

REACH Conference: Leadership Strategies to Increase Resilience and Sustainability of Affordable Housing

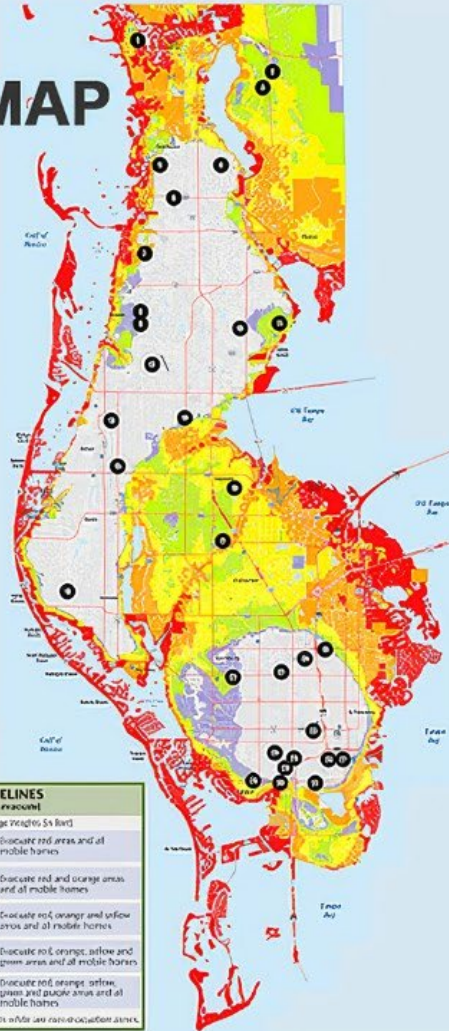
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Solutions and Strategies Session 1: Balancing Increasing Density with Resilience and Community Character Preservation

The Coastal High Hazard Area

OLD MAP



EVACUATION GUIDELINES	
Mobile homes MUST always evacuate!	
A	Potential surge reaches 5+ feet Evacuate red areas and all mobile homes
B	0' to 4' Evacuate red and orange areas and all mobile homes
C	4' to 10' Evacuate red, orange and yellow areas and all mobile homes
D	10' to 20' Evacuate red, orange, yellow and green areas and all mobile homes
E	20' to 25' Evacuate red, orange, yellow, green and purple areas and all mobile homes

Areas shown in blue are non-evacuation areas.

NEW MAP



EVACUATION GUIDELINES	
Potential surge reaches 3+ feet:	
I	0 to 35' Evacuate purple areas, green, orange, yellow, purple areas and all mobile homes
D	0 to 28' Evacuate red, orange, yellow and green areas and all mobile homes
C	Up to 20' Evacuate red, orange and yellow areas and all mobile homes
B	0 to 15' Evacuate red and orange areas and all mobile homes
A	0 to 11' Evacuate red areas and all mobile homes

Areas shown in white are non-evacuation areas. Surge height will vary depending on ground elevation.

Principles

- Don't occupy the Floodplain with “permanent” structures. It FLOODS!
 - Especially not in the CHHA. It's highly susceptible to numerous hazards to human occupation.
 - But, if development and redevelopment is to be allowed: limited to water-dependent uses, e.g., fish camps, marinas, multi-slip docking facilities, ports, etc.
- Know that sea level elevations are rising. Faster and further than we thought they were. . . .
- Identify low-lying coastal areas that are most vulnerable
 - This is why we're doing statewide vulnerability analyses!
 - We need to “do the math” on the planning, engineering, development, and maintenance of infrastructure in the Floodplain (SFHA) and other current and future vulnerability areas, before pursuing any (public or private) development there.
- Don't develop the highest flood risk areas for other than environmental stabilization, public access, public trust, stormwater, recreation uses, etc. To the greatest extent—start planning for that now.
- Understand that geographic migration is going to be a future factor. Coastal areas—particularly the barrier islands need to start planning for that now:
 - Education
 - Emigration
 - Relocation

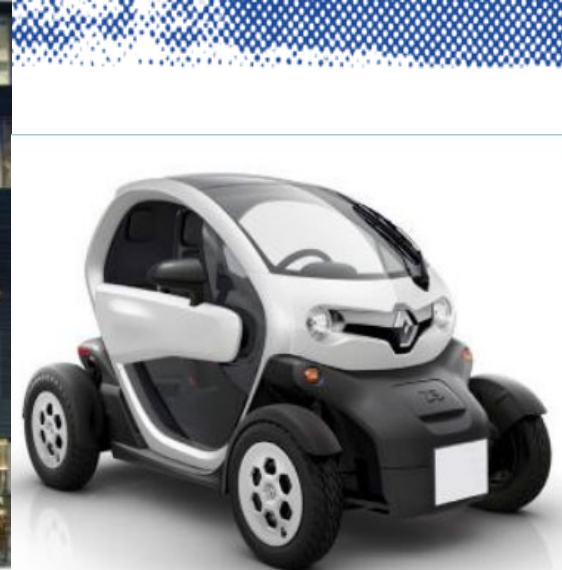
Regulatory Strategies

Low-Carbon Land-Use and GHG Emissions Reduction Ideas

- GREENSPACE PRESERVATION
 - Environmentally Sensitive Area Designation
 - Timber Harvesting
 - Tree Protection
 - Landscaping Requirements
 - Erosion and Sedimentation Control
 - Steep Slope Protection
 - Stormwater Management, Low-Impact Design, and Green Infrastructure
 - Identification of Future Inundation Areas, Blue and Green Space Areas, Adaptation Action Areas
 - Density Development Areas
 - Transferable Development Entitlements
- TRANSPORTATION
 - Pedestrian-Oriented Design
 - Transit-Oriented Development
 - Multi-Purpose Mixed-Use Multi-Modal Mobility Hubs (5M Hubs)
 - Minimized automobile trips
 - First and last mile connectivity
 - Multi-modal integration, collocation, and transitions between modes
 - Economic generator
 - Social gathering facilitation
 - Storm protected parking for sheltering-in place
 - Evolving uses over time as trends change



Mid-level parking in Cincinnati (Gensler/Forbes)



a small electric car (Electrek)



Miami Beach Parkade (Xavier de Jaureguiberry/



Example of an off-street bicycle parking facility (Broxap Design & Build)



Electric vehicle charging station at Portland Airport (The Manufacturer)



Blue-bike station (CyCLO)