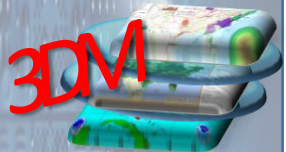


Improving Resiliency w/Better Data

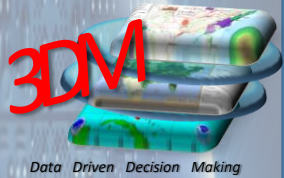


Data Driven Decision Making



Data Driven Decision Making

Safety Message



Opening Remarks



John Shaner

Chair

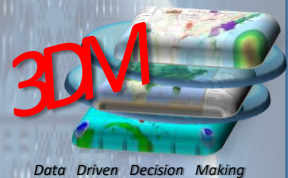
Multi-State Fleet Response Working Group



Erin Robinson

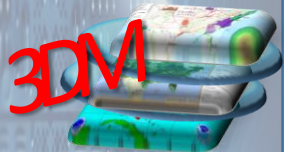
Executive Director

Earth Science Information Partners (ESIP)



Agenda

Time	Description
7:30am	Registration
8:00am	Opening Remarks & Welcome
8:15am	Session #1 – Why Are We Here? Where Are We Going?
8:45am	Session #2 – Better Decisions w/Better Data User Panel
10:00am	Session #3 - The Private Sector Disaster Challenge
12:00pm	Lunch
12:30pm	Session #4 – Defining What Are Usable and Un-Usable Data Sets
1:00pm	Session #5 – Applying Data to Real World Disasters
3:45pm	Wrap Up / Next Steps
4:00pm	Conclusion
5:00pm	Happy Hour Reception – Marriott Lobby Bar



Data Driven Decision Making

Session #1

Why Are We Here?

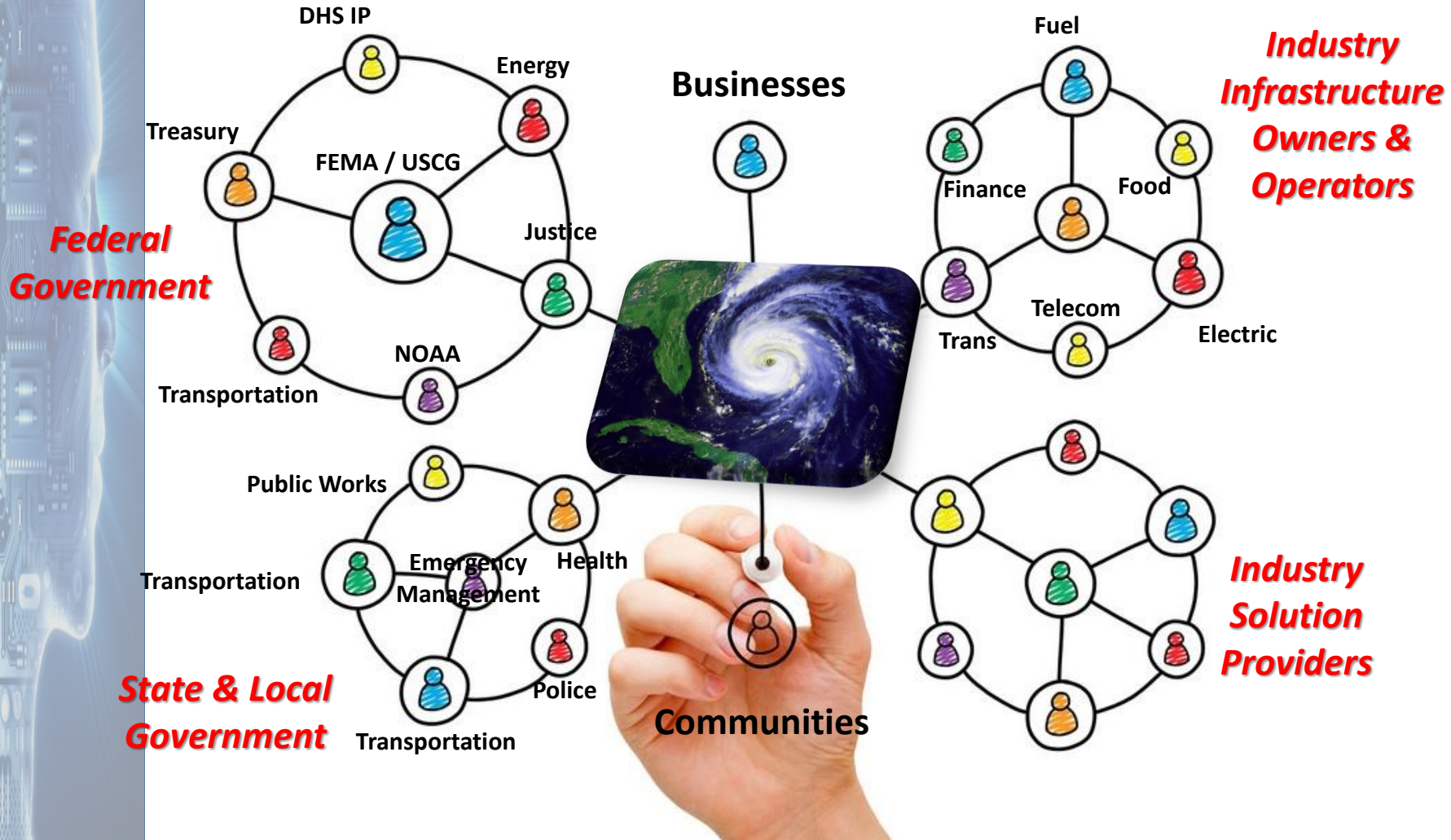
Background



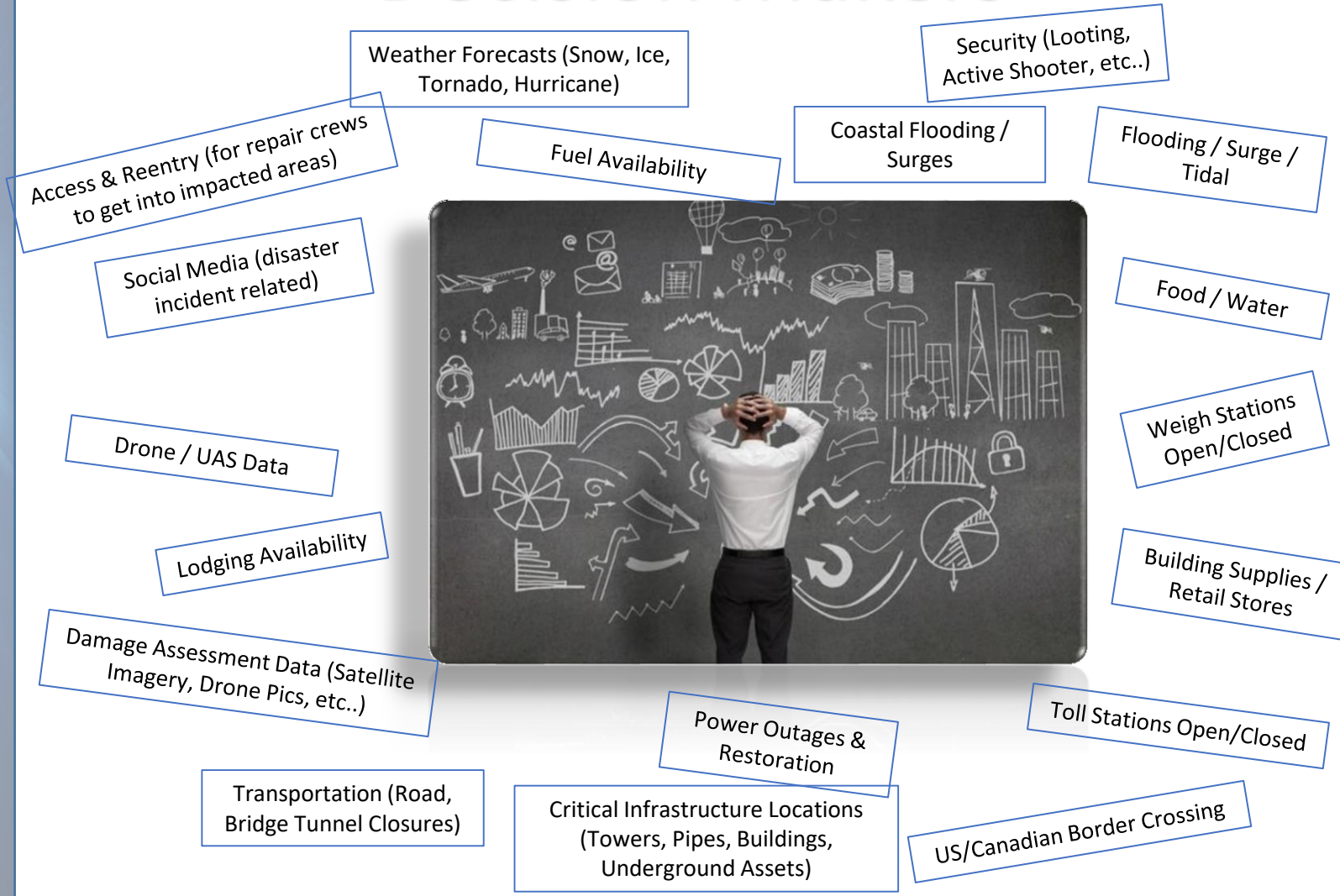
2014 AHC FRWG Objectives	2015 AHC FRWG Objectives	2016 AHC FRWG Objectives
Training and Education Educating people on the operational products, procedures, and benefits of them to the private & public sectors.	Training and Education Public Sector Webinar on Declarations and Waivers	Education <ul style="list-style-type: none"> • Sustain ongoing education efforts to create shared perspectives for coordinated action during disaster response • Develop programs that integrated disaster management and business continuity professionals
Information Sharing & Technology Explore policies, approaches, and technologies that can support secured information sharing	Information Sharing w/CYBER ID Pilot Regional Secure Information Sharing Pilot Legal, Policy, Process Drafted	Sensitive Information Sharing <ul style="list-style-type: none"> • Operationalize the SISE (Sensitive Information Sharing Environment) • Expand circle of trusted data providers and users • Expand data sources • Explore Mobile data apps and solutions
Joint Exercises Conducting tabletop exercises , drills , and the development of sector specific exercise modules	Joint Exercises CATEX 2015 (January 13 Planning Meeting w/states)	Planning & EXERCISES <ul style="list-style-type: none"> • Sustainment of Regional Integrated Planning Framework & Working Groups • Integration and coordination of government and private sector exercises
Partnerships Continue to identify operational partners that can expand the capabilities and resources of the Working Group	Partnerships Continue to identify new and develop existing public and private sector partnerships	Partnerships <ul style="list-style-type: none"> • Continue to identify and formalize strategic relationships that add capability and resources • Leverage government and industry investments • Implement 2016 Membership Model
Sustainment Develop a sustainment plan to support the continued work of the Working Group	Sustainment <ul style="list-style-type: none"> • Evolve the Working Group and Mission • Develop new products and services • Enhance fleet movement processes 	Operations <ul style="list-style-type: none"> • Continued development of operational solutions to expedite disaster logistics and comm. • Develop disaster help desk services • Expand base of participating government and industry stakeholders • Leverage existing tools and resources
Define Short-Medium-Long-Term Goals Continue to define and prioritize the list of short, medium and long-term goals that address fleet movement choke points for all sectors	Short-Medium-Long-Term Goals Review and update	Underlying these objectives is the FRWG's vision and guiding principles <ul style="list-style-type: none"> • long-term sustainability • integration of public sector and the private sector • share critical, sensitive operational information • Building trusted relationships • short, mid and long-term solutions

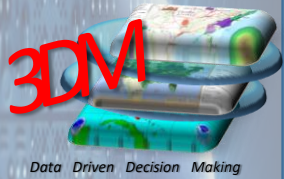
Data D

Regional Disasters Expose Coordination Issues



Need for Better Data For Decision Makers

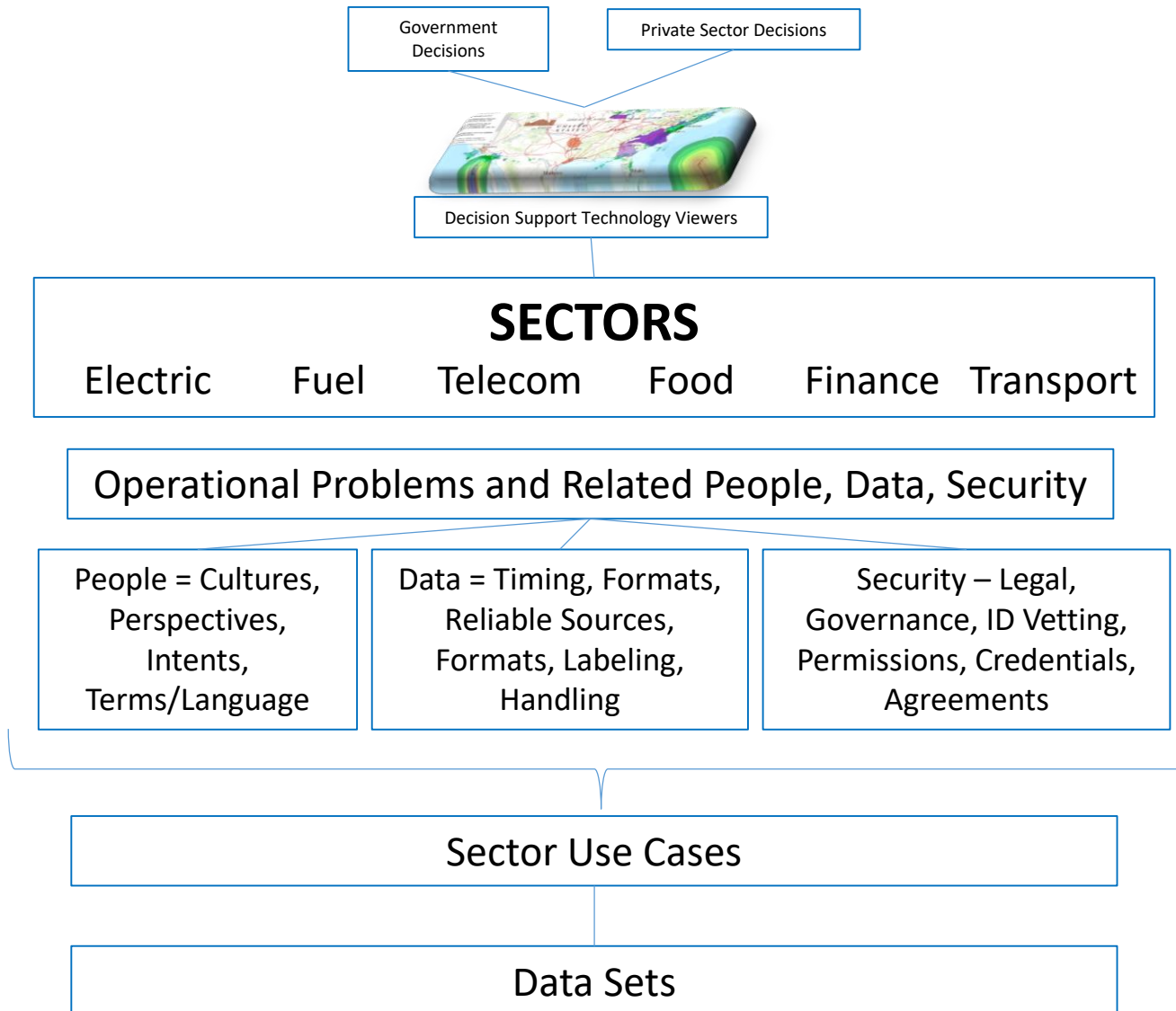




3DM Initiative Process

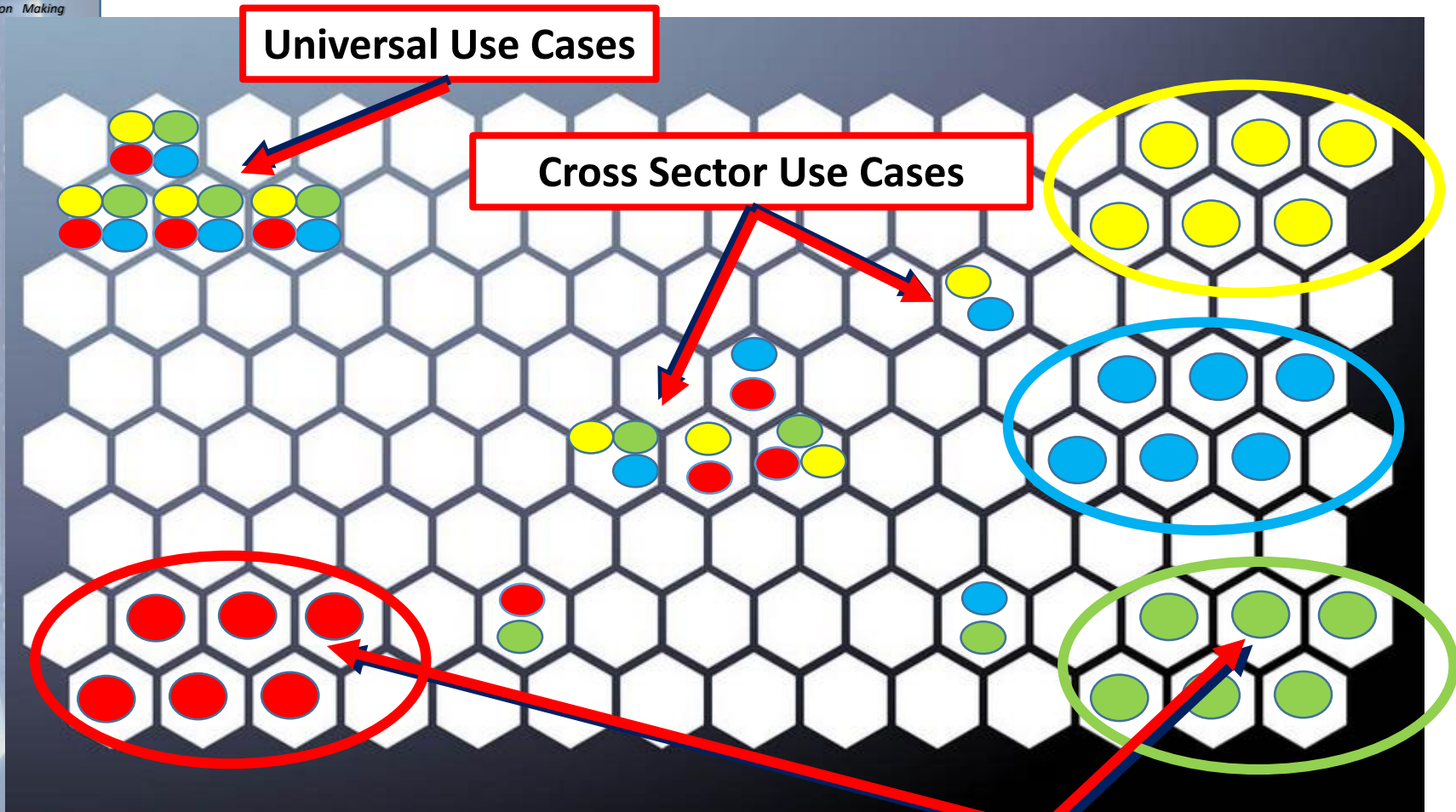
- Establish Work Group
- Leverage SISE Trust Framework & Philosophy
 - Simple, Operational Benefit, Results
- Develop Operational Use Cases
- Identify & Integrate Data Sets
 - Short, Mid and Long-Term Data Sets
- Leverage Technology Partners
- Test, Validate and Operationalize

Use Case Methodology





Use Case "Honeycomb" Approach

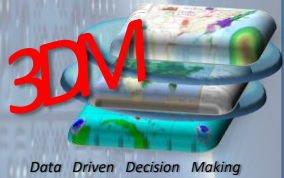


Universal Use Cases

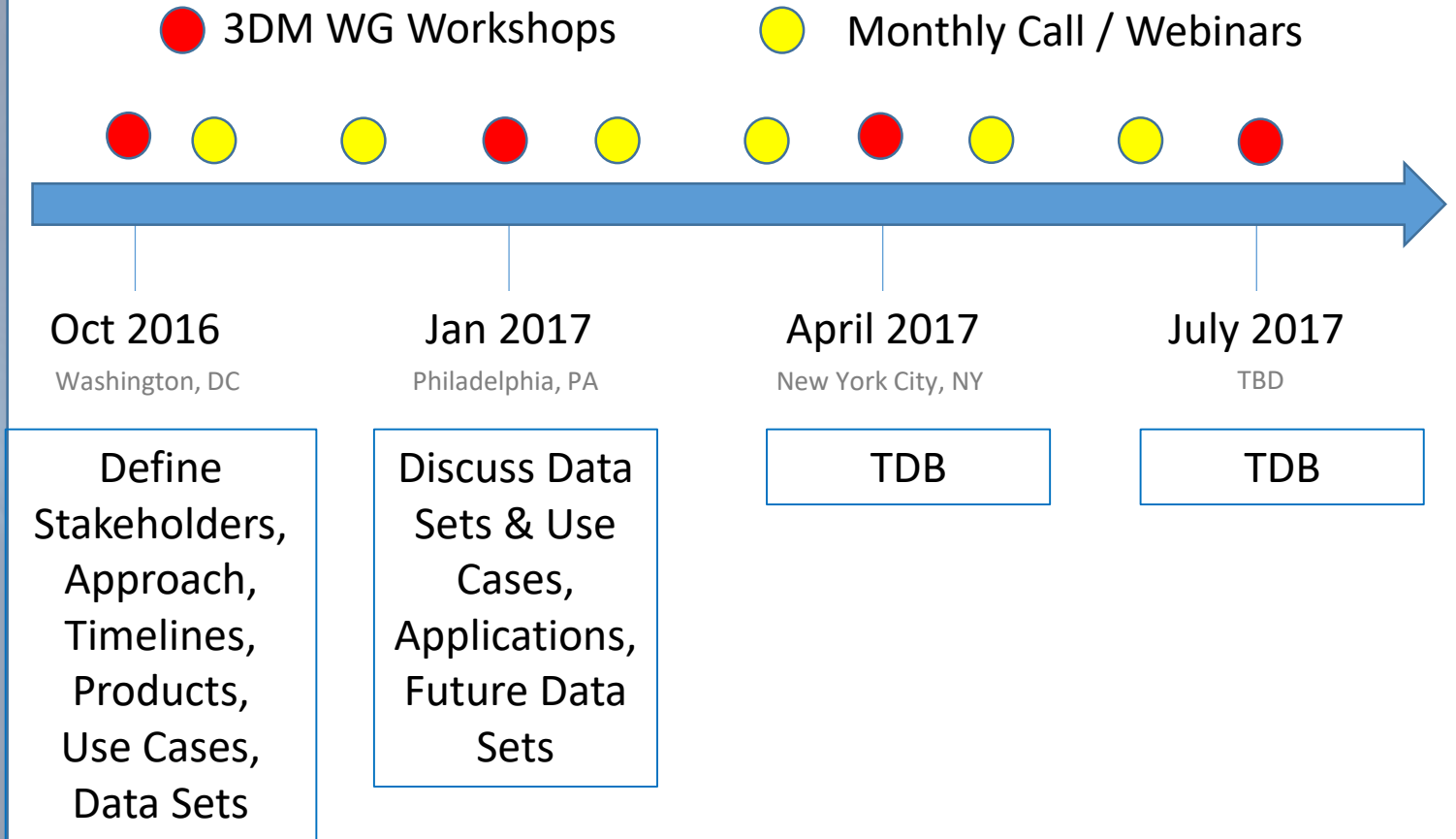
Cross Sector Use Cases

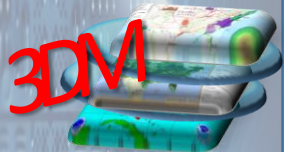
Sector Use Cases

- Electric Sector
- Fuel Sector
- Food/Water Sector
- Telecommunications Sector



3DM Initiative Timeline

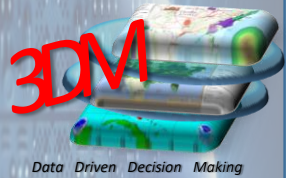




Data Driven Decision Making

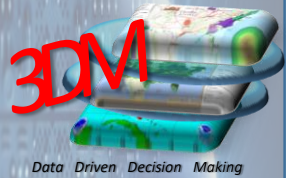
Session #2

Better Decisions w/Better Data Users



Session #2 – Better Decisions w/Better Data User Panel

- **Description:** *This session will discuss the GeoCollaborate Daily Dashboard technology and the challenges, issues, benefits, and possible opportunities to improve data sets, use cases and visualization tools to enhance public and private sector regional security/disaster decision making.*
- **Objectives:**
 - *Gain common understanding of FRWG technology's history & development*
 - *Demonstration of current uses FRWG collaborative technology (GeoCollaborate platform) in recent regional storms/disasters*
 - *Feedback from stakeholders on current data sets and their usefulness*
 - *Recommendations on improvements to technology and/or data sets*



FRWG Requirements for Regional Disaster Coordination

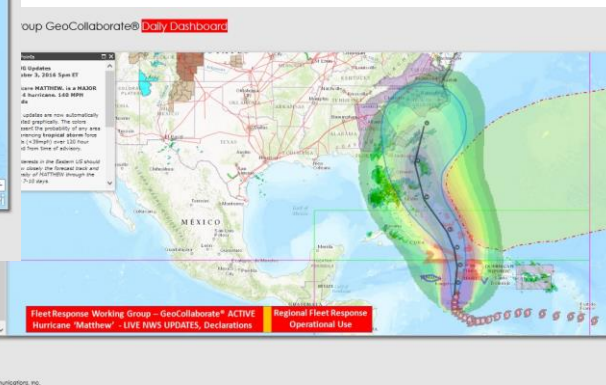
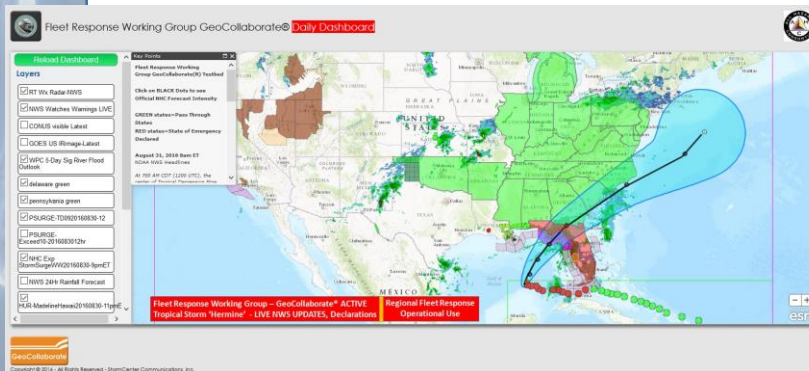
- Merge information and data from multiple state, feds and companies for situational awareness
- Needs to be Simple & Visual
- Overlay information into Common Operating Picture
- Does require replacement of other systems
- Cloud based, works on any device
- Support data collaboration
- Sustainable platform

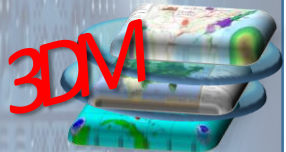


Collaborative Information Sharing

Dave Jones

CEO

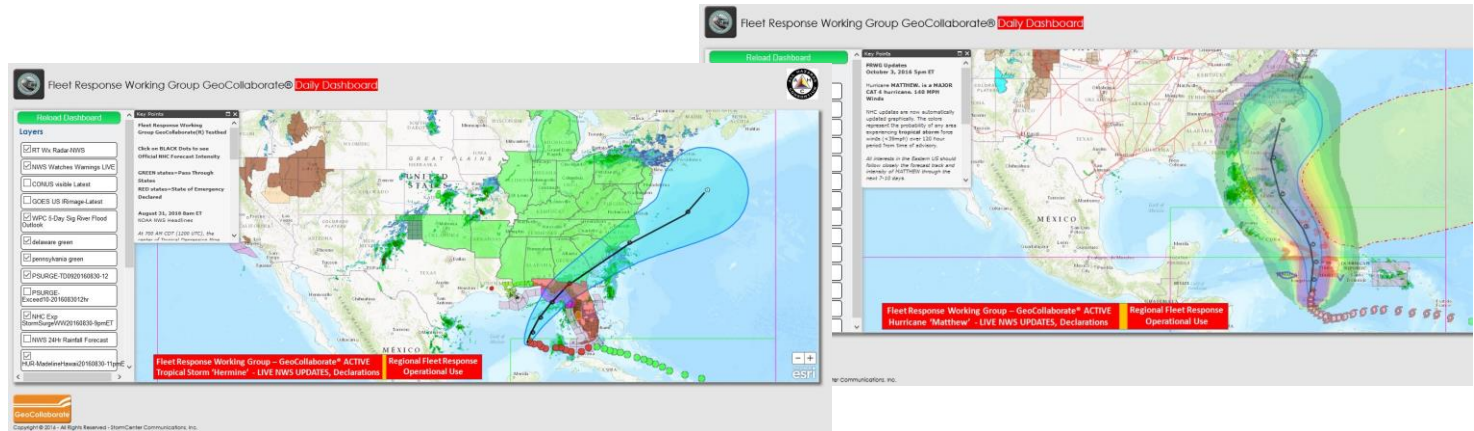
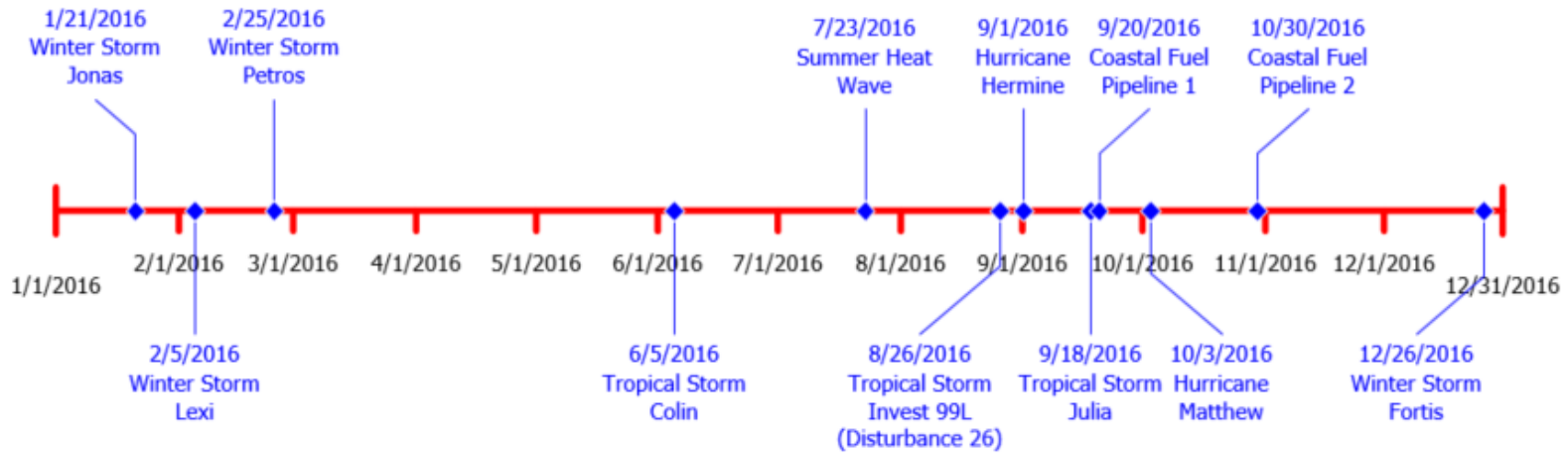


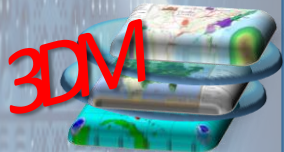


Data Driven Decision Making

Demonstration

Private Sector Discussion on Data Collaboration Needs

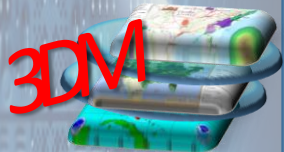




Data Driven Decision Making

Session #3

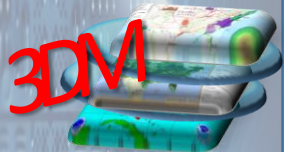
The Private Sector's Disaster Challenge



Data Driven Decision Making

Session #3

Private Sector Disaster Stories



Data Driven Decision Making

Session #3


Table Work Exercise



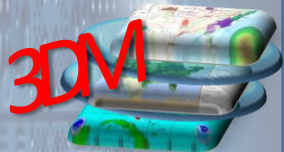
Table Exercise

- Objective:
 - *Building awareness of Use Cases and data sources/sets alignment*
- Activity:
 - *Write you name on top of MATRIX form*
 - *Private sector person will brief how Use Case #1 applies to real world disaster situation.*
 - *Table will discuss what data sets could be used for Use Case #1.*
 - *After discussion, participants place "X" in boxes under Use Case #1 where you think the data sets apply. Discuss findings as a group*
 - *Repeat for Use Case #2 and #3.*
 - *Pick one person to report out at end of session*
- Table Exercise Tools:
 - *Use Case / Data Set Matrix*
 - *In your folder*

Your Name: _____



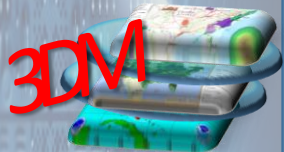
POSSIBLE DATA SETS	USE CASE / DATA SET MATRIX			Notes
	Use Case #1	Use Case #2	Use Case #3	
Wildfires				
Flooding / Surge / Tidal				
Coastal Flooding / Surges				
Fuel Availability				
Lodging Availability				
Food / Water				
Building Supplies / Retail Stores				
Power Outages & Restoration				
Weather Forcecasts (Snow, Ice, Tornado, Hurricane)				
Transportation (Road, Bridge Tunnel Closures)				
Weigh Stations				



Data Driven Decision Making

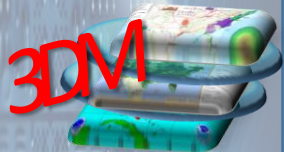
Session #3

Report Outs from Table Discussions



Data Driven Decision Making

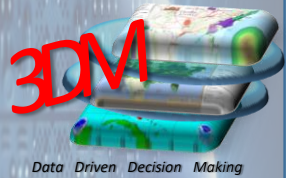
LUNCH



Data Driven Decision Making

Session #4

Defining Usable and Un-Usable Data Sets



FRWG Understanding For Data Set Usability

- Short-Term
 - Data Is Usable Now Or Within 90 Days
- Mid-Term
 - Data Is Usable Within 6-12 Months
- Long-Term
 - Data Is Usable With 12-18 Months
- Other Guidelines????



ESIP Operational Readiness Levels

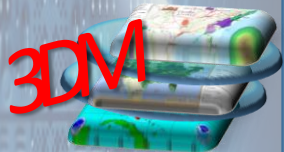


- Operational integration into your system

- Testing within AHC

- Discovery & Feasibility

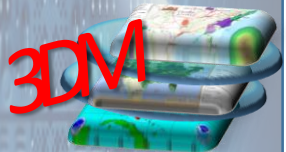
- Exposure through Data-Driven Decision Making Workshops



Data Driven Decision Making

Session #5

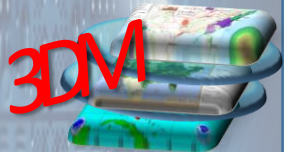
Applying Data to Real World Disasters



Data Driven Decision Making

Dataset Showcase

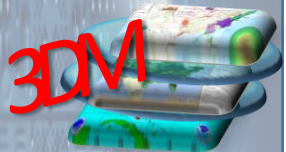
SEDAC



Data Driven Decision Making

Questions

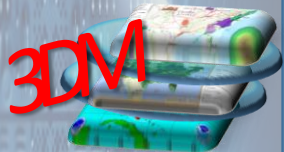
- ***How is this information relevant to your sector or organization?***
- ***What are other possible uses of this data?***
- ***Are there recommendations to improve it?***



Data Driven Decision Making

Dataset Showcase

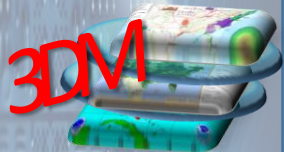
ESRI



Data Driven Decision Making

Questions

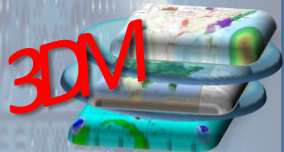
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Data Driven Decision Making

Dataset Showcase

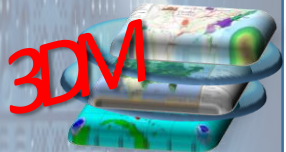
GeoDecisions



Data Driven Decision Making

Questions

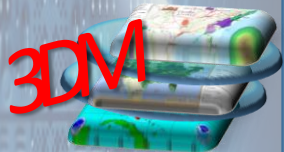
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Data Driven Decision Making

Dataset Showcase

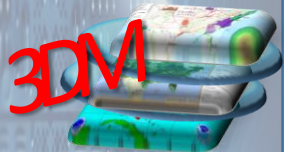
HazardHub



Data Driven Decision Making

Questions

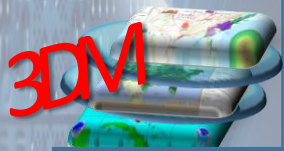
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Data Driven Decision Making

Dataset Showcase

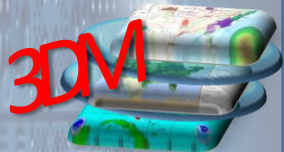
All Hazards Consortium



Emergency Resource Library

Data Sets To Support Decision Makers

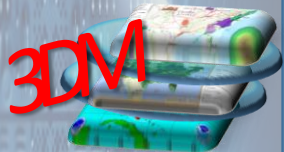
Currently Available	In Development	Future
<ul style="list-style-type: none"> • Weather Radar/Storms • State Declarations & Waivers • Flooding Rivers • Low Height Bridges & Tunnels • Open/Closed Retail Facilities (Hughes)- Fuel, Pharmacies, Hotels • State Post Disaster Re-Entry Procedures 	<ul style="list-style-type: none"> • Banks Branches • ATM Machines for Cash • Commercial Fueling Stations <i>(For Large Trucks and Commercial Vehicles)</i> • Convenience Stores • Home Improvement Centers (Hardware & Supply Stores) • Commercial Generators- Mobile • Commercial Generators- Fixed Units • Ice- Dry Ice • Ice- Bagged Ice 	<ul style="list-style-type: none"> • Mold Removal • Fire Restoration • Propane • Heating Oil • Oxygen- Bottled • Storage Facilities- Refrigerated • Storage Facilities- Controlled Environment • Storage Facilities- Warehouse • Lighting- Portable • Laundry Services • Pumps- Industrial (Flood Alleviation) • Trucks- Rental • Trucks- Refrigerated • Trucks- Storage Trailers • Rental Equipment Facilities- Forklifts, Bucket Trucks, etc. • Cleanup- Bulk Sorbents & Products • Waste Disposal Services • Waste Disposal Services- Hazardous Wastes • Mitigation Services- Business Continuity/Disaster Recovery • Portable Satellite Equipment & Services • Satellite Phones/Radios • Trunk Repair Facilities • Medical Supplies & Equipment • Available Housing Units/Apts • Drone Resources (Training, Operations, Equipment, Countermeasures)



Data Driven Decision Making

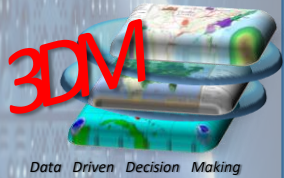
Questions

- ***How is this information relevant to your sector or organization?***
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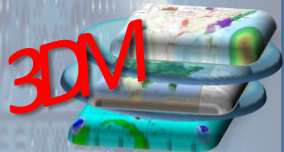
Data Driven Decision Making

Wrap Up / Next Steps



Wrap Up / Next Steps

- **Objective:**
 - *Gain common agreement on the following:*
 - *Importance & value of this 3DM initiative*
 - *Overall approach & timelines*
 - *Organizational participation*
- **Products**
 - *Working Group Directory*
 - *Communication Website*
 - *Data Set URLs Library*
 - *Other Ideas?*
- **Next Meetings**
 - *Monthly Conference Call / Webinar*
 - *3Dm Workshop, April 3 at Con Edison in NYC*
 - *Other Meetings?*



Data Driven Decision Making

Happy Hour Reception

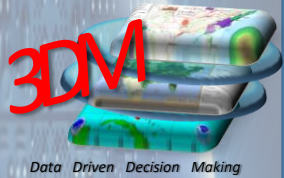
5:00pm to 7:00pm

In Marriott Hotel Lobby Bar

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Thank You



In Coordination With:

- Edison Electric Institute (EEI)
- Federation of Earth Science Information Partners (ESIP)
- DHS NPPD, Office of Infrastructure Protection (DHS-IP)
- NOAA/ National Weather Service
- Multi-State Fleet Response Working Group (FRWG)
- East Coast Corridor Coalition (EC3)