



Lighthouse Projects Glasgow, Scotland



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Lighthouse & Step Up Projects

LIGHTHOUSE PROJECTS

- Clyde Waterfront: NHS Southern General Campus & Fastlink
- Commonwealth Games Athletes Village
- **Technology Strategy Board Future Cities Demonstrator**

STEP UP PROJECTS

Street Lighting Retrofit

Ibroxholm DH

Wyndford State CHP

PassivTEN: Glasgow Tenements

Municipal Glasgow Strategic Drainage Plan

South Clyde Energy Centre Shieldhall

Glasgow House

City Centre North DH

Clyde Gateway East Smart Grid



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Future cities demonstrator

COMPETITION FOR LARGE-SCALE DEMONSTRATOR PROJECT FUNDING



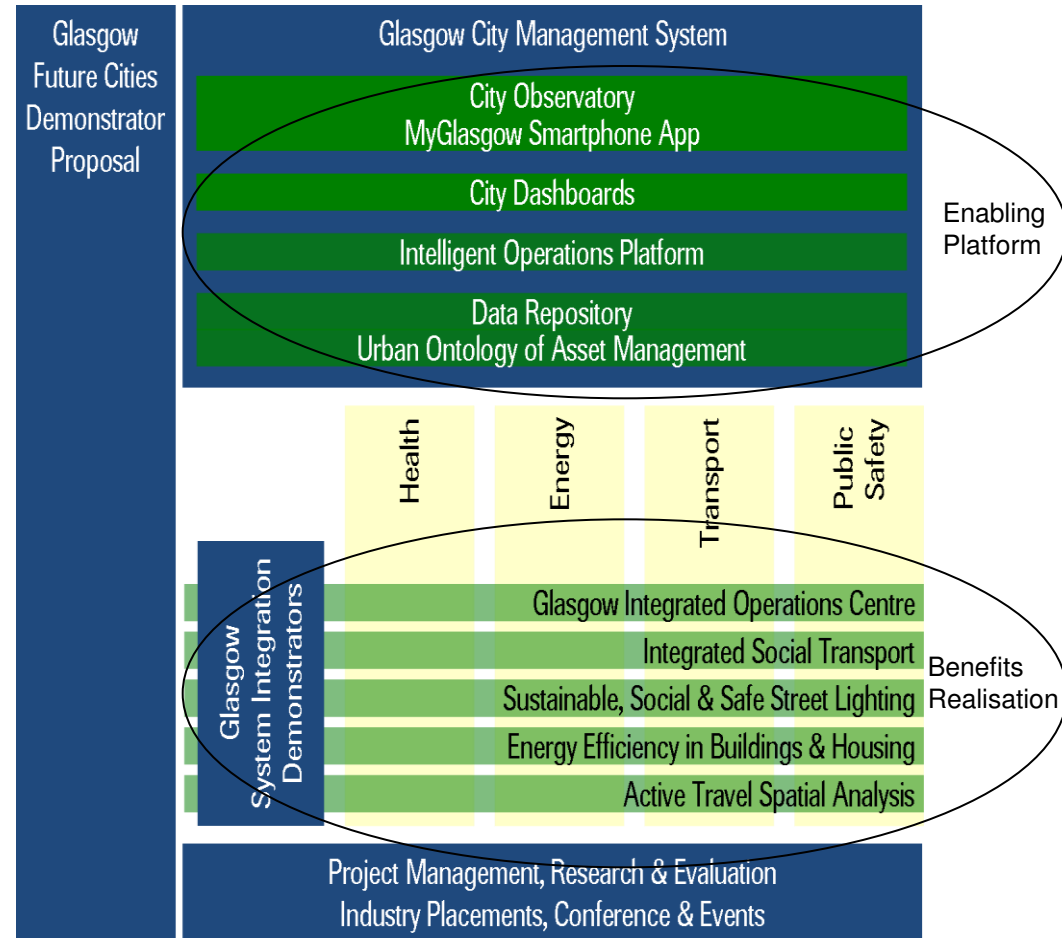
Technology Strategy Board

Driving Innovation

An ambitious programme aimed at using technology & data to make Glasgow a smarter, safer and more sustainable city.

TSB Future Cities Demonstrator

Public, private and academic sectors will combine expertise and use cutting-edge technology to enhance day-to-day life in the city. It integrates issues such as public safety, transport, health, technology and sustainable energy.



Actors

- Glasgow City Council
- Glasgow Community & Safety Services
- Sustainable Glasgow
- Health providers
- Energy suppliers
- Glasgow's Universities
- Wider SME/private sector
- Citizens

Integrated approach

- **Integrated Operations Centre**: managing a new futuristic public space CCTV network and TRAFFCOM roads management systems.
- **Sustainable Glasgow**: efficient energy conservation/generation, use of green technology, air pollution and integration of active transport (walking and cycling) routes with public transport networks.
- **Big Data Store**: collecting and analysing information from previously unconnected databases to influence future city services and developments and make it more accessible to more organisations.
- **Centralised City Dashboard**: giving agencies and the public real time information on subjects like traffic flow, weather alerts, accident and emergency waiting times, rail and bus services and roads gritting. Access will be via smartphone apps and customisable interface.

Data Platform & Web Portals

open.glasgow.gov.uk
Data Portal

map.glasgow.gov.uk
Map Portal

dashboard.glasgow.gov.uk
Dashboard Portal



City Technology Platform



Data

- from Files
- from Operational Databases
- from Data Repositories
- from other Open Data Portals ("Internet of Information")

Real-Time Events

- from Workforce (where possible)
- from Web-Services and Business Applications
- from City Infrastructure ("internet of Things")
- from (Volunteering) Citizens ("Internet of People"/ "Crowd-Sourcing")

Integrated Operations Centre



Budget

- Cost: £24million
- Finance: The Government's innovation agency - Technology Strategy Board (TSB)
- Further investment being sought

Expected Results

- Produces results in 4 main areas: health; energy; transport and public safety
- Increase inward investment: fast/transparent public sector operating
- Reduction of energy demands in businesses and in transport
- Improvement in environment: reduced impact of transport, better building management and fleet management
- Smart management of energy supply/demand in City buildings & utilities network
- Improve crime prevention, reduction antisocial behaviour
- Better functioning, more liveable cities, healthier and more sustainable

Key elements of success

- Unique integrated approach to transport, energy, technology underpinning management of a city
- Transforms Glasgow into a Future City, using the Glasgow City Management System to deliver a better service and real benefits to the quality of life of citizens and across the city.
- Working with partners: “Glasgow works best when it works together”.
- Stakeholders: sustained vision and leadership from leading organisations within Glasgow.

Problems along the way

Limitation/challenge	Solution
Fragmentation of data across the systems within Glasgow.	Sufficient technical expertise to ensure data is reliable for Glasgow City Management System.
Short Timescale	Ensure there is enough technical expertise to deliver real benefits in the limited timescale.
Sharing of access to live or private data (Data Protection)	Put in place agreements for members to facilitate sharing data.
Public Procurement and timings	Early identification of work packages and Prior Identification Notices (PINs)

Other things that need to be mentioned

- The TSB Future City Demonstrator in Glasgow is a national trailblazer providing added opportunities for dissemination as a Lighthouse project.



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For further information

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