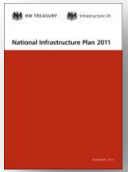


Delivering 21st Century Construction

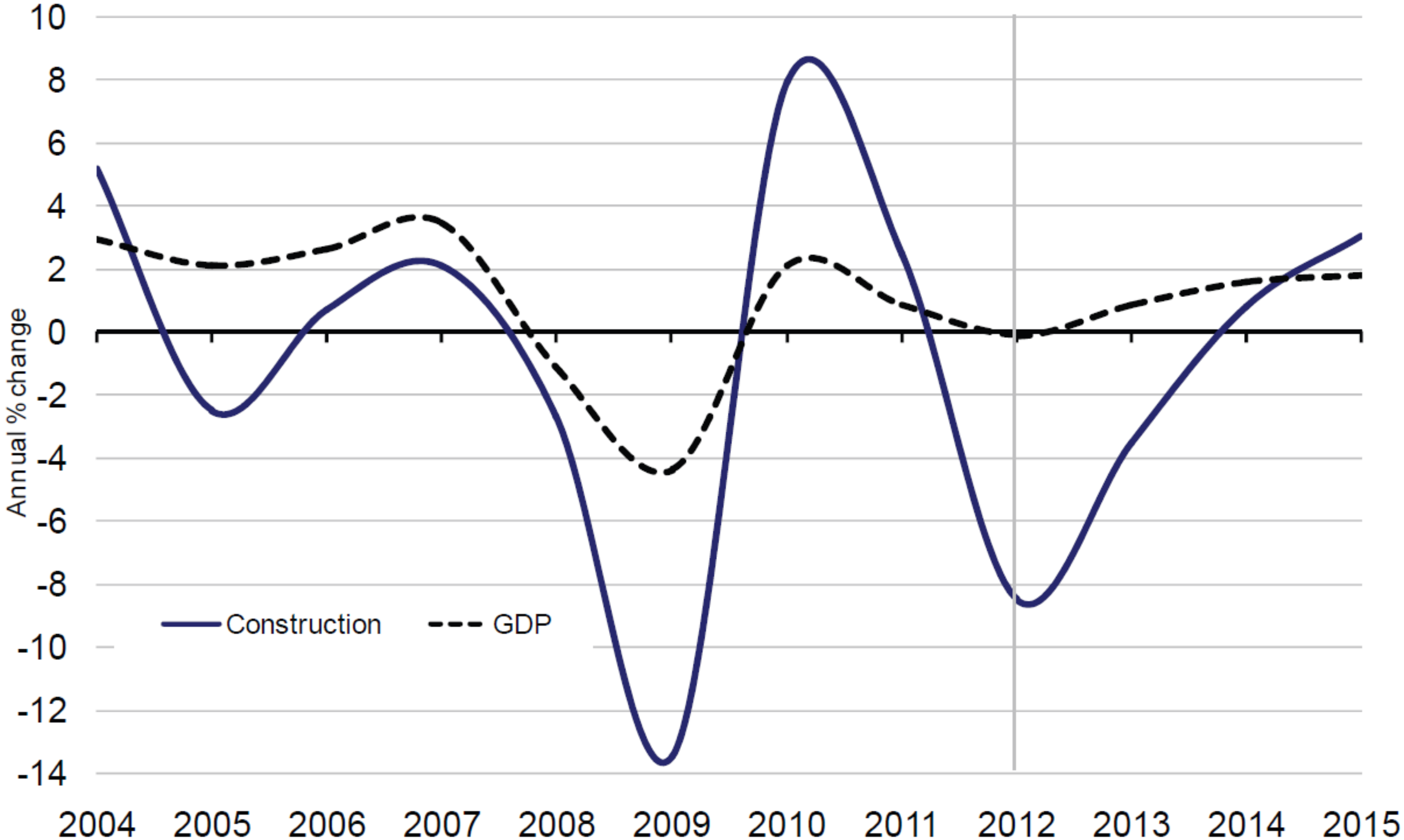
Keith Waller

Senior Adviser, Infrastructure UK

15 January 2013

Context

GROWTH IN UK CONSTRUCTION OUTPUT AND GDP



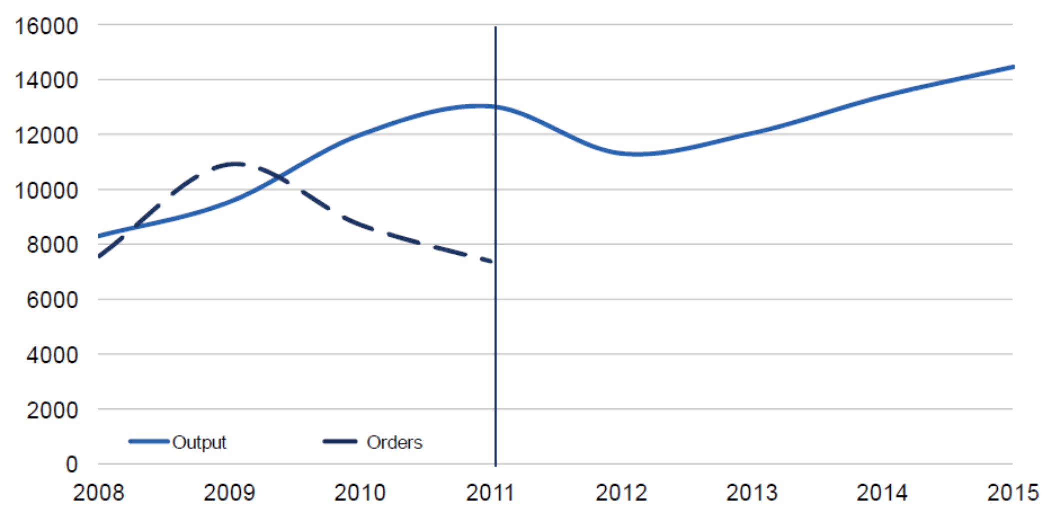
Source: ONS, Experian.

Analysis of Construction Forecasts

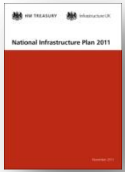
- Shows cyclical behaviour of industry
  - Not all construction sectors responding at same rate
  - Construction forecast to decline in 2013 by circa 3.5%
- Infrastructure forecast to lead growth
  - 2012 infrastructure output down circa 13%, but orders up 38%
  - Output to grow in 2013 and beyond

NEW INFRASTRUCTURE ORDERS AND OUTPUT

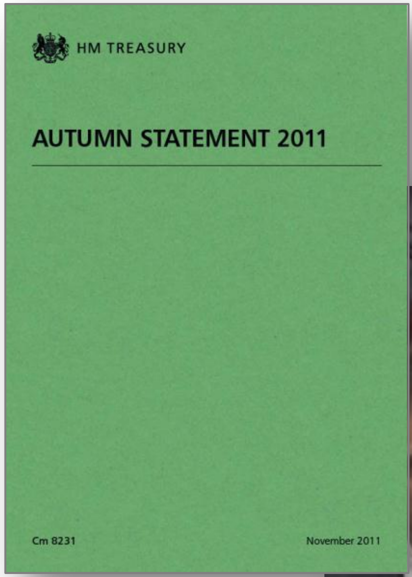
£ million 2005 Prices



Source: ONS, Experian.

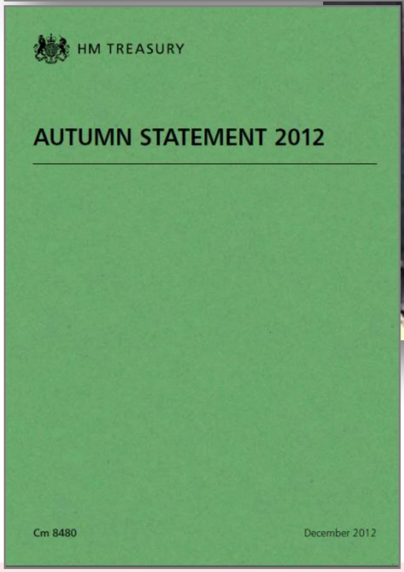


Autumn Statement 2011 and 2012 – consistent policy


HM TREASURY

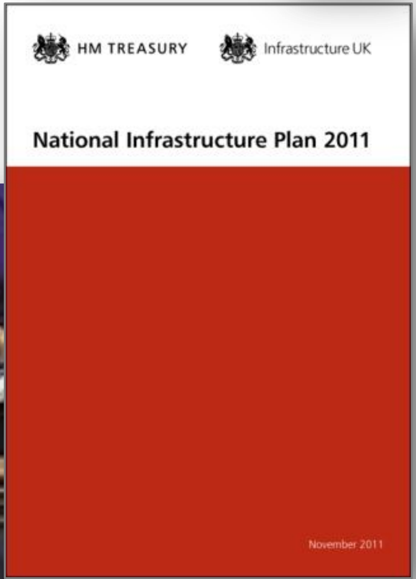
AUTUMN STATEMENT 2011

Cm 8231 November 2011


HM TREASURY

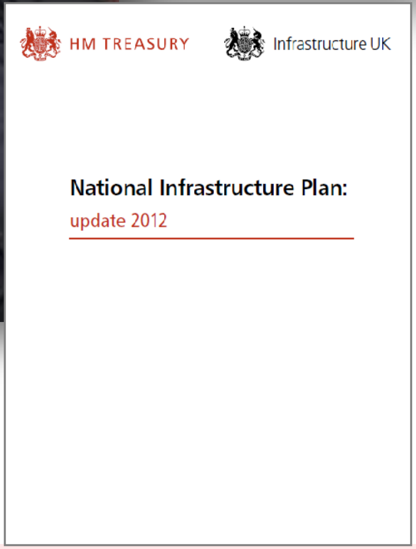
AUTUMN STATEMENT 2012

Cm 8480 December 2012


HM TREASURY Infrastructure UK

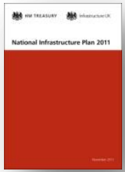
National Infrastructure Plan 2011

November 2011


HM TREASURY Infrastructure UK

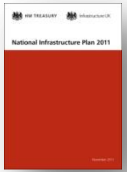
National Infrastructure Plan:
update 2012

National Infrastructure Plan - overview



- A vision for the UK’s infrastructure
  - Effective planning for medium term across all sectors
  - Long-term ambitions for each sector
- Mobilising funding and financing infrastructure *investment*
  - New approach to public private infrastructure investment – PF2
  - UK Guarantees Scheme – up to £40bn
  - Pension Investment Platform, Insurances, Inward Investment
  - Established Green Investment Bank - £3bn capitalisation
- Focusing on delivery
  - Prioritising major projects through a new Cabinet Committee
  - Bringing down costs in planning and through the Infrastructure Cost Review

The vision – long-term ambitions for each sector



Transport

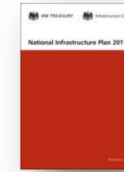
Energy

Communications

Environmental networks

Note: this is a selection from the fuller list of ambitions in the National Infrastructure Plan

The vision – performance and cost analysis



- In general, performance has risen since 2005, but so have costs

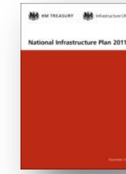
	Evolution of performance		Evolution of cost	
Sector	**Since 2005**	**Change 2010 to 2011[a]**	**Since 2005**	**Change 2010 to 2011[a]**
Major roads	↑	Stable	↑	Improved
Rail	↑	Improved	↓	Improved
Airports	↓	Stable	↑	Improved
Ports	↑	Stable	↑	Improved
Electricity	↑	Stable	↑	Stable
Gas	↑	Improved	↑	Stable
Communications	↑	Improved	↓	Improved
Water and sewerage[b]	↑	No 2011 data	↑	No 2011 data
Waste	↑	Stable	↑	Stable
Flood risk management	↑	Improved	↓	Improved

Source: HM Treasury analysis, see Annex D for details.

[a] +/- five points is classified as stable

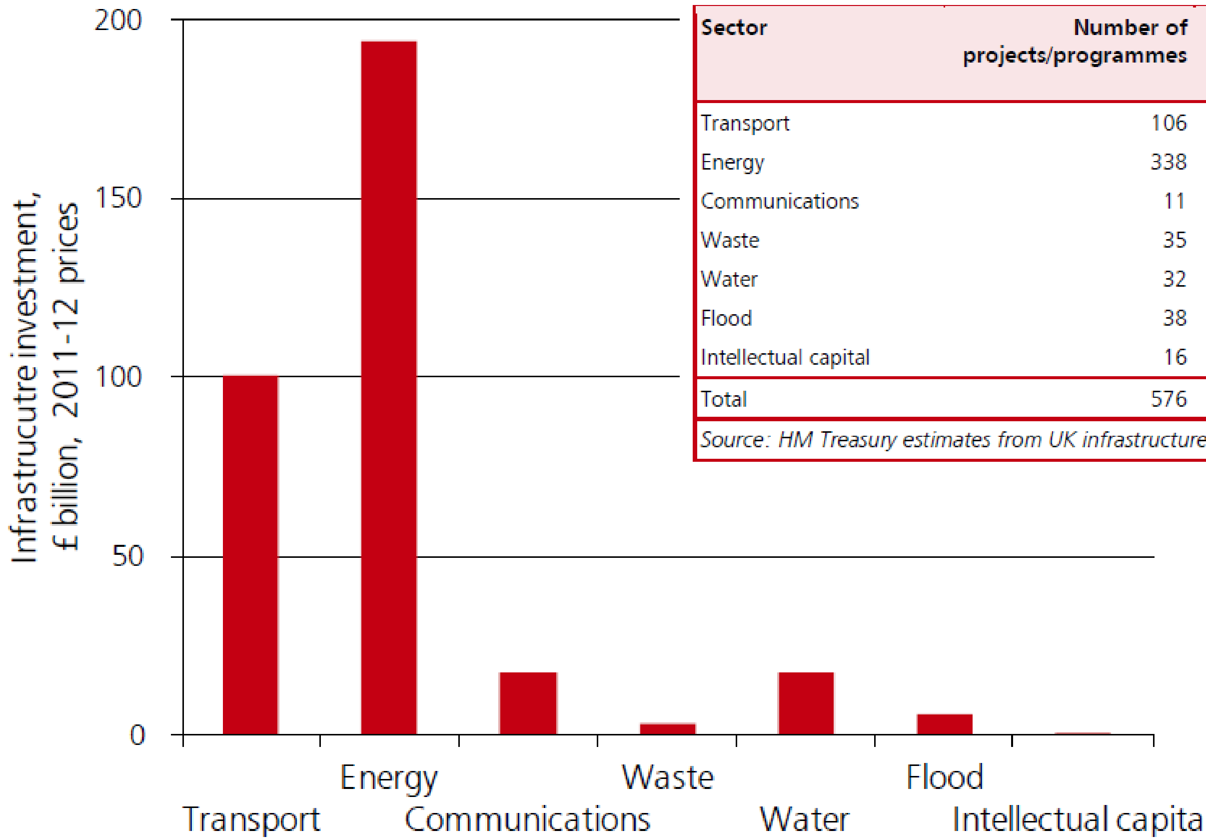
[b] Data for water and sewerage are to 2010. Updated indices are not available due to significant changes in data collection by Ofwat

UK infrastructure investment pipeline



2012-15 and beyond overall investment in economic infrastructure of more than £300 billion across over 500 projects and programmes

Chart 4.A: Infrastructure investment pipeline overview[a]



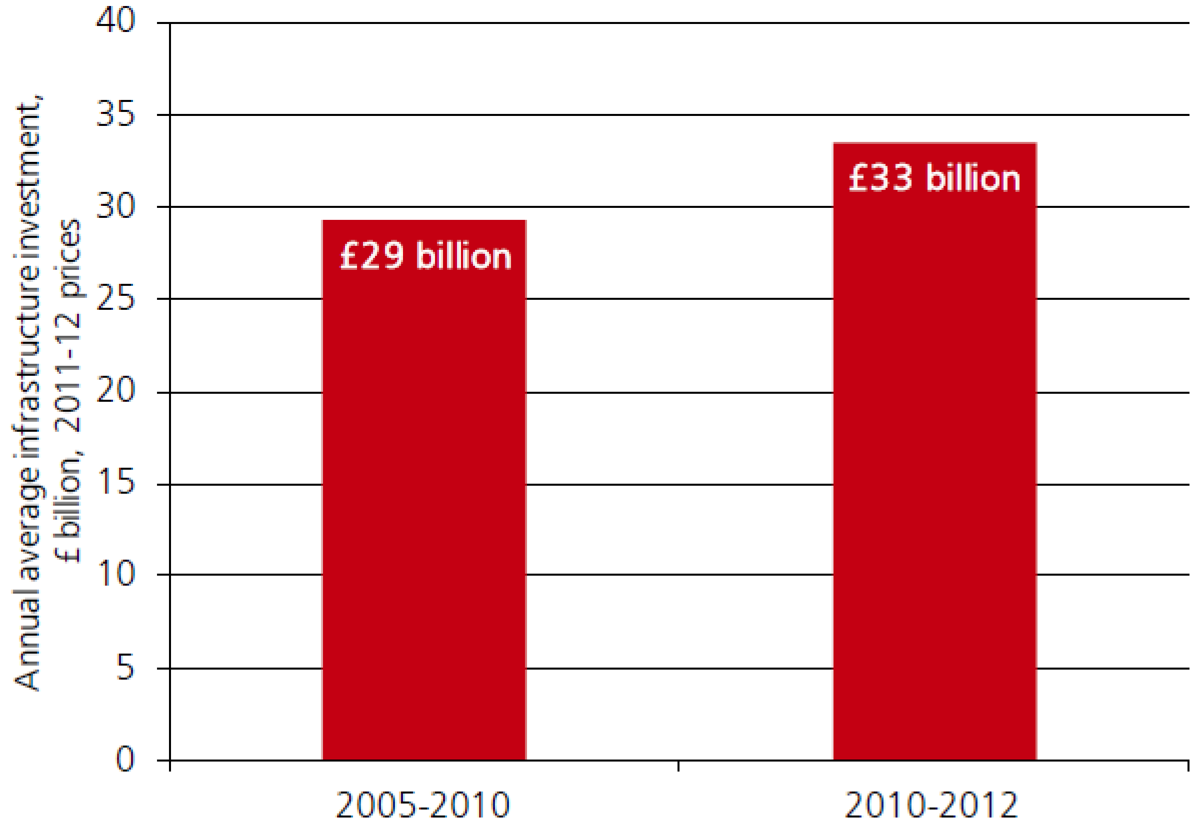
Sector	Number of projects/programmes	Number of projects/programmes with cost data	Infrastructure investment (£ million, 2011-12 prices)
Transport	106	91	100,690
Energy	338	113	193,773
Communications	11	11	17,389
Waste	35	28	3,299
Water	32	32	17,484
Flood	38	38	5,784
Intellectual capital	16	16	201
Total	576	329	338,620

Source: HM Treasury estimates from UK infrastructure investment pipeline data

Source: HM Treasury estimates from 2012 UK infrastructure investment pipeline data

Funding and financing – public /private investment

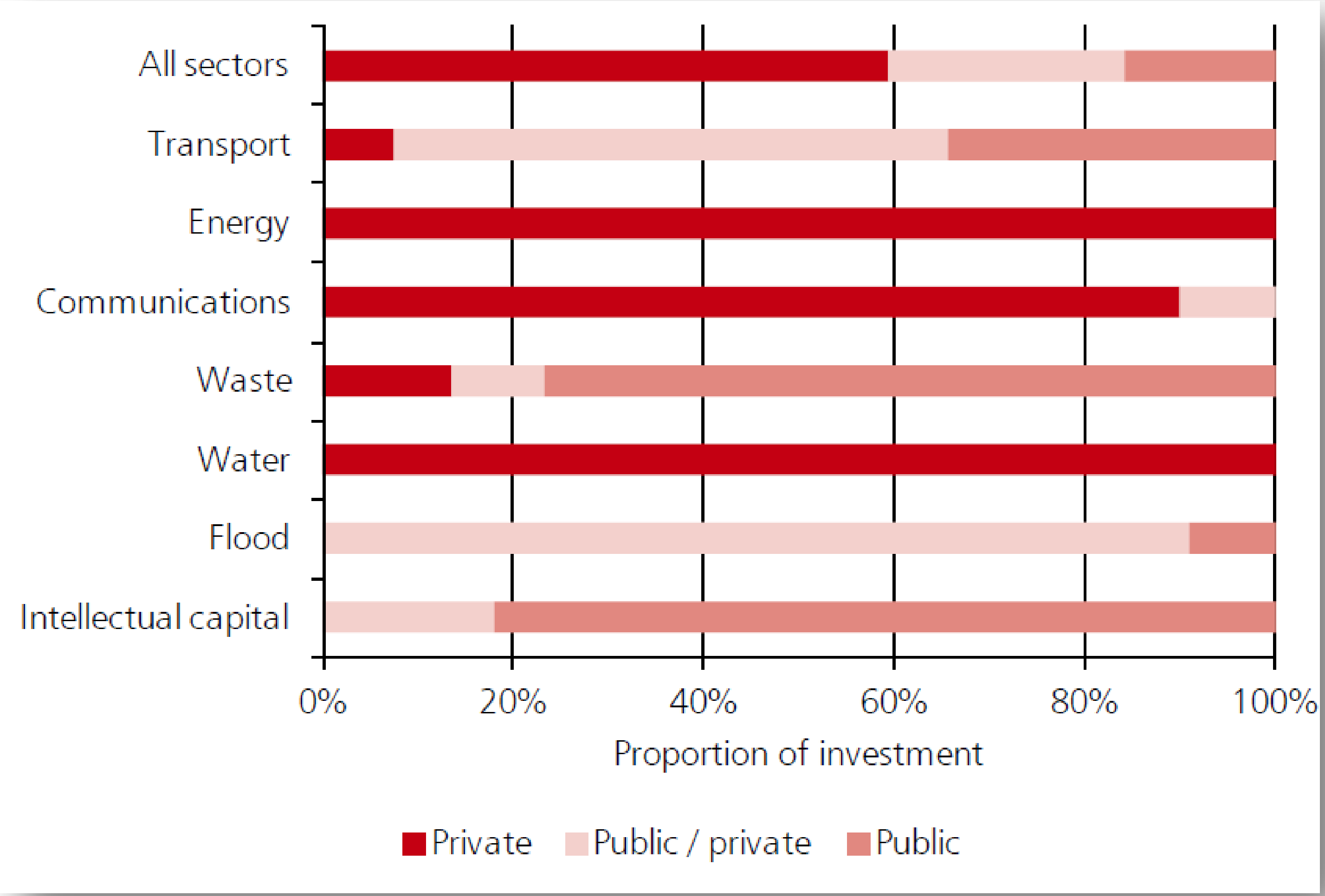
Average annual infrastructure investment in the UK, public and private



Source: HM Treasury estimates using data from company accounts, regulators, Office for National Statistics and government departments

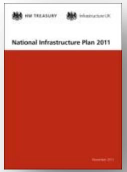
Funding and financing – public /private investment

Most UK infrastructure investment is already led by the private sector



Source: HM Treasury analysis.

Focusing on delivery – prioritising major projects

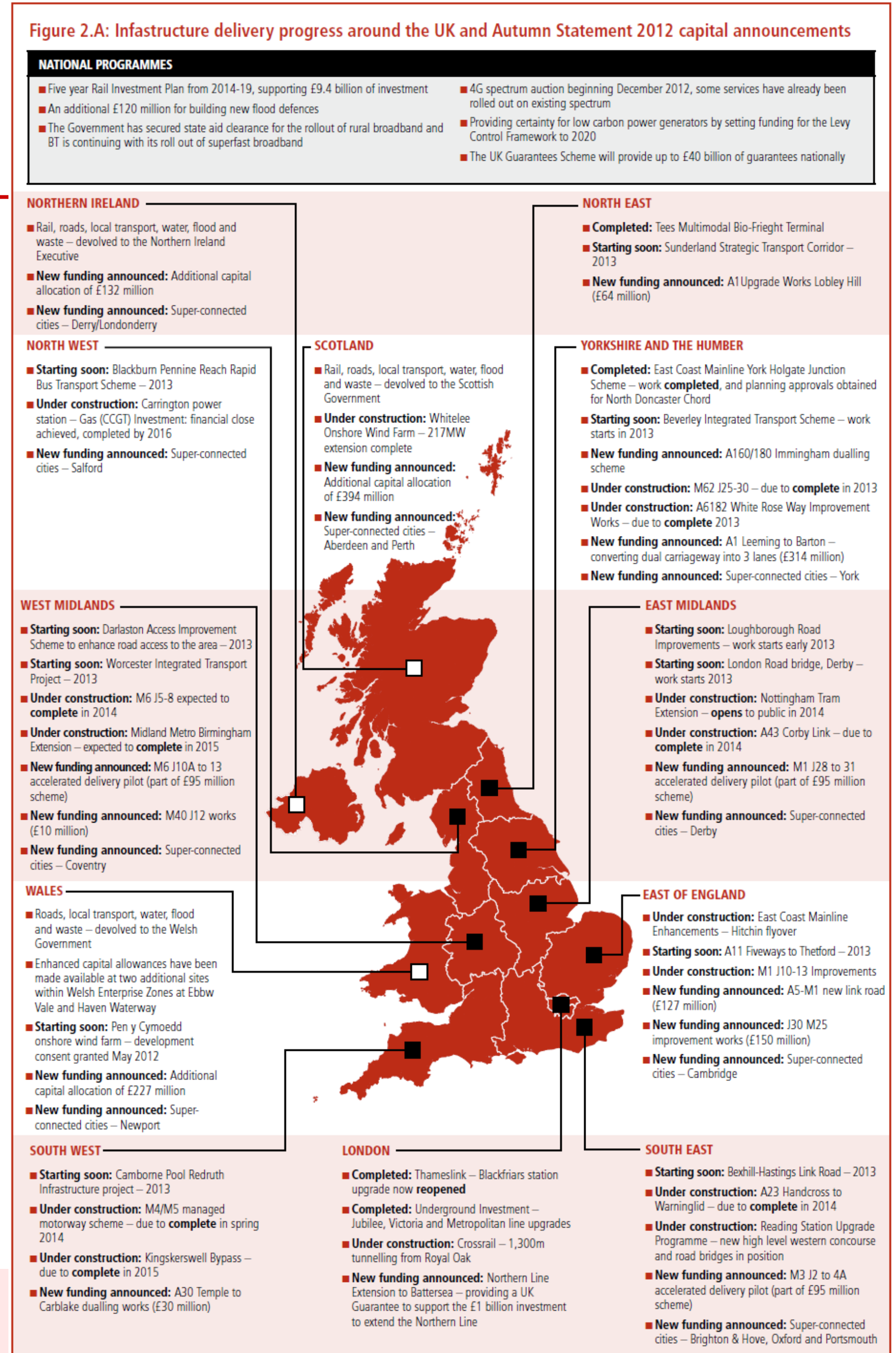


- The Government has identified 40 projects and programmes that are of national significance and critical for growth
- Cabinet Committee, chaired by the Chief Secretary to the Treasury, to tackle poor coordination and planning and regulatory hold ups to ensure delivery

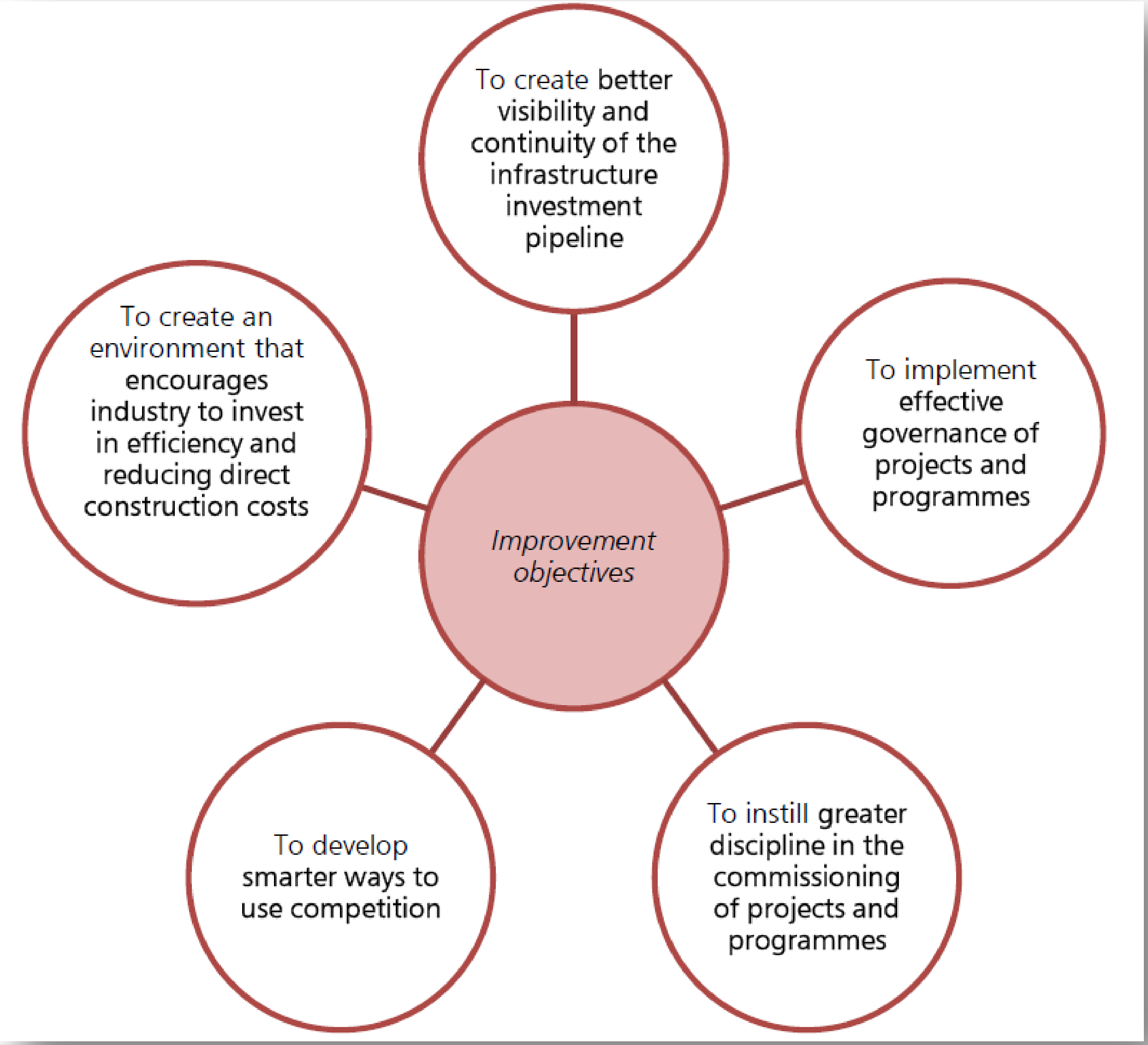
Transport	
Roads	
Highways Agency programme in construction – pre-2010 Spending Review	New Lower Thames crossing
Highways Agency managed motorways programme – Spending Review projects	Mersey Gateway Bridge
Highways Agency trunk road improvements programme – 2010 Spending Review projects	Local transport projects – funded at or before 2010 Spending Review
Highways Agency – Autumn Statement package	Local authority major transport schemes – development pool projects
Alternative approaches to resolving issues along the A14 corridor	
Public transport	
Crossrail	Reading upgrade programme
Thameslink	High Speed Two (subject to consultation)
Rail infrastructure and rolling stock enhancement	Northern rail connectivity (Liverpool-Newcastle including Northern Hub)
East Coast Main Line	Intercity Express Programme
Great Western Electrification	London Underground investment programme
Kings Cross Station improvements	Northern Line Extension to Battersea
Airports	
Gatwick capital investment programme	Heathrow capital investment programme
Ports	
Ports – container terminal projects	Ports – renewable energy projects
Local infrastructure funding programmes	
Growing Places Fund	Regional Growth Fund
Energy	
Electricity generation – new nuclear investment	Electricity generation – wind energy investment
Carbon Capture and Storage investment	Electricity and gas transmission and distribution investment
Electricity generation – gas investment (CCGT)	Smart meters
Electricity generation – biomass investment	
Communications	
4G mobile auction and rollout	Fixed broadband investment – private and public
Rural mobile coverage	Urban broadband fund
Water and sewerage and flood risk management	
Thames Tideway Tunnel	Flood and coastal erosion risk management programme (including Thames Estuary 2100)

Delivery Progress

- Key commitments in AS 2011 delivered:
  – Energy Bill published
  – High Speed 2 decision
  – £9.4bn investment in rail network
  – Offshore Wind Programme Board formed
  – Major new investments in highways network
  – Flood defence programme



Improving Delivery - Key themes



Focusing on delivery – efficiency and innovation

Implementing the Cost Review

The Government has:

- published the construction and infrastructure pipelines
- committed to streamlining procurement processes and better engagement with suppliers
- started driving out duplication and redundancy in technical standards
- begun working with industry to build skills and capability to meet investment pipeline

Pipeline – Addressing cyclicality

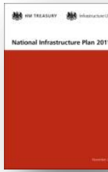
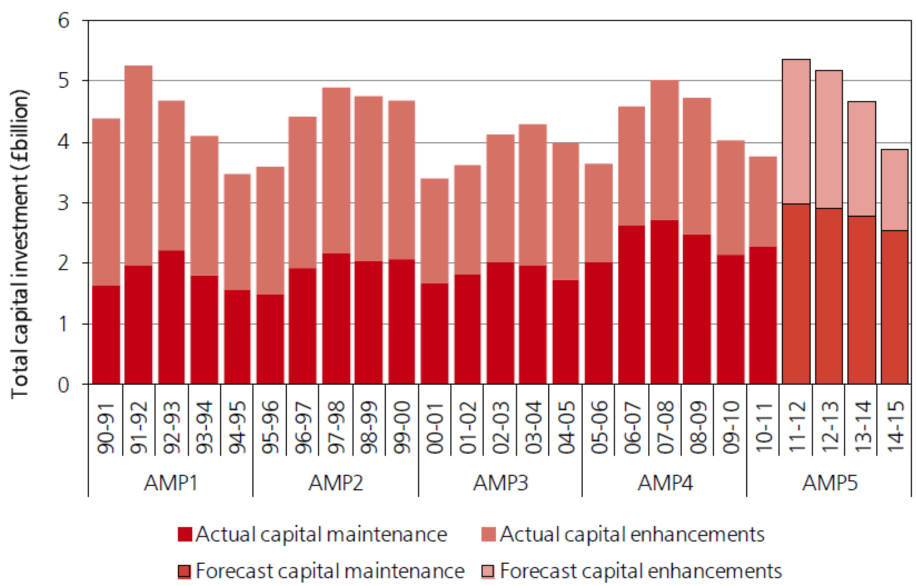
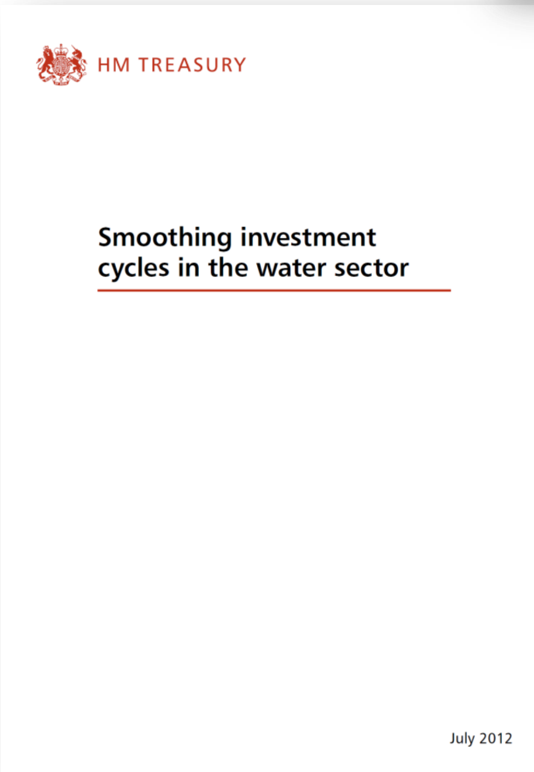


Chart 1.A: Total industry net capital investment 1990-91 to 2014-15



Source: Ofwat[2]



- Even with published pipeline – cyclical effects undermine optimum performance
- Estimated impact in water sector alone is 3-5% lower productivity, loss of between 20,000 and 40,000 jobs each five year period
- Actions set out to incentivise smooth investment profile

Standards

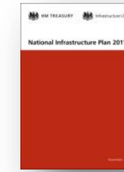
- Report published July 2012
- Evidence of clients getting smarter at simplifying their requirements
  - LU, NR
- Still pockets of poor practice
  - Midland Quarry Products supply asphalt to local authority highways clients
  - Same overarching highways standards, but MQP produce 270 different asphalt mixes
- Action plan now being implemented

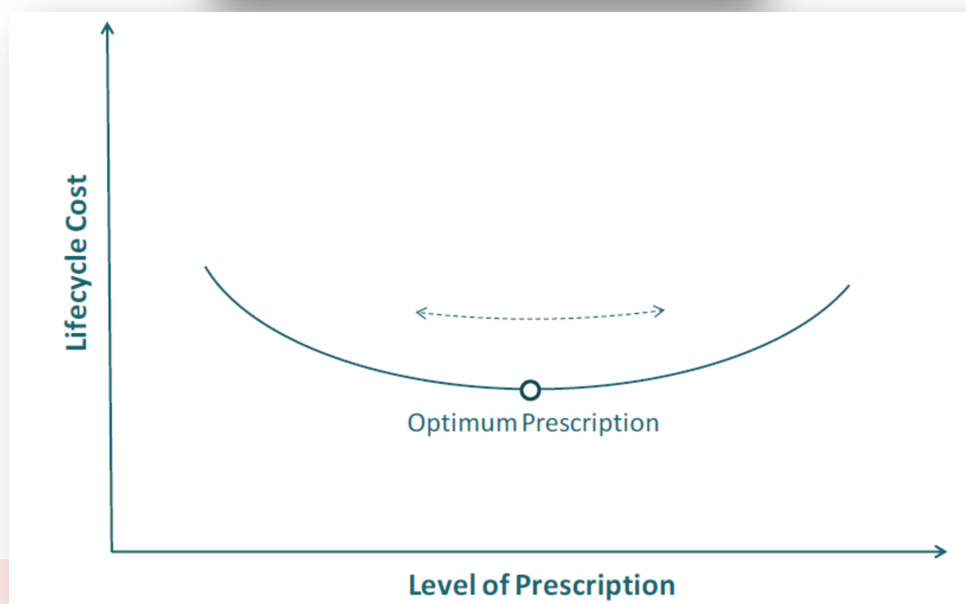

Specifying Successful Standards

An industry enquiry into how standards and specifications can enable the UK to innovate, lower costs and improve whole life value of our infrastructure assets

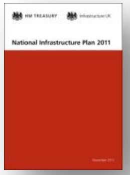
Infrastructure Cost Review

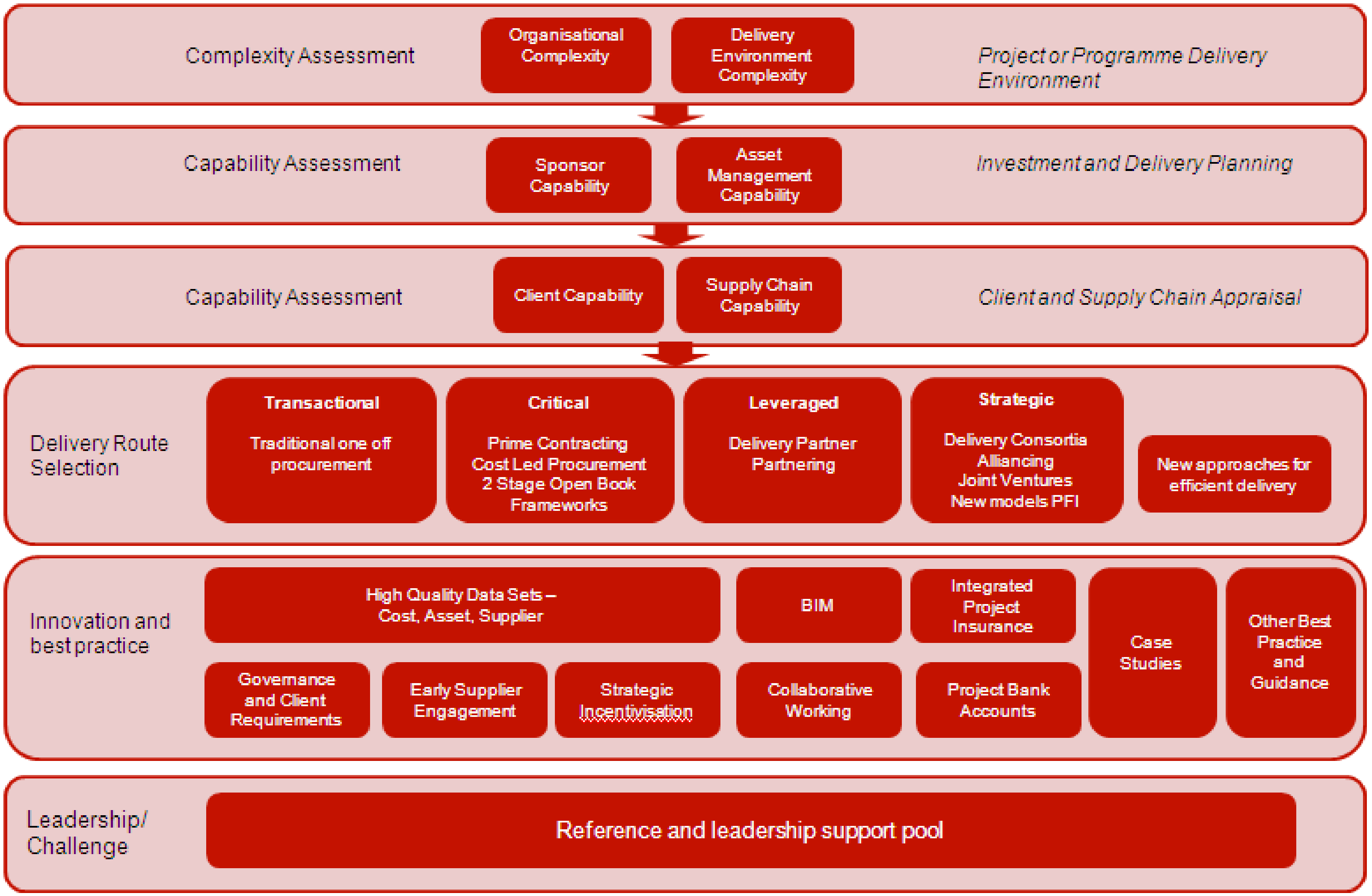
Industry Standards Group - July 2012





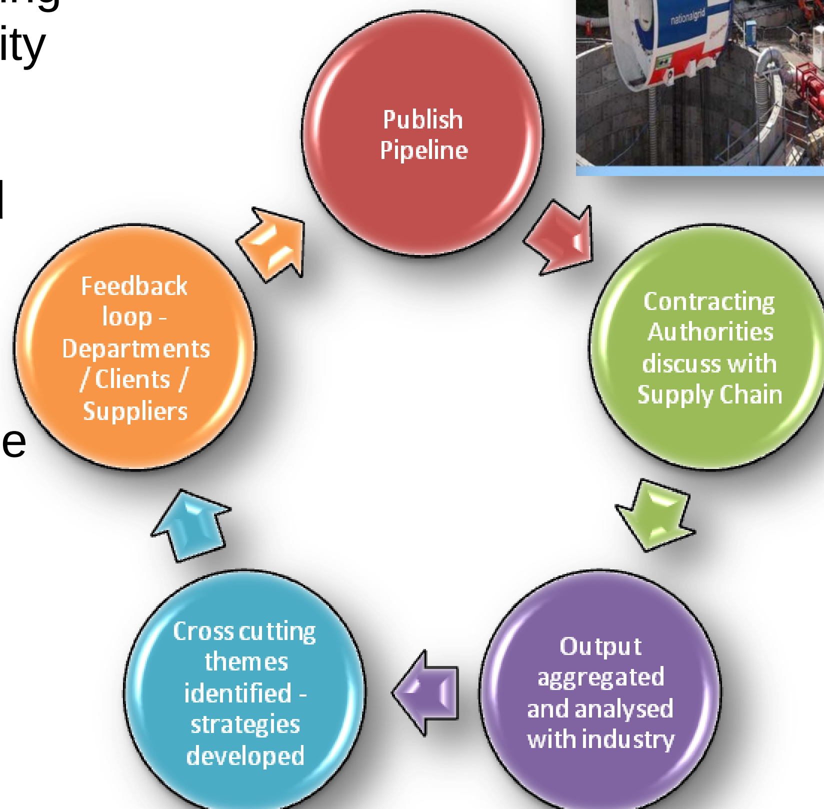
Infrastructure Procurement Routemap



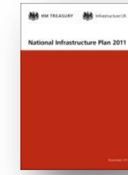


Building Capability

- Having published pipelines – how should we use them?
- Example: Tunnelling analysis April 2012
  - Industry, clients and government producing a co-ordinated approach to build capability
- Industrial Strategy for Construction, under Peter Hansford, being prepared for Summer 2013
  - A vision for UK construction
  - Build skills and capability to meet pipeline
  - Improve procurement and delivery
  - Innovative modern methods
    - BIM, DFMA
  - Low Carbon, Low Cost



Summary



- There remain a number of key challenges
  - Pipeline – short term volumes
  - External pressures – Eurozone and global economic climate
- However:
  - Strong government focus on infrastructure delivery at the highest level
    - New Cabinet Committee keeping cross Whitehall focus on delivery
    - Increasing levels of investment in economic infrastructure in line with NIP
  - An targeted approach to build capability to meet published pipelines
    - Industrial Strategy for Construction
  - Cost Review principles being embedded in project delivery

Backed by:

- A long term, sustainable need to invest in UK's economic infrastructure


HM TREASURY
Infrastructure UK
Infrastructure Cost Review:
Implementation Plan
HM TREASURY
Infrastructure UK
National Infrastructure Plan 2011
HM TREASURY
Infrastructure UK
National Infrastructure Plan:
update 2012

Links

National Infrastructure Plan

http://www.hm-treasury.gov.uk/infrastructure_nip.htm

Infrastructure Cost Review

http://www.hm-treasury.gov.uk/iuk_cost_review_index.htm