

# Designing Resilient Communities Project



## Stakeholder Advisory Group Meeting

PRESENTED BY

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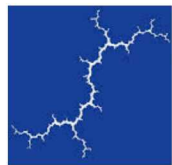
# WELCOME!



Sandia  
National  
Laboratories



nationalgrid



Synapse  
Energy Economics, Inc.



Entergy



SIEMENS



# Why Are We Here?

*Help chart the path forward to enable practical, rigorous and replicable energy infrastructure planning that serves community resilience imperatives*

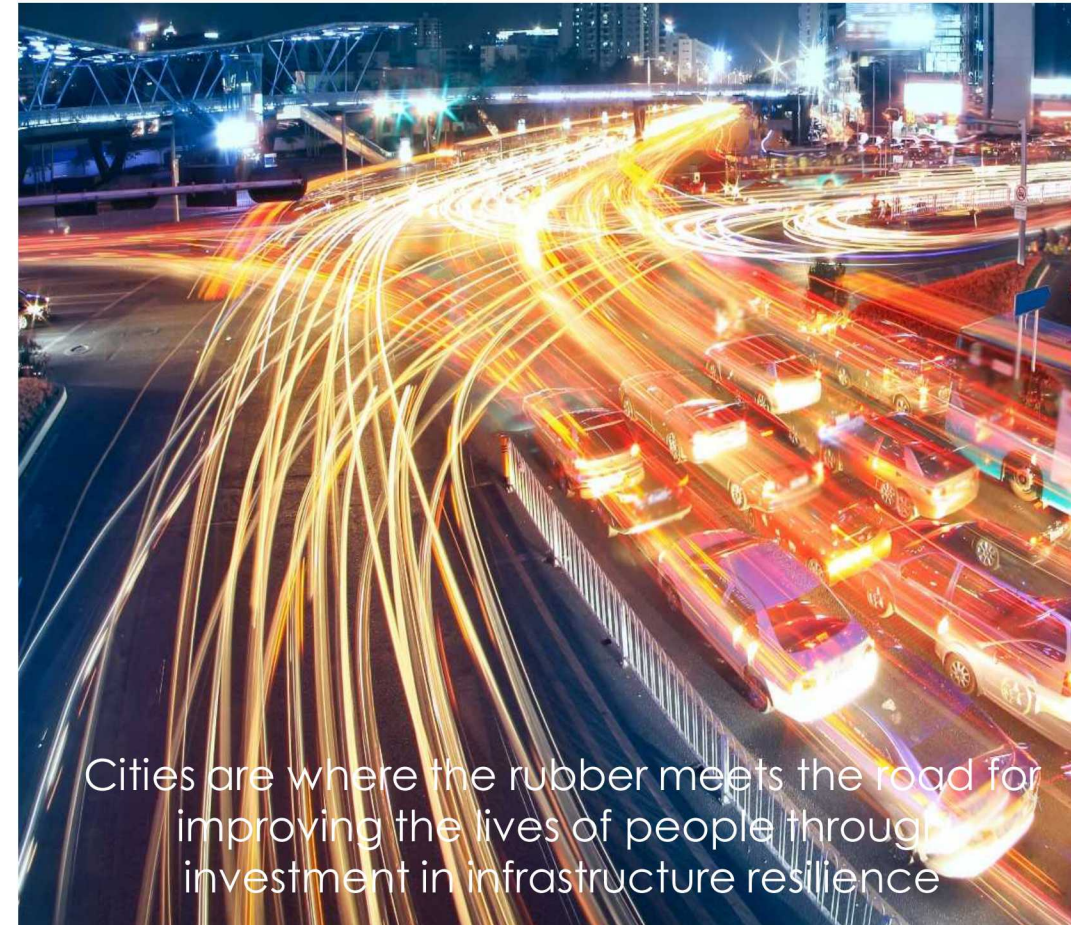
Energy as an enabler of all critical services

Role of cities is key

- Trends: Urbanization, increasing threats
- Resilience planning function – disconnect between municipal and utility planning process

A complex and challenging problem, multiple gaps

- Resilience-based metrics, methods and tools
- Regulatory and business models
- Stakeholder—who are they and what are their roles?
- Technology solutions



Cities are where the rubber meets the road for improving the lives of people through investment in infrastructure resilience

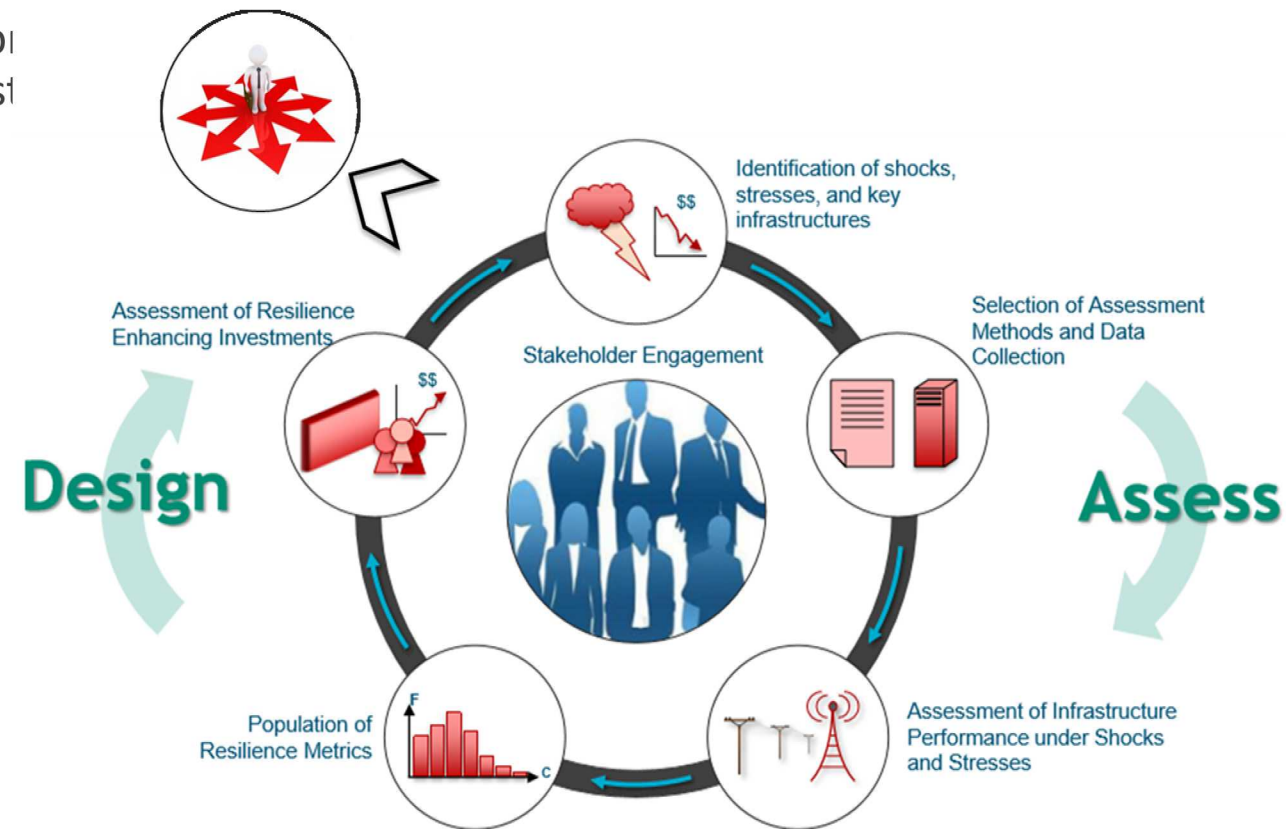
# Designing Resilient Communities Project

## Goals:

- Demonstrate a practical consequence-based approach to resilient grid infrastructure planning and investment
- Resilient Community Design Framework
- Stakeholder engagement
- Technology demonstration

## Key partners:

- City of San Antonio, CPS Energy, National Grid
- UTSA, NMSU, Synapse Energy Economics
- RF 100RC and multiple cities through the SAG



# Designing Resilient Communities Project

Core Sandia Project Team:

- Robert Jeffers, PI
- Robert Broderick, Co-PI
- Katherine Jones
- Vanessa Vargas
- Sara Peterson
- Mercy DeMenno



# Sandia and Energy Resilience

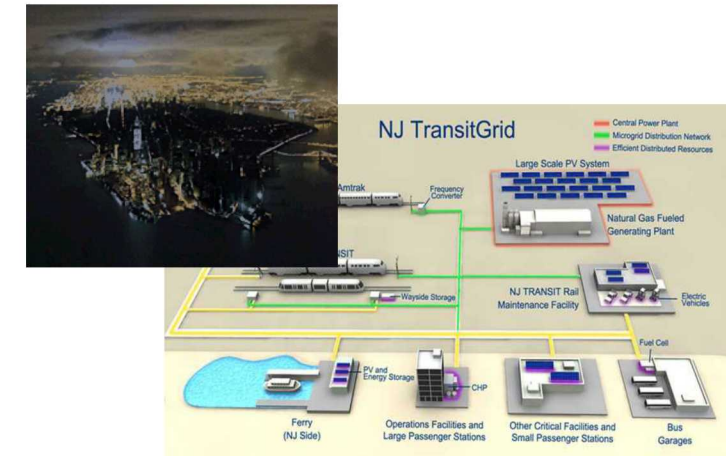
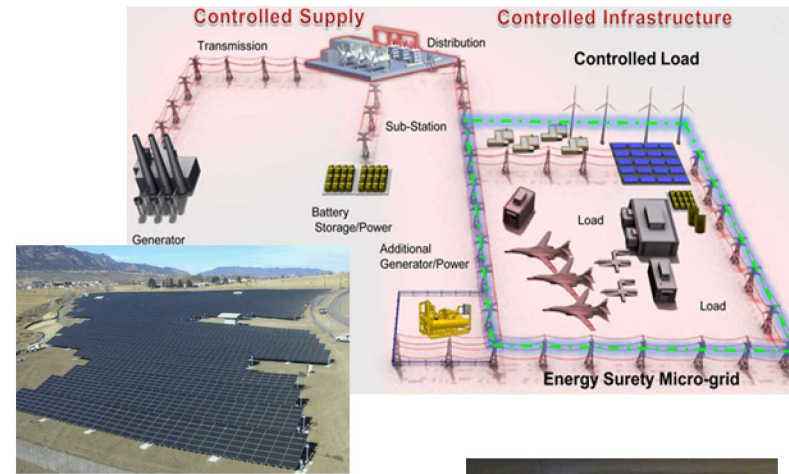
Sandia National Laboratories is a national leader in the development of resilience solutions for Government and Civilian sectors

Broad applications and partnerships

- DOE, DHS and DOD
- Municipal and State agencies
- Research collaborations
- International interactions

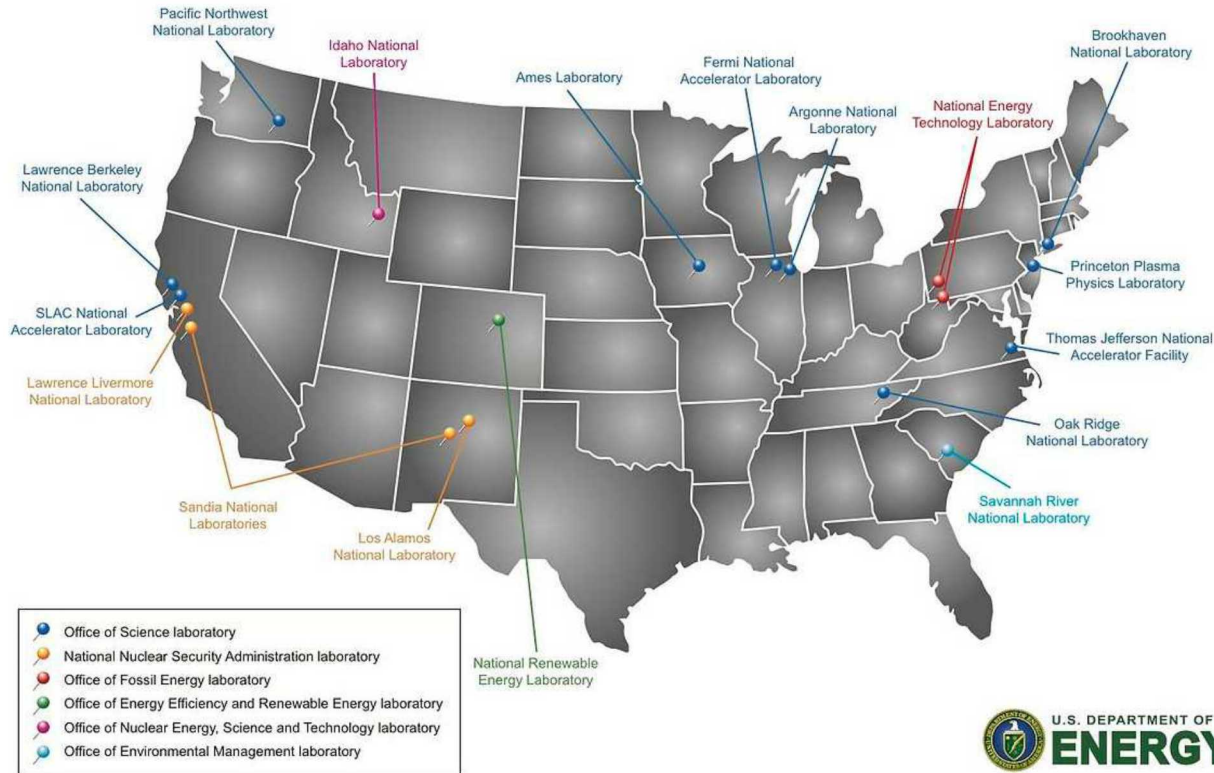
Closely-related projects

- SPIDERS
- NJT, Hoboken; NOLA
- Urban Resilience Pilot Program (R&D)
- GMLC Resilience Metrics projects
- San Juan PR Resilience Nodes



# Resilience – All Hands on Deck

Many DOE National Laboratories are actively working on infrastructure resilience topics



## 41 FFRDCs

There are 41 Federally Funded Research and Development Centers

## 25 R&D

25 are research and development labs

## 16 DOE

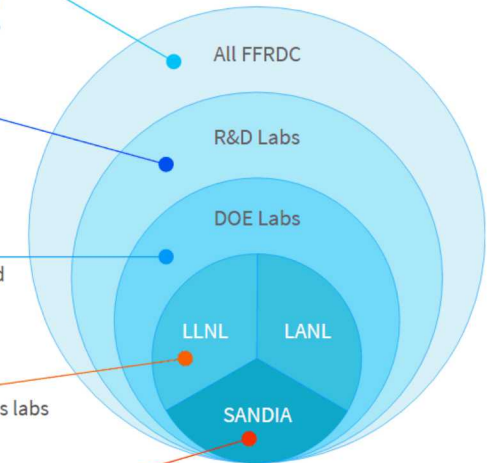
16 are DOE-sponsored FFRDCs

## 3 NW

3 are nuclear weapons labs

## Sandia

Sandia is a DOE-sponsored FFRDC managed and operated by Sandia Corporation, a wholly-owned subsidiary of Lockheed Martin Corporation



# Agenda

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## Tuesday July 24, 8:00 – 5:00 PM

- Welcome & Rationale
- DOE Perspectives
- The Resilient Community Design Framework
- Resilient Energy Enabling Resilient Communities
- Stakeholder Advisory Group Perspectives I

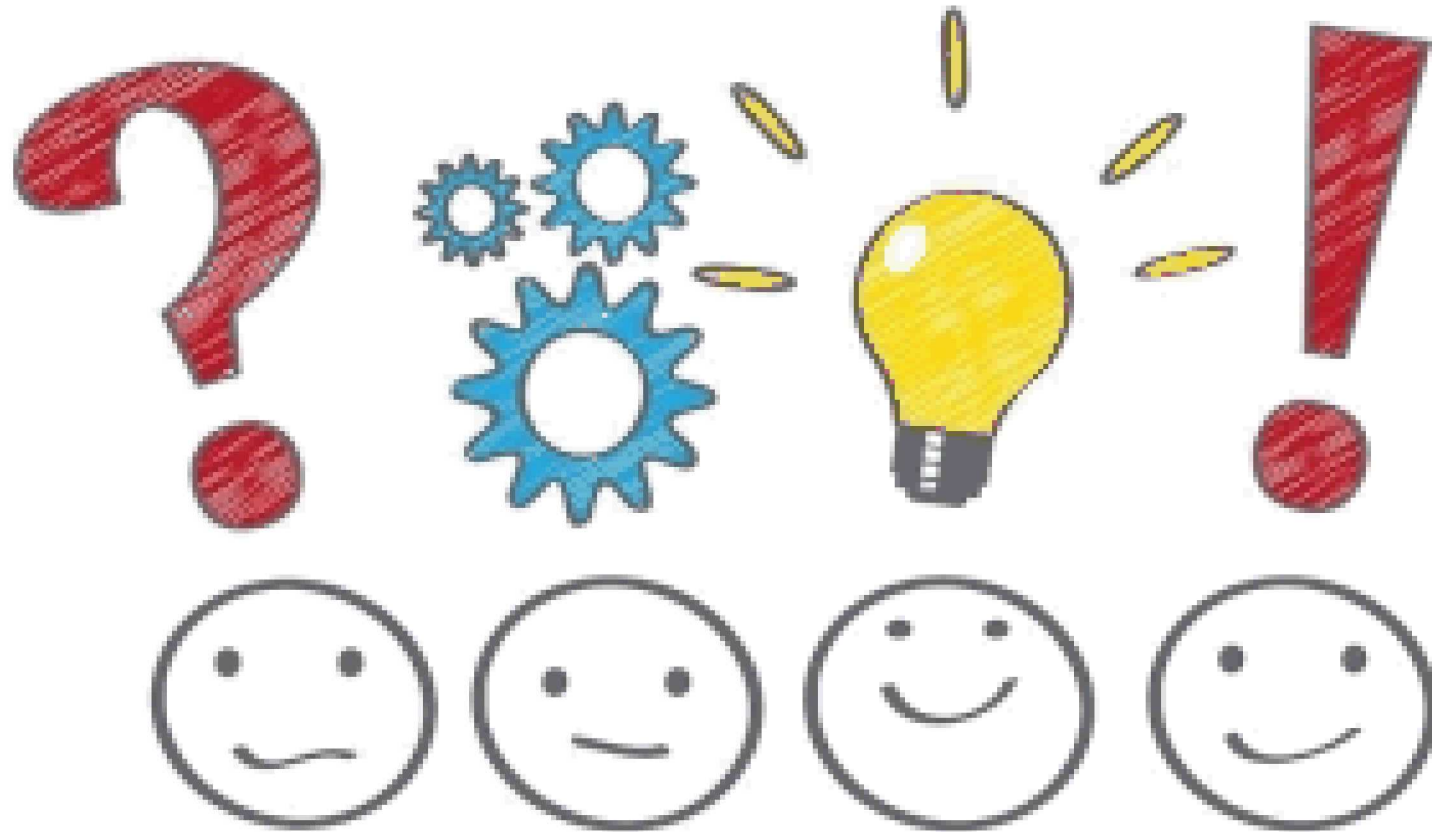
## LUNCH

- Stakeholder Advisory Group Perspectives II
- Demonstration Partners Perspectives
- Technology Solutions Providers Perspectives
- Day 1 Summary

## Wednesday July 25, 8:00 – 12:30 PM

- Review Day 1 take-aways
- SAG roundtable
- SAG breakout sessions
  - Group 1: Coordinating Stakeholder Roles
  - Group 2: Alternative Regulatory Frameworks and Utility Business Models
  - Group 3: Technical Capabilities to Support Integrated Resilience Planning
- Out-briefs from breakout sessions
- Summary and next steps
- Adjourn

# Questions? Comments?



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