



**GREATER NEW ORLEANS**  
INC  
REGIONAL ECONOMIC DEVELOPMENT

# **Economic Recovery and Urban & Coastal Resilience, Greater New Orleans**

July 22, 2015

---

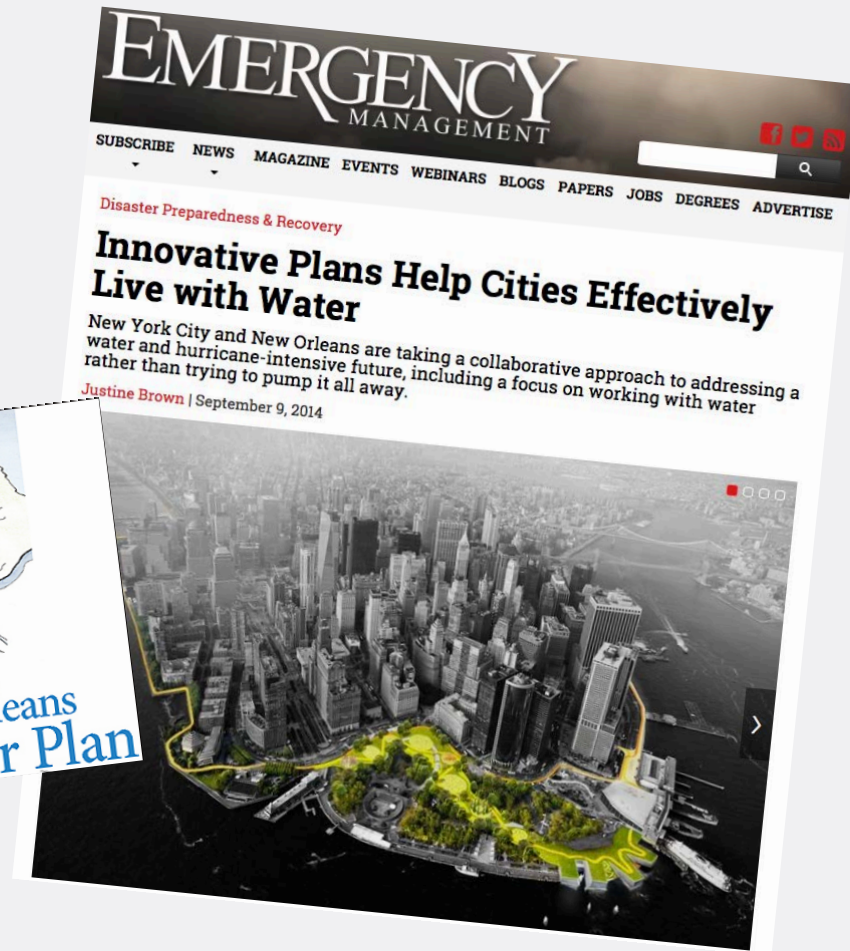
# SESSION objectives

The content of this session will help listeners answer these key questions both broadly and in their communities:

- What is a resilient economy?
- What are its characteristics?
- How can communities rebuild or build new to incorporate economics benefits beyond avoided damage (preserve/retain business activity, jobs, economic value, and ideally increase and diversify that economic activity in order to promote greater resilience)
- How can the resilience benefits be communicated to outside stakeholders and partners?

# Defining Resilience

The ability to plan and prepare for, recover from, or more successfully adapt to actual or potential adverse events



# What is a Resilient Economy?

## Framing economic resilience

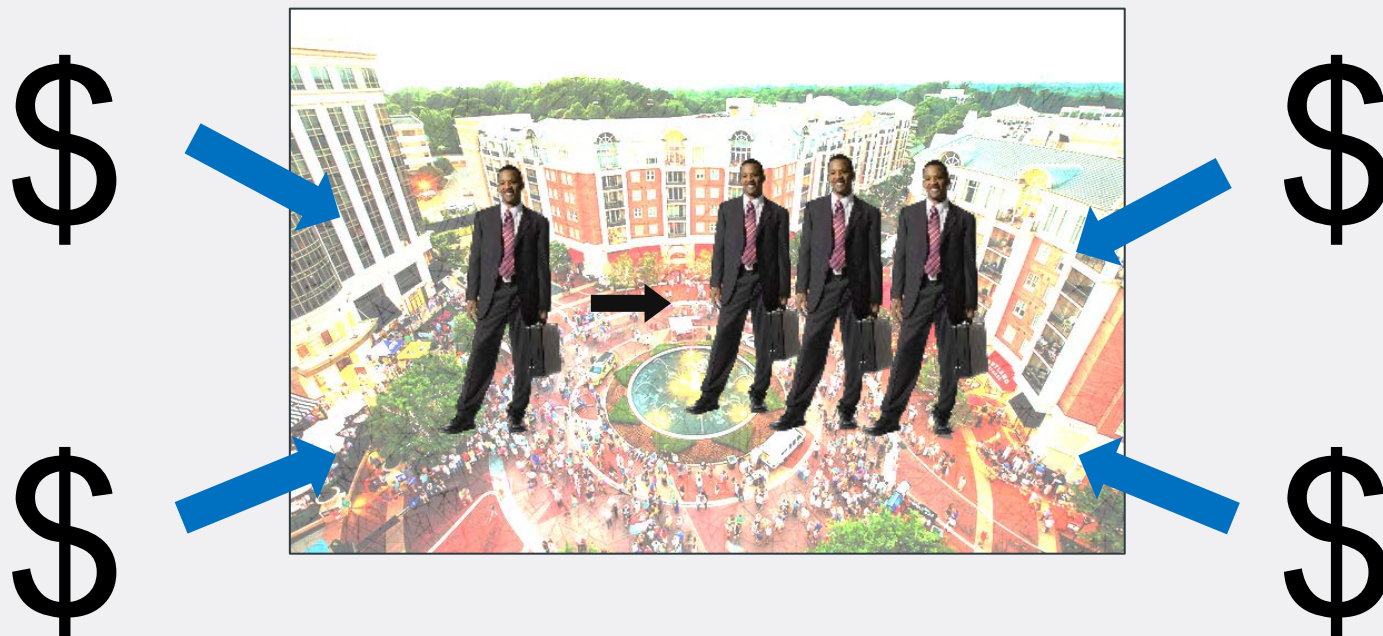
1. Able to **rapidly recover** from disasters and other shocks with minimal outside assistance. For example:
  - Returning to the prior job growth rate
  - Generating previous tax base
2. A “**radically resilient**” economy can bounce back + achieve a higher growth rate. For example:
  - Increasing GDP
  - Attracting/advancing new economic sectors and drivers

# Characteristics of a Resilient Economy

- Economic **diversification**
- Strong **pre-existing business conditions**
- Strong and coordinated **leadership**
- Sustained business and community **engagement over time**
- **Economic opportunity**
- **Diversity** of human capital
- Economic composition: **Export industries and manufacturing** are key
- Community mindset: **Standard of excellence + finding opportunity in challenge and change**

# A Strategy for Economic Resilience

Create net new cash flows/job growth\* within a community



***Projects that cannibalize pre-existing revenue sources or jobs within the region may be important, but do not contribute to economic resilience.***

\* Includes job retention.

# Contents

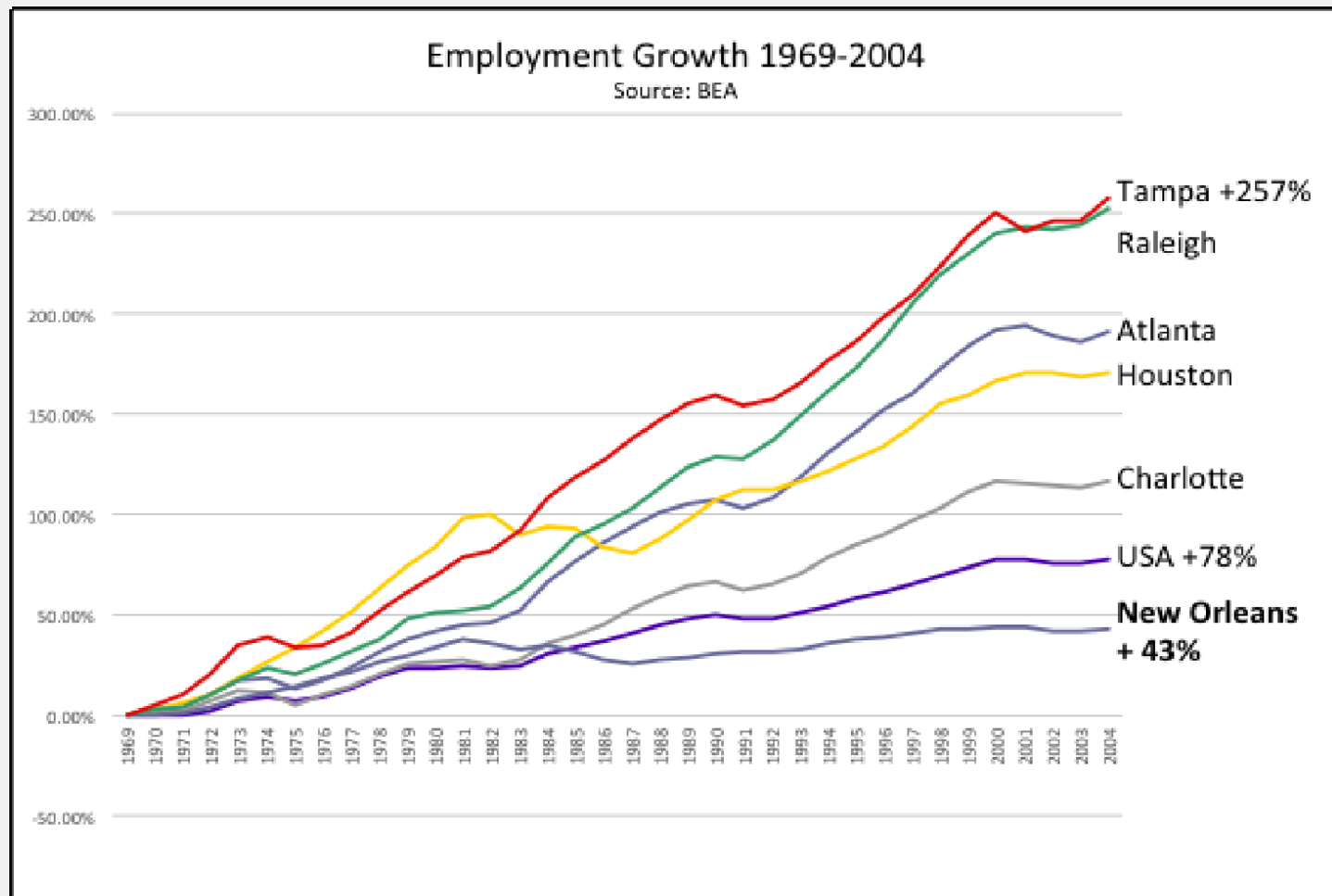


## Prologue

- GNO, Inc. Overview
- Greater New Orleans Economy Overview
- A Resilient New Orleans
- Leverage Opportunities

# Prologue

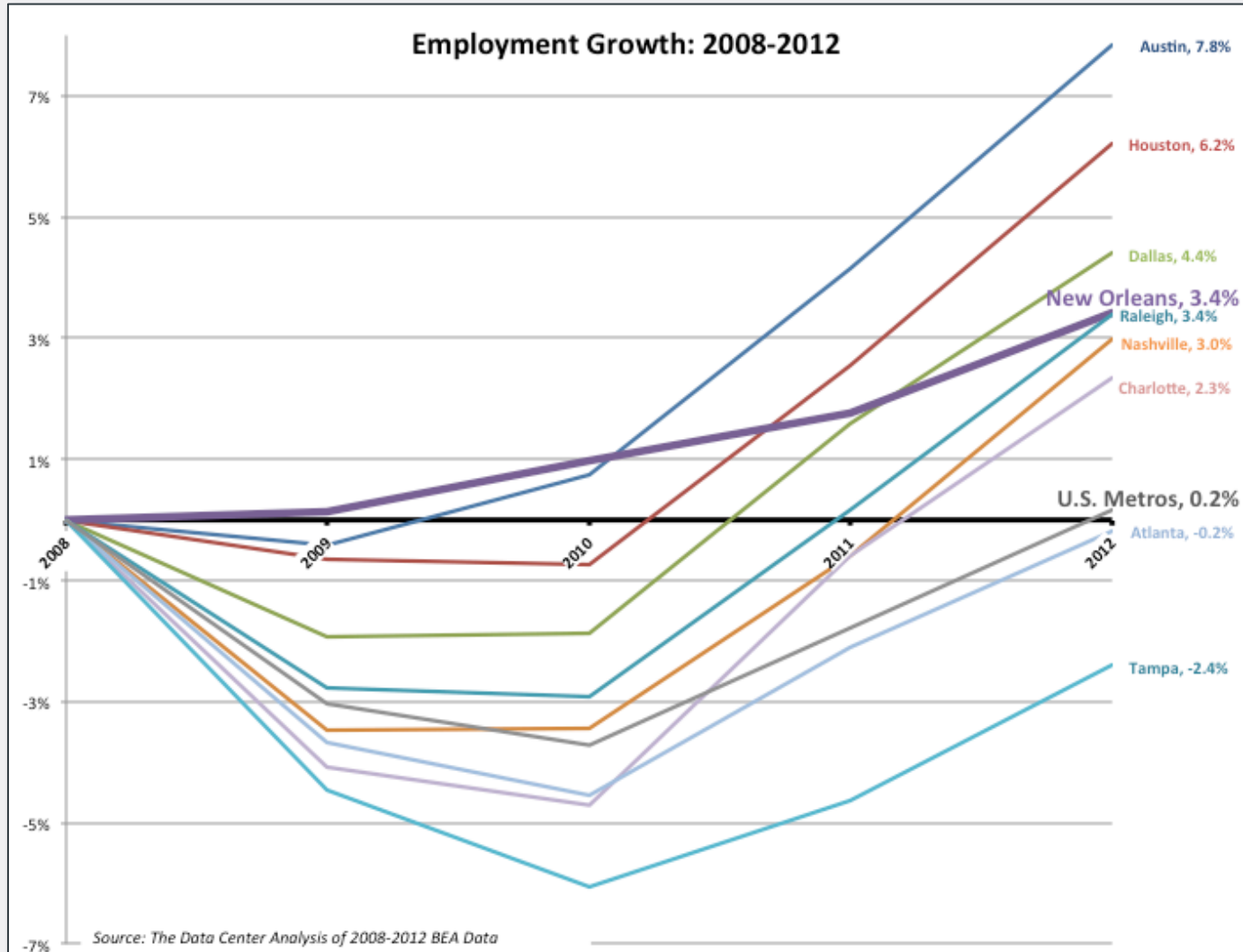
Greater New Orleans dramatically underperformed not only the South, but the entire nation, for four decades.





# Prologue

Greater New Orleans is now one of the top performers.



# New Orleans Economic Overview

Louisiana and New Orleans are at their highest point, in nearly every ranking, in history.

#1

Growing Employment



#1

Most Cost Friendly



#1

Metro for IT Job Growth



#1

for Export Growth



# Economy Overview - Performance

Louisiana and New Orleans are at their highest point, in nearly every ranking, in history.

**#1**

Best Incentives in USA

**Business Facilities**  
THE LOCATION ADVISOR

**#1**

Most Improved

**CHIEF  
EXECUTIVE**

**#1**

America's Best City

**TRAVEL+  
LEISURE**

**#2**

Boomtown in America

**Bloomberg**

# Contents

- Prologue



- GNO, Inc. Overview

- Greater New Orleans Economy Overview

- A Resilient New Orleans

- Leverage Opportunities

# GNO, Inc. Overview

GNO, Inc. is the economic development organization serving the ten counties of Southeast Louisiana.



## Business Development

- Business Attraction
- Business Growth
- Business Retention
- Research

## Product Development


- Policy
- Workforce
- Brand Development
- Ecosystem Development

# GNO, Inc. Overview

The true functional economic unit of southeast Louisiana is the “Southeast Super Region,” encompassing 2.6 million people.



# Contents

- Prologue
- GNO, Inc. Overview
-  Greater New Orleans Economy Overview
  - A Resilient Region
  - Leverage Opportunities



# New Orleans Economic Overview

Greater New Orleans has been the strongest market in the south over the past decade.

## Top Investment Markets 2003-2012

Total number of projects from the 100-largest projects announced in the South each year from 2003-2012.

MARKET	NUMBER OF PROJECTS	MARKET	NUMBER OF PROJECTS	MARKET	NUMBER OF PROJECTS
1. New Orleans, La.	55	9. Louisville, Ky.	13	14. Atlanta, Ga.	8
2. Baton Rouge, La.	54	10. Corpus Christi, Texas	12	Piedmont Triad, N.C.	8
3. Houston, Texas	36	Kansas City, Mo.	12	15. Durham, N.C.	7
4. Dallas-Fort Worth, Texas	25	11. Charlotte, N.C.	11	Tuscaloosa, Ala.	7
5. Lake Charles, La.	24	12. Greenville, S.C.	10	Raleigh, N.C.	7
6. San Antonio, Texas	19	Marshall Co., W.Va.	10		
7. Memphis, Tenn.	15	Northern Virginia	10		
8. Austin, Texas	14	13. Mobile, Ala.	9		
Decatur, Ala.	14	Nashville, Tenn.	9		
		Port Arthur, Texas	9		

Source: S&B





# Economy Overview - Key Drivers

Greater New Orleans has three intrinsic economic drivers.



River



Energy



Culture

# Economy Overview - Key Industries

Greater New Orleans' economy is anchored by three “**Foundational**” industries.



**Advanced  
Manufacturing**



**International  
Trade**



**Energy  
(Oil and Natural Gas)**

# Economy Overview - Key Industries

Greater New Orleans' economy is growing with three “**Diversifying**” industries.



Digital Media  
(Software Development)



Emerging  
Environmental



Biosciences  
(Medical Center of Excellence)



# Economic Overview - Key Trends

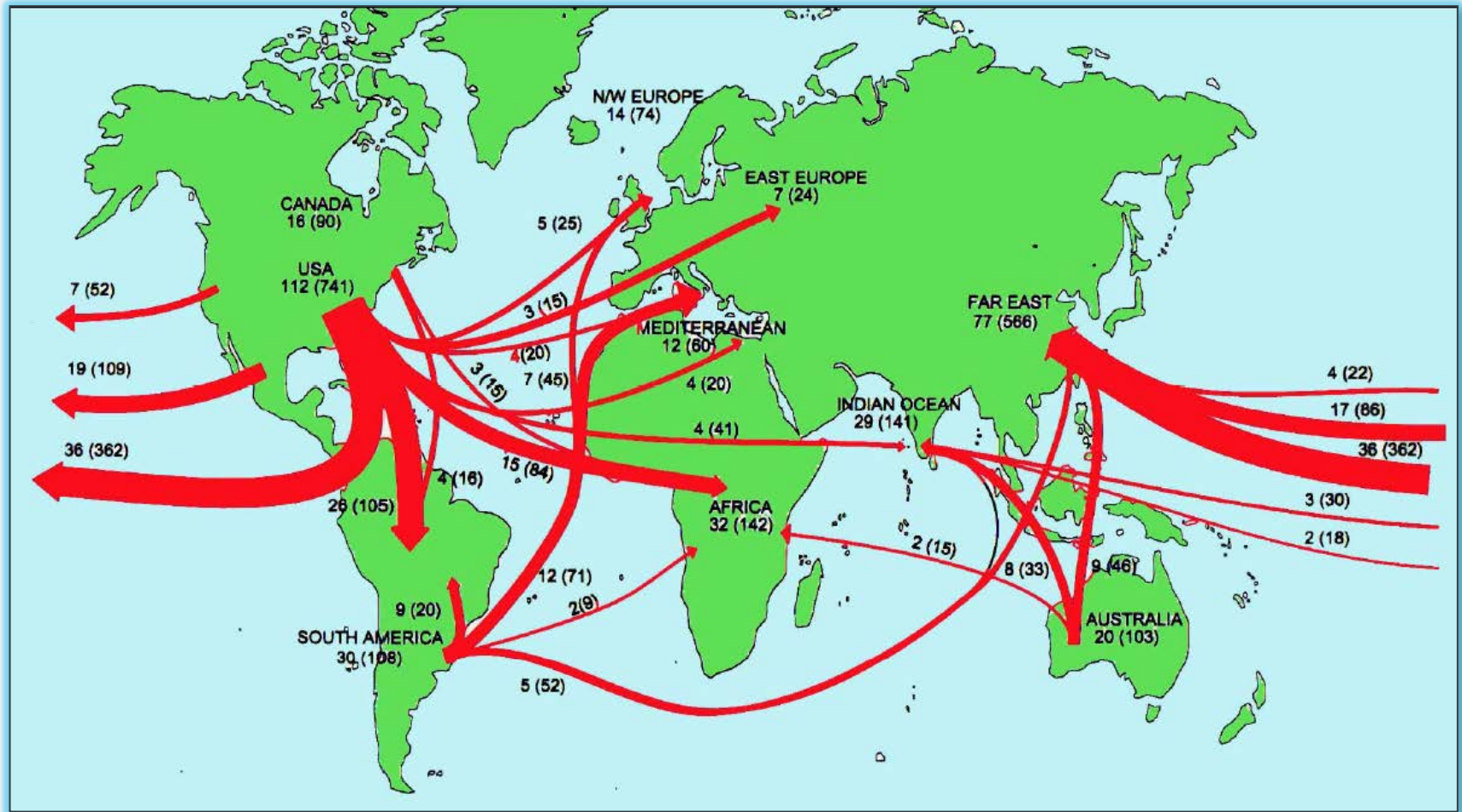
Natural gas is fueling and feeding a massive industrial boom.



- |   |  |  |
|---|--|--|
| <b>1</b> Sasol Limited<br>\$16,000 M / 1,253 jobs           | <b>8</b> EuroChem<br>\$1,500 M / 200 jobs                            | <b>23</b> Sundrop Fuels<br>\$450 M / 150 jobs  |
| <b>2</b> Chenier Energy<br>\$16,000 M / 148 jobs            | <b>9</b> BioNitrogen Louisiana Holdings, LLC<br>\$1,400 M / 250 jobs | <b>24</b> Shintech Louisiana, LLC<br>\$420 M / 88 jobs                                 |
| <b>3</b> Sempra Energy<br>\$6,000 M / 130 jobs              | <b>10</b> South Louisiana Methanol<br>\$1,332 M / 63 jobs            | <b>25</b> Sapa Extrusions<br>\$415 M / 0 jobs  |
| <b>4</b> Nucor Steel<br>\$3,400 M / 375 jobs                | <b>11</b> G2X Energy<br>\$1,300 M / 243 jobs                         | <b>26</b> Williams Olefins<br>\$400 M / 5 jobs   |
| <b>5</b> CF Industries Nitrogen, LLC<br>\$2,237 M / 93 jobs | <b>12</b> Benteler AG<br>\$890 M / 675 jobs                          | <b>27</b> Exxon Mobil Refinery<br>\$362 M / 14 jobs                                    |
| <b>6</b> Magnolia LNG<br>\$2,200 M / 50 jobs                | <b>13</b> Lake Charles Cogeneration, LLC<br>\$820 M / 210 jobs       | <b>28</b> Avalon Rare Metals Processing, LLC<br>\$352 M / 225 jobs                     |
| <b>7</b> Faustina Hydrogen Products<br>\$1,600 M / 200 jobs | <b>14</b> Cornerstone Chemical Co. / Dyno Nobel<br>\$768 M / 60 jobs | <b>29</b> Exxon Mobil Corp (Chemical)<br>\$336 M / 30 jobs                             |
|   | <b>15</b> Mosaic Fertilizer, LLC<br>\$700 M / 53 jobs                | <b>30</b> Georgia Pacific<br>\$300 M / 0 jobs  |
|   | <b>16</b> Valero Refining - New Orleans, LLC<br>\$700 M / 24 jobs    | <b>31</b> Westlake Vinyls Company LP<br>\$300 M / 100 jobs                             |
|   | <b>17</b> Dow Chemical<br>\$600 M / 0 jobs                           | <b>32</b> Exxon Mobil Corporation (Refinery)<br>\$300 M / 26 jobs                      |
|   | <b>18</b> Valero Refinery<br>\$600 M / 85 jobs                       | <b>33</b> German Pellets Louisiana, LLC / Louisiana Pellets, Inc.<br>\$290 M / 80 jobs |
|   | <b>19</b> Methanex Corporation<br>\$550 M / 35 jobs                  | <b>34</b> PPG Industries, Inc.<br>\$264 M / 27 jobs                                    |
|   | <b>20</b> Honeywell International<br>\$500 M / 80 jobs               | <b>35</b> BASF Corporation<br>\$253 M / 56 jobs  |
|   | <b>21</b> Methanex Corporation<br>\$500 M / 120 jobs                 | <b>36</b> Diamond Green<br>\$250 M / 60 jobs   |
|   | <b>22</b> Westlake Vinyls Company<br>\$467 M / 60 jobs               | <b>37</b> Shell Chemical Company - Ascension<br>\$250 M / 15 jobs                      |

# Economic Overview - Key Trends

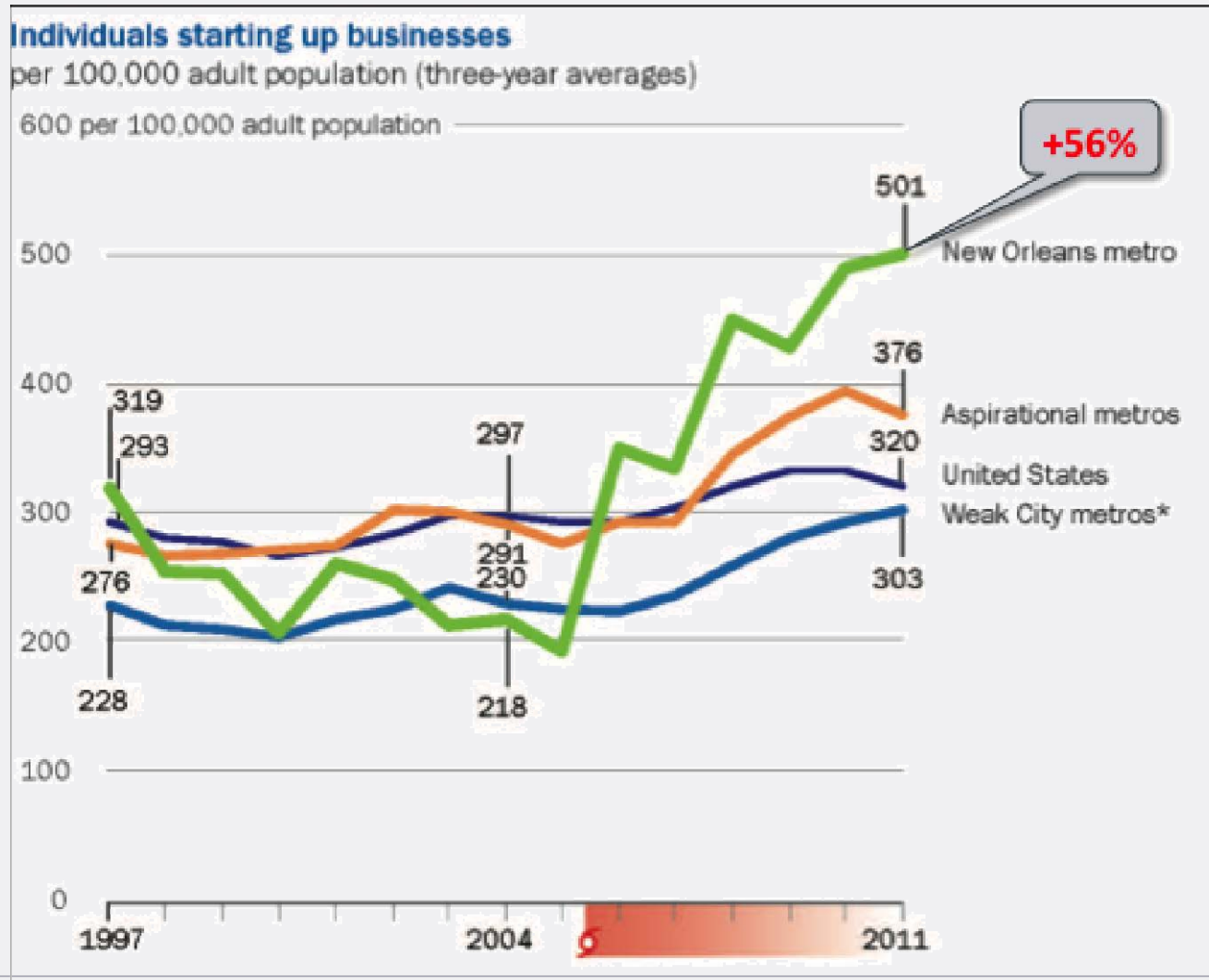
Exports have doubled since 2009.



Source: Fearnleys Research

# Economic Overview - Key Trends

Entrepreneurship is surging.





# Economic Overview - Key Trends

PowerMoves.NOLA aims to make New Orleans the national hub for minority entrepreneurship.

## Silicon Bayou's Frontman

In New Orleans, PowerMoves.NOLA awarded more than \$150,000 to promising tech entrepreneurs. **BLACK ENTERPRISE** spoke with PowerMoves.NOLA President Earl Robinson, an entrepreneur in his own right, about the success of PowerMoves.NOLA and what it may herald for minority entrepreneurs.

**How many of the startups at PowerMoves.NOLA do you expect to succeed? Most startups fail.**

I expect 100% of them to succeed in one way or another. Success for us is raising a certain amount of money after this that makes them a viable company. That's one way to succeed. Another way is growing their respective networks so that if they do fail, they fail up. If they've met someone who says 'I know you were the CEO of that and we heard it didn't do well, but you'd be a great CMO in my company,' then that's a success. That's what the venture capital spaces in Silicon Valley and Silicon Alley are about. So we're trying to set up—I don't want to call it a safety net—it's an ecosystem.



EARL ROBINSON  
PRESIDES OVER NEW  
ORLEANS' TECH BOOM.

STEM  
SPOTLIGHT



POWERMOVES  
NOLA

Twenty-Five Thousand

NEW ENTREPRENEURS WIN BIG IN NEW ORLEANS

Tech

Victorious  
Entrepreneurs:  
(Clockwise  
from TL)  
Candace  
Mitchell  
Luke  
Cooper  
Olubunmi  
'Boonie'  
Odumade  
Kellee  
James  
Bea  
Arthur

# Economic Overview - Key Trends

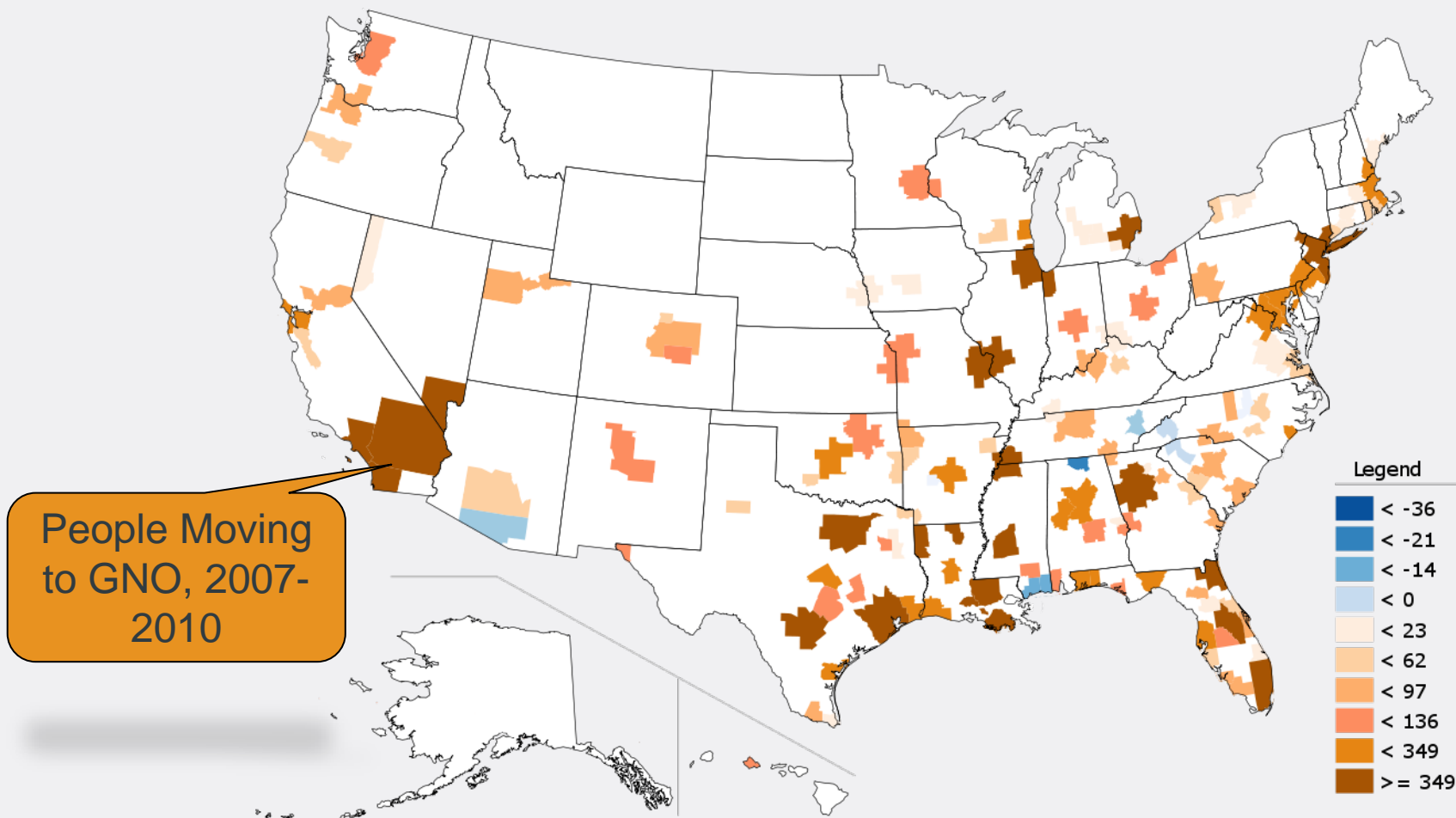
New Orleans is the #1 “Brainpower City” in America, for attracting young college graduates





# Economic Overview - Key Trends

Greater New Orleans is also #1 for attracting “Workers in their Prime” (35-49 yrs)



# Economic Overview - Key Trends

Major real estate investments are driving development.

## \$2B New Medical Complex



# Economic Overview - Key Trends

Major real estate investments are driving development.

## New \$850M César Pelli Airport Terminal



# Contents

- Prologue
- GNO, Inc. Overview
- Greater New Orleans Economy Overview



## A Resilient New Orleans

- Leverage Opportunities



After Katrina, Congress gave the Army Corps of Engineers \$14.6 billion to repair and improve hurricane and flood protection in New Orleans. About \$10 billion later, the 130-mile system of levees, walls and gates designed to keep out a 100-year storm surge is essentially complete. The corps says the city now is safe from flooding in a storm that has a 1 percent chance of hitting in any year, and the levee system also is designed to significantly reduce flooding from even larger storms. Interior drainage improvements designed to deal with heavy rainfall, however, are still under construction.

**Project:** The main feature is a conference during which we will present our findings, emphasizing, giving the most sense of the part of the first mass production.

**Release feature:** The new mass export of a political sea, open for surge to flow from the sea through the conference, symbolizing to the river and the sea into Jefferson Park.

**Let to be some, arriving.**



**map file:**  
 (see file: [Detailed description of map resources and data](#))

**Keywords:** new structures (Piel-Martinez-Lainch)

**Topic** **NAME** **TEACHER** **DATE** **PER**

**Keywords:** *Belgium, Belgium, Belgium, Belgium, Belgium*

These findings strongly indicate 100-year level of protection requirements in feed. Low iron and bioavailable zinc often trigger stress for subsequent animal health risk.

**Project:** Garvey began before Katrina, but he saw mountains, rubble and strengthening, giving the west coast of Jefferson Parish and a small part of St. Charles Parish the same sense of protection as other areas.

**seismic features:** The western Tie-In to the Mississippi canal is a gap in the straight of line original river.

**work to be done:** minor construction completion and arranging of more surface vegetation for grass and other plants.

[illegible]

The diagram illustrates the water treatment process in a plant. It shows the flow from the intake gate, through screening, sedimentation, flocculation, filtration, and finally to the distribution tank. Key components and their functions are labeled:

- Intake gate:** The first barrier where water enters the plant.
- Screening gate:** Removes large debris and trash from the water.
- Sedimentation tank:** Allows heavy solids to settle at the bottom.
- Flocculation tank:** Where fine particles are combined into larger flocs.
- Filtration tank:** Removes the flocs and other suspended solids.
- Distribution tank:** Stores the treated water before it is sent to the distribution system.

Arrows indicate the flow direction, and labels describe the function of each stage.

**Project:** Temporary jacks and pump space. Last Pontchartraine storm surge from flooding the city.

**Notes and details:** The caissons encased west of line 17th Street. Caisson was in place strengthening by injecting concrete into their foundations. There is a jack line caisson to have more caissons from east side added.

**Use to be as soon:** Permanent jacks and pumping station is on east of line east of each caisson, to replace temporary jacks east in 2006.

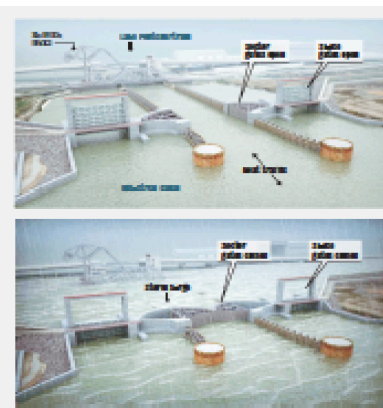


**Project: Flood Lane**  
 Postcard-size water, up to 40 feet, framing up into the mountains. Come, as happens during hurricane strikes.

**Native waters**  
 When the gates close, the mountain's water flows into the Gulf of Mexico. The water is then used to generate power.

**Let it be so**  
 The gates are not closed, and the water is not used to generate power. The gates are closed, and the water is not used to generate power.

## ▶ HOW IT WORKS



20  
19  
18  
17  
16  
15  
14  
13  
12  
11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
0

→ 19. Almost Every Weekday

→ 12. Twice a week (or more) and once a week (or more) (Average of 12 times a week along 0-20)

→ 10. Multiple Times a Week (or more)

→ 8. Once a Week (or more)

→ 6. Once a Week (or more)

→ 4. Once a Week (or more)

→ 2. Once a Week (or more)

→ 0. Not at all

**Project:** The dirt-covered birds in cubitos, hanging 52. Bernardo Páez, 19, is scraped away and recast. Several jobs are being done.



**Project 4.** A nearly two-mile-long, 25-foot-high wall was constructed to protect the nearby surge from Lake George and raised the lower Stewarts. Two large open spaces for storage and floating docks are open access to the riverfront. The project cost \$1.5 million.

[illegible]

**CROSS-SECTION**

2.57 m "rougher" plating at any one in 100 feet long and be erected at summit

200 ft long

Storm surge barrier

Storm surge

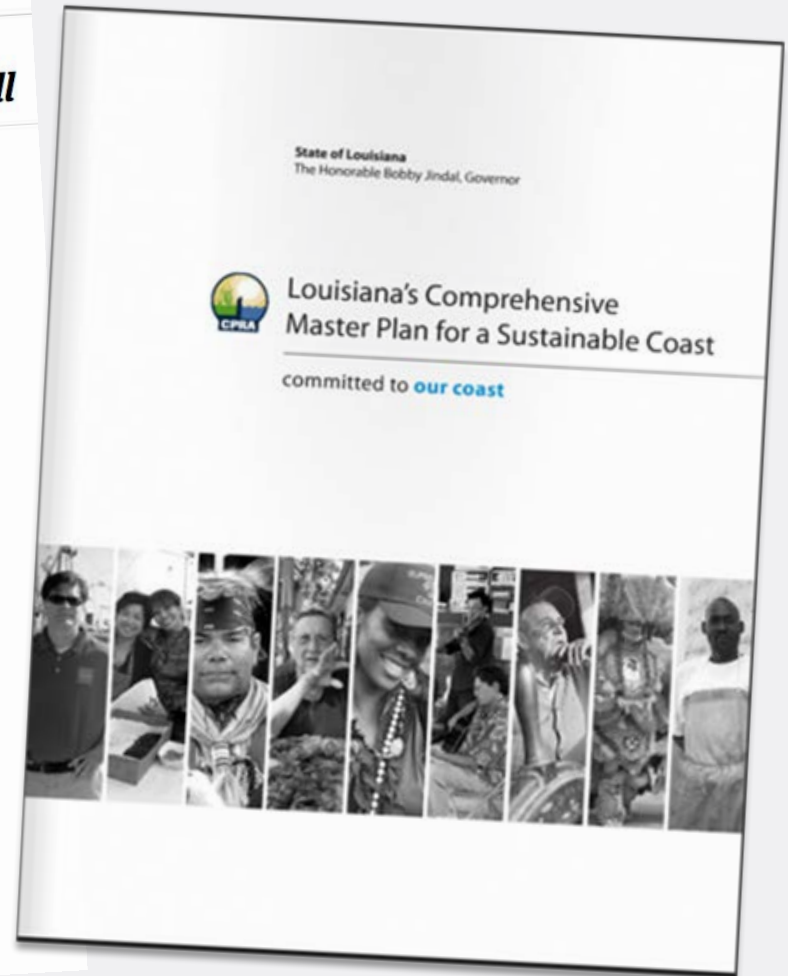
Concrete structure

Concrete structure

# LA Coastal Master Plan



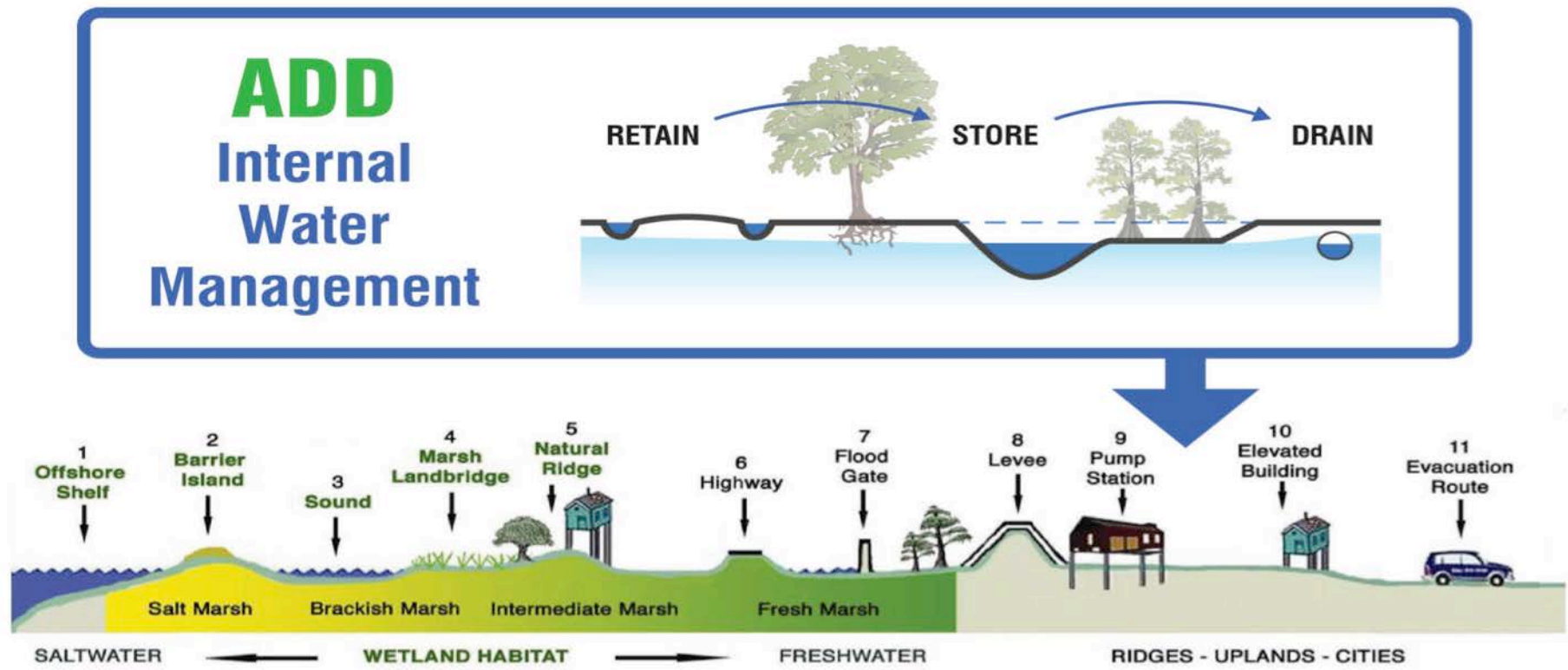
# LA Coastal Master Plan





# Multiple Lines of Flood Protection & Resilience

Coastal stabilization, levee systems and internal water management work must work in tandem for comprehensive flood protection





# Greater New Orleans Urban Water Plan



# Six Water Principles

Methods to live with water



- Living Water Systems
- Slow, Store, Drain
- Smart Retrofits
- Modern Materials and Practice
- Working with Nature
- Integrated Multiple Scales

# Economic Benefits

\$6.2 Billion investment over 50 years = \$22.3 Billion in economic benefits

**\$8  
BILLION  
REDUCTION IN  
FLOOD DAMAGES**

## REDUCED REPETITIVE FLOOD COSTS

Full implementation of the Greater New Orleans Urban Water Plan would fully eliminate flooding from a T5 storm (approximately 6" of rainfall in 24 hours) and substantially reduce the damage and effects of a T10 storm (11.5" in 24 hour period).

**\$183  
MILLION  
ESTIMATED  
INCREASE IN  
PROPERTY VALUES**

## HIGHER PROPERTY VALUES

The Urban Water Plan also enables the safe development of new waterfront property valued at \$183 MILLION.

**\$2.2  
BILLION  
REDUCTION IN  
SUBSIDENCE  
DAMAGE**

## REDUCED COST OF SINKING LAND/SUBSIDENCE

Similarly, properly maintaining groundwater levels would significantly reduce the subsidence rate and its damaging effects. Estimated damage costs in vulnerable areas are estimated at \$2.2 BILLION.

**UPTO  
\$11.3  
BILLION  
ESTIMATED  
ECONOMIC IMPACT  
FROM PROJECT  
EXECUTION**

## REGIONAL ECONOMIC IMPACT

Implementation of the Greater New Orleans Urban Water Plan would spur and support significant activity in supporting industry sectors estimated between \$5.29 - \$11.32 BILLION, supporting 44,040 - 101,790 jobs (direct and indirect, full and part-time).

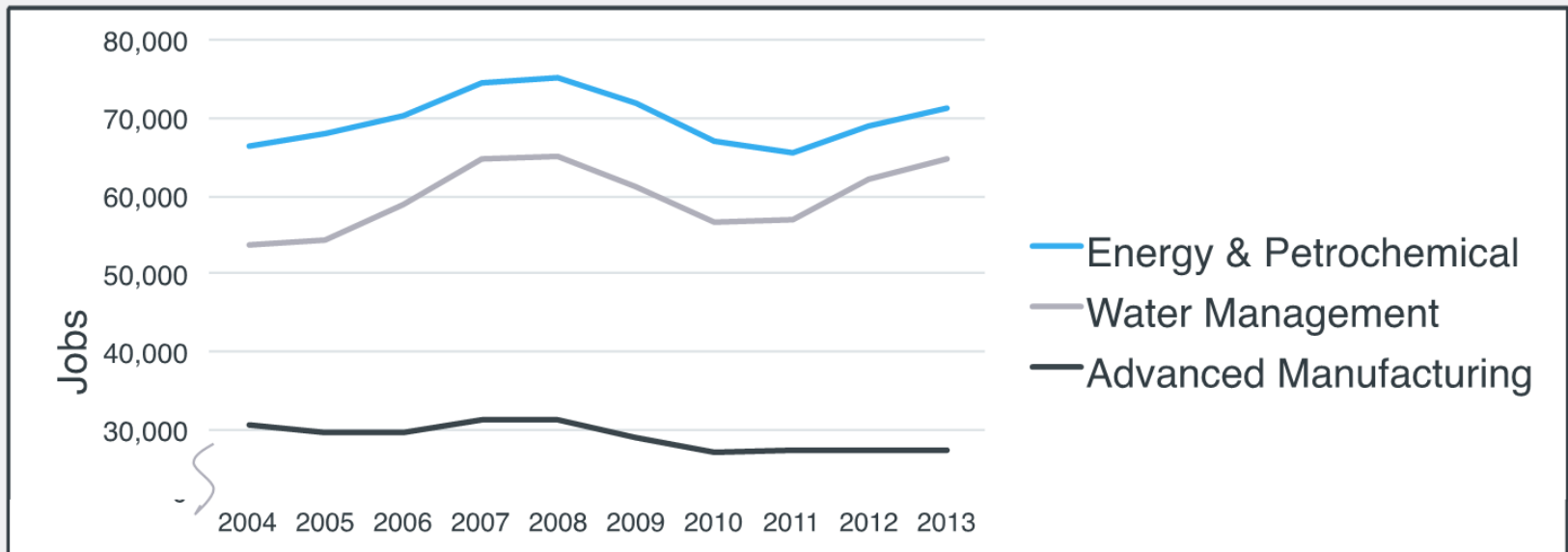
**\$609  
MILLION  
REDUCTION IN  
INSURANCE  
PREMIUMS**

## LOWER FLOOD INSURANCE PREMIUMS

By addressing the problems associated with sinking land, flood insurance premiums could drop as much as \$609 MILLION through credit given to parishes through the NFIP's Community Rating System (CRS).

# Jobs

Water Management is SE Louisiana's second largest industry sector, which has added more jobs than any other sector since 2010



Source: The Data Center 'The Coastal Index' Report



# Emerging Environmental Industry

*“Emerging Environmental” describes products and services that help companies create jobs and wealth while managing environmental challenges such as:*

## Flooding



## Coastal Erosion



## Subsidence



# Local Companies and Workforce

Louisiana is source of expertise and experience for water management solutions



The Times-Picayune  
Greater New Orleans ✓

**9 years after Katrina, New Orleans aims to turn environmental weaknesses into economic strengths**



The Times-Picayune  
Greater New Orleans ✓

**UNO and GNO, Inc. announce new certificates in coastal science and engineering**

# Export Experience

Louisiana firms secured \$327M in state and federal prime contracts related to Hurricane Sandy rebuilding






**“The greatest economic  
turnaround of our lifetime”**  
*Forbes*



**“America’s Favorite City”**  
*Travel + Leisure*



# Contents

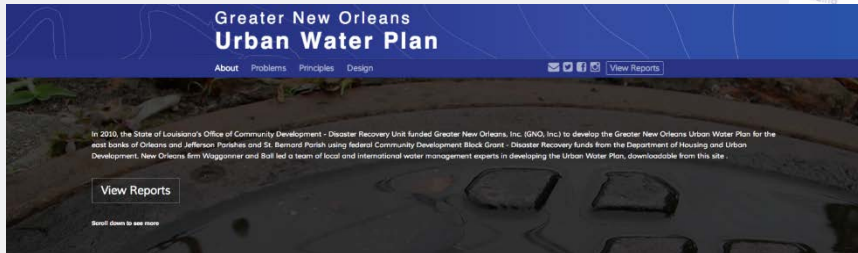
- Prologue
- GNO, Inc. Overview
- Greater New Orleans Economy Overview
- A Resilient New Orleans
-  Leverage Opportunities & Resources

# Leverage Opportunities

- BP/RESTORE Act: \$18.7 Billion (Gulf Coast only)
- HUD National Disaster Resilience Competition: \$1 Billion
- FEMA Hazard Mitigation Grant Program
- Vacant Properties
- Real Estate Development
- Policy (e.g. Zoning Ordinances)

# Resources

Learn more at [LivingWithWater.com](http://LivingWithWater.com) and Urban Water Plan iPad app



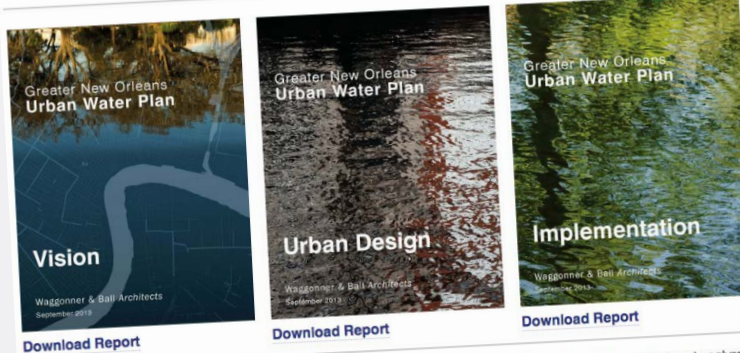
## Reports

The Greater New Orleans Urban Water Plan is a set of reports with cross-referenced information as outlined below.

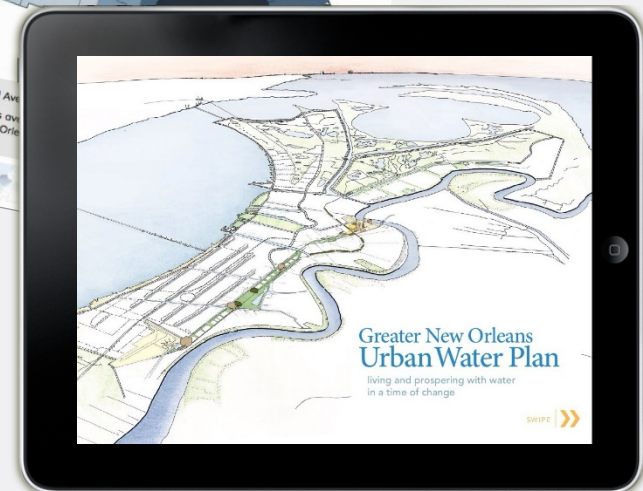
**Vision** presents an overview of the Urban Water Plan.

**Urban Design** is geared towards planning and design professionals. This report tests water planning principles through design drawings at the system, basin, district, and demonstration project scales.

**Implementation** is geared towards policy-makers, water system managers, and other stakeholders interested in effecting change. The report presents the value and economic impact of the Water Plan and outlines an action plan for implementation that includes prioritization and phasing of proposed strategies, financing tools, policy and community action recommendations, existing jurisdictions, and potential partners.



**System Design & Analysis** is a set of individual reports geared towards engineers and scientists that describes and analyzes the existing water system, and presents the envisioned framework of the integrated water system. The set includes the following reports:



# Contact Information

## Robin Barnes

Executive Vice President & COO

[rbarnes@gnoinc.org](mailto:rbarnes@gnoinc.org)

504.527.6996

## Greater New Orleans, Inc.

[gnoinc.org](http://gnoinc.org)

[gnoinc.org/waterapp](http://gnoinc.org/waterapp)

[gnoinc.org/waterplan](http://gnoinc.org/waterplan)