EACP Committee

From: Vong, Uyen <uvong@honolulu.gov>
Sent: Monday, September 16, 2019 3:17 PM

To: EACP Committee **Subject:** EACP-26 Presentation

Aloha,

Please find attached Director Stanbro's presentation deck for the EACP Committee meeting on September 17, 2019.

PowerPoint Version: https://drive.google.com/file/d/10WRX-I1UILq6QNQGWn4rjmB580iCUQf-/view?usp=sharing

PDF Version: https://drive.google.com/open?id=1 5QAyaoMGdrtWzTC8Mi2Twv1ZbuiCHID

Uyen



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The City and County of Honolulu has a new Resilience Strategy! Take a quick look HERE.





History and Formation

2015-2016 Charter Commission

Jessie Souki (Chair); David Rae (Chair)

Nearly 150 proposals→ 20 Final

National Research led to New York Model

2016 Charter Amendment Question #7: Should the city use its powers to serve the people in a sustainable and transparent manner and to promote stewardship of natural resources for present and future generations, and should the city create an Office of Climate Change, Sustainability and Resiliency?

Yes 157,215

No 109,389





Mandate from O'ahu Voters



The Resilience Office is a Charter-mandated City office created to respond to climate change, resilience, and other sustainability challenges.



Green
City Operations









Federal & State Agencies



Ensure Sustainable City Plans & Policies



Facilitate Climate
Change Commission





Structure

Agency within Mayor/Managing Director's Office

16 Total Staff



7 Regular City Staff + 3 Grant-Funded6 In-Office VISTA + 9 City-wide VISTA

ACCC Climate Advisor

Climate Resilience & Equity Manager

Energy Program Manager

Office Manger & Outreach Specialist

Executive Director & Deputy Director

Coastal & Water Program Manager

Grants & Research Manager

Long-Term
Hazard
Mitigation &
Disaster
Recovery
Program
Manager

Communications & Outreach Manager

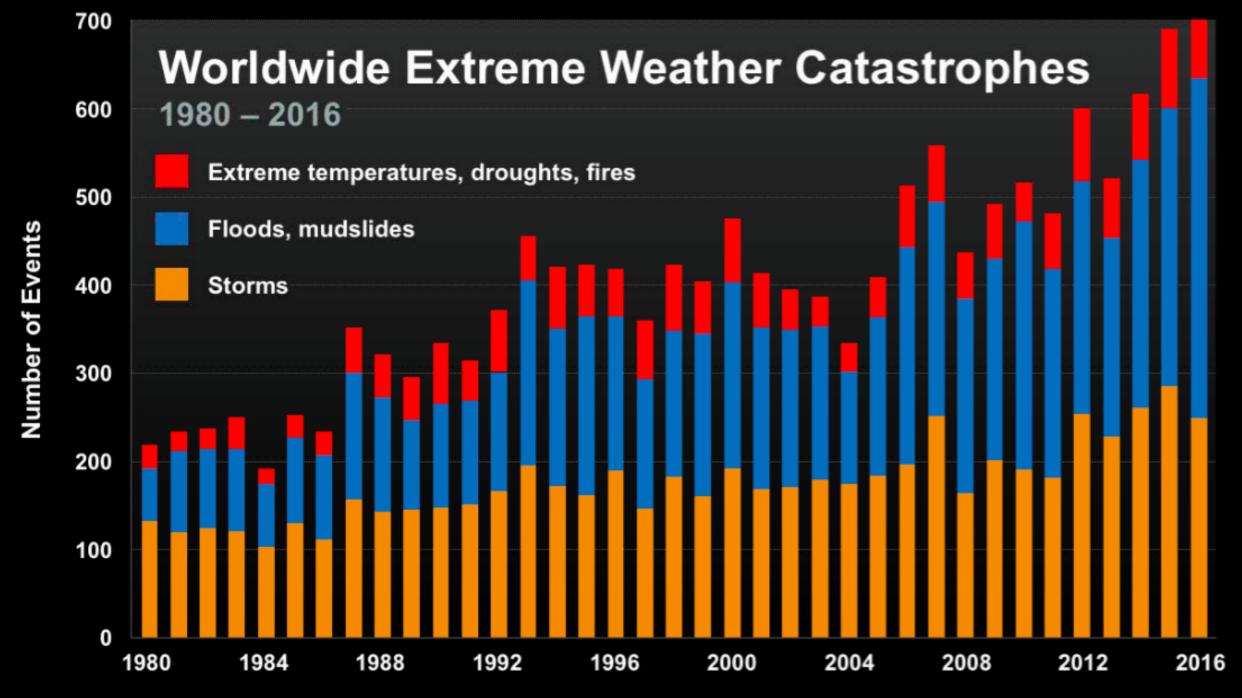




Climate Change is Now



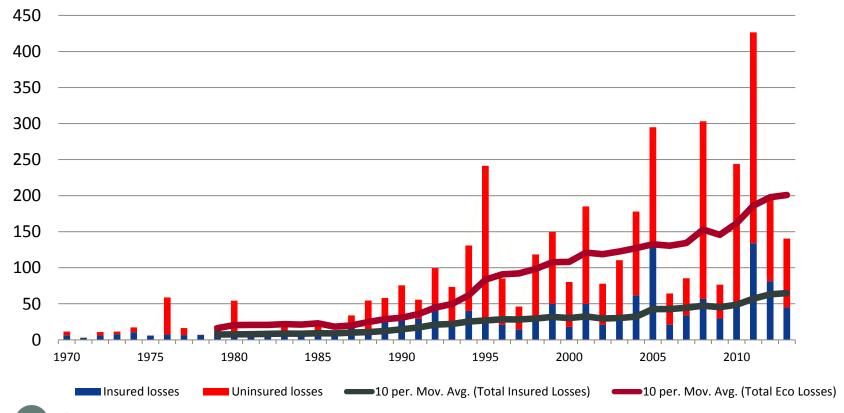




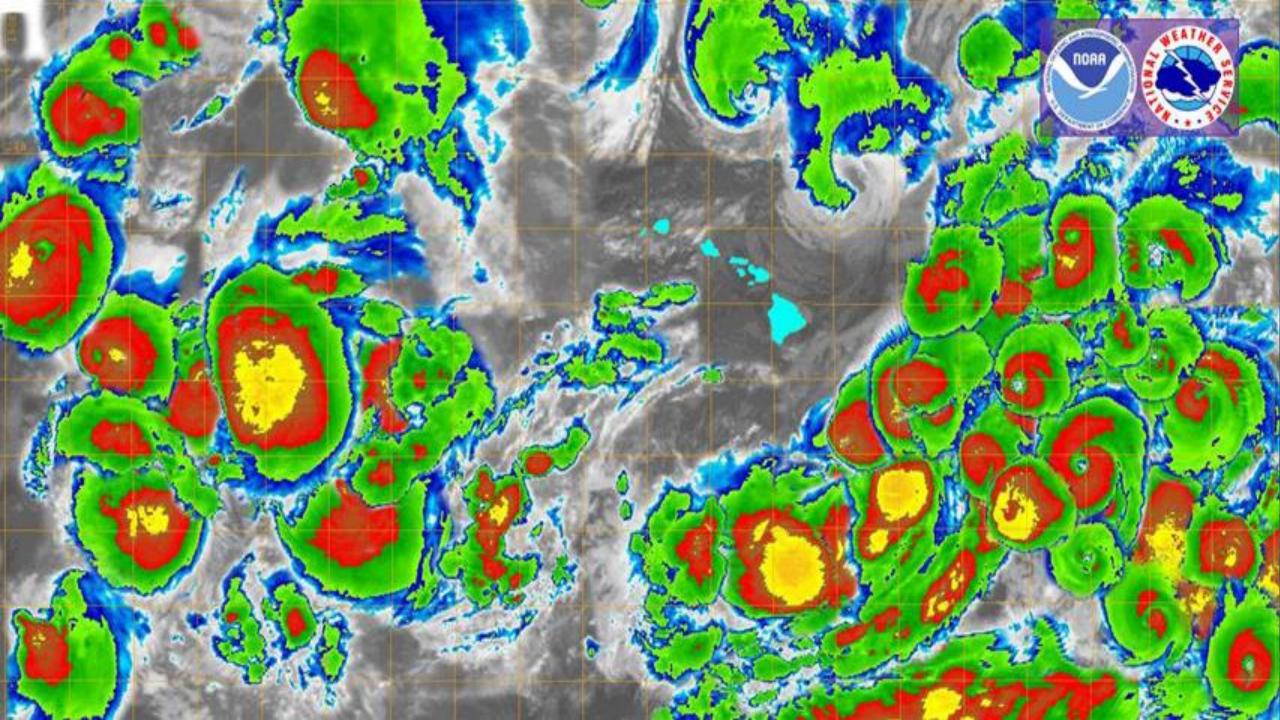
Risk/Protection Gap

The cost of disasters is widening along with the gap between uninsured and insured losses

Global natural catastrophe losses, 1970-2013 (in USD bn)











State & City Mandates & Targets

100% renewable energy by 2045
100% carbon neutral by 2045
100% renewable fuel municipal fleet by 2035
100% renewable ground transportation statewide by 2045

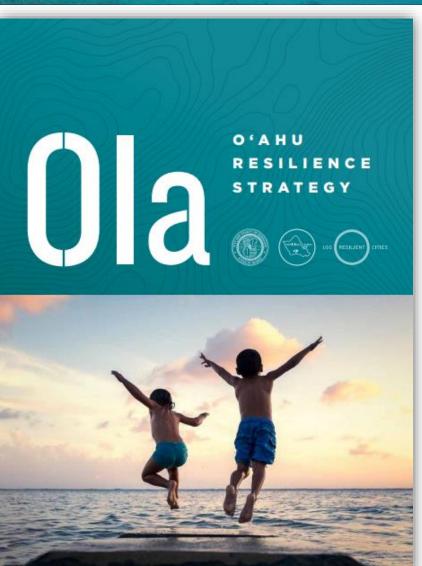






Fulfilling Our Mandate











Bond Rating



Grant Opportunities



Other Work

Collaboration



Heat Strategy



Disaster Recovery



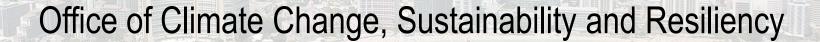
City Climate Change Commission

- Required to meet at least 2x/yr
- First met on February 7, 2018
- Have met 13x in 16 months

www.resilientoahu.org/about-the-commission









City Climate Change Commission

Policy Guidance

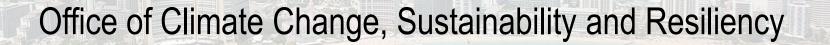
CLIMATE CHANGE BRIEF

This brief describes the local, regional, and global impacts of climate change as documented by the peer-reviewed scientific literature and credible empirical data sources. It provides a benchmark for the commission, attesting to the Climate Change Commission's concerns, underpinning the Commission's decisions and recommendations, and serving to inform those the Commission serves.

SEA LEVEL RISE GUIDANCE

This report builds on findings in the Hawai'i Sea Level Rise Vulnerability and Adaptation Report (2017), Sweet et al. (2017), USGCRP (2017), Sweet et al. (2018), and other scientific literature to provide specific policy and planning guidance on responding to sea level rise by the City.





Mayor's Directive on Climate Change



July 16, 2018: Mayor Caldwell issued an executive order on climate change and sea level rise in response to guidance issued by the City's Climate Change Commission.





Adaptation Examples



City Center Section
Rail Stations
Design Elevations
> 6 ft SLR + Flood



Sand Island Wastewater
Treatment Plant Secondary
Treatment Facility
Design Elevation
6 ft SLR + Flood + Freeboard
(16 ft above MSL)



Impacts of Climate
Change on Honolulu
Water Supplies and
Planning for Mitigation





Disclosure



The City and County currently publicly discloses its climate management activities including climate risk through CDP, an internationally recognized public disclosure platform used by thousands of companies, hundreds of cities and institutional investors. Honolulu's public disclosure is available at www.cdp.net.





Honolulu Networks & Memberships





American Cities Climate Challenge





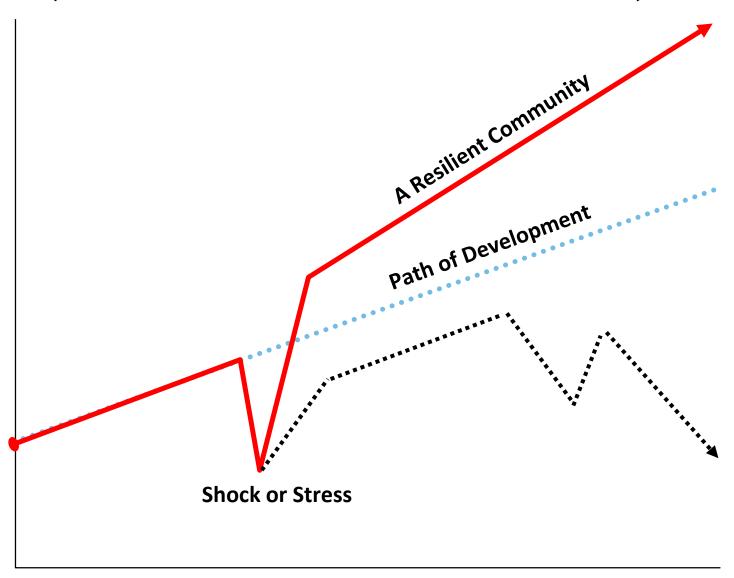
Resilience

The capacity of individuals, communities, institutions, businesses, and systems to survive, adapt, and thrive no matter what kinds of chronic stresses and acute shocks they experience.





Shocks and stresses can bring opportunities for communities to evolve, and in some circumstances, transform.





O'ahu Resilience Strategy



Community Input

Agenda Setting Workshop

140+

Stakeholders from 19 sectors representing 117 unique organizations

3 (

+2,200

Resilience Perception Surveys Conducted

(33) Neighborhood Board Presentations

(219) Meetings with other Stakeholder Groups

Basic Needs ^{Ovides} & Enhances Fosters Economic

On a scale of 1-10 (low - high), how resilient do you think O'ahu is today?



Riot/Civil Unrest

Survey Responses: Top Five Shocks & Stresses

Top 5 Shocks	Top 5 Stresses		
Hurricane	Cost of Living		
Tsunami	Climate Change Impacts		
Infrastructure Failure	Aging Infrastructure		
Rainfall Flooding	Lack of Affordable Housing		
External Economic Crisis	Over-reliance on Imports		
Disease Outbreak	Food or Water Shortage		
Nuclear Attack	Income Inequality		
Earthquake	Lack of Political Leadership		
Cyber Attack	Over-reliance on Tourism and Military Economy		
Terrorist Attack	Decline of Aloha Spirit		
Heat Wave	Educational Disparity		





- Community Resilience Pillars



Remaining Rooted



Bouncing Forward



Climate Security



Community Cohesion



O'ahu Resilience Strategy | Working Groups



Chief Output:

RESILIENCE ACTIONS

recommendations for specific initiatives, projects, or policies that the City might take

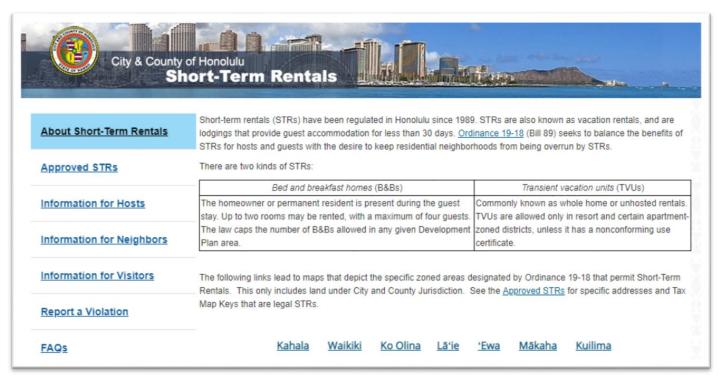




Remaining Rooted

Action 2: Return Illegal Vacation Rental Units to Local Housing

Near immediate 40% decrease in unpermitted vacation rentals listed online



http://www.honolulu.gov/dppstr/default.html





Bouncing Forward

Action 11: Protect Lives and Property by Updating Building Codes

Energy Code
Electrical Code
Building Code
Plumbing Code
Fire Code

National Benefit-Cost Ratio Per Peril *BCR numbers in this study have been rounded	Exceed common code requirements	Meet common code requirements	Utilities and transportation	Federally funded
Overall Hazard Benefit-Cost Ratio	4:1	11:1	4:1	6:1
Riverine Flood	5:1	6:1	8:1	7:1
Hurricane Surge	7:1	Not applicable	Not applicable	Not applicable
Wind	5:1	10:1	7:1	5:1

National Benefit-Cost Ratio by Hazard Mitigation Measure

If the City invests now in mitigation, rather than clean-up after a natural hazard, the return on investments are considerable:

Exceeding common code requirements saves \$4 per \$1 spent; Adopting model codes saves \$11 per \$1; mitigating infrastructure saves \$4 per \$1 spent; Federal mitigation grants save \$6 per \$1 spent.



Bouncing Forward

Action 14: Establish Future Conditions Climate Resilience Design Guidelines

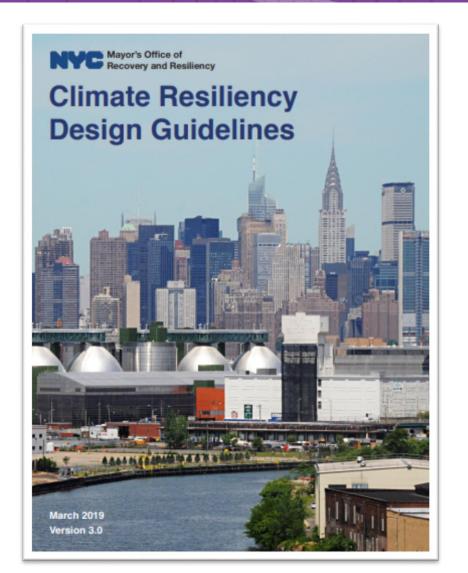
Forward-looking Design Parameters for:

Heat

Wind

Flooding

Sea Level Rise







Action 20: Reduce Taxpayer Expense and Increase Renewable Energy through City-wide Energy Performance Contracts

City-wide ESPC DPR ESPC



Photo credit: Honolulu Board of Water Supply





Action 25: Accelerate Carbon-Free New Mobility Options

Micromobility
Shared Mobility
Transit access





Photo credit: Bikeshare Hawaii







Photo Credit: Department of Facility Maintenance



Action 32: Deploy Sustainable Roof Systems to Manage Urban Heat and Rainfall

Green, blue, cool roofs Energy production



Photo Credit: Patrick Race, San Francisco Planning Department



