

Historic Preservation / Sea-Level Rise: A Collaboration Document

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Overview and Summary

The impetus for these SLR/Historic Preservation dialogues grew out of a desire to utilize FIU's presence on Miami Beach as neutral territory to facilitate the respectful sharing of ideas and opinions around the subject matter. We started this volunteer process by briefing the Planning Department and the City of Miami Beach Commissioners on the project and gaining their support. To the greatest extent possible, we hoped to facilitate a knowledge sharing and learning process to help the City's citizens and leadership discuss—and evaluate—issues and potential solutions related to sea-level rise and historic preservation.

This document was created through the input of vested homeowners, residents, historic preservationists, business owners and developers who are interested in the future of the City of Miami Beach (and who were available when we scheduled the 5PM sessions). The notes below were collected during five intimate and thoughtful “Dialogues” scheduled between March 14, 2017 and May 15, 2017 in the Miami Beach Urban Studios located at 420 Lincoln Road. The participants, of which there were just over twenty including the hosts, were given an opportunity to review and correct the notes before they were included below. None of the invited participants sat on city land use boards, worked for the City of Miami Beach or served as elected officials.

The document has been divided in seven focus areas, many of which overlap with one another. These are: historic buildings, preservation strategies, planning/zoning/funding, new construction, current projects in Miami Beach, flood water management, and parking/housing/insurance. Each focus area includes a brief summary followed by notes of the discussions transcribed during the events. In many cases the notes have attempted to retain the original train of thought and grammar. The document closes with final thoughts toward possible solutions including areas of possible convergence.

In summary, the facilitators found great promise in the convergence of a great number of ideas around historic preservation and sea-level rise. There was general acknowledgement of the need for data-driven conversations and results. As to be expected, there remained many questions surrounding both broad priorities and specific resiliency strategies. What should incentives look like and who should receive them? How do we evaluate the term “contributing” when applied to an historic building? What does it entail to modify historic buildings for resiliency without losing the precious relationship between past and present? How can we leverage the need for new

investments for sea-level rise adaptation to grow Miami Beach stronger with higher quality of life for residents and business owners, preserving its uniqueness and with a flourishing tourist economy? To answer these and many more questions, we hope to see more respectful dialogues grounded in facts following in the near future.

1. Historic Buildings

Historic Buildings: Summary

Historic buildings and their designation as contributors to Miami Beach were the topic of some of the most frequent and impassioned areas of discussion. Concerns were expressed about a range of issues from the definition of a “contributing” historic building to the impact that historic designation has on the options for future repurposing or resiliency of the building. The point of confluence, if there was one, seemed to be that more data is needed on the specific benefits that historic building fabric provides our community and that those data be utilized to guide decision-making processes moving forward.

Historic Buildings: Notes

- There were concerns that there are more hurdles in Miami Beach to refurbishing historic homes than to tear down and rebuild.
- Participants said they would be willing to raise their historic buildings to allow parking underneath, and would be willing to invest to do this if the city would allow it.
- Homes built right after WWII tended to have basements – soon after this, it was thought, they were discovered to be flood prone and sump pumps were installed. Apparently, many homes with basements have sumps.
- Restoration services are often needed in historic buildings because corrosion of rebar inside concrete is expanding causing it to crack further and spall.
- It was thought that refurbishing was less expensive than new construction, with some key exceptions.
- Historical designation was mentioned as a means to deter developers from razing designated structures.
- Homes on Key Biscayne designed and built by the Mackle brothers for retirees and young WWII veterans, are suffering a similar fate to private art deco homes on Miami Beach, in that many are being torn down and replaced by large homes rather being renovated.
- Building at 948 Meridian Avenue can't be adapted for sea-level rise because of existing code restrictions related to land use in historic districts. Basement flooding at 700 Euclid still occurs, even with 2 sump pumps in operation.
- Who is neighborhood historical preservation for? Tourists? Residents? Heritage? Quantify documented visits with inventory of Flickr posts on MB. Use data.
- Refurbishing historic structures is certainly possible and there are good and not so good examples of how it can be done. One issue is that the cost of

refurbishing historic structures is difficult to assess because new costs creep in as you pull the carpet up, get into the structure of the building. Webster is a heralded example of adaptive reuse but it cost way more than the client thought it would. Difficult to know at the onset of refurbishment how a construction project will change.

- We want to know specifically what it means to be a “contributing” building?
- There is recognition that some historic properties may not be cost effective to preserve (some are in quite bad shape). But at the same time historic buildings give MB its uniqueness.
- We should recognize that raising homes is very expensive and we don’t have all the information on how it might be accomplished.
- We should repurpose more historic buildings.
- Is it just the preserving of a façade that constitutes preserving a building? Or is there some other way to honor it?
- Make sure that people understand we are preserving buildings by saving their fine architectural details, which does not mean the death of the building.
- Is historic preservation the business of nostalgia?
- Wolfie’s is an example of what did not work well in terms of preservation.
- Lincoln theatre is an example of what did work well with a renovation and repurposing of an historic building.

2. Preservation Strategies

Preservation Strategies: Summary

Comments concerning preservation strategies tended to develop consensus around the idea that not all buildings are equally adaptable to sea-level rise and that there needed to be large-scale thinking and funding to address the multiple needs. These included the idea of a Works Progress Administration (WPA)-style government-funded effort to make the changes required to build resilience¹ into historic buildings and neighborhoods and the development of net positive incentives that engage the private sector.

Preservation Strategies: Notes

- We are interested in seeing options that make a difference and implementing those best options in order to be proactive. We would like case studies (i.e. incentivizing people to raise their homes) of success. Apparently Palm Beach does a lot of historic preservation.
- We need to create a market to develop the economies of scale, a new WPA-type effort, that would enable some level of subsidy for solutions that may be

¹ Urban resilience describes the capacity of human communities and the environment that sustains them to continue to function well, so that the people living and working in those communities – including the poor and vulnerable – thrive now and into the future no matter what stresses or shocks they encounter (adapted from City Resilience Framework - The Rockefeller Foundation)

expensive – however, there are cost-effective examples of refurbishing large buildings and long-term benefits that are not yet part of the calculus.

- Miami Beach should become a model for changing the way we do things rather than reacting. For example, in taking climate mitigation seriously, it should be recognized and assessed that redevelopment—the creation of a new building—has a higher carbon footprint than refurbishing or repurposing an existing historic building would have.
- Participants thought that raising one-story buildings, and allowing parking underneath, would likely result in schemes that do not exceed current height restrictions because they would be rising only from 1 to 2 floors in the historic district.
- We want focused attention on the building fabric to enable a complete, detailed reconstruction² of historic structures. This would include a survey of ground elevations of historic structures.
- The status quo for Historic District isn't working because of the hurdles to refurbishing for sea-level rise adaptation. Also, we recognize that some additional height allowances would be needed, first floor parking, and rules would need to be changed to be less rigid in order to allow for long-term preservation of these historic structures. We need design guidelines that are consistent with sea-level rise adaptation – a new first floor and new additions that are architecturally sympathetic. What are some other amenities that sea-level rise adaptation design guidelines could afford? These may help change hearts and minds of the “old guard.”
- There is consensus that we need to work together to incentivize development, which might be thought of as a zoning, planning and preservation trifecta.
- There was a suggestion that the historic preservation and planning boards need to work together to agree on creating a quality, resilient built environment that is protected from sea level changes.
- Decision making should include business owners.
- There is a need to have the new in order to save the old. Buildings that can be saved, should be saved. All buildings should be screened for sea-level rise.
- There can be an increase in FAR, but maintain the scale of the community.
- In Cleveland, the city will sell you a house for \$1 if you renovate (a Knight Cities project?).
- Are there other ways to preserve history? Digital scans? Augmented reality? More often than not we cannot rely on building surveys for actual historical renderings. Buildings change over time as they are renovated, and much is not documented. Even if documented, some features are irreplaceable, like terrazzo floors (i.e. few remaining terrazzo artisans).
- We need to generate revenue if raising buildings is what is identified as the way to preserve some structures. We have to determine what's valuable. We need a

² The use of the terms refurbish, repurpose and renovate were generally used to express similar (but not necessarily identical) strategies involved in modifying and saving existing buildings. Terms like redevelopment, rebuild, reconstruct, and new development, however, were generally used to describe new construction.

new narrative for guiding preservation of priority structures i.e. “everything” can’t be “contributing.” We also need a mechanism to compensate residents, businesses, and developers who are the financial losers.

- Rather than calling it preservation, call it something else to allow for different ideas about honoring what is valuable about historic structures.

3. Planning/Zoning/Funding

Planning/Zoning/Funding: Summary

On the issues of planning, zoning, and funding related to historic preservation and sea-level rise, the most passionate discussions occurred amongst those who engage directly with the urban fabric and its zoning. The larger points of consensus seemed to grow around the idea that everyone in Miami Beach, including the State and the Federal government, is in this together and should be communicating.

Planning/Zoning/Funding: Notes

- There are concerns that state and federal governments are not on board with city strategies toward sea-level rise and historic preservation.
- We need to find a way to leverage our tourist hub status for reinvestment in the community – need to capture more of the income from tourists – there’s a tourist tax, but more of that needs to be captured in order to meet the needs of the entire community and raise the tax base without penalizing residents or businesses. Roads are being raised above the level of front doors and this calls into question how much the quality of life of residents is a priority.
- The group agrees that the market for historic buildings has cooled. But they expect the trend will soon turn away from modernist new construction and back to historic buildings, which will be lost if there isn’t historic building fabric remaining.
- There seem to be zoning issues and new regulations with no clear understanding of what’s motivating those land-use zones/regulations. For example, some original historic structures are no longer permitted for their original use, which could be leveraged as an incentive for refurbishing for sea-level rise adaptation. Historic hotels are no longer able to be used as hotels. Homes on stilts are not permitted because of issues related to walkability. It is unclear why there are new regulations that require more area for permeable substrates. It seems that archaic or window-dressing type rules have triumphed over livability and common sense.
- These are issues that concern me: height & parking restrictions, impact fees, FAR, grade, zoning, planning & HP boards in silos, restrictions on redevelopment and refurbishing historic structures.
- We need a methodology (decision-making tool) to incentivize quality redevelopment; zoning/planning changes i.e. double FAR (raising the structure and adding a floor, but needs to be evaluated to make it economically feasible), pay for additional FAR (that could also be bought from neighbors to avoid

increasing it on the historic structure) that feeds city's tax base; cut all parking requirements and give benefits for building above grade; also need more live-work-play options on beach with walkable streets.

- There are incentives that are not actually net positive incentives. Instead, they are opportunities to avoid negative incentives.
- An example of a disincentive that contrasts Miami Beach to downtown Miami is Brickell Heights. The total impact fees are much greater on Miami Beach than in downtown Miami.
- Why can't zoning be more flexible? For instance, why can't there be a zone for a requirement rather than a number, for example, to guide the parking requirement. What is the number for specifically?
- We need actual, value-added incentives.
- We need variances on height and parking.
- Private sector funding is critical.
- Look at new ideas for FAR exchange, purchasing it from the City in North Beach, for example.
- Look at new ideas that integrate zoning requirements and massing.
- The problems would be solved if the City were to up-zone RM1 to RM2 everywhere.
- We should create tools that allow for simulation to better inform and understand decisions.
- We need to accommodate the time lag between the decision and the implementation.
- We need more than incremental solutions. Those incremental solutions also need the same decision support (also "adaptable" rather than "incremental").
- In this transitional phase, how do you blend the context to allow Base Flood Elevation + 5 in one place and not in another?
- Incentives are key, private sector is part of solution. Business/private sector also needs a vote.
- Sea-level rise needs to be considered on land use boards.
- There are concerns that commissioners do not have the answers to constituents' questions.
- Workforce development is needed to build the talent base to seek solutions to most pressing issues.
- Consider waterways rather than raising streets.
- Maybe we need multiple solutions. I am not a fan of raising roads, but what about a Venice lake canal structure? It doesn't make sense to raise the roads and not raise the buildings. You can't say to homeowners that you don't care about their homes (apparently, city staff have intimated this clearly).
- There were concerns that commissioners are not cognizant of realities of sea-level rise or are cognizant and not dealing with those realities – commissioners are unresponsive.

- There are concerns that even when residents try to do the right thing, like replace their seawall and bring it up to the new height, the information about what needs to be done depends on which inspector you get.
- Rather than have the developer be incentivized, create a fund that others pay into that is pooled to pay for historical preservation.
- Get community more involved.
- Get organizations more integrated in their efforts.
- There is a general distrust of the Miami Beach Historic Preservation Board and historic designations. These are believed to be set up against developers. The HPB only considers plans that are consistent with existing zoning. They will not consider adding bonuses to floor area ratios and reducing parking requirements to create incentives. Instead they work against developers.

4. New Construction

New Construction: Summary

Discussions that involved new construction tended to concentrate around concerns about funding, incentives, and potential challenges that new construction could pose to existing historic building fabric. The subject crossed into numerous other areas, but the consensus seemed to be that new construction, however funded would have to be resilient to sea-level rise.

New Construction: Notes

- There were concerns raised that developing in former mangrove areas or along water's edge makes urban neighborhoods more vulnerable. A question was posed as to whether there is an escalation of flooding because we've lost mangroves?
- There was an interest in increasing green space and coastal vegetated areas and using different types of vegetation or land cover that could increase the movement of water off the land surface. One question when thinking about newly renovated parks was: "Does artificial turf have same capacity to move water as planted surface?"
- There was an observation that lot coverage allowances seem to be increasing in historic districts.
- There were suggestions that the city should double FAR. The city should also add new multi-family buildings; workforce housing, 10 stories tall, no parking requirements, and an arrangement that allows for increased FAR.
- A pro forma is needed to guide policy. It is needed to understand new requirements for the future. There is a question of how you incentivize developers to create new development. LEED was an example – but it was pointed out that something like this can't be blanket across the city – it would need more specific guidelines for Miami Beach, perhaps guidelines that are LEED like – but, not all one size that fits all to create the plan for historical preservation. There is a need for a pro forma equation i.e. plug in sq. ft., how

much can I rent it out and for how long you keep the bldg. – need 5-6% capitalization to get financing. For example, NYC has “Pluto” dataset (www1.nyc.gov/site/pluto). One looks at the lot, connects to a spreadsheet, sees what is the building generating for taxes at what FAR to guide decision about development. Then we can tweak the policy to evaluate how the capitalization changes to evaluate these policy ramifications and to guide policy – and its dynamic because annual markets changes.

- There were concerns that the injection wells to get rid of rain water from these large new developments are weakening the underlying limestone substrate.
- New, out of place buildings, ruin the fabric/character of the neighborhood.
- There should be new criteria for creating first floor areas adaptable to the rising right-of-ways and adjacent land. Currently, although changing soon, projects before the HPB cannot be evaluated nor recommendations based upon any standards related to sea-level rise (although changing soon).

5. Current Projects in Miami Beach

Current Projects in Miami Beach: Summary

One of the most common threads running through the focus area on current projects related to sea-level rise was the need for more consistent and reliable communications between the City and the residents on what was happening when and why, and what is happening next.

Current Projects in Miami Beach: Notes

- There were concerns with how the city was implementing its strategy to deal with sea-level rise. Some quotes were: “I couldn't get clear answer from city what was being used for planning.” “We are concern that there were no consistent SLR horizons for planning.” “Are we all using the same set of assumptions?” “Alton road storm water infrastructure was done poorly.”
- There were concerns that city is putting interests of tourists over residents. Some quotes in this were: “Is the city concerned with residents or tourists? They do not require the same strategy.” “What will residents do when other conditions make it difficult to live in Miami Beach because of sea level but after the point when they cannot sell their homes?”
- Participants said the city’s work at Lenox & 14th was an improvement over conditions prior to the work – except the garden groundcover is still being flooded with saltwater and damaged. They claimed that the drain fields had been widened 7 years ago – with crews out there every morning making sure there are no obstructions from water entering the drains.
- Some city staff have a bad reputation for insensitivity while others are thought to be trying to help residents accommodate the changes with flood mitigation efforts. In general, the contractors on the jobs are considered to be straightforward and able to answer resident questions. In light of the changes to the sidewalk and street levels, there seemed to be some questions as to who is

responsible (owner or city) for getting rid of the water on private property and whether it can go into the storm sewer.

- There were concerns expressed about possible misappropriation of bond funds that were voted in 10-15 years ago to pay for new pipes in mid-beach. Public is not sure what the money went for, although they were charged.
- Some expressed concerns that the City solutions are expensive. They understand that the live, work, play model is ideal, but there is concern that this will result in residences that are unaffordable. How can historic homes be renovated AND have affordable housing?
- There were concerns that flood mitigation efforts put transportation and tourists ahead of residents. Some homeowners feel they are being left behind
- Questions were raised about the possibility of a cascading pump failure from one neighborhood to another.
- Residents had heard that an existing water-related “solution” possibly being offered by city is that you can pay to have storm water from your roof diverted to the city’s storm drain in order to help keep it off of your property, but you have to pay to connect.
- There were concerns about raising streets.
- The issue was raised that Normandy Town Center in North Beach is proposing an increase in FAR.

6. Flood Water Management

Flood Water Management: Summary

Discussions that engaged larger issues of how water is managed tended to suggest that big questions required big solutions. There was also, in a different group and in a different context a suggestion that water management be modelled, like historic preservation, along the lines of a new WPA program. There were, however, also questions about how much of the science is known at this point and, from what is known, how much of it is related to what the City of Miami Beach is doing to manage water.

Flood Water Management: Notes

- There were concerns about lack of information and questions about which areas of the city are at which elevations. Individuals want clarity and scientific information/data on what the projections are and what it will impact. The perception is that city is not using best available information for planning.
- We need our WPA for sea-level rise.
- The little Dutch boy doesn't work in Miami Beach. We need large-scale change, that is also adaptable.
- There were uncertainties about the causes of sea-level rise. And there were questions about real estate values and the ability to sell property in the future.
- There were concerns about the subsidence of land (from the increasing weight of concrete on land) and the increasing the impacts of flooding on land. There were

also concerns that “external forces” are contributing to the big increase in sea-level rise recently, observing large increases at their residences, specifically asking about whether more water is coming from the Everglades into Biscayne Bay.

- There were concerns about drinking water quality
- Concerns were expressed that the “models are wrong” for climate change. There were references to Bret Stephens’s opinion column “Climate of Complete Certainty” in the *NYT* 4.28.17.
- Some folks were concerned that flood mitigation was only about tourists.
- One resident noted that during a 1940’s hurricane, Indian Creek met the ocean surge along Collins. Preparing for such a storm surge again should be second nature.

7. Parking, Housing and Insurance

Parking, Housing and Insurance: Summary

While each of these are very big topics and would normally deserve their own focus areas, they did not come up as frequently as expected within the context of Historic Preservation and sea-level rise. If there was any consensus to be found among all three areas, however, it would be that sea-level rise offers, indeed will require, new modalities of parking and transportation, new ways to think about housing and equity, and new products in the insurance markets.

Parking, Affordable Housing and Insurance: Notes

- There were concerns from experience that the city will not permit first floor parking, despite participant being willing to pay for it. Participants said they would be happy to raise their building to allow parking underneath, and would be willing to invest to do this if the city let them.
- The Miami Beach Convention Center had a parking plan for a FAR that is OK for office buildings in case they don’t want to use it all for parking in the future.
- The example was brought up of the HUD 80/20 Housing Program – 20% of units must be set aside for households with incomes at 50% or less of local Area Median Income. Why can’t we do it on Miami Beach? The economics aren’t there. Gov’t loans and lots more insurance are needed, which make that loan program unusable.
- Some thought that an FAR trading scheme will not work out economically, and for affordable housing (B3 type of deal), land would have to be provided for free for it to be economically advantageous.
- Some felt that we need to find ways to offer affordability in historic neighborhoods.
- There is concern that flood mitigation efforts are resulting in uninsurable changes to properties. For example, the walling off of front yards to raise roads may result in new basement-type structures. They said they don’t want to inform insurance agents about these changes for fear of insurance changes.

- There was an example that Lloyd's of London wouldn't give resident insurance on her paintings in her Miami Beach home because of concerns about sea-level rise.

Possible Solutions

These dialogues were conceived of and designed to encourage thoughtful and respectful conversations in a “neutral” university space about topics that seem to contain inherent conflicts. They were intended to expand the minds of those interested in the topic and set the stage for larger public dialogues to be more aware of data and more information, where needed. There was no expectation that these dialogues would result in “solutions” since parties whose interests might diverge were not in the rooms together. As mentioned above, there were a few areas where it appeared that “solutions” may be close at hand.

Areas of possible convergence included:

- There is an assumption that historic districts in Miami Beach are key to the unique character of the city and to its appeal to tourists, businesses and residents alike.
- The engagement of both the private and public sectors is critical to funding resilient solutions for historic neighborhoods.
- City leadership has an important role in building trust so that decisions that are made are clearly made using all possible environmental, financial, social and historical data.
- There is no single silver-bullet solution. Solutions should probably be bundled together as a portfolio to include multiple components. These could relate simultaneously, for example, to changes in infrastructure, building fabric, financial models, and to how we perceive of the historic fabric.
- Modifications to historic buildings (or the creation of new buildings) that enhance resiliency would require changes to the FAR and zoning. How much, where, and when would take further study.
- New construction developed to resilient standards in historic neighborhoods may also necessitate reconsiderations of FAR and lot coverage.
- Modifications to building codes, FAR, and planning standards should be incremental, with regularly timed reviews for revisions based upon latest data.