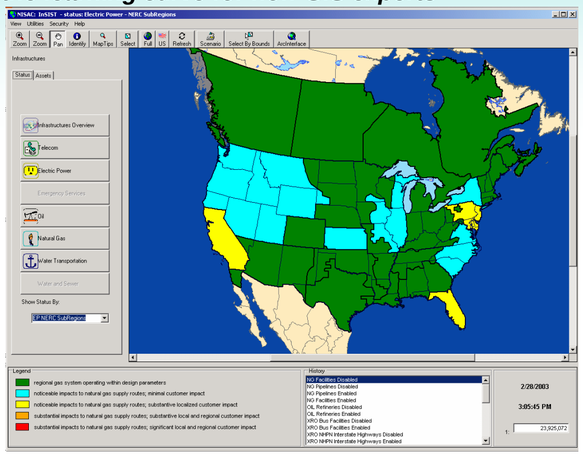
National Infrastructure Simulation & Analysis Center

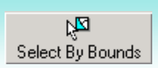
InSIST
Indications & Warnings System and Information Sharing Tool

User Interface

The User Interface provides a means for displaying infrastructure status.

User Interface enhancements are designed to allow GIS experts full functional access while minimizing the learning curve for non-GIS experts



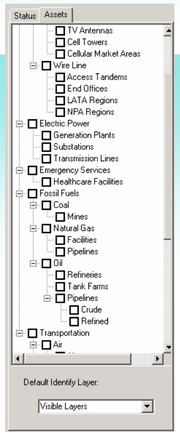


Users can select infrastructure assets that meet specified criteria and either lie within or cross specific bounds.

Advanced users can select to analyze infrastructure asset data using traditional GIS tools.

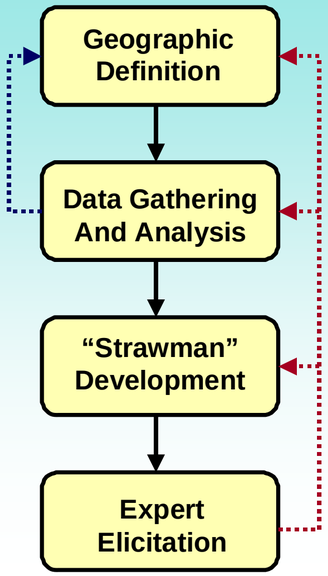
Users can examine scenario-based infrastructure analysis questions using the What If capability.

Infrastructure Status and Assets are quickly accessible to InSIST users through button and tree menus.



Indicator Development Process (IDP)

The Indicator Development Process provides a recursive methodology for developing infrastructure status functions.



Defines candidate boundary sets based on regulation, organization

Provides clarity in developing functional capability using candidates

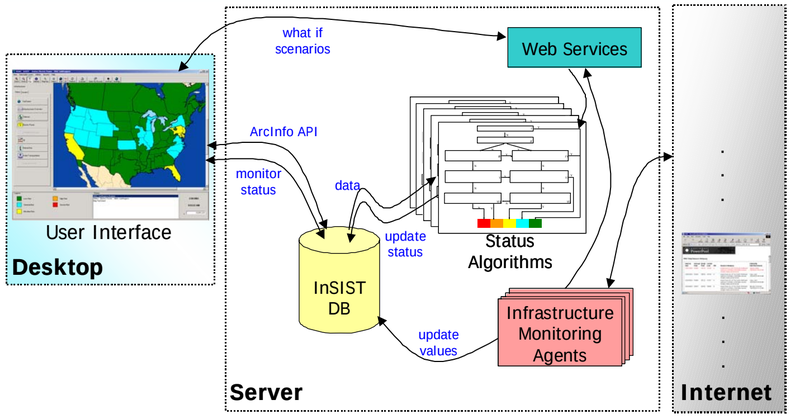
Provides introductory functional capability using available data sources

Enhances functional capability, incorporating expertise, new data sources

Software Architecture

The software architecture ties together the functional capabilities and user interface into a working tool.

Software Architecture development assumes a multiple user-type, varied data source environment.



What is InSIST?

The Indications and Warnings System and Information Sharing Tool is an in-development, high-level screening tool. It is designed to provide user with indicators, or valuations, of the status of interdependent infrastructures based on their relationships. These indicators are provided in a common geographic environment.

InSIST is also designed to provide users with a high-level aggregate analytic capability, to understand how potential changes in infrastructure assets or characteristics affect the status of interdependent infrastructures.

What infrastructures are developed in InSIST?

Infrastructure	Status Valuation	Analytic Capability	Geographic Scope
Electric Power	Y	Y	National
Natural Gas	Y	Y	Western U.S.
Oil	Y	Y	Western U.S.
Water Transportation	Y	N	lower Columbia & Willamette Rivers
Wire Line Telecommunications	Y	N	Oregon & Washington

InSIST Collaborative Development Team

InSIST Development Lead	***Kevin Stamber***
User Interface Development	***Clay Pryor***
Software/Functional Development	***Pengchu Zhang***
Database Coordination	***Larry Olson***
Security Development	***Cheryl Beaver***
Software/Architecture Development	***Steve Kleban, Rich Detry Andy Scholand***

External Input from many entities, including Argonne National Lab, National Imagery and Mapping Agency, Lucent Technologies, Regional Maritime Security Coalition, US Coast Guard, Bonneville Power Administration

NISAC's core partners are Sandia National Laboratories and Los Alamos National Laboratory.
Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy under contract DE-AC04-94AL85000.
Los Alamos National Laboratory is operated by the University of California for the United States Department of Energy under contract W-7405 ENG-36.