

**COUNTY OF SAN DIEGO
BOARD OF SUPERVISORS
TUESDAY, OCTOBER 21, 2025**

MINUTE ORDER NO. 20

**SUBJECT: STRENGTHENING DISASTER PREPAREDNESS AND RECOVERY
THROUGH PROACTIVE INFRASTRUCTURE DOCUMENTATION
(DISTRICTS: ALL)**

OVERVIEW

The recent fires in Los Angeles highlight the devastating and widespread impacts of natural disasters in California, which carry significant human, economic, and infrastructure costs. For local governments, disasters often result in billions of dollars in damages, placing immense pressure on local budgets and requiring substantial federal assistance to recover. The Federal Emergency Management Agency (FEMA) plays a critical role in reimbursing these costs but imposes stringent documentation requirements to validate disaster-related claims.

The County Board of Supervisors has previously taken significant steps to enhance FEMA reimbursements and improve disaster resilience. Most recently, these include updates to the Flood Damage Prevention Ordinance in September 2024 to align with FEMA requirements, emergency funding allocations for flood recovery in January 2024, and additional support for flood relief efforts in March 2024. These actions reflect the Board's ongoing commitment to strengthening disaster recovery processes and maximizing federal assistance.

Under FEMA's recent update to the Public Assistance Program and Policy Guide (PAPPG) Version 5.0 applicants may be required to provide pre-incident photographs or video to establish the condition of assets before a disaster. This requirement formalizes the need for high-quality, proactive documentation to expedite reimbursement processes and ensure eligibility for funding. Without this preparation, delays, and outright denials of FEMA reimbursements can create significant fiscal challenges for county governments.

This initiative will position the County to meet new FEMA reimbursement eligibility requirements by implementing unique technology in infrastructure documentation. The documentation will also meet emergency reimbursement requirements for other federal agencies including Federal Highway Administration Emergency Relief Program and U.S. Housing and Urban Development recovery programs. The approach includes:

Core Capabilities

- Drone & Vehicle-Powered Imaging
 - o High-resolution aerial and ground-based drone/vehicle footage
 - o Capable of capturing geo-tagged, time-stamped, and audit-ready imagery
 - o Specialized sensors and cameras document assets inaccessible to traditional systems (e.g., underside of bridges, levees, culverts, drainage channels)
- Geospatial Database
 - o Proprietary, secure GIS-integrated database for storing, indexing, and retrieving infrastructure imagery
 - o Searchable by GPS coordinates, physical address, map interface clicks, or "Proximity Clipping"

- o Proximity Clipping technology ensures precise image retrieval (i.e., pulling multiple drone passes to select the clearest image)
- Permanent Digital Records
 - o Maintains imagery to meet federal reimbursement standards
 - o Provides an immutable archive for audits, federal reviews, and compliance checks

Software Platform: Uploading & Processing

- Secure Video Interface
 - o Upload and archive video/photographic files directly into a cloud-based system
 - o Duplicate upload protection ensures no redundant files are stored
 - o Built-in quality control identifies missing, outdated, or poor-quality images and prompts for retakes
- Automated Image Extraction
 - o Converts continuous drone video into high-quality still images at user-defined intervals
 - o Enhances search and retrieval functionality for large datasets
 - o Reduces manual labor in post-processing
- Rapid Distributed Processing
 - o Parallel processing framework accelerates upload-to-database time
 - o Ensures large-scale county datasets (tens of thousands of images) are available quickly during a disaster response and recovery
- Metadata Tagging
 - o Every file automatically tagged with:
 - o Latitude/longitude GPS coordinates
 - o Date/time stamp
 - o Drone ID/camera ID (for quality control and equipment tracking)

Today's action seeks single source authority to contract with Infrastructure Documentation Solutions. This vendor is uniquely qualified to provide these services because of their expertise in aligning infrastructure and facilities mapping and municipal documentation with FEMA emergency reimbursement requirements, along with their possession of and ability to use advanced technological systems to obtain the required documentation accurately.

By approving this request, the Board will position the County to expedite reimbursements, reduce fiscal challenges during recovery, and safeguard the \$10 billion portfolio of critical infrastructure that supports community resilience. This initiative aligns with the County's strategic focus on resilience, equity, and sustainability by ensuring that all communities, particularly those most vulnerable to disasters, benefit from timely recovery efforts and robust infrastructure protection.

RECOMMENDATION(S)

SUPERVISOR JOEL ANDERSON

Direct the Chief Administrative Officer (CAO) to:

1. Establish appropriations of \$2.5 million in the Office of Emergency Services, Services and Supplies from unassigned General Fund balance to immediately engage Infrastructure Documentation Solutions to map, catalog and database the unincorporated area's most vulnerable infrastructure. (4 VOTES)

2. In accordance with Board Policy A-87, Competitive Procurement, approve and authorize the Director of the Department of Purchasing and Contracting to enter into negotiations with Infrastructure Documentation Solutions and subject to successful negotiations and a determination of a fair and reasonable price, award a contract to map, catalog, and database infrastructure in the unincorporated area, for up to one year and an additional six months if needed, and to amend the contracts as needed to reflect changes to requirements and funding, subject to the approval of the Director of the Office of Emergency Services.
3. Direct the Chief Administrative Officer to oversee the contract implementation to begin the contracted work within 6 months of approval of this Board letter.
4. Direct the Chief Administrative Officer to report back to the Board of Supervisors the results of initial work and recommendations for ongoing compliance with new FEMA requirements.

EQUITY IMPACT STATEMENT

Lower-income communities are often the most severely affected by disasters and are heavily dependent on federally funded responses. This initiative will help ensure equitable recovery by strengthening the County's ability to secure FEMA reimbursements and expediting the rebuilding of essential infrastructure.

SUSTAINABILITY IMPACT STATEMENT

Critical infrastructure supports sustainable and healthy environments. By documenting and protecting these assets, including the County's maintained natural features, this initiative promotes resilience and ensures timely restoration of vital services after disasters.

FISCAL IMPACT

Funds for this request are not included in the Fiscal Year 2025-2026 Operational Plan in the Office of Emergency Services. If approved, this request will result in costs of \$2.5 million in Fiscal Year 2025-2026. The funding source is unassigned General Fund balance. There will be no change in net General Fund cost and no additional staff years. If approved, this request will result in current year costs of \$2.5 million.

BUSINESS IMPACT STATEMENT

The County's businesses depend on reliable infrastructure for their operations. This initiative ensures that critical infrastructure is repaired quickly and effectively post-disaster, providing substantial benefits to the business community.

ACTION:

ON MOTION of Supervisor Anderson, seconded by Supervisor Desmond, the Board of Supervisors took the following actions:

1. Direct the Chief Administrative Officer to develop a scope for a Critical Infrastructure Documentation Initiative that enhances the County's ability to inventory, map, and document critical infrastructure in order to expedite reimbursements and reduce fiscal challenges during disaster recovery and emergency response efforts, ensuring ongoing compliance with new FEMA requirements, including geotagging and video.

2. Direct the Chief Administrative Officer to explore opportunities for partnership and cost-sharing with other local jurisdictions, regional agencies, and entities to leverage data, expertise, and resources in developing and maintaining critical infrastructure documentation.
3. Authorize the Director of Purchasing and Contracting to issue a competitive procurement for services described in Action 1 and upon selection of a vendor and a determination of a fair and reasonable price, enter into negotiations with the successful vendor and within 120 days of this Board action, execute an agreement, subject to successful appropriations.
4. Direct the Chief Administrative Officer to identify funding for a procurement to map, catalog, and database the unincorporated area's most vulnerable infrastructure and return to the Board to establish appropriations of \$2.5 million for the procurement in the Office of Emergency Services during the first quarter operational status letter based on funding identified.
5. Direct the Chief Administrative Officer (CAO) to ensure that all data collection, storage, and sharing conducted under the Critical Infrastructure Documentation Initiative adhere to the following principles:
 - o A. Local Data Ownership and Use Limitations: All imagery, video, metadata, and associated records collected under this initiative shall remain the property of the County of San Diego. Such data may be shared with state or federal agencies solely for the purposes of disaster response, recovery, and reimbursement, and not for unrelated enforcement or surveillance activities.
 - o B. Data Privacy and Civil Liberties Safeguards: For the purposes of this initiative, the CAO shall, in consultation with the County's Office of Ethics and Compliance, develop clear guidelines governing drone deployment, data retention, public access, and third-party vendor use to ensure compliance with the California Consumer Privacy Act (CCPA) and County privacy policies.
 - o C. Vendor and Contracting Requirements: Any contractor or vendor engaged through this initiative shall be expressly prohibited from selling, sharing, or otherwise disclosing County data to any third party or federal entity, except as necessary for disaster recovery or reimbursement under this program.
 - o D. Transparency and Accountability: The CAO shall include, as part of the annual emergency management update, provide a public report to the Board detailing data collection activities, federal or state data-sharing instances, vendor relationships, and steps taken to protect resident privacy and community trust.

AYES: Aguirre, Anderson, Lawson-Remer, Montgomery Steppe, Desmond

State of California)
County of San Diego) §

I hereby certify that the foregoing is a full, true and correct copy of the Original entered in the Minutes of the Board of Supervisors.

ANDREW POTTER
Clerk of the Board of Supervisors



Signed
by Andrew Potter