REPORT

The 2024 Miami-Dade Property Insurance Strategy Forum

Collaborating across sectors to address the property insurability crisis

Acknowledgments

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Event convened by:
Office of Innovation and Economic Development, Miami-Dade County

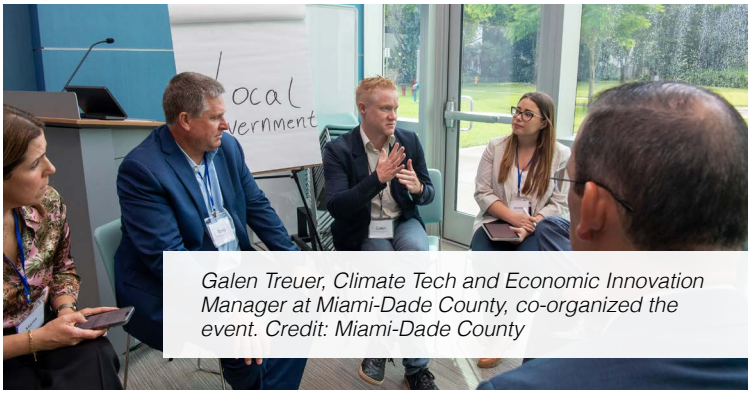
Event designed and facilitated by:
Aspiration

Report made possible by:
The Miami Foundation

The organizing team expresses deep gratitude to all participants for their willingness to co-design the agenda for this “no panels, no presentations” event, to dedicate two days to engage in intensive discussion, and to follow up with review and feedback in the summarization and reporting process. The contents of this document reflect thousands of hours of time and insights from dozens of people, shared before, during, and after the Forum. Special thanks to the many participants – more than half! – who served as peer facilitators and notetakers. Finally, we thank our partners at the Miami-Dade County Office of Innovation and Economic Development and Office of Resilience, our hosts at the University of Miami, and our event co-sponsor the British Consulate in Miami.

For more information about the event and our methodology, contact Aspiration at insurancestrategy@aspirationtech.org

Allen “Gunner” Gunn, executive director of Aspiration, was MC of the Forum. Credit: Miami-Dade County



Galen Treuer, Climate Tech and Economic Innovation Manager at Miami-Dade County, co-organized the event. Credit: Miami-Dade County

Nikisha Williams, Managing Vice President of Collective Impact at the Miami Foundation (left) and Miami-Dade County Mayor Daniella Levine Cava (right) in discussion during the Forum kickoff. Credit: Miami-Dade County

Event organizers, Kate Stein, Wallis Greenslade, and Greg Bloom (left to right), coordinate activities over lunch. Credit: Greg Bloom

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Executive Summary

Miami-Dade County residents are experiencing rising property insurance costs, and with that, mounting concerns about housing affordability and risks of extreme weather. Climate change is intensifying hazards like storms, wildfires, and flooding that can devastate communities, inflict large-scale losses on insurers and, in turn, drive up the costs of insurance and reinsurance everywhere. As communities across the southeast recover from back-to-back hurricanes Helene and Milton, it is increasingly clear that insurance is an essential element of our capacity to adapt – yet at the same time, affordable insurance is increasingly unavailable in Miami-Dade County and beyond, putting many at risk of catastrophic losses.

The underlying drivers of soaring property insurance premiums are numerous and interconnected. Systemic challenges like these require interdisciplinary, multi-sectoral responses. Neither the public sector nor the insurance industry can address this crisis alone; however, by working together, we can rise to meet the moment. That was the purpose of the 2024 Miami-Dade Insurance Strategy Forum. With the leadership of Mayor Daniella Levine Cava, the Insurance Strategy Forum kicked off a new, cross-sector conversation among key stakeholders, created space for meaningful collaboration, and set the precedent for ongoing dialogue and action.

What We Accomplished

2 days, 40+ dialogues, 70 people – and many recommendations

The Forum, convened by Miami-Dade County's Offices of Innovation and Economic Development and Resilience with support from several partners, took place on July 17-18 at the University of Miami's campus in Coral Gables. More than 70 participants – from (re)insurance, broking, risk modeling, local and state government, housing affordability, academia and international diplomacy – engaged in a series of focused dialogues. They shared observations and technical expertise, and made recommendations for actions that prioritize the values of climate resilience and housing affordability. Some discussions revealed significant differences in perspectives, and we have strived to accurately reflect these differences in all their complexity; that said, many participants expressed surprise about the extent to which we found common agreement. This event was all the more powerful because we could respectfully hold diverse perspectives alongside all that we clearly agreed upon.

Big picture takeaways: Building resilience through, and for property insurance

There are no quick fixes to this multifaceted, systemic set of problems – but participants in the Forum discussed a range of promising short-term opportunities and long-term strategies to make significant progress toward a more stable insurance market, more resilient communities, and more secure residents.

In the near term, we identified opportunities to collect better data, share it more effectively, apply more agile processes to effectively price risk – and incentivize risk reduction through existing programs like My Safe Florida Home and FORTIFIED. Through concerted, collaborative efforts, actions like these can accelerate adaptation while decelerating the rise in premiums.

In the longer term, as natural hazards continue to intensify, Forum participants articulated a need to fundamentally reimagine the relationship between insurance and society – because nobody will be truly resilient in a future where insurance is a luxury good.

Executive Summary

In this document we have assembled summaries of our discussions, co-authored in collaboration with participants.

Envisioning the big picture and long-term possibilities: we analyzed the drivers moving us toward catastrophic outcomes, and imagined other drivers that can shift our course.

Connecting insurance and the housing affordability crisis: we assessed the interdependencies and opportunities to promote high-quality, resilient and affordable housing in the face of climate-driven disasters.

Catalyzing investment in resilience: we considered opportunities for the insurance industry, investors, academia and government to facilitate risk reduction through incentivization and other collaborative strategies.

Assessing innovative applications of existing and emerging insurance tools: we identified insurance products and approaches that can be applied to local, state and national challenges.

Enhancing collective intelligence through better data and modeling: we proposed ways to better account for risk mitigation measures, and use models to improve collective decision-making.

Educating and engaging consumers and insurance agents: we developed strategies to promote understanding of the relationship between insurance, risks, and mitigation.

Local government's role in property insurability: we outlined an agenda for municipal actions that can reduce risks, monitor results, and inform wise decision-making across sectors.

State government's role in property insurability: we outlined an agenda for policy-making and public investment that can stabilize the market, spur innovation, and protect residents and businesses.

Moving forward: Working together

Overall, we affirmed that this kind of dialogue – among people with different perspectives, in collaborative and solutions-oriented discussion, supported by professional facilitation – is essential to find our way forward. Many participants left with resolutions to continue to convene industry, government, academic and community stakeholders, and move toward action; several such conversations have been progressing on their own initiative already.

Meanwhile, the Forum organizing team is already fielding expressions of interest from other communities who are interested in engaging in similar convenings. It is critical to maintain this momentum – potentially through an ongoing series of stakeholder convenings – as we rise to meet the challenge of this moment.

To learn more about this event and/or possible future events, please contact Greg Bloom, insurancestrategy@aspirationtech.org**, Kate Stein,** kate.stein@wtwco.com**, and/or Galen Treuer,** galen.treuer@miamidade.gov**.**

Context: Miami-Dade is ground zero for climate change risks

The location, geology and ecosystems of South Florida mean that communities here are uniquely exposed to the impacts of climate change. Increasingly intense tropical storms and hurricanes are an annual threat. Although Florida's building code sets a stringent standard for building in high wind zones, and Miami-Dade's codes are some of the strictest in the nation, many older properties remain vulnerable.

The region's flood risk is well documented: Miami-Dade County has been kept dry for the last century by a complex network of canals, which is threatened by rising sea levels and more intense rainfall, as water moves horizontally and vertically through the region's porous limestone substrate. Past decisions in urban planning (like deploying septic systems rather than sewers through most of the county) now present risks that climate change exacerbates, with the potential for those risks to be compounded in ways that are not yet well anticipated by models due to their reliance on historical data. In addition to risks to private property, changes such as saltwater intrusion into the Biscayne Aquifer – a key source of drinking water for Miami-Dade residents – pose risks to the public at large.

Living with water is necessary for long-term security, and will be critical to adaptation in Miami-Dade. Efforts to restore Florida's Everglades, the ecosystem into which South Florida has been built, may provide a relevant precedent. The Comprehensive Everglades Restoration Plan (CERP) already contributes significantly to regional resilience and improves quality of life by improving water quality and reducing flood risk in inland communities. In addition, as part of Miami-Dade County's Sea Level Rise Strategy, stormwater and sewage system upgrades to reduce flooding and water contamination are underway with positive results. And, as a result of proactive actions to mitigate flood risks, Miami-Dade County achieved an upgraded rating in the National Flood Insurance Program's Community Rating System, moving from a score of 5 to a 3 and earning residents a 35% discount on flood insurance premiums.

These successes notwithstanding, the impacts of climate change on Miami-Dade County continue to intensify. Moreover, most of these impacts, and some of the measures underway to respond to them, are unevenly distributed. In particular, wealthier communities with higher tax bases are able to invest more in resilience measures, more quickly; less-wealthy communities may not be able to make the same investment. Older housing stock is less raised, less hardened and more vulnerable. Further, these inequities are interdependent and compounding: raising buildings in some areas intensifies flooding in others. Low-income and minority communities may be less resilient because they are less able to afford, or have less access to, disaster preparedness essentials such as food and supplies, generators, and cars or plane tickets for evacuation. These kinds of social and economic vulnerabilities are not factored into insurance pricing, and with rising insurance rates, a concerning number of low- and middle-income homeowners and small businesses have said they are forgoing property insurance – "going bare" – because they can't afford it given South Florida's already-high cost of living.

As the risks from climate change increase, clear public policy and investment are needed to drive effective and equitable adaptation. Failing that, Miami-Dade County and other climate-vulnerable communities run the risk that their ability to adapt will be governed by insurance and financial markets, with a disproportionately negative impact on people who have the fewest resources to cope. Premiums, conditions, and outright market "retrenchment" (i.e., insurers deciding to withdraw from areas they deem too risky) end up determining what areas can be inhabited, by whom, and with what protection against loss.

We have to move faster to invest in adaptation, promote insurability and thereby avoid outcomes that will entail widespread loss and suffering on existentially-threatening scales in South Florida and beyond.

Discussion Summaries

The following summaries were prepared from discussion notes by participants and facilitators. Views and opinions expressed here do not reflect the official policies or positions of Miami-Dade County.

Event MC Allen "Gunner" Gunn, introducing the day's activities. Credit: Greg Bloom

Alissa Farina, Assistant Chief Resilience Officer for City of Miami, addresses the room during the opening circle. Credit: Miami-Dade County

Envisioning the Big Picture and Long-Term Possibilities

How might we cope with a riskier future? Even under the best-case scenarios of a societal transition to clean energy, extreme weather and rising sea levels will pose increasing risks to residents of South Florida (and all coastal communities). While many conversations at the Insurance Strategy Forum addressed the urgency of current challenges in the property insurance market – considering the need for action within the next few years – participants also took time to consider the farther future. In conversations about the "long-term big picture," participants analyzed the role that property insurance plays in expanding or constraining the range of options for adaptation to a changing environment.

This discussion started by considering the range of possible outcomes for Miami-Dade County across generations – thinking past the length of today's insurance policies and mortgages, to 2060 and beyond. Participants considered the clear threat of a range of outcomes that seem dystopian as projected from our current status quo; we also challenged ourselves to imagine non-dystopian and even positive futures. Working backwards from these possible futures, participants considered various drivers that make different outcomes more or less likely, and the role that property insurance plays among them.

Through this process, participants identified a set of key themes among the actual and hypothetical drivers toward negative or positive futures – which suggests a set of principles to guide action:

Risk mitigation requires investment – and the property insurance market could be a driver for such investment. Property-owners and communities should invest in resilience measures that lower the risks posed by storms and other hazards – and these interventions should in turn lower the price of property insurance premiums. The insurance industry's products and policies can more effectively incentivize such investments by using risk-reflective premiums in their underwriting processes. (Participants also noted that insurance companies also play a role of institutional investors. Therefore, they can potentially complement strategies to incentivize risk reduction by prioritizing green investment through their institutional investment portfolios.)

Sustainable planning and adaptive recovery complement each other by redistributing risks in more resilient ways. Long-term planning can redistribute risks by, for instance, developing dense residential buildings on fortifiable, transit-accessible ground (build ups); this process can be accelerated in times of post-disaster recovery, rather than reactively rebuilding in areas that will inevitably be re-destroyed. By shifting out from our reactive cycle of build-destroy-rebuild, to an adaptive cycle of "buy-outs and build-ups," we can equitably mitigate risks ensuring that Miami-Dade remains livable for middle- and low-income residents.

Success will require "polycentric" coordination: mutual adjustments among many independent decision-makers. Ultimately this entails enhancing coordination capacities that already exist (planning councils, etc.) and forming new kinds of institutional arrangements (multi-disciplinary working groups, etc.). And we need more opportunities like this to engage these problems through dialogue among many perspectives.

By improving our data supply and our modeling processes, we can inform wise decisions that more effectively manage risks. Ultimately, all of the potential drivers of effective adaptation require shared understanding across many different stakeholder groups – insurers, property owners, builders, governments, and the public at large – of risks, the range of possible options to reduce these risks, and the tradeoffs among those options. Better data, made available in more useful ways, is essential.

Envisioning the Big Picture and Long-Term Possibilities

The status quo is driving us toward an unsustainable future

Participants expressed anxiety that – although Miami-Dade County has achieved some significant adaptation wins (see: 'Context' section) – nationwide our current course is driving us toward a future of maladaptation, in which short-termism, siloed decision-making, inadequate adaptation funding and the inequitable distribution of risks leave us in an unsustainable, destructive cycle.

If we are unable to correct inequitable imbalances in the distribution of risks, everyone will suffer – even the wealthy who can afford extremely expensive insurance or to self-insure. Catastrophic climate events can be expected to result in mass climate migration from Miami-Dade, especially with so many "going bare," which will also reduce the tax base and therefore reduce the community's capacity to adapt and mitigate risks. By continuing to develop in places that are so risky as to be increasingly uninsurable, we are collectively investing in infrastructure that may be unusable within its lifespan. South Florida's energy and food systems are fragile, and without collective capacities for more adaptive public investment, we can anticipate a collapse in public services, which will result in businesses leaving, and a decreasing quality of life for all.

Furthermore, the federal government could be left 'on the hook' for large-scale recovery, which could yield macroeconomic shocks. The accumulation of real estate value here has broader implications of risks to the banking system, global asset decay, etc. Miami is not just a city, it's an interdependent regional system and a critical financial hub – especially for Latin America, though potential impacts are even global, with financial risk being transferred through insurance and reinsurance markets. Our local risks can cascade into global consequences.

Working toward *less bad* future states

When prompted to envision less dystopian futures, participants observed a range of plausible less-bad scenarios:

- Several observed that recent legislation to tamp down on **litigation** is starting to decrease the rise of property insurance rates and may even entice carriers to return to the market.
- Others observed that risk modeling can be better leveraged to develop more **localized understandings of risk**, rather than just aggregated levels.
- Some observed that **climate migration** out of Miami-Dade can potentially have benefits for other parts of Florida – if those areas are prepared to effectively absorb an influx of population.
- Many of the other topic challenges addressed elsewhere in the forum were considered to be helpful in reducing and redistributing risks – though some felt that, in the long term (beyond a mortgage cycle), these actions (even when necessary) may not be sufficient to avert catastrophic collective outcomes.

Envisioning the Big Picture and Long-Term Possibilities

Better than *less bad*: envisioning positive future states

Participants expressed surprise at the broad and compelling range of desirable future outcomes that we could envision together.

- Participants discussed strategies for "**living with water**" via "water-balancing infrastructure," and densifying around fortifiable areas, by developing housing hubs built around mass transit systems. The region's educational institutions can also reflect this need for adaptation and specialize in innovative solutions.

- Participants envisioned innovation in large-scale **3D printing of homes**, modified to sustain more frequent weather events – all of which could reduce materials costs (which can insulate against inflation in the costs of materials), as well as promote wage growth and economies of scale in the construction sector.

- This process of material risk reduction could also have the beneficial result of **diversifying our economy**, resulting in less economic vulnerability and more opportunity. Hyper-local and circular approaches to economic development can leverage local resources and labor.

- Participants also envisioned ways to **holistically balance the distribution of risk** in ways that drive effective adaptation: such as enabling high property insurance rates on high-risk luxury properties lived in by the wealthy few to help finance the development of sustainable infrastructure and affordable housing inventory for the many.

There were key themes running through positive scenarios. For instance, participants observed the need to **break the "reactive development cycle**," by engaging in **sustainable development through long-term planning** and **"adaptive reconstruction cycles."**

This might entail a strategy that combines "building up" (within relatively high-ground, transit-accessible areas) with "buying out" (to redistribute population centers away from untenable areas). This process will require difficult long-term work, yet also may be able to move fast when planned as a response to a major disaster or disasters.

The forum brought together actors across public and private sectors, including the Florida Office of Insurance Regulation, to build a better understanding of the regulatory environment and policy landscape in which Florida's private property insurance market sits. Credit: Miami-Dade County

Envisioning the Big Picture and Long-Term Possibilities

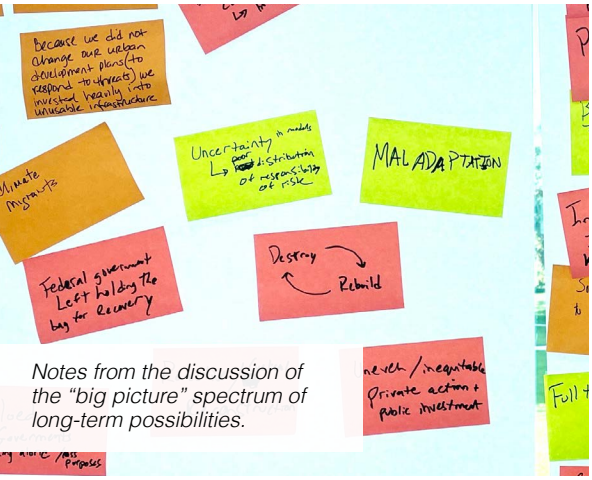
What's driving us toward bad outcomes?

Participants observed common themes among the drivers that are moving us toward less-desirable futures. A primary theme among these drivers is short-term thinking, and reactivity. Government planning is often trapped in electoral cycles. Insurance contracting operates on annual cycles, leaving the market detached from resilience initiatives that take years. Insurance companies themselves even invest in short-term returns ("double materiality" of investment in fossil fuel economy, etc.) rather than long-term adaptation. All of this is at odds with lending that takes place on 15 to 30-year timescales, and planning horizons which are even longer. As a result, at **a public and private level we are currently driven toward typically maladaptive responses: investment in real estate and infrastructure that may be unsustainable in the long-term, unchecked by insurance policies written with only a 12-month timescale in mind.**

Another primary theme of drivers toward maladaptation is silo-ization of planning and response efforts. Governmental action, for instance, is siloed among agencies and also across jurisdictions and scales. When actors only attend to information and incentives within their own institutional context, it's difficult to achieve the kind of coordination necessary to facilitate effective adaptation.

One participant remarked, "we can't expect government to solve this itself. But if we just let the private sector sort things out, they end up profiting directly from this destruction." Another noted that under 'stable' environmental conditions, insurance companies' profit motive can generate healthy competition in the market – but increasing levels of uncertainty pose threats of various kinds of market failure that could easily result in lose-lose scenarios among public and private sectors.

Culturally – in the United States generally and Florida in particular – governments are inclined to avoid market interventions. However, all markets are shaped, directly or indirectly. So there needs to be collaboration and mutual obligation in (re)shaping Florida's property insurance market.



Notes from the discussion of the "big picture" spectrum of long-term possibilities.

What could drive us toward positive outcomes?

Participants reflected on a range of drivers that could move us toward better outcomes – mostly involving coordination across sectors and for the long-term.

- For instance, the private sector can engage in **longer-term strategies** that more effectively support the management of assets over time. Some participants envisioned a virtuous cycle in which insurance companies incentivize and invest in resilience initiatives, in collaboration with their clients. One way or another, cost stabilization will require coordination among the insurance industry, clients and the public sector.

Envisioning the Big Picture and Long-Term Possibilities

- Successful outcomes will also require **coordination within and across jurisdictions**. Resilience initiatives have to be prioritized and sequenced across different geographic scales and time horizons. They also have to be coordinated among actors across diverse, overlapping public, private, and civic sectors. One lens that can help understand this challenge is "polycentricity" – the extent to which there is effective coordination among many independent decision-making centers (county, state, federal – and also civic associations and industry associations and planning councils, etc). As Michael Polanyi wrote in 1951: "a polycentric task can be socially managed only by a system of mutual adjustments."

- Promoting effective polycentricity will require **institutional innovation**: new kinds of decision-making processes to enable distributed, multi-disciplinary, participatory coordination – like the Vision 2030 Council Partnership in Miami. This might look like multi-disciplinary working groups and/or academic institutions creating an advisory panel to advise local and state governments. It also might look like building the capacity and establishing new authority for existing planning councils.

- It also looks like a more effective **data supply chain**, sourced from and used by many actors to more effectively generate collective understanding and wise decision-making. State insurance regulators and regulatory committees can support this by ensuring that standardized metrics are established for insurance models – KPIs etc. Modeling must also integrate analysis of different risks (flood, wind, etc). In the words of one participant, "We need to better measure what we manage." This may entail ensuring that modelers have better data, and regulators have more resources and capacity to act on this data. Better data and modeling can also yield a better collective understanding of the nature of risk and tradeoffs – residents are better equipped to make wise decisions.

- Another key element of success will be **trust** – between government and residents, between policyholders and insurers, between insurers and modelers, insurers and reinsurers, etc. Trust requires reliability, consistency and accountability. Trust can fuel – and will be fueled by – civic engagement to develop buy-in to and collective wisdom for public infrastructure initiatives and planning initiatives.

Relocation: Planned or unplanned?

Planned relocation: Planned relocation (sometimes termed managed retreat) would apply a collective respect for the boundaries of risk to strategic decision-making processes about which areas to protect and which areas to facilitate retreat from. This requires collaborative, cross-sector anticipation of major risks and creative approaches to adaptive response.

Post-disaster windows of opportunity: After a disaster, there is a period of collective altruism, and these are moments in which the political economy is more favorable to action: an ethos of 'we will rebuild' in public-private partnerships and civic spirit. *How might this be harnessed not just to rebuild, but to redistribute risk by choosing where not to rebuild?*

SUMMARY OF DISCUSSIONS CREATED WITH PARTICIPANTS

Connecting Insurance and the Housing Affordability Crisis

Miami-Dade County is in the throes of a housing affordability crisis. Recent research has shown the county is **short of more than 90,000 homes for people earning less than $75,000 per year. Ninety percent of renters with incomes below $50,000 are cost-burdened**, meaning they spend more than 30 percent of their income on housing. **Much existing affordable housing is small-scale, subsidized, in bad condition – and typically underinsured.** And **as insurance prices continue to rise, it is becoming less profitable to develop and maintain affordable housing**; this is further exacerbating a nationwide shortage of affordable housing.

These are the current conditions, in which South Florida hasn't had a big storm hit directly in 30 years. **One large hurricane, or multiple hurricanes making landfall in the same season, could be catastrophic.** Not only could storms decimate the County's already-limited affordable housing stock, but the lack of adequate insurance – coupled with soaring materials costs due to potential post-storm supply chain issues – could mean homes are not rebuilt at all, and Miami-Dade residents are permanently displaced.

Addressing Florida's property insurance challenges will not solve the housing crisis, but most summit participants agreed that, where possible, **insurance should support making housing available, affordable and disaster-resilient**. This includes **ensuring insurance supports affordable housing not only for homeowners, but also for renters** – who do not have to purchase property insurance themselves, but often feel the effects of rising insurance rates when their landlords pass along the costs via rent increases. Participants also noted that **insurers' and local governments' concerns about safety and resilience sometimes directly challenge the availability of affordable housing**, especially in the wake of the 2021 collapse of an aging condo building in Surfside. Participants observed anecdotally that, especially on Miami Beach, developers are purchasing aging condominiums, demolishing them, and constructing new luxury housing that is unaffordable for many Miami-Dade residents.

Across four working group sessions, participants identified a number of challenges at the intersection of affordable housing, insurance and climate risk, and discussed some initial ideas for intervening in housing and insurance systems to enhance community resilience in Miami-Dade County.

A detailed discussion on Miami-Dade County's affordable housing challenges, their drivers and potential solutions was beyond the scope of this forum. However, participants identified a number of ways in which climate risk, property insurance and affordable housing are entwined and impact each other, citing local examples.

Connecting Insurance and the Housing Affordability Crisis

Climate risk poses challenges to lending & insurance

The availability of capital for construction and purchase of affordable housing matters immensely to South Florida. However, participants reported lenders are increasingly apprehensive about making loans in climate change-vulnerable geographies, including Miami-Dade. They said this is both due to observed changes in natural hazards (e.g. rapid intensification of hurricanes) and due to the outcomes of scenario-based climate stress testing required by regulators. They suggested that effects of lenders' apprehension include:

- **Lenders require borrowers to purchase more insurance, which has become more expensive.**
  - Instead, some borrowers are electing to accept force-placed insurance, in which the lender purchases insurance for their portfolio of loans, then passes on the cost of the insurance to borrowers who do not have insurance of their own. Although force-placed insurance is typically much more expensive than a general property insurance policy – and the coverage is far more limiting than a standard homeowners policy, as it excludes contents coverage – it is increasingly appealing to some borrowers because the costs of property insurance in Florida have risen so dramatically.

- **Homeowners pay high premiums for the property insurance that is required if they have a mortgage.**
  - In response, a growing number of Floridians are refinancing their mortgages to pay them off more quickly so that they then are not required to pay for property insurance. They 'go bare' without insurance, which means that in the event of a disaster that damages or destroys their property, they would have to cover all the recovery costs themselves (or potentially rely on state or federal aid, depending on the nature of the disaster and recovery programs).

- **Lenders are increasing the cost of capital for real estate investment, construction and development.**
  - As a consequence of this, developers who are seeking a return on their investment are gravitating toward building luxury housing rather than affordable housing. This can exacerbate the phenomenon of 'climate gentrification', in which lower-income residents living in less climate change-vulnerable areas (e.g. higher ground that is less susceptible to sea-level rise and flooding) are displaced by wealthier newcomers fleeing risky coastal areas.

Tim Cerio, CEO of Florida Citizens Property Insurance Corporation (pictured left), facilitates a small group discussion with participants including Miami-Dade County Mayor Daniella Levine Cava (pictured center). Credit: Miami-Dade County

Connecting Insurance and the Housing Affordability Crisis

Nikisha Williams, Managing Vice President of Collective Impact at the Miami Foundation, and Dr Carolyn Kousky, Associate Vice President at the Environmental Defense Fund deep in discussion about community-centered approaches to disaster insurance in South Florida. Credit: Miami-Dade County

Insurance shapes post-disaster housing recovery, or lack thereof

Beyond housing availability, another critical dimension of Miami-Dade's affordable housing crisis is the quality of affordable housing that is available. Participants emphatically agreed that housing should promote safety, well-being and resilience, and suggested that the insurance industry should play a more active role in promoting risk mitigation – which can also benefit insurers by reducing the amount of loss and damage for which payouts are required.

Participants flagged several existing and potential initiatives that promote investment in risk reduction and climate change adaptation at the property level, including:

- The state programs My Safe Florida Home and My Safe Florida Condo, which provide grant funding for homeowners and condo-owners to fortify their properties. Participants noted that the My Safe Florida Condo program is in a pilot phase. The My Safe Florida Home program has been very popular, with a large number of applications received and all grant funding distributed within just a few weeks of its release. Participants encouraged the Florida's Legislature to allocate additional funding to these programs – particularly since investment in risk mitigation can help bring down property insurance premiums (see the Modelling & Data summary of this report for more detail).

- PCRAM (the Physical Climate Risk Assessment Methodology) is an open-source resource for investors to help them assess, design and quantify the resilience needs of infrastructure assets. Its coalition of creators includes asset managers, asset owners and engineers who envision PCRAM will "provide a common language between the infrastructure and financial industries."

- FORTIFIED is a voluntary resilient construction standard intended to equip builders and roofing contractors with construction solutions that protect houses and commercial buildings against severe weather. A program of the Insurance Institute for Business & Home Safety (IBHS), FORTIFIED promotes risk reduction measures that insurance forum participants hope also will bring down the costs of risk transfer (insurance).

SUMMARY OF DISCUSSIONS CREATED WITH PARTICIPANTS

Connecting Insurance and the Housing Affordability Crisis

Forum participants emphasized that **when these resilience upgrades and construction measures are implemented, it is critical that they are captured in data and models** that the insurance and lending industries use for decision-making. (For more on this and the underlying challenges, see the summary of modeling & data discussions.)

Participants also discussed how, **in the aftermath of a disaster, insurance impacts the nature of recovery for individuals and communities** – including whether high-quality affordable housing remains available, or if additional stock is built. This brought the conversation back to lending, with an emphasis on how, in the aftermath of a disaster, the challenging lending dynamics described above might be intensified, leading to reduced housing availability and affordability.

Across all of these discussions, participants noted that **subsidizing housing, subsidizing insurance and subsidizing resilience all have different outcomes** – some of which support residents' safety, financial resilience and well-being, others less so, with contradictions and variation across short-, medium and long-term time horizons. Participants also pointed out that **while there is an immense need for affordable housing in Miami-Dade County, it is also a place where risk is increasing**, so subsidizing affordable housing or insurance without also investing in resilience could jeopardize residents' financial stability, safety and quality of life. To encourage investment in resilient development, participants proposed **requiring investors or developers to prove insurability before beginning construction**, and/or that **investors and developers be required to pay the first several years of property insurance premiums**. They also recommended further exploration of **how parametric insurance might be utilized to benefit renters and people who cannot afford to buy or maintain insurance** – including people experiencing homelessness. Additional notes on that discussion are available in the insurance products innovation section.

A lively discussion on affordable housing with Maria Claudia Schubert-Fontes, Climate Justice Policy Manager at Catalyst Miami. Credit: Miami-Dade County

SUMMARY OF DISCUSSIONS CREATED WITH PARTICIPANTS

Catalyzing Investment in Resilience

Miami-Dade County and other municipalities throughout Florida face an array of potential shocks and stressors, from hurricanes and sea-level rise, to a lack of affordable housing, aging infrastructure, pandemics and population shifts. Measures to address these challenges – particularly those related to the impacts of climate change on infrastructure, communities and businesses – **will cost untold billions of dollars**, and the sources of funding and finance remain unclear. But this **investment in resilience is essential for reducing financial and safety risks to Floridians**, and for promoting economic stability. **Insurance is key to not only protecting these investments, but unlocking them.**

Across three sessions, participants first assessed **the current state of play with regard to capital for resilience investments**, including a range of **risk-mitigating interventions, potential capital sources** and insurance-related **challenges to capital deployment**. They articulated **a list of priority actions to encourage investment in resilience-building**, and proposed developing **a working group of risk mitigators, modelers and insurers** to identify and take forward actions that connect investment in resilience to premium reductions.

Current State of Resilience Investment

Participants described the current resilience investment landscape as challenged by a lack of common and consistent understanding of the benefits of adaptation and resilience-building measures. This challenge is in large part driven by a lack of data that quantifies the benefits of resilience investment, as well as the failure of some cost-benefit analysis techniques to account for non-financial forms of value, e.g. environmental, cultural and social value that might be preserved or enhanced alongside property value.

Participants pointed to nature-based solutions, green infrastructure, building fortification, and water/stormwater management as common examples of the kinds of investments for which there is a lack of quantitative data that captures their value — both financial value and other types. For example, the city of Miami Beach invested significant funding to elevate roads in four neighborhoods to avoid flooding from sea level rise and high tides. The City also installed bigger stormwater pipes and pumps capable of handling larger storm events, which should significantly reduce flooding risk to properties in the area based on stormwater modeling. However, federal flood modeling and flood insurance premiums don't take into account investments in resilience such as these examples. "We need models that can more appropriately account for the true complexity of resilience interventions."

Participants who work in the insurance industry said that the lack of quantified risk mitigation benefits makes it difficult to price resilience investments into premiums. One participant even described attempting to price resilience investments into premiums as "a fool's errand", in part because of the amount of time it takes for premium reductions to be achieved.

Catalyzing Investment in Resilience

Strategies to promote resilience investments

Participants identified carrots and sticks – **incentives and mandates** that would help promote resilience investment. Proposed mandates included **updates to building codes and zoning codes** that would force developers and builders to build for resilience, as well as **requirements that insurers account for different types of resilience measures.** Proposed incentives included **additional capacity rights for developers who invest in resilient/ sustainable design, bursaries or premium reductions from insurers that insureds could invest in risk identification & mitigation and federal and state grant programs that provide loans, matching or funding for resilience investment** by local governments and/or property-owners – for instance, the STORM Act, which created a federal revolving loan fund to support hazard mitigation efforts by local governments. Participants also highlighted **PCRAM - the Physical Climate Risk Assessment Methodology** as an initiative that supports investment in adaptation and resilience by providing an open-source, expert methodology for investors and property-owners to assess the resilience of a given property.

Finally, participants flagged that **education on the benefits of resilience investment** – for a range of stakeholders including local and state government, lenders, investors and banks – as a critical prerequisite to enable the development and uptake of incentives and mandates.

Catalyzing Investment in Resilience

Capital Sources and Challenges

Impact investors sources identified by participants include:

- Venture capital, private equity
- Impact investors
- Hedge funds, pension funds
- Developers
- Banks (traditional financing)
- Federal and state funding (e.g. FEMA, SBA, My Safe Florida Home grant program)
- Insurance companies
- Sovereign wealth funds
- Individual savings
- Philanthropy
- Multilateral finance institutions (e.g. World Bank, IMF)

Key challenges participants thought could inhibit investment of this capital:

- Physical risk from hurricanes, sea-level rise
- The narratives around climate risk impacts to Florida, suggesting it's not a smart investment
- Interest rates
- Competition in global markets
- Expensive catastrophe bonds (cost is barrier to entry)
- Tort reform is still needed despite improvements
- The level of sophistication needed for entry for retail investors
- Regulatory uncertainty and inconsistency across states
- Lack of clarity around how to access STORM Act funds (revolving loan program that lends to local governments for hazard mitigation assistance)
- Access to capital for small businesses
- My Safe Florida Home program has run out of funding - requires sustained government investment

Participants also highlighted a **fundamental tension around investment in Florida's property insurance market**, namely, that the more Florida grows with high-density, expensive, at-risk properties, the less capacity is available from the insurance and reinsurance marketplace, which can contribute to current and future premium increases.

Catalyzing Investment in Resilience

Potential Steps to Catalyze Resilience Investment

Participants discussed a number of potential actions to address some of the challenges mentioned above, and then prioritized these based on factors including feasibility and scale of impact. **Participants prioritized the following action paths:**

- Repurposing COVID funds to help fund the My Safe Florida Home program;
- Education on tort reform successes;
- Engaging government-sponsored enterprises, such as Fannie Mae and Freddie Mac, to support home hardening;
- Collecting and sharing property risk reduction data via a central data repository
- Benchmarking against the FORTIFIED building standard,
- Exploring use of the PCRAM methodology to assess property investments.

Other potential action paths identified by participants included:

- Seeking clarity on how local governments can access STORM Act revolving loan funds;
- Creating/utilizing catastrophe bonds index funds;
- Expanding use of catastrophe bonds among Florida insurers.
- **Creating a Climate Resiliency Academy** to help resilience officers and others in government better understand financial opportunities and better communicate their communities' value propositions to would-be investors.
- **Engaging the Community Bankers Association and other lenders** in discussions about the value resilience investment and what they can do to promote it;
- Advocating for **increased staff and capacity for the Florida Office of Insurance Regulation** to enhance its ability to partner on some of these initiatives.

[1] A risk bursary is a form of funding the insurer provides to the insured for risk management initiatives.
[2] Other risk-mitigating development interventions mentioned include expanded on-site water capture, larger setbacks to allow for more street-tree canopy, higher energy efficiency, or more public open space.

Risk Mitigation Interventions

A variety of improvements to building and community design can reduce the risk of flooding and extreme weather events. By modeling the risk reduction impact of such investments, clarifying their effect on premiums, and by providing incentives such as discounts and bursaries[1], the insurance industry can help catalyze large-scale shifts in design practices.

For instance, higher ground floors reduce the risk of flooding. (Furthermore, if the floor-to-ceiling height of the ground level is large enough, the building's ground floor can also be raised relatively easily in the future to adapt to higher water levels over time without compromising building function.) Such interventions significantly reduce long-term risks for buyers, but may be opposed by developers because of the short-term costs. As such, it may come down to state or local governments to either incentivize or require developers to invest in risk mitigation measures. Governments can impose zoning requirements (sticks) that mandate developers to increase in-ground floor height, and the floor-to-ceiling height of the ground level. Governments also can incentivize developers to invest in these risk mitigation interventions by rewarding them (carrots) with increased development capacity – meaning more square footage, more units, more floors or height, for example – in plans with higher ground floor elevation. [2]This strategy can yield wins for developers, investors, neighbors, and municipalities – and, in turn, the insurance market.

SUMMARY OF DISCUSSIONS CREATED WITH PARTICIPANTS

Catalyzing Investment in Resilience

Lastly, several forum discussions addressed the need for more and better property-level data – this would help both insurers and investors better assess property-level risk and bring adequate capital closer for property-owners in need. As detailed in the section of this report about Modeling & Data, participants proposed **a cross-sector working group that would develop strategies to connect data on property-level risk mitigation measures with insurance rate models**, in order to create opportunities for communities and governments to optimize their risk reduction/resilience investment spending.

For more examples of risk-mitigating interventions, see:

Insurance Institute For Business & Home Safety (IBHS)

- FORTIFIED Overview in Supplemental Materials appendix
- Estimating the Economic Value of FORTIFIED Multifamily Construction
- Economic and Fiscal Impacts of the FORTIFIED Homes on Baldwin and Mobile Counties and the State of Alabama

Smart Home America

- Coastal Construction Code Supplement
- Resilient Housing Planning Guide

Applied Research Associates (ARA) 2024 Residential Wind-Loss Mitigation Study (see Supplemental Materials) recommends adding wind mitigation certifications as a line item in the Florida insurance regulator's "1802 form," as used in inspections, where it asks for building code. The report mentions IBHS's FORTIFIED program as an example of a wind mitigation certification. The report also recommends that state policy should accept such FORTIFIED designations as proof that mitigation features required on the form were installed and installed correctly.

Assessing Innovative Applications of Existing and Emerging Insurance Tools

For Florida property-owners, particularly homeowners, the predominant form of insurance is **indemnity insurance** – where the property-owner pays their insurer a premium in exchange for the promise they will receive a payout in the event of damage to their property, subject to policy terms and conditions. However, a number of summit participants agreed it would be valuable to explore other forms of insurance and risk transfer. They saw these as **potential alternatives to increasingly costly property indemnity insurance**; they also noted that **some forms of alternative risk transfer can provide greater flexibility around how post-disaster payouts are used** (e.g. for fuel and generators, to cover lost income or higher rent), delivering targeted benefits to under-insured and uninsured populations, including renters. In four sessions across two days, participants (a) identified a **range of insurance solutions and products whose applicability in Florida could be further explored** and (b) homed in specifically to discuss the **pros and cons of parametric insurance, what gaps it might fill, and barriers to its use.**

New risk transfer vehicles and new applications of existing ones

Indemnity insurance is the form of property insurance most commonly purchased by Florida homeowners and businesses; as described above, under an indemnity policy, a property-owner pays their insurer a premium in exchange for the promise to cover losses sustained in the event of qualifying damage to their property. When such damage occurs, the policyholder will then go through a claims process in which they file a claim and their insurer or a public adjuster assesses the damage. The insurer then makes a payout based on the damage assessment, potentially after some back-and-forth deliberation with the policyholder and adjuster.

However, there are other forms of insurance and other risk transfer vehicles that might be explored to help Florida property-owners. Currently, most of these are predominantly used by large companies and some large public entities (e.g. counties, cities and coalitions of regional governments) although some solutions are available for homeowners, renters and small businesses. There is a great deal of attention on one of these risk transfer options – parametric insurance – as a vehicle that, when scaled appropriately and deployed under the right conditions, might be relevant and useful for individuals and smaller organizations, not only large ones. Parametric insurance will be discussed in detail later in this section.

Assessing Innovative Applications of Existing and Emerging Insurance Tools

For now, the full list of insurance and risk transfer tools identified by summit participants to consider exploring further include:

Risk transfer tool	Form and function
Captives	A captive insurer is wholly owned and controlled by its insured. Its primary purpose is to underwrite the risks of its owners (which can include third-party risk, too) and return underwriting profits to its owners.
Insurance-linked securities (ILS)	Insurance-linked securities are financial instruments whose value is contingent on a pre-defined event. For investors, insurance-linked securities are attractive because they are believed to have minimal correlation with wider financial markets and thus provide an opportunity for portfolio diversification. They also often have attractive rates of return. Approximately one-third of ILS are catastrophe bonds (see below).
Catastrophe bonds (cat bonds)	A catastrophe bond is an insurance-linked security that pays out when a predetermined catastrophic event occurs, such as an earthquake of a 7.0 magnitude or a hurricane that causes a pre-established amount of financial loss. Catastrophe bonds generally have a maturity of 3-5 years.
Endorsements (riders)	An endorsement is an additional term added onto an original insurance policy, changing the original scope of coverage.
Managing general agent (MGA)	A managing general agent is a specialized intermediary to which an insurer has given underwriting authority for specific, pre-agreed risks. MGAs often have expertise in non-standard or niche types of insurance, and can provide greater efficiency for insurers, brokers and insureds.
Excess & surplus lines insurance (E&S)	Excess & surplus lines insurance provides coverage for risks that "standard" insurers will not cover. Typically, these non-standard risks are large, complex or have a significant loss history. E&S insurers are regulated differently than "standard" insurers. This gives them greater flexibility around the risks they underwrite. However, if an E&S insurer goes insolvent and is no longer able to pay claims (which is rare), the state will not step in to pay outstanding claims from its insurance guaranty fund.
Force-placed insurance (collateral protection insurance)	Force-placed insurance (sometimes known as collateral protection insurance) is placed by a lender on a mortgaged property when the property-owner's insurance has lapsed or not been renewed. Force-placed insurance allows the lender to protect the financial value of the asset in the case of loss and damage, and generally has limited coverage for the asset owner. Force-placed insurance tends to be significantly more expensive than a general property insurance policy.
Multi-year policies	Multi-year policies, sometimes known as long-term insurance, are insurance products that provide a guaranteed price (or ceiling/floor price) for a time period between 3 and 25 years. These policies are very uncommon, and most of those that do exist (largely commercially, often for the construction industry) tend to use a 3-year term.
New risk pooling arrangements across geographies / perils	Risk pooling arrangements can take many forms. One example is the Caribbean Catastrophe Risk Insurance Facility (CCRIF), whose members are national governments and utility companies in the Caribbean and Latin America. These risk pool participants pay premiums into a central pot of capital, in exchange for an insurance product for disaster response.The geographic diversity of the risk in the pool, and the retention of some risk, enables it to be underwritten by global reinsurers at a lower rate than any of the pool members could achieve alone.
Parametric insurance / parametric microinsurance	Parametric insurance differs from traditional indemnity insurance in that it pays out not based on the amount of damage to a property, but based on whether an event (e.g. a hurricane) surpasses a predetermined threshold of intensity (a "trigger", such as maximum windspeed). Parametric microinsurance is an insurance policy with low premiums and coverage, typically designed for lower-income households or small businesses (e.g. smallholder farmers in developing countries).
Blended instruments, e.g. parametric + bonds	Blended instruments combine different types of insurance coverage and financial instruments into one package to provide curated risk coverage. For example, a government bond could be complemented by a parametric insurance policy that, in the aftermath of a destructive hurricane, provides the government with funds to cover its obligations to lenders. Adding insurance cover to the bond helps ensure the government can continue making regular payments on its debt even as it simultaneously pays for post-disaster recovery. The term 'blended finance' refers to financing structures in which strategic investment of public funding is used to attract private finance. A government bond could become an example of blended finance if, for example, a donor organization provided the government funding to repurchase the bond and issue a new one with a lower outstanding debt balance and longer repayment period.

Assessing Innovative Applications of Existing and Emerging Insurance Tools

Since many of these solutions are targeted at large entities (e.g. companies and governments), participants recommended exploring whether there are creative ways for municipalities and nonprofits to collaborate with major employers on designing and implementing insurance programs that benefit local communities. Participants also strongly emphasized that before pursuing any particular risk transfer product or program, governments, industry organizations and nonprofits must have a clear understanding of what specific gap the product or program is intended to fill.

In Miami-Dade County, participants highlighted a need for risk transfer programs and vehicles that:

- Better connect risk reduction and risk transfer;
- Respond to non-property losses, e.g. business interruption and lost income;
- Provide liquidity for immediate post-disaster needs, such as food and hotel costs;
- Embed parametric microinsurance in loans to small businesses, e.g. loans made through community development financial institutions (CDFIs);
- Aggregate risks of individual homeowners, renters and/or small businesses;
- Focus on responding to the needs of lower-income residents;
- Support pre-event preparedness and loss reduction; and
- Substitute/complement municipalities' self-insurance.

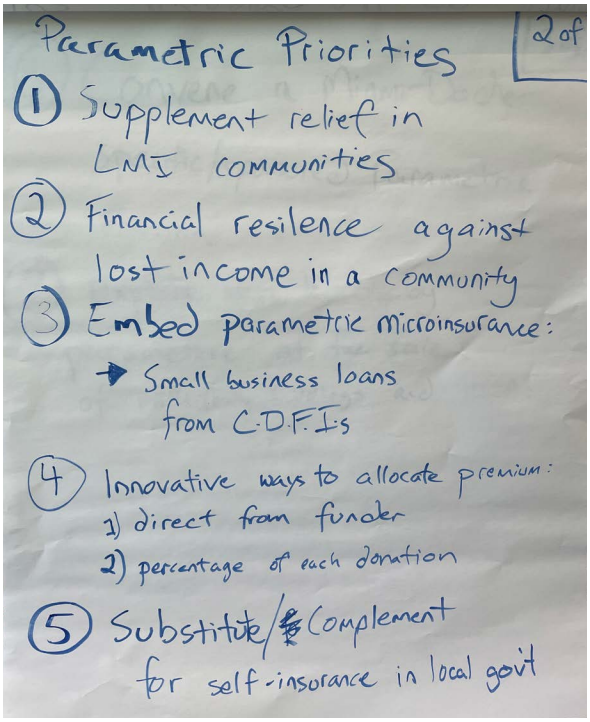
Parametric insurance

See also: Affordable Housing

In contrast to indemnity insurance, **parametric insurance** pays out not based on the amount of damage to a property, but based on whether an event (e.g. a hurricane) surpasses a predetermined threshold of intensity (a "trigger", such as maximum wind speed). Since its infancy in the 1990s, parametric insurance has largely gained attention through its use in multi-country risk pools that provide predominantly lower-income countries capacity to respond to the impacts of hazards such as hurricanes, earthquakes and typhoons. Today, it is also part of risk transfer programs for governments and large corporations; additionally, there is **growing investment in exploring parametric insurance / "microinsurance" for homeowners and small businesses** in both developed and developing countries, including a 2023 pilot focused on helping lower-income New Yorkers recover from flooding. Also in 2023, insurance industry organizations, local government, nonprofits and philanthropy partnered to assess the feasibility of parametric insurance policies to fill protection gaps in three Miami-Dade neighborhoods. Following on from this work, The Miami Foundation purchased a parametric insurance policy that, when triggered, provides the foundation with additional funding it can disburse to nonprofits to support hurricane recovery efforts in the local community. (See p. 26 for more information.)

SUMMARY OF DISCUSSIONS CREATED WITH PARTICIPANTS

Assessing Innovative Applications of Existing and Emerging Insurance Tools



Discussions at the Miami-Dade Property Insurance Strategy Forum revealed **different perspectives** that call for **additional research, deliberation and pilot projects**. In general, participants agreed that **parametric insurance is not a panacea** and that it **cannot be compared like-for-like with indemnity insurance**, as they are different products, though they can be complementary. Parametric insurance has advantages such as **relatively fast payouts** (typically days or weeks, as there is no claims adjustment process), **flexibility in how payouts are used, transparency around payouts, and reduced risk of fraud and litigation. However, it is not inexpensive and it carries "basis risk"** – the risk that the predetermined amount the policy pays out will be either too much or too little to cover the loss incurred[3]. Moreover, parametric insurance faces **regulatory complexities**: for parametric insurance to be considered insurance at all, it must fulfill a requirement to prove that it is compensation for a loss, in order to be differentiated from gambling or financial speculation. Further, parametric insurance programs designed to benefit residents rather than large organizations might **require an intermediary**, since there are few, if any, firms offering direct-to-household property microinsurance products in the United States at the moment[4]. An example of this would be a nonprofit or startup to help write policies, or a nonprofit that can buy a policy with named beneficiaries.

[3] Indemnity insurance also carries basis risk, but on the downside only – i.e. with indemnity insurance, there is only a risk that the insurance policy will not be adequate for the loss incurred. The policy won't pay out if there is no loss, therefore there is no upside basis risk and it is not possible for the policyholder profit off their insurance policy (something that worries regulators).

[4] There are a number of parametric microinsurance programs designed to benefit people in developing countries whose incomes and ability to earn a livelihood are affected by extreme weather hazards. For example, the Kilimo Salama program in Kenya pays out to smallholder farmers in the event of drought or excessive rainfall. An extreme heat micro-insurance program in India provides female street vendors payouts to help them cope with the effects of extreme heat and income they may lose as a result. A parametric program in the Philippines provides replacement income to fisherpeople when ocean conditions are too dangerous for fishing; the program has now been expanded to Indonesia and Honduras. None of these programs focus on property insurability challenges of the types seen in the United States and other developed countries, but lessons learned from these efforts can and should inform thinking around parametric products in the developed world.

Assessing Innovative Applications of Existing and Emerging Insurance Tools

The process of establishing a mass market parametric insurance program or entity in Florida would require significant legwork. Most parametric policies targeted at households have **modest payout limits**, largely due to concerns about the legal restrictions that forbid policyholders from making a profit when their insurance pays out. As such, these **micro-policies also tend to have lower profit margins and may not be enticing to insurers** unless they can be guaranteed of scale.

However, many participants felt strongly that **a well-structured parametric insurance program that fills a specific protection gap could benefit Florida property-owners and renters**, particularly those for whom indemnity insurance is prohibitively expensive. (For more on this, see the summary of discussions on insurance and affordable housing.) Participants recommended **additional education for local and state government officials** on parametric insurance and its applications, as well as further exploration of **potential parametric partnerships between local government and industry**, and further **consideration as to how parametric policyholders/beneficiaries could be paid in the aftermath of a disaster**, e.g. whether they would be required to have a bank account or whether apps such as Venmo or CashApp might be used.

The Miami Foundation's Parametric Insurance Policy

To strengthen disaster resilience in Miami-Dade County, The Miami Foundation has introduced parametric insurance to provide immediate financial relief to local nonprofits following hurricanes and other natural disasters. Unlike traditional insurance, this parametric policy triggers payouts based on specific conditions—such as wind speed and storm proximity—eliminating lengthy damage assessments and claims processes.

Key Features:

- **Triggers:** Payouts are activated based on hurricane intensity within two zones around Miami-Dade County:

  a. 25-mile radius:
  Category 3: 15% payout
  Category 4: 50% payout
  Category 5: 75% payout

  b. 50-mile radius:
  Category 5: 25% payout

- **Rapid Payout:** Funds are disbursed within 10 days of activation, ensuring immediate resources for nonprofits to initiate relief efforts.
- **Nonprofit-Focused:** Payouts are directed to The Miami Foundation, which swiftly grants funds to local nonprofits for disaster relief and community recovery.
- **Activation:** Payouts are triggered by the NHC data, ensuring objective and prompt funding disbursement.
- **Miami Disaster Resilience Fund (MDRF):** This parametric insurance policy enhances the MDRF, a permanent and revolving fund that supports disaster preparedness and equitable long-term recovery, amplifying the Fund's capacity to provide rapid financial assistance to nonprofits.

Through this policy, The Miami Foundation ensures faster recovery efforts led by trusted community-based organizations. With access to funds within days of a hurricane, organizations can reduce financial strain during recovery, utilize funds for diverse disaster-related needs, and strengthen their response capabilities. By integrating this innovative term approach with the MDRF, we enhance our ability to support frontline organizations critical to Miami-Dade's long-term resilience.

Enhancing Collective Intelligence Through Better Data and Modeling

Insurance premiums reflect the levels of anticipated risks: the greater the risk of loss for a given property, the higher the property insurance premium that an insurer is likely to charge. Throughout the Forum, participants discussed various ways to **reduce property risk in order to bring down insurance costs**. A common theme throughout all of these discussions was the challenge of producing, sharing, and more effectively using data to understand levels of risk amid uncertainty.

Throughout Florida, property owners are making investments to make their homes and businesses more resilient to hurricanes, e.g. by strengthening exterior sheathing or enhancing the connection between their roof and walls. Local and state governments are investing in such measures, too, e.g. through the My Safe Florida Home grant program. **Such investments can reduce the potential for storms to damage a property and result in insured loss; however, these investments currently do not always result in corresponding reductions in premiums.**

Most participants thought that **progress could be made by improving processes of collecting data on risk mitigation measures, and enhancing models to account for their benefits**. There was a general consensus that this would require better, more intentional collaboration among all actors in the ecosystem. Across 10 working group discussions, forum participants explored **limitations and opportunities for risk models and data supply to impact premium pricing and underlying risks**. Drawing on experience from across insurance and modeling, as well as policymaking, development and housing advocacy, participants identified **key gaps in models and data**, and then identified potential opportunities to fill the gaps by **improving the data supply chain, enhancing data collection and data sharing, broadening the use of catastrophe models, and connecting risk mitigators, modelers and insurers.**

Gaps in Models

Participants in the forum highlighted several gaps in catastrophe models used by insurance companies to inform pricing.

- **Not all companies have the capability to develop location-specific models, and effective models are entirely unavailable for some geographies** due to historically low insurance market penetration or a lack of data collection and detailed hazard modeling for the region.
- **Different models interpret climate change trends differently**, which can lead end users to overestimate our understanding of evolving climate risks.
- Current models are reactive, in that they describe what currently exists – but not normative, in that **they don't facilitate understanding of what is needed to make entire communities insurable.**
- Models struggle to **account for the risk-reduction benefits of nature-based solutions.**
- In Florida, there has also been **difficulty modeling and pricing the impacts of legal issues, such as fraud.**

Enhancing Collective Intelligence Through Better Data and Modeling

One of the most challenging problems with Florida's insurance models is that **flood and wind modeling is not typically integrated** – which results in confusion, administrative costs and even litigation that can emerge when it's unclear whether wind or water caused property damage. This observation suggests a clear set of improvements that can be made to improve modeling and the market as a whole – however, participants also observed that **change management is a consistent challenge with models**. It takes a relatively long time for models to be developed and updated. However, once such changes go into effect, the view of a property-owner's risk – and therefore their premium – can change instantly.

Gaps in Data

Forum participants identified several data gaps affecting catastrophe models and insurance pricing. Fundamentally, participants emphasized that **inconsistent and/or poor-quality data can lead to inaccurate risk modeling, increased uncertainty, and higher cost estimates, resulting in higher premiums**. Specific challenges include:

- **Limited data on "secondary modifiers"** (property-level characteristics such as roof attachment and property frame-to-foundation connections)
  - Specific data needs include better information on house construction, mitigation features, innovations in construction, and the impact of development on floodwater management. Often, this data is too aggregated to be of use in protecting single properties against hazards.
  - The Florida Office of Insurance Regulation's form for collecting information on secondary modifiers and risk mitigation measures (Form 1802) is outdated, though updates are in progress, and a new form specifically focused on condos is being created.
  - New data collection methods like drones and satellite imagery show promise but still fall short in observing secondary modifiers.

- **Difficulty accounting for some community-level attributes that impact exposure to a hazard, e.g.:**
  - Nature-based solutions that deliver risk mitigation benefits, e.g. bioswales
  - Wind tunnels in urban areas
  - Human decisions that impact risk, e.g. water release from dams

- **Inconsistent data about complex hazards, e.g.:**
  - Rapid storm intensification, and near-term climate risks
  - Cascading hazards, such as windstorms and floods in Florida or hurricanes and wildfires in Hawaii
  - Divergent estimates of tail risks and the effects of climate-driven changes on critical infrastructure, such as saltwater intrusion into groundwater

Enhancing Collective Intelligence Through Better Data and Modeling

Participants noted that in some cases, **datasets already exist** that could help fill some of these gaps. In one session, participants began to **map out the data supply chain**, doing initial work to identify data that is already available at the aggregate/community level, the micro/property level, and the macro level. While time constraints precluded completion of this work during the forum, the initial effort highlights that **data sharing across sectors, particularly among insurers, lenders, and local and state government**, could help all parties make progress on meeting their data needs and become more aligned in their understanding of risk at the property and community level. This insight can inform coordinated action across jurisdictions – including potential federal action such as the recently proposed "Federal Commission on Weather Risk Data and Modeling." The 'data supply chain improvement' objective is addressed by several of the proposed actions and next conversations described below.

Improving and Expanding Catastrophe Model Use

Forum participants flagged several gaps in the use of catastrophe models, particularly emphasizing that while models are useful tools for estimating risk, they are not perfect and **should be supported by field engineering and site assessments**, as well as through **enhancements to data collection and data sharing** (see above). Participants noted that **different insurers and reinsurers have different risk appetites**, leading to different pricing decisions even in the unlikely event of identical model outputs. Participants also reported that **lenders may not consistently use models, let alone in the same way insurers do**. Consequently, even if catastrophe models show limited losses for a property, the lender may still require the borrower to take out insurance that would cover a total loss. To this end, one working group focused on how to **broaden the use of catastrophe models** through education and policymaking, with the goal of catalyzing shared understanding and cross-sector responses to systemic risks that transverse insurance, finance and real estate.

Participants also pointed out that **models are not typically used to identify the most impactful risk-reduction measures**, and sometimes they are used inappropriately. In particular, **catastrophe models are more effective as portfolio tools rather than for assessing risks to individual properties**. Additionally, while models influence behavior among underwriters, brokers, insureds and others, **the exact nature of this influence is unclear.**

Addressing Gaps in Data and Model Use

Following the discussions identifying modeling and data gaps, participants highlighted a number of **proposed actions to enhance model use and improve availability and quality of data** on hazards, properties and community-level adaptation/resilience measures. These actions do not directly respond to all of the **gaps described above. Rather, they target gaps that have the greatest bearing on whether models effectively account for risk mitigation and resilience investments** by property owners and governments.

Enhancing Collective Intelligence Through Better Data and Modeling

The recommended actions are as follows:

- **Create an open source, co-managed data repository**
  Building on the insight that **useful datasets exist, but are not shared, across sectors**, participants proposed creating a data repository that could provide **standard modeling data by peril**, as well as **information on property-level characteristics**, potentially benchmarked against building codes or the Insurance Institute for Business and Home Safety's FORTIFIED standard. Participants envision this effort **existing outside of industry** and **be led by a rotating management board**, comprising representatives from local and state government, modelers, insurers, reinsurers, real estate, academia, and federal bodies such as FEMA or NOAA. A follow-up conversation is scheduled among interested participants to discuss how to take this idea further.

- **Develop a research agenda to fill data gaps**
  Significant gaps exist in **understanding and quantifying the risk reduction benefits of resilience investments**, including nature-based solutions, in Florida and beyond. In response, participants proposed developing a **research alliance among Florida universities, focused on insurability**. Participants proposed **partnering with government** – for instance, the Florida Building Commission might fund specific research on adapting the building code to better address rainfall flooding and sea-level rise – and they also proposed **working with the insurance industry to identify research needs**. A potential agenda of work might include **predicting missing data from available data using multivariate averages**, developing **damage functions to account for the impact of risk mitigation measures, improving integration of flood and wind models**, and **courses on municipal law, insurance products and policy**, as well as **embedding an insurance curriculum within university programs on climate change**. A follow-up conversation is scheduled among interested participants to discuss how to take this idea further.

- **Connect risk mitigators, modelers and insurers**
  To make progress on the challenge that insurance industry models do not always account for property- and community-level investments in resilience, participants proposed creating a **cross-sector working group to develop and pilot solutions in South Florida**. The group would bring together people who work on risk mitigation/climate resilience in local government, with insurers and modelers to **enhance community and government use of risk data to optimize investment**, and **pilot connecting risk mitigation measures to Florida insurance rate models for two communities**. A follow-up conversation is scheduled among interested participants to discuss how to take this idea further.

Over two days, the Forum brought together over 70 stakeholders, convening over 40 dialogues about critical issues relating to property insurance challenges in Florida. Credit: Miami-Dade County

Educating and Engaging Consumers and Insurance Agents

Florida's insurability and risk challenges are **systemic** and **polycentric** in nature: there are multiple interconnected causes, and multiple different actors whose actions influence insurance pricing and risk exposure.

For instance, a homeowner's premium might reflect not only their home's location and physical attributes, but also the state building code, the costs of reinsurance, the impacts of inflation, and the extent to which insurance models account for investments in fortification and other resilience measures that have been made by the homeowner, their local government, community, etc.

These kinds of interdisciplinary challenges require collaborative responses that bring together re/insurers, insurance agents, modelers, state regulators, local government, developers, builders and many other actors. A key objective in such cross-sector collaboration is educating these diverse actors about one another's challenges and opportunities.

For many participants, the Forum provided opportunities to hear firsthand the perspectives of people whose decision-making has direct impacts on their 'worlds'. However, participants agreed there is a need for additional education and sustained interdisciplinary dialogue, in order for all stakeholders to gain a holistic understanding of premium pricing and risk drivers, and to pursue more effective, polycentric responses. A main focus of education discussions at the forum was **the need to engage and educate insurance agents, as the primary risk management professionals with whom homeowners and small businesses interact.**

Insurance Agent & Consumer Education – Gaps & Opportunities

Forum participants flagged that currently, **the work environment for insurance agents tends to be transactional** and focused on insurance policy sales, with little time available for agents to speak with property owners about risk mitigation activities or flood insurance. When agents (and insurers) do communicate on risk mitigation, they **tend to emphasize only activities that are either required as a prerequisite for coverage, or linked to known rate reductions.**

On the consumer side, forum participants noted that **property owners often have only a limited understanding of insurance** – they may not understand how a deductible works, let alone have awareness of property-level risk mitigation measures they can take to potentially reduce their insurance premiums. Many **make their insurance purchasing decisions based mainly on comparing the costs of different policies**, and **lack awareness of initiatives such as the My Safe Florida Home and My Safe Florida Condo programs**, which provide grant funding for consumers to harden their homes against storms.

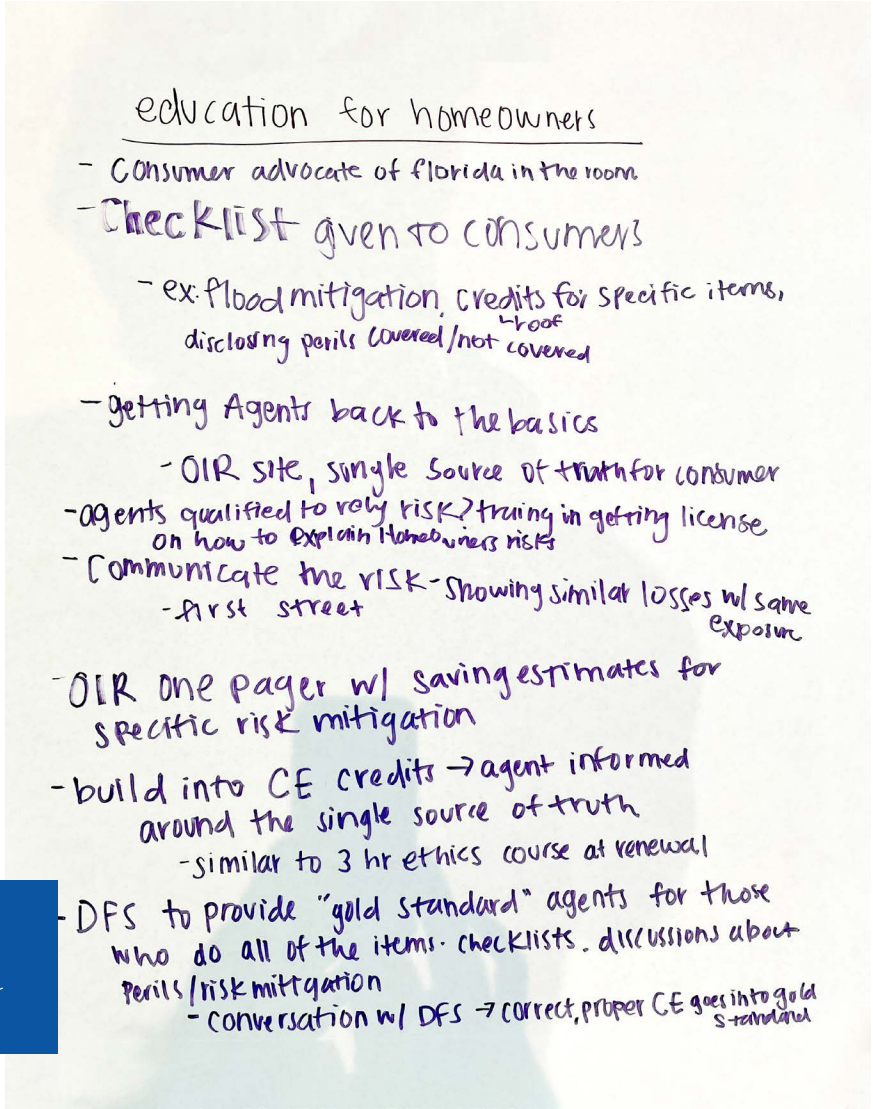
Educating and Engaging Consumers and Insurance Agents

Forum participants recommended exploring the following actions to engage insurance agents and promote consumer education:

- Develop a **one-page checklist that agents talk through with consumers** at the point of sale to include: a brief explanation and example of how a deductible works, information on flood insurance and flood mitigation, examples of risk mitigation activities applicable to Florida homes, condos and businesses, and disclosure of perils that are covered and not covered.

- **Qualify and incentivize agents to explain property risks and risk mitigation**, e.g. through **continuing education credits, test questions or licensing** and by creating a **'gold standard' recognition** administered by the Department of Financial Services, for insurance agents who meet a set of criteria demonstrating their commitment to educating property-owners on risk and risk mitigation.

Forum participants noted that these activities will likely require engagement and coordination among the Department of Financial Services (whose remit includes licensing insurance agents), the Florida Office of Insurance Regulation (whose remit includes identifying risk mitigation activities applicable to Florida homeowners and businesses), Florida Citizens Property Insurance Corporation and the Florida Insurance Consumer Advocate, as well as trade associations such as the Florida Association of Insurance Agents. A next conversation is scheduled among interested participants to discuss how to take these ideas forward.



Understanding risk is complex and challenging. Some discussions focused on the need for greater education, and considered where the responsibility for education should sit – at a homeowner, agent, or government level?

Educating and Engaging Consumers and Insurance Agents

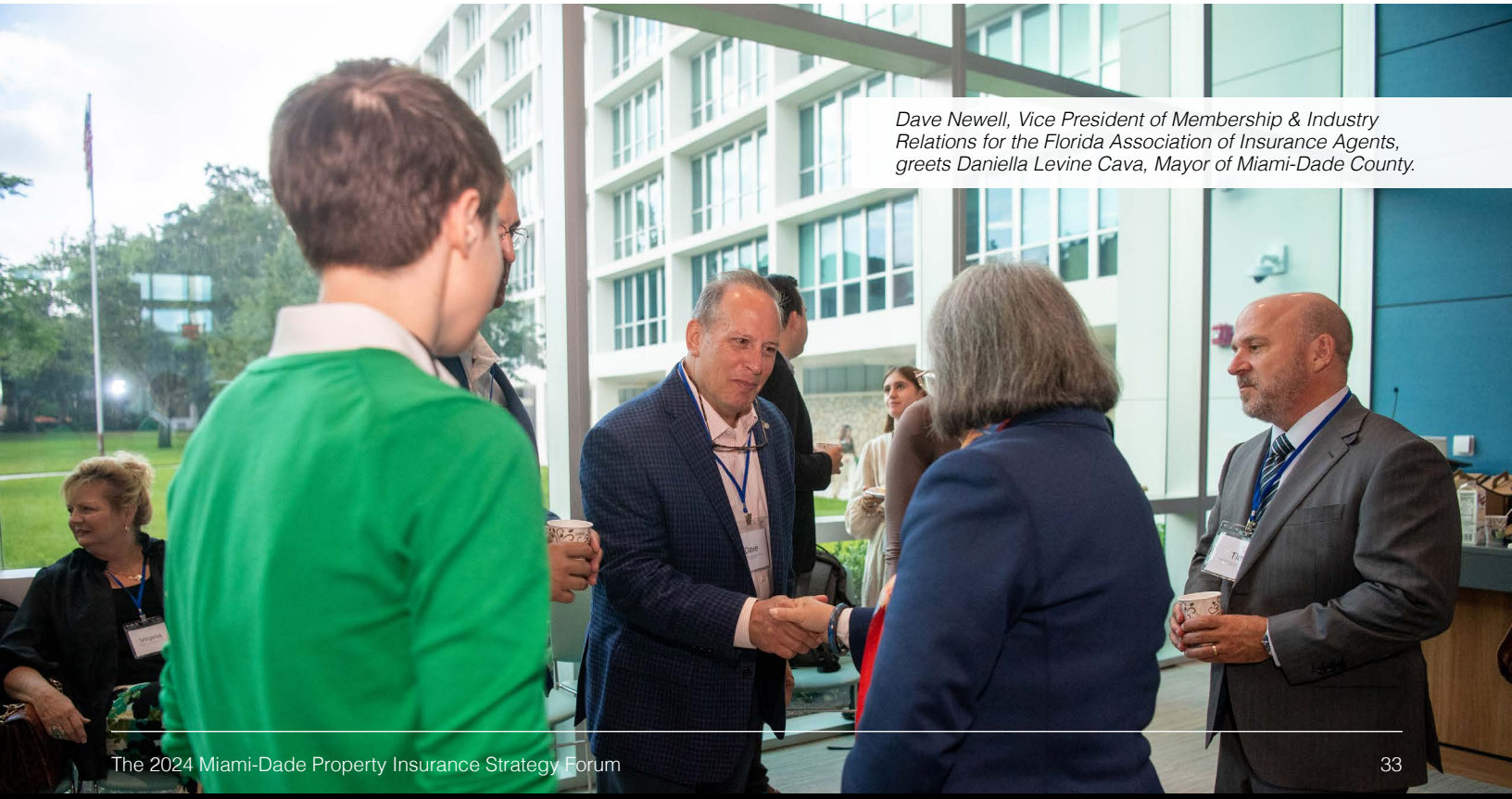
Other Education Gaps & Opportunities

In addition to educating insurance agents and consumers on risk mitigation opportunities, participants highlighted the following education needs:

- Local governments often take action to educate residents on risk-reduction measures (for example, in advance of a hurricane, many Florida governments circulate communications that encourage boarding up windows and storing outdoor furniture). But local governments do not necessarily educate residents on the importance of insurance for pre-storm preparedness and climate change adaptation.
  - Are there opportunities for **state and local governments and the insurance industry to partner in communicating the value of insurance?**
  - What **additional education on insurance would benefit local government staff** in their efforts to build community resilience and adapt to climate change?

- Catastrophe models are widely used by insurers and reinsurers to assess properties' risk and insurability, but rarely utilized by other finance actors, e.g. lenders. **Participants recommended educating lenders, builders, community planners and economists on catastrophe risk models**, as part of a broader mandate to catalyze shared understanding and cross-sector responses to systemic risks that transverse insurance, finance and real estate.

- Academic researchers, including forum participants, have expressed interest in conducting research that helps address Florida's insurability challenges. **What topics and/or data needs could their work help address?**



Dave Newell, Vice President of Membership & Industry Relations for the Florida Association of Insurance Agents, greets Daniella Levine Cava, Mayor of Miami-Dade County.

SUMMARY OF DISCUSSIONS CREATED WITH PARTICIPANTS

Local Government's Role in Property Insurability

Local government is on the front line of Miami-Dade County's property insurance crisis. **They experience rising costs firsthand as insurance customers and hear from constituents about difficulty getting or paying for insurance**. In addition, they are responsible for local risk management planning and resilience investments. For local governments and the communities that they serve, **increasing hazards and rising insurance costs are an existential** threat. If property values decline, people or businesses move away, and revenue from property taxes fall, local governments may not be able to meet the needs of their remaining residents.

Discussions centered on a few key points:

- The need to support residents and communities to make resilience improvements.
- The opportunity for insurers and local governments to share data (especially on property-level characteristics).
- The tension between the need to signal the real levels of risk to properties, and the financial strain that unaffordable insurance places on residents.

Participants noted that the National Flood Insurance Program (NFIP) has a roadmap for how mitigation can reduce premiums, codified in the Community Rating System. The same is needed in the private property insurance market, for both communities and property owners. IBHS, the Insurance Institute for Business & Home Safety, could have a role in this work, building on its FORTIFIED standard for resilient construction. **A roadmap that links risk mitigation activities to premium reductions would encourage homeowners and local governments to increase their investments in risk reduction and resilience**. Such investments are harder to make a case for if it's not clear that they will contribute to premium reductions.

State level decisions can enable or constrain local governments' ability to influence the built environment and insurability. For example, Florida's insurance marketplace is regulated at the state level, by the Department of Financial Services and the Office of Insurance Regulation. Additionally, programs that provide homeowners and businesses with funding for risk mitigation – most prominently, My Safe Florida Home – are administered by the State, and funding is determined by Florida's Legislature. Discussions identified the need to **update the state form used to collect information on risk mitigation measures implemented by property-owners (Form 1802); the Florida Office of Insurance Regulation is currently working on enhancements to this**. Participants indicated it would be useful to aggregate the data collected from this updated Form, and share it with insurers and local governments, to ensure consistent understanding and increased ability to account for property-level risk mitigation measures.

Adoption and enforcement of more stringent code and rules – including property-level risk disclosure – is critical for safety and insurance affordability. However, this strategy is difficult to successfully implement. For example, the City of Miami adopted a resilience code for new construction and worked with RMS, one of the primary risk modeling companies used by Florida insurers, to model the benefits. To date, Miami residents have not (yet) seen the benefits from insurers in reduced premiums. For more analysis of changes that can help ensure resilience investments are reflected in premium pricing, see the Data and Modeling Summary.

SUMMARY OF DISCUSSIONS CREATED WITH PARTICIPANTS

Local Government's Role in Property Insurability

Key Challenges (and Opportunities) for Local Government

- Local governments are well-positioned to make significant investments in resilience, but the impact of these investments are not typically accounted for by insurers or modelers.
- Insurance price modeling is a "black box" that is hard to understand or influence.
- Grant programs like My Safe Florida Home are good but complicated for residents, and do not have enough money to meet demand (only $200M statewide)
- Residents and agents need education on the benefits of risk mitigation in general, and these programs in particular.
- Local governments are better positioned than state or federal government to gather better, more detailed data – especially about property-level characteristics – and are interested in working to get it used. Digital permitting helps.

Key Questions

- How do governments help residents and businesses cope with rising costs of property insurance premiums?
- What needs to happen to ensure that risk reduction investments made by local governments and their residents translate into reduced insurance premiums?
- What kind of business case analyses are needed in order to demonstrate to insurers and reinsurers the loss reduction benefits of investments in resilience and adaptation, including in public space?
- How can local governments develop equitable strategies that support the diverse experience across populations with very different needs and capacities?

Suggested Actions

- Share information and pool programs through a **pre-disaster risk mitigation resource center for homeowners**. Work with agents to do this.
- Provide education on resilience benefits for reinsurers, insurers, and residents.
- Provide property level risk disclosure to municipalities at point of sale.
- Introduce FORTIFIED standard as a building code for affordable housing, to set clear benchmarks that promote resilient development.

SUMMARY OF DISCUSSIONS CREATED WITH PARTICIPANTS

State Government's Role in Property Insurability

The State of Florida currently plays multiple roles in Florida's property insurance system. The State Legislature (notably its Banking and Insurance Committee (BI) but also the Select Committee on Resiliency) sets the legislation that governs insurance markets; Citizens Property Insurance Corporation is the state insurer of last resort; the Florida Office of Insurance Regulation regulates insurance companies; and the Department of Financial Services regulates insurance agents. Each of these roles has a different purpose and mandate, and taken together, they have significant influence over insurance affordability and risk mitigation in Florida.

Today, many property owners in Florida face exorbitantly high insurance rates, and many communities don't have the protection they need from the physical risks Florida faces. Given the important role of state bodies here, the State of Florida sessions were well attended at the Forum. Over the course of three discussions focused specifically on state government, as well as additional discussions on data and education, participants identified what they believe to be state bodies' goals for property insurance markets, as well as key challenges, themes, and actions to promote property insurability and risk reduction moving forward.

There are many overlapping goals for property insurance markets in Florida

As the State of Florida plays many roles in insurance markets, there are a range of desired outcomes. A key goal is an overall reduction in property insurance premium costs.

Several other goals discussed had a focus on the role of Citizens, the insurer of last resort for Florida. One such goal is the depopulation of Citizens, such that Citizens can be the State's insurer of last resort, alongside the introduction of new carriers into the Florida market. Key to this will be a pricing structure for Florida Citizens that does not interfere with market competition; there might be something to learn from Louisiana Citizens, whose pricing structure ensures the cost of last-resort coverage remains above the cost of coverage in the private market.

There were discussions about the capabilities and capacities needed by state-level bodies to better deliver their mandate and use policy and legislative tools to support insurability outcomes in the Florida market. These included greater resources and teeth for FLOIR as an organization and greater state capability to rate evaluations for a rate increase in an effective and efficient way.

Further desired outcomes include less litigation; a better-educated market who know how insurance and risk work in Florida; and more innovation in the utilization of technology for better data, to inform new approaches and models.

State Government's Role in Property Insurability

Forum participants, Lauren Ordway Evans (left), representing the Southeast Florida Regional Climate Change Compact and the Institute for Sustainable Communities, and Francesca de Quesda Covey, Miami-Dade County Chief Innovation and Economic Development Officer. Credit: Miami-Dade County

Key challenges for state bodies

- **Affordability needs to be urgently addressed**. 'For constituents and homeowners the shift in lowering rates isn't happening fast enough - although there are nominal rate decreases happening - just not fast enough for affordability'

- **Citizens' mandate contains a contradiction**. Citizens' double mandate of ensuring both property insurance availability and risk-reflective pricing creates a challenging balance in a state where development in risky areas is ongoing, as inflation is driving up total insured values, and climate change intensifies hurricanes.

- **Coordination is needed between different state-level bodies** that hold various (aforementioned) roles and responsibilities across the insurance market. As different agencies hold different levers, it is imperative that decisions impacting the state property insurance market are approached holistically, with an adequate understanding of the full system that insurance operates within, i.e. accounting for the needs and interconnections of communities, real estate, and financial architecture.

- **Understand and avoid the potential for a 'debt clash'** in the event that Citizens, the Florida Hurricane Catastrophe Fund and the Florida Insurance Guaranty Association all need to access the bond market at the same time due to a big hurricane or severe season. In this situation, it may be challenging for all three programs to secure the capital they need, which could then lead to assessments ("hurricane taxes") on consumers – at a moment when many households might already be struggling in a storm's aftermath. Additional details here.

State Government's Role in Property Insurability

Key themes

- Much of the state-related discussion focused on **litigation**. Participants acknowledged the work done by the State Legislature, the tort reform's effects, and raised concerns that consumers don't understand the change or implications arising from this.

- Participants also highlighted the need for **consumer education, including via insurance agents**, to encourage property-level risk mitigation. Citizens and FLOIR self-identified as having a key role in educating consumers. Another Forum session focused on education specifically, highlighting the need to provide further professional education for agents, and the value of a one-pager for agents to support consumer education.

- **Incentives**. Participants observed that state policy can incentivize risk mitigation investments, such as through policy that promotes standards like FORTIFIED for benchmarking, verification, and discounting to property owners. See more about this in the section on Catalyzing Investment in Resilience.
  - While insurers in Florida are required to offer discounts for wind mitigation, they are not currently required to offer a specific discount for FORTIFIED. See more about the wind discount process via this explainer of Form 1802 here.
  - Another example (discussed with IBHS in post-event conversation): **the Florida Housing Corporation might also require and/or incentivize FORTIFIED** in its Low-Income Housing Tax Credit (LIHTC) program. The Louisiana Housing Corporation requires a FORTIFIED Roof as a minimum construction standard in its 2024 QAP (Qualified Allocation Plan) and provides additional scoring consideration for projects that build to FORTIFIED Silver and Gold. The Mississippi Home Corporation incentivizes FORTIFIED Multifamily in its 2024 QAP scoring criteria. Florida Housing expects to enter rule development in the spring of 2025, which will include the Qualified Allocation Plan (QAP).

- **Banking and insurance**. Participants identified a link between the banking sector and insurance sector, regarding the housing market and lending. Here, there was an expectation that the Legislature might have a role to play in addressing the property uninsurability and premium-cost challenges.

- **Trust**. Participants flagged a lack of trust within the system - between consumers and insurers, and between industry and government. Agents were seen as key to trust-building between consumers and insurers, and there was encouragement for the government to pursue additional opportunities to build trust with industry – for instance, there was encouragement for FLOIR to hold a discussion with insurers about how the rate-filing process could be made more efficient.

State Government's Role in Property Insurability

Key questions and pathways forward

- FLOIR regulates insurance companies, the State Department for Financial Services regulates agents, the State Legislature sets policy, and Citizens ensures insurance is available in Florida. What can be done to **enhance coordination among the various bodies that shape Florida's property insurance market?**
  - To understand and avoid the potential for a 'debt clash' (described above) if Citizens, the FHCF and FIGA all need to go to the bond market at once due to a severe hurricane or season, **what forward-looking analysis should be undertaken? What reforms to the design of the three programs might be considered?**

- What role might state bodies play in supporting an **open-sourced data repository** to enhance both local and national insights on climate / weather analytics / property insurance? How might state funding, and data provision from the state enable wider **innovation** in Florida's property insurance market?

- Could the State of Florida (or local governments) potentially **require proof of private insurability *before* a building permit is issued** and construction begins?

- Could the State of Florida implement a policy that requires local governments to mitigate vulnerability to storms and flooding in their growth plans, including (potentially) by placing **limits on development and redevelopment in the riskiest areas?**

- What **educational resources** can be developed to promote risk reduction (for example through the My Safe Florida Home program and the FORTIFIED building standard) alongside insurance buying? How can state bodies such as FLOIR and Citizens partner with insurance agents and industry associations, such as the Florida Association of Insurance Agents (FAIA), to promote consumer education?

- How might the state government **leverage the FORTIFIED standard to promote wind mitigation investments** – such as through inspections (i.e. via Form 1802, which attests to wind risk mitigation measures via inspection) and Florida Housing's Qualified Allocation Plan?

- How might the state mandate a stronger, more protective **baseline** in insurance policies in Florida?

- Where and how is **reinsurance regulated**, and how does FLOIR interact with this?

- Similarly, **excess and surplus (E&S) carriers** are regulated outside of Florida. What can be done to promote transparency and visibility into the solvency and operations of E&S carriers who write in Florida?

See also: Resource from the FEDERAL ALLIANCE FOR SAFE HOMES (FLASH)
Resilience Policy Resource Guide and Retrofitting Program Playbook for State Insurance Regulators and Addendum – August 2024 both available for download in the Supplemental Materials appendix

Post-Event Activities

Participants concluded the summit by identifying a set of next conversations that they proposed to hold after the event, to move discussion toward action along the identified paths of opportunity. As of October, many of these conversations have already occurred (some are still merely proposed and in need of catalyzing leadership).

The Aspiration organizing team may be able to help facilitate connections among interested parties, so **if you are interested in getting involved, and/or hosting a next conversation on one of the topics below, please contact Greg Bloom,** insurancestrategy@aspirationtech.org.

Topics	Proposed Action
Big Picture	Leverage outputs from the summit to shape the agenda for Florida's Joint Conference of Planning Councils.
Big Picture, State Government	Propose a multi-disciplinary working group to inform Florida's State Legislature and/or Governor.
Big Picture, Data & Modeling	Create a panel with academic institutions to gather data, analyze, and make recommendations to inform decisions across the system.
Big Picture, Affordable Housing	Convene further multi-stakeholder dialogues, expanding to include critical parties who were not represented at this Forum.
Catalyzing Investment, State Government, Local Government	Explore ways to promote FORTIFIED in Florida as a standard evaluation framework for property risk mitigation. Offer education, promote incentives like discounts, Low-Income Housing Tax Credit (LIHTC), etc. Work with the industry to model for impacts, and perhaps require via wind risk mitigation inspection form.
Catalyzing Investment, State Government, Local Government	Provide an overview of the Physical Climate Risk Assessment Methodology and its potential applications in Florida.
Catalyzing Investment In Resilience	Establish a working group to develop pilot projects that connect risk mitigators, modelers and insurers, to help ensure investments made in hardening properties and adapting to climate risks are accounted for in insurance pricing.
Enhancing Collective Intelligence, Local Government, State Government	Establish a cross-sector working group to develop a shared academic research agenda on insurability.

Post-Event Activities

Topics	Proposed Action
Innovative Applications Of Existing And Emerging Insurance Tools	Develop a detailed mapping of the potential gaps that parametric insurance might fill, for instance: • Multi-family buildings and homeowners associations • Embed into small-business loans from community development financial institutions (CDFIs)
Innovative Applications Of Existing And Emerging Insurance Tools	Continue exploring potential opportunities for cross-sector partnerships on new and emerging insurance products, e.g. not only parametric insurance, but also captives, inter-governmental risk pooling, etc.
Data & Modeling	Develop strategies for improving the availability, quality, and usability of data pertaining to climate risks, property status, and more.
Educating And Engaging Consumers And Insurance Agents	Engage with the Florida Association of Insurance Agents, the Florida Department of Financial Services and other interested stakeholder groups to develop professional development opportunities and training for insurance agents on risk mitigation.
Educating And Engaging Consumers And Insurance Agents	Develop a one-page checklist that agents talk through with consumers at the point of sale to include: a brief explanation and example of how a deductible works, information on flood insurance and flood mitigation, examples of risk mitigation activities applicable to Florida homes, condos and businesses, and disclosure of perils that are covered and not covered.
Local Government	Identify one key action for Miami-Dade County to move forward to help promote insurability/property insurance affordability.
State Government	Increase efficiency in the rate filing process, as a starting point by bringing together a diverse group of insurance organizations with the Florida Office of Insurance Regulation and other state bodies to discuss rate filing challenges.

Conclusion

The current crisis in Florida's property insurance market reflects a classic "wicked problem," in which there are many causes, unfolding across varying and often long time scales, experienced in different ways by different people – and therefore described in different ways by different people. Given such complexity, wicked problems typically resist simple solutions: any single "quick fix" is likely to have undesirable outcomes that make the situation worse.

However, human societies *have* found ways across history to cope with wicked problems, and these coping mechanisms typically emerge from the same process: people talking through it together.

> **"Astonishing that I could enter the space totally ignorant and leave feeling pretty well informed about half a dozen solutions to slow down skyrocketing insurance premiums. The unique facilitation style meant that I could hear and learn from many people across multiple industries, and brainstorm with them about the priority solutions."**

The Miami-Dade Property Insurance Strategy Forum was a place to start. Across two days, and more than forty peer-facilitated discussions, the Forum brought together insurance industry actors (including agents, brokers, industry associations, reinsurers, model vendors and more), alongside academics, local community organizations and national nonprofits working on housing and environmental adaptation, real estate developers, local government representatives (including leadership from resilience, economic development, and housing departments) and regional planners, state government representatives (including legislative and regulatory offices) and executive leadership of Citizens, Florida's insurer of last resort.

This report captures the most significant points expressed in these discussions. Even as we publish this report, those discussions continue to evolve into coordinated action: there are new statewide and local efforts to promote resilient development standards like FORTIFIED, emerging collaborations among academic and industry partners, and new approaches to modeling risk underway in the institutions that shape Florida's property market.

One of the most prominent takeaways from the Forum is the need for more dialogues like this. Given the "polycentric" nature of this domain (in which many different interests and roles are distributed among different actors across jurisdictions and sectors), the moment calls for multi-stakeholder fora that can foster understanding, explore new ideas, and facilitate cross-sector action. Indeed, word of the Miami-Dade event spread quickly even before this report was released – and the organizing team is already supporting several similar events now being planned in other regions.

Conclusion

As future dialogue emerges, we will note that many important voices were not in the room with us in July, and should be prioritized for inclusion in future dialogues. For instance, Forum participants recommended including more large national carriers and underwriters in future dialogues, along with actuaries and industry scientists. We also recommend engaging financial institutions – banks and mortgage service providers, private equity and Community Development Finance Institutions – as key actors with significant financial stakes in getting this right. These dialogues should include representatives of public agencies that produce research and policy – such as the National Association of Insurance Commissioners, the Federal Insurance Office, and the National Oceanic and Atmospheric Administration – and more elected policymakers at local, state, and national levels.

Forum organizing team, saying goodbye after the event. Left to right: Kate Stein, Galen Treuer, Greg Bloom, Allen Gunn, Wallis Greenslade

Most importantly of all, perhaps, is the need to center these conversations around the interests and perspectives of the people who are most impacted: homeowners, renters, and community leaders who are facing existential threats. To appropriately address the truly collective nature of this crisis, future conversations must include sufficient representation from homeowners, tenants associations, community leaders, and advocates that represent their interests – especially those who are currently 'falling through the cracks' of the insurance market, such as mobile homeowners, tenants of multifamily properties, etc. Several participants also observed that these conversations will be simultaneously inequitable and uninformed if they do not include the voices of Tribal nations, which are typically among first to suffer from these crises, yet also clearest in their understanding of the ways to sustainably balance the needs of human societies within the limits of natural systems.

> **"It was the first step in a long journey - getting a diverse group in room and starting to listen to each other - PRICELESS."**

The situation is urgent. In the time between the Forum and the publication of this report, two record-breaking back-to-back hurricanes, Helene and Milton, have hit Florida. Both spared Miami-Dade, but wreaked historic destruction through our state and across the South. We must transition from reactive to adaptive cycles of collective planning and response as soon as possible. This is perhaps the most wicked problem that humanity has ever faced – and our only way out is to work through it together.

For more information on the contents of this report, including a list of participating organizations, and a summary of the inception and methodology through which the Forum was designed, you can review this folder of Supplemental Materials.

Raw notes from this discussion can be made available on request. To inquire about this or other prospective events, please reach out to Greg Bloom at Aspiration: insurancestrategy@aspirationtech.org

Thank you again to
Aspiration and The Miami Foundation

The Miami Foundation
For A Greater Miami