DTN/Meteorlogix: Providing Accurate Forecasting and Consulting for Transportation

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DTN/Meteorlogix

MDSS Private Sector Forum
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The DTN/Meteorlogix Approach

Three keys to successful forecasting

- Advanced tools and technology
- Experienced meteorologists
- Measurable accuracy
Advanced Tools and Technology
The DTN/Meteorlogix Weather Forecast System

Advanced Tools and Technology

• Take advantage of:
  • New forecast input sources
    • Computer models
      ▪ Increased number
      ▪ Improved accuracy
  • Improvements in science and technology
    • Exclusive long-term partnerships with leading government research organizations
  • Additional observation sources
    • Supplemental observations
    • Road sensor information
The DTN/Meteorlogix Weather Forecast System

*Advanced Tools and Technology*

- Only commercial weather provider in the industry licensed to utilize DICast forecast system
  - Developed in 1998 by National Center for Atmospheric Research
  - Utilizes meteorological data (observations, models, statistical data, climate data, etc.) to produce highly accurate meteorological forecasts
  - Foundation of the most accurate temperature and precipitation forecasts in the industry
The DTN/Meteorlogix Weather Forecast System

*Advanced Tools and Technology*

- **Graphical Forecast Editor**
  - Developed at NOAA's Forecast Systems Laboratory
  - Gives meteorologists a tool to view and understand the past and present state of the atmosphere as well as future guidance
  - On-screen editing allows meteorologists to create a numerical database of weather information
  - Incorporates terrain and local effects

[Images of weather maps showing precipitation and temperature]
Experienced Meteorologists
The DTN/Meteorlogix Weather Forecast System

Experience Counts

- Make experience count
  - Integrate a forecasters knowledge into the system
    - Key Industry knowledge
    - Understanding of local and terrain effects
  - Experienced meteorologists are critical element
    - Team of 55 meteorologists with over 400 years of experience
    - Three Certified Consulting Meteorologists on staff
Good morning DOT Team – I am about to make a critical decision regarding keeping my staff on through the afternoon. Can you advise on whether the snow will develop as far north as our region or will it remain south like the past 3 storms?
Posted by ILDOT District 5 at 10:14am CDT

Good morning. We are very confident that the northern extent of the significant snow and wind will remain south of your District through the day today into this evening. This will be very much like the storm over the weekend, which as you pointed out, basically stayed to your south.
Posted by MetOperations at 10:22am CDT

- Consult directly with our experienced DOT forecast team
- Receive expert consultation and tap into forecaster confidence
- Public forum allows other interested parties to also benefit from the consultation
Measurable Results
The DTN/Meteorlogix Weather Forecast System

**Measureable Results**

- Forecast accuracy drives accurate MDSS
  - Objective 3\textsuperscript{rd} party audit of forecast accuracy
  - Thorough study (9 months, 800 locations across US)
  - Compared to all publicly available forecasts, including National Weather Service and free services such as weather.com.
  - DTN/Meteorlogix was best rated #1 for 2 straight years
  - 36\% more accurate than the NWS on precipitation start and stop times
Meteorlogix Forecast System

Benefits

- **Accuracy:** DTN/Meteorlogix forecasts have been independently rated as #1 in the industry
- **Timeliness:** Forecasts updated each hour
- **Quality:** Best of class technology combined with input from experienced staff
- **Continuous Improvement:** Strategic partner relationships with the scientific community ensure future enhancements to maintain state of the art status
Contact Information

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