

Resident Town Hall for

North Bay Island

March 4, 2021

Tonight's Agenda

1. Introduction
2. Ground Rules for Town Hall Engagement
3. Presentations:
 - a) Katherine Hagemann, AICP, Miami-Dade County Resilience Program Manager for Adaptation
 - b) Alec Bogdanoff, Ph.D., Co-Founder and President of Brizaga
 - c) Reinaldo Borges, R.A., AIA, NCARB, Principal-CEO of Borges Architects and Associates
 - d) Silvia Vargas, FAICP, LEED AP, Village Planner
4. Questions and Public Comment
5. Next Steps
6. Open House



Introduction:

How do NBV100 Master Plan ideas affect NBI Property Values?

Our Plan

- NBV100 is organized around a series of catalytic projects and ideas that will allow current and future NBV homeowners to build and renovate their homes so that they're better suited for changing climate conditions and can be even more attractive, while maintaining or increasing their property values.
- One of our goals is to provide residents with the framework for building sensibly and sustainably as well as providing transparent and easy-to-understand rules for development.



How do NBV100 Master Plan ideas affect NBI Property Values? (Cont'd)

Real estate externalities...what are they?

- Joint Center for Housing Studies, Harvard University: The preservation and enhancement of property values are central justifications for having strict code enforcement; your neighbor must keep his house nicely painted, must mow her lawn, must not have broken windows...because these and other signs of neglect are **negative externalities** (actions by others that have an effect on your property value); they hurt the value of your property. They're the main reason for having strict code enforcement, something for which our residents frequently ask.
- The opposite (**positive externalities**) is true also: having neighbors who invest in improving their homes (e.g. by painting them or adding lush landscaping) helps the entire block. NBV100 adds other ways to increase property values (e.g. by ensuring that new homes are less prone to flooding and are less likely to flood their neighbors' homes; by allowing water views for non-waterfront homes).



How do NBV100 Master Plan ideas affect NBI Property Values? (Cont'd)

Appraisal value - principle of progression

- If a property hasn't been updated in 60 years, but it's located among properties in a high-value neighborhood or island where neighbors continue to invest and improve their homes, the subject property's value will be greater relative to a similar home in a below-median community.
- **Progression** is the idea that when a community exhibits improving overall conditions, then the value of a property of lesser condition will be greater than if it were located among properties of similar quality and characteristics.
- This is one of the key elements that real estate appraisers take into account when assessing property value.

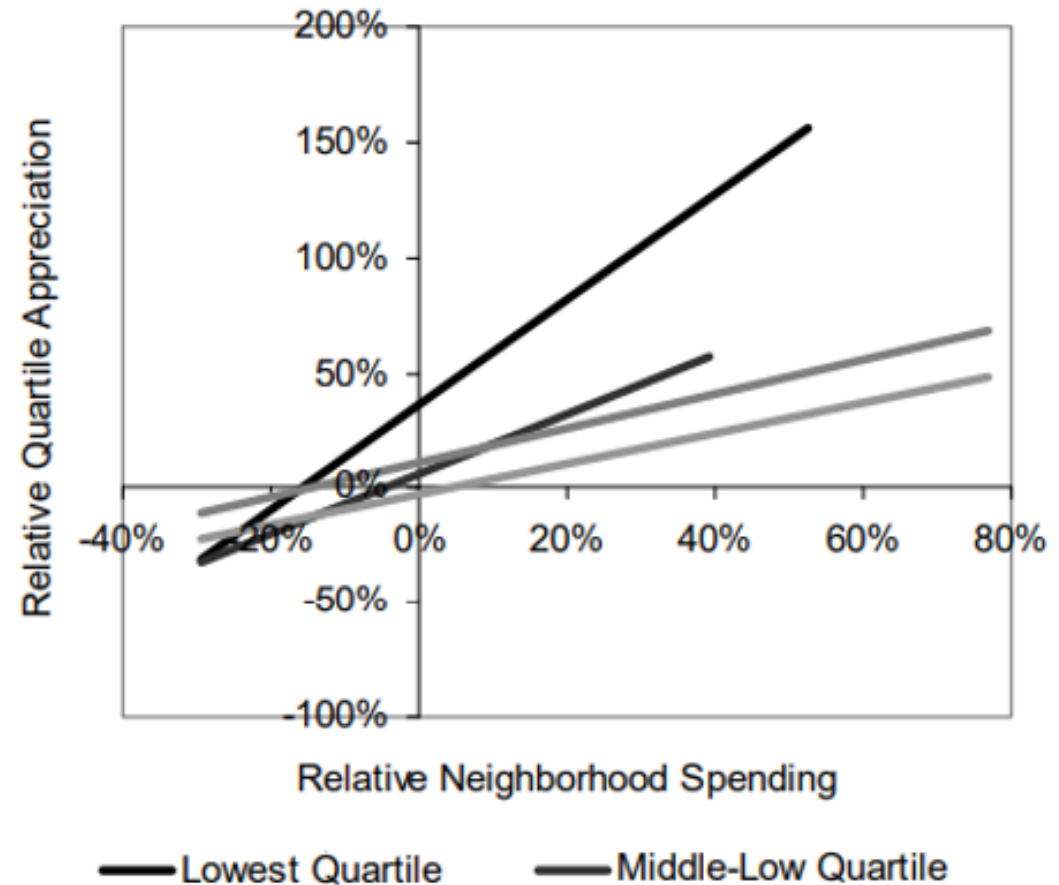
Boston Appraisal Services (2018). "How Conformity, Progression, and Regression Affect Neighborhood Property Values." <https://bit.ly/3uSgON7>



How do NBV100 Master Plan ideas affect NBI Property Values? (Cont'd)

What does it mean for NBV residents?

- As NBV100 continues to implement improvements in development standards, NBV homeowners can expect an increase to their property values.
- This is because neighborhood and housing improvement projects generate significant, positive spillover effects.
- When the neighborhood level of property improvement activity is high or rising, individual homeowners see their house values rise and are more likely to invest in their properties. When neighbors invest in their homes, everyone wins.



Relative Zone Home Improvement Spending and Quartile House Value Appreciation, Trendiness

Park, Kevin. (2008). "Good Home Improvers Make Good Neighbors" Joint Center for Housing Studies of Harvard University, Pg. 13; 19

Ellen, Ingrid Gould and Ioan Voicu (2006). "Nonprofit Housing and Neighborhood Spillovers." *Journal of Policy Analysis and Management*. Vol. 25, No.1. 31-52.

Ground Rules for Engagement

- Questions and comments at the end.
- Everyone is encouraged to participate.
- Only one person speaks at a time.
- When your turn comes, state your name and where you live.
- Be concise and stay on topic.
- Limit your comments to allow time for others to participate.
- This Town Hall meeting is about dialogue, not debate.
- Listen to and respect other points of view.
- Ask questions and seek to understand.

Presentations

Katherine Hagemann, AICP, Miami-Dade County Resilience Program Manager for Adaptation

Alec Bogdanoff, Ph.D., Co-Founder and President of Brizaga

Reinaldo Borges, R.A., AIA, NCARB, Principal-CEO of Borges Architects and Associates

Silvia Vargas, FAICP, LEED AP, Village Planner, Principal Planner at Calvin Giordano & Associates, Inc.

Resident Town Hall on
Zoning for Resilience in

North Bay Island

March 4, 2021



Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS™

Background: NBV100 Master Plan

- Vision: "To equip North Bay Village with the tools to become a more livable, sustainable and prosperous community that can adapt to the challenges of a changing climate."
- Overarching Goals
 - Livability
 - Resilience
 - Prosperity



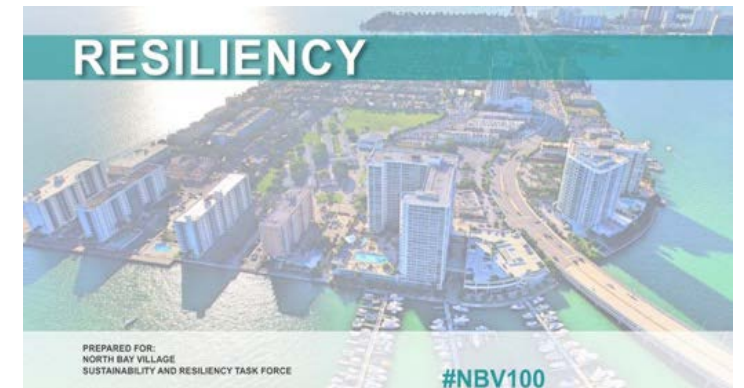
DPZ CoDESIGN

Next Milestone: North Bay Island (NBI)

- Encourage homeowners to build sustainably.
- Enable homeowners to maximize their homestead's potential creatively.
- Facilitate approaches by private property owners to address resilience issues.

IMPROVE QUALITY OF LIFE

INCREASE PRIVATE PROPERTY VALUE



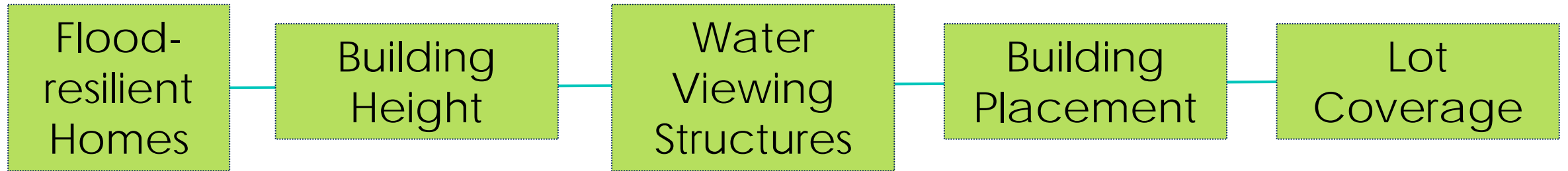
Current Zoning

(Sec. 8.10 of ULDC): RS-1 Low Density Single-Family Residential

The purpose of this District is to provide for low-density single-family residential development in a spacious setting, together with other principal uses as may be approved as use exceptions and such accessory uses as may be necessary and compatible.



Focused Topics



Flood-resilient homes

Concept: Allowing new and substantially improved homes to be raised, creating an understory space.

The understory may be open or include flood-resistant enclosed areas under the building's lowest floor, usable solely for parking of vehicles, building access, or storage.



CDS Architecture (NBV100 Master Plan Report by DPZ Codesign)

Why do this?

- Floodproofing. Raising residential structures above anticipated water levels helps avoid property damage during a flood.
- “The Business Case for Resilience in Southeast Florida”: Property and real estate values can be preserved and increased in value with individual property adaptation, with a return-on-investment ratio of 4:1. *
- “Business Case Analysis for the City of Miami Beach Stormwater Resiliency Program”: If you are reconstructing a home, elevating it may increase property value by 3.6% for each foot of increase in elevation.
- If insurance rates increase, individual property adaptation becomes even more cost effective.

*Life cycle costs, expected useful life cycle, design complexity, insurance savings, etc.

WHAT'S AT RISK

The region could see **17 inches** of sea-level rise by 2040 and **40 inches** of sea-level rise by 2070.¹

More than \$4.2 billion

in property value could be lost due to daily tidal inundation by 2040.

Permanent sea-level rise could affect **720 jobs** and cause **\$28 million** in sales, property, and tourism tax losses by 2040.

\$3.2 billion in property damage could be caused by a 10-year storm tide event in 2040.

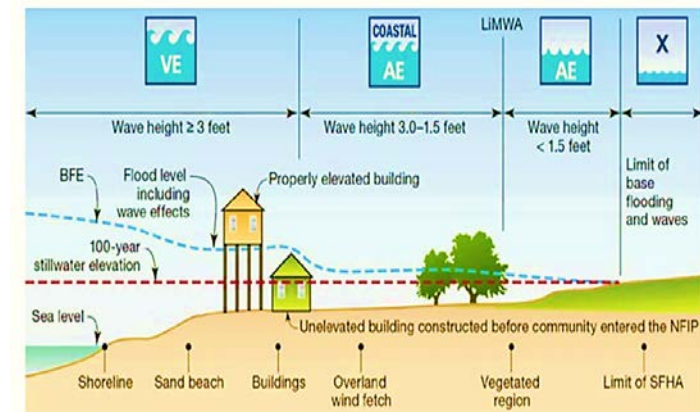
\$1.8 million in sales and tourism tax losses could result from a single 10-year storm tide event in 2040.

IN 50 YEARS

Daily tidal inundation could expose **\$53.6 billion** of property value, affect **17,800 jobs**, and cause **\$384 million** in fiscal losses.

Over **294,000** parcels and nearly **500 miles** of major roadways* could be affected by a 10-year storm tide event in 2070.

*Major roadways include all functional classes except for local as provided in state-wide data set (functional classes 9 and 19).

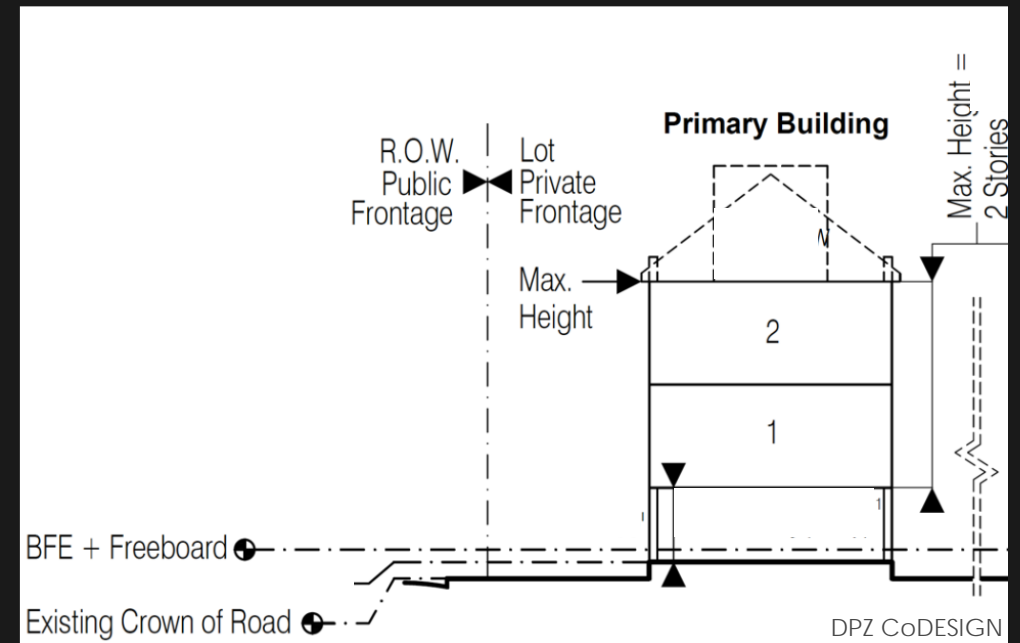




Already happening...

Conceptual Approach

- Incentivize raising new and substantially improved structures; understory does not count towards maximum building height.
- Incentivize raising structures; understory counts towards building height, but height definition is adjusted
- Non-elevated structures floodproofed.



- Clearance: How much?
Measured from where? (early concept proposed 10 feet from the crown of road to the underside of the ground floor structure).
- Limitations:
 - Limited square footage
 - Limited uses: entry vestibule, parking and/or storage
 - Limited enclosures: Any enclosed areas to be wet floodproofed (flow-through or breakaway walls).
 - Attractive finishes and screening from the street, the water and neighbors.
 - Mechanical systems and lighting fixtures concealed

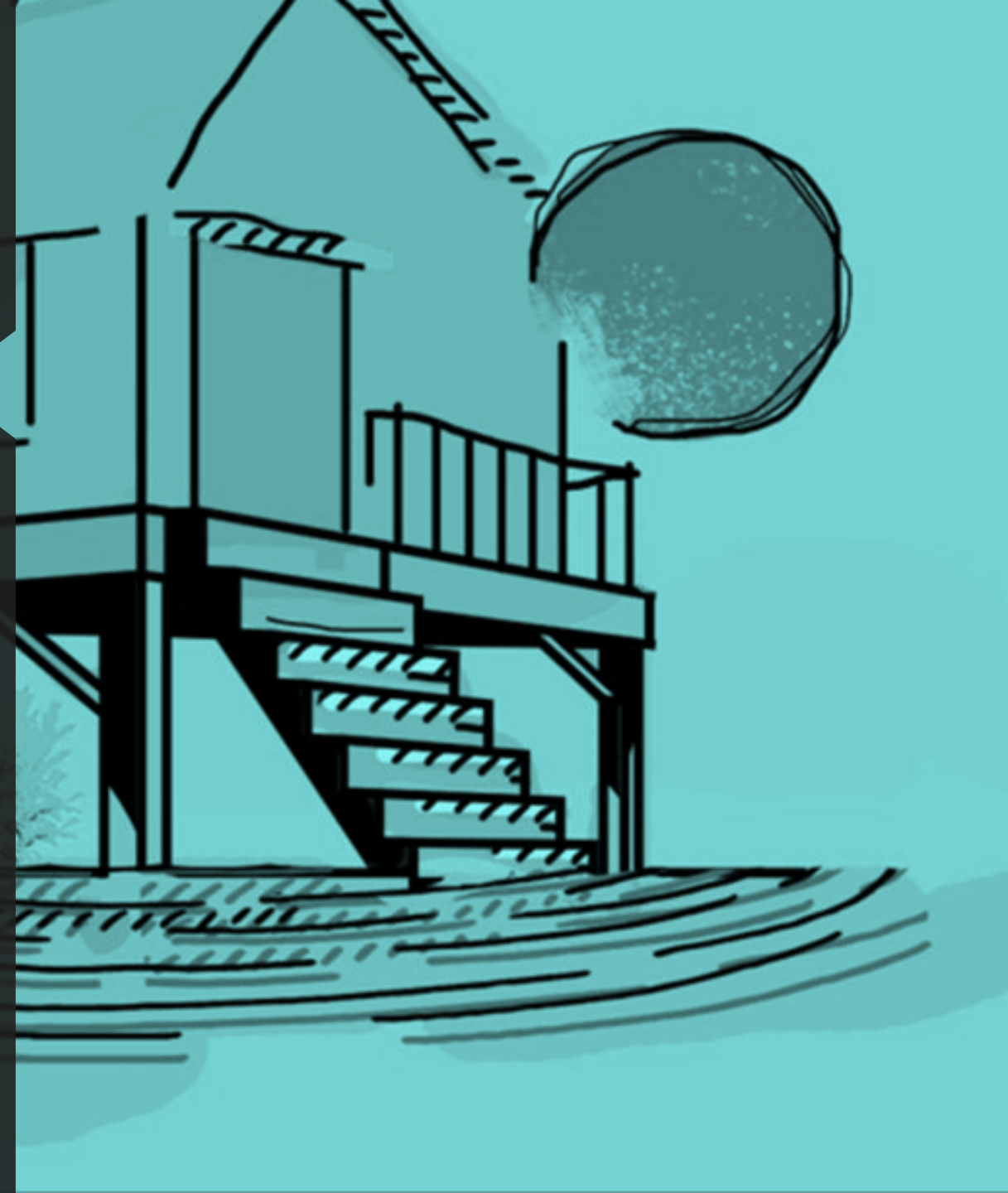


CDS Architecture



Examples of nearby communities already regulating for flood hazard reduction

- Miami Beach (Division 4. - Provisions for Flood Hazard Reduction)
- North Miami Beach (Sec. 24-113 - Flood Resistant Development)
- Key Biscayne (Sec. 30-100. - Single Family and Two-Family districts)
- Bay Harbor Islands (Sec. 5-17. - Elevation of dwellings, garages and carports and Article III. - Provisions for flood hazard reduction)
- Aventura (Sec. 30-167. - Provisions for flood hazard reduction)



Miami Beach

- Design Review Board approval required
- More stringent submittal requirements (with lots of visuals)
- Building height measured from BFE of the lot plus minimum freeboard measured to the top of the structural slab for a flat roof and to the mid-point of the slope for a sloped roof.
- Understory minimum height of 12 feet as measured from BFE + freeboard to the underside of the first-floor slab (waivable by DRB)
- Enclosed entry vestibule, parking and/or storage including garage with flow-through/breakaway walls
- Screening required

<http://toddmichaelglaser.com/properties/10604/>



Praxis Architecture



Todd Michael Glaser (Domo Architecture?)

Key Biscayne

- Provisions applying to one and two-family dwellings
 - New construction: Min elevation of lowest floor or bottom of the lowest horizontal structural member at or above BFE plus one (1) foot
 - Substantial improvement/damages: To BFE
- Height for elevated buildings is 35 ft measured from BFE to the top of the highest point of the building roof
- Enclosures: limited storage of maintenance equipment, entry to living area (stairway or elevator) and parking (garage). Unfinished and nonpartitioned interior



Building Height

Twist on an Old Challenge

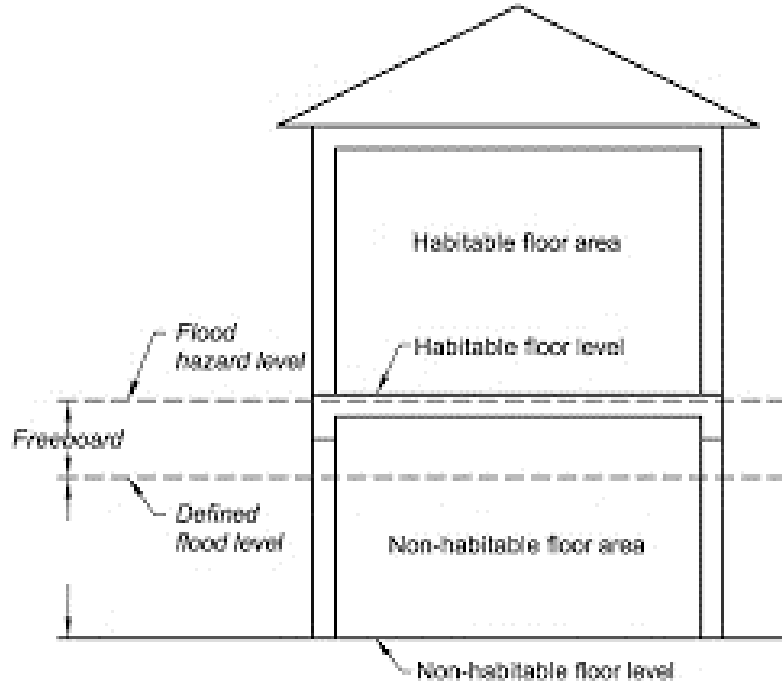
Establishing Building Height Limits

Traditional Approach

Ground-based measure; often crown of road or "highest adjacent ground"

Resilience Approach

Measured from base flood elevation (BFE) or BFE plus freeboard



CDS Architecture

Crown of road. The cross-sectional shape of a road surface.

Freeboard. Additional height, usually expressed as a factor of safety in feet, above a flood level for purposes of floodplain management.

Considerations

1. Measure building height from BFE plus freeboard, not from grade.

Purpose: Support resilient design and accommodate changing BFE.

2. Different treatments for pitched versus flat roofs.

Purpose: Offer property owners and designers latitude to design varied architecture.

3. Take into consideration elevation of new or substantially improved structures, including maximum number of habitable stories.

Purpose: Promote a cohesive, compatible neighborhood scale while maintaining a generous building envelope.

Current Zoning Standard(s)

Sec. 8.10 (RS-1): Max building height: Three stories not to exceed 35 feet above grade.

- Ch. 3: Height of building. The vertical distance from grade to the highest point of a flat roof; the deck line of a mansard roof; the average height between eaves and ridge of gable, hip, and gambrel roofs; or the average height between high and low points of a shed roof.
- **New Sec. 15.2.C.1.** Unless otherwise specified... the height of buildings shall be measured in feet from the Base Flood Elevation (BFE) plus freeboard.



Sample Height Definitions & Limits

Bay Harbor Islands

- Height: The vertical distance from BFE to the highest point of the roof surface for a flat roof, to the deck line for a mansard roof or to the average height of the highest gable of a pitched, hip or gambrel roof. Decorative, non-habitable roof features such as A/C, mechanical and elevator equipment or equipment rooms, water storage facilities, accessory recreational facilities, etc. don't count in measuring building height.
- RD-Single Family district: Maximum of 2-1/2 stories or 25 feet above BFE, but certain sloped roofs may exceed this restriction up to 35 feet on waterfront properties and up to 30 feet on non-waterfront properties if they meet certain conditions.
- Second story building area is restricted to 80% of the first (ground) floor gross floor area inside exterior walls. The area by which the second story is reduced may be applied to the first floor, if approved by the Planning and Zoning Board.



Sample Height Definitions & Limits (Cont'd)

Miami Beach

- Height: Height shall be measured from the required BFE for the lot, plus freeboard, measured to the top of the structural slab for a flat roof and to the mid-point of the slope for a sloped roof. Mechanical equipment, chimneys, spires, steeples, radio or television antenna, flag poles, solar apparatus and utility poles are excluded.
- All new construction and substantial improvements to existing construction must meet the minimum freeboard requirement (1 foot) and may exceed this minimum up to a maximum freeboard of 5 feet without such height counting against the maximum height for construction in the applicable zoning district.
- Maximum building height for all single-family residential districts is two stories above BFE, plus freeboard and varies between 24 and 31 feet according to district and roof type.

Sample Height Definitions & Limits (Cont'd)

Aventura

- Height: the vertical distance between the finished elevation at the center of the front of the building to the highest point of the roof surface, excluding mechanical equipment, chimneys, spires, steeples, radio or television antenna, flag poles, solar apparatus and utility poles. The height of a structure shall be measured to the mean height between eaves and ridge for a gable, hip and gambrel roof and to the highest point, excluding parapet, of a flat roof and to the deckline of a mansard roof.
- RS1: Two stories or 30 feet above the centerline of the road, whichever is less.
- RS2: Three stories, not to exceed 55 feet above the centerline of the road, whichever is less.

Water Viewing Structures

Purpose: To provide non-waterfront lots access to water views, capitalizing in unique Village setting and increasing property values.

Considerations:

- Optional only
- Limits on height above maximum permitted building height.
- Limits on use and square footage.
- Step-backs to ensure privacy.
- For new and substantially improved only?
Or also existing construction?



Potential Building Placement Alternatives

Establish a narrow “flex” front yard setback zone (no more than 5 feet) with a minimum and maximum setback line.

Purpose: Provide limited flexibility to move back residential structures if they are raised, thereby mitigating perception of height from the road, while at the same time introducing a small degree of variety that is consistent with existing patterns of development.

“Setback. The distance from the Base Building Line to the point where a Building may be constructed. This area must be maintained clear of permanent Structures except for encroachments described in each Transect Zone.”

Current Zoning Standard (Sec. 8.10):

Setback	Distance (Feet)
Front	20
Side (corner)	20
Side (interior)	10
Rear	15
Waterfront	25

Applicable except for Lots I through 7 of Block 1 and 1 through 4 of Block 2, respectively, of the subdivision known as North Bay Island, which shall have a minimum waterfront setback of 20 feet.

Miami Beach

Setback requirements for a single-family detached dwelling in the RS-1, RS-2, RS-3, RS-4 single-family residential districts

- Front yard setback: 20 feet minimum. One-story structures may be located at the minimum setback line, while two-story structures must be set back a minimum of 10 additional feet. *At least 50 percent of the required front yard area shall be sodded or landscaped pervious open space. Except for driveways and paths leading to the building, paving may not extend any closer than five feet to the front of the building.
- Side yard setbacks: The sum of the required side yards must be at least 25 percent of the lot width. Each required side yard facing a street must be no less than ten percent of the lot width or 15 feet, whichever is greater. Interior side yards vary by lot width, and 2-story side elevations have a greater requirement for open space.
- Rear yard setback: 15 percent of the lot depth, 20 feet minimum, 50 feet maximum. At least 70 percent of the required rear yard must be sodded or landscaped pervious open space; when located at or below adjusted grade, the water portion of a swimming pool may count toward this requirement, when located above adjusted grade, the water portion of a swimming pool may count towards 50 percent of this requirement, provided adequate infrastructure is incorporated into the design of the pool to fully accommodate on-site stormwater retention.

Potential Lot Coverage Approach

Establish impervious area limits based on number of stories.

Purpose: To improve water management, reduce flooding, and protect water quality.

Basic Concept:

Lot Occupation	Standard
Lot Coverage: <ul style="list-style-type: none">• Single story• Two stories• Raised structure	40% max 30% max 45% max
Green Space	20% lot area min
Open Space	40% lot area min

Current Zoning Standard

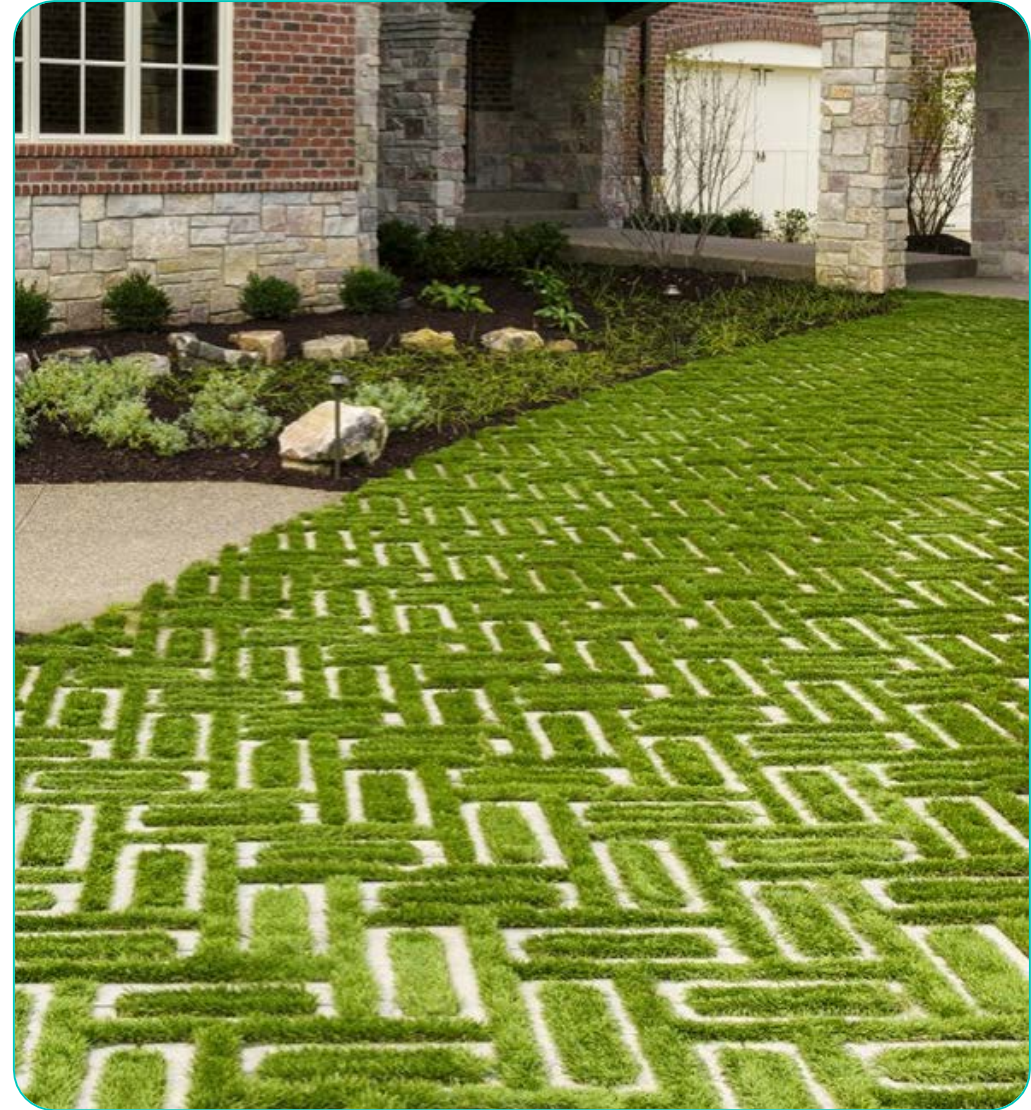
Sec. 8.10: No lot coverage or minimum pervious for RS-1 or RS-2 zoning districts today.

Per Sec. 8.15:

- ...the front yard area may be paved up to 40% of the total linear footage, and the balance may only be paved if a greenspace is created between the Village's sidewalk and the paved area, for a depth of no less than 48 inches; and
- ...on NBI, at least 60% of the linear footage of any property's street front Village easement or right-of-way area must be maintained as greenspace (pervious) area from the street to the property line.

*New resilience provisions require participation in Green Building Program through features such as:

- Permeable surface for parking and drives
- Green infrastructure (rain gardens, cisterns, etc.)
- Green roofs



Miami Beach

- Maximum Lot Coverage for a 2-Story Home = 30%
- 1-story structures may exceed 30% lot coverage through staff level review and are subject to the setback regulations outlined in section 142-106, but in no instance shall the building footprint exceed 50 percent of the lot area.

Key Biscayne

- Minimum Lot Coverage: 30%
- Maximum Lot Coverage:
 - One Story residences, 45%
 - Multistory residences, 35%

Bay Harbor Islands

Aventura

Open space (not lot coverage)

- a) Minimum of 35 percent open space at ground level for one-story homes, and minimum of 40 percent open space at ground level for homes with any portion of the home above one story.
- b) Plus a minimum of 50 percent landscaped "green" pervious open space at ground level in the front yard area. The use of pervious pavers or landscape strips in driveways or walkways shall not be included in the 50-percent landscaping requirement. Within front setback areas sufficient open space and landscaping materials shall be provided to break large expanses of hardscapes, screen parking areas and provide shade.

Plot coverage: The combined plot area covered by all principal and accessory buildings shall not exceed 45 percent of the area of the lot

Questions?



Next Steps

- Summarize input from this Town Hall
- Present outcomes to Commission for consensus direction before proceeding to draft Code amendments
- Review of proposed amendments by P&Z Board and 2 readings by Commission prior to adoption.

Useful Resources on Resilience

- Miami-Dade County Resilience.
<https://www.miamidade.gov/global/economy/resilience/sea-level-rise-flooding.page>
- The Business Case for Resilience in Southeast Florida. https://knowledge.uli.org/-/media/files/research-reports/2020/the-business-case-for-resilience-in-southeast-florida_final.pdf?rev=81609c7f6b72479d89c49aff72fea446&hash=FB2E953B8A456CFE781169A0CAA82333
- Miami-Dade County Risk Finder (interactive).
https://riskfinder.climatecentral.org/county/miami-dade-county.fl.us?comparisonType=postal-code&forecastType=NOAA2017_int_p50&level=3&unit=ft
- <https://sealevelrise.org/solutions/>