

Friends and Partners of Aviation Weather
NTSB Washington, DC
12 July 2017
Helicopter Air Ambulance Operations

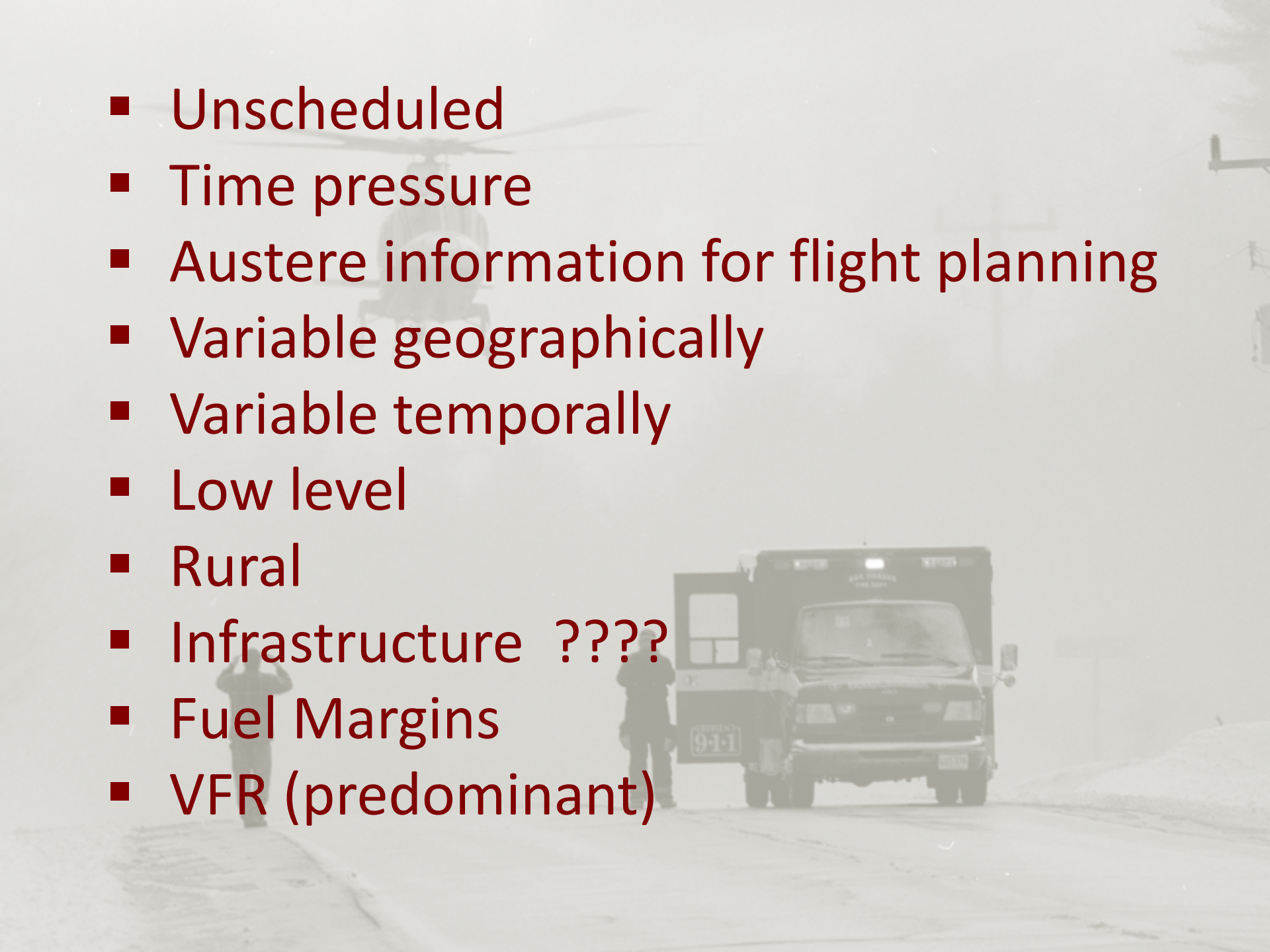


US HELICOPTER SAFETY TEAM

THOMAS JUDGE
EXECUTIVE DIRECTOR LIFEFLIGHT OF MAINE/ CHAIR USHST
INFRASTRUCTURE WORK GROUP

Anatomy of HAA Ops:



- 
- The background of the slide is a faded, grayscale photograph of an emergency scene in winter. A helicopter is visible in the upper left, and an ambulance with "9-1-1" on its side is parked on a snowy road in the lower right. Two figures are standing near the ambulance. The overall scene is misty or foggy.
- Unscheduled
 - Time pressure
 - Austere information for flight planning
 - Variable geographically
 - Variable temporally
 - Low level
 - Rural
 - Infrastructure ?????
 - Fuel Margins
 - VFR (predominant)

Risk sectors for operations:

- VFR into UIMC
- Night
- Low level operations
- Temporal / fatigue
- Aircraft performance
- Workload (Single Pilot)
- Information gaps
- Temperature extremes

A021 WEATHER REQUIREMENTS

A021

- The certificate holder must use an approved weather reporting source if located within 15 nautical miles from the destination landing area, or use the area forecast if no such weather reporting source is available.

Helicopter Emergency Medical Services Tool

[INFO](#) [Feedback](#)

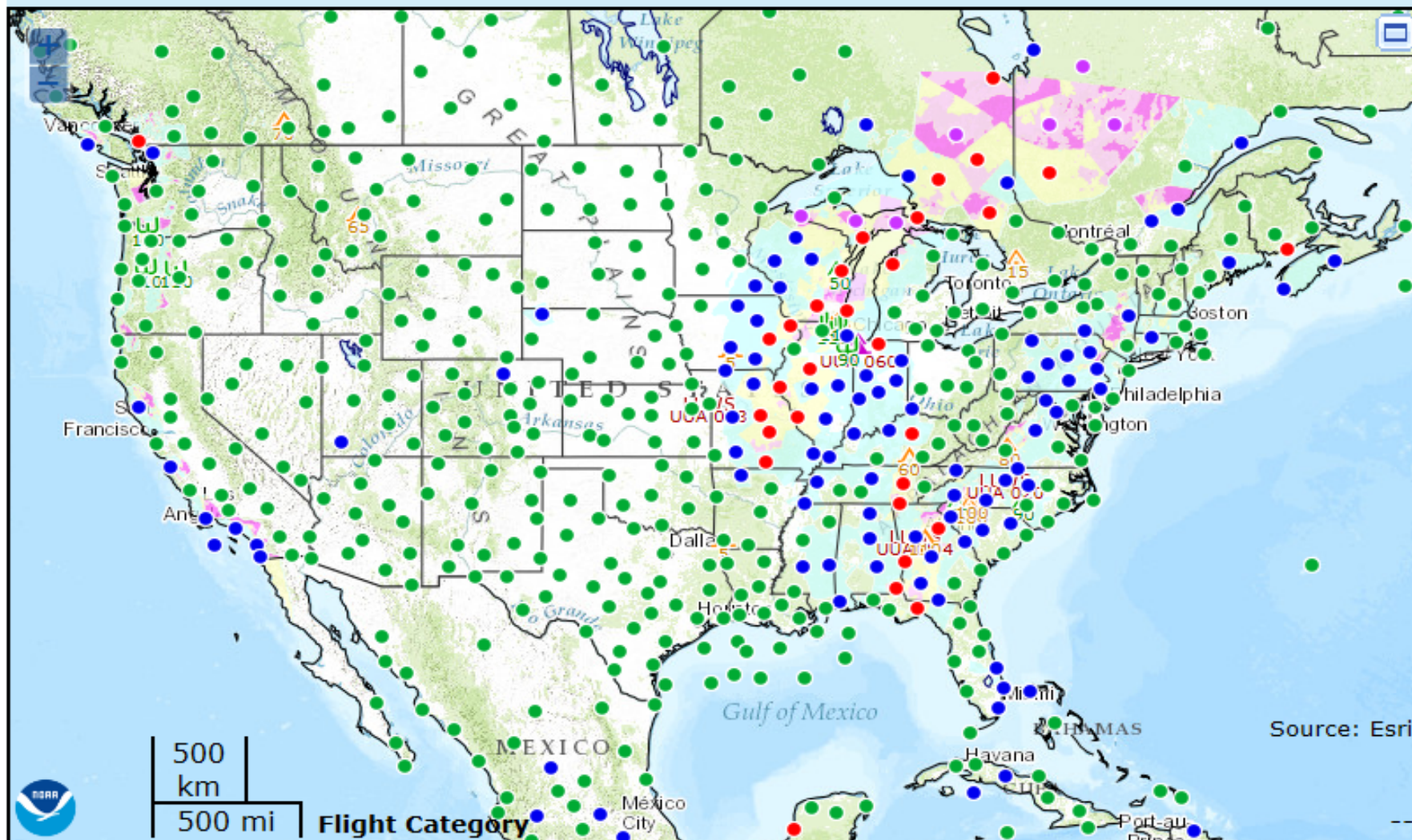
Weather

Overlays

View

Configure

1543 UTC 14 Oct 2014



Obscure

LIFR

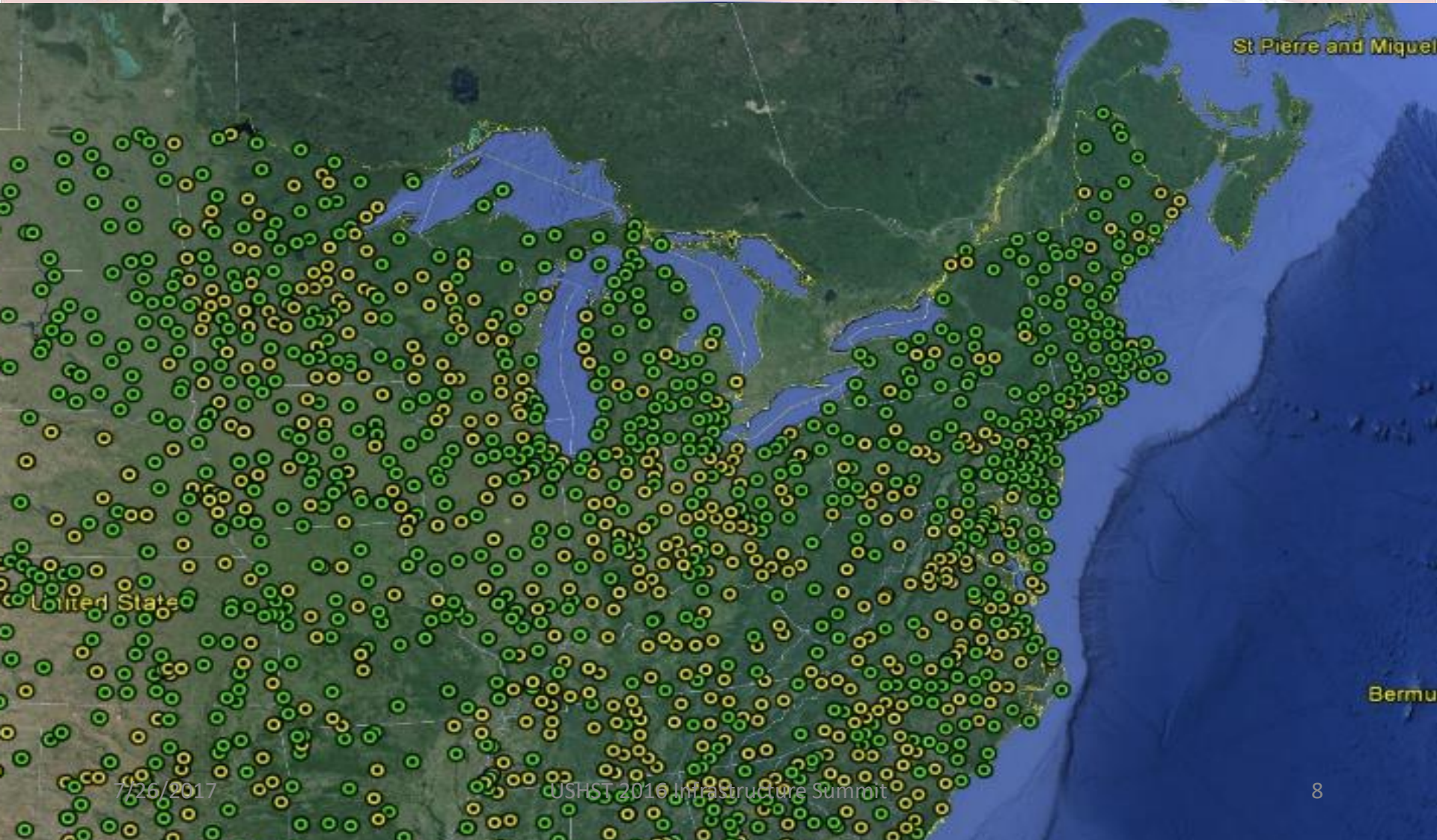
IFR

MVFR



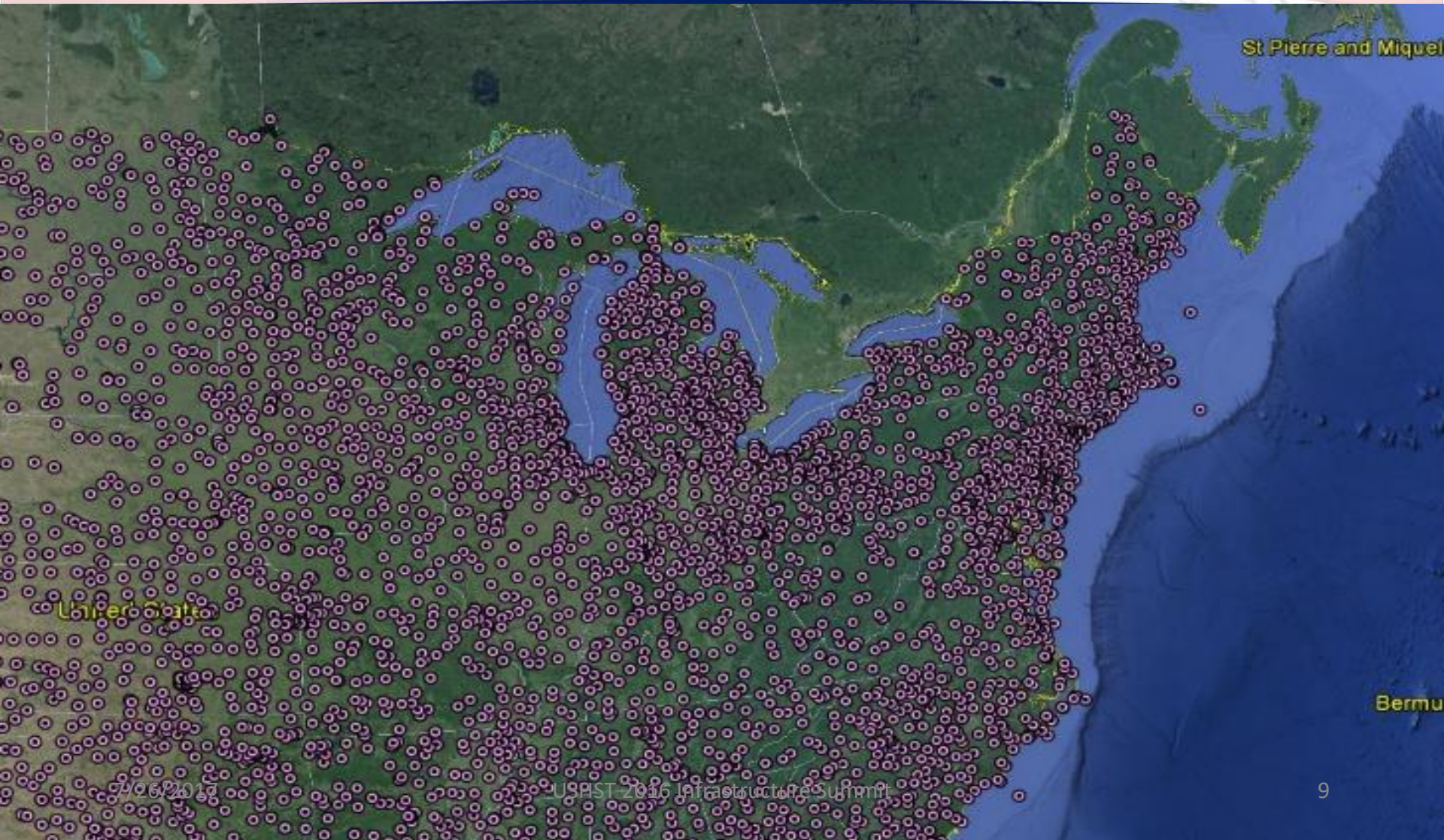


Combined FED/Non-FED





All Known Weather Sites





4.40

120.37
100

HAA Ops needs:

- Integrated weather product / density
- Add ceilometers / cloud visibility
- Rapid single source accessible wx source
 - Cameras
 - Predictive trends for visibility
 - 150 mile radius ideal
- On board color coded wx displays
- On board forward looking systems-visibility changes



TJUDGE@LIFEFLIGHTMAINE.ORG

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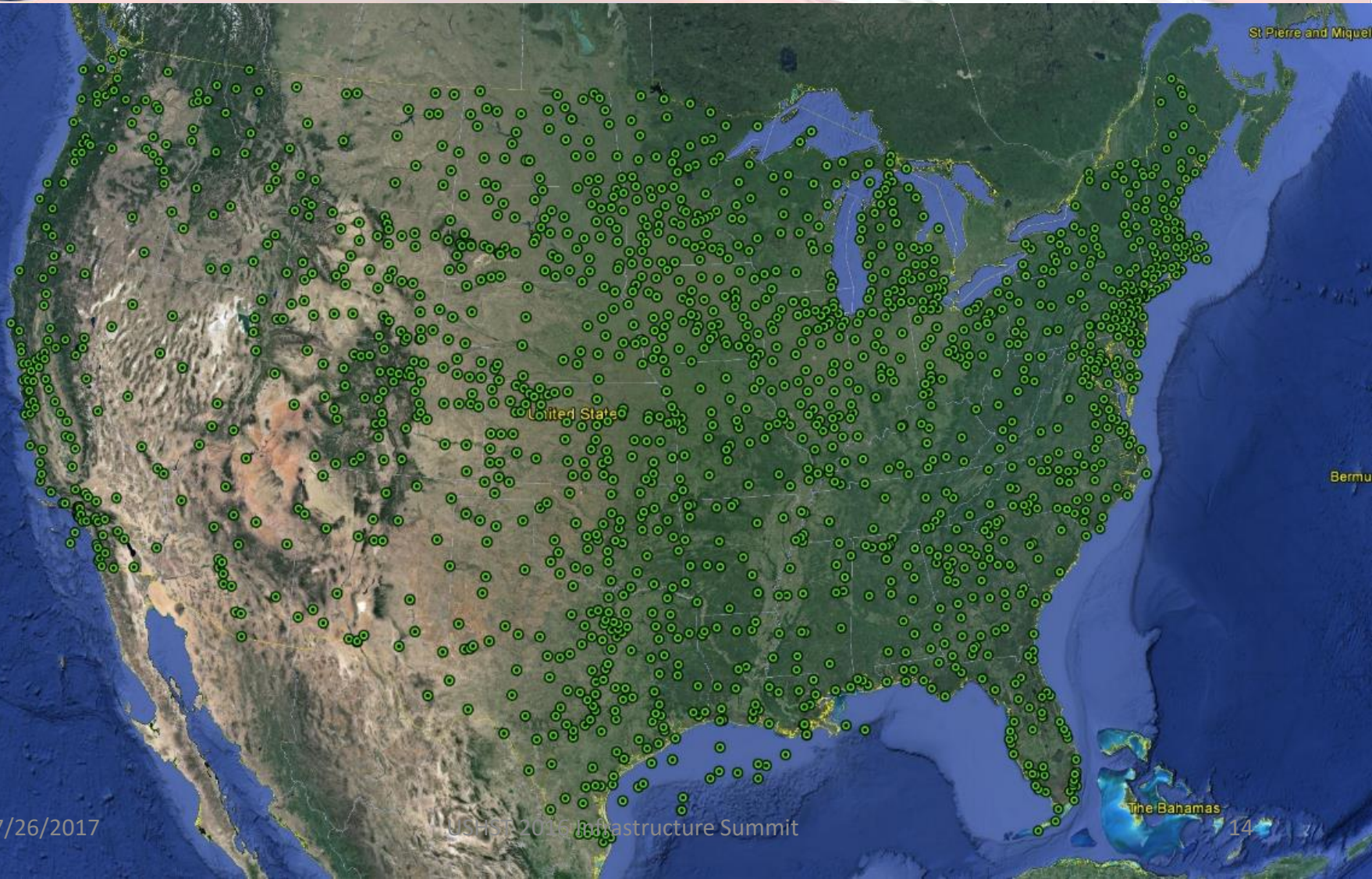
FRIENDS AND PARTNERS OF AVIATION
WEATHER

NTSB WASHINGTON, DC
3 AUGUST 2016





Federal AWOS/ASOS

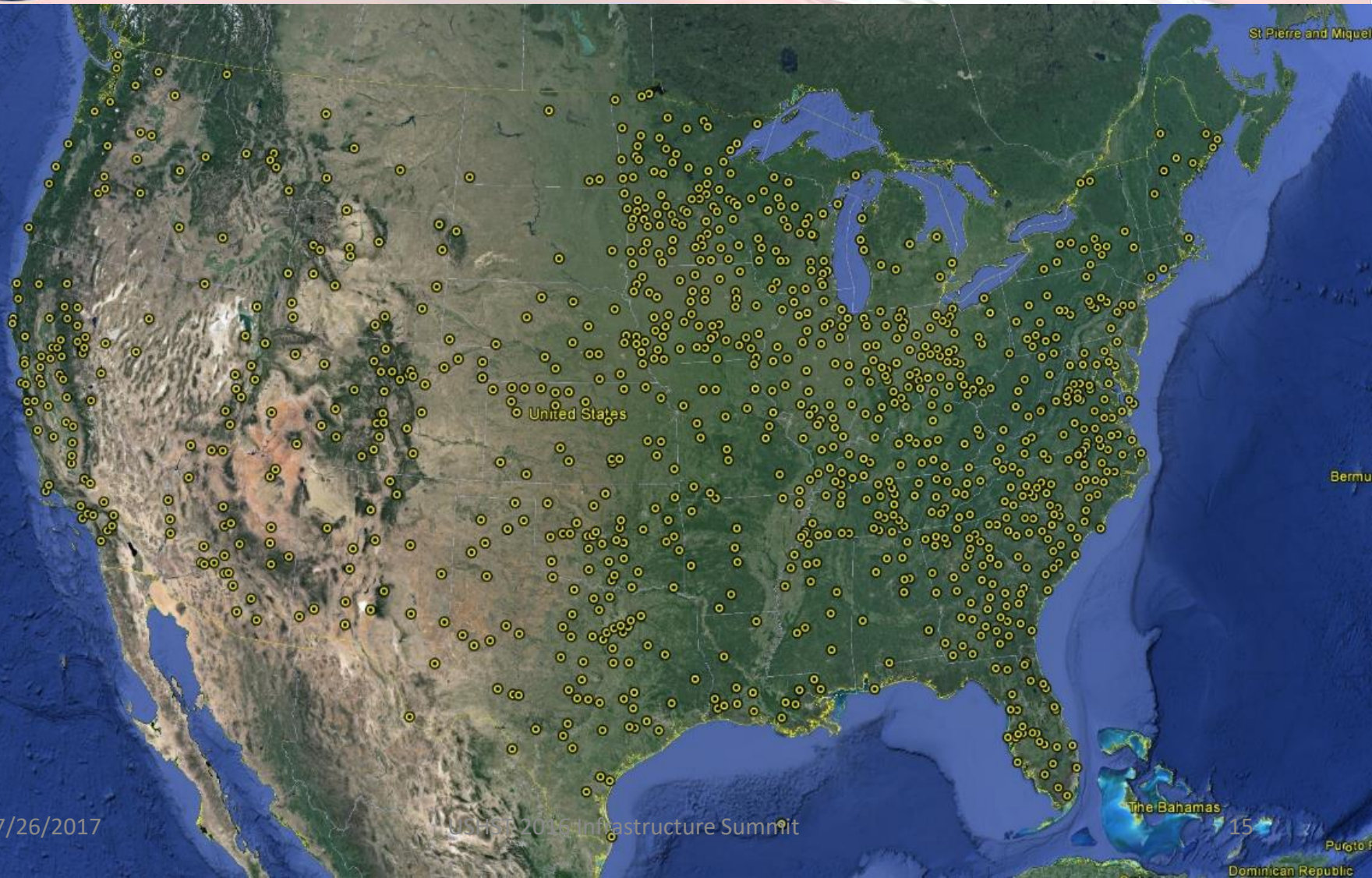


7/26/2017

USHST 2016 Infrastructure Summit



Non-Fed AWOS



7/26/2017

USHST 2016 Infrastructure Summit

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Strategies

1.

Increasing the density of reporting stations by including additional weather reporting sites.

- Non Federal AWOS-IIIs are lowest hanging fruit but all AWOS AV and higher commissioned by FAA
- Non-aviation weather systems, i.e. DOT road systems, RAWs (Remote Automatic Weather Stations), and private weather stations.



Strategies

Weather into the system:

- NADIN
- MADIS
- MESOWEST



Strategies

2.

Pertinent information that pilots make go no-go decisions on in dynamic HEMS environment.

- Not just Ceiling and Visibility
- . Temperature
- . Dew point
- . Humidity
- . Wind direction
- . Wind speed
- . Precipitation



Strategies

3.

Improving the ability to trend the above data so as to identify whether or not conditions are deteriorating or improving



Strategies

4.

Rapid access in flight to weather not being reported through normal aviation channels.