# **Executive Summary**

Actuarial & Underwriting Committee Meeting, July 13, 2021

Board of Governors Meeting, July 14, 2021

## Catastrophe Modeling Software – 21-02-0030-00

### Topic

Citizens is requesting approval to contract with AIR Worldwide Corporation for Catastrophe Modeling Software. This software is used to estimate Citizens' exposure to hurricane losses, in order to ensure actuarial sound rating, improve risk management, enhance risk transfer decision-making, and assist in catastrophe reserving and real-time hurricane event response. Approval is requested for a five (5) year base term with a three (3) year renewal option, for an amount not to exceed \$4,849,039 for the life of the contract.

#### **History**

Citizens is seeking approval to contract with AIR Worldwide for Catastrophe Modeling Software through a cloud based, software as a service solution. Citizens uses this software to estimate Citizens' exposure to hurricane losses through AIR's proprietary modeling methodologies approved by the Florida Commission on Hurricane Loss Projection Methodology. These modeled hurricane loss results are needed for ratemaking and regulatory reporting, for making decisions as a storm is approaching, and for estimating losses immediately after a storm.

More technically, Citizens' Catastrophe Modeling Team uses the software to model full probabilistic loss distributions of annual aggregate and occurrence losses broken down in a variety of ways, including by total portfolio, policy, location, reinsurance layer, region, and event. It is used to prepare Citizens' annual aggregate and single occurrence modeled loss results, including return period loss, tail value at risk, and average annual loss, on both a monthly and quarterly basis. These modeled loss results are needed at building/location level as well as at the portfolio level.

The software also delivers real time event modeling. This includes mapping components that provide visual representations of Citizens' exposure, a hazard component that can retrieve detailed information for exposure data, and the ability to assess a location's exposure to a given tropical cyclone. It provides direct access to stochastic and historical event database tables which include event descriptions. Convenient access to exposure and loss databases for post processing and detailed queries are also provided.

Citizens' current catastrophe modeling software is provided by AIR Worldwide Corporation and is housed on Citizens' network. This contract expires on December 16, 2021.



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## **Actuarial & Underwriting Committee Meeting, July 13, 2021**

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The requested contract was negotiated on best value to Citizens pursuant to Invitation to Negotiate No. 20-0030 for Catastrophe Modeling Software System. The ITN was issued on October 9, 2020. Citizens received responses from three (3) vendors: AIR Worldwide Corporation, Eqecat, Inc (dba CoreLogic) and Risk Management Solutions, Inc. After review and scoring, the Evaluation Team recommended advancing all three (3) vendors to negotiations. Citizens' negotiation team recommended AIR Worldwide Corporation for award on April 13, 2021, after conducting negotiations with all three (3) vendors.

The contract is for a five (5) year base term with one (1), three (3) year renewal option. Approval is requested for an amount not to exceed \$4,849,039 including renewals.

#### Recommendation

Staff proposes that the Actuarial and Underwriting Committee review, and if approved recommend the Board of Governors:

- a) Authorize Citizens to contract with AIR Worldwide Corporation for an initial term of (5) years, and for a three (3) year optional renewal term, for an amount not to exceed \$4,849,039 for the life of the contract, as set forth in this Action Item: and
- b) Authorize staff to take any appropriate or necessary action consistent with this Action Item.



# **Actuarial & Underwriting Committee Meeting, July 13, 2021**Board of Governors Meeting, July 14, 2021

<b>⋈</b> ACTION ITEM		□ CONSENT ITEM	
		□ Contract Amendment	
☐ Contract Amendment		☐ Existing Contract Extension	
□ Other		☐ Existing Contract Additional Spend	
		☐ Previous Board Approval	
		□ Other	
Action Items: Items requiring detailed explanation to the Board. When a requested action item is a day-to-day operational item or unanimously passed through committee it may be moved forward to the board on the Consent Index.  Move forward as Consent: This Action item is a day-to-day operational item, unanimously passed through committee or qualifies to be moved forward on the Consent Index.  Consent Items: Items not requiring detailed explanation to the Board of Governors. Consent items are contract extensions, amendments or additional spending authorities for items previously approved by the Board.			
Item Description	Catastrophe Mode	ling Software	
Purpose/Scope	Corporation for Catas software as a service exposure to hurricand approved by the Flori These modeled hurri-reporting, for making losses immediately a corporate decision management proces	eeks Board approval to contract with AIR Worldwide strophe Modeling Software services through a cloud based, e solution. Citizens uses this software to estimate Citizens' e losses through AIR's proprietary modeling methodologies da Commission on Hurricane Loss Projection Methodology. Cane loss results are needed for ratemaking and regulatory decisions as a storm is approaching, and for estimating after a storm. They are used in portfolio management and making to ensure actuarially sound rates, improve risk ses, enhance risk transfer decision-making, and assist in g and catastrophe event response.	
Contract ID	Catastrophe Modeling Contract number: 21-	02-0030-00	
		or: AIR Worldwide Corporation	
Budgeted Item	⊠Yes		
	□No	0004 O (' P   1   1   1   1   1   1   1   1   1	
	Funding included in contract year.	2021 Operation Budget and annually for each respective	

# **Actuarial & Underwriting Committee Meeting, July 13, 2021**Board of Governors Meeting, July 14, 2021

Procurement Method	This contract was procured pursuant to Invitation to Negotiate.: 20-0030. The ITN was issued on October 9, 2020. Three (3) vendors were advanced to the negotiation phase. Citizens' negotiation team recommended AIR Worldwide Corporation for award on April 13, 2021, after conducting negotiations with all three vendors.		
Contract Amount	Not to exceed \$4,849,039 for the life of the contract (including the renewal term)		
Contract Terms	Five (5) year base term with one optional three (3) year renewal term.		
Committee Recommendation	Staff proposes that the Actuarial and Underwriting Committee review, and if approved recommend the Board of Governors:		
	<ul> <li>a) Authorize Citizens to contract with AIR Worldwide Corporation for an initial term of five (5) years, and for one (1) three (3) year optional renewal term, for an amount not to exceed \$4,849,039 for the life of the contract, as set forth in this Action Item; and</li> </ul>		
	b) Authorize staff to take any appropriate or necessary action consistent with this Action Item.		
Board Recommendation from Committee	If approved at its July 13, 2021, meeting, the Actuarial & Underwriting Committee recommends that the Board of Governors:		
	<ul> <li>a) Authorize Citizens to contract with AIR Worldwide Corporation for an initial term of five (5) years, and for one (1) three (3) year optional renewal term, for an amount not to exceed \$4,849,039 for the life of the contract, as set forth in this Action Item; and</li> </ul>		
	b) Authorize staff to take any appropriate or necessary action consistent with this Action Item.		
Contacts	Jennifer Montero, Chief Financial Officer		