

Indiana Department of Transportation




Road Weather Information System (RWIS)

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What is RWIS?

- Weather Station on Roadside
- Atmospheric Sensors
 - Air Temperature
 - Relative Humidity and Dew Point
 - Wind Speed and Direction
 - Precipitation Yes/No
- Surface Sensors
 - Status
 - Pavement and Subsurface Temperature
 - Chemical Concentration



I-65 & SR114

Why are we Interested?

OUR Responsibility to:

- Ensure safe movement of traffic
- Ensure roadway integrity



Costs of Roadway Weather

Annually from Weather Related Vehicle Crashes:



- 800,000 injured
- 7,000 fatalities
- Economic cost of \$42 billion

Costs of Roadway Weather

- Snow, Ice and Fog caused estimated 544 million vehicle-hours of delay in 1999
- State & Local Agencies spend more than \$2 billion annually on snow & ice removal per Federal Highway Administration
- One day shutdown due to snow in a metro area costs between \$15 & \$93 million in lost wages, retail sales & taxes

How Does RWIS Help?

- PROVIDE PAVEMENT TEMPERATURES
- Provides Information for Decision Making Regarding Snow & Ice Removal, Before & After
- Verify Forecasts - Tracking
- Improve Pavement Forecasting

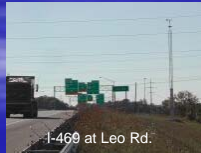
I-74 & SR 75

History

- Toll Road Network
- City of Indianapolis/INDOT Network
- ITS Network
- Construction Project
- Contract with SSI



Macgregor Rd, Indy



I-469 at Leo Rd.

Siting

- Coverage in North and Center of State
- Evaluated need
- Statewide Coverage
- www.ops.fhwa.dot.gov/weather/index.asp
Click on Projects and Programs to view EES Siting Guidelines Project



US41
Vincennes



I-65 & SR114

Two Applications

- Regional Weather Information
- Geographic Concern



Construction Project

- I-74 & I-465 RWIS
- Added to Existing Construction Project
- Flyover Bridge in Southeast Indianapolis



Contract with SSI

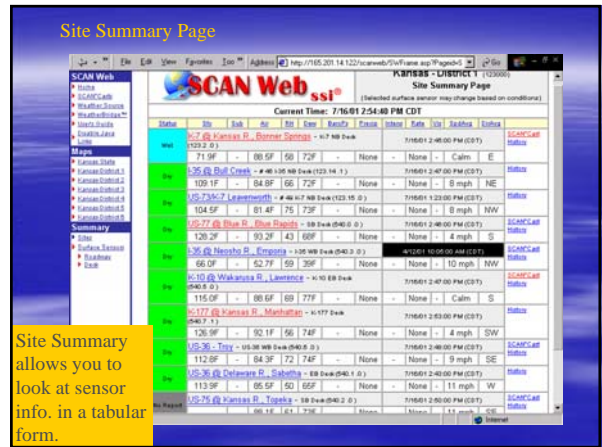
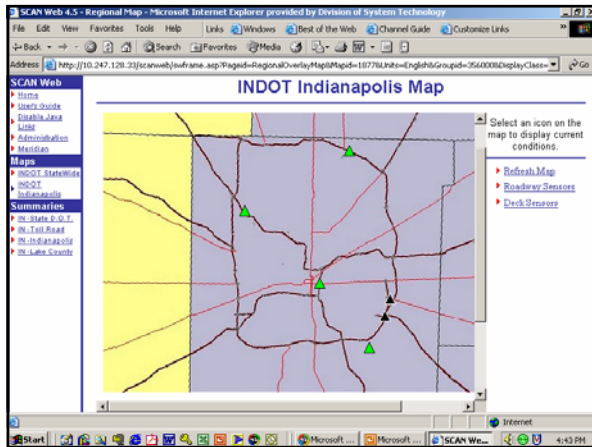
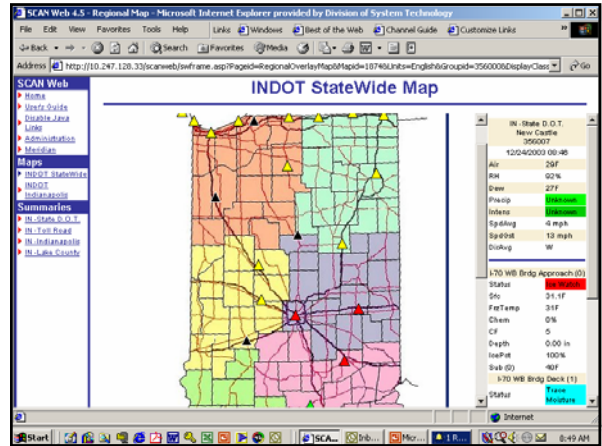
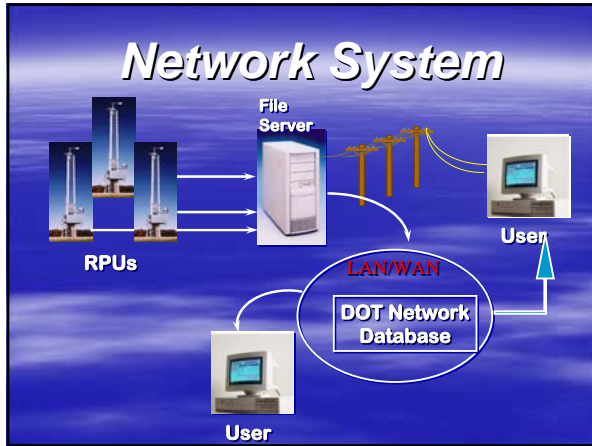
- RFP Process
- SSI Selected
 - Thorough Presentation
 - Price
- Issued Purchase Order
 - Awarded 16 Sites



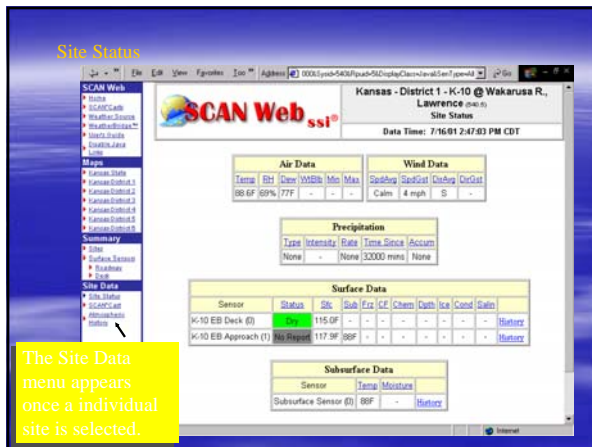
INDOT RWIS Network

- 31 Sites Statewide
- Displayed on Surface Systems, Inc. (SSI) ScanWeb Software
- Two Servers in Indianapolis
- Toll Road Network, NW IN ITS Network and Contract for 16

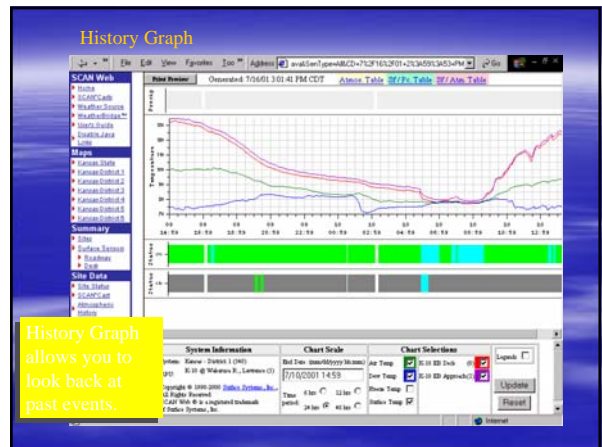




Site Summary allows you to look at sensor info. in a tabular form.



The Site Data menu appears once a individual site is selected.



History Graph allows you to look back at past events.

Future

- Road Weather Condition
– By Next Season on INDOT Internet Site
- Reviewing Need for Additional Sites



QUESTIONS??



Road Weather Condition
Demo