The Campbell Scientific RWIS Solution
CSI Facts

- Based in Logan, UT
- Approx. 300 employees
- Incorporated in 1974
  - Family business, privately held
  - Roots in Utah State University’s Soils Laboratory
- Datalogger and sensor manufacturing done in-house
- Emphasis on quality, rugged, remote operation.
CSI Around the World

China
Canada
United States
Costa Rica
Brazil
United Kingdom
South Africa
Australia
Datalogger Capabilities

Measurements
- Analog
  - Voltage
  - Current
  - Resistive
  - Voltage/Current excitation
- Digital/Serial
- Pulse
  - Pulse counts
  - High frequency

Communications
- NTCIP
- ModBus
- Radio Networks
- TCP/IP
- DNP3
- Satellite
- FTP
- RS-485
- SDI-12
- Etc.
Extensive Sensor Support

Sensor Types
- Resistive/Wheatstone Bridge
- Analog inputs
  - Single ended and differential
- Pulse counters
- Switched voltage excitation
- Switched current excitation
- Vibrating Wire gauges
- Smart Sensors
- Continuous analog outputs
- SDI-12 inputs
- Serial I/O ports

Manufacturers
- RM Young
- Met One
- Texas Electronics
- Vaisala
- Apogee
- Lufft
- Etc.
Flexibility

- User-programmable dataloggers (RPUs)
  - Short Cut, CRBasic
  - Training classes available
  - Work with Application Engineers
CalTrans

- CR1000s in place of former RPU
- Measure existing sensors
- NTCIP compatibility allowed the use of existing software
- Programming, installation, maintenance done in-house

UDOT

- Complete Campbell systems
- Meteorologists incorporated into TOC access RWIS data directly
- Add sensors as funds become available
Colorado: RWIS Data from ALERT System

Douglas County, CO in conjunction with Denver’s Urban Drainage Flood Control District
Thank You