

04/25/18 Revised 05/17/18

TO: SLR Committee Members, City of Miami Commission, Resiliency Office, Community members

As an architect, my focus is more on ADAPTATION at the moment than on Mitigation.

My suggestions as to a **40 Year Plan** towards a more resilient City of Miami and greater South Florida is the following:

1. **MAPPING:** Finalize a detailed topographic map of the city and its elevations above mean sea level.
2. **STORM WATER MANAGEMENT MASTER PLAN:** Create a smart storm water management plan with a smart consideration of the water capacity that the system could handle in a certain period of time, say next 40 years.
3. **TIMELINE AND PRIORITIES TO REDUCE RISK:** Create a timeline of how 6-8 feet of SLR will bring significant risk and damage to our cities infrastructure and its building assets.
4. **GUIDELINES FOR DESIGNERS-BEST PRACTICE WITH INCENTIVES:** Create a SOLUTION BASED guideline that will allow architects, planners, engineers and developers as well as private home owners understand how we need to design into a more resilient future proofed city.
5. **ECONOMIC MODELING OF RISK AND STRESSES:** Create a simple to understand pro vs. con strategy towards urban economic stability and growth associated with Climate Related stresses. This should be a document that all citizens of our coastal city should study and learn how each of us will be part of a solution towards increased resiliency in our community. Economic modeling is important to have a data based decision making process.
6. **SEA WALLS STRATEGY- SHORT and LONG TERM:** Create a SEA WALL strategy to effectively protect the edge of our city along the body of water we know as Biscayne Bay. This in my opinion is a hard infrastructure strategy but natural systems will compliment this strategy as well but not as a primary solution.
7. **RESILIENCY INTERACTIVE ECONOMIC MODEL:** Create a COST EVALUTION of the impacts of SLR on our city, evaluating the cost of doing nothing and the return on investment of gradual phased investments into our cities infrastructure and future proofed civic realm.
8. **ENVIRONMENTAL IMPACT ACCESSMENT AND STRATEGY:** Create a working document on how we need to protect the natural environment that will inform infrastructure work in our city thru a phased implementation schedule associated with the cost of adapting the City to the impacts of Climate Change and specifically Sea Level Rise.
9. **ASSISTANCE STRATEGY TO HELP DISADVANTAGE COMMUNITY ON IMPACTS RELATED TO CLIMATE RELATED STRESSES:** Create a comprehensive document that establishes a sensible and inclusive social equity plan to assist the disadvantaged in our community to adapt and cope with the many impacts that SLR and Climate Change is already bringing to this community. We need to reinforce how we treat the community of disadvantaged citizens and how we protect them from this catastrophic event well into the future.
10. **CODE MODIFICATION STRATEGY WITH URGENCY:** Focus City Planners, Building Dept. Officials, Public Works and other city staff on the creation of a guideline towards a RESILIENCY MIAMI that along with political leadership will become a world class document that will set new standards towards enhancing resiliency, protecting our built assets and ensure a future proofed city, one project at a time with a comprehensive global approach. Informed by the best design and planning strategies along with economic strategies that will bring a phased approach to a very complex and devastating concern we now know as SLR and Climate Change.

Respectfully,

Reinaldo Borges, AIA, ULI, NACRB

Principal of Borges + Associates Architect

Chair of AIA Miami SLR Task Force

Chair of Pillar Board Miami Beach Chamber

Member of SLR Committee City of Miami

Member of AIA Florida Strategic Council on Resiliency

Sea Level Rise: 40 Year Plan Workshop
05/17/2018 at 10am at the Miami Rowing Club

Attendance: Patrick, Reinaldo, Wayne, Jose, Albert, Frances

Opening Remarks

- FEMA will be moving to risk-based pricing in 2-3 years, this will have significant impact
- Would like to present something to commission by end of year

Discussion

- What concepts to consider?
 - Risk plan cannot focus on everything (carbon emissions, erosion, etc) needs to be concise and focus on biggest risks
 - Jane: unique plan that should point to other existing plans, target at investors, need to address equity throughout the planning process
 - Heat, disease pandemics, storm surge... what risks to include?
 - Is this a 40 year resiliency plan or 40 year risk plan?
 - How does this fit in with 100RC? We already have a team of experts working on a plan and can leverage 100RC resources. Don't want this plan to end up disjointed and unconnected to ongoing GM&B work
 - Focus on risk and financial impacts – all other actions don't happen if we don't address economics
 - What are our primary threats when it comes to water? Use this plan to come up with a philosophy on land reclamation/retreat
 - Need to think of "smart growth" in development
 - We need to demand design standards from the SLRC first, incentives second
 - Chronic issues in city of Miami – elderly, housing...
 - We need a set of best management practices (BMP)/framework
 - "A plan gets shelved, a framework gets implemented" - Albert
- Recommendations
 - Mapping – use deliverables from Stormwater Master Plan
 - Can ORS give SLRC updates on SWMP?
 - Dynamic model that is used by all areas and planners in the Compact so planning is coordinated
 - Design guidelines for existing and new buildings
 - Economic Modeling – tie in RMS?
 - Investors at Exceedance conference spoke a lot about thinking about ROI
 - Consider all expertise, not just RMS
 - Sea Wall Strategy short and long term – sea wall continuity, evaluate cost-benefit,
 - Green infrastructure is also beneficial, we should include it
 - Yes, but it is slower to implement (such as mangroves)
 - Consider "natural and built solutions" - title of that action should reflect that
 - Code Modifications with Urgency – building is a backbone and engine of life in South Florida, code is what shapes our future
 - Planning is having a meeting next week, draft on Code "low-hanging" fruit will be done by next week, open to recommendations from the committee on land-use and retreat (inclusive of equity)

- Funding/contracting
 - Ability to contract outside: ORS has about \$100K to spend on contractual services
 - Reinaldo: should point and use County resources when possible – they have a bigger budget and already work on heat stress
 - Does Planning have funding for contracting?
 - Note: as a committee we can ask for pilots
 - Multi-jurisdictional concepts are cost-sharing opportunities
 - City agreed to give is \$300K once, we should go back to the City and ask for that money
- Vulnerable populations
 - Tie in to Partners for Places grant
 - Ensure Kilan is involved
 - Frances: equity needs to be thought of in all actions, not just a siloed action
 - Address equity via property
- Title ideas
 - “40 Year Resiliency Risk Reduction Plan” – Reinaldo’s suggested title
 - Resilience and Risk should both be in the title
 - “City of Miami 40 Year Risk Reduction Plan” – Frances suggested title
 - Does not want resilience in the title
 - “City of Miami Risk Action Plan” – Wayne (RAP for short)
 - Patrick is concerned that it sounds too broad, isn’t the focus on flooding?
 - “Risk Action Framework Tool” – Albert (RAFT for short)