

**STATE OF HAWAII
REQUEST FOR SOLE SOURCE**

STATE PROCUREMENT OFFICE
STATE OF HAWAII

TO: Chief Procurement Officer

FROM: Dept. of Business, Economic Development and Tourism /Office of Planning/Coastal Zone Management
(Department/Division/Agency)

Pursuant to §103D-306, HRS, and Subchapter 9, Chapter 3-122, HAR, the Department requests sole source approval to purchase the following:

Description of goods, services, or construction:

HAZUS-MH 2004 software now includes a hurricane loss estimation module that may have useful applicability in Hawaii in emergency planning and hazard mitigation. However, there is no published validation of the model for Hawaii hurricane losses. The research investigator shall perform a case study to provide a validation assessment. A Hurricane Iniki scenario case study shall be conducted of HAZUS-MH versus parcel-geocoded reconstruction cost databases for each community on Kauai, representative of 1992 conditions. Services shall include the following:

- Create a 1992-equivalent building inventory mapping scheme for Kauai within HAZUS-MH by processing of the property tax-derived database.
- Assemble the actual loss data for Kauai according to census tract mapping and HAZUS-compatible specific building types to produce damage data summaries in categories comparable to HAZUS-MH output.
- Perform HAZUS-MH Hurricane Module run using windfield parameters for Hurricane Iniki and compare damage and direct losses by census tract and by specific building type.

Name of Vendor:	Martin & Chock, Inc.	Cost: \$75,000
Address:	1132 Bishop Street, Suite 1550 Honolulu, Hawaii 96813	

Term of Contract: (18 months)	From: (approx. start date) December 1, 2004 <i>upon execution of Contract</i>	To: May 31, 2006	Prior Sole Source Reference No.
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The goods, services, or construction has the following unique features, characteristics, or capabilities:

Derivative from original damage and reconstruction data originally collected by the Kauai Office of Emergency Permitting, the processed loss cost database developed by Chock is a very detailed property-geocoded database of Iniki losses for building structures on private property across the entire island of Kauai. It includes damage states, damage type, reconstruction cost, and reconstruction duration. Past information on Hurricane Iniki damage to Hawaii buildings of residential, commercial, and resort occupancies were gathered and geo-referenced on GIS. Comprehensive reconstruction cost documentation were validated by georeferenced overlay of post-hurricane aerial photography and linked to a robust 1992-era property tax database of construction material and specific building type attributes, year built or altered, and property valuation, building size, height, configuration, etc. This included indigenous Hawaii construction features. The customized linked databases can now be used in conjunction with geocoded parcels in GIS to create 1992 equivalent census tract occupancy mapping schemes for general building stock in HAZUS-MH. By this means, HAZUS-MH results for Hurricane Iniki can be compared to actual damage data for an *equivalent* building inventory representation. Independent validation of Hurricane Iniki losses for this model will not be performed by FEMA and must be done by the State of Hawaii.

REQUEST FOR SOLE SOURCE (Cont.)

How the unique features, characteristics, or capabilities are essential for agency to accomplish its work:

CZM (Coastal Zone Management) Hawaii partners with state and county agencies in the development of their multi-hazard mitigation plans. It is also anticipated that these products will be published by DBEDT/CZM or SCD and that they will be utilized in informational briefings to planners and emergency managers. This study will indicate whether the HAZUS-MH hurricane module could adequately serve (with further work) to use for certain loss estimation applications of potential hurricane events for emergency response planning in Hawaii and the Pacific. The overall effort will support CZM's goals to implement effective public safety planning and mitigation of coastal hazards and to identify issues with vulnerabilities of existing structures.

The following other possible sources for the goods, services, or construction were investigated but do not meet our needs because:

The nature of the work is specialized research involving a unique knowledge of structural engineering, wind engineering, Hawaii construction history, probabilistic modeling and statistical inference, economic risk analysis, electronic database customization, and expertise in ArcView and ArcGIS Geographic Information Systems and HAZUS-MH. The combined knowledge of the customized computer modeling of this region and building inventory is uniquely held by this investigator. The Insurance Div. of the Dept. of Commerce and Consumer Affairs has indicated that it does not want the Kauai property loss database developed by Chock to be released to outside parties. Thus, it is also necessary that this study be performed in Hawaii by the originator of the customized and proprietary database. Please see attached letter from Major General Robert Lee.

Direct questions to: Ann Ogata-Deal _____ Phone: 587-2804 _____

I certify that the information provided above is to the best of my knowledge, true, correct and that the goods, services, or construction are available through only one source.

[Handwritten Signature]

DEC 06 2004

Department Head or Designee

Date

Title (If other than Department Head)

Chief Procurement Officer's comments:

[Empty box for Chief Procurement Officer's comments]

Please ensure adherence to applicable administrative and statutory requirements.

Expenditure may be processed through a purchase order: Yes No In no, a contract must be executed and funds certified.

APPROVED DISAPPROVED

[Handwritten Signature]
Chief Procurement Officer

12/17/04
Date

STATE OF HAWAII NOTICE OF SOLE SOURCE

The Chief Procurement Officer is in the process of reviewing the request from the Department of Business, Economic Development & Tourism for the sole source purchase of the following goods, services, or construction:

HAZUS-MH 2004 software now includes a hurricane loss estimation module that may have useful applicability in Hawaii in emergency planning and hazard mitigation. However, there is no published validation of the model for Hawaii hurricane losses. The research investigator shall perform a case study to provide a validation assessment. A Hurricane Iniki scenario case study shall be conducted of HAZUS-MH versus parcel-geocoded reconstruction cost databases for each community on Kauai, representative of 1992 conditions. Services shall include the following:

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Vendor: Martin & Chock, Inc.

Address: 1132 Bishop Street, Suite 1550
Honolulu, Hawaii 96813

Term of Contract:

From: non-execution Date
~~December 1, 2004~~ To: May 31, 2006

Cost:

\$75,000

Direct any inquiries to:

Department: Business, Economic Development & Tourism

Contact Name/Title: Ann Ogata-Deal/Planning & Policy Analyst

Address: P.O. Box 2359, Honolulu, Hawaii 96804

Phone Number:

(808) 587-2084

Fax Number:

(808) 587-2899



Date Notice Posted: 12/10/04

A copy of this notice of sole source shall be posted by the Chief Procurement Officer and the purchasing agency in an area accessible to the public, at least seven (7) calendar days prior to any approval action.

Submit written objections to this notice to issue a sole source contract within seven (7) calendar days from the date this notice was posted to:

Chief Procurement Officer

Office/Agency _____

Address _____