100 RESILIENT CITIES
RESILIENT
GREATER MIAMI
& THE BEACHES
Preliminary Resilience Assessment
#resilient305
Source: zimbio.com
Source: Hilton hotels

欢迎到迈阿密来！
BEM-VINDO A MIAMI!
WILLKOMMEN IN MIAMI!
BENVENUTI A MIAMI!
WILLKOMMEN IN MIAMI!
WELCOME TO MIAMI! ¡BIENVENIDO A MIAMI!
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MIAMI!

hello, miami

We are Resilient Greater Miami & the Beaches, a partnership of Miami-Dade County, and the cities of Miami and Miami Beach. We are the only city of the 100 Resilient Cities Network—pioneered by the Rockefeller Foundation—where multiple governments are collaborating to develop a collective voice that will, together, better allow us to plan, prepare, and respond to our community's challenges. As part of this effort, we reached out to each of the 35 individual governments in the Greater Miami region to listen, learn, and incorporate input directly from community leaders, residents, and subject-matter experts.

Like many metropolitan areas, we recognize our transportation, housing, and socioeconomic challenges; however, we are also aware of the concerns associated with climate change, sea level rise, and other long-term issues. As Resilient Greater Miami & the Beaches, we are working to reduce and mitigate many of these difficulties because Miami, as we know it today, is our home as much as it is yours. As we continue this process, we continue to engage; we continue to invest. We thank our mayors, commissioners, and city managers whose leadership and support make this happen.

We are here to stay. We hope you are, too.

James F. Murley
Miami-Dade County

Jane Gilbert
City of Miami

Susanne M. Torriente
City of Miami Beach

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welcome

This Preliminary Resilient Assessment (PRA) has been created by Greater Miami & the Beaches (GM&B) as part of 100 Resilient Cities (100RC) resilience planning process. It is the culmination of our first phase of listening to and learning from all of you—residents, businesses, and community organizations. It is the foundation for our next step and outlines our most important resilience priorities.

We hope you find this to be a great resource about resilience issues in Greater Miami & the Beaches. We invite to you continue on this journey with us over the next few months as we develop and prioritize actions to increase our resilience.

Participate locally through: www.resilient305.com
Learn more about the global effort at: www.100resilientcities.org

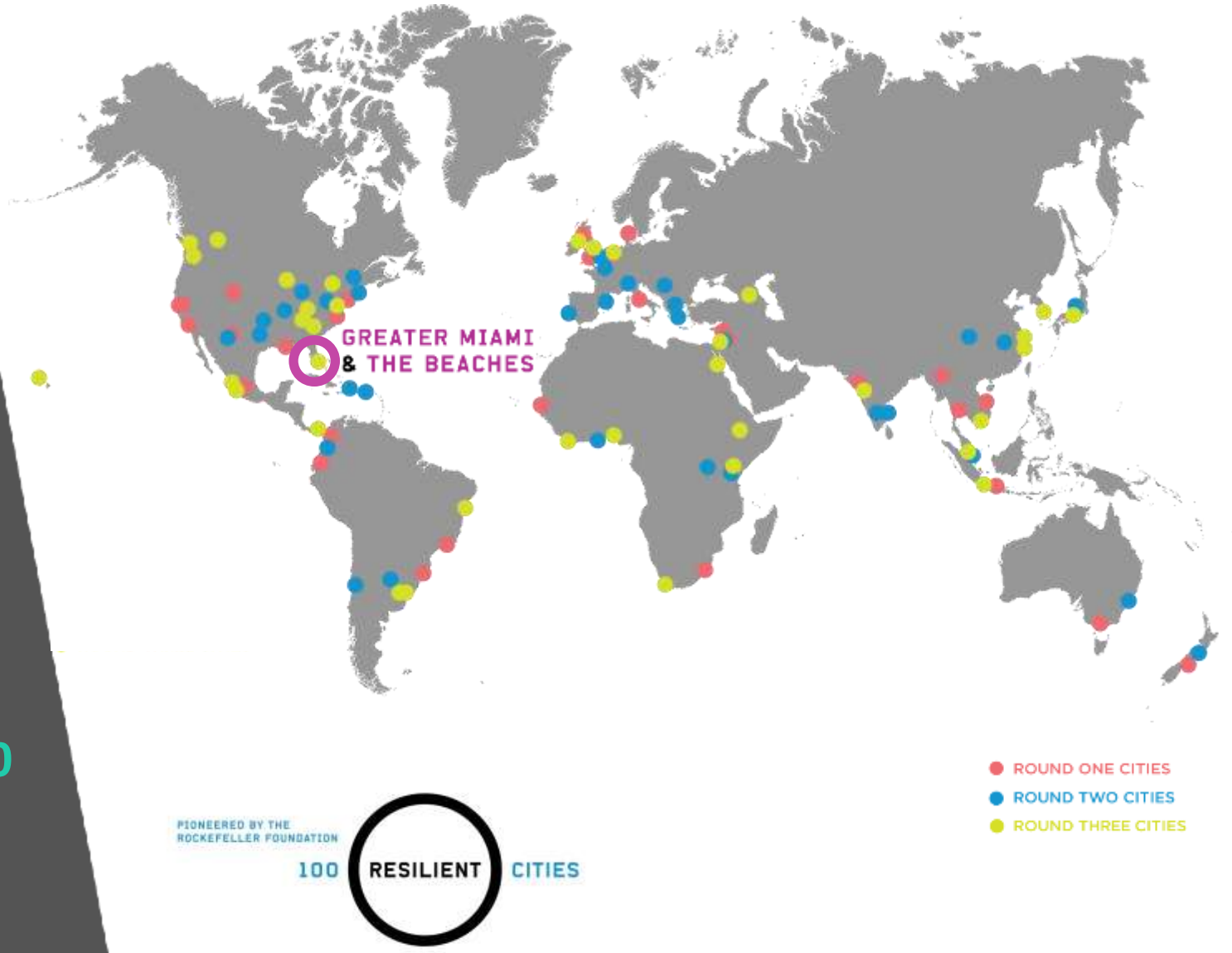
Introduction

Introduction

100 Resilient Cities

A **$100 million effort** launched by the **Rockefeller Foundation** in 2013 to help cities **build resilience to social, economic, and physical challenges**. To respond to impacts of **urbanization, globalization, and climate change**.

The Resilient Cities Network is comprised of **100 cities spanning 40 countries and 27 languages**.



Introduction

Greater Miami & the Beaches

Resilient GM&B is a **collaboration among Miami-Dade County, City of Miami, and City of Miami Beach,** created to respond to the region's major challenges.

In 2016, after a very competitive process of more than 400 applicants, GM&B was selected to join 100RC. **With the support of 100RC, we are creating your resilience strategy!**

Introduction

Greater Miami & the Beaches

Together we are… Resilient

Meet some of our team members; join our efforts.

Chief Resilience Officers

Deputy Resilience Officers

MIAMI-DADE COUNTY

THE CITY OF MIAMI INCORPORATED 1896 DADE CO., FLORIDA

MIAMIBEACH

Join us @ resilient305

Introduction
Greater Miami & the Beaches

Our Process

Fall **2016**

Summer **2017**

Fall **2018**

We **Launched**

We Listened and Learned

Phase I

We are **Here**

We Discover

We Plan

Phase II

GM&B Resilience Strategy

Institutionalize and **Implement**

Introduction
Structure

Miami-Dade County, the **City of Miami**, and the **City of Miami Beach** are working together in a partnership of equals to address their common and overlapping resilience challenges and opportunities.

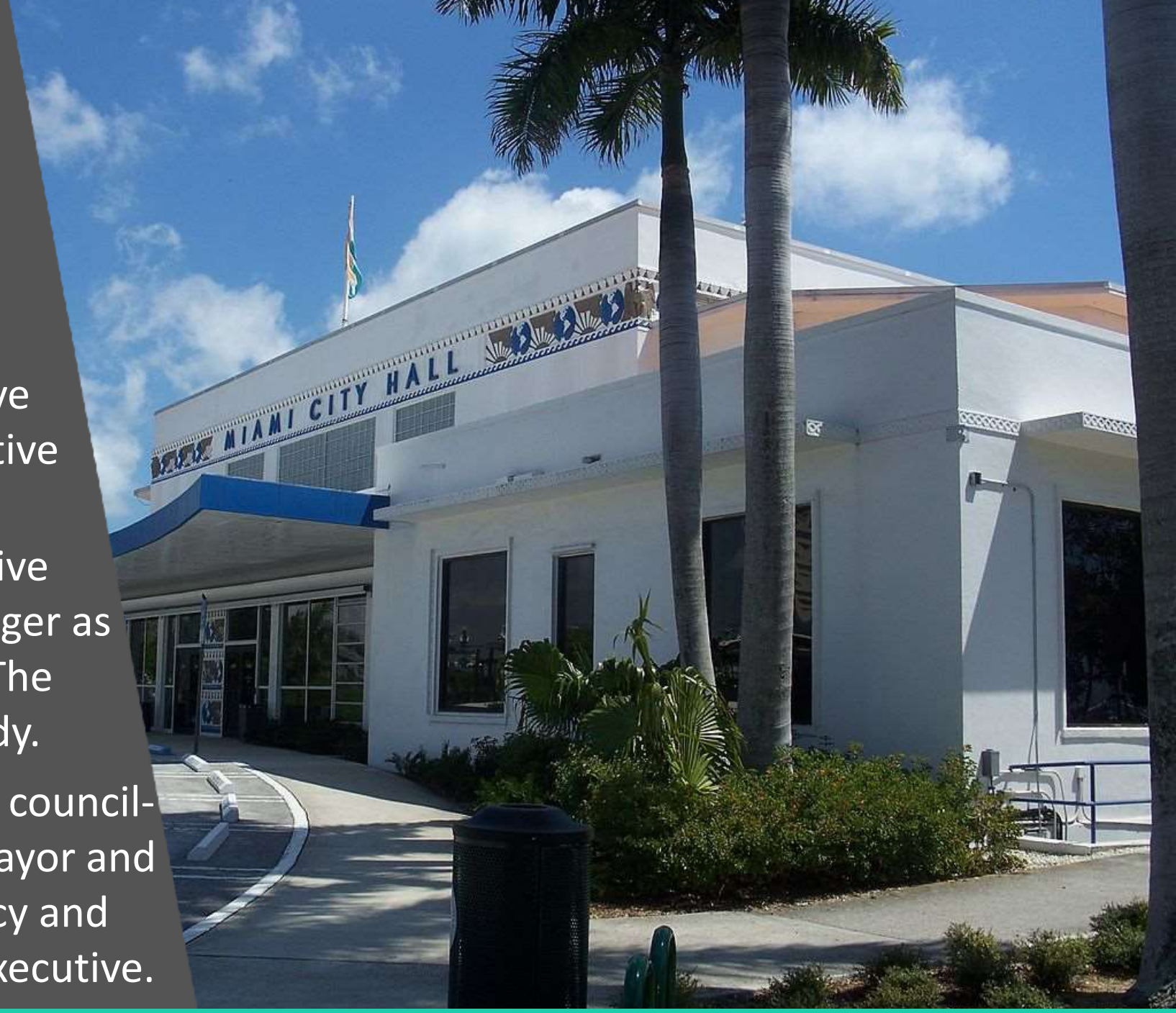
Introduction

GOVERNANCE

Miami-Dade County has a strong mayor form of government. The mayor serves as the chief executive and the Commission is the legislative body.

The **City of Miami** has an executive mayor who appoints a city manager as the chief administrative officer. The Commission is the legislative body.

The **City of Miami Beach** has a council-manager system, where the mayor and six commissioners set city policy and the city manager is the chief executive.



Introduction

FINANCIAL HEALTH

GM&B is **strong financially**. Balanced budgeting/sound fiscal policy is a priority of current executive leadership in each jurisdiction.

For all three jurisdictions, **property taxes are very large sources of revenue**. This reliance on property taxes means that GM&B's revenue was hit hard by the housing market crash in 2008, but has since steadily recovered.

Introduction
PLANNING

Each jurisdiction has a Planning Department and engages in **comprehensive, functional, and special topic planning**.

The comprehensive plan is the core planning process for each of the three jurisdictions and includes **short- and long-term economic, social, physical, environmental, and fiscal goals**.

All three entities are integrating resilience in their next comprehensive plan updates.

GM&B Today

GM&B Context
Introduction

The 100RC process includes developing the local area context. The context is a **holistic scan of resilience**.

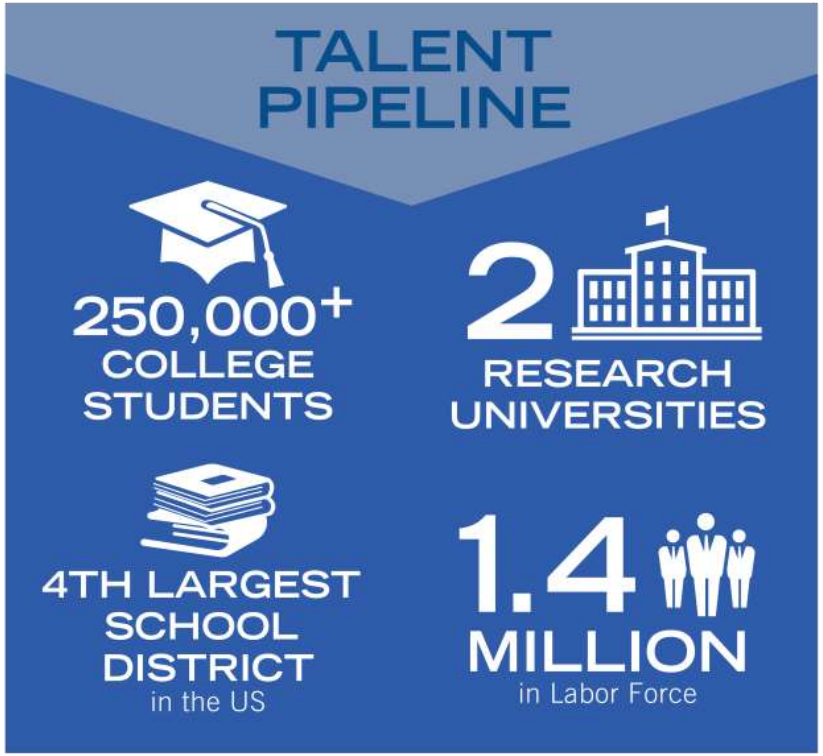
The team developed an actions inventory, collected opinions on resilience, and analyzed demographic data to understand challenges and opportunities.

The following information helps to frame and inform the resilience priorities.

GM&B Context

Positive Attributes

GM&B Highlights



Source: Beacon Council; Advantage Magazine

GM&B Context

Positive Attributes

GM&B Highlights

Source: Beacon Council; Advantage Magazine

GM&B Context

Shocks + Stresses

Rebounding + Bouncing Forward

Top Shocks

STORMS
Hurricane Andrew, 1992
Unnamed Storm, 1993

INFRASTRUCTURE
Dolphin Expressway
Overpass Collapse
at NW 97 Ave
Bridge Collapse,
2005

FLOODING
King Tide Flooding,
City of Miami Beach,
2011

GROWING TRAFFIC CONGESTION

SEA LEVEL RISE + COASTAL EROSION

AGING INFRASTRUCTURE

DECREASING HOUSING QUALITY & AFFORDABILITY

EROSION
Beach Renourishment,
1970s

STORMS
Hurricane Wilma, 2005
Hurricane Katrina, 2005

GLOBAL FINANCIAL CRISIS
2008

FLOODING
King Tide Flooding
Miami-Dade County,
2016

Top Stresses

GM&B Context

Shocks + Stresses

Sea Level Rise

- **Sea level has risen about three inches** since Hurricane Andrew hit and is **expected to rise another three to seven inches** by 2030.
- Much of the development in GM&B is close to sea level. More than 85,000 people and 53,000 homes are located on land **less than three feet above high tide**. More than $21 billion in assets are at risk.
- Man-made and natural systems, such as beaches and mangroves, will be affected as sea level continues to rise, likely resulting in **increased damage from floods and storms**.

"As sea levels rise, the risks of flooding increase. Higher sea level results in higher high tides, storm surges, and inland flooding due to higher groundwater levels." *—Young professional*

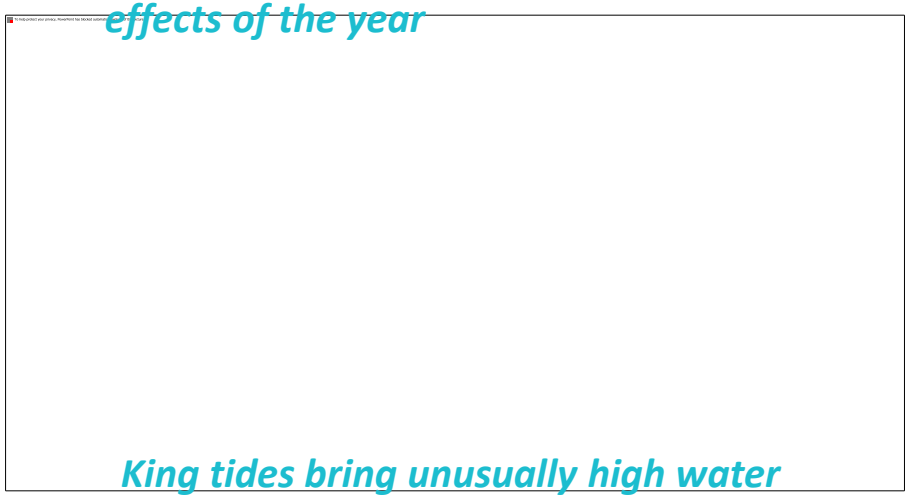
GM&B Context

Shocks + Stresses

Flooding

- King tides are becoming **higher** according to tidal gauges.
- While stronger **building codes** have helped protect newer buildings from storm surges, risks are more costly today due to higher water levels and increased development in vulnerable areas.
- GM&B has an **intricate water management system** overseen by local government and the South Florida Water Management District (SFWMD).
- Heavy **rain events** or high water levels can strain stormwater systems and lead to flooding.

King tides occur when the orbits and alignment of the Earth, moon, and sun combine to produce the greatest tidal effects of the year



King tides bring unusually high water levels, and they can cause local tidal flooding. Over time, sea level rise is raising the height of tidal systems.

GM&B Context

Shocks + Stresses

Natural Systems

- Restoration of the **Everglades and Biscayne Bay** is key to providing fresh water, providing natural buffers from flooding, and protecting critical ecosystems.
- Natural systems worldwide are **strained by climate change** and urbanization.
- Two thirds of Miami-Dade County land area are **protected lands**, e.g., National Parks, Marine Sanctuaries, and Water Management Areas. This has resulted in concentrated development.
- **Limited open space** in urban environment can exacerbate flooding risks and limit adaptation options.
- Protections provided by offshore reefs and other **marine systems are degrading** due to ocean acidification and warming.

"Beach renourishment is an economic issue."

—Coastal Mayor

GM&B Context

Shocks + Stresses

Water Management

- **Rising sea levels and groundwater levels** require a delicate balance between retaining and infiltrating freshwater to recharge aquifers and draining freshwater to manage flooding risks, all while trying to improve **water quality**.
- Water, sewer, and drainage systems need to be redesigned, rebuilt, and maintained, with acknowledgement of **accelerating sea level rise** and the potential for higher **storm surges** and heavy rainfall events.
- Seasonal agriculture will continue to require careful **water management**, especially given saltwater intrusion into underground aquifers.

"Trying to identify inexpensive temporary solutions while seeking funding for permanent solutions." *—Inland mayor*

"..using infrastructure to build community cohesion..." *—Coastal mayor*

GM&B Context

Shocks + Stresses

Housing

- **Housing cost burdens have risen dramatically.** Average rents increased 65% (from $1,505 in 2009 to $2,501 in 2015).
- In 2014, over 66% of renter households, and over 50% of owner households were **cost-burdened**, making it the **third least affordable housing market** in the nation.
- The local housing market is affected by external, often **seasonal/absentee buyers**.
- Cities of Miami Beach and Miami are **densely populated**.
- Inland communities, such as Doral and Kendall, are experiencing **increased mixed-use development**.
- **Housing rights for tenants are lacking**.

"Foreign investments have been great for the economy but have negatively impacted housing affordability."
—Inland mayor

"'Middle-America sprawl codes are keeping housing prices up." *—inland mayor*

GM&B Context

Shocks + Stresses

Housing

- **Homelessness has increased 2%** since 2015 and 9.5% since the beginning of 2017.
- The Miami-Fort Lauderdale-West Palm Beach metros have one of the **highest foreclosure rates** in the nation.
- Approximately **29,000 new luxury residential** units have been built since 2010.
- Miami-Dade County and Cities of Miami, Hialeah, North Miami, Miami Beach, and Homestead **receive funding from HUD for affordable housing which is expected to be cut significantly**.

"Many waitlisted for housing assistance."

—Inland mayor

"There is much fraud and many assessments associated with high-rise developments."

—Coastal mayor

"There is no housing for young people." *—Inland mayor*

GM&B Context

Shocks + Stresses

Mobility

- GM&B is the sixth most **congested** county in the U.S.
- **Connected, reliable transportation is needed** between residential areas and jobs.
- **Perceptions about transit** need to change for more widespread ridership; “transit is for the disenfranchised.”
- **Rideshare is disrupting** existing travel services/patterns.
- Public transit concerns include **safety, cleanliness, and reliability**.

“A better quality of life is tied to more efficient transportation… Young generations want it… People don’t want to rely on private automobiles.”

—Coastal mayor

GM&B Context

Shocks + Stresses

Mobility

- **Pedestrians and bicyclists feel unsafe** competing with vehicles.
- Transit **ridership is declining** in many areas.
- Transportation is planned and managed by **multiple organizations**.
- **Funding** is needed for operations and maintenance of transportation infrastructure.

".. 700,000 cars go through Coral Gables daily…"

—Inland mayor

"Can't get people to flex on parking requirements"

—Inland mayor

GM&B Context

Shocks + Stresses

Mobility

	Commuters Coming In	Commuters Staying Within	Commuters Going Out
Miami-Dade County	248,782	743,205	201,163
City of Miami	219,626	46,798	94,025
City of Miami Beach	39,893	9,212	25,530

GM&B Context

Shocks + Stresses

Economy

- Though unemployment dropped from over 12% to under 5% from 2009 to 2015, 55-61% of Miami-Dade County **earn less than a living income** or **struggle to pay for basic needs** due to the preponderance of lower wage jobs and high cost of living
- 51% of households have **insufficient liquid savings** to survive for 3 months at poverty level in the event of unexpected job or income loss
- The top three economic engines, **Miami International Airport, PortMiami, and Tourism**, are based on transient services and transient population.
- The **agriculture industry** is a large component of the local economy.
- **GM&B lacks a diversified economy.**
- Job placement can be difficult for **many residents battling barriers such as low education rates and skillsets needed for a changing economy**.

"We need to foster a more diverse economy in less vulnerable areas."

—Inland mayor

"Agriculture is at the mercy of national policies."

—Inland mayor

GM&B Context

Shocks + Stresses

Social Services

- There is **opportunity for more collaboration** amongst social service organizations for streamlining and improved services
- The **homeless population** is no longer just "people on the street"; it also includes recent graduates and an aging population. **15% of the homeless population** is undocumented.
- Five out of ten people make too much to qualify for assistance, but **not enough to live**.
- **Access to quality and affordable childcare** is difficult.
- The Department of Health is concerned about the undocumented **population not accessing health services.**
- The **aging population** struggles to afford their homes, putting stress on extended family.
- Federal, state, and local **funding is uncertain, fragmented and limited**.

"We are unable to break the cycle of continued disrepair and poverty."

—Inland mayor

"Many on fixed incomes are reliant on government support…we fear social unrest if it doesn't meet people's needs."

—Coastal mayor

GM&B Context

Shocks + Stresses

K-12 Education

- Florida schools are **significantly under funded** as compared to other states. The state ranks 48th for funding in the country.
- Miami-Dade County Public Schools (M-DCPS) **graduation rates are increasing,** however has a challenge of **16% not graduating** from high school on time.
- It's a challenge to **attract and retain quality educators due to high costs of living**.
- M-DCPS has the highest **student refugee population** in the country and offer **bilingual education**.
- One in five children attend **private schools** in GM&B.
- As of 2017, there are **no "F" rated schools** in M-DCPS.
- There are **increasingly fewer vocational programs** in public schools.
- M-DCPS is a national leader in magnet schools.

"Schools are overcrowded in NE Miami-Dade."

—Inland mayor

"Education is a major determinant for relocation of young families."

—Young professional

GM&B Context

Shocks + Stresses

Universities

- Three primary universities are **FIU, University of Miami (UM), and Miami-Dade College (MDC).**
- The combined enrollment of these universities and other local universities are approximately **240,000 students each term**.
- There is **strong collaboration** amongst the universities to move resilience forward with GM&B.
- **One Community One Goal's Academic Leaders Council** aligns with the business community to align worker availability.
- Florida Climate Institute is a multidisciplinary network of 10 universities that **collaborates to find a better understanding of climate variability** and change.

"Local universities lack investment in the community."

—Focus group participant

"Recent graduates are finding job placement elsewhere, where they can afford to live."

—Current student

GM&B Context

Shocks + Stresses

Juvenile Crime

- Although violent crime has decreased, **property crime is increasing**.
- There has been an 80% **reduction in overall juvenile crime** over the last 20 years.
- There is an **increase in firearms** in juvenile age group.
- **There is a lack of accessible and affordable services** to address long term impacts of mental health, substance abuse, and family support services.
- Overall crime is decreasing; however, **isolated pockets** remain in which the majority of juvenile offenders reside.

"Gangs are not based on race or culture, instead on a block-by-block basis."

—Safety professional

GM&B Context

Shocks + Stresses

Health

- GM&B has the **highest Affordable Care Act enrollment** in the U.S.
- **26% of Miami-Dade County residents are uninsured.**
- Miami is ranked **#2 for the most HIV infections** and **#1 for the most HIV-related deaths** in the U.S.
- In 2015, **21.6% persons under 65 are without health care** insurance; 42% in 2011.
- Refugee Health Assessment Program used to average 300 people per day; the number is declining since **end of the wet foot/dry foot policy**.

"People don't understand the risk of not having regular health screenings."

—Health professional

"Many people are more risk tolerant because of the issues they've faced in their origin countries." ***—City professional***

GM&B Context

Shocks + Stresses

Health

- State declared a Public Health Emergency for the **opioid epidemic: 236 people fatally overdosed in MDC** from heroin/fentanyl in their blood from 2015 to November 2016.
- **Pool drowning** is the number one cause of death for children under five.
- The 2016 **Zika Virus** outbreak had 350 travel-related cases, 272 locally-acquired cases, and 44 unknown sources.

"We are given money to fight, but not to prepare."

—Health professional

"The Zika virus cost us millions." *—City professional*

GM&B Context

Shocks + Stresses

Storms + Recovery

- **GM&B is vulnerable** to hurricanes and tropical storms.
- National Climate Assessment (2014) predicts **increased intensity and frequency of hurricanes** in the region.
- Increased development and population over the last 11 years without a major storm creates **uncertainties of evacuation, response, and long-term community recovery**.
- Power and **utility redundancy** is critical and unknown.
- **Communication and access** to residents are key.
- Residents and governments **lack funding preparedness**.
- **Storm and flood insurance** rates are increasing.
- **Absentee owners contribute to delayed recovery.**

"Communicating preparedness with residents is a challenge."

—Coastal mayor

"Need unity throughout the county to address flood insurance."

—Coastal mayor

GM&B Context

Shocks + Stresses

Collaboration

- **35 local governments** comprise GM&B.
- Intergovernmental **collaboration is not fully leveraged**.
- Harmonization and **alignment of codes and standards** is needed to address real property concerns such as land use, zoning, and sea level rise.
- Organizations need to improve their **knowledge of comprehensive data, plans, and resources**.
- Access and use of sea level rise-related **data is new and emerging** for many local governments and businesses.
- **Improved relationships** in and between governments would allow for stronger initiatives.

"Need centralized tools and structure to support small municipalities."
—Inland mayor

"We need to cooperate as opposed to compete; we should take a holistic approach to problem solving." *—coastal mayor*

Actions

This City Resilience Framework is a 100RC Tool to categorize plans, programs, projects, studies, and initiatives. A total of 280 were identified throughout the engagement process. Of those, 100 were prioritized for consideration in future Resilient GM&B efforts, many of which are identified on the following pages.

GM&B Context

Key Actions

Sea Level Rise + Climate Change

- Adopted a Green **Sustainable Buildings Ordinance for new construction**.
- GM&B partners participate in the National Flood Insurance Program **Community Rating System (CRS)** Program, which recognizes floodplain management activities and have the following scores:
  - Unincorporated Miami-Dade County: 5
  - City of Miami: 7
  - City of Miami Beach: 6

"South Florida and Greater Miami & the Beaches have formed unique and progressive partnerships to plan and prepare for sea level rise and climate change."

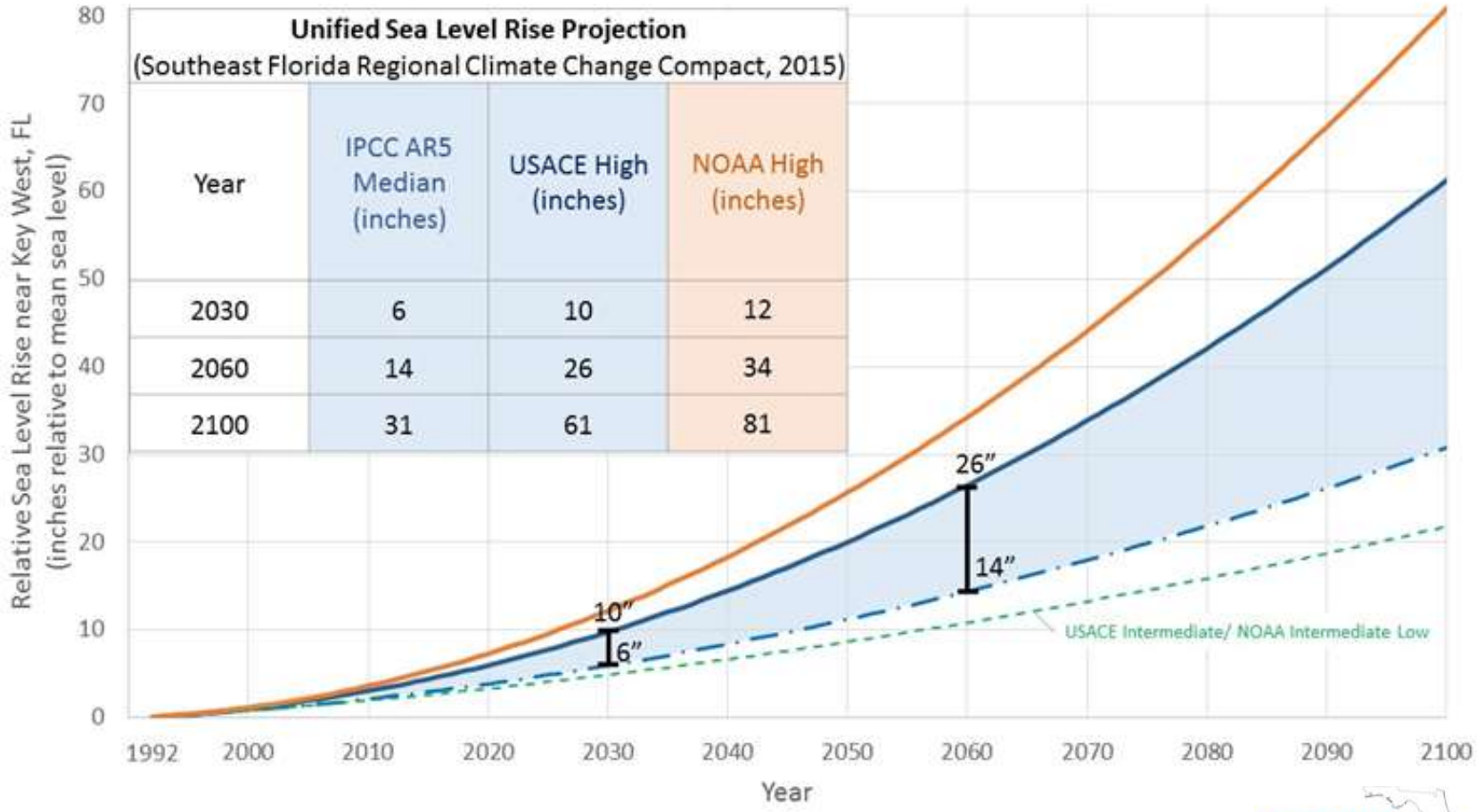
—Coastal Assistant City Manager

Sea Level Rise + Climate Change

- GM&B partners participate in the **Southeast Florida Regional Climate Change Compact .**
- The Compact successfully convened scientists to develop unified **sea level rise projections** for Southeast Florida.

Unified Sea Level Rise Projection
(Southeast Florida Regional Climate Change Compact, 2015)

Year	IPCC AR5 Median (inches)	USACE High (inches)	NOAA High (inches)
2030	6	10	12
2060	14	26	34
2100	31	61	81



SOUTHEAST FLORIDA REGIONAL COMPACT CLIMATE CHANGE

GM&B Context

Key Actions

Sea Level Rise + Climate Change

Miami-Dade County Key Actions

- Currently performing a **vulnerability assessment of key infrastructure and capital investments**.
- The Miami-Dade County Water and Sewer Department is investing billions on **improving critical infrastructure**, and sea level rise is a key part of the design criteria.
- Miami-Dade County is developing additional **adaptation strategies** to address sea level rise.
- Miami-Dade County, in partnership with the SFWMD and the U.S. Army Corps of Engineers, works to restore, preserve, and protect the Everglades through the **Comprehensive Everglades Restoration Plan**.

GM&B Context

Key Actions

Sea Level Rise + Climate Change

Miami-Dade County Key Actions

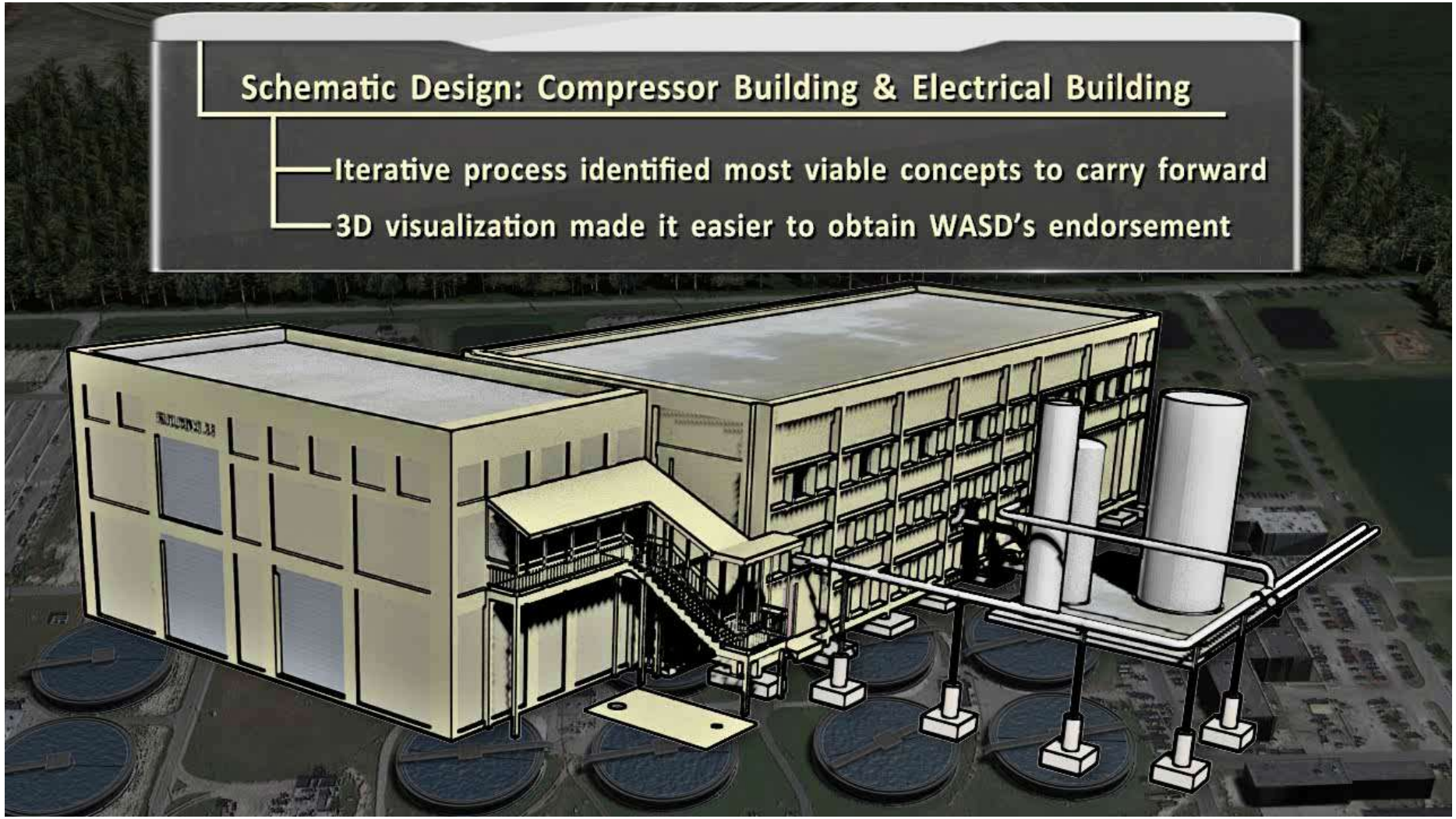
- Currently partnering with the Urban Land Institute on a pilot **Adaptation Action Area** for the Arch Creek drainage basin.
- Currently working with Rand Corporation to **visualize how sea level rise and future land use decisions will impact flooding risks**.
- Working **collaboratively with the South Florida Water Management District** and municipalities to understand how sea level rise will impact the regional canal network.
- Investing in protecting the County's drinking water and actively monitoring and **managing any saltwater intrusion into the aquifer**.
- Created a **Sea Level Rise Task Force** who recommended that the County prepare an Enhanced Capital Plan to increase the resilience of the County's infrastructure.

GM&B Context

Key Actions

Sea Level Rise + Climate Change

BIM model for an electrical building for our South District Oxygen Production Consent Decree Project. It is a brand new building that will store transformers at the bottom and all switchgear at the top, about 16 feet high.



GM&B Context

Sea Level Rise + Climate Change

Key Actions

The City of Miami Key Actions

- Establishment of a **Sea Level Rise Advisory Committee** in 2015 and an interdepartmental **Resilient Infrastructure Committee** in 2017.
  - Partnering on a **Resilient Redesign for Shorecrest**.
  - Updating the City of Miami's **stormwater master plan** while implementing stormwater upgrades in highly vulnerable areas.
  - Creating a **rapid action plan for flood risk mitigation** of critical infrastructure.
  - Strengthening flood risk mitigation in the Future Land Use and Coastal Management elements of the City's **Comprehensive Neighborhood plan**.
  - **Proposed Miami Forever General Obligation Bond** includes $193 million for flood risk mitigation and will be on the ballot in November.
  - The City's zoning code contains several standards aimed at **maximizing natural infiltration** of stormwater directly into the ground.

GM&B Context

Key Actions

Sea Level Rise + Climate Change

City of Miami Beach Key Actions

- Established a **Mayor's Blue Ribbon Panel** on Flooding and Sea Level Rise and a Commission Committee on Sustainability and Resiliency.
- Committing to investing half a billion dollars to **raise roads** and improve **stormwater drainage**.
- Updated the **land use and development code** to incorporate climate adaptation and resilience, including increased freeboard, base flood elevation, roadway, ground, and seawall heights.
- Recently completed a **vulnerability assessment for its infrastructure**.
- **Constructing green living shorelines** to complement sea walls.

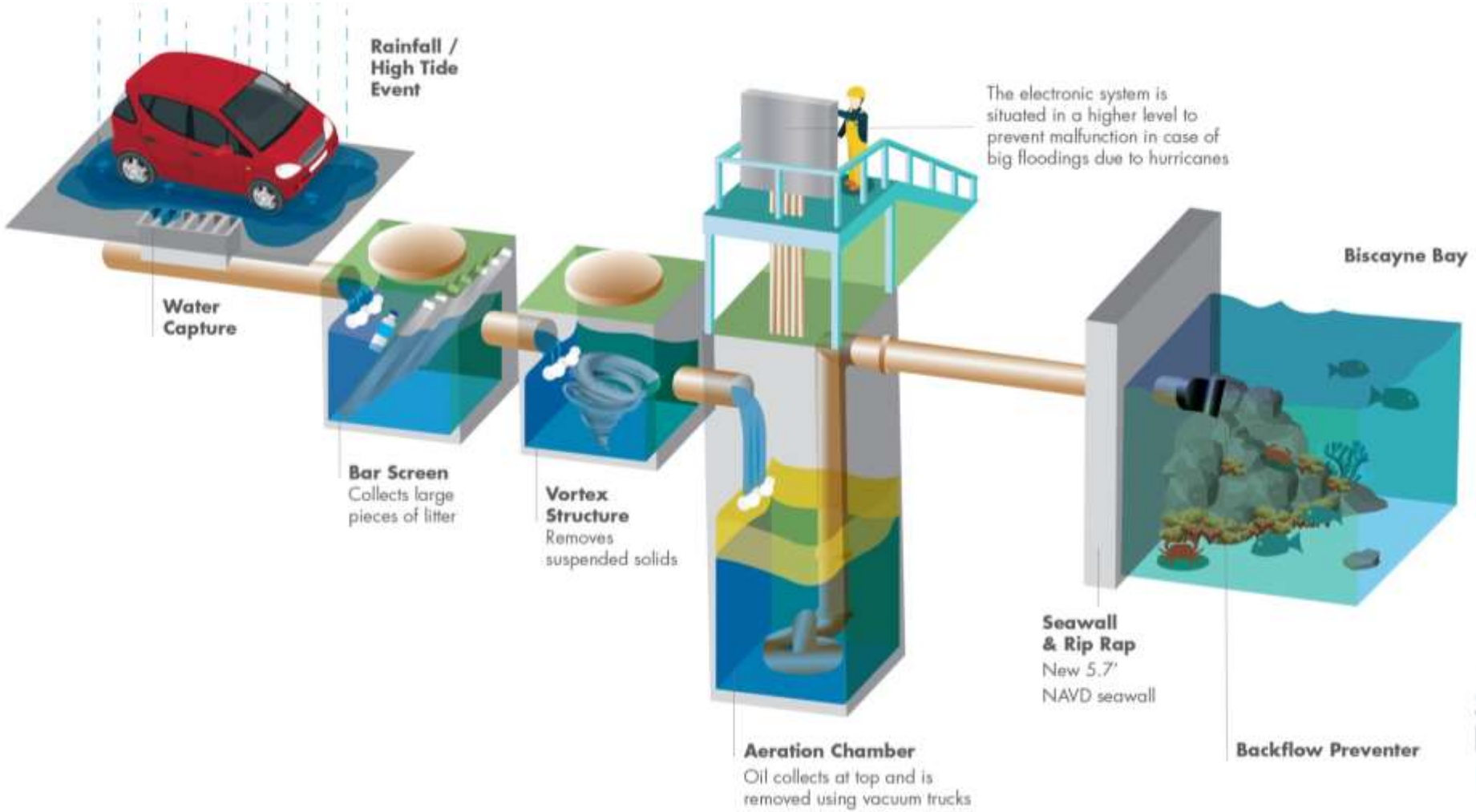
"The City of Miami Beach has made a commitment to adapt to sea level rise, invest in aging infrastructure, and use the best available science to do so."

—Coastal Assistant City Manager

GM&B Context

Key Actions

Sea Level Rise + Climate Change



Stormwater Pump Station UPGRADES

MIAMIBEACH RISING ABOVE

GM&B Context

Key Actions

Sea Level Rise + Climate Change

City of Miami Beach Key Actions

- **Maintaining extensive sand dunes** that minimize risk from storm surge and provide habitat.
- Developing **design guidelines for historic preservation** in the face of sea level rise and climate change.
- Developing unique and creative ways to help the community learn more, including an **Adaptation Calculator and dynamic Resilience Open Houses**.
- Conducting dynamic **surface/groundwater modeling**.
- Recently hosted the U.S. Conference of Mayors, and is internationally **recognized for its adaptation projects**.

"Our program delivers quality of life for residents and visitors today and provides for a sustainable and resilient tomorrow."

—Coastal Assistant City Manager

GM&B Context

Housing

Key Actions

- The Miami-Dade County **Homeless Trust 10-year Plan** provides framework to locally end homelessness.
- The Miami-Dade County **Housing Surcharge Tax or MEEK tax** sets aside funding for affordable housing.
- Miami-Dade County Consolidated **Housing and Urban Development (HUD) Plan** outlines goals toward providing access and opportunity to attainable housing, social services, and jobs.
- Miami-Dade County is committed to working on a five-year plan to provide **affordable housing** in partnership with six entitlement cities, including the City of Miami and City of Miami Beach, by June 2018.
- Greater **Miami Chamber of Commerce Housing Taskforce** highlights opportunities for housing affordability.

GM&B Context

Housing

Key Actions

- University of Miami's **Miami Affordability Project** is a tool to visualize neighborhood level housing market dynamics.
- The City of Miami Beach initiated **Innovative Housing Conversion Projects**.
- The City of Miami's affordable and attainable mixed-income and workforce **housing benefits ordinances**.
- **The City of Miami's Miami 21 is a form-based zoning code guide based on principles of New Urbanism and Smart Growth**
- **Florida International University (FIU) Metropolitan Center** is an urban policy think tank and solutions center.
- **Liberty Square Rising** revitalization initiative is for the redevelopment of the Liberty Square Public Housing Project.
- Adopted a volunteer **Property Assessed Clean Energy Programs (PACE)** program.

GM&B Context

Mobility

Key Actions

- Transit Planning Organization (TPO) completed a 2040 **Long Range Transportation Plan**.
- Miami-Dade County **Strategic Miami Area Rapid Transit (SMART) Corridor Plan** identifies six major corridors for proposed mobility solutions.
- **TPO's Land Use Study** determines how mobility networks interact with land uses.
- **TPO's Transportation Improvement Program (TIP)** identifies a list of upcoming transportation projects over a four-year period.
- Miami-Dade County **Metrorail Car Replacement Program** is a phased implementation plan to replace Metrorail Cars.

GM&B Context

Key Actions

Mobility

- Multiple, highly used Municipal **Trolley + Circular Systems** are operated and funded by the local governments.
- **Underline Project** is a planned 10-mile neighborhood park, urban trail, and living art destination underneath the existing Metrorail line.
- The City of Miami Beach Transportation Master Plan has a **Pedestrian First Strategy** component.
- City of Miami Beach built the city's first **protected bike lane** in Miami-Dade County.

GM&B Context

Key Actions

Social Services

- Miami-Dade County **Homeless Trust** oversees the **Homeless Plan** and provides funding support to provider organizations.
- City of Miami **A Comprehensive Center for Exceptional Student Services (ACCESS) Program** provides free individual tax assistance at parks and Neighborhood Enhancement Team (NET) Offices.
- **Career Centers** at Lindsey Hopkins and Camillus House.
- Summer Youth **Financial Empowerment & Employment Program**.
- City of Miami **Homeless Assistance Program (MHAP)** provides services to the homeless.

Miami Herald

Camillus.org

GM&B Context

Key Actions

Social Services

- United Way's **Asset Limited, Income Constrained, Employed (ALICE) Report** establishes populations in economic danger.
- **Beacon Council's One Community, One Goal** Initiative provides a roadmap for economic success.
- **CareerSource** works directly with business to connect them with people in need of jobs.

Beacon Council

GM&B Context

Key Actions

Health

- **Consortium for a Healthier Miami-Dade** to act as a catalyst for healthy living.
- The Children's Trust funded **school-based health clinics**.
- The Miami-Dade County **Healthcare Preparedness Coalition** serves as a forum of healthcare organizations and supporting agencies.
- The Miami-Dade County **substance abuse task force** combats the ongoing drug epidemic.

GM&B Context

Key Actions

Health

- The **MetroLab** partnership with local universities is studying ways to help local government combat mosquito-borne illness.
- Miami-Dade County **funding operation model for mosquito control** improved to address Zika.
- **Mosquito repellent** was provided to vulnerable populations by local government organizations.
- Media and neighborhood **outreach campaigns about Zika** awareness were held.

GM&B Context

Key Actions

Juvenile Crime

- GM&B partners have **active social media** presences to distribute information and monitor potential risks.
- Miami-Dade County's **juvenile assessment center (JAC)** works to address and intervene prior to re-offense.
- Miami-Dade County is a leader in-state for **civil citations of juvenile offenders to avoid jail and offer rehabilitative services.**
- M-DCPS **ended out-of-school suspensions, reducing juvenile crime**.
- **The Children's Trust Together for Children** Initiative is a coalition formed to promote and address youth safety.
- Education, mentoring, and workforce development initiatives were formed with **5000 Role Models and Big Brothers Big Sisters**.

GM&B Context

Key Actions

Emergency Management

- After Hurricane Andrew, **the South Florida Building Code** transformed construction standards to ensure buildings stand up to storms. It was adopted by the entire **State of Florida**.
- **GM&B has advanced Urban Search and Rescue teams, ready to deploy in the event of a major disaster recovery.**
- **Local Mitigation Strategy (LMS)** Workgroup meets quarterly to coordinate and move disaster preparedness and mitigation funding.

GM&B Context

Key Actions

Emergency Management

- City of Miami's **72-hour initiative** prepares the community for hurricanes, terrorism, and active shooter events.
- American Institute of Architects Miami **Sea Level Rise (SLR) Task Force** are identifying opportunities to strengthen the Florida Building Code.
- City of Miami Beach **land use codes have been updated to take SLR projection into account and plan for climate adaptation**.
- The countywide **Recovery Plan** addresses policies that promote an all-hazards disaster recovery process amongst all stakeholders.

GM&B Context

Key Actions

Intergovernmental Collaboration

- GM&B partners are members of the **Southeast Florida Regional Climate Change Compact**. Municipal working groups meet about important topics.
- **Seven50** is a blueprint for development in Southeast Florida and takes sea level rise into account.
- **Several leadership groups meet routinely, including: the Miami-Dade County Manager's Association, the Planners Technical Committee (PTC), and the Miami-Dade Police Chiefs Association.**
- GM&B partners are translating **resilience planning into budgeting and strategic planning**.

GM&B Context

Key Actions

Intergovernmental Collaboration

- Miami-Dade County **League of Cities** unites common interests of governments within the county.
- The Miami **Urban Area Working Group (UAWG)** establishes Urban Area policy and **Urban Areas Security Initiative (UASI)** funding allocation.
- Miami-Dade County **LMS Workgroup** meets quarterly to discuss disaster preparedness and mitigation funding.
- The **Transportation Planning Organization (TPO)** meets regularly to coordinate federal funding and prioritize capital projects.

GM&B Context

Case Study

Intergovernmental Collaboration

Miami-Dade County is vulnerable to a variety of hazards and the Comprehensive Emergency Management Plan establishes the framework for the County and its 34 municipalities to address these risks. The Plan outlines the intergovernmental roles and responsibilities. Each municipality is independently responsible for the safety of its residents and visitors with mutual aid support from the County.

The Local Mitigation Strategy (LMS) Working Group is made up of a broad stakeholder group including federal, state, and local government; private enterprise; private and public schools, colleges, and universities; hospitals; and not-for-profits. The Working Group meets quarterly to update the strategy which includes a countywide list of funded and unfounded projects which are tracked to monitor progress on risk mitigation and comprehensively address the impact the current and future hazards.

In addition to the LMS working group, the Whole Community Engagement Group is convened quarterly by The County's Emergency Management with representatives of the municipalities, universities/colleges and other County partners. The group is convened to discuss current issues, best practices, and inform and solicit feedback on current plans.

GM&B Context

Transient + Aging Population

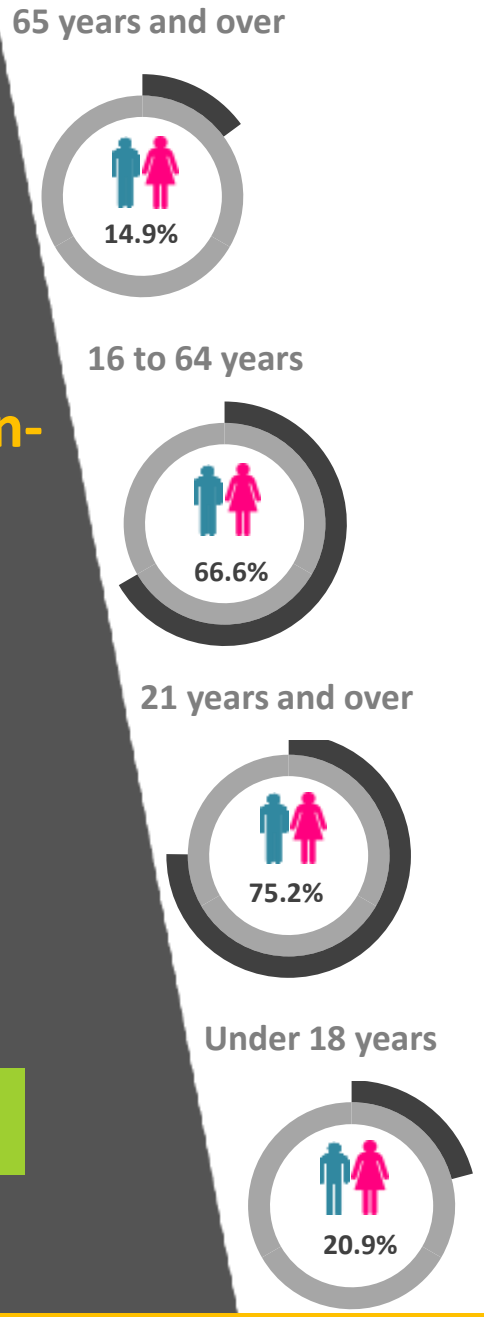
ANNUAL POPULATION: GM&B has **2.7 million people** with **52% foreign-born**; 21% under age 18 and 15% over age 65; the **average age is 36 years old** and is expected to increase to 40 by 2030.

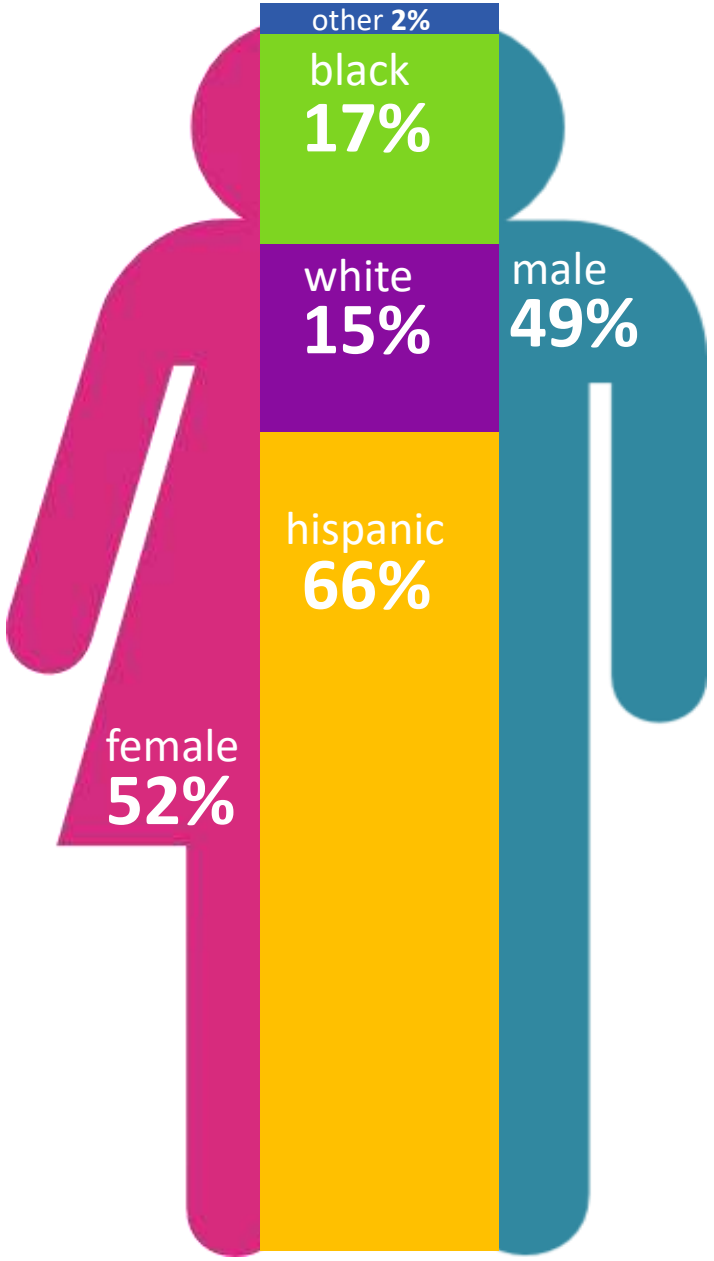
POPULATION

2.7

MEDIAN AGE

36





GM&B Context

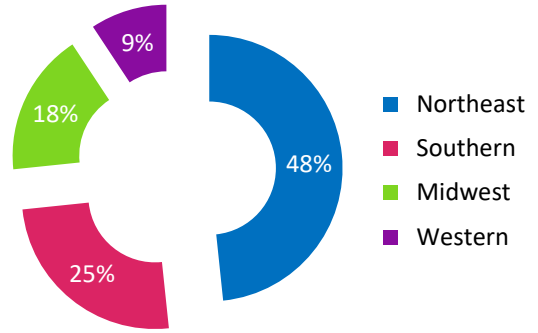
Transient & Aging Population

VISITING POPULATION:

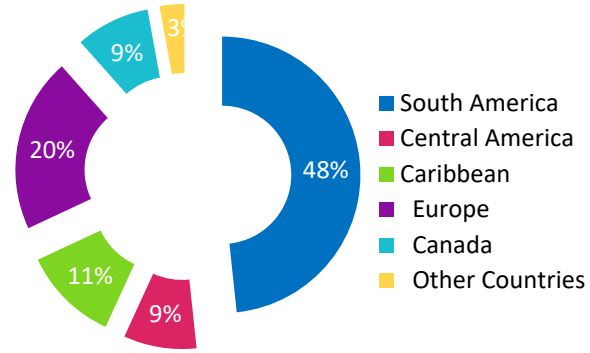
22.5 million arrivals at Miami International Airport in 2016;

51% international and 49% domestic visitors to GM&B;

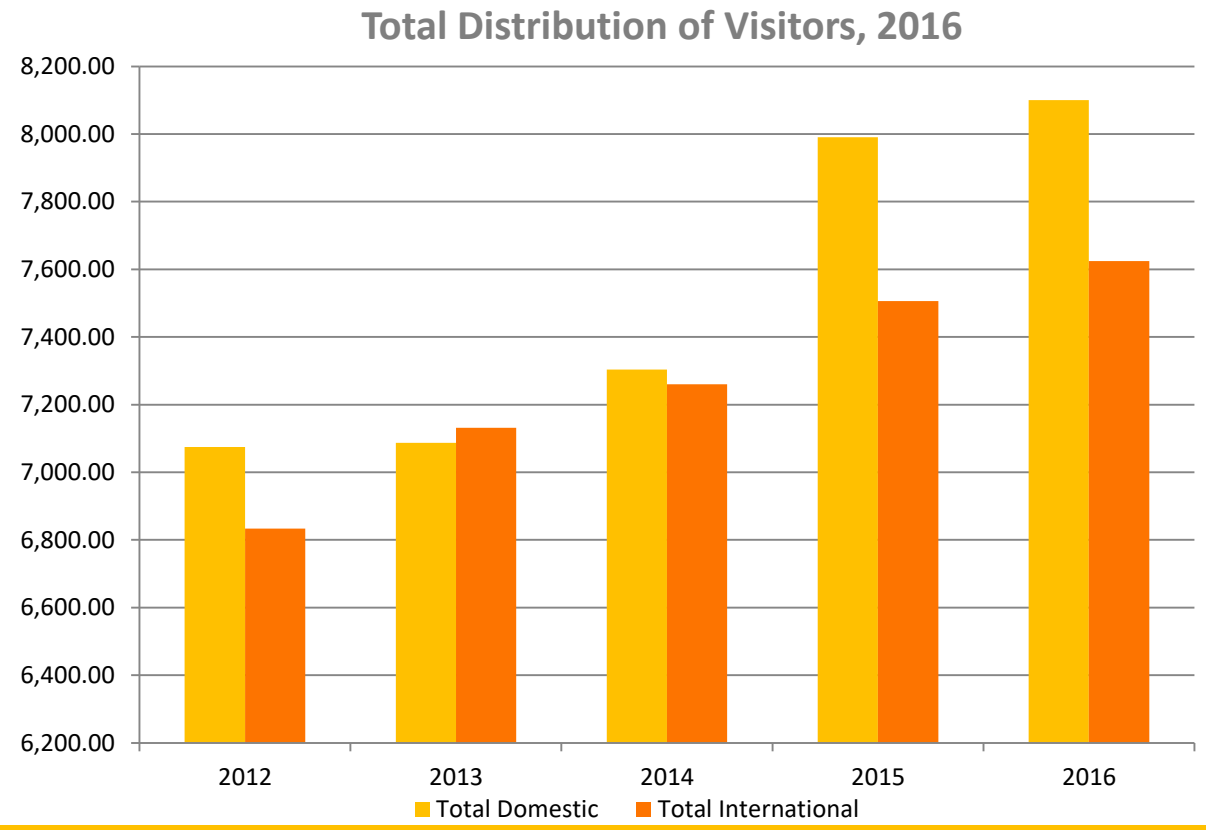
33% of visitors from Latin America annually; **85% visit for leisure**.



Domestic Visitors, 2016



International Visitors, 2016

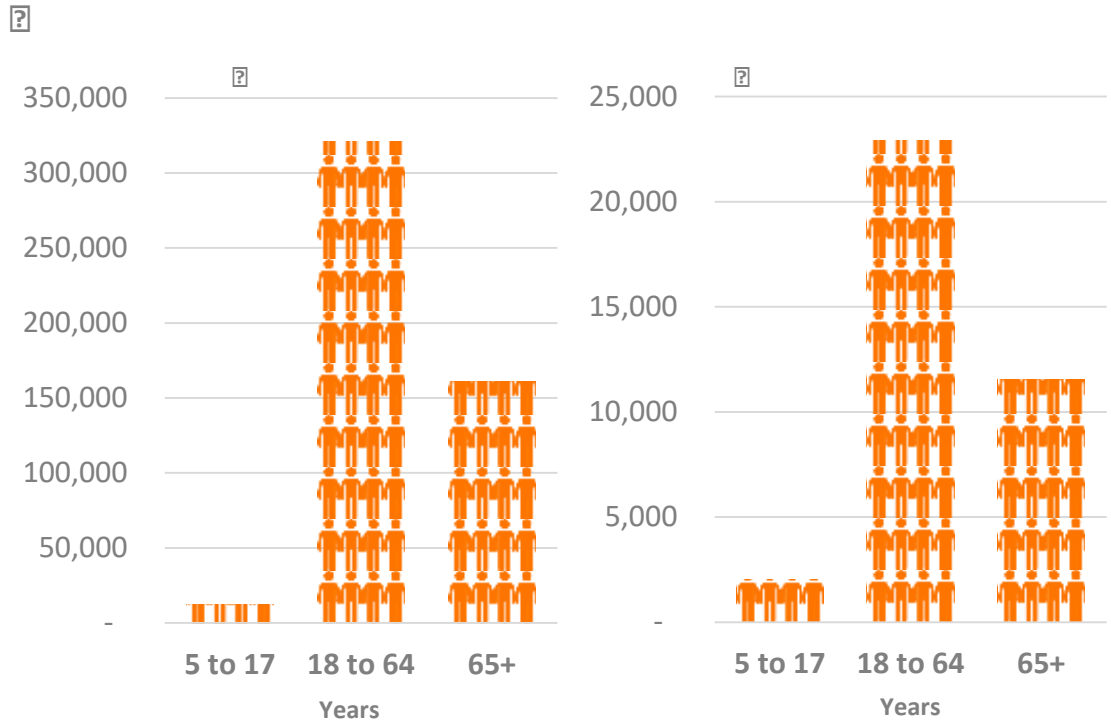


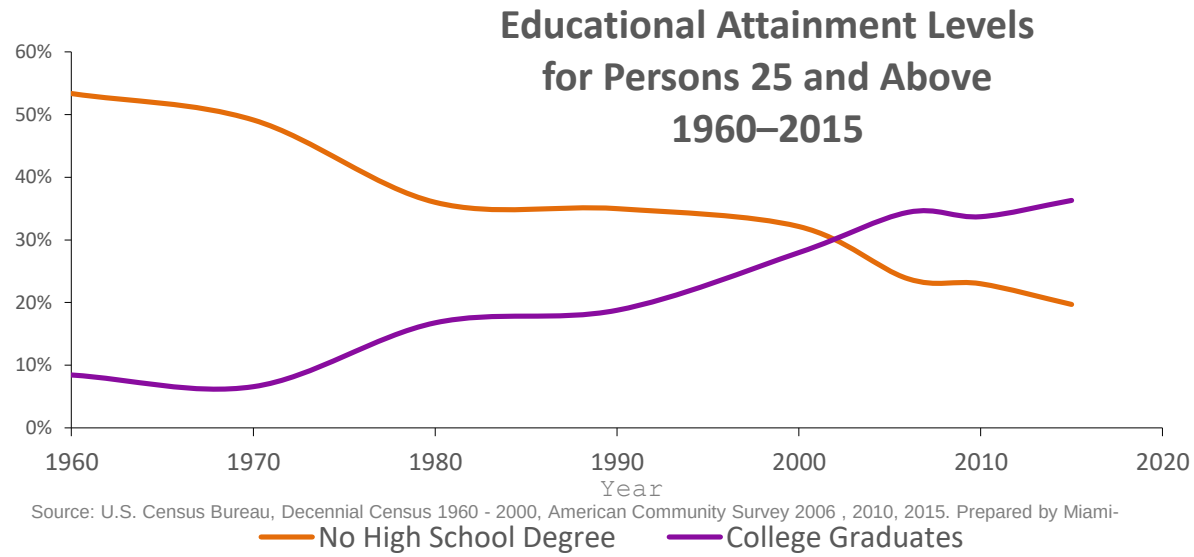
GM&B Context

Education + Language

EDUCATION: Among residents over the age of 25, **20% have no high school degree** and **36% percent have a college degree**. Miami-Dade County Public School (M-DCPS) high school graduation rates are slightly below the national average.

LANGUAGE: 531,023 (19.6%) of the 2.7 million people are **not proficient in English**.





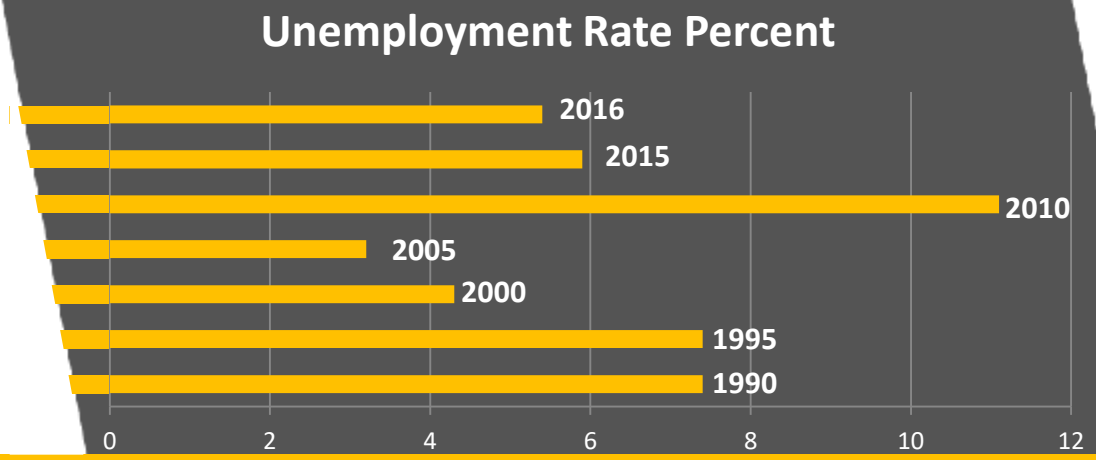
Source: U.S. Census Bureau, Decennial Census 1960 - 2000, American Community Survey 2006 , 2010, 2015. Prepared by Miami-

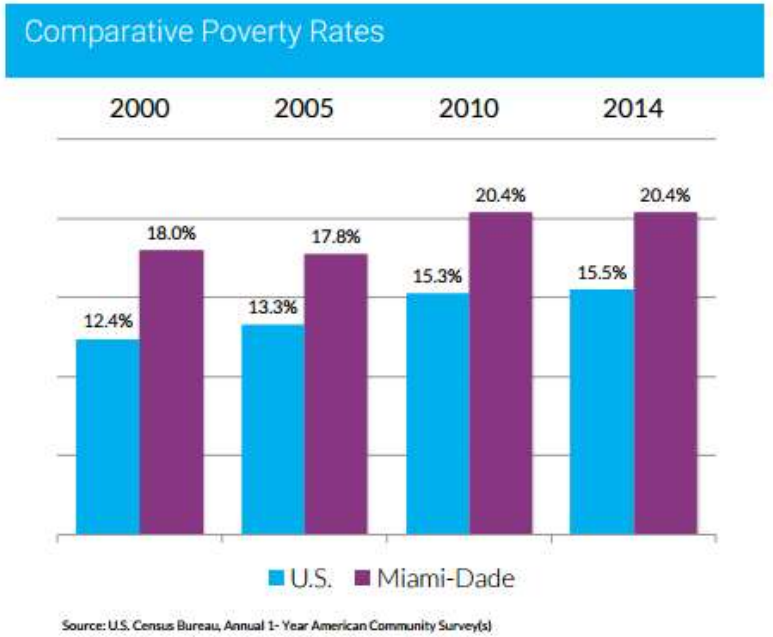
GM&B Context

Income Gaps + Averages

INCOME: The average income is $43,278, **11% lower than the national average**.

POVERTY: 20% of the population lives below the poverty level, **5% higher than the national average**.

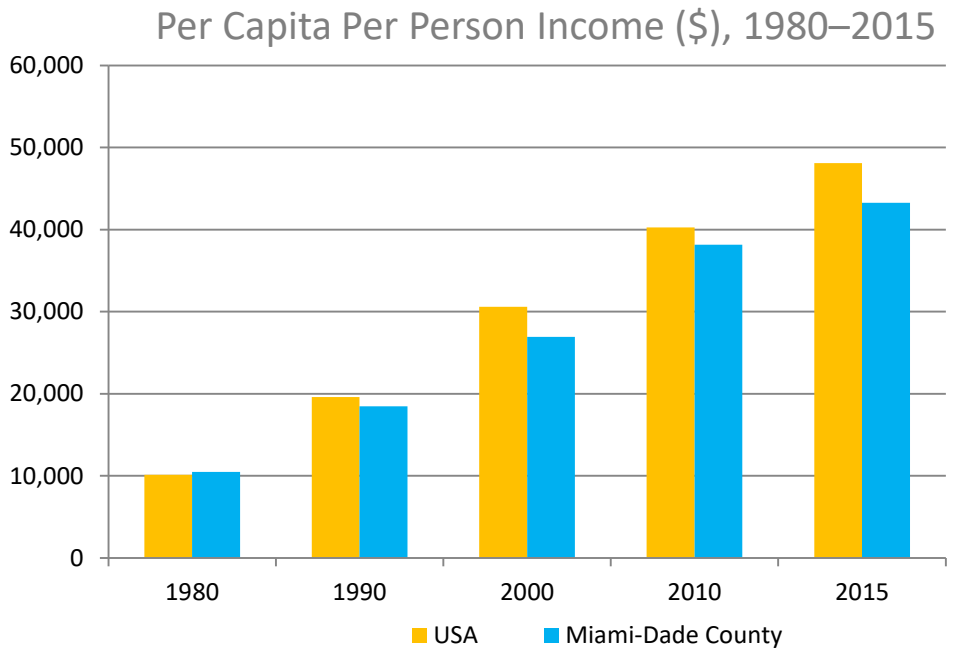




Miami-Dade County:

534,720
Persons Live Below Poverty

267,544
Households Earn Less Than $25,000

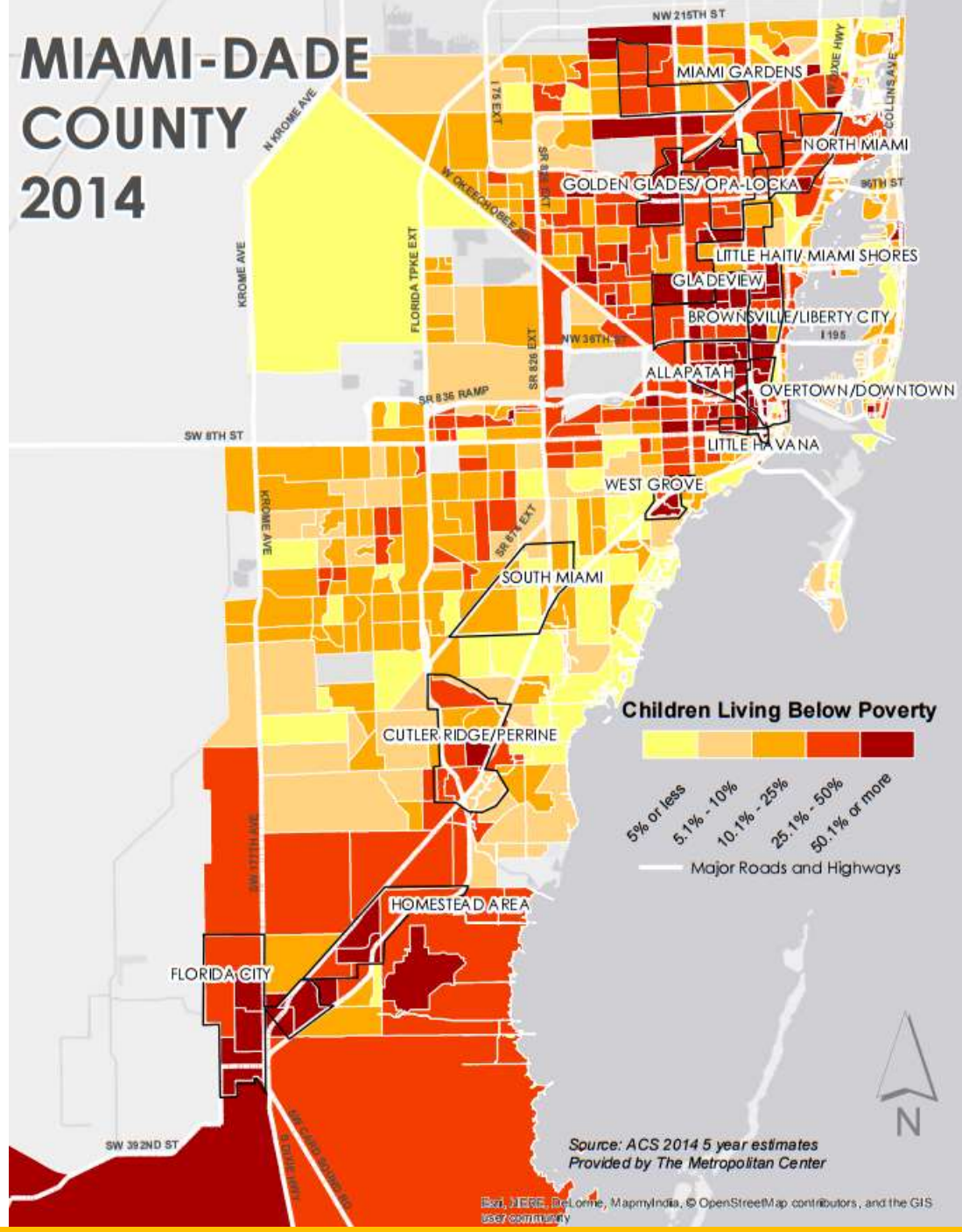


GM&B Context

Poverty

VULNERABLE: 21% of GM&B is in poverty; **27.5**% of persons in poverty are under the age of 18.

According to a 2016 Bloomberg report, the **City of Miami is the most unequal in the country** with a large gap in cost of living and cost of housing.



GM&B Context

Distressed Communities

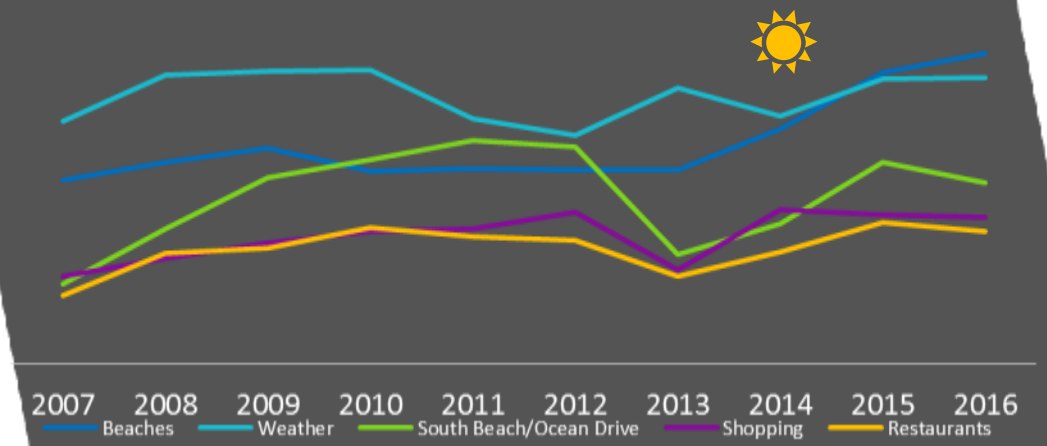
VULNERABLE: The region has high levels of poverty, housing distress, and low educational attainment primarily in isolated pocket communities.

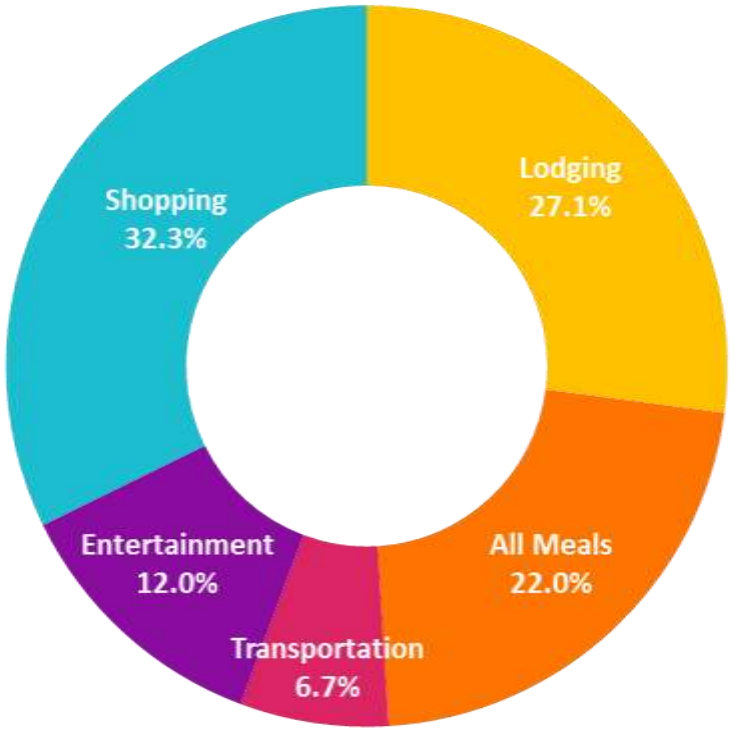
The highlighted 14 neighborhoods have been identified has Miami-Dace County's most distressed based on 12 **economic, education and housing distress indicators**.

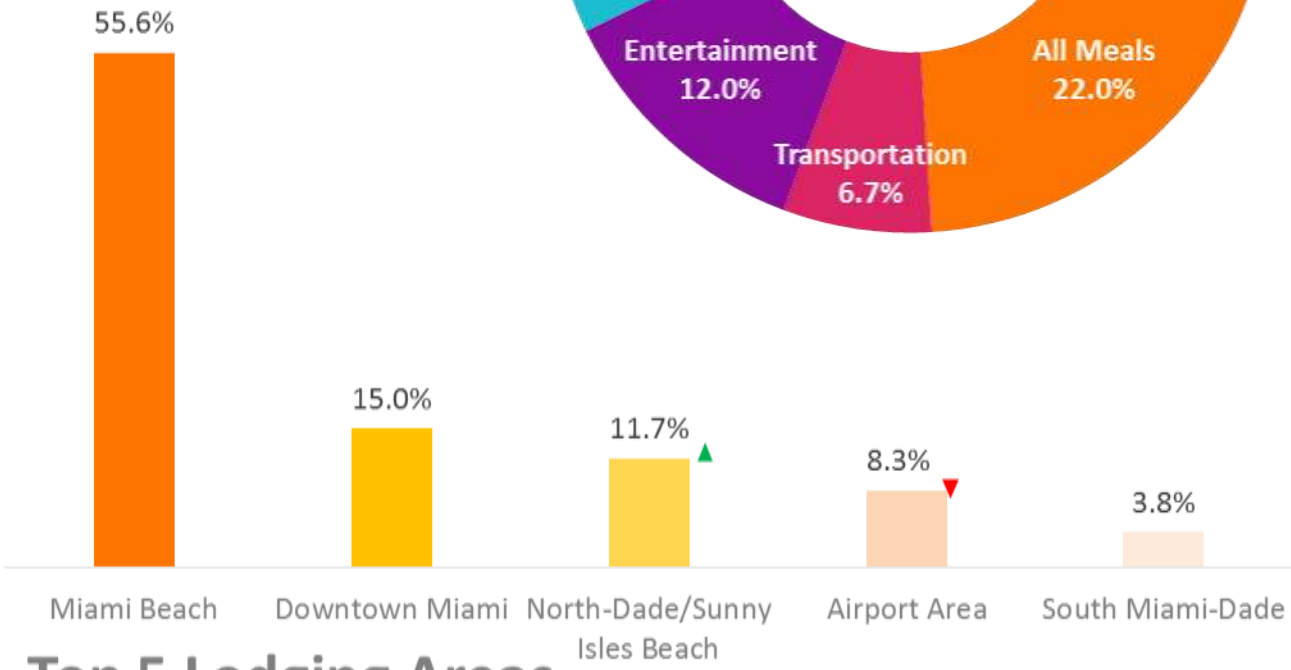
GM&B Context

Tourism + Economy

TRANSIENT: The top three economic engines, **Miami International Airport, PortMiami, and Tourism,** generated approximately $85.5 billion in 2015.







Top 5 Lodging Areas

Source: 2016, The Greater Miami Convention & Visitors Bureau

GM&B Context

Economy + Diversity

Growing Industries

HOSPITALITY

Industry Growth:

Year	Jobs
2012	120,894
2016	137,791

14%

Wages/Salaries*:
$28,919

Total No. of Companies: 6,869

Who's Here:
Royal Caribbean, Carnival Cruise LinesCrystal Cruises, Joe's Stone Crabs, Amadeus North America, Expedia, Fontainebleau Hotel, East, Miami, Big Bus Tours, Faena Hotel, ZooMiami, Perez Art Museum Miami

LIFE SCIENCES HEALTHCARE

Industry Growth:

Year	Jobs
2012	118,655
2016	128,263

8%

Wages/Salaries*:
$54,092

Total No. of Companies: 1,581

Who's Here:
BD Biosciences, Beckman Coulter, Cordis, Noven Pharmaceuticals, Teva Pharmaceuticals, Medtronic Latin America, Novartis Latin America, OPKO Health, Baptist Health System, UHealth, Jackson Memorial, Nicklaus Children's, Mount Sinai Medical Center

2015 Wages + Salaries, Sources: EMSI 2016 via Beacon Council; Advantage Magazine

GM&B Context

Economy + Diversity

Growing Industries

BANKING

Industry Growth:

Year	Jobs
2012	36,802
2016	40,975

11%

Wages/Salaries*:
$105,584

Total No. of Companies: 2,964

Who's Here:
Bank of America Merrill Lynch, Citibank, Northern Trust Bank of Florida, SunTrust Bank, TD Bank, BBVA Compass, Visa International, Wells Fargo PayPal

CREATIVE

Industry Growth:

Year	Jobs
2012	23,066
2016	26,100

13%

Wages/Salaries*:
$70,233

Total No. of Companies: 3,448

Who's Here:
Telemundo, Tiffany & Co. Latin America, Perry Ellis International, Rene Ruiz, Bianca Coletti, Chopard Marketing, Hermes Latin America, Univision, HBO Latin America, Del Toro, Miansai

**2015 Wages + Salaries, Sources: EMSI 2016 via Beacon Council; Advantage Magazine*

GM&B Context

Economy + Diversity

Growing Industries

TRADE

Industry Growth:
Year Jobs
2012 28,533
2016 34,394

Wages/Salaries*:
$47,721

Total No. of Companies: 2,511

Who's Here:
Hellman Worldwide, Ryder, Seaboard Marine, Southeastern Freight Lines, Sysco South Florida, CMA – CGM (Caribbean), DHL Global Forwarding, FedEx Latin America and Caribbean, Kuehne & Nagel, Maersk, UPS Americas, Dependable Packaging Solutions, Floral Logistics, Flagler Global Logistics, Trans-Express, Overseas Cargo

AVIATION

Industry Growth:
Year Jobs
2012 21,264
2016 24,670

Wages/Salaries*:
$62,253

Total No. of Companies: 482

Total No. of Companies: 482

Who's Here:
American Airlines, LATAM, KLX Aerospace Solutions, Boeing Flight Services, IATA, Airbus Americas Training Center, HEICO, AAR, Barfield, Satair, FEAM, ATR Americas.

2015 Wages + Salaries, Sources: EMSI 2016 via Beacon Council; Advantage Magazine

GM&B Context

Economy + Diversity

Growing Industries

TECHNOLOGY

Industry Growth:

Year	Jobs
2012	6,795
2016	8,674

Wages/Salaries*:
$87,171

Total No. of Companies: 7,773

Although the Technology Industry has the lowest number of jobs in comparison to other industries, ***the Technology Industry is seeing the most job growth*** *in recent years.*

Who's Here:
Oracle, Telefonica Data USA, Verizon Teremark (NAP of the Americas), Apple, Cisco, Google, Twitter, Uber, Lyft, Microsoft, Facebook, Intel, SAP, SapientNitro, Alienware, CareCloud, FPL Fibernet

**2015 Wages + Salaries, Sources: EMSI 2016 via Beacon Council; Advantage Magazine*

Stakeholder Engagement

Stakeholder Engagement

Introduction

The Stakeholder Engagement part of resilience strategy development is **proactive and inclusive** to reflect all parts, ages, ethnicities, cultures, and income levels of a community. Our efforts range from simply informing to listening, consulting, and collaborating—with goal of **empowering the whole community** to have a voice in building resilience.

This section contains a **summary of stakeholder assessment** via meetings, focus groups, online questionnaires, social media, and summaries.

Stakeholder Engagement
Summary

2,031
Responses
in 2 months

Resilient GM&B Priorities Online Questionnaire

14 Interactive Focus Groups

491
Participants

LMS, MDCCMA, Philanthropy Miami, Miami Beach Workshops, Code for Miami, Planner Technical Committee, AIA/MCAD, CLEO Institute (Little Haiti), UASI, GMCC Goals Conference, South Dade EDC, Liberty City, Little Havana, Doral Community Coalition

70%
Mayor Meetings Completed

403
Responses
In 2 months
Discovery Area Priorities Questionnaire

Numerous
Local Speaking Engagements

9 Subject Specific Meetings **118**
Participants

transportation, housing, planning, education and youth development, social services, health services, public safety, water resources and natural systems, GIS

200
Participants

Agenda Setting Workshop

5 100RC Engagements

Resilience Summit, Facebook Live, Gold Coast Australia Resilience Symposium, Manchester ASW, New Orleans

Stakeholder Engagement

Numbers as of August 2017

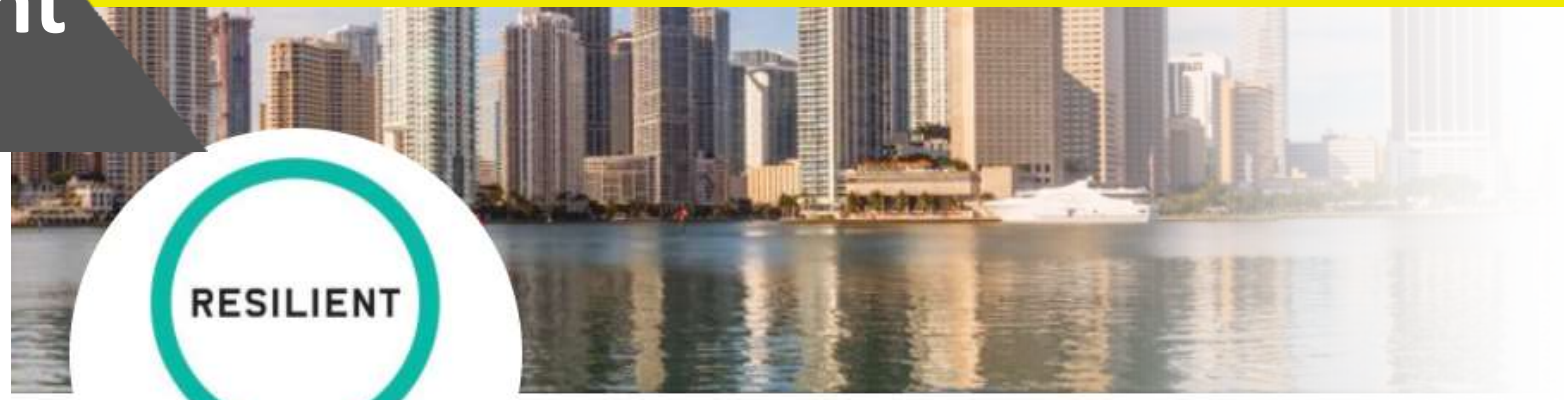
379 likes
386 followers

Facebook Live with **The New Tropic:** **3000** viewers

1,010 following
462 followers

1,151 following
390 followers

@Resilient305



RESILIENT GREATER MIAMI THE BEACHES

Tweets 242 | Following 1,010 | Followers 462 | Likes 167 | Lists 1

Resilient305
@Resilient305

A collaboration between @MiamiDadeCounty, @CityofMiami, @MiamiBeachNews and @100ResCities to respond to Greater Miami & The Beaches' challenges

Miami, FL
resilient305.com
Joined March 2017
75 Photos and videos

Tweets | Tweets & replies | Media

Resilient305 @Resilient305 · Aug 28
Resilience is about surviving and thriving, regardless #Resilient305 Photo... instagram.com/p/BYV0jO

Resilient305 @Resilient305 · Aug 25
Did you know sunscreen was invented by a #Miami Benjamin Green developed a lotion for WWII soldier

2 2

Resilient305 @Resilient305 · Aug 24
On 8.24.1992 #HurricaneAndrew made landfall on

Stakeholder Engagement

Key Issue Topics

Social Services

- Awareness of services (by users and by providers)
- Collaboration (data sharing, resources, tracking)
- Cultural diversity

Natural Systems

- Quality (Everglades, Biscayne Bay)
- Integration (urban, preservation)
- Agriculture

Planning + Zoning

- Collaboration among Miami-Dade County and all cities
- Land use standards
- Data sharing
- Lack of economic diversity

Public Safety

- Juvenile crime
- Cybersecurity
- Disaster response

Stakeholder Engagement

Key Issue Topics

Housing

- Rent-regulated housing; affordability bands
- Location and quantity of availability
- Non-resident buyers driving up housing costs

Transit

- Public perception of public transit
- Transit reliability, ease of use, safety
- Multimodal options (safe, connected)

Water Resources

- Water quantity and quality (aquifer, sea level rise)
- Shoreline nourishment
- Utility infrastructure (water, sewer)

Education + Youth Development

- Funding per child
- Truancy + graduation rates

Health Services

- Health pandemic (Zika, yellow fever)
- Preventive care in amongst vulnerable populations
- Major health issues (HIV, drug use)

Stakeholder Engagement
Key Findings

What is Resilience?

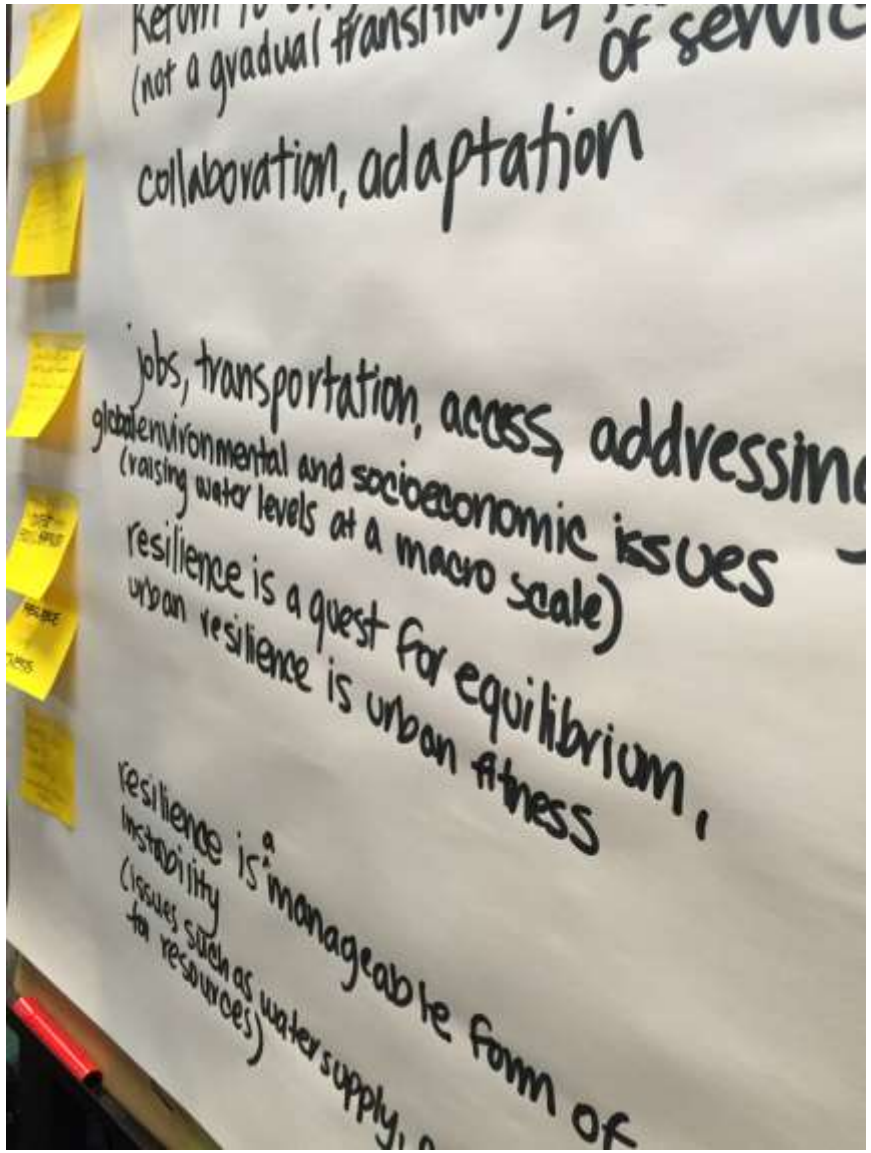
"Adaptability in the built environment… buildings that can withstand shocks and stresses." —Architect, Private Sector

"Be prepared, now." —Engineer, Public Sector

"Urban Resilience is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience." —100RC

"The ability to recover from acute or chronic stresses." —Emergency Management, Public Sector

"Proactive and engaging all stakeholders to create a plan that resolves issues." —Community Programs, Non-profit



Stakeholder Engagement

Key Findings – Averages

Priority Shocks + Stresses

Agenda Setting Workshop

Focus Groups

Mayor Meetings

Shocks

Agenda Setting Workshop

- Hurricanes/Tornadoes 22%
- Economic Crash 11%
- Infrastructure Failure: Cyber Security/Communications 9%
- Infrastructure Failure: Transport/Access 9%

Focus Groups

- Hurricanes/Tornadoes 28%
- Economic Crash 17%
- Infrastructure Failure: Transport/Access 9%
- Rainfall Flooding 9%

Mayor Meetings

- Rainfall Flooding 19%
- Economic Crash 19%
- Hurricanes/Tornadoes 19%
- Infrastructure Failure: Sewer/Stormwater 16%

Top Shocks across engagement include Hurricanes/Tornados, Economic Crash, Infrastructure Failure

Stakeholder Engagement

Key Findings – Averages

Priority Shocks + Stresses

Agenda Setting Workshop

Focus Groups

Mayor Meetings

Stresses

Agenda Setting Workshop

- Overtaxed + Unreliable Transportation System 15.5%
- Rising Sea Level + Coastal Erosion 15.5%
- Aging Infrastructure 15.5%
- Lack of Affordable Housing 14%
- Access to Quality Education 7%

Focus Groups

- Lack of Affordable Housing 29%
- Overtaxed + Unreliable Transportation System 25%
- Rising Sea Level + Coastal Erosion 17%
- Pronounced Poverty 11%
- Aging Infrastructure 9%

Mayor Meetings

- Overtaxed + Unreliable Transportation System 23%
- Aging Infrastructure 16%
- Rising Sea Level + Coastal Erosion 15%
- Unstable Political Climate 12%
- Lack of Affordable Housing 12%

Top Stresses across engagement include Housing, Transportation, Infrastructure, Rising Sea Level

Stakeholder Engagement

Key Findings – Averages

Strengths + Weaknesses

Agenda Setting Workshop

Strengths

- Ensures continuity of critical services **21%**
- Meets basic needs **11%**
- Fosters long-term and integrated planning **10%**

Focus Groups

- Provides and enhances natural and man-made features **27%**
- Meets basic needs **23%**
- Ensures continuity of critical services **17%**

Mayor Meetings

- Fosters long-term and integrated planning **16%**
- Promotes cohesive and engaged communities **16%**
- Ensures continuity of critical services **12%**
- Ensures social stability, security, and justice **12%**

Top Strengths across engagement is ensures continuity of critical services

Stakeholder Engagement

Key Findings – Averages

Strengths + Weaknesses

Agenda Setting Workshop

Focus Groups

Mayor Meetings

Weaknesses

Provides reliable communications and mobility **31%**

Empowers a broad range of stakeholders **12.5%**

Supports livelihoods and employment **8%**

Supports livelihoods and employment **30%**

Fosters long-term and integrated planning **21%**

Provides reliable communications and mobility **18%**

Provides reliable communications and mobility **19%**

Meets basic needs **13%**

Ensures continuity of critical services **13%**

Top Weaknesses across engagement is reliable mobility

Stakeholder Engagement

Stakeholder Input

Perceptions Assessment

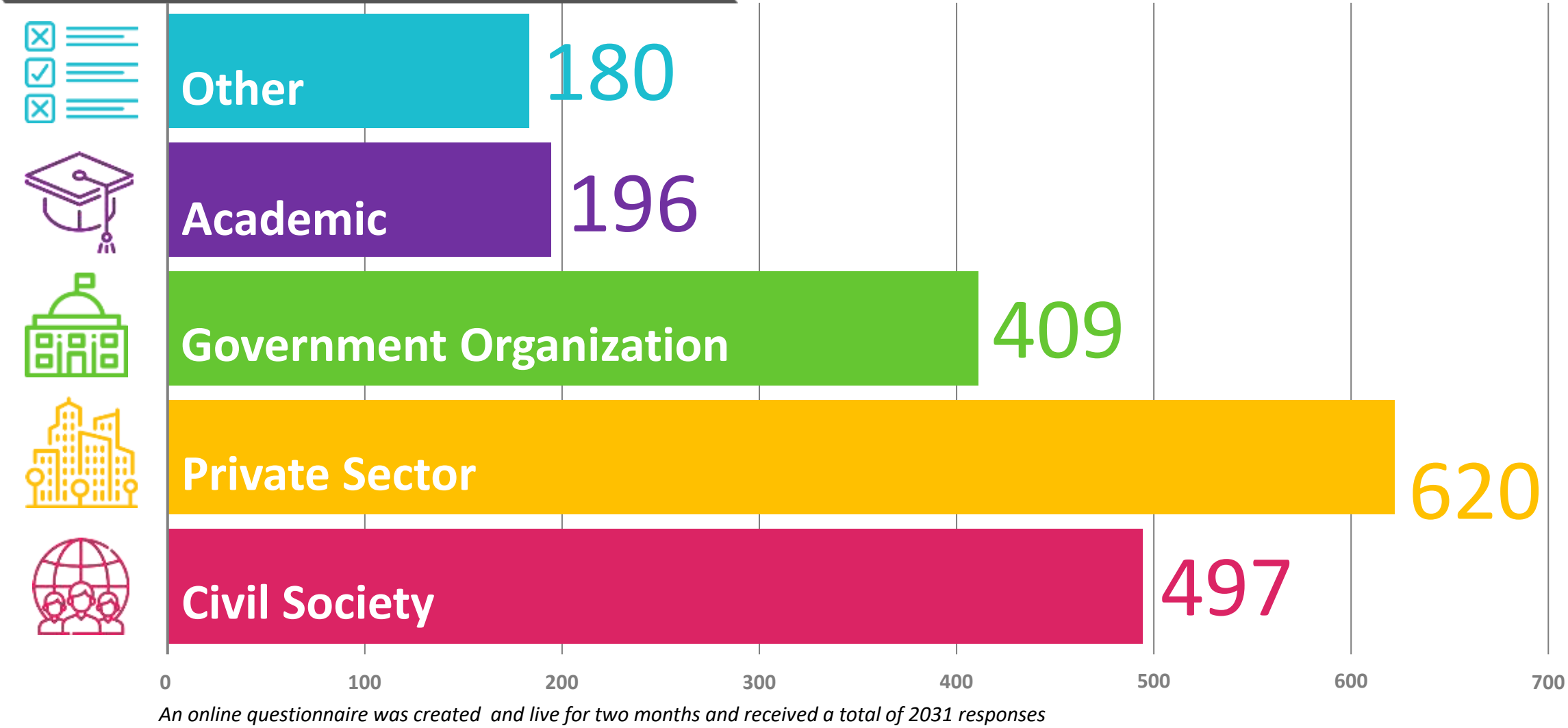
Perceptions

This City Resilience Framework gauges perceptions of primary resilience drivers. Workshop, meeting, and focus group participants from government, private, and civic sectors performed a strengths and weaknesses assessment on our services to identify gaps and opportunities.

Questionnaire Responses

2031 Total Respondents

Response by Profession

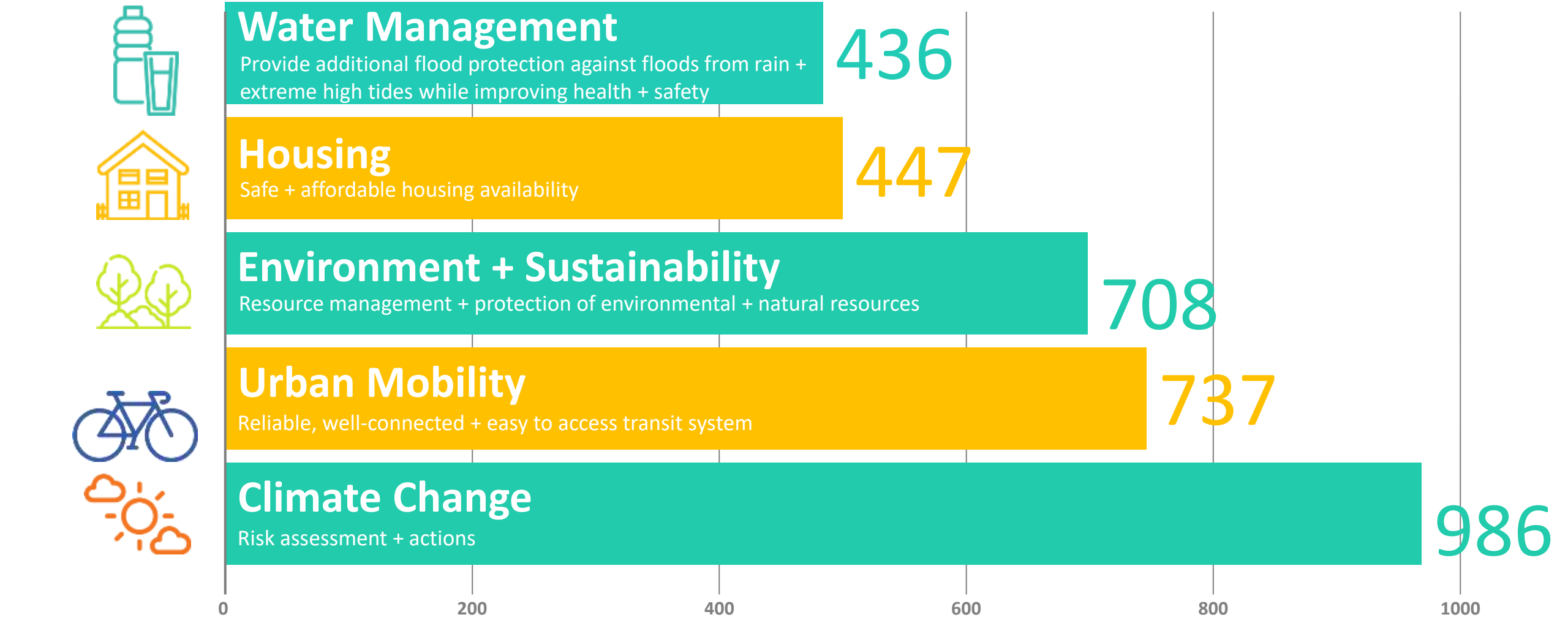


An online questionnaire was created and live for two months and received a total of 2031 responses

Questionnaire Responses
Key Priorities for Strategy

Response by Priority; Top 5 out of 18

Which issues should be prioritized in our 20-year resilience strategy?



An online questionnaire was created and live for two months and received a total of 2031 responses

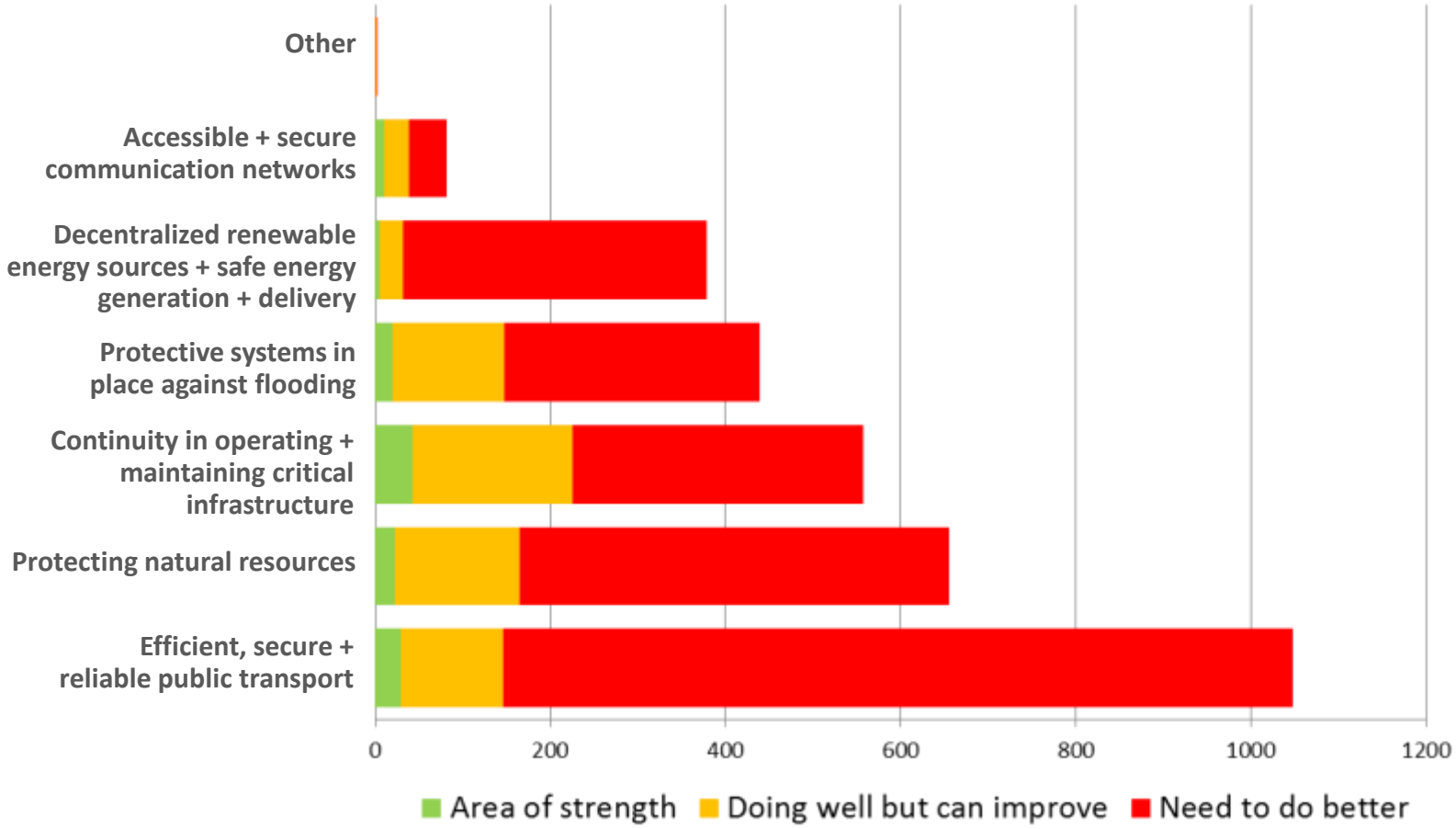
Questionnaire Responses
Key Findings

Infrastructure + Environment

Choose two factors that you feel are most important and rate how you think we're performing.

Infrastructure + Environment

Protects and enhances natural and man-made assets; ensures critical services operate in times of need; and provides a free flow of people, information, and goods.



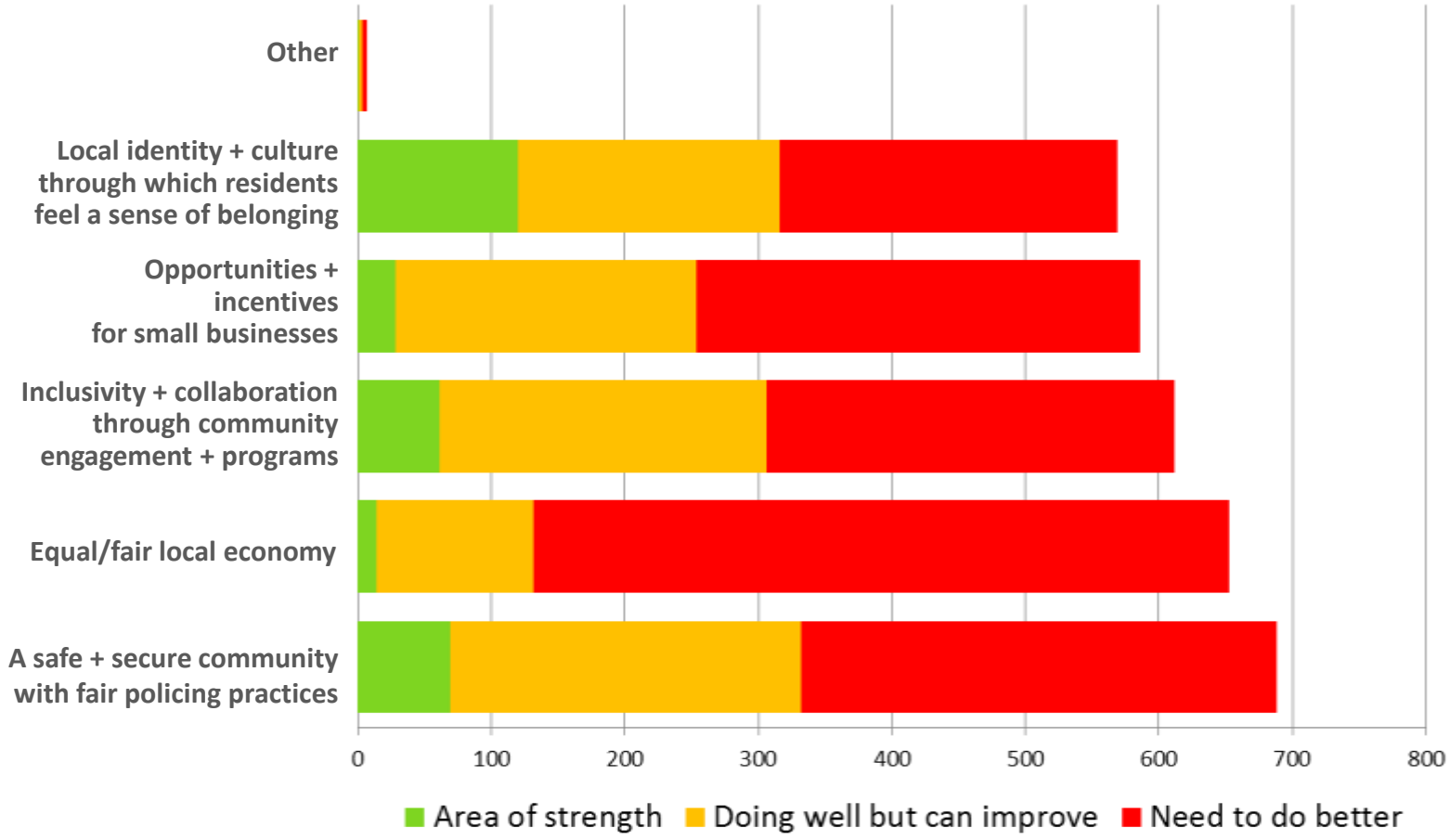
Questionnaire Responses
Key Findings

Economy + Society

Choose two factors that you feel are most important and rate how you think we're performing.

Economy + Society

Promotes social unity and the empowerment of its residents; ensures social stability, security, and justice; and fosters economic prosperity.



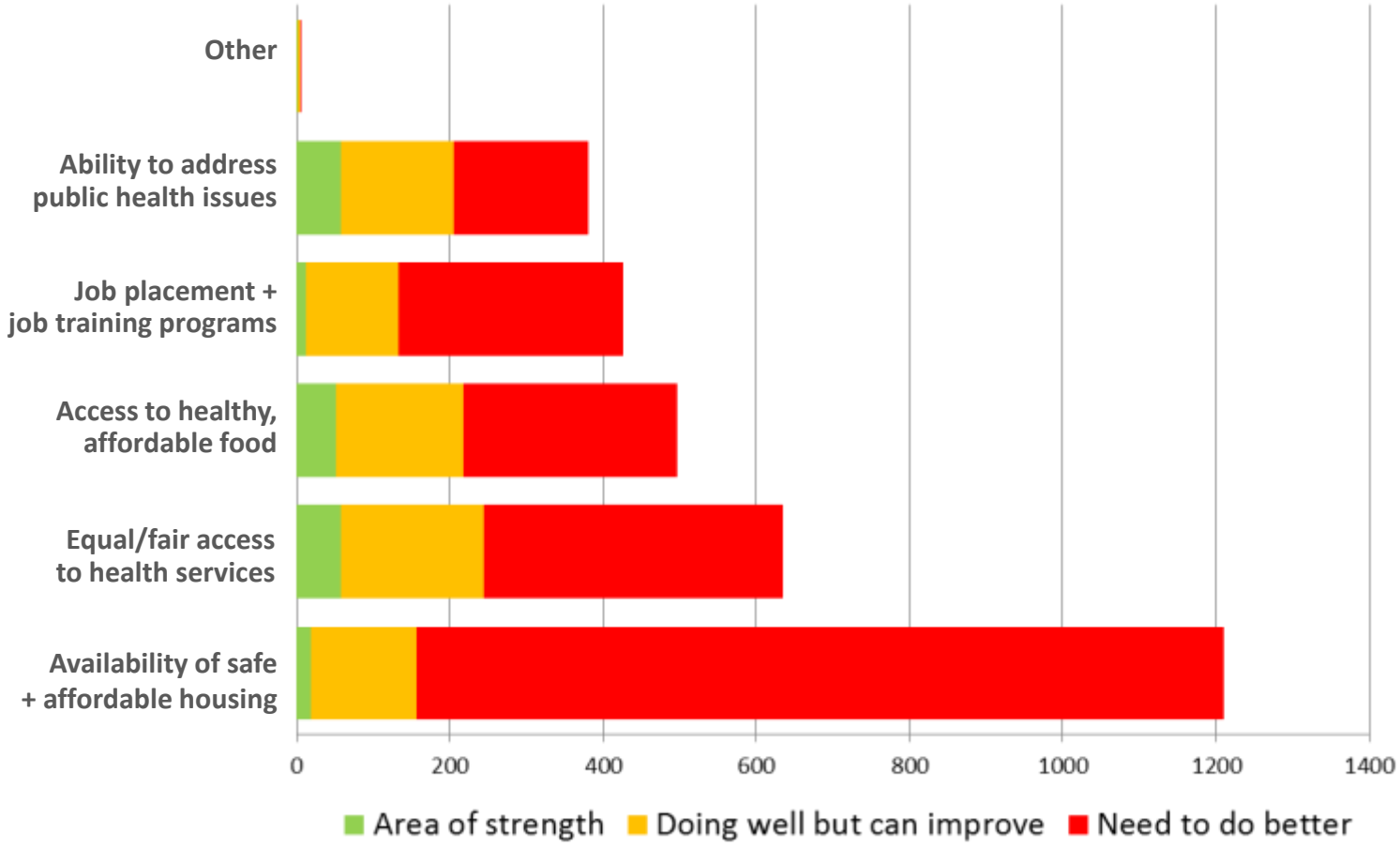
Questionnaire Responses
Key Findings

Health + Wellbeing

Choose two factors that you feel are most important and rate how you think we're performing.

Health + Wellbeing

Addresses the basic needs of the population including housing and healthcare, and provides its people with access to jobs and opportunities.



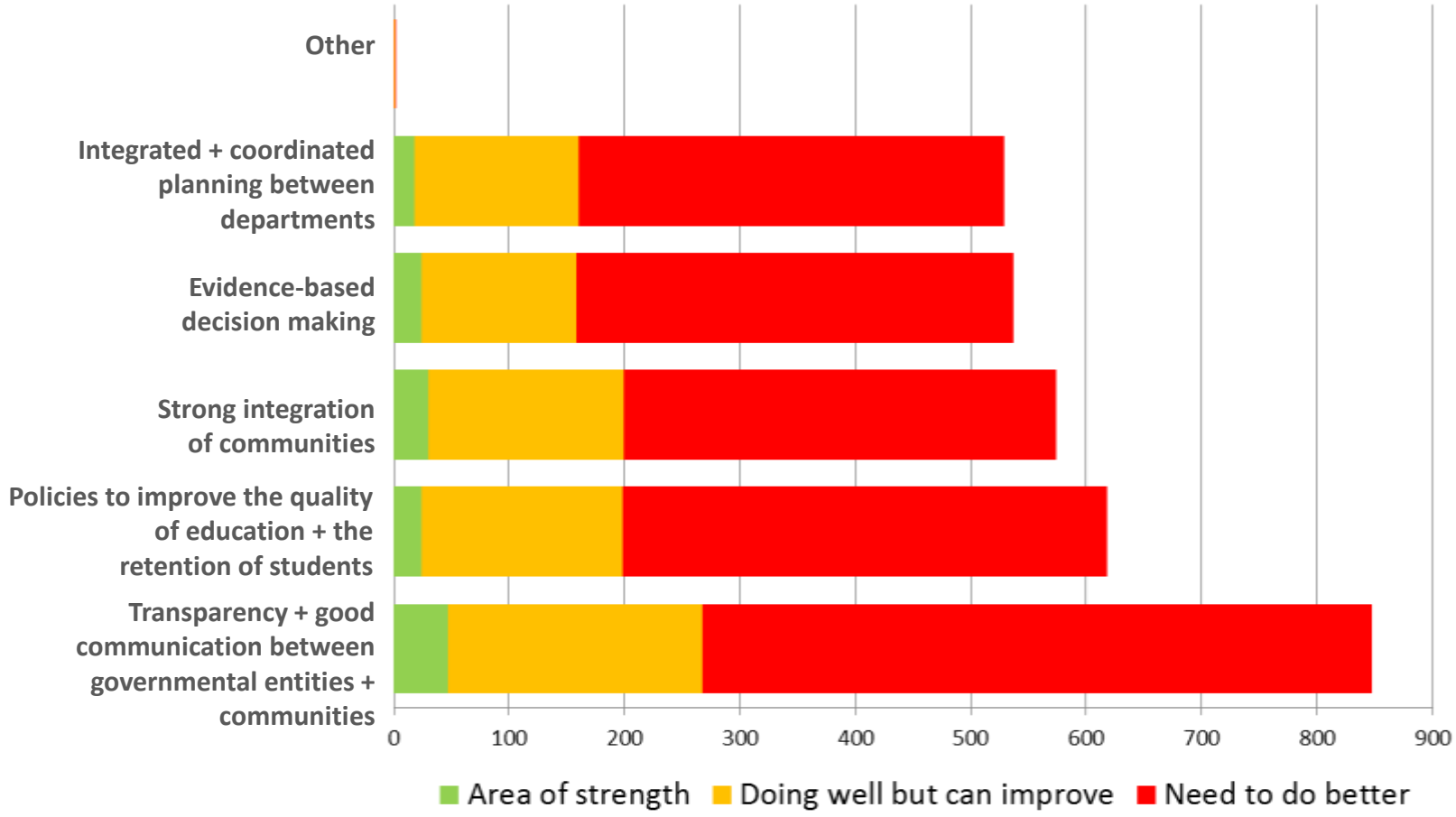
Questionnaire Responses
Key Findings

Leadership + Strategy

Choose two factors that you feel are most important and rate how you think we're performing.

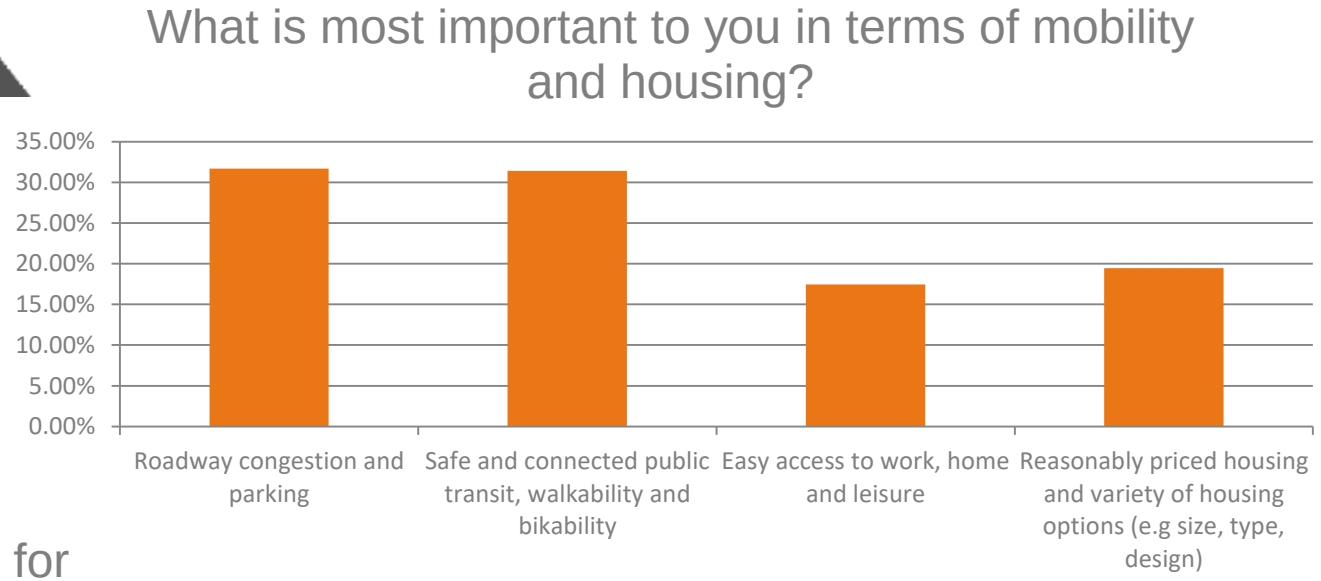
Leadership + Strategy

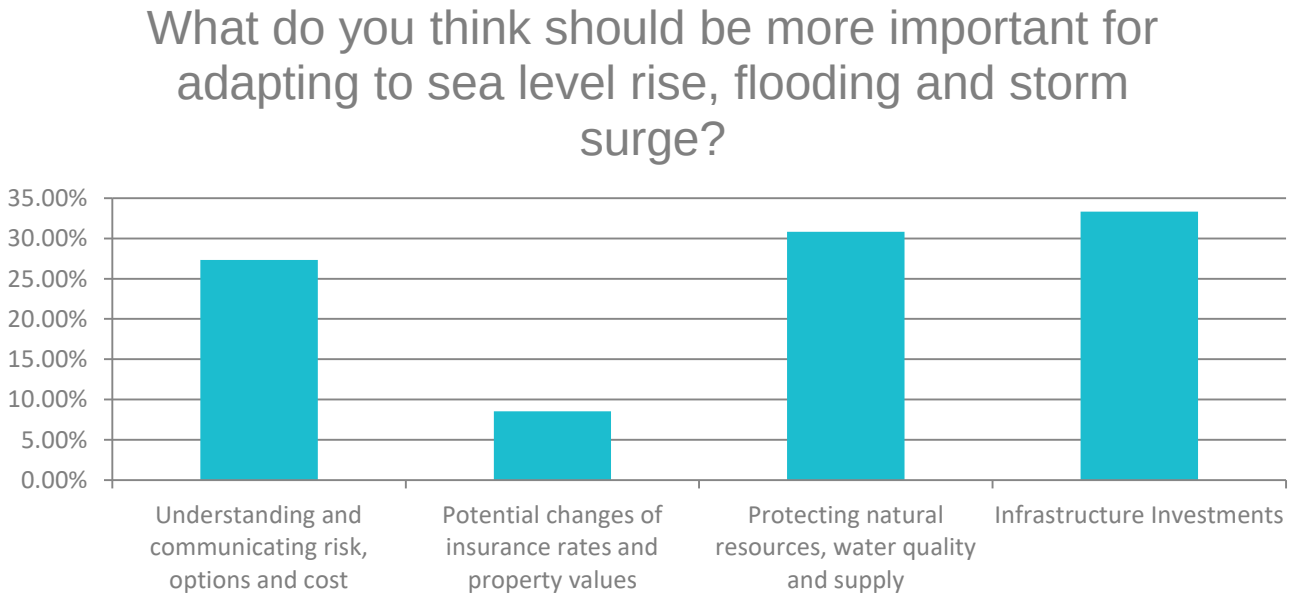
Promotes effective and efficient management; empowers a broad range of stakeholders; promotes long-term integrated planning.



Infrastructure Investment

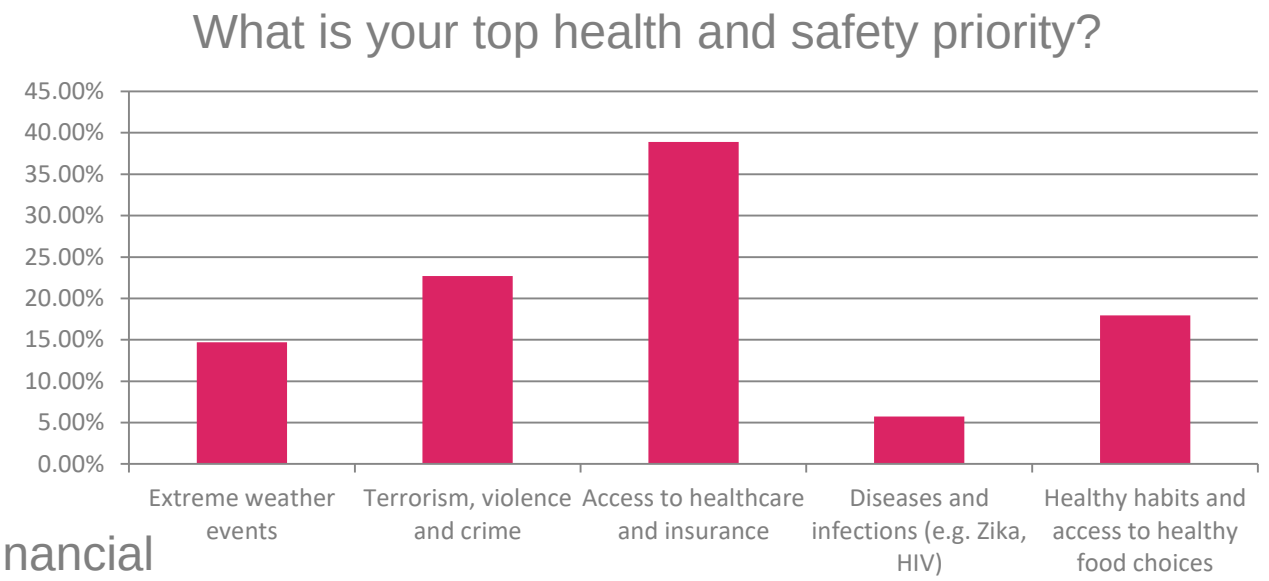
Questionnaire Responses
Understanding Priorities

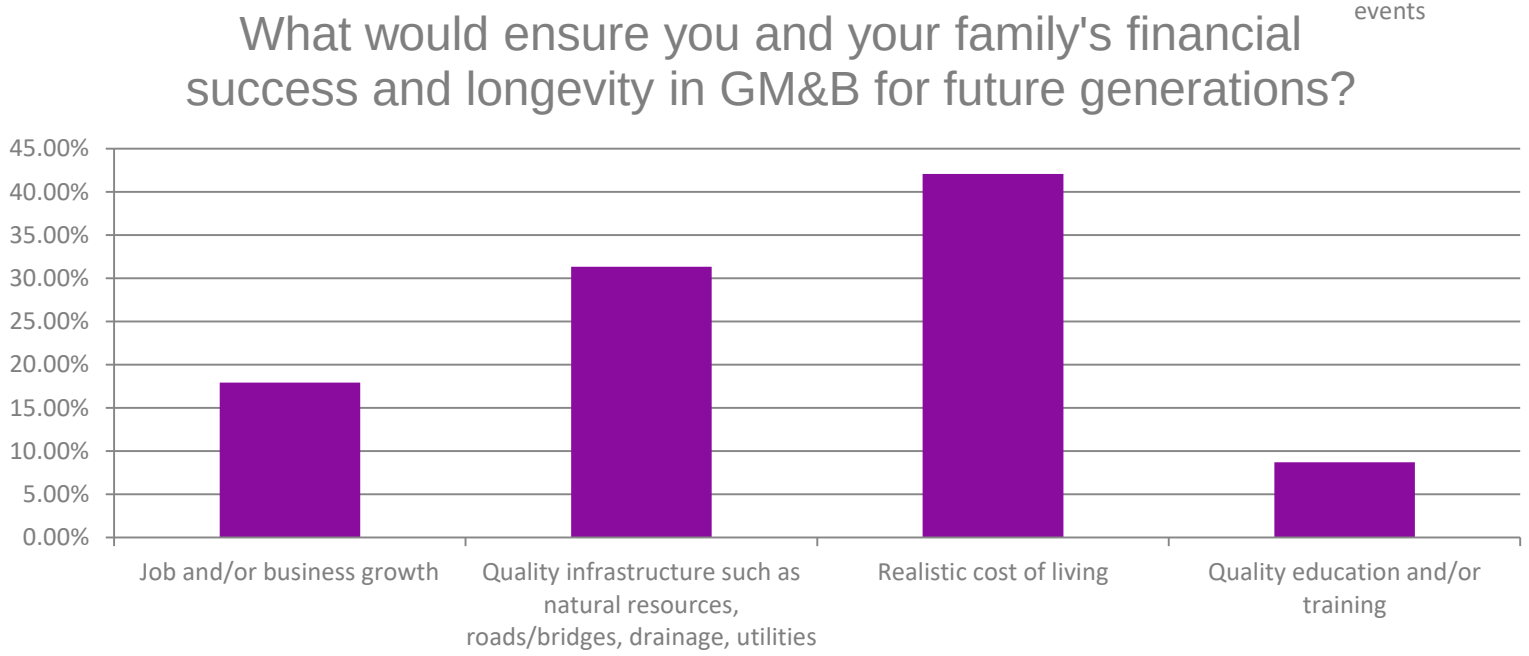




Human Investment

Questionnaire Responses
Understanding Priorities

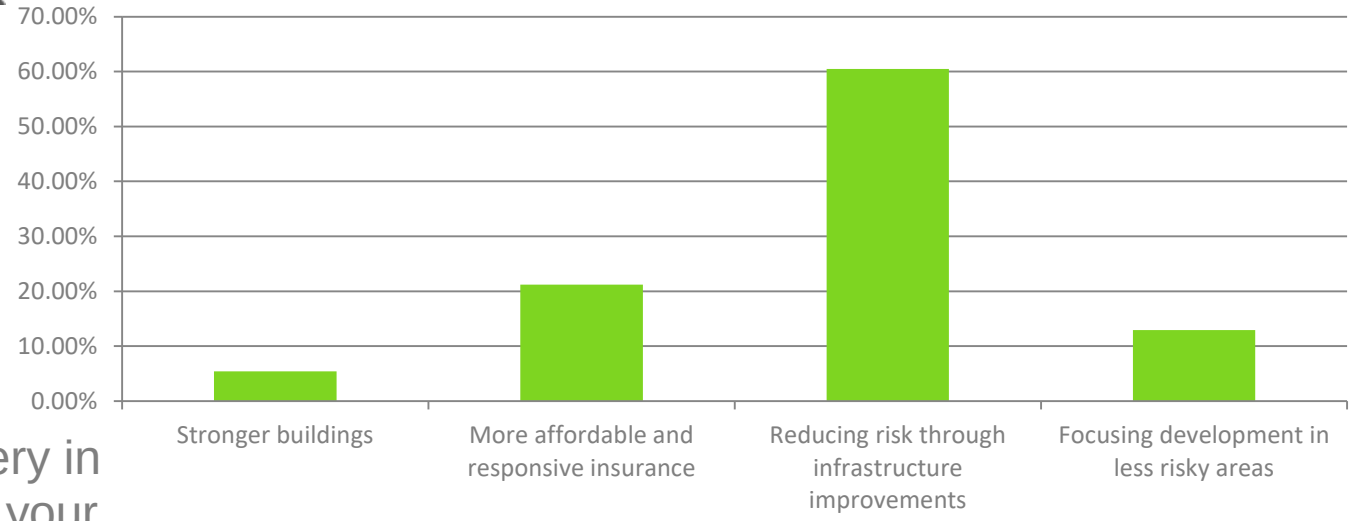




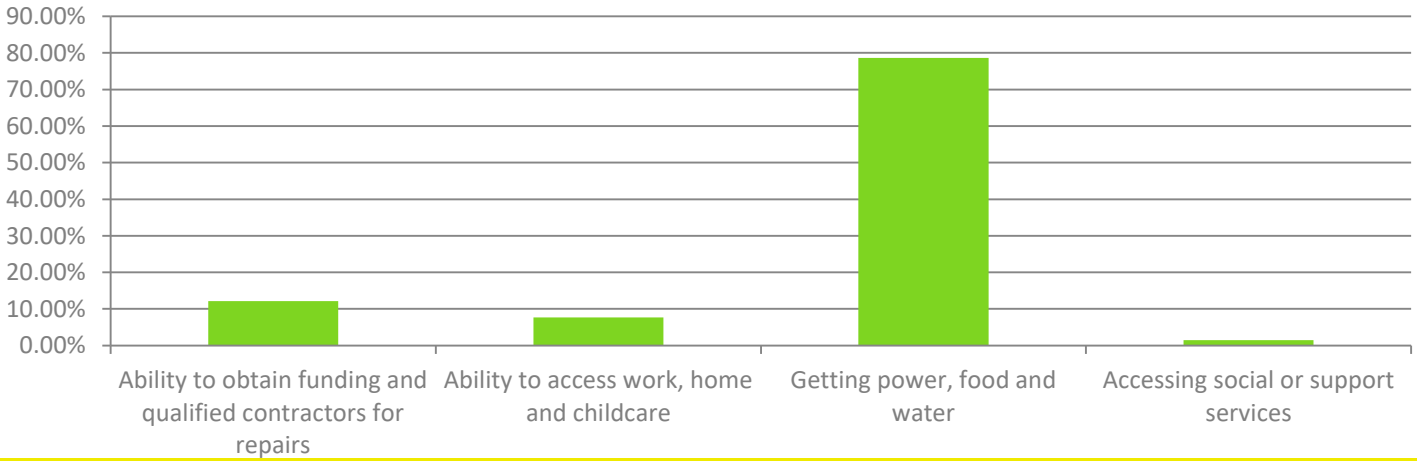
Recovery Investment

Questionnaire Responses
Understanding Priorities

What should government start to plan for now to prepare and recover from a potential disaster?

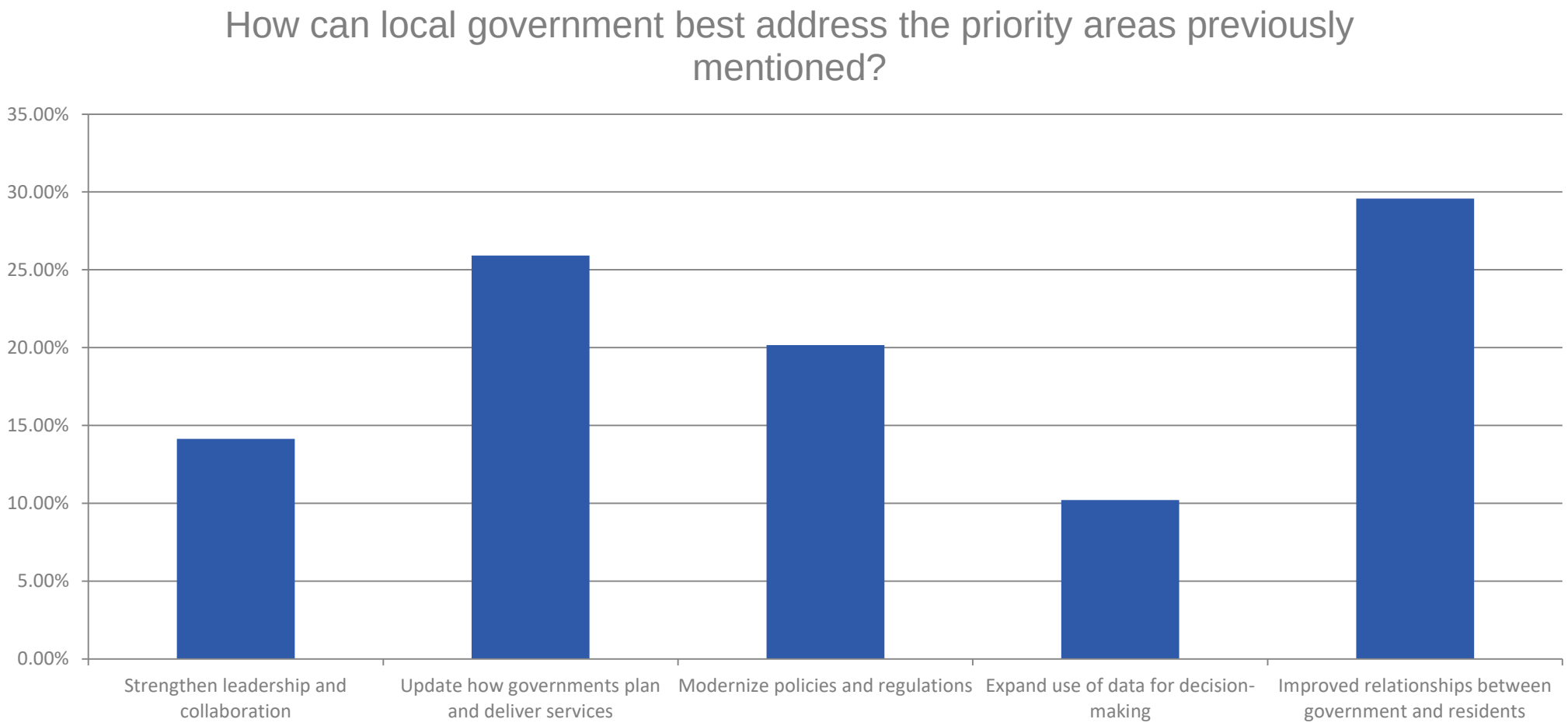


What is most important to you for quick recovery in the event of a disaster like a storm (assuming your friends and family are safe)?



Collaborative Investment

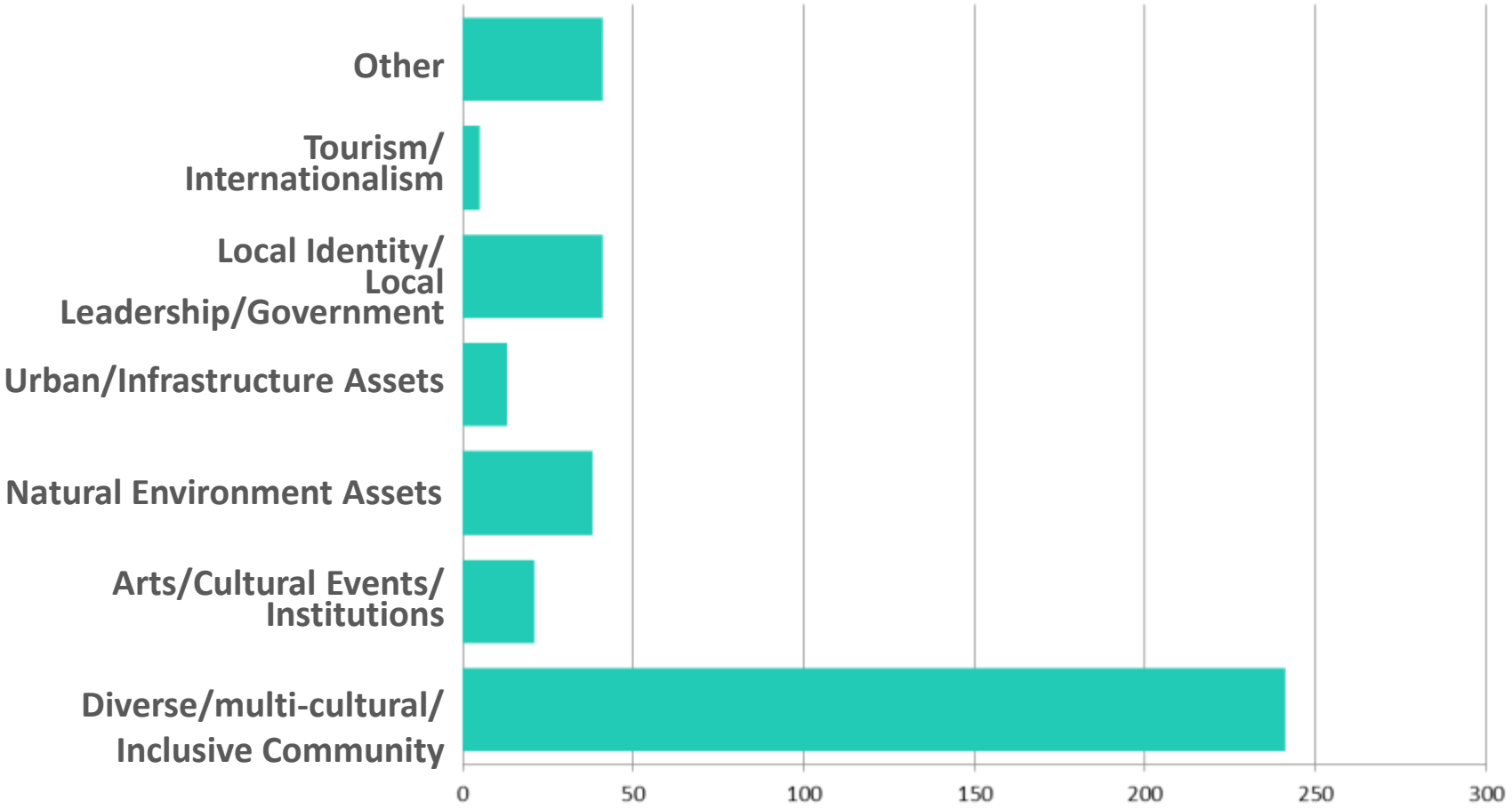
Questionnaire Responses
Understanding Priorities



Questionnaire Responses
Key Findings

Personal Investment

What makes you **proud** of our **community?**



**This is a sample set, categorizing 400 of the approximately 1,100 responses.*

Questionnaire Responses
Key Findings

Personal Investment

What makes you **proud** of our **community?**

"I'm proud of our clean beaches, new bike lanes, city bikes, programs for the community…improving schools, a government that cares for growing this city forward!"
—Real estate professional

"Its growth in the arts and performing arts and creation of major world class festivals." *—Visitor*

"I love the diversity of our people and our beautiful natural resources." *—Non-profit professional*

"The natural environment and the cosmopolitan feel of our community." *—Tourism + entertainment professional*

"Our open arms to people from other countries, especially those facing danger and socioeconomic hardship in their home countries." *—Tourism + entertainment professional*

Discovery Areas

RESILIENT
GREATER MIAMI
& THE BEACHES

Discovery Areas

The Resilient GM&B team has engaged residents and organizations to **prioritize Discovery Areas for further investigation**.

The Discovery Areas outlined in the following pages are the **framework for our next body of work**. They will help us **understand risk, recognize connections, and focus on data**.

Here is what we have learned:

Building On Our Strengths

Discovery Areas

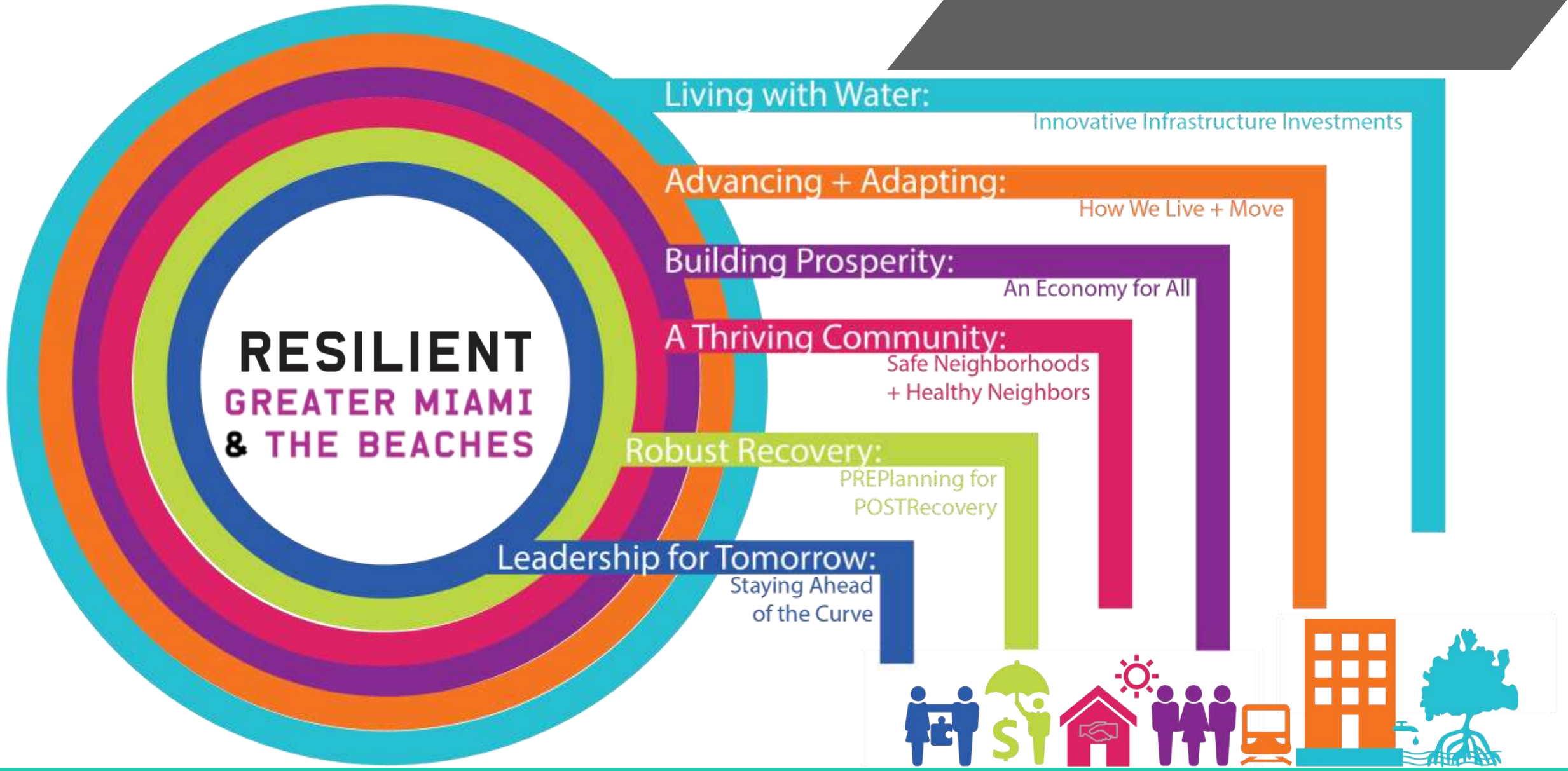
We are proud of our rich cultural diversity. This is one of our greatest strengths. Diversity with real dialogue and strong relationships result in great opportunities.

We are a **series of neighboring communities** with distinct challenges and opportunities from neighborhood to neighborhood or from one side of the highway to the other. We crisscross each other from Little Havana to Homestead.

How do we stop and connect? **How do we empathize and uplift?** How do we create a cohesive GM&B community of communities? A beautiful mosaic or quilt – that can stand alone, **but is so much stronger together?**

We propose six Discovery Areas.

Discovery Areas



Cross-Cutting Themes

Discovery Areas

The six Discovery Areas are inter-related. Our systems need to be modernized and moved away from typical silos to more collaborative, creative, and entrepreneurial solutions. We therefore propose **three Cross-Cutting Themes** across each Discovery Area.

Cross-Cutting Themes

Discovery Areas

- Too many of us are struggling just to find living-wage jobs, affordable housing, and feel safe in our neighborhoods, therefore we need to address **Social Equity** head on.
- These complex matters require a multidisciplinary approach and must incorporate **Innovation and Technology**.
- As an **Intergovernmental Collaboration** from the start, GM&B has an opportunity to seek solutions that involve multiple public and private sector partners.

Living with Water

Innovative Infrastructure

SITUATION: Southeast Florida is vulnerable to sea level rise due to its **low elevation**, **unique geology**, and the **density of coastal development**. However, there are many **opportunities for innovative adaptation** with mangroves, dunes and parks, and innovative building materials and designs.

INTENT: This discovery area will focus on **investing in natural and man-made infrastructure** to rise above and learn to live with water to create a more resilient community in the face of storms and sea level rise.

Connecting Context to Discovery

Living with Water
Innovative Infrastructure

While we are a **subtropical region**, famous for our **connections to water**, we are also a low-lying region, **vulnerable to flooding, sea level rise** and **coastal erosion**. We are leading **innovative infrastructure investment** in some areas, but **aging infrastructure** is a both a concern and an **opportunity to rebuild in better ways** that **enhance our people and environment**.

Connecting Context to Discovery

Living with Water
Innovative Infrastructure

We can build upon vulnerability assessments, architectural innovation, solutions that **incorporate gray and green infrastructure**, the **strong Florida Building Code** that requires construction to withstand Category 5 hurricanes. We can point to the **Southeast Florida Climate Change Compact** as a testament to **collaborative leadership** for climate change, but **social equity** needs more work. **Climate change, environment and water management** were top priorities in our questionnaire.

Pending Questions for Phase II

- **Coordinated and Committed Planning:** How do we proactively **plan, coordinate, and use consistent data and communications strategies across governments** and the private sector to address sea level rise risks?
- **Funding:** How do we **utilize existing budgets and leverage innovative financing and funding** mechanisms to equitably implement adaptation projects and improvements to aging infrastructure?
- **Natural Systems:** How do we **use emerging science to plan for and manage sea level rise impacts** on coastal erosion and natural ecosystems?

Advancing + Adapting

How we live and move

SITUATION: Residents spend too much time **commuting**, and **struggle to find reasonably priced housing** that fits their needs. We are the **Gateway to the Americas** with the one of the largest **international airports** and the **top cruise port in the U.S.**, wages are lower than the national average, and housing costs are high.

INTENT: This discovery area will focus on **improving livability, affordability, and connectivity** in GM&B.

Connecting Context to Discovery

Advancing + Adapting
How we live and move

We have strong, well-developed, **international transportation assets** with well-developed supporting networks for goods. However, for **people trying to get from home to work**, our public transit and roads are **overtaxed and unreliable**. We are densely populated, geographically large, and a high growth region, which places stresses on **housing access and affordability** and causes even more **traffic & transportation** stress. International investment makes our real estate more expensive than **local communities** can afford. **Transportation and housing** have been top concerns through stakeholder engagement.

Pending Questions for Phase II

Advancing + Adapting
How we live and move

- **Equity:** How can we work with the SMART Plan consortium to integrate **social equity issues** such as ensuring adjacent neighborhoods to the corridors **include affordable housing and mixed use development**?
- **Integrate:** How do we integrate **innovative housing and job opportunities into future transportation** planning activities, **while addressing existing social equity issues**, diversifying existing housing stocks, and avoiding future risk from flooding and sea level rise?
- **Collaborate:** How do we **improve intergovernmental collaboration** among public and private entities producing affordable housing to **promote the production of mixed-income and mixed use developments**?

Building Prosperity
An Economy for All

SITUATION: Our **economy lacks diverse**, highly paid and living wage jobs. Our **poverty rate is above the national average**. We are a **city of immigrants** with a constant influx of people moving here for a better life.

INTENT: The discovery area will focus on **workforce development, expanding and diversifying job supply, and education**.

www.zimbio.com

Connecting Context to Discovery

Building Prosperity
An Economy for All

We are an international tourism destination, but our **economy is over reliant on lower paying service oriented jobs**. Our economy would benefit from diversity that offers higher paying wages to help people better afford high housing costs. **Educational attainment is improving** however schools have difficulty attracting teachers due to **high cost of housing**, and education is challenging given GM&B's **complex demographics**. **52% of Greater Miami and the Beaches is foreign born**. Overall, our focus groups across diverse **communities** felt that our greatest weakness is GM&B's ability to **"support livelihoods and employment."**

Pending Questions for Phase II

Building Prosperity
An Economy for All

- **Priorities:** How do we ensure that our economic and workforce development programs are addressing the dramatic disparities that exist between our racial and ethnic groups?
- **Innovation:** How could technology, private, civic and government sector **partnerships** help our workforce development programs to better **address the needs of our most vulnerable**?
- **Opportunity:** How do we **leverage the major investments in infrastructure to ensure local and inclusive access** to the resulting business and job opportunities?

A Thriving Community

Safe Neighborhoods + Healthy Neighbors

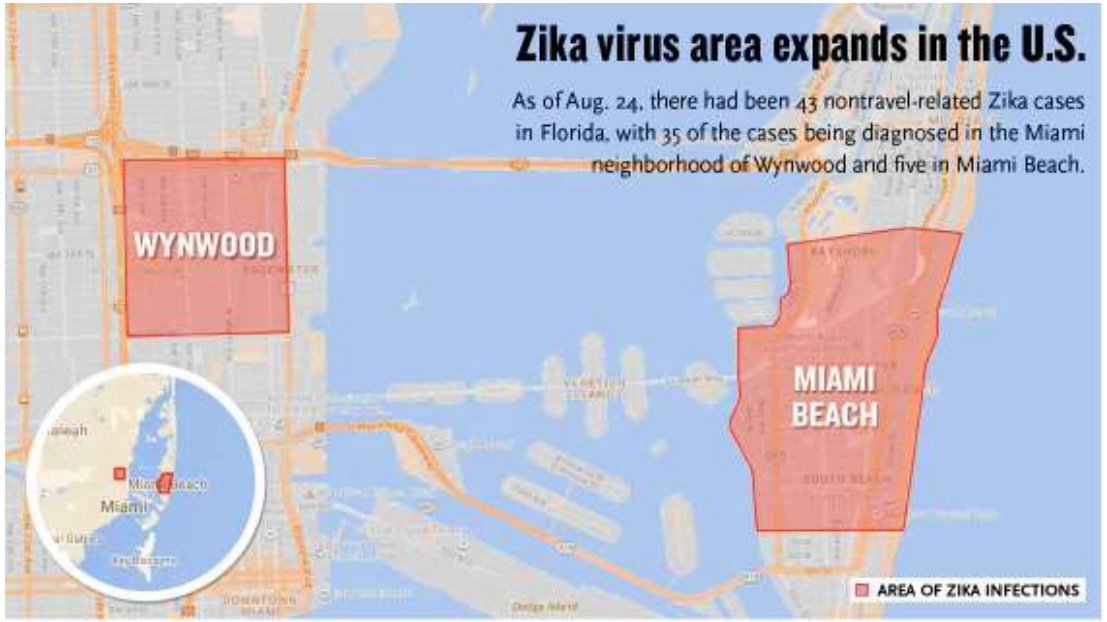
SITUATION: Significant pockets of our community suffer from **violence, crime, addiction, and poor health**. Climate change and globalization have intensified public health concerns to South Florida such as **Zika**.

INTENT: This discovery area will **examine these issues of safety, youth violence, pandemics, and public health**.

Connecting Context to Discovery

A Thriving Community
Safe Neighborhoods + Healthy Neighbors

Our geographic location, climate, and position as an **international port city**, makes us highly vulnerable to **international crime, drug activity**, and vector-borne illnesses like **Zika**. Our **poverty rate is higher than the national average**, and is made worse by the chronic lack of affordable housing. We also face **high rates of endemic crime** especially in communities with high rates of **poverty and associated socioeconomic indicators**.



Source: The Miami Herald

Connecting Context to Discovery

A Thriving Community
Safe Neighborhoods + Healthy Neighbors

We have the highest **Affordable Care Act enrollment in the country** and a **significantly poor and undocumented population** that do not or cannot access preventative care and social services. A thriving community depends heavily on building economic prosperity for all and adapting and advancing the way we live – to provide needed **housing, transportation**, **health access and living wage** improvements, especially in our **poor and vulnerable neighborhoods**, where historic distrust towards government and leadership is often deeply entrenched.

Pending Questions for Phase II

A Thriving Community
Safe Neighborhoods + Healthy Neighbors

- **Advance:** How do we **elevate, accelerate, and integrate the work products of our university and other partners to better prepare our systems** to prevent, respond to, and recover from changes in public health due to climate change, globalization, and urbanization?
- **Equity:** How can we **prioritize neighborhood** enhancements, engagement and access to opportunity in neighborhoods **experiencing high incidences of violent crime and poverty**?
- **Intervention:** What sort of **cross sector, data-driven and/or technology-based interventions** could be effective to **respond to the root causes of the opioid and HIV** epidemics?

Robust Recovery

PREPlanning for POSTDisaster

SITUATION: We are **vulnerable to hurricanes and flooding** but well-known throughout the nation for our **advanced emergency management**.

INTENT: This discovery area focuses on **how to change our culture and policies, systems, and insurance structures** now for faster, more affordable, and smarter recovery in the event of a disaster.

Connecting Context to Discovery

Robust Recovery
PREPlanning for POSTDisaster

South Florida is vulnerable to **hurricanes and flooding** but these risks have strengthened our **emergency management**, preparation and response systems . We have learned that building upon this strong foundation will accelerate **robust recovery**. In order to **help neighborhoods** recover quickly and **equitably**, we need to **strengthen private and public sector commitments**, focusing our attention on **collaboration and innovation** to protect **our greatest assets: our people and our places**. Financially, we must design our **recovery contracts, finances, and insurance** to reduce the financial and human impacts of **shocks** and **stresses**. As we envision risk reduction in the future, we must **consider new land use approaches**. Greater Miami and the Beaches desire to bounce forward, not just bounce back.

Pending Questions for Phase II

Robust Recovery
PREPlanning for POSTDisaster

- **Structure and Systems:** What **plans and policies** can we put in place now for post-disaster rebuilding to **protect our tax base** and allow for **fast and smart response and recovery**? What systems and services do we need and how are these systems interdependent?
- **Culture & Social Equity:** How do we create a **culture of pre-disaster readiness and planning** among individuals, businesses, and governments? How do we create **customized tools** targeted to **diverse audiences with distinct needs**?
- **Disaster Finance & Innovation:** What kind of financing mechanisms do organizations and residents need to rebound quickly? How can we improve **insurance affordability** to ensure that adaptive measures are reflected in **reduced risk, and to optimize recovery** through insurance and financing for governments, residents, and businesses?

"Our goal is to bounce forward, not just bounce back."
—Coastal Assistant City Manager

Leadership for Tomorrow

Staying Ahead of the Curve

SITUATION: We have **2.7 million people** and growing, **35 mayors**, approximately **1.2 million registered voters**, **12 million tourists**, and more than 2000 square miles.

INTENT: This discovery area will focus on **how to build consensus, collaboration, and courage across organizations and communities** to address shocks and stresses and **turn challenging systems designed for the past upside down**.

Connecting Context to Discovery

Leadership for Tomorrow
Staying Ahead of the Curve

The GM&B **collaboration is comprised of three separate government entities**. GM&B also has 31 additional municipalities as well as state and federal partners to determine the best ways to address complex shocks and stresses such as: **transportation, housing, economic shocks, and poverty**. GM&B has strong partnerships to address sea level rise and disasters such as the Southeast Florida Climate Change Compact, **the Local Mitigation Strategy, and the Urban Areas Security Initiative**. However, **our complex dynamic often creates a collaborative Rubik's cube**.

Pending Concerns + Questions

Leadership for Tomorrow
Staying Ahead of the Curve

- **Collaboration:** How do we **modernize** the way government does business, given the threats we face? How do we **create, organize, and commit** a culture of interdisciplinary and interjurisdictional **collaboration** around resilience? How do we use GM&B as the model for better city-county coordination? How do or can cities better access the county to know what projects are happening and how cities can help and participate? What legislative changes are needed to achieve more integrated practices?

Pending Questions for Phase II

- **Data & Innovation:** How we **expand and innovate** sophisticated use of data in government operations such as **open data, performance management, chief innovation officers, and smart cities** to inform the decision-making process? How do we build **smart decision-making** for resilience?
- **Engagement & Social Equity:** How do we expand **effective public participation** with all residents, businesses, and community groups?

Next Steps

Next Steps

Areas for Discovery
Toward a More Resilient GM&B

Fall **2016** — Summer **2017** — Fall **2018**

We Listened and Learned — *We Discover* — *We Plan*

We **Launched** — **Phase I** — **Phase II** — **GM&B Resilience Strategy**

We are **Here**

Institutionalize and **Implement**

We will investigate the pending questions in the six discovery areas to help identify actions for a robust Resilience Strategy.

Acknowledgements

thank you

This PRA is a milestone that could not have been completed without the diversity and passion of our community. Thank you to our partners in this journey—and we look forward to your roles evolving from shaping the Discovery Areas to be part of the resilience strategy implementation.

James F. Murley
Miami-Dade County

Jane Gilbert
City of Miami

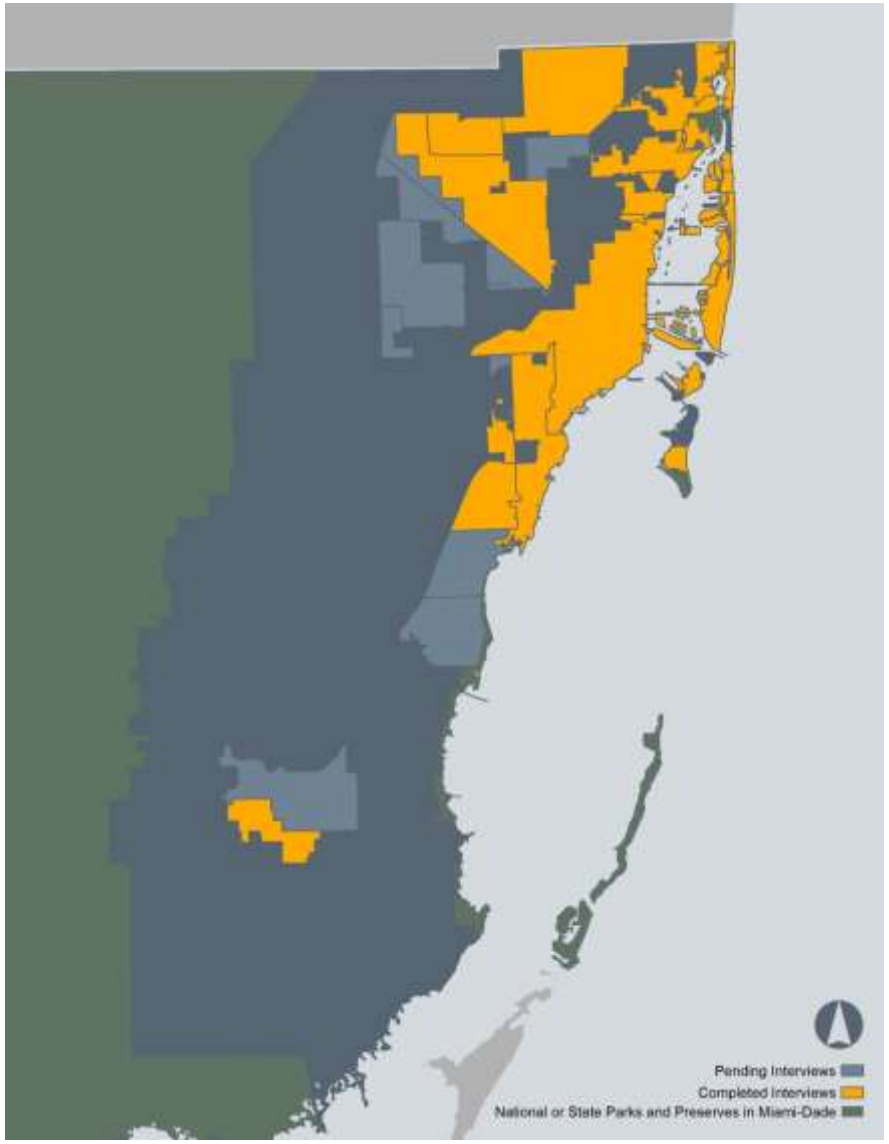
Susanne M. Torriente
City of Miami Beach

Participation – Government

Thank you!
Toward a More Resilient GM&B

- City of Miami Beach Community Development Corporation
- City of Miami Beach Chamber of Commerce
- City of Miami Beach Emergency Management
- City of Miami Beach Office of the City Manager
- City of Miami Beach Planning Department
- City of Miami Beach Police Department
- City of Miami Beach, Public Works
- City of Miami Beach Transportation
- City of Miami Fire Rescue
- City of Miami, Grants
- City of Miami Planning Department
- City of Miami Police Department
- City of Miami Transportation
- Miami-Dade County Citizens Independent Transportation Trust
- Miami-Dade County Community Action & Human Services
- Miami-Dade County Division of Environmental Resources
- Miami-Dade County Division of Environmental Resources, Division of Planning
- Miami-Dade County Fire Rescue (MDCFR)
- Miami-Dade County Homeless Trust
- Miami-Dade County Juvenile Service Department
- Miami-Dade County Medical Examiner
- Miami-Dade County Neat Streets
- Miami-Dade County Office of Community Advocacy
- Miami-Dade County Office of Emergency Management, LMS Workgroup
- Miami-Dade County Office of Resilience
- Miami-Dade County Office of Management and Budget
- Miami-Dade County Public Housing and Community Development
- Miami-Dade County Public Schools (M-DCPS) Community Engagement
- Miami-Dade County Public Schools (M-DCPS) Regional Office
- Miami-Dade County Seaport
- Miami-Dade County Transportation Planning Organization
- Miami-Dade Expressway Authority (MDX)
- South Florida Water Management District (SFWMD)
- South Florida Regional Transportation Authority (SFRTA), Tri-Rail
- Florida Department of Public Health

Participation – Government



- Bal Harbour Village
- City of Aventura
- City of Coral Gables
- City of Hialeah
- City of Miami
- City of Miami Beach
- City of North Miami
- City of North Miami Beach
- City of South Miami
- City of Sunny Isles
- El Portal Village
- Florida City
- Indian Creek Village
- Miami-Dade County
- Miami Shores Village
- North Bay Village
- Town of Bay Harbour Islands
- Town of Golden Beach
- Town of Miami Lakes
- Town of Surfside
- Village of Biscayne Park
- Village of Key Biscayne
- Village of Pinecrest

Thank you!
Toward a More Resilient GM&B

Thank you to each of our governments within Miami-Dade County that met with us to share their thoughts, concerns and hopes for the future of a Resilient GM&B!

Participation – Civil + Private

- American Institute of Architects (AIA) Miami Chapter
- Bank United
- Beacon Council
- CareerSource
- Catalyst Miami
- CLEO Institute
- ESRI
- FernLeaf
- FIU Metropolitan Center
- FIU Sea-Level Solutions Center
- Greater Miami Chamber of Commerce (GMCC)
- Greater Miami Convention & Visitors Bureau (GMCVB)
- Jewish Community Services of South Florida
- Miami-Dade County City and County Management Association (MDCCMA)
- Miami-Dade Hospital Coalition
- Michael Berman Consulting
- Miami Center for Architecture and Design (MCAD)
- Miami Homes for All
- Miami Waterkeeper
- Nicklaus Children's Hospital
- People Acting for Community Together (PACT)
- PhilanthropyMiami
- Service Employees International Union (SEIU) Florida
- South Florida Centers for Disease Control and Prevention
- The Children's Trust
- The Miami Foundation
- United Way of Miami-Dade County
- University of Miami Office of Civic and Community Engagement

Thank you!
Toward a More Resilient GM&B

And of course, thank you all of the **amazing residents** throughout GM&B who have participated by attending our meetings, responding to our questionnaires, following us on social media, and checking out our website!

Steering Committee

Thank you!
Toward a More Resilient GM&B

- Gretchen Beesing, Catalyst Miami
- Truly Burton, Builders Association South Florida
- Jaret Davis, Beacon Council
- Erik Eikenberg, Everglades Foundation
- Maurice Ferre, MDX
- Valencia Gunder, New Florida Majority
- Bobbi Ibarra, Homes for All
- Marsha Jackman, Vailon Group
- Jorge Luis Lopez, Parks Foundation
- Michelle Mejia, Baptist Health Kendall
- Rebekah Monson, The New Tropic
- Delaney Reynolds, Sink or Swim
- Scott Robins, Developer
- Zerry Ihekwaba, City of Miami
- Jimmy Morales, City of Miami Beach
- Jack Osterholt, Miami-Dade County
- Javier Soto, The Miami Foundation

Special Thanks

Thank you!
Toward a More Resilient GM&B

- **Deputy Chief Resilience Officers:** Nichole Hefty, Amy Knowles, Stephanie Tashiro
- **100RC Team:** Otis Rolley, Eric Wilson, Peter Jenkins
- **Strategy Partner:** Claire Bonham-Carter and Lauren Swan
- **Miami Beach Intern:** Corin Smith
- **Graphics + Data:** The **Greater Miami Convention & Visitors Bureau (GMCVB)** for tourism data; **Miami-Dade County GreenPrint** for demographic data; **Beacon Council: Advantage Miami** for economic data; **FIU Metropolitan Center** for distressed community data
- **Accommodation + Support:** A special thanks to **PortMiami, the *Cruise Capital of the World*** for hosting us throughout the strategy development process!

Leadership for Tomorrow; Robust Recovery; Thriving Community; Building Prosperity; Advance + Adapt; Innovative Infrastructure

Social Equity; Innovation + Technology; Intergovernmental Collaboration

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& THE BEACHES

RESILIENT
GREATER MIAMI & THE BEACHES

@resilient305

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100 RESILIENT CITIES