



P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Attachment 1

Item No.
Environment & Sustainability Standing Committee
January 15, 2015

TO: Chair and Members of Environment & Sustainability Standing Committee

SUBMITTED BY: Original Signed

Bob Bjerke, Planning & Development

DATE: December 16, 2014

SUBJECT: 100 Resilient Cities Challenge

INFORMATION REPORT

ORIGIN

Environment & Sustainability Standing Committee, December 4, 2014, Item 12.2 Motion: *Motion passed that that ESSC request staff provide a brief presentation overviewing the submissions of the other cities in the 100 Resilient Cities Challenge program and what they are doing with the aim to assisting in building our capacity around adaptation and sustainability.*

LEGISLATIVE AUTHORITY

HRM Charter, Purpose of Act, 2 (c) (iii) recognize that the functions of the municipality are to ...develop and maintain safe and viable communities.

BACKGROUND

At the June 6, 2013 Environment & Sustainability Standing Committee, staff were directed to prepare an application to submit to the newly announced Rockefeller Foundation Resilient Cities Program.

DISCUSSION

100 Resilient Cities - Pioneered by the Rockefeller Foundation (100RC) is dedicated to helping cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century. 100RC supports the adoption and incorporation of a view of resilience that includes not just the shocks (such as earthquakes, fires, and floods) , but also the stresses that weaken the fabric of a city on a day to day or cyclical basis. Examples of these stresses include high unemployment; an overtaxed or inefficient public transportation system; endemic violence; or chronic food and water shortages. By addressing both the shocks and the stresses, a city becomes more able to respond to adverse events, and is overall better able to deliver basic functions in both good times and bad, to all populations.

Cities in the 100RC network are provided with the resources necessary to develop a roadmap to resilience along four main pathways:

1. Financial and logistical guidance for establishing an innovative new position in city government, a Chief Resilience Officer, who will lead the city's resilience efforts;
2. Expert support for development of a robust resilience strategy;
3. Access to solutions, service providers, and partners from the private, public and NGO sectors who can help them develop and implement their resilience strategies; and
4. Membership of a global network of member cities who can learn from and help each other.

Through these actions, 100RC aims not only to help individual cities become more resilient, but will facilitate the building of a global practice of resilience among governments, NGOs, the private sector, and individual citizens.

100 Resilient Cities—Pioneered by The Rockefeller Foundation is financially supported by The Rockefeller Foundation and managed as a sponsored project by Rockefeller Philanthropy Advisors, an independent nonprofit organization that provides governance and operational infrastructure to its sponsored projects.

The challenge will award \$1 million and a Chief Resiliency Officer to 100 Cities over a three year intake competition. The first two intakes have been completed. The final application year is 2015.

Halifax has provided an application in 2013 and 2014, and will re-apply in 2015. The Halifax Approach to the application is consistent to the operational delivery of Emergency Management in Halifax. By supporting the EMO with the funding capacity and dedicated resource (Chief Resiliency Officer), the intent is to bolster the community capacity for adaptation to shocks and stresses. The five components of Emergency Management according to the Emergency Management Framework for Canada are:

- Prevention
- Mitigation
- Preparedness
- Response
- Recovery

The focus of the application and capacity is to build community resiliency in the Prevention, Mitigation, and Preparedness components. As well, by bolstering community based capacity, recovery plans can be improved.

FINANCIAL IMPLICATIONS

There are no costs to application.

COMMUNITY ENGAGEMENT

A fundamental approach to the Halifax approach is to help support the volunteer Joint Emergency Management Teams developed by the Halifax EMO.

The mission of JEM Teams is to promote awareness of local community resources, to train local agencies to work together and provide a structure for coordinated local emergency response.

JEM Concept

- To work with local agencies and community residents
- Participate in emergency planning & response
- Coordinate neighbor/community emergency preparedness and awareness
- Participate in coordinated humanitarian efforts
- Support role to 1st Responders
- Bring local community resources to bear during emergency event
- Act as single voice from the community to establish priorities & resource allocations
- Maintain a local community resource list
- Train to assist the community through future unknown perils

Joint Emergency Management (JEM) is a concept developed by the Halifax Regional Municipality's Emergency Management Office (EMO), to allow community organizations to prepare for, and respond quickly to, a wide range of emergencies. In times of crises, EMO will activate JEM Support Centres (JSC) to coordinate humanitarian response to the JEM coverage area. These centres are a facility where trained individuals can meet to provide local input to the Emergency Operations Centre, located in Dartmouth. Currently there are five such JEMs in HRM.

ATTACHMENTS

None. Staff are providing a brief presentation to Committee as requested.

A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/index.php> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Original Signed

Report Prepared by: Richard MacLellan, Manager, Energy & Environment, 902 233 4846

Attachment 2

HALIFAX

100 Resilient Cities Program Overview

January 15, 2015

100 Resilient Cities - Pioneered by the Rockefeller Foundation (100RC)

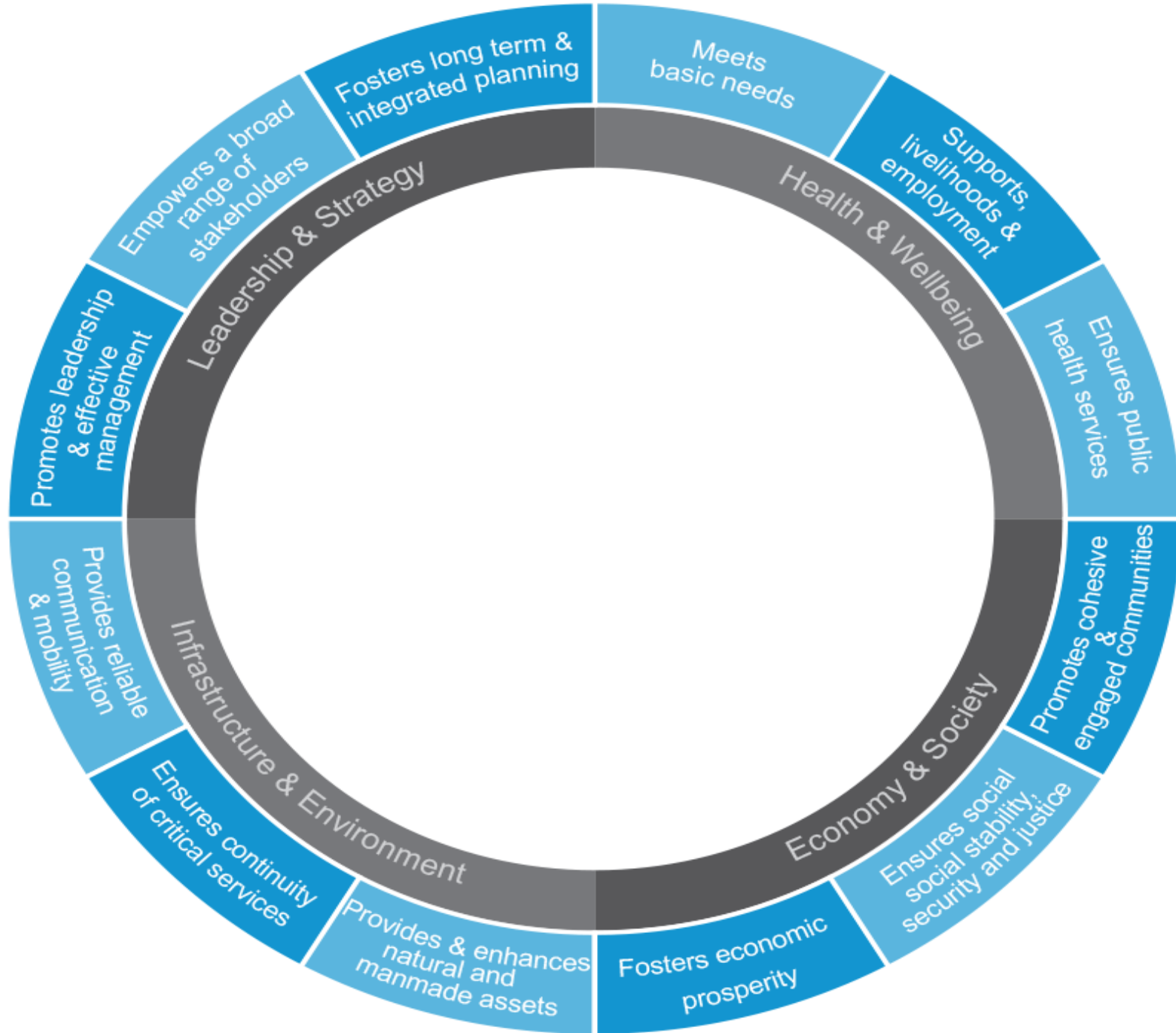
- To help cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century
- Includes the shocks but also the stresses that weaken the fabric of a city
 - Shocks include flooding, fire, earthquakes
 - Stresses include high unemployment, inefficient public transportation system, endemic violence, chronic food or water shortages
- By addressing shocks and stresses, a city becomes more able to respond to adverse events and better able to deliver basic functions at all times, to all populations

100 Cities Over 3 Years

- 100 cities globally are provided with the resources necessary to develop a roadmap to resilience along four main pathways:
 1. Financial & logistical guidance for establishing a **Chief Resilience Officer** to lead the city's resilience efforts
 2. Expert support for development of a resilience strategy
 3. Access to solutions, service providers & partners from the private, public & NGO sectors who can help them develop & implement resilience strategies
 4. Membership to a global network of member cities who can help & learn from each other

Chief Resiliency Officer

- Works across government departments to help the city improve internal communications, promotes collaboration and synergies, ensures no duplication of work
- Brings together stakeholders to learn about city's challenges & help build support for initiatives & resilience building
 - Government officials, private, non-profit, civil society
- Leads resilience strategy (6-9 months) then puts it into action with help from 100RC & platform partners
- Acts as the resilience point person



2013 & 2014 Invited Cities

Accra, Ghana
Amman, Jordan
Arusha, Tanzania
Ashkelon, Israel
Athens, Greece
Bangalore, India
Bangkok, Thailand
Barcelona, Spain
Belgrade, Serbia
[Berkeley, USA](#)
[Boston, USA](#)
[Boulder, USA](#)
Bristol, England
Byblos, Lebanon
Cali, Colombia
Chennai, India
[Chicago, USA](#)
Christchurch, NZ
Da Nang, Vietnam
Dakar, Senegal
[Dallas, USA](#)
Deyang, China
Durban, South Africa
[El Paso USA](#)

Enugu, Nigeria
Glasgow, Scotland
Huangshi, China
[Jacksonville, USA](#)
Juarez, Mexico
Kigali, Rwanda
Lisbon, Portugal
London, GB
[Los Angeles, USA](#)
Mandalay, Myanmar
Medellin, Colombia
Melbourne, Australia
Mexico City, Mexico
Milan, Italy
[Montreal, Canada](#)
[New Orleans, USA](#)
[New York, USA](#)
[Norfolk, USA](#)
[Oakland, USA](#)
Paris, France
Phnom Penh, Cambodia
[Pittsburg, USA](#)
Porto Alegre, Brazil
Quito, Equador

Ramallah, West Bank
Rio de Janeiro, Brazil
Rome, Italy
Rotterdam, The Netherlands
[San Francisco, USA](#)
[San Juan, USA](#)
Santa Fe, Argentina
Santiago de los Caballeros, DR
Santiago Metropolitan Region, Chile
Semarang, Indonesia
Singapore
[St Louis, USA](#)
Surat, India
Sydney, Australia
Thessaloniki, Greece
Toyama, Japan
[Tulsa, USA](#)
Vejle, Denmark
Wellington, NZ

HALIFAX

Overview of Select North American Cities Challenges (20 Cities invited to date)

- **Berkeley**
 - Earthquakes, Heat Wave, Wildfire
- **Boston**
 - Flooding, Infrastructure Failure, Lack of Affordable Housing, Sea level rise, Social inequity, Terrorism
- **Chicago**
 - Aging Infrastructure, Endemic Crime, Flooding, Infrastructure Failure
- **Dallas**
 - Aging Infrastructure, Energy Shortages, Flooding, Infrastructure Failure, Terrorism
- **Montreal**
 - Aging Infrastructure, Declining or Aging Population, Hazardous Materials Accident, Heat Wave, Infrastructure Failure
- **New York**
 - Heat Wave, Poor Transportation System, Sea Level Rise, Tropical Storms
- **Norfolk**
 - Flooding, Sea Level Rise
- **Pittsburgh**
 - Aging Infrastructure, Flooding, Infrastructure Failure, Pollution

Halifax Approach to Application

Top 4 Shocks	Top 4 Stresses
Flooding	Environmental Degradation
Hurricane	Aging Infrastructure
Infrastructure Failure	Rising Sea Levels/ Coastal Erosion
Hazardous Materials Accident	Lack of Affordable Housing

- Chief Resiliency Officer – Model ‘D’ selected:
 - “The CRO is a new staff member; the portfolio is existing or merged with other functions”
 - Ex: A city merges Dept. of Env. and Earthquake Preparedness Office, creating new resilience office headed by CRO hired from outside the government. Employees from two groups report to CRO, who reports directly to the Mayor”

Next Steps?

- Trends of winning cities
 - Large populations and/or dire shocks & stresses
 - Mostly outside of North America
- Council could ask HRM to apply in the 3rd & final year
- Options for changing approach to application
- Could enhance Halifax's readiness to take on resiliency now to be documented in application next year
- Possible Halifax is not among the 100 cities with the highest need for this assistance
- Recommend we apply again next year as the time required seems worthy of the possible reward