

# Welcome and How We Got... from There to Here

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NASPI Working Group Meeting  
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**RELIABILITY | ACCOUNTABILITY**





- Albuquerque Metro Population – 910,726
- 300+ days of sunshine per year
- April is **WINDY** season – Arizona moves to Texas through the air

New Mexico has an official State Question related to ordering your Chile for your burritos and enchiladas:

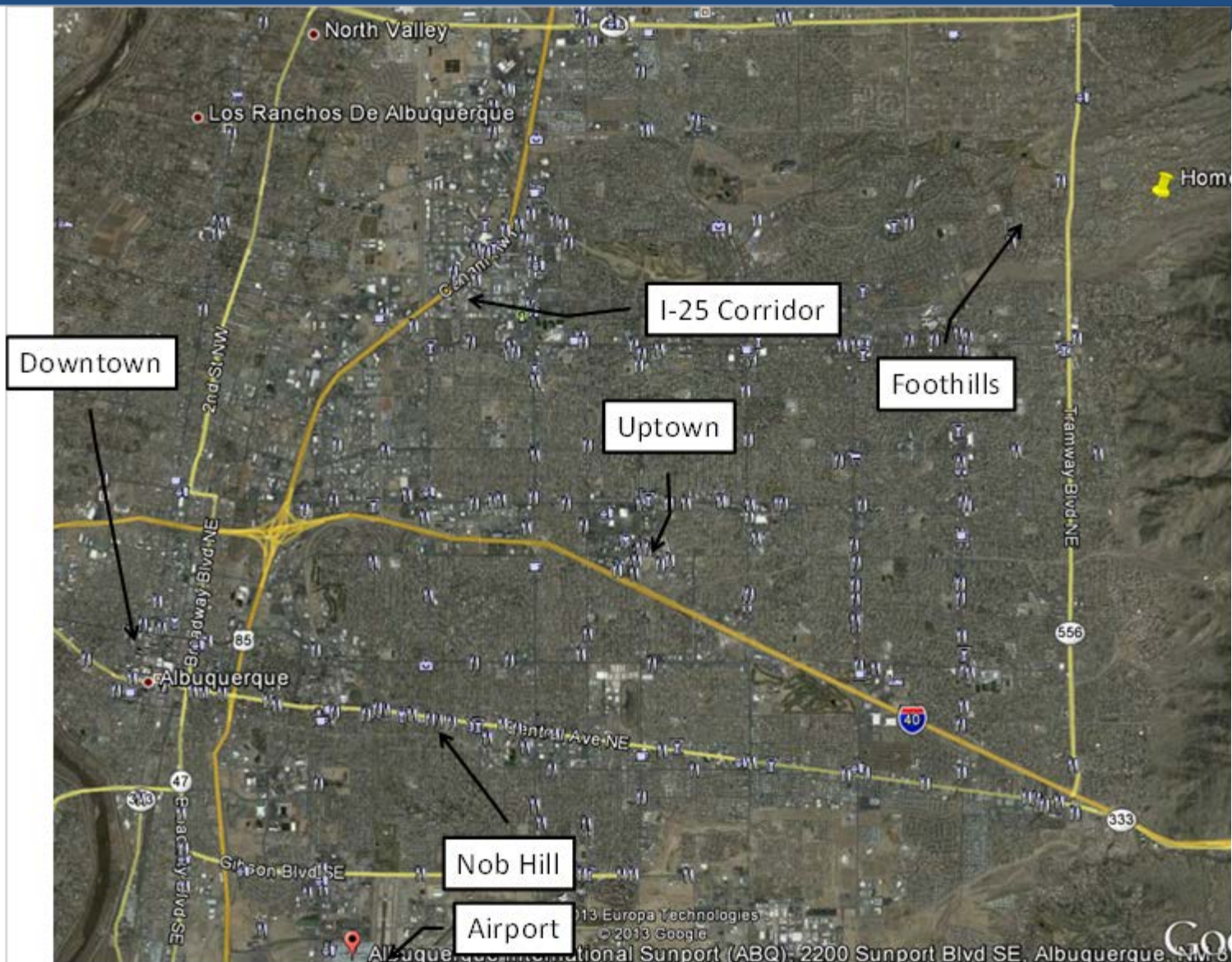
## **Red** or **Green**

- There are three official answers;
  - **Red**
  - **Green**
  - **Christmas**
- Its and easy 70 mile drive (at 75 mph speed limit) to Santa Fe
- Sandia Tram – ~11 miles away from Uptown
  - A 2.7 mile tram to the top of Sandia Peak (10,378 feet)
  - Bring a jacket!

## The New Mexico Flag is the Zia

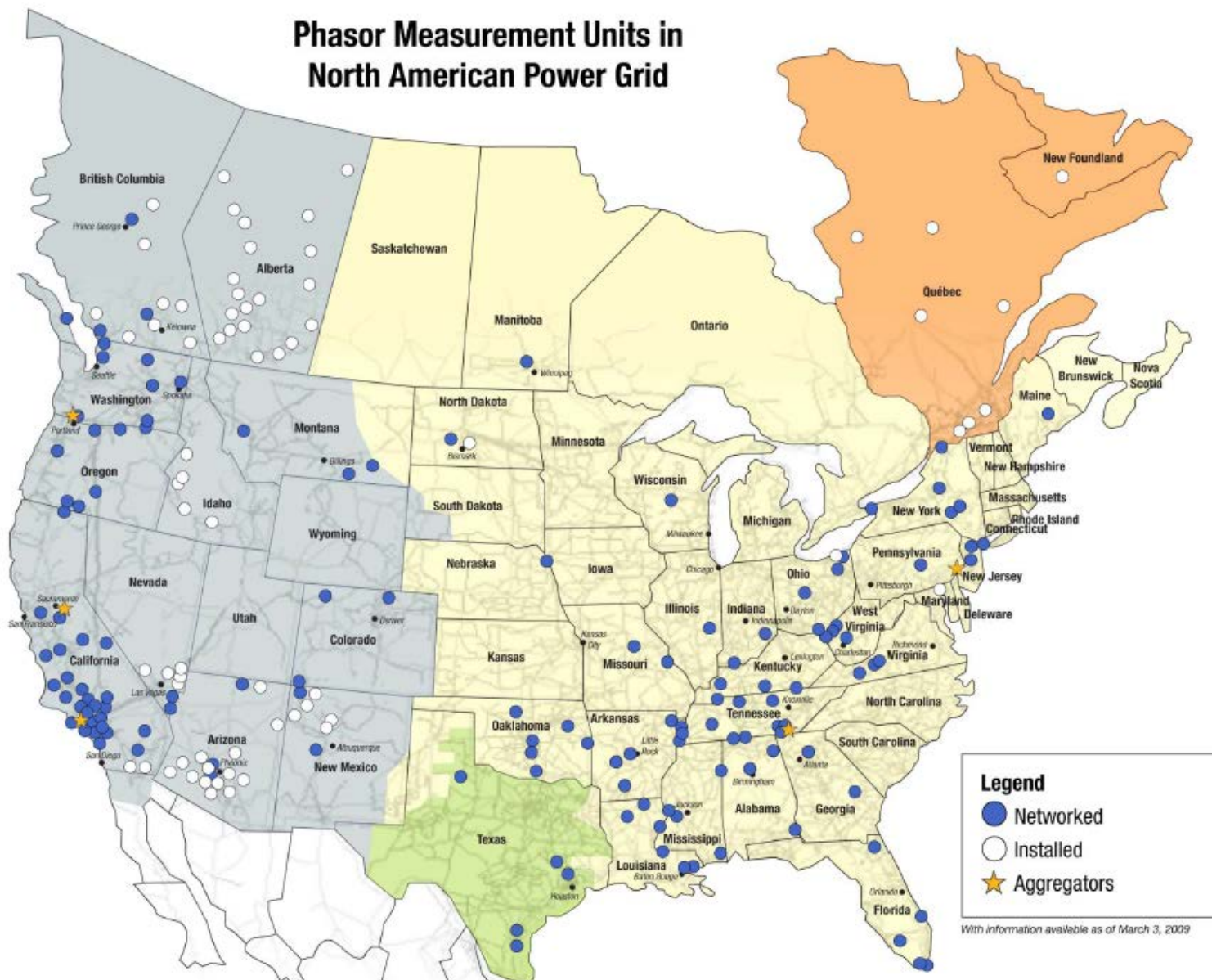


There are 19 official Pueblos in New Mexico – Descendants of the Anasazi people



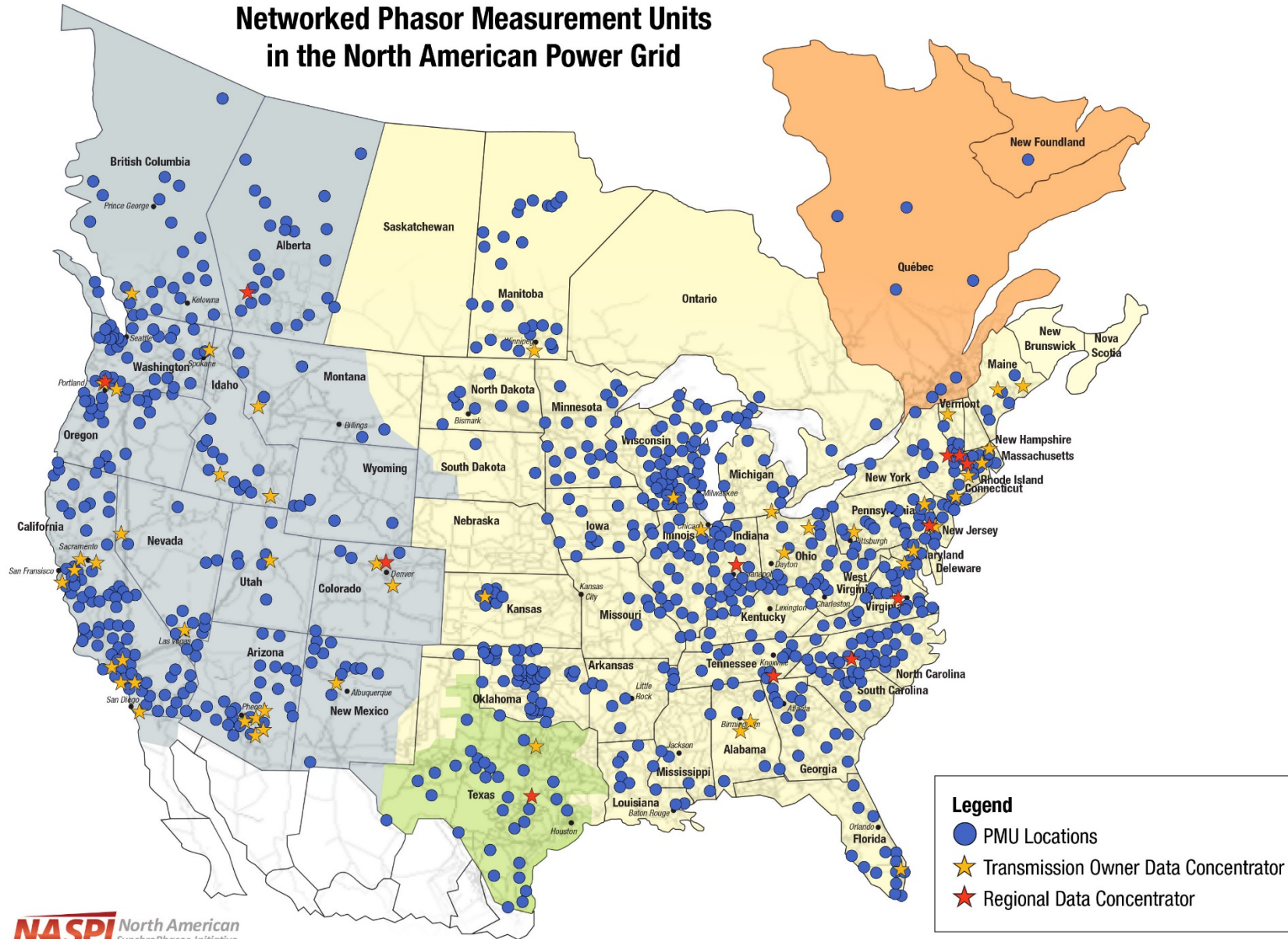
# *From There To Here*

- PMUs were launched in 1990s in WSCC, NYPA, BPA, etc.
- In the shadow of the 2003 blackout...the Eastern Interconnection Phasor Project (EIPP) was started by DOE, NERC, and the Industry
- Once NERC became the ERO in 2005, EIPP expanded to become the North American Synchro-Phasor Initiative (NASPI)
- Funding from the American Recovery and Reinvestment Act of 2009 (ARRA) resulted in a significant jump in the number of PMUs
- Today's challenge – make them used and useful!





## Networked Phasor Measurement Units in the North American Power Grid



**Legend**

- PMU Locations
- ★ Transmission Owner Data Concentrator
- ★ Regional Data Concentrator

With information available as of July 10, 2017

## Progress

- PMUs are regularly now routinely used for Event Analysis and Dynamics model validation
- Mode meters in use for detection of inter-are oscillations
- Several imaginative uses are in service across North America, often highlighted at NASPI meetings

## Challenges

- Data Quality
- Lack of “THE KILLER APP”
- How do we maintain interest in PMUs?



# Questions