County Policy Proposal
Submitted by: Pinellas County
Contact: JanetCLong@PinellasCounty.org

GATE-8: Resiliency

GATE Committee Recommendation:
Action 1: Adopt
Action 2: Incorporate into guiding principles (*see proposed GATE 17 in Guiding Principles)*

Proposed Policy:

Action 1: SUPPORT the development of a Florida Resiliency Plan.

Action 2: SUPPORT collaboration among regional coalitions focused on resiliency and climate change in order to maximize resources, share information, analysis, and best practices, and foster useful collaboration.

Issue Summary:
Florida is one of the most vulnerable places to the impacts of a changing climate. Floridians are seeing sea level rise, increasing hurricane intensity, heavy rainfall, flooding, and other extreme weather events. Extreme weather and other sustained threats have the potential to severely impact community and economic development priorities, public health and natural resources. The State of Florida and its 67 counties must be prepared to both adapt to climate impacts such as sea level rise - already in the pipeline - and to reduce the principle driver of climate change with clean energy solutions so not to exacerbate the problem. A number of local and regional efforts are well underway or are developing around the state to address these challenges: the Tampa Bay Regional Resiliency Coalition; the decade old Southeast Florida Regional Climate Compact; the East Coast Florida Regional Planning Council; and, P2R2 (the Public/Private Partnership Regional Resiliency Committee of the Northeast Florida Regional Council in the Jacksonville area).

In light of the critical need and efforts underway, we propose **two actions**:

1. The development of a Florida Resiliency Plan with consistent statewide analysis and datasets and tools that improve integration of observed and projected knowledge about climate change into decision-making) starting with vulnerability assessments across key, multiple sectors (agriculture, tourism, insurance) and regions/characteristics (floodplains, watersheds and springs). Efforts and planning to become more resilient will incorporate local/regional adaptation efforts already underway.
2. Support the formation of a Consortium of Regional Resiliency Collaboratives (eg. the Tampa Bay Regional Resiliency Coalition and the Southeast Florida Regional Climate Compact) in Florida to share information and analysis, best practices and foster useful collaboration. This effort will foster research, technical reports, and provide for recommendations and information to directly inform vulnerability assessments and adaptation strategies for Florida's energy sector, water resources and management, oceans and coasts, forests,

wildfires, agriculture, biodiversity and habitat, and public health. For example, the value of resiliency will be considered in how counties promote the health and safety of the public, minimize loss of life, and reduce economic losses caused by flood damages.

Background:
Florida is ground zero for the impacts of climate change and policies to guide the state and local governments lags behind where we need to be. That said, many in Florida already see the benefits of regional collaboration. Tampa Bay has a legacy of successful regional collaborations building strong science to guide decisions and planning efforts. The South Florida local governments launched the Southeast Florida Regional Climate Change Compact in 2010. It is one of the nation's leading examples of regional-scale climate action mechanism for collaboration on climate adaptation and mitigation efforts. It's time that Florida Counties lead the way in planning for our future.

Analysis:
Karen Clark and Company in 2015 released a report that stated, while every coastal location is subject to storm surge flooding from the 100-year hurricane, the largest losses are concentrated in relatively few places along the coast. Four of the top cities are in Florida; the west coast of this state is more vulnerable than the east coast and Tampa/St Petersburg is the metropolitan area most vulnerable to flooding damage with a loss potential of $175 billion. Using Geographic Information Systems, economic impact software, county property records and employment data, the Tampa Bay Regional Planning Council (TBRPC) prepared The Cost of Doing Nothing: Economic Impacts of Sea Level Rise in the Tampa Bay Region to consider the potential impacts of year round flooding on the regional economy. Together these impacts bear cumulative costs of $162 billion to the region's Gross Regional Product. We must get out in front of these challenges with thoughtful planning for adaptation, resiliency and sustainability.

Fiscal Impact:
There is no specified financial impact for the collaboration and planning process. There is however, an opportunity to avoid costs down the road. Miami Beach is spending $600 million in pumps and raising roads. The City of Miami has just directed $192 in bond money to pay for climate impacts. There is also a concern about lost revenues to local governments. The Union of Concerned Scientists in their recent analysis of Zillow data under a sea level rise projection of an average of 1.8 feet of sea level rise for Florida in 2045 and 6.4 feet in 2100 entitled Underwater said that by 2045, about 64,000 of today's residential Florida properties, currently home to more than 100,000 people, are at risk of chronic inundation. Miami, the Florida Keys and the Tampa-St. Petersburg area stand out as being highly exposed within the next 30 years. This number jumps to more than 1 million properties at risk by 2100—about 10 percent of the state's current residential properties and home to approximately 2.1 million people today. More than 40 percent of the nation's homes at risk in 2100 are in Florida. The total value, in today's dollars, of Florida's at-risk properties is the largest of any coastal state. By 2045, about $26 billion-worth of residential properties are at risk of chronic flooding. The million-plus homes that would face this

flooding at the end of the century are currently worth more than $351 billion. Florida's municipalities could take a large hit to their property tax revenues in 2045 and the greatest hit of all coastal states in the lower 48 at the end of the century. The homes at risk in 2045 currently contribute nearly $350 million in annual property tax revenue to their municipalities. The homes at risk by 2100 currently contribute roughly $5 billion collectively in annual property tax revenue. Florida ranks second in 2045 and first in 2100 for the most commercial properties at risk in the lower 48. By 2045, about 2,300 of today's commercial properties, currently valued at more than $3 billion, are expected to experience chronic inundation. In 2100, this number jumps to more than 37,500 properties valued at roughly $46 billion today. Approximately 35 percent of the nation's commercial properties at risk at the end of the century are in Florida.