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The Underwater: Using Art to Engage Communities Around Climate Action

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The Underwater: Using Art to Engage Communities Around Climate Action

XAVIER CORTADA *

Acknowledgements: With gratitude to Adam Roberti ** and Ryan Deering *** for assisting me with this essay.

This Article delves into the intersection of art and environmental activism, with a focus on the impact of climate

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change. Cortada, both an artist and trained attorney, recounts his three-decade journey leveraging art to inspire community engagement and address social and environmental challenges. He explains how Antarctic researchers made him aware of South Florida's vulnerability to sea level rise, leading to the development of interactive art projects that foster civic engagement and climate advocacy. The Article also addresses the challenges posed by climate denial and misinformation, emphasizing the need for creative strategies to combat these issues.

Cortada introduces specific participatory art initiatives he has crafted to visualize South Florida's vulnerability to rising seas and to ignite dialogue and action on climate change. He details a range of projects, including The Underwater, Underwater HOA, Elevation Drive, Underwater Vote, and HELLO, which all effectively employ art to render climate change a personal and pressing matter for communities.

This law review Article is an innovation in and of itself, serving simultaneously as an exhibition of "Underwater Florida," a performative artwork Cortada created in 2022 to document the fraught state of coastal cities along the Florida peninsula. It showcases images of yard signs that the artist placed in front of 54 Florida city halls to mark their respective elevations, thereby recording this moment in the state's history and sharing information with its residents to encourage policymakers to prepare for a future with rising seas. In mapping elevations along Florida's coastline to underscore the threat of sea level rise, Cortada acts as a sentinel, witness, neighbor, informant, educator, science communicator, and advocate, and as a figurative bridge between the potential victims of tomorrow and today's contributors to climate harm.

The inclusion of “Underwater Florida” in the law review Article exemplifies the innovative format, which transcends traditional academic boundaries to captivate its audience. This symbiotic relationship between art and academic discourse is a testament to their combined strength in conveying urgent messages about climate action. Cortada's efforts extend to transforming public spaces into platforms for climate storytelling and fostering interdisciplinary engagement in regional governments, demonstrating art's potency in stimulating public discourse and prompting action on climate change. The Article concludes by reinforcing the essential role of art in fostering a culture of care and activism, crucial for preserving our planet and its inhabitants in the face of a climate crisis.

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INTRODUCTION

I am an artist.¹

For three decades, I have developed and implemented socially engaged art processes to strengthen our connection to each other and to the natural world.² Much of my art is structured around creating experiential activities that pique curiosity, instill a sense of responsibility, and encourage further exploration to build a cadre of engaged, compassionate, and science-literate citizens.³ Particularly focused on the environment, my practice uses art's elasticity to work

¹ Renée D. Ater, *Xavier Cortada: Socially Engaged Activist Artist*, in *PAINTING CONSTITUTIONAL LAW: XAVIER CORTADA'S IMAGES OF CONSTITUTIONAL RIGHTS* 27 (M. C. Mirow & Howard M. Wasserman eds., 2021).

[Xavier Cortada is] a socially engaged activist artist who is committed to deploying art as a community-building tool. For Cortada, art has the profound ability to bring public awareness to pressing social, environmental, and political issues. His activist art-making includes painted and collaged murals, easel painting, mosaics, site-specific installations, performance, textiles and banners, and interventions in the environment.

Id.

² See *Artist: Biography*, CORTADA, <https://cortada.com/artist/> (last visited Dec. 26, 2023).

³ See Melissa G. Bublitz et al., *Collaborative Art: A Transformational Force within Communities*, 4 J. ASSOC. FOR CONSUMER RSCH. 313, 314 (2019).

Cortada believes . . . [his practice] engages his neighbors "as problem-solvers who will learn and work together, now, to better prepare themselves and their heirs for the chaos to come." Such grandiose language and ideas color the better part of Cortada's portfolio. But the grandiosity of his ideas is necessary, for he faces a difficult task. His work is meant to force us to reassess our relationship to each other and to the natural world, to better understand our place in nature and in our human communities. By placing his ideas in the tangible context of the natural world, Cortada paints a picture of coexistence. Art is a capable agent of change, and Cortada is making it work for the communities he serves.

across disciplines to engage the community in creative problem-solving.⁴

Trained as an attorney, I began my community work in the early-90s focusing on violence, mental health, and substance abuse.⁵ In the mid-1990s, I introduced message murals to this work as a way

Id. at app. D; see also Xavier Cortada et al., *Underwater Homeowners Association: Using Socially Engaged Art to Problem-Solve in an Imperilled, Polarized and Imperfect World*, 3 J. ENV'T MEDIA 163, 168 (2022).

Cortada's vision involves utilizing these types of artistic interventions to uplift and amplify the voices of those who often go unheard in the pursuit of social and economic stability for all Miamians. Indeed, his projects aim to create experiential activities that pique curiosity, instill a sense of responsibility, and encourage further exploration to build a cadre of engaged, compassionate and science-literate citizens. It is through this organic process, often referred to as "slow activism," that neighbor by neighbor, house by house, block by block, society begins to transform.

Genuinely molding participants into change agents who protect the most vulnerable of our citizens and ecosystems, these slow activists will infiltrate and improve systems, elect responsible leaders, and ultimately hold them accountable.

Id.

⁴ Xavier Cortada, *Reclaiming Art*, AM. FOR THE ARTS: ARTSBLOG (Nov. 9, 2011), <https://blog.americansforthearts.org/2019/05/15/reclaiming-art> [hereinafter *Cortada's Reclaiming Art*].

In using arts and culture to build community, we often forget that the greatest resource isn't necessarily the program we design, or the object we create, or the idea we generate. It is the people themselves. We somehow forget that art is theirs; that for a very long time now people have intuitively used it to better connect with one another.

Like our deep ancestors, they were using art intuitively to create a sense of place, to exchange ideas, to build community. To connect with one another and the natural world.

Id.

⁵ *Daily Inspiration: Meet Xavier Cortada*, VOYAGEMIA (Mar. 16, 2023), <https://voyagemia.com/interview/daily-inspiration-meet-xavier-cortada/>.

to bring people together to address issues they cared about.⁶ My goal was to amplify their voices, to allow others to listen.⁷

Throughout this process, I discovered that art possesses a unique ability to disarm participants and engage them in meaningful conversations.⁸ Whether working with AIDS, Alzheimer's, or cancer patients; engaging with children in psychiatric facilities⁹ or adult

⁶ See *HBO's Faces of Addiction*, CORTADA, <https://cortada.com/art1997/hbos-faces-of-addiction/> (last visited Dec. 26, 2023).

⁷ Xavier Cortada, *Creating, Collaborating, Connecting with Art, Activism, and the Internet*, AM. FOR THE ARTS: ARTSBLOG (Dec. 5, 2012), <https://blog.americansforthearts.org/2019/05/15/creating-collaborating-connecting-with-art-activism-and-the-internet> [hereinafter *Creating, Collaborating, Connecting* Blog].

Back then, I was painting collaborative message murals to address important social concerns in different locations around the world (AIDS in Africa, child welfare in Bolivia, peace in Northern Ireland[,], gangs in Philadelphia). The collaborative murals mattered because I wanted to amplify people's voices, share their concerns.

Id.

⁸ *Id.*

By having more people commit themselves to addressing the problem. It helps knowing that they are not going at it alone. It is inspiring to know that there are others out there just as passionate about solving a particular problem and just as active in solving it.

In a time when we can feel so disconnected, large-scale projects unify us in our resolve and allow us to engage in trans-community rituals that bring us together across all sorts of divides.

Id.

⁹ See generally Bernard P. Perlmutter & Xavier Cortada, "Communities that Care": Incorporating Socially Engaged Artistic Practices into Clinical Legal Education, 29 CLINICAL L. REV. 307, 337 (2023).

prisons; or collaborating with survivors of sexual abuse,¹⁰ I witnessed how the universal language of art assisted people in opening up and discussing the challenging issues they faced.¹¹

As time passed, my participatory projects evolved into something more conceptually driven, with an emphasis on site-specificity, context, and, importantly, process.¹² This transformation was

¹⁰ See *id.* at 338.

Cortada exemplifies the cultural and ecological transnationalism of the twenty-first century. In addition to producing work on commission for the White House, the World Bank, and numerous public collections in Florida, he has collaborated with artists around the world, creating eco-art projects in the Netherlands, Latvia, and Hawai'i, peace murals in Cyprus and Northern Ireland, AIDS awareness murals in Geneva and South Africa, and child welfare murals in Bolivia and Panama. Cortada is an American artist but also self-consciously a citizen of the planet. He describes his most recent series, *Ancestral Journeys*, a collaborative project with the National Geographic scientist Spencer Wells, as "work that uses genetic data to explore how nature influenced human migration and history," specifically regarding the various pathways that today's residents of the Western Hemisphere took from Africa sixty thousand years ago. His point here is that "[p]erceived differences among people [have] often allowed for exploitation, marginalization, segregation and alienation. Inside our DNA we carry genetic markers that prove that we share the same ancestors and are one human family."

See Alan C. Braddock & Renée Ater, *Art in the Anthropocene*, 28 U. CHI. PRESS J. 2, 2 (2014).

¹¹ See Xavier Cortada, *Let Art Bloom*, AM. FOR THE ARTS: ARTSBLOG (Nov. 11, 2011), <https://blog.americansforthearts.org/2019/05/15/let-art-bloom>.

When I started out as a professional artist in the mid-1990s, I would engage others in painting collaborative murals to amplify their voices.

I would bring people together in public spaces to address important social concerns: street children in Bolivia's main plaza; former gang members in a Northern Philly barrio; Greek and Turkish Cypriots at the UN Green Line; Protestants and Catholics in Northern Ireland; AIDS workers in South Africa; kids jailed in Miami's adult prisons and psychiatric facilities, etc.

Id.

¹² See, e.g., Mary Jo Aagerstoun, *Reclamation Project Essay*, CORTADA, <https://cortada.com/art2006/reclamation/reclamationproject-about/mary-jo-aagerstoun-essay/> (last visited Dec. 26, 2023).

[T]he *Reclamation Project*, a broad definition of this practice is apt: “us(ing) the passage of and the manipulation of time as [an] essential element.” The movement and manipulation of the *Reclamation Project*’s living media (propagules), the project’s organization, reception and continuation over time, the multiplicity of sites, and what happened at each (collection of propagules, finding and preparing display locations, and, finally, their ritual planting), all combine to resemble many types of time-based performance art—from the “Happenings” of the late 1950s down to today’s performative “social practice” projects.

The Reclamation Project refers to the social sculpture genre in its combination of performance with two other characteristics of the traditional sculpture genre—the “additive” (pastiche or assemblage), and the “kinetic”—deployed together to engage social and institutional processes and individuals, as sculptural media. The term “social sculpture” was first used by German artist Joseph Beuys in the 1960s. This art practice is the basis for much of what is known today as “social practice” art.

The evidence that the *Reclamation Project* has started an ongoing “learning together” conversation, where the engaged community and the “teacher” exchange insights and practical ideas, is apparent in its continuing vibrant existence across many community platforms. The project illustrates Wallace Heim’s concept of “slow activism,” where a successful “slow activist” exchange “. . . works not only in the immediacy of the [first] event,” but in an ongoing way, in “unforeseen” future circumstances.

One can point to the instantly recognizable characteristics of succeeding generations of the *Reclamation Project* as evidence that the project is “working.” Each new appearance melds established scientific methods, teacher-learning-from-pupil-learning-from teacher pedagogy, and seemingly diametrically opposed aesthetic approaches: the choreographed movement of people and living plants, to Nature’s cadence; the grid installation form; the “slow activism” weaving together unlikely partnerships and social processes; and the mobilization of surprise as an audience engagement tactic.

Id.

partly spurred by witnessing the devastating destruction of mangrove forests along an eighteen-mile stretch of a highway leading to the Florida Keys.¹³

It was a pivotal moment that redirected my focus towards environmental concerns and more intensive community engagement.¹⁴ Wanting to make a difference, I leaned into my past collaborative

¹³ See Xavier Cortada, *A Creative Approach to Community Climate Action*, TED COUNTDOWN LONDON (Oct. 2022), https://www.ted.com/talks/xavier_cortada_a_creative_approach_to_community_climate_action [hereinafter Cortada London TED Talk].

I first started working with my neighbors on environmental issues when I witnessed a destruction of wetlands on a drive down to the Florida Keys. Miles upon miles of mangroves were being bulldozed to make space for a wider road. And I imagined someone driving down that road in the future [would have no idea of] the ecosystem that once thrived there, just like many of us are oblivious to the nature we've already destroyed.

So, I used eco art. I brought my neighbors, my South Floridians, on walks through majestic mangrove forests. There we were, knee deep in water, crawling through mangrove roots . . . We collected mangrove propagule seedlings that we would then give to store owners on Lincoln Road, the busiest shopping area in Miami Beach. We asked those store owners to grow those mangroves as vertical nurseries right there inside their stores. Our volunteers put the seedlings in disposable cups and hung them on the merchant windows as installations that reference the city grid that displaced the mangroves on that very barrier island.

When the people walk by that store, it's really unexpected to see a bunch of mangroves in a window. So, they ask a store owner, "What is this about?" The owner says, "These mangroves are reclaiming their island. Mangrove seedlings used to hang on this very location, on trees, before all of this concrete was poured." Well, when the installations came down after the seedlings were germinated, we planted them—twenty-five acres of them on Biscayne Bay. But more importantly, we inspired thousands of South Floridians to become environmental stewards, to care for the environment.

Id.

¹⁴ See generally *id.* (describing the impact of socially engaged art, specifically Cortada's work surrounding the Florida Keys, to get individuals to "tap into their own creativity and work with others in finding approaches to build a more just, more loving, and a more beautiful world").

community work to find ways to tackle this newfound issue. However, unlike my earlier work, this one was more universal—everyone was impacted by the environment and everyone had a role in protecting it. Here, everyone had something to say. But, more importantly, everyone had something to do.¹⁵

The work was no longer limited to a specific moment in time or even to the four corners of a canvas (in fact, it didn't even utilize traditional art materials like paints and brushes).¹⁶ It was no longer about creating a mural to generate awareness about an issue; rather it was about launching a process to solve it.¹⁷ As such, the new work

¹⁵ Ater, *supra* note 1, at 41–42.

From his Antarctica art installation and paintings, Cortada began to create an “evolving body of work that used genetic data to explore how nature influenced human migration and history.” Similar to *Reclamation Project*, Cortada relied on community participants to make the art and imbue it with local meaning.

Works such as *Reclamation Project*, *The Markers (South Pole)*, and *Ancestral Journeys* reveal an artist committed to science and to participatory art projects. Through his eco-art practice, Cortada reveals the ways in which local communities and recent science can be connected to raise consciousness about pressing environmental concerns.

Id.

¹⁶ See *Reclamation Project: EcoArt by Xavier Cortada*, CORTADA, <https://cortada.com/reclamation> (last visited Dec. 26, 2023) [hereinafter *Reclamation Project*].

¹⁷ Sam Bower, *Environmental Art*, in *A WORKING GUIDE TO THE LANDSCAPE OF ARTS FOR CHANGE* 14–15 (2011), https://cortada.com/wp-content/uploads/sbower_env_art_trend_paper.pdf.

The Reclamation Project is an exceptional participatory mangrove restoration project launched by Miami artist Xavier Cortada in 2006. At its most basic level, according to the artist, “it explores our ability to coexist with the natural world.” With these modest ambitions as its starting point, the project succeeds by making reforestation so compellingly beautiful, fun, and engaging that people want to see it continue. The artwork involves the annual collection of mangrove propagules in coastal areas with the help of volunteers. The plant material is then exhibited in long rows of clear water-filled cups suction-cupped to windows and walls in local museums, schools, businesses, and other public spaces. The propagules are nurtured into seedlings and then planted along coastal areas with the help

fostered a sense of ownership and shared responsibility for the issues being addressed.¹⁸

Indeed, socially engaged art is not just about a single moment; it often involves sustained engagement with a community or issue.¹⁹ Artists may work with communities over extended periods, helping to nurture ongoing change and dialogue.²⁰ Providing a platform for participants to approach and address problems in more creative ways,²¹ this engaged work is intended to help reframe perspectives,

of additional volunteers as part of an ongoing reforestation program. The Reclamation Project proved so popular that the Miami Science Museum committed to managing the coastal reforestation component and hosting a permanent ongoing exhibit of 1,100 mangrove seedlings in their facility. A Foundation was also formed to support additional installations in neighboring counties and communities.

Id.

¹⁸ *Reclamation Project*, *supra* note 16.

¹⁹ *See, e.g., id.* (discussing how a later “iteration of [the *Reclamation*] project . . . saw eco-art installations and programming in all 45 of Miami-Dade County’s public libraries and dozens of schools”).

²⁰ *See About the Reclamation Project*, CORTADA, <https://cortada.com/art2006/reclamation/reclamationproject-about/> (last visited Dec. 26, 2023) (stating how the *Reclamation Project*, which started in 2006, is still ongoing).

²¹ *See, e.g., Creating, Collaborating, Connecting Blog*, *supra* note 7.

Participants grow the seedlings in public installations (vertical gardens) they create in their schools and colleges in order to educate the broader community. Thousands of people see the art and are encouraged to think about (and perhaps act on) the importance of mangroves and coastal wetlands.

But it isn’t just about numbers and inspiration, it[‘]s also about innovation: Having more people engaged in the art-making, means that they are thinking more creatively and, in them, that generates the more opportunities for innovation.

These projects, in essence, serve as an invitation for people to come, experience, and act. Through their participation they can provide valuable feedback on how to make the process and project better.

But the biggest contribution comes in that participants are asked to imagine, to see things differently, and help innovate new ways of thinking about things. Indeed, these projects serve as platforms for them to create new projects of their own.

generate awareness, and spur action to address environmental and social concerns.²²

I. MAPPING THE COASTLINE: MAKING THE INVISIBLE VISIBLE

In 2022, I embarked on an artistic journey to map Florida's coastline.²³ I visited the seats of government for fifty-four coastal Florida municipalities.²⁴ From the cultural vibrancy of Miami to the historic charm of St. Augustine, these cities were not merely picturesque waterfront destinations—they were living, breathing communities with rich histories, diverse economies, and distinctive characters.

One overarching concern loomed over all of these coastal cities—the imminent threat of rising sea levels.²⁵ Florida's low-lying topography and exposure to hurricanes placed them all at risk.²⁶

Id.

²² See *Let Art Bloom*, *supra* note 11.

We need to better coexist by better tempering our personal demand for excess so that our growth is managed in a way that sustains not just humans but all living beings with whom we share (and need for our survival on) this planet. Not just now, but for generations (and millennia) to come.

We need to recreate lost habitats, rehabilitate dwindling ecosystems and engage in sustainable practices across every single one of the planet's longitudes.

Id.; see also Xavier Cortada, *Painting the Genome for the Public*, SCIENCE, Feb. 4, 2011, at 548.

More of us need to realize that we came about in the same way that all other life did—we share the same biology. May we use the knowledge we develop to act as best we can to sustain life for all species sharing this planet.

Id.

²³ See *The Underwater: A Socially Engaged Art Project by Xavier Cortada – About*, CORTADA, <https://cortada.com/art2022/underwater/about/> (last visited Dec. 26, 2023).

²⁴ See *The Underwater: A Socially Engaged Art Project by Xavier Cortada – Underwater Florida*, CORTADA, <https://cortada.com/art2022/underwater/city-halls/florida/> (last visited Dec. 26, 2023) [hereinafter *Underwater Florida*].

²⁵ See *id.*

²⁶ See *Sea Level Rise*, FLA. CLIMATE CTR. FLA. STATE UNIV., <https://climate-center.fsu.edu/topics/sea-level-rise> (last visited Dec. 26, 2023) (“Florida is among the most exposed states in the country to sea level rise and coastal storms. With

To visually represent their susceptibility to rising seas, I turned to art. During each stop, I meticulously painted a number on a yard sign and placed it prominently at the entrance of each city hall.²⁷ The integer depicted the number of feet above sea level for each respective city hall.²⁸ I called the project *Underwater Florida*.²⁹



*Underwater Florida*³⁰

This was part of an ongoing participatory art project that I launched four years earlier in the streets of my community.³¹ I worked with my neighbors to engage, educate, and mobilize others

its low-lying coastal topography and more than 8,400 miles of shoreline, much of Florida and its coastal population are vulnerable to the impacts of rising sea levels.”).

²⁷ See *Underwater Florida*, *supra* note 24.

²⁸ See *id.* (displaying video thumbnails of the fifty-four installations).

²⁹ On February 10, 2023, the *University of Miami Law Review* Symposium on Environmental Justice hosted the global preview of artist Xavier Cortada’s *Underwater Florida*, a video installation showcasing the artist’s climate-focused performances across fifty-four coastal Florida city halls during the Summer and Fall of 2022. See *Underwater Florida*, *supra* note 24. Cortada delivered remarks to close the symposium on its first day; his speech was titled “Mobilizing Climate Constituencies through Socially Engaged Art.” See *2023 Symposium Program Overview*, U. MIA. L. REV. (Feb. 10, 2023), <https://lawreview.law.miami.edu/2023-symposium/>. *Underwater Florida* was partially sponsored by a Fellowship in the Arts & Humanities award that Cortada received from the University of Miami.

³⁰ Cortada paints Underwater Markers at fifty-four coastal Florida city halls, depicting their respective elevations above sea level.

³¹ See *Underwater HOA: A Participatory Art Project by Xavier Cortada – Main*, CORTADA, <https://cortada.com/art2018/underwaterhoa/> (last visited Dec. 26, 2023) [hereinafter *Underwater HOA*].

around the climate crisis. By repurposing ice paintings³² that I created in Antarctica³³ as the backdrop for yard signs and street murals that popped up all over the neighborhood, I leveraged our geographic location to showcase local elevations and make rising sea levels an issue that was both personal and urgent, incentivizing residents to educate themselves and become civically engaged.

II. MELTING ICE: LESSONS FROM BELOW

Featuring Antarctica was important because I was attempting to make a connection between human impacts on the climate (e.g., melting glaciers in Antarctica) and the impacts of a changing climate on humans (e.g., rising seas that flood coastal cities).

The dire effects of a warming planet didn't crystallize in my mind until I traveled to Antarctica in 2006 as part of the National Science Foundation Antarctic Writers Program.³⁴ Through this prestigious fellowship, I would create a series of art installations around

³² Braddock & Ater, *supra* note 10, at 2; *Antarctic Ice Paintings*, CORTADA, <https://cortada.com/2007/ice-paintings> (last visited Dec. 26, 2023).

In 2007 the Miami-based artist Xavier Cortada produced *Astrid*, a small abstract painting consisting of liquid splotches of blue pigment in a grainy, grayish-white field on paper. The work recalls postwar expressionism of the New York School or later post-painterly abstraction, but such associations only scratch the surface of the picture's meaning. The more we learn about the artist, his materials, and the context of production, the more we recognize this to be a work of our time, even as it gestures to the past and future.

Id.

³³ Cortada London TED Talk, *supra* note 13.

I spoke with scientists there and I learned just how vulnerable my city was. I stood on the ice that threatened to melt and drown the only place I'd ever called home.

I took ice that glaciologists had brought me from their field work sites and melted it to create a series of Antarctic ice paintings, paintings that were made in Antarctica, with Antarctica, about Antarctica. But they weren't just about Antarctica. They were about where Antarctica was going.

Id.

³⁴ *Art in Antarctica*, CORTADA, <https://cortada.com/art2007/art-in-antarctica/> (last visited Dec. 26, 2023).

climate change, addressing biodiversity loss and exploring how interconnected we are with all species on Earth.³⁵ However, it wasn't until I was there that I realized just how grave things were.³⁶

³⁵ Suzaan Boettger, *Global Warnings*, ART IN AM., June–July 2008, at 159; Xavier Cortada: *Using a Moving Ice Sheet to Mark Time*, APECS, <https://www.apecs.is/outreach/internationalpolar-week/past-polar-weeks/polar-week-march-2017/polar-art/1703-xavier-cortadausing-a-moving-ice-sheet-to-mark-time.html> (last visited Dec. 26, 2023).

Cortada's videos and 8-by-10 inch photographs document a trip to the South Pole early in 2007 as part of the U.S. National Science Foundation's Antarctic Artists and Writers Program. There he installed bright flags to mark human events in Antarctica over the past century. More pertinent to the show's theme—beyond the voguish locale for artistic expeditions—were his documentation and the residue of a strangely ritualistic performance in which he placed 24 identical men's black shoes around the South Pole. From each he drew and read a statement from an individual living in one of the world's time zones (such as: "I tell my wife, the day the mountain loses its snow, we'll have to move out of the valley." Jose Ignacio Lambarri, farmer, Urubamba Valley, Peru").

Id.

³⁶ Cortada has created art installations at the North and South Poles to address environmental concerns at every point in between. *Art in Antarctica*, *supra* note 34. In 2007, as a National Science Foundation Antarctic Artists and Writers Program Fellow, Cortada used the moving ice sheet beneath the South Pole as an instrument to mark time; the art piece will be completed in 150,000 years. *Id.*; *About the 150,000-Year Journey*, CORTADA, <https://cortada.com/art2007/art-in-antarctica/150000-year-journey/> (last visited Dec. 26, 2023). In 2008, he planted a green flag at the North Pole to reclaim it for nature and launch an eco-art reforestation effort. *Native Flags: About*, CORTADA, <https://cortada.com/native-flags-about> (last visited Dec. 26, 2023).



*Antarctic Ice Painting*³⁷

The artist residency provided me with an opportunity to be up close and personal with Antarctic researchers, some of the brightest minds on the planet. We shared living quarters and communal eating areas where we talked about art and science, as well as their deep understanding of Earth's southernmost continent, the human impacts on it, and how those impacts affect the rest of the world. While there, I received ice samples from the Western Antarctic Ice Sheet, which scientists often use to analyze and monitor the evolution of atmospheric carbon dioxide (CO₂) concentrations over time.³⁸

III. CHANGING CLIMATE: A STATE OF EMERGENCY

As the Antarctic ice revealed, humanity's voracious consumption of fossil fuels has caused CO₂ concentrations to skyrocket, rapidly heating the planet and putting us all on a crash course for catastrophe.³⁹ The climate crisis has already had, and will continue to

³⁷ Xavier Cortada, *Astrid* (illustration), in XAVIER CORTADA, ANTARCTIC SEA ICE SERIES (2007), <https://cortada.com/2007/ice-paintings/astrid>.

³⁸ See J. H. Mercer, *West Antarctic Ice Sheet and CO₂ Greenhouse Effect: A Threat of Disaster*, 271 NATURE 321, 321–25 (1978).

³⁹ See *The Keeling Curve*, SCRIPPS INST. OCEANOGRAPHY, <https://keelingcurve.ucsd.edu/> (last visited Dec. 26, 2023).

have, far-reaching consequences that impact every corner of our world.⁴⁰ Looking toward the decades to come, global food insecurity will be exacerbated as agriculture and soils face unprecedented threats.⁴¹ Drinkable water becomes scarce as droughts and saltwater intrusion into freshwater sources become the new norm.⁴² Pollution—from plastics to oil spills to smog—tarnishes our land, poisons our water, and contaminates our air.⁴³ Ecosystems such as coral reefs teeter on the brink of collapse, and the ocean's very chemistry shifts with acidification.⁴⁴ Biodiversity and habitats vanish before our eyes in the midst of the world's sixth mass extinction.⁴⁵ Hurricanes, emboldened and rapidly intensifying, slowly churn across communities and wreak havoc with unforgiving storm surges.⁴⁶ Public health is compromised by extreme heatwaves and shifting vector ecology, bringing diseases like Malaria, Dengue, and Zika into once-safe havens.⁴⁷ Mass migration becomes a stark reality as individuals and families seek refuge from the relentless grip of a planet in jeopardy of surpassing irreversible tipping points.⁴⁸ These compounding crises paint a grim picture of our future, one marked

⁴⁰ See H. Orru et al., *The Interplay of Climate Change and Air Pollution on Health*, 4 CURRENT ENV'T HEALTH REP. 504, 504 (2017).

⁴¹ See S. Asseng et al., *Rising Temperatures Reduce Global Wheat Production*, 5 NATURE CLIMATE CHANGE 143, 143 (2014); see also L. R. Oldeman, *Global Extent of Soil Degradation*, in INT'L SOIL REFERENCE & INFO. CTR. BI-ANNUAL REP. 19, 21 (ISRIC ed., 1992).

⁴² HANDBOOK OF DROUGHT AND WATER SCARCITY: ENVIRONMENTAL IMPACTS AND ANALYSIS OF DROUGHT AND WATER SCARCITY 150, 329 (Saeid Eslamian & Faezeh A. Eslamian, eds., 2016). See J. Klassen & D. M. Allen, *Assessing the Risk of Saltwater Intrusion in Coastal Aquifers*, 551 J. HYDROLOGY 730, 730 (2017).

⁴³ See Orru et al., *supra* note 40, at 505; see also Helen V. Ford et al., *The Fundamental Links Between Climate Change and Marine Plastic Pollution*, 806 SCI. TOTAL ENV'T 1, 1–2 (2022).

⁴⁴ O. Hoegh-Guldberg et al., *Coral Reefs Under Rapid Climate Change and Ocean Acidification*, 318 SCI. 1737, 1737, 1742 (2007).

⁴⁵ Robert H. Cowie et al., *The Sixth Mass Extinction: Fact, Fiction, or Speculation?*, 97 BIOLOGICAL REVS. 640, 640–41 (2022).

⁴⁶ See Greg Holland & Cindy L. Bruyère, *Recent Intense Hurricane Response to Global Climate Change*, 42 CLIMATE DYNAMICS 617, 625 (2014).

⁴⁷ See Kevin D. Lafferty, *The Ecology of Climate Change and Infectious Diseases*, 90 ECOLOGY 888, 888 (2009).

⁴⁸ See Etienne Piguet et al., *Migration and Climate Change: An Overview*, 30 REFUGEE SURV. Q. 1, 20–23 (2011).

by unparalleled political and economic instability, and a human toll that is simply beyond imagination.

Amidst this distressing backdrop, there is an additional factor to be weighed, and one that affects every coastline of every continent: sea level rise.⁴⁹ According to data from the National Oceanic and Atmospheric Administration, global sea level rise scenarios vary greatly depending on our greenhouse gas emissions, and based on the ‘high emissions’ pathway we could see a rise of up to seven feet by the end of the century.⁵⁰ If this comes to fruition, hundreds of millions of people who live in low-lying coastal regions will be displaced.⁵¹

My home, at 6.13 feet above sea level in Miami, will be permanently inundated.⁵² Long before my house has fish swimming in the front yard, however, my neighbors and I will be dealing with inoperable septic tanks, exorbitant flood insurance premiums, and the risk of saltwater intrusion contaminating our clean drinking water.⁵³ While it may be challenging to precisely forecast when these realities will come to pass, recent reports from Antarctica and Greenland regarding record low sea ice levels, the destabilization of glaciers like Thwaites, and the unusually rapid melting of ice sheets, seem to imply that sea level rise could outpace current scientific projections.⁵⁴

⁴⁹ See Scott A. Kulp & Benjamin H. Strauss, *New Elevation Data Triple Estimates of Global Vulnerability to Sea-level Rise and Coastal Flooding*, NATURE COMM'NS, Oct. 2019, at 5 (mapping the projected global effect of rising sea levels on every continent).

⁵⁰ See WILLIAM V. SWEET ET AL., NAT'L OCEAN SERV., GLOBAL AND REGIONAL SEA LEVEL RISE SCENARIOS FOR THE UNITED STATES 61 (2022), <https://aambpublicoceanservice.blob.core.windows.net/oceanserviceprod/hazards/sealevelrise/noaa-nos-techrpt01-global-regional-SLR-scenarios-US.pdf>.

⁵¹ See Kulp & Strauss, *supra* note 49, at 1, 3.

⁵² *Id.*

⁵³ See Alissa H. Cox et al., *Preliminary Evidence that Rising Groundwater Tables Threaten Coastal Septic Systems*, 5 J. SUSTAINABLE WATER BUILT ENV'T 1, 10–11 (2019).

⁵⁴ See Kathryn Hansen, *Antarctic Sea Ice Reaches Another Record Low*, NASA EARTH OBSERVATORY (Feb. 21, 2023), <https://earthobservatory.nasa.gov/images/151093/antarctic-sea-ice-reaches-another-record-low>; T.A. Scambos et al., *How Much, How Fast? A Science Review and Outlook for Research on the Instability of Antarctica's Thwaites Glacier in the 21st Century*, 153 GLOB. & PLANETARY CHANGE 16, 16 (2017); Seth Borenstein, 'Devastating' Melt of Greenland, Antarctic Ice Sheets Found, AP NEWS (Apr. 20, 2023, 4:01 AM),

IV. CLIMATE CRISIS: A STATE OF DENIAL

Despite the abundance of accessible research and data that underscores the urgency of our current moment in human history, climate change continues to polarize public opinion and paralyze legislative efforts at all levels of government.⁵⁵ This division is perpetuated, in no small part, by the climate change countermovement, a coalition of conservative think tanks and vested interests in the fossil fuel industry.⁵⁶ For decades, these groups have employed tactics that sow doubt and confusion about the reality of the climate crisis.⁵⁷ Through well-funded disinformation campaigns and the promotion of skepticism, they have succeeded in undermining consensus among the general public.⁵⁸ As a result, many individuals are unsure what the truth is and sometimes find themselves in online echo chambers that breed conspiracy theories.⁵⁹ The political right has also rallied around climate change as an issue emblematic of the left's agenda for expanding government, raising taxes, and imposing more regulations, further hindering the public's collective understanding of the problem.⁶⁰

Even without interference from corporations, politicians, and media pundits, the common representation of the climate crisis as a remote and future threat makes its urgency particularly difficult for humans to grasp, adding yet another layer to our dilemma of generating consensus.⁶¹ Climate change is often portrayed as a problem in the years or decades ahead, causing many to feel complacent or

<https://apnews.com/article/ice-sheet-greenland-antarctica-melt-climate-49405a4999b1af5e3964781ff72bc59a>.

⁵⁵ See Robert J. Brulle, *Networks of Opposition: A Structural Analysis of U.S. Climate Change Countermovement Coalitions 1989–2015*, 91 SOCIO. INQUIRY 603, 603 (2021).

⁵⁶ *Id.*

⁵⁷ See *id.* at 604.

⁵⁸ See Justin Farrell, *Network Structure and Influence of the Climate Change Counter-movement*, 6 NATURE CLIMATE CHANGE 370, 370 (2016).

⁵⁹ See Matteo Cinelli et al., *The Echo Chamber Effect on Social Media*, PROC. NAT'L ACAD. SCI., Dec. 21, 2021, at 1.

⁶⁰ See Sander van der Linden et al., *Inoculating the Public Against Misinformation About Climate Change*, GLOB. CHALLENGES, Feb. 27, 2017, at 1.

⁶¹ See Simon Bushell et al., *Strategic Narratives in Climate Change: Towards A Unifying Narrative to Address the Action Gap on Climate Change*, 28 ENERGY RSCH. & SOC. CHANGE 39, 40 (2017).

downplay its significance.⁶² This phenomenon, known as ‘hyperbolic discounting’ in behavioral economics, means that short-term concerns are often prioritized while long-term issues are marginalized.⁶³ Similarly, the ‘construal level’ theory in social psychology suggests that individuals are more adept at comprehending and responding to events that feel psychologically close to them, compared to those that seem psychologically distant.⁶⁴ These cognitive biases curb our collective ability to rally public support for significant action.

Altogether, we have a perfect storm of deception, greed, and maladaptive human cognition that has bred resistance against the much-needed regulations and policies that are necessary for effective climate governance. We face this challenge in the context of a limited window of opportunity for effective mitigation; according to the Intergovernmental Panel on Climate Change, we must cut global greenhouse gas emissions almost in half by 2030 to limit warming to well below 2° Celsius above pre-industrial levels and to strive for a 1.5° Celsius target.⁶⁵ Achieving this goal is crucial to minimize the risk of triggering climate-related feedback loops that lead to self-reinforcing processes, such as accelerating ice sheet melt or the release of large amounts of greenhouse gases from permafrost.⁶⁶ Moreover, ambitious action and global cooperation are mandatory if equity and climate justice are kept in mind, understanding that those who have contributed the least to the crisis bear a disproportionate burden of the impacts.⁶⁷

⁶² *See id.*

⁶³ *See id.*

⁶⁴ Alexa Spence & Nick Pidgeon, *Framing and Communicating Climate Change: The Effects of Distance and Outcome Frame Manipulations*, 20 GLOB. ENV'T CHANGE 656, 657 (2010).

⁶⁵ INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, GLOBAL WARMING OF 1.5°C, at vi, 450 (Valérie Masson-Delmotte et al. eds., 2018).

⁶⁶ *See* William J. Ripple et al., *Many Risky Feedback Loops Amplify the Need for Climate Action*, 6 ONE EARTH 86, 86–87 (2023).

⁶⁷ *See* David Schlosberg & Lisette B. Collins, *From Environmental to Climate Justice: Climate Change and the Discourse of Environmental Justice*, 5 WIRES CLIMATE CHANGE 359, 361 (2014).

V. UNDERWATER HOA: VISUALIZING DATA, SPARKING CONVERSATIONS, AND CONVENING NEIGHBORS (2018)

Recognizing the imperiled situation that our species finds itself in, I felt I needed to turn toward engaged art once again. I needed to make these issues deeply personal to my community. I wanted to find a way for them to truly grasp the consequences of inaction and have them embrace the importance of sustained action. Rather than simply raising awareness, I aimed to ignite conversation and real engagement, having people not just acknowledge climate change, but actually help me make it impossible to ignore. That's when I came up with the idea of creating a process where my neighbors would organically discover how sea level rise was a personal issue for them, and I felt the best way to achieve this was by connecting it to their most cherished asset—their homes.⁶⁸

In 2018, I partnered with the Village of Pinecrest, a municipality within Miami-Dade County, to bring the “Underwater Homeowners Association” or “Underwater HOA” to life during Art Basel, an annual Miami art fair marked by extravagant spending and conspicuous consumption.⁶⁹ Using an app, residents discovered their property's elevation above sea level and then installed one of a series of ‘Underwater Markers’ (yard signs printed with numbers depicting elevations ranging from ‘<4’ to ‘13+’) in their front yard.⁷⁰ My “Antarctic Ice Paintings” served as the backdrop to these signs, sim-

⁶⁸ See *Underwater HOA*, *supra* note 31.

⁶⁹ Opinion, *Hey Art Basel – we owe you one*, MIA. HERALD, Dec. 2, 2015, at 20A [hereinafter *Hey Art Basel*]; *Underwater HOA*, *supra* note 31.

Art—and by association, big money—takes center stage in Miami-Dade this week with the start of Miami Art Week, and its signature event, Art Basel Miami Beach . . . This year, local artists are making social statements on serious issues with their art, which will be on display at several venues. Xavier Cortada, for instance, is staging a series of panel discussions, performance art and other events to spotlight sea-level rise and climate change. But no doubt Art Basel's best contribution is the focus it's brought to local artists, like Mr. Cortada, by showcasing their talent and helping turn some dodgy neighborhoods into bohemian enclaves.

Hey Art Basel, *supra* note 69.

⁷⁰ *Underwater HOA*, *supra* note 31.

ultaneously working to grab the attention of passersby while drawing a link between melting glaciers and the vulnerable, low-lying homes of Miami.⁷¹



*Underwater HOA*⁷²

Alternatively, I asked community members to repurpose their political yard signs and make a political statement about sea level rise: Paint them white like the glaciers in Antarctica, with a squiggly blue line at the bottom to denote the rising seas caused by melting glaciers.⁷³ I then asked them to put the elevation of their property on that line to portray how many feet of sea level rise will bring water to their doorstep.⁷⁴ That was my way of letting neighbors know that Antarctica doesn't care what political party you belong to—it will flood you regardless.

By showcasing elevation data in this unexpected, ambiguous, and visually compelling manner, I aimed to capture the curiosity of individuals who were likely not involved in local climate efforts. It

⁷¹ *The Underwater: A Socially Engaged Art Project by Xavier Cortada – Elevation Yard Sticks*, CORTADA, <https://cortada.com/art2022/underwater/markers/> (last visited Dec. 26, 2023).

⁷² Xavier Cortada, *Underwater HOA: Marker 8* (photograph), in XAVIER CORTADA, *UNDERWATER HOA* (2018), <https://cortada.com/art2022/underwater/underwater-hoa/>.

⁷³ *Underwater HOA: A Participatory Art Project by Xavier Cortada – Participate*, CORTADA, <https://cortada.com/art2018/underwaterhoa/participate/> (last visited Dec. 26, 2023).

⁷⁴ *Id.*

was in these moments of intrigue when unsuspecting people could learn about sea level rise by talking to the friend, neighbor, or family member who originally installed the marker.⁷⁵ Furthermore, unlike political yard signs that often emphasize divisive perspectives, these markers leveraged property elevations as a mechanism for neighbors to see their common ground.⁷⁶

While yard signs were popping up house by house, I worked with art students at four local public high schools to paint elevation murals on four major intersections along a 2.5-mile stretch of Pinecrest's Killian Drive (the city's main street), temporarily renamed "Elevation Drive."⁷⁷ These peculiar murals with seemingly random numbers not only raised questions, but effectively mapped the topography of the city.⁷⁸ As people would drive along the road from east to west, traveling inland and away from the Atlantic Ocean, most would expect to gradually move to higher ground that is less vulnerable to rising seas.⁷⁹ However, after learning what the ambiguous numbers meant through word of mouth, many residents were surprised to find intersections further west with lower numbers than some closer to the coast—a discovery revealing that Pinecrest lies on a ridge and that those living west of the ridge were actually more susceptible to sea level rise than some of their neighbors closer to the bay.⁸⁰

⁷⁵ *Id.*

⁷⁶ Kate Stein, *What to Do With Those Political Yard Signs? This Artist Has An Idea, Linked to the Rising Sea*, CORTADA, <https://cortada.com/press/press-2018/what-to-do-with-those-political-yard-signs-this-artist-has-an-idea-linked-to-the-rising-sea/>.

⁷⁷ *Underwater HOA: A Participatory Art Project by Xavier Cortada – Elevation Drive*, CORTADA, <https://cortada.com/art2018/underwaterhoa/elevation-drive/> (last visited Dec. 26, 2023).

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ *Id.*



*Elevation Drive*⁸¹

As word of the Underwater HOA spread, so did news about the project's first community meeting.⁸² The idea was to provide a space where newly concerned residents could meet to share experiences, insights, and ideas around flooding and sea level rise.⁸³ In order to create the trappings of an actual membership organization, and as part of the greater performative effort, I penned an oath that was administered by the County Commissioner who represented the area, Daniella Levine Cava, who two years later was elected as Miami-Dade County's first female mayor.⁸⁴ These monthly convenings served as a collaborative platform for problem-solving and community organizing.⁸⁵ We were able to continue distributing yard signs to grow the citywide installation, host speakers from climate scientists and insurance experts to architects and youth activists, and

⁸¹ Xavier Cortada, *Underwater HOA Elevation Drive: 7* (photograph), in XAVIER CORTADA, *UNDERWATER HOA* (2018), <https://cortada.com/art2018/underwaterhoa/elevation-drive>.

⁸² *Events: "Underwater HOA" Inaugural Meeting at Hibiscus Gallery*, CORTADA (Jan. 9, 2019, 7:00 PM), <https://cortada.com/event/antarctic-ice-paintings-at-hibiscus-gallery-2-2/>.

⁸³ *See id.*

⁸⁴ *See Inaugural Underwater HOA Meeting in Pinecrest, FLA.* CONSERVATION VOTERS (Jan. 20, 2019), <https://fcvoters.org/2019/01/20/inaugural-underwater-hoa-meeting-in-pinecrest/>; *Daniella Levine Cava – Mayor, MIA.-DADE CNTY.*, <https://www.miamidade.gov/global/government/biographies/mayor.page> (last visited Dec. 26, 2023).

⁸⁵ *See Underwater HOA: A Participatory Art Project by Xavier Cortada – Monthly Meetings*, CORTADA, <https://cortada.com/art2018/underwaterhoa/monthly-meetings/> (last visited Dec. 26, 2023).

importantly, discuss how we could best address our shared concerns.⁸⁶

VI. UNDERWATER VOTE: CATALYZING CIVIC ENGAGEMENT AND CLIMATE ADVOCACY (2020)

In-person “Underwater HOA” meetings came to an abrupt halt in March 2020 with the COVID-19 pandemic, forcing us to adapt to the limitations of Zoom meetings and brainstorm how we could continue advocating for climate action in the absence of real human interaction. Having a pivotal 2020 presidential election on the horizon allowed us to shift gears and pursue “Underwater Vote.”⁸⁷ This voter mobilization initiative aimed to inspire individuals to register and cast their vote in the upcoming election while keeping sea level rise front of mind.⁸⁸ Initially focused on the University of Miami community, I worked with students to create three distinct installations featuring dozens of Underwater Vote Markers.⁸⁹ These Underwater Markers displayed the word “VOTE” on one side, with some facing in one direction and others in the opposite direction, producing an eye-catching sea of numbers and “VOTE” messages across the university campus.⁹⁰

We also developed “Underwater Vote” Zoom background images for people to use during their daily online meetings as a way of engaging fellow voters in conversation about climate change.⁹¹ I

⁸⁶ See *id.*

⁸⁷ Xavier Cortada, Opinion, *Vote to keep our heads above water. South Florida is on the front lines of sea-level rise*, MIA. HERALD (Oct. 28, 2020, 2:39 PM), <https://cortada.com/art2020/underwatervote/vote-to-keep-our-heads-above-water/> [hereinafter CORTADA MIA. HERALD OPINION]; *Underwater HOA: A Participatory Project by Xavier Cortada – Underwater Vote Project*, CORTADA, <https://cortada.com/art2018/underwaterhoa/uhoa-underwater-vote-project/> (last visited Dec. 26, 2023) [hereinafter *Underwater Vote Project*].

⁸⁸ CORTADA MIA. HERALD OPINION, *supra* note 87.

⁸⁹ *Underwater Vote Project*, *supra* note 87.

⁹⁰ See *Underwater Vote: A Voter Mobilization Art Piece by Xavier Cortada – Lakeside Installation*, CORTADA, <https://cortada.com/art2020/underwater-vote/lakeside-installation/> (last visited Dec. 26, 2023).

⁹¹ *Underwater Vote Project*, *supra* note 87.

wanted us to make sure we voted, not just thinking about our immediate needs, but also the greater chaos to come, unless those we elect into office commit to equitably addressing our climate emergency.⁹²



*Underwater Vote*⁹³

VII. HELLO: ENCOURAGING VULNERABILITY AND CHALLENGING TRADITIONAL NOTIONS OF SELF (2021)

In 2021, I was invited to attend COP26, the annual United Nations Climate Change Conference in Scotland, as an Official Observer on behalf of the University of Miami School of Law.⁹⁴ Wanting to engage conference attendees in participatory art, I conceptualized a project that would generate meaningful dialogues, and not superficial conversations, between people from all around the world, many of whom had never met before. I launched this project, "HELLO," days before departing to Glasgow, Scotland with Miami-

⁹² See CORTADA MIA. HERALD OPINION, *supra* note 87.

⁹³ Xavier Cortada, *Underwater Vote* (photograph), in XAVIER CORTADA: UNDERWATER VOTE (2020), <https://cortada.com/art2020/underwatervote/lakeside-e-installation/>.

⁹⁴ See 2021 United Nations Climate Change Conference (COP26), CORTADA, <https://cortada.com/art2021/hello/cop26/> (last visited Dec. 26, 2023).

Dade Mayor Daniella Levine Cava as she unveiled the county's Climate Action Strategy.⁹⁵ My “HELLO” stickers looked like traditional name tags at first glance, however individuals were challenged to instead identify themselves with qualifiers such as their personal elevations, hopes, and fears, written atop a backdrop of my Antarctic Ice Paintings.⁹⁶ Hundreds of delegates responded to the prompts on these stickers (HELLO my “elevation, fear, future, hope, purpose” is) and wore them into negotiations, policy discussions, and meetings throughout the course of the conference.⁹⁷ By initiating this process, I aimed to reframe the way we saw one another and our collective vulnerability, ultimately fostering a deeper sense of empathy and connection between diverse participants. I have since implemented “HELLO” at annual conferences from New York to Mexico, including for the American Association of Art Museum Curators and at the International Conference on Educational Innovation, among others.⁹⁸



HELLO⁹⁹

⁹⁵ *Miami-Dade County Mayor Announces New Climate Action Strategy Ahead of World Conference*, CBS NEWS MIA. (Oct. 27, 2021, 6:53 PM), <https://www.cbsnews.com/miami/news/miami-dade-county-mayor-climate-action-strategy/>; *HELLO: A Participatory Art Project by Xavier Cortada – Main*, CORTADA, <https://cortada.com/art2021/hello/> (last visited Dec. 26, 2023) [hereinafter *HELLO*].

⁹⁶ *HELLO*, *supra* note 95.

⁹⁷ *See id.*

⁹⁸ *Art Curators Conference: Confronting Environmental Crisis: From Policy to Practice*, CORTADA (May 3, 2022), <https://cortada.com/events-2022/art-curators-conference/>; *9th Annual International Conference on Educational Innovation: Using the Power of Art to Work Across Disciplines in Engaging Communities*, CORTADA (Jan. 16, 2023), <https://cortada.com/events-2023/9th-annual-international-conference-on-educational-innovation/>; *Keynote Address at Florida Public Art Conference: Cortada Delivers Keynote Address at 25th Annual Florida Public Art Conference*, CORTADA (May 11, 2023), <https://cortada.com/events-2023/keynote-address-at-florida-public-art-conference/>.

⁹⁹ Xavier Cortada, “HELLO” Stickers (Photograph), in XAVIER CORTADA: HELLO (2021), <https://cortada.com/art2021/hello/about/>.

VIII. THE UNDERWATER: INSPIRING STUDENTS TO LEAD WITH COMMUNITY EDUCATION AND OUTREACH (2022)

As a way of reaching broader audiences and being more inclusive, the “Underwater HOA” evolved into “The Underwater” in 2022.¹⁰⁰ This transformation marked a significant step in our effort to engage all Miami-Dade residents, not just homeowners.¹⁰¹ Under the banner of the newly established Xavier Cortada Foundation, a non-profit dedicated to amplifying the impact of my socially engaged art, “The Underwater” initiative built on our previous successes in Pinecrest and sought to mobilize students and their families around the climate crisis.¹⁰² To this end, I partnered with my alma mater, Miami Senior High School, to advance the campaign across Miami’s Little Havana neighborhood.¹⁰³ We began by working with faculty and staff to pique the curiosity of Miami High’s student body.¹⁰⁴ Student clubs created a variety of posters with a central question—“What’s your number?”—and plastered them all over the school.¹⁰⁵ Although the question is referring to the number the students would soon discover when they figured out their homes’ elevations above sea level, none of the students involved in creating the banners and posters knew that, leaving them and the rest of their classmates to wonder what the question could possibly mean.¹⁰⁶ Then, individual numbers between one and twenty-four (the range, in feet, of Miami-Dade’s elevation above sea level) were posted around the school, maintaining speculation about the ambiguous question while also providing all of its possible answers.¹⁰⁷

¹⁰⁰ *The Underwater: A Socially Engaged Art Project by Xavier Cortada – About*, XAVIER CORTADA FOUND., <https://cortadafoundation.org/underwater/about/> (last visited Dec. 26, 2023).

¹⁰¹ *See id.*

¹⁰² Summer Brugal & Amanda Rosa, ‘There’s Still Hope for Miami.’ *Inside This High School’s Climate Change Art Project*, MIA. HERALD (May 19, 2022) <https://cortada.com/press/2022-press/theres-still-hope-for-miami-inside-this-high-schools-climate-change-art-project/>.

¹⁰³ *Id.*

¹⁰⁴ *See The Underwater: A Socially Engaged Art Project by Xavier Cortada – Little Havana: What’s Your Number?*, CORTADA, <https://cortada.com/art2022/underwater/little-havana/whats-your-number/> (last visited Dec. 26, 2023) [hereinafter *What’s Your Number? Project*].

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*



*The Underwater*¹⁰⁸

Over the following weeks, working in conjunction with Miami High's science department, more than eighty 90-minute-long, interactive presentations were given to over 2,000 Miami High students.¹⁰⁹ During each of these sessions, students learned why Miami is referred to as ground zero for climate change, used an app to discover their home's elevation above sea level, and finally painted their number on an Underwater Marker that they were encouraged to place in their front yards. In contrast to the original "Underwater HOA" signs, these were printed without pre-existing numbers and with QR codes, giving participants the opportunity to personalize their markers and improve access to the project's website.¹¹⁰ At the end of each presentation, students were also invited to browse the "Underwater Intel."¹¹¹

This online resource hub contains a curated selection of videos, books, podcasts, and more for anyone who

¹⁰⁸ Xavier Cortada, Photograph of Miami Senior High School students posing with their new "Underwater Markers" (Apr. 2022).

¹⁰⁹ *What's Your Number? Project*, *supra* note 104.

¹¹⁰ *See id.*

¹¹¹ *See The Underwater: A Socially Engaged Art Project by Xavier Cortada – Underwater Intel*, CORTADA, <https://cortada.com/art2022/underwater/intel/> (last visited Dec. 26, 2023).

wants to dive deeper in their climate education. Additionally, the Intel highlights Miami-based organizations to get involved with, inspiring leaders to learn from, and special places around South Florida to explore. With the understanding that everyone has different interests and passions, the resources are divided into the following topics: ‘Science, Nature & Conservation,’ ‘Justice, Law & Policy,’ ‘Business, Energy & Technology,’ ‘Art, Culture & Media,’ and ‘Health, Wellness & Diet.’¹¹²

Once all of the presentations were finished, yard signs were distributed, and Intel was shared, we convened residents at the Little Havana Climate Town Hall and Community Connection Fair.¹¹³ The town hall included an interdisciplinary panel discussion and community Q&A that centered topics spanning science, policy, and innovative solutions.¹¹⁴ At the subsequent fair, “students and their families had the ability to learn about and get involved in ongoing local efforts ranging from climate advocacy and adaptation to sustainable seafood and native tree planting.”¹¹⁵ Empowered by the platform that this project gave them, seventy-five Miami Senior High School students later traveled to Little Havana’s Calle Ocho in an effort to install Underwater Markers in as many yards and windows of small businesses as possible.¹¹⁶

After practicing what to say to shopkeepers, in English and in Spanish, [] the students walked from Miami High to Calle Ocho and split into two groups. Store by store, the students began conversations

¹¹² *The Underwater: A Socially Engaged Art Project* by. Xavier Cortada – Little Havana, CORTADA, <https://cortada.com/art2022/underwater/little-havana/> (last visited Dec. 26, 2023) [hereinafter *Little Havana*].

¹¹³ *See id.*; *The Underwater: A Socially Engaged Art. Project* by Xavier Cortada – Little Havana: Community Connection Fair, CORTADA, <https://cortada.com/art2022/underwater/little-havana/fair/> (last visited Dec. 26, 2023).

¹¹⁴ *See Little Havana*, *supra* note 112.

¹¹⁵ *Id.*

¹¹⁶ *See The Underwater: A Socially Engaged Art Project* by Xavier Cortada – Little Havana: Calle Ocho, CORTADA, <https://cortada.com/art2022/underwater/little-havana/calle-ocho/> (last visited Dec. 26, 2023).

about the initiative and asked if they would be allowed to put an Underwater Marker, with each business' elevation above sea level drawn on top, in a visible location for customers and passersby to see. By the end of the afternoon, dozens of businesses along Calle Ocho had proudly displayed their Underwater Marker and began a process of engaging and educating their neighbors about their shared vulnerability to rising seas.¹¹⁷



*Calle Ocho*¹¹⁸

IX. UNDERWATER FLORIDA: COMMUNICATING A PRECARIOUS FUTURE ACROSS THE PENINSULA'S COASTLINE (2022)

In 2022, I decided to expand our climate action initiative across Florida, a state whose very shape is defined by the water that surrounds it. Traveling to fifty-four coastal city halls, I painted a yard sign at each, depicting their respective elevations above sea level.¹¹⁹

¹¹⁷ *Id.*

¹¹⁸ Xavier Cortada, Photograph of Miami Senior High School students bringing "The Underwater" to shops on Calle Ocho in Little Havana (May 2022).

¹¹⁹ *Underwater Florida*, *supra* note 24.

By installing these signs at the very location where city officials make decisions about municipal budgets, as well as land use, planning, and zoning, I attempted to make visible the threat that sea level rise poses to each city's future tax base.¹²⁰

Elected municipal leaders rely mostly on property taxes to fund essential services.¹²¹ However, Florida's "Save Our Homes" Constitutional Amendment¹²² limits annual property tax increases for existing residential properties, even as it costs more and more to deliver city services. This amendment incentivizes officials to permit new developments that expand the tax base without the same constraints.¹²³ The one thing Florida is more addicted to than fossil fuels is its insatiable appetite for growth, growth, growth.¹²⁴

Florida's relentless pursuit of unchecked growth, particularly in climate-vulnerable regions, may appear as a financial windfall, but it is a perilous venture. In the face of looming threats from sea level rise and climate change, prioritizing unbridled growth, especially in vulnerable coastal zones, risks compromising cities' enduring economic stability, burdening future generations.¹²⁵

Property values may decrease, directly affecting homeowners and local tax revenue.¹²⁶ Skyrocketing insurance costs in these regions impact affordability and financial stability, posing challenges for cities with limited budgets in funding vital coastal protection

¹²⁰ See *id.*

¹²¹ See Linna Zhu & Sheryl Pardo, *Understanding the Impact of Property Taxes is Critical for Effective Local Policymaking*, URBAN INST. (Nov. 5, 2020), <https://www.urban.org/urban-wire/understanding-impact-property-taxes-critical-effective-local-policymaking>.

¹²² FLA. CONST. art. VII, § 4(d)(1).

¹²³ See Dean H. Gatzlaff, *The "Save Our Homes" Amendment Could Cause Some Problems*, IDEAS IN ACTION: FLA. TAXWATCH, Oct. 1994, at 2 (noting that the Amendment will directly result in a substantial revenue decrease for local governments without countering measures).

¹²⁴ See, e.g., Grace Dean, *Tech Jobs, Sun, and No Income Tax: Experts Explain Why Florida is Poised to Keep Growing Even After the Pandemic*, BUS. INSIDER (May 21, 2021, 10:57 AM), https://www.businessinsider.com/florida-growth-jobs-economy-population-new-york-pandemic-employment-miami-2021-4?utm_source=copy-link&utm_medium=referral&utm_content=topbar#.

¹²⁵ See Linda Shi et al., *Can Florida's Coast Survive its Reliance on Development? Fiscal Vulnerability and Funding Woes Under Sea Level Rise*, J. AM. PLAN. ASS'N, Sept. 29, 2023, at 11.

¹²⁶ See *id.* at 7.

measures.¹²⁷ Florida's geographic location also exposes it to the devastating impact of hurricanes, especially the damage caused by storm surge and flooding.¹²⁸ These risks will only intensify as the climate crisis escalates, diverting government resources away from essential services and infrastructure improvements towards disaster recovery.¹²⁹

Moreover, Florida's appeal to businesses may diminish as they weigh climate vulnerability risks, including property damage, business disruption, and increased insurance costs.¹³⁰ Hasty and unsustainable development threatens to degrade the state's natural resources and ecosystems, potentially destabilizing its economic foundations.¹³¹ Coastal developments that ignore sea level rise and climate change may become vulnerable, reducing appeal to both tourists and investors.¹³² Florida, without an income tax, relies on sales tax revenue from residents and tourists, especially in high-tourism and growth-driven regions.¹³³ These coastal areas heavily depend on the state's natural beauty.¹³⁴ Neglecting responsible land use management risks irreparable damage to these essential assets, potentially leading to economic collapse as the factors sustaining regional prosperity erode.¹³⁵

¹²⁷ See Sal Nuzzo, *Why Your Florida Property Insurance is so High*, THE JAMES MADISON INST. (July 28, 2022), <https://jamesmadison.org/why-your-florida-property-insurance-is-so-high/>.

¹²⁸ See *Hurricanes*, FLA. CLIMATE CTR. FLA. STATE UNIV., <https://climate-center.fsu.edu/topics/hurricanes> (last visited Dec. 26, 2023).

¹²⁹ *The Rising Costs of Extreme Weather Events*, THE WHITE HOUSE (Sept. 1, 2022), <https://www.whitehouse.gov/cea/written-materials/2022/09/01/the-rising-costs-of-extreme-weather-events/>.

¹³⁰ See URB. LAND INST., *THE BUSINESS CASE FOR RESILIENCE IN SOUTHEAST FLORIDA: REGIONAL ECONOMIC BENEFITS OF CLIMATE ADAPTATION* 6 (2020).

¹³¹ See Jeff Vandermeer, *Florida's Environmental Failures Are a Warning for the Rest of the U.S.*, TIME (July 12, 2023, 8:00 AM), <https://time.com/6288683/florida-desantis-environment-climate-change/>.

¹³² URB. LAND INST., *supra* note 130, at 13, 19.

¹³³ See Logan Padgett, *Is Florida Such a Tax-Friendly State?*, THE JAMES MADISON INST. (Sept. 26, 2022), <https://jamesmadison.org/is-florida-such-a-tax-friendly-state-2/>.

¹³⁴ See *Florida's Natural Assets: Investing in Nature is Key to Our Prosperity*, DEFS. OF WILDLIFE, <https://defenders.org/sites/default/files/publications/floridas-natural-assets.pdf> (last visited Dec. 26, 2023).

¹³⁵ See, e.g., Tom Bayles, *Florida's Pro-Growth Law Could Prevent Challenges to New Development*, *Opponents Say*, WLRN (May 26, 2023, 2:00 PM),

Constituents, much like the leaders they elect, share a common goal: securing a better future for their descendants.¹³⁶ This shared objective should compel politicians to take decisive action now to ensure a prosperous and sustainable future. Climate change and sea level rise threaten Florida's coastal cities with economic instability and a diminished quality of life.¹³⁷ Future Floridians will grapple with the daunting task of adapting to rising seas at precisely the moment when property values are likely to plummet, eroding the tax base their predecessors painstakingly built.¹³⁸ Growing our way out of the problem is not a viable solution.

Municipal leaders confront a daunting challenge in reconciling land development, especially in coastal areas, with the associated increase in tax revenue, all while considering the looming threat of substantial sea level rise.¹³⁹ To address this complex issue, they must conduct thorough risk assessments that account for both short-term risks, like hurricanes, and the long-term, escalating threat of sea level rise.¹⁴⁰ This entails implementing stringent zoning and building codes that prioritize resilience, including elevated structures and flood-resistant construction.¹⁴¹

Additionally, strategic investments in living shorelines and other nature-based solutions, along with managed retreat plans, are crucial for mitigating immediate vulnerabilities while acknowledging the inevitability of sea level rise over time.¹⁴² Municipal leaders should

<https://www.wlrn.org/environment/2023-05-26/floridas-pro-growth-law-could-prevent-challenges-to-new-development-opponents-say>.

¹³⁶ See U.S. CONST. pmbl.

¹³⁷ See generally Linda Shi et al., *supra* note 125, at 1.

¹³⁸ See *id.* at 7.

¹³⁹ See *id.*

¹⁴⁰ See FLA. STAT. § 380.093(1)(c) (2023).

¹⁴¹ See Jennifer E. Fine & Carly Grimm, *How Florida Zoning Regulations Can Encourage Development and Climate Change Resiliency*, BILZIN SUMBERG (Apr. 27, 2020), <https://www.bilzin.com/we-think-big/insights/publications/2020/04/land-development-in-the-305-episode-6>.

¹⁴² See *What You Need to Know About Nature-Based Solutions to Climate Change*, THE WORLD BANK (May 19, 2022), <https://www.worldbank.org/en/news/feature/2022/05/19/what-you-need-to-know-about-nature-based-solutions-to-climate-change>; Yuliya Panfil, *The Case for 'Managed Retreat,'* POLITICO (July 14, 2020, 11:49 AM), <https://www.politico.com/news/agenda/2020/07/14/climate-change-managed-retreat-341753>.

also embrace a development approach that recognizes the encroachment of rising seas, gradually reclassifying land as unsuitable for development to protect communities, taxpayers, and the environment. While challenges are present, the profound love for one's children and grandchildren, which unites constituents and politicians alike, should serve as the unwavering driving force behind a commitment to sustainability and resilience in a changing world.

This is how much the fifty-four featured coastal cities grew during the past fifty years.¹⁴³ How much growth will constituents allow politicians to bring in the next fifty years?

Aventura (2020 Population: 40,242) - Data for 1970 is not available.

Boca Raton (2020 Population: 97,422) - Growth rate: Approximately 241.85%

Boynton Beach (2020 Population: 80,380) - Growth rate: Approximately 343.55%

Bradenton (2020 Population: 55,698) - Growth rate: Approximately 164.91%

Cape Canaveral (2020 Population: 9,972) - Growth rate: Approximately 133.97%

Cape Coral (2020 Population: 194,016) - Growth rate: Approximately 1800.13%

Cedar Key (2020 Population: 687) - Growth rate: Approximately 17.65%

¹⁴³ *Compare* U.S. DEP'T OF COMMERCE, BUREAU OF THE CENSUS, 1970 CENSUS OF POPULATION: CHARACTERISTICS OF THE POPULATION: NUMBER OF INHABITANTS: FLORIDA 11 (1973), https://www2.census.gov/prod2/decennial/documents/1970a_fl1-01.pdf [hereinafter 1970 CENSUS], with *Quick Facts*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/US/PST045222> (last visited Dec. 26, 2023) (search for the desired city in the search box labeled "Enter state, county, city, town, or zip code"; select "Population, Census April 1, 2020" in the dropdown labeled "-- Select a fact --") [hereinafter 2020 CENSUS].

Cocoa Beach (2020 Population: 11,354) - Growth rate: Approximately 14.07%

Coral Gables (2020 Population: 49,248) - Growth rate: Approximately -0.50%

Cutler Bay (2020 Population: 42,425) - Data for 1970 is not available.

Daytona Beach (2020 Population: 72,647) - Growth rate: Approximately 60.26%

Deerfield Beach (2020 Population: 86,859) - Growth rate: Approximately 407.19%

Delray Beach (2020 Population: 66,846) - Growth rate: Approximately 245.12%

Fernandina Beach (2020 Population: 13,052) - Growth rate: Approximately 87.53%

Flagler Beach (2020 Population: 5,160) - Growth rate: Approximately 396.16%

Florida City (2020 Population: 13,085) - Growth rate: Approximately 154.91%

Fort Pierce (2020 Population: 47,297) - Growth rate: Approximately 61.66%

Fort Walton Beach (2020 Population: 20,922) - Growth rate: Approximately 4.64%

Fort Lauderdale (2020 Population: 182,760) - Growth rate: Approximately 30.92%

Fort Myers (2020 Population: 86,395) - Growth rate: Approximately 215.93%

Hallandale Beach (2020 Population: 41,217) - Growth rate: Approximately 72.74%

Hollywood (2020 Population: 153,067) - Growth rate: Approximately 43.22%

Homestead (2020 Population: 80,737) - Growth rate:
Approximately 490.31%

Islamorada (2020 Population: 7,107) - Growth rate:
Approximately 467.42%

Jacksonville (2020 Population: 949,611) - Growth
rate: Approximately 79.50%

Jupiter (2020 Population: 61,047) - Growth rate: Ap-
proximately 1843.63%

Key West (2020 Population: 26,444) - Growth rate:
Approximately -4.06%

Lake Worth Beach (2020 Population: 42,219) -
Growth rate: Approximately 78.05%

Marathon (2020 Population: 9,689) - Growth rate:
Approximately 120.40%

Melbourne (2020 Population: 84,678) - Growth rate:
Approximately 110.38%

Miami (2020 Population: 442,241) - Growth rate:
Approximately 32.04%

Miami Beach (2020 Population: 82,890) - Growth
rate: Approximately -4.80%

Naples (2020 Population: 19,115) - Growth rate: Ap-
proximately 58.73%

New Smyrna Beach (2020 Population: 30,142) -
Growth rate: Approximately 184.88%

North Bay Village (2020 Population: 8,159) -
Growth rate: Approximately 68.91%

North Miami (2020 Population: 60,191) - Growth
rate: Approximately 73.16%

Palm Beach (2020 Population: 9,245) - Growth rate:
Approximately 1.75%

Palmetto Bay (2020 Population: 24,239) - Data for 1970 is not available.

Panama City (2020 Population: 32,939) - Growth rate: Approximately 2.63%

Pensacola (2020 Population: 54,312) - Growth rate: Approximately -8.73%

Pinecrest (2020 Population: 18,388) - Data for 1970 is not available.

Pompano Beach (2020 Population: 112,046) - Growth rate: Approximately 196.95%

Port St. Joe (2020 Population: 23,474) - Growth rate: Approximately 433.11%

Sarasota (2020 Population: 434,006) - Growth rate: Approximately 975.52%

St. Augustine (2020 Population: 14,329) - Growth rate: Approximately 16.00%

St. Petersburg (2020 Population: 258,308) - Growth rate: Approximately 19.47%

Stuart (2020 Population: 17,425) - Growth rate: Approximately 261.70%

Surfside (2020 Population: 5,689) - Growth rate: Approximately 57.38%

Tampa (2020 Population: 384,959) - Growth rate: Approximately 38.58%

Titusville (2020 Population: 48,789) - Growth rate: Approximately 59.87%

Venice (2020 Population: 25,463) - Growth rate: Approximately 283.00%

Vero Beach (2020 Population: 16,354) - Growth rate: Approximately 37.35%

West Palm Beach (2020 Population: 117,415) -
Growth rate: Approximately 104.56%

X. TED TALK: DELIVERING A CLIMATE ACTION TOOL KIT TO
GLOBAL AUDIENCES (2022)

After decades of engaging thousands of people around social and environmental justice issues, I earned the opportunity to share my practice with the world during a 2022 TED Talk in London.¹⁴⁴ My talk, “A Creative Approach to Community Climate Action,” offered a vision of community organization grounded in the transformative power of art.¹⁴⁵ I wanted to ensure that anyone who watched the video, now well over one million people, not only understood my conviction for the potential of socially engaged art, but also realized that they could use their own creativity to become agents of change. Notably, everyone who saw my video on TED’s website was invited to bring “The Underwater” to their community through a tool kit that describes a step-by-step roadmap of how to bring the initiative to life.¹⁴⁶ This process of discovery, conversation, and ultimately mobilization can be replicated at every place where land touches water, and with minimal financial barriers, as there are few resources required for implementation.¹⁴⁷

¹⁴⁴ Cortada London TED Talk, *supra* note 13.

¹⁴⁵ *Id.*

¹⁴⁶ See *Join the Movement: Create Cortada’s Eco-Art Projects Where You Live*, CORTADA, <https://cortada.com/ted-talk-participate/> (last visited Dec. 26, 2023).

¹⁴⁷ See *Underwater HOA: A Participatory Art Project by Xavier Cortada – Participate: Preparing Your Yard Marker*, CORTADA, <https://cortada.com/art2018/underwaterhoa/participate/> (last visited Dec. 26, 2023) [hereinafter *Participate: Preparing Your Yard Marker*].



*TED Talk*¹⁴⁸

XI. UNDERWATER PARKS: TRANSFORMING PUBLIC SPACES INTO PLATFORMS FOR CLIMATE STORYTELLING (2023)

As Miami-Dade County's inaugural artist-in-residence, I'm now working through my foundation and collaborating with the Office of the Miami-Dade County Mayor, Miami-Dade County Department of Parks, Recreation, and Open Spaces, the University of Miami College of Engineering, and private sector partners to create a permanent interactive art installation of data-driven elevation sculptures made of sustainable concrete across all of the county's 287 parks.¹⁴⁹ These concrete markers, each ambiguously depicting a park's elevation above sea level, are being made from seawater, recycled aggregate and non-metallic reinforcement, and placed either

¹⁴⁸ Xavier Cortada, *Ted Talk* (photograph), in *A Creative Approach to Community Climate Action*, TED (Oct. 2022), https://www.ted.com/talks/xavier_cortada_a_creative_approach_to_community_climate_action.

¹⁴⁹ Press Release, Danny Turkel, Miami-Dade County, Miami-Dade Mayor Daniella Levine Cava Names Xavier Cortada Miami-Dade's Inaugural Artist-in-Residence (Aug. 8, 2022) (on file with author); *The Underwater: A Socially Engaged Art Project by Xavier Cortada – Miami-Dade Parks*, CORTADA, <https://cortada.com/art2022/underwater/miami-dade-parks/> (last visited Dec. 26, 2023) [hereinafter *Miami-Dade Parks*].

at the entrance of each park or at the front of the park's most prominent building.¹⁵⁰ The materials used in each marker ensure that, unlike most buildings and infrastructure, if it is exposed to saltwater, it will not corrode or collapse.¹⁵¹ Hopefully these permanent art pieces will act as sentinels that oversee our collective pivot toward resilience and justice, as opposed to our commitment to arrogance and greed.¹⁵²

Anyone who scans the sculpture's embedded QR code can discover their own home's elevation above sea level and get a free "Underwater Marker" to put in their front yard, thereby joining the countywide installation and raising awareness of sea level rise in their neighborhood.¹⁵³ The central call to action, however, is for residents to contact their local elected officials, tell them about their newly discovered elevation, and ask what the city, county, or state's plan is for addressing sea level rise given current projections of up to seven feet by the end of the century.¹⁵⁴ Participants will also be encouraged to help share the initiative online by posting a picture or video of their personalized elevation marker on social media with the tag #Underwater305.¹⁵⁵ In this way, motivated individuals will have the ability to encourage others to install their own signs and call or email their local politicians.¹⁵⁶

¹⁵⁰ *Miami-Dade Parks*, *supra* note 149.

¹⁵¹ *Id.*

¹⁵² See *Underwater HOA: A Participatory Art Project by Xavier Cortada – About*, CORTADA, <https://cortada.com/art2018/underwaterhoa/underwater-hoa-about/> (last visited Dec. 26, 2023) [hereinafter *Underwater HOA: About*].

¹⁵³ *Miami-Dade Parks*, *supra* note 149.

¹⁵⁴ *The Underwater: A Socially Engaged Art Project by Xavier Cortada – Intel: Justice, Law & Policy*, CORTADA, <https://cortada.com/art2022/underwater/intel/justice-law-policy/> (last visited Dec. 26, 2023).

¹⁵⁵ *Participate: Preparing Your Yard Marker*, *supra* note 147.

¹⁵⁶ *Id.*



*Underwater Parks*¹⁵⁷

Supplementing the elevation sculptures is an educational programming component that will encompass training park staff about the campaign, and hosting events where park visitors can create Underwater Markers to learn how they can help tackle the climate crisis and participate in a ritualistic performance whereby they splash the sculpture with water from Biscayne Bay, that ideally being the last time saltwater makes contact there.¹⁵⁸ Symbolizing the profound connection between the park, the bay, and our shared vulnerability, this immersive ritual invites reflection on the urgent need for collective action and provides yet another element to the story that participants will later recount to friends and family. My hope is that those who join this process will have a memorable experience that inspires them to fight for the future of their community.

XII. UNDERWATER BROWARD: CATALYZING INTERDISCIPLINARY ENGAGEMENT STRATEGIES IN REGIONAL GOVERNMENTS (2023)

I am currently in the planning phase of bringing “The Underwater” to Broward County through a joint investment from the county’s

¹⁵⁷ Xavier Cortada, *Underwater Parks* (photograph), in XAVIER CORTADA: THE UNDERWATER: MIAMI-DADE PARKS (2022), <https://cortada.com/art2022/underwater/miami-dade-parks/>.

¹⁵⁸ See *Miami-Dade Parks*, *supra* note 149.

Resilient Environment Department and Cultural Division. We will be launching this initiative with Broward residents through engagement events at ten schools (where we will be distributing hundreds of Underwater Markers), a climate town hall, and Water Matters Day (Broward's largest environmentally focused annual event), as well as with four ceramic elevation murals in prominent locations, a metal elevation sculpture at Government Center, and the digital art wrapping of a county bus. This collaboration between two completely different departments, resilience and culture, within a regional government that is responsible for almost two million people, truly showcases art's ability to serve as a catalyst for innovation and cooperation. If we are successful in our mission of engaging and educating residents in the months that lie ahead, this will likely be the first year of a multi-year effort across Broward County. I applaud the progressive nature of this government that is not shying away from the climate crisis, but rather marshaling its citizens to be part of the solutions. This is what leadership looks like.

CONCLUSION

At this critical moment in human history, as our civilization is confronted with alarming threats posed by rising sea levels, extreme heat, intensifying weather events, prolonged droughts, devastating wildfires, food and water scarcity, the specter of pandemics, the alarming depletion of our planet's biodiversity, and all of the other elements of this unfolding environmental catastrophe, it is crucial that everyone is engaged in problem-solving.

In our world today, where there is an intense focus on science, business, technology, and law, it is easy to lose sight of the fact that people are the ultimate solution.¹⁵⁹ Despite the promises that technology brings, the future remains bleak because we have not yet fully committed to divesting from fossil fuels, which continue to warm and harm the planet.¹⁶⁰ Propelled by a sense of urgency, it is only through the collective resolve of people—as consumers and constituents—that we can drive this essential change.

I firmly believe in the transformative power of art to address this pressing issue. This belief is deeply rooted in my profound faith in

¹⁵⁹ See Cortada's *Reclaiming Art*, *supra* note 4.

¹⁶⁰ See *The Keeling Curve*, *supra* note 39.

humanity's capacity to think, innovate, and express love. Art serves as a potent tool that allows us to tap into both the ingenuity and compassion of individuals who will develop the solutions we so desperately need.

Art has the capacity to help us imagine and bring about a more equitable, sustainable, and compassionate future for all. Through experiential processes, it can cultivate enduring individual transformations that inspire action on climate. Art aids us in uncovering moments of awareness and constructing pathways to meaningful action. It does so by helping us reframe how we perceive problems, making them more relevant and personal.

Art can do more than reflect on what should or shouldn't have been; it can propel us to become. With socially engaged art, we can create platforms that inspire, convene, educate, and mold us into change agents who, recognizing the necessity of mutual support in an interconnected world, can wholeheartedly work to protect society's most vulnerable members and preserve our planet's fragile ecosystems. Acknowledging the urgency for structural change, we can utilize art as a means to infiltrate and reform existing systems, elect responsible leaders, and ultimately, demand accountability.

In fact, this is the premise behind "The Underwater," delivering the immediacy of the climate emergency right to your doorstep.¹⁶¹ It is no longer a distant concern, impacting just Arctic polar bears; instead, it is intensely local and personal.¹⁶² The effort engages residents in using data-driven art to systematically reveal their personal vulnerability to rising seas and, armed with this knowledge, demand that their government equitably plan for a future impacted by climate change.

I was motivated to create this work because my community is ground zero for the climate crisis. As sea levels rise up to seven feet by the end of the century, the low-lying neighborhoods that don't have the resources to adapt will likely be abandoned, while climate gentrification will evict low-income residents at higher elevations.

My engaged work aims to open channels for sharing climate information and collective problem-solving, contributing to community well-being and vibrancy. The project actively engages community members from diverse backgrounds, providing opportunities

¹⁶¹ See *Underwater HOA: About*, *supra* note 152.

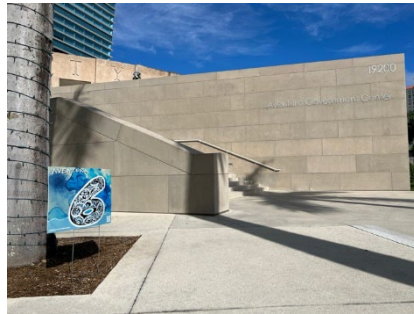
¹⁶² See Cortada London TED Talk, *supra* note 13.

for them to participate in workshops, events, and the creation of their own elevation yard signs. This inclusive approach promotes social cohesion, bridges divides, and encourages dialogue around climate change and environmental justice.

This socially engaged environmental art approach pushes the boundaries of artistic practice and demonstrates art's transformative potential in addressing social and environmental challenges, both locally and globally. By providing accessible and engaging educational campaigns, "The Underwater" helps build climate literacy within the community, fostering a sense of environmental stewardship. Importantly, this initiative forges strong connections among residents, nurturing a sense of pride and responsibility for their neighborhood and the planet.

Now more than ever, at a time when our planet is in true peril, when our people are polarized, and when our economic, social, and racial disparities become increasingly evident, we cannot simply be passive observers or critics of today's culture. We must actively participate in molding a culture of caring, one that is dedicated to preserving our planet and its people.

Recognizing that the climate crisis is a race against the clock, in my practice, I have chosen to embrace the concept of slow activism: Using artistic processes, individuals can coalesce around a shared vision and help each other develop new ways of seeing, new ways of feeling, and new ways of being. They can work together and learn together to better prepare for a future with rising seas and global climate change. United, they can use art to develop innovative approaches to build a more just, loving, and beautiful world.

Aventura (5.71 ft)ⁱBoca Raton (16.56 ft)ⁱⁱBoynton Beach (16.25 ft)ⁱⁱⁱBradenton (9.91 ft)^{iv}Cape Canaveral (10.06 ft)^vCape Coral (12.45 ft)^{vi}

Cedar Key (7.76 ft)^{vii}Cocoa Beach (4.78 ft)^{viii}Coral Gables (9.69 ft)^{ix}Cutler Bay (8.78 ft)^xDaytona Beach (5.73 ft)^{xi}Deerfield Beach (12.12 ft)^{xii}

Delray Beach (20.32 ft)^{xiii}Fernandina Beach (8.80 ft)^{xiv}Flagler Beach (16.46 ft)^{xv}Florida City (7.22 ft)^{xvi}Fort Lauderdale (5.90 ft)^{xvii}Fort Myers (14.52 ft)^{xviii}

Fort Pierce (18.19 ft)^{xix}Fort Walton Beach (7.53 ft)^{xx}Hallandale Beach (6.96 ft)^{xxi}Hollywood (12.43 ft)^{xxii}Homestead (6.66 ft)^{xxiii}Islamorada (7.12 ft)^{xxiv}

Jacksonville (22.02 ft)^{xxv}Jupiter (8.75 ft)^{xxvi}Key Biscayne (6.17 ft)^{xxvii}Key West (7.30 ft)^{xxviii}Lake Worth Beach (17.19 ft)^{xxix}Marathon (3.37 ft)^{xxx}



Melbourne (21.50 ft)^{xxxvi}



Miami (9.91 ft)^{xxxvii}



Miami Beach (6.64 ft)^{xxxviii}



Naples (9.84 ft)^{xxxix}



New Smyrna Beach (7.01 ft)^{xl}



North Bay Village (5.40 ft)^{xli}

North Miami (8.69 ft)^{xxxvii}Palm Beach (4.69 ft)^{xxxviii}Palmetto Bay (10.64 ft)^{xxxix}Panama City (23.46 ft)^{xl}Pensacola (9.35 ft)^{xli}Pinecrest (10.62 ft)^{xlii}

Pompano Beach (7.79 ft)^{xliv}Port St. Joe (9.01 ft)^{xliv}Sarasota (17.41 ft)^{xlvi}St. Augustine (5.68 ft)^{xlvi}St. Petersburg (37.49 ft)^{xlvi}Stuart (11.49 ft)^{xlvi}

Surfside (4.94 ft)^{xlix}Tampa (17.37 ft)^lTitusville (11.42 ft)^{li}Venice (14.67. ft)^{lii}Vero Beach (11.89 ft)^{liii}West Palm Beach (14.49 ft)^{liv}

ⁱ Aventura City Hall (25.95298, -80.13923) can be found at 19200 West Country Club Drive, at an elevation of 5.71 feet above sea level. Located in north-eastern Miami-Dade County, Aventura is named after the Spanish word for “adventure.” Aventura was officially incorporated in 1995. The city’s current population, as of 2020, is 40,242. Today, the city is governed by a commission-manager form of government. The annual city budget of Aventura was \$60,468,975 in 2022.

See Location of Aventura City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Aventura City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Aventura City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app> (enter “19200 West Country Club Drive” into the location field box); *City Facts*, CITY OF AVENTURA, <https://www.cityofaventura.com/257/City-Facts> (last visited Dec. 28, 2023); *City of Aventura*, BROWARD ARTS CALENDAR, <https://www.artscalendar.com/organization/city-of-aventura> (last visited Dec. 28, 2023); *Quick Facts: Aventura City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/aventuracityflorida/POP010220> (last visited Dec. 28, 2023); *City Commission*, CITY OF AVENTURA, <https://www.cityofaventura.com/200/City-Commission> (last visited Dec. 28, 2023); *Operating and Capital Budget: Fiscal Year 2021/2022*, CITY OF AVENTURA, <https://www.cityofaventura.com/Archive-Center/ViewFile/Item/458> (last visited Dec. 28, 2023).

ⁱⁱ Boca Raton City Hall (26.35155, -80.09056) can be found at 201 West Palmetto Park Road, at an elevation of 16.56 feet above sea level. Located on Florida’s southeastern coast, Boca Raton was incorporated at the height of Florida’s land boom in May of 1925. The city’s current population, as of the 2020 US census, is 97,422. This stands in contrast to Boca Raton’s population of 28,506 in 1970. Today, the city is governed by a council-manager form of government. The annual city budget of Boca Raton was \$614,858,900 in 2022.

See Location of Boca Raton City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Boca Raton City Hall,” then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Boca Raton City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “201 West Palmetto Park Road” into the location field box); *Our History*, BOCA RATON HIST. SOC’Y, <https://www.bocahistory.org/our-history> (last visited Dec. 28, 2023); *QuickFacts: Boca Raton City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/bocaratoncityflorida/POP010220#POP010220> (last visited Dec. 28, 2023); ROBERT L. HAGAN, BUREAU OF THE CENSUS, 1970 CENSUS OF POPULATION TBL.6 (1973); *Government*, CITY OF BOCA RATON, <https://www.myboca.us/27/Government> (last visited Dec. 28, 2023); CITY OF BOCA RATON, CITY OF BOCA RATON FY 2022–23 PROPOSED BUDGET 1 (Aug. 11, 2022).

ⁱⁱⁱ Located in Palm Beach County, Boynton Beach is only fifty-eight miles north of the city of Miami. The city’s 2020 population was 80,380, a large increase from the population of 18,115 in 1970. Boynton Beach operates under the commission-manager form of government and meets at Boynton Beach City Hall (26.52687, -80.06335) on 100 East Ocean Avenue, located at an elevation of

16.25 feet above sea level. The annual city budget of Boynton Beach was \$251.2 million in 2022.

See *QuickFacts: Boynton Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/boyntonbeachcityflorida/POP010220#POP010220> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Government*, CITY OF BOYNTON BEACH, <https://www.boynton-beach.org/27/Government> (last visited Dec. 28, 2023); Location of Boynton Beach City Hall, GOOGLE MAPS, <http://www.google.com/maps> (search in search bar for “Boynton Beach City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Boynton Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “100 East Ocean Avenue, Boynton Beach, FL, USA” into the location field box) (last visited Dec. 28, 2023); CITY OF BOYNTON BEACH, FY 2021–2022 ADOPTED BUDGET: CITY OF BOYNTON BEACH, FLORIDA 10 (Dec. 1, 2021) https://www.boynton-beach.org/DocumentCenter/View/486/FY21-22-Boynton-Beach-Adopted-Budget_accessible?bidId=.

^{iv} Bradenton City Hall (27.49875, -82.57276) can be found at 101 12th Street West, at an elevation of 9.91 feet above sea level. Located on the Atlantic coast of Florida, Bradenton is known as “The Friendly City.” Bradenton was established in the early 1840s before becoming incorporated in 1903. The city’s 2020 population was 55,698, more than double the population of 21,040 in 1970. Today, Bradenton uses the mayor-council form of city government, also called the “Strong-Mayor” form, in which a mayor serves as the city’s Chief Executive and Administrative Officer. The annual city budget of Bradenton was \$140,556,173 in 2022. One of the strongest hurricanes to ever hit Bradenton was Hurricane Six, striking down on the city on October 7, 1946.

See Location of Bradenton City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Bradenton City Hall” then right click for coordinates); Elevation of Bradenton City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (search “101 12th Street West” into the location field box); CITY OF BRADENTON, <https://cityofbradenton.com/> (last visited Dec. 28, 2023); A. Sterling Hall, Speech at Manatee County Historical Society Membership Meeting Address (Nov. 18, 1970), <https://cdm16681.contentdm.oclc.org/digital/collection/p16681coll2/id/6829>; *Bradenton*, MANATEE CNTY. PUB. LIBR. SYS. DIGIT. COLLECTION, <https://mymanatee.contentdm.oclc.org/digital/custom/bradenton> (last visited Dec. 28, 2023); *Quick Facts: Bradenton City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/bradentontcityflorida/LND110210> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Mayor and Council*, CITY OF BRADENTON, <https://cityofbradenton.com/council> (last visited Dec. 28, 2023); *Adopted Budget for Fiscal Year 2021–2022*, CITY OF BRADENTON, https://cityofbradenton.com/vertical/Sites/%7B98CFEB92-7265-45CB-AF6F-7115C2CD7C81%7D/uploads/Website_Version_-_Adopted_Budget.pdf (last visited Dec. 28, 2023); Nick Merianos, *Hurricane Six Struck Bradenton 74 Years Ago, Causing Millions in Crop Loss*, SPECTRUM BAY NEWS 9 (Oct. 7, 2020, 11:16 AM), <https://baynews9.com/fl/tampa/weather/2020/10/07/hurricane-six-struck-bradenton-74-years-ago>.

^v Located in Brevard County, Cape Canaveral is a cape on the Atlantic Coast of Florida. Cape Canaveral was made the base of NASA operations in 1958 and officially incorporated in 1963 as Cape Kennedy (before the name was changed in 1973). The city's 2020 population was 9,972, more than double the population of 4,258 in 1970. Cape Canaveral operates under the council-manager form of government. The city government meets at the City of Cape Canaveral City Hall (28.38507, -80.60519) on 100 Polk Avenue, located at an elevation of 10.06 feet above sea level. The annual city budget of Cape Canaveral was \$36,141,980 in 2022.

See Robert Lea, *Cape Canaveral: Launch Pad for U.S. Space Program*, SPACE.COM (July 2, 2023), <https://www.space.com/33926-cape-canaveral.html>; *Quick Facts: Cape Canaveral City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/capecanaveralcityflorida> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *City Government*, CITY OF CAPE CANAVERAL, <https://cityofcapecanaveral.org/government/index.php> (last visited Dec. 28, 2023); Location of Cape Canaveral City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "City of Cape Canaveral City Hall"; then right click for coordinates); Elevation of City of Cape Canaveral City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "100 Polk Avenue" into the location field box); CITY OF CAPE CANAVERAL, ADOPTED BUDGET FISCAL YEAR 2022–2023 2 (2022), https://cms3.revize.com/revize/capecanaveral/Adopted_BUDGET_FY2022-2023.pdf.

^{vi} Located in southwest Florida, Cape Coral is known as the "waterfront wonderland." Cape Coral was officially founded in 1957. The city's population in 2020 was 194,016, a large increase from the population of 10,193 in 1970. The City of Cape Coral operates under the council-manager form of government and meets at Cape Coral City Hall. Cape Coral City Hall is located on 1015 Cultural Park Boulevard (26.63287, -81.95851), located at an elevation of 12.45 feet above sea level. The annual city budget of Cape Coral was \$978,464,119 in 2022. Recently, Cape Coral was hit hard by Hurricane Ian.

See *Cape Coral: A 'Waterfront Wonderland,' FL GUIDE*, <https://www.flguide.com/2021/10/06/cape-coral-a-waterfront-wonderland-2/> (last visited Dec. 28, 2023); *Let's Follow Cape Coral's History*, HAPPY CAPE BOAT & VILLA SERV., <https://www.cape-coral.com/info/en/local/history/> (last visited Dec. 31, 2023); *Quick Facts: Cape Coral City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/capecoralcityflorida/POP010220> (last visited Oct. 31, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Overview*, CAPE CORAL, https://www.capecoral.gov/government/city_government/overview/index.php (last visited Dec. 28, 2023); Location of Cape Coral City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "1015 Cultural Park Blvd"; then right click for coordinates); Elevation of Cape Coral City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "1015 Cultural Park Blvd" into the location field box); CITY OF CAPE CORAL, FY2023–2025 ADOPTED BUDGET, <https://online.pubhtml5.com/sqafb/xupw/#p=1> (last visited Dec. 28, 2023); Stefania Lugli, *Cape Coral Residents Worn Out from Ian's Destruction, Complain of Lack of Disaster Relief*, HERALD-TRIB. (Oct. 1, 2022, 10:09 PM), <https://www.heraldtribune.com/>

story/news/2022/10/01/dispatch-from-cape-coral-lee-county-florida-after-hurricane-ian/8153195001/.

^{vii} Cedar Key City Hall (29.13664, -83.03205) can be found at 490 2nd Street, at an elevation of 7.76 feet above sea level. Located off the northwest coast of Florida, Cedar Key gets its name from the Spanish “Las Islas Sabinas.” Cedar Key was established in the early 1800s, becoming the second largest city in the state in the 1880s. The city’s 2020 population was 840, only 126 more residents than the population of 714 in 1970. Today, Cedar Key uses a mayor/commission system type of municipal government.

See Location of Cedar Key City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Cedar Key City Hall”; then right click for coordinates); Elevation of Cedar Key City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “490 2nd Street, Cedar Key, FL, USA” into the location field box); *Florida’s Historic Places: The Cedar Keys*, EXPLORING FLA., <https://fcit.usf.edu/florida/lessons/cedarkeys/cedarkeys.htm> (last visited Dec. 28, 2023); *Nostalgia from the Old Website*, CEDAR KEY HIST. SOC’Y MUSEUM, <https://cedarkeyhistory.org/cedar-key-history> (last visited Dec. 28, 2023); *Florida’s Historic Places: The Cedar Keys*, EXPLORING FLA., <https://fcit.usf.edu/florida/lessons/cedarkeys/cedarkeys.htm> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Cedar Key, FL*, DATA USA, <https://datausa.io/profile/geo/cedar-key-fl> (last visited Dec. 28, 2023); *System of Government*, CITY OF CEDAR KEY, <https://cityofcedarkey.org/city-commission/system-of-government/#:~:text=The%20City%20of%20Cedar%20Key,via%20a%20yearly%20public%20election> (last visited Dec. 28, 2023).

^{viii} Located in Brevard County, Cocoa Beach lies directly south of Cape Canaveral. The city was established on June 5, 1925, by a local attorney, Gus Edward. The city’s 2020 population was 11,354, a small increase from the population of 9,952 in 1970. Cocoa Beach operates under a city commission-city manager form of government. The commission meets at the Cocoa Beach City Hall (28.31818, -80.61035) on 2 South Orlando Avenue, located at an elevation of 4.78 feet above sea level. The annual city budget of Cocoa Beach was \$84,843,3520 in 2022.

See *History at a Glance*, COCOA BEACH, <http://www.cityofcocoa-beach.com/162/History-at-a-Glance> (last visited Dec. 28, 2023); *Quick Facts: Cocoa Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quick-facts/fact/table/cocoa-beach-city-florida/POP060210> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *City Commission*, COCOA BEACH, <http://www.cityofcocoa-beach.com/555/City-Commission> (last visited Dec. 28, 2023); Location of Cocoa Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Cocoa Beach City Hall”; then right click for coordinates); Elevation of Cocoa Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “2 South Orlando Avenue” into the location field box); CITY OF COCOA BEACH, ADOPTED ANNUAL BUDGET 2021/2022 A-4 (2021), <http://www.cityofcocoa-beach.com/DocumentCenter/View/6030/Adopted-Annual-Budget-FY-2022->.

^{ix} Coral Gables City Hall (25.74942, -80.26354) can be found at 405 Biltmore Way, at an elevation of 9.69 feet above sea level. Located in South Florida near

Miami, Coral Gables is known as “The City Beautiful.” Coral Gables was officially incorporated on April 29, 1925, as the culmination of a lifelong effort by real estate developer George Merrick to build an ideal city from the foundations of his family’s homestead. The city’s current population, as of 2020, is 49,248. Today, the city is governed by a five-member elected city commission, who serve four-year, staggered terms, along with a two-year term mayor. The annual city budget of Coral Gables was \$340,367,963 in 2022.

See Location of Coral Gables City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Coral Gables City Hall”; then right click for coordinates); Elevation of Coral Gables City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “405 Biltmore Way” into the location field box); *History of Coral Gables*, CORAL GABLES, <https://www.coralgables.com/departments/historical-resources-cultural-arts/history-coral-gables> (last visited Dec. 28, 2023); *The City Beautiful Movement*, CORAL GABLES MUSEUM, <https://coralgablesmuseum.org/portfolio-item/the-city-beautiful-movement/> (last visited Dec. 28, 2023); *Quick Facts: Coral Gables City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/coralgables-city-florida/POP010220#POP010220> (last visited Dec. 28, 2023); *City Commission*, CORAL GABLES, <https://www.coralgables.com/departments/city-commission> (last visited Dec. 28, 2023); CORAL GABLES, 2022–2023 BUDGET 9 (2022), <https://www.coralgables.com/sites/default/files/2023-02/FY23-Adopted%20Budget%20-%20For%20Web.pdf>.

^x Located in Miami-Dade County, Cutler Bay is a coastal community that was established after the devastation of Hurricane Andrew. A newly established city, Cutler Bay was officially incorporated in 2005. The city’s 2020 population was 45,425. “The Town of Cutler Bay is governed by a five-member Town Council and operates under the Council-Manager form of government.” The commission meets at the Cutler Bay City Hall (25.57665, -80.36577) on 10720 Caribbean Boulevard, located at an elevation of 8.78 feet above sea level. The annual city budget of Cutler Bay was \$43,422,008 in 2022. Cutler Bay often faces severe flood issues due to the presence of hurricanes and tropical storms.

See *Town History*, TOWN OF CUTLER BAY, <https://www.cutlerbay-fl.gov/community/page/town-history> (last visited Dec. 28, 2023); Steven Alexander, *Cutler Bay and Miami-Dade County Public Schools Create Emergency Response Vehicles*, in ROGER L. KEMP, TOWN AND GOWN RELATIONS: A HANDBOOK OF BEST PRACTICES 67 (2013); *Development of Cutler Bay*, TOWN OF CUTLER BAY, <https://www.cutlerbay-fl.gov/community/page/development-cutler-bay> (last visited Dec. 28, 2023); *Quick Facts: Cutler Bay Town*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/cutlerbaytownflorida/POP010220> (last visited Dec. 28, 2023); *Town Council*, TOWN OF CUTLER BAY, <https://www.cutlerbay-fl.gov/town-council> (last visited Dec. 28, 2023); Location of Cutler Bay Town Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Cutler Bay Town Hall”; then right click for coordinates); Elevation of Cutler Bay Town Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “10720 Caribbean Boulevard” into the location field box); CUTLER BAY, TOWN OF CUTLER BAY ADOPTED BUDGET 2021–22, <https://www.cutlerbay-fl.gov/sites/default/files/fileattachments/finance/page/247>

1/town_of_cutler_bay_adopted_budget_2021-22.pdf (last visited Dec. 28, 2023); David Volz, *Cutler Bay Sets Proposed Millage Rate and Budget*, S. DADE NEWS LEADER (Aug. 19, 2022), https://www.southdadenewsleader.com/news/cutler-bay-sets-proposed-millage-rate-and-budget/article_b8912b00-1f3b-11ed-8c55-5b6ab98ddb0c.html; Ian Margol & Trent Kelly, *Brunt of 'Catastrophic' Cutler Bay Flooding Came After Weekend Storm, Residents Say*, LOCAL 10 NEWS (June 7, 2022, 12:07 PM), <https://www.local10.com/news/local/2022/06/07/video-days-after-storm-cutler-bay-neighborhood-remains-inundated-with-catastrophic-flood-waters/>.

^{xi} Daytona Beach City Hall (29.207477895798178, -81.01982447700281) can be found at 301 S. Ridgewood Avenue, at an elevation of 5.73 feet above sea level. Located on Florida's Atlantic coast, Daytona Beach is the host of the iconic Daytona 500 NASCAR race. The city's 2020 population was 72,647, a large increase from the population of 45,327 in 1970. Daytona Beach uses a city commission type of municipal government. In 2022, the annual city budget of Daytona Beach was \$312,435,850.

See Location of Daytona Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "Daytona Beach City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Daytona Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "301 S. Ridgewood Ave" into the location field box) (last visited Dec. 28, 2023); *History of City*, DAYTONA BEACH, <https://www.codb.us/365/History-of-City#:~:text=Daytona%20Beach%20was%20founded%20in,for%20the%20sum%20of%20%241%2C200> (last visited Dec. 28, 2023); *Quick Facts: Daytona Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/daytonabeachcityflorida> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *City Commission*, DAYTONA BEACH, <https://www.codb.us/384/City-Commission> (last visited Dec. 28, 2023); CITY OF DAYTONA BEACH, FY 2021–2022 ADOPTED BUDGET i (2021), <https://www.codb.us/ArchiveCenter/ViewFile/Item/5923>.

^{xii} Deerfield Beach City Hall (26.320048242218963, -80.09950331573997) can be found at 150 NE 2nd Avenue, at an elevation of 12.12 feet above sea level. Deerfield Beach was officially incorporated on June 11, 1925. The city's 2020 population was 86,859, a large increase from the population of 17,130 in 1970. Deerfield Beach has a five-member city commission as well as a mayor elected at large to lead its municipal government. The City Commission is the governing body of the City and exercises legal powers designated in the City Charter.

See Location of Deerfield Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "Deerfield Beach City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Deerfield Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "150 NE 2nd Ave" into the location field box) (last visited Dec. 28, 2023); *History*, DEERFIELD BEACH FLA., <https://www.deerfield-beach.com/548/History> (last visited Dec. 28, 2023); *Quick Facts: Deerfield Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/deerfieldbeachcityflorida/PST045222> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.7; *Government*, DEERFIELD BEACH

FLA., <https://www.deerfield-beach.com/19/Government> (last visited Dec. 28, 2023).

^{xiii} Located on Florida's southeast coast, Delray Beach was first named Linton until the town was officially incorporated in 1898 under the new name of Delray Beach. The city's 2020 population was 66,846, a large increase from the population of 19,366 in 1970. Delray Beach operates under the city commission manager form of government. The Commission meets at the Delray Beach City Hall (26.463986664670454, -80.07452264641789) on 100 NW 1st Avenue, located at an elevation of 20.32 feet above sea level. The annual city budget of Delray Beach was \$244.5 million in 2022.

See About Delray Beach, CITY OF DELRAY BEACH FLA., <https://www.delraybeachfl.gov/our-city/things-to-know/about-delray-beach#ad-image-0> (last visited Dec. 28, 2023); *Quick Facts: Delray Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/delraybeachcityflorida> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.8; DELRAY BEACH, FLA., CHARTER art. III, § 3.01 (2023); Location of Delray Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "Delray Beach City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Delray Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "100 NW 1st Ave" into the location field box) (last visited Dec. 28, 2023); CITY OF DELRAY BEACH, FY 2021–2022 ADOPTED BUDGET 8 (2021), <https://www.delraybeachfl.gov/home/showpublisheddocument/10695/637769752936930000>.

^{xiv} Located in northeastern Florida, Fernandina Beach is the northernmost city on Florida's Atlantic Coast. Fernandina Beach has a long history, originally founded as a Spanish settlement until becoming part of the United States in the 1800s. The city's 2020 population was 13,052, a significant increase from the population of 6,955 in 1970. Fernandina Beach operates under the commission-manager plan to govern the city. The Commission meets at the Fernandina Beach City Hall (30.67008240480461, -81.46388989044088) on 204 Ash Street, located at an elevation of 8.80 feet above sea level. The annual city budget of Fernandina Beach was \$169,118,864 in 2022.

See Florida's Historic Places: Fernandina and Amelia Island, EXPLORING FLA., <https://fcit.usf.edu/florida/lessons/fernandina/fernandina.htm> (last visited Dec. 28, 2023); *Quick Facts: Fernandina Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/fernandinabeachcityflorida/PST045222> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; FERNANDINA BEACH, FLA., CODE OF ORDINANCES pt. I, § 8 (2023); Location of Fernandina Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "Fernandina Beach City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Fernandina Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "204 Ash St." into the location field box) (last visited Dec. 28, 2023); CITY COMM'RS, ANNUAL BUDGET & PROGRAM OF MUNICIPAL SERVICES: FISCAL YEAR 2021–2022 I.1 (2021), <https://www.fbfl.us/DocumentCenter/View/22658/City-of-Fernandina-Beach-Adopted-Budget-FY-2021-2022?bidId=>.

^{xv} Flagler Beach City Hall (29.48143325591986, -81.12750435822731) can be found at 105 South 2nd Street, at an elevation of 16.25 feet above sea level. Located on Florida's Atlantic coast, Flagler Beach was officially incorporated on April 16, 1925. The city's 2020 population was 5,160, an increase from the population of 1,042 in 1970. Flagler Beach uses a commission-manager form of municipal government. In 2022, the annual city budget of Flagler Beach was \$20,520,144.

See Location of Flagler Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "Flagler Beach City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Flagler Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "105 South 2nd St." into the location field box) (last visited Dec. 28, 2023); Sisco Deen, *Early Flagler County History*, FLAGLER CNTY. HIST. SOC'Y (Feb. 28, 2009), <https://flaglercountyhistoricalsociety.com/early-flagler-county-history/>; *Quick Facts: Flagler Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/flaglerbeachcityflorida> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.10; FLAGLER BEACH, FLA. CODE OF ORDINANCES pt. I, art. I (2023); CITY OF FLAGLER BEACH, FINAL BUDGET BOOK: FISCAL YEAR 2021–2022 5 (2021), <http://www.cityofflaglerbeach.com/DocumentCenter/View/3387/>.

^{xvi} Located in Miami-Dade County, Florida City is the southernmost municipality in the Miami metropolitan area. Florida City was officially incorporated in 1914. The city's 2020 population was 13,085, more than double the population of 5,133 in 1970. Florida City is governed by a mayor and city commission. The commission meets at the Florida City City Hall (25.448455169700626, -80.48307956755224) on 404 West Palm Drive, located at an elevation of 7.28 feet above sea level. The annual city budget of Florida City was \$50,959,000 in 2022.

See *Florida City: Gateway to the Florida Keys*, MIAMI-DADE BEACON COUNCIL, <https://www.beaconcouncil.com/why-miami-dade/cities/florida-city/> (last visited Dec. 28, 2023); *City History*, CITY OF FLA. CITY, <https://www.floridacityfl.gov/city-history/> (last visited Dec. 28, 2023); *Quick Facts: Florida City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/floridacitycityflorida> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.7; *City Information*, CITY OF FLA. CITY, <https://www.floridacityfl.gov/city-information/> (last visited Dec. 28, 2023); Location of Florida City City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "Florida City City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Florida City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "404 West Palm Drive" into the location field box) (last visited Dec. 28, 2023); David Volz, *Mayor Otis Wallace Submits the Florida City Annual Budget*, SOUTH DADE NEWSLEADER (Aug. 19, 2022), https://www.southdadenewsleader.com/news/mayor-otis-wallace-submits-the-florida-city-annual-budget/article_1eb94336-1f32-11ed-8262-a3797acc4b3d.html.

^{xvii} Located in South Florida, north of Miami, Fort Lauderdale is known as the "Venice of America." Fort Lauderdale was officially incorporated in 1911 and is

named after a “Second Seminole War fortification built on the banks of the New River.” The city’s current population, as of 2020, is 182,760, a large increase from the population of 139,590 in 1970. The city has been governed by a commission-manager form of government since 1925. The commission meets at Fort Lauderdale City Hall (26.12426863452711, -80.14325268862524) on 100 N. Andrews Avenue, located at an elevation of 3.62 feet above sea level. The annual city budget of Fort Lauderdale was \$897,744,024 in 2022. The city has a long history of dealing with hurricanes, the titular 1947 Fort Lauderdale hurricane being an example of the type of natural disasters that residents must be prepared for.

See *About Fort Lauderdale*, CITY OF FORT LAUDERDALE, <https://www.fortlauderdale.gov/government/about-fort-lauderdale> (last visited Dec. 28, 2023); *Quick Facts: Fort Lauderdale City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fortlauderdalecityflorida> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.8; *Government*, CITY OF FORT LAUDERDALE, <https://www.fortlauderdale.gov/government> (last visited Dec. 28, 2023); Location of Fort Lauderdale City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Fort Lauderdale City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Fort Lauderdale City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “100 N. Andrews Ave” into the location field box) (last visited Dec. 28, 2023); CITY OF FORT LAUDERDALE, FISCAL YEAR 2022 ADOPTED BUDGET 1 (2022), <https://www.fortlauderdale.gov/home/showpublisheddocument/64252>; *Fort Lauderdale: Florida’s History with Tropical Systems*, HURRICANE CITY, <https://hurricanecity.com/city/fortlauderdale.htm> (last visited Dec. 28, 2023).

^{xviii} Located in the center of Lee County, Florida, Fort Myers is known as the “Gateway to the Tropics.” Fort Myers was officially incorporated in 1885 after being initially “established as a Seminole War Post in 1841.” The city’s current population as of 2020 is 86,395, a large increase from the population of 27,351 in 1970. The Fort Myers City Council is composed of a mayor and six councilpersons. The commission meets at the City of Fort Myers City Hall (26.64222998751318, -81.86903637363038) on 2200 Second Street, located at an elevation of 13.69 feet above sea level. The annual city budget of Fort Myers was \$513.1 million in 2022. Hurricanes and tropical storms are common in Fort Myers, a city dealing with the former at least once every two and a half years.

See *The History of Fort Myers*, FORT MYERS ONLINE, <https://www.fortmyers-online.com/history.htm> (last visited Dec. 28, 2023); *History of Downtown Fort Myers*, CITY OF FORT MYERS, <https://www.cityftmyers.com/1741/Downtown> (last visited Dec. 28, 2023); *Quick Facts: Fort Myers City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fortmyerscityflorida> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.8; *Mayor & City Council*, CITY OF FORT MYERS, <https://www.cityftmyers.com/1168/Mayor-City-Council> (last visited Dec. 28, 2023); Location of Fort Myers City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Fort Myers City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Fort Myers City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter

“2200 Second St.” into the location field box) (last visited Dec. 28, 2023); CITY OF FORT MYERS, HIGHLIGHTS OF THE ANNUAL BUDGET: FISCAL YEAR 2021–2022 9 (2021), <https://www.cityftmyers.com/DocumentCenter/View/17820>; *Fort Myers: Florida’s History with Tropical Systems*, HURRICANE CITY, <https://hurricane-city.com/city/fortmyers.htm> (last visited Dec. 28, 2023).

^{xix} Fort Pierce City Hall (27.447814883010455, -80.3259747175387) can be found at 100 N. U.S. Highway 1, at an elevation of 16.72 feet above sea level. Located on Florida’s Atlantic Coast, Fort Pierce is known as “Sunrise City.” Fort Pierce was incorporated in 1901. The city’s 2020 population was 47,297, a significant increase from the population of 29,721 in 1970. Today, Fort Pierce’s government is made up of an elected mayor and city commission. The annual city budget of Fort Pierce was \$47,513,496 in 2022.

See Location of Fort Pierce City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Fort Pierce City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Fort Pierce City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “100 N. U.S. Highway 1” into the location field box) (last visited Dec. 28, 2023); *About Fort Pierce*, CITY OF FORT PIERCE, <https://www.cityoffortpierce.com/224/About-Fort-Pierce> (last visited Dec. 28, 2023); *Quick Facts: Fort Pierce City*, U.S. CENSUS BUREAU, <https://www.census.gov/quick-facts/fact/table/fortpiercecityflorida/PST045222> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.8; *Government*, CITY OF FORT PIERCE, <https://www.cityoffortpierce.com/27/Government> (last visited Dec. 28, 2023); CITY OF FORT PIERCE, FISCAL YEAR 2021/2022 OPERATING BUDGET 5 (2021), <https://www.cityoffortpierce.com/DocumentCenter/View/16854/FY-2022-Final-Budget>.

^{xx} Fort Walton Beach City Hall (30.405587546691343, -86.62023973121772) can be found at 107 Miracle Strip Parkway SW, at an elevation of 7.53 feet above sea level. Located on the Florida panhandle, Fort Walton Beach is found in the middle of a stretch of the Florida coastline that is unofficially known as “The Emerald Coast.” Fort Walton Beach was first settled in 1821 before becoming incorporated in 1937. The city’s 2020 population was 20,922, a small increase from the population of 19,994 in 1970. Today, Fort Walton Beach’s government is made up of an elected mayor and seven city council members who serve at large. The annual city budget of Fort Walton Beach was \$52,861,351 in 2022.

See Location of Fort Walton Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Fort Walton Beach City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Fort Walton Beach, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “107 Miracle Strip Parkway SW” into the location box field) (last visited Dec. 28, 2023); *Join the Club*, CITY OF FORT WALTON BEACH, <https://www.fwb.org/376/Join-the-Club> (last visited Dec. 28, 2023); *Quick Facts: Fort Walton Beach*, U.S. CENSUS BUREAU, <https://www.census.gov/quick-facts/fact/table/fortwaltonbeachcityflorida,US/POP010220> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *City Charter*, CITY OF FORT WALTON BEACH, <https://www.fwb.org/173/City-Charter> (last visited Dec. 28, 2023); CITY OF FORT WALTON BEACH, ANNUAL

COMPREHENSIVE FINANCIAL REPORT FY 2020–21 vii (2021), https://flauditor.gov/pages/mun_efile%20rpts/2021%20fort%20walton%20beach.pdf.

^{xxi} Hallandale Beach City Hall (25.98073975327614, -80.14273891595923) can be found at 400 South Federal Highway, at an elevation of 6.96 feet above sea level. Located in southern Broward County, Hallandale Beach is named after Luther Halland, one of the original settlers of the area. Hallandale Beach was officially incorporated in 1999. The city’s 2020 population was 41,217, almost double the population of 23,849 in 1970. Today, Hallandale Beach has a commission-manager form of government, consisting of five elected officials: a mayor, a vice-mayor and three commissioners who establish legislative policies. The annual city budget of Hallandale Beach was \$147.1 million in 2022.

See Location of Hallandale Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in the search bar for “Hallandale Beach City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Hallandale Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “400 South Federal Highway” into the location field box) (last visited Dec. 28, 2023); FLA. INT’L UNIV. DIGITAL COMMONS, CITY OF HALLANDALE BEACH: MPO COMMUNITY BACKGROUND REPORT 1 (2011), https://digitalcommons.fiu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1007&context=mpo_broward; *Quick Facts: Hallandale Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/hallandalebeachcityflorida/POP010220> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *City Commission*, HALLANDALE BEACH, <https://hallandalebeachfl.gov/27/City-Commission> (last visited Dec. 28, 2023); *City of Hallandale Beach, FL: Budget Overview*, OPENGOV, https://stories.opengov.com/hallandalebeachfl/published/vgY_mMUhK#:~:text=The%20FY%202021%2D22%20Budget%20for%20all%20City%20Funds%20totals,attributable%20to%20the%20General%20Fund (last visited Dec. 28, 2023).

^{xxii} Hollywood City Hall (26.01117388349829, -80.15955001597202) can be found at 2600 Hollywood Boulevard, at an elevation of 12.43 feet above sea level. Located on Florida’s east coast, Hollywood is sometimes called the “Diamond of the Gold Coast.” Hollywood was officially incorporated in 1925. The city’s current population, as of 2020, is 153,067, almost 50,000 more residents than the population of 106,873 in 1970. Today, the city is governed by a commission-manager form of government. The annual city budget of Hollywood was \$755 million in 2022. Hollywood is in a very high-risk zone for hurricanes with seventy-nine hurricanes recorded since 1930.

See Location of Hollywood City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search for “Hollywood City City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Hollywood City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “2600 Hollywood Boulevard” into the location field box) (last visited Dec. 28, 2023); *History of Hollywood*, CITY OF HOLLYWOOD FLA., <https://www.hollywoodfla.org/187/History-of-Hollywood> (last visited Dec. 28, 2023); *Quick Facts: Hollywood City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/hollywoodcityflorida> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.7; *Government*, CITY OF HOLLYWOOD FLA.,

<https://www.hollywoodfl.org/27/Government> (last visited Dec. 28, 2023); CITY OF HOLLYWOOD FLA., ADOPTED OPERATING BUDGET FISCAL YEAR 2022 ix (2021), <http://www.hollywoodfl.org/DocumentCenter/View/19244/FY-2022-Adopted-Budget-Book?bidId=>; *Hollywood: Florida's History with Tropical Storms*, HURRICANE CITY, <https://hurricanecity.com/city/hollywood.htm> (last visited Dec. 28, 2023).

^{xxiii} Located in Miami-Dade County, Homestead is named after the “Homesteader’s Trail,” the only path going through the South Dade area in the early 1900s. Homestead was founded in 1913 by railroad workers settling in the area. The city’s current population, as of 2020, is 80,737, a large increase from the population of 13,674 in 1970. Homestead utilizes a mayor-council form of municipal government. Homestead City Hall (25.471995313845426, -80.47581454338116) is on 100 NE Civic Court, located at an elevation of 6.66 feet above sea level. The annual city budget of Homestead was \$203,012,089 in 2022.

See History of Our City, CITY OF HOMESTEAD, <https://www.cityofhomestead.com/264/History-of-Our-City#:~:text=The%20City%20of%20Homestead%2C%20the,called%20the%20%22Homesteaders%20Trail%22>. (last visited Dec. 28, 2023); *Quick Facts: Homestead City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/homesteadcityflorida/POP010220> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.7; *Elected Officials*, CITY OF HOMESTEAD, <https://www.cityofhomestead.com/89/Elected-Officials> (last visited Dec. 28, 2023); Location of Homestead City Hall, GOOGLE MAPS, <https://www.google.com/maps/> (search in the search bar for “Homestead City Hall”; then right click for the coordinates) (last visited Dec. 28, 2023); Elevation of Homestead City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “100 NE Civic Court” into the location field box) (last visited Dec. 28, 2023); CITY OF HOMESTEAD, FISCAL YEAR 2022 ADOPTED BUDGET 3 (2021), <https://www.cityofhomestead.com/DocumentCenter/View/3909/FY-2022-Adopted-Budget-Book-Numbers-Only?bidId=>.

^{xxiv} Located in the Florida Keys, Islamorada is nicknamed the “Village of Islands,” as the village encompasses six of the keys. Islamorada was founded in 1513 by Ponce de Leon, officially becoming incorporated in 1997. The city’s current population, as of 2020, is 7,107, a large increase from the population of 1,251 in 1970. Islamorada has a council-manager form of municipal government. Islamorada City Hall (24.954152491628875, -80.60446850528315) on 86800 Overseas Highway, located at an elevation of 7.12 feet above sea level.

See Islamorada History, FLA. KEYS, <https://floridakeys.com/islamorada/history/> (last visited Dec. 28, 2023); *Village Council*, ISLAMORADA VILL. OF ISLANDS, <https://www.islamorada.fl.us/27/Village-Council> (last visited Dec. 28, 2023); *Quick Facts: Islamorada City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/islamoradavillageofislandsvillageflorida,US/POP010220> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.10; Location of Islamorada City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in the search bar for “Islamorada City Hall”; then right click for the coordinates) (last visited Dec. 28, 2023); Ele-

vation of Islamorada City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “86800 Overseas Hwy” in the location field box) (last visited Dec. 28, 2023).

^{xxv} Jacksonville City Hall (30.341750396859226, -81.66251119814105) can be found at 117 W. Duval Street, at an elevation of 22.02 feet above sea level. Located on the Atlantic coast of northeastern Florida, Jacksonville is known as the “River City.” Jacksonville was established in 1822 and was named in honor of the 7th U.S. President, Andrew Jackson. The city’s current population, as of 2020, is 949,611, almost double the population of 528,865 in 1970. Today, Jacksonville uses the mayor-council form of city government, also called the “Strong-Mayor” form, in which a mayor serves as the city’s chief executive and administrative officer. The annual city budget of Jacksonville was \$1,531,720,546 in 2022.

See Location of Jacksonville City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in the search bar for “Jacksonville City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Jacksonville City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “117 W. Duval St.” into the location field box) (last visited Dec. 28, 2023); *A River Runs Through It*, THE JACKSONVILLE HIST. CTR., <https://www.jaxhistory.org/a-river-runs-through-it/> (last visited Dec. 28, 2023); *Historical Jax Facts*, VISIT JACKSONVILLE, <https://www.visitjacksonville.com/blog/historical-jax-facts/> (last visited Dec. 28, 2023); *Quick Facts: Jacksonville City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/jacksonvillecityflorida,U S/pST045222> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.10; *Jacksonville, Florida*, BALLOTPEDIA, https://ballotpedia.org/Jacksonville,_Florida (last visited Dec. 28, 2023); CITY OF JACKSONVILLE, SUMMARY OF ANNUAL BUDGET 5 (2021), <https://www.jacksonville.gov/departments/finance/docs/budget/fy-2021-2022-budget-summary.aspx>.

^{xxvi} Located on the southeastern coast of Florida, Jupiter is named after the Roman god of the sky. Jupiter was officially incorporated in 1925. The city’s current population, as of 2020, is 61,047, a large increase from the population of 3,136 in 1970. Today, the city is governed by a council-manager form of government. The commission meets at the Jupiter Town Hall (26.931990634352253, -80.10260406665348) on 210 Military Trail, located at an elevation of 8.75 feet above sea level. The annual city budget of Jupiter was \$56,678,721 for 2021.

See Jupiter History Web Committee, *How Jupiter Got Its Name*, TOWN OF JUPITER (Dec. 3, 2012), [https://www.jupiter.fl.us/DocumentCenter/View/297/How-Jupiter-Got-Its-Name?bidId=](https://www.jupiter.fl.us/DocumentCenter/View/297/How-Jupiter-Got-Its-Name?bidId=;); *Jupiter’s History Timeline*, TOWN OF JUPITER, <https://www.jupiter.fl.us/141/History-Timeline> (last visited Dec. 28, 2023); *Quick Facts: Jupiter City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/jupitertownflorida/PST045222> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Jupiter’s Municipal Government*, TOWN OF JUPITER, <https://www.jupiter.fl.us/243/Town-Council> (last visited Dec. 28, 2023); Location of Jupiter Town Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Jupiter Town Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Jupiter Town Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “210 Military Trail” into the location field box) (last visited Dec. 28, 2023); TOWN

OF JUPITER, TOWN OF JUPITER GENERAL FUND: SUMMARY OF ADOPTED BUDGET: FISCAL YEAR 2021–2022 1 (2022), <https://www.jupiter.fl.us/DocumentCenter/View/33453/FY2022--Adopted-Operating-Budget>.

^{xxvii} Key Biscayne City Hall (25.690889339827468, -80.16481408246864) can be found at 88 W. McIntyre Street, at an elevation of 6.17 feet above sea level. Florida's southernmost barrier island, Key Biscayne is known as the "Island Paradise." Key Biscayne was founded in 1513 by Juan Ponce de Leon and was originally named "Santa Marta." The city's current population, as of 2020, is 14,809. Today, Key Biscayne uses the council-manager form of city government. The annual city budget of Key Biscayne was \$35.5 million in 2022.

See Location of Key Biscayne City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "Key Biscayne City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Key Biscayne City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "88 W. McIntyre Street" into the location field box) (last visited Dec. 28, 2023); *History of Island of Key Biscayne*, VILL. OF KEY BISCAYNE, https://keybiscayne.fl.gov/uniquely_kb/about_key_biscayne/history_of_island_of_key_biscayne.php (last visited Dec. 28, 2023); *Quick Facts: Key Biscayne Village*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/keybiscaynevillageflorida/POP010220> (last visited Dec. 28, 2023); *Village Council*, VILL. OF KEY BISCAYNE, https://keybiscayne.fl.gov/your_government/council/index.php (last visited Dec. 28, 2023); *Village of Key Biscayne Approves 2021–22 Budget*, VILL. OF KEY BISCAYNE (Sept. 24, 2021), https://www.keybiscayne.fl.gov/news_detail_T8_R138.php.

^{xxviii} Key West City Hall (24.553125220021144, -81.78912537548139) can be found at 1300 White Street, at an elevation of 7.30 feet above sea level. Part of the Florida Keys archipelago, Key West is the southernmost city in the contiguous United States. Key West was officially incorporated in 1828 and designated as a port of entry, ultimately growing to be one of the largest cities in Florida by the late 1800s. The city's current population, as of 2020, is 26,444, only 1,119 less residents than the population of 27,563 in 1970. Key West's government operates under a council-manager system, combining the expertise of elected officials with professional management to ensure efficient and effective governance. The annual city budget of Key West was \$207,455,652 in 2022. Due to the long history of Key West, the city has records of hurricane activity going back to the 1500s, its isolated location making it particularly vulnerable.

See Location of Key West Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "Key West City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Key West City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "1300 White Street" into the location field box) (last visited Dec. 28, 2023); *See Things To Do Near The Southernmost Point*, OLD TOWN TROLLEY TOURS, <https://www.trolleytours.com/key-west/southernmost-point-things-to-do> (last visited Dec. 28, 2023); Jerry Wilkinson, *History of Key West*, FLA. KEYS HIST. MUSEUM, <http://www.keyshistory.org/keywest.html> (last visited Dec. 28, 2023); *Quick Facts: Key West City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/keywestcityflorida/PST045222> (last visited Dec.

28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Your Government: About Us*, CITY OF KEY WEST FLA., <https://www.cityofkeywest-fl.gov/966/About-Us> (last visited Dec. 28, 2023); CITY OF KEY WEST, CITY OF KEY WEST ANNUAL BUDGET FISCAL YEAR 2021–2022 9 (2021), <https://www.cityofkeywest-fl.gov/DocumentCenter/View/5690/Fiscal-Year-20212022-Annual-Budget-PDF>; *Hurricanes That Shaped the Florida Keys*, CITY OF KEY WEST FLA., <https://www.cityofkeywest-fl.gov/239/Hurricanes-That-Shaped-the-Florida-Keys> (last visited Dec. 28, 2023).

^{xxix} Located in Palm Beach County, Lake Worth Beach, formerly just Lake Worth, is a city sixty-four miles north of Miami. Lake Worth Beach, Jewell at the time, was officially incorporated on June 14, 1913. The city’s current population, as of 2020, is 42,219, a significant increase from the population of 23,714 in 1970. Today, the city is governed by a commission-manager form of government. The commission meets at the City of Lake Worth Beach City Hall (26.616444746605474, -80.05768911388226) on 7 N. Dixie Highway, located at an elevation of 17.19 feet above sea level. The annual city budget of Lake Worth Beach was \$162,526,220 in 2021.

See Mary Kate Leming, *Celebrating Our History: Before Lake Worth, There Was Jewell*, COASTAL STAR (Sept. 4, 2013), <https://thecoastalstar.com/profiles/blogs/celebrating-our-history-before-lake-worth-there-was-jewell>; *Florida 4k, Lake Worth Beach – Lake Worth Florida*, YOUTUBE (Feb. 21, 2023), <https://www.youtube.com/watch?v=ntecnMTxPUU>; *QuickFacts: Lake Worth Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/lakeworthbeachcityflorida/PST045222> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Lake Worth Beach, City Commission & Departments*, CITY OF LAKE WORTH BEACH FLA., <https://lakeworthbeachfl.gov/government/#:~:text=The%20City%20of%20Lake%20Worth,by%20residents%20of%20the%20City> (last visited Dec. 28, 2023); Location of Lake Worth Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Lake Worth Beach City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Lake Worth Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “7 N. Dixie Hwy” in location field box) (last visited Dec. 28, 2023); CITY OF LAKE WORTH BEACH FLA., FY 2021 ANNUAL BUDGET 26 (2020), <https://lwbddata.sfo3.digitaloceanspaces.com/finance/doc/FY%202021%20-%20Budget%20Book.pdf>.

^{xxx} Located in the Florida Keys, Marathon’s history dates back to the foundation of the Florida East Coast Railroad. Marathon was officially established on March 9, 1927. The city’s current population, as of 2020, is 9,689, an insignificant increase from the population of 4,397 in 1970. Today, the city is governed by a council-manager form of government. The council meets at the Marathon City Hall (24.72670384550062, -81.0448068752679) on 9805 Overseas Highway, located at an elevation of 3.37 feet above sea level. The annual city budget of Marathon was \$28,870,653 in 2022.

See Jerry Wilkinson, *History of Marathon*, KEYS HISTOREUM, <http://www.keyshistory.org/marathon.html> (last visited Dec. 28, 2023); *QuickFacts: Marathon*

City, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/marathoncityflorida/POP010220> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.10; *Administration: Government*, CITY OF MARATHON FLA., <https://www.ci.marathon.fl.us/administration/page/government> (last visited Dec. 28, 2023); Location of Marathon City Mall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Marathon City Hall”; then right click to search for coordinates) (last visited Dec. 28, 2023); Elevation of Marathon City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “9805 Overseas Highway” into the location field box) (last visited Dec. 28, 2023); CITY OF MARATHON, ADOPTED BUDGET: FISCAL YEAR OCTOBER 1, 2021 THROUGH SEPTEMBER 30, 2022 i.2 (2021), https://www.ci.marathon.fl.us/sites/default/files/fileattachments/finance/page/3431/fy22_adopted_budget_-_website.pdf.

^{xxx} Melbourne City Hall (28.07976435969587, -80.60656783101979) can be found at 900 E. Strawbridge Avenue, at an elevation of 21.25 feet above sea level. Melbourne was officially incorporated in 1969 when the cities of Eau Gallie and Melbourne City joined together. The city’s current population, as of 2020, is 84,678, more than double the population of 40,236 in 1970. Today, Melbourne uses the council-manager form of city government. The annual city budget of Melbourne was \$251,475,876 in 2022.

See Location of Melbourne City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Melbourne City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Melbourne City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “900 E. Strawbridge Ave” into the location field box) (last visited Dec. 28, 2023); *History of Melbourne, FL*, ANDREW PICKETT L., <https://www.andrewpickettllaw.com/history-of-melbourne-fl/#:~:text=Originally%20known%20as%20Crane%20Creek,first%20church%20in%20the%20town> (last visited Dec. 28, 2023); *QuickFacts: Melbourne City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/melbournecityflorida/AGE295222> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Run for City Council*, CITY OF MELBOURNE, <https://www.melbourneflorida.org/departments/city-clerk/run-for-city-council#:~:text=The%20Charter%20of%20the%20City,laws%20and%20the%20annual%20budget> (last visited Dec. 28, 2023); CITY OF MELBOURNE, FLA., CITY OF MELBOURNE: FISCAL YEAR 2021–2022 ADOPTED BUDGET CM-2 (2021), <https://www.melbourneflorida.org/home/show-publisheddocument/6301/637710995227570000>.

^{xxxii} Located on the east coast of South Florida, Miami is a large metropolis known as the “Magic City.” The city of Miami was officially incorporated in 1896, with only 444 original citizens. The city’s current population, as of 2020, is 442,241, a significant increase from the population of 334,859 in 1970. Today, the city is governed by a mayor-city commissioner plan. In this form of municipal government, the board of commissioners serves as the city’s primary legislative body and the mayor serves as the city’s chief executive. The commission meets at Miami City Hall (25.727829462437352, -80.23378666015662) on 3500 Pan American Drive, located at an elevation of 9.91 feet above sea level. The annual city

budget of Miami was \$1,368,052,000 in 2022. The city of Miami has been instrumental to the climate monitoring in South Florida since the early 1900s when the Weather Bureau established the city's first Weather Bureau Office in 1911, initially measuring and recording rainfall, temperature, and elevation.

See *City of Miami History*, CITY OF MIA., <http://archive.miamigov.com/home/history.html> (last visited Dec. 28, 2023); *QuickFacts: Miami City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/miamibeachcityflorida,miamicityflorida,miamidadecountyflorida/POP010220#POP010220> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; THE CITY OF MIAMI, FLA., CODE ch. 2, art. II §§ 2.31, 2.32 (2023); Location of Miami City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Miami City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Miami City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “3500 Pan American Drive” into the location field box) (last visited Dec. 28, 2023); CITY OF MIA., ADOPTED BUDGET IN BRIEF: FISCAL YEAR 2021–2022 6 (2022), <http://archive.miamigov.com/Budget/docs/FY22/Budget%20in%20Brief%202021-2022%20ADOPTED%2012-16-21.pdf>; Russell Pfof & Pablo Santos, *History of National Weather Service, Forecast Office, Miami, Florida*, NAT'L WEATHER SERV., <https://www.weather.gov/mfl/floridahistorypage> (last updated Aug. 15, 2013).

^{xxxiii} Miami Beach City Hall (25.79300776230996, -80.13557523131955) can be found at 1700 Convention Center Drive, at an elevation of 6.54 feet above sea level. Located in South Florida, Miami Beach is an island city directly adjacent to the city of Miami. Miami Beach was officially incorporated as a town on March 26, 1915. It would quickly outgrow that designation and was officially incorporated as a city only two years later in 1917. The city's current population, as of 2020, is 82,890, a small decline from the population of 87,072 in 1970. Today, the city is governed by a city commission/city manager type of government. The city commission consists of six elected commissioners and an elected mayor. Commissioners are elected for a term of four years with a term limit of two terms. The annual city budget of Miami Beach was \$675.9 million in 2022. Similar to its neighbor, the city of Miami, Miami Beach is at high-risk of hurricanes, tropical storms, and flooding.

See Location of Miami Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Miami Beach City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Miami Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “1700 Convention Center Drive” into the location field box) (last visited Dec. 28, 2023); Casey Pickett, *Incorporation of Miami Beach in 1915*, MIA. HIST. (Mar. 25, 2015), <https://miami-history.com/incorporation-of-miami-beach->; *QuickFacts: Miami Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/miamibeachcityflorida,US/PST045222;1970> CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Mayor and Commissioners*, MIA. BEACH, <https://www.miamibeachfl.gov/city-hall/elected-officials/> (last visited Dec. 28, 2023); MIA. BEACH, ADOPTED FY 2022 WORKPLAN AND

OPERATING BUDGET 2 (2021), <https://www.miamibeachfl.gov/wp-content/uploads/2022/01/FY-2022-Adopted-Budget-Book-Electronic-Version.pdf>; *Memorial Web Page for the 1926 Great Miami Hurricane*, NAT'L WEATHER SERV., https://www.weather.gov/mfl/miami_hurricane (last visited Dec. 28, 2023).

^{xxxiv} Located on the Gulf of Mexico in southwest Florida, Naples is known as part of the "Paradise Coast." Naples was founded in 1886 with the original intention of being developed as a winter retreat. The city's current population, as of 2020, is 19,115, an increase of over 7,000 from the population of 12,042 in 1970. Today, the city is governed by a seven-member city council consisting of a mayor and six council members who are nonpartisan and elected at large. The commission meets at Naples City Hall (26.13947, -81.79533) on 735 8th Street South, located at an elevation of 9.84 feet above sea level. The annual city budget of Naples was \$159,912,729 in 2022. "As of 2018, the City of Naples has approximately 14,713 flood insurance policies in force," covering over seventy-five percent of the local population.

See Florida's Paradise Coast, NAPLES, MARCO ISLAND, EVERGLADES: FLA.'S PARADISE COAST, <https://www.paradisecoast.com> (last visited Dec. 28, 2023); *History of Naples*, NAPLES-FLA., <https://www.naples-florida.com/hiscul.htm> (last visited Dec. 28, 2023); *Quick Facts: Naples City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/naplescifyflorida> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *City Council & Mayor*, CITY OF NAPLES, FLA., <https://www.naplesgov.com/citycouncil> (last visited Dec. 28, 2023); Location of Naples City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "Naples City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Naples City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "735 8th St. South" into location field box); CITY OF NAPLES, FLA., ADOPTED BUDGET: CITY OF NAPLES, FLORIDA: FISCAL YEAR 2021–2022 1 (2021), https://www.naplesgov.com/sites/default/files/fileattachments/finance/page/51071/1a_final_adopted_budget_21-22.pdf; *Flood, Storms, & Hurricane Facts*, CITY OF NAPLES, FLA., <https://www.naplesgov.com/building/page/floods-storms-hurricane-facts> (last visited Dec. 28, 2023).

^{xxxv} New Smyrna Beach City Hall (29.02682, -80.92324) can be found at 210 Sams Avenue, at an elevation of 7.01 feet above sea level. Located just south of Daytona Beach, New Smyrna Beach's history goes back centuries, with the city being founded in 1768. The city's current population, as of 2020, is 30,142, a large increase from the population of 10,580 in 1970. The New Smyrna Beach government operates under a commission-manager system. The annual city budget of New Smyrna Beach was \$41,506,760 in 2022.

See Location of New Smyrna Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "New Smyrna Beach City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of New Smyrna Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "210 Sams Ave" into the location field box) (last visited Dec. 28, 2023); Mike Miller, *New Smyrna Beach, Florida*, FLA. BACK ROADS TRAVEL, <https://www.florida-backroads-travel.com/new-smyrna-beach-florida.html#:~:text=A%20Scottish%20doctor%2C%20Andrew%20Turnbull,seven%20year%20>

period%20of%20indenture (Aug. 2, 2023); *Quick Facts: New Smyrna Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/newsmyrna-beachcityflorida/POP815221> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; NEW SMYRNA BEACH, *City Commission*, <https://www.cityofnsb.com/1305/City-Commission#:~:text=The%20City%20of%20New%20Smyrna,and%20developing%20an%20overall%20vi-sion> (last visited Dec. 28, 2023); CITY OF NEW SMYRNA BEACH, ADOPTED BUDGET: FISCAL YEAR OCTOBER 1, 2022–SEPTEMBER 30, 2023 52 (2021), <https://www.cityofnsb.com/DocumentCenter/View/18185/City-of-NSB-FY23-Budget>.

^{xxxvi} North Bay Village City Hall (25.84859, -80.15102) can be found at 1666 John F. Kennedy Causeway #3, at an elevation of 4.02 feet above sea level. Part of the metropolitan area of Miami, North Bay Village is on what is known as “Broadcast Key,” so named after the area’s radio history. North Bay Village was incorporated in 1945. The city’s current population, as of 2020, is 8,159, almost double the population of 4,831 in 1970. The North Bay Village government operates under a commission-manager system.

See Location of North Bay Village City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “North Bay Village City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of North Bay Village City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “1666 John F. Kennedy Causeway #3” into the location field box) (last visited Dec. 28, 2023); *Quick Facts: North Bay Village City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/northbayvillagecityflorida/POP010220> (last visited Dec. 28, 2023); 1970 CENSUS OF THE POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Government*, N. BAY VILL., <https://northbayvillage-fl.gov/government/> (last visited Dec. 28, 2023); *About North Bay Village*, N. BAY VILL., <https://northbayvillage-fl.gov/about-us/> (last visited Dec. 28, 2023).

^{xxxvii} Located in northeast Miami-Dade County, North Miami was originally named the “Town of Miami Shores” due to its eastern boundary with the Atlantic Ocean. North Miami was founded on February 5, 1926. The city’s current population, as of 2020, is 60,191, a large increase from the population of 34,767 in 1970. The North Miami city council operates under a council-manager form of government. North Miami City Hall (25.892175109442853, -80.18271650084043) can be found on 776 NE 125th Street, with an elevation of 8.69 feet above sea level. The annual city budget of North Miami was \$161,787,976 in 2022.

See *Government*, N. MIA. FLA., <https://www.northmiamifl.gov/27/Government#:~:text=North%20Miami%20operates%20under%20a,two%20consecutive%20four%20year%20term> (last visited Dec. 28, 2023); *QuickFacts: North Miami City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/northmiamicityflorida/POP010220> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; Location of North Miami City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “North Miami City Hall”; then right click for coordinates) (last visited Dec. 28,

2023); Elevation of North Miami City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “776 NE 125th St.” into the location field box) (last visited Dec. 28, 2023); N. MIA. FLA., FY 2021–2022 ADOPTED ANNUAL BUDGET 8 (2021), <https://www.northmiamifl.gov/DocumentCenter/View/12018/2021-to-2022-Adopted-Annual-Budget-PDF>.

^{xxxviii} Palm Beach Town Hall (26.70307, -80.03638) can be found at 360 S. County Road, at an elevation of 4.69 feet above sea level. Palm Beach was officially incorporated on April 17, 1911. The city’s current population, as of 2020, is 9,245, an insignificant increase from the population of 9,086 in 1970. Palm Beach uses the council-manager form of city government. The annual city budget of Palm Beach was \$277,560,337 in 2022.

See Location of Palm Beach Town Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Palm Beach Town Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Palm Beach Town Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “360 S. County Rd.” into the location field box) (last visited Dec. 28, 2023); *Town of Palm Beach’s History*, TOWN OF PALM BEACH, FLA., <https://www.townofpalmbeach.com/343/History-of-Palm-Beach> (last visited Dec. 28, 2023); *Quick Facts: Palm Beach Town*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/palmbeachtownflorida/PST045222> (last visited Dec. 28, 2023); 1970 CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Town of Palm Beach*, TOWN OF PALM BEACH, FLA., <https://www.townofpalmbeach.com/122/Departments> (last visited Dec. 28, 2023); BUDGET SUMMARY: TOWN OF PALM BEACH – FISCAL YEAR 2021–2022 (2021), <https://www.townofpalmbeach.com/DocumentCenter/View/15412/BUDGET-SUMMARY-AD-Exhibit-A?bidId=>.

^{xxxix} Located in the southern part of the metropolitan area of Miami, Palmetto Bay is nicknamed the “Village of Parks” due to the numerous city-operated parks it offers its residents. Palmetto Bay was officially incorporated on September 10, 2002. The city’s current population, as of 2020, is 24,439. The Palmetto Bay City Council operates under a council-manager form of government. Palmetto Bay Village Hall (25.60449, -80.34956) is located at 9705 Hibiscus Street, at an elevation of 10.64 feet above sea level. The annual city budget of Palmetto Bay was \$15,720,911 in 2022.

See *History of Palmetto Bay*, VILL. OF PALMETTO BAY, FLA., <https://www.palmettobay-fl.gov/681/History-of-Palmetto-Bay> (last visited Dec. 28, 2023); *Welcome to Palmetto Bay*, VILL. OF PALMETTO BAY, FLA., <https://www.palmettobay-fl.gov/431/Welcome-to-Palmetto-Bay> (last visited Dec. 28, 2023); *Quick Facts: Palmetto Bay Village*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/palmettobayvillageflorida/POP010220> (last visited Dec. 28, 2023); *Mayor & Council*, VILL. OF PALMETTO BAY, FLA., <https://www.palmettobay-fl.gov/376/Mayor-Council> (last visited Dec. 28, 2023); Location of Palmetto Bay Village Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Palmetto Bay Village Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Palmetto Bay Village Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “9705 Hibiscus St.” into location field box) (last visited Dec.

28, 2023); VILL. OF PALMETTO BAY, ADOPTED OPERATING & CAPITAL BUDGET FISCAL YEAR 2021–2022 13 (2021), <https://www.palmettobay-fl.gov/DocumentCenter/View/16792/FY-2021-22-Adopted-Budget?bidId=>.

^{xi} Located on the Gulf of Mexico, Panama City is named after the Panama Canal as the city is directly on a pathway from Chicago to Panama. Panama City was officially incorporated in 1909, as part of a development project by the Gulf Coast Development Company. The city’s current population, as of 2020, is 32,939, an insignificant increase from the population of 32,096 in 1970. Today, the city is governed by a commission-manager form of government. The commission meets at the City of Panama City City Hall (30.15759, -85.66083) on 501 Harrison Ave, located at an elevation of 23.46 feet above sea level. The annual city budget of Panama City was \$132,053,778 in 2022. Since 1975, Panama City and the larger Bay County area have experienced five of the twelve major recorded storms in Florida.

See Marlene Womack, *History of Bay County*, BAY CNTY. CENTENNIAL, <https://web.archive.org/web/20181012060112/http://www.baycounty100.com/History-Bay-County-FL.aspx> (last visited Dec. 28, 2023); *Explore Panama City History*, DUNES OF PANAMA VACATION RENTALS, <https://www.dunesofpanama.com/explore-panama-city-history/> (last visited Dec. 28, 2023); *Quick Facts: Panama City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/panamacitycityflorida> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *City Commission*, CITY OF PANAMA CITY, FLA., <https://www.panamacity.gov/395/City-Commission> (last visited Dec. 28, 2023); Location of Panama City City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Panama City City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Panama City City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “501 Harrison Ave” into location field box) (last visited Dec. 28, 2023); CITY OF PANAMA CITY, FLA., FY 2022 BUDGET REPORT 10 (2021), <https://www.panamacity.gov/Archive/ViewFile/Item/1471>; Robert Hurst, *A Short History of Hurricanes*, PANAMA CITY: NEWS HERALD (July 23, 2020, 4:14 PM), <https://www.newsherald.com/story/news/2020/07/23/short-history-of-hurricanes/41961139/>.

^{xli} The City of Pensacola City Hall (30.40770, -87.21874) can be found at 222 West Main Street, at an elevation of 9.35 feet above sea level. The westernmost city of the Florida panhandle, Pensacola is known as the “City of Five Flags” due to the different nations that have governed it over time. Established in 1559 by Don Tristan de Luna and Spanish settlers, Pensacola was America’s first settlement. The city’s current population, as of 2020, is 54,312, a decrease of 5,195 from the population of 59,507 in 1970. Today, the city is governed by a mayor-council form of government. The annual city budget of Pensacola was \$253,203,200 in 2022. The first hurricane recorded in Pensacola was in the first year of settlement, 1559. Since 1975, Pensacola has been directly hit by eight hurricanes.

See Location of Pensacola City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Pensacola City Hall”;

then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Pensacola City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “222 West Main St.” into location field box) (last visited Dec. 28, 2023); *About Our City*, PENSACOLA, <https://www.cityofpensacola.com/1200/About-Our-City> (last visited Dec. 28, 2023); *Quick Facts: Pensacola City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/pensacolacityflorida/PO010220#POP01022> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.10; *City Government*, PENSACOLA, <https://www.cityofpensacola.com/27/City-Government> (last visited Dec. 28, 2023); CITY OF PENSACOLA, FISCAL YEAR 2022: APPROVED BUDGET-IN-BRIEF 7 (2021), <https://www.cityofpensacola.com/ArchiveCenter/ViewFile/Item/1251>; *Pensacola, Florida*, NATURALLY RESILIENT COMMUNITIES, <https://nrcsolutions.org/pensacola-florida/> (last visited Dec. 28, 2023); *Pensacola: Florida’s History with Tropical Systems*, HURRICANE CITY, <https://hurricanecity.com/city/pensacola.htm> (last visited Dec. 28, 2023).

^{xlii} Pinecrest, a suburban village in Miami-Dade County, is a community that was officially incorporated more recently, specifically on March 12, 2996. The city’s current population, as of 2020, is 18,388. The Village of Pinecrest is governed by a five-member village council. Pinecrest Village Hall (25.653869856006512, -80.32902046961455) is located at 12645 Pinecrest Parkway, at an elevation of 10.62 feet above sea level. The annual city budget of Pinecrest was \$41,310,592 in 2022.

See History, PINECREST, <https://www.pinecrest-fl.gov/Government/About-Us/History#:~:text=Rapid%20growth%20and%20local%20issues,succeeded%20by%20Matzner%20in%202004> (last visited Dec. 28, 2023); *Quick Facts: Pinecrest Village*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/pinecrestvillageflorida/POP010220> (last visited Dec. 28, 2023); *Village Council*, PINECREST, <https://www.pinecrest-fl.gov/Government/Council#:~:text=The%20Village%20of%20Pinecrest%20is,reside%20anywhere%20in%20the%20Village> (last visited Dec. 28, 2023); Location of Pinecrest Village Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Pinecrest Village Hall”; then right click for coordinates); Elevation of Pinecrest Village Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “12645 Pinecrest Parkway” into location field box); VILL. OF PINECREST, ANNUAL BUDGET REPORT 2021–2022 III-19 (2022) <https://www.pinecrest-fl.gov/files/sharedassets/village/government/finance/documents/budget-2021-2022-remediated.pdf>.

^{xliii} Pompano Beach City Hall (26.23147614623308, -80.12519757723415) can be found at 100 West Atlantic Boulevard, at an elevation of 7.79 feet above sea level. Located on the Atlantic coast of South Florida just north of Fort Lauderdale, Pompano Beach, often referred to as “the Heart of the Gold Coast,” was incorporated in 1945 following the official merger of the city of Pompano with the area’s newly formed beach municipality. The city’s current population, as of 2020, is 112,046, a large increase from the population of 37,724 in 1970. The City of Pompano Beach operates under a commission-manager form of government. The annual city budget of Pompano Beach was \$433,510,744 in 2022.

See Location of Pompano Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Pompano Beach City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Pompano Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “100 West Atlantic Boulevard” into the location field box) (last visited Dec. 28, 2023); *Our History*, POMPANO BEACH HIST. SOC’Y, https://www.pompanohistory.com/our_history#:~:text=In%201947%20the%20City%20of,rather%20than%20join%20Pompano%20Beach (last visited Dec. 28, 2023); *Quick Facts: Pompano Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/pompanobeachcityflorida/POP010220> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Government*, POMPANO BEACH, <https://www.pompano-beachfl.gov/government> (last visited Dec. 28, 2023); *City of Pompano Beach Budget-in-Brief*, POMPANO BEACH, <https://stories.opengov.com/pompano-beachfl/published/-nl9cznlp#:~:text=The%20total%20City%20of%20Pompano,New%20construction%20totals%20%24177M> (last visited Dec. 28, 2023).

^{xliv} Port St. Joe City Hall (29.812811192883363, -85.30198561466034) can be found at 305 Cecil G. Costin Sr. Boulevard, at an elevation of 9.01 feet above sea level. Port St. Joe was founded in 1835 as a harbor town. The city’s current population, as of 2020, is 23,474, a large increase from the population of 4,401 in 1970. Port St. Joe operates under a commission-manager form of government. The annual city budget of Port St. Joe was \$33,180,594 in 2022. The community suffered extensive damage from Hurricane Michael in 2018.

See Location of Port St. Joe City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Port St. Joe City Hall”; then right click for coordinates); Elevation of Port St. Joe City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “305 Cecil G. Costin Sr. Boulevard” into location field box); *St. Joseph – Florida’s Lost*, EXPLORE SOUTHERN HIST., <https://web.archive.org/web/20080704181231/https://www.exploresouthernhistory.com/portstjoe2.html> (last visited Dec. 28, 2023); *Quick Facts: Port St. John CDP*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/portstjohncdpflorida/POP010220#POP010220> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Your City Government*, CITY OF PORT ST. JOE, <https://www.cityofportstjoe.com/city-organizational-chart.cfm#:~:text=Business%20Licenses,Your%20City%20Government,to%20as%20Commission%2DManager%20Plan> (last visited Dec. 28, 2023); Budget 2021-2022, CITY OF PORT ST. JOE (Oct. 11, 2021, 11:59 AM), <https://www.cityofportstjoe.com/pdf/historicdoc/202210116858.pdf>; James Gordon, *Port St. Joe Rebounding from Hurricane Michael*, NBC 15 NEWS (Oct. 10, 2019, 8:39 PM), <https://mynbc15.com/weather/hurricane-stories/port-st-joe-rebounding-from-hurricane-michael>.

^{xlv} Sarasota City Hall (27.33794770326334, -82.53857872563452) can be found at 1565 1st Street, at an elevation of 17.66 feet above sea level. Situated south of Tampa on Florida’s Gulf Coast, Sarasota, whose name is derived from a blend of languages used by Native Americans and Spanish settlers, was officially incorporated as a town on October 14, 1902 and quickly grew into a city due to investment

and tourism inspired by the Ringling Brothers investment in Sarasota Property. The city's current population, as of 2020, is 434,006, a very large increase from the population of 40,327 in 1970. Today, the city is governed by a commissioner-manager form of government. The annual city budget of Sarasota was \$234,412,773 in 2022. Sarasota is in high-risk of hurricane activity, most recently being damaged by Hurricane Ian in 2022.

See Location of Sarasota City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "Sarasota City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Sarasota City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter "1565 1st Street" into the location field box) (last visited Dec. 28, 2023); *Sarasota History*, HIST. & PRES. COAL. OF SARASOTA CNTY., <https://historicpreservationsarasota.com/sarasotahistory/> (last visited Dec. 28, 2023); *Quick Facts: Sarasota County*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/sarasotacountyflorida> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *City Commission*, CITY OF SARASOTA, <https://www.sarasotafl.gov/government/city-commission#:~:text=The%20City%20of%20Sarasota%20is,Mayor%20from%20among%20their%20members> (last visited Dec. 28, 2023); Anne Snabes, *City of Sarasota Passes \$233 Million Budget, Which is 0.48% Lower than the Fiscal Year 2020-21*, HERALD-TRIB. (Sept. 22, 2021, 3:03 PM), <https://www.heraldtribune.com/story/news/2021/09/22/city-of-sarasota-approve-2021-22-budget-over-233-million/5807348001/>; *Hurricane Ian's Impact on Sarasota Bay*, SARASOTA BAY ESTUARY PROGRAM (Dec. 9, 2022), <https://sarasotabay.org/hurricane-ians-impact-on-sarasota-bay/#:~:text=There%20were%20more%20bottom%20samples,and%20north-ern%20Little%20Sarasota%20Bay>.

^{xlvi} The City of St. Augustine City Hall (29.893633788317768, -81.31475367037389), resides at 75 King Street, at an elevation of 5.68 feet above sea level. Located on the northeast coast of Florida, "St. Augustine is the oldest continuously occupied settlement of European and African-American origin in the United States." St. Augustine was established in 1565 by Don Pedro Menéndez de Avilés under the direction of King Philip II. The city's current population, as of 2020, is 14,329, an increase of 1,977 from the population of 12,352 in 1970. Today, the city is governed by a city commission form of government. The annual city budget of St. Augustine was \$64,753,381 in 2022. St. Augustine's origins begin with hurricanes, as Don Pedro Menéndez de Avilés was able to defeat the French, initially occupying the area only after storms destroyed the French ships looking to capture the conquistador. In recent years, Hurricane Matthew in 2016 and Hurricane Irma in 2017, have directly hit the city of St. Augustine.

See Location of St. Augustine City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for "St. Augustine City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of St. Augustine City Hall, EYES ON THE RISE, [https://www.eyesontherise.org/app/\(search "75 King Street" into the location field box\)](https://www.eyesontherise.org/app/(search%2075%20King%20Street%20into%20the%20location%20field%20box)) (last visited Dec. 28, 2023); *Our History*, CITY OF ST. AUGUSTINE, <https://www.citystaug.com/693/Our-History#:~:text=Founded%20in%201565%2C%20St.,the%20Spanish%20established%20at%20St> (last visited Dec. 28, 2023); *Quick*

Facts: St. Augustine City, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/staugustinecityflorida/PST045222> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *Government*, CITY OF ST. AUGUSTINE, <https://www.citystaug.com/27/Government> (last visited Dec. 28, 2023); CITY OF ST. AUGUSTINE, 2022 ADOPTED BUDGET 4, <https://www.citystaug.com/DocumentCenter/View/5099/2022-Adopted-Budget> (last visited Dec. 28, 2023); Sheldon Gardner, *A Turbulent History: St. Johns Country Has Been Pummeled by Hurricanes Over the Centuries*, ST. AUGUSTINE REC. (Aug. 31, 2019, 10:29 PM), <https://www.staugustine.com/story/news/local/2019/09/01/look-back-at-some-of-major-hurricanes-to-hit-st-johns-county/4294471007/>.

^{xlvi} Located on Florida's gulf coast, St. Petersburg "has always been characterized by endless sunshine." St. Petersburg was officially incorporated in 1903 with an initial population of only a few hundred citizens. The city's current population, as of 2020, is 258,308, an increase of 42,076 from the population of 216,232 in 1970. Today, the city is governed by a strong mayor and city council system. In this form of government, the city council serves as the city's primary legislative body while the mayor serves as the city's chief executive. The commission meets at St. Petersburg City Hall (27.77332, -82.63998) on 175 5th Street North, located at an elevation of 37.49 feet above sea level. The annual city budget of St. Petersburg was \$711,215,762 in 2022. Recently, St. Petersburg dealt with the effects of Hurricane Ian in 2022.

See History of St. Pete, ST. PETERSBURG, <https://www.stpete.org/visitors/history.php> (last visited Dec. 28, 2023); *Quick Facts: St. Petersburg*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/staugustinecityflorida/PST045222> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; Location of St. Petersburg City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar "St. Petersburg City Hall"; then right click for coordinates); Elevation of St. Petersburg City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (search "175 5th Street North" into the location field box); CITY OF ST. PETERSBURG, FISCAL YEAR 2022 ADOPTED BUDGET 20 (2021), <https://cms5.revize.com/revize/stpete/Departments/Finance/Budget%20Documents/2022/FY22%20Adopted%20Budget.pdf>; Veronica Brezina, *The Aftermath of Hurricane Ian*, ST. PETE CATALYST (Sept. 29, 2022), <https://stpetecatalyst.com/the-aftermath-hurricane-ian/>; ST. PETERSBURG, FLA., CODE OF ORDINANCES, art. III, § 3.01 (2023).

^{xlvi} The City of Stuart City Hall (27.20052, -80.25500) can be found at 121 SW Flagler Avenue, at an elevation of 11.53 feet above sea level. Located on the Atlantic Coast of South Florida, Stuart is famed for sailfishing. Stuart was officially incorporated in 1914, and was initially developed for pineapple farming. The city's current population, as of 2020, is 17,425, an increase of 12,605 from the population of 4,820 in 1970. Today, the city is governed by a mayor, vice mayor, and three commissioners. The annual city budget of Stuart was \$33,194,665 in 2022. Notable hurricanes to hit Stuart in recent years are Frances, in 2004, and Nicole, in 2022.

See Location of the City of Stuart City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar "Stuart City Hall"; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of City of Stuart City

Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “121 SW Flagler Ave” into the location field box); *City of Stuart Details & History*, CITY OF STUART, <https://www.cityofstuart.us/276/City-of-Stuart-Details-History> (last visited Dec. 28, 2023); *Quick Facts: Stuart City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/stuartcityflorida> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.10; CITY OF STUART, FLA., ADOPTED BUDGET FISCAL YEAR 2022 6 (2021), <https://cityofstuart.us/ArchiveCenter/ViewFile/Item/130>; *Stuart: Florida’s History with Tropical Systems*, HURRICANE CITY, <https://hurricanecity.com/city/stuart.htm> (last visited Dec. 28, 2023).

^{xlix} Surfside City Hall (25.881564788132923, -80.12292165383197) can be found at 9293 Harding Avenue, at an elevation of 4.94 feet above sea level. Located along the Atlantic coast in South Florida, Surfside is known primarily as a beach-side residential community. Surfside was officially incorporated on May 18, 1935. The city’s current population, as of 2020, is 5,689, only 2,075 more residents than the population of 3,614 in 1970. The Town of Surfside operates under a Commission-Manager form of government. The annual city budget of Surfside was \$31,179,905 in 2022.

See Location of Surfside City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Surfside City Hall”; then right click for coordinates); Elevation of Surfside City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (search “9293 Harding Ave, Surfside” into the location field box); *About the Town of Surfside*, TOWN OF SURFSIDE, FLA., <https://www.townofsurfsidefl.gov/residents/about-the-town-of-surfside> (last visited Dec. 28, 2023).; *Quick Facts: Surfside Town*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/surfsidetownflorida/POP010220> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.10; *Town Commission*, TOWN OF SURFSIDE, FLA., <https://www.townofsurfsidefl.gov/departments-services/town-commission#:~:text=The%20Town%20of%20Surfside%2C%20Florida,and%20prohibitions%20governing%20the%20Commission> (last visited Dec. 28, 2023); TOWN OF SURFSIDE, FLA., FISCAL YEAR 2022 ANNUAL BUDGET 47 (2021), https://www.townofsurfsidefl.gov/docs/default-source/default-document-library/financial-documents/financial-reports/2021-2022-town-of-surfside-adopted-budget.pdf?sfvrsn=1b341694_10.

¹ Located on Tampa Bay along Florida’s gulf coast, Tampa is known as the “Lightning Capital of North America.” Tampa officially became part of U.S. territory in 1845, the military having a large impact in Tampa’s early development. The city’s current population, as of 2020, is 384,959, an increase of 107,192 from the population of 277,767 in 1970. Today, the city is governed by a strong mayor and council form of government. The council meets at Tampa City Hall (27.95610, -82.45650) on East Kennedy Boulevard, located at an elevation of 17.40 feet above sea level. The annual city budget of Tampa was \$1,802,092,727 in 2022. The last major hurricane to hit Tampa Bay as a category 3 hurricane or larger was the 1921 Tampa Bay Hurricane. However, even without being hit directly, recent hurricanes have affected the area through flooding and wind damage.

See *Tampa Bay – Lightning Capital of North America*, No. 1 HOME ROOFING, <https://no1homeroofing.com/tampa-bay-lightning-capital-of-north-america/#:~:text=%E2%80%9CThough%20the%20Tampa%20Bay%20area,with%20thunderstorm%20activity%20per%20year> (last visited Dec. 28, 2023); *Tampa History*, TAMPA.GOV, <https://www.tampa.gov/info/tampa-history> (Oct. 1, 2023); *Quick Facts: Tampa City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/tampacityflorida/POP010220> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.7; *Boards and Commissions*, TAMPA.GOV, <https://www.tampa.gov/guide/boards-and-commissions> (last visited Dec. 28, 2023); Location of Tampa City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Tampa City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Tampa City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “East Kennedy Boulevard” into the location field box) (last visited Dec. 28, 2023); *Recommended Budget for Fiscal Year 2022: Fiscal Year 2022 Operating and Capital Budget*, CITY OF TAMPA, FLA., <https://stories.opengov.com/tampa/published/Xzi3uo1Hx> (last visited Dec. 28, 2023); Mike Clay, *Notable Hurricanes that Impacted Tampa Bay Since 1921*, SPECTRUM NEWS (June 8, 2021, 9:00 AM), <https://www.baynews9.com/fl/tampa/weather/2021/06/07/notable-hurricanes-that-impacted-tampa-bay-that-you-may-not-have-heard-about>.

^{li} The county seat of Brevard County, Florida, Titusville is a popular place to view rocket launches from the nearby Cape Canaveral. Titusville was founded in 1867 by Confederate Colonel Henry Titus before becoming incorporated in 1887. The city’s current population, as of 2020, is 48,789, an increase from the population of 30,515 in 1970. Titusville uses a council-manager form of government. The council meets at Titusville City Hall (28.62331, -80.79361) on 555 S. Washington Ave, located at an elevation of 11.42 feet above sea level. The annual city budget of Titusville was \$120,446,512 in 2022.

See *About Titusville*, TITUSVILLE, FLA., <https://titusville.com/890/About-Titusville> (last visited Dec. 28, 2023); *History of Titusville*, TITUSVILLE, FLA., <https://titusville.com/652/History-of-Titusville> (last visited Dec. 28, 2023); *Quick Facts: Titusville City*, U.S. CENSUS BUREAU, <https://www.census.gov/quick-facts/fact/table/titusvillecityflorida/POP010220> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.7; *Council / Manager Form of Government*, TITUSVILLE, FLA., <https://titusville.com/178/Council-Manager-Form-of-Government> (last visited Dec. 28, 2023); Location of Titusville City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Titusville City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Titusville City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “555 S. Washington Ave” into the location field box) (last visited Dec. 28, 2023); CITY OF TITUSVILLE, FLA., FISCAL YEAR 2022: ADOPTED ANNUAL BUDGET 8 (2021), <https://titusville.com/DocumentCenter/View/2718/FY22-ADOPTED-BOOK-WITH-COVERS-100721>.

^{lii} Venice City Hall (27.099398762548372, -82.45059807360735) can be found at 401 West Venice Avenue, at an elevation of 14.76 feet above sea level. Located along Florida’s gulf coast, Venice is known as the “Shark Tooth Capital of the World.” Venice was settled in the late 1800s. The city’s current population, as of

2020, is 25,463, a significant increase from the population of 6,648 in 1970. Today, Venice operates under a council-manager system of local government. The annual city budget of Venice was \$117,399,741 in 2022.

See Location of Venice City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Venice City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Venice City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “401 West Venice Avenue” into the location field box) (last visited Dec. 28, 2023); Corey Beckman, *Venice is ‘Shark Tooth Capital of the World,’* FOX 13 NEWS (July 9, 2021), <https://www.fox13news.com/news/venice-florida-is-the-shark-tooth-capital-of-the-world>; *Venice Timeline*, VENICE GOV., <https://www.venicegov.com/government/historical-resources/timeline> (last visited Dec. 28, 2023); *Quick Facts: Venice City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/venicecityflorida/POP010220> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.10; *Mayor & City Council*, VENICE GOV., <https://www.venicegov.com/government/mayor-city-council> (last visited Dec. 28, 2023); CITY OF VENICE, FLA., ADOPTED BUDGET: FISCAL YEAR 2022 4 (2021), <https://www.venicegov.com/home/showpublisheddocument/9536/637710325572630000>.

^{liii} Located on the Atlantic coast of Florida, Vero Beach is the second most populous city in Indian River County. Vero Beach was officially incorporated in 1919. The city’s current population, as of 2020, is 16,354, a small increase from the population of 11,908 in 1970. Vero Beach uses a council-manager form of government. The council meets at Vero Beach City Hall (27.638846581330846, -80.3947191905539) on 1053 20th Place, located at an elevation of 11.86 feet above sea level. The annual city budget of Vero Beach was \$27,890,326 in 2022.

See *Vero Beach, Florida: History*, WIKIWAND, https://www.wikiwand.com/en/Vero_Beach%2C_Florida (last visited Dec. 28, 2023); *Historic Preservation – A Brief History*, CITY OF VERO BEACH, FLA., <https://www.covb.org/260/Historic-Preservation---A-Brief-History> (last visited Dec. 28, 2023); *Quick Facts: Vero Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/verobeachcityflorida/PST045222> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.10; *About Vero Beach*, CITY OF VERO BEACH, FLA., <https://www.covb.org/391/About-Vero-Beach> (last visited Dec. 28, 2023); Location of Vero Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “Vero Beach City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of Vero Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “1053 20th Place” into the location field box) (last visited Dec. 28, 2023); CITY OF VERO BEACH, FLA., ANNUAL BUDGET: FISCAL YEAR 2021–2022 9 (2021), <https://www.covb.org/Archive-Center/ViewFile/Item/218>.

^{liv} The West Palm Beach City Hall (26.71422, -80.05422) can be found at 401 Clematis Street, at an elevation of 14.49 feet above sea level. Located along the Atlantic coast in South Florida, West Palm Beach is known as the “Orchid City.” West Palm Beach was officially incorporated on November 5, 1894, two years before the city of Miami. The city’s current population, as of 2020, is 117,415,

only 246 less residents than the population of 57,375 in 1970. Today, the city is governed by a strong mayor form of government. The mayor is the Chief Executive Officer, and the City Administrator serves as the Chief Operating Officer. The annual city budget of West Palm Beach was \$205,580,642 in 2022. West Palm Beach has been affected by recent hurricanes such as Frances and Jeanne in 2004, Wilma in 2005, and Irma in 2017.

See Location of West Palm Beach City Hall, GOOGLE MAPS, <https://www.google.com/maps> (search in search bar for “West Palm Beach City Hall”; then right click for coordinates) (last visited Dec. 28, 2023); Elevation of West Palm Beach City Hall, EYES ON THE RISE, <https://www.eyesontherise.org/app/> (enter “401 Clematis Street” into the location field box) (last visited Dec. 28, 2023); Bri Hand, *Living in West Palm Beach: What You Should Know*, LANDING (Dec. 31, 2021), <https://www.hellolanding.com/blog/living-in-west-palm-beach-what-you-should-know/>; *History*, WEST PALM BEACH, <https://www.wpb.org/our-city/history> (last visited Dec. 28, 2023); *Quick Facts: West Palm Beach City*, U.S. CENSUS BUREAU, <https://www.census.gov/quick-facts/fact/table/westpalmbeachcityflorida/PST045222> (last visited Dec. 28, 2023); CENSUS OF POPULATION IN FLORIDA, *supra* note ii, at tbl.6; *City Administration*, WEST PALM BEACH, <https://www.wpb.org/government/city-administration> (last visited Dec. 28, 2023); CITY OF WEST PALM BEACH, FLA., BUDGET IN BRIEF: FISCAL YEAR 2023 (2022), <https://www.wpb.org/home/show-publisheddocument/5365/638021984040870000>; Eliot Kleinberg, *Palm Beach County Hurricanes Through the Years*, PALM BEACH POST (Sept. 2, 2019, 6:47 AM), <https://www.palmbeachpost.com/story/news/2019/09/02/palm-beach-county-hurricanes-through-years/3992653007/>.