

Leapfrogging: Use of community sustainability initiatives to inform community resilience

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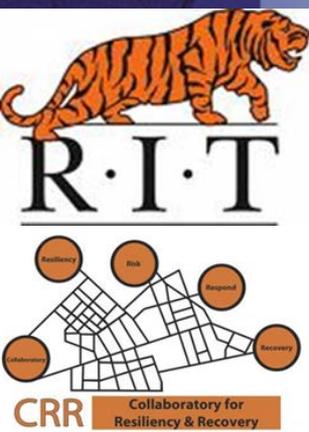
Abstract

- As our world wrestles with the impacts of climate change, various efforts to increase community and regional resilience have been implemented. These efforts span the range of tools and methodologies aimed at supporting resilience: from indexes to measure performance, to risk and vulnerability assessment and implementation processes. Each example contributes to our growing understanding of what it means to be resilient, but determining a reasonable path forward can be difficult for a locality of limited means. **This presentation will examine how a community can leverage infrastructural and process knowledge within related activities to progress toward measurable resilience.**



The Leap:

- 30 published systems to measure resilience
- Models systems of systems multi-criteria risk propagation across CI & other components
- Initiatives to address these risks & vulnerabilities
- **The Challenge: translation & implementation particularly for information & resource limited regions**



Community sustainability map: Rochester, NY

Rochester Sustainability Collaborative

Notes from Collaborative Meeting 08.10.2015

GOALS

Measurable & Goal-Based

- Regional Improvements**
 - GHG Reduction, Eco Districts
- Sustainability Plans**
 - Personal, Corporate, Institutional, Regional
- Collective Impact**

ECONOMIC GROWTH & RESILIENCY

- Promotion of Local Suppliers
- Market Demand Analysis
- Resiliency Planning
- Job Growth & Opportunity

EDUCATION

- Training & Mentoring in Sustainable Practices
- Emerging Technologies
- Emerging Issues
- Public Education
- Member Sustainability Plans

The RSC mission is to organize and foster ongoing strategic collaboration among member organizations for the purpose of achieving meaningful and sustained environmental, economic, and social transformation for the benefit of RSC members and the Greater Rochester Community.

NETWORK COLLABORATION

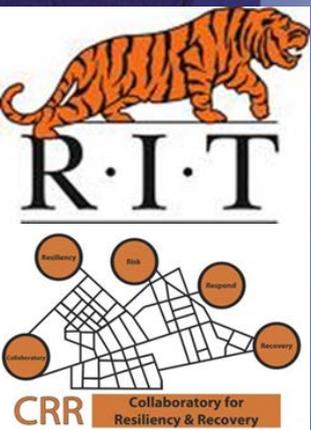
- Best Practice Dissemination & Training
- Eco-Focused Organization Directory
- Partnership Identification
- Membership Growth
- Food Resources & Waste
- Access to Healthcare

REGULATORY IMPROVEMENT

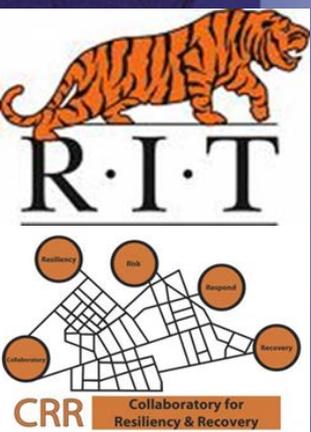
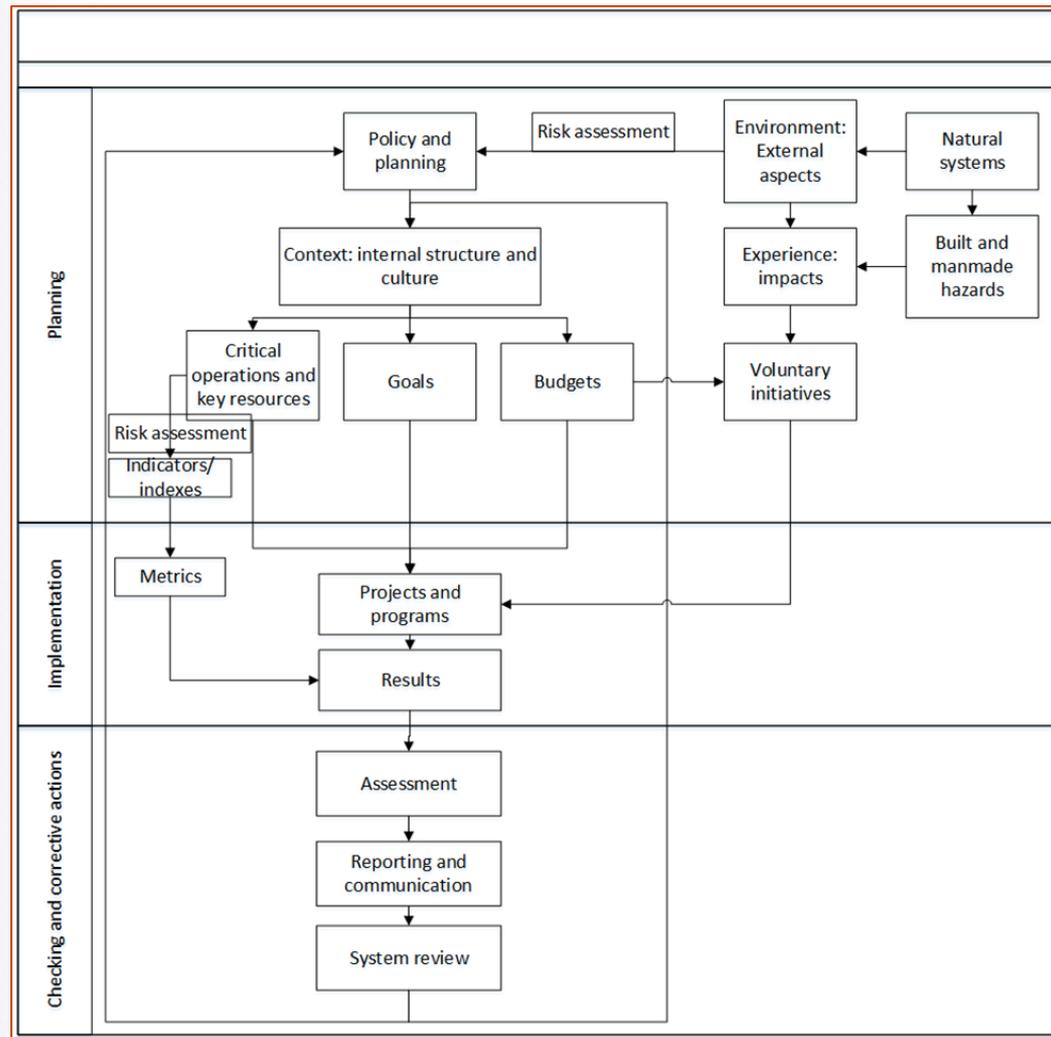
- Policy Gap Analysis
- Policy Gap Improvements
- Public Education

ACTIVITIES

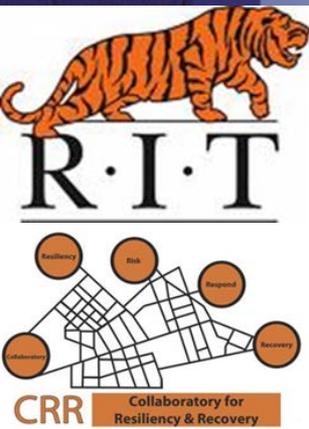
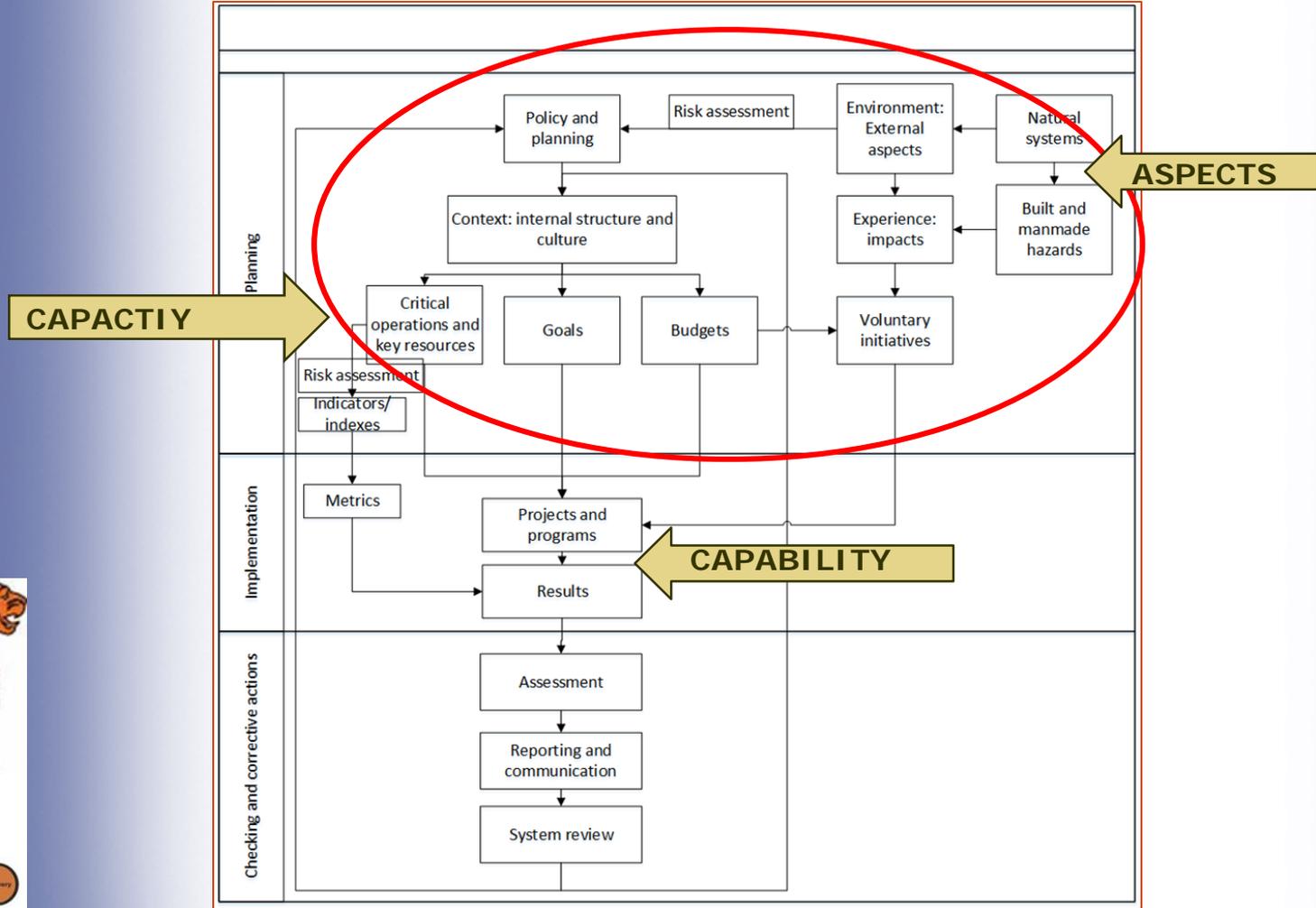
- Tool Box
- Planning Resources
- Seminars
- Presentations



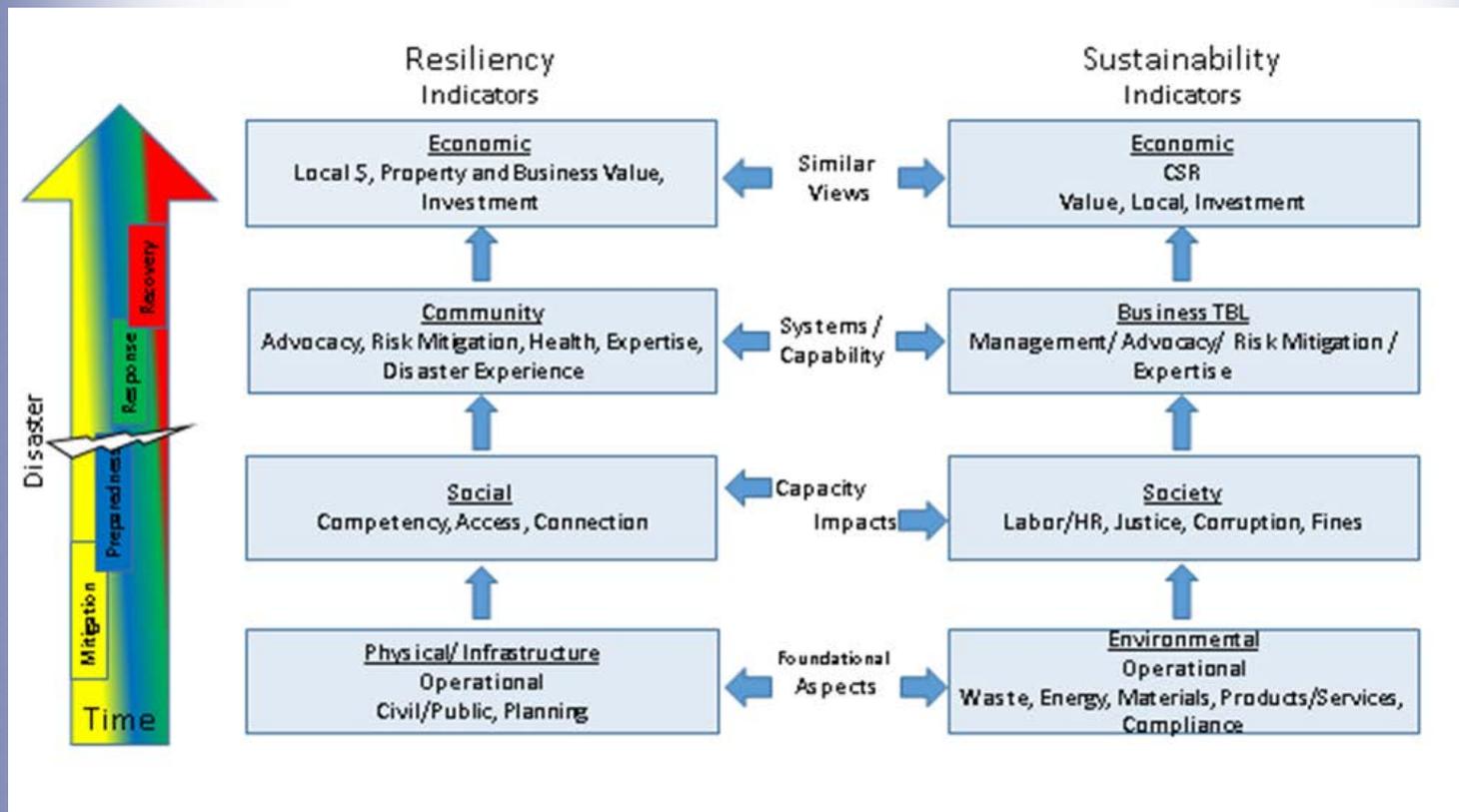
Integrated Community Resilience Map



Integrated Community Resilience Map



Capability Crossover

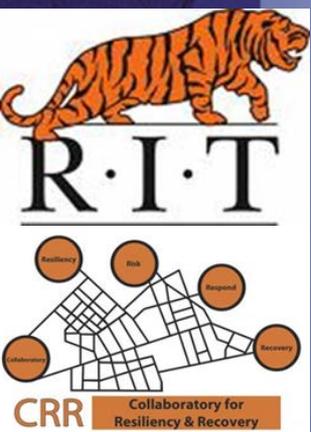


Levels of Sustainability/Resiliency

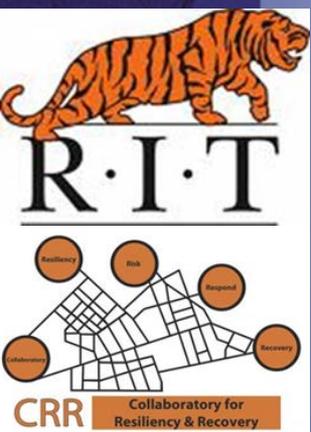
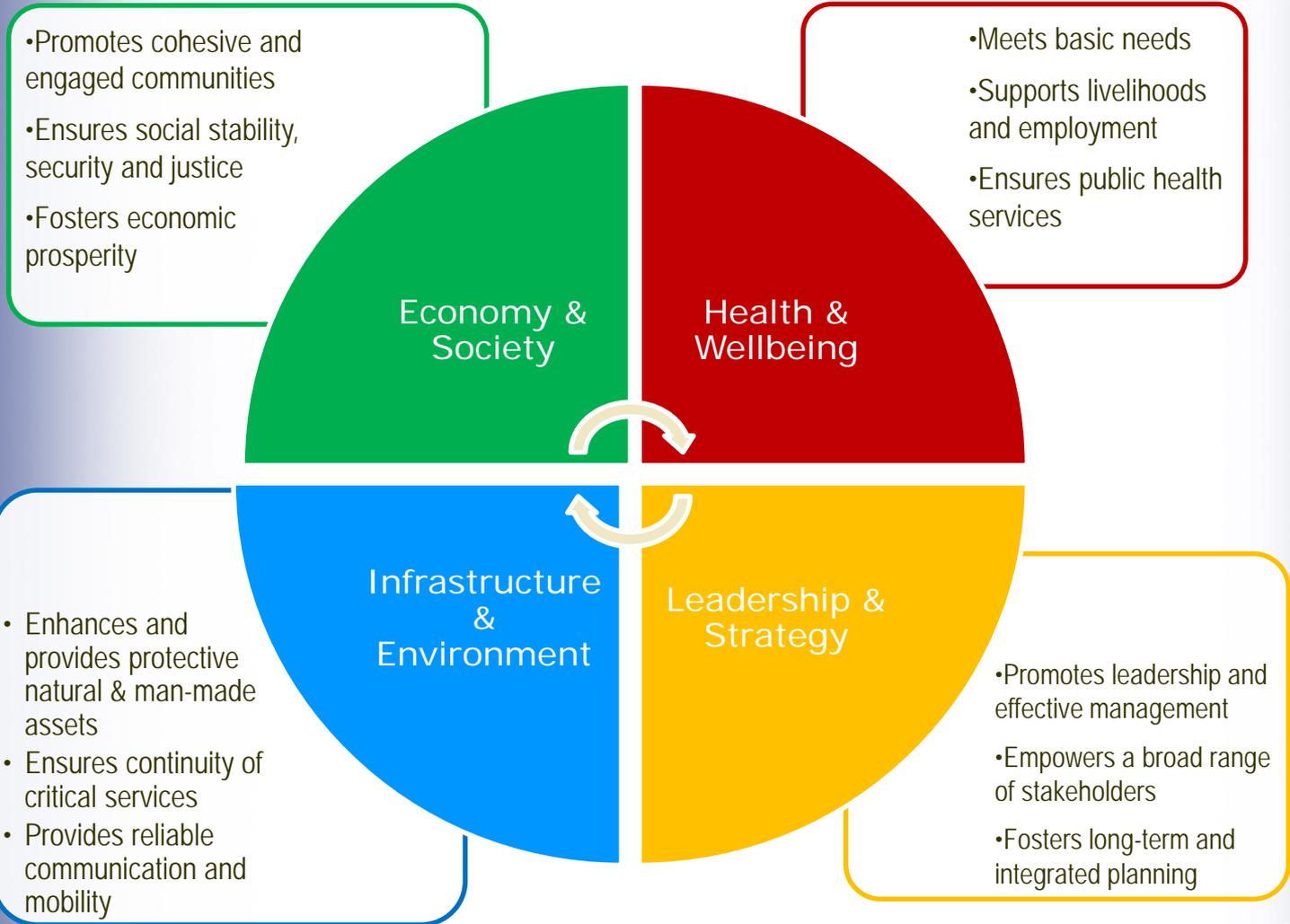


Least Developed

Most Developed



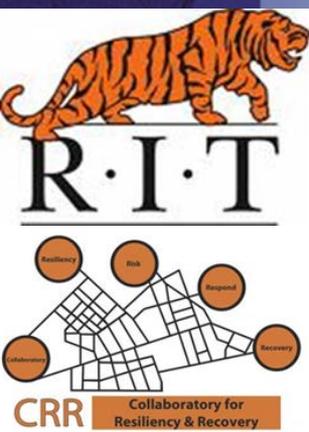
Rockefeller 100 Resilient Cities 4 Dimensions



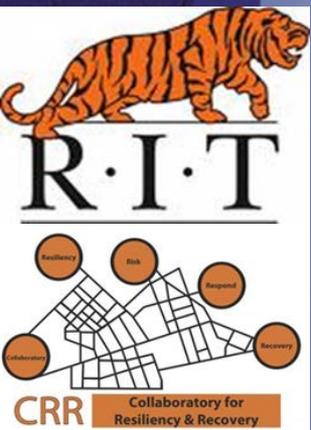
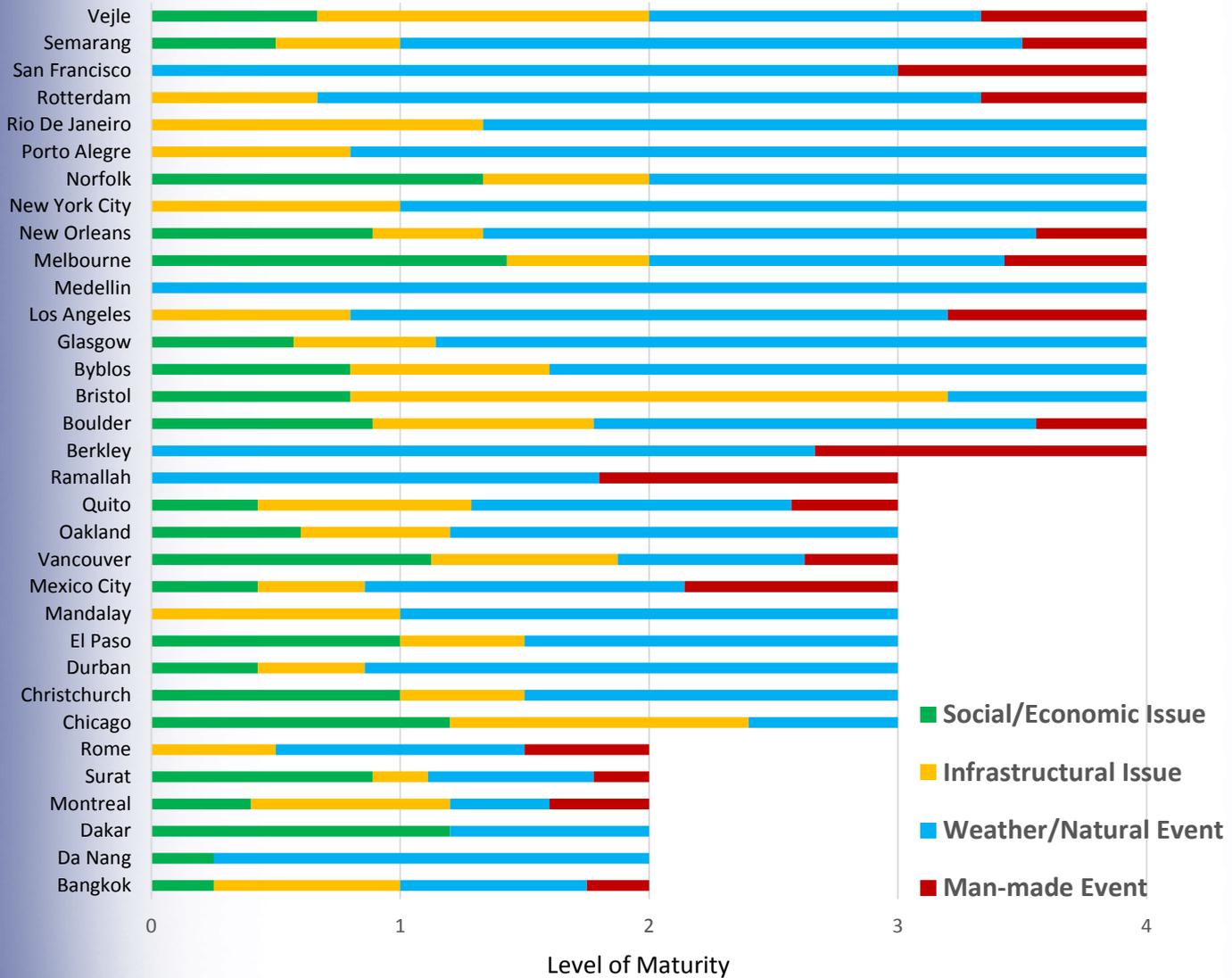
Selection Process of 100RC

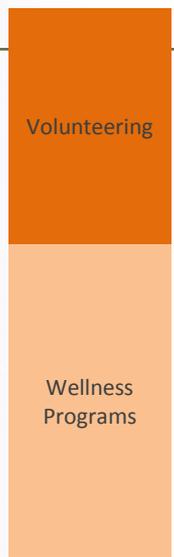
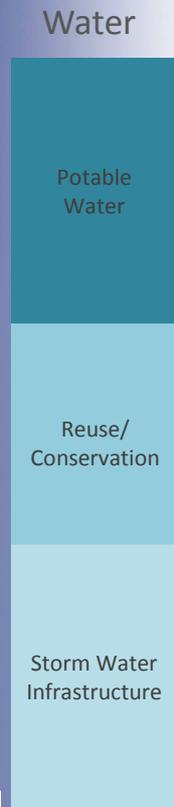
- Judges wanted:
 - Innovative mayors
 - Recent catalyst for change
 - History of building partnerships
 - Ability to work with a wide range of stakeholders

- Trends in first round picks for 100RCs were:
 - Leaders in sustainability (Durban, Boulder)
 - Accomplished large projects with limited means (Medellin)
 - Have rapid growth with significant risk (Mandalay)
 - Experienced a historically devastating disaster (New Orleans)



City Maturity & Resiliency Challenges

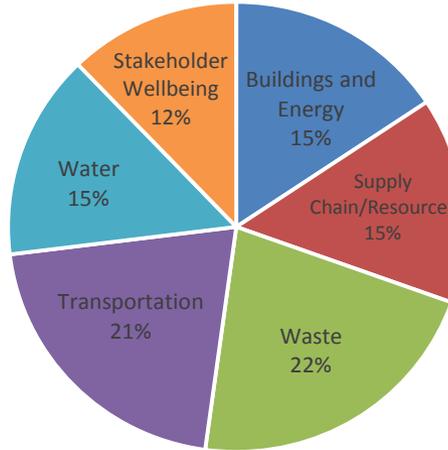




Supply Chain/Resources



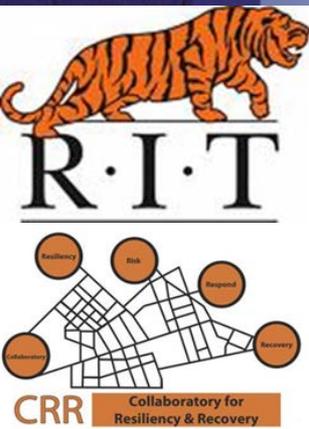
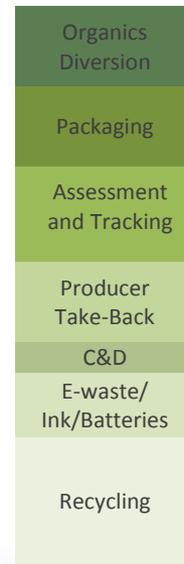
Rochester Sustainability Project Distribution



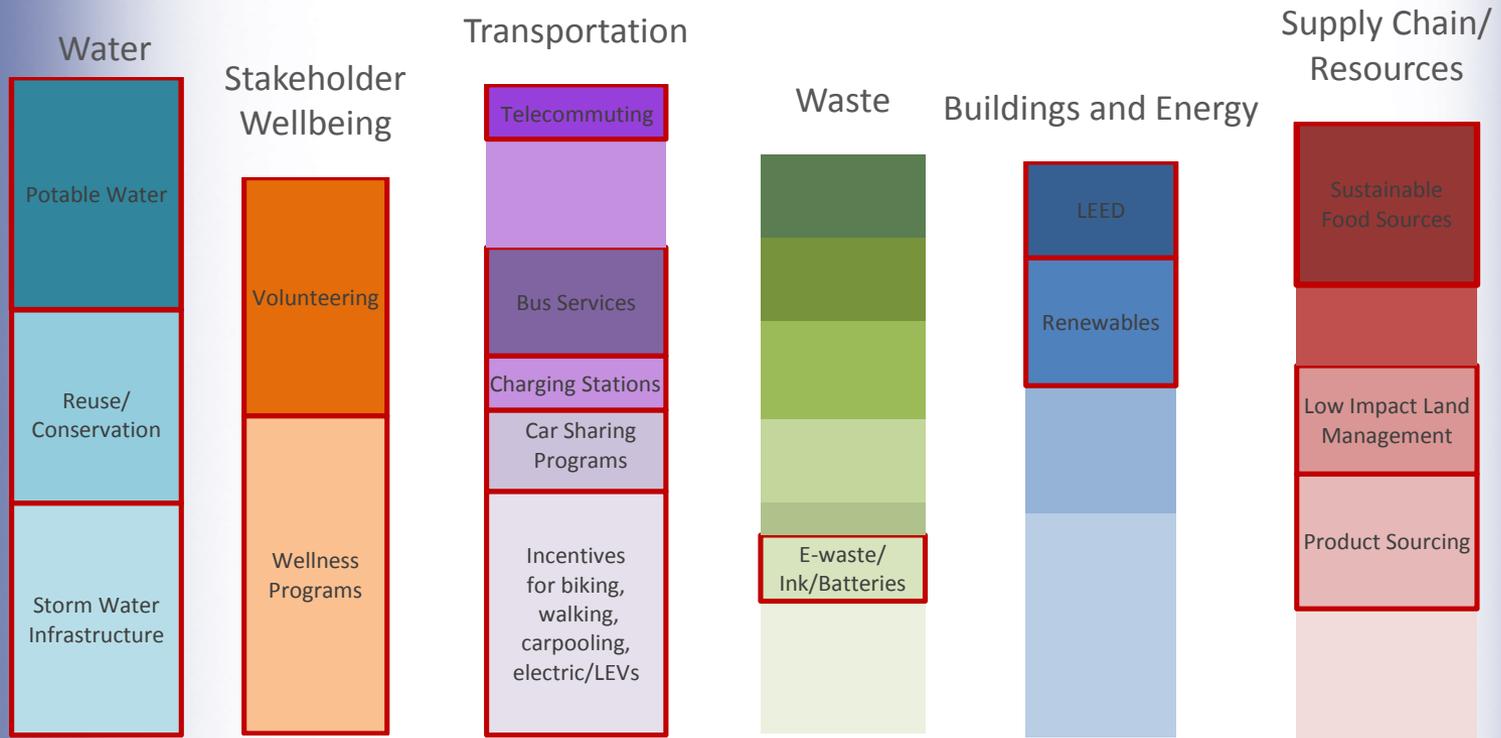
Transportation



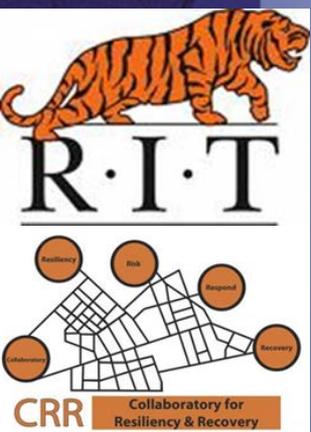
Waste



Crossover with Resilience

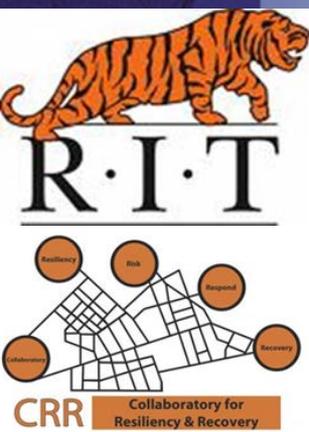


- More than half (135/215) of Rochester's sustainability projects have resiliency relevance



Interesting Facts

- “Participatory Budgeting” in (Porto Alegre)
- “Future-proofing” (Bristol)
- Rockefeller’s initial funding is used to hire a Chief Resilience Officer (“top-level advisor to the city’s mayor or chief executive”)
- Recent host cities for the Olympics have created sustainability plans for residents to cover things like transportation, waste, accessibility, and transparency
- RIT in Rochester, NY region is part of Second natures Climate commitment (Three options: carbon, *resiliency* & combined climate option)



Conclusions & Questions

- Local community and infrastructural initiatives in sustainability can result in understanding of community interactions and capabilities
- This understanding can be leveraged, in concert with supporting information, to make measureable gains in resilience.
- Questions?
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