

How to Capture FEMA Funds for Resilient EV Charging Deployments

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Today we'll cover...

Why emergency preparedness is gaining priority

Beam EV ARC™ sustainable EV charging

Federal funding's shift to hazard mitigation and preparedness

DHS and FEMA programs and timelines

Key indicators of FEMA funding success

Q&A

Emergency preparedness is gaining priority

State of the Grid

+64%

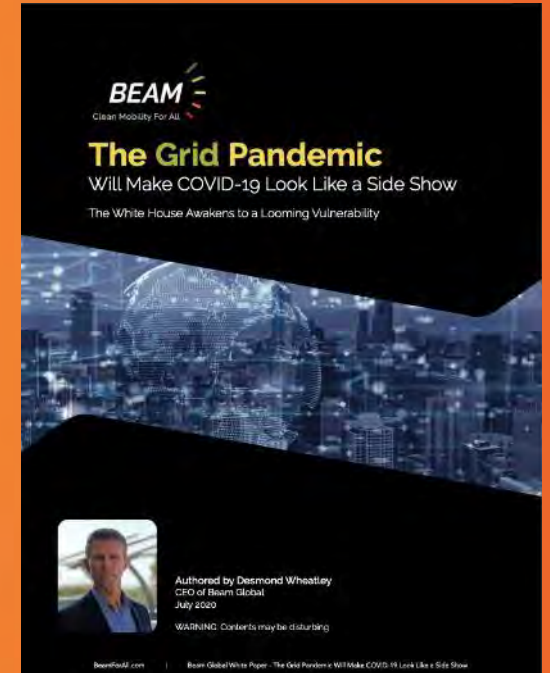
Increase in major power outages over the past 10 years

\$200B

Cost of blackouts for U.S. businesses every year

\$2T

Cost of grid maintenance from 2010-2030 to support current reliability



Whitepaper: THE GRID PANDEMIC WILL MAKE COVID-19 LOOK LIKE A SIDE SHOW



<https://www.americanprogress.org/article/a-clean-power-grid-is-a-reliable-power-grid/#:~:text=For%20decades%2C%20the%20United%20States,of%20households%20across%20the%20country.>
<https://www.cnn.com/2022/09/14/us/power-outages-rising-extreme-weather-climate/index.html>

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Climate Disasters' Increasing Frequency & Intensity

83%

Major grid outages in US were weather-related over past 20 years

+78%

Increase in annual weather-related power outages in the past 10 years, compared to the previous 10 years

100%

Considering all weather-related outages: 22% winter weather, 15% tropical cyclones, 58% severe weather

[Climate Central U.S. data analysis](#)

America's Magnificent Machine

Supporting the pace of EV adoption will strain the US grid

- Hub-and-spoke structure vulnerable to mass-scale grid loss
- Vulnerable to nefarious actors, internal and external, physical and cyber
- Vulnerable to increasingly frequent and intense climate disasters
- Disadvantaged communities often most negatively affected
- Sense of urgency for clean mobility—29% GHG from transportation



(Photo by John Paraskevas/Newsday RM via Getty Images) / NEWSDAY VIA GETTY IMAGES

EV ARC™ 2020

Sustainable EV Charging | Energy Resiliency | Emergency Preparedness

EV ARC™ 2020

Rapid Deployment, Off-Grid

No Construction, No Electrical Work, No Utility Bill

- 100% renewably powered
- Fastest and easiest to deploy
- The EV charger brand and service of your choice
- Avoided costs = Lowest TCO
- Off-grid EV charging and emergency power
- Highly visible sustainability initiative
- Drive on Sunshine



EV ARC™ 2020

Off-Grid Emergency Power

Energy when and where you need...

- Charge during blackouts, utility outages, weather events
- Relocate to high-risk locations, hospitals, shelters...
- Wind-rated up to 160 mph
- Flood-proof up to 9.5 feet
- Working asset during emergencies
- Integrated emergency power panel
- Included in FEMA's Authorized Equipment List (AEL)*



** Beam Global EV ARC™ solar-powered charging stations are included in the FEMA Authorized Equipment List, under designation 10BC-00-SOLR Chargers.*



Address preparedness, resilience and sustainability

Solar plus battery storage delivers energy during grid outages, emergencies, nighttime and inclement weather for energy resiliency

- Charge EVs during grid outages
- Emergency power for first responders
- Generates and stores its own electricity
- Grid-independent, renewably powered
- No stress on an already-stressed utility grid
- Zero emissions, 100% solar



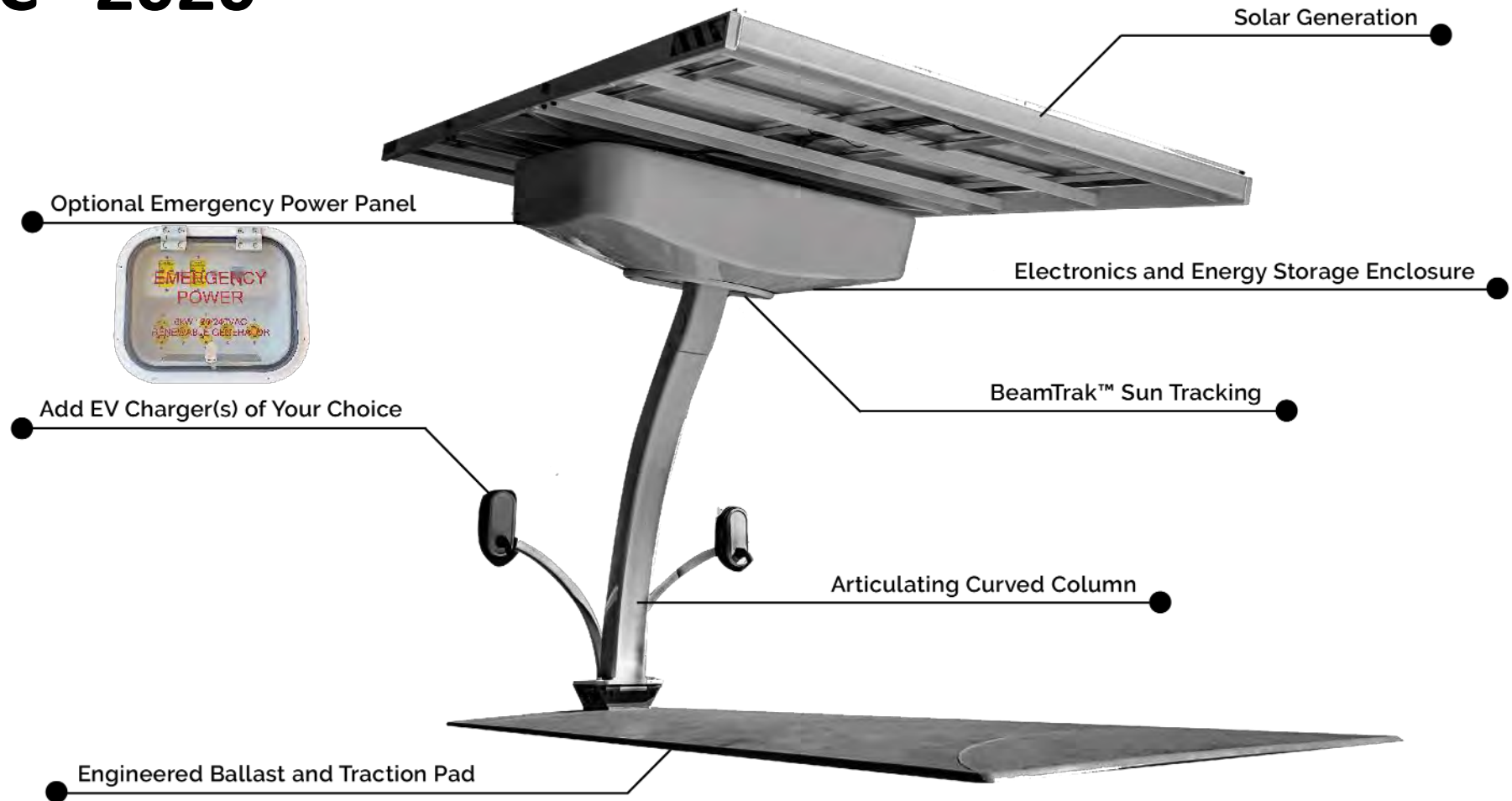
EV ARC™ 2020

Fits in a Standard Parking Spot

- Maintain full parking capacity
- Cars park on the base pad
- ADA compliant
- Reach as many as 12 parking spaces
- Charge up to 6 vehicles at the same time
- Transportable but permanent



EV ARC™ 2020



EV ARC™ 2020



FEMA Funds for Resilient EV Charging Deployments

Amanda Wood

Senior Government Affairs Consultant

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In a typical year there are
over **1,000** federal grant programs
through **26 federal agencies**
providing more than **\$400 billion** to public agencies.

\$7 Trillion in New Spending in Just 30 Months

- **CARES Act in April 2020 -- \$2.2 trillion**
Funding to public agencies including cities, counties, transit agencies, local law enforcement, and tribal governments (\$150 billion to states and locals, \$25 billion to transit, \$10 billion to aviation)
- **CRRSA in December 2020 -- \$900 billion**
Omnibus/relief bill that provided a down payment on additional funding, including \$6 billion more for transit and extensions for state and local funding, vaccine rollout, schools, and stimulus checks, plus \$266 million for a broadband deployment program
- **American Rescue Plan Act in April 2021 -- \$1.9 trillion**
More than \$350 billion in highly flexible direct allocations for state, local and territorial governments with a focus on use for critical infrastructure
- **Infrastructure Investment & Jobs Act in November 2021 -- \$1.2 trillion**
\$550 billion in new spending to improve roads and bridges, deploy broadband and EV infrastructure, fortify the grid, etc.
- **Inflation Reduction Act in August 2022 -- \$740 billion**
Clean Energy and Tax-focused
- **CHIPS Act in August 2022 -- \$53 billion**
Investment in U.S. semiconductor manufacturing, research and development, and workforce

American Recovery and Reinvestment Act of 2009 was a \$787 billion package

Shift to Federal Investment in Hazard Mitigation and Preparedness

- Flood Mitigation Assistance Grant—\$800 million
- Building Resilient Infrastructure and Communities Grant—\$1 billion
- Hazard Mitigation Grant Program—depends on disaster declarations
- Emergency Management Performance Grant—\$355 million
- FEMA Preparedness Grant—\$1.7 billion

Preparedness

Defined by DHS/FEMA as...

"...a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response."

National Preparedness Goals

As part of FEMA's response mission:

Provide **essential public and private services** and resources to the affected population and surrounding communities, to include **emergency power to critical facilities, fuel support** for emergency responders

DHS Strategic National Risk Key Findings

Many could impact the grid:

- Natural Hazards
- Technological and Accidental Hazards
- Conventional Terrorist Attacks
- Cyber Attacks

Department of Homeland Security Funding Streams and FY23 Funding Levels

- State Homeland Security Program \$415million
- Urban Area Security Initiative \$615 million
- Operation Stone Garden \$90 million
- Tribal Security Grant Program \$15 million
- Transit Security Grant Program \$93 million
- Port Security Grant Program \$100 million
- Nonprofit Security Grant Program \$305 million



Urban Area Security Initiative (UASI)

- Assists high-threat, high-density urban areas, with FEMA selecting 2-3 dozen communities each year to receive funding through this program.
- UASI region allocation will come from DHS this winter, but UASI communities are already soliciting project for inclusion in their spending plans.



Sample FY23 UASI Allocations

UASI Area	Counties Included in Region	FY23 Allocation
Phoenix Area	Maricopa	\$5,250,000
Anaheim/Santa Ana Area	Orange	\$5,250,000
Bay Area	Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma	\$36,493,265
Los Angeles/Long Beach Area	Los Angeles	\$66,174,270
Riverside Area	Riverside, San Bernardino	\$3,900,000
Sacramento Area	Sacramento, Yolo, Placer, El Dorado	\$3,800,000
San Diego Area	San Diego	\$16,445,560
Denver Area	Denver, Adams, Arapahoe, Broomfield, Boulder, Clear Creek, Douglas, Elbert, Gilpin, Jefferson	\$3,900,000
DC National Capital Region	District of Columbia, Howard, Montgomery and Prince Georges County, MD; Montgomery, Prince William, Fairfax, and Arlington County, VA	\$50,360,095
Miami/Fort Lauderdale Area	Broward, Miami-Dade, Monroe, Palm Beach	\$14,528,750
Orlando Area	Orange, Lake, Brevard Osceola, Volusia and Seminole	\$3,800,000
Jacksonville Area	TBD -- new UASI	\$1,500,000
Tampa Area	Hillsborough, Pinellas	\$3,800,000
Honolulu Area	TBD -- new UASI	\$1,500,000
Atlanta Area	Clayton, Cobb, DeKalb, Fulton, and Gwinnett	\$7,700,000



State Homeland Security Grant Program (SHSP)

- Cities and counties are eligible to make requests through their State Administrative Agency (SAA) for use of SHSP funds, unlike UASIs that determine their own spending plans and submit them through their SAA.
- There are no matching requirements, and 80% of the SHSP funds are required to pass through to local agencies.
- Every city in the country is eligible for SHSP funds through their SAA and only three dozen or so will receive UASI funds, so if your community is not located within a UASI region you will need to work with your State Administrative Agency



FEMA Authorized Equipment List

Use case is emergency preparedness and response focused, so that this day-to-day asset can also be used for emergency power by first responders and others in the event of a grid or other attack.

For this For this reason, EV ARCs are on the Authorized Equipment List

(AEL Designation: 10BC-00-SOLR Chargers)



DHS Preparedness Grants Timeline

- **Fall/Winter 2023**
UASI regions and States begin to collect local priorities from regional city and county partners
- **Fall/Winter 2023**
Congress passes Appropriations Bill that funds DHS and the DHS Preparedness Grants
- **60 Days Later...**
DHS announces UASI regional and SHSGP allocations and opens competitive grants—transit, tribal, etc.
- **60 Days After That...**
UASI Regions turn in their spending plans and competitive grants are submitted for review
- **And in Just 60 Days More...**
Funds are approved and available for drawdown

Competitive DHS Preparedness Grants

- **Operation Stonegarden**—provides **\$90 million** to enhance cooperation and coordination among state, local, tribal, territorial, and federal law enforcement agencies to jointly enhance security along the United States land and water borders.
- **Tribal Homeland Security Grant Program**—provides **\$15 million** to eligible tribal nations
- **Port Security Grant Program**—provides **\$100 million** to help protect critical port infrastructure from terrorism
- **Transit Security Grant Program**—provides **\$93 million** to owners and operators of public transit systems
- **Nonprofit Security Grant Program**—provides **\$305 million** to nonprofit organizations that are at high risk of terrorist attack.

Prior Year Funding

- Work with UASI Coordinator or SAA to amend past budget justifications to include your technology purchase
- Reprogram unspent formula funding or funds that were awarded through competitive grants



Key Indicators of FEMA Funding Success

- Have a plan to secure a key preparedness asset for the benefit of your community (its about the use case, not the shopping list)
- Show a local commitment to this effort, including community partners, both government and non-gov't
- Coordination with other local agencies, including Emergency Management
- Have early conversations with state and regional administrative agencies
- Arm your federal elected officials to advocate for you



We are here to help

- Identify high viability grant opportunities for you
- Reprogram prior year funding that has not been expended
- Provide draft narratives and budget justifications for your applications
- Identify key UASI decisionmakers in your region
- Engage your Congressional delegations for political support
- Help you to expedite drawdown of awarded funds



GET STARTED

WHAT

Meeting and report customized for your organization, situation and need of funding for which you qualify.

WHO

For local and state government organizations, Tribal governments, transit authorities and ports that are building sustainable EV charging infrastructure.

WHEN

Beam Clean Mobility Expert will be reaching out to setup a meeting by end of next week.





Q&A

Get Started

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ARC Mobility™ Trailer Deploys in Minutes



<https://vimeo.com/789165491>