

## Scottish Government Budget Options

Briefing Series No 4

# **OUTLOOK FOR SCOTLAND'S INFRASTRUCTURE**

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# OUTLOOK FOR SCOTLAND'S INFRASTRUCTURE

## EXECUTIVE SUMMARY

The arrival of devolution coincided with Scotland benefitting from record levels of public funding. Such additional funds substantially eased the development of Scotland's public infrastructure such as its roads, schools, train lines and stations, its lifeline ferries, social housing as well as the country's water and sewerage network. However, the impending Whitehall budget cuts will have a profound impact on future spending.

**On the capital side, instead of arguing for yet more investment, Scotland's politicians may actually be facing the stark choice of, can we add to the Scottish economy's much needed capital stock or can we only maintain what we have already secured?**

Added to the government's dilemma is that there are fewer strong advocates arguing for retention of investment spending compared to spending on services where people's jobs are at risk to-day, tomorrow and next year.

Projections for what the Scottish Government may have available to spend on capital projects between now and 2014-15 suggest there could be a serious investment hiatus. To ensure capital spending is not cut to an inappropriate degree over the next spending review period, greater clarity on the Scottish Government's views is now required. In developing its responses to both the independent budget review panel and the UK spending review, it will need to address the following strategic questions:

- a) What proportion of the reduced Scottish budget should and will be allocated for capital investment?
- b) Which of the many potential new infrastructure projects remain a priority and which are now either no longer essential or affordable?
- c) Does maintenance of the exiting capital stock take precedence over further capital developments?

## MAIN POINTS:

- The UK Government's intention of limiting future net investment implies a substantial cut in investment spending; between 2010-11 and 2013-14 net investment is set to fall from around 2.6% of GDP to around 1.2%. The Scottish Government is not limited to applying an equivalent cut in Scotland's infrastructure spending; it can choose to favour more capital investment at the expense of resource spending. However, if it applies the same cut (ie, DEL capital is cut by say, 50%), there will be £1.6 billion less to spend on publicly funded capital projects in Scotland by 2014-15 (see **Scenario 1 in Fig 2**). This is the most likely capital scenario.

- Evidence from previous periods of fiscal consolidation suggests that favouring investment spending over revenue secures a more sustained adjustment as economies emerge from recession. It could be argued, therefore, that maintaining and developing Scotland's infrastructure spend will be a key element in ensuring Scotland emerges stronger from the current recession.
- A key risk to infrastructure investment is if the pressure to maintain 2010-11 levels of spending on all recurring programmes (ie, current, or resource, spending) succeeds. Whilst it is unrealistic for the Scottish Government's budget cuts to be borne in full by capital projects, retaining spending on current programmes at 2010-11 levels would result in just such an outcome, ie, there would be nothing left either for new capital spending or for the maintenance of what is already in place (ie, **Scenario 3 in Fig 2**)
- Retaining the existing (ie, 2010-11) capital/resource ratio throughout the forecast period produces **Scenario 2 in Fig 2**.
- Under Scenario 1, if Health is ring-fenced at its 2010-11 level, by 2014-15 all other spending areas will face a 60% reduction in their capital budgets, and highlights the added pressures on all non-Health capital spending should Health be singled out for preferential treatment.
- To ensure the vastly reduced investment funding is utilized effectively there is a need for greater clarity on how it is to be allocated. There are many potential capital projects that could be developed over the next 5-10 years but limited or no publicly available understanding on which offers greatest return to the Scottish economy nationally, regionally or locally. The Scottish Government's Infrastructure Investment plans need to be extended and regularly updated to provide the basis for effective investment planning.
- Without an understanding of the current progress of all existing infrastructure projects it is not possible to know if the anticipated capital budget is or will be adequate to meet expectations across the country. Spreading the cost of large infrastructure investments over more than one spending review period may help reduce the risk of funds being insufficient. However, using PPP-like structures has fallen out of favour leaving limited or no room to fill any impending funding gap.
- Greater transparency on how capital projects are selected for funding is now needed. Cost benefit analysis (applied in standardized basis across all potential options) offers an obvious starting point for assessing how best to allocate scarce funds, with the final selection being strongly linked to those projects that have the highest cost:benefit ratio.

## INTRODUCTION

This briefing paper outlines projections for spending on capital in Scotland's public sector between now and 2014-15. Given these projections, the paper also suggests that current decisions being made on what proportion of the Scottish block should be used for capital investment could have substantial long-term effects on the shape of Scotland's infrastructure and its longer-term economic prospects.

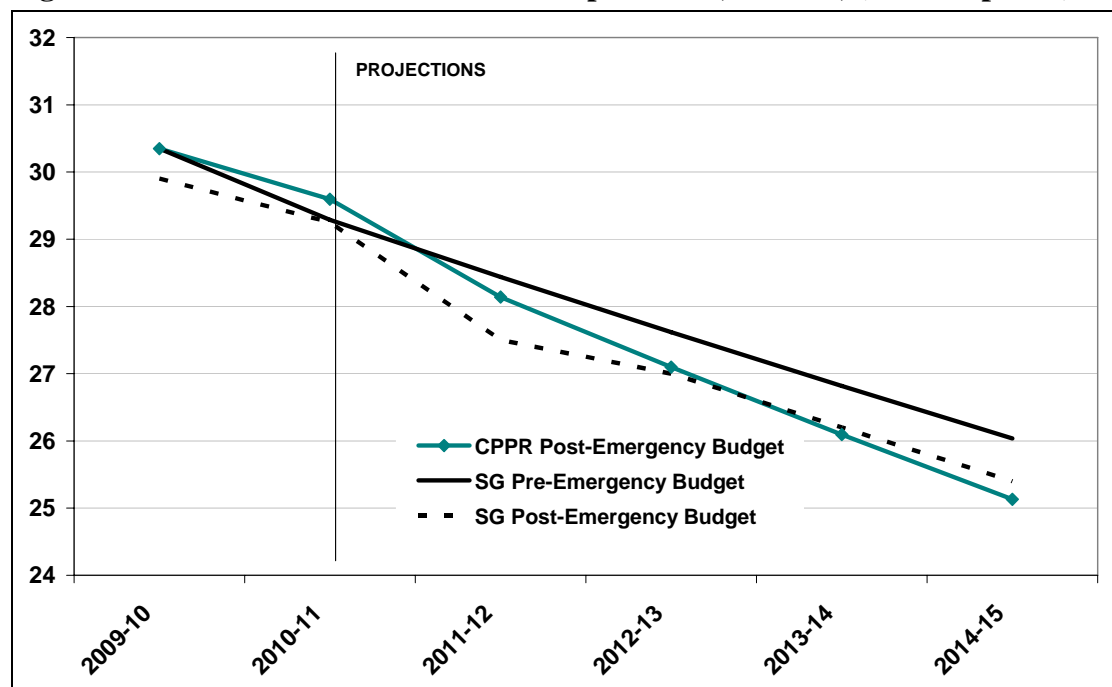
With the new UK Government's emergency budget reaffirming the previous Labour Government's budget commitment to halve public investment by 2014-15, planning where such spending cuts occur is important if their negative impact is to be limited. This is the case for all spending cuts but is especially true when dealing with infrastructure spending, where planning can span many years.

## SPENDING OUTLOOK

### Total DEL

The Scottish Government's recent (pre and post Emergency Budget) projections for Scotland's public spending confirm the stark challenge over at least the next 5 years (see Fig 1).

**Fig 1: Scottish Government Total DEL Expenditure, £billion, (2010-11 prices)**



Source: Scottish Government, 2010a & b; CPPR projection

From what now looks like the high watermark (ie, 2009-10), the Scottish Government could be faced with assessing how to plan its future spending promises against a backdrop of a real terms reduction in available funds of up to -£5 billion<sup>1</sup> by 2014-15 (based on the CPPR projection).

### **Split between capital and recurrent spending**

The 2010 Scottish budget allocation for recurring programme commitments (ie, funded by DEL resource allocations) is just under 90%, with the remainder being used to develop Scotland's capital infrastructure. Evidence from the European Commission and the IMF suggests favouring investment spending over revenue is more likely to secure a sustained adjustment when emerging from recessions<sup>2</sup>. It could be argued, therefore, that maintaining and developing Scotland's infrastructure should be a key element in helping Scotland emerge stronger from the current recession.

#### *DEL capital scenarios*

As Fig 2 illustrates, the outlook for Scotland's infrastructure could be bleak, extremely so if the difficult decisions on recurring programmes are not taken and capital spending is sacrificed.

#### Scenario 1: Scottish DEL capital faces same % cut as UK Government DEL capital

In its initial report on the state of UK public finances, the Office for Budget Responsibility (OBR)<sup>3</sup> accepts the UK Treasury's March 2010<sup>4</sup> projections (and retained this in its post Emergency Budget projections) for the percentage of GDP that is to be allocated to net investment spending. Between 2010-11 and 2014-15 net investment will fall from around 2.6% of GDP to around 1.2%. If the Scottish Government chooses to apply the same level of reduction on DEL capital, this would mean a cut of £1.6 billion will need to be accommodated in the next 4 years (ie, Scenario 1 in Fig 2).

*Whilst this scenario could be viewed as the most likely, two other options facing Scotland are worth discussing.*

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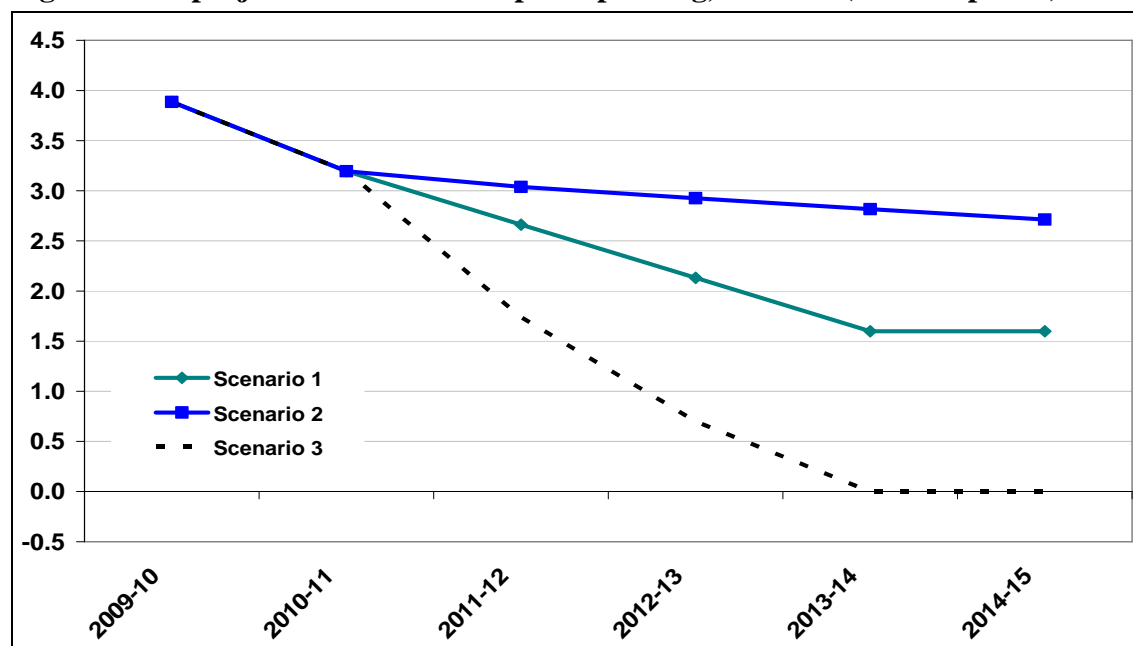
<sup>1</sup> The Scottish Government's scenarios pre and post the Emergency Budget are not directly comparable given technical changes that have been implemented in the latter. These have effectively lowered the starting point for any future real terms cuts. The CPPR projection is based on a Scottish budget reduction of -3.7% per annum in real terms over this period.

<sup>2</sup> See CPPR report to the Scottish Parliament's Financial Scrutiny Unit on the lessons to be learned from previous economic recessions. See CPPR (2010).

<sup>3</sup> See Office for Budget Responsibility (2010).

<sup>4</sup> See Table C2 UK Budget 2010.

**Fig 2: CPPR projections for DEL Capital spending, £ billion (2010-11 prices)**



Scenario 2: Scottish DEL capital kept at same % of total DEL as in 2010-11

Should the percentage of total DEL allocated to capital spending in Scotland remain at its 2010-11 level, £0.5 billion would be trimmed from the DEL capital budget by 2014-15 (ie, Scenario 2 in Fig 2). This scenario sets a probable upper limit to what is possible for DEL capital over the next 4 years.

Scenario 3: Scottish DEL Resource kept at its 2010-11 level

Finally, the third line in Fig 2 (Scenario 3) illustrates the impact on DEL capital if spending on all of the Scottish Government’s annually recurring programmes were simply to remain at their 2010-11 levels (ie, all of the impending budget cuts are taken from the capital budget). Under these conditions capital DEL falls to zero by 2013-14. Such a scenario is impossible not least because there are already known projects that have effectively already secured their share of any future capital budget (see Appendix for some of the current examples). Thus, the lower limit for DEL capital is not going to be nil, but the retention of more current spending programmes will add to the pressure on Scotland’s infrastructure programme.

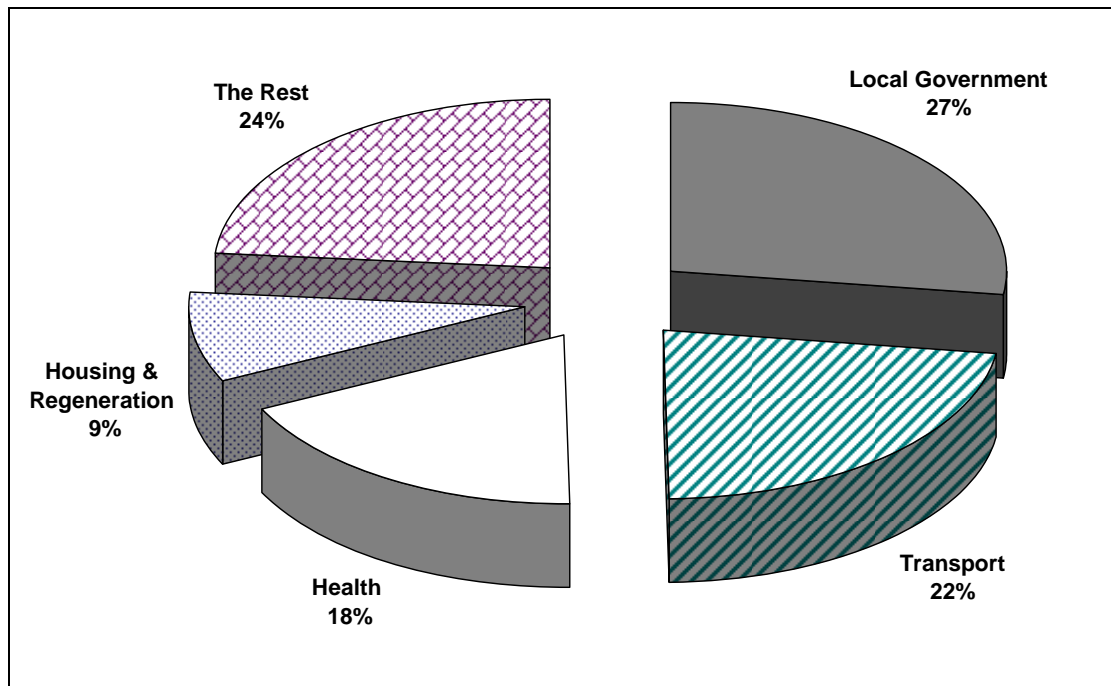
**Impact on budget recipients of capital spend**

The Scottish Government’s capital budget is not evenly allocated across all possible recipients. As Fig 3 shows, more than three quarters is spent by 4 areas: Local Government with 27%, Transport on 22%, Health with 18% and Housing and Regeneration on 9%. The remaining 6 areas<sup>5</sup> together are set to receive less than one-

<sup>5</sup> Of “The Rest” category Higher & Further Education & Schools (6%), Prisons, Courts & Central Police (6%) and Scottish Water & Climate Change (5%) together accounted for 17%.

quarter of the total capital spending for 2010-11 (see the Appendix for the current list of Scottish Government supported capital projects).

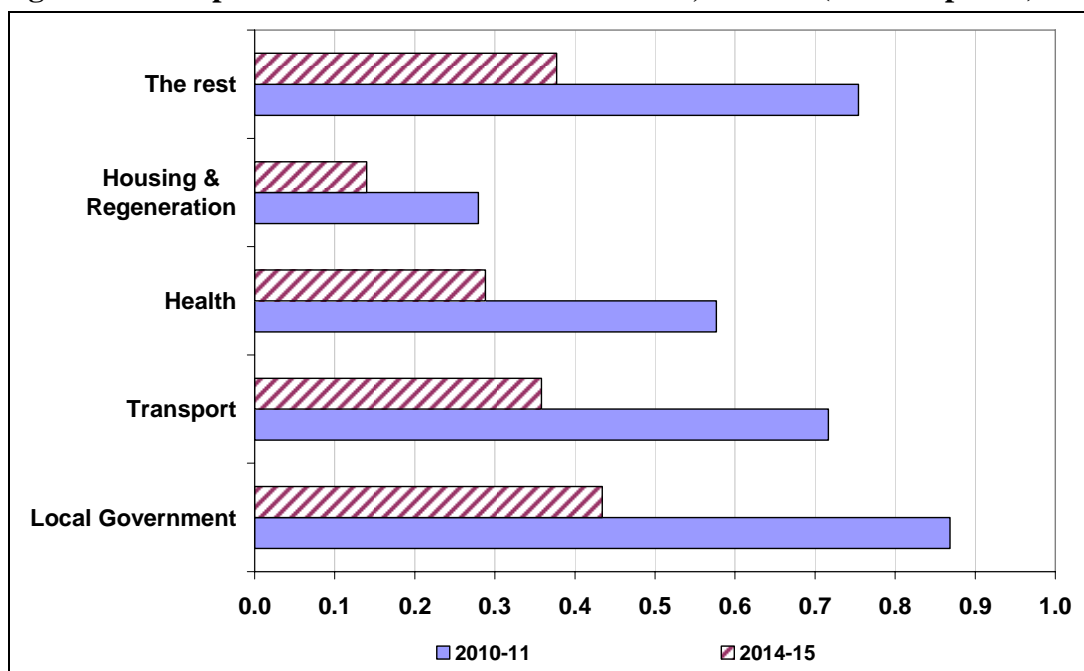
**Fig 3: Share of DEL Capital in 2010-11**



Source: Scottish Government, 2009

If these shares are and the total capital spending is cut by 50% (ie, Scenario 1 above), Fig 4 illustrates the relative impact of such an outcome across these key budget recipients.

**Fig 4: DEL Capital allocations 2010-11 & 2014-15, £billion (2010-11 prices)**



Source: Scottish Government, 2009 & CPPR projections

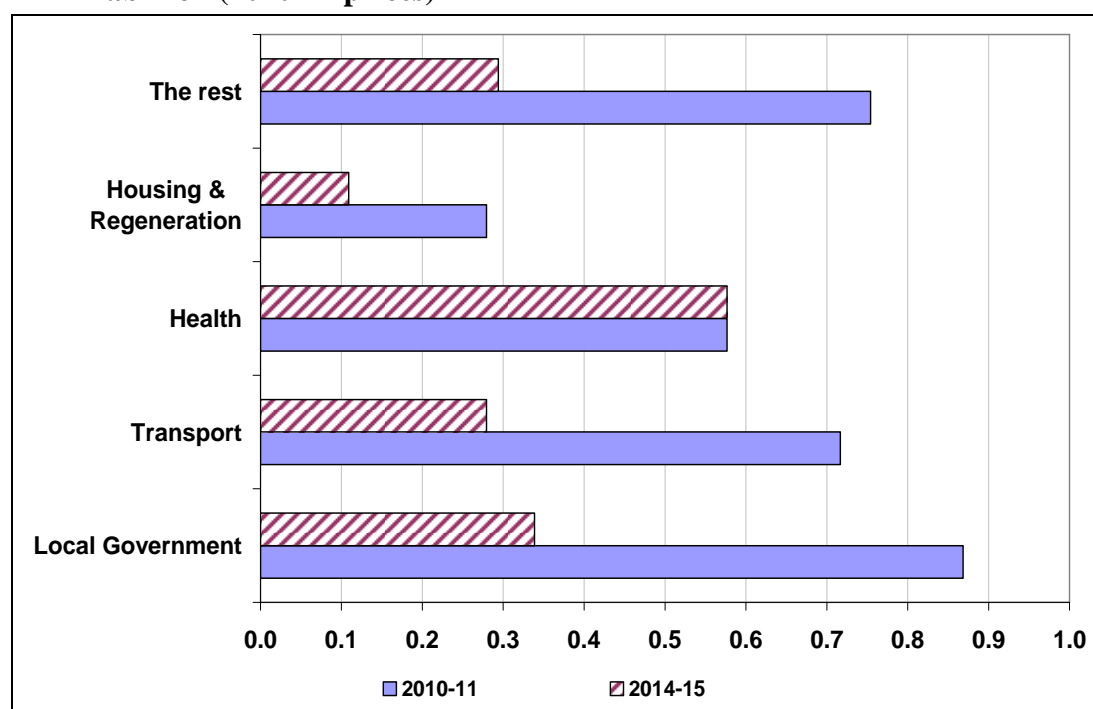
Between 2010-11 and 2014-15, they will have to plan for potentially large capital reductions:

- Health would secure a total DEL capital allocation of £0.29 billion;
- Local Government would secure £0.43 billion;
- Transport would secure £0.36 billion;
- Housing & Regeneration would face a fall to 0.14 billion; and,
- All other budget areas would collectively have to work with a total capital budget of £0.38 billion.

*Ring-fencing health capital allocation*

Should the 50% overall reduction in capital spend be maintained AND Health<sup>6</sup> capital spending be ring-fenced at its 2010-11 level, then the budget cuts for the rest could rise to almost 60% (see Fig 5).

**Fig 5: DEL Capital allocations assuming Health ring-fenced at 2010-11 level (£billion (2010-11 prices))**



Source: Scottish Government, 2009 & CPPR projections

If Health continues to receive £0.58 billion per annum (in real terms), by 2014-15:

- Transport will have only £0.28 billion not only for all maintenance activities but also for all new infrastructure investment;
- Local Government would be down to an allocation of around £0.34 billion to spread amongst all 32 local authorities;
- Housing & Regeneration could go as low as £0.11 billion;
- All other budget areas will have no more than £0.29 billion to share in total.

<sup>6</sup> This is based on the Health spending line in the Scottish Government’s Health and Wellbeing portfolio being ring-fenced.

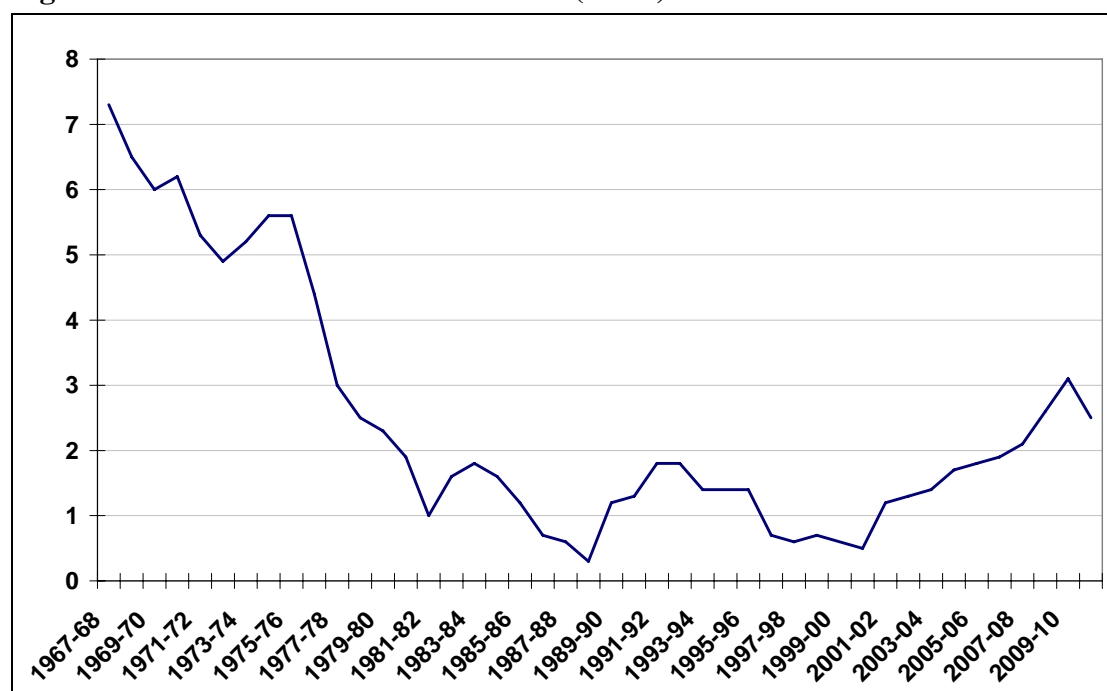


## IMPLICATIONS FOR CAPITAL PLANS

### *Return of the stop / go cycle?*

As Fig 6 highlights, although the UK's capital spending over the last decade has been significant, it has been well short of the levels experienced throughout the 1960s and 1970s.

**Fig 6: UK Public Sector Net Investment (PSNI) as a % GDP**



Source: PESA, 2009

In 1967-68 net capital spending accounted for over 7% of GDP and only fell to 2010-11 levels by 1978-79. Throughout the 1980s and 1990s, Public Sector Net Investment (PSNI)<sup>7</sup> averaged 1.2% of GDP, roughly the same level now anticipated for the UK for 2013-14 and beyond. Although the recent boost to UK capital spending on public services has been substantial, it is far from clear that this spending has satiated the UK's (and Scotland's) infrastructure needs.

It is also not clear whether the re-emergence of a “stop/go” approach to development of Scotland's infrastructure would leave maintenance spending at risk. This area of the Scottish Government's spending could be viewed as an easy target for achieving budget cuts, but such an approach would simply add to future demand for capital spend as the asset base deteriorates accordingly. With severe budget reductions, public sector productivity improvements are even more essential to ensure public services continue to be delivered. So too is some minimal level of spending on infrastructure maintenance to ensure it remains fit-for-purpose.

<sup>7</sup> PSNI includes the annual capital component of any PPP payments but not the aggregate investment cost supported by such payments.

### *On-going role for PPPs?*

Much has been written about the relative pros and cons of PPP schemes and the Scottish Government's growing obligation to pay the associated interest payments and service charges. This paper is not seeking to argue for or against PPPs. However, there appear to be two very important pros that should at least be assessed if the Scottish Government wishes to maintain or grow Scotland's public sector capital stock against a background of falling PSNI spending limits.

First, if DEL capital is to be severely constrained, would suitably structured PPPs allow the acceleration of capital investment that would otherwise need to be cut? Such an approach would help to spread the cost of Scotland's public infrastructure spending over a longer time horizon, ie, it would span more than one relatively short UK Government spending review period. It could also help ensure the costs are borne not only by current tax payers but by also by future generations of tax payers who will also benefit from the investment.

Secondly, would the development of PPP structures help to ensure any newly acquired capital assets are adequately maintained, ie, will PPP contracts prevent budget cuts to maintenance spending on Scotland's newly acquired hospitals, schools and roads? Under PPP arrangements the cost of maintenance is usually an element of the annual service charge (along with debt interest and principal repayments). So, even if capital budgets are at risk, PPP roads, for example, will be maintained whilst conventionally procured roads may be at risk of deteriorating to "save" other publicly-funded proposals.

### *Impact on known capital projects?*

What might all of this mean for existing and future capital plans? Unfortunately, there is limited data on annual spending commitments for the existing infrastructure projects and even less for future infrastructure needs. As a consequence, even under the most benign scenario (ie, Scenario 2), it is not possible to indicate which projects might now need to be delayed? If cost overruns occur within existing projects, thus requiring support from future capital allocations, what additional delays will then ensue?

As the Appendix highlights, the Scottish Government's most recent review of its directly funded schemes shows there are a large number of infrastructure projects either already underway or sitting in the wings awaiting adequate funding to secure their delivery. Audit Scotland's<sup>8</sup> most recent review of the Scottish Government's supported capital programme indicated there were "104 major projects valued at £4.7 billion in progress" and that "between 2002 and 2007 ...43 publicly-funded major capital projects valued at £811 million had been completed". This substantial historic capital investment has however, now added to future maintenance and capital spending needs.

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<sup>8</sup> See Audit Scotland (2008)

The Scottish Government's recent<sup>9</sup> assessment of the country's infrastructure needs listed 37 Health schemes valued at a minimum of £930 million, at least 60 projects across Scotland's 32 local authorities valued at £600 million+ and a wide array of new developments across all the other budget areas that will need capital support post 2010-11.

The projects outlined in the Appendix exclude both local authority sponsored investments (eg, the Glasgow Commonwealth Games, Edinburgh Trams etc) and infrastructure investments that are wholly funded through private finance. It may be possible to argue that future developments funded via such routes are at less of a risk (though not at nil risk) from the impending budget cuts. Nonetheless, as general Scottish Government support falls and capital rationing by banks and private equity continues, questions on where, when and how Scotland's infrastructure developments are to be delivered now need to be urgently addressed.

Greater clarity around future investment priorities and what they mean for annual spending requirements (ie, the annual cashflow needed to develop such priorities) is also now essential to ensure Scotland's infrastructure plans are anything other than vague. Finally, a similar level of clarity is needed on where infrastructure priorities now exist, where projects may now no longer be essential and how value for money is going to be secured across all funded projects.

#### *A wider role for SFT?*

As the capital budget tightens it is possible that the role of organisations such as the Scottish Future Trust (SFT)<sup>10</sup> will become pivotal.

In its written submission to the independent budget review panel SFT indicated it is already working on infrastructure projects to the value of £5.5 billion, spanning the whole of Scotland's public sector. It helps scrutinise key projects to ensure they remain needed, assist in the planning and implementation of project procurement and aim to provide suitably structured funding and financing solutions.

SFT's submission also reinforces the importance of maintaining capital investment as both a boost to economic growth and as a means of ensuring the public sector asset base remains fit-for-purpose not only now but for the next generation.

Prioritising what infrastructure will be needed and what should be funded is now essential. If SFT's skills and funding mechanisms allow capital spending to be more evenly spread over the coming years, then the negative impact arising from the sharp reduction in DEL capital could be greatly reduced.

#### *The Scottish Water effect?*

In the timescale 2010-11 to 2014-15, Scottish Water is set to receive capital support from the Scottish Government amounting to £140 million per annum. This is a declining level of support compared to the annual commitment given to it over the last

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<sup>9</sup> See Scottish Government (2008)

<sup>10</sup> See Scottish Future Trust (2010).

10 years. However, Scottish Water will still secure just under 5% of the total Scottish capital budget in 2010-11. Should total capital spending fall 50% by 2014-15 (ie, Scenario 1 above), Scottish Water's share will simply rise year-on-year, as, unlike some areas of the Scottish public sector, Scottish Water's infrastructure investment is needed to allow it to meet pre-defined output targets set by the sector's independent economic regulator (the WICS). Failure to meet these output targets will leave Scottish Water facing penalty payments, further jeopardising the delivery of its investment programme. The Scottish Government's capital challenge simply adds to the evidence in support of Scottish Water being given the freedom to seek funding directly from the private sector thus freeing-up the £140 million of capital grant given to it annually.

## **HOW TO CHOOSE BETWEEN PROJECTS?**

With less money available, the mechanism on how to prioritise between competing capital bids becomes more important. Clarity in the methodology to be applied is essential and it is assumed the independent budget review panel will outline its preferred approach when it indicates which projects and programmes are to be favoured and which to be cut.

The HM Treasury Greenbook<sup>11</sup> on project appraisal offers guidance on how to assess whether investments are both value for money and cost effective. Applying cost benefit analysis techniques allows meaningful comparisons between competing spending proposals. Those proposals with a positive net present value of costs over benefits are deemed worthy of progressing. The choice of which and how many can then be funded will inevitably be influenced by political horse trading. However, if those ultimately funded are also those projects with the highest cost-benefit ratios then we can be more confident that Scotland's scarce capital spending has been utilised as efficiently as possible<sup>12</sup>.

Whilst having a more standardised approach to appraising investment projects is now essential, so too is the continued use of the government's Gateway review process. Such reviews ensure projects are independently assessed at various key stages, aimed at minimising the likelihood of serious cost over-runs and delays. If future investment funds are limited, making use of appraisal techniques and Gateway reviews will help maximise their return.

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<sup>11</sup> See HMT(2003) for general guidelines on project appraisal in the public sector or the STAG (Scottish Transport Appraisal Guidance) guidelines for appraising transport projects in Scotland.

<sup>12</sup> The Financial Times, (July 4<sup>th</sup> 2010) suggests a zero-based budgeting approach is currently underway in Whitehall as a mean of cutting the total capital budget and ensuring projects that continue to secure scarce funding are those deemed to "...show the most economic benefits".

## CONCLUSIONS

The last decade has seen public spending on Scotland's infrastructure reach record levels. It has encouraged many to believe that Scotland's schools, hospitals, public roads, lifeline ferries, the rail network along with Scotland's water infrastructure will continue to provide the economy and its citizens with the necessary infrastructure to grow. Unfortunately, given the substantial UK budget deficits, total public spending and with it support for capital projects, has proven to be unsustainable. The ability of the UK and Scottish Governments to maintain infrastructure development is now at a crossroads. If current resource spending is protected the impending budget cuts will mean little or nothing is left for capital spending. As the Scottish Government responds to both its own independent budget review and the UK Government's spending review, greater clarity and openness on what and where scarce capital spending is to be allocated is now essential.

### Contacts:

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**Appendix**  
**Scottish Government's Capital Project List**

	Est value		Completion date	
	Low £m	High £m	Earliest	Latest
<b>HEALTH</b>				
NHS Forth Valley Acute Hospital	293	293	2011	2011
NHS Fife General Hospital	170	170	2011	2011
State Hosiptal Redevelopment	90	90	2011	2011
Royal Hosiptal for Sick Children Edinburgh	148	148	2012	2012
Tayside Mental health Development	98	98	2012	2012
NHS Grampian Emergency Care Centre	95	95	2012	2012
Southern General Hospital Glasgow	842	842	2015	2015
<i>Monklands General Hospital</i>	<i>400</i>	<i>400</i>	<i>??</i>	<i>??</i>
<i>Royal Edinburgh Hosiptal</i>	<i>135</i>	<i>135</i>	<i>??</i>	<i>??</i>
<i>NHS Ayrshire &amp; Arran Mental health facility</i>	<i>53</i>	<i>53</i>	<i>??</i>	<i>??</i>
<i>D&amp;G Royal Infirmary refurbishment</i>	<i>36</i>	<i>222</i>	<i>??</i>	<i>??</i>
<i>NHS Lothain Clinical Neurosciences</i>	<i>28</i>	<i>53</i>	<i>??</i>	<i>??</i>
<b>TRANSPORT</b>				
Airdrie to Bathgate Rail Lnk	375	375	2010	2010
M74 Completion	692	692	2011	2012
M80 Stepps to Haggs	320	320	2011	2012
A90 Aberdeen Western Peripheral Route	295	395	2012	2013
M74 Raith Junction	56	61	2012	2013
A90 Balmedie to Tippetty Dualing	53	63	2012	2013
Edinburgh Waverley Station	135	135	2012	2012
GARL (ex branch line)	219	219	2012	2013
M8 Baillieston to Newhouse	170	210	2013	2014
M8 Associated Network Improvements	54	64	2013	2014
Highland Main Line	50	90	2013	2013
Borders Railway	235	295	2014	2014
Traffic Scotland Intelligent Transport System	80	80	2015	2015
New Forth Crossing	1,700	2,300	2016	2017
Edi-Gla Rail Improvement Programme	1,164	1,164	2016	2016
<b>OTHER</b>				
HM Prison Grampian	110	110	2013	2014
Court Unification	61	61	2010	2010
HM Prison Shotts, Phase 1	59	59	2010	2011
HM Prison Low Moss	128	128	2011	2012
Scottish Crime Campus Gartcosh	82	82	2012	2013
Parliament House	63	63	2013	2013
National Indoor Sports Arena Glasgow	116	116	2012	2012
Glasgow School of Art	50	50	2012	2012
Glasgow City Centre Colleges	315	315	2015	2015
	481	481		
<b>TOTAL</b>	<b>8,970</b>	<b>10,046</b>		

*Note: The list excludes projects not sponsored directly by the Scottish Government eg, Glasgow Commonwealth Games, Edinburgh Trams etc*

*Source: Scottish Parliament, Finance Committee - Budget Strategy Phase; Budget 2011-12, Annex F*