UDOT Traveler Information System

Presented by: Dave Kinnecom UDOT Traffic Operations Manager



Traffic Operations Center Traveler Information

- UDOT's Traffic Operations Center serves the entire state and all the of I-80 corridor
- 35,000 SF building houses UDOT and Department of Public Safety Communications Bureau







Traffic Operations Center Functions

- Traffic Management
 - -Incident Management
 - -Traffic Signal Operations
 - -Ramp Meter Operations
 - -DMS Operations



Traffic Operations Center Functions

- Traveler Information
 - -CommuterLink Web Site
 - -511
 - -Commercial radio broadcasts
 - -Traffic Video to 4 local TV stations











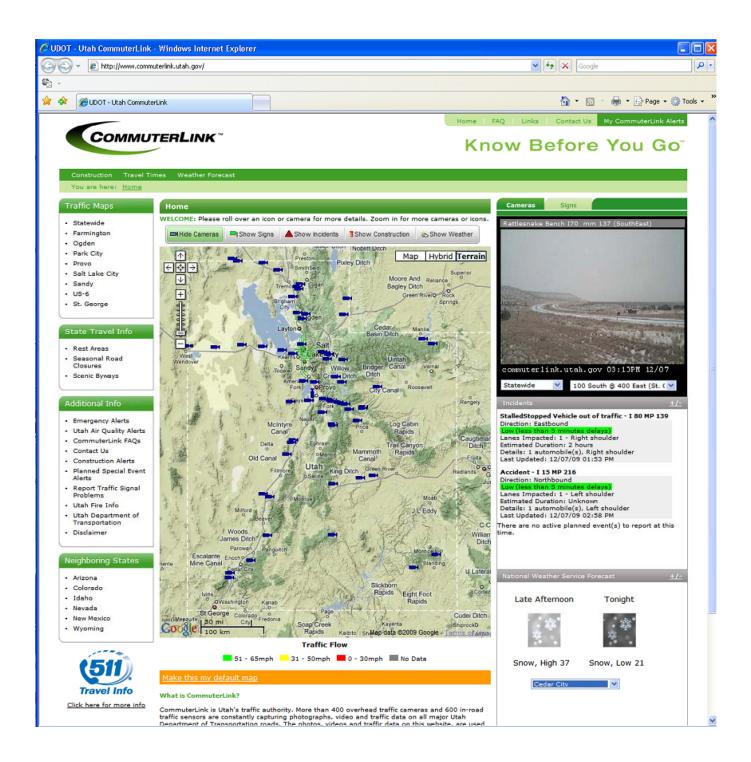
Utah's I-80 ITS Infrastructure

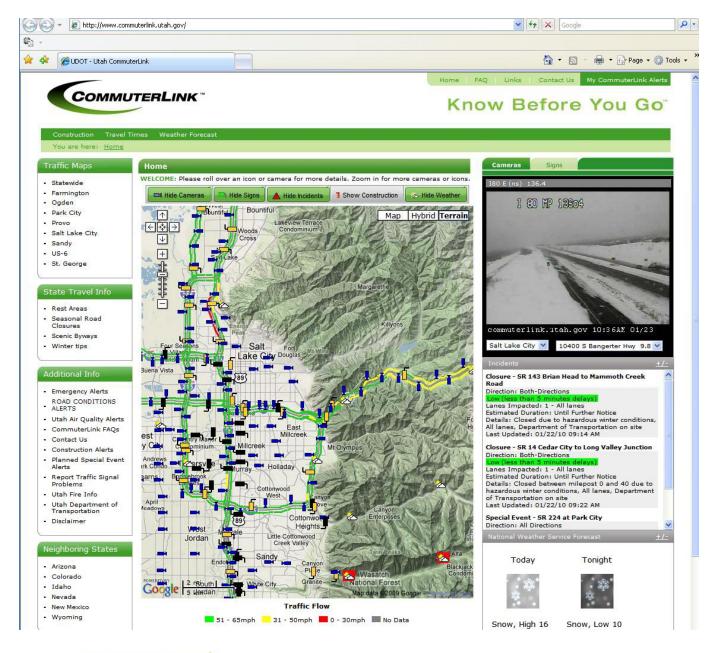
- Dynamic Message Signs
 - 9 Westbound
 - 9 Eastbound
- Cameras
 - -64 PTZ full motion Salt Lake Metro
 - -7 on Road/Weather Stations













UTAH DEPARTMENT OF TRANSPORTATION TRAFFIC OPERATIONS CENTER

10:10 AM Saturday, January 23, 2010

This document contains 2 pages.

CANYON RESTRICTIONS

REGION 1: Including Box Elder / Cache / Weber Counties



89

89]

[89]91

I-84 Idaho to Blue Creek Summit US-89

Lower Logan Canyon

US-89 Upper Logan Canyon

US-89 / US-91 I-15 to Wellsville via Sardine Canyon SNOW TIRES / CHAINS / 4X4 ADVISED





or 1-866-511-8824

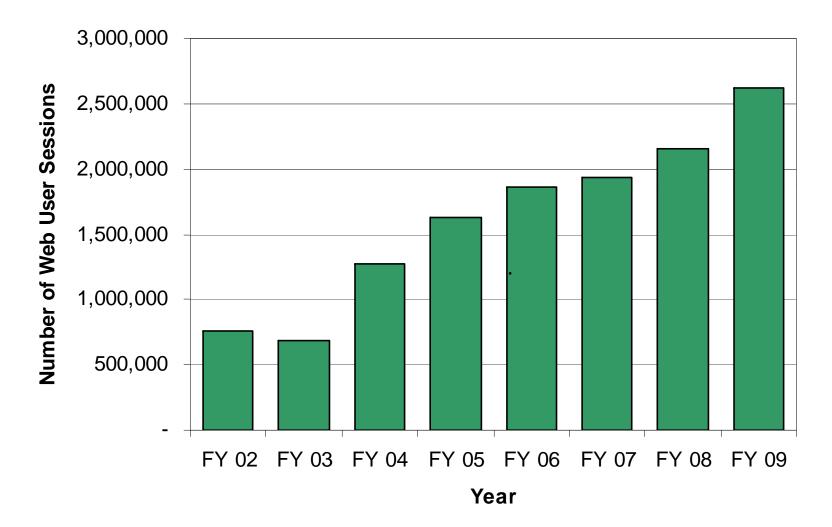
REGION 2 :	Including Salt Lake County	,	
80	I-80 Westbound Through Parleys Canyon	NO RESTRICTIONS	
80	I-80 Eastbound Through Parleys Canyon	NO RESTRICTIONS	
20	SR-210 Little Cottonwood Canyon	CHAINS / 4X4 REQUIRED	
209	SR-209 Big Cottonwood Canyon	NO RESTRICTIONS	
REGION 3:	Including Utah / Duchesne	Counties	and the second second



NO RESTRICTIONS

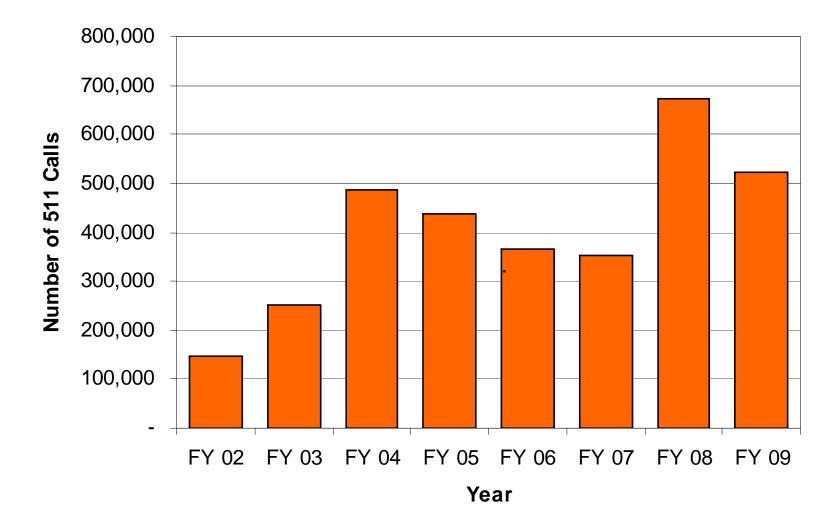


CommuterLink User Sessions





511 Calls





ISSUES - CHALLENGES

- Limited information in rural areas We need Computer-Aided Dispatch
- Poor understanding of inter-city customer needs
- What is the future of en-route traveler information ? HAR and 511 have significant limitations.



UDOT Weather Operations

Presented by: Ralph Patterson UDOT Chief Meteorologist



UDOT Weather Operations Highlights

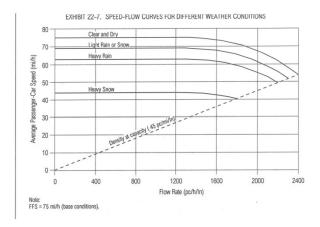


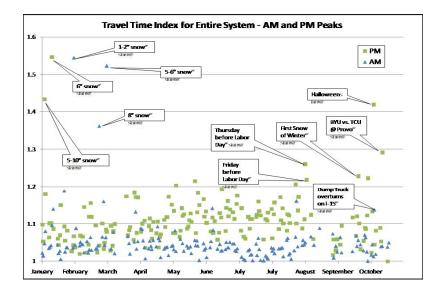
- Research
- Impacts VS Forecast
- 511/Traveler Information
- Road Condition
 Forecasts RYG
- RWIS
- I-80 Partnering Opps



RESEARCH

Highway Capacity Manual 2000



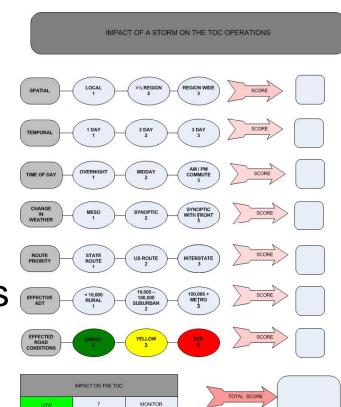


- Partners
 - U of U
 - BYU
 - -NWS
 - AURORA

IMPACT VS FORECAST



- Trends
- Crashes
- Delays
- LOS
- Staffing
- Materials



PREPARE TEAMS

BEEF UP STAFFING

MEDIUM

7-16 16-24

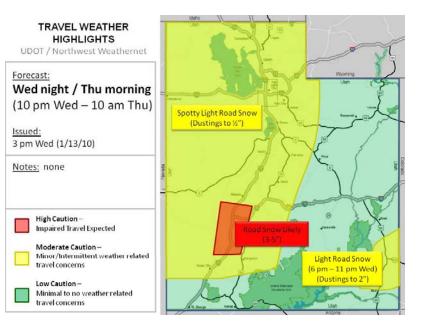


511 TRAVELER INFORMATION



CONNECTING COMMUNITIES

- Dedicated Meteorologist
- Graphics

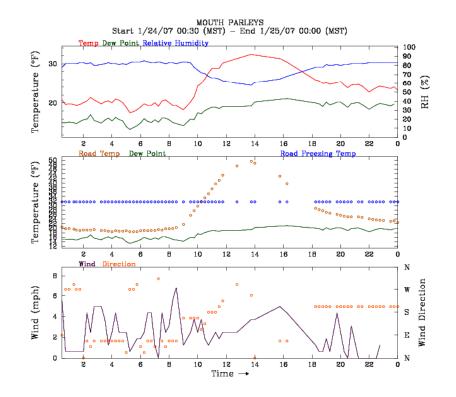


Red Yellow Green Impact Scale

	Degree of	Weather Impact	Recommended Action
	Caution	On Travel	
GREEN	Low	Minimal	Normal Caution
YELLOW	Moderate	Minor/intermittent weather related	Monitor 511, Commuterlink
		road concerns anticipated	Web page and NWS Weather
			Forecasts.
RED	High	Travel expected to be impaired. Be	Monitor 511, Commuterlink
		prepared for hazardous road	Web page and NWS weather
		conditions	forecasts. Be prepared to
			alter travel plans as
			necessary



RWIS-ESS

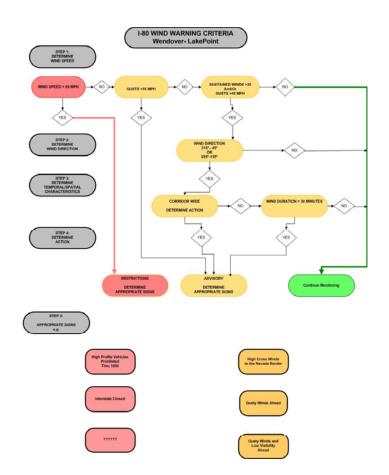


- Pyronometers
- Radar
- Non-invasive
- PTZ Cameras
- IP Protocal
 Communications
- Alternative power



I-80 Partnering

- Common 511 messages/format
- Similar messages/library
 - VMS/DMS
 - HAR
 - Road condition reports
- Interaction between TMC's
- Mutual Road Weather Forecasts Impact Based (RYG)





UDOT Winter Maintenance Organization and Strategy

Presented by: Richard Clarke UDOT Engineer for Maintenance



Utah Routes and Regions

The complete I-80 route through Utah is the responsibility of UDOT's Region 2



Setting

100 miles -- Salt Flats and Great Salt Lake Desert

28 miles – Salt Lake City metropolitan area

68 miles -- of steep mountain grades with two summits



I-80 Tooele County

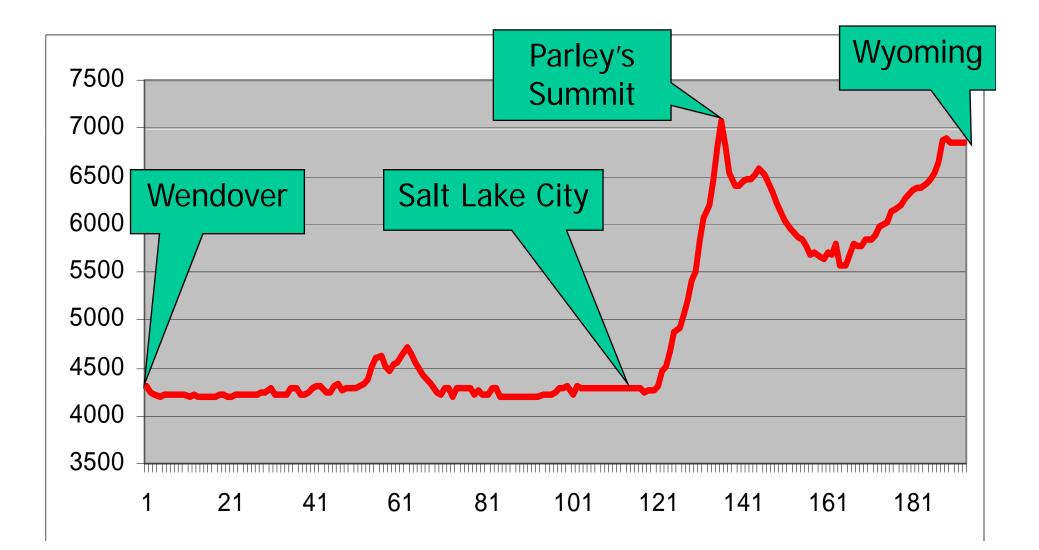
Salt Lake City Metro Area



I-80 Parley's Canyon

I-80 Echo Canyon

Profile



TRAFFIC (2008 Data)

Location	AADT	Combo Trucks
Salt Flats	7850	44%
Salt Lake Valley – West of I-15	56500	16%
Salt Lake Valley – East of I-15	97620	5%
Parley's Canyon	44990	20%
Echo Canyon	13600	43%



UDOT Winter Strategy –

- Interstates get top priority
- Second high volume arterials
- Lastly other roads



UDOT Snowfighting Goal

 Pavement rated B+ One hour after the storm

<u>B+ means</u>

- All Travel Lanes Open
- Wet Pavement
- Some slush less than 2" deep



Region 2 Strategy

Aggressive weather monitoring and forecasting Proactive pretreatment Anti-ice then switch to solids Prevent snow pack Continue to treat and plow















Equipment

Plow trucks with spreaders
Plow Trucks with all-liquid systems
Plow trucks with hybrid systems
2 - Snow blowers within 30 minutes travel time



Basic Snowfighting Vehicle





Tag Axle Plow with Wing

Fleet Reduction Due to Increased Efficiencies































Manpower & Equipment

Everyone on the snow plan attends annual Snow School in the fall Trans.Tech program supplements regular maintenance employees Seasonal employees















Winter Materials

Solar salt from Great Salt Lake Rock salt (ICE Slicer) Salt Brine Deslicking grit



Application Rates

Salt – 250 lb/lane-mile (1/8 cy/lane-mile) pre-wet with brine at 6 gallons/lane mile

Brine – 15 gallon/lane-mile standard rate

 40 gallon/lane-mile heavy frost or below 25 degrees



Spreader Calibration

Every spreader is calibrated in the fall and after hydraulic system repairs We use ground speed controllers



Organization

Three maintenance areas – East, West, & Metro Each area manages it's own dispatch and work assignments – No central dispatch

TOC & UHP advise supervisors of trouble spots



Questions