northgate–Angle Lake**
- Tacoma Dome–St Joseph**
- Future service:**
- S Line** DuPont–Lakewood
- In service:**
- N Line** Everett–Seattle
- S Line** Lakewood–Seattle
- Stride bus rapid transit**
- Future service:**
- S1 Line** Bellevue–Burien
- S2 Line** Lynnwood–Bellevue
- S3 Line** Shoreline–Bothell
- ST Express buses**
- In service:**

- New station or bus facility**
- Added parking**
- Station improvements**
- Major transfer hub**
- Existing station or bus facility**
- Existing parking**
- Provisional light rail station**

For more details, including information about project schedules, go to:  
[soundtransit.org/system](https://soundtransit.org/system)



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## Life before EnergyCAP

- Spreadsheets
- Intensive manual labor
- No review process
- Created tools with Excel for analysis
- Manual data entry of 5,000+ invoices per year
- No meter location system

**Raise your hand if you were running your utility program similar to this prior to EnergyCAP?**

# Why EnergyCAP?

What led Sound Transit to choose EnergyCAP?

*With utilities tied to over 500 meters and spend forecasted to grow from \$14M to \$65M by 2046, Sound Transit needed an automated system to scale.*

- 100% control of our utilities
- Quality data
- The current process was labor intensive
- New expansion projects
- Cost-saving opportunities
- Separate Operations utilities from PM; Construction projects and partners
- Make data-driven decisions



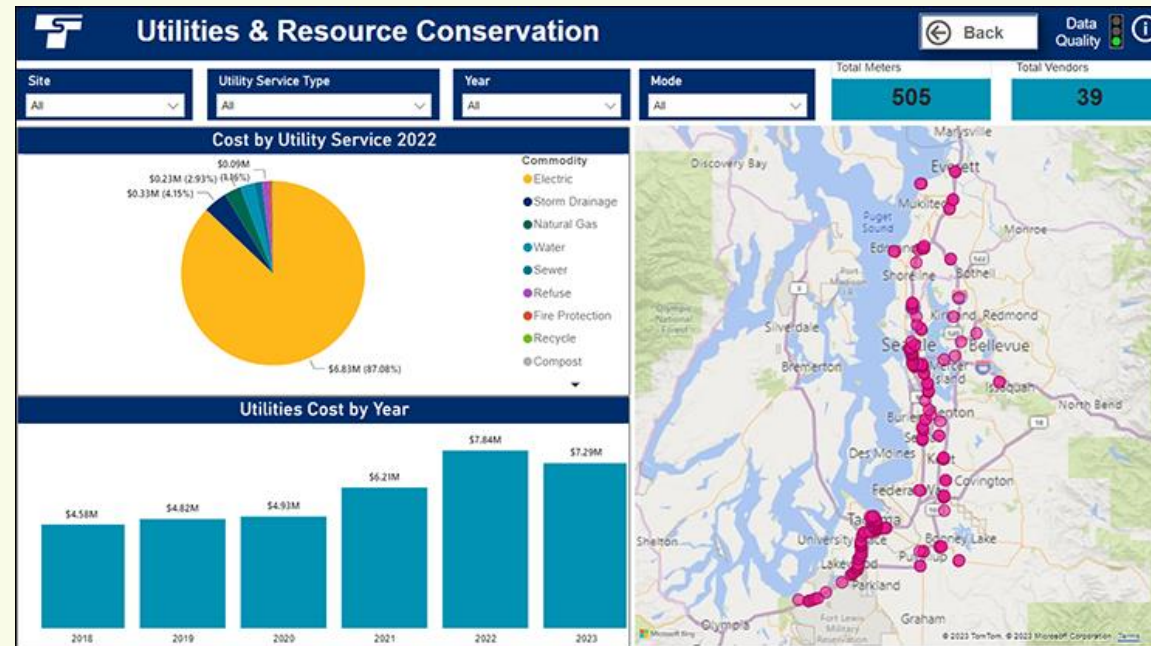
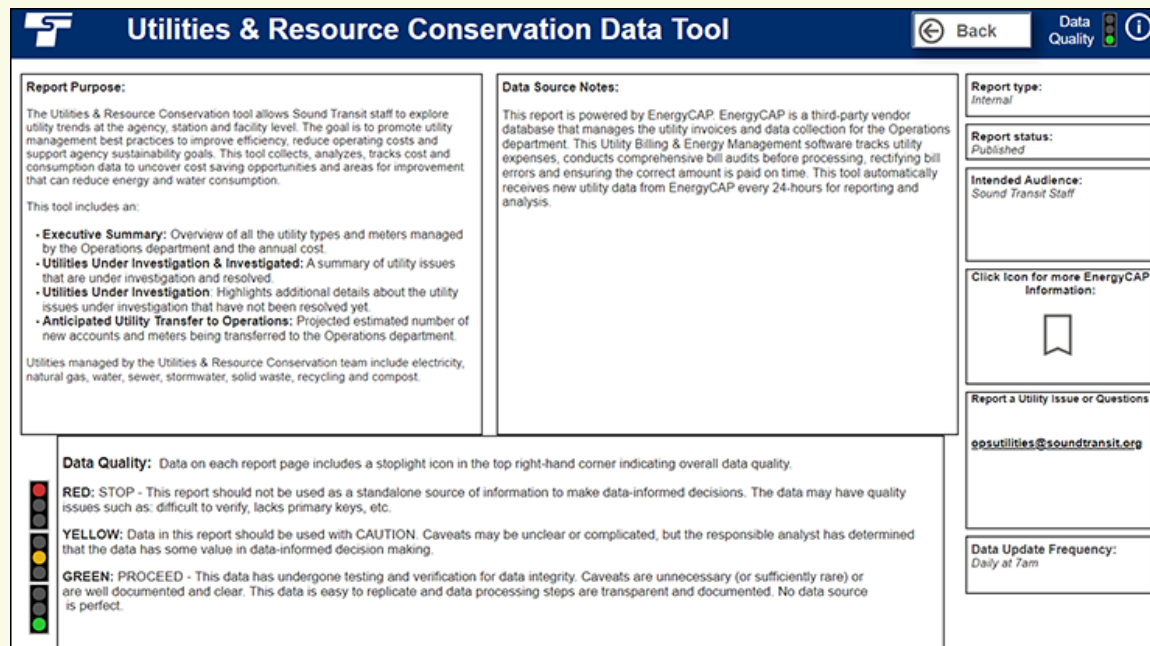
# **EnergyCAP in action**

## EnergyCAP implementation outcomes

- Ability to flag spikes for investigation with configurable alerts and reporting templates
  - Investigated over 1,600 utility issues and anomalies in 2022 alone
    - Investigated over 1,400 in 2023
- Visibility into utility spend across locations, vendors, and commodities
- Well-established documentation and tracking for 500+ meters to aid growth projections and planning
- Automation processes

# Power BI dashboard

**Report Designer BI** dashboards provide visibility to utility analytics across the organization.



## Secrets to success

- Bill CAPture
- Power BI Dashboard
- Eco Champions and workshops
- Automation

**What advice would you give?**

# Questions?



# CATALYST '24



## **Session survey**