

Executive Summary

Board of Governors Meeting, March 25, 2020

Exposure Reduction Study

Recommended Vendor: Florida State University (FSU)
Contract Number: 20-20-3001-00

History

At the December 11, 2019 Board Meeting I presented an approach for your consideration to conduct an independent study to assure that Citizens is taking advantage of all opportunities to further reduce exposure. I recommended that we approach FSU to conduct the study due to their prior work in this area for the Florida Legislature. We have subsequently been working with FSU to complete the Exposure Reduction Study that is detailed in your Board Book.

This proposed study would identify any opportunities to reduce Citizens exposure as well as opportunities to expand and strengthen the Florida Admitted Property Market. Given the current financial issues many Florida Domestic Companies face and a marketplace that is offering fewer opportunities for Floridians to obtain affordable Property Insurance I believe this study is necessary to identify any impediments that stand in the way of providing competitive alternatives for Floridians. Completion of this study will identify opportunities for Citizens Board of Governors to consider and provide input for the Florida Legislature prior to the March 2021 Legislative Session. Unless there are questions, I would like to read the recommendation.

Recommendation

Staff recommends that Citizens Board of Governors:

- a) Approve the contract for an Exposure Reduction Study with FSU for a total cost of \$265,696 for the term beginning April 2020 and ending December 2020; and,
- b) Authorize staff to take any appropriate or necessary action consistent with this Action Item.

ACTION ITEM

CONTRACT ID	EXPOSURE REDUCTION STUDY CONTRACT NUMBER: 20-20-3001-00 RECOMMENDED VENDOR: FLORIDA STATE UNIVERSITY (FSU)
BUDGETED ITEM	No. Cost will be absorbed within our approved board budget.
CONTRACT AMOUNT	\$265,696
PURPOSE / SCOPE	<p>In 2011, Citizens' policy count peaked at approximately 1.5 million policies with approximately \$510 billion in total exposure. Since then, positive legislative actions, the Citizens' Clearinghouse initiative, and robust depopulation policies have improved Citizens' position in the marketplace. Currently Citizens' policy count is approximately 443,000 policies with approximately \$110 billion in total exposure. This success was accomplished while balancing the need to provide superior service to Citizens' policyholders and to protect all Floridians from potential assessments. Citizens believes now is an appropriate time to obtain an independent analysis of further exposure reduction opportunities.</p> <p>To that end, at the December 11, 2019 Board of Governors meeting, President Gilway presented an approach to conduct an independent analysis to ensure Citizens is taking advantage of all opportunities to reduce exposure and fulfill its mission as a residual market insurer. President Gilway recommended to the Board that Citizens pursue a contract with FSU and its Florida Catastrophic Storm Risk Management Center (Department of Risk Management/Insurance, Real Estate & Legal Studies) to perform this independent analysis. FSU is recognized nationally for its highly regarded studies related to Florida's property insurance market. The feedback provided by the Board in December is reflected in the recommended contract and scope of work negotiated by Citizens' Vendor Management Office.</p> <p>The FSU proposal is to perform the Exposure Reduction Study over an eight-month period, with delivery of the final report anticipated by December 2020 at a cost not to exceed \$265,266. The proposed analysis will:</p> <ul style="list-style-type: none">a. Identify opportunities for Citizens to further reduce its exposure while continuing to fulfill its mission as a residual market insurer,b. Identify inhibitors to Citizens' further depopulation and identify strategies to expand Citizens' depopulation; and,c. Identify mechanisms to eliminate or reduce the re-population of risks by Citizens tracking the risks specifically depopulated.
CONTRACT TERM(S)	April 2020 through December 2020

ACTION ITEM

PROCUREMENT METHOD	This purchase is exempt from competitive solicitation requirements as a service provided by a governmental entity, pursuant to s. 287.057(3)(e)12., F.S. and Citizens Purchasing Policy II.E.4.
RECOMMENDATION	Staff recommends that Citizens Board of Governors: <ul style="list-style-type: none">a) Approve the contract for a Exposure Reduction Study with FSU for a total cost of \$265,696 for the term beginning April 2020 and ending December 2020; and,b) Authorize staff to take any appropriate or necessary action consistent with this Action Item.
CONTACT	Barry Gilway, President, CEO, and Executive Director

February 3, 2010

Barry J. Gilway
President/CEO & Executive Director
Citizens Property Insurance Corporation
Executive Office
301 West Bay Street
Jacksonville, FL 32202

Regarding: Citizens Exposure Reduction Analysis – Requested Scope of Services

Dear President Gilway,

Per our conversation and your follow up email dated December 17, 2019, the Florida Catastrophic Storm Risk Management Center is highly interested and pleased to respond to Citizens Property Insurance Corporation's "Requested Scope of Services for Exposure Reduction and Depopulation Opportunities Analysis."

The attached proposal addresses the purpose of the analysis, the questions being explored, and boundaries and constraints. We have put together a work plan as a general guide to our activities related to the scope of the project. I have been designated as the principal investigator and; therefore, will be the project manager, coordinator, and contact for Citizens. Four full-time faculty members in our Department of Insurance/Risk Management will be involved (see our bios on page 8 of the proposal). In order to enhance our analysis, we plan to use hurricane modeling resources. We will interact closely with Citizens and seek input from a wide variety of interested parties in the process. Our ultimate goal will be to provide you with various analyses in order to identify opportunities to further reduce Citizens exposure as well as to identify opportunities to expand the use of the admitted market. This will involve both quantitative and qualitative approaches.

The fee for the project will be \$265,266. Payments will be broken down into four installments which will be requested following the completion of various milestones or deliverables. Approximately, every two months, we will provide you with an update. The start time for the project will be March 1, 2020, and the target completion date is October 1, 2020, when we deliver our final written report. Additionally, we will be available for follow up, to respond to questions, and to present the report as requested. If selected, we will execute any necessary confidential agreements to protect data and information as required by Citizens.

Given the date of your next board meeting, we may need to adjust the start and end date. The next step after your board approves the project will be for Citizens to contact Rose Driber who is our Grants Office in the Sponsored Research Administration area at Florida State University. She

will work with Citizens on the terms of the contract. Her email is rdriber@fsu.edu and phone number is 850-644-8652.

Please let us know if you have any questions or need any further information and thank you for giving the Florida Catastrophic Storm Risk Management Center at Florida State University the opportunity to respond to your research needs.

Sincerely,

Jack E. Nicholson, PhD

Research Faculty I

Director of the Florida Catastrophic Storm Risk Management Center

Department of Risk Management/ Insurance, Real Estate & Legal Studies

The Dr. William T. Hold/The National Alliance Program in Risk Management and Insurance Program

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Citizens Property Insurance Corporation
Exposure Analysis
March 1, 2020 to October 1, 2020

submitted by:



FLORIDA STATE UNIVERSITY
COLLEGE OF BUSINESS

**Proposed Scope of Services –
Citizens Property Insurance Corporation Exposure Analysis**

Project: Citizens Property Insurance Corporation Exposure Reduction and Depopulation Opportunities Analysis

Principal Investigator: Jack E. Nicholson, Director
Florida Catastrophic Storm Risk Management Center
Department of Risk Management/Insurance, Real Estate & Legal Studies
Florida State University College of Business
821 Academic Way, Suite 233
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jnicholson@business.fsu.edu
(850) 644-8217

Florida State University Sponsored Research Contact:

Gary K. Ostrander
Vice President for Research
874 Traditions Way, 3rd Floor
Tallahassee, FL 32306-4166
sra-pre@fsu.edu
850-644-5260

Sponsor/Funding Agency: Citizens Property Insurance Corporation (Citizens)

Sponsor Project Manager: Barry Gilway, President & CEO or designee
Citizens Property Insurance Corporation
Executive Offices
301 West Bay Street
Jacksonville, FL 32202
Office: 850.513.3744
Email: Barry.Gilway@citizensfla.com

Proposed Project Dates: March 1, 2020 to October 1, 2020

Submitted: January 2020



FLORIDA STATE UNIVERSITY
COLLEGE OF BUSINESS



Citizens Property Insurance Corporation Exposure Analysis Proposal

March 1, 2020 to September 30, 2020

Project Objective/Summary

Florida is a peak risk zone given its large exposure to hurricanes. As a result, residential property insurance prices tend to be relatively high in Florida, and insurers must carefully manage their hurricane exposure within their financial constraints. During the last ten years, reinsurance markets have been favorable with falling prices which have enabled many property insurers in the admitted market to expand their writings.

Citizens Property Insurance Corporation was created by the Florida Legislature in August 2002 as a not-for-profit, tax-exempt, government entity. Its mission is to provide insurance protection to Florida policyholders who are entitled to but are unable to find property insurance coverage in the private market.

Citizens has been highly successful at reducing its exposure to one of the lowest levels since its creation in 2002. With ten years of no land-falling hurricanes in Florida from 2006 to 2015, property insurance prices have in many cases fallen or remained stable. However, some market problems have impacted consumer rates such as the assignment of benefits issue which was recently addressed in the 2019 Legislative Session. Although the Florida property insurance market has not been disrupted, the hurricanes that occurred in 2016, 2017, and 2018 have focused attention on the reinsurance markets. Going forward, some insurers (but not all) are expecting to see reinsurance rates increase. This could make it difficult for some Florida insurers to continue to purchase moderately priced reinsurance at some attachment layers. At this time, it is unclear which direction the reinsurance markets and the magnitude of any pricing impact will take for the year 2020.

Citizens has made significant efforts and has been highly successful at managing its risk. It has a large surplus position and a strong risk transfer program. The difficult question, which arises now, is – what more can be done? This analysis will endeavor to answer this question from the approach of how Citizens can reduce its exposure (not solely policy count) as well as what can be done to enable the admitted market carriers to enhance their writings to prevent policies from being placed in Citizens. The ideal situation would be to create a competitive private market such that Citizens would have a much smaller role as a residual insurer. This would reduce risks to the people and businesses of Florida and strengthen the long-term financial security of the state through greater reliance on the private market.

This document outlines a proposed set of tasks to assist the understanding of Citizens' current and evolving position within the Florida residential property insurance market. The proposed scope of services includes robust analyses that will identify opportunities to further reduce Citizens Property Insurance Corporation's exposure in the Florida property insurance market and/or to expand the use of the admitted market before a risk is placed with Citizens.

This project, if awarded, would be managed by the Florida Catastrophic Storm Risk Management Center in the Department of Risk Management/Insurance, Real Estate, and Legal Studies (RMI) in the College of Business at Florida State University. The Storm Center and the RMI Department have participated in other insurance related projects and insurance market studies for the State of Florida and are pleased to submit this proposal.

The project is proposed as a 7-month project beginning in March 2020 and concluding in September 2020. This should allow adequate time for the results to be considered by Citizens well in advance of the 2021 Legislative Session. Dr. Jack E. Nicholson, the Director of the Florida Catastrophic Storm Risk Management Center (Storm Center) will be the project manager, coordinator, and contact. Dr. Cassandra Cole, Dr. Kathleen McCullough, and Dr. Chuck Nyce will comprise the remainder of the project team. Brief bios for these individuals are included on page 7 of this document.

The proposed cost for this project is \$263,013.

PROPOSED SCOPE OF SERVICES

The requirements for the successful completion of this project are varied, but the end goal is to identify measures and actions that can be taken to further reduce Citizens' exposure and determine ways to enhance the capabilities of the private market to take on more residential property risks. Florida is a moving target with a growing population and a vibrant economy with increasing insurance needs. As a result, this research will require creativity and the generation of innovative and perhaps untried ideas.

In the course of this project, certain boundaries and constraints will be considered that will guide the applicability of the project's final analysis and various recommendations. Important considerations as required by Citizens are the following:

- reducing Citizens' actual exposure;
- promoting the private market's retention of risk depopulated by Citizens;
- maintaining Citizens' tax-exempt status;
- protecting the favorable status of Citizens' outstanding bonds;
- maintaining Citizens' ability to provide levels of customer service that are comparable to the standards of the private market;
- and maintaining adequate organizational capacity and capability that enables Citizens to respond to significant market fluctuations.

The primary deliverable of this project will be a final report that addresses the scope of services as specified by Citizens in order to meet the needs and challenges in today's current insurance market. This final report will be derived from a set of specific tasks that are defined below. An estimate of the time/composition of the task for the entire project is also included.

TASK 1: Background Research & Literature Review [15% of Project]

The purpose of Citizens will be examined from the vantage point of its formation in 2002. The evolution of the private market will also be described as well as the nature and causes of change over time. Citizens' history of exposure reduction including successes, shortfalls, and various complicating issues will be investigated. Legislative changes, administrative actions, past hurricane losses, and financial events will be reviewed in the context of their impact on Citizens exposure variations over time. Residual wind insurers in other coastal states will be reviewed in order to identify actions that they have taken to deal with accumulations of exposures in their various state residual markets. This process will also involve a review of academic literature, trade publications, insurance industry reports, and government reports.

TASK 2: Identifying and Establishing Core Industry Questions [10% of Project]

Citizens has identified nine questions that require exploration. In summary, these questions are:

- A.** What strategies or approaches have other residual market insurers successfully implemented which could benefit Citizens in its efforts to further reduce exposure and/or depopulate?
- B.** How could Citizens further encourage private market carriers to “take out” Citizens’ policies?
- C.** How could Citizens promote the retention of risk by the private market following depopulation of that risk from Citizens?
- D.** What are market hindrances to the further depopulation of Citizens?
- E.** What does the impact of Florida’s property insurance market structure—with a high level of domestic carriers and a reliance on reinsurance—have on Citizens’ role as a residual market insurer?
- F.** How could Citizens optimize its role as a residual market insurer to create conditions which would promote the availability of additional capital in Florida’s property insurance market?
- G.** What additional measures could Citizens take to decrease the likelihood and/or impact of assessments?
- H.** How could Citizens further improve its overall financial strength, which affects, for example, Citizens’ bond rating, Florida’s bond rating, and the overall financial strength of the State?
- I.** For any recommended opportunities:
 - 1. What would the impact be on Citizens’ access to capital markets and traditional reinsurance?
 - 2. What are the implications to Citizens’ ability to respond to significant market fluctuations?
 - 3. What is the expected business outcome and what would be the expected benefits resulting from the recommended opportunity?
 - 4. Does the opportunity conflict with a boundary or constraint, and, if so, what is a feasible mitigating measure?

These questions will be addressed in the context of the methodology that will be used to develop the answers. Several of the questions relate to identifying new approaches for exposure reduction, ways to encourage more private market participation to reduce Citizens exposure, the identification of hinderances to further depopulation by Citizens, ways to optimize Citizens’ role to encourage private market participation in writing more risk, ways to improve Citizens overall financial strength, etc.

TASK 3 Initial Formulation of Ideas/Approaches [12.5% of Project]

This task involves an understanding of Citizens' past attempts to reduce its exposure as well as attempts to expand the private market. The current residential property insurance market circumstances and environment will be reviewed. Our faculty team will consider various creative ideas given the historical context of the Florida market as well as recent trends and developments. The hurricanes of 2016, 2017, 2018, and 2019 will be considered as well as the impact that they are having on the admitted insurance company market and the reinsurance market.

TASK 4: Interviews with Interested Parties & Stakeholders [12.5% of Project]

The initial/preliminary formulation of ideas/approaches will be discussed with various interested parties and stakeholders. These will include insurers, insurer associations, agents, reinsurers, insurance regulators, legislative staff, rating agencies, financial market participants, hurricane modelers, and the state's risk taking entities which include Citizens, the Florida Hurricane Catastrophe Fund, and the Florida Insurance Guaranty Fund. Discussions will also incorporate residual market insurers in other states and their national organization.

TASK 5 Data Collection & Analysis [35% of Project]

Data collection and analysis is critical to the success of this project. Task 5 will involve the collection of various types of data from Citizens and the private market. The data will include exposure data, financial data, loss data, solvency measures, market share data, and other operating data. Data will be collected regarding trends and growth with respect to the type of insurer – Citizens, Florida domestics, national insurers, and domestic subsidiaries of national insurers. Other financial and reinsurance data will be collected as well. Most of this data will be from publicly available sources as well as insurance industry secondary sources. The data may involve the creation of surrogate measures where certain confidential exposure data cannot be provided directly by insurers. For example, public data regarding the number of policyholders for individual companies can be combined and weighted with aggregate zip code exposure data in ways to approximate individual insurer exposure for various locations in the state. This will be useful for hurricane modeling purposes.

A hurricane model will be used to determine the optimal exposure for Citizens and the private market and whether the existing exposure can be theoretically reallocated to minimize Citizens' exposure and maximize that of the private market. Other analyses will be done by creating various charts, graphs, and figures to understand the trends over time and identify what approaches can be used to continue favorable trends and reverse unfavorable trends.

The intent is to obtain the services of Karen Clark and Company (KCC) to conduct the hurricane modeling. The firm is in Boston, Massachusetts, and the anticipated price of this service is \$85,000 for modeling and consulting on the design of the project and results. This is generally

lower than the market price for comparable types of hurricane modeling services. As such, the \$85,000 figure is based on the price paid to modelers by the Florida Hurricane Catastrophe Fund (FHCF), which uses hurricane models for its ratemaking. The KCC model also is unique in that it can do Characteristic Event (CE) methodology, which is a proprietary approach that supplements the major financial approach used for insurer exposure risk management known as Probable Maximum Loss (PML) analysis. PML is a “one number” approach that is not capable of recognizing “hidden pockets” of risk based on the various locations of policies across the state. The CE approach will be useful in that it will allow for an optimization approach to Citizens book of business in conjunction with various insurers’ books of business. It is expected that this approach can optimize ways to minimize Citizens exposure and maximize private market participation in the state. It is noted that the residential exposure in Florida is \$2.6 trillion including over 6 million policies written by 160 insurers (Source: FHCF). Numerous hurricane simulations (50,000 or more) are needed to derive the relevant numbers for each of these insurers.

TASK 6: Revised Formulation of Idea/Approaches [5% of Project]

Once the data collection, modeling, and analytical tasks have been done, the faculty team will revise and reformulate the initial ideas/approaches created in task #3. The approaches will be divided into those that reduce Citizens exposure and those that expand the private market. The various questions asked by Citizens will be considered for each approach to ensure that the analysis is complete and satisfies Citizens concerns as stated in its “request for services” document.

TASK 7: Final Report [10% of Project]

At the conclusion of this project, a comprehensive final report will be submitted to Citizens. This report will include findings from the tasks previously outlined including recommendations to accomplish Citizens goals of reducing its exposure and of identifying ways to expand the private residential property insurance market. A draft report will be initially produced which will allow comments and feedback from Citizens’ designated project manager. Various edits will be incorporated in the final document which can be shared, at Citizens’ discretion, with other stakeholders including the Florida Legislature.

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The faculty members working on this project may desire to conduct further analysis separate from this project and will agree to notify Citizens and obtain prior agreement before proceeding with any attempt of publish various papers or articles. If necessary, agreements to not use or protect confidential information will be executed for the protection of Citizens.

Project Schedule

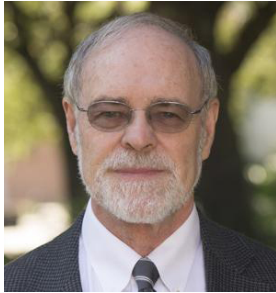
Based on the scope of services and needs of Citizens, this project will require 7-months for completion. Although many of the tasks will be ongoing, a proposed project schedule is provided below.

Table 1: Proposed Project Schedule

	March 2020	April 2020	May 2020	June 2020	July 2020	Aug 2020	Sept 2020	Oct. 2020
Task 1: Background Research	X	X						
Task 2: Core Research Questions	X	X						
Task 3: Initial Formulation of Ideas/Approaches			X	X				
Task 4: Discussion with Interested Parties & Stakeholders			X	X				
Task 5: Data Collection & Analysis	X	X	X	X	X			
Task 6: Revised Formulation of Ideas/Approaches						X	X	X
Task 7: Final Report						X	X	X
Progress Reports		X		X		X		X

PROJECT PERSONNEL

The team assembled for this project is comprised of the following FSU College of Business faculty.



Dr. Jack Nicholson, Director
Florida Catastrophic Storm Risk Management Center

Dr. Nicholson served as the Chief Operating Officer of the Florida Hurricane Catastrophe Fund for the State Board of Administration of Florida for 21.5 years. Prior to that, he was a senior level manager for the Florida Department of Insurance and also taught at Florida State University and the University of Iowa. He received his Ph.D. from the University of Georgia and an obtained his M.B.A. from the University of North Dakota while serving as an officer in the United States Air Force. Dr. Nicholson has been involved in hurricane catastrophe issues from a regulatory, legislative, and administrative standpoint since Hurricane Andrew in 1992.



Dr. Cassandra Cole, Chair
Department of Insurance/Risk Management, Real Estate, and Legal Studies
Dr. William T. Hold Professor in Risk Management & Insurance Director of the MS-RMI

Dr. Cole is the department chair and Director of the MS-RMI Program. Dr. Cole's articles have appeared in numerous journals including the *Journal of Risk and Insurance*, the *North American Actuarial Journal*, *Applied Economics*, the *Journal of Insurance Issues*, the *Risk Management and Insurance Review*, and the *Journal of Insurance Regulation*. She currently serves as co-editor of the *Journal of Insurance Regulation* and a member of the Spencer Educational Foundation Board of Directors.



Dr. Kathleen McCullough
Associate Dean for Academic Programs
State Farm Professor of Risk Management/Insurance

Dr. McCullough is an associate dean. In her position as associate dean, she oversees academic strategy, academic policy, accreditation/assurance of learning and research programs. This includes oversight of all academic programs and interfacing with university-level administration on these issues. She is also the State Farm Insurance Companies Professor in Risk Management and Insurance in the Department of Risk Management/Insurance, Real Estate and Legal Studies.



Dr. Charles Nyce
Robert L. Atkins Associate Professor of Risk Management and Insurance

Charles Nyce is the Robert L. Atkins Associate Professor of Risk Management and Insurance at Florida State University. He previously served as the Associate Director of the Florida Catastrophic Storm Risk Management Center from 2009 through 2012. His main research area is catastrophic risk financing. He joined the Center in 2009 after serving as Senior Director of Knowledge Resources for the American Institute for CPCU. He has authored numerous articles on a variety of risk management and insurance topics, including title insurance, IPOs, enterprise risk management, predictive analytics and natural hazards. He has his Ph.D. from the Wharton School at the University of Pennsylvania and has taught risk management and insurance at LaSalle University, The University of Hartford and the University of Georgia.

PROPOSED PROJECT FUNDING

The proposed budget for this project is \$263,013. The budget includes both direct and indirect expenses as estimated for an operational period of eight (8) months beginning on March 1, 2020 and ending on October 1, 2020.

Budget Category	Amount
Salaries	\$ 129,483.00
Fringes	\$ 12,724.00
Hurricane Modeling Services KCC	\$ 85,000.00
Printing, Proofreading, and Editing Services	\$ 1,500.00
Total Direct Costs	\$ 228,707.00
Indirect Costs @ 15%	\$ 34,306.00
TOTAL PROJECT COSTS	\$ 263,013.00

Invoicing and Reporting

This project is proposed as a percentage complete project. The project manager will submit four bi-monthly progress reports at the conclusion of each two-month reporting period as identified in Table 1 (page 7). The Final Report (Task 7) will serve as the fourth and final report. Invoices will then be generated and submitted to the project sponsor by Florida State University's Sponsored Research Accounting Services using the same time frame. Any supporting deliverables will also be submitted at that time. The progress reports will provide detail on the level of completion by both task and project. Invoicing shall occur no later than 90 days of the close of each reporting period.

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Any questions or comments about the information contained within this document can be directed to:

Jack E. Nicholson, Director
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