SAVI Web Interface

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The SAVI Web Interface

A prototype web-based interface that allows users to query GIS-enabled data about Indianapolis, that:

- Currently uses the Social Assets and Vulnerabilities Indicators (SAVI) database.

- Is a component of the Electronic Atlas of Central Indiana, which we will link to ECAI.
SAVI Web Objectives

- To increase accessibility and usability of SAVI database.
- To provide ability to perform data queries that are dynamic and data driven.
- To provide ability to perform relative analysis of data layers.
Development Activities

- Spring/Summer 1999
  - Design input from initial advisory meeting
  - Development of functional specifications
  - Exploration of capabilities of MapObjects IMS versus Arc IMS
    - Assistance from ESRI
    - Prioritization of functionality

- Fall/Winter 1999
  - Prototype design and development
  - Metadata design and development
  - Prototype review by advisory groups
  - Usability testing
  - Graphical design
Advisory Groups

- **User community**
  - Community Planners
  - Human Service Planners
  - Religious Leaders
  - Governmental Officials
  - Educators
  - Scholars (Geography, Urban Planning, Sociology, etc.)

- **Data source providers**
SAVI Web Functions

- Graphical and tabular data display
- Data query based on feature attributes and location
- Data download
- Metadata display
- Online Help
- Single address geocoding
Query Builder

- A query builder has been developed to support the following five types of queries:
  - Selection of sites based on attributes
  - Selection of areas based on attributes
  - Selection of sites relative to areas, and attributes of both
  - Selection of sites relative to sites, and attributes of both
  - Selection of areas relative to areas, and attributes of both
Post-Prototype Functions

- Hotlinks to other data and/or websites
- Multiple Address Geocoding
- Wizards
- More Error Trapping
- More On-line Help
- Time series animation
- Interface to RDBMS data source
- Interface to raster data
Future GIS Functionality

- Distance Mapping
- Map Overlay to Determine Site Suitability
- Proximity Mapping to Define Service Areas
- Network Analysis to Determine Site Accessibility
- Population Density Mapping
- Ranking
- Path Analysis
Development Software

- Map Objects versus Arc IMS
- Visual Basic 6.0 versus Java
- HTML versus XML
Programming and Design Issues

- Limited Color Palette
- Browser Compatibility
- Printing
- Use of Frames
Data Representation

- Aggregation unit
- Normalization
- Legend gradients
Documentation

- Metadata
  - FGDC
  - Dublin Core
  - Simple
- Disclaimers
- On-line Help
- Tutorials (future)
Suitability of Data

- Why was the data developed?
- How was the data developed?
- What source documents were used to develop the data?
- How dated is the data? And the source documents? Who developed the data? Qualifications?
- What is the format of the data? Can it be converted cleanly?
Suitability of Data (cont.)

- What nongraphic data is incorporated?
- What scale was the data developed? Is this acceptable?
- How accurate is the data? Is this accuracy level acceptable?
Suitability of Data (cont.)

- Is the data maintained? How often, and how much?
- What system was the data developed on?
- What system was the data delivered to? Should existing data be incorporated?
- Should existing data be replaced?
- How should links be created?