



Wyoming DOT

Enhanced Citizen Assisted Reporting  
(ECAR)

# Origin

- ▶ Recognized that we have many systems to get information to public
  - Numerous roadside
    - ▶ DMS
    - ▶ HAR
    - ▶ ETC.
  - Pre-trip information systems
    - ▶ 511 Notify (Email/Text via GovDelivery)
    - ▶ 511 telephone
    - ▶ Website

# Origin (cont.)

- ▶ Needed a better way to get timely and accurate source information
- ▶ Options
  - More maintenance reports – costly
  - More sensors – costly and limiting
  - Citizens – inexpensive and flexible

# History

- ▶ Previous attempts had been made to solicit reports from citizens
- ▶ Attempts lacked structure and formal training

# Other Options/Concepts

- ▶ NWS Weather spotters
- ▶ Google's WAZE
  - Social network – crowd sourcing of road reports
- ▶ NOAA's MPING
  - App for reporting weather conditions

# Pilot Project 2005

- ▶ Began with development of training program
- ▶ Asked maintenance workers to view photos and evaluate conditions
- ▶ Found inconsistencies among plow operators – they need training, too

# Pilot Project (cont.)

- ▶ Began with a single district and a small number of volunteers
- ▶ Met with volunteers and maintenance workers
- ▶ Contentious first meeting – axes to grind

# Pilot Project (cont.)

- ▶ Trained maintenance workers as well as volunteers
- ▶ First season results: 100% success
- ▶ Formed relationships and gained mutual respect



Training

# Overall Goals

- ▶ To provide consistent, reliable, accurate and timely information concerning roadway conditions to the traveling public.
- ▶ During the year, we will be using road condition reports from private citizens to augment our public information systems. The information will be used on our website and our phone system.

# Overall Goals

- ▶ This project is **NOT** for you to dispatch plow operators. The snow plan (priority routes) will be discussed later in the presentation.
- ▶ This project **IS** for you to assist other citizens by providing timely and accurate information based on your observations.

# Safety

- ▶ Important - Please ensure your safety at all times and do not report conditions while driving. Studies show that accidents occur more frequently when the driver is inattentive. Please buckle up and don't dial and drive.



# What To Report

# Types of Information to Report

- ▶ Pavement conditions
- ▶ Weather conditions
- ▶ Dead animal on the traveled way
- ▶ Breaches in the right-of-way fencing
- ▶ Rock fall or other debris on roadway
- ▶ Report incorrect information on:
  - Highway Advisory Radios (HAR)
  - Dynamic Message Signs (DMS)
  - Flashing Beacon Systems
- ▶ Other as deemed important

# Emergency

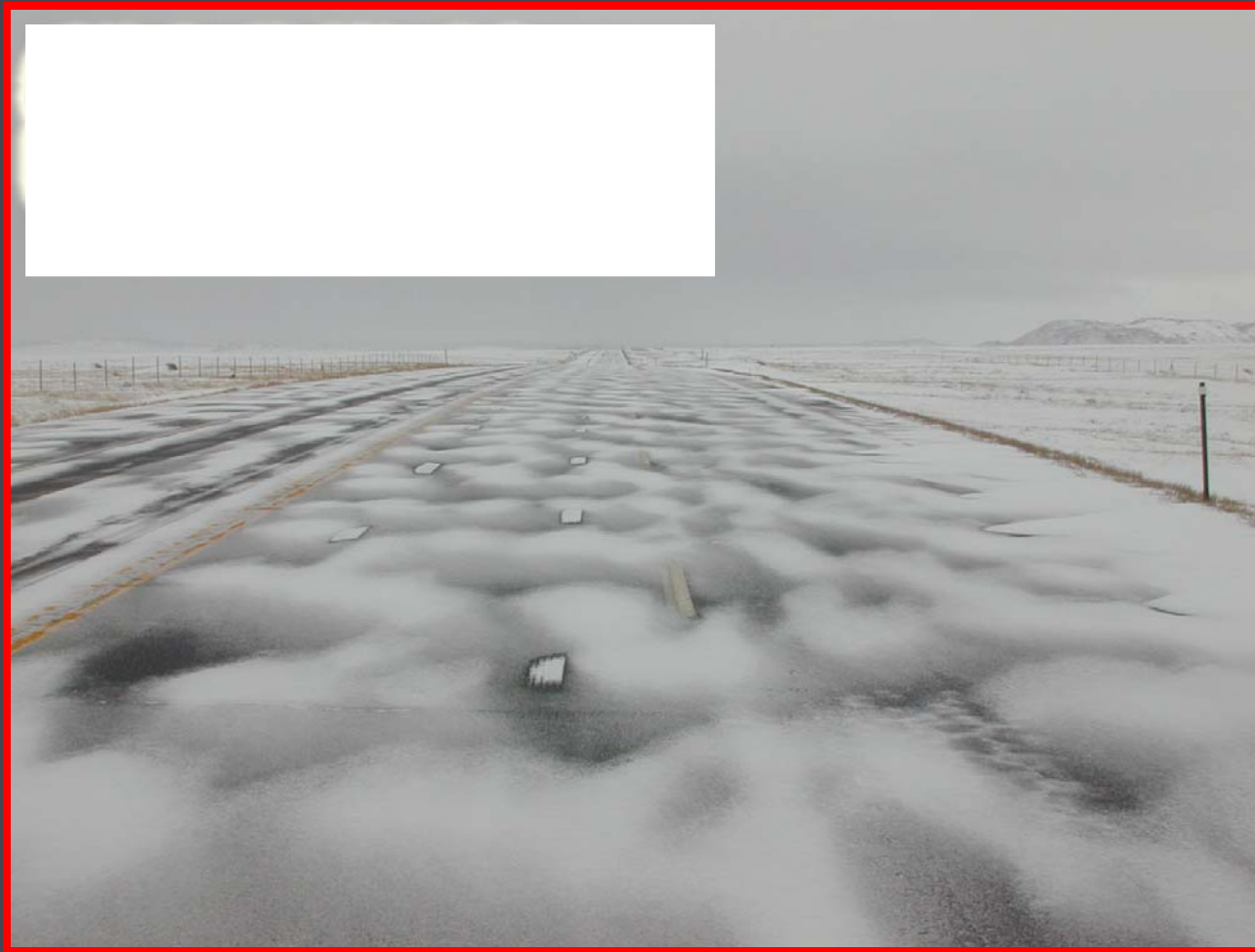
- ▶ Important - In the event of an emergency or if you have witnessed a crash, please contact 800-442-9090 or 307-777-4321, directly. Emergencies should NOT be reported to the road report call taker.

# Training

- ▶ Definitions for road and atmospheric conditions
  - Critical for consistency
- ▶ Cues
  - Delineator post spacing
- ▶ Condition photos



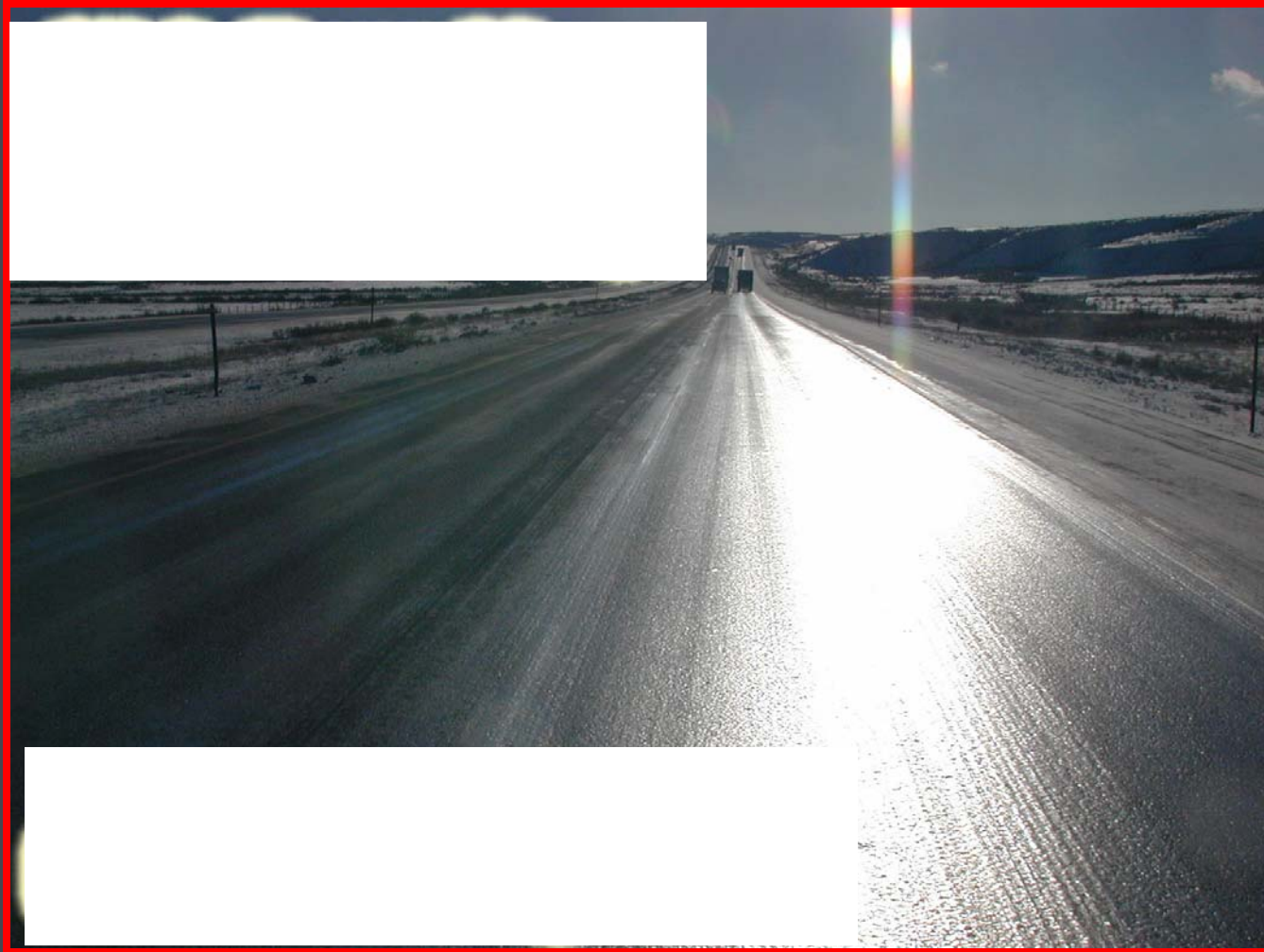
# Weather



# Weather



# Weather



# Weather



# Weather



# Snow Plan

# Snow Plan

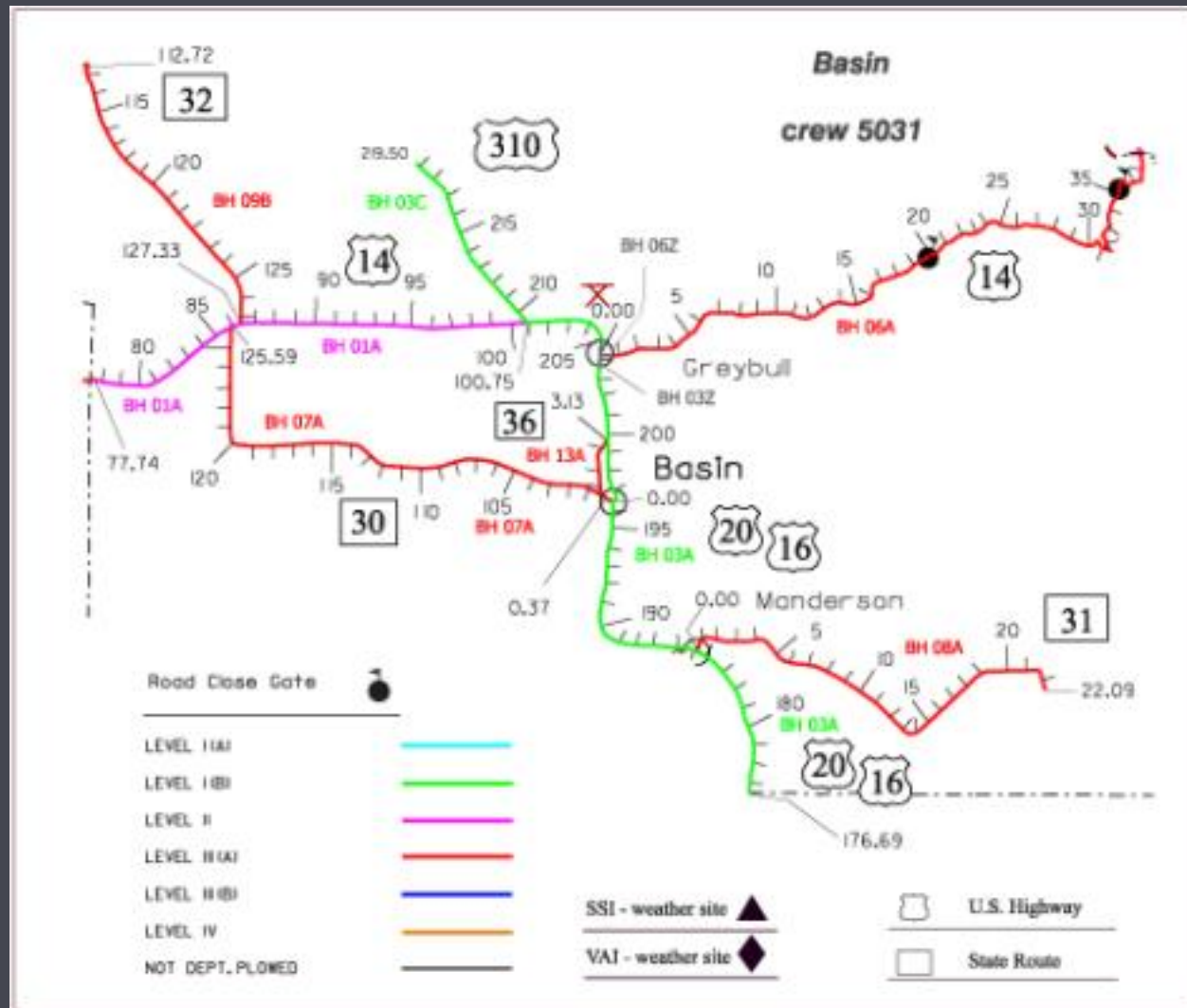
Ia	Interstates and some Primaries
	Operations: 24 hrs/day (as needed)
	Goal: Clear road
Ib	High volume Primaries and Secondaries
	Operations: 20 hrs/day (as needed)
	Goal: Safe movement of traffic at restricted rate
II	Most Primaries and Secondaries
	Operations: 16 hrs/day
	Goal: Safe movement of traffic at restricted rate

# Snow Plan

IIIa	Primary/Secondary routes with local traffic
	Operations: 2x per 8 hr shift
	Goal: Min Service for traffic observing reasonable speed
IIIb	Primary/Secondary routes with least traffic
	Operations: Varies
	Goal: Provide service as time allows
IV	Routes seasonally closed for winter
	Operations: Varies
	Operations: Treated after all other routes



# Typical Snow Plan with Roads



# How to Report

# Reporting Process

- ▶ We welcome your reports on routes you are designated to cover and any route where you may see a problem.
- ▶ Please provide the call taker
  - Your name and access code
  - Type of vehicle you are driving
  - Your call back telephone number
  - Direction of Travel and Direction of Impact
  - The route and milepost range of the event
  - A detailed description of the witnessed event
- ▶ In some cases, a call taker may not be present. Please leave a message with the detailed information, if necessary.

# Route and Milepost

- ▶ Route:
  - Interstate
  - U.S. Route
  - Wyoming or State Route
- ▶ Route Number
- ▶ Direction of Travel will be:
  - Increasing milepost
  - Decreasing milepost
  - Both – events that affect both directions
- ▶ Example: US 20 at milepost 150 in the increasing milepost direction.

# Coordination

## ▶ Idaho

- NorthWest Passage
- Consistent phrasing

## ▶ Utah

- I-80 Coalition

# Benefits of Citizen Reporting

- ▶ Cost effective
- ▶ Engages public
- ▶ Helps to meet CFR 511
- ▶ Much improved consistency – internally
- ▶ More timely and accurate information

# Future

- ▶ Will be pursuing Utah mobile app
  - May incorporate this app into plows
    - ▶ AVL
    - ▶ Real-time condition information
    - ▶ Plow-based weather sensors
    - ▶ Plow metrics
  - Provide app for citizens
- ▶ Location-based images?

# Contact Info

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