Mobile ITS Applications

NRITS 2009

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Overview

- Mobile ITS in the CARS group

- Types of Applications:
  - Traveler information
  - Data input applications
  - “TMC on a Blackberry”
CARS-Web 3G

Idaho
New Hampshire
Minnesota
Select a section of US 95:

- **Oregon to Payette**: 1 report
- **Payette to New Meadows**: 2 reports
- **New Meadows to Lewiston**: 3 reports
- **Lewiston to Coeur d'Alene**: No reports
- **Coeur d'Alene to Canada**: 2 reports
New Meadows to Lewiston

US 95: Deer on the roadway.

Between Ranny Road and Sheep Creek Rest Area (6 to 7 miles south of the Riggins area). Watch for deer on the roadway.

US 95: Delays.

At Cemetery Road (near White Bird). Expect delays. The roadway is reduced to one lane. Bridge construction work is in progress. Look out for flaggers. There is a width limit in effect. Trucker information is available. Expect 15-minute delays. Width limit 16' 0". Daily. Until 6:00PM MDT, 5/14/2009.
CARS-Web 3G:
Weather Stations
US 95: Five Mile Hill
(15 miles north of Bonners Ferry)

29°F

Light Snow

Dewpoint 29°F
Relative Humidity 89%
Wind Speed 5 mph
Wind Direction NW
Surface 34°F
Surface Conditions Dry
Visibility 0.4 miles

Last updated at 4:15 pm Mountain Time
CARS Web 3G: Transit
Select Valley Regional Transit Bus Route:

#1 Parkcenter
#2 Broadway
#3 Vista
#4 Roosevelt
#5 Emerald
#6 Orchard
#7 Fairview
#8 Chinden / Five Mile
#9 State Street

Route #4 Roosevelt Select Bus Stop:

Zone 3 Main & 8th
13th at Post Office
Latah & Rose Hill
Roosevelt & Overland
Vista & Canal
Targee & Vista
Coordination with 511 Web Sites
**I-90: Fourth of July Summit**

At Fourth of July Pass (11 miles east of the Coeur d'Alene area).

**Maximum Elevation:** 3,173 ft.  **Maximum Grade:** 5%

**73° F**  
Clear Skies

- Dewpoint: 43° F
- Relative Humidity: 33%
- Wind Speed: 5 mph
- Wind Direction: NW
- Surface: 55° F
- Surface Conditions: Dry
- Visibility: 10 miles

**I-90: Dry pavement.**
Interstate 90: from Exit 12: US 95 to Exit 39 Old Mission State Park dry pavement, clear skies.
**US 95: Deer on the roadway.**

Between Ranny Road and Sheep Creek Rest Area (6 to 7 miles south of the Riggins area). Watch for deer on the roadway.

Comment: Milepost 186 to 187.

Last updated May 1 by the ITD

**US 95: Delays.**

At Cemetery Road (near White Bird). Expect delays. The roadway is reduced to one lane. Bridge construction work is in progress. Look out for flaggers. There is a width limit in effect. Trucker information is available. Expect 15 minutes of delay for tractor-trailers.
Traffic Tweeting

Minnesota
Idaho
Traffic Tweeting

mndottraffic


16 minutes ago from JTwitter

Learn about upcoming road work, improvement projects—and how to get info sent right to your inbox—straightaway at www.mndot.gov
7:34 PM Aug 12th from web

The new 35W is closer to becoming a reality. Learn more about it at www.dot.state.mn.us/upa
6:59 PM Aug 10th from web
Google Static Map (3G)


At Exit 6A: Penn Avenue (Richfield). Look out for an accident. The left lane is closed. For the next 45 mins.
Integrated Web & Mobile Developments

Idaho
Minnesota
Driving directions to
230 N 2nd St, Mountain Home, ID 83647

50.4 mi – about 53 mins

1. Head north on N Vine St toward W State St 
2. Sharp right at W State St
3. Turn right at N 27th St
4. Turn right at W Main St
5. Continue on W Fairview Ave
6. Merge onto I-184 W via the ramp to I-84
7. Merge onto I-84 E toward Twin Falls
8. Take exit 90 to merge onto I-84-BL toward ID-51/Mountain Home/Bruneau/ID-67
9. Turn left at E 2nd St N

Traffic events for this route

I-84 in both directions: Roadway reduced to one lane. Between Exit 74 - Simco Road and Exit 90 - Interstate 84 Business. The roadway is reduced to one lane, the right lane is closed, speed restrictions are in force, the road is being repaved, road construction work is in progress, speed limit 45 miles per hour until August 8.
“Hello. This is 511 Travel Information, brought to you by the Minnesota Department of Transportation.

“The current travel time for your morning commute is 44 minutes.”
Direct from k511:
On I-75, between Mile 150 and Mile 165. The road is closed.

Reply with 'd k511 hi.'
Mobile TMC

Iowa
Michigan
Mobile TMC

- “I want a TMC on my Blackberry.”
- Enterprise research project
- Michigan and Iowa are participants
- Two different TMC systems
- Use of ITS standards
Mobile TMC – Camera Control
ADVERSE WEATHER
EXPECT DELAYS

Priority: 3 - High
Duration: until further notice

Message Library:
- Adverse weather. Expect delays
  Priority: 2
- Station closed for the holiday
  Priority: 2
- All trains delayed 45 minutes
  Priority: 3
- Bike storage available
  Priority: 10
Mobile
TMC:
DMS Control
CARS-Voice
“Enter or say the **segment ID**, followed by **pound**.”

“23 #”

“Enter or say another **segment ID**, followed by **pound**. When you’re done, enter pound again or say **stop**.”

“24, stop”

“You said segments **23 and 24**. Is that right? Say **yes** or **no**.”

“Yes”
Voice Entry – Select Conditions

“Please choose one of the following road conditions ... Ice Glaze ... Icy Patches, Black Ice ... Packed Snow ... Packed Snow Patches ... Melting Snow.

“Ice Glaze”

“Please choose one of the following pavement treatments: Plowed Snow ... Cleared Snow ... Treated Pavement.”

“Treated Pavement”

“You have reported icy glaze, treated pavement for segments 23 and 24 on route I-94 and I-294. Is that right? Say yes or no.”

“Yes”
“Say the station number you want. Or, enter the station number followed by the pound key.”

“10 #”

“You want Station 10, is that right? Say Yes or No.”

“Yes”

“At Station 10, air temperature is 66 degrees. There is heavy precipitation. Road Surface temperature is 82 degrees. Wind Speed is 10.0 miles per hour. Winds are blowing in the Southeast Direction. Visibility is 1.1 miles.”

“If you want this report sent to your phone, enter or say one”

[1]
Mobile ITS Summary

- Traveler info, field data entry, TMC control
- Voice and text entry
- Bandwidth limitations: 802.11 wireless, 3G, EDGE
- Use of existing platforms: Twitter, Facebook, etc.
- Texting/SMS: simple / low-fi, but powerful
Thank you!

Questions?

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