

The Shape of Things to Come

Building a Resilient Economic Future In Miami

Kevin T. Greiner

Sr. Fellow, FIU Metropolitan Center



www.metropolitan.fiu.edu



@FIUMetroCenter

The poster is a vibrant, stylized illustration. At the top, a man in a futuristic, metallic suit with a helmet-like headpiece is shown in a dynamic, forward-leaning pose, holding a sleek, golden rocket. The background is a fiery orange and yellow, suggesting a dramatic or apocalyptic setting. In the lower right, a man in a red and white classical-style tunic points upwards, while a woman in a similar dress stands beside him. In the lower left, a man in a white robe is shown in a laboratory setting, looking at a glowing orb. The overall composition is busy and detailed, with various mechanical and architectural elements scattered throughout.

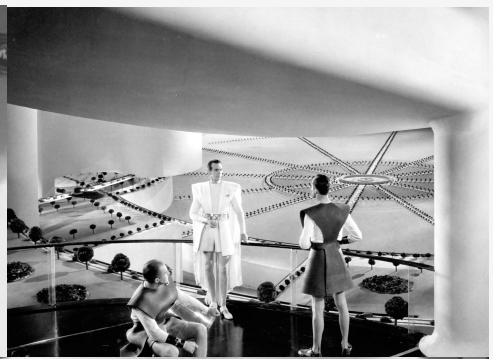
WHAT WILL THE
NEXT HUNDRED
YEARS BRING
TO MANKIND?

H.G. WELLS' **THINGS TO COME**

An ALEXANDER KORDA
production

with RAYMOND MASSEY · RALPH RICHARDSON
SIR CEDRIC HARDWICKE · PEARL ARGYLE
MARGARETTA SCOTT and a cast of 20,000

Directed by WILLIAM CAMERON MENZIES
A London Film · Released thru United Artists



An Existential Threat?



\$90,000,000,000,000
(**\$90 Trillion**)

The Global Commission on the Economy and Climate



-13%

UNHCR



1,000,000,000
(**1 Billion**)

UNHCR

Nature of the Threat

Miami's Great Recession

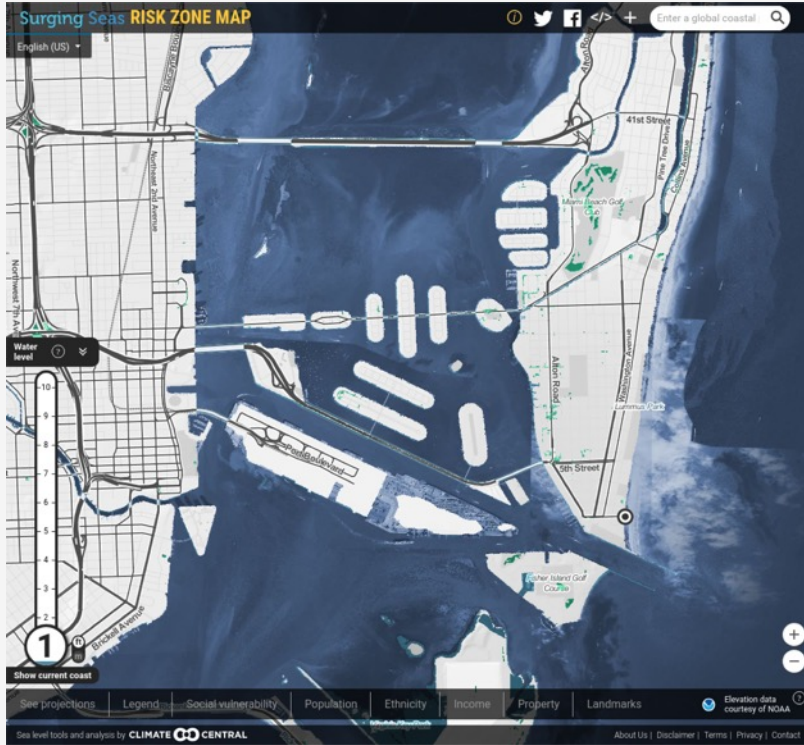
Industry	Employment Change 2007-2010
561320 Temporary help services	(3,284)
236115 New single-family general contractors	(3,106)
441110 New car dealers	(2,374)
238222 Nonresidential plumbing and hvac contractors	(2,104)
488119 Other airport operations	(2,099)
531210 Offices of real estate agents and brokers	(1,935)
238221 Residential plumbing and hvac contractors	(1,748)
999999 Unclassified	(1,669)
238211 Residential electrical contractors	(1,661)
445299 All other specialty food stores	(1,640)
561422 Telemarketing and other contact centers	(1,582)
236220 Commercial building construction	(1,556)
522292 Real estate credit	(1,543)
111219 Other vegetable and melon farming	(1,315)
561110 Office administrative services	(1,257)
522110 Commercial banking	(1,176)
444190 Other building material dealers	(1,172)
541310 Architectural services	(1,142)
238212 Nonresidential electrical contractors	(1,119)
332321 Metal window and door manufacturing	(1,102)
541330 Engineering services	(1,090)
339112 Surgical and medical instrument manufacturing	(1,059)

105,870 Jobs Lost

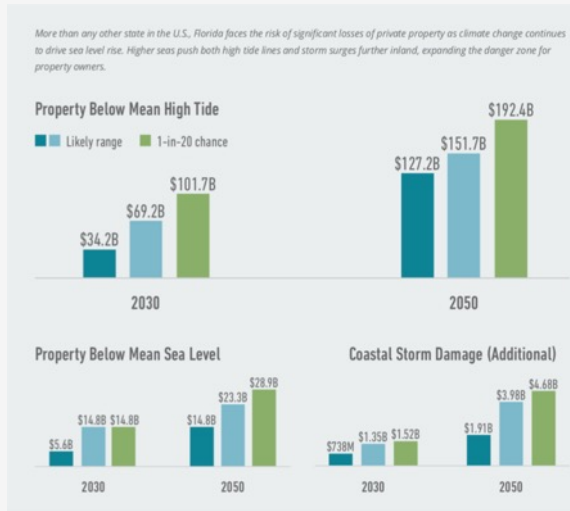
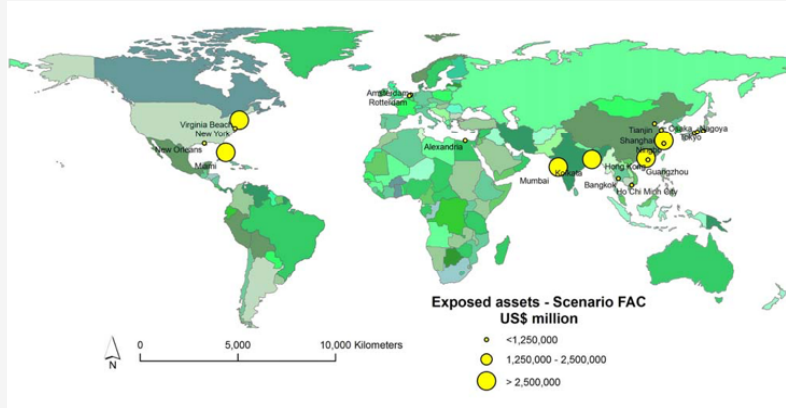
Industry	Employment Change 2007-2010
622110 General medical and surgical hospitals	4,615
621610 Home health care services	3,113
483112 Deep sea passenger transportation	2,923
722110 Full-service restaurants	2,868
452112 Discount department stores	1,326
611110 Elementary and secondary schools	1,118
621491 Hmo medical centers	920
443120 Computer and software stores	877
334510 Electromedical apparatus manufacturing	834
721110 Hotels and motels, except casino hotels	801
623110 Nursing care facilities	768
611519 Other technical and trade schools	739
512131 Motion picture theaters, except drive-ins	694
611310 Colleges and universities	690
326199 All other plastics product manufacturing	685
448120 Women's clothing stores	676
448190 Other clothing stores	581
621112 Offices of mental health physicians	541

48,105 Jobs Gained

Nature of the Threat – Long-Term Economic Changes?



Nature of the Threat – Long-Term Economic Changes?



Miami-Dade Assets At Risk Property Value

Below 3 feet: \$38.01 B
 Below 2 feet: \$16.33 billion
 Below 1 foot: \$7.32 billion

Homes

Below 3 feet: 71,702
 Below 2 feet: 25,192
 Below 1 foot: 8,512

Roads

Below 3 feet: 384 miles
 Below 2 feet: 134 miles
 Below 1 foot: 25 miles

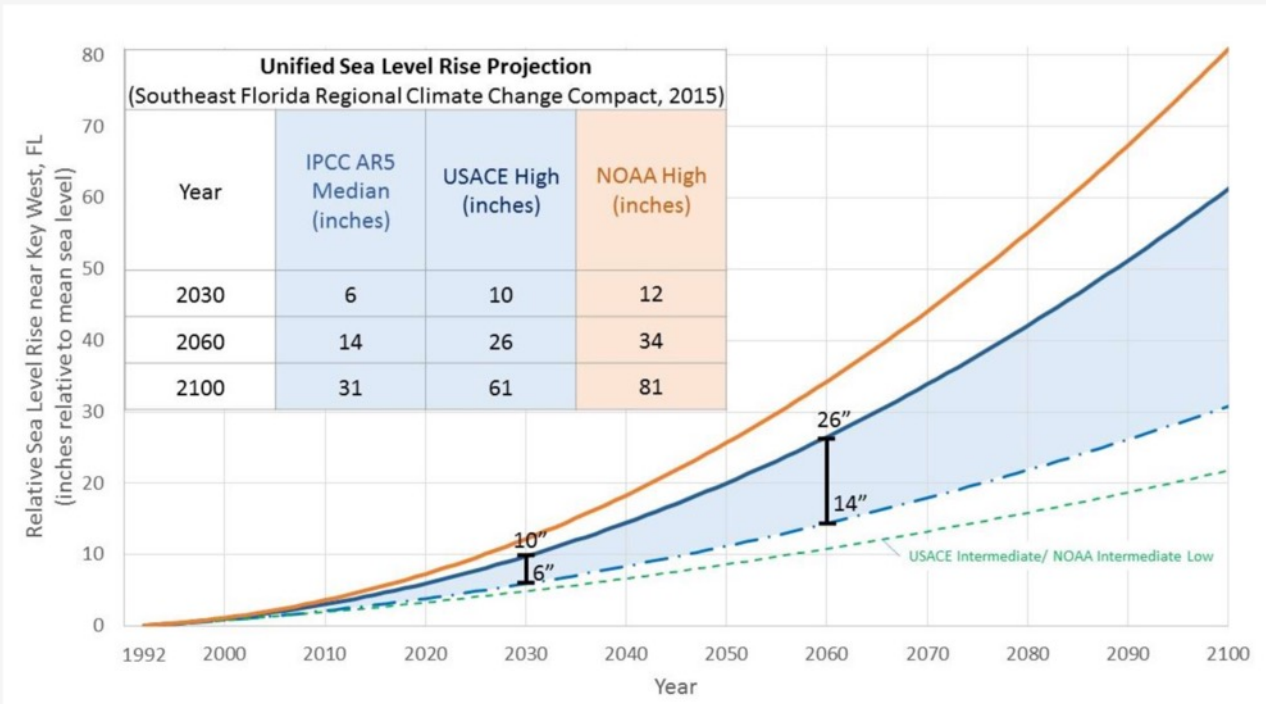
Hazardous Waste Sites

Below 3 feet: 73
 Below 2 feet: 23
 Below 1 foot: 8

Wastewater Sites

Below 3 feet: 73
 Below 2 feet: 36
 Below 1 foot: 11

Economic Risk – Not Far Away



2030: 80 High-tide Flood Events Per Year
2045: 380 high-tide flood events per year
2060: Inundation

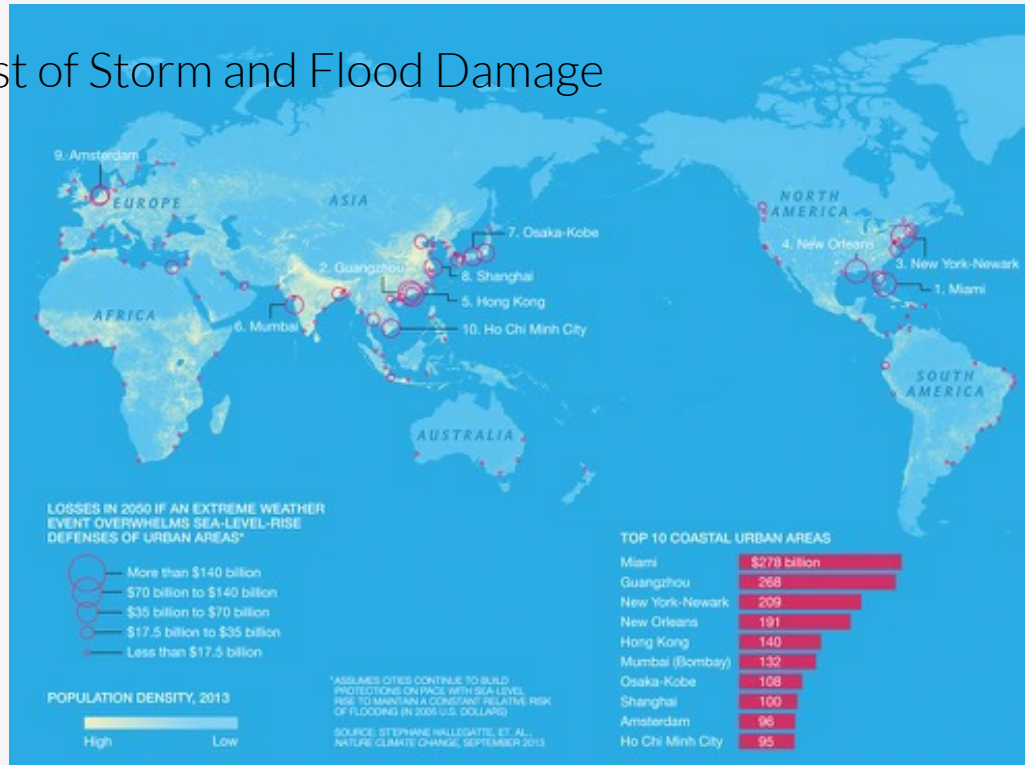
Economic Risk – Short Term

Increased Number and Intensity of Storms



Economic Risk – Short Term

Increased Cost of Storm and Flood Damage

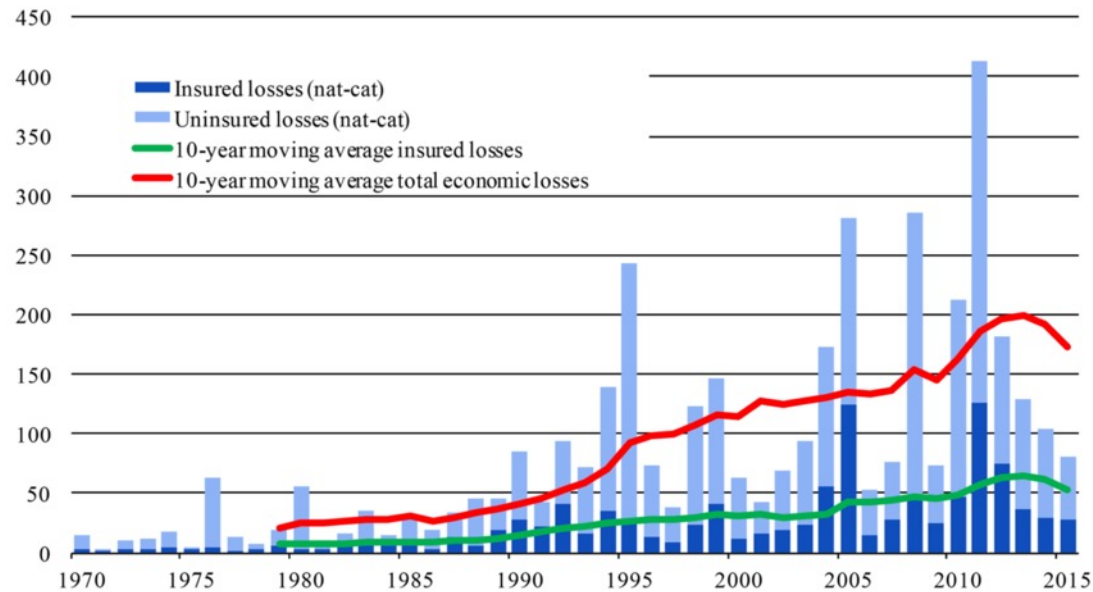


EXPECTED VALUE OF HURRICANE DAMAGES TO MIAMI-DADE, 2000-2050

Year	2000	2010	2020	2030	2040	2050
Damage	\$43 billion	\$105 billion	\$255 billion	\$614 billion	\$1.47 trillion	\$3.5 trillion

SOURCE: The methodology is further explained in Robert Repetto and Robert Easton, "Changing Climate, More Damaging Weather," Issues in Science and Technology, Winter 2010, accessed at <http://issues.org/26.2/repetto.html>

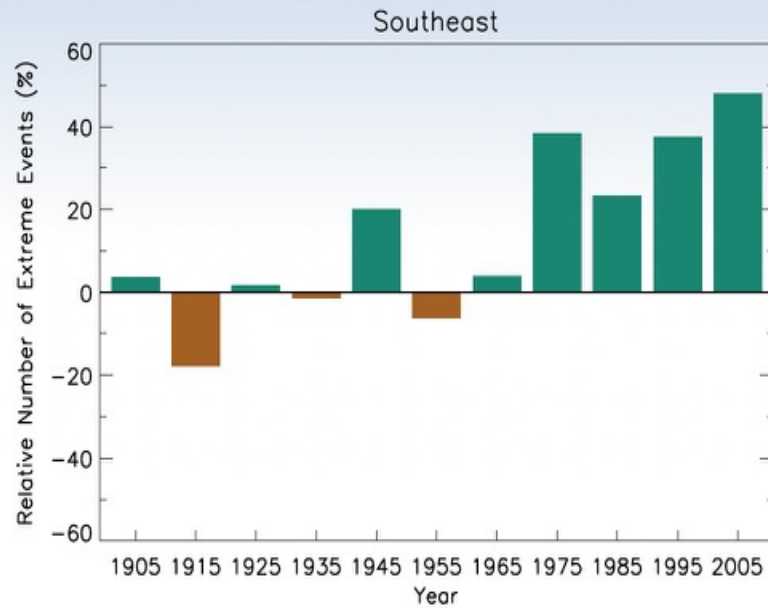
The Growing Burden of Uninsured Losses Natural Catastrophe Losses 1970 – 2015 (in 2015 USD)



Source: Swiss Re Economic Research & Consulting and Cat Perils.

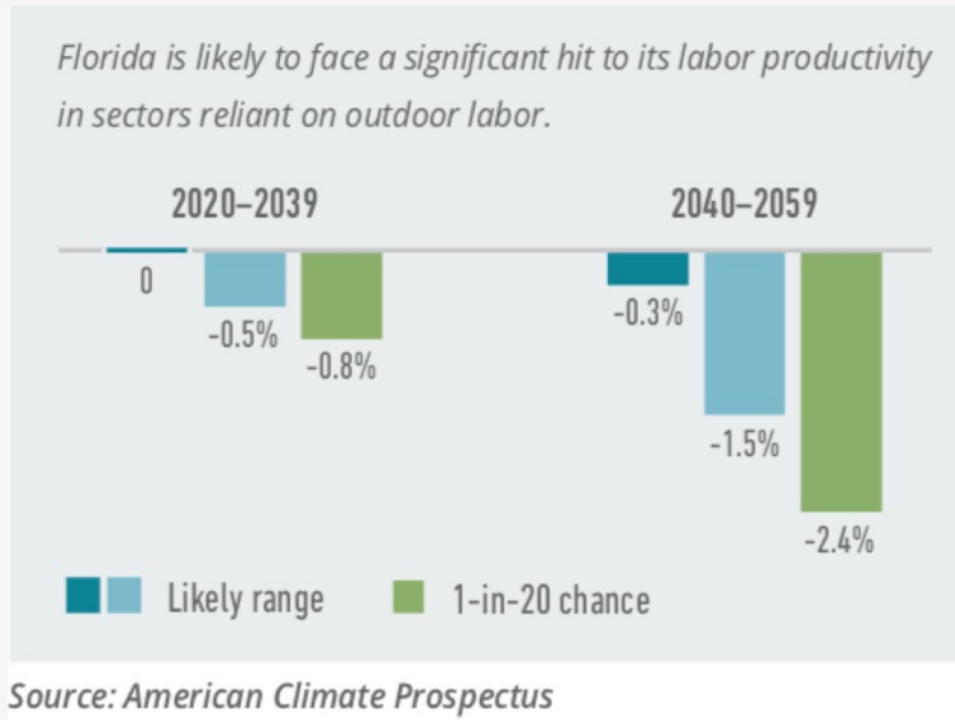
Economic Risk – Short Term

Southeast Extreme Precipitation Trends



Economic Risk – Short Term

Loss of Labor Productivity



Economic Risk – Short Term

Other Disruptions

Loss of Investor Confidence

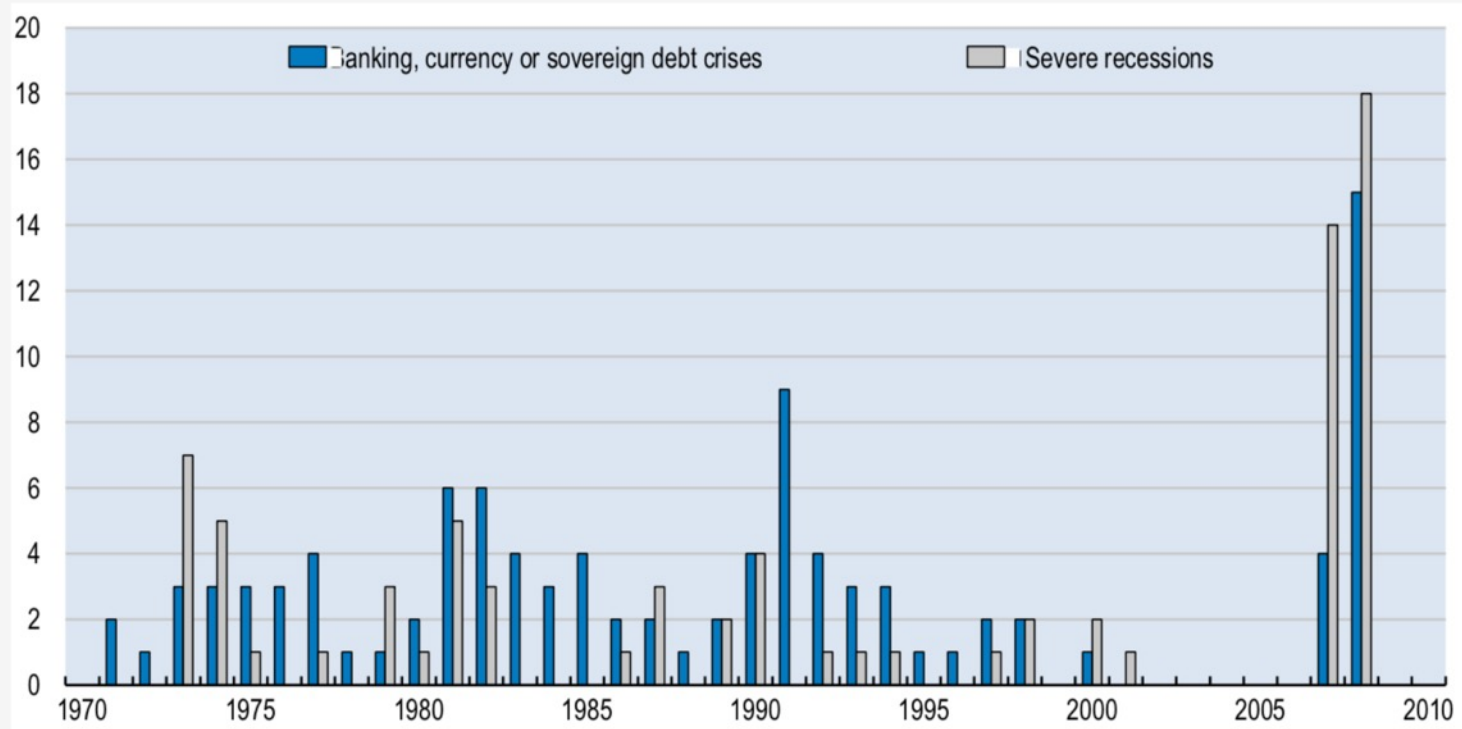
Bond Rating Threats: Negatively Impacting Public Finance of Climate Change Investments development

Rising Insurance Cost to Property Owners and Businesses

Insurance Provider Retreat From the Market

Economic Risk – Short Term

Bank System Crises and Recessions in More Countries Each Year



The Limits to Infrastructure



Re · sil · ience

Defining Resilience



ARCHITECTURE AT ZERO
A COMPETITION FOR ZERO NET ENERGY URBAN ARCHITECTURE

Defining Resilience

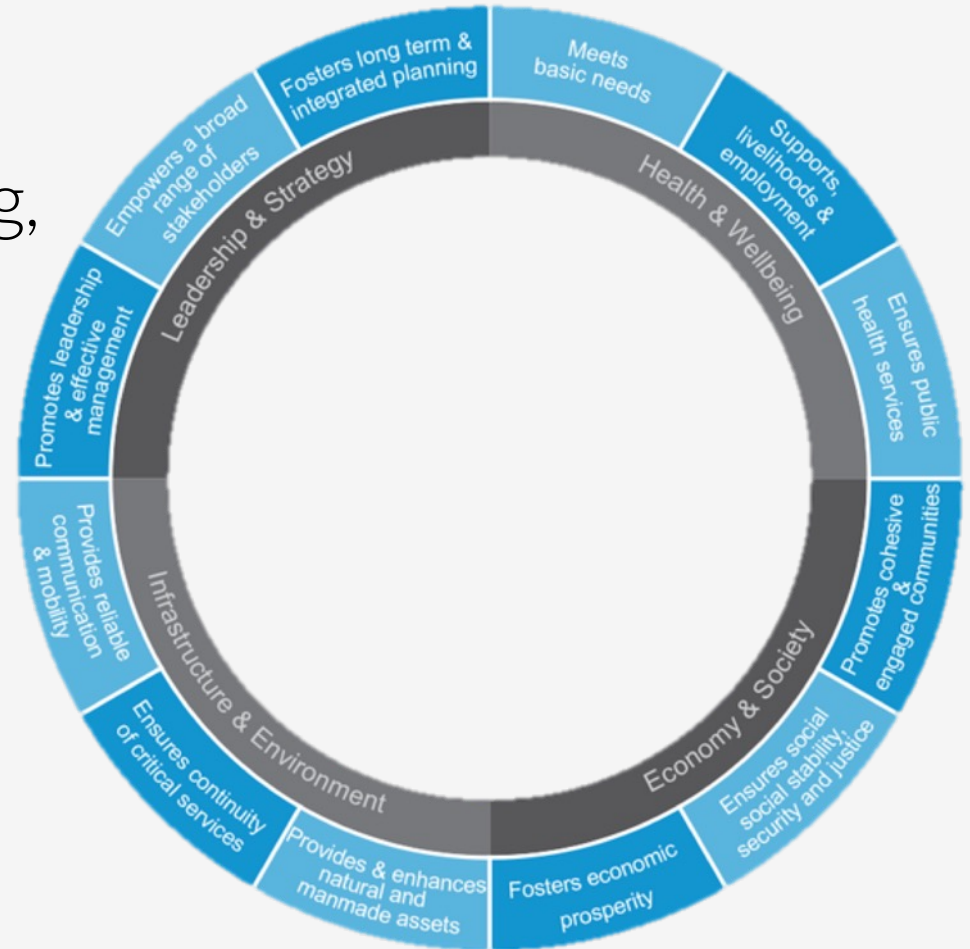
- A. Ability of an economy to recover quickly
- B. Ability to withstand shocks
- C. Ability of an economy to avoid shocks

Resilience or Rebound?

Defining Resilience

'If planning is everything,
maybe it's nothing'

Aaron Wildavsky (1973)



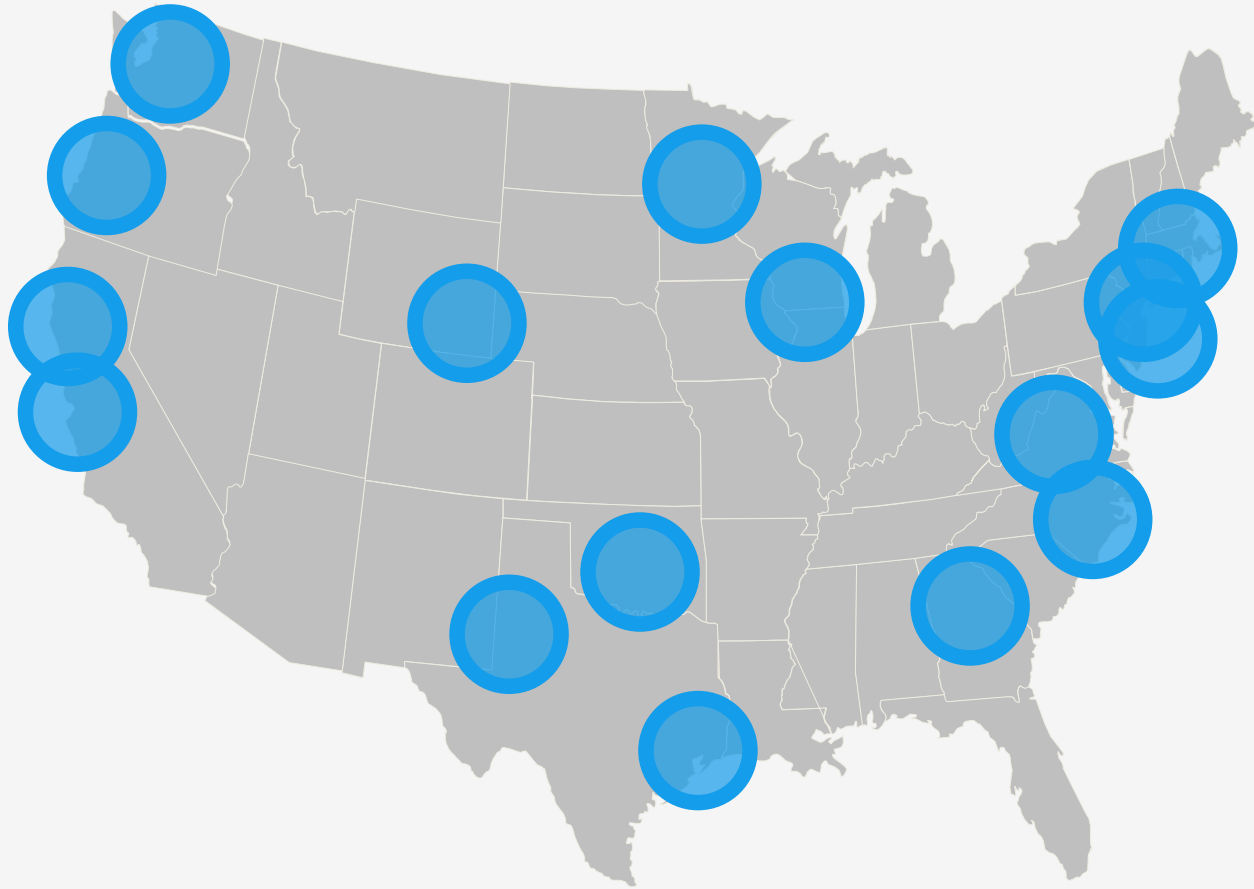
Economic Resilience:

The ability of a Region to regain employment and *improve* its economy by re-structuring it to avoid or capitalize on increasing climate disruptions and/or permanent economic sector losses

Historic Examples



Historic Examples





Re-Thinking Resilience

A Metro Resilience Performance Index

Resilience Performance Index

1

Economic Risk Level

Economic Risk – Short Term

Agriculture Cluster	Employment	Output	Employee Compensation	Tax On Production & Imports
Vegetable and melon farming	1,065	\$158,505,569	\$15,186,371	\$1,315,518
Fruit farming	1,696	\$76,547,203	\$13,038,881	\$1,247,303
Tree nut farming	38	\$6,127,785	\$1,052,972	\$99,850
Greenhouse, nursery, and floriculture production	3,454	\$416,339,386	\$79,359,055	\$2,482,641
Sugarcane and sugar beet farming	19	\$1,729,533	\$412,396	\$14,228
All other crop farming	1	\$34,889	\$7,295	\$287
Beef cattle ranching and farming, feedlots, dual-purpose ranching and farming	22	\$1,730,235	\$30,158	\$88,247
Poultry and egg production	2	\$1,272,474	\$76,508	\$4,390
Animal production, except cattle and poultry and eggs	28	\$2,748,401	\$104,746	\$49,479
Support activities for agriculture and forestry	2,076	\$80,741,646	\$46,329,365	\$1,504,046
Nitrogenous fertilizer manufacturing	6	\$9,310,804	\$258,568	\$62,105
Fertilizer mixing	60	\$39,686,314	\$3,957,784	\$180,572
Animal, except poultry, slaughtering	7	\$4,206,672	\$191,487	\$24,828
Meat processed from carcasses	630	\$285,361,328	\$24,214,725	\$1,541,112
Rendering and meat byproduct processing	38	\$23,584,719	\$2,347,378	\$101,047
<u>Poultry processing</u>	<u>50</u>	<u>\$12,362,763</u>	<u>\$1,275,356</u>	<u>\$10,129</u>
	9,193	\$1,120,289,720	\$187,843,045	\$8,725,781

What Losses Look Like

Hospitality and Tourism Cluster	Employment	Output	Employee Compensation	Tax On Production & Imports
Commercial hunting and trapping	49	\$3,325,814	\$33,366	\$330,091
Retail - Miscellaneous store retailers	12,719	\$572,202,332	\$301,871,918	\$54,310,497
Scenic and sightseeing transportation and support activities for transportation	9,428	\$1,256,640,625	\$360,877,563	\$16,351,974
General and consumer goods rental except video tapes and discs	1,879	\$241,521,988	\$62,355,614	\$19,401,686
Travel arrangement and reservation services	10,138	\$1,357,136,230	\$308,494,843	\$5,440,170
Commercial Sports Except Racing	6,830	\$528,387,695	\$394,452,332	\$60,444,500
Racing and Track Operation	2,020	\$92,183,624	\$19,874,409	\$8,483,846
Museums, historical sites, zoos, and parks	1,187	\$107,509,361	\$43,188,492	\$4,822,580
Amusement parks and arcades	438	\$30,815,100	\$10,611,401	\$2,549,955
Gambling industries (except casino hotels)	6,168	\$614,491,211	\$249,366,714	\$3,134,691
Other amusement and recreation industries	2,788	\$163,643,188	\$75,390,190	\$3,397,731
Hotels and motels, including casino hotels	20,534	\$2,225,301,758	\$826,559,265	\$313,955,048
Other accommodations	<u>241</u>	<u>\$19,457,699</u>	<u>\$8,902,495</u>	<u>\$2,378,616</u>
	74,420	\$7,212,616,626	\$2,661,978,601	\$495,001,386

Transportation and Logistics	Employment	Output	Employee Compensation	Tax On Production & Imports
Air transportation	16,892	\$6,177,546,387	\$1,568,857,055.7	\$532,470,947.3
Truck transportation	14,981	\$2,109,128,906	\$286,850,372.3	\$27,699,932.1
Ship building and repairing	82	\$21,508,509	\$7,788,147.4	\$348,141.3
Boat building	646	\$156,511,307	\$31,423,957.8	\$2,104,220.6
Water transportation	<u>10,195</u>	<u>\$7,776,013,672</u>	<u>\$844,173,645.0</u>	<u>\$43,530,139.9</u>
	42,796	\$16,240,708,780	\$2,739,093,178.3	\$606,153,381.2

TOTALS	126,409	\$24,573,615,126	\$5,588,914,824.7	\$1,109,880,548.8
Percent of County Economy (All Private & Public Employment)	8%	12%	9%	11%

Economic Risk – Short Term

Small Economic Shocks Ripple Through the Regional Economy

Annual Economic Losses

1-Yr Revenue Decline	Employment	Employee Compensation	Value Added	Total Output
-5%	-11,731	-\$719,867,160	-\$1,073,456,352	-\$2,137,422,041
-15%	-35,193	-\$2,159,601,591	-\$3,220,369,221	-\$6,412,266,565

Annual Local Tax Loss: -\$70,211,430

2

Industrial Structure

Industry Concentration – By Employment and Output

Industry Diversification – 5% Rule

Location Quotient

Future Economic Growth is Always Built from the Industry Structure of the Past

3

Industry Knowledge Content

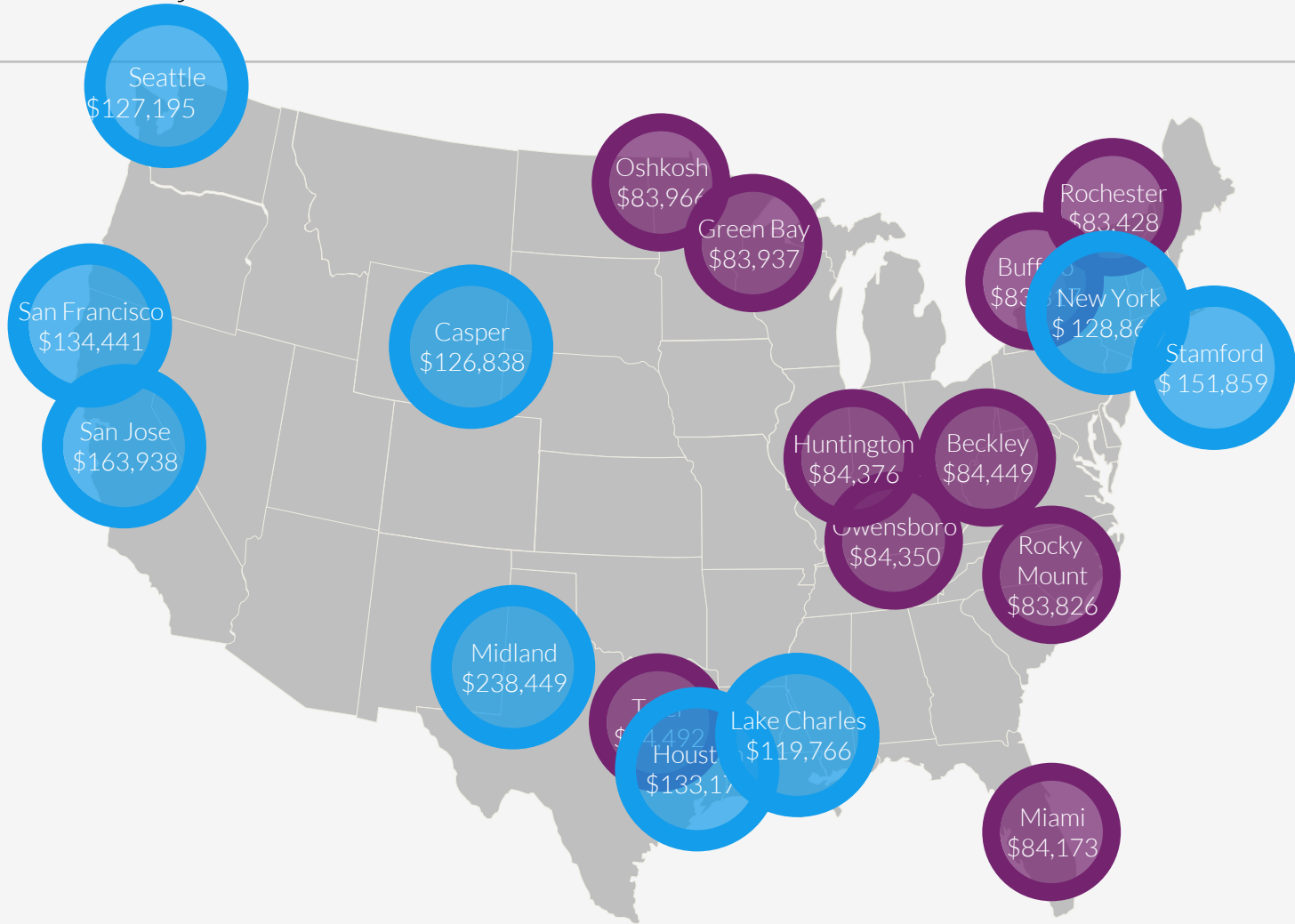
Patent Activity

Occupational Educational Requirements

R&D Spending – Total and by Industry

Provides Innovation and Greater Flexibility Against Change

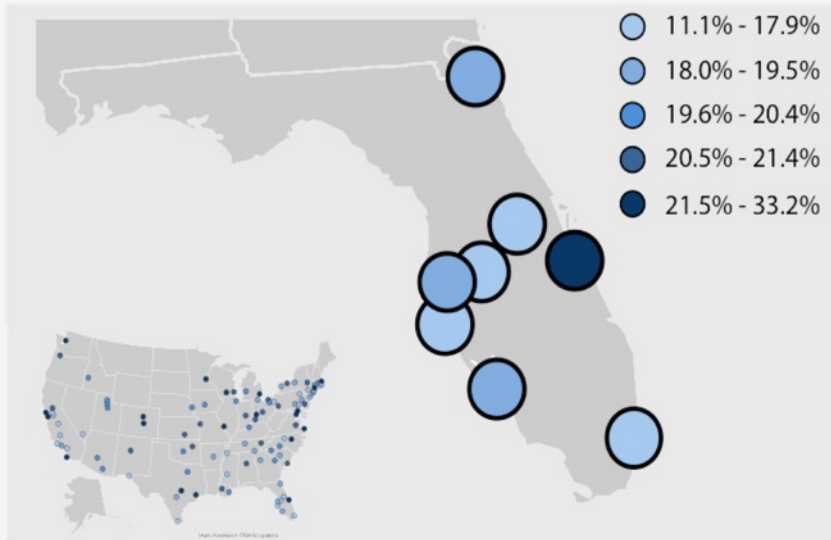
The Resiliency Index



The Resiliency Index

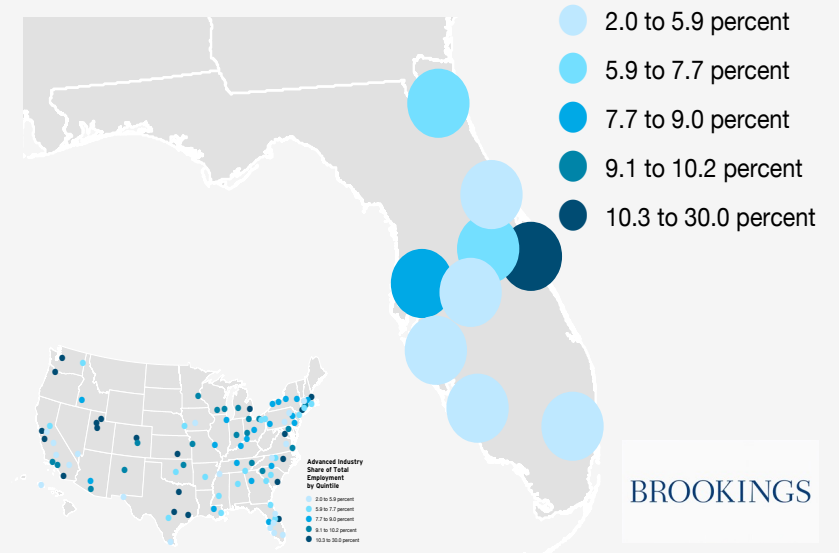
Share of Workers in STEM Occupations

Top 100 Largest Metro Areas



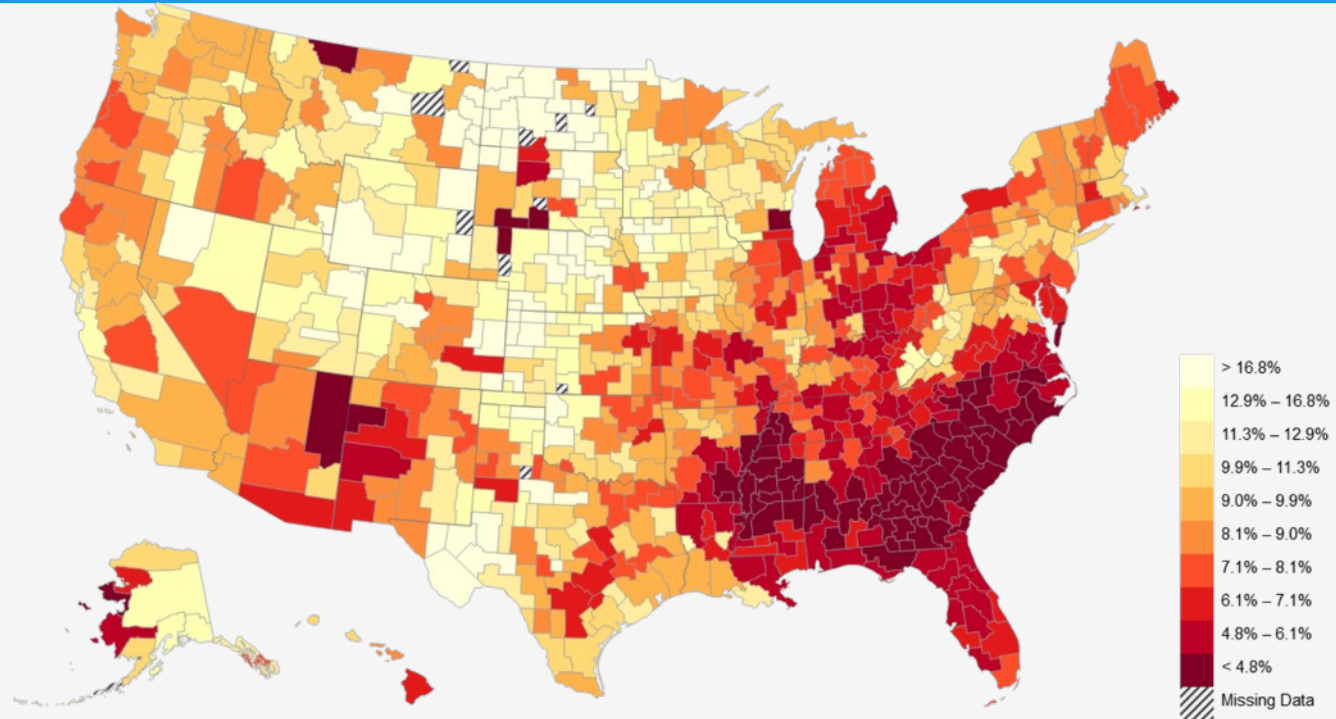
Advanced Industry Employment

Top 100 Largest Metro Areas



4

Upward Economic Mobility



5

Labor Force Capacity and Skill Level

Educational Attainment

Wage Comparables

Wage Growth

The Resiliency Index

75/50 Ratio

	Population	Percent Earning Less than \$50,000 Per Year	Percent Earning More than \$75,000 Per Year	75/50 ratio	Total
New York County, New York	1,634,989	30.2	50.2	1.66	658,760
Fairfax County, Virginia	1,132,887	31.3	49.7	1.59	455,628
San Francisco County, California	850,282	31.7	47.6	1.50	342,760
Santa Clara County, California	1,885,056	33.7	48.3	1.43	662,021
Montgomery County, Maryland	1,026,371	34.8	45.3	1.30	400,275
Middlesex County, Massachusetts	1,567,610	34.1	42.3	1.24	582,417
Westchester County, New York	969,229	36.2	43.5	1.20	328,421
Fairfield County, Connecticut	941,618	36.7	43.0	1.17	316,097
Nassau County, New York	1,356,801	36.2	42.0	1.16	476,972
Bergen County, New Jersey	930,310	36.6	40.8	1.11	340,523
Contra Costa County, California	1,107,925	37.0	41.1	1.11	349,778
King County, Washington	2,079,550	37.9	40.1	1.06	775,116
Alameda County, California	1,605,217	39.4	39.0	0.99	550,174
Collin County, Texas	886,633	38.7	38.2	0.99	350,469
DuPage County, Illinois	930,514	40.1	36.4	0.91	340,700
Suffolk County, New York	1,498,130	40.8	36.6	0.90	517,041
Oakland County, Michigan	1,235,215	40.8	36.6	0.90	426,942
Hartford County, Connecticut	895,699	42.3	32.4	0.77	307,897
Orange County, California	3,132,211	47.1	33.4	0.71	1,039,537
Hennepin County, Minnesota	1,209,265	44.8	31.4	0.70	454,530
Fulton County, Georgia	996,757	47.4	33.0	0.70	359,496
New Haven County, Connecticut	860,874	44.0	29.2	0.66	286,376
Wake County, North Carolina	998,576	47.7	30.9	0.65	376,938
Prince George's County, Maryland	897,693	47.3	28.5	0.60	354,445
St. Louis County, Missouri	1,000,560	49.8	27.9	0.56	349,516
San Diego County, California	3,253,356	51.4	28.0	0.54	1,078,463
Cook County, Illinois	5,227,575	50.6	27.1	0.54	1,765,056
Travis County, Texas	1,148,176	53.4	27.0	0.51	456,662
Mecklenburg County, North Carol	1,011,774	53.4	26.6	0.50	374,007
Sacramento County, California	1,479,300	51.5	25.2	0.49	435,712
Allegheny County, Pennsylvania	1,230,360	51.6	24.4	0.47	436,479
Kings County, New York	2,606,852	53.6	24.3	0.45	847,929

	Population	Percent Earning Less than \$50,000 Per Year	Percent Earning More than \$75,000 Per Year	75/50 ratio	Total
Macomb County, Michigan	859,703	52.8	23.8	0.45	281,641
Los Angeles County, California	10,057,155	57.3	24.1	0.42	3,225,451
Honolulu County, Hawaii	986,999	54.0	22.4	0.41	367,364
Harris County, Texas	4,434,257	56.9	23.3	0.41	1,584,190
Queens County, New York	2,310,011	55.5	21.9	0.39	822,769
Tarrant County, Texas	1,947,529	55.5	21.9	0.39	702,313
Erie County, New York	922,129	53.9	21.2	0.39	299,537
Riverside County, California	2,323,892	56.6	22.2	0.39	630,174
Franklin County, Ohio	1,232,118	55.6	21.3	0.38	448,516
Cuyahoga County, Ohio	1,258,710	55.4	21.0	0.38	401,569
Maricopa County, Arizona	4,088,549	57.8	21.9	0.38	1,342,123
Gwinnett County, Georgia	874,242	57.9	21.7	0.37	309,054
Palm Beach County, Florida	1,398,757	59.2	21.9	0.37	435,365
Salt Lake County, Utah	1,092,518	57.5	21.0	0.37	383,666
Wayne County, Michigan	1,767,593	58.4	20.3	0.35	474,217
Hillsborough County, Florida	1,323,059	60.0	20.4	0.34	458,307
Kern County, California	871,337	60.3	20.2	0.33	229,209
Broward County, Florida	1,863,780	60.6	20.1	0.33	638,685
San Bernardino County, California	2,106,754	59.5	19.7	0.33	582,850
Pinellas County, Florida	939,548	61.5	19.2	0.31	307,540
Dallas County, Texas	2,513,054	62.1	19.3	0.31	907,625
Shelby County, Tennessee	936,990	61.0	18.5	0.30	309,044
Fresno County, California	963,160	62.0	18.4	0.30	240,744
Pima County, Arizona	1,003,338	62.4	18.2	0.29	286,643
Philadelphia County, Pennsylvania	1,559,938	60.7	17.2	0.28	458,040
Milwaukee County, Wisconsin	955,306	59.7	16.5	0.28	305,740
Bexar County, Texas	1,858,699	63.3	17.1	0.27	622,066
Clark County, Nevada	2,070,153	63.1	16.6	0.26	670,892
Orange County, Florida	1,256,055	65.5	17.2	0.26	434,840
Duval County, Florida	900,890	64.2	16.4	0.26	312,449
Marion County, Indiana	932,142	64.3	15.3	0.24	309,128
Miami-Dade County, Florida	2,664,418	69.2	15.0	0.22	915,101
Bronx County, New York	1,436,785	67.5	13.0	0.19	405,123

6

Income Inequality

Gini Index

95/20 Ratio

Housing Affordability

The Resiliency Index

Counties with Highest Income Inequality - Counties Over 1 Million Population, 2016

Mean Income of Households, by Income Quintile

Ratio of the Mean Income of Top 5% of Households to Mean Income of the Lowest 20%

	Population	Lowest Fifth	Second Fifth	Third Fifth	Fourth Fifth	Highest Fifth	Top 5 percent	95/20 Ratio
United States	318,558,162	\$12,243	\$32,709	\$55,754	\$88,586	\$200,035	\$358,316	29.3
1 New York County, New York	1,643,734	\$10,316	\$36,891	\$76,131	\$137,768	\$432,635	\$877,049	85.0
2 San Francisco County, California	870,887	12883	45226	88168	146927	344923	617832	48.0
3 Fulton County, Georgia	1,023,336	\$11,078	\$33,268	\$59,324	\$101,347	\$276,207	\$526,675	47.5
4 Fairfield County, Connecticut	944,177	17158	48940	87184	144627	409563	812098	47.3
5 Westchester County, New York	974,542	16400	47798	87212	144999	392996	762116	46.5
6 Kings County, New York	2,629,150	\$8,871	\$26,726	\$50,752	\$86,175	\$206,528	\$375,238	42.3
7 Miami-Dade County, Florida	2,712,945	\$9,132	\$25,161	\$44,489	\$74,076	\$192,489	\$377,014	41.3
8 Philadelphia County, Pennsylvania	1,567,872	\$6,911	\$21,660	\$39,766	\$66,560	\$156,964	\$279,037	40.4
9 Cuyahoga County, Ohio	1,249,352	\$8,786	\$25,571	\$45,546	\$75,063	\$179,291	\$331,892	37.8
10 Cook County, Illinois	5,203,499	\$10,977	\$32,182	\$57,348	\$93,071	\$221,706	\$410,814	37.4
11 Shelby County, Tennessee	934,603	9516	26636	47110	77566	187102	348597	36.6
12 Palm Beach County, Florida	1,443,810	\$12,993	\$33,027	\$55,703	\$90,175	\$237,298	\$474,900	36.6
13 Wayne County, Michigan	1,749,366	\$7,659	\$23,293	\$42,385	\$70,402	\$156,454	\$270,252	35.3
14 Los Angeles County, California	10,137,915	\$12,164	\$33,197	\$58,389	\$95,659	\$228,159	\$419,027	34.4
15 Dallas County, Texas	2,574,984	\$12,404	\$31,435	\$51,741	\$82,695	\$210,098	\$409,434	33.0
16 Bronx County, New York	1,455,720	\$6,965	\$18,552	\$35,425	\$60,695	\$135,587	\$229,097	32.9
17 Harris County, Texas	4,589,928	\$12,919	\$33,171	\$56,175	\$91,512	\$222,001	\$409,155	31.7
18 Hennepin County, Minnesota	1,232,483	\$14,843	\$40,091	\$68,179	\$107,373	\$248,807	\$459,992	31.0
19 Travis County, Texas	1,199,323	\$14,335	\$38,861	\$64,721	\$102,025	\$242,743	\$444,099	31.0
20 Allegheny County, Pennsylvania	1,225,365	\$11,721	\$31,483	\$54,744	\$87,496	\$198,447	\$361,723	30.9
21 Bergen County, New Jersey	939,151	18081	51355	88851	139573	310702	556599	30.8
22 Marion County, Indiana	941,229	9348	26176	43779	69495	158144	287460	30.8
23 Mecklenburg County, North Carolina	1,054,835	\$13,868	\$35,837	\$59,445	\$94,732	\$227,219	\$418,722	30.2
24 Middlesex County, Massachusetts	1,589,774	\$17,522	\$51,281	\$89,117	\$137,727	\$296,963	\$525,118	30.0
25 Pinellas County, Florida	960,730	11034	28536	47403	75900	177595	327701	29.7
26 Milwaukee County, Wisconsin	951,448	9523	25975	45403	72460	158549	280957	29.5
27 Broward County, Florida	1,909,632	\$12,165	\$31,986	\$53,418	\$84,785	\$194,297	\$351,396	28.9
28 Hartford County, Connecticut	892,389	13921	39252	68464	106897	230441	400788	28.8
29 St. Louis County, Missouri	998,581	15219	37547	61647	97716	234515	436683	28.7
30 Orange County, Florida	1,314,367	\$11,641	\$30,150	\$49,576	\$77,264	\$182,170	\$333,337	28.6
31 Hillsborough County, Florida	1,376,238	\$11,789	\$31,102	\$52,137	\$82,796	\$189,739	\$337,144	28.6
32 Alameda County, California	1,647,704	\$15,546	\$45,498	\$80,442	\$127,881	\$266,603	\$442,971	28.5
33 Duval County, Florida	926,255	10853	30056	49403	76962	171727	308795	28.5
34 Franklin County, Ohio	1,264,518	\$11,657	\$32,575	\$54,312	\$84,629	\$185,158	\$326,163	28.0
35 Santa Clara County, California	1,919,402	\$20,687	\$58,481	\$101,422	\$157,761	\$335,460	\$576,035	27.8
36 Fresno County, California	979,915	10274	26448	46193	75654	166484	285090	27.7
37 King County, Washington	2,149,970	\$17,046	\$46,756	\$79,131	\$123,182	\$267,746	\$470,529	27.6
38 New Haven County, Connecticut	856,875	12856	36197	63307	101952	211350	352771	27.4

95/20 Ratio

7

Ability to Create National Brands

Fortune 500 Companies

Start-Up Capacity

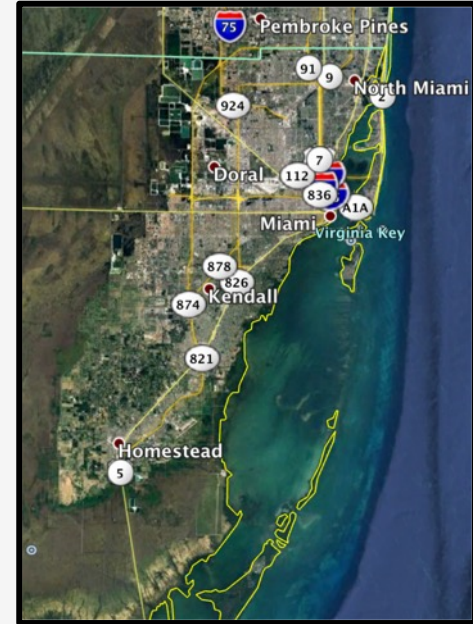
Start-Up Survival Rates

Start-Up Scale Up Rates

Number of \$500M Per Year Scale-Ups in Last 10 Years

8

Land Use Re-purposing



9

Redevelopment Capacity

Speed to Employment Recovery

Local Financial Industry & Capacity

Speed Bringing Major Projects to Completion

History of Transformative Investments

Where Does Miami Rank?

Large County Benchmarks

Highest 3
Economic Risk

Bottom 5th
Industry Structure

Bottom 10th
Industry Knowledge
Content

Bottom 5th
Economic Mobility

Bottom 10th
Labor Force Capacity

7th Highest
Income Inequality

Top 10
Redevelopment Capacity

Middle
National Scale
Companies

Middle
Land Use Repurpose

The Resiliency Challenge

Economic Resiliency in Miami is a Three-Part Challenge:

Aiding Key Industries to Become More Resilient to Increasing Risks

Growing Smaller and Newer Industries Less Prone to Climate Change Risks

Growing Industries and Occupations that Improve Overall Resiliency

Target Job Growth Rates

Assuming a 1.1% - 2.2% Annual Metro Area Job Growth Rate:

7% - 8% Growth Rate in Advanced Industries to Reach US Average (9%)

13.4% Growth Rate in Advanced Industries to Reach Seattle (15.8%)

Current Advanced Industry Growth Rate: 4.5%

165,011 – 340,946 Advanced Industry Jobs Over 10 Years
86,277 – 279,596 More Jobs Than Currently Being Created

Where Does Miami Go
From Here?

A Teachable Historic Moment?

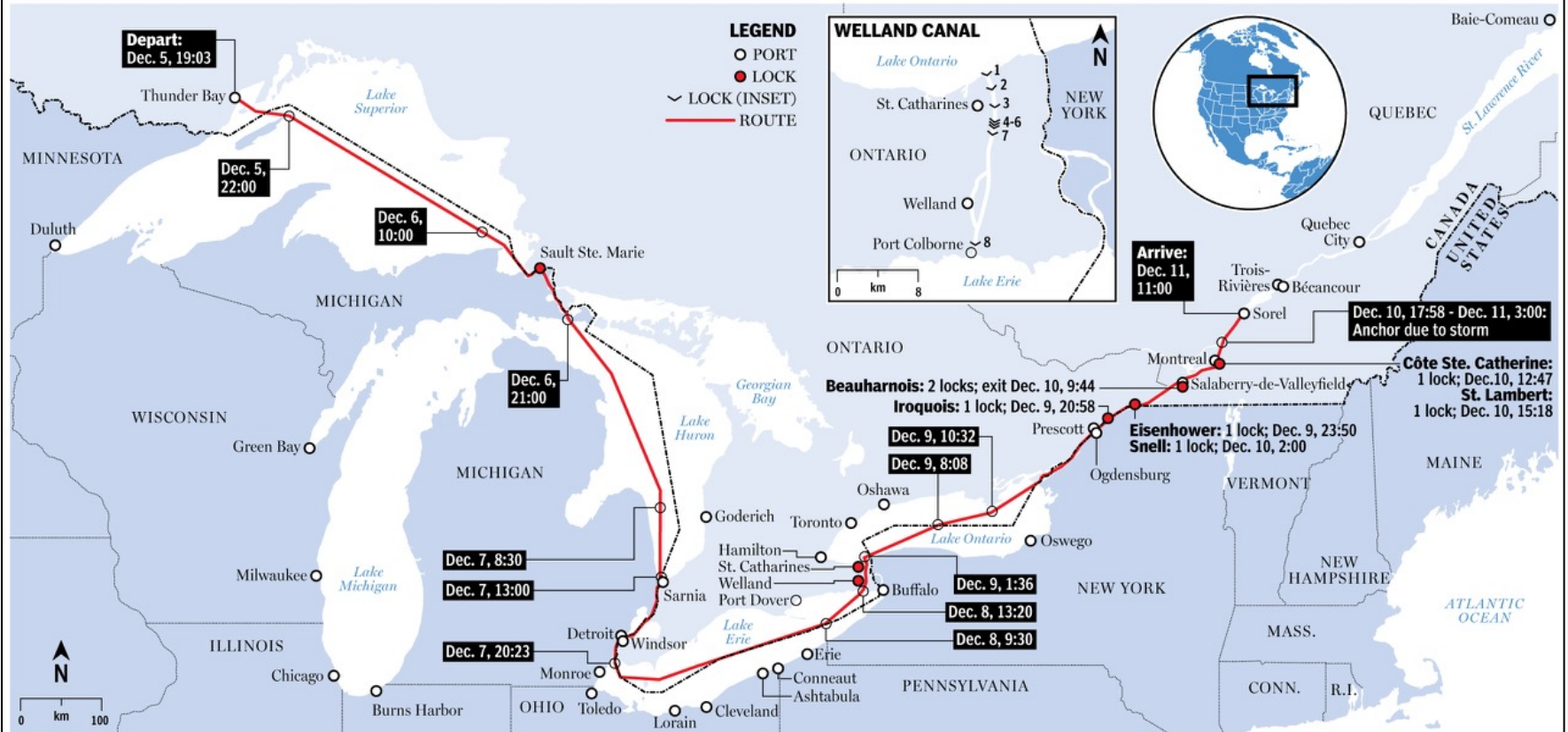


A Teachable Historic Moment?

HAULING GRAIN ON THE GREAT LAKES HIGHWAY

The voyage of the MV Kaministiquia: Thunder Bay – Sorel, Dec. 5-11, 2014

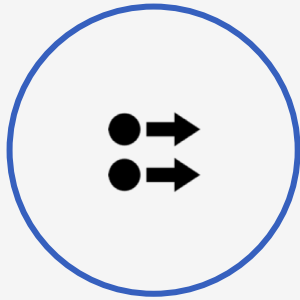
THE VOYAGE



A Teachable Historic Moment?

"There has never been a time
when we could look forward to a
more brilliant future."

*Dexter Rumsey, President of the Buffalo Chamber of Commerce
(1958)*



A Preliminary Action Agenda

1

Re-Think Economic Development Targets

A Community-Wide Commitment to Economic Resiliency

Re-Visit the One Community One Goal Targets in Light of Resiliency Needs

Re-assess Economy on Industry-by Industry Basis

2

A Focus on Local Businesses

The Fastest Path to New Economic Growth – 97% Rule

Lower Cost & Lower Risk

Restore & Reinvent Small Business Incentives in the County

3

Build and Monetize Resilience Expertise



2%
Total Exports

\$10 Billion
Total Value

Action Agenda: The Miami Context

4

Dramatic Expansion of Educational Opportunity & Job Training



Seed funding to develop a Children's Savings Account Program – Sec. 529 savings accounts for 2,000 children per year. **Seed each account with \$1,000**



Seed funding to develop Employee Owned Business Cooperatives employing 10 workers each



Job Re-Training & Degree Programs Serving Targeted Resilient Economy Industries

5

The Climate Change Works Progress Administration



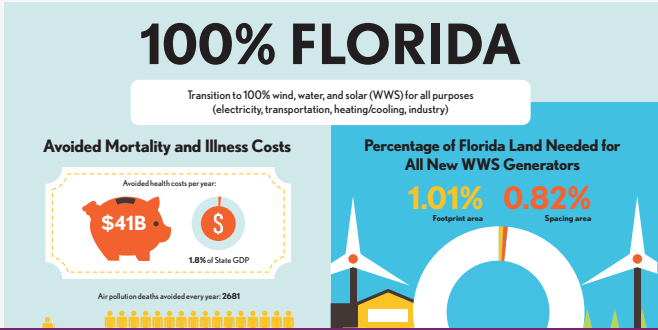
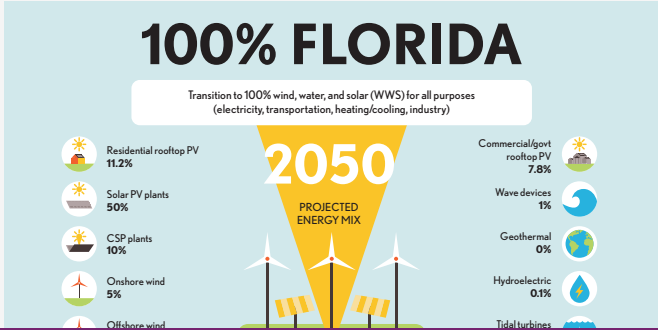
6

A Zero-Carbon County

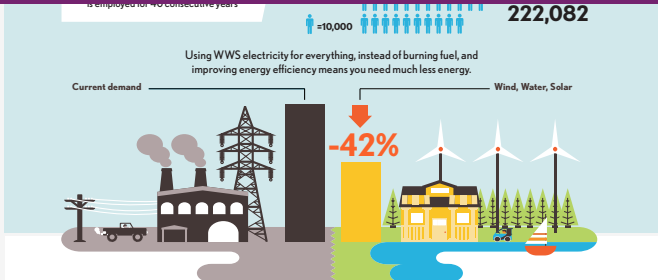




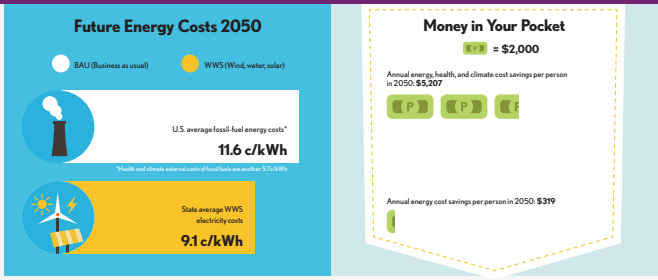
thesolutionsproject.org



Miami's Next Transformative Investment?



VISIT [THE SOLUTIONS PROJECT.ORG](http://thesolutionsproject.org) TO LEARN MORE AND [100.ORG](http://100.org) TO JOIN THE MOVEMENT



VISIT [THE SOLUTIONS PROJECT.ORG](http://thesolutionsproject.org) TO LEARN MORE AND [100.ORG](http://100.org) TO JOIN THE MOVEMENT

7

Build the Region's *Institutional* Resilience Infrastructure



Ecosystem & Climate



Water & Water Quality



Built Environment & Land
Use



Energy &
Telecommunication



Transportation



Computation, Visualization and
Communication



Governance, Leadership and
Legislation



Economics & Finance



Agriculture & Food Security

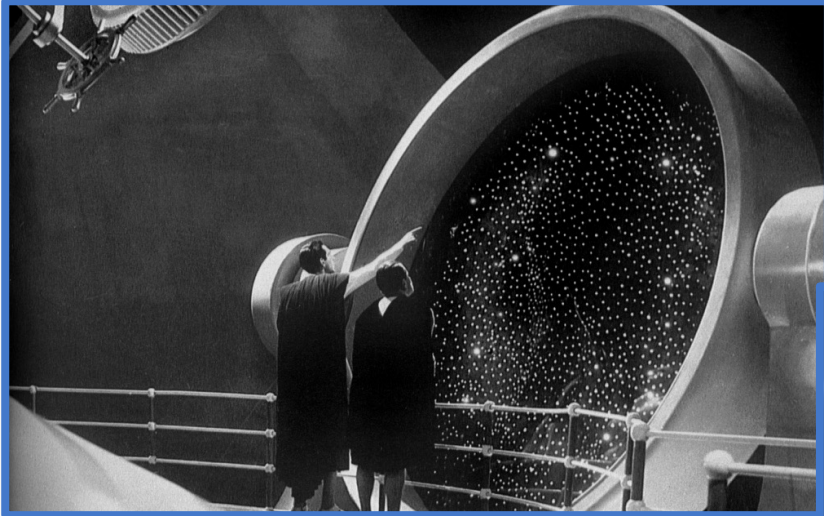


Community & Public Health



Carbon Neutral Cities

Miami's Crossroads Moment?



The Shape of Things to Come

Building a Resilient Economic Future In Miami

Kevin T. Greiner
Sr. Fellow, FIU Metropolitan Center



www.metropolitan.fiu.edu



@FIUMetroCenter