







### **About the Lab**



The UCL City Leadership Laboratory brings together world-class academic

scholarship, public authorities, international organisations, the private sector and local SMEs to create a unique environment for urban experimentation, research, teaching and – most importantly – action.

The Lab builds on three years of projects, grants and activities of the City Leadership Initiative, a joint effort of the World Bank Group and United Nations Human Settlements Programme (UN-Habitat), with funding from the UK Government's Economic and Social Research (ESRC) and Engineering and Physical Sciences (EPSRC) Research Councils. While the aim of the Lab is to tackle globally relevant city challenges, the projects undertaken are *practically oriented* and often *locally focused*.

The Lab sits within UCL's policy-focused Department of Science, Technology, Engineering and Public Policy (UCL STEaPP) and has links across UCL's network of urban research and practice.

### **Project Overview**

Life in cities and regions is built upon, and can only prosper in the future, with well-functioning infrastructures. Yet can local governments control, shape and orient these 'vital systems' in ways their citizens require them to? The purpose of this research is to better understand the 'governance grip' on the integrated oversight and management of infrastructure in cities.

The value of the project is two-fold: local government can benefit from understanding the 'fragility' and 'resilience' of critical infrastructure networks to ensure informed local governance. This can contribute to constructively advancing overall infrastructure system performance and the associated benefits, as well as add to the working reservoir of public and civic 'good' in our cities and regions.

A 'nexus' (integrated urban system) viewpoint brings attention onto how robust systems are in a particular location and to what extent they are adequately understood and transparent for improving integrated management, maintenance and investment decision-making. Nexus is here understood, in line with the UK's Engineering and Physical Research Council (EPSRC), as the confluence of water, energy, food and waste systems that underpin our cities.

Understanding the nature and governance of current 'nexus' systems and testing the direction required for improved oversight, will help reveal 'network interdependences' that can highlight governance challenges, risks and opportunities.

While doing better can potentially help inform priorities to mitigate short-run problems (crisis and emergency management), our interest is in the strategic medium to long-term city-regional level role of public governance. An emphasis on assessing the 'governability grip' through the current and emerging institutional architecture brings into focus the 'direction of travel' for infrastructure system performance improvements that can lead to integrated and resilient outcomes.

### Aim

To assess the governability of critical infrastructure resilience and fragility and provide insights into future directions for system coordination improvements.

The project takes place in three general steps: 1) assessment method development 'Governability Grip' method); 2) preliminary testing; and 3) internationalisation and wide application. Having to date almost completed phase 1, the Lab team is now concentrating on preliminary testing in selected UK city-regional contexts in light of the upcoming May 2017 local government elections. This will offer, for select city-regions (proposed Combined Authorities of West Midlands, Sheffield, Greater Manchester and Liverpool, as well as Greater London) a view of the state of their fundamental 'nexus' resilience or fragility, with an assessment of their 'grip' on the issues, and new insights for advancing 'governability' and coordination. The project pursues an understanding the nature of accountability as it stands, and look to test what it might need to become for improved oversight and management. In collaboration with global Lab partners, the study will then be translated internationally to other countries and regions.

# **Project Method**

### Prior Research

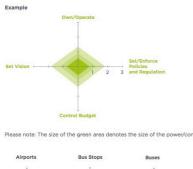
In 2015-16 the Lab has collaborated with the C40 Climate Leadership Group and Arup to



develop a systematic assessment of the powers that C40 Cities have to tackle climate change. This analysis, published in the report Powering Climate Action, identified governance typologies of cities and categorised powers over a city's assets and functions

according to four power dimensions: own or operate; set or enforce policy/regulations; control budget; set visions. This research is relied upon as governance and power are "inextricably linked", with fundamental elements of governance concerned with powers.

The "Governability Grip" assessment method is based on this analysis and further research by the Lab in infrastructure, urban nexus and policymaking in cities.



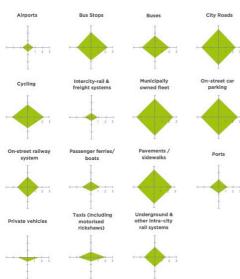


Fig.1: the assessment method deployed in *Powering Climate Action* across a variety of sectors.

# Stage 1: Assessment

The first stage of the methodology sees an assessment framework used to test the current situation with the select case areas. The following eight elements will be explored to assess governability of the critical infrastructure provisions of water, energy, waste and food.



- **1. Vision –** Setting and developing long-term planning
- **2. Policy –** Shaping and defining strategic & regulatory arrangements
- **3. Budget –** Funding arrangements & budget control
- **4. Ownership –** Asset & system ownership arrangements
- Accountability Citizen access to institutional mechanisms, processes & standards
- **6. Legitimacy –** Nature and establishment of decision-making
- **7. Connectivity –** Functional connections between infrastructures
- 8. **Interdependencies –** Governance & management connectivity

Each of these governability dimensions are scored across a 4-point scale defining the degree of, for instance, connectivity or capacity to set visions. These are then applied across the four sectors of the nexus of water, energy, food and waste. So, for instance, on vision setting, a city could score: 0 ("Has no influence over the vision), 1 (can influence the vision), 2 (contributes to the setting of the vision), or 3 (sole control over the setting of the vision).



Fig.2: sample of summary governability gap assessment.

# Stage 2: Engagement

The second stage will focus on testing the 'governability grip' of local government on these key infrastructures. It will focus on core questions relating to the current situation and barriers/opportunities for development. Our sampling (interview and survey field engagement) will seek responses from each case area where we capture four viewpoints, namely:

- (i) the **emergency manager** in local government as the entry point assuming a system-level knowledge of key infrastructures, interdependencies and integration issues.
- (ii) the **strategic planner** in local government assuming a longer-view role with oversight on development and investment issues for setting directions for progress.
- (iii) the 'councillor' with local government responsibilities and oversight (partial at least) this actor represents a political perspective of 'governability grip' and a view of what needs to be done or could be done.
- (iv) the *infrastructure expert* by provision area a key person from each of the provisions (water, energy, waste, food) based within a utility or company, or a key consulting expert with relevant knowledge.

# Stage 3: Analysis

Bringing together the assessment and engagement results, the third stage will generate findings of interest to a wide range of stakeholders. While adding local value in the regions where practice is considered, the findings will also be of potential interest in national government, city networks, investment banks and multilateral actors.

In the pilot UK testing, this will offer important insight not just to local governments (and their networks) but also to national departments (e.g. CLG and BEIS on communities and local government and local economic development respectively), the National Infrastructure Commission (NIC) and other interested parties to help inform infrastructure strategies, investment and devolution responsibilities.

As part of the pilot testing, project outputs include:

- A publically available Summary brief and full report containing the findings and case studies for all interested parties.
- A Mayoral Advisory Brief targeting cities where UK Mayoral elections are held in 2017, with releases by the *Centre for Cities*, linking with post-election briefing undertaken by the Centre.
- Findings are also likely to be used in academic outlets and publications.

# **Project funding and collaboration**

The project is developed by the UCL City Leadership Lab at UCL STEaPP with support from the UK Engineering and Physical Sciences Research Council as part of the £1.4 million "WEFWEBs" Project ((EP/N005600/1) with the University of Glasgow, Imperial College London, University of Exeter, University of Oxford, Newcastle University, University of Cambridge, Rothamsted Research and the Lab at UCL.

The WEFWEBs project examines the data and evidence around the water, energy and food systems (including social, economic, political, institutional and environmental components) and their interactions and dependencies within the local, regional and national scales.

The application of the "Governability Grip" methodology has also been supported by an EPSRC Impact Accelerator Award (EP/K503745/1) provided to the Lab by the UCL Office of the Vice-Provost (Enterprise).

# Connectivity Set Vision Set Policy Connectivity Legitimacy Accountability Water Energy Food Waste

Fig.3: sample of governability gap assessment for a city.

# **Project team**

Michele Acuto, Director of the UCL City Leadership Lab and Professor of Urban Theory, UCL STEaPP;

<u>Paul Honeybone</u>, Research Associate in the UCL City Leadership Lab and Doctoral Researcher, UCL STEaPP/CEGE;

<u>Katrien Steenmans</u>, Research Associate in the UCL City Leadership Lab and Doctoral Researcher, University of Surrey;

Jenny McArthur, Research Associate in the UCL City Leadership Lab and Doctoral Researcher, UCL STEaPP/CEGE;

### Learn more and contact us

Learn more about the Lab at:

### www.cityleadership.net

and on twitter at @CityLeadersLab