



LEADERSHIP INITIATIVE

Smarter, Safer and Sustainable Cities

Complementary or competing agendas?



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**City Leadership Initiative project brief for the
UN-Habitat Global Network of Safer Cities,
Technical Working Group II:**

Safety and Smart Cities
September 2015



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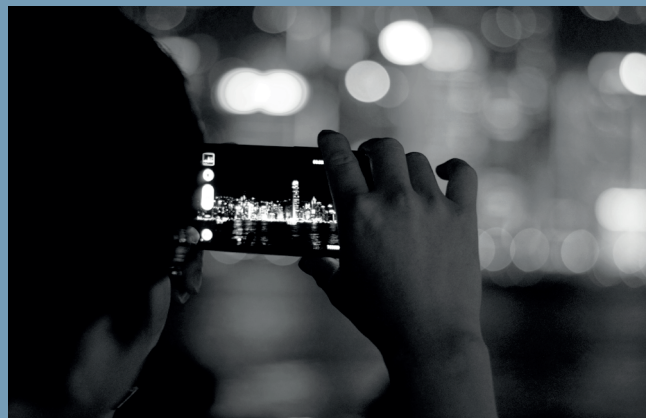


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Executive summary

What are the friction and opportunities in the interplay between 'smart', 'safe' and 'sustainable' city agendas?



'Smarter', 'safer' and more 'sustainable' urban developments are often-repeated goals of city policy and planning, but what do these agendas entail, and does achieving one mean forgoing another? The Safer, Smarter and Sustainable Cities project aims to investigate the interplay between these three agendas to highlight practical steps towards integrating 'Safer' and 'Smarter' urban development, while not forgetting the critical needs for urban sustainability and cross-sectoral collaboration. The project investigates the 'smarter', 'safer' and more 'sustainable' goals and agendas cities are prioritising, strategies they are putting in place to achieve these goals, and practical applied solutions.

Sustainable-smart-safe "win-win-wins" are possible

Advice > encourage a reflexive review the goals and delivery mechanisms of these agendas

Previous CLI research has suggested that strategic planning is a near-ubiquitous technique for all cities today. More in-depth research on the current project has shown that very few cities have specific strategies (not just guidelines) for safety, whilst 'smart' seems to be growingly popular, and not a single city failed to plan for sustainability. Integrating safety is possible, and necessary, but does not need to be a separate process. The degree of alignment between strategies offers a key determinant of policymaking, and our data shows that cities tend to have separate strategies for 'smart', 'safe' and 'sustainable' agendas, while the overlaps between the three are obvious.

Safety is not just a technical matter and requires strategic investments

Advice > encourage a 'safer' focus or element in 'smart' and 'sustainable' agendas

Safety is often dealt with in a technical rather than 'visionary' and strategic way. We find that maturity of an agenda is a key factor in the influence of an agenda into urban policy. We find the number of strategic urban plans (SUPs) that have sustainability at their core is 45% as opposed to safe at 20% and smart at 15%. 'Sustainability' tends to be a broad umbrella concept and strategy. "Safety" is less developed as a visionary concept and more of a technical addendum, losing important opportunities for an effective 'safer cities' agenda, especially because marketing remains a dominant determinant of policy implementation.

Variety is important, but integration is also imperative

Advice > encourage the exchange of information and enhance the establishment of a common ground (guidelines) for city-to-city cooperation

We have found cities tend to separate the three goals of 'safety', 'smartness' and sustainability in their strategy, considering each concept as distinct. 'Sustainability', the oldest concept, is most well accepted while the newer concepts of 'safe' and especially 'smart' are still being debated over even by cities which have dedicated plans for these issues. In particular, we find that 'smart' has two camps - either 'digital focused' or 'human focused'.

'Sustainability' tends to be a broad umbrella concept and strategy and 'safety' is less developed as a visionary concept. Likewise, these concepts tend to acquire different meanings in different cities. While determining the confines of each concept is important, CLI also suggests that exploring how these concepts overlap and align will be important in future policymaking and research.

Strategy needs institutional commitment

Advice > establish clear mechanisms for policy collaboration and implementation in GNSC, and between GNSC and other networks

Cities with visionary plans are more likely to explore novel concepts regarding safety and smartness on the long term, as well as being more likely to have long term sustainability plans. Sustainable agendas have the highest percentage of visionary approaches (79%), while 'safety' remains the most operational and needs to become more central in the global aspirations of cities. Yet these visions and agendas need to turn into practice. A means to test whether agendas go beyond marketing into policy impact is to see whether the city has governance structures that enable achieving these aims: some cities have

developed specific institutional mechanisms to deliver their agenda. 'Smart' and 'safe' need to meet institutionally too, not just on paper or words.

Networking is key

Advice > encourage a strategic integration approach to urban policy and city diplomacy, connect GNSC to other networks

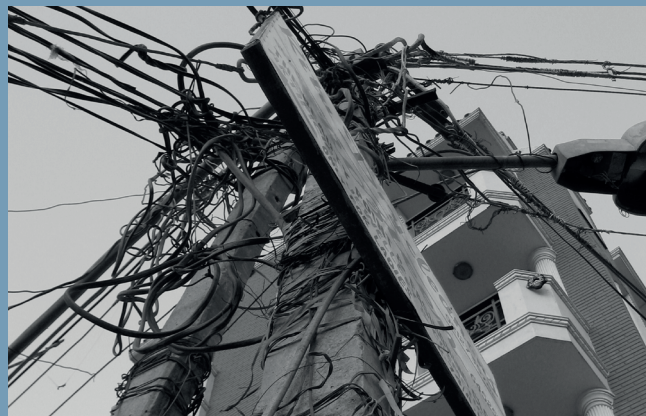
Networks joining cities on specific issues can lend direction to policy initiatives, ensure continuity beyond electoral cycles and mobilize funding and ideas. Yet networking possibilities for cities can be overwhelming and unsustainable. In line with other work by CLI with WHO, it is becoming critical for cities to be strategic about what specific initiatives they should network for. Applied and policy-specific initiatives are key to maintain GNSC networking effective.



Radically different cities still have similar priorities.

I - Overview

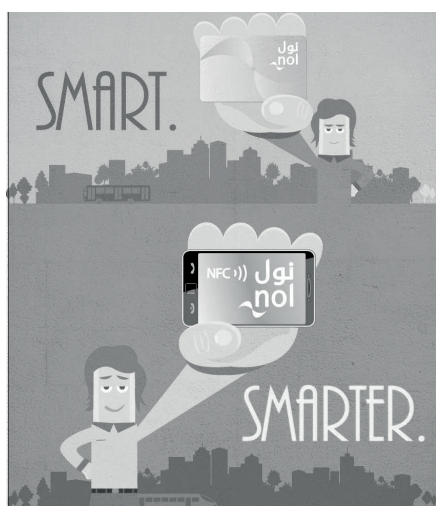
Can the 'smart', 'safe' and 'sustainable' cities agendas work together to deliver a better urban future?



Background

The Safer, Smarter and Sustainable Cities project capitalizes on the City Leadership Initiative (CLI), a research partnership of University College London (UCL STEaPP, GCSC, Public Policy) with the World Bank Group and UN-Habitat based at UCL STEaPP and supported by the ESRC, and it is developed jointly by CLI, the United Nations Global Network of Safer Cities (GNSC) and SAP Software & Solutions.

The project involves a study aimed at identifying trends and commonalities in a selected pool of major international cities drawn from major city networks. In particular, the research focuses on highlighting touch points, development opportunities and conflicts/barriers between the "smart", "safer" and "sustainable" city agendas that are now commonly discussed in the Habitat III process and applied in cities the world over. The study offers a chance for cross-disciplinary and academia-policy collaborations, as well as for direct industry-city networks cooperation.



Support

The project is developed by the City Leadership Initiative with support from the Grand Challenge of Sustainable Cities at University College London. The project is informing activities by UN Global Network of Safer Cities' technical working group (TWG) II on "Safety and Smart Cities" within the frame of the UN-Habitat Safer Cities programme and in collaboration with the UN-Habitat UNI Hub on Safer Cities. The TWG is jointly lead by Cli and SAP Software Solutions, with participation from Sheffield Hallam University, Thales, Huawei, the European Forum on Urban Security (EFUS), CITYNET and a variety of experts on safety and smart urban developments. This working paper represents the initial scoping analysis for the TWG and Safer Cities Hub, and is meant to inform further policy debates and research initiatives.

Purpose

Habitat III, the 2016 United Nations Conference on Housing and Sustainable Urban Development is seeking to implement a 'New Urban Agenda' that meets the current need for sound city leadership practice. Its potential is undeniable. In an increasingly urbanized world, city leaders have become important drivers of change. Three agendas have particular resonance and are gaining momentum in the lead up to the conferences; 'safe', 'smart', and 'sustainable' city agendas.

Despite their popularity there is no consensus around the effectiveness of these three agendas, or whether they have complimentary or competing aims and practical requirements. While there is arguably no recipe for success it is important to gain better understanding of their stra-

'Smart' transpor technology, Dubai



Methodology

The Safer, Smarter and Sustainable Cities project was devised as a scoping inquiry into the overlap and frictions of "Safer," "Smart" and "Sustainable" cities agendas now so common in urban policy and practice. In order to offer a snapshot of international trends and applied contexts, the project relies on a set of case studies from both developing and developed countries, and focuses on specific 'indicators' of safe, smart and sustainable urban policy, across two different foci ('levels of analysis') at city and project-specific level. The Safer, Smarter and Sustainable Cities project also consulted a varied group of professionals working on related issues and with knowledge of the urban policy dimensions of these three agendas.

In summary:

- 20 City Case Studies: Selection based on geographic spread, size, and the existence of a Strategic Urban Plan (SUP)
- 6 Indicators: Stakeholders, ownership, targets/metrics, approach, form and timescale
- 2 Levels of Analysis: Governance level, project Level
- Data collection method: Desk review (each cities' respective strategic plans), complemented with Interviews with city officials
- Workshop: a roundtable discussion was held in London in July to discuss and critique initial findings as well as bring in complimentary views and experiences.

II - Initial findings

What are the core touch-points shaping an effective integration of 'safe', 'smart' and 'sustainable' innovation?



Form

A review of the latest available official strategic documents of 19 cities in three selected areas – Safe, Smart and Sustainable – shows that the agendas vary widely in their form across cities. We distinguish here between dedicated strategies and embedded strategies. When speaking of 'dedicated strategies', we refer to strategic documents that have explicitly and exclusively 'safety', 'smartness' or 'sustainability' (SSS) as one of its goals. 'Embedded strategies' reflect a different kind of strategic orientation. We focus on strategies that focus on related topics and explicitly include either a 'smart', 'safe' or 'sustainable' element (i.e. safe transport, smart waterfront redevelopment, sustainable housing).

Overview by agenda

The analysis of the sample reveals trends for each agenda. These trends point out the limits to specific safer city emphasis, but also the popularity of smart and sustainable developments, making these policy directions critical gateways for an effective implementation of safer agendas.

In terms of *safe cities*, less than half of the cities reviewed for the project have a dedicated safe city strategy (47%). This is slightly more than the number of embedded safety strategies (37%). 16% don't have a safety strategy at all. Out of the three cities without a strategy, two have actively de-

cided not to include safety within the cities' vision – Vienna and Singapore. This is in spite of (or maybe because) these cities have a long term, extensive and detailed vision for the city. Addis Ababa on the other hand has a master plan that does not take into account urban safety, reflecting more traditional urban development practice. Symptomatically, amongst the selected cities, only Nairobi's Strategic Urban Plan (SUP) has safety at its core.

In terms of *smart cities*, the majority of selected cities (74%) have a dedicated smart city strategy. Moreover, 11% have an embedded strategy and 16% don't have a strategy at all. A good example of this is Vienna's Strategic Vision for the coming decades, which has 'Smart' as its leitmotif. Yet, smart is not necessarily a purview of technology and technological development. In Vienna, 'Smart' has a distinct 'human' focus, as opposed to more common technological innovation foci existent in other plans.

Lastly, in terms of *sustainable cities*, all cities reviewed have either a dedicated sustainability strategy (68%) or an embedded sustainability strategy (32%): "sustainability" remains the bedrock of much strategic urban planning worldwide, and this is testified by the fact that more than half of the sustainability strategies (58%) are also the city's SUP.

Discussions with professionals highlighted how a wide range of *city labels* have emerged in recent years (i.e. smart, resilient, eco, knowledge, creative, happy...), many of which seem to be promoting sustainable outcomes.

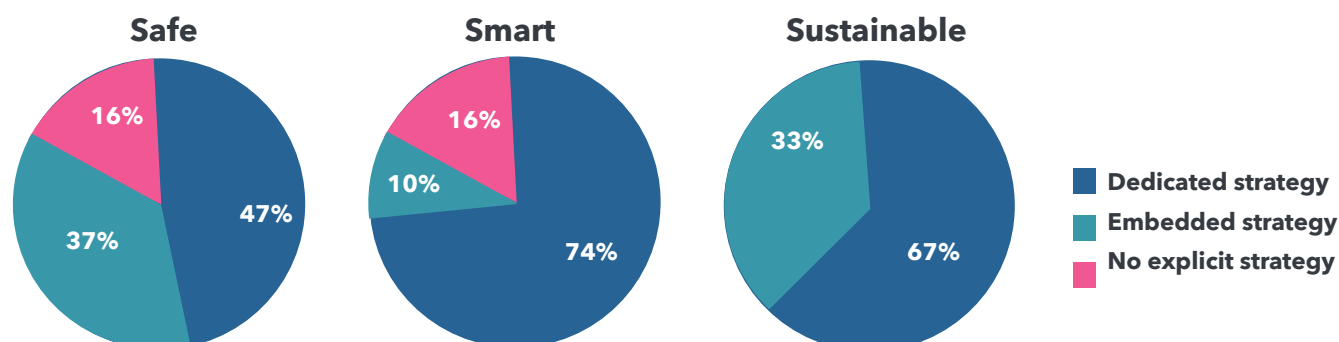


Figure 1. Form of strategies by agenda

Yet the interpretation of each label varies across different cities, this is a challenge when comparing actions or policies across cities for both policy and research purposes. In order to have discussions at the level of UN Habitat and more generally global policy mobility, definitional clarity is important. The plurality of use of these labels is an important issue in itself: is it important to bottom out a common framework of understanding, and to articulate what the issues are and how we talk about them?

Agendas' features

The research scoping for the project has highlighted other important features current shaping the interconnections (or lack thereof) between safe, smart and sustainable agendas.

First, **maturity** is a key factor. We find the number of SUPs that have sustainability at its core is 45% as opposed to safe at 20% and smart at 15%. This shows us that sustainability as a concept seems to have been well embedded within councils' approaches, whereas smart and safe tend to be newer and more evolving concepts. For example Hamburg is focused on developing a new smart strategy and Sydney is currently working on a new safety strategy.

Second, the **degree of alignment** between strategies offers a key determinant of policymaking: our data shows that cities tend to have separate strategies for SSS. At this stage we are not able to say much more about the degree of alignment between the content of these strategies but we hope to pick up on this in the interview process.

However, third, scoping and implementing agendas is also a matter of **definitions**. When we look at the range of definitions we see different patterns across the three agendas. We find that 'smart' has two camps - either 'digital focused' or 'human focused'. 'Sustainability' tends to be a broad umbrella concept and strategy. 'Safety' is less developed as a visionary concept. Research for the project has also found that the form the strategy takes is directly dependent on the definition that is adopted by each city (e.g. the definition of Vienna for 'smart' is so broad they are able to make a fifty year plan). Of course each city will have their own interpretation of the concepts for their unique contexts, however it is important that cities are able to contextualise this in a global understanding of what each concept means in order that they are able to participate in global debate and access

markets. We believe this requires a more evolved global conversation on definitions of terms, particularly around the smart and safe agendas given the current impetus on developing these.

Fourth, **city networks** and networking matters for the directions and themes implemented in agendas. More clarity/transparency around the form of these strategies seems to be needed. It is particularly important in the context of the rise of urban networks. If cities are to exchange knowledge and knowhow, they must be clear about their own strategic landscape. It is not sufficient to be clear about their positioning in regards to a certain topic, but rather the positioning of the strategies to each other. It would be interesting to find out how urban networks engage with the strategic landscape and see how this affects policy recommendations and projects in practice.

Lastly, **marketing** remains a dominant determinant of policy implementation. 'Vision' documents are used by cities for marketing and branding of the city both internally within the authority (to communicate with different departments and set direction) and also as a global brand. In branding terms sustainability and smart have a more positive story to tell. This may be why we have seen a bigger focus on these agendas in the visioning exercises carried out by cities. In that sense safety as a concept in itself might need rebranding if it is to escalate up city priorities. We are already seeing this change in cities like Rio who are aligning their safety strategy with their smart branding, thereby reprioritising safety as a key component of urban agendas.

Strategic visions are a great proxy to understand how cities see themselves and how they want to be seen. They can be partially thought of as a branding exercise. Yet, in practice, financing and grants are an important driver for policy creation and focus. A question that ought to be asked is whether the agendas are purely a result of branding to meet loan conditionalities or whether they are more than that (i.e. have strategic embedded outcomes). A means to test whether they are the latter is to see whether the city has **governance structures** that enable achieving these aims: some cities have developed specific institutional mechanisms to deliver their agenda which are likely to insure a long(er) term resilience of the ideas embedded in strategies.

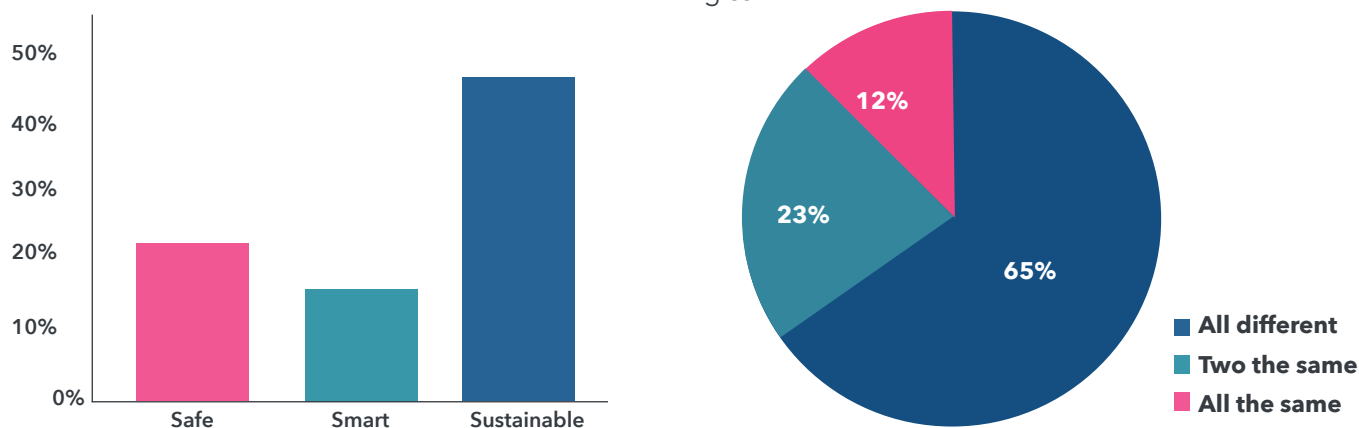


Figure 2. Percentage of SUPs with each agenda at its core

Agendas' approach

The operational shape of agendas is also a challenging dimension that we should take into account for its impact on composite safer-smarter connections. Importantly, the shift from spatial master plans to visioning is key the contemporary context of strategic urban policy. We know from Albrechts (2006) that there has been a shift from spatial planning to strategic projects - the latter are guided by strategic city visions. This is confirmed in our data where we find that only Addis Ababa and Mumbai are representative of the more old-fashioned planning approach, whereas the rest of the other cities do mainly visioning. The strength of the visioning approach is that it allows for flexibility at the more operational level. The number of cities that are both strategic visions and operational guides confirms this. In addition to that, cities that adopt a traditional spatial planning approach do not have clear strategies or visions around safe, smart and sustainable that we can see.

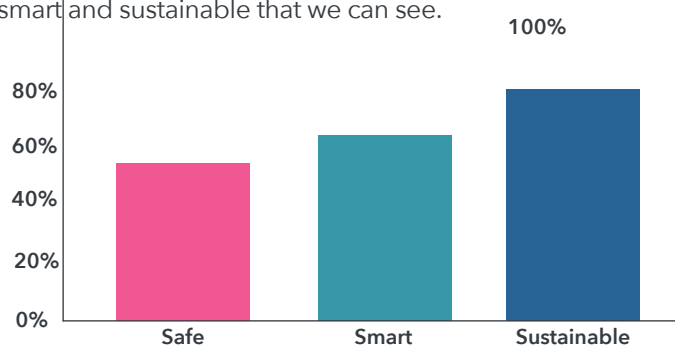


Figure 4. Strategic agenda's with visionary approach

The project has found an important difference between the single narrative and vision that a city develops and the multiplicity of individual strategies that can tend to be self-contained. In practice there are multiple strategies that each have different narratives. The visioning approach allows more flexibility in how action is adopted on the ground. In this sense, the difference between purely **operational and strategic** approaches is paramount. Sustainable agendas have the highest percentage of visionary approaches (79%), in line with the growing 'forward-looking' and internationalised role of the environment in strategic urban planning. Yet 'sustainable' is also the strategic orientation with the lowest proportion of projects. Safety seems to score the lowest in terms of visionary approaches, making this domain an often quite technical one rather than a central element of a city's long-term aspiration.

The issue of timescales is also key to the type of approaches taken by the three safer, smarter and sustainable agendas. Timelines are almost always associated to the publication and implementation of agendas: in the cities studied, all

of the sustainable strategic visions have a specific timeline associated with it. This may be linked to global targets that cities have agreed to, which are oriented in terms of time and naturally feed down into their approaches to planning. Moreover, an understanding of timescales is fundamentally interwoven within the concept of sustainability. However the project did not find that the safe and smart city approaches tended to have timescales attached. For instance, Melbourne's 'Smart City' does not have a timeline of projects but instead focuses on changing the approach of how the city operates and runs. This mind-set might be specific to the planning culture in the country (its 'public management philosophy') yet it opens up the discussion towards different operational approaches. On the other hand, in Rio de Janeiro, place making was a priority in the agenda, and was facilitated through 'Smart' interventions (including e-democracy). Beyond a methodology, smart can also be seen as a vision - it is the mayor or Rio who is taking this vision forward, the aim is to change the way that citizens participate in the city. A common question emerged as to whether smart is predominantly a methodology for achieving government priorities or whether it is a separate agenda. More broadly, a critical problem emerges clearly from this study, that of the lack of consistency across Safe, Smart and Sustainable Strategies: only 2 out of 19 cities have all three dedicated strategies with the same timeline (Bogota and Dubai) and for the most part agendas are set nearly independently in their implementation, roll out and broader vision landscapes.

Lastly, but certainly centrally to the problem of implementation, is the issue of ownership and spatial focus. For each category, over three quarters of the strategies are focused on city-wide and strategic landscapes. Only a few cases are administrated or directed by single departments 'owning' entirely the process of strategy-setting and implementation. While this may be representative of the project's research methodology, focused principally on the top-level strategic domain, the question of ownership is by no means secondary. Importantly, the project observed that the overlap between agendas changes over time. For example, the implementation of Smart City agendas has grown exponentially over the last 6 or 7 years, and is now being integrated into Safe and Sustainable agendas in many contexts. This, in conjunction with the variety of institutional and strategic forms illustrated above, highlights how a context of international and global guidelines (like those of GNSC and Habitat III) need to **account for diversity** and allow for flexible localised adaptation.

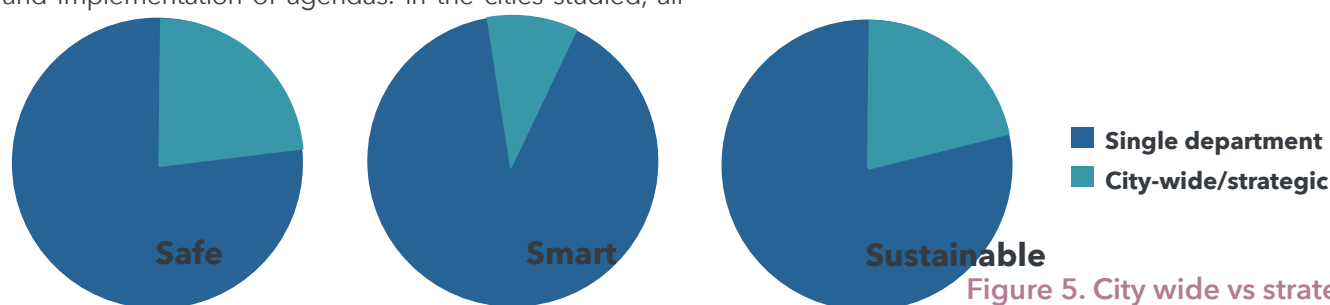


Figure 5. City wide vs strategic



ABOUT THE CITY LEADERSHIP INITIATIVE

*The **City Leadership Initiative (CLI)** is a project of University College London's newly-established Department of Science, Technology, Engineering and Public Policy (UCL STEaPP), and is funded by the UK's Economic and Social Research Council (ESRC), in partnership with the World Bank Group, the World Health Organisation (WHO), and the United Nations Human Settlements Programme (UN-Habitat).*

CLI is designed to improve our understanding of how leadership translates into long-term strategic visions. Through its research project, it aims to respond to pressing concerns about the future of cities and city leadership in the 21st century. Developed jointly with as a core research programme and as a policy engagement studio, this initiative seeks to assess the impact, entrepreneurial approaches and innovative structures that city leaders deploy to confront global challenges such as those of inequality, insecurity, economic constraints and environmental degradation.

ABOUT THE HABITAT-UNI SAFER CITIES HUB

Habitat UNI is UN-Habitat's partnership with universities worldwide. UNI promotes universities becoming closer partners of cities, actively engaged in problem solving, thus closing the gap between academia and practice and encouraging collaborative learning. UNI promotes and facilitates the dissemination of educational and research products of its members and involve scholars, researchers and students in a number of activities. The partnership is open, and invites all levels of academia to engage, and is organized in thematic Hubs. The thematic hub on 'Safer Cities', led by University College London, provides a platform for exchange and cross-institutional integration for academics engaging with the challenge of urban safety and security.

The hub is seeking to advance knowledge aimed to improve policies and responses to the issues of crime, violence, societal conflict but also feelings of insecurity, advancing the work of cities and partners within the framework of the UN Global Network on Safer Cities (GNSC). The Hub encourages research that is policy-relevant and applied, but also balanced between Global North and South. The Hub supports the development of research and education that facilitates a better understanding of existing urban safety and security problems whilst also studying future urbanization trends and allowing anticipative approaches and sustainable strategies.

The Project Team



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