

Overview

We Are IEM

Largest Woman-& Minority-owned Crisis Management Firm In The United States

Emergency Management, Homeland Security, National Security, Law Enforcement, Public Health, and Emerging Technology Solutions Provider



\$250+ Billion

Managed in Disaster & COVID-19 Recovery Funds using IEM software and tools



Project & Grants Management

1000+ Projects Managed



380 Billion Al-based Sims

COVID-19 Modeling Simulations Conducted in 2021



Customers

HUD, FEMA, SBA, HHS, DOD, DHS, DOI, DOC, DOE, 50 States, 3 Territories, D.C., Tribal Nations, the Private Sector & International



38+ Years

Applying Technology and Experience To Disasters, Emergencies, & Other Risks



1,400 Employees



\$1+ Billion

In Revenue (2017-2022)



CORPORATE LEADERSHIP TEAM



Bryan Koon

President and

CEO



Madhu Beriwal

Founder and
Chairwoman



Ted Lemcke
Chief Technology
Officer



Dan Michael
Chief Financial
Officer



Brad Tiffee
Chief Administrative
Officer



Nick Lattanzi

VP for Digital

Services &

National Security



Jon Mabry VP for Disaster Recovery



Andrew Coffey

DIR, National

Security

Technologies



Sid Baccam

MGR, Emerging
Technologies



David Ortiviz MGR, Public Outreach



Don Mason

DIR, Digital

Modernization



Luis Monterrubio

MGR, Geospatial

Programs



Marlon Walker

SUPV, Information
Solutions



International Homeland Security

- Emergency Response Surge Support
- FEMA grant management and administration (PA and HMGP)
- Preparedness
 - o Disaster response surge support for states and utilities
- Hazard Mitigation Planning
- Black Sky Planning
- Energy Security and Analysis
- GEO and AirOps
- Digital Services
 - Grid Modelling
 - Al-supported grant management
 - Al-supported AARs
 - Statistical Analysis
 - Data Analytics
- Threat simulation tools
 - Infrastructure failure and downstream impacts, and climate change modeling

Customer Snapshot:

- **FEMA** Regional Power Outage Incident Annex (POIA) development
- Long-term power outage interdependency planning for large metropolitan areas
- Full-cycle **GridEx** support (exercise participation, evaluation, and improvement planning)
- Pipeline and volatile liquid incident response planning
- GIS mapping and hazard impact modeling
- Drone and GIS-aided infrastructure risk, vulnerability, and damage assessments





Energy Projects Overview

BRIC

- Substation Hardening
- Substation Hardening and Transmission Lines Upgrades
- o Feeders Upgrades

Hazard Mitigation Grant Program

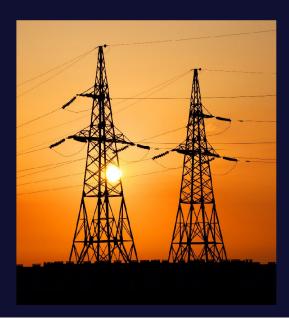
- Microgrid Installations
- o Generator and Microgrid Projects
- Steel Pole Projects
- Drive Timber Pilings
- Tribal Solar Installations
- Solar Array Feasibility
- Solar Installations
- Substation Hardening

FEMA Advanced Assistance

- o Microgrid HUB and Portable Energy
- Microgrid Studies for Various Locations

BCA Metrics

- "Cradle-to-the-grave" project management and BCA development
- IEM sought pre-approval from FEMA
- Novel methodologies and analyses
- BCA is not proprietary



Project Insights

- Explicit Beneficiaries (e.g., partners, businesses, critical community infrastructure, interdependent infrastructure)
- Repetitive Financial Savings Statements
- Metrics
 - Social Vulnerability Index
 - o 490 million minutes of power interruptions avoided over 50 years
 - Estimated savings of \$165.1 million in reduced restoration costs over 50 years
 - Benefit-to-cost ratio of 4.01
- Explicit Alignment with State and Federal Goals
 - Justice40
 - Climate Action Plan
- Proven Nature-Based Solutions
 - Restoration of the grass and flowers beneath the distribution lines which supports the natural environment – especially the local honeybee population
 - Utilization of products that protect distribution assets (transformers, conductors, etc.) from saltwater decay which requires frequent disruption to the natural environment to replace).
 - o Protecting critical environments from damage incurred from repeated pole replacements
 - Conservation of wetlands, mangroves to mitigate storm surge impacting infrastructure





Implementation

Eligibility is Foundational

- For projects covering IOU assets, the mitigation action should be covered in the local HMP (the local government) and the state HMP.
- For projects covering COU assets (cooperatives and public power), eligibility likely falls under the state HMP.
- Microgrids are viewed a backup generators and are henceforth covered under the backup power of both the local and state HMPs.

Language Matters

o There is a level of subjectivity; do not assume this interpretation stands in your state

Partnerships are Enablers

- Beneficiaries are allies (PPP)
- Who benefits form this project? Who is harmed if it is not implemented?





President's National Infrastructure Advisory Council (NIAC)

- Only executive council that examines cross-sector critical infrastructure security and resilience issues and provides recommendations to the President on how to secure the nation's infrastructure.
- Composed of senior executives from industry and state and local government
- Conduct in-depth studies on physical and cyber risks to critical infrastructure
- In addition to IEM, the NIAC consists of experts from:
 - o PJM, Hawaiian Electric, ChargePoint, Williams, ComEd, CalOES,
 - o Academia, healthcare, communications, and other sectors



Barriers

- Lack of clarity in Decision-Making and Command
- Risk Equivalency
- Lack of Outcome-Based Goals to Secure Critical Infrastructure
- Inflexibility of Legal Requirements
- Cross-Sector Supply Chain Physical/Cyber Challenges
- Cross-Sector Skills Training and Workforce Development
- Need for Common Standards to Protect CI
- Need for More Intelligence Sharing from Government
- Need for Private Sector Information Sharing Regarding Vulnerabilities

Recommendations

- *Cross-Sector Drills, Exercises and Collaboration
- Engage Vulnerable Communities in Planning and Restoration Efforts
- Enhance Timeliness and Transparency of Threat Information
 - "Even if uncertain or imprecise"
- Common Cause-Failure Analysis
- Deliver timely delivery of infrastructure support provided by the IJA and IRA
 - Support multi-year funding
 - Ensure timely and responsible funding
 - Alternative, novel, progressive procurement different from "design-bid-build"
- *Examine Additional Mechanisms for Cross-Sector Collaboration

State Implementation

- "Big-Tent Resilience"
 - o Interdependencies must be internalized
 - Stress how building energy codes, efficiency programs, conservation, etc. contribute to resiliency and security
- Regional Preparedness
 - o Pooled resources and joint efforts
- Multi-sector Exercises with New Partners
- Multi-sector Hazard Mitigation Projects





SAFE. SECURE. RESILIENT.

THANK YOU

Campbell Delahoyde

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Links:

IEM Energy Security Planning

Cross-Sector Collaboration to Protect Critical Infrastructure: Barriers and Recommendations for Improvement

