

**JUSTIFICATION FOR  
CONTRACTS BETWEEN STATE AGENCIES**

In accordance with 11-35-710 of the South Carolina Consolidated Procurement Code and Budget and Control Board action of November 5, 1984:

A. SC Office of Resilience formerly SCDRO/Dept of ADMIN proposes to contract with  
Hazards & Vulnerability Research Institute/University of South Carolina  
(1) (2)  
for the following goods or services:

B. Please see attached original contract agreement and new scope of work to amend the original agreement. Four required elements identifies: where recovery has taken place, demographic analysis of applicants and recipients, geographic patterns in recovery progression, and summary and recommendations.  
(3)

The proposed scope of work assess the validity of using SoVI for targeting areas for recovery resources based on those most in need. The proposed scope of work examines the relationship between the initial selection of areas using SoVI and FEMA verified los data and the outcomes as seen through completed projects.

C. The determination of "Cost Justification" for this contract: Please see attached addendum and contract agreement.  
(4)

D. Estimated Cost Savings: \$ \$40,000  
(5)

E. I certify that this is not a Sole Source contract.

F. **NOTE :** This contract is subject to the Drug Free Workplace Act if the stated or estimated value is fifty thousand dollars (\$50,000) or more.

\$40,000  
VALUE OF CONTRACT

1-Year  
TERM OF CONTRACT

John H. C. White  
APPROVED MMO

6 March 21  
DATE APPROVED

SC Office of Resilience, 632 Rosewood Dr. Columbia, SC  
AGENCY NAME AND ADDRESS

[Signature]  
AUTHORIZED SIGNATURE

Chief Resilience Officer  
TITLE

April 5, 2021  
DATE

- NOTES:**
- (1) Requesting Agency.
  - (2) Contractor Agency.
  - (3) List items giving full description and unit price (or) a full description of the services to be performed and price.
  - (4) This determination must relate to cost - a breakdown of elements; how cost was determined; the price is fair and reasonable.
  - (5) Estimated Total Potential Cost Savings.

**DISTRIBUTION:** Two (2) copies to the Materials Management Office. One (1) approved form will be returned.  
Use reverse side for continuation or use attachments. A copy of the contract agreement **must be attached** for review.

## **Scope of Work**

### **Post-Audit of Social Vulnerability Metrics Supporting Disaster Recovery**

Submitted by  
Susan L. Cutter, Director  
Hazards & Vulnerability Research Institute  
University of South Carolina

### **Synopsis**

South Carolina's Action Plans for Recovery for the 2015 Floods (Presidential Disaster Declaration #4241), and 2016 Hurricane Matthew (Presidential Disaster Declaration #4286) used social vulnerability (as measured by the Social Vulnerability Index or SoVI) to identify the most impacted and most vulnerable areas from each disaster. Combining SoVI in census tracts with FEMA verified loss data in declared Individual Assistance (IA) designated counties highlighted the greatest need amongst the vulnerable populations that became high priority areas for HUD CDBG-DR recovery resources administered through SCDRO. Of particular interest are the HUD-identified most impacted and distressed (MID) counties in these two declarations. These nine counties include: Charleston, Clarendon, Dorchester, Florence, Georgetown, Horry, Marion, Sumter, and Williamsburg. Also of interest are the seven HUD-identified non-MID counties in the same declarations: Berkeley, Calhoun, Colleton, Darlington, Dillon, Lee, and Orangeburg.

The state received roughly \$156.7 million in HUD recovery overall for the 2015 Floods, but SCDRO only oversaw \$96.8 million within the state government area of responsibility. SCDRO has spent 96% of those funds, the majority in the MID counties. For the Hurricane Matthew Recovery, the state received \$65.3 million with 99% of the funds expended, again, the majority in MID counties.

The purpose of the project is to assess the validity of using SoVI for targeting areas for recovery resources based on those most in need. The project will examine the relationship between the initial selection of areas using SoVI and FEMA verified loss data and the outcomes as seen through completed projects. We pose three broad questions:

- 1) Are the completed projects located in the initially targeted census tracts defined as high social vulnerability with high FEMA loss counts? If not, what factors might account for the discrepancies?
- 2) Do the demographic characteristics of applicants at the census tract level compare to the overall social vulnerability for that census tract, thereby partially validating SoVI as a tool for targeting unmet needs post-disaster?

3) Are there any geographic disparities in the recovery progression from applicant to key turnovers? What might account for such disparities at either the county or census tract level?

The scope of work below describes the tasks and deliverables of this project.

## **Scope of Work**

### **1. Where has recovery taken place?**

Task Description: Geographic comparisons of point locations of recovered housing to pre-defined social vulnerability levels

Data Source(s): SCDRO address data for completed housing projects

Deliverables:

- a. maps and statistical analyses of SoVI and address/tract comparisons for MID counties
- b. maps and statistical analyses of SoVI and address/tract comparisons for non-MID counties
- c. Findings Brief on geospatial targeting and its effectiveness

### **2. Demographic analysis of applicants and recipients**

Task Description: Geospatial analyses of the demographics of applicants

Data Source(s): SCDRO case management data on applicants, Census data

Deliverables:

- a. Statistical comparisons of applicant/recipient demographics between census tracts for MID and non-MID counties (are the applicants/recipients representative of the overall demographics of the census tract)
- b. Analysis of the over/under represented demographic factors based on tract means from Census data
- c. Assessment of how well SoVI reflects the demographic characteristics of applicants/recipients at the census tract level
- d. Findings Brief on congruence between demographics and SoVI

### **3. Geographic patterns in recovery progression**

Task Description: Assess the geographic disparities in the progression of recovery from applicant-drop out-award letters-construction in progress-key turnovers

Data Source(s): SCDRO case management data (race/ethnicity, age, income, household head etc.) SCDRO monitoring data on applicants through key turnovers by address

Deliverables:

- a. Match the progression to location (addresses then aggregate to census tracts)
- b. Examine census aggregate where incomplete process occur—drop out, award letter, key turnover to ascertain geographic disparities
- c. Identify factors at county and census tract level for key stages—drop out, award letter, key turnover—to help explain disruptions in the process (e.g. household composition changes such as new family members, health issues, job status; structural issues such as financing; construction delays/timing).
- d. Findings Brief on recovery patterns including a map illustrating the geographic progression patterns

**4. Summary and recommendations**

**Task Description:** Document summarizing the findings and recommendations to SCDRO for improving targeting and assurance of reduced geographic disparities in recovery

**Data Source(s):** Project findings, consultations with SCDRO staff

**Deliverables:**

- a. Short white paper on findings along with some actionable recommendations for future recovery program monitoring to enhance future disaster resilience
- b. Briefings to SCDRO staff as requested

**Budget and Budget Justification**

Project Duration: May 16, 2021-May 15, 2022

Total: \$40,000

Item	Cost
Project Director	\$5,000
Graduate Student (12 month)	20,000
Fringe (.3009) faculty/staff	1,505
Fringe (.006) graduate asst. AY	93
Fringe (.0828) graduate asst. sum.	373
<b>Subtotal personnel</b>	<b>\$26,970</b>
Data and supplies	217
Contractual services	2,100
Travel	125
Subtotal	29,412
Indirect costs (.36)	10,588
<b>TOTAL</b>	<b>\$40,000</b>

Personnel: Dr. Cutter will manage and oversee the work and ensure that the task deliverables are met. She will also provide consulting and/or advisory services on an “as needed” basis for SCDRO. The budget includes one week of her academic salary (equivalent to 40 hours). One graduate student will assist working 20 hours a week for the 9 month academic year, and 20 hours/week during the summer months.

Fringe: Fringe is charged at 30.09% for faculty. The fringe charged for graduate students who are enrolled is 0.60% (academic year), and 8.28% during the summer.

Data and Supplies: Miscellaneous supplies include color cartridges for printing maps and color-coded spreadsheets.

Travel: This includes any outside Columbia travel to meet with county officials and/or

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stakeholders during the duration of the project.

**Contractual Services:** HVRI computer usage is billed at \$21/hour to cover computer maintenance, and site licenses for statistical and geospatial software. A total of 100 hours is billed as a direct charge to the project.

**Indirect Costs:** Facilities and administration costs are charged at the rate of 36% of modified total direct costs (excluding tuition, for example) for service contracts for on campus work.

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