**Predicting Storm Damage** 

Efficiency Lab Presented by Jon Daggerhart



#### Efficiency Lab

- 15 years experience in electric power software creation
- Mature software company that understands the importance of quality, security, and system integration
- Working with weather experts to create solutions for electric power
  - NOAA (National Oceanic & Atmospheric Administration)
  - Baron Weather
  - IBM (Weather Channel)



#### Weather Challenges

- Weather is unpredictable and a significant contributor to outages
- Storms are increasing in frequency and severity
- Customers expect utilities to respond quickly
- Utilities need to manage costs associated with outages
- Utilities lack a tool to predict and respond efficiently to weather related impact on important assets



#### Here's what Efficiency Lab has now:

- Real-time weather tools from Baron and IBM
- Storm recording and potential lightning damage based on asset location
- Weather API's providing real-time and historic data to existing systems

Here's what Efficiency Lab is working on:

- Seamless integration of Storm Sight and various real-time weather applications
- Building data library of electric power asset locations
- Predictive Analytics engine from historical storm data
- Augmented Reality features for storm replay and analysis at physical asset locations



#### Here's what Efficiency Lab needs:

- Historic data related to outages caused by storms
- General cost information related to outage restorations
- Opportunities to test and refine the Storm Sight concept in real world scenarios
- Industry partners to help identify the needs around weather related asset damage and outages



# Storm Sight Demo

- Real-time weather data and forecasting tools
- Storm replay with asset damage from lightning

#### Next Steps

- A follow up conversation with Efficiency Lab to discuss opportunities to participate in Storm Sight
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#### Questions for GIS Interest Group

- What systems or processes do you feel would benefit from having access to real-time or historic weather data?
- . What data sources are available for asset maps or historic outage data that should be included in Storm Sight?
- What are some common weather related issues that impact power distribution?
- What kind of weather information do you wish was available to you quickly and easily?