

The Journey towards Smart City Recognition

A Perspective from Birmingham

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Birmingham 2012

- 1,100,000 population
- 450,000 homes
- 160,000 daily commuters
- 4.3 million people of working age population within a one hour drive of the city centre
- 32m visitors per annum
- 20% of the West Midlands economy
- 65,000 students in three universities
- Youngest city in Europe
 - 37% population aged less than 24



Connected Throughout the UK and Europe



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Cities – A challenge of urban growth

- Greatest challenge since humans became social
- Cities – c.2% of global land mass but consume c.80% resources
- Current global population: c.7bn; forecast for 2030: 8.3bn (UK: 62.3mn growing to c.75mn by 2030)
- 1950 – 30% of global population urbanised
- Today – 80% of developed world lives in cities
- 2050 – 80% of global population will be urbanised
- Not just an issue for developing countries; cities will also grow in developed world by c.6%

Why be 'Smarter'

Acute and Long Term Challenges

Resource Scarcity More people Climate Change Global competitiveness
Lack of Finance Older people Low Carbon Economy

Duplication

Current systems - strained

Inflexible

Silos

Not effective

Competing Objectives

Debt

Adaptable

New systems – able to cope

Networked

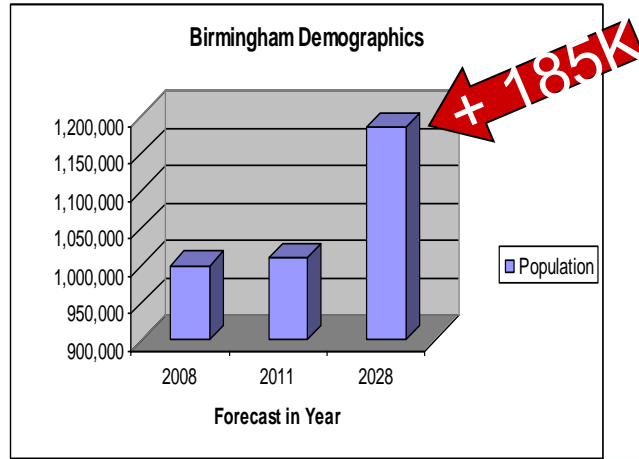
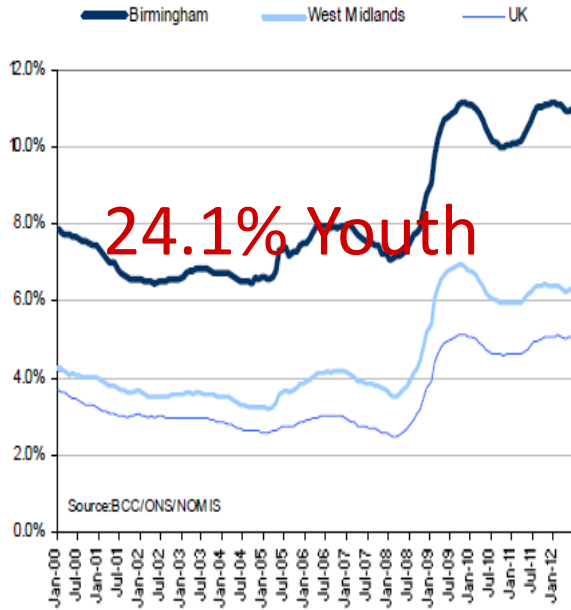
Innovation friendly

Businesses engage
and invest

People take
responsibility

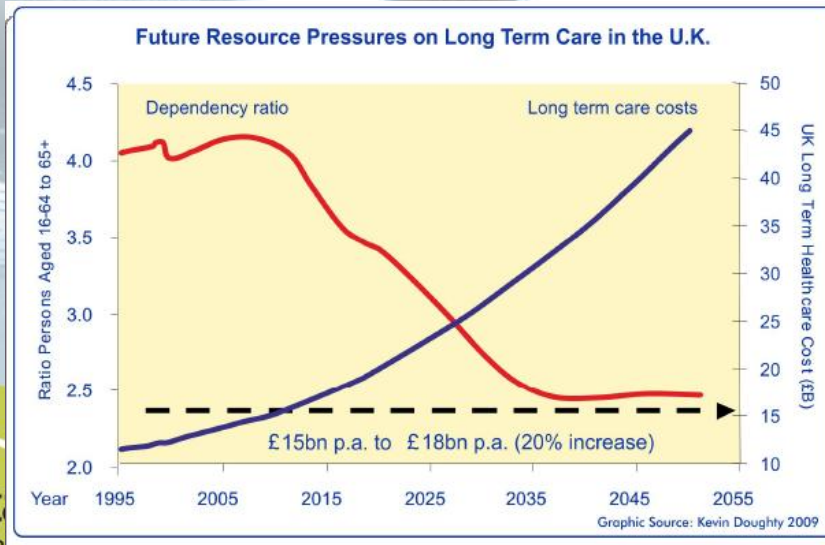
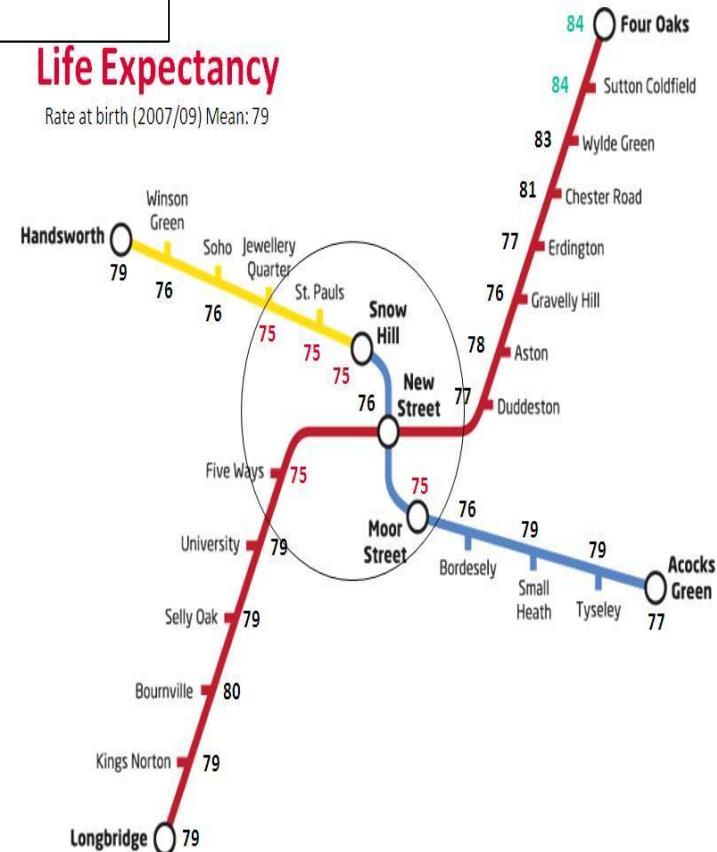
Multi-
disciplinary

Birmingham Focused Challenges



Life Expectancy

Rate at birth (2007/09) Mean: 79



The Giant Awakes: And sets the Pace



Birmingham's Digital Districts Programme

Digital Birmingham is leading on the City's aims to establish a series of digital districts in partnership with industry to create a future proof digital infrastructure that captures the ambitions of a world class city.

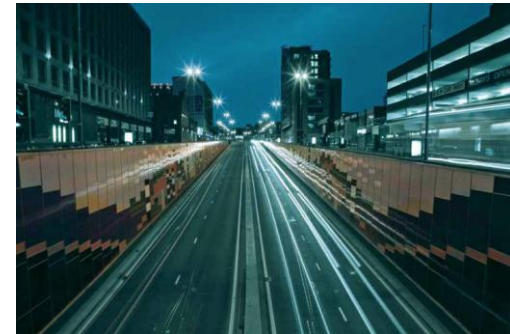
The aim of the Digital Districts programme is to transform a section of the city into one of the most dynamic and innovative regions in the world in a bid to establish vibrant and healthy business and residential communities. The first of these digital districts will be in the Digbeth, Edgbaston and Jewellery Quarter areas of the city transforming them into a high quality environment for working, living and learning. The area will be supported by an exceptionally high speed network - one that will include the all-important 'first mile' connection to the home or business.

It is designed to encourage the uptake of digital products and services with particular emphasis upon a small geographic area but it is a model that can be applied to many other regions. The District will also be a catalyst for economic growth in specific business sectors, including the creative industries, which will be high bandwidth to compare globally and ensure they can meet all their existing and future information and services needs.

Why is ultrafast broadband connectivity so important?

Digital industries are growing rapidly and are of high value, as well as being a major productivity benefit on other sectors. Therefore Birmingham and the wider Midlands need to be positioned appropriately, growing the digital sector is a regional priority. Recent studies show that international businesses consider the quality of available telecommunications to be one of the top four criteria when determining where to locate or relocate. So high-speed broadband is vital if Birmingham is to attract the best companies that are going to thrive in the next decade. Skills of the country's Skills Strategy Value Added - their contribution to the economy of each individual producer, industry or sector comes from technology intensive services, and over the next five to seven years these sectors could create a further £25 billion to GVA.

Modern cities live or die by the way they connect, with their people, with other cities and with the rest of the world, and by their ability to exchange information and data as readily as possible. The development of next generation broadband infrastructure is a strategic priority for The Greater Birmingham and South Local Enterprise Partnership, which sees it as an opportunity to enhance its productivity and international competitiveness. The availability of digital broadband will enable Birmingham businesses to unleash their potential by developing a new generation of exciting and innovative services, products and applications, created right here in Birmingham but marketed across the world.



Street Services PFI – Amey Plc



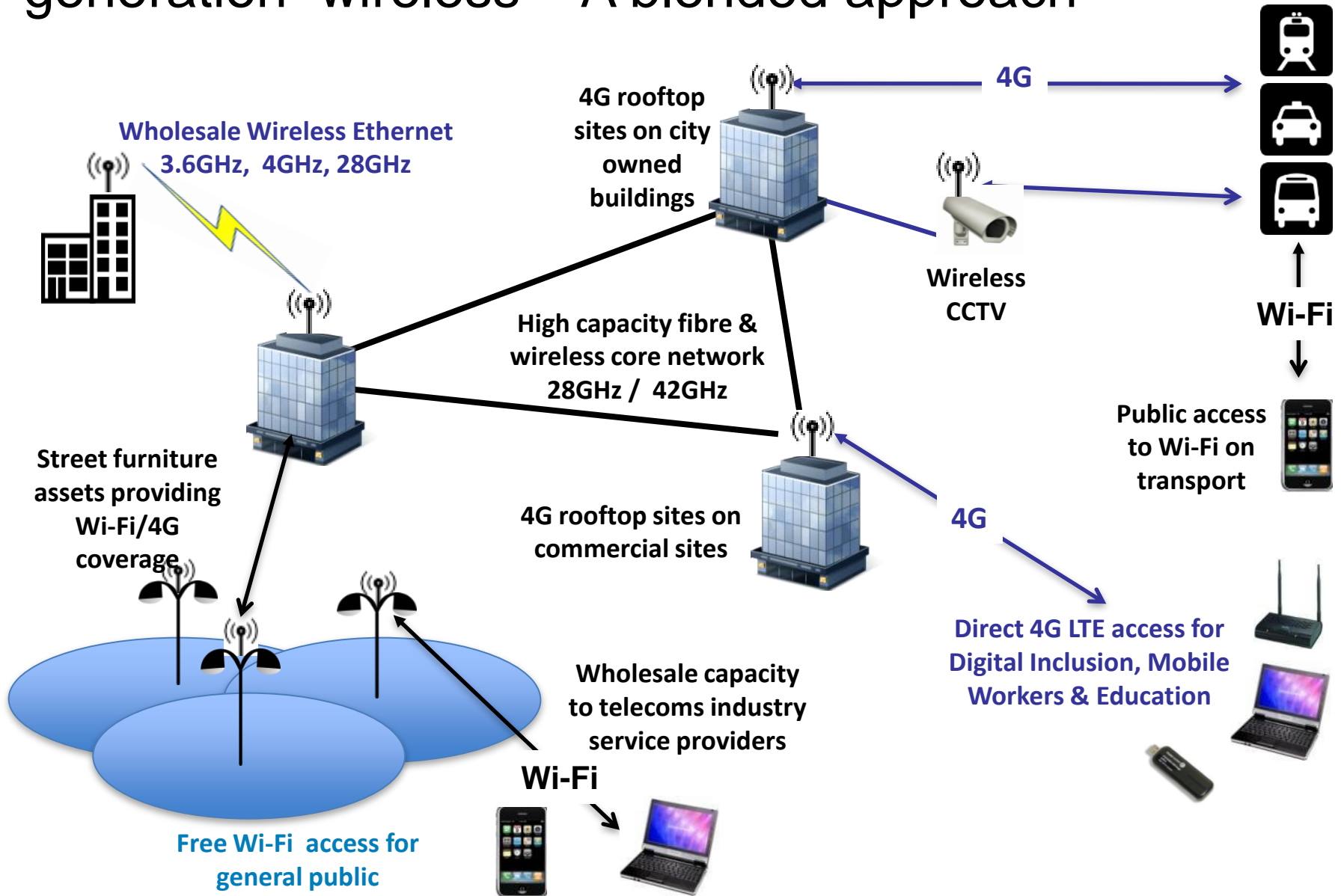
Working for the Future



Library of Birmingham

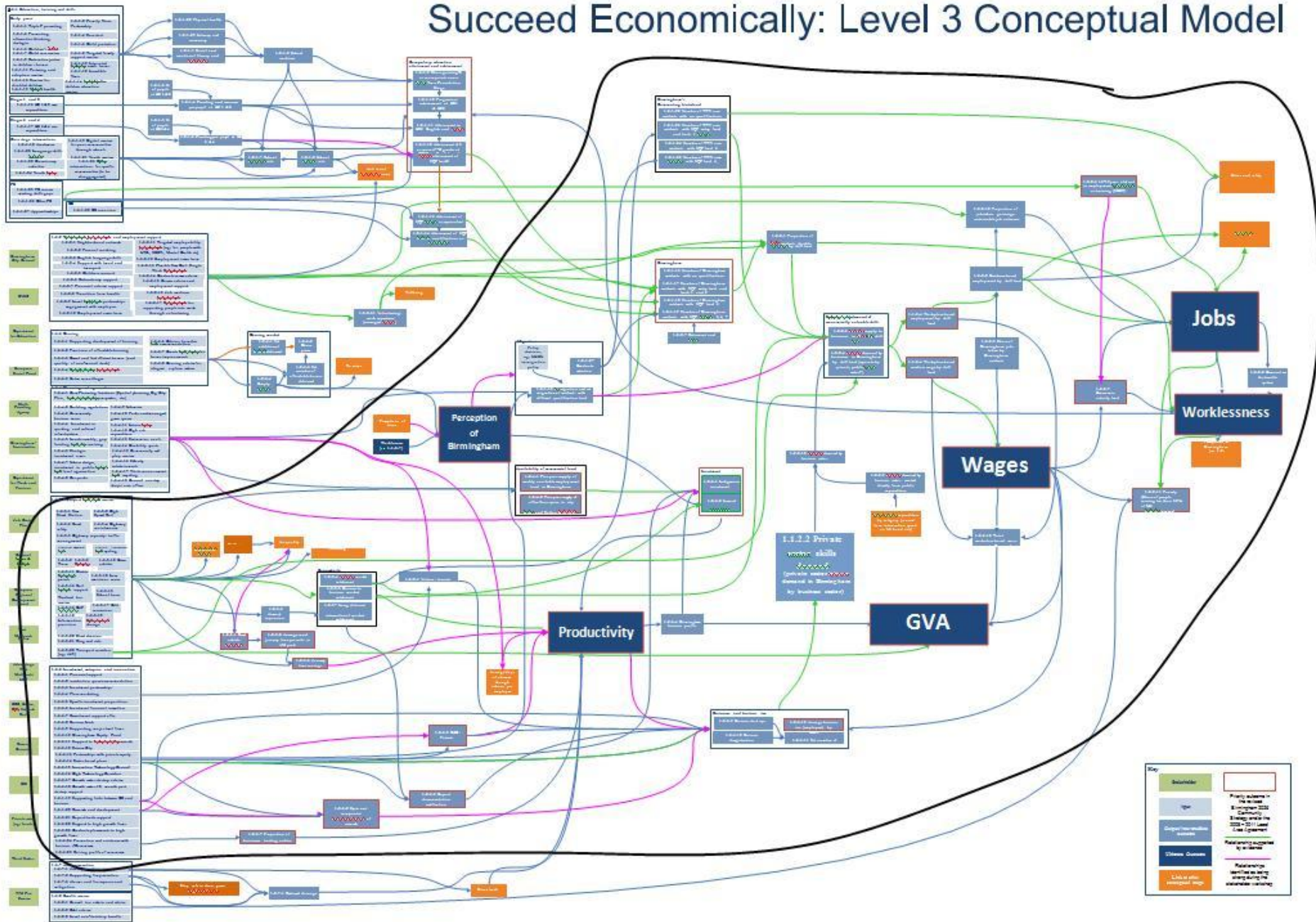


Accelerating the opportunities of next generation wireless – A blended approach

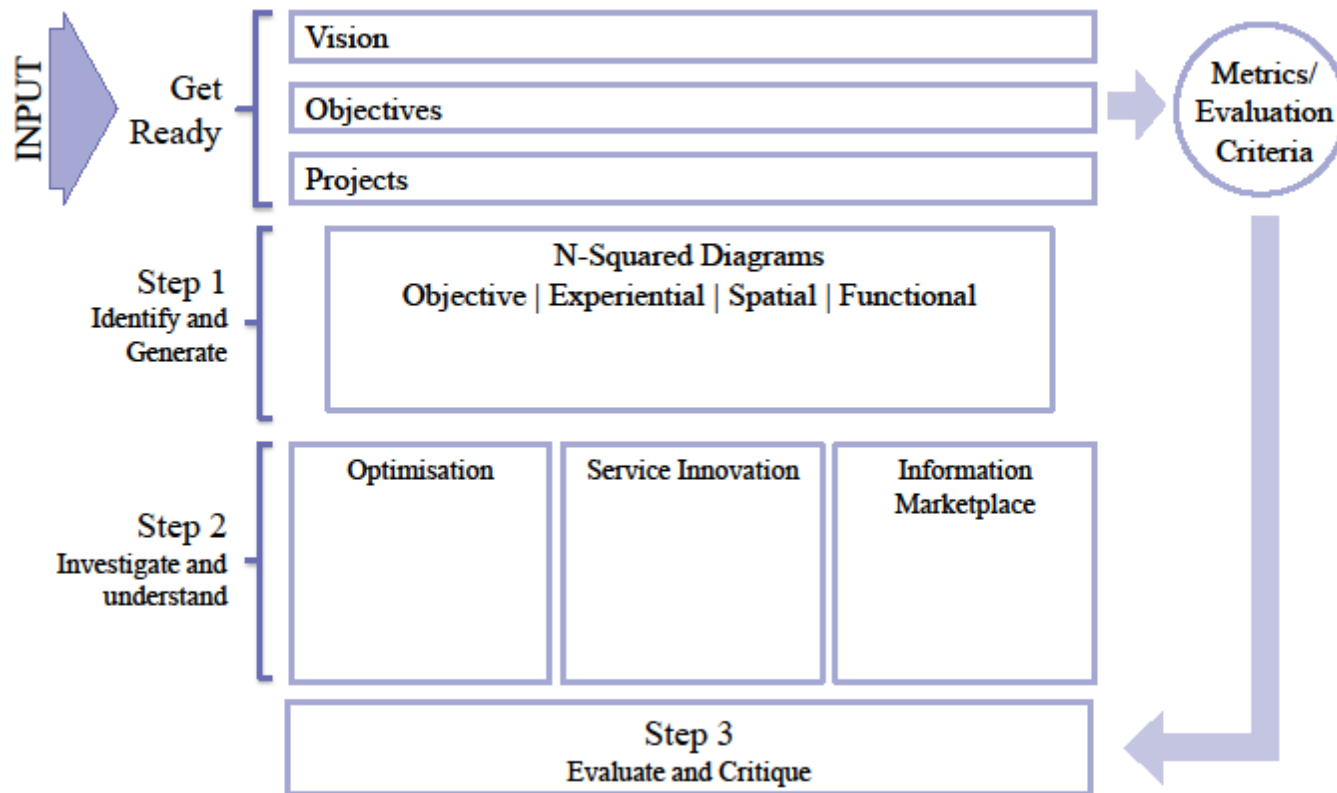


A Glimmer of Worldwide Recognition

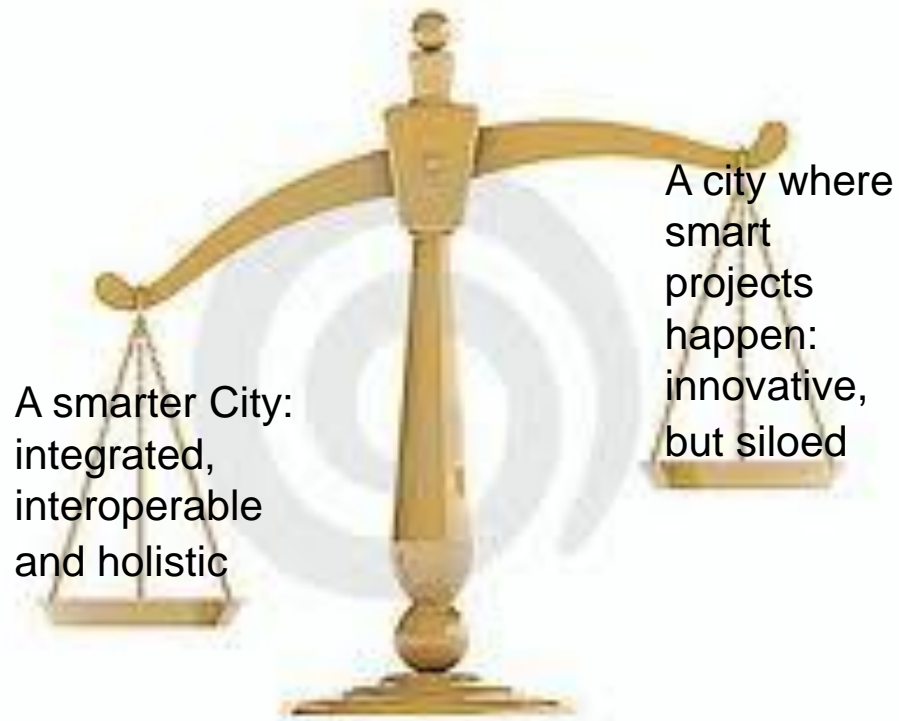
Succeed Economically: Level 3 Conceptual Model



Triple Helix Methodology Overview



Establish your Strategic Imperatives



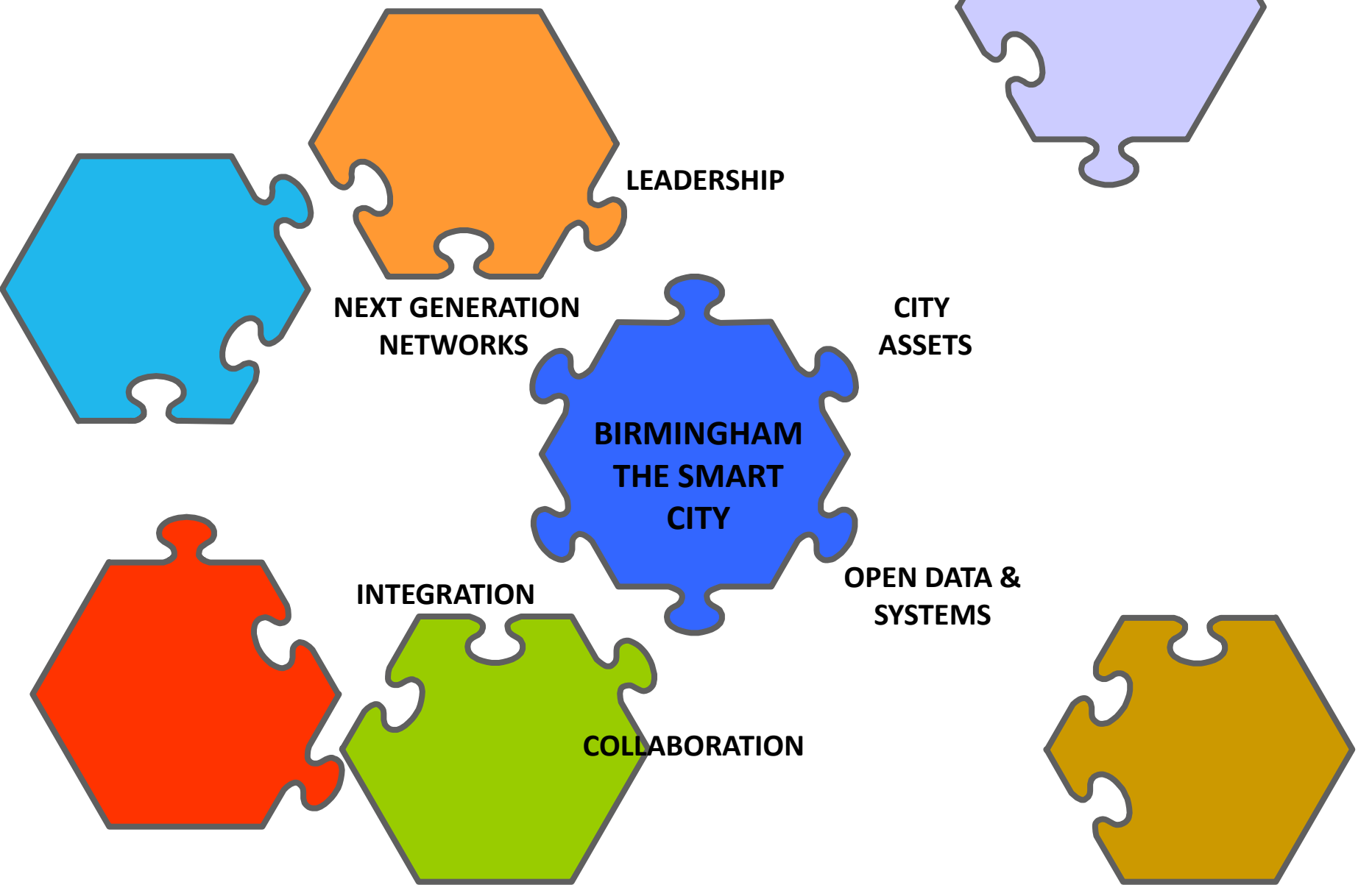
A smarter City:
integrated,
interoperable
and holistic

A city where
smart
projects
happen:
innovative,
but siloed

dreamstime.com

Birmingham's Smart City Journey

The enablers for change

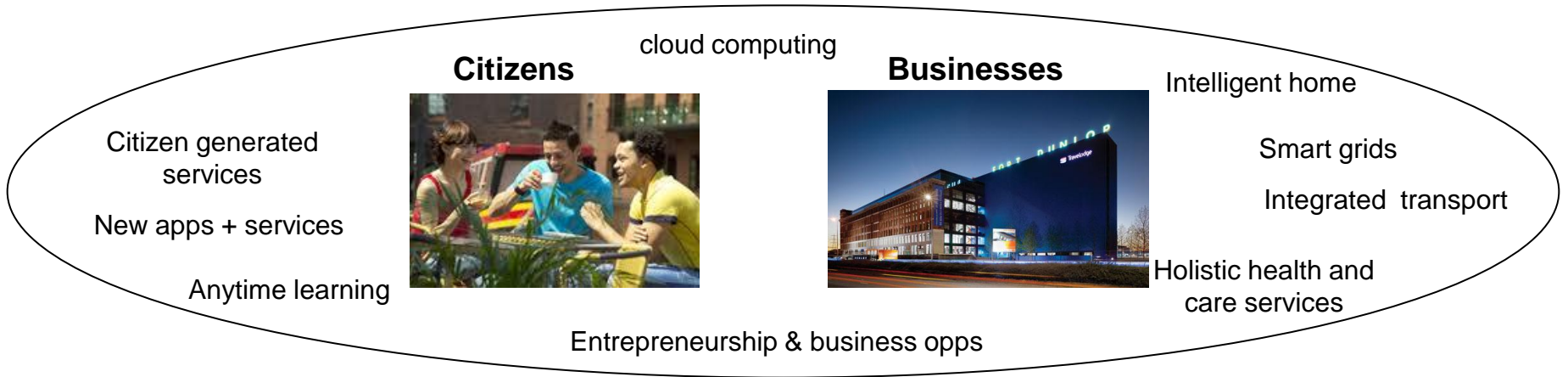


Smart Accessible City
Smart Connected City
Smart City Economy
Smart Inclusive City
Smart Sustainable City

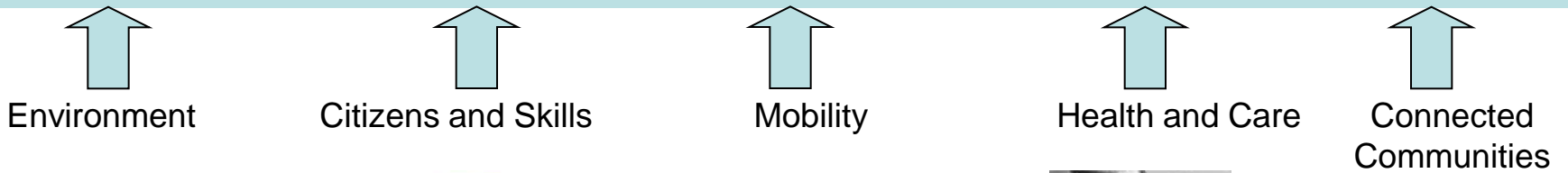
Smart = Physically + Culturally + Digitally

A Birmingham Priority: The Connected City

Layer 3: Governance, Interrelationships, Collaboration & Partnership



Layer 2 :- Open Innovation Platforms - Real time data, open & linked data, standard datasets



digital
birmingham

Layer 1 :- City Infrastructure – Wired and Wireless

A holistic model = Complexity

- Economy
- People + Skills
- Transport
- Healthy Living
- Environment
- Governance

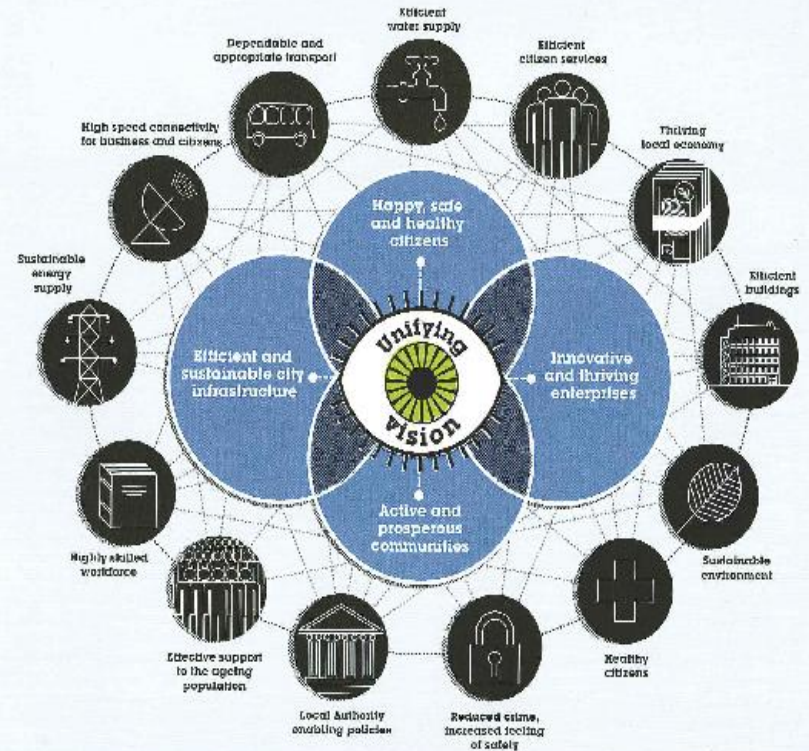
How do we prioritise



ECONOMIC RECOVERY

© IBM

A Model of the Successful Smarter City



Operating on a Live System



Delivering

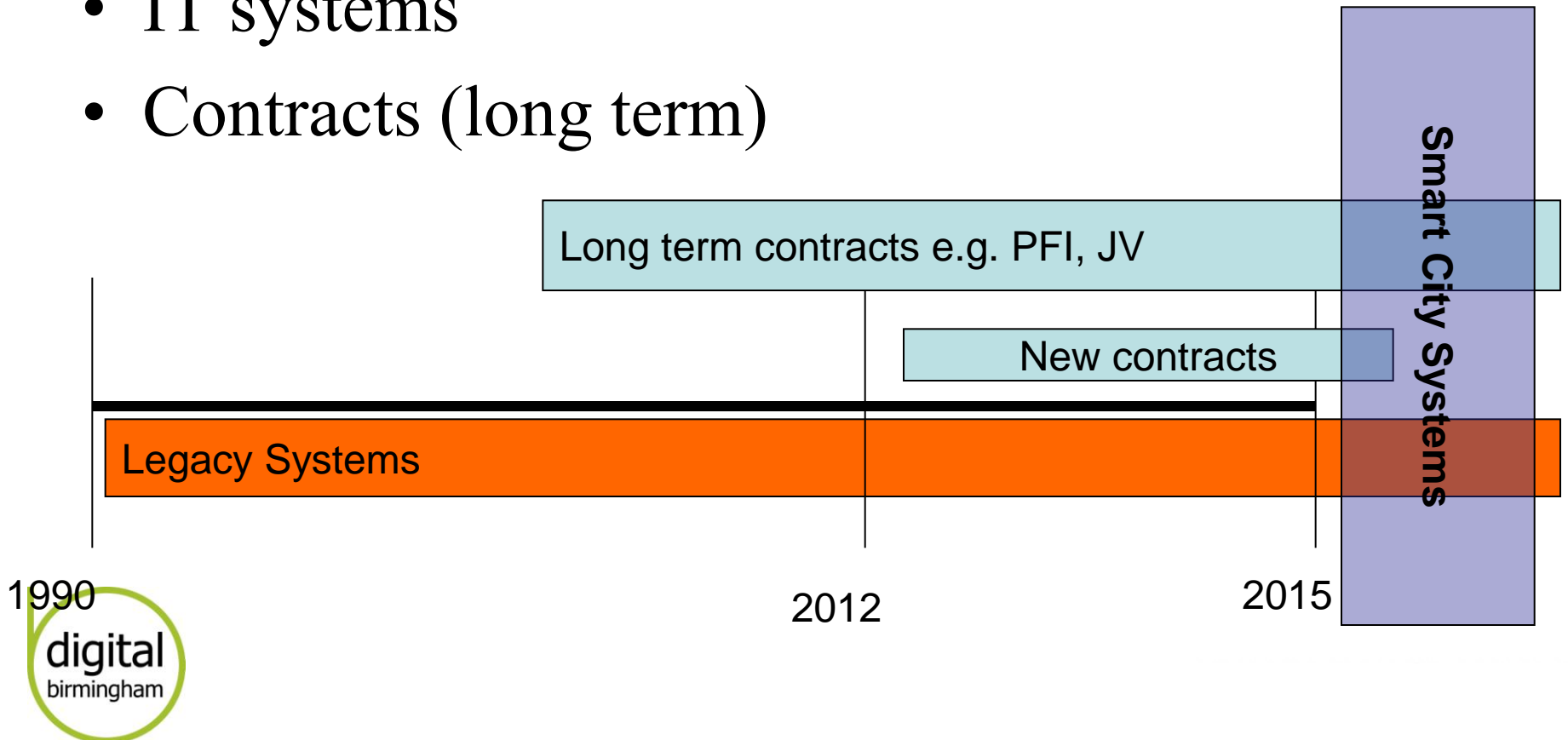
Commissioning

Decommissioning

Monitoring

Legacy Systems

- Physical infrastructure
- IT systems
- Contracts (long term)



Smart Birmingham: Strategic Framework

Our vision

An agile city where intelligent enterprise and social collaboration is infused with technology to help its people live, learn and work better through services provided by and for its people



Our mission

To create the sustainable environment that will enable our businesses, communities and citizens to learn, create and prosper in an open and collaborative way, through the provision of city governance, platforms, and spaces, which integrate and leverage intelligence across our communities



Strategic outcomes

- Succeed economically
- Stay safe in green, clean neighbourhoods
- Be healthy

Making a step change – in a 2-5 year period - in our delivery against the strategic outcomes for Birmingham 2026



Smart Birmingham: what it looks like and how it feels

1. Best place to start and grow a business
2. Connected to opportunities, spaces, places and markets
3. Open-minded, collaborative and experimental
4. Joined up in our city thinking
5. Easy, friendly and attractive place to come together
6. The City is pleasant, safe and fun to be in
7. Better information, more choice, more convenience, less waste
8. A great place to grow up and grow old

Conclusion

- Our aim is to create a smarter city, not just a city where smart things happen
- Recognise the need to demonstrate leadership, but to let local communities help inform the strategic direction
- Recognise that the role of the city is to act an enabler, and to stimulate and accelerate opportunities through collaboration between all sectors
- Real change will only be possible through access to data, enabled through city system integration at all levels of governance
- A smart city is not about buying new technologies – It's about learning to do things differently as innovation lies in the application of knowledge

