

# Memorandum



CITY OF DALLAS

DATE February 5, 2016

TO Honorable Members of the Quality of Life & Environment Committee: Sandy Greyson (Chair), Tiffinni A. Young (Vice Chair), Rickey D. Callahan, Mark Clayton, Philip T. Kingston, B. Adam McGough

SUBJECT Resilient Dallas

On Monday, February 8, 2016, the Quality of Life & Environment Committee will be briefed on Resilient Dallas. A copy of the briefing is attached.

Please contact me if you have any questions or need additional information.

A handwritten signature in black ink that reads "Theresa O'Donnell".

Theresa O'Donnell  
Chief Resiliency Officer

## Attachment

c: Honorable Mayor and Members of the City Council  
A.C. Gonzalez, City Manager  
Warren M.S. Ernst, City Attorney  
Craig D. Kinton, City Auditor  
Rosa A. Rios, City Secretary  
Daniel F. Solis, Administrative Judge  
Ryan S. Evans, First Assistant City Manager

Eric D. Campbell, Assistant City Manager  
Jill A. Jordan, P.E., Assistant City Manager  
Mark McDaniel, Assistant City Manager  
Joey Zapata, Assistant City Manager  
Jeanne Chipperfield, Chief Financial Officer  
Sana Syed, Public Information Officer  
Elsa Cantu, Assistant to the City Manager – Mayor & Council



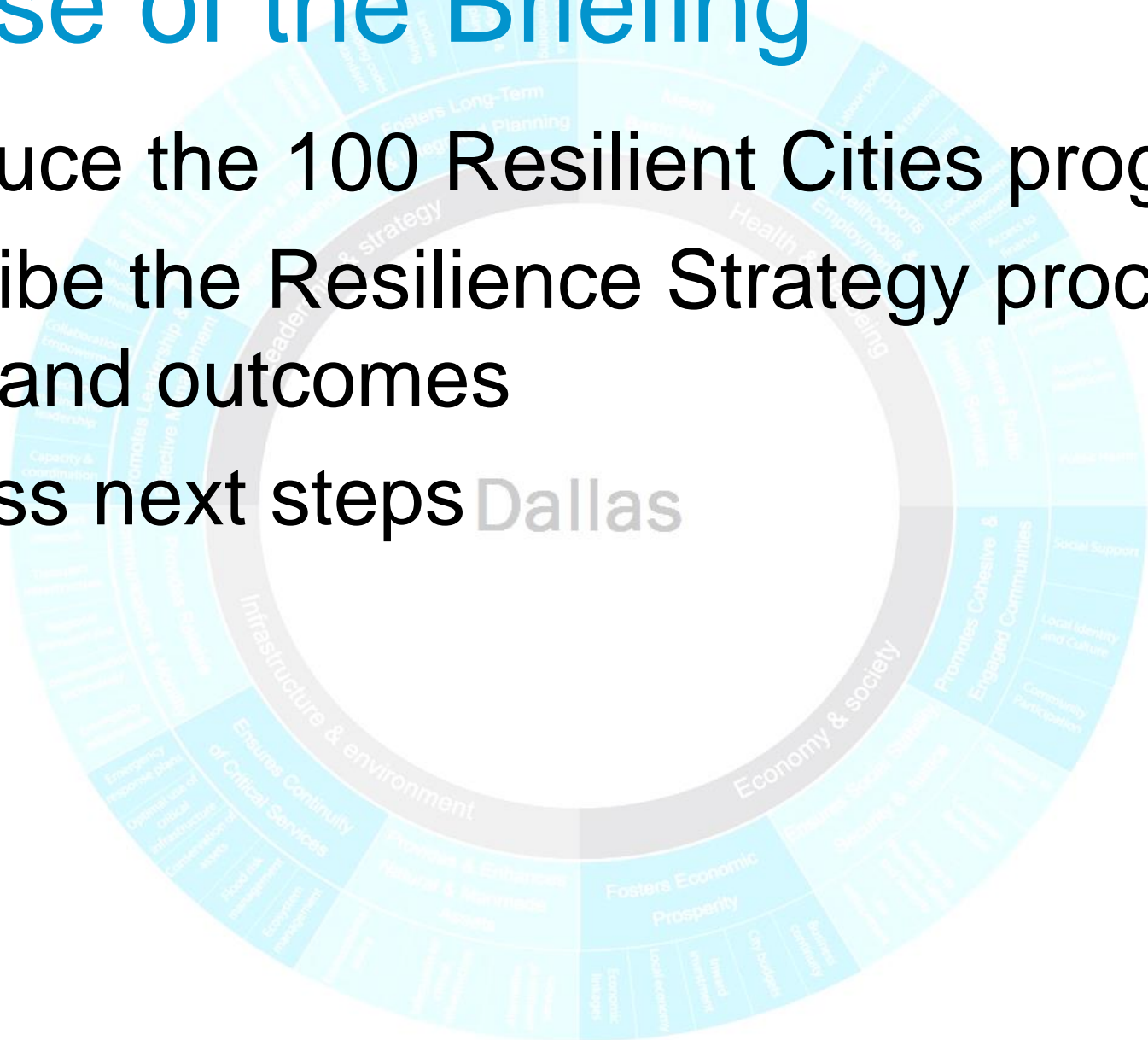
# Resilient Dallas

Quality of Life & Environment  
Committee  
February 8, 2016



# Purpose of the Briefing

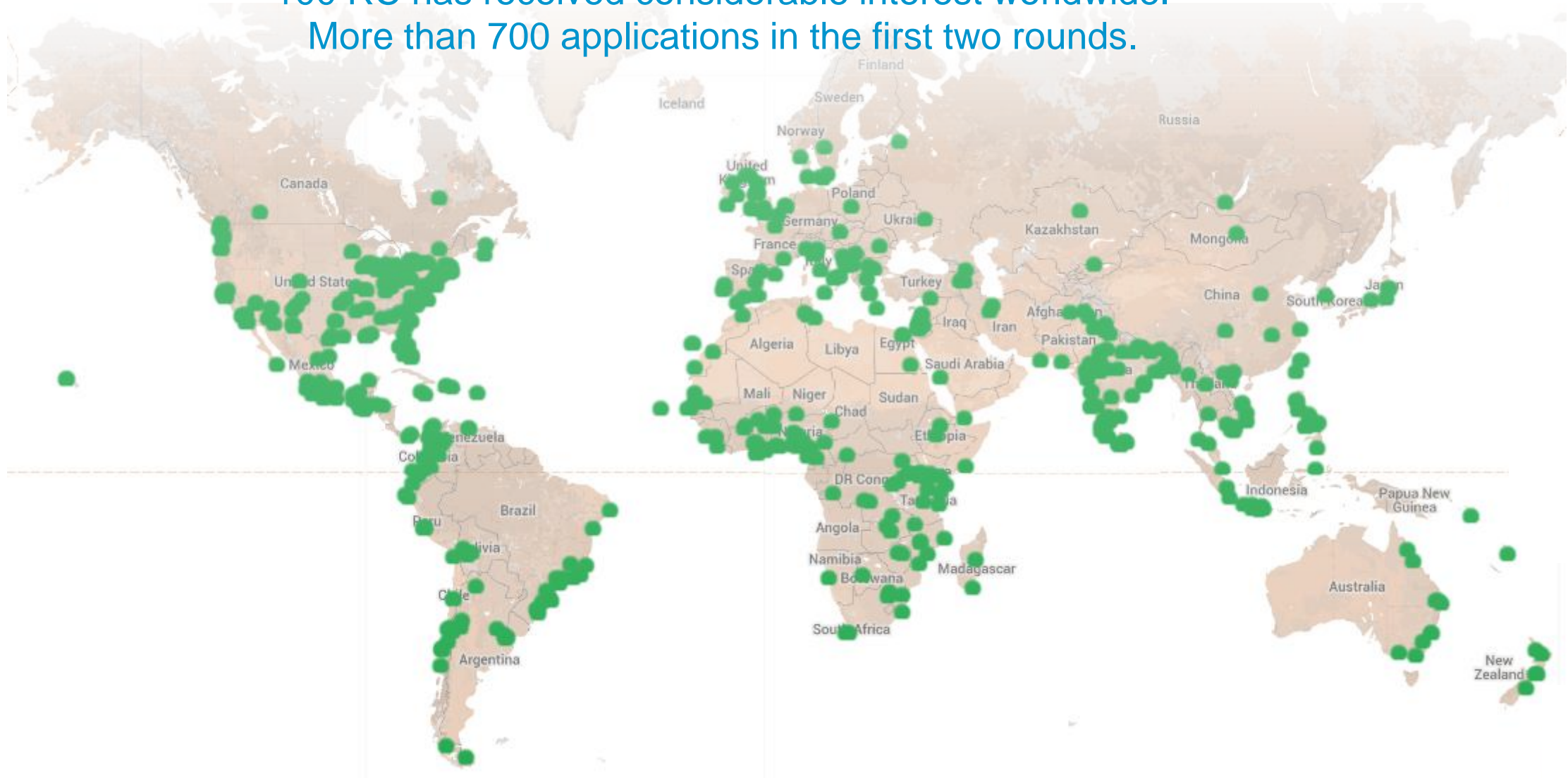
- Introduce the 100 Resilient Cities program
- Describe the Resilience Strategy process, time lines, and outcomes
- Discuss next steps Dallas



**100RC partners**  
with cities around the  
world to **help them**  
**become more resilient** to the  
social, economic and  
physical challenges that  
are a growing part of  
the 21st century.

# Applicant Cities

100 RC has received considerable interest worldwide.  
More than 700 applications in the first two rounds.



# First Wave 32 Cities

NORTH AMERICA



LATIN AMERICA & THE CARIBBEAN



EUROPE



AFRICA



MIDDLE EAST



OCEANIA



SOUTH ASIA



EAST ASIA



BOULDER (CO)  
BERKELEY (CA)  
EL PASO (TX)  
JACKSONVILLE (FL)  
LOS ANGELES (CA)  
MEXICO CITY (MEXICO)  
NEW ORLEANS (LA)  
NEW YORK CITY (NY)  
NORFOLK (VA)  
OAKLAND (CA)  
SAN FRANCISCO (CA)

MEDELLÍN (COLOMBIA)  
PORTO ALEGRE (BRAZIL)  
QUITO (ECUADOR)  
RIO DE JANEIRO (BRAZIL)

BRISTOL (ENGLAND)  
GLASGOW (SCOTLAND)  
ROME (ITALY)  
ROTTERDAM (NETHERLANDS)  
VEJLE (DENMARK)

DAKAR (SENEGAL)  
DURBAN (SOUTH AFRICA)

ASHKELON (ISRAEL)  
RAMALLAH (PALESTINE)  
BYBLOS (LEBANON)

MELBOURNE (AUSTRALIA)  
CHRISTCHURCH (NEW ZEALAND)

SURAT (INDIA)

BANGKOK (THAILAND)  
MANDALAY (MYANMAR)  
DA NANG (VIETNAM)  
SEMARANG (INDONESIA)

# Second Wave 35 Cities

NORTH AMERICA



LATIN AMERICA & THE CARIBBEAN



EUROPE



AFRICA



MIDDLE EAST



OCEANIA



SOUTH ASIA



EAST ASIA



BOSTON (MA)  
CHICAGO (IL)

**DALLAS (TX)**

JUAREZ (MEXICO)  
MONTREAL (CANADA)  
PITTSBURGH (PA)  
ST. LOUIS (MO)  
TULSA (OK)

CALI (COLOMBIA)  
SAN JUAN (UNITED STATES)  
SANTA FE (ARGENTINA)  
SANTIAGO DE LOS CABALLEROS (DOMINICAN REPUBLIC)  
SANTIAGO, METRO AREA (CHILE)

ATHENS (GREECE)  
BARCELONA (SPAIN)  
BELGRADE (SERBIA)  
LONDON (ENGLAND)  
LISBON (PORTUGAL)  
MILAN (ITALY)  
PARIS (FRANCE)  
THESSALONIKI (GREECE)

ACCRA (GHANA)  
ARUSHA (TANZANIA)  
ENUGU (NIGERIA)  
KIGALI (RWANDA)

AMMAN (JORDAN)

SYDNEY (AUSTRALIA)  
WELLINGTON CITY (NEW ZEALAND)

BANGALORE (INDIA)  
CHENNAI (INDIA)

DEYANG (CHINA)  
HUANGSHI (CHINA)  
PHNOM PENH (CAMBODIA)  
SINGAPORE (SINGAPORE)  
TOYAMA (JAPAN)

1900



10%

90%

2007



50%

50%

2030



60%

40%

2050



70%

30%

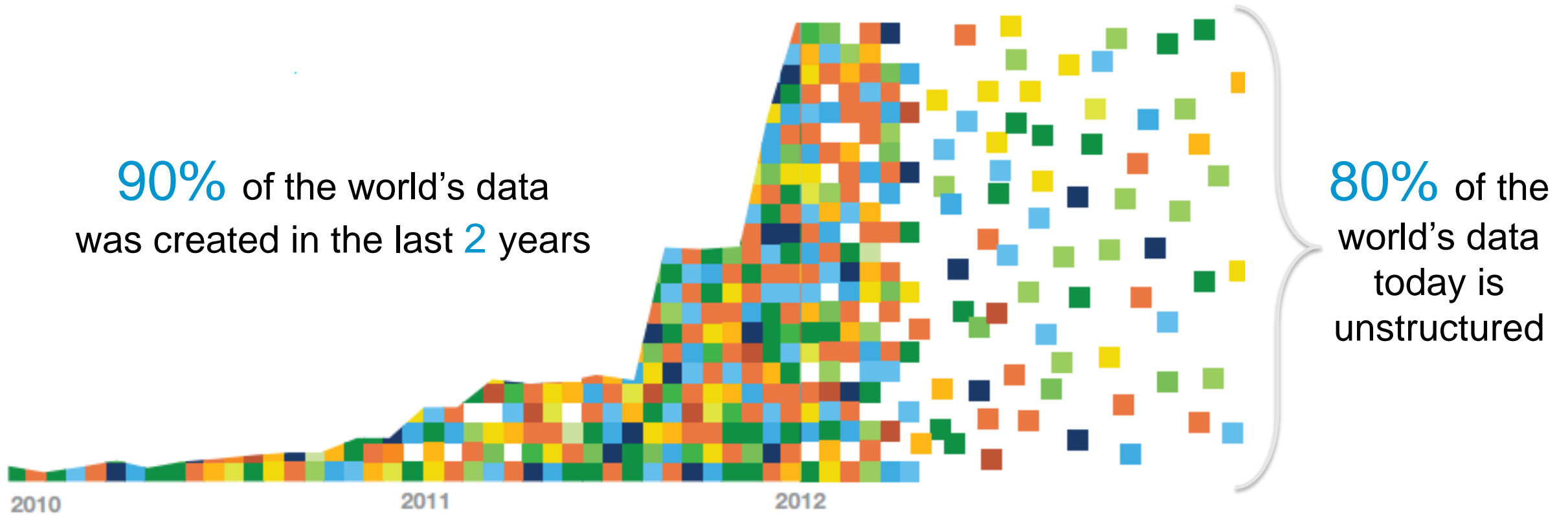
Cities are dynamic centers of human interaction, economic activity, opportunity, and innovation.


A number of significant trends are impacting cities around the world.

- ❖ Migration - 1.4 million people are moving into cities every week.



# The Information Revolution Is Underway





One-half of the infrastructure built by cities in 2070 hasn't been constructed yet

Cities have a unique opportunity to re-think traditional approaches and incorporate **resilient design** into infrastructure projects and other public investments

**100 RESILIENT CITIES**

# Equity and Social Cohesion will be guiding principles of the Resilience Strategy

Urban areas capture the wide extremes of wealth and poverty

# URBAN RESILIENCE

The capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kind of chronic stresses and acute shocks they experience.

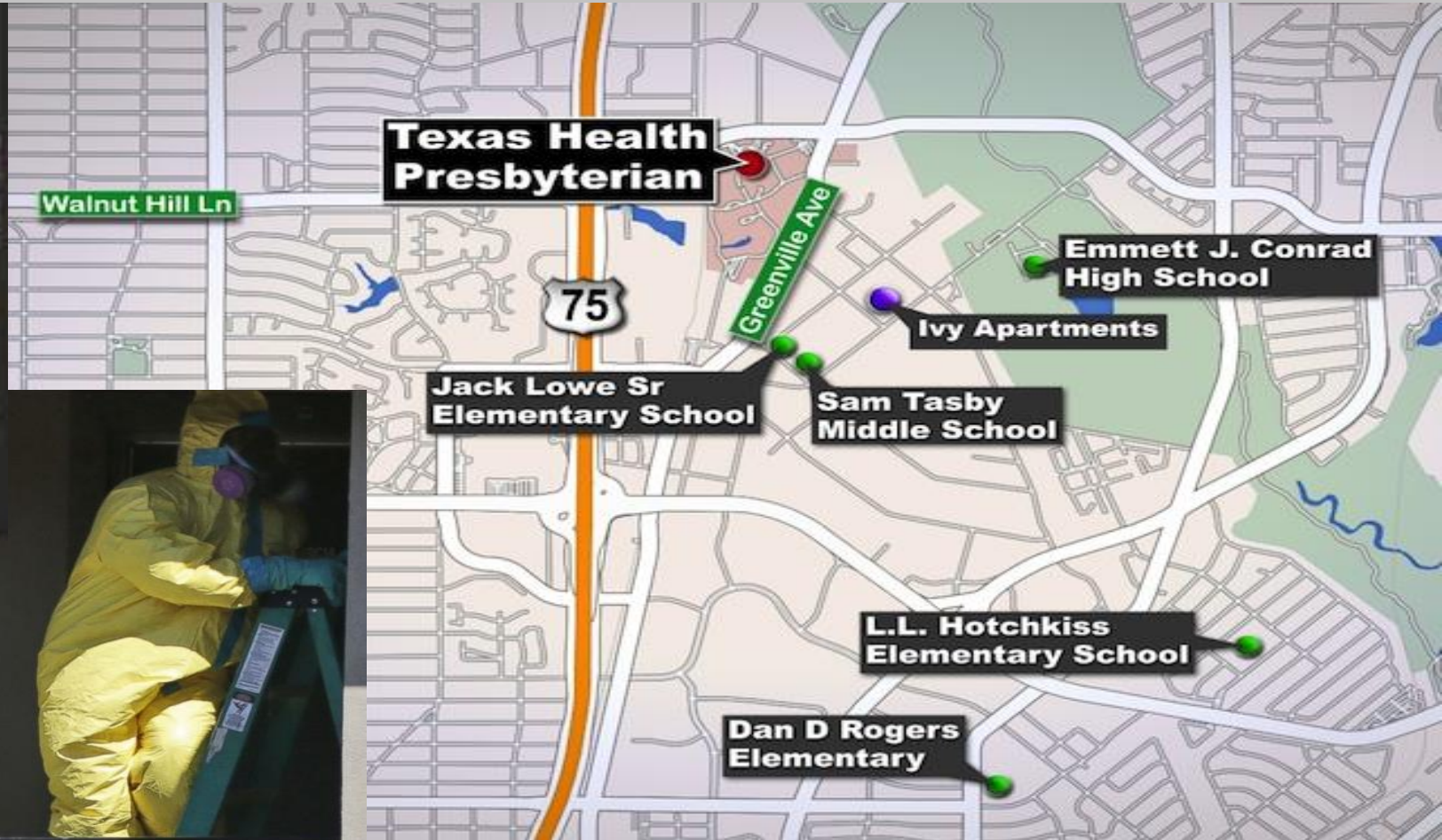
A city's ability to maintain essential functions is threatened by both acute shocks and chronic stresses.

12



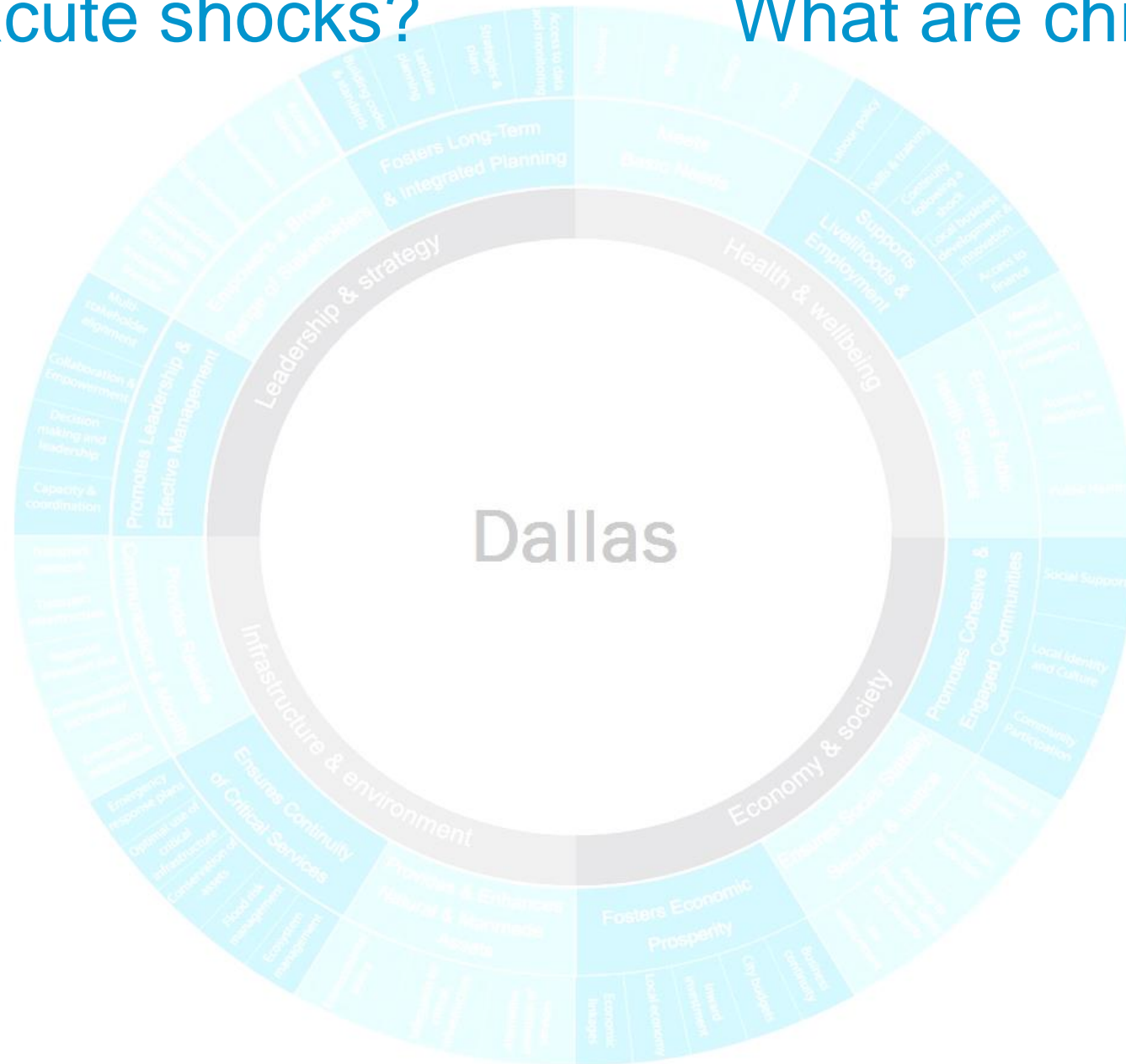
**100 RESILIENT CITIES**

Acute shocks or chronic stresses can lead to social breakdown, physical collapse, or economic decline.



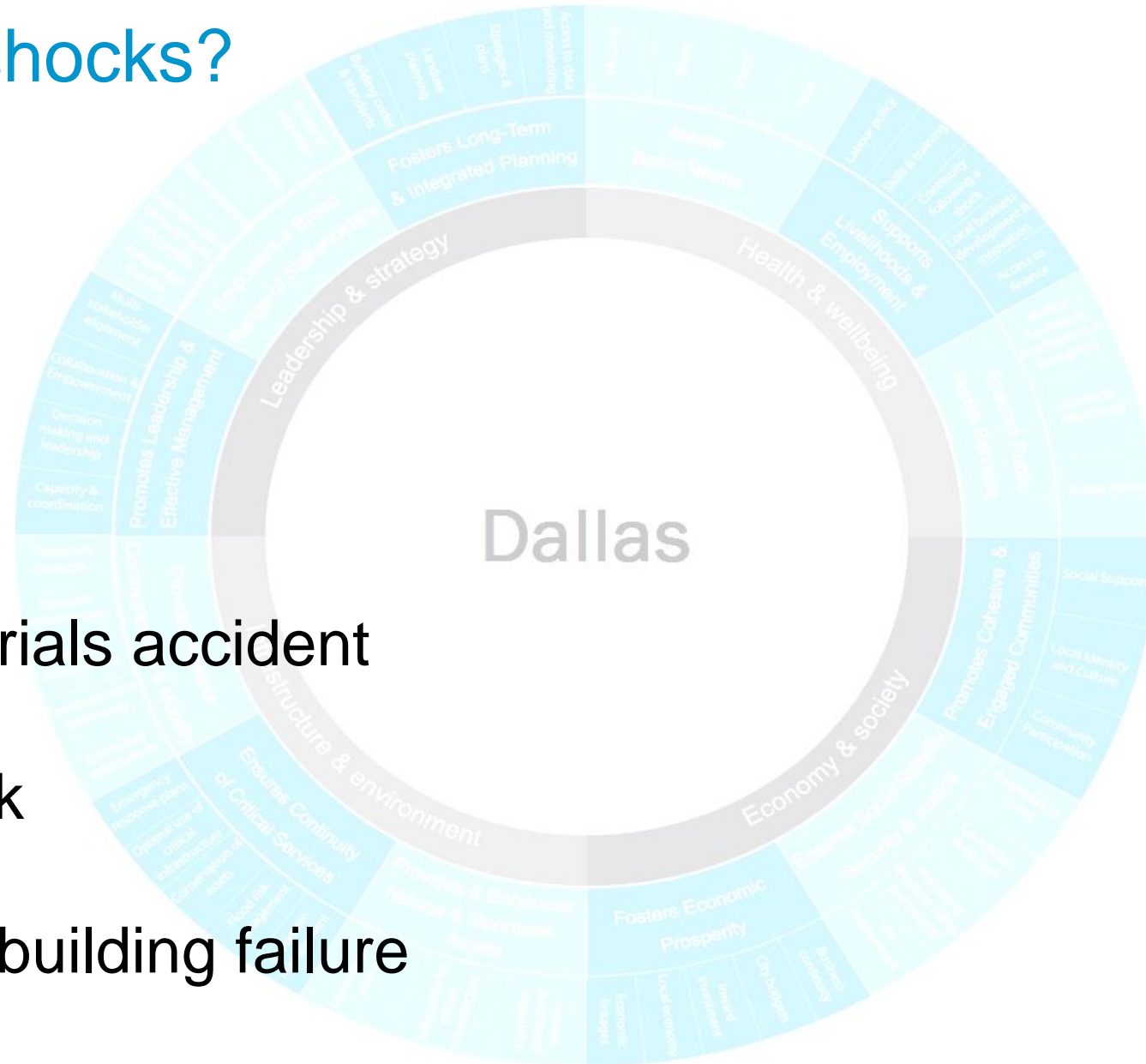
# What are acute shocks?

# What are chronic stresses?



# What are acute shocks?

- Tornadoes
- Extreme Heat
- Drought
- Flooding
- Earthquake
- Ice storms
- Hazardous materials accident
- Terrorism
- Disease outbreak
- Riot/civil unrest
- Infrastructure or building failure



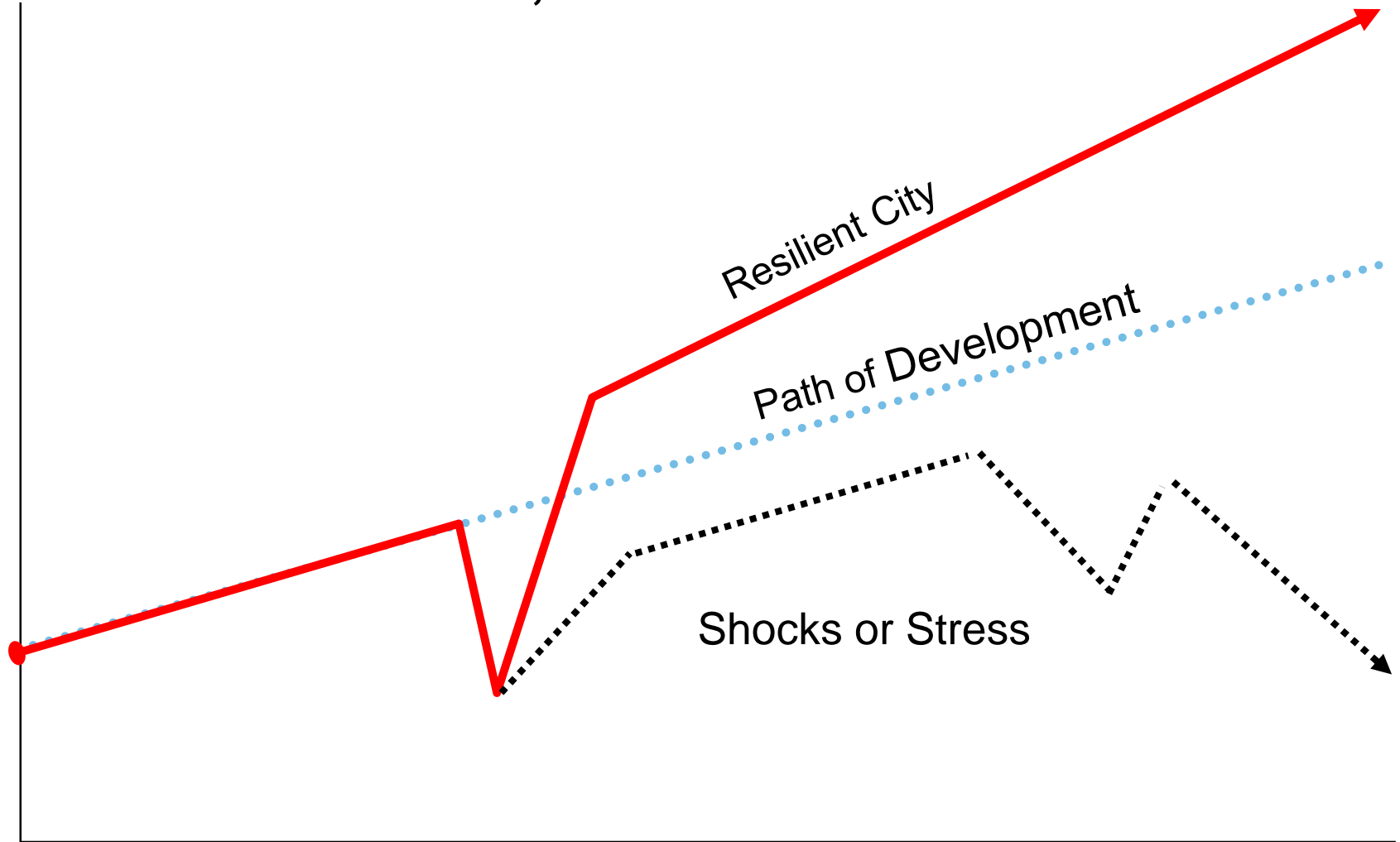


## What are chronic stresses?

Tornados  
Extreme Heat  
Drought  
Flooding  
Earthquakes  
Ice storms  
Hazardous materials accident  
Terrorism  
Disease outbreak  
Riot/civil unrest  
Infrastructure failure

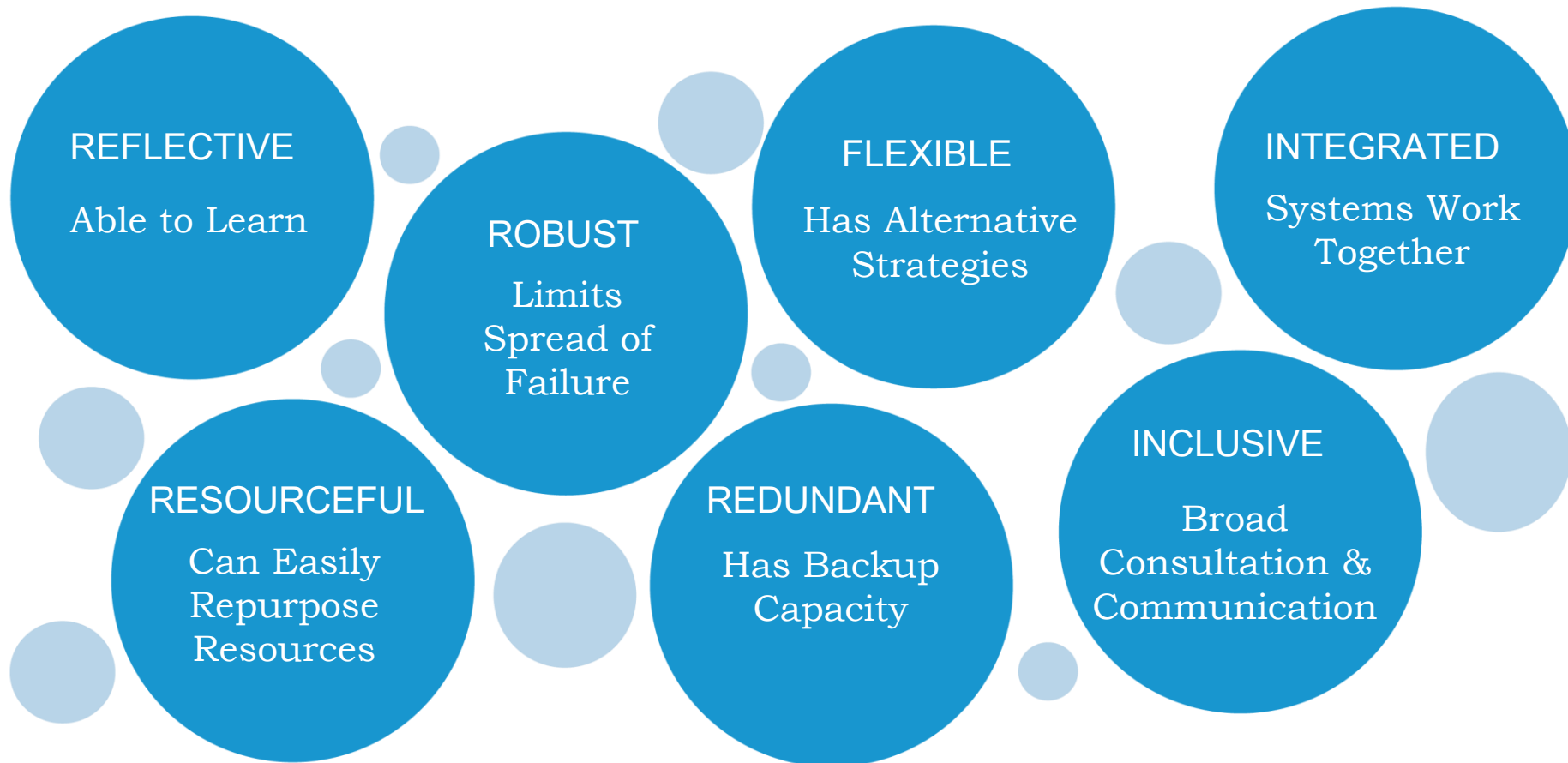
Water Scarcity  
Lack of affordable housing  
Poor air quality  
High unemployment  
Homelessness  
Lack of social cohesion  
Poverty/inequity  
Aging Infrastructure  
Shifting macroeconomic trends  
Crime & violence

Shocks and stresses can bring opportunities for cities to evolve, and in some circumstances, transform.



# Qualities of resilient systems

Resilient systems exhibit qualities that enable them to withstand, respond, and adapt more readily to shocks and stresses.



An aerial photograph of a city skyline, likely Atlanta, Georgia, featuring a mix of modern glass skyscrapers and older brick buildings. A large white circle is superimposed over the center of the image, containing the title text. The sky is blue with scattered white clouds.

# The 100 RC Resilience Strategy Process

# 100RC provides cities **4 types of support** to address these problems

1. Funding to hire a **CHIEF RESILIENCE OFFICER (CRO)**



2. Support to develop a **CITY RESILIENCE STRATEGY**



3. A **PLATFORM OF SERVICES** to support strategy implementation



4. Membership in the **100RC NETWORK**



TO HELP COMPLEX URBAN SYSTEMS ORGANIZE AND INTEGRATE AROUND RESILIENCE

TO SCALE SOLUTIONS EFFICIENTLY

# Role of the Chief Resilience Officer

The CRO leads the city's resilience building efforts;



Working with multiple internal and external stakeholders to create and implement a resilience strategy



Serving as a senior advisor to the Mayor, City Council and City Manager



Promoting resilience thinking and serving as both a local and regional thought leader



Networking with other CROs, 100RC staff, and service providers via the network and platform

# Resilience Leadership Team

Resilience strategy will be developed with the assistance of many city departments and external stakeholders.

Primary City of Dallas leadership team includes -

- Theresa O'Donnell, Chief Resilience Officer
- Rocky Vaz, Director of Emergency Management
- William Madison, Interim Director of Environmental Quality
- Peer Chacko, Director of Planning and Urban Design
- Sana Syed, Director of Public Information

# 100 Resilient Cities and Strategy Partner

Supporting City of Dallas team will be:

- Olivia Stinson, Relationship Manager, 100 Resilient Cities, NYC
- Charolette Couturier, 100 Resilient Cities staff, NYC
- Steven Duong, Project Manager, AECOM
- Claire Bonham-Carter, AECOM
- Ignacio Bunster-Ossa, AECOM
- Melissa Higbee, AECOM

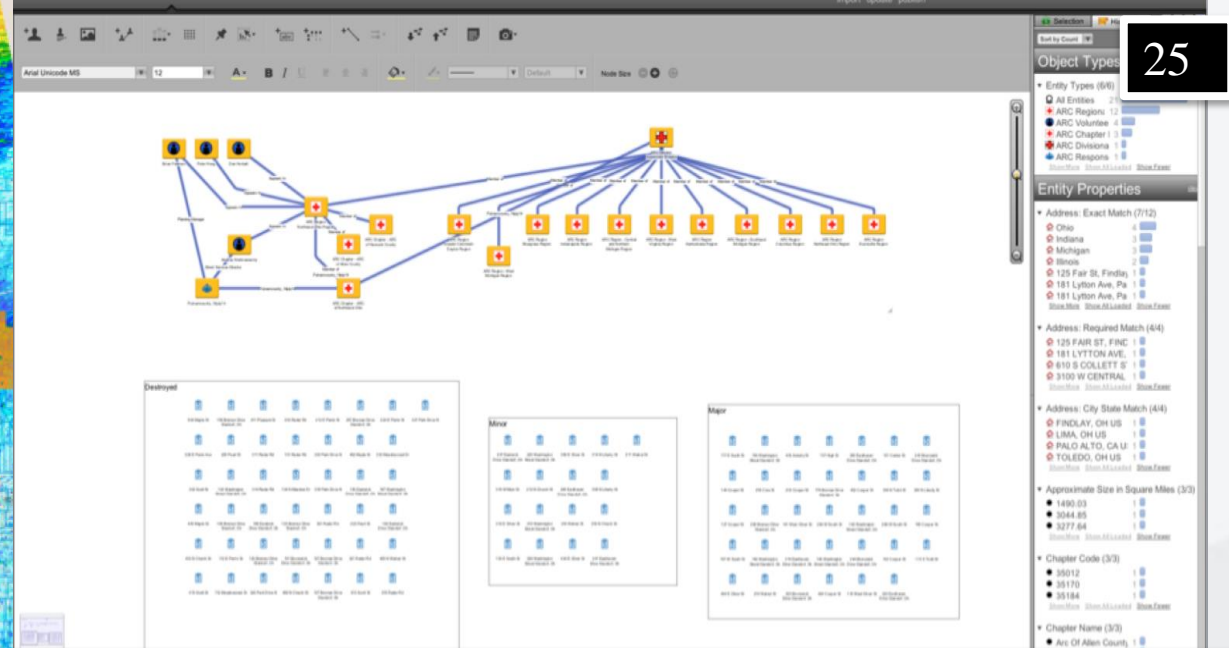
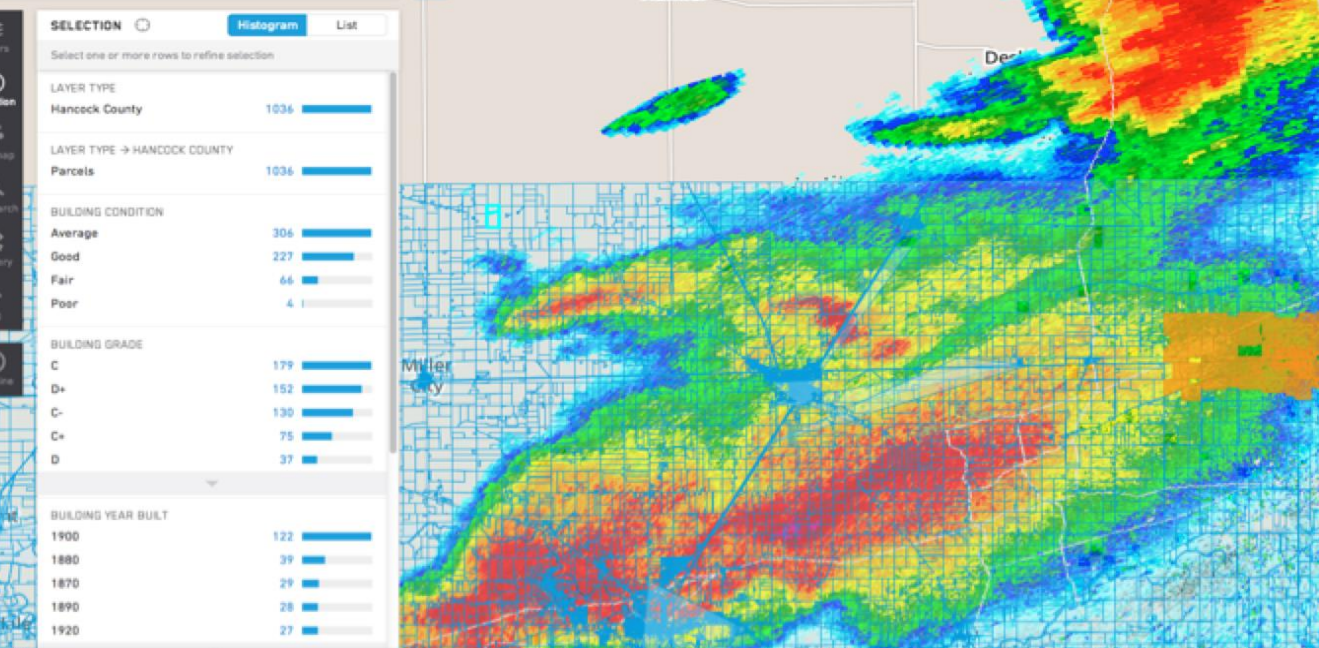


# What is the 100 RC Platform?



The Platform consists of tools and services that cities can draw upon to develop and implement their resilience strategies.

The 100 RC Platform has grown to 37 partners offering 45 services, representing over **\$100 million** of value to member cities.



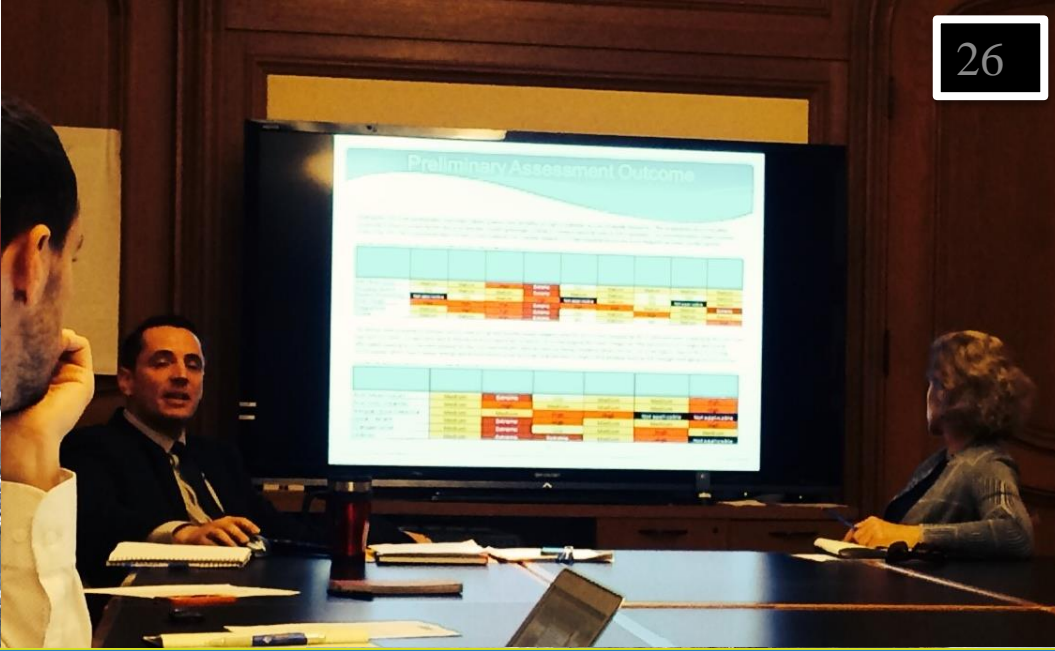
# Platform Services



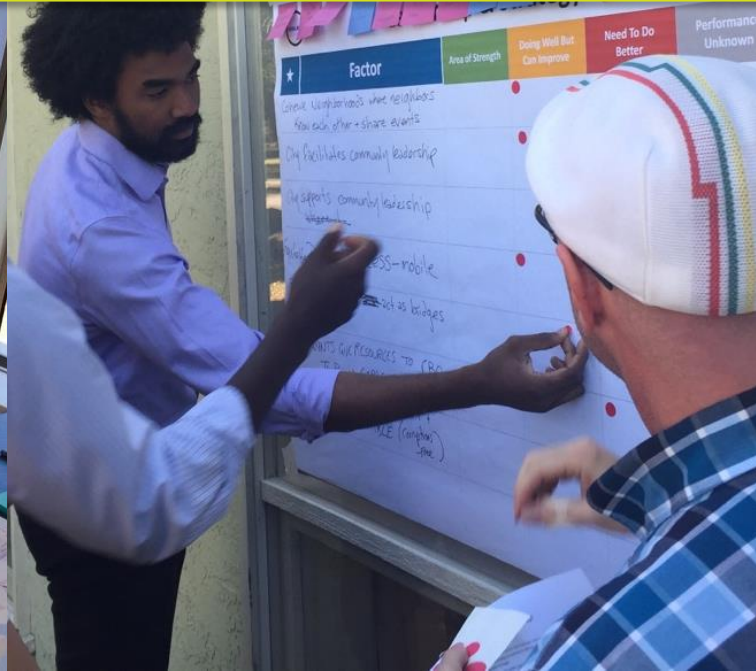
data sources country info events help contact feedback terms

- GEOdatabase
- Google (Encode)
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  - istoric Footprints
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  - ropical Cyclone Tracks
  - allstorms

Administrative and Postal Code data  
 Cresta and Cresta Subzones  
 Global Coastal Flood Risks  
 Global River Flood Zones  
 Global Wildfire  
 Earthquake Epicentres  
 Hail USA  
 Hail Type  
 Landscan Population data  
**Seismic Hazard**  
 Sigma Loss Data  
 Sigma World Insurance  
 Tornadoes USA  
 Tropical Cyclone Tracks  
 Tsunami Run-Up  
 Volcanoes  
 Wind Speed



**STRATEGY DEVELOPMENT PROCESS**



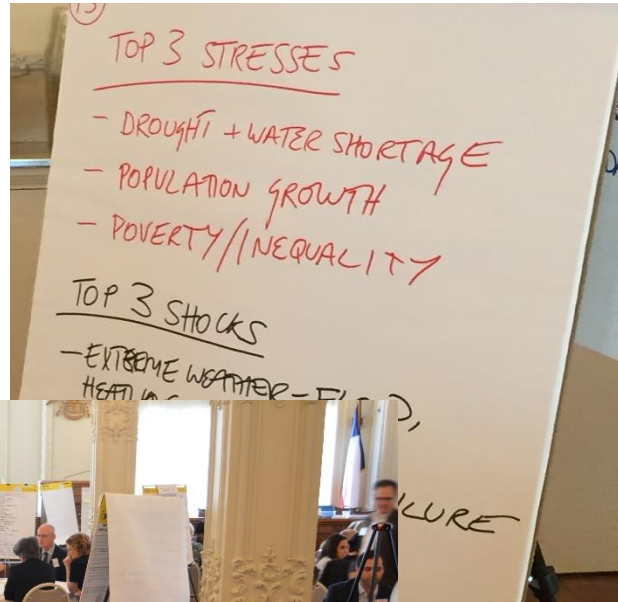
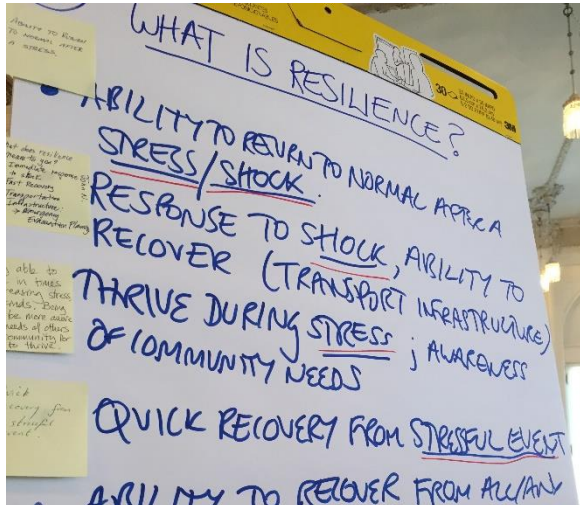
# What We Are Building Toward

The Resilience Strategy builds upon other strategies, programs and initiatives currently underway and will be enhanced by extensive community and stakeholder engagement.



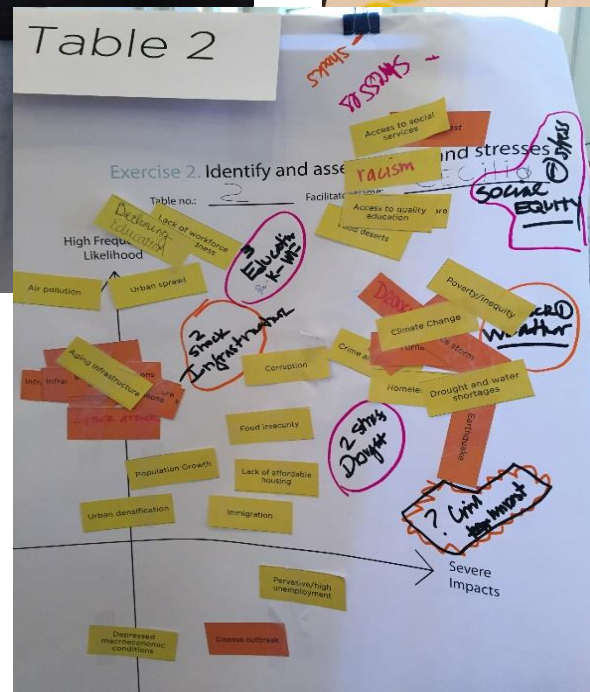
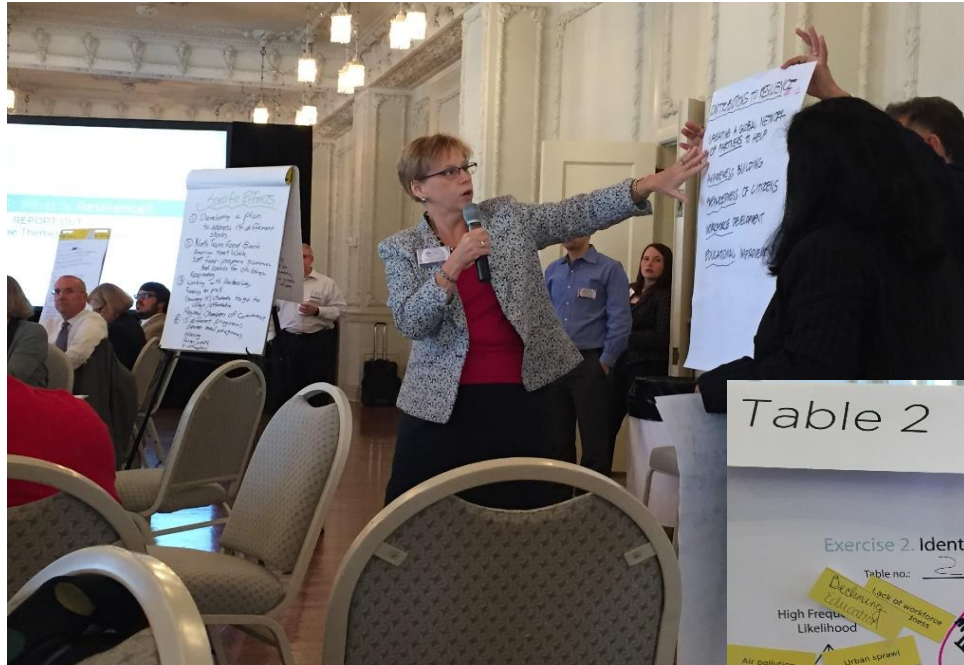
# Agenda Setting Workshop

October 15, 2015

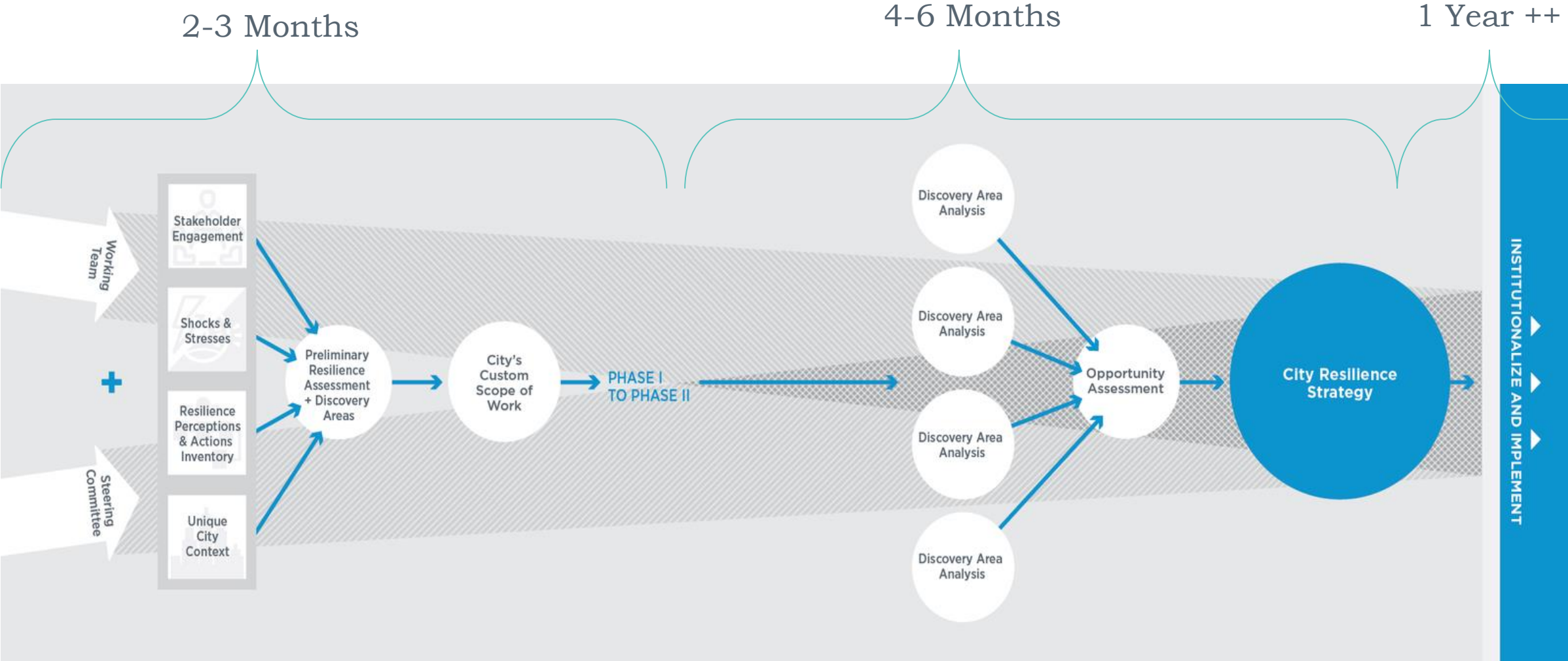


- MPT Alonzo kicked off the day
- DMPT Wilson, CM Gates & CM Thomas also attended
- 110 stakeholders registered for the workshop
- Introduction of urban resilience to Dallas

# Agenda Setting Workshop



# Resilience Strategy Process





## City Resilience Framework has 4 key dimensions

- Leadership & Strategy
- Health & Wellness
- Infrastructure & Environment
- Economy & Society



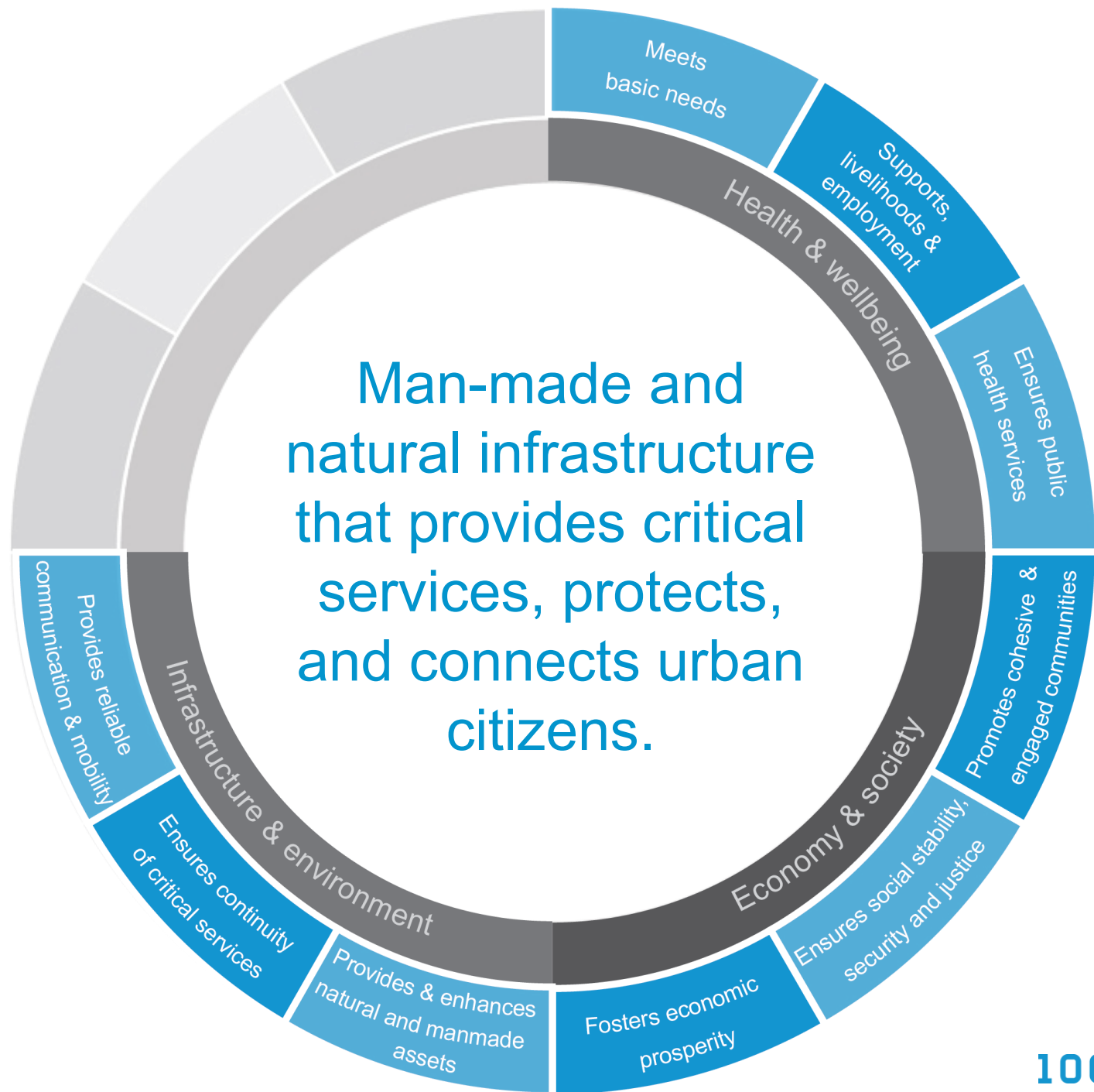
# City Resilience Framework

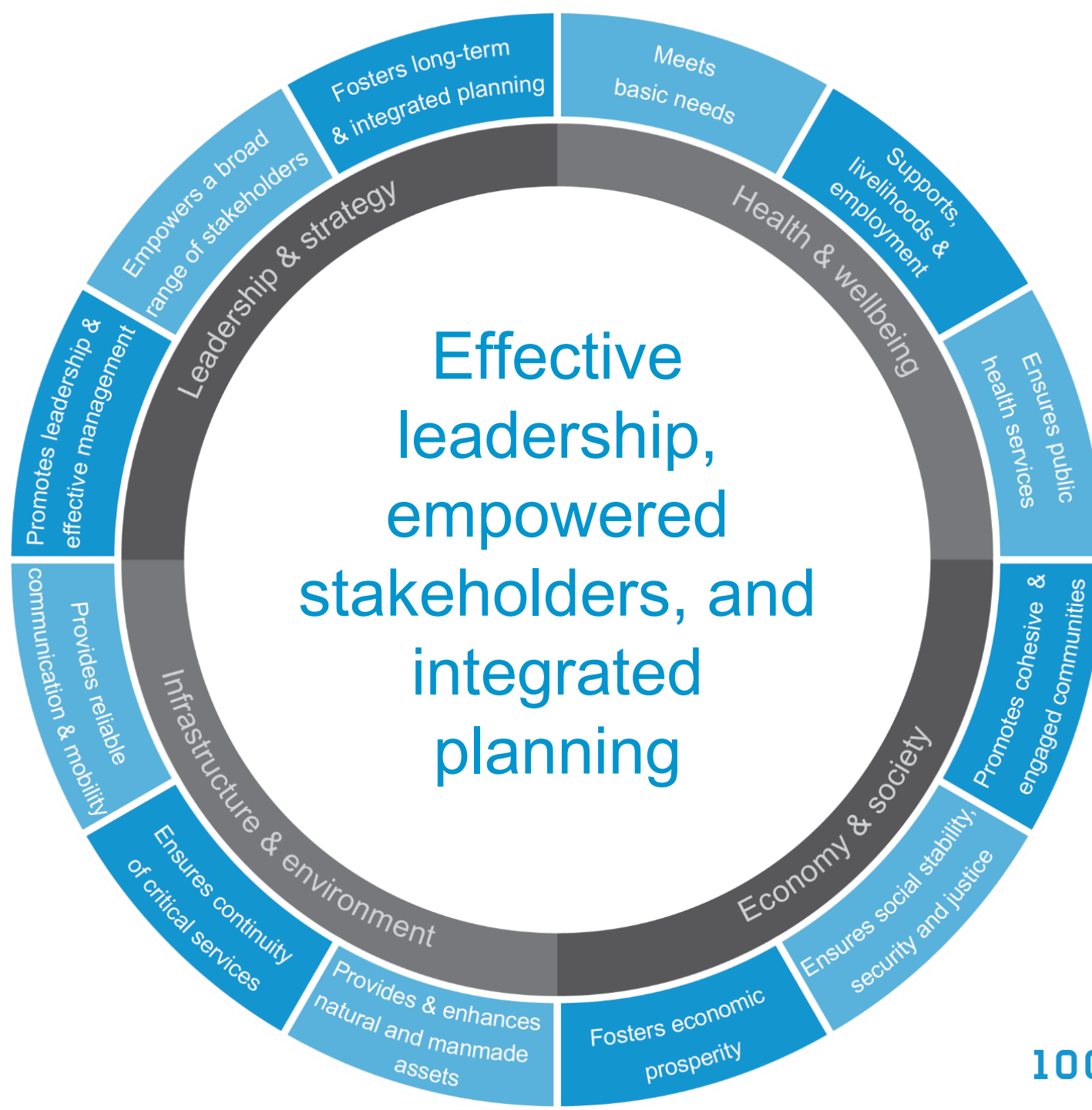


The 4 dimensions are further divided into 12 drivers. These drivers serve as the basis for exploring a city's ability to withstand a wide range of shocks and stresses



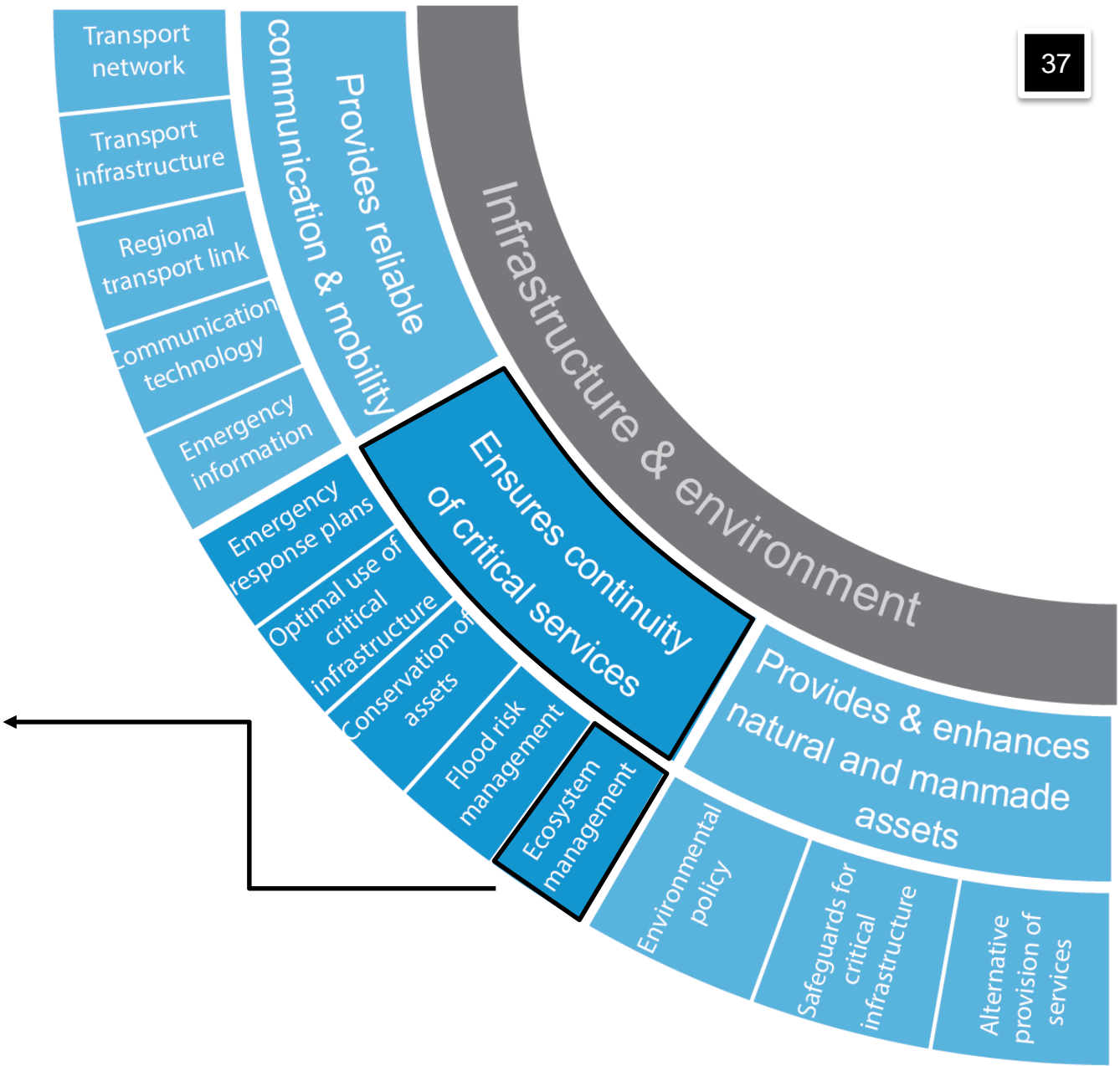


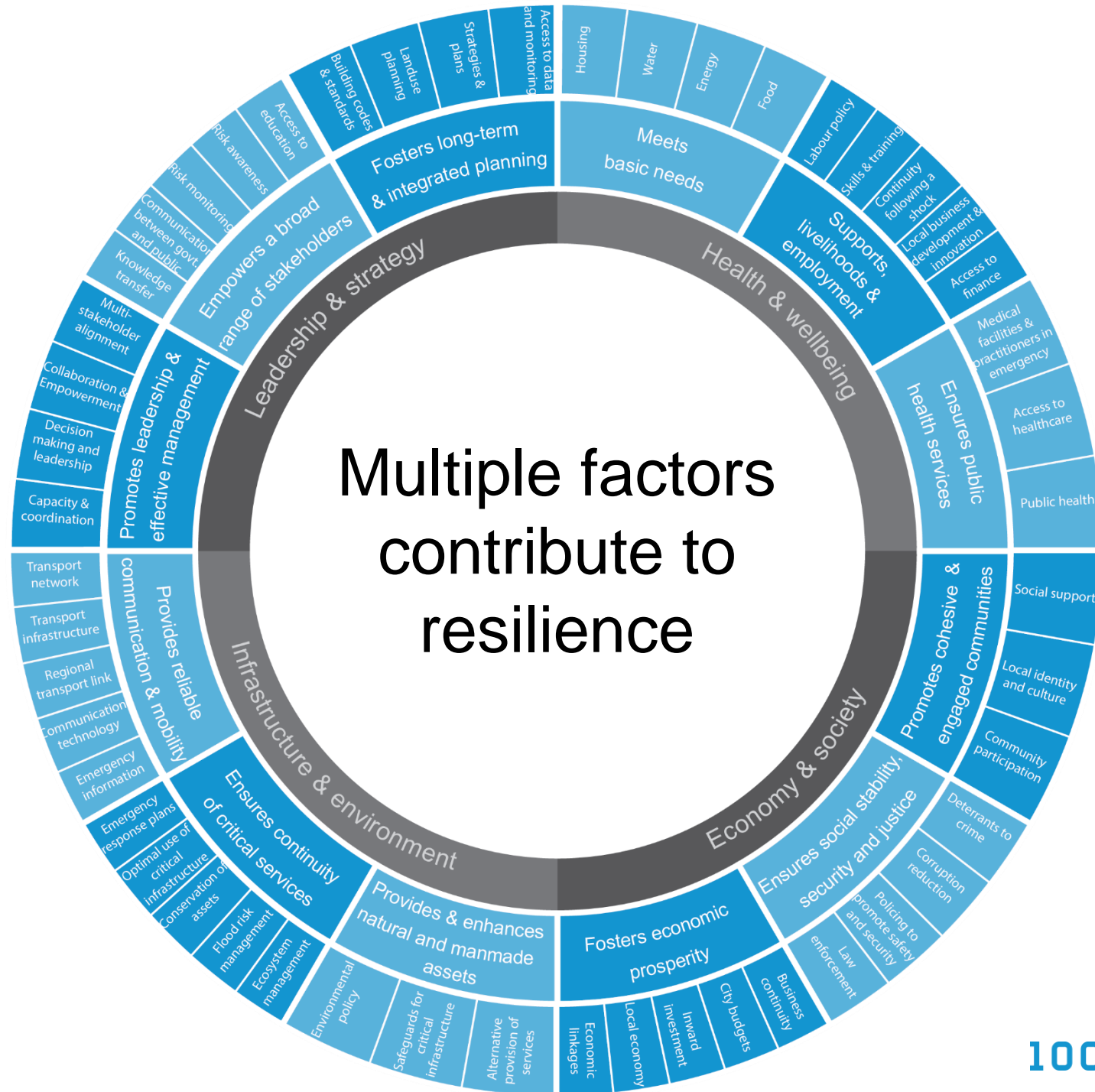




Each driver is made up of 3-6 sub-drivers

Ecosystem management





## What is the 100RC Resilience Strategy?

**PHASE I:  
2-3 MONTHS**

**RAPID DIAGNOSTIC &  
STAKEHOLDER  
ENGAGEMENT**

**PHASE II:  
4-6 MONTHS**

**DEEP & FOCUSED DIAGNOSTIC  
RESULTING IN ACTIONABLE INITIATIVES**

**IMPLEMENTATION**

**6-9 MONTHS**

The 100RC Resilience Strategy Process is a 6-9 month effort led by the CRO to develop a roadmap to resilience for the city. It is a deliberate process to engage a broad range of stakeholders, leverage existing plans and actions, identify cities' unique resilience priorities, and generate an actionable set of initiatives.



# 100 RESILIENT CITIES



## Assets and Risks Tool

DO PHYSICAL ASSET SCAN

DO SHOCK SCREEN

DO SHOCK SCREEN AND ASSET MATRIX

DO SCENARIO ANALYSIS

DO STRESS MATRIX

DO SHOCK AND STRESS MATRIX

REVIEW ASSET SUMMARY

REVIEW SHOCK SUMMARY

REVIEW STRESS SUMMARY

REVIEW OVERALL SUMMARY

# Preliminary Resilience Assessment

Specific tasks that need to be accomplished during Phase I

## Develop a Public Outreach Plan

- Set the groundwork for effective engagement with diverse stakeholders and potential partners throughout the strategy process and into implementation

## Collect and analyze existing plans, programs, and actions

- Gather existing data sets and information to gain a comprehensive understanding of the resilience activities underway

## Begin gathering public perceptions about Dallas' resilience

- Engage in meaningful conversations with stakeholders and citizens to identify perceptions of the city's resilience strengths and weaknesses

# Stakeholder Mapping

Sector (Govt;NFP;Acad/Policy;Priv;Other)	Health and Well-being			Economy and Society			Urban Systems and services			Leadership and Strategy		
	1 Minimal human vulnerability	2 Diverse livelihoods and employment	3 Adequate safeguards to human life and health	4 Collective identity and mutual support	5 Social stability and security	6 Availability of financial resources and contingency funds	7 Reduced physical exposure and vulnerability	8 Continuity of critical services	9 Reliable communications and mobility	10 Effective leadership and management	11 Empowered Stakeholders	12 Integrated development planning
	Food	Livelihood opportunities	Public health management	Community and civic participation	Deterrents to crime	Economic structure	Environmental Policy	Ecosystem management	Integrated transport networks	Multi-stakeholder alignment	Research, knowledge transfer & best practice sharing	City monitoring and data
	Water and sanitation	Skills and training	Access to affordable health services	Social relationships and networks	Corruption reduction	Inward investment	Safeguards for critical infrastructure	Flood risk management	Information and communications technology	Intra-governmental alignment	Risk monitoring and alerts	Strategies and plans
	Energy	Development and innovation	Emergency facilities and practitioners	Local identity and culture	Policing and justice	Integration with regional and global economy	Building codes and standards	Maintenance practice	Emergency communications services	Government decision-making and leadership	Public awareness of risk	Land use and development
	Housing	Access to financial assistance		Integrated communities	Approach to law enforcement	Business continuity planning		Demand on critical infrastructure		Emergency capacity and coordination	Education	
<b>Stakeholder Org</b>					Sound fiscal management		Continuity planning			Communication between government and citizens		

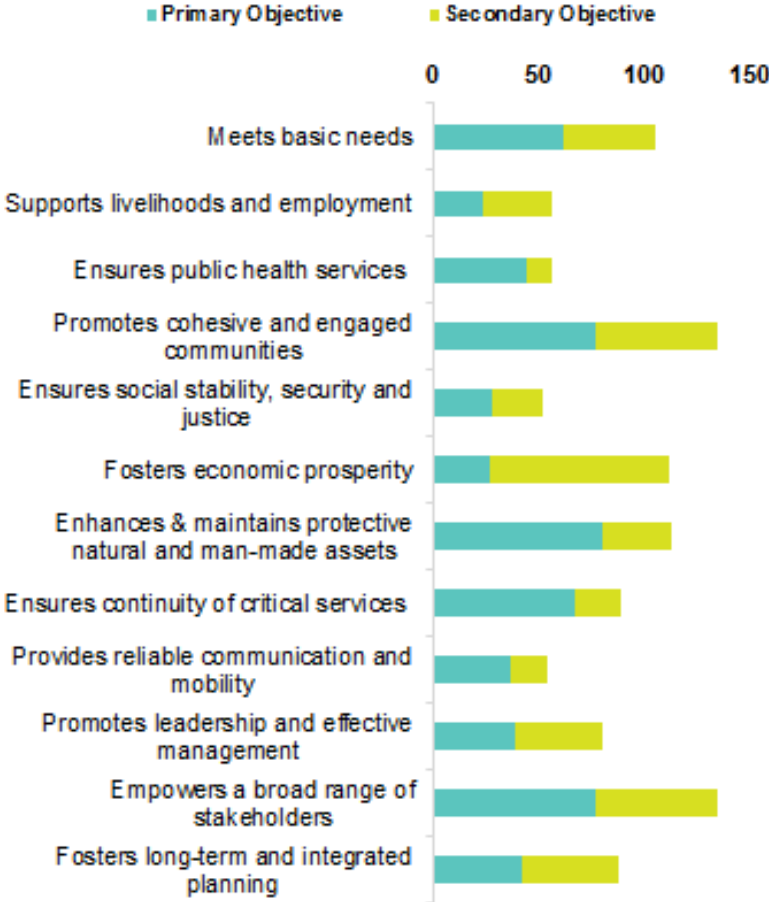
NFP	Access AIDS Care	C (H)	I	A (HC)								
NFP	American Red Cross	R(F,H)	I	A (HC)							R	
NFP	Bon Secours DePaul Hospital	I		R (HC)				A	I		R	
NFP	Catholic Charities (F,H,E)	C	A (S, F)	C								
NFP	Chesapeake Bay Foundation										R	X
NFP	Children's Hospital of the Kings Daughters			R (HC)				A	I		R	
G	City of Norfolk Department of Communications	I	I	I	C	I	I	I	R	C	R	R
G	City of Norfolk Department of Economic Development		R (DI)				R		R (CP)			A
G	City of Norfolk Department of Environment	I			C			A (EP)	R (EM)	I	R	A

## Collect and Analyze existing plans and actions

- Build a **City Profile** - desktop research to understand Dallas' resilience challenges and opportunities
- Create an **inventory of resilience actions** and develop a baseline of city resilience activity
- Explore risk through a systems analysis by prioritizing **shocks and stresses** and exploring their interconnections

# Actions Inventory

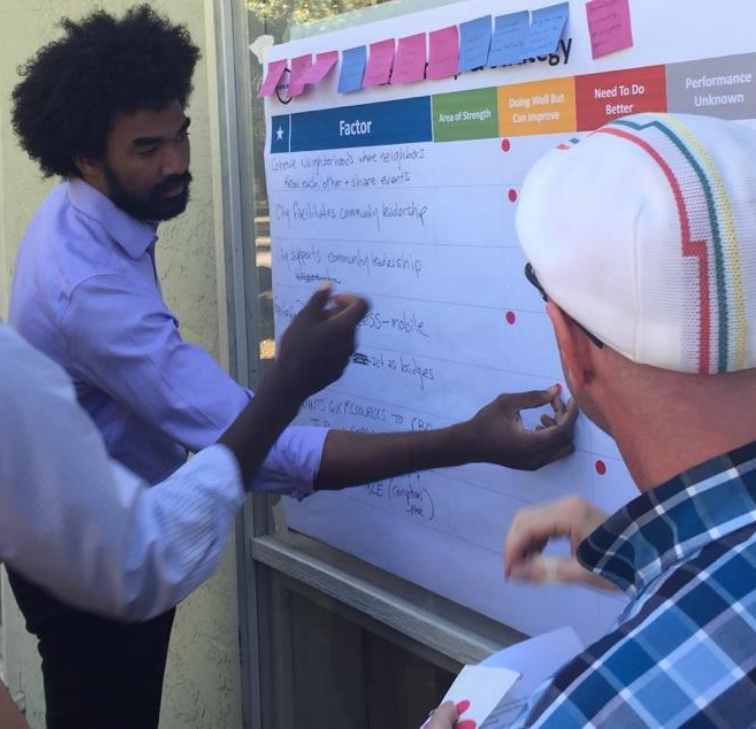
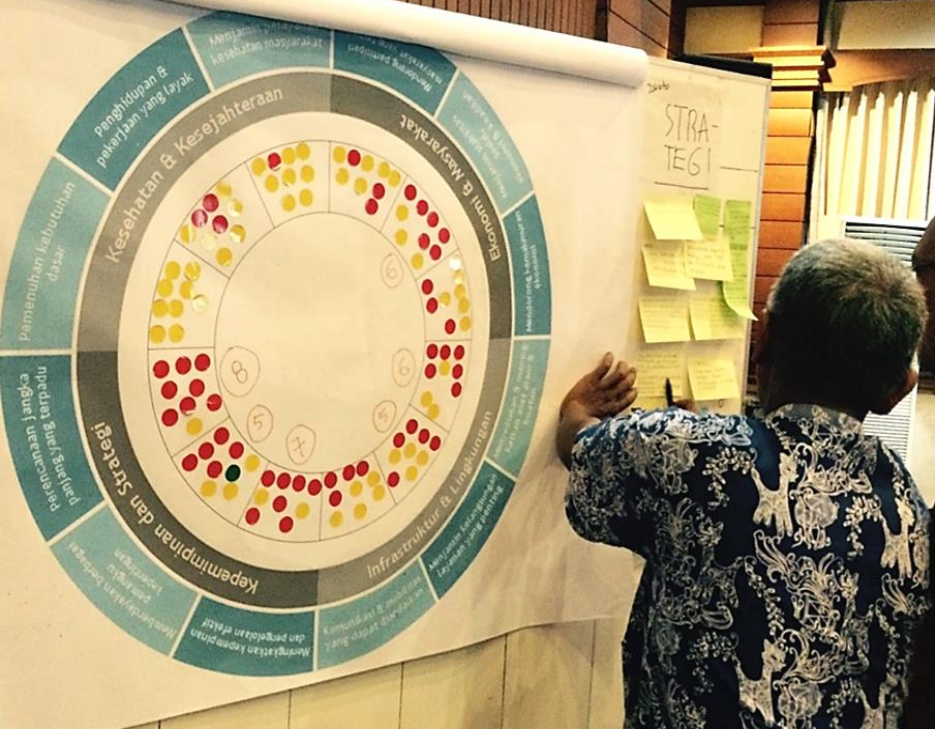
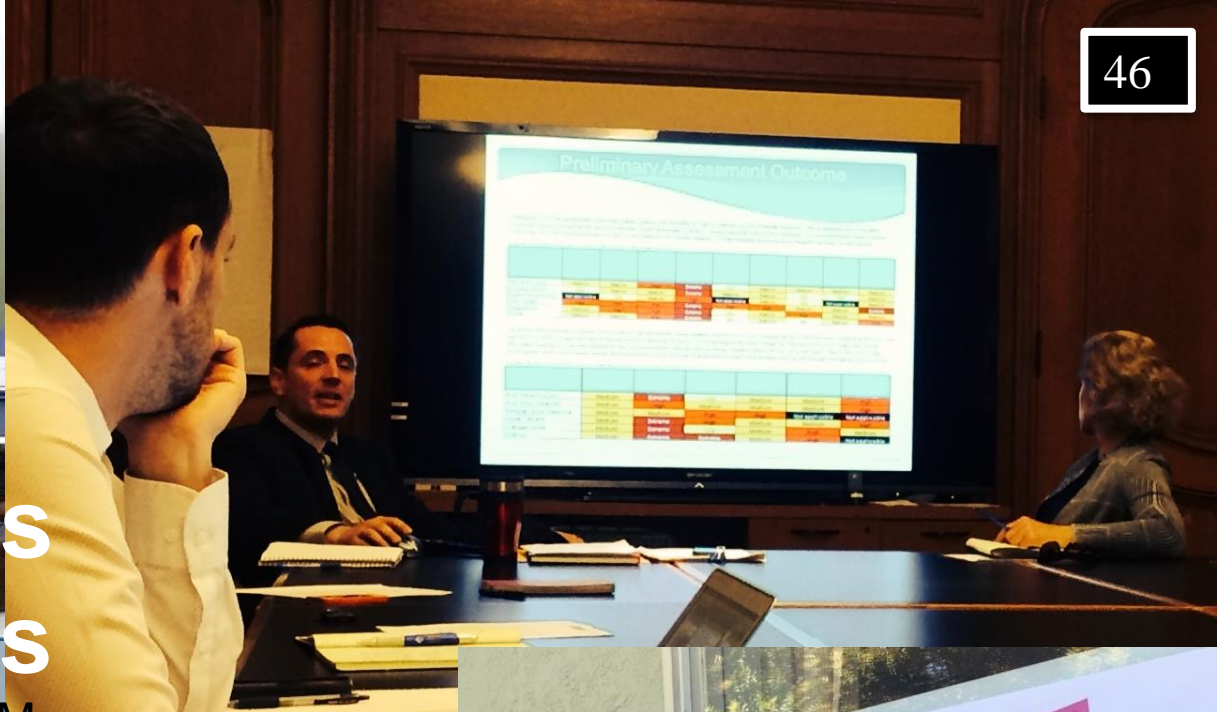
City Actions Contributing to Resilience: Primary and Secondary



# Gathering public perception of resilience


DIMENSION/ TOPIC	Example Factors	Questions to help further define the topic area
<p><b>Health &amp; Wellbeing</b></p>	<ul style="list-style-type: none"> <li>• <i>Residents have enough healthy food to eat every day, which is affordable and produced in ways that support biodiversity and replenish its sources.</i></li> <li>• <i>Residents have easy and affordable access to clean, safe, public drinking water to meet basic needs and ensure supply even in prolonged emergencies.</i></li> <li>• <i>Residents have affordable access to stable and consistent energy to meet basic needs and ensure supply even in prolonged emergencies.</i></li> </ul>	<p><b>What factors help meet people’s basic needs?</b> (e.g. affordable housing, stable energy, affordable food, clean water, public health care, education)?</p> <p><b>What factors contribute to creating jobs, a skilled workforce, and/or economic development?</b> (e.g. Labor and Workforce Policy; Skills and Training; Livelihood Support Following a Shock or Tragedy; Local Business Development and Innovation; Access to Finance)</p> <p><b>What factors address emergency response?</b> (e.g. Medical Facilities and Practitioners that provide emergency services; Emergency housing and shelters; Community-based disaster response; First responders)</p>

# Community outreach through neighborhood workshops, town hall style meetings and conversations with other interested groups



# Web-based engagement

SurveyMonkey, Inc [US] | <https://www.surveymonkey.com/create/survey/preview?sm=ssj3ZGXUL5I>



## Community Input on Berkeley's Resilience

### Part 1: About You

Please provide some general information about yourself. (The survey is anonymous unless you choose to provide your contact information at the end.)

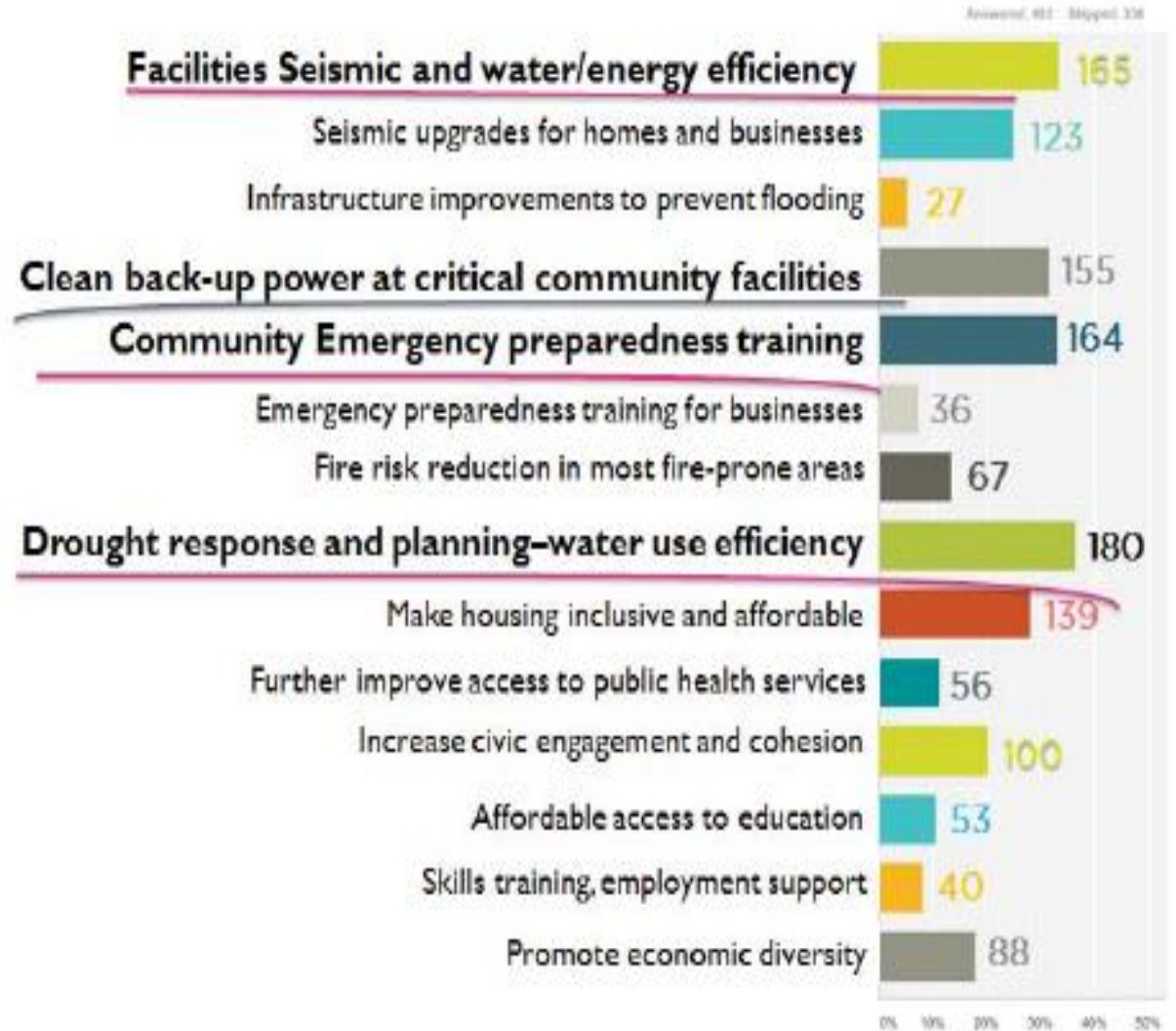
**1. Which of the following categories best describes you? (Please select all that apply.)**

- I am a resident of Berkeley
- I work in Berkeley
- I am a student in Berkeley
- Other (please specify)

**2. Please select which of the following groups you represent.**


- Government (e.g., federal, state, county, city, etc.)
- Private (e.g., a business owner or representative, etc.)
- Civil Society (e.g., a resident or representative of a community-based organization, local NGO, neighborhood association, faith-based organization, etc.)
- Academic or research institution (e.g., UC Berkeley, the Berkeley Lab, Berkeley City College, BUSD, etc.)
- Other (please specify)

SurveyMonkey® PREVIEW & TEST [Get Feedback](#) [Cancel](#)

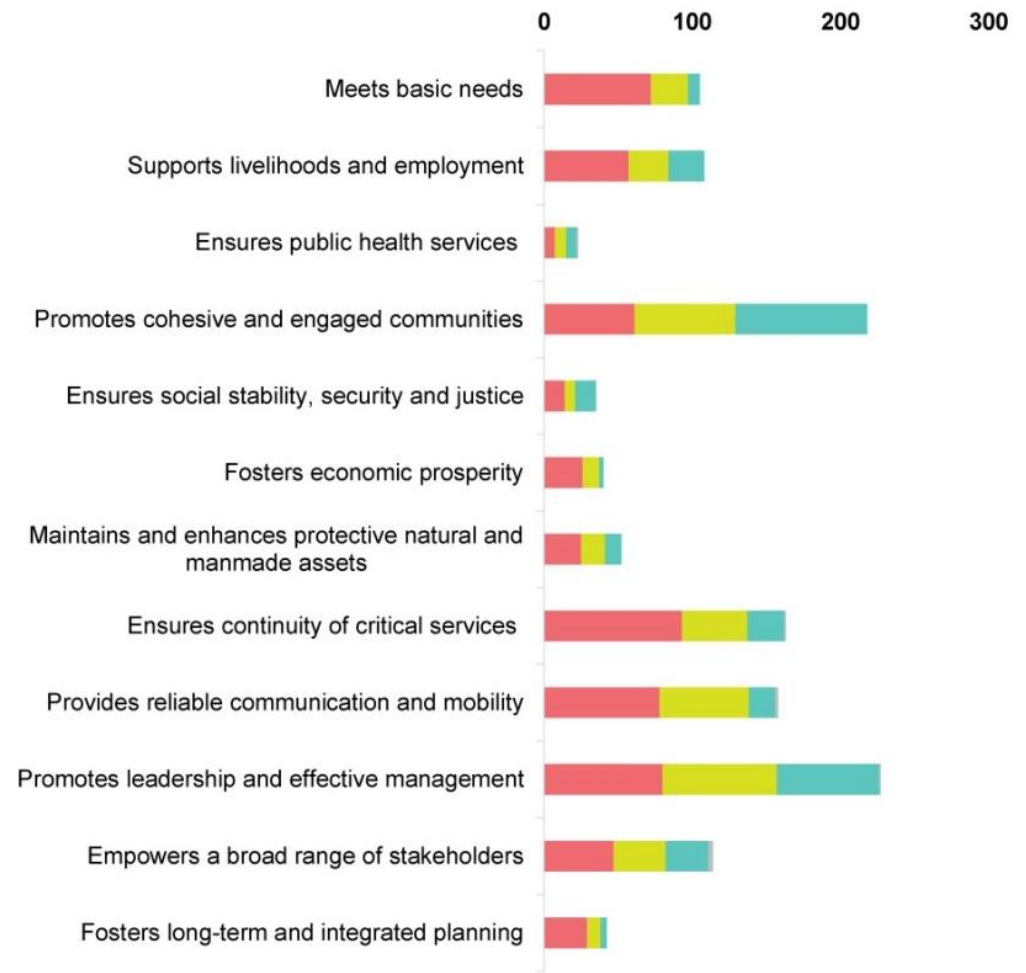
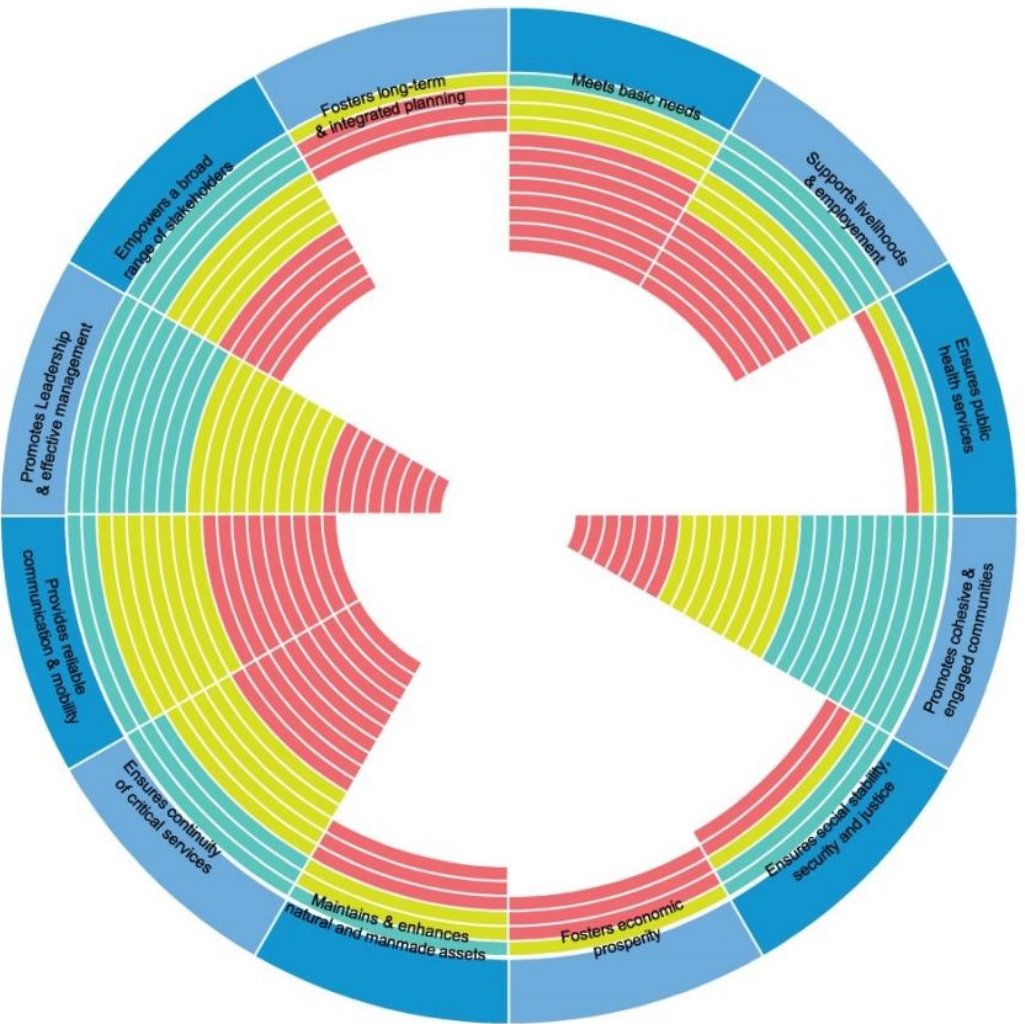




# Community perceptions: collected and analyzed

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  <p><b>100 RESILIENT CITIES</b></p> </div> <div style="text-align: center;"> <p><b>Tool A</b> Input: Factors and Rating</p> </div> <div style="text-align: right;"> <p>Navigate:</p> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; padding: 2px;">Cover Page</div> <div style="border: 1px solid black; padding: 2px;">Input Factors and Rating</div> <div style="border: 1px solid black; padding: 2px;">Output 1 Driver Analysis</div> <div style="border: 1px solid black; padding: 2px;">Output 2 Inter-dependent Sub-indicators</div> <div style="border: 1px solid black; padding: 2px;">Output 3 Factors by Stakeholder</div> <div style="border: 1px solid black; padding: 2px;">Output 3 Factors by Drivers &amp; Sub-indicators</div> </div> </div> </div>									
Entry Number	Consultee	Enter Factor mentioned by stakeholder	Provide Additional Narrative (if necessary)	Issue Rating	Select a Driver	Select a Sub Driver	Does this relate to another sub-Driver (indirectly)?	Score (Automatic)	Exact Source (If consultee wishes for this to be recorded)
28	Government	Data Accessibility and Distribution	Subfactor of #23 above. C - doesn't know where data is (it's on www.dataaf.org). G - not delivering data in a way that's meaningful to community.	Need to do better	11Empowers a broad range of stakeholders	Communication between government & public		1	Group C
29	Government	Data Relevance	Subfactor of #23 above. G - 10 categories around public safety, economic etc G - assessing data e.g. in disaster, knowing the baseline of number of houses were destroyed would be useful as it can inform recovery efforts.	Need to do better	11Empowers a broad range of stakeholders	Public Risk Awareness		1	Group C
30	Government	Data (socio-economic, population, housing, infrastructure, safety) is relevant, collected, readily available, reliable, consistent and distributed.	Same category as # 23 above, but a different rating.	Area of strength	11Empowers a broad range of stakeholders	Communication between government & public		3	Group C
31	Civil Society	Data (socio-economic, population, housing, infrastructure, safety) is relevant, collected, readily available, reliable, consistent and distributed.	Same category as # 23 above, but a different rating. Issue rating was unknown, but that drop down selection has been removed	Not mentioned	11Empowers a broad range of stakeholders	Communication between government & public		Not Mentioned	Group C
32	Civil Society	Wastewater systems that are seismically upgraded	Needs to do better. Little retrofit has been done	Doing well, but can improve	7 Maintains and enhances protective natural and manmade assets	Alternative provision of services		2	Group D
33	Government	Reliable Effective Public Transit - reliability	Accessible & dense public transit network. Daily population of SF has access to local & regional network. (locals, commuters, tourists) (split?) Reliability could improve, under shock situation may be difficult. During commute times system is at capacity in key locations (Financial district).	Need to do better	9 Provides reliable communication and mobility	Public transport infrastructure		1	Group D
34	Government	Sound Capital planning process to address & prioritize public infrastructure		Area of strength	10 Promotes leadership and effective management	Collaborative decision-making & leadership		3	Group D
35	Government	Reliable and Effective Transit Network - role in event of shock; informed daily population- commuters, residents, schoolchildren	Local & Regional Transit Network - informed Daily pop	Doing well, but can improve	8 Ensures continuity of critical services	Optimisation of critical infrastructure		2	Group D
36	Government	Reliable Effective Public Transit - coverage	Accessible & dense public transit network.	Area of strength	9 Provides reliable communication and mobility	Public transport infrastructure		3	Group D
37	Civil Society	A well educated & informed residents, commuters, tourists, school children	Preparedness for shocks (e.g. seismic event)	Need to do better	9 Provides reliable communication and mobility	Emergency information systems		1	Group D
38	Civil Society	Sufficient capacity in delivery systems to aid those who lack capacity to achieve resilience	Neighborhoods that may not be able to plan on their own. Low income residents / neighborhoods. Lack adaptive capacity. Already stressed. Depends on neighborhood. [More data necessary] Unknown	Doing well, but can improve	8 Ensures continuity of critical services	Optimisation of critical infrastructure		2	Group D
39	Civil Society	A well educated & informed residents, commuters, tourists, school children	Preparedness for shocks (e.g. seismic event)	Need to do better	9 Provides reliable communication and mobility	Emergency information systems		1	Group D
40	Business	A robust communications system throughout the city	Progress & tying it into ex comm. Networks (twitter...), basic infrastructure is there, but it has gaps. No centralized overall system to reach everybody. (Only 60,000 twitter followers of a daily population of 1.2 mio. People)	Need to do better	9 Provides reliable communication and mobility	Communications technology		1	Group D
41	Business	Effective Traffic Control (that moves you through the city at quick pace)	Already stressed system. Signage. During & after a disaster? Life Lines = doing OK, but overall rating unknown.	Not mentioned	9 Provides reliable communication and mobility	Transport Network		Not Mentioned	Group D
42	Other	availability of arteries to move emergency personnel	Life Lines = doing OK, but can improve	Doing well, but can improve	9 Provides reliable communication and mobility	Emergency information systems		2	Group D

# Community Perceptions: analyzed for gaps



■ Need to do better ■ Doing well, but can improve ■ Area of strength ■ Unknown

# Preliminary Resilience Assessment

Phase I work culminates with a Preliminary Resilience Assessment:

- Captures the city's resilience strengths, weaknesses, gaps and opportunities.
- Recommends 3 or 4 focus areas - topics identified for further research and analysis in Phase II.

**1. ADAPT TO THRIVE**

*How can our communities and our changing natural environment...*

**CHALLENGES + OPPORTUNITIES**

- Climate Change
- Air Quality
- Environmental Protection
- Environmental Risk Awareness
- Water Infrastructure
- Energy Infrastructure

**Aspirations for the year 2050**

- New Orleansians have an accurate understanding of risks and have developed the capacity to adapt to those risks.
- The coast is healthy, functioning and sustains communities and ecosystems.
- The urban environment has adapted to its natural semi-aquatic, deltaic foundation.
- Greater New Orleans has a reliable and redundant energy production and distribution network that is able to meet and adapt to the increased demand and risks of the 21st Century.

**Major stresses**

Five major area of stress will potentially have an impact on the resilience capacity of Vejele. These are described in table 5.0 List of major stresses.

Table 4.0: List of major stresses

Type	CRF drivers	Indicator	Risk statement	Commentary	Risk assessment		Risk Rating
					Likelihood of increasing	Consequence	
Climate changes	Infrastructure & environment Health and wellbeing	Increased flooding and damage to city assets	Potential scenario under current conditions: Flooding had impacted infrastructure and business.				
Decline in public welfare	Health and wellbeing	Increasing public expenditures, inequality, vulnerable populations, chronic diseases and mental illness.	The strategy with a demographic change pressure on aging citizens lead to vulnerable citizens.				
Lack of social cohesion and resilience	Economy and society	Increased social unrest, crime and violence, radical groups and vulnerable populations.	There is a community account poor at...				
Economic resilience	Economy and society Leadership and strategy	1. Financial instability. 2. Increased unemployment. 3. There are indications of potential growth in unskilled labor, which is an emerging threat and a serious stress indicator.	After a sectorial 2009-2012 have no municipality due to stabilize. Two are 1. An it which 1 EU. 2. The could c				

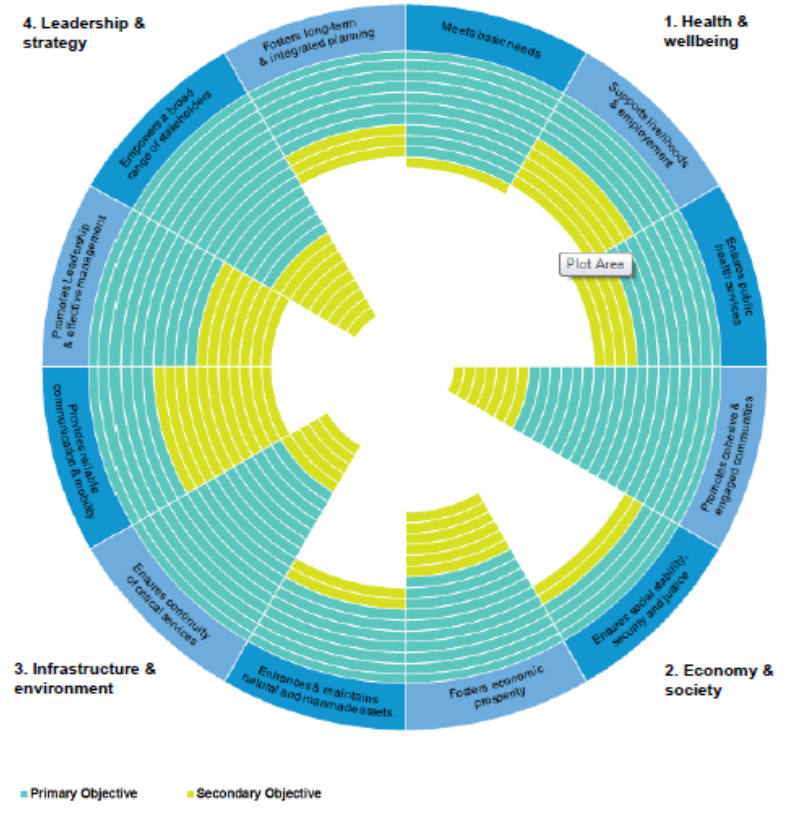


Figure 5 'drivers' of resilience Existing resilience-building actions mapped against the City Resilience Framework

# Next Steps

- Continue gathering baseline data to develop the Preliminary Resilience Assessment
- Launch the Public Outreach Effort
- Creation of a Stakeholder Committee

