Westminster: A Smart City for All

Call for Ideas

City of Westminster

SMART Westminster

Westminster City Council is the local authority for the City of Westminster in Greater London, England. Stretching just over eight square miles, Westminster is one of only two London boroughs to hold city status. The city is divided into 20 wards, each electing three councillors. As home to the UK government, the monarchy and some of the world's most iconic landmarks, it is a city of great economic, historic and cultural significance but not without challenges. For more information about the City, please see the 2019-2040 City Plan, as well as the recently launched Oxford Street District Framework.

Why SMART?

We have committed to being a World-Class SMART City for All. Becoming a SMART city is a process, not an end goal – therefore our approach matters. SMART in Westminster means being inclusive, innovative and participatory,

The City for All vision commits us to becoming one of the best connected and most technologically advanced cities on the planet that capitalises on the diversity of its communities to reimagine a SMART future for the benefit of all. The Council cannot and should not deliver this vision alone – SMART solutions require creativity, collaboration, openness and co-delivery with our local and international partners across all sectors.

This cross-cutting opportunity can help us achieve our City for All priorities and create additional benefits too.

SMART Westminster: be part of our story

What is the call for ideas?

We are looking to engage technology providers and innovators globally to crowdsource ideas for projects to implement as part of Westminster's SMART Strategy. These ideas should address key **challenges** to enhance the overall **user experience** for a range of users that spend time in the city, from residents to workers, businesses and tourists.

Westminster is looking to learn from the global community, engage innovators and to table new ideas for consideration and inclusion in its SMART Strategy and implementation roadmap.

How will the ideas be assessed?

We have developed **four thematic programmes** as part of our SMART Vision for Westminster, which are set out in the appendix of this briefing pack. Ideas that are able to contribute towards objectives and desired outcomes of the programmes will be **considered for implementation** as part of the SMART Strategy and implementation roadmap.

We have also set out a number of Westminster's **key challenges** that cut across these programmes, which solutions may focus on.

What's the business opportunity?

The council is looking to implement a number of initiatives through identifying **delivery partners** to work with within the **next 6-12 months** as well planning for longer time horizons.

Shortlisted providers will be invited to engage and collaborate with the Council around their solutions during the development of the SMART Strategy. **Terms of Reference** will be developed for the most relevant solutions that could be implemented in the next 6-12 months including costing, timelines and dependencies for technical implementation.

Who can submit an idea?

We are welcoming ideas from **all types of organisations** that have a **scalable solution** to the challenges identified.

Our call for ideas is looking to identify solutions to deliver on the SMART programmes underpinning Westminster's Vision

Extraordinary Experience

Known as a leading global innovator in creating a world-class experience for businesses, residents and visitors using Westminster's iconic assets.

Creating a **truly immersive physical experience** throughout that is augmented by digital products and services.

Empowering People

Committed to a citizen centric approach, where digital and technological solutions are co-created with our residents; both young and old, all backgrounds, identities and abilities to solve existing challenges and create new opportunities.

Rebuilding a local economy through a network of innovative partnerships and implementing emerging transport modes to support efficient freight and mobility for all.

Innovative Economy

Supports and encourages innovation through an inclusive approach that covers local businesses, creating the conditions for incubation, growth and investment.

Ensuring across the Borough **the community is properly and efficiently served**, as well as actively participating in public life.


CleanTech City

Tackles the climate challenge, optimising resources, consumption patterns, and environmental impacts, through a holistic and circular approach to people, planet, and technology.

Properly **addressing environmental** concerns, particularly air quality and waste management, whilst becoming a showcase for impactful solutions.

We are open to consider all innovative solutions that can deliver our SMART programmes, below are some key areas of interest...

Mobility
- ➜ Electrification of fleet(s)
- ➜ Parking availability
- ➜ Micromobility
- ➜ Pedestrian and traffic flows
- ➜ Safety
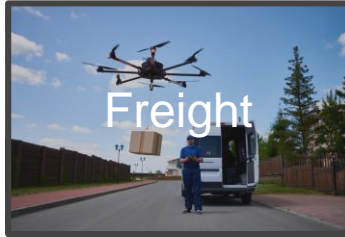
Freight
- ➜ Reduce congestion around high streets
- ➜ Autonomous last-mile deliveries
- ➜ "Off-site" logistics hubs

Waste & circular economy
- ➜ Closed loop systems
- ➜ Local sourcing of materials
- ➜ Domestic behaviour change
- ➜ Sharing economy
- ➜ Recycle, re-use, repurpose

Air pollution
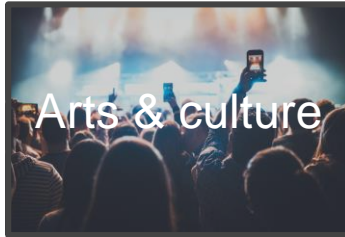- ➜ Reducing pollutant emissions at source
- ➜ Air filtration
- ➜ Changing behaviours and raising awareness

Safety & crime
- ➜ Improving user experience and confidence in safety measures
- ➜ Communication of safety measures

Climate & environment
- ➜ GHG emissions mitigation measures
- ➜ Climate risk adaptation measures
- ➜ Behaviour change and awareness building

Arts & culture
- ➜ Applying technology to highlight Westminster's Art and Culture offering
- ➜ Immersive digital experiences
- ➜ Installations and showcases

Business experience
- ➜ Communication and engagement
- ➜ Business start-up / scale-up services
- ➜ Employee experience
- ➜ Attracting innovators
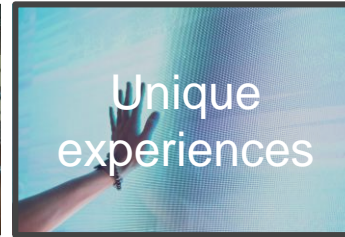
Unique experiences
- ➜ Immersive and interactive public domain
- ➜ Enhancing legibility and permeability of public realm
- ➜ Multi-purpose solutions
- ➜ Augmented reality
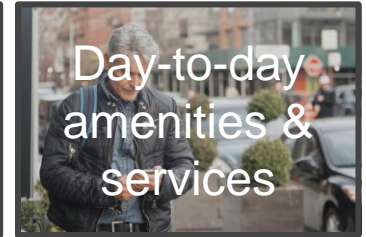
Day-to-day amenities & services
- ➜ Wayfinding services
- ➜ Street legibility for visitors
- ➜ Street markets and retails innovators

Further information and how to apply

Additional information is provided in the appendices to give context to Westminster's SMART Vision and ambitions for the Borough. We welcome applications from solution providers globally, as such we are conscious that some applicants will need further information on the local context and key challenges.

Further information provided in the **appendices** includes:

- The SMART Vision and thematic programmes
- Key challenges

In addition we are hosting a **briefing** including a **Q&A** session on the call for ideas, providing more detail on the opportunity and a chance to answer any questions that you may have.

Appendix #1

Westminster's SMART Vision

Westminster:
A SMART City for All

We have committed to being a World-Class City for All. This means a sustainable, inclusive and prosperous city that puts people at the heart of what we do. The City for All vision commits Westminster to becoming one of the best connected and most technologically advanced cities on the planet. This cross-cutting opportunity can enhance and accelerate all City for All outcomes and create additional benefits too.

Accelerated citizen outcomes >>
A smarter Westminster will **use technology to enable and continually improve services to make a positive impact on the City and for its people**

Global reach and impact >>
Westminster is an iconic and global UK asset. The Smart City will enhance brand and reputation by **bringing creative digital and technological solutions to city design, life and experience**

Shared value and opportunity >>
The smart vision is to solve existing challenges but also create **new opportunity via collaboration and delivery partnerships**

The importance of SMART to Westminster's people

Westminster's ambition to be truly innovative in its approach to serving residents, businesses, and visitors is central to the Council's plans for a smarter urban future. By demonstrating how smart innovation can be integrated into the Council's daily operations, organisational culture, and contribute to wider developmental aims of the Borough's plans, Westminster can establish itself as a global SMART leader.

Serving all our residents

Understandings of what SMART means to Westminster are grounded in the fundamental need for the continue improving how the Council serves all residents groups across the Borough.

The role of smart technologies and innovative approaches relates to all citizen services the Council provides. Whether that relates to child or adult social care, access to education and apprenticeships, or the quality of other vital public services.

Supporting our local businesses

The future of Westminster relies on the Council's ongoing support for all local businesses, big or small. Now more than ever as the City looks to build resilience, the Council must bring about new relationships with its business communities.

This may involve innovating around new partnerships, targeted training and development, direct investment and funding, or simply further clarity in communication and engagement with businesses over the critical issues.

Accommodating our visitors and commuters

Westminster above all else, is an iconic destination known around the world. The role of SMART approaches and solutions is therefore essential to enhancing the City's creative capital and visitor experience.

The possibilities of technology in enhancing Westminster's experiential elements are almost endless, ranging from augmented reality within retail to wayfinding around London's key landmarks.

Becoming a smarter council

As London's economy becomes increasingly digital and emerging technologies influence our lives the Council recognises the need for digital and data leadership. We will make sure that our services are able to respond to how technology is changing Westminsters' life chances and expectations.

The Council will continue to integrate smart innovation into its organisational culture and operations, transforming council services to provide more efficient and effective services to Westminster's diverse communities.

This SMART Vision document is the first step in delivering this agenda, and will outline the technical foundations of future action and implementation, including how the Council itself will act in a "smarter" and more innovative way.
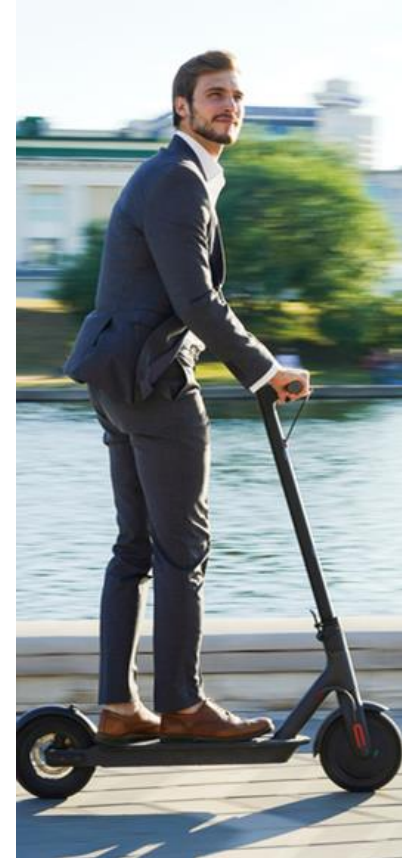
Proposed SMART programmes

Following the initial visioning process with Westminster's leadership we were able to establish four emerging thematic programmes to explore further. These programmes, and their individual objectives, are illustrated below.

1

Extraordinary Experience

Known as a leading global innovator in creating a world-class experience for businesses, residents and visitors using Westminster's iconic assets.

2

Innovative Economy

Supports and encourages innovation through an inclusive approach that covers local businesses, creating the conditions for incubation, growth and investment.

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3

Empowering People

Committed to a citizen centric approach, where digital and technological solutions are co-created with our residents, capitalising on Westminster's diversity of cultures to solve existing challenges and create new opportunities.
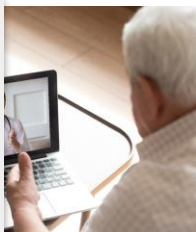
4

CleanTech City

Tackles the climate challenge, optimising resources, consumption patterns, and environmental impacts, through a holistic and circular approach to people, planet, and technology.

Inclusive

Innovative

Participatory

Our programmes will leverage the unique opportunities in our City

Westminster is home to some of the most unique assets not only in London, but around the world. We want to make the most of the opportunities that Westminster provides us with to deliver improvements across the Borough. Like all major districts within major urban centres, the Borough faces a range of typical social, infrastructural, and environmental challenges, in particular ones linked to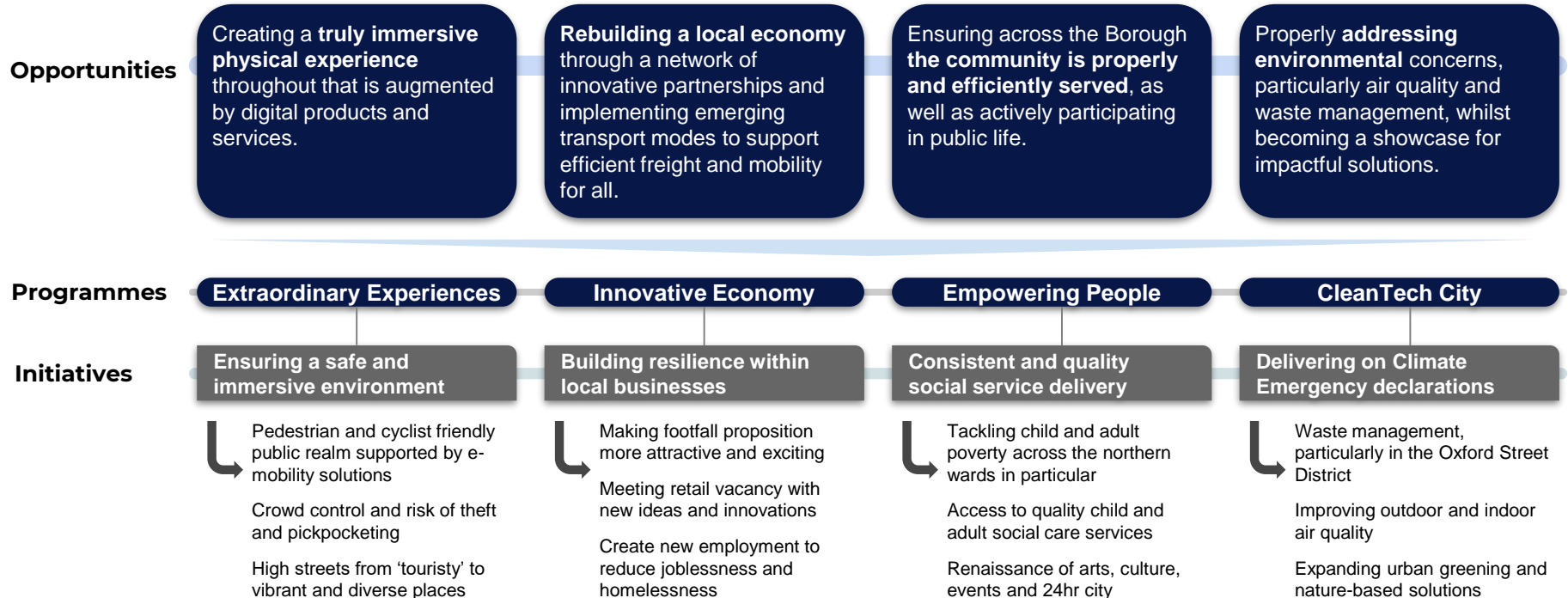 mobility, freight and waste. At its core, Westminster's ambitious SMART Vision will be one that wholeheartedly addresses these challenges.

Opportunities

| Creating a **truly immersive physical experience** throughout that is augmented by digital products and services. | **Rebuilding a local economy** through a network of innovative partnerships and implementing emerging transport modes to support efficient freight and mobility for all. | Ensuring across the Borough **the community is properly and efficiently served**, as well as actively participating in public life. | Properly **addressing environmental** concerns, particularly air quality and waste management, whilst becoming a showcase for impactful solutions. |

Programmes

| **Extraordinary Experiences** | **Innovative Economy** | **Empowering People** | **CleanTech City** |

Initiatives

| **Ensuring a safe and immersive environment** | **Building resilience within local businesses** | **Consistent and quality social service delivery** | **Delivering on Climate Emergency declarations** |

Pedestrian and cyclist friendly public realm supported by e-mobility solutions	Making footfall proposition more attractive and exciting	Tackling child and adult poverty across the northern wards in particular	Waste management, particularly in the Oxford Street District
Crowd control and risk of theft and pickpocketing	Meeting retail vacancy with new ideas and innovations	Access to quality child and adult social care services	Improving outdoor and indoor air quality
High streets from 'touristy' to vibrant and diverse places	Create new employment to reduce joblessness and homelessness	Renaissance of arts, culture, events and 24hr city	Expanding urban greening and nature-based solutions

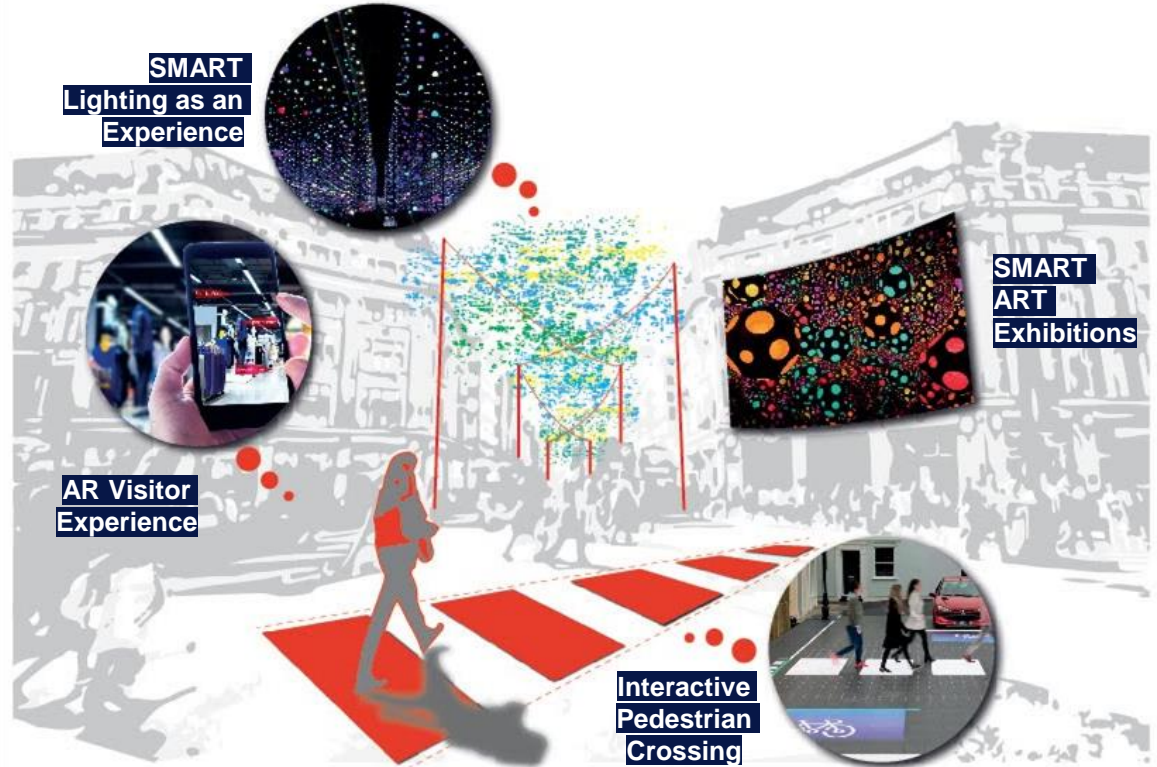# Extraordinary Experience: Illustrative projects

Westminster boasts some of the UK's most iconic assets, whether in retail, nightlife, heritage, or tourism. The City therefore, is one of the few places in London that is experienced by almost everyone who journeys to the Capital. The future of Westminster is one that must continue to serve these users, heightening their experiences through a more interactive construction of space, and deployment of digital technology.

❯ Programme Objective

Be a leading global innovator in creating a world-class experience for businesses, residents and visitors using Westminster's iconic assets.

❯ Key Outcomes

➔ Bringing to life Westminster's iconic assets in unique and innovative ways

➔ Greener and cleaner public realm that is educational, engaging and inspiring

➔ Public realm that provides a safe and SMART return to the city

➔ Exploration and re-discovery of the city beyond key attractions and high streets

➔ Westminster as a platform to showcase diversity of local culture and talent

➔ Intuitive and accessible public realm

SMART Lighting as an Experience

SMART ART Exhibitions

AR Visitor Experience

Interactive Pedestrian Crossing
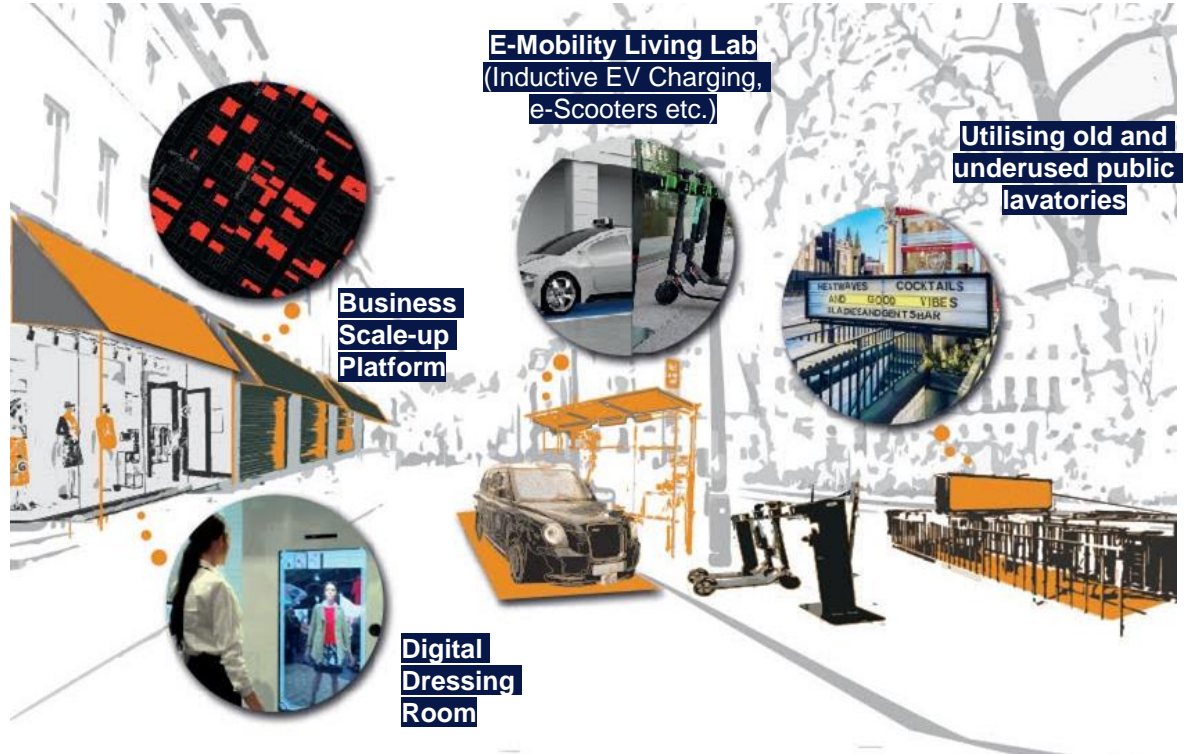
Innovative Economy: Illustrative projects

Creating a truly innovative economy within Westminster will require new technologies, approaches, and relationships between the Council, local businesses, entrepreneurs, and research institutions. In order to develop the ecosystem required, Westminster must look to embed innovation into the culture and practice of both the local economy and itself. Key milestones could include both a physical reallocation of space (i.e. a Hub) as well as the incubation of new ideas and solutions, all facilitated within a broader tech-enabled environment.

Programme Objective

Supporting and encouraging innovation through an inclusive approach that covers local businesses, creating the conditions for incubation, growth and investment.

Key Outcomes

➔ Intuitive and flexible public services for businesses (e.g. leasing space, waste collections, deliveries, planning and licensing)

➔ Flexible and agile use of commercial space that responds to changing market demands

➔ A thriving and innovative retail district that showcases technology on a global stage

➔ A revived night economy with a safe and vibrant 'after hours' offering for workers

➔ Impactful and inclusive training and skills development for all businesses and languages

E-Mobility Living Lab (Inductive EV Charging, e-Scooters etc.)

Utilising old and underused public lavatories

Business Scale-up Platform

Digital Dressing Room
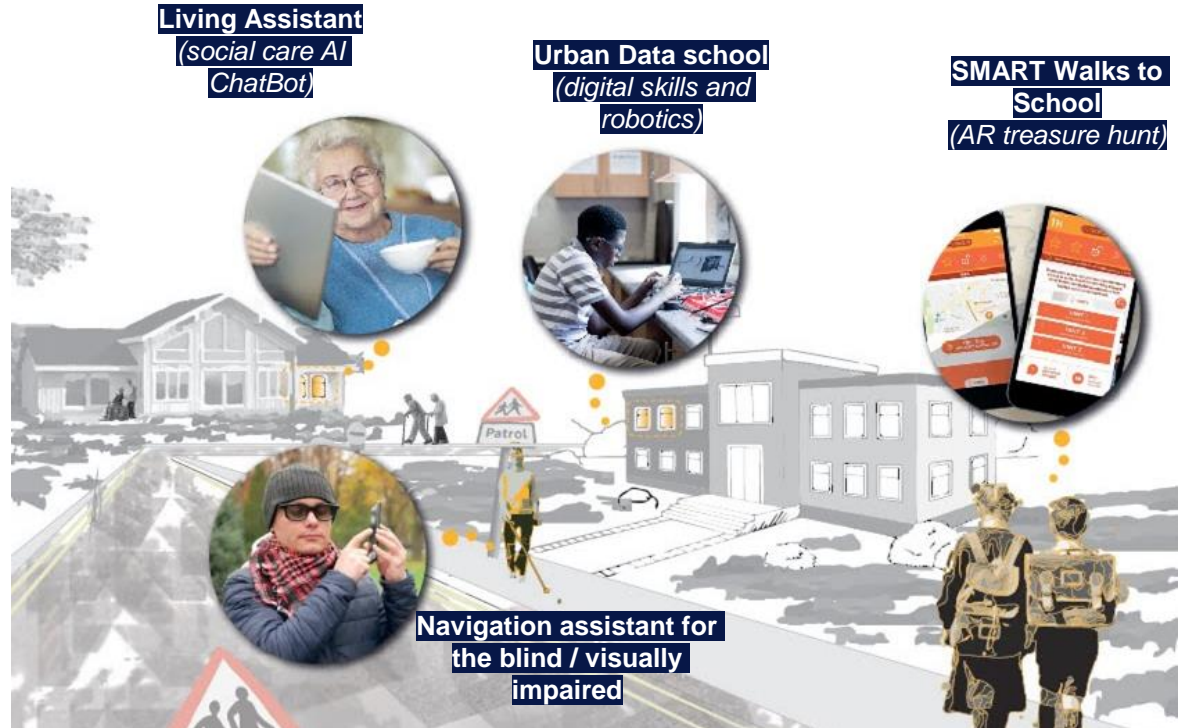
Empowering People: Illustrative projects

Westminster's SMART future is wholly dependent upon the residents and community groups not only being brought along the journey, but allowed to directly feed into the transformation process. What makes Westminster truly "smart" will be decided in the various outcomes that serve the needs and aspirations of Westminster's residents.

❯ Programme Objective

Committed to a citizen centric approach, where digital and technological solutions are co-created with our residents, capitalising on Westminster's diversity of cultures to solve existing challenges and create new opportunities.

❯ Key Outcomes

➔ Efficient and streamlined experience of local public services for residents

➔ An interactive, engaging and inclusive environment that enables citizen feedback

➔ Ensuring local ideas are used to shape decision making and improve quality of life

➔ Safer and more accessible environment for marginalised groups and disabled people

➔ Digital inclusion and equity driven through ubiquitous access to public services & data

Living Assistant
(social care AI ChatBot)

Urban Data school
(digital skills and robotics)

SMART Walks to School
(AR treasure hunt)

Navigation assistant for the blind / visually impaired
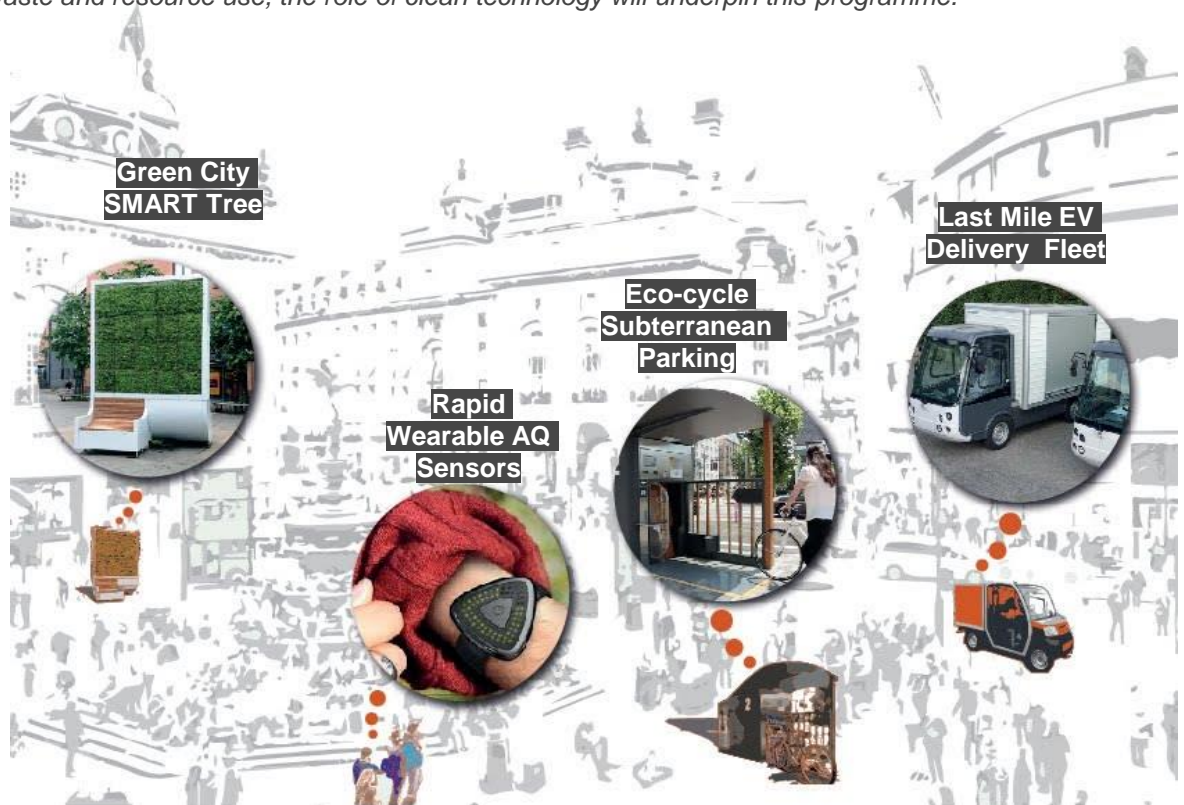
CleanTech City: Illustrative projects

Westminster's SMART future is also a sustainable one. To properly fulfil the City's full potential in becoming an iconic SMART destination, the role of technology in achieving the Council's environmental objectives will prove vital. Whether this relate to the climate emergency declaration, properly tackling air quality, or a more circular approach to waste and resource use, the role of clean technology will underpin this programme.

❯ Programme Objective

Optimising resources, consumption patterns, and environmental impacts, through a holistic and circular approach to people, planet, and technology.
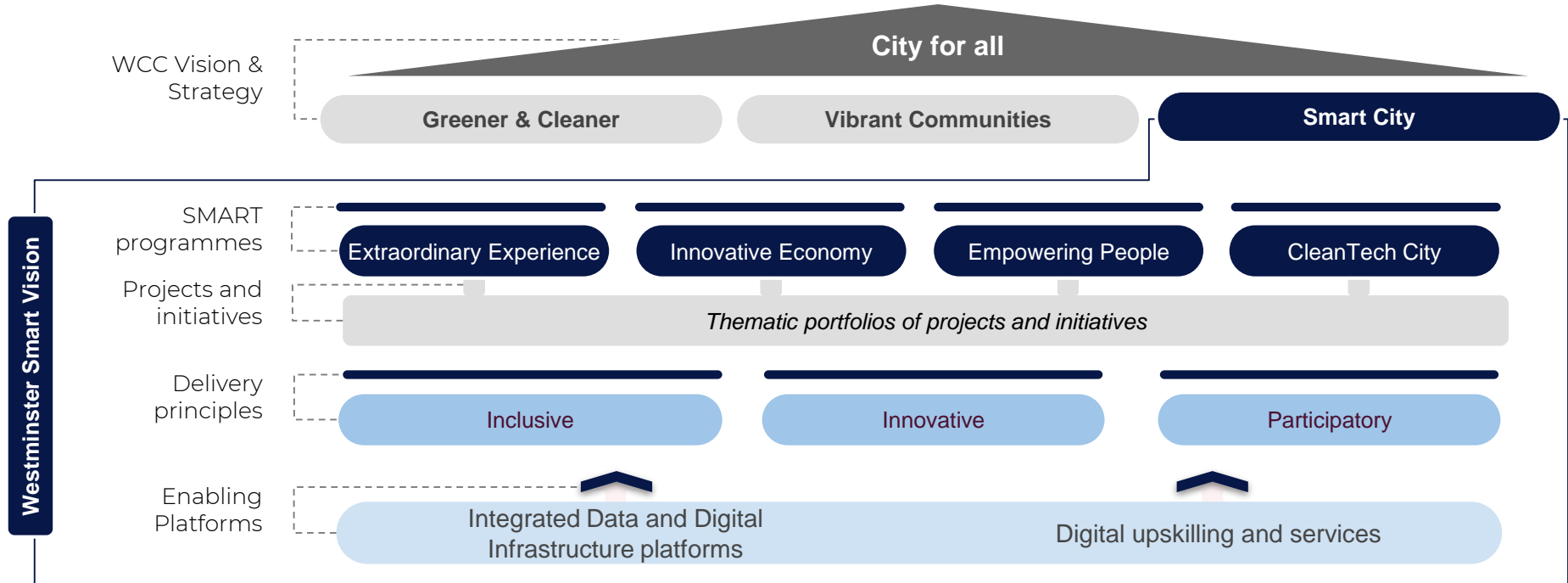
❯ Key Outcomes

➔ Sustainable innovations that reduce GHG emissions and air pollution concentrations

➔ A comprehensive environmental monitoring network

➔ A circular economy for industry, and a sharing economy for citizens

➔ Urban greening and a productive sustainable local food system

➔ Active travel and the electrification of mobility and last-mile connectivity

➔ Protect, enhance, and educate around Westminster's natural capital

Green City SMART Tree

Last Mile EV Delivery Fleet

Eco-cycle Subterranean Parking

Rapid Wearable AQ Sensors

Westminster's SMART city vision

The graphic below illustrates the core architecture of Westminster's SMART Vision, explaining how it nests within the Council's overarching 'City for All' plan. This is explained through a cascading of thematic programmes and principles, that either build on existing elements or introduce new concepts that enhance Westminster's SMART credentials.

WCC Vision & Strategy

City for all

Greener & Cleaner | Vibrant Communities | Smart City

Westminster Smart Vision

SMART programmes

Extraordinary Experience | Innovative Economy | Empowering People | CleanTech City

Projects and initiatives

Thematic portfolios of projects and initiatives

Delivery principles

Inclusive | Innovative | Participatory

Enabling Platforms

Integrated Data and Digital Infrastructure platforms | Digital upskilling and services

Appendix #2

Key challenges

We've identified a set of key challenges for the City

We have carried out extensive research to identify the key challenges for the City. The below information is provided as context, solutions may address one or more of these challenges.

COVID-19 and economic recovery
Global competitiveness
Climate emergency
Social equity

Mobility & congestion	Air quality	Crime	Net zero & climate risk	Waste & resource management	Rough sleeping	Noise
Westminster encapsulates a historic part of London, not ideally designed for large volumes of visitors, especially in sites like Oxford Street where there are bottlenecks, tight entrances, exits, roads, pavements and cycle lanes. Mobility is a challenge which impacts all users, regardless of their purpose for visiting or mode of transport.	Despite being a London-wide issue, some pockets within Westminster have particularly polluted air due to congestion, building infrastructure and other factors. Interventions such as the Low Emission Zones have gone some way to address this challenge. However, more must be done to address this multi-faceted issue and to comply with WHO guidelines.	An important issue for all users of the City, and a key reputational issue for Westminster's high streets and amenity-rich areas. Pre-pandemic levels of crimes in the public realm were among the highest in the country. There is also a high perceived risk, directly impacting user experience and decision making about visiting the City.	Direct physical impacts include the Urban Heat Island effect and increased likelihood of extreme weather and damage to infrastructure. Indirect impacts include user concern about climate change informing decisions making on where to visit, or to base businesses. Westminster must be proactive in enabling sustainable lifestyle choices for users.	The City generates a significant volume of both municipal and commercial waste. More must be done in relation to segregation of waste streams to maintain recyclate quality, as well as reducing the overall volumes of waste. This challenge is becoming an increasingly important issue as society becomes more circular, but provides an opportunity for City to lead on.	Westminster as a whole has a net inflow of rough sleepers. This is largely attributable to the high footfall and places to shelter provided by locations such as the Oxford Street District. There is a clear opportunity for City to rise to this challenge, creating a more inclusive place for all users.	With high levels of traffic, trains, buses, freight and private cars, high levels of noise feel inevitable for the City. The WHO has found that noise significantly affects the physical and mental health of those it impacts. Ironically, this appears to be a silent crisis for the City and its users, with a much smaller evidence base.

Contact details

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