



Plan and Policy Resiliency Integration Survey Summary 2018

Regional Resiliency Action Plan
East Central Florida Regional Planning Council



Introduction:

Summary:

The ECFRPC is working with local, regional, state, and federal communities, departments and agencies to develop a regional resilience action plan for coastal east central Florida. This survey was developed to provide insight into the progress of integrating resiliency into various local and regional plans and policies.

Goal:

The goal of the Regional Resilience Action Plan is to increase the ability of local and regional stakeholders to implement resiliency and climate adaptation strategies across disciplines. It is important to note that this action plan encompasses a variety of resiliency aspects and aims to incorporate discussion on infrastructure (water, energy, waste, etc.), health, planning, emergency preparedness, economics and leadership.

Major Finding:

East Central Florida jurisdictions and agencies are working toward resiliency, though as indicated lack of resources may be a hindrance to substantial work and policy development. The majority of staff feels they are prepared and educated to address resiliency. Regional agencies and jurisdictions feel there is a real concern about Sea Level Rise and climate impacts at a community and staff level. Many agencies and communities are engaging stakeholders in “resiliency” conversations and looking at future conditions as a matter responsibility practice not policy.

Link to Survey: <https://www.surveymonkey.com/r/policyimplementation>



Survey Summary Results:

Who responded to the survey?

29 respondents

| Local Governments | Agencies |
|--|---|
| City of Satellite Beach | FDOT |
| Volusia County | Space Coast TPO |
| Volusia County Emergency Management | River to Sea TPO |
| Volusia County Growth and Resource Management | Canaveral Port Authority |
| City of Rockledge | SJRWMD |
| City of Titusville | Indian River Lagoon Council |
| City of Ormond Beach | FDOT – District 5 |
| City of Cape Canaveral | Department of Economic Opportunity |
| Brevard County Natural Resources Management Department | University of Florida IFAS Extension Brevard County |
| Town of Melbourne Beach | East Central Florida Regional Planning Council |
| City of Cocoa | NASA Kennedy Space Center |
| New Smyrna Beach | |
| City of Indian Harbour Beach | |
| City of Orange City | |
| County of Volusia | |



Question 5: Have you adopted required Peril of Flood policies into the most recent version of the Coastal Element of your Comprehensive Plan? (<http://www.adaptationclearinghouse.org/resources/florida-sb-1094-e-an-act-relating-to-the-peril-of-flood-e.html>)

| Response Results | |
|------------------|--|
| 10.71% | It is in draft form and working through the Commission and DEO |
| 50.00% | Not applicable to our jurisdiction/agency. |
| 32.14% | We have not drafted language yet. |
| 7.14% | Yes, it has been adopted. |

Question 6: Have you identified and adopted Adaptation Action Areas in the most recent version of the Coastal Element of your Comprehensive Plan?

| Response Results | |
|------------------|---|
| 7.14% | Yes, we have adopted AAAs. |
| 0.00% | It is in draft form and working through the Commission and DEO. |
| 28.57% | We intend to consider AAA but have not drafted language yet. |
| 0.00% | We do not intend to adopt AAAs. |
| 21.43% | We are interested but have not yet due to lack of capacity (staff, time, resources, money, etc.). |
| 42.86% | Not applicable to our jurisdiction/agency. |



Question 7: Please consider the following question in reference to the plans below: Has your agency or jurisdiction implemented future water levels (i.e. sea level rise, nuisance flooding) into the following plans? Leave unchecked if not applicable.

| Response Results | Plans |
|------------------|---|
| 40.00% | Stormwater Master Plan |
| 10.00% | Conservation Plan |
| 25.00% | Floodplain Management Plan |
| 35.00% | Comprehensive Plan |
| 10.00% | Long Range Transportation Plan |
| 5.00% | Local Mitigation Plan |
| 15.00% | Capital Improvement Plan |
| 10.00% | Sustainability Action Plan |
| 10.00% | Building Codes |
| 5.00% | Strategic Regional Policy Plan |
| 5.00% | Sustainability Plan |
| 5.00% | Beach Renourishment/Dune Restoration Plan |
| 30.00% | Other |

Other (please specify)- **30.00%**

- “Assessment of future water supplies”; - *SJRWMD*
- “Future water levels are being considered for the 2045 LRTP” - *R2CTPO*
- “State of the System Report (next year's)” - *Space Coast TPO*
- “Comprehensive Emergency Management Plan” - *VCEM*
- “We will begin to include in our Comprehensive Economic Development District Strategy. We work with local communities and agencies to incorporate future water level conditions in various plans and policies. We conduct vulnerability assessments.” - *ECFRPC*



Question 8: Please consider the following question in reference to the plans below: Has your agency or jurisdiction implemented future climate conditions and associated impacts (i.e. heat, drought, invasive species, disease, food security, etc.) into the following plans? Leave unchecked if not applicable.

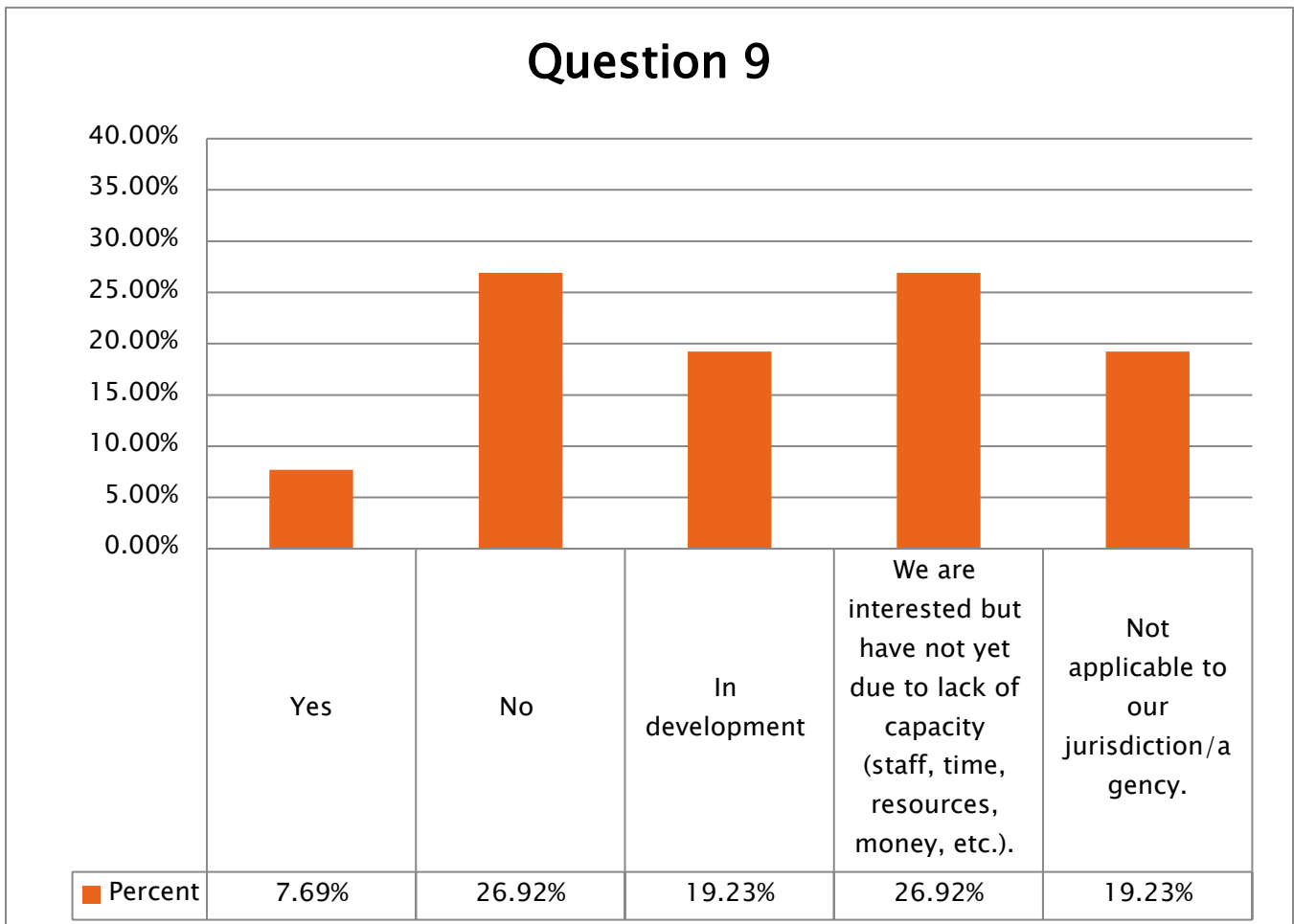
| | |
|--|--|
| 3 respondents implemented future climate conditions and associated impacts into these plans. | Comprehensive Plan |
| 2 respondents implemented future climate conditions and associated impacts into these plans. | Stormwater Master Plan Conservation Plan Floodplain Management Plan Long Range Transportation Plan Sustainability Plan |
| | Strategic Regional Policy Plan Long Range Transportation Plan Sustainability Action Plan Building Codes Community Rating System Roadway Design Manual |
| 38.46% | *Other (please specify)* |

Other (please specify)- **38.46%**

- “Landscape/Land Clearing Ordinance includes provisions for invasive species, keeping diversity to prevent diseases and measures against heat island effects, but not specifically related to Climate Change”- *Brevard County Natural Resources Management Department*
- “Assessment of future water supplies”- *SJRWMD*
- “We will begin to include in our Comprehensive Economic Development District Strategy.” - *ECFRPC*
- 2 responses “No/ Not yet”

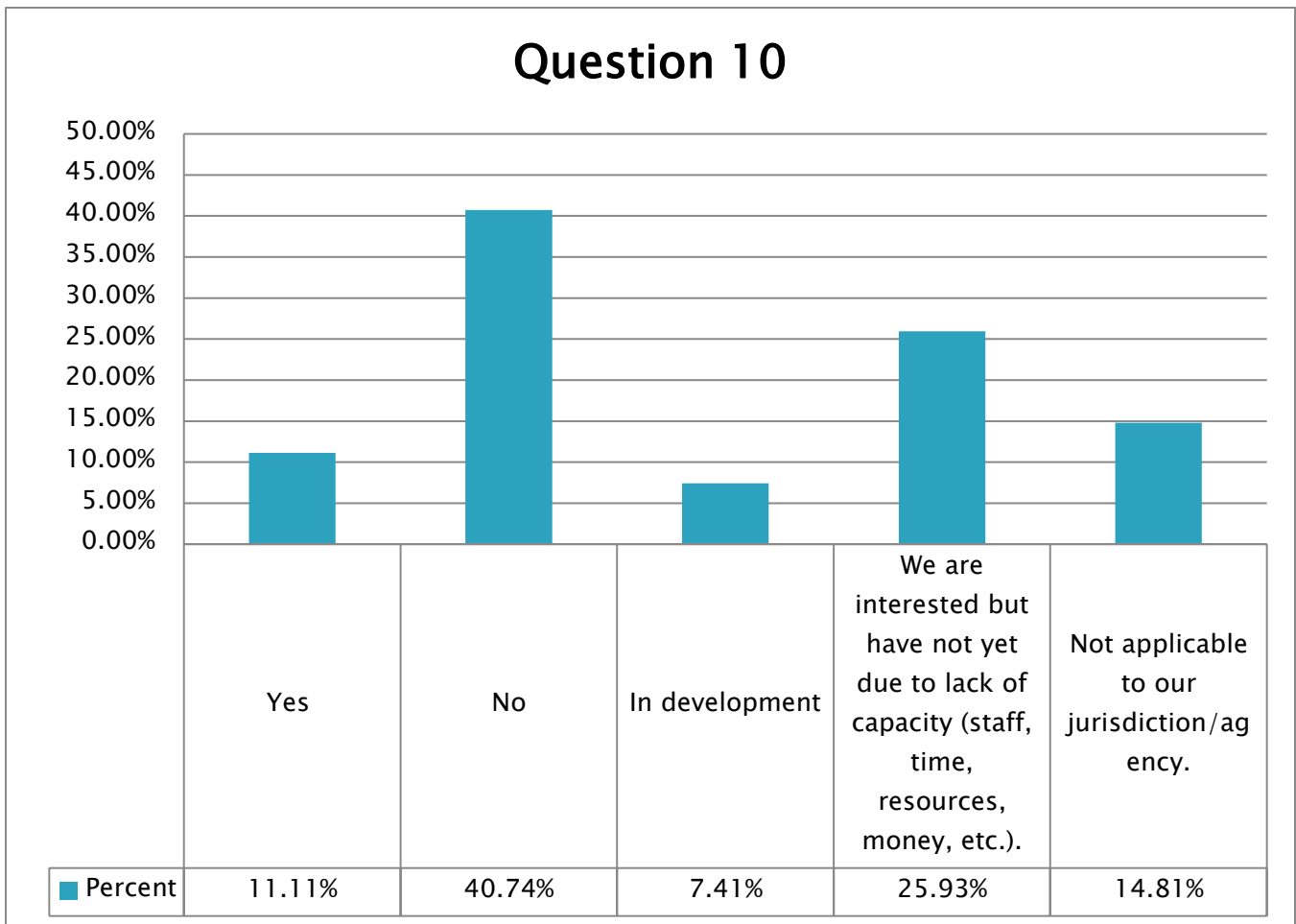


Question 9: Does your agency or jurisdiction have an adopted Resiliency Plan?



Yes/In Development- *City of Satellite beach, Volusia County, City of Ormond Beach, River to Sea TPO, Town of Melbourne Beach, IRL Council.*

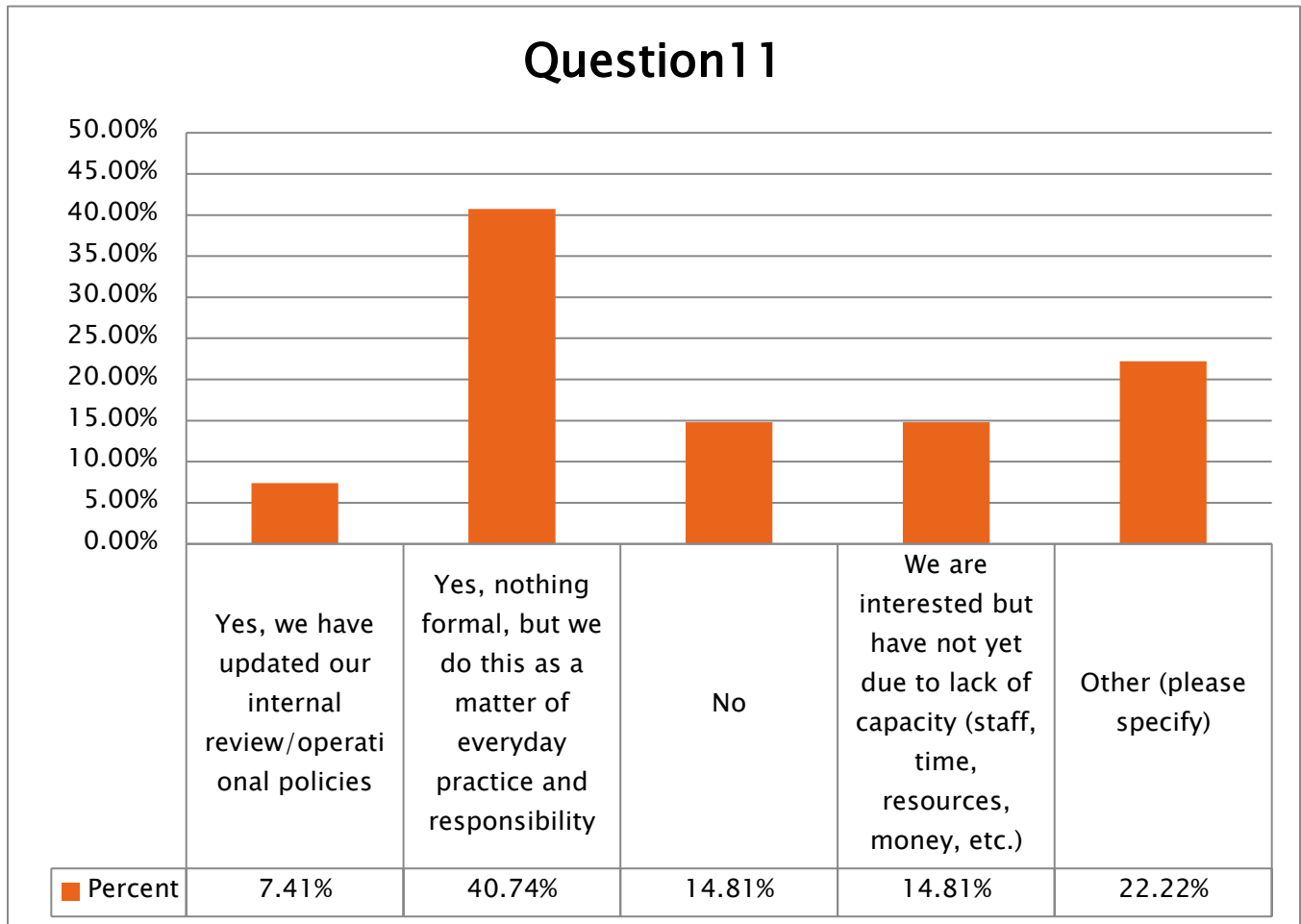
Question 10: Does your agency or jurisdiction have an adopted Sustainability Plan?



Yes/In Development– *City of Satellite Beach, Volusia County, City of Ormond Beach, Town of Melbourne Beach, NASA Kennedy Space Center.*



Question 11: Has your agency or jurisdiction issued policies or direction to assess projects and proposals with a resiliency lens (i.e. future flood conditions, ecosystem migration, and sustainability)?



Yes/Yes, nothing formal– *City of Satellite Beach, City of Rockledge, Space Coast TPO, FDOT, City of Ormond Beach, Town of Melbourne Beach, IRL Council, FDOT– District 5, Department of Economic Opportunity, City of Cocoa, University of Florida IFAS Extension Brevard County, ECFRPC, NASA Kennedy Space Center.*

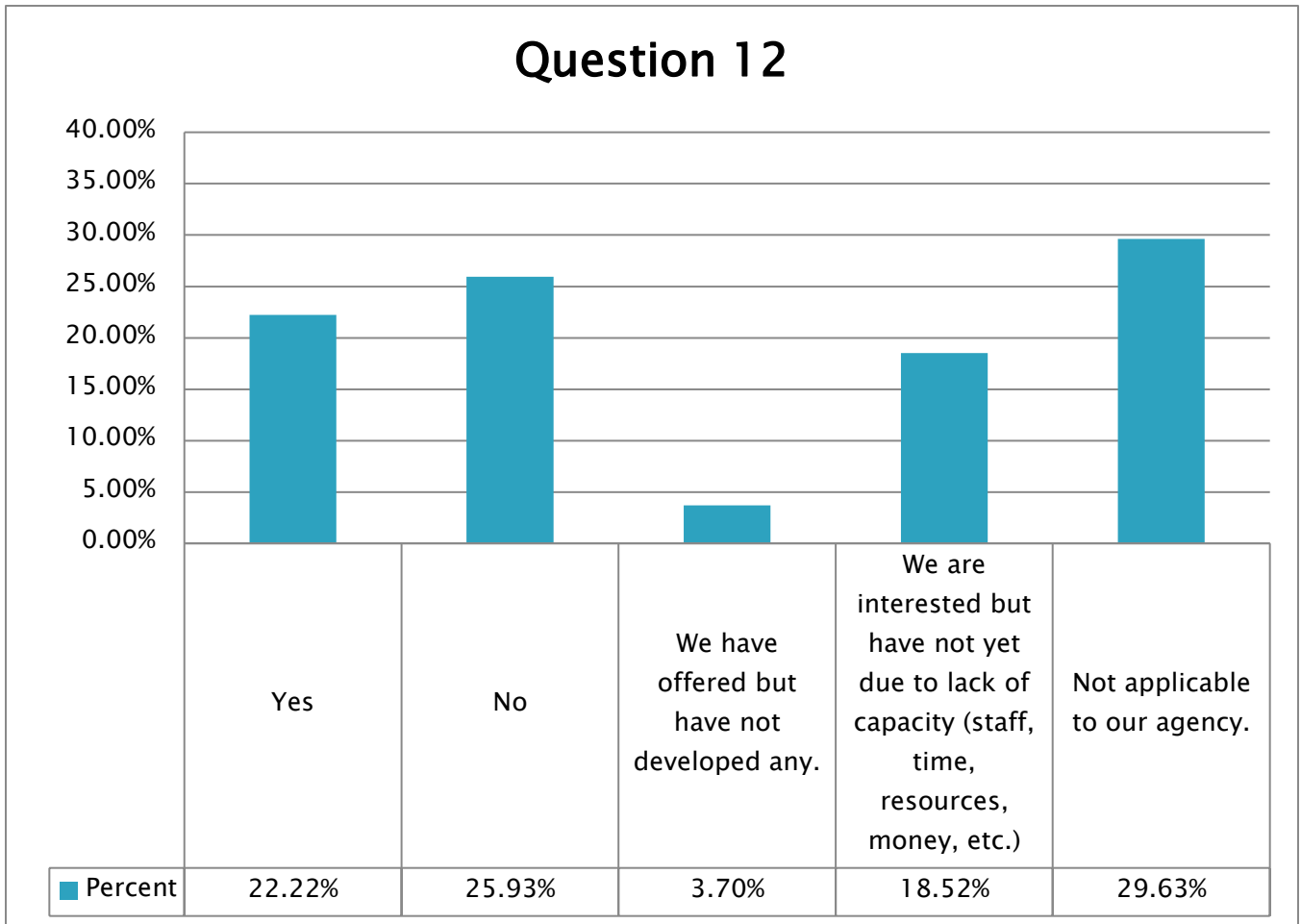


Other (Please Specify)–

- “Yes, for Federal grant applications to elevate flooded homes.” – *VCEM*
- “In development.” – *River to Sea TPO*
- “Flood Plain Regulation.” – *Canaveral Port Authority*
- “Started project with ECFRPC.”– *Brevard County Natural Resources Management*
- “Defer to our Drainage/Permitting section” – *FDOT*
- “Resiliency is entering the window of planning”– *SJRWMD*



Question 12: Has your agency or jurisdiction worked with small businesses to develop Continuity of Operations Plans (COOP) as disaster or major business interruption can have significant impacts on small businesses?



Question 13:

Has your agency or jurisdiction completed a vulnerability assessment in any of the following areas?

| Response Results | Areas |
|------------------|--|
| 28.00% | Transportation Infrastructure |
| 20.00% | Water Infrastructure (storm, waste, sewer) |
| 12.00% | Social vulnerability |
| 16.00% | Environmental resources/ natural systems |
| 16.00% | General asset and area assessment |
| 0.00% | Groundwater Supply |
| 12.00% | We have not conducted a vulnerability assessment. |
| 24.00% | We are interested but have not yet due to lack of capacity (staff, time, resources, money, etc.) |
| 8.00% | Not applicable to our agency/jurisdiction. |
| 28.00% | *Other (please specify)* |

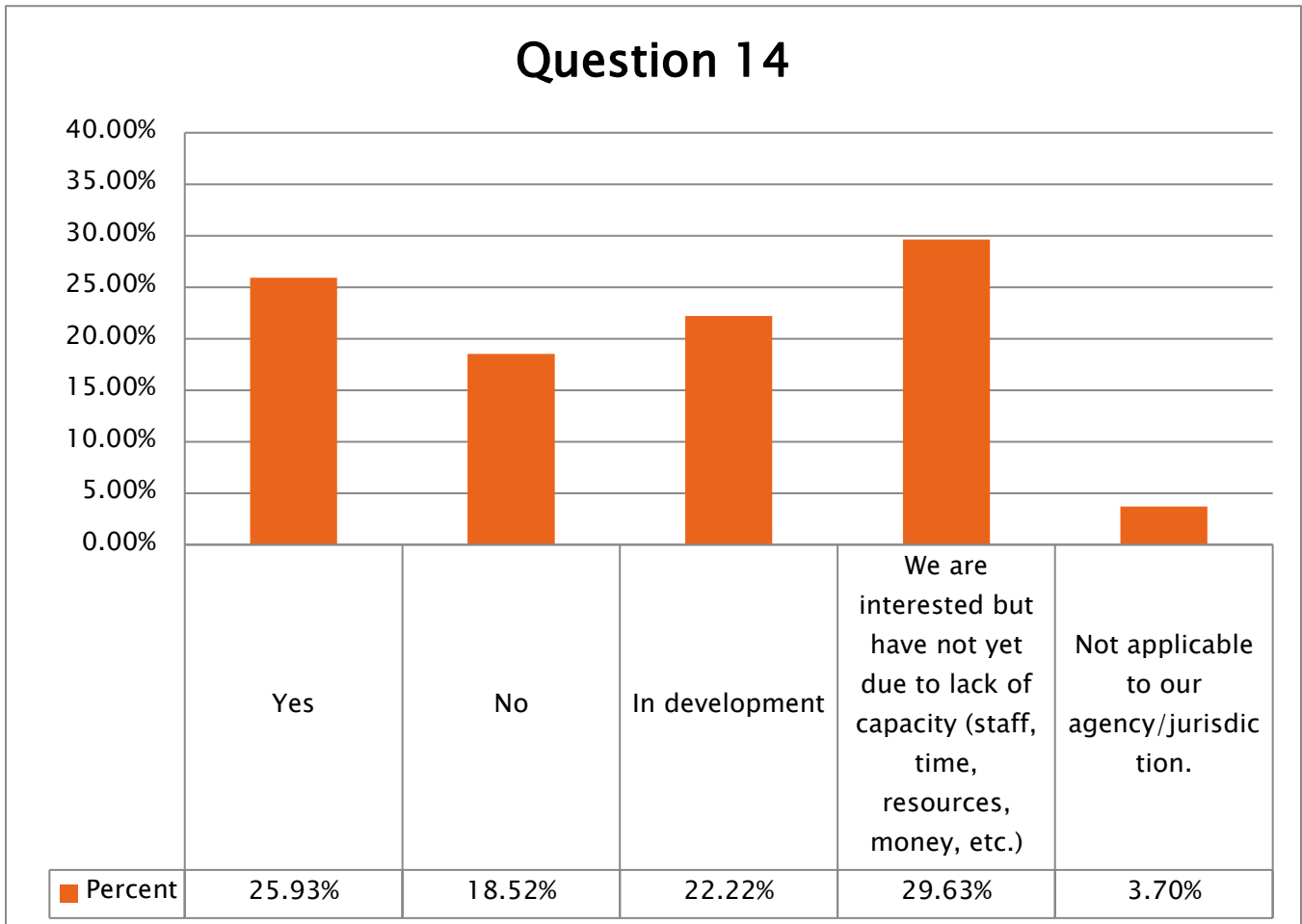
Other (please specify)- **28.00%**

- “On a project-by-project basis”- *FDOT*
- “We have conducted a variety of vulnerability assessments for TPOs, and Counties and anticipate more this year. To not provide double counting we did not answer for these studies. We are currently doing a high level business and social vulnerability assessment for the RRAP.” - *ECFRPC*
- “Started project with ECFRPC.”- *Brevard County Natural Resources Management Department*
- “Defer to Drainage/Permitting section”- *FDOT District 5*
- “We have examined sea level rise as it may affect natural resources along the coast”- *SJRWMD*
- “Vulnerability and risk assessment in progress”- *IRL Council and IRL National Estuary Program*
- “Another section of FDOT will need to respond on this one.”- *FDOT District 5*



Question 14:

Has your agency or jurisdiction conducted an assessment of future climate impacts on particular projects?



Question 15:

Please describe the projects have you assessed future climate impacts and the what impacts were assessed? 15 Responses– (2 “N/A”):

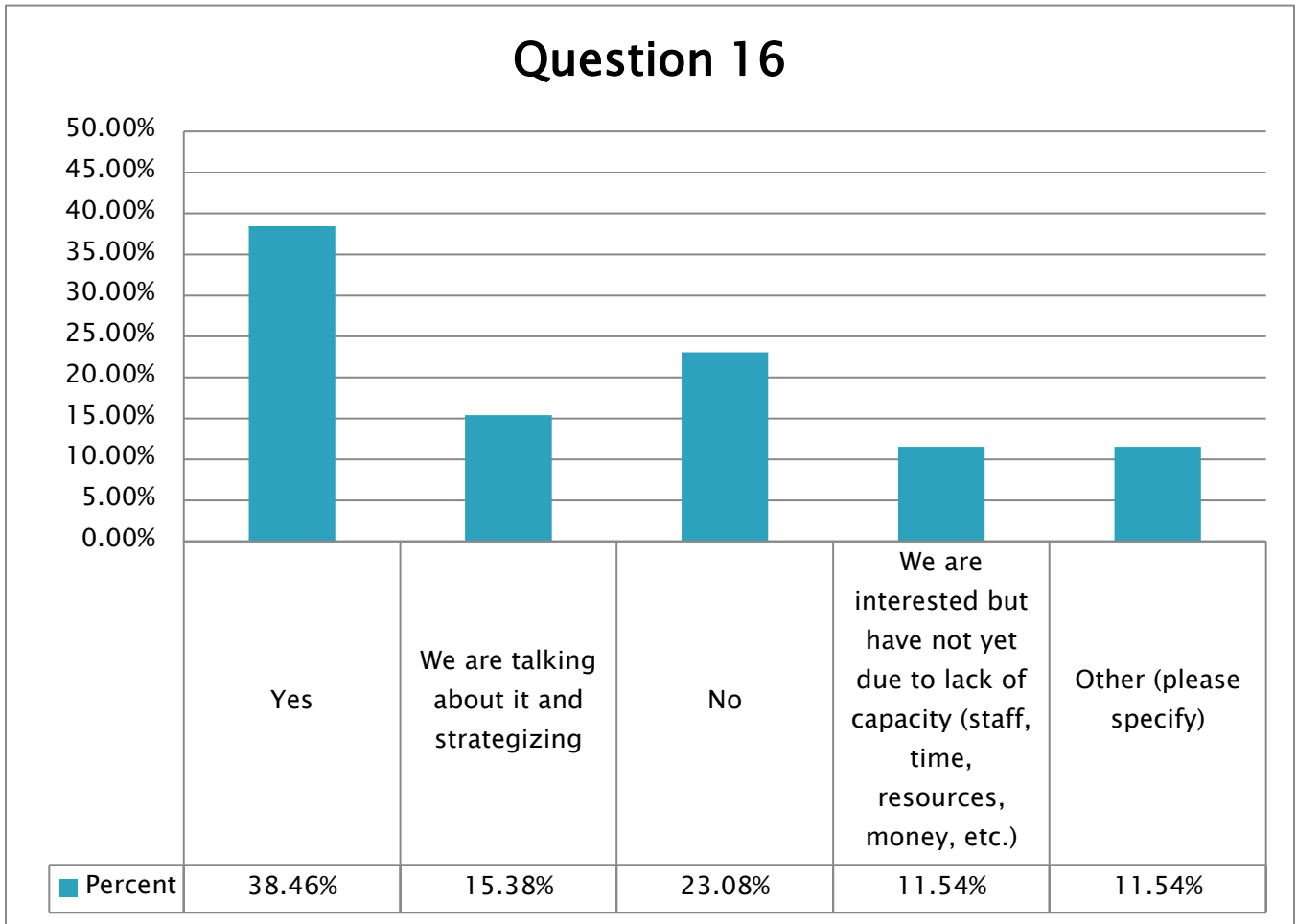
- “Various high–level research has been conducted assessing vulnerable coastline assets. KSC's Master Plan and its Central Campus Consolidation Strategy identifies the most feasible areas with higher elevations to concentrate future development.” – *NASA Kennedy Space Center*
- “When we reviewed plans for facilities through the facility siting process, we provided comments to consider sea level rise and increased surge on these private critical facilities.” – *ECFRPC*
- “Mitigation projects for home owners in flood prone areas. Also requires home owners to mitigate against all other hazards.” – *Volusia County Growth and Resource Management and Emergency Management*
- “Mitigation projects to elevate flooded homes; sea level rise.” – *VCEM*
- “Stormwater Infrastructure Sanitary Sewer Collection ---Infiltration”–*City of Ormond Beach*
- “Sea Level Rise for evacuation routes and critical facilities.” – *River to Sea TPO*
- “Currently working with ECFRPC.” – *Brevard County Natural Resources Management Department*
- “pertains to south Fla, FDOT District 6” –*FDOT District 5*
- “Water withdrawals from the St. Johns River” – *SJRWMD*
- “Program funded some of Satellite Beach Climate Change Research. Working on revised Comprehensive Conservation and Management Plan for the IRL”– *IRL Council and IRL National Estuary Program*
- “We are currently working on a retro fit and FEMA reimbursement program for rising up to 50 homes within an area impacted by rising seas.” – *City of New Smyrna Beach*



- “Extension as a whole has looked at agriculture practices and health related impacts to climate change. Extension also works with stakeholders on thinking about climate change impacts.” – *University of Florida IFAS Extension Brevard County*



Question 16: Has your agency or jurisdiction been actively engaging stakeholders and citizens in the conversation about resiliency?



Question 17: Please share successes or lessons learned concerning your engagement efforts that the project team and other jurisdictions should be aware of. **16 Responses**– (7 “N/A):

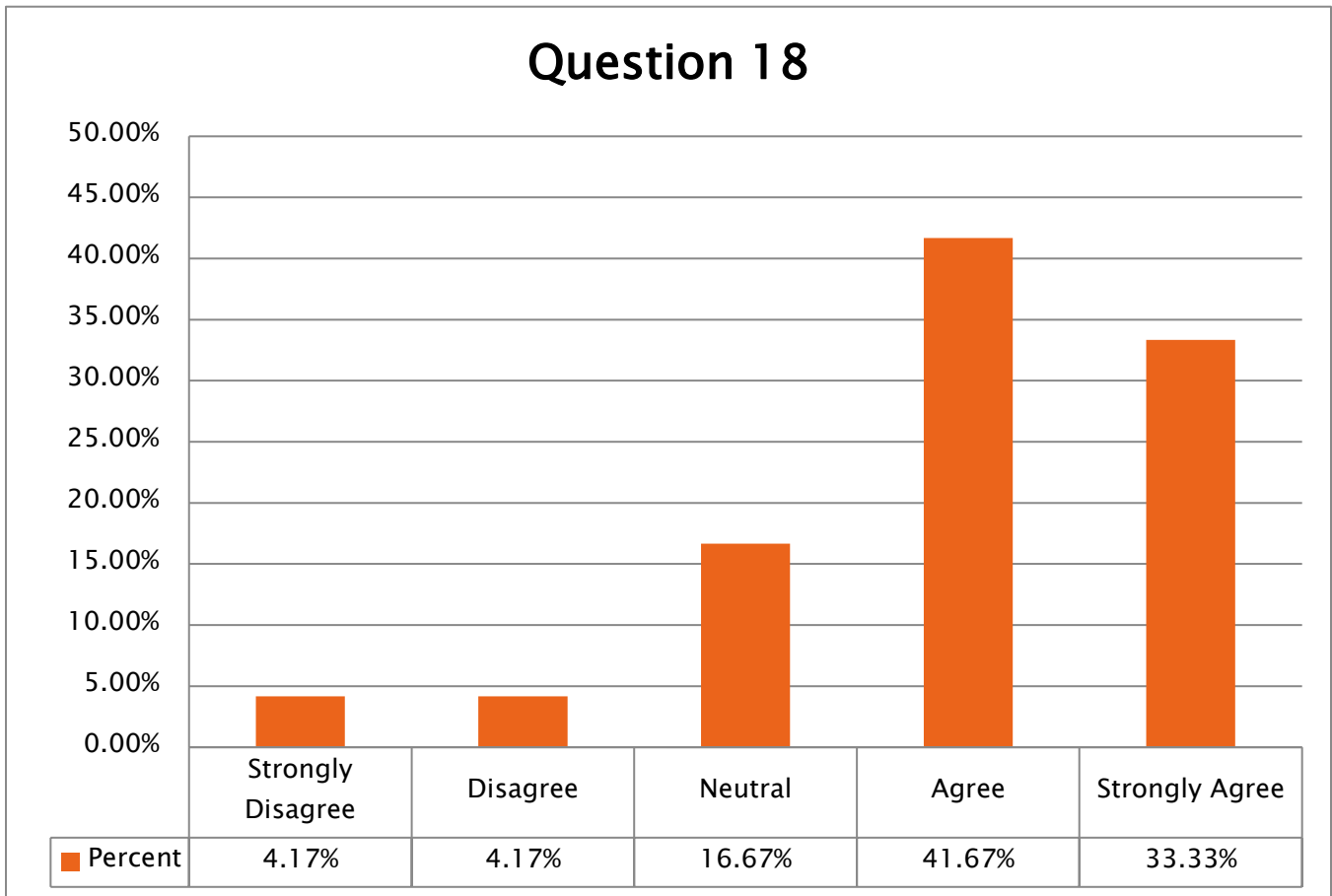
- “KSC has focused significant resources on adaption strategies such as dune restoration to protect valuable launch infrastructure naturally located on the coast. Even if these measures prove successful over time, there are still many questions related to how general transportation access across Center will be impacted, i.e. how will employees and support services be able to reach launch pads on the coast if inland water levels (Banana River & Banana Creek) rise significantly.” – *NASA Kennedy Space Center*
- “Each community is different and discussion needs to be tailored to each specific community.” – *ECFRPC*
- “We discuss resiliency during our public outreach presentations to various groups.”– *VCEM*
- “Elected officials and senior staff from Public Works, Emergency Management and Traffic Engineering must be represented in the stakeholder group.”– *River to Sea TPO*
- “Long-term concerns get overrun by immediate issues”– *SJRWMD*
- “Public confusion and political positioning on climate change can make risk assessment and adaptation planning process more difficult than it needs to be.”– *IRL Council and IRL National Estuary Program*
- “We have pilot studies from three local communities on adaptation action planning, are working with DEP to complete an Adaptation Planning Guidebook and Post Disaster Redevelopment Guidebook update and provide funding and technical assistance to local governments in preparation of Peril of Flood amendments and resilience planning in their comprehensive plans.”– *Department of Economic Opportunity*



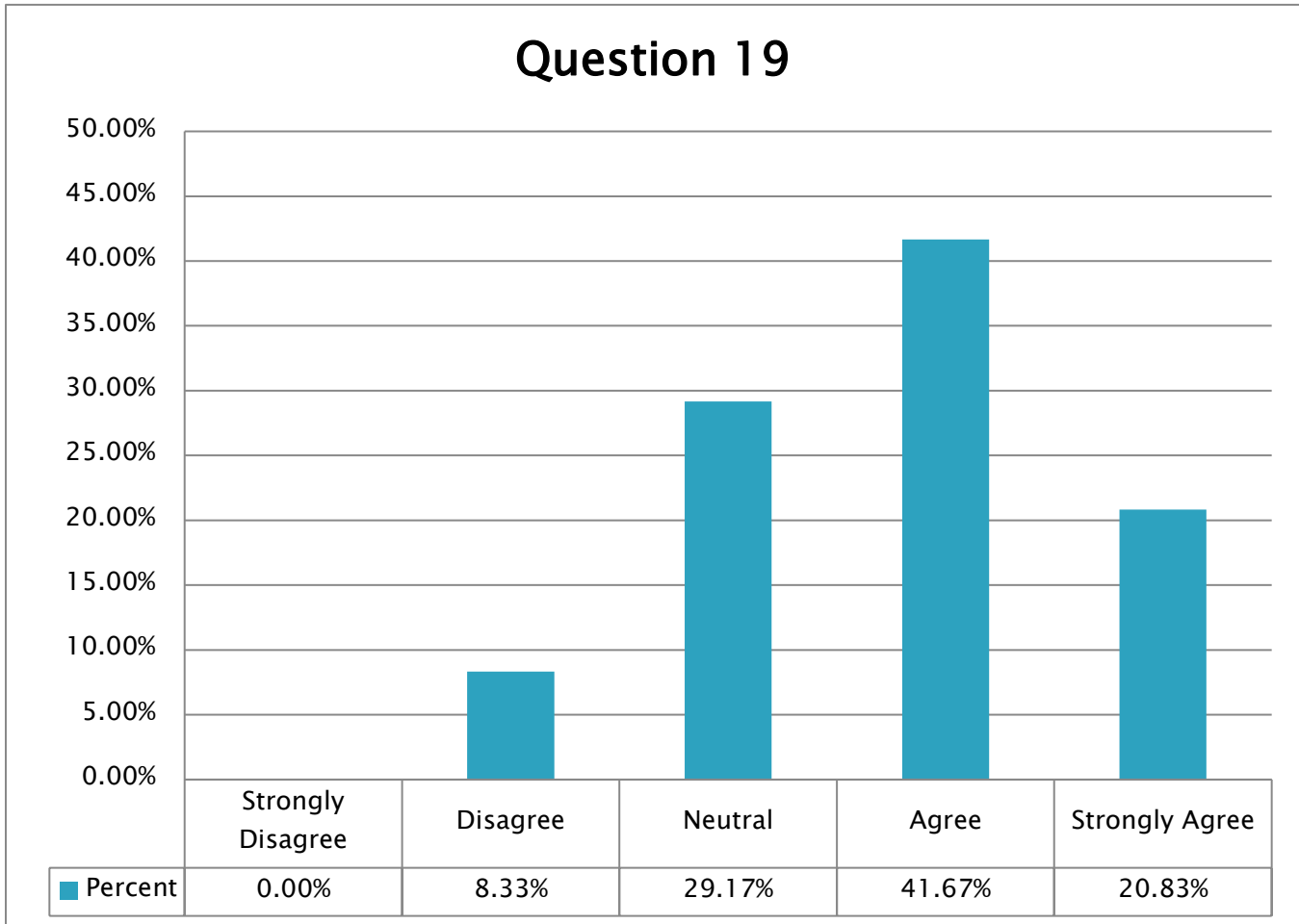
- “We are starting a year of CCR community meetings on Jan 16, 2018– covering all areas.”– *City of New Smyrna Beach*
- “Extension often works with stakeholders to discuss sustainability and climate change issues and what stakeholders should think about in regards to these impacts.”– *University of Florida IFAS Extension Brevard County*



Question 18: The people in my organization/ agency are concerned about SLR and flooding.



Question 19: The people in the community I work for are concerned about SLR and flooding.



Question 20: How educated and prepared does your organization’s staff feel to plan for the impacts of SLR and coastal flooding issues?

| | |
|--------|---|
| 11.54% | Unprepared and under-educated to appropriately plan for impacts. |
| 61.54% | Somewhat prepared and educated to appropriately plan for impacts |
| 7.69% | Unprepared but sufficiently educated to appropriately plan for impacts. |
| 3.85% | Prepared but under-educated to appropriately plan for impacts. |
| 15.38% | Sufficiently prepared and educated to appropriately plan for impacts. |

Question 21:

What did we miss that is relevant to your plans, policies and actions that your agency or jurisdiction is undertaking to address resiliency?

13 Responses– (9 “N/A”):

- “I will need to investigate actions in other parts of the agency”– *SJRWMD*
- “NEPs follow the EPA workbook guidance on this issue.”– *IRL Council and IRL National Estuary Program*
- “Help local governments implement Peril of Flood statutory requirements in comprehensive plans.”– *Department of Economic Opportunity*
- “We have worked with the RPC to apply for a grant to do the city-wide assessment.”– *City of New Smyrna Beach*



