THE ENVISION™ RATING SYSTEM

A New Fact of Life…

It is no longer enough that infrastructure work, that it be constructed on time and within budget…or even that it last…it now must be **SUSTAINABLE**.

We are not without tools to guide us…

There are our
- Best Practices
- Statutes and Regulations
- Science and Technology
- Community values and priorities

And there is ENVISION™

Envision™ was developed in joint collaboration between the Zofnass Program for Sustainable Infrastructure at the Harvard University Graduate School of Design and the Institute for Sustainable Infrastructure.

The Institute for Sustainable Infrastructure is a not-for-profit education and research organization founded by the American Public Works Association, the American Council of Engineering Companies and the American Society of Civil Engineers.

WHAT IS ENVISION™?

Envision™ is a tool, which itself is part of a larger system, developed to help evaluate the sustainability of civil infrastructure.
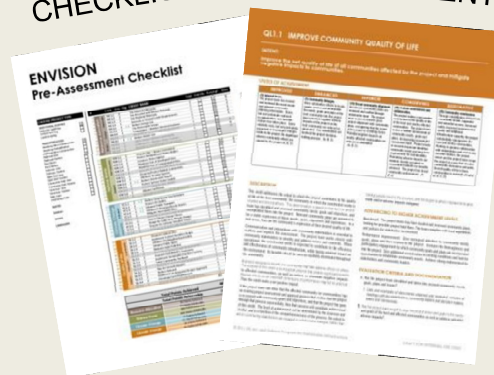
This system includes:

- A self assessment checklist
- The Envision™ Rating Tool
- A credential program for individuals
- A Project Evaluation and Verification Program
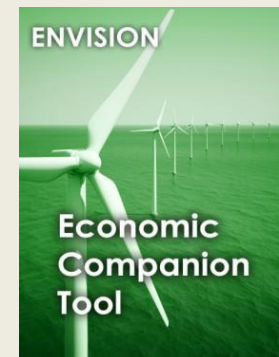- A Recognition Program for Sustainable Infrastructure

PHASE TOOLKITS

PRE-ASSESSMENT CHECKLIST

RECOGNITION ASSESSMENT

COMPANION TOOLS

WHAT MAKES ENVISION™ UNIQUE?

- It applies to civil infrastructure

- It includes design, planning, construction and maintenance elements

- It is applicable at any point in an infrastructure project's life cycle

- It speaks to the triple bottom line: social, economic and environmental goals

- It is designed to keep pace with a changing concept of sustainability

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WHAT TYPES OF INFRASTRUCTURE CAN ENVISION™ RATE?

ENERGY

Geothermal

Hydroelectric

Nuclear

Coal

Natural Gas

Oil/Refinery

Wind

Solar

Biomass

WATER

Potable water
distribution

Capture/Storage

Water Reuse

Storm Water
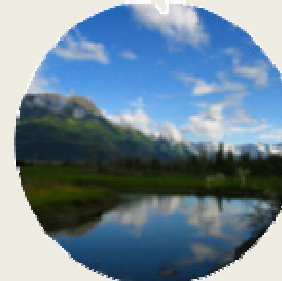
Management

Flood Control

WASTE

Solid waste

Recycling

Hazardous
Waste

Collection &
Transfer

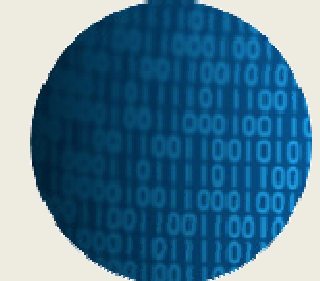## TRANSPORT

Airports

Roads

Highways

Bikes

Pedestrians

Railways

Public Transit

Ports

Waterways

LANDSCAPE

Public Realm

Parks

Ecosystem
Services

INFORMATION

Telecommunications

Internet

Phones

Satellites

Data Centers

Sensors

CATEGORIES

QUALITY OF LIFE
13 Credits

LEADERSHIP
10 Credits

RESOURCE ALLOCATION
14 Credits

NATURAL WORLD
15 Credits

CLIMATE AND RISK
8 Credits

QUALITY OF LIFE

1 PURPOSE

QL1.1 Improve Community Quality of Life
QL1.2 Stimulate Sustainable Growth & Development
QL1.3 Develop Local Skills & Capabilities

2 WELLBEING

QL2.1 Enhance Public Health & Safety
QL2.2 Minimize Noise and Vibration
QL2.3 Minimize Light Pollution
QL2.4 Improve Community Mobility & Access
QL2.5 Encourage Alternative Modes of Transportation
QL2.6 Improve Accessibility, Safety, & Wayfinding

3 COMMUNITY

QL3.1 Preserve Historic & Cultural Resources
QL3.2 Preserve Views & Local Character
QL3.3 Enhance Public Space

QL0.0 Innovate or Exceed Credit Requirements

LEADERSHIP

1 COLLABORATION

LD1.1 Provide Effective Leadership & Commitment
LD1.2 Establish A Sustainability Management System
LD1.3 Foster Collaboration & Teamwork
LD1.4 Provide for Stakeholder Involvement

2 MANAGEMENT

LD2.1 Pursue By-Product Synergy Opportunities
LD2.2 Improve Infrastructure Integration

3 PLANNING

LD3.1 Plan For Long-Term Monitoring & Maintenance
LD3.2 Address Conflicting Regulations & Policies
LD3.3 Extend Useful Life

LD0.0 Innovate or Exceed Credit Requirements

RESOURCE ALLOCATION

1 MATERIALS

RA1.1 Reduce Net Embodied Energy
RA1.2 Support Sustainable Procurement Practices
RA1.3 Use Recycled Materials
RA1.4 Use Regional Materials
RA1.5 Divert Waste From Landfills
RA1.6 Reduce Excavated Materials Taken Off Site
RA1.7 Provide For Deconstruction & Recycling

2 ENERGY

RA2.1 Reduce Energy Consumption
RA2.2 Use Renewable Energy
RA2.3 Commission & Monitor Energy Systems

3 WATER

RA3.1 Protect Fresh Water Availability
RA3.2 Reduce Potable Water Consumption
RA3.3 Monitor Water Systems

RA0.0 Innovate or Exceed Credit Requirements

NATURAL WORLD

1 SITING

NW1.1 Preserve Prime Habitat
NW1.2 Protect Wetlands & Surface Water
NW1.3 Preserve Prime Farmland
NW1.4 Avoid Adverse Geology
NW1.5 Preserve Floodplain Functions
NW1.6 Avoid Unsuitable Development on Steep Slopes
NW1.7 Preserve Greenfields

2 LAND+WATER

NW2.1 Manage Stormwater
NW2.2 Reduce Pesticide & Fertilizer Impacts
NW2.3 Prevent Surface & Groundwater Contamination

3 BIODIVERSITY

NW3.1 Preserve Species Biodiversity
NW3.2 Control Invasive Species
NW3.3 Restore Disturbed Soils
NW3.4 Maintain Wetland & Surface Water Functions

NW0.0 Innovate or Exceed Credit Requirements

CLIMATE AND RISK

1 EMISSIONS

CR1.1 Reduce Greenhouse Gas Emissions
CR1.2 Reduce Air Pollutant Emissions

2 RESILIENCE

CR2.1 Assess Climate Threat
CR2.2 Avoid Traps & Vulnerabilities
CR2.3 Prepare For Long-Term Adaptability
CR2.4 Prepare For Short-Term Hazards
CR2.5 Manage Heat Island Effects

CR0.0 Innovate or Exceed Credit Requirement

FOR MORE
INFORMATION
ABOUT ENVISION™

sustainableinfrastructure.org

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