



THE GOVERNANCE GAP: CLIMATE ADAPTATION AND SEA-LEVEL RISE IN THE SAN FRANCISCO BAY AREA

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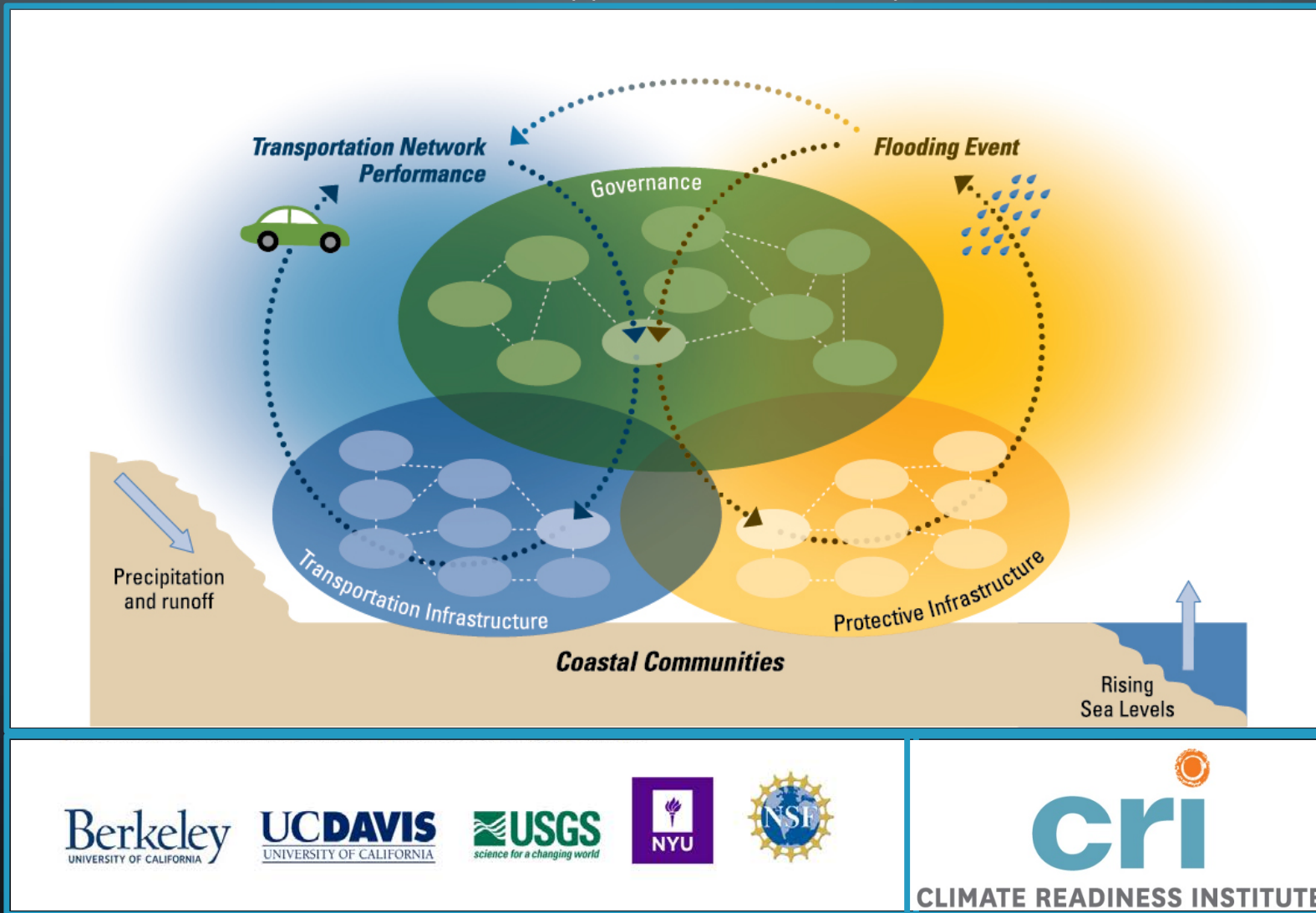
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RESILIENT INFRASTRUCTURE AS SEAS RISE (RISER SF BAY)

<http://riser.berkeley.edu/>



GOVERNANCE RESEARCH APPROACH

- Face to face interviews with stakeholders from regional to local, government and non-governmental (2016): 43 individuals interviewed at average of 1 hour each.
- Governance Solutions focus groups: North Bay, South Bay, Central Bay
- Report 2017: “The Governance Gap: Climate Adaptation and Sea-Level Rise in the San Francisco Bay Area”
- Governance Gap Survey: June 25-Sept 10, 2018. 722 respondents.
- Report 2019: “The Governance of Sea Level Rise in the San Francisco Bay Area: results from a survey of stakeholders.”

RECOMMENDATIONS FROM THE GOVERNANCE GAP REPORT

- Institutions: Climate Adaptation Vision or Commission (e.g. Delta Vision, Governor's Commission for a Sustainable South Florida, Western Water Commission)
- Planning: Vision Plan and next step recommendations
- Funding: “Local first” funding portfolio: parcel taxes, increases in fees, special taxation districts
- Permitting: Create new integrated permitting strategy for green infrastructure
- Science/Policy: Climate science services center (possible legislative target)
- Civic engagement: Integrated strategy from in-person to digital
- Political leadership: Create state and federal legislative caucus groups focused on climate adaptation (legislative relations staff)

A GOVERNANCE SURVEY OF INVOLVED STAKEHOLDERS

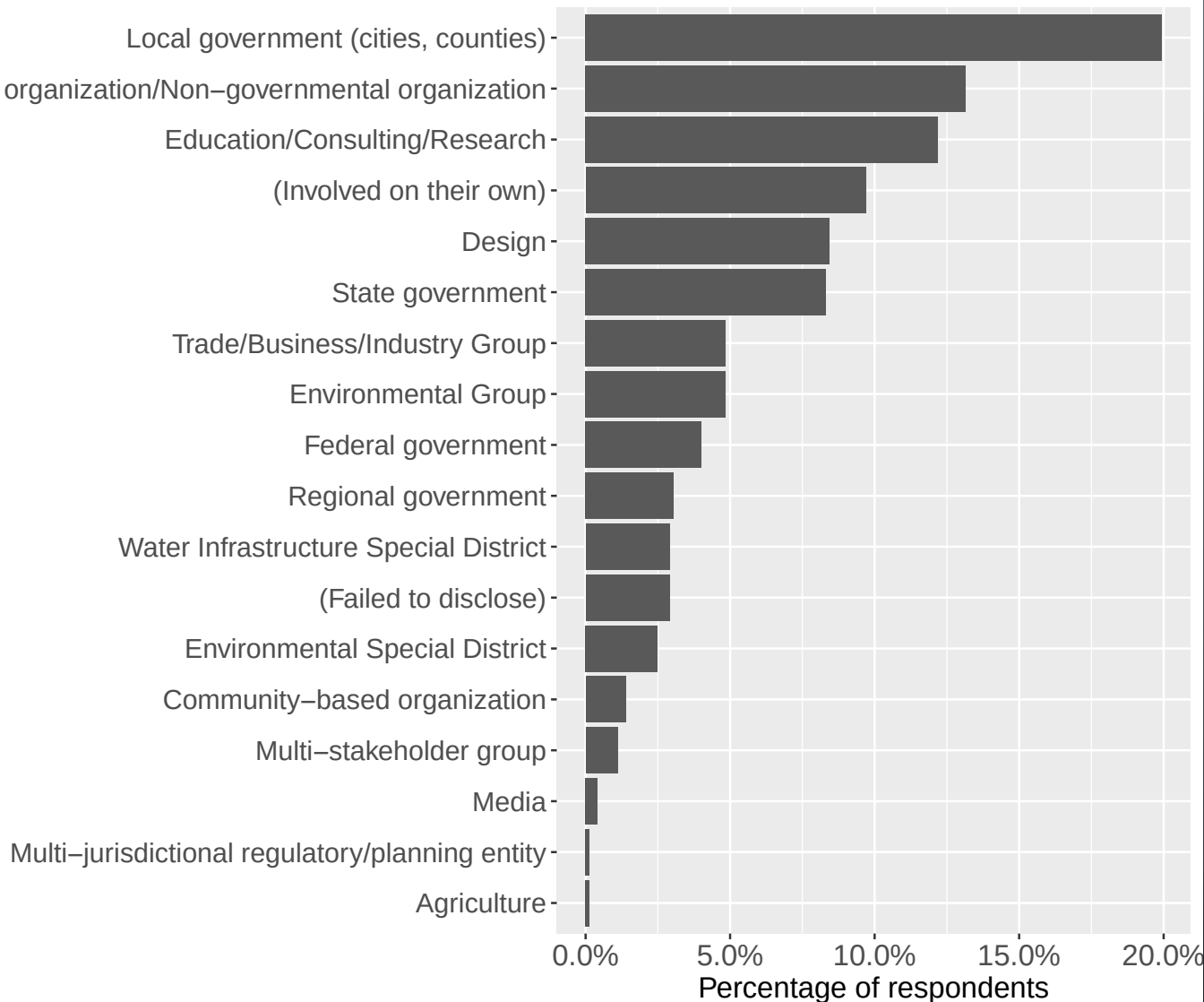
The survey comprised 3 parts:

- Stakeholders' perceptions of the problem;
- Stakeholders' preferences concerning the actions;
- Stakeholders' collaborative activities.

Respondents represent 385 organizations. 65 respondents involved in individual capacity.

Question: Please choose the category that best describes your primary organization

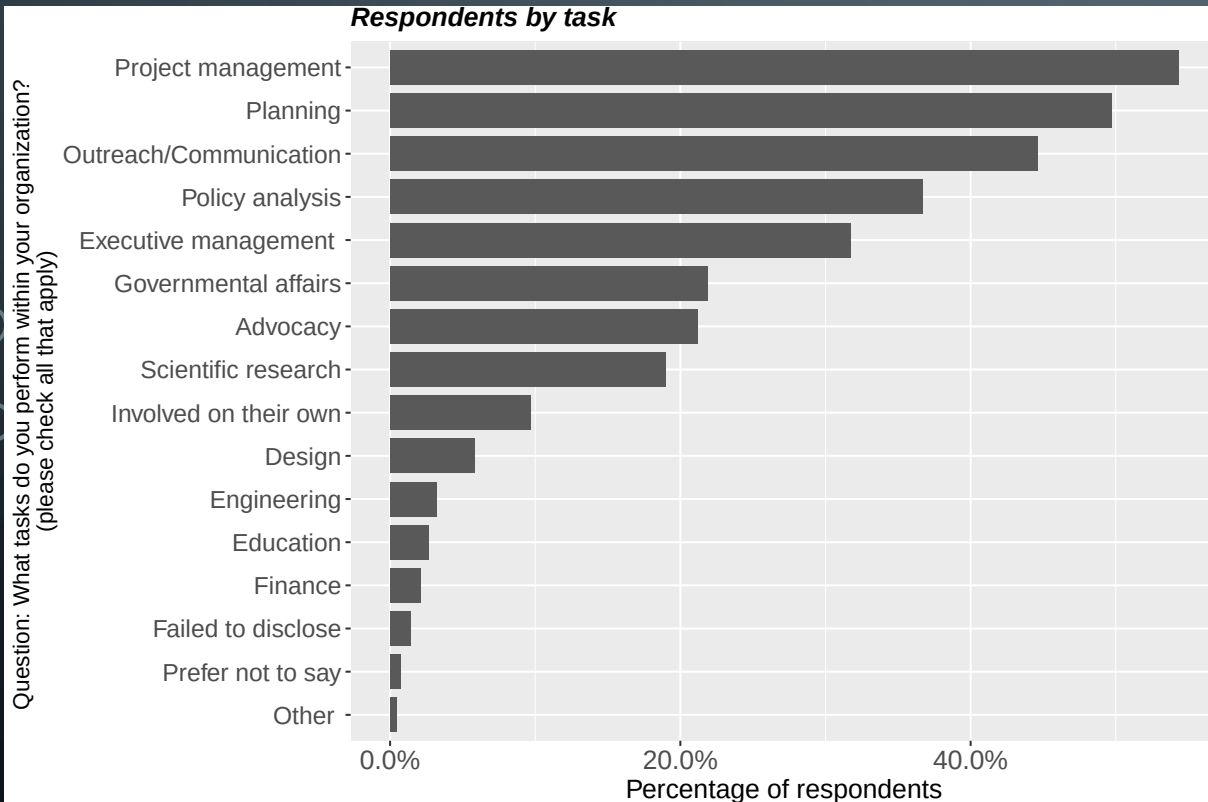
Respondents by type of organization



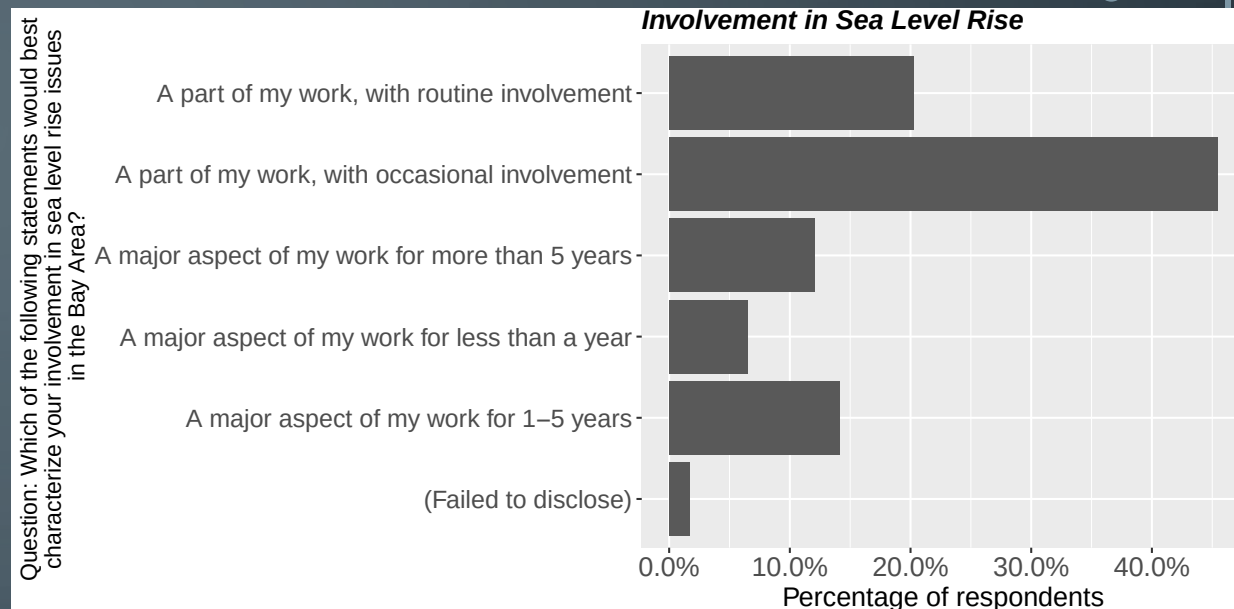
MANY TYPES OF
ORGANIZATIONS
INVOLVED IN SEA
LEVEL RISE

MOST HAVE SEA LEVEL RISE AS PART OF THEIR WORK, AND ARE INVOLVED ON BEHALF OF ONE ORGANIZATION

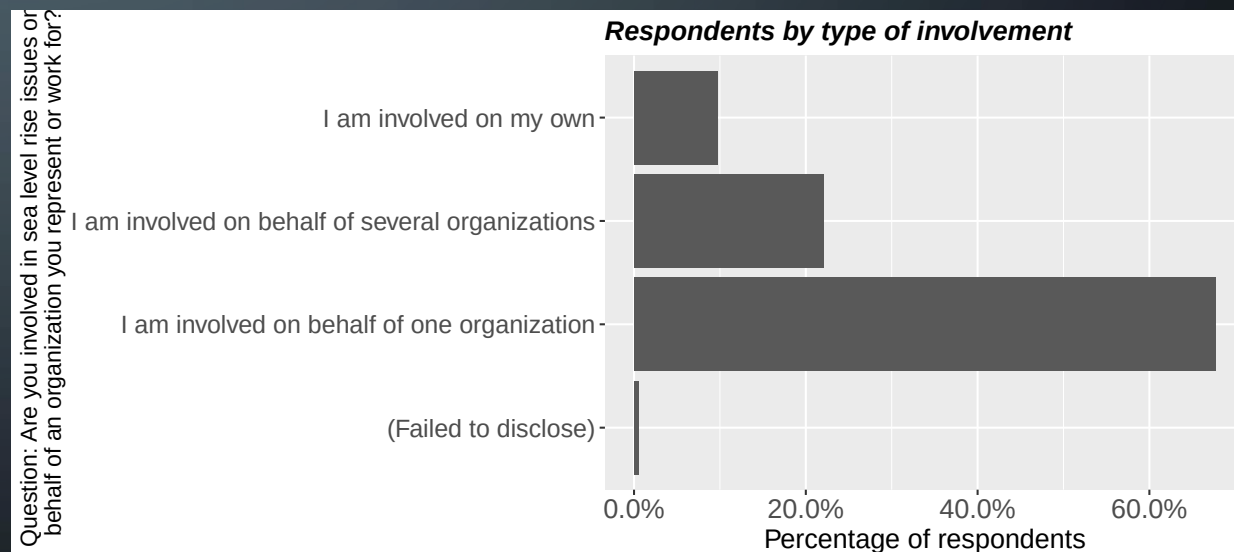
Respondents by task



Involvement in Sea Level Rise

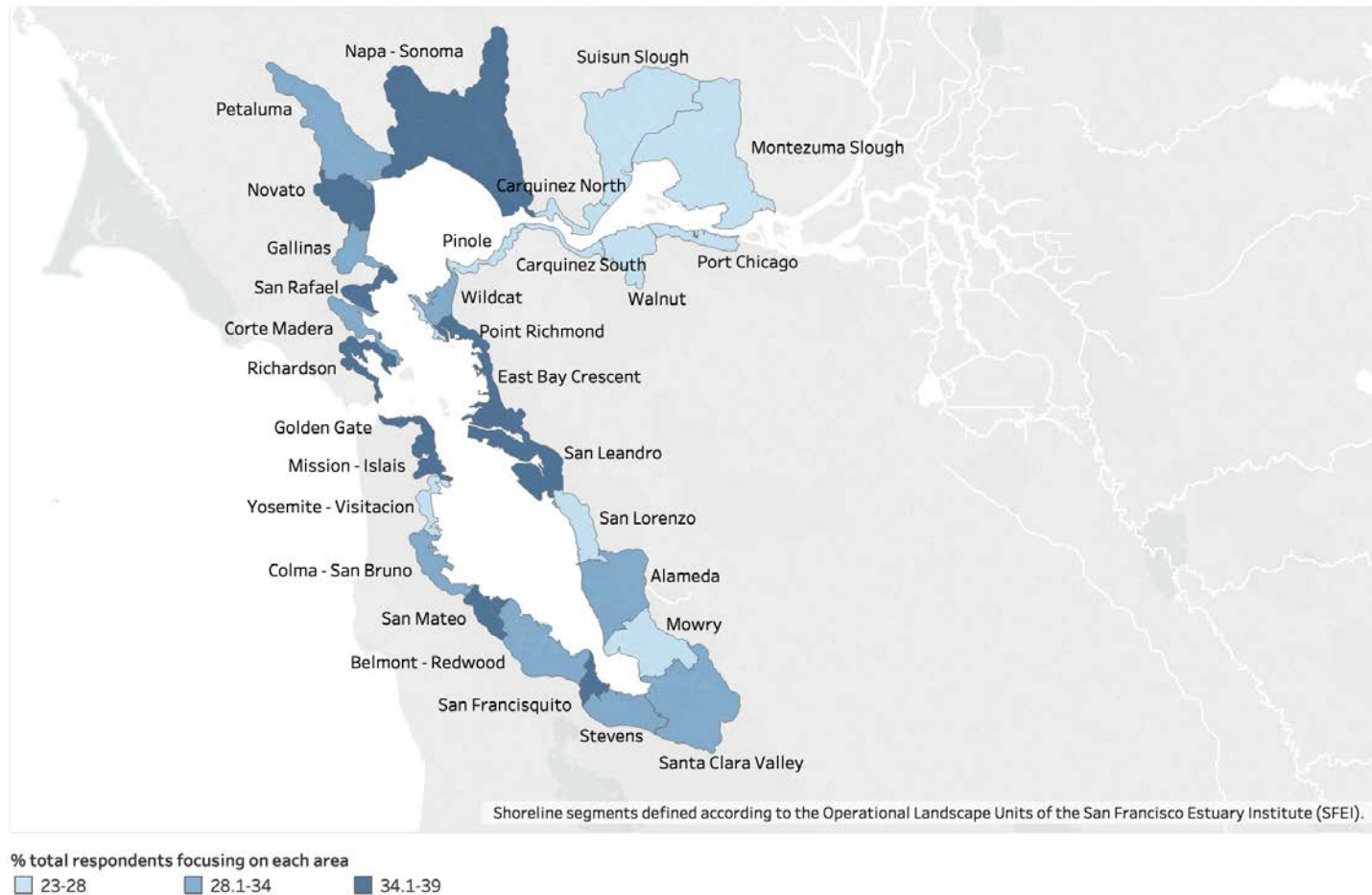


Respondents by type of involvement



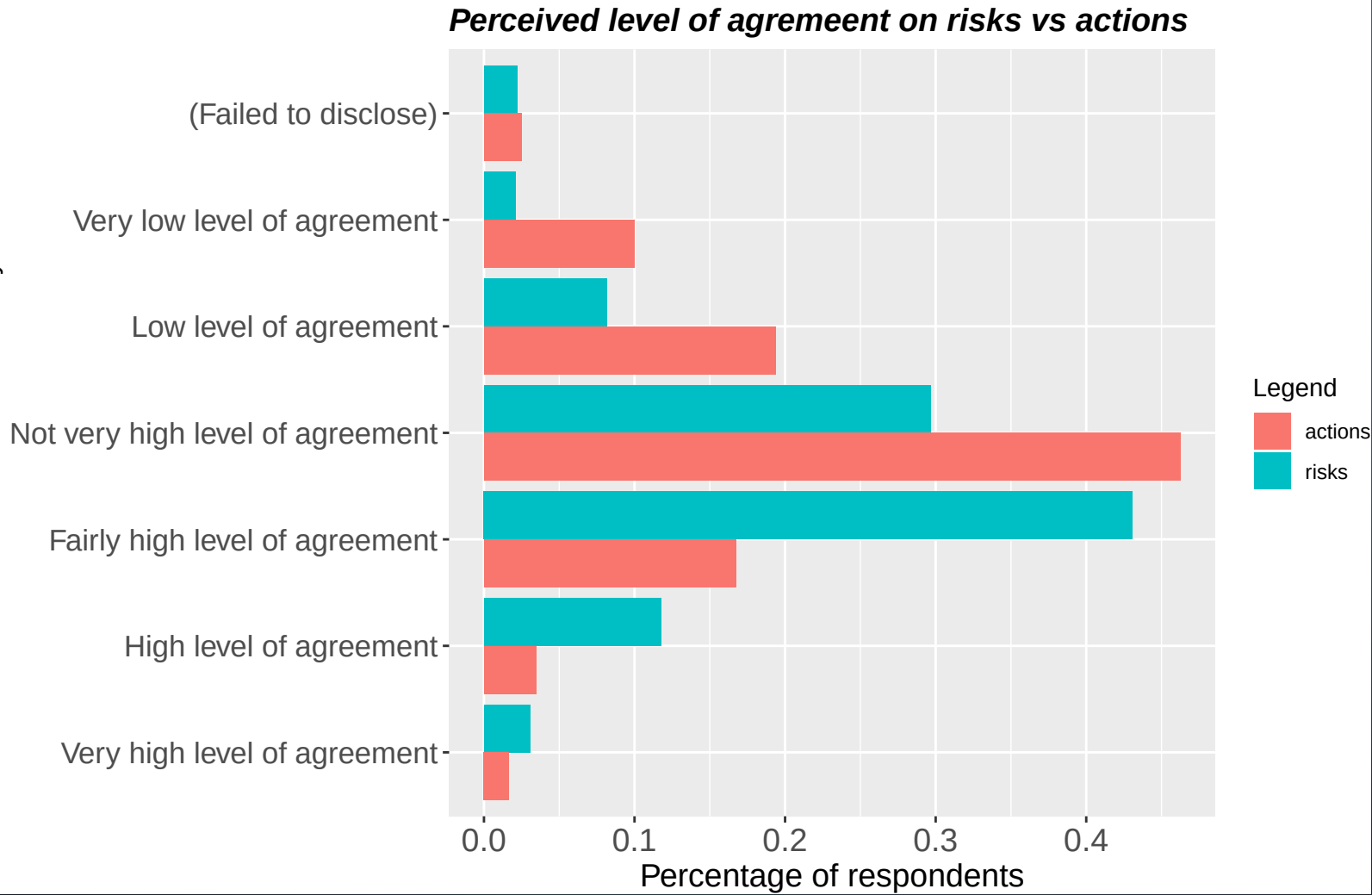
GEOGRAPHIC FOCUS OF RESPONDENTS

Shoreline Segments Respondents Focus On



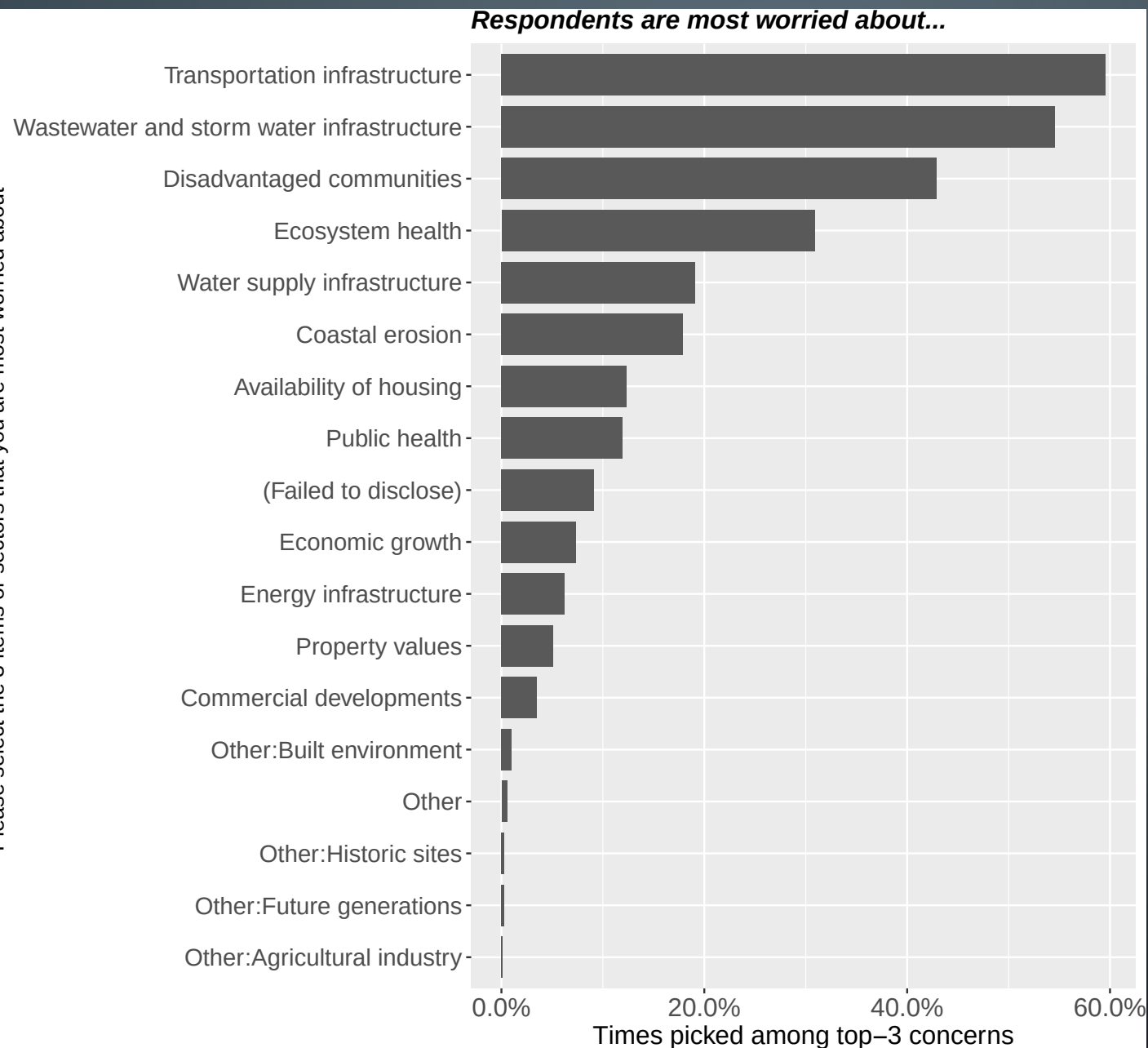
HIGHER RESPONSE
FREQUENCIES IN
SEGMENTS WITH
HIGHER POPULATION,
NOT HIGHER
INUNDATION RISK

Question: Based on your experience, how would you characterize the level of agreement among stakeholders concerning the risks/actions needed to address sea level rise in the Bay Area?



MORE
AGREEMENT ON
EXISTENCE OF
PROBLEM, THAN
WHAT TO DO
ABOUT IT

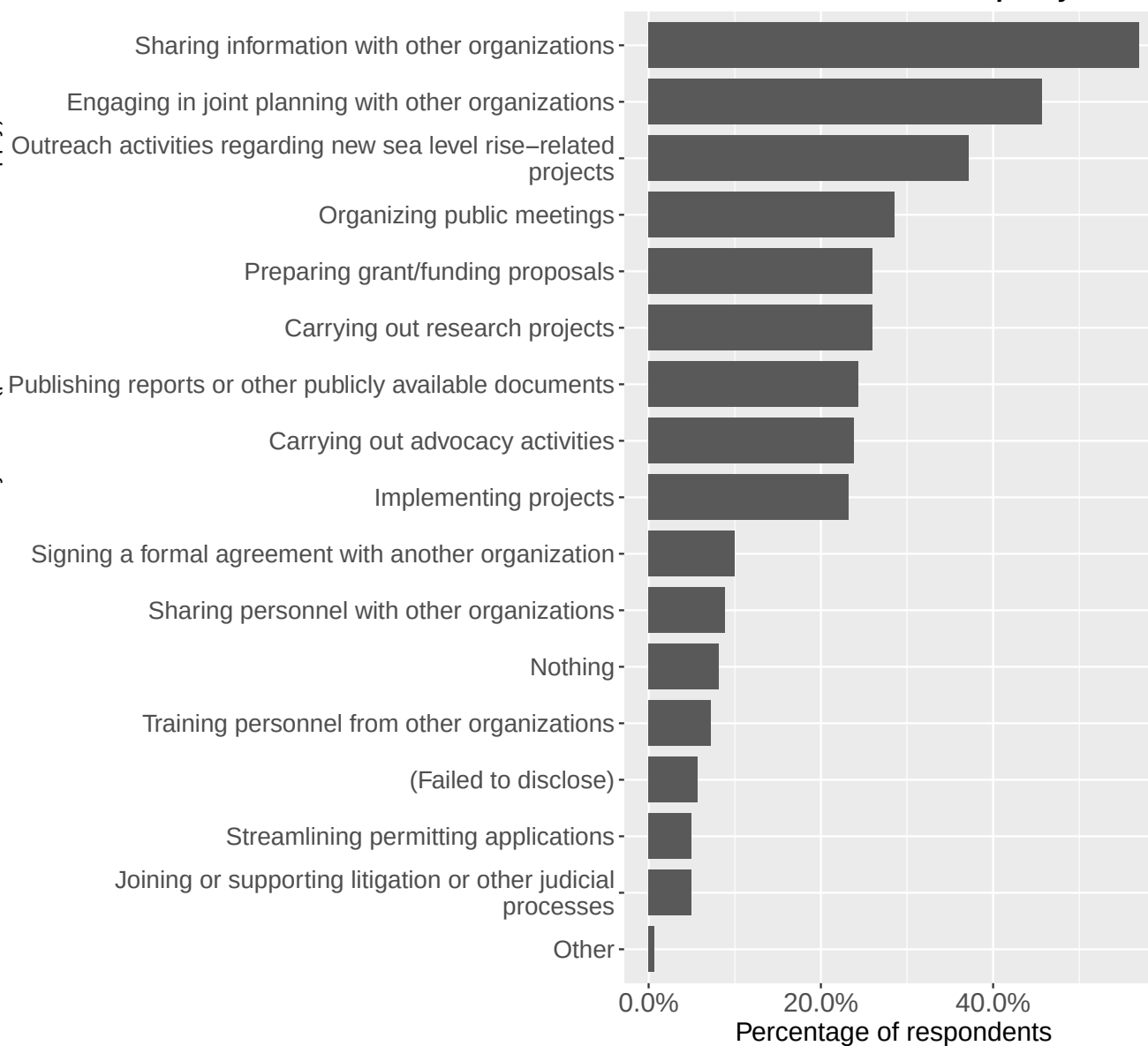
Question: Sea level rise may affect infrastructure and communities.
Please select the 3 items or sectors that you are most worried about



**INFRASTRUCTURE
AND
DISADVANTAGED
COMMUNITIES ARE
MAIN CONCERNS**

Question: In the past year, which of the following collaborative activities did you engage in with reference to sea level rise in the Bay Area? (please check all that apply)

Collaborative activities in the past year



COLLABORATIVE
ACTIVITIES ARE STILL
LOW COMMITMENT

Barriers to collaboration

Question: In the past year, which of the following have represented the highest barriers for you working collaboratively with other stakeholders? (please select up to 3)

Lack of an overarching plan to address sea level rise in the Bay Area

Lack of political leadership of elected officials

Insufficient financial resources

Lack of public support for policies addressing sea level rise

Insufficient human resources to analyze relevant information

Permitting obstacles

Uncertainty about the future extent of sea level rise

Lack of relationships with community-based organizations

(Failed to disclose)

Opposition from stakeholders groups

Lack of leadership within my organization

Lack of experience collaborating with other organizations in the Bay Area

Don't know

Lack of availability of adequate scientific information

Other

Other:Sea level rise is not my organization's main focus

Other:Lack of public outreach/communication by other organizations/politicians/scientists

Other:Lack of central authority to organize and respond to sea level rise

0.0% 10.0% 20.0% 30.0%

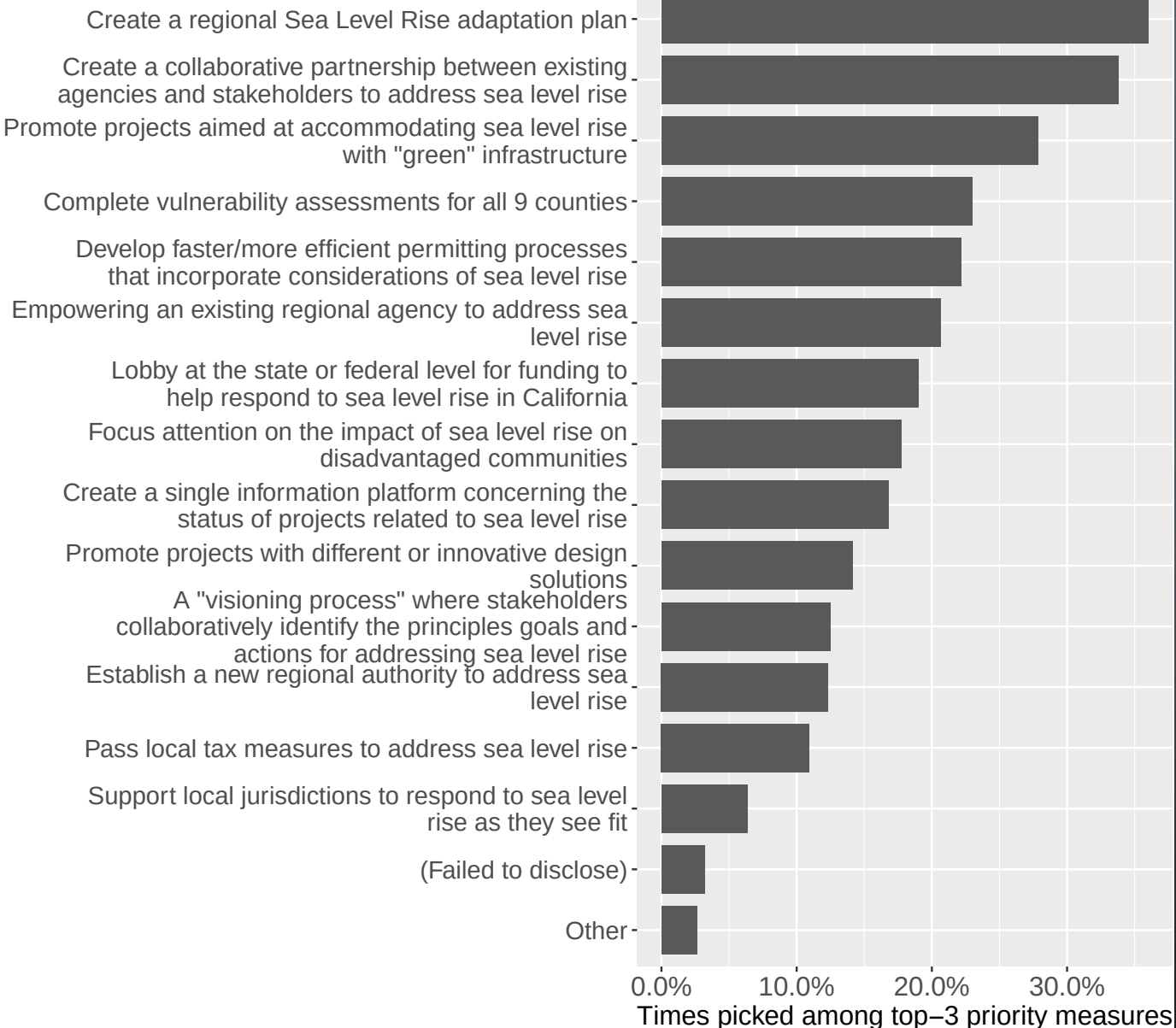
Times picked among top-3 barriers

PLANNING, LEADERSHIP,
AND MONEY ARE MAJOR
BARRIERS

SCIENCE IS NOT A
BARRIER

Question: If you had to decide what sea level rise policies should be prioritized in the Bay Area, which ones would you select from the list below? (please select up to 3)

Sea level rise policies to prioritize



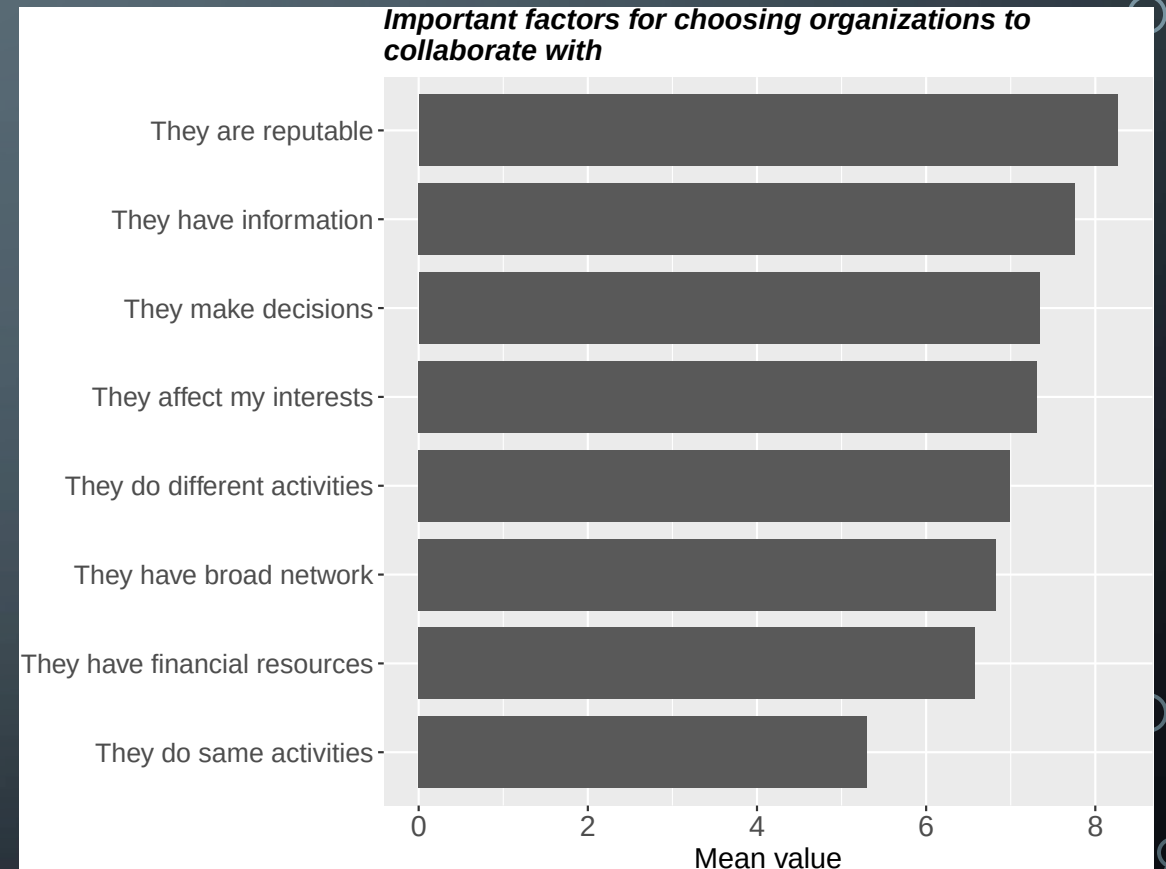
EVERYBODY WANTS A PLAN
...BUT WHO WILL MAKE IT?

NOBODY WANTS A NEW
AUTHORITY!

“VISIONING” PROCESS AS
UNDERAPPRECIATED PATH
FORWARD

WHO COLLABORATES?

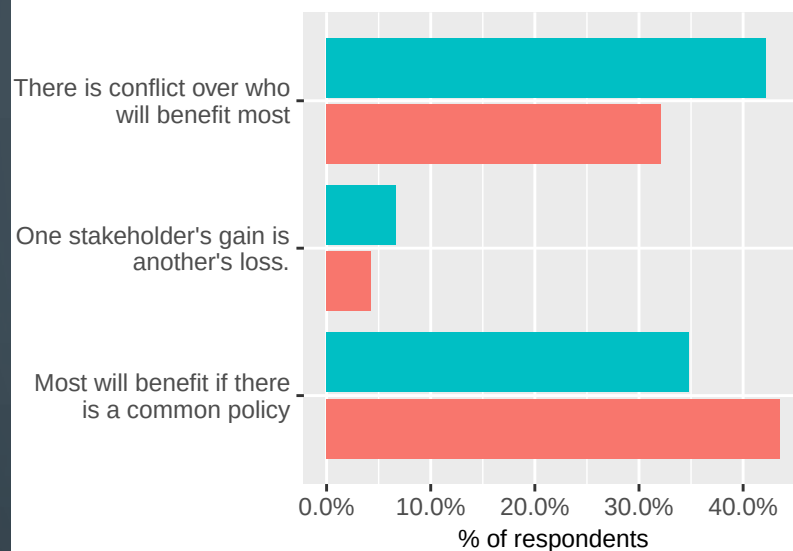
	Actor	Number of Connections
1	Bay Conservation and Development Commission (BCDC)	161
2	Marin County	100
3	State Coastal Conservancy	94
4	San Mateo County	71
5	United States Army Corps of Engineers (USACE)	61
6	United States Fish and Wildlife Service (USFWS)	60
7	San Francisco Bay Regional Water Quality Control Board (RWQCB)	59
8	San Francisco Estuary Institute (SFEI)	56
9	National Oceanic and Atmospheric Administration (NOAA)	54
10	Bay Area Regional Collaborative (BARC)	54
11	Association of Bay Area Governments (ABAG)	50
12	California Department of Transportation (Caltrans)	49



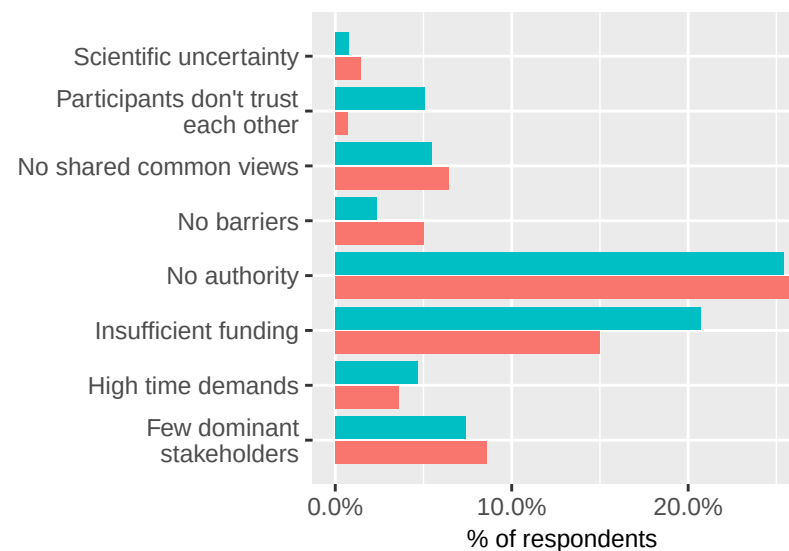
MOST CLICKED COLLABORATIVE INITIATIVES

Collaborative initiative	Participating respondents
Resilient by Design	256
Adapting to Rising Tides	140
SeaChange San Mateo County	35
BAYWAVE Marin County	33
SR37	31
Bay Area Climate Adaptation Network (BayCAN)	26
San Francisco Bay Restoration Authority	26
CHARG	24
San Francisco Seawall Project	20
C-SMART Marin	15

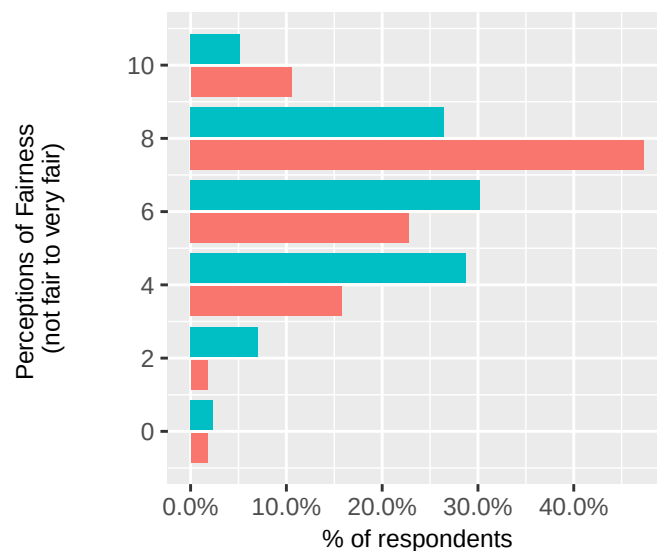
Perceptions of cooperation



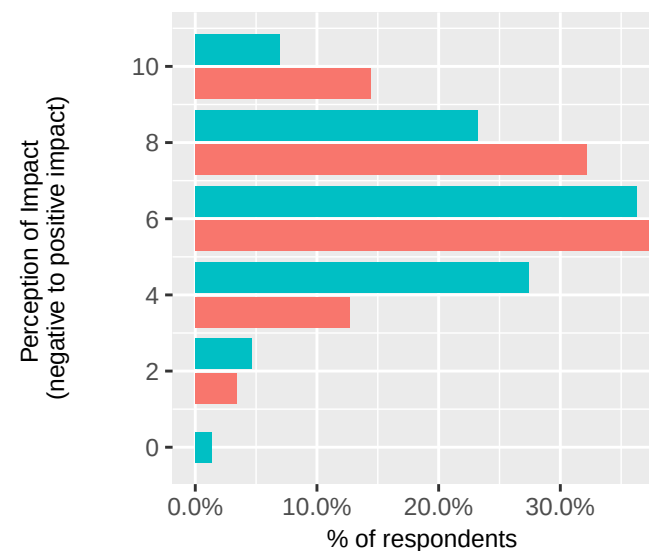
Barriers to success



How fair is each initiative?



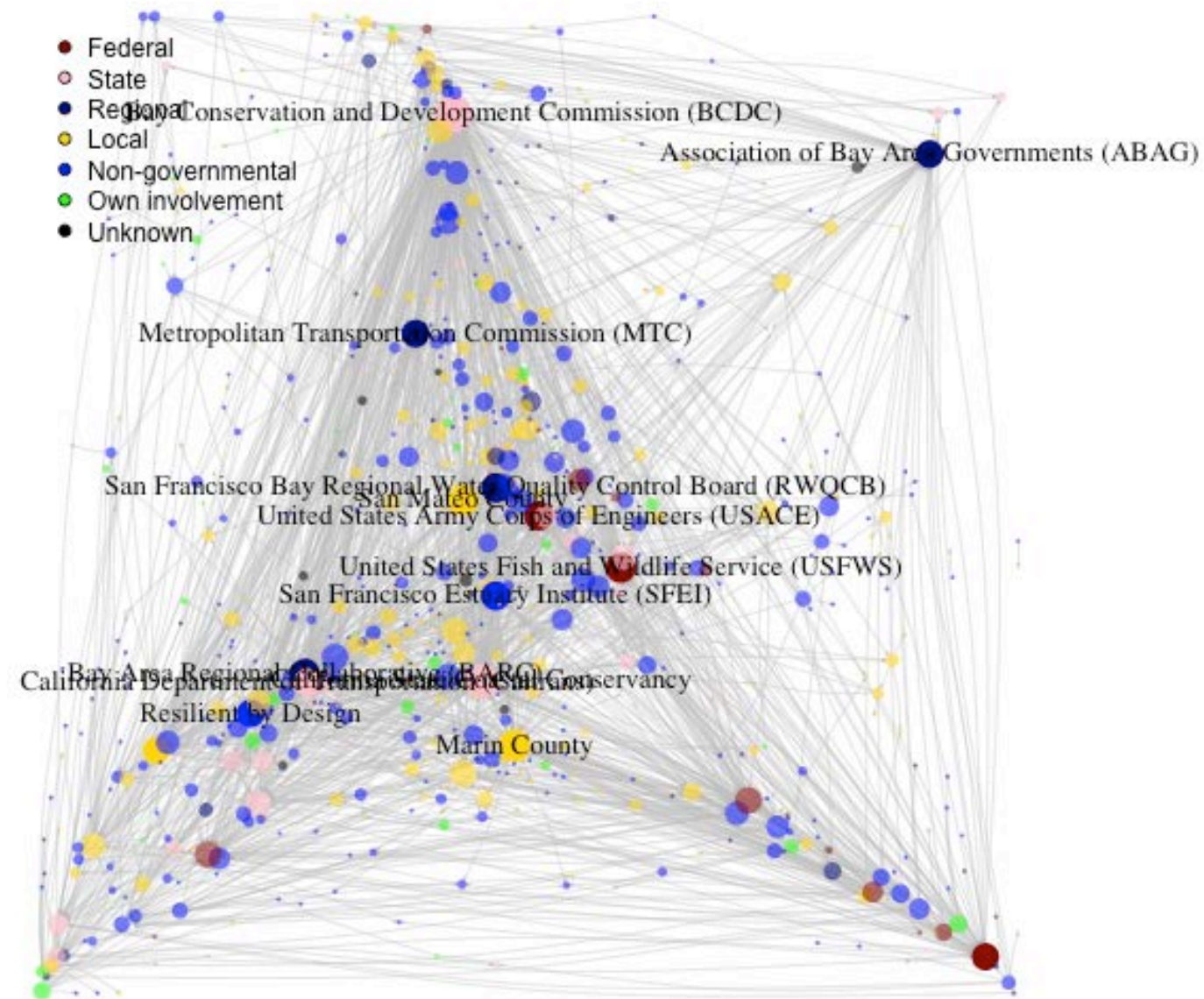
How impactful is each initiative to your goals?



Adapting to Rising Tides Resilient by Design

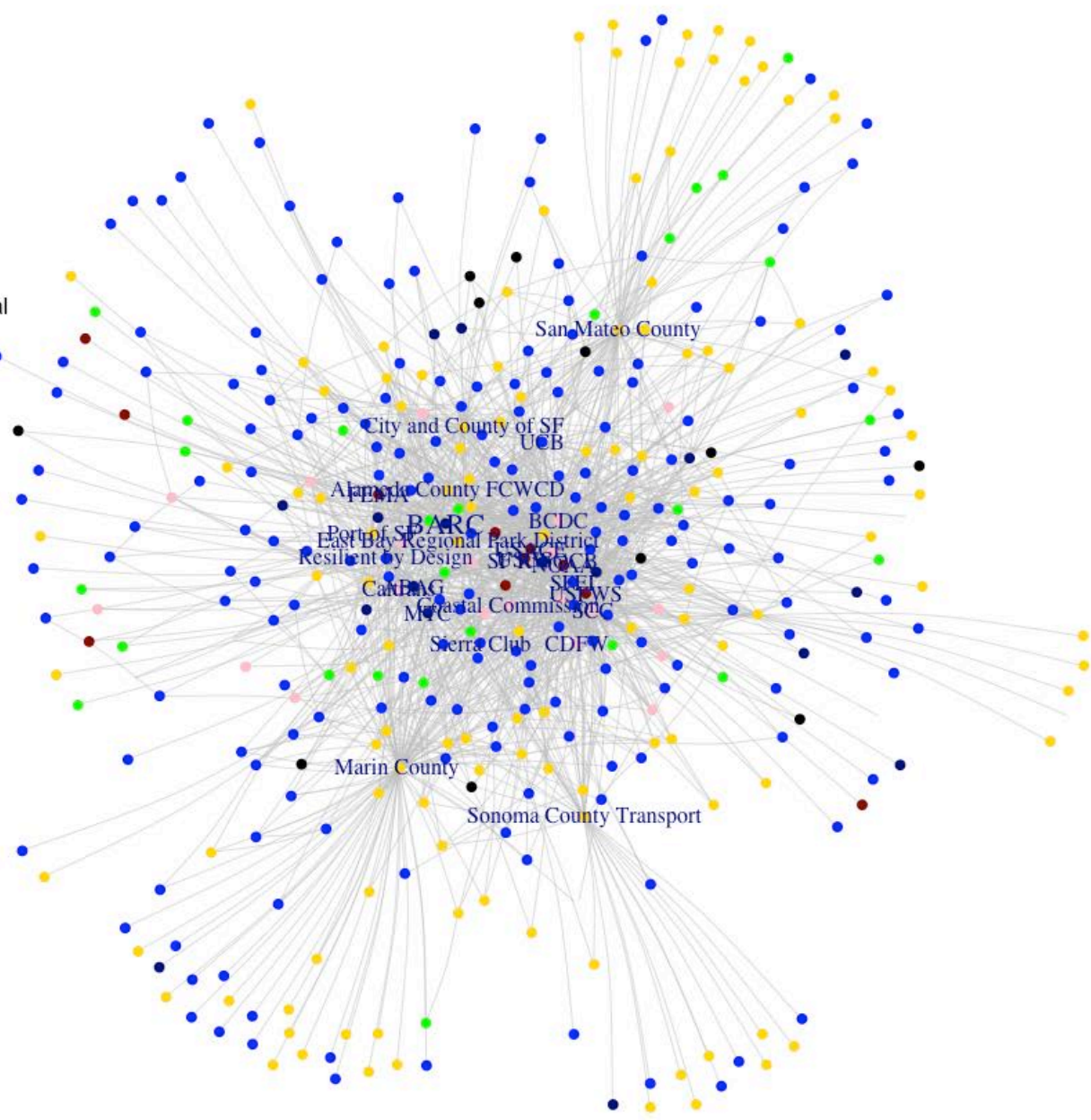


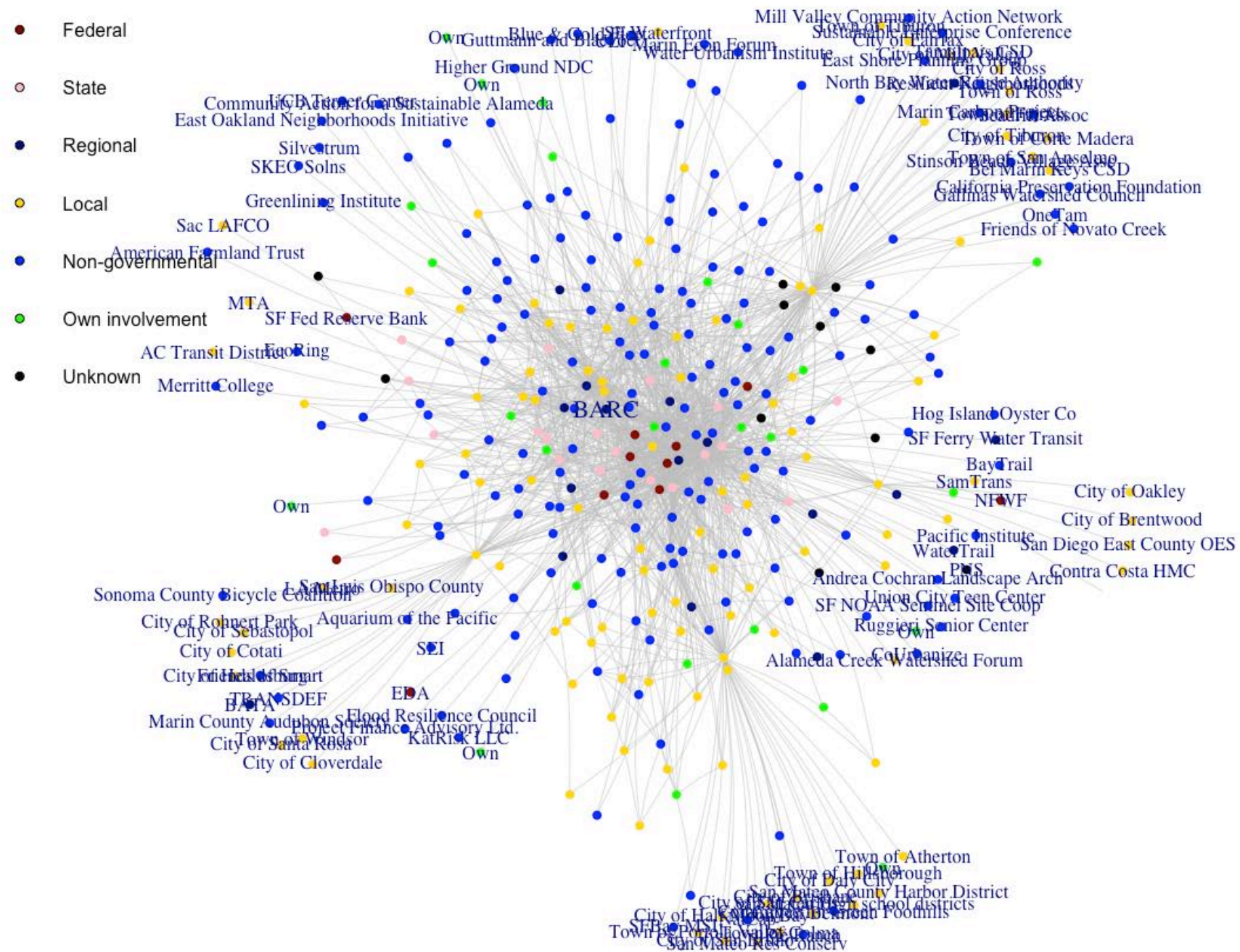
Sea level rise in the San Francisco Bay Area - respondents' network (only actors with >50 connections are labelled)

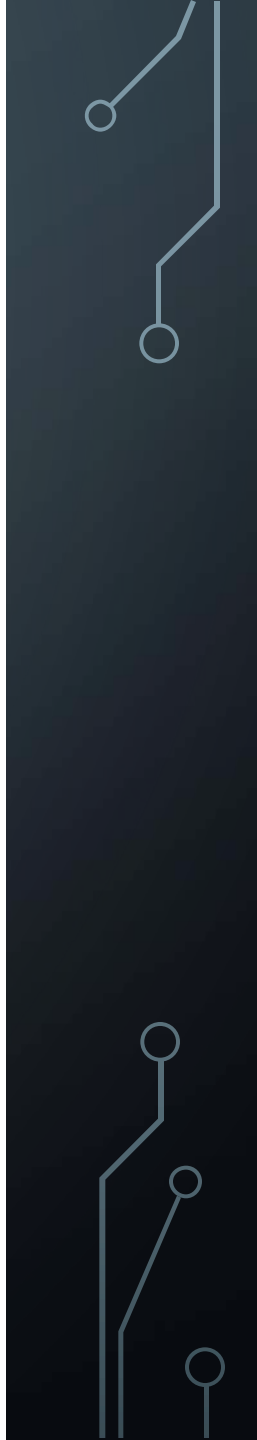


BARC - Ties twice removed (core)

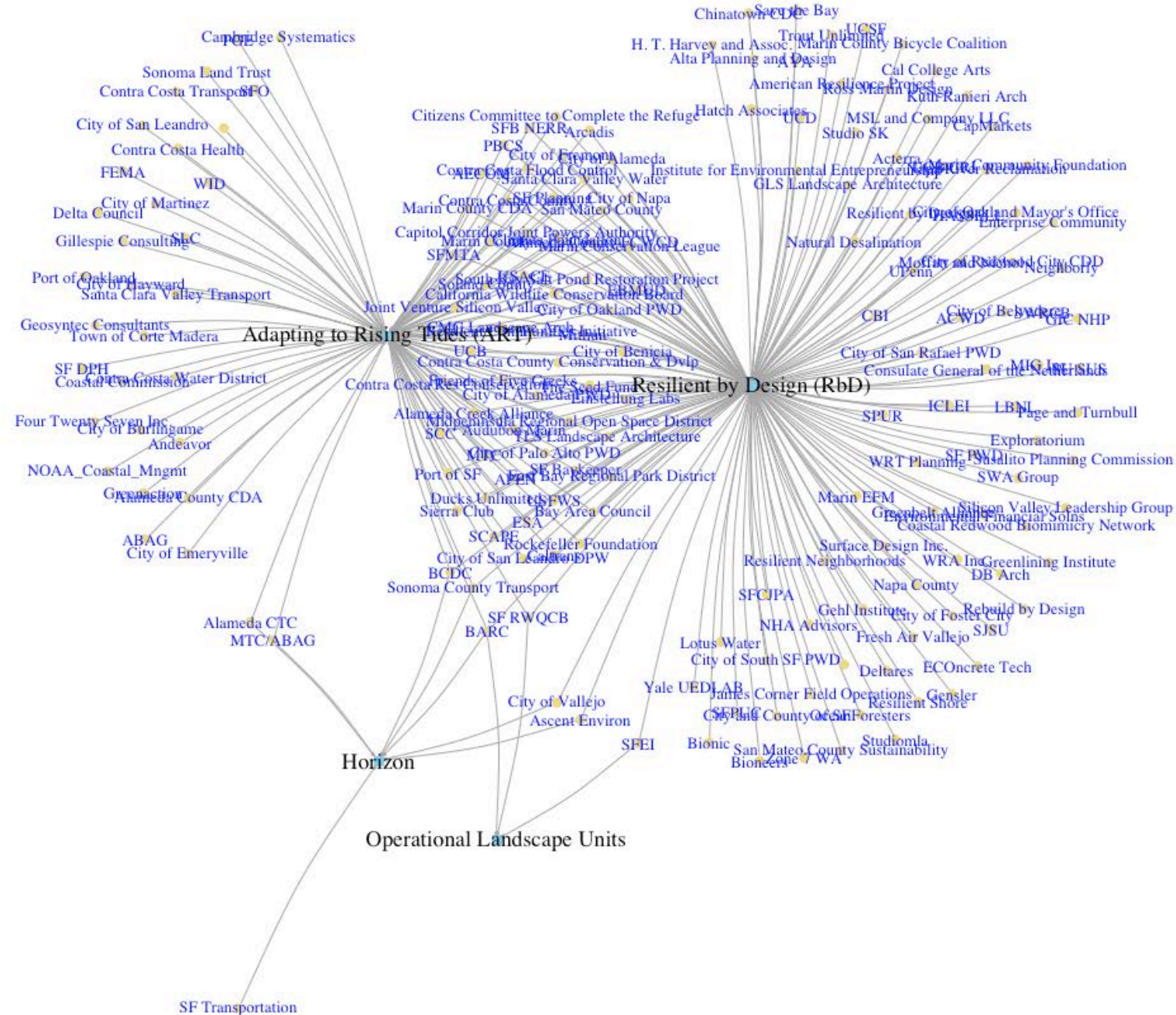
- Federal
- State
- Regional
- Local
- Non-governmental
- Own involvement
- Unknown



[illegible]



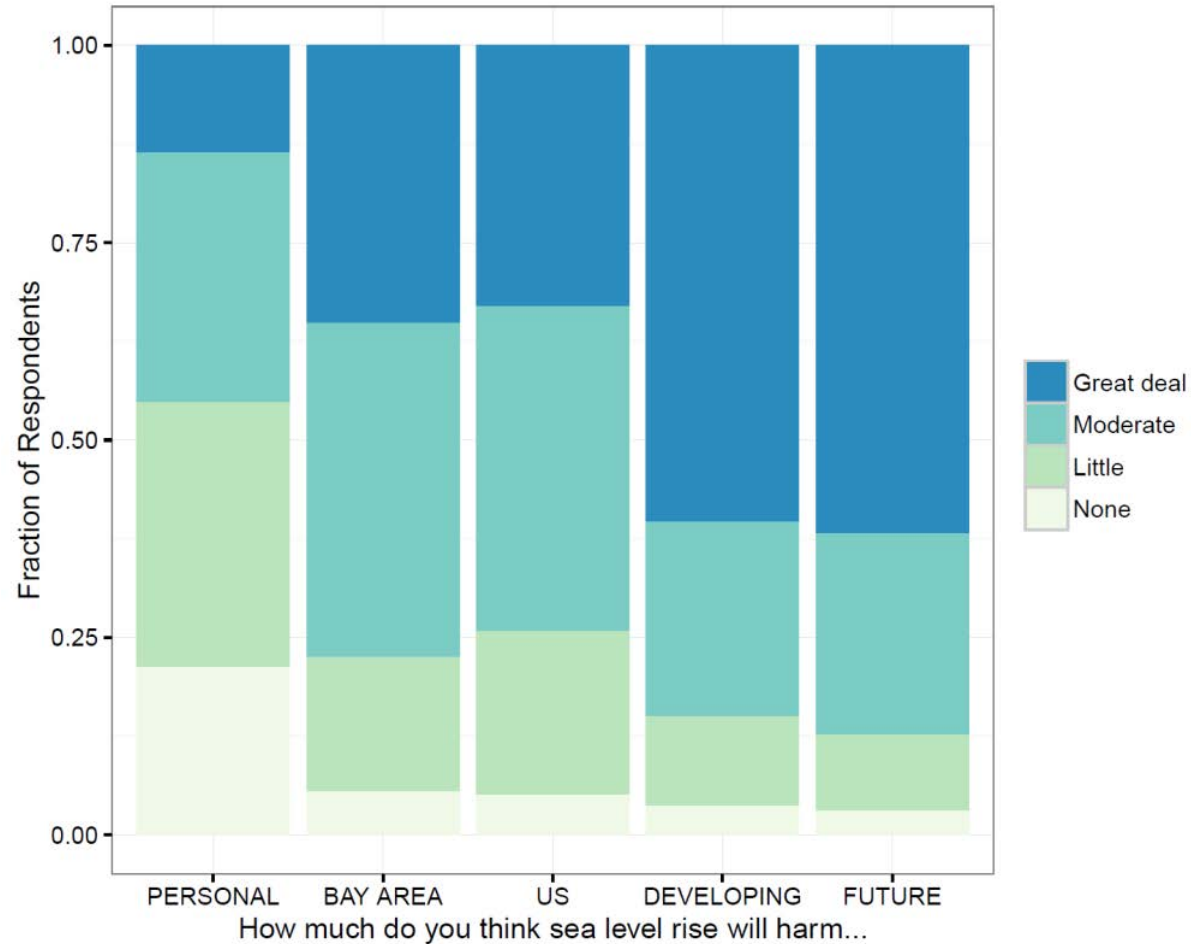
Actors that BARC is connected through the collaborative initiatives it participates in



HORNS OF A GOVERNANCE DILEMMA: CONSIDERATIONS FOR BARC

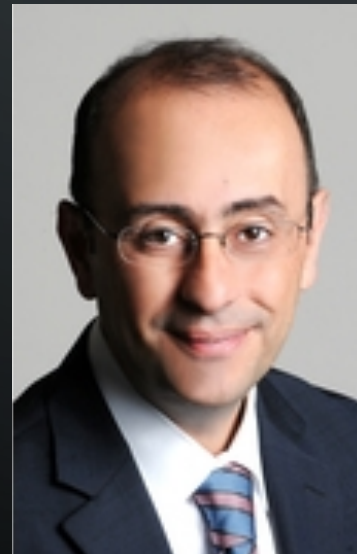
- Dilemma: Plan and leadership needed, but from who?
- BARC as capacity/convening role
- Seek to complement rather than compete with other existing efforts





NEXT STEPS

- Continued Outreach and Engagement on Basis of Current Results
- Comparative study of transportation projects in San Diego, Los Angeles, and Bay Area
- Household surveys in multiple regions
- Replication of governance study in other regions



THANKS!

QUESTIONS?

(Clockwise from top): Mark Lubell,
Mark Stacey, Bruce Riordan, Samer
Madanat, Francesca Vantaggiato