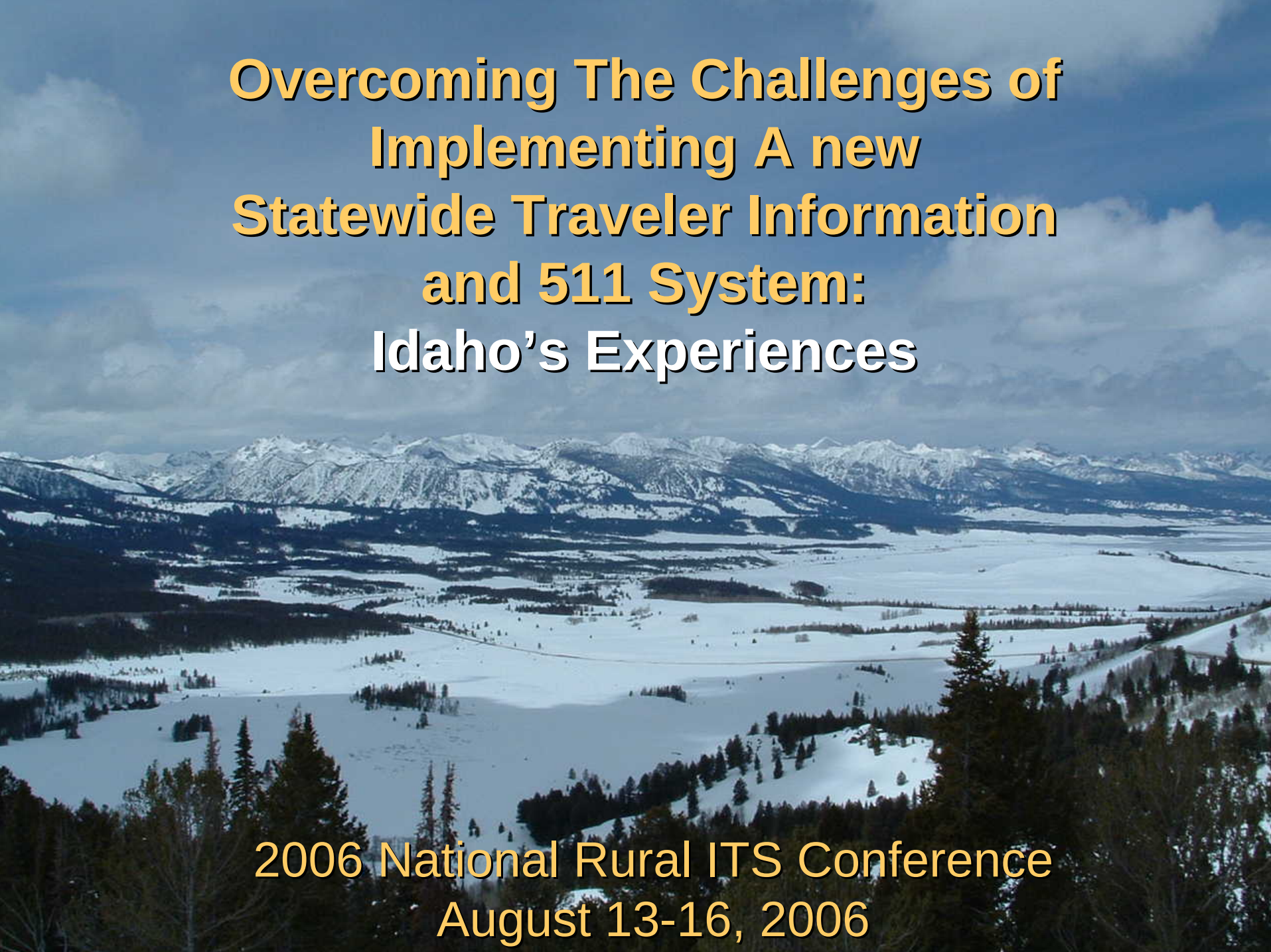


Overcoming The Challenges of Implementing A new Statewide Traveler Information and 511 System:

Idaho's Experiences

2006 National Rural ITS Conference
August 13-16, 2006

Agenda

- Overview and Background
- Experiences: Challenges and Solutions
- Planned Future Enhancements

Why did Idaho need a new system?

- Phone system overloads
- Outdated user interface
- Limited breadth of information
- Disconnect with national 511 standards
- Lack of timely and accurate information

Expected additional benefits

- Potential to improve safety
- Improved efficiency
  - Greater use of automation
  - Combined processes

Idaho Traveler Services History

- Decision to implement 511 (early 2004)
- Selection of CARS system (late 2004)

- Established system
- CARS coalition cost sharing
- Ability to handle call volumes

System Development Goals

- Desire to provide comprehensive traveler information
- Foster partnerships among agencies with traveler information interests
- Focus on improved accuracy and timeliness
- Initial system
  - Focus on winter driving conditions
  - Other available information

Program Schedule

- Initial system planning and design . . 2004-2005
- Beta testing and training . . . . . .Sep-Oct 2005
- System live (initial system) . . . . . Nov. 2005
- Operation and refinements . . . Winter 2005-2006
- Additions . . . . . Jan. 2006 – present
  - Road Work
  - Trucking
- Beta testing and training . . . . . .Mar-Apr 2006
- Spring Additions Live . . . . . April 2006
- System refinements . . . . . Ongoing

Idaho Travelers Services System
Providing Information Travelers Need to Know

- Winter Driving Conditions
- Road Work activities that impact traffic
- Commercial Vehicle Delays, restrictions
- Incidents that occur on Idaho highways

Field Report

Data Entry

CARS: Condition Acquisition and Reporting System

Public Access: web/phone

All Advisories	Driving Conditions	Road Work	Trucking	Cameras	Weather	Mountain Passes

http://511.idaho.gov

Data Entry Approach

- ITD's relationship with State Communications. They:
  - Provide District maintenance operations dispatch
  - Are responsible for road closures/openings
  - Collect winter road conditions by roadway segment from maintenance Foreman
  - Input into CARS at two designated times per day and provide backup for exception reporting
- ITD Districts input exception reports into CARS during normal business hours*

Challenges
(selected for discussion)

- Procedural Changes within Idaho Transportation Department
- Segment-based Reporting of Winter Road Conditions
- Location Descriptions in Rural Areas
- To Time Stamp, or not to Time Stamp
- Maintaining Multi-Agency Involvement and Support

ITD Procedural Changes

THE CHALLENGE

- Extensive winter road condition reporting procedures implemented to fit new system
  - Times of day and exception reporting
  - Who to report information to
  - What and how to report information
  - How to enter information into the system
- Institute changes – obtain buy-in and compliance

ITD Procedural Changes

THE SOLUTION

- Developed brief concept paper and circulated for comment
  - Worked through established Maintenance Steering Committee
  - Revised as appropriate
- Obtained support from management
- Found “champions” to support implementation
- Training, training, training!
  - Conducted at the Districts
  - Weekly statewide video conference calls to address issues

Segment-based Reporting

THE CHALLENGE

- Idaho reports winter road conditions for 200+ segments
  - CARS not built to handle this type of data entry
- Initially, State Comm was spending more than 3 times longer to input conditions, than previous system
  - It was nearly impossible to support

Segment-based Reporting

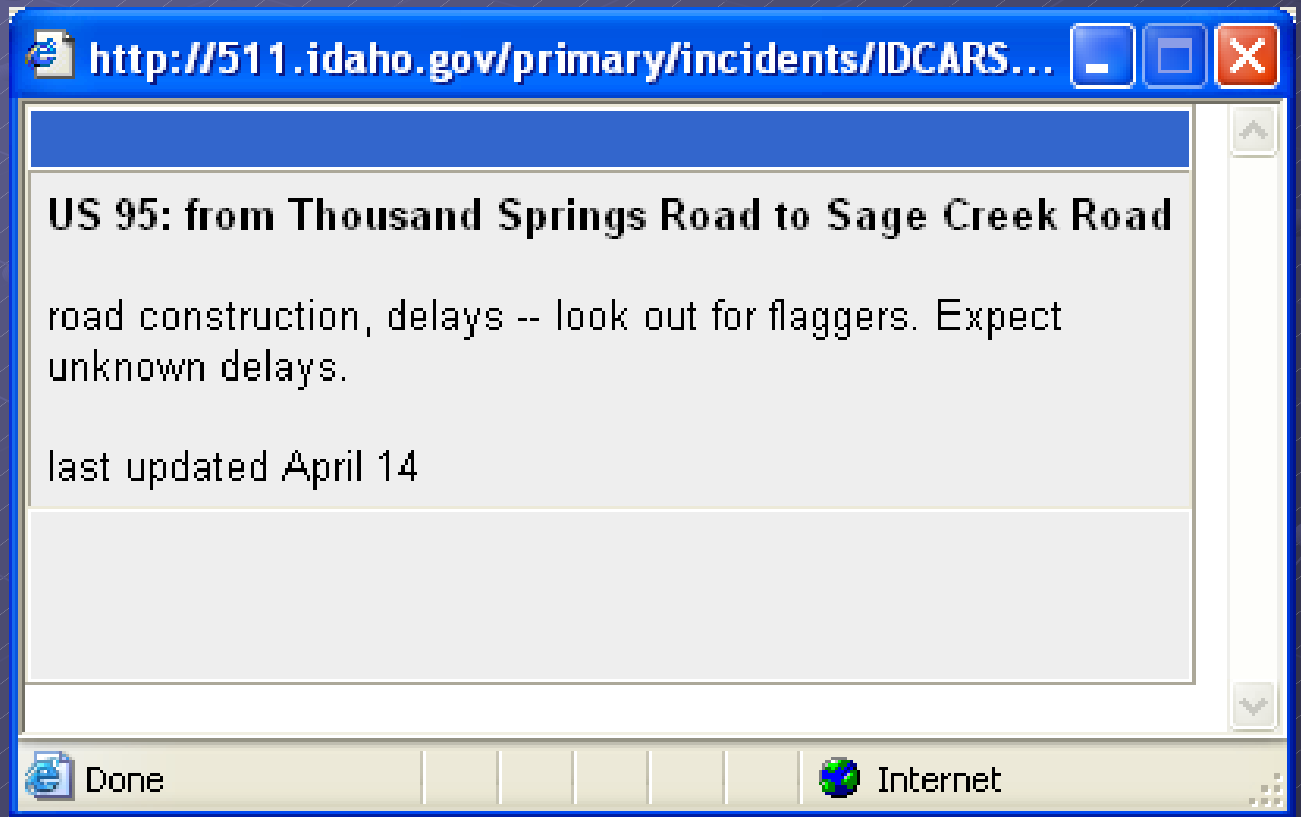
THE SOLUTION

- Idaho requested that Castle Rock develop a tool to facilitate segment based data entry
  - Cost shared with Iowa and Maine
  - Tailored to Idaho specific segments and needs
- Tool was in place about 1 month after system initiation
  - It worked!
- Refinements are being made to the tool for upcoming winter season

Location Descriptions in Rural Areas

THE CHALLENGE

- Lack of recognizable location descriptors in rural areas



Location Descriptions in Rural Areas

THE SOLUTION

- Adding in free text to describe location, where possible
  - "Event is 2 miles south of _____ city"
- CARS next generation to implement more sophisticated approach
  - Near city locations

Time Stamp, or no Time Stamp

THE CHALLENGE

- Idaho's philosophy
  - Keep the information accurate and current and no time stamp would be necessary
  - Didn't want to confuse users with various update times
  - Problem was always having accurate and current information
- Users strongly requested a time stamp on events

Time Stamp, or no Time Stamp

THE SOLUTION

- After much discussion and thought, realized better to let users know when events were last updated
- Idaho implemented a time stamp
  - Time stamp for each event = event update time
- Currently implementing change within CARS to easily update an event time stamp without altering the event
  - When conditions are evaluated and do not change

Multi-agency Involvement and Support

THE CHALLENGE

- Idaho traveler information system is broad based involving several agencies
- How could we effectively "involve" all participating agencies
- Need for multi-agency support and participation to develop and implement the new system

THE TRANSPORTER
The Idaho Transportation Department

ITD unveils new 511 travel information system

ITD formally launched a new statewide travel information service Tuesday that provides updates on winter road and weather conditions, emergency closures and access to tourist information 24-hours-a-day, seven-days-a-week.

By calling 511 or visiting 511.idaho.gov on the Web, travelers will have access to travel conditions as they change on Idaho's highways and will receive more timely and accurate information. The new system also includes more than 70 Web cameras located across the state. Idaho 511 will share 576 telephone lines with multiple states, minimizing the chance of callers getting a busy signal during winter storms.

"A well informed motorist travels smarter and travels safer," said Charles L. Winder, chairman of the Idaho Transportation Board.

511 Travel Info

Within minutes of road and weather conditions being reported from transportation department snowplows, the information will be updated on both the Web site and telephone system.

"Timely information is critical to making the best travel choices," Winder added. "Idaho's new 511 system not only will provide current road and weather conditions, but is free and easy to use."

The 511 phone system uses voice recognition technology, enabling callers to get information simply by speaking into the telephone. It also enables callers to make selections using the phone keypad.

The 511.idaho.gov site is designed for easy navigation and features clickable maps.

Multi-agency Involvement and Support

THE SOLUTION

- ***Step 1***: Established stakeholder group to help develop system and provide early input
  - 19 agencies participated
  - Conducted 4 meetings over 10 month period
- ***Step 2***: Established Advisory Council to Idaho Transportation Board
  - 11 members
  - Establish partnership
  - Provide policy level input
  - Provide strategic oversight
  - Guide future system enhancements

Planned Future Enhancements (FY 07)

- Automated notifications – subscriber based (public agency and media only)
- Center to Center Interfaces to share information with other sources
- Enhancements to CARS 511
- Next Generation CARS Web
- Mileage Calculator and Route Summary

Potential Future Enhancements (FY 08 and Beyond)

- Inclusion of Some Local Roads for Detours
- Expansion of Notifications to the Public
- Expansion of CVO Information
- More Automated Data Collection and Entry Directly into CARS
- Improved Weather Information
- CARS 4 Implementation

Other Observations

- Listen to your users and take their input seriously
  - Many changes made since initial system start-up
- Change is good . . . . NOT
  - Users had difficulty with “new” system
- Can’t be all things to all people
  - Need to strike a balance
- Technology problems are the easy ones
  - Getting people to change their philosophy and processes have been the most challenging

Questions?