

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING (“MOU”) is made and executed effective this _____ day of _____, 2022 (“Effective Date”), by and between the Center for Risk-Based Community Resilience Planning (“CoE”), the National Institute of Standards and Technology Engineering Laboratory (“NIST”), and the County of Monterey (“County,” and together with CoE and NIST, the “Parties”).

Article I. Scope, Objectives, and Authority

A. **Scope:** CoE and NIST plan to partner with six communities for development of resilience plans using the CoE Interdependent Networked Community Resilience Modeling Environment (“IN-CORE”) and NIST Community Resilience Planning Guide for Buildings and Infrastructure Systems: A Playbook (the “Playbook”). CoE and NIST will collaborate with the County, as one of the six partner communities, to support the County’s resilience planning, evaluation, and decision-making related to the County’s Hazard Mitigation and Community Resilience Plans. By participating in the collaboration, the County will be permitted to pilot various interdisciplinary resilience planning tools provided by IN-CORE and the Playbook.

The purpose of CoE and NIST involvement is to make IN-CORE useful and applicable to a wide range of communities, and to understand what data and information communities need for community resilience planning support. In addition, CoE and NIST want to build a user base for IN-CORE and enhance IN-CORE usability and responsiveness to community needs.

B. **Objectives:** CoE, NIST, and the County intend to document in writing the scope of the hazard preparedness collaboration and preferred milestones prior to starting the collaboration. If necessary, binding agreements may be executed to set terms for access to confidential information (e.g., a nondisclosure agreement). At the completion of the collaboration, CoE, NIST will document the outcomes of the collaboration, including feedback provided by the County so that IN-CORE and the Playbook can be improved to become more useful and applicable to a wide range of communities for resilience planning.

C. **Authority:** NIST and CoE enter into this MOU under the authorities granted by:

1. Title 15 United States Code Section 272 (b)(10), which authorizes NIST to cooperate with other departments and agencies of the federal government, industry, state and local governments, and private organizations in establishing standard practices, codes, specifications, and voluntary consensus U.S. standards.
2. Title 15 United States Code Section 272 (b)(11), which authorizes NIST to advise government and industry on scientific and technical problems.

Article II. Background

CoE is developing IN-CORE as a computational environment which will allow users to optimize community resilience planning and post-disaster recovery strategies using models of interdependent physical systems combined with socio-economic systems. The Playbook six-step process supports community resilience planning, including an inclusive planning process, by linking social and economic functions with the built environment, and establishing priorities to improve resilience for a range of natural hazards. CoE is integrating IN-CORE and the Playbook so that the six-step planning process can be informed by IN-CORE analyses. IN-CORE results are based on models of the community and natural hazard events to determine corresponding infrastructure damage, social and economic impacts, and recovery time, and to evaluate alternative policies and projects to improve community resilience. The combined use of the Playbook and IN-CORE can support informed, risk-based decision making for community resilience.

NIST and CoE are primarily interested in answering the following questions about how IN-CORE and the Playbook can be applied in communities:

- What information do communities need for decision support with respect to community resilience?
- What works well in IN-CORE and the Playbook for informing community resilience decisions?
- Where are the gaps and challenges in guidance, models, or outputs?
- What are the best approaches to communicate the outputs of IN-CORE and the Playbook with community stakeholders and decision makers?

Pursuant to this MOU, the County seeks to further CoE and NIST's objectives by participating in this collaborative as a test community, and in this capacity the County intends to update their Community Resilience Plan in conjunction with IN-CORE and the Playbook.

Article III. Responsibilities of the Parties

A. NIST/CoE intend to:

1. Provide IN-CORE models paired with the Playbook planning steps, and coordinate with the County to obtain data sets needed for running the models.
2. Provide technical guidance and support to the County on use of the IN-CORE interface in community resilience planning efforts.
3. Provide user instructions in the form of guides and handouts for community resilience professionals.
4. Provide technical guidance on translating IN-CORE outputs into resilience projects and policies.
5. Present default policy portfolios to be considered for adoption by the County, at the County's sole discretion, based on the results of IN-CORE models and resilience priorities of the County. It is understood by the Parties that such adoption of policy portfolios cannot be implemented by the County except upon public notice and hearing in compliance with various statutory and legal requirements, including, but not limited to, an appropriate

California Environmental Quality Act (CEQA) review. With respect to adoption of any policy portfolio, the County is responsible for compliance with CEQA and all other applicable law.

B. County intends to:

1. Identify and form a Core Resilience Team (“CRT”)—to include a diverse cross-section of participants, including resilience professionals—who will be representatives of and vested in a resilient future for the County.
2. Coordinate the resilience planning process in anticipation of a hazard event and use the Playbook and IN-CORE in that process.
3. Provide CRT members to: (i) participate in and provide input during CoE engagement workshops, and (ii) review and provide written feedback on draft reports and handouts developed by CoE, such as metrics development, resilience planning profiles, resilience policy portfolio development, and the IN-CORE interface.
4. Provide data to the CoE modelers to facilitate development of IN-CORE models for the County.

Article IV. Anticipated Results

A. CoE/NIST

1. Feedback and evaluation of Playbook and IN-CORE usability and features (e.g., interfaces, visuals, input and output data, and metrics) from County participants. County hereby acknowledges that such feedback may be used by CoE to compile a report for the County’s use of IN-CORE and the Playbook in its resilience planning activities to enhance alignment of IN-CORE and the Playbook with planning objectives.
2. Case study of County’s community resilience planning process using the Playbook and IN-CORE, including key lessons learned and considerations for other communities utilizing the Playbook and IN-CORE. CoE will prepare the case study with data gathered from its collaboration with the County, subject to the confidentiality provisions of this MOU and any separate agreement between the Parties regarding confidential information that may exist pursuant to Article V.B. CoE shall not proceed with publication of any case study or other report containing the data gathered from its collaboration with the County without written consent from the County to publish.
3. Development of training materials for use by County and other communities.

B. County

1. Written evaluation of County’s current vulnerabilities, institutional resilience planning capacity, and existing resilience plans and policies.
2. Memo documenting community resilience goals and metrics to inform future planning.
3. A set of policies and projects County may implement and adopt (at the County’s sole and absolute discretion) aimed at improving resilience in response to the findings of the collaboration.

4. Community report drafted by County on recommended resilience plan updates (e.g., community goals, plan updates and integration, updated or new policies, prioritized projects).

Article V. Miscellaneous

- A. **No funding:** All activities contemplated under this MOU are subject to and dependent upon the availability of appropriated funds, personnel, and resources, including, without limitation, the availability of funds approved by the County of Monterey Board of Supervisors and the limitations on future budget commitments provided under the California State Constitution and other applicable state and local law. Nothing in this MOU should be interpreted to constitute an obligation of funds. Each participant shall pay all its own expenses and costs related to activities pursued under this agreement, subject to availability of funds, unless some other arrangement is to be mutually agreed upon in advance by a separate written and binding agreement. Any financial arrangements should be negotiated on a case-by-case basis, as permitted by relevant law and regulations, and should be detailed in separate written agreements.
- B. **Confidential Information:** No confidential or proprietary information will be shared under this agreement. If at some point the Parties wish to exchange such information, such exchange shall occur pursuant to a separate written and binding non-disclosure agreement.
- C. **Non-binding Agreement:** This MOU is a statement of intent of the Parties to cooperate and collaborate as outlined. This MOU is not legally binding and does not create legally binding duties or obligations. This MOU shall not be the basis of any legal claim between the Parties.
- D. **Notice.** All notices and communications hereunder shall be in writing and shall be delivered by hand, mailed by registered or certified mail, delivered by an express courier, or sent via email to the addresses designated by the Parties below. Notices sent via courier shall be deemed given and effective two (2) business days following the date of mailing, and notices sent via registered or certified mail shall be deemed given and effective on the date of receipt. All other forms of notice allowed hereby shall be deemed effective when given. A Party may update their address for notice by providing notice to the other Party in the manner provided for herein.

To NIST:

Name
Title
Address
Email Address

To County:

Name
Title
Address
Email Address

- E. **Counterparts.** The Parties may execute this MOU in counterparts, each of which is deemed an original, but all of which together constitute one and the same agreement.

Article VI. Duration of Agreement and Discontinuation

This MOU is to commence on the Effective Date and continue for a period of three (3) years, unless discontinued earlier by either Party in writing. This MOU may be extended if needed and desired by mutual written consent of the Parties.

This MOU may be modified by mutual written consent of the Parties. The Parties may review and decide to continue their cooperation at regular intervals.

IN WITNESS WHEREOF, CoE, NIST and County have executed this MOU to commence on the Effective Date as first written above.

COUNTY:

County of Monterey

Gerry Malais
Director of the Office of Emergency Services

Date

Approved as to form
Office of the County Counsel
Leslie J. Girard, County Counsel

[Name]
[Title]

Date

CENTER FOR RISK-BASED COMMUNITY RESILIENCE PLANNING:

[Name]
[Title]

Date

Center for Risk-Based Community Resilience Planning

[Name]

Date

[Title]

Center for Risk-Based Community Resilience Planning

**NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY ENGINEERING
LABORATORY:**

[Name]

Date

[Title]

National Institute of Standards and Technology Engineering Laboratory

[Name]

Date

[Title]

National Institute of Standards and Technology Engineering Laboratory