EARLY PROJECT DEVELOPMENT AND RESILIENCE FINANCE

Braulio Eduardo Morera,
Director, Innovation & Project Development

Stewart Sarkozy-Banoczy
Director, Global Strategic Partnerships & Development / Sr Advisor North America

12 November 2020
EARLY PROJECT DEVELOPMENT & RESILIENCE FINANCE

01 Urban Resilience
02 Early Project Development
03 Resilience Finance
Urban Resilience
Our Network

- 84 Chief Resilience Officers
- across 47 countries
- speaking 21 languages
- in cities ranging from 40,000 to 21 mil people
URBAN RESILIENCE

Is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.
City Resilience Framework

- 4 dimensions – define focus areas where cities need to take action.
- 12 drivers – reflect the actions cities can take to improve their resilience.
- 50 sub-drivers – provide more detail about the scope of the driver.
Are resilience frameworks useful?

- Create a consistent language
- Enable learning and knowledge sharing
Questions & Answers
THE CHALLENGE

“Until now, most activity tackling the global climate crisis has been focused on mitigating its effects by focusing on greenhouse gas emissions. Meanwhile, efforts to protect society from the growing frequency and severity of climate impacts are clearly lagging.” (Haley, WEF, 2019)

“There is already a significant gap between total projected infrastructure needs and trends in infrastructure investment.” (OECD, 2018)

But...

“Innovative financing doesn’t magically create new projects, let alone a whole pipeline of shovel-ready financeable projects”. (Hempen & Vajjhala, 2017)

Thus...

Investment in strategic and agile upstream project design is likely to dynamise the use of financing instruments and surface demand-driven innovation needs.
**Strategic approach**

<table>
<thead>
<tr>
<th>Know</th>
<th>Plan</th>
<th>Implement</th>
</tr>
</thead>
<tbody>
<tr>
<td>understanding of risk and commitments to disaster risk reduction and resilience</td>
<td>Capacities to plan for risk reduction and resilience</td>
<td>Capacities to implement resilience actions and reduce risks</td>
</tr>
</tbody>
</table>

**Assess**
- Robust understanding of risks
- Explore local factors of resilience

* Tools are very effective in this stage, e.g. Disaster Resilience Scorecard for Cities, R-Cities' Perceptions and Actions tool

**Identify and prioritise**
- Prioritisation tools
- Consultation tools
- Strategy creation

**Build project capacity**
- Key staff and technical support
- Local partnerships
- External partnerships

The two processes above are mutually dependent

**Improve and articulate projects**
- Description
- Rationale
- Output and outcomes

**Financial evaluation**
- Merits
- Challenges
- Structure

**Concept Note**
- Context / Background
- Programme / Project Overview
- Costs and financing
- Implementation arrangements
- Risks and mitigations

Quality and appropriateness of plans as well as capacity are key for the above
Strategic approach

Know
understanding of risk and commitments to disaster risk reduction and resilience

Plan
Capacities to plan for risk reduction and resilience

Implement
Capacities to implement resilience actions and reduce risks
Building project capacity: technical

Design and implementation can look like ‘two icebergs’ – we don’t see the whole size of the investments and efforts required.

For local governments it is urgent to understand the size of the investments.
Why is it worth investing time and effort in building alliances with partners and stakeholders?

- Create alignment and clarity between project team, key stakeholders and decision-makers about the potential (resilience) values of the opportunity.

- Identify and understand:
  - Where the value is obtained from (value generators, critical success factors)
  - What can impact value (barriers and opportunities, stakeholders, decision-making process)

- Create a decision-based path forward to develop the opportunity and maximise resilience value.
EARLY PROJECT DEVELOPMENT

“Innovative finance tools have one thing in common: each one requires projects that are already designed, quantified, and valued. This means that public entities have had to invest up-front in designing a project to generate savings that can be attributed to a specific entity.” (Hempen & Vajjhala, 2017)

Thus...
Project design needs to follow best practice frameworks, guidance, and use tools to minimise financial risks and dead-end work.
Articulate (& improve) projects

A clear and holistic description of the project, ideally in two-three pages.

This exercise clarifies the ‘what’, ‘how’ and ‘why’.

This is a great opportunity to integrate best practice by using relevant tools like

- **Review+plan tools**: RVR (R-Cities), Project Scan (R Cities)
- **Process tools**: SURF (RF-Wood), SuRe (GIB).

### Context

- General background
- How the context helps to explain the need for the project?
- Shocks and stresses
- Alignment to policy

### Impact & outcomes

- Potential impact (outcomes)
- Desired results (output)
- Transformational value (resilience, climate, co-benefits)
- Alignment with investment criteria

### Proposal

- What is the project?
- What are the main pieces or parts of this project?
- What is the project trying to achieve?
- At what stage is this project in?
- What are next steps?
- What is the estimate cost?
Articulate (& improve) projects

Buenos Aires (CABA), Comuna 8 / Papa Francisco
Articulate (& improve) projects

Santa Fe, Argentina
Estacion Belgrano
Based on initial project descriptions, a potential lender would look at three key areas: merits of the project, key challenges of the proposal, and potential structuring arrangements. Cities normally are asked to provide more information or evidence on key questions.

**Merits**
- The asset and the borrower’s experience and/or capacity
- Revenues
- Baseline credit worthiness based on geography/country
- Macro-economics
- Risks
- Governance of the asset

**Structuring**
- Asset ownership, operational arrangements
- Economics Capital costs, income, debt servicing

**Challenges**
- Size/scale
- User base
- Procurement
- Location / standards used
- Competition in the context

**Evidence**
- Revenue
- Externality capture potential
- Non financial benefits
- Policy
- Timeframes
Concept

Detailed project description.
Normally requires technical input of ‘re-feasibility’ studies, such as: design brief, demand studies, ground conditions
Four ‘moments’ to think recovery work

How COVID-19 affects project development

PHASES OF WORK

ASSESS

• How has the COVID-19 crisis changed your understanding of disparities in the city?
• What mechanisms do you have in place to understand them, especially new insights on root causes? (Data and systems)

LEARN

• How can cities measure and learn from resilience building efforts?

PLAN

• How do existing city (resilience) plans need to change? Which additional initiatives do they need to incorporate for resilient and equitable recovery?
• Which additional stakeholders need to be engaged to make recovery efforts more holistic/lasting?

OPTIMISE

• How can cities embed equity principles more continuously in recovery to address the root causes of existing disparity? (over time)

RECOVERY ASSESSMENT

PORTFOLIO DEFINITION

PROJECT ENHANCEMENT

RESILIENCE DEEP DIVES

GUIDING QUESTIONS (DALLEE, 2020)

TOOLKIT FOR A RESILIENT RECOVERY

Tools in development

Tools in pilot stage

Recovery Impact Assessment
Recovery Resilience Assessment
Recovery Needs Assessment
Recovery Action Plan
Scenario Planning
Co-lab
Project Scan
Resilience Opportunity Framing
Urban Resilience Screen
Sustainable Economy
Effective Provision of Critical Services
Reliable Mobility & Communications
Equity
Questions and Answers
Financing
Resilience

I
Initiatives vs Projects & Funding vs Financing

II
Internal City Financial Tools & Levers

III
External Funding & Financing Options

IV
Hyper Local Framing and Tools for Financing and Funding

V
Linking the City & the Entrepreneur
I. Initiatives vs Projects & Funding vs Financing
Initiatives vs Projects: Focusing Local Finance to Local Goals

**Initiative**

High level vision or call to action

**Project**

An individual or collaborative effort that is carefully planned to achieve a specific aim
Getting to "Project"  
Scale is Important

- Initiatives are typically composed of multiple projects that together achieve the intended outcome.
- Certain initiatives can be the same as a project.
- Initiatives and their project parts can often be funded internally or by outside grants, particularly in the feasibility and development stage.
- Financiers are focused on projects – it is much more challenging and sometimes impossible to fund an initiative.
Example | Resilience Strategy City Waste and Circularity Goal

City Shocks & Stresses:

**Shocks**
- Disease Outbreak
  - Extreme Heat
- Infrastructure Failure
  - Severe Storms
  - Flooding
  - Storm Surge

**Stresses**
- Aging Infrastructure
- Climate Change
- Economic Inequality
- Environmental Degradation
- Lack of Affordable Housing
- Undiversified Economy

**EXAMPLE INITIATIVE: 75% Circularity in Waste System by 2035**

**Example Project A**
- Plastics and Solid Waste Collection System
- Public–private Partnership (P3)

**Example Project B**
- Food Waste Collection Network
  - (local youth employment and composting sales for gardens)
- Hybrid or NGO with grant start up funding

**Example Project C**
- New City and Corporate Container Agreement
- Conversations, legislative changes and corporate engagement
Santa Fe Shocks & Stresses:

**Shocks**
- Rainfall flooding & River flooding
- Hydric infrastructure failure
- Storms with strong winds
- Hazardous materials accidents
- Economic crisis
- Disease outbreaks

**Stresses**
- Endemic crime and violence
- Poverty / Social inequality
- Poor comprehensive waste management
- Location of families in high-risk flood zones
- Lack of affordable housing
- High unemployment
- Poor service infrastructure
- Inflation

---

**EXAMPLE INITIATIVE: Objective D** – Reduce the negative impact of urban solid waste on the environment by incorporating new technologies and management processes.

“In 5 years, the city’s households will produce a third of the current amount of household waste; and the recovery and recycling rate will double. In 10 years, Greater Santa Fe will count on an integrated urban solid waste management plan.”

---

**Example Project A**

Green and Circular Economy

Roadmap integrated with USW plan for city

**Example Project B**

Pilot Zone for a New USW Integrated Management

Study, testing, awareness/education campaign

**Example Project C**

Informal Waste Collectors Inclusion Program

Program expansion, partnerships
Example Surat, India, Strategy Pillar 5: Ecosystem & Environmental Regulation

Surat Shocks & Stresses:

**Shocks**
- Rainfall flooding
- River flooding
- Severe storms
- Storm surge
- Financial/economic crisis

**Stresses**
- Undiversified economy
- Water insecurity
- Inadequate public transportation systems
- Inadequate sanitation systems
- Lack of social cohesion
- Inadequate health systems/facilities

EXAMPLE INITIATIVE: Goal 5.4 – Innovative Urbanism Tactics for Balanced Ecosystem – Initiative: Decentralization of Waste Management (5.4.4)

<table>
<thead>
<tr>
<th>Example Project A</th>
<th>Example Project B</th>
<th>Example Project C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litter and Segregation Awareness Campaigns</td>
<td>Cultural and Festival Initiatives</td>
<td>Public Building Pilot Project for SWM</td>
</tr>
</tbody>
</table>

**Refinement:**
What is the Difference Between Funding and Financing?

**Funding**
- Money provided to support a project
- Funding is used to pay back (and/or catalyze and bridge) financing
- For example, taxpayers commit tax revenues to fund the development of an area
- Grant or forgivable money to catalyze, complete or leverage other money for financing

**Financing**
- The process of acquiring funds for a project from a lender that are returned, typically with a rate of return
- ‘Funding’ can be leveraged for financing
- All financing must be paid back by either with City funds or other funds (“there’s no such thing as a free lunch”)
- For example, the tax revenue stream was committed to secure a $500 million financing at a 5% interest rate
Examples of Funding and Financing

**Funding**

Money provided to support a project, sometimes free of charge

**Examples**

- Mexican government program provides grants to support homeowners with seismic retrofits
- Voters in Seattle approved a property tax levy for a period of 7 years to support educational achievement

**Financing**

Process of acquiring funds for a project that are returned to the lender, typically with a return

**Examples**

- Bank of America provides a city in India with a 10 year loan at a 7% interest rate
- The city issues a social impact bond to pay for the services of a new NGO program that reduces recidivism
### Other Examples of Funding and Financing

#### Example Funding Sources ("Levers")

- Existing or New Budget Revenues
  - Taxes: Property, Business, Sales, Income, etc.
  - Tolls, User Charges, and Fees
  - Donations, Grants, Subsidies, Corporate CSR other other supports (might be in-kind)
  - Proceeds from Asset Sales
  - Forgoing Future Money
- Existing or New Budget Expenses
  - Savings
- Physical Assets
- Reserves

#### Example Financing Structures ("Products")

- Bonds
  - Municipal Bonds
  - Impact Bonds
  - Green Bonds
  - Tax-increment backed Bonds
- Mission-related Investment (MRI) / Program-related Investment (PRI)
- Impact investors, regional/global development, institutional investors
- Leases
- Credit Guarantees
- Pay for Performance Contracts
- Pay for Service Contracts
- Equity Commitments
# How Funding and Financing Can Work Together

<table>
<thead>
<tr>
<th>Borrowers like ...</th>
<th>Can leverage funds such as...</th>
<th>To access finance which can include...</th>
<th>With the support of a financial institution...</th>
</tr>
</thead>
<tbody>
<tr>
<td>- City Government</td>
<td>- Existing or New Budget Revenues</td>
<td>- Mission-related Investment (MRI) / Program-related Investment (PRI)</td>
<td>- Wells Fargo</td>
</tr>
<tr>
<td>- National Government</td>
<td>- Taxes: Property, Business, Sales, Income, etc.</td>
<td>- Impact investors, regional/global development, institutional investors</td>
<td>- Bank of America</td>
</tr>
<tr>
<td>- Regional Government</td>
<td>- Tolls, User Charges, and Fees</td>
<td>- Equity</td>
<td>- Goldman Sachs</td>
</tr>
<tr>
<td>- State Government</td>
<td>- Donations, Grants, Subsidies, Corporate CSR other other supports (might be in-kind)</td>
<td>- Guarantees</td>
<td>- Local Banks/FI</td>
</tr>
<tr>
<td>- Tribal Government</td>
<td>- Proceeds from Asset Sales</td>
<td>- Municipals Bonds</td>
<td>- Development Banks</td>
</tr>
<tr>
<td>- Development Aid Agency</td>
<td>- Forgoing Future Money</td>
<td>- Green Bonds</td>
<td>- (Impact Investors)</td>
</tr>
<tr>
<td>- Inter-governmental Organization</td>
<td>- Existing or New Budget Expenses</td>
<td>- Tax-Increment Financing (TIF)-backed Bonds</td>
<td></td>
</tr>
<tr>
<td>- Non-governmental Organization / Non-Profit / Charity (rare philanthropy)</td>
<td>- Savings</td>
<td>- Leases</td>
<td></td>
</tr>
<tr>
<td>- Private Sector Corporation</td>
<td>- Physical Assets</td>
<td>- Credit Guarantees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Reserves</td>
<td>- Pay for Performance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pay for Service</td>
<td></td>
</tr>
</tbody>
</table>

Financiers are most excited about dedicated funding streams.
II. Internal City Financial Tools and Levers
## City Budgets

During this module, we will address components of your local municipal budget and what that can mean for various project types and size, while also prompting you to begin investigating on your own the following questions / topics:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Budget Components</strong></td>
<td>What are the components of your budget?</td>
</tr>
<tr>
<td><strong>Expense / Capital Budget</strong></td>
<td>What is the size of your Expense Budget? What is the size of your Capital Budget? Do you have any other budget(s)?</td>
</tr>
<tr>
<td><strong>Revenue Budget</strong></td>
<td>Where do your revenues come from? How does your municipality collect those revenues? Who pays this money?</td>
</tr>
<tr>
<td><strong>Decision Process Around Allocating Budgets</strong></td>
<td>What is your municipality’s decision process around allocating budgets? Who makes the decisions?</td>
</tr>
<tr>
<td><strong>Fiscal Year</strong></td>
<td>When does your Fiscal Year begin and end?</td>
</tr>
<tr>
<td><strong>Key Actors</strong></td>
<td>Who are the key players in your budget? Do you have a relationship with them?</td>
</tr>
<tr>
<td><strong>Financial Plan</strong></td>
<td>How many years does your budget cover (Financial Plan)?</td>
</tr>
<tr>
<td><strong>Other Gov Entities &amp; Budgets</strong></td>
<td>Are there other government entities in and around your municipality which spend money (i.e., energy, transit, water, etc.)? Do you know the size of their budgets? When are their budgets determined?</td>
</tr>
</tbody>
</table>
# Budget Components

**What are the components of your municipality’s budget?**

For example, the following outlines the components of a typical budget (large city):

<table>
<thead>
<tr>
<th>Budget Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense Budget</td>
<td>Funds current city government services, including government employee salaries, pensions, debt service, and operating expenses (rent and utilities, printing services)</td>
</tr>
<tr>
<td>Contract Budget</td>
<td>Subset of items in Expense Budget that are related to agency contractual services. Personal Services vs. Other than Personal Services</td>
</tr>
<tr>
<td>Revenue Budget</td>
<td>Contains estimate of how much money the city government will take in during the fiscal year (licenses, permits, rental income, general property taxes)</td>
</tr>
<tr>
<td>Financial Plan</td>
<td>Accompanies the city budget and provides multiyear perspective on city spending and revenues</td>
</tr>
<tr>
<td>Capital Budget</td>
<td>Contains funding for physical infrastructure used in support of government operations or for general public use (libraries, bridges, and parks)</td>
</tr>
<tr>
<td>Capital Program</td>
<td>Provides multiyear plan detailing the funds needed for projects already underway or new projects initiated in the Capital Budget</td>
</tr>
<tr>
<td>10-year Strategy</td>
<td>Details the city’s plan for development of capital facilities for upcoming decade</td>
</tr>
</tbody>
</table>
Decision Process

- What is your City’s decision process around allocating budgets? Who makes the decisions?
- When does your City’s Fiscal Year begin and end?
- How many years does your City budget for (financial plan)?

Key Actors

- Who are the key players in your municipality’s budget, and do you have a relationship with them?

| Executive | Mayor  
| Deputy Mayor  
| Metropolitan Mayor/Manager  
| City Manager  
| Governor  
| Finance/Budget Office | CFO/finance officer  
| Cabinet Member  
| Budget Director  
| Deputy Director  
| Budget Analyst  
| Agency/Department | Agency/Department Head/Commissioner  
| Agency/Department – Commissioner for Budget  
| Legislative | City or Metropolitan Council Finance  
| Non-Governmental/Hybrid | Interest Groups, State, Metropolitan, Regional |
Other Government Entities and Budgets

Are there other government entities in your municipality that spend money (i.e., energy, transit, water)? Do you know the size of their budgets? When are their budgets determined? What kinds of specific projects or themes might they support? Some NYC examples:
III. External Funding and Financing Options
External Products and Uses

There are many ways to use the local municipal funding “levers” we touched on to also harness external financing for larger projects. And they can be used in many combinations depending on the scale, timing and city resources in play.

**Debt** involves borrowing a fixed sum from a lender, which is then paid back by the borrower with interest.

1. Municipal Bonds
2. Community Development Finance
3. Commercial Loans

**Equity** involves providing capital in exchange for ownership. Investors look at the returns of the investment and are prepared to take the risk if the upside potential is attractive (sponsors, equity funds, institutional investors).

**Public–Private Partnership (PPPs or P3s)** is a contractual agreement between a public agency and a private sector entity that outlines the resources and risk commitments between two parties in delivering an asset and/or service(s) for the use of the general public.
What’s the Difference Between Debt and Equity?

**Borrower**
- Jorge wants to buy a home.
- Collateral
  - Held in case loan payments are not made

**Equity**
- He makes a down payment of ¼ of the cost of home.
  - The value of Jorge’s down payment (share of ownership)
  - High upside and downside for Jorge (his return can change based on market conditions)

**Debt**
- He borrows remainder from the bank (lender).
  - Established rate of return to lender (fixed or floating) with interest
A Quick “Resilience” Note About PPPs/P3s

**Resilient PPPs**

Building resilience into PPPs for projects (not limited to infrastructure) for greater R value

**Examples:**
- Parking garage used for storm water retention, gray water, backup
- Elevation of road to serve as dyke/dam
- Community facility designed as hurricane shelter, cooling center, with back up emergency features

**How:**
- Resilience in planning process
- Resilience in minimum requirements
- Resilience in evaluation criteria

**PPPs for Resilience**

PPPs for dedicated resilience projects

**Examples:**
- Storm water PPP in Prince George’s County in Maryland (with socio-economic contractor targets and green space use)
- Locks and dams PPPs in Belgium and the Netherlands

- How can we make PPPs better for overall resilience dividends/increasing R value?
- How has COVID-19 potentially changed the thinking around PPPs any of your work? How could they potentially be used more effectively? Might there be greater demand?
A Word About Credit Ratings

- Analyze an issuer’s ability to meet its debt service
- Each credit rating agency evaluates credit risk based on its own standards and applies its own rating methodologies
- There are three major rating agencies for municipal bonds: Moody’s Investors Service, S&P Global (formerly Standard & Poor’s) and Fitch Ratings. Of the three rating agencies, S&P Global and Moody’s rate over 80% of all municipal and corporate bonds.
- Depending on your municipality location and the type of project, there may be the need to look at state/province, national ratings (presently ~11 countries have AAA ratings).

Bond Ratings:
- Highest (AAA/Aaa)
- High (AA/Aa)
- Above Average (A)
- Medium (BBB/Baa)
- Anything below this is not considered Investment Grade (‘Junk Bonds’)

What Does a Rating Mean to My City?
- Ratings affect cost of borrowing.
- The higher the rating, the lower the cost of borrowing – and there is a resilience strategy story here!
IV. Hyper Local Framing and Tools for Financing and Funding
The Resilient Community Development Financing (ResCDF) Initiative

Vision: We envision a world in which communities are socially, economically and environmentally safe and healthy with the capacity to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience and where all people, especially those with low incomes, are able to reach their full potential.

Mission of Resilience Finance: Build the capacity of low-income, low-wealth, and other underserved people and communities to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience by ensuring access to affordable, responsible financial products and services that embrace resilience planning and implementation.
Resilient Community Development Financing Initiative

Objective

Achieve widespread adoption of resilience finance by the CDFI industry, impact investors, foundations, and other supporting stakeholders, including the integration of resilience principles, resilience screen, and/or other tools into planning, business development services, lending, and organizational practices and policies, while recognizing our role in service to the wellbeing of the earth and global citizenry.

Working definition of “resilient community development” includes both:

• resilience: the capacity of individuals, communities, institutions, businesses, and systems to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience, and

• community development: the capacity to provide social, economic, and environmental “dividends” to communities beyond the basic functions of a given project.
The Resilience Principles (Draft)  
Principle One

Ensure a resilience-based process in all endeavors. A resilience-based process requires that: (1) affected/influenced/leading stakeholders are engaged individually, organizationally, or as a community and (2) the mix of shocks and stresses that the project, program, or service is intended to solve or could face are thoroughly investigated. This includes social, environmental, physical elements of the community at hand, while focusing on equitable, holistic resilience. **Keywords: resilience process, stakeholders, shocks, stresses**
The Resilience Principles (Draft)

Principle Two

Strive for reliable performance and intended outcomes in both routine and extraordinary situations under all reasonably foreseeable conditions over the delivery lifespan of the project, program, or service. Once foreseeable shocks and on-going stresses at the local level have been identified, the project, program or service shall be evaluated through: (1) examination of forecasting/lifecycle data, (2) consideration of project stages (construction, start up, etc.), sustainability, standards, impacts (social and environmental), etc.; (3) financial stress testing, (4) review of operations and management, including emergency operations for the project, where possible and applicable.

Further, the project, program, or service will be structured to avoid, minimize, mitigate, and recover from all foreseeable risks and potential cascading events. Performance and outcomes must exhibit equity and economic empowerment while beyond risks.”

Keywords: project, performance, outcomes, risk avoidance
The Resilience Principles (Draft)

Principle Three

Create positive “co-benefits” and minimizing short and long-term negative impacts by recognizing the systemic interdependencies that exist (in all communities/settings). Though designed first and foremost to achieve its primary objectives for its defined client/target market, the project, program, or service will be evaluated against specific local, regional, national, and/or global objectives for vulnerable populations, equity, climate mitigation and disaster risk reduction.

The project, program or service will be structured to positively affect the community and greater system and to boost positive impacts and to avoid or lessen negative impacts and unintended consequences. **Keywords: co-benefits, positive impacts, interdependencies**
Next Steps 2020–21

1. Complete first set of baseline questions and/or checklists for each principle
2. Finalize a matrix for target audiences, applications, use cases for the principles and tools
3. Begin testing the principles and baseline questions, checklists and tools with cohort of financial institutions on live “resilience deals”
4. Collect data and case studies for distribution and larger awareness and adoption campaign of the principles and related tools
V. Linking the City & the Entrepreneur
Funding/Financing the Entrepreneur

Resilience Ecosystem

Entrepreneurship Ecosystem

Market Systems
(i.e. investors & other capital providers)

Policies, Regulation & Enforcement
(i.e. local & national government)

Waste Management & Recycling
(i.e. formal and informal systems)

Innovation & Entrepreneurship
(i.e. local ecosystem)

LEADERSHIP & STRATEGY

RESILIENT CITIES NETWORK

HEALTH & WELL-BEING

ECONOMY & SOCIETY

INFRASTRUCTURE & ENVIRONMENT

Foster long-term & integrated planning
Meet basic needs
Support intelligent & informed governance
Promote inclusive & engaged communities
Ensure economic prosperity
Ensure social stability & justice
Maintain and enhance natural & man-made assets
Provide reliable transportation & mobility
Ensure access to critical services
Empower a broad range of stakeholders
Provide robust environmental stewardship

−

−

−
Thank you
Gracias
شكراً