

Chapter 2 Workshop Notes

General Document Comments:

- Who is the ultimate audience for the RAP? - IMO, top of the list, it includes elected officials, top leadership in local governments, and top management decision makers in local government. We need help making the business case for resiliency including getting it into strategic plans, capital improvement planning, and annual budgets.
- Can you please circulate contact info?

Chapter 1 Comments:

- Loss of agricultural crops due to heat intolerance should be on list of climate indicators.
- Heat data is needed

ALICE Comments and Additional Resources:

- How will the new minimum wage impact ALICE?
- unitedforalice.org/florida
- <https://www.unitedforalice.org/methodology>

Community Health Comments and Additional Resources:

- RE: costs, a new report from the U.S. House Committee looked at the health benefits of climate action, the report found: The report highlights how keeping global warming in check per the climate accord goals set in 2015 would lead to the following estimated benefits in Florida over the next 50 years:
 - 101,000 avoided premature deaths,
 - 40,000 avoided emergency room visits and hospitalizations,
 - 10.2 million avoided lost work days,
 - And nearly \$750 billion in economic value of expected health benefits. Source:
 - <https://climatecrisis.house.gov/florida-climate-action-benefits>
- Union of Concerned Scientists presented on the Underwater report at the Tampa Bay Regional Planning Council
- This parallels the discussion about new urban communities and green building features re housing infrastructure
- Average cost of climate related ER visit

Climate Impacts to Health Comments and Additional Resources

- Clinicians in South Florida have seen the impact of exposure to roaches and rat feces, and it can have significant impacts on their patients.
- gas appliances increases asthma too
<https://www.theatlantic.com/science/archive/2020/10/gas-stoves-are-bad-you-and-environment/616700/>
- <https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities>

- Re: Granular data on heat. In Miami, there is a Citizen Science project, called Miami Shade, where citizens put “button” thermometers in their neighborhoods, at a bus stop, and they track temperatures. See it here: <http://miamistories.net/2020/06/16/join-miami-shade-citizen-science-heat-project/>
- I am not aware of any such effort in Tampa Bay, but there might be some tree canopy analysis in some of our counties.
- That kind of citizen science approach might be the best bet. Data on heat-related illness are available at zip code level from AHCA (the FL Agency for Healthcare administration), but I don't know that those data would be useful for the project in question. The heat-related hospitalization/ED data are geographically coded by where the person lives, not where they experienced heat-related illness
- The Trust for Public Land “Urban Heat Island Severity”
- “Contains the relative heat severity for every pixel for every city in the United States. This 30-meter raster was derived from Landsat 8 imagery band 10 (ground-level thermal sensor) from the summers of 2018 and 2019.”
<https://www.arcgis.com/apps/webappviewer/index.html?id=1b6cad6dd5854d2aa3d215a39a4d372d>
- FYI One project we’ve talked about at FCCA is doing some coding training exercises with Clinicians to help them better-code heat-related emergencies so that we have better data on the back-end.
- Proper coding is so important for public health tracking! Not necessarily related to climate, but it's essential like bike and pedestrian accidents too
- resource with the ArcGIS link - very interesting. Thank you for sharing.
- This research paper documenting a relationship between cyanobacterial harmful algae blooms and non-alcoholic liver disease may be of interest: <https://pubmed.ncbi.nlm.nih.gov/25948281/>
- I am concerned with the potential impact on major health centers such as hospitals and medical schools in Tampa and St Pete if a hurricane hits Tampa Bay. I know this might be in the simulated hurricane recently produced by TBRPC, but this is a critical impact of climate change locally.
- That is an important concern. It is one that our Emergency Management Departments at the County level are on top of. In Clearwater we have a hospital that will be high and dry. Obviously, Tampa General has a lot of vulnerability...
- Also, City Tech Collaborative ’s “Urban Heat Response”
<https://storymaps.arcgis.com/stories/2a65c5325c164c7cad6d9a0d8fb40ad1>

Housing and Risks Comments and Additional Resources

- REVISIONING RECOVERY FILMS <https://vimeo.com/43229446> Password: revisioning
- Revisioning Recovery website: www.workingfilms.org/revisioning-recovery.
- UF created the tool before the REACH project, they will develop a regional version using our data and SLR scenarios and timeframes
- <https://arcg.is/00uiS1>
- I am also very interested in understanding the number of homes without access to a working air conditioner, or without adequate insulation

- The Shimberg Center is working on another project that may touch upon the insulation element. It is in very early stages but we understand this is also an important issue.
- I believe that there is a significant opportunity - through job training and workforce development - to enable low-income communities to participate in the rebuilding and strengthening of their homes - through major energy efficiency/ resiliency retrofits to homes and businesses. This will require significant funding, which I believe should come from public-private-non-profit partnerships.
- Actions directed to the FL Legislature pointing out the COST of taking funds from Housing Trust Fund.
- St Petersburg has a prime opportunity to apply these findings to a new Tropicana Field.

Breakout Discussion

Suggested Goal: Common Understanding

- Agree on the data that your jurisdiction is going to track over time - and how does that relate to climate change - how does it relate to equity?
- Encourage use of Social Determinants of Health -
- Where is the opportunity for local government to insert health? (In an RFP?)
- Success is when actions positively affect social determinants of health.
- What are your metrics, write them down, and hold yourself accountable to them.

Suggested Goal: Break Down Silos

- Create a standing working group to breakdown silos and to ensure right hand is talking to left hand.
- Increase collaboration with public health partners through inclusion on committees, work groups, teams, task forces
- Identify, build and grow partnerships
- Identify partners through human asset mapping (meet people where they are at)

Suggested Goal: Use Health- Equity Lens

- Ensure all decisions require a review of the unintended consequences. e.g. a requirement to review and consider externalities and unintended consequences.
- Emphasize preventative care and develop systems that recognize root causes of health issues.
- Ensure costs are calculated, including externalities (asthma attacks, ER visits,)
- Health Behavior Education and Removing barriers

Suggested Goal: Education

- Increasing Community Understanding - Raise awareness of health in all policies, and combatting generational health habits

Suggested Goal: Educate the public and local governments about the health impacts of climate change.

- Objective: Educate the public about their disaster vulnerability and offer trainings to ensure that households have individual emergency response plans

Suggested Goal: Integrate health and equity assessments and considerations into resilience planning across the region.

- Objective: Develop health and equity measures/metrics/indicators
- Objective: Monitor changes in climate-related health outcomes over time.
- Objective: Evaluate local regulations surrounding heat-related safety. Do any local governments prohibit outdoor work on extreme heat conditions (or other health conditions -- asthma guidance and air pollution)?
- Objective: Address the social determinants of health in resilience planning.
- Objective: Identify physician guidelines for when you should not participate in outdoor activities. Look to a respected health/public health group to develop these regulations. Sports and military organizations have developed these kinds of guidelines in the past.
- Objective: Incorporate weather STEM outlets. Weather-STEM outlets monitor wet bulb low temperature every 15 minutes and list observations by color category when it is safe to be outside and for what duration of time.

Suggested Goal: Establish partnerships with public health, healthcare, and equity-focused organizations to assess health impacts and implement health and equity-promoting strategies.

- Objective: Develop a health/equity subcommittee of the Resilience Coalition.

Suggested Goal: Research health-related planning and adaptation strategies used by other jurisdictions around the country.

- Objective: Identify success stories from other jurisdictions that may be transferrable to the region.

Suggested Goal: Communities should understand their health vulnerabilities by assessing and projecting the climate risk associated with health and looking at the social determinates of health. Social determinates should be integrated with climate risk.

- Develop integrative strategies and find sources of funding to implement those strategies.
- promoting more cross sectoral, sustainable development practices that are mainstreamed across plans
- advancing green infrastructure, green space in urban design
- develop strategies that promote health co-benefits

Suggested Goal: Root health strategies in resolving historic injustices and systemic barriers and patterns.

- Center and integrate equity in all health and resilience policies
- Identify diverse sources of funding assistance to decrease economic burdens to retrofit / upgrade, attaining targets and development codes
- Increase access to healthcare, insurance, prevention, treatment for VPs

Suggested Goal: Build awareness among communities, community leaders, increase education/awareness on climate risks, health impacts and response strategies

OBJECTIVE for GOAL 3: Develop integrated training and communications platforms

- Training of public health professionals in climate and health mitigation/adaptation planning
- Emergency response training offerings in neighborhoods
- Increase capacity of local community response teams

Suggested Goal: Increase resilience administrative / professional capacity

OBJECTIVE for GOAL 4: Increase professional positions related to climate resilience

- Expert positions related to risk mapping, epi, climate evaluation, public health, floodplain management in house at the county / local level

Suggested Goal: Promote broader collaboration and engagement

OBJECTIVE for GOAL 5: Establish stronger relationships with partners working in climate change resilience and planning

- Develop partnerships with community service organizations and social service delivery partners, faith-based organizations
- Find opportunities to include health representatives / professionals in resilience planning workshops
- Leverage strategic partnerships and research with universities and research centers
- Collaborate with private sectors to for resilient planning (Building codes, green infrastructure)

Suggested Goal: don't look at health by itself, but how its connected to everything (social determinants)

Suggested Goal: Spread awareness and provide educational tools on barriers and patterns focusing on vulnerable population.

Suggested Goal: Increase housing resilience by assessing integrating housing risks into all critical resilience documents and plans.

CHANGE TO: Increase housing resilience by identifying housing risk and incorporating standardized incentives and regulatory language across all local and regional plans within the TBRPC footprint.

- replace 'housing risks' with climate-based risks to affordable housing
- Link local governmental documents/local codes to the RRAP
- Collaboration/integration with working groups (#5)
- Unified regional policies

Suggested Goal: Create standardized, science-based methods for quantifying and mapping housing inundation and produce new maps to support local planning and identify areas to encourage/incentivize the development of affordable housing with access to transit, jobs, and resources.

- produce and adopt new maps for planning and reg purposes
- tax/permitting reductions to build away from high-risk areas & transit corridors
- encourage critical infra, jobs, transit, etc away from high-risk areas
- This is trying to cover too many items.

Suggested Goal: Develop a regional framework, process and metrics to evaluate the intersections of community vulnerability and affordable housing risks

- there are mechanisms in the State's comp plan ... look at how adaptation action areas can serve as mechanism for building new strategies

Suggested Goal. Define additional data/research needed to inform housing strategies based on forecasted Income/wages compared to rent and housing needs.)

- Can we look at other economic forecasts (insurance)?

- DEFINE ADDITIONAL DATA RESEARCH NEEDED TO CONDUCT A PHYSICAL HOUSING NEEDS ASSESSMENT FOCUSED ON LOW AND MOD INCOME HOUSEHOLD AND NEIGHBORHOODS start with assessment of housing stock and quality and compare with
- need to reconcile issues Hills. Co is having right now with mechanism and tracking affordability. Establish programs to support development of affordable housing

Suggested Goal: Support collaboration/integration between LMS, CRS programs and housing plans. (Regional/Local Action: Convene LMS and CRS workgroups to develop housing recommendations for future plan updates.)

- Encourage affordable housing away from high risk or non-insurable development areas

Suggested Goal: Coordinate a shared understanding of current/ future risk and resilience priorities across government departments. (Get everyone moving in the same direction.)

- Review and re-prioritize/leverage funding resources to important areas to reduce flood risk (ex: monies for inland conservation could be better spent protecting coastal areas)
- Share resources across municipalities/counties

Suggested Goal: Proactively work to reduce potential disaster impacts- concerns about potential of long-term recovery (2-4-year rebuilding process); need to put in place policies to enable more efficient/equitable recovery

- Reduce socio-economic disparities in recovery

Suggested Goal: Advance mitigation strategies

- Relocate very poor condition homes (empty lots)- homes that empty/blighted → and rebuild resilient affordable housing and improve neighborhood infrastructure
- Recognizing importance of natural systems to protect homes/communities

Suggested Goal: Advance resilient and equitable development policies and practices

- Be careful about policies (perhaps unintended effects) that could increase gentrification
- Use adaptation action areas as policy framework

Suggested Goal: Broader comprehensive community planning is integrated into resilience planning/flood risk mitigation

- Need to consider other factors such as lack of good hospitals, access to food, and more
- Conduct assessment of transportation corridors- need to know where to locate redevelopment that is safer w/ access to community resources, jobs, transportation, etc.

Actions

- Re: Common understanding: One metric - access to a grocery store or healthy food retail
- Education is important - helping people understand how to make healthy choices -- Food and Nutrition Education
- Establish a competition to foster citizen led innovation on architectural resiliency/mitigation strategies.

- Incorporate weather STEM outlet information into municipal regulations regarding heat risk during outdoor work/activity.
- Develop a health/equity subcommittee of the Resilience Coalition
- Develop a monitoring system for different climate change impacts on health (i.e., particulate matter in the air, heat index, etc.)
- TBRPC provides all potential housing risk within the region-Matrix for potential risks so we can then respond to the risk respectively (i.e.: heat, etc.)
- Provide resilience guide
- Establish the incentives and regulations toolkit for every jurisdiction to meet the minimum standard, and how can you exceed the minimum regulations
- Create a regional chapter linked to FGBC, engaging community participation (organizations, residents)
- Assess existing affordable housing stock (NOAH) vulnerabilities to prioritize them for mitigation activities (in an organized process based on potential hazard impact)
- Develop climate adaptation toolkit based on neighborhood, not region
- Use valuable case studies (City of Miami Beach, LA Safe) to help inform the region's resiliency efforts. (ie: <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/Regional+Adaptation+Strategy.pdf>)
- Define strategy about mobile homes and make it consistent. Incentive on private sector to tie-down and mitigation.
- Preserve affordability of units/mobile homes in disrepair through regulation and public/private partnerships.
- Encourage affordable housing away from high risk or non-insurable development areas
- tax/permitting reductions to build away from high-risk areas & transit corridors
- plan for shelter-in-place for development within the CHHA (or support municipal sheltering capacity needs)
- create (obtain) a revolving mitigation fund for aging housing infrastructure
- support above-code building requirements
- Support- prioritize programs that conduct home hardening, elevation and reconstruction.
- Target repetitive flood areas for homes to be bought out and the residents relocated appropriately
- Replace older mobile homes and support programs that strengthen mobile homes with tie-downs and other enhancements
- Ensure equitable resilience activities that prioritize low and moderate income households and neighborhoods, persons experiencing homelessness, including renters and persons residing in group or permanent supportive housing
- Provide a variety of financial and regulatory incentives to support housing mitigation activities and apply regulatory disincentives to housing development in areas subject to climate based hazards
- Advocate for and support housing resilience activities that result in home insurance premium discounts and other economic benefits such as tax relief for green building practices
- Advocate for and support community engagement and competence in implementing housing resilience programs including robust citizen participating and implementation of tools such as community land trusts, permanent affordability requirements, land banking, and green certification

Measuring Progress and Success

- Re: Common understanding: One example metric - access to a grocery store or healthy food retail
- MEASURE: partnerships - how many new partners are you bringing into the fold
- Number of partner jurisdictions that adopt regulations regarding heat risk during outdoor activity
- Number of jurisdictions that track high tide flooding
- Number of jurisdictions that track reductions of energy use in government buildings
- Number of jurisdictions that explicitly consider health impacts and outcomes on planning
- Amount of affordable housing units built away from the CHHA
- Increase in sheltering capacity
- increase insurability of new and old homes
- Number of homes assessed for risks to climate-change-based hazards
- Creation or expansion of home retrofit programs utilizing resilience measures
- Marketing and public information of assessments and resilience programs.
- Hire staff qualified to do home inspections, work writeups, customer intake and excellent service and project management
- Number of homes retrofitted for flood or wind hazards
- Assisted housing outfitted with heat sensors and alarms
- Number of installations of backup generators for permanent supportive housing and other assisted housing to allow for sheltering in place
- Number of mobile home replacements, tie-downs etc.
- Adoption of Incentive Strategies to reduce the cost of developing affordable housing (LHAP)
- Extent of insurance premium discounts for homeowners utilizing resilient building practices (securing window and door openings, strengthen gable ends, water barriers, flashing, etc...)
- Support infrastructure programs that target low mod neighborhoods to correct inadequate drainage issues

The next meeting is the Equity Workshop on Friday, Dec 11 !