



Types of Infrastructure Envision Rates



ENERGY

Geothermal Hydroelectric

Nuclear

Natural Gas

Oil/Refinery





WATER

Potable water distribution Capture/ storage Water Reuse Storm Water

Management Flood Control



WASTE

Solid waste Recycling Hazardous Waste Collection & Transfer



TRANSPORT

Airports

Roads

Highways

Bikes

Pedestrians

Railways

Public Transit

Ports

Waterways



LANDSCAPE

Public Realm

Parks

Ecosystem Services

Natural Infrastructure



INFORMATION

Telecommunications

Internet

Phones

Data Centers

Sensors



64 Credits in 5 Categories



Quality of Life

14 Credits



Leadership

12 Credits

Collaboration, Planning, Economy

Wellbeing, Mobility, Community



Resource Allocation

14 Credits

Materials, Energy, Water



Natural World

14 Credits

Siting, Conservation, Ecology



Climate & Resilience

10 Credits

Emissions, Resilience



The Envision Framework

- 1. Guidance Manual (v3)
- 2. Pre-Assessment Checklist
- 3. Online Scoresheet
- 4. Sustainability Professional Credential
- 5. Verification
- 6. Envision Achievement Level Award



Institute for Sustainable Infrastructure

- ✓ Teach sustainable infrastructure
- ✓ Credential leaders Envision Sustainability Professional (ENV SP)
- ✓ Verify projects (platinum, gold, silver, bronze)
- ✓ Set standards for sustainable infrastructure (Envision)
- ✓ Incentivize higher performance



Envision Platinum California High-Speed Rail System

Completed December 10, 2020



Envision Platinum LaGuardia Airport Central Terminal Building Replacement Project

Completed August 22, 2019



Envision Platinum Westside Subway Extension (Purple Line), Section 1

Completed August 20, 2019



Envision Platinum

Upland Prairie Wind Farm

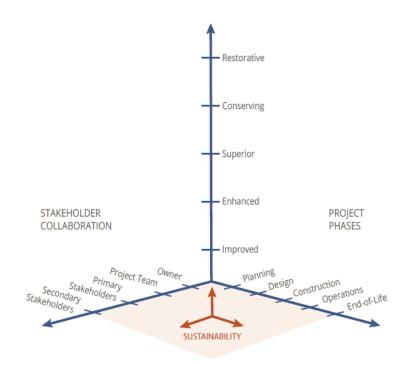
Completed July 22, 2019





Envision

A framework that provides guidance to initiate systematic changes in the planning, design, and delivery of sustainable and resilient infrastructure.















BART Berryessa Station

- Multi-modal transit facility
- Habitat restoration and enhancement
- Native American contemplation garden
- Educational interpretive panels
- Native plants in parking lots and station
- Bioretention basins for water quality
- Recycled water for irrigation
- New bike/ped trail that connects to regional trail
- Solar power on parking garage
- EV charging stations
- Motion detector lighting
- Variable speed escalators
- Artwork reflecting local character and protected species
- Construction materials reused and recycled

BART Berryessa Station







BART Silicon Valley Phase II

- The Sustainability Charter is VTA's commitment to design and construct BSVII in the most sustainable way possible
- The goal is Platinum Certification using the Envision rating system for infrastructure projects
- Envision helps focus efforts to meet the targets in VTA's 2020 Sustainability Plan for GHG emissions, water and energy conservation, and waste reduction



VTA's BART Silicon Valley Phase II Extension Project **Sustainability Charter**

We, the BSVII team and VTA, commit to design and deliver the BSVII Project in a manner that is environmentally, socially, and economically sustainable. To fulfill our commitment, we will design, construct, operate, and maintain the BSVII Project using the most cost-effective practices, providing the greatest environmental benefit, without adverse effects on the construction schedule or budget Our delivery of the BSVII Project will:

- · Provide a comfortable, healthy, and secure environment for patrons and staff by maximizing safety and reliability, reflecting the local context, and promoting transit-oriented development that will help bring riders into the system.
- Integrate sustainable strategies in the design and construction of the whole project.
- · Reduce energy dependency by minimizing nonrenewable energy consumption and employ renewable sources of energy.
- Protect, conserve, and enhance natural resources.
- · Reduce resource consumption by using environmentally preferable products and recycling/reusing resources and materials
- Support VTA's, BART's, and Santa Clara County's sustainability missions

The BSVII Project will demonstrate exemplary achievement of these principles using the Institute for Sustainable Infrastructure's Envision™ standards and rating system.

Acknowledgements and Signatures



Thank You!

QUESTIONS?

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