

LECTURE 11

Overview of INVEST

INVEST — Infrastructure Voluntary Evaluation Sustainability Tool

*INVEST is a web-
based self-evaluation
tool*



Popular Links

Case Studies

Videos

INVEST Library

Getting to Know INVEST

My Workspace

Sustainable Highways Initiative

Version 1.3 Translation

Technical Assistance Opportunities

Who is using INVEST?

System Planning for States

System Planning for Regions

Project Development

Operations and Maintenance

Welcome to INVEST Version 1.3!

Announcements

- **INVEST Version 1.3 is here!** Read the [INVEST 1.3 Update Info](#) and then learn how to [Translate Existing Evaluations to Version 1.3](#).
- Read the [MetroPlan Orlando INVEST case study](#) on integrating health and sustainability principles into transportation planning.
- Check out a new video from Arizona DOT about how the agency is building [sustainable](#) freeways. The video is available for viewing [here](#).
- Learn about how the [Illinois Tollway's use of sustainable practices has resulted in over \\$200 million in cost savings](#). Also be sure to check out the [Illinois Tollway INVEST case study](#).
- Presentations from INVEST workshop in Texas available for download and viewing [here](#).
- Presentations on INVEST from the Transportation Research Board Annual Meeting available for download and viewing [here](#).
- View [Using INVEST to Accomplish Your Goals](#) to learn different approaches to improving sustainability with

INVEST — Infrastructure Voluntary Evaluation Sustainability Tool (continued)

- It includes voluntary sustainability best practices called criteria
- It covers the full life cycle of transportation — system planning, project planning, design, construction, and operations and maintenance
- Developed by the Federal Highway Administration (FHWA)

<https://www.sustainablehighways.org/>

Why Measure Sustainability?

- **Track and assess progress**
INVEST provides a snapshot in time of sustainability efforts
- **Encourage broad participation of stakeholders**
INVEST helps communicate goals and progress to all involved
- **Evaluate sustainability of trade-offs**
INVEST includes criteria that help evaluate multiple options
- **Meet or anticipate new requirements**
INVEST helps users understand new technologies and best practices
- **Find and address programmatic barriers**
INVEST helps find hindrances in policies, standards, and specifications
- **Communicate benefits and goals**
INVEST helps influence public opinion and raise awareness

How Is Sustainability Measured?



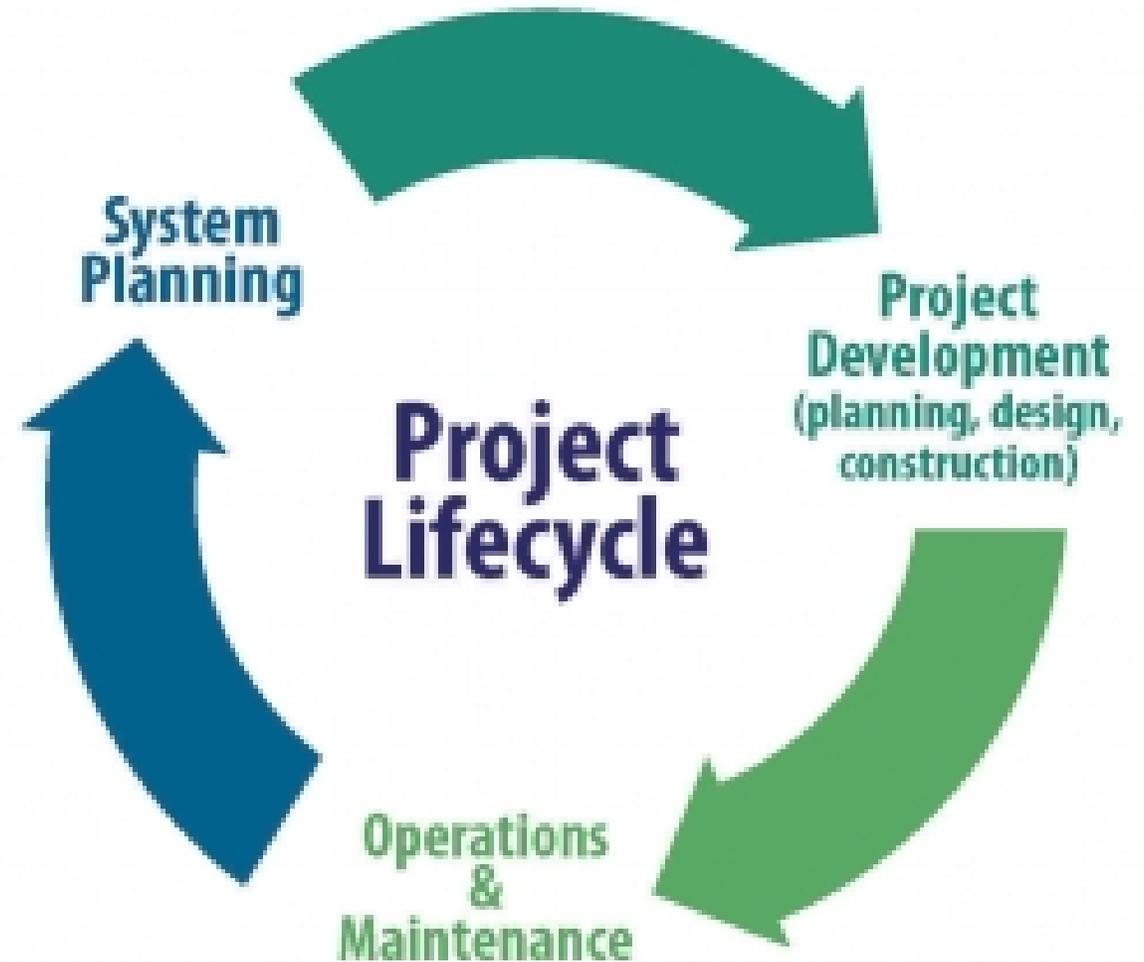
Sustainability

is measured by assessing performance of social, environmental, and economic principles. While a balanced treatment of all three is an ideal goal, it is not always achievable.

How Is Sustainability Measured?

- One **method of measurement** is to compare a program or project to existing best practices
- Many organizations develop their own **measurement tools** and **best practices**
- **Balancing triple bottom line goals** may be accomplished over a group of projects or the entire program
- INVEST provides the **opportunity to consider sustainability** along with other performance measures without mandating values or choices

*INVEST Has Modules
to Evaluate the
Sustainability of
Transportation
Projects throughout
the Project Life Cycle*



The goal of INVEST is to make transportation more sustainable than common practice dictates today



- Is sustainable transportation possible considering material resource requirements and impacts to human and natural environments from development and vehicle usage?
 - Transportation provides immense social and economic benefits
 - Transportation is a necessary part of our society's infrastructure

Achieving Sustainability Goals

- **Implementing sustainable practices** can benefit agencies as well as road users
- **Example — safety criterion**
 - Agency benefits — reduced costs for emergency response, property damage, and legal liability
 - Road user benefits — savings in crash property damage, travel delays, and productivity

**Advance better
business practices**

**Integrate
sustainability into
project and
programs**

**Improve education
and understanding
of sustainability**

**Facilitate
communication and
outreach**

Monitor Performance and Benchmark

- May be used to evaluate past performance, current performance, and goals for future performance
- May be used on a regular basis to benchmark year-over-year achievements
- Helps establish a high standard of achievement across all projects and identify improvements
- Helps identify potential solutions early in design and ensures they are carried forward through construction

Benefits

Improve sustainability of specific transportation projects

- Users may take a prospective or a retrospective approach
- Helps agencies identify areas of improvement or excellence

Keep projects on track to meet sustainability goals

- INVEST is effective in tracking projects in development
- Helps establish a sustainability schedule with milestones

Provide contractors with incentives for implementing sustainability

- INVEST may be embedded in contract documents and design-build
- INVEST may be used to demonstrate sustainability in procurement requests and contracts mechanisms

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