

FLEET OF THE FUTURE

PLATFORM 1



INTEGRATING SUSTAINABILITY AT BART  
APTA SUSTAINABILITY WORKSHOP  
JULY 31, 2018





# Overview

## Plan Conceptualization and Creation (Kate)

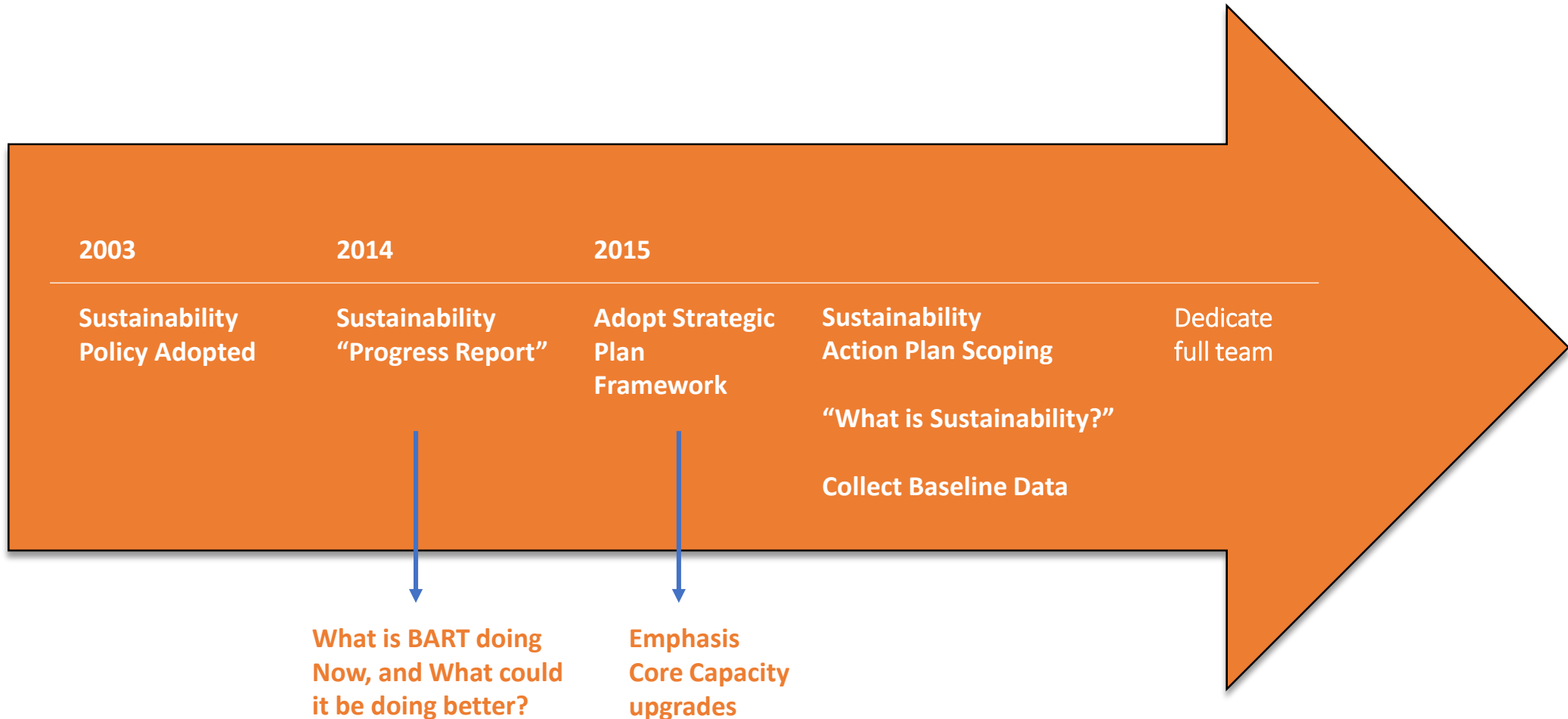
- Action Plan process
- Action Prioritization
- Change Management Framework

## Plan Completion and Implementation (Serena)

- Capacity Building
- Internal Engagement
- Strategic Implementation
- Opportunities and Governance



# Multi-Year Process





# 2015 Strategic Plan Framework

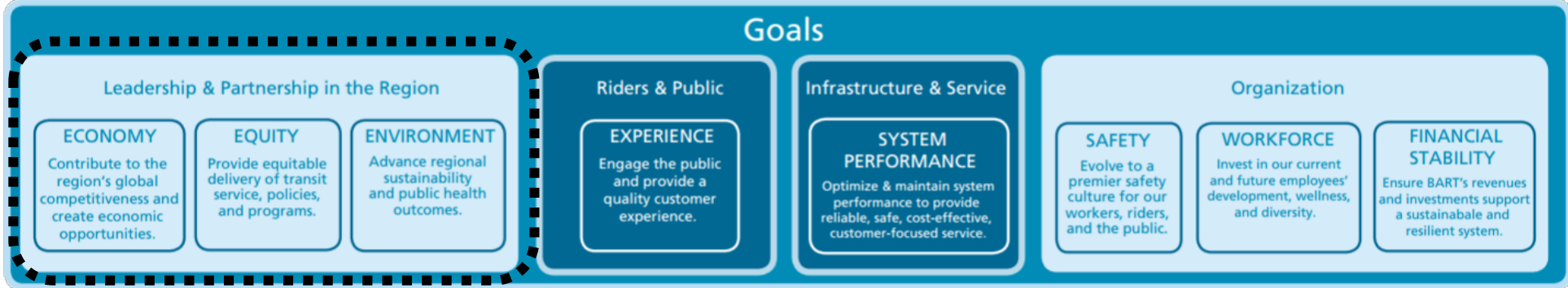
## Vision

BART supports a sustainable and prosperous Bay Area by connecting communities with seamless mobility.

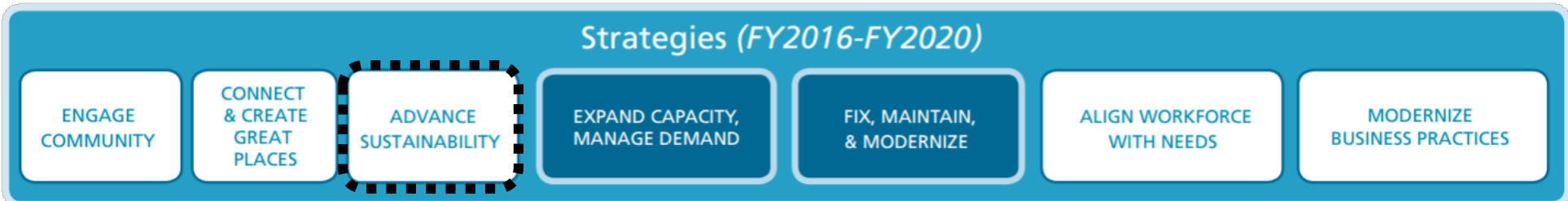
## Mission

Provide safe, reliable, clean, quality transit service for riders.

## Goals



## Strategies (FY2016-FY2020)





# 2015 Strategic Plan Framework

**Vision**  
BART supports a sustainable and prosperous Bay Area by connecting communities with seamless mobility.

**Mission**  
Provide safe, reliable, clean, quality transit service for riders.

**Goals**

<b>Leadership &amp; Partnership in the Region</b> <ul style="list-style-type: none"><li><b>ECONOMY</b> Contribute to the region's global competitiveness and create economic opportunities.</li><li><b>EQUITY</b> Provide equitable delivery of transit service, policies, and programs.</li><li><b>ENVIRONMENT</b> Advance regional sustainability and public health outcomes.</li></ul>	<b>Riders &amp; Public</b> <ul style="list-style-type: none"><li><b>EXPERIENCE</b> Engage the public and provide a quality customer experience.</li></ul>	<b>Infrastructure &amp; Service</b> <ul style="list-style-type: none"><li><b>SYSTEM PERFORMANCE</b> Optimize &amp; maintain system performance to provide reliable, safe, cost-effective, customer-focused service.</li></ul>	<b>Organization</b> <ul style="list-style-type: none"><li><b>SAFETY</b> Evolve to a premier safety culture for our workers, riders, and the public.</li><li><b>WORKFORCE</b> Invest in our current and future employees' development, wellness, and diversity.</li><li><b>FINANCIAL STABILITY</b> Ensure BART's revenues and investments support a sustainable and resilient system.</li></ul>
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**Strategies (FY2016-FY2020)**

<b>ENGAGE COMMUNITY</b>	<b>CONNECT &amp; CREATE GREAT PLACES</b>	<b>ADVANCE SUSTAINABILITY</b>	<b>EXPAND CAPACITY, MANAGE DEMAND</b>	<b>FIX, MAINTAIN, &amp; MODERNIZE</b>	<b>ALIGN WORKFORCE WITH NEEDS</b>	<b>MODERNIZE BUSINESS PRACTICES</b>
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A photograph of a BART station platform. In the foreground, there are several tall palm trees and a planter box filled with purple and red flowers. A white bus is parked at the platform. In the background, there are more palm trees and a modern building with large windows. The sky is clear and blue.

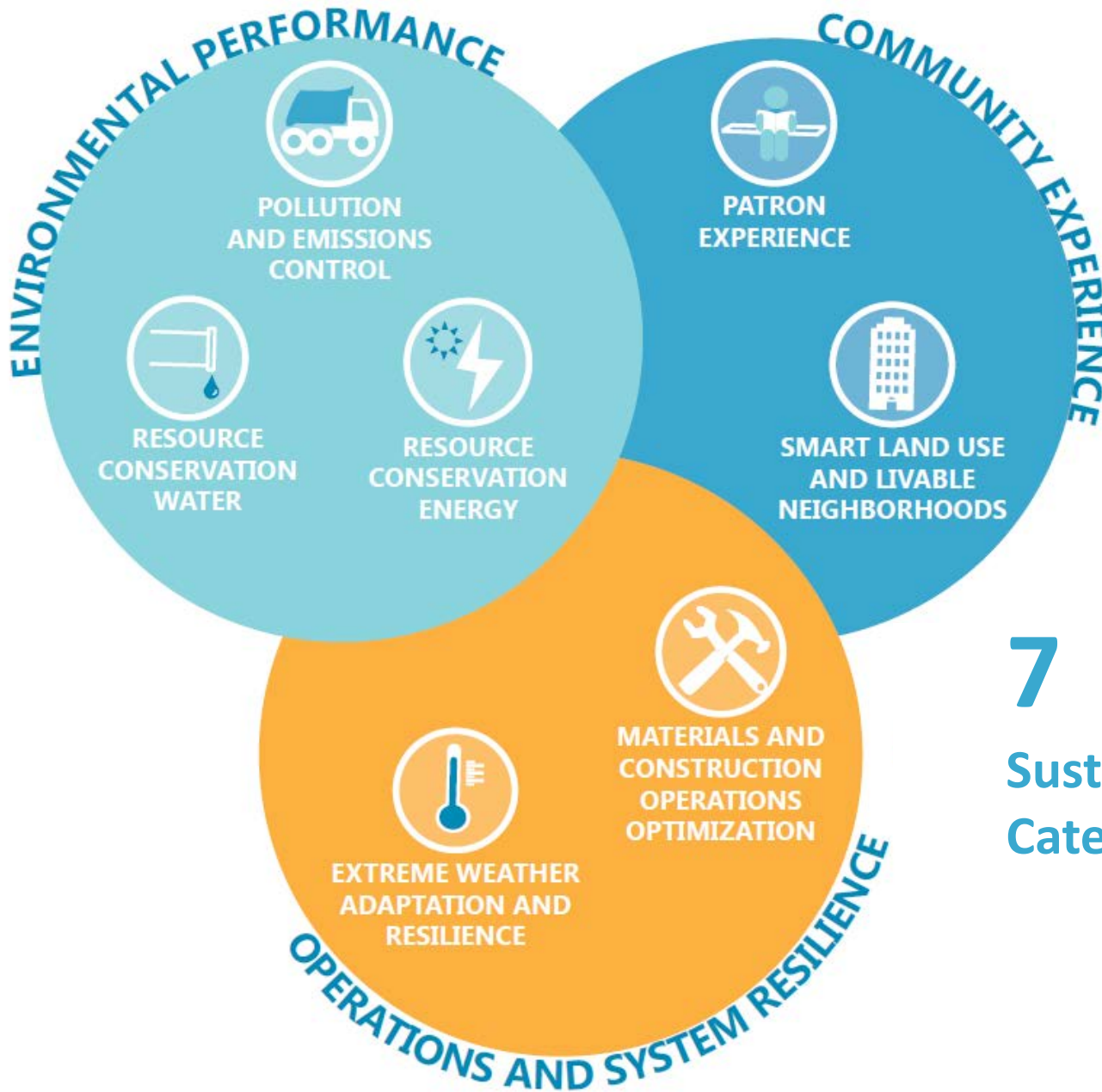
The San Francisco Bay Area Rapid Transit District (BART) is committed to advancing Regional sustainability by providing safe, affordable, equitable, and environmentally-friendly transit to move people to jobs, recreation, and services.”

BART Sustainability Policy Vision  
Adopted 2017



# Multi-Year Process





# 7 Sustainability Categories



ENVIRONMENTAL PERFORMANCE

COMMUNITY EXPERIENCE

**LEVEL ONE - PRIORITIZATION**

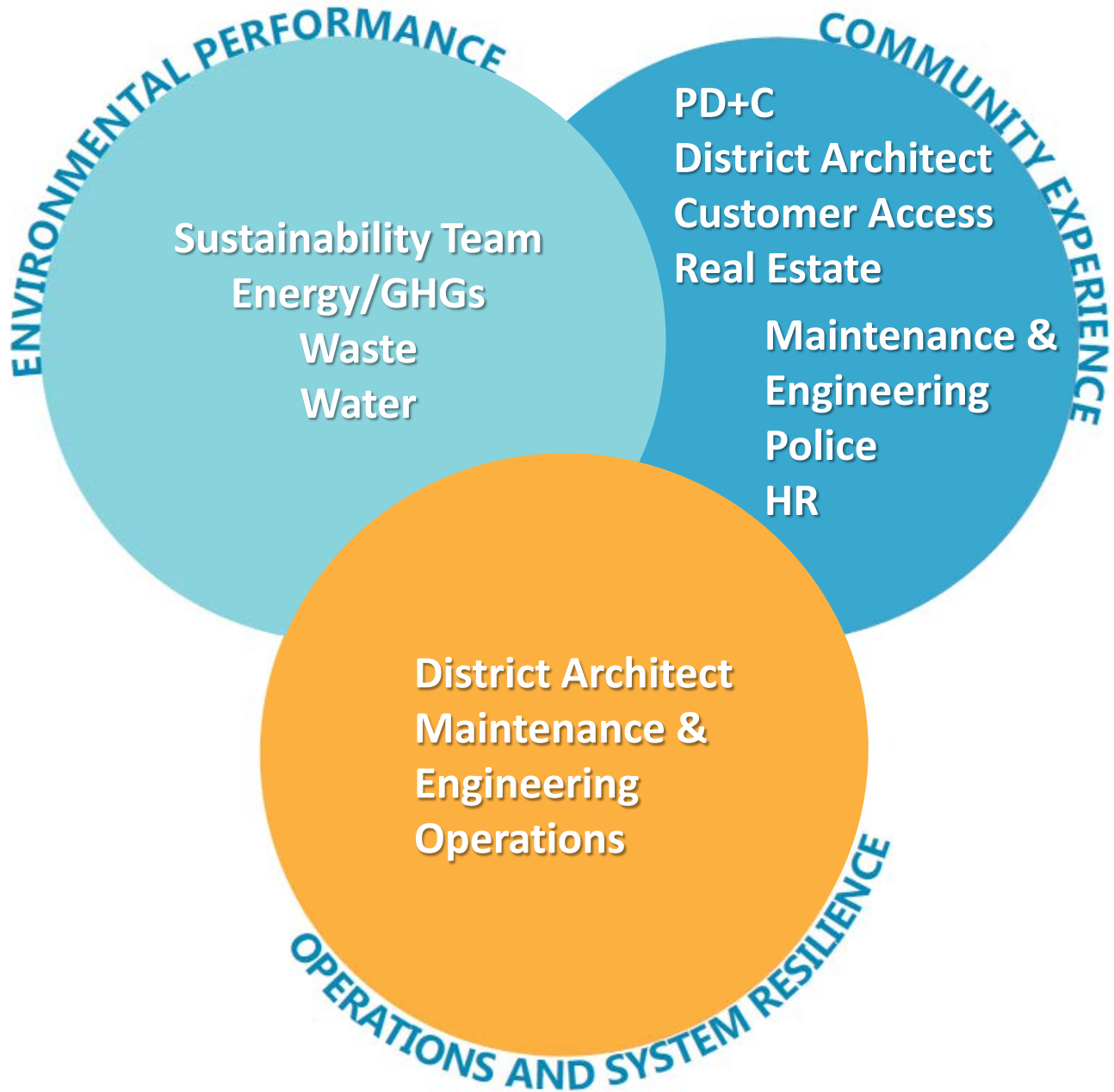
- Technical feasibility
- Impact to Metric
- Visibility
- Funding
- Supports BART priorities

**LEVEL TWO – EFFECTIVENESS**

- Initial costs, Net Present Value and Payback period as feasible.

OPERATIONS AND SYSTEM RESILIENCE

**50+**  
Actions





# Apply the “Change Management Framework”

1

RESOURCES - Dedicate sustainability staff, commit adequate funding

2

LEADERSHIP - Involve the BART Board and top level management

3

MISSION - Define mission, vision and core values

4

PARTNERSHIPS - Use cross cutting teams for action implementation and oversight

5

INSPIRATION - Inform, engage and motivate employees

6

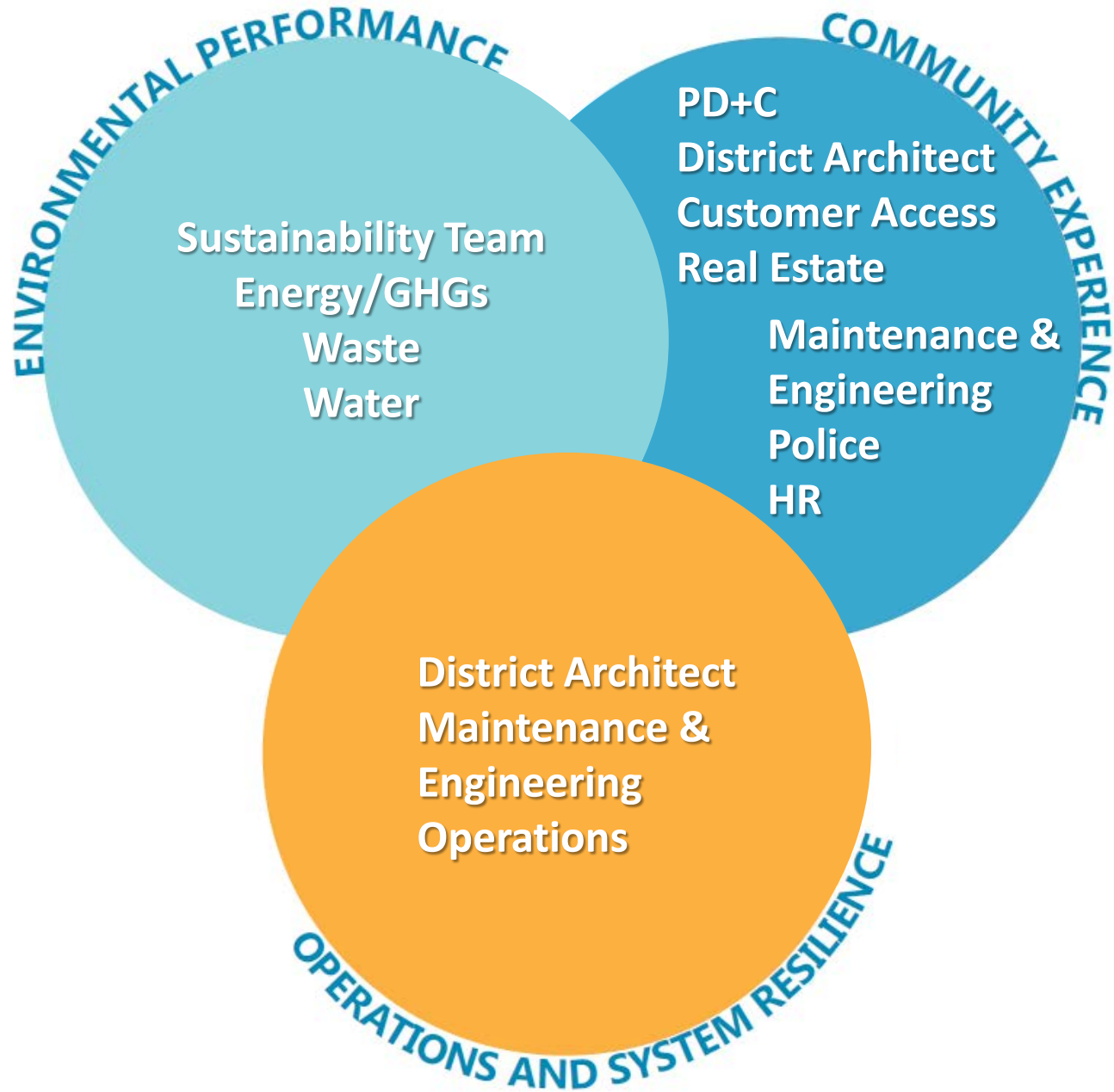
INTEGRATION - Coordinate with existing decision making tools; i.e. performance measures and budget prioritization

7

VISIBILITY - Gain public recognition and support for District sustainability initiatives

8

IMPLEMENTATION - Ongoing reporting on progress, regular updates, incorporating actions into annual workplans and budgets.



**20**

**Actions Prioritized**



# Priority Actions

## Energy and GHG Emissions



Increase Capacity to Support Regional **Greenhouse Gas Goals**

Adopt a **Strategic Energy Plan**

Make **Renewable Energy** Purchases

Invest in **On-Site Energy** Generation



Invest in District **Lighting Retrofits**

Onboard new **Energy Efficient Train Cars**

## Water Conservation

Regularly **Audit Water Use** and Correct Issues

Upgrade **Water** Fixtures

## Emissions and Pollution Control

Support **Solid Waste Reduction**

Improve **Recycling** at All District Shops and Yards

Clean and **Reuse Water**

## Materials and Construction Operations Optimization



**Update the Bart Facilities Standard (BFS)** for Construction Activities  
Develop Sustainability Design Guidance

## Extreme Weather Adaptation and Resilience

Coordinate with Regional Agencies in **Climate Adaptation Planning** and Implementation

Conduct **Hazard Mitigation Planning**

## Smart Land Use and Livable Neighborhoods

Improve **Station Character** and **Community Fit**

Continue to Lead the Region in **Transit Oriented Development**



Connect to Community – **Station Access**

## Patron Experience

Create **Cleaner** Station Environments

Create **Safer** Station Environments



# 2025 Targets



**Resource Conservation – Energy and GHG Emissions**

**85% | 89%** Reduce Total GHG Emissions per vehicle revenue mile.\*  
**4% | 6%** Reduce District Energy use per vehicle revenue mile.\*



**Resource Conservation – Water**

**6% | 17%** Reduce District Water Use.\*



**Emissions and Pollution Control**

**To Be Determined** Reduce District Waste (Total Tons/Vehicle Revenue Mile); and Increase Landfill diversion rate.



**Materials and Construction Operations Optimization**

**100%** Train BART Project Delivery staff in BART Facilities Standards (BFS) Sustainability Controls.



**Extreme Weather Adaptation and Resilience**

**100%** Implement High Priority Actions in the BART Local Hazard Mitigation Plan.



**Smart Land Use and Livable Neighborhoods**

**24%** Reduce per passenger GHG emissions associated with access to stations by shifting passengers to greener modes of transportation and developing TOD adjacent to stations.\*



**Patron Experience**

**100%** Meet all adopted Performance Standards for both System Safety and Patron Comfort.

\* Compared to 2025 Business as Usual projections



# Strategies for Success

## *Capacity Building*

- 2017: Negotiated 2 Power Purchase Agreements (PPAs) to take BART to 90% renewable electricity
- On-Site Solar at Warm Springs, Lafayette and Antioch Stations (2.5MW)





# Strategies for Success

## *Internal Engagement & Visibility*



- Provide visibility to innovative solutions from different parts of the org e.g. recycle oil rags
- LEED certification for green building
  - Warm Springs Station
  - eBART Maintenance Facility
  - 2 BART Facilities under construction





# Strategies for Success

## *Opportunistic & Iterative Project Implementation*

- EV charging stations pilot at Warm Springs Station
  - 20 Dual Port, 2 Single Port Level 2 EV charging stations
  - 42 parking spaces (including 3 ADA spaces)
  - Active since mid-April 2017





# Long-Term Sustainability Opportunities

- Deepen internal engagement and cross-function collaboration
- Socialize sustainable behaviors
- Pursue green procurement and sustainable construction practices
- Engage with external partners
- Proactively seek funding opportunities



## Implementation and Governance

- Actions status will be assessed and reported annually against 2025 Targets
- All annual reporting will be presented to the Sustainability Executive Committee
- The Sustainability Group will work with other teams to support inclusion of Plan actions into annual work plans and budgets
- Every five years, the Sustainability Action Plan and Sustainability Policy will be reviewed and updated as needed



Thank you!

Kate Howe

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