



**Potential economic benefits from improved connectivity - a case study of rail between Scotland and the North East of England**

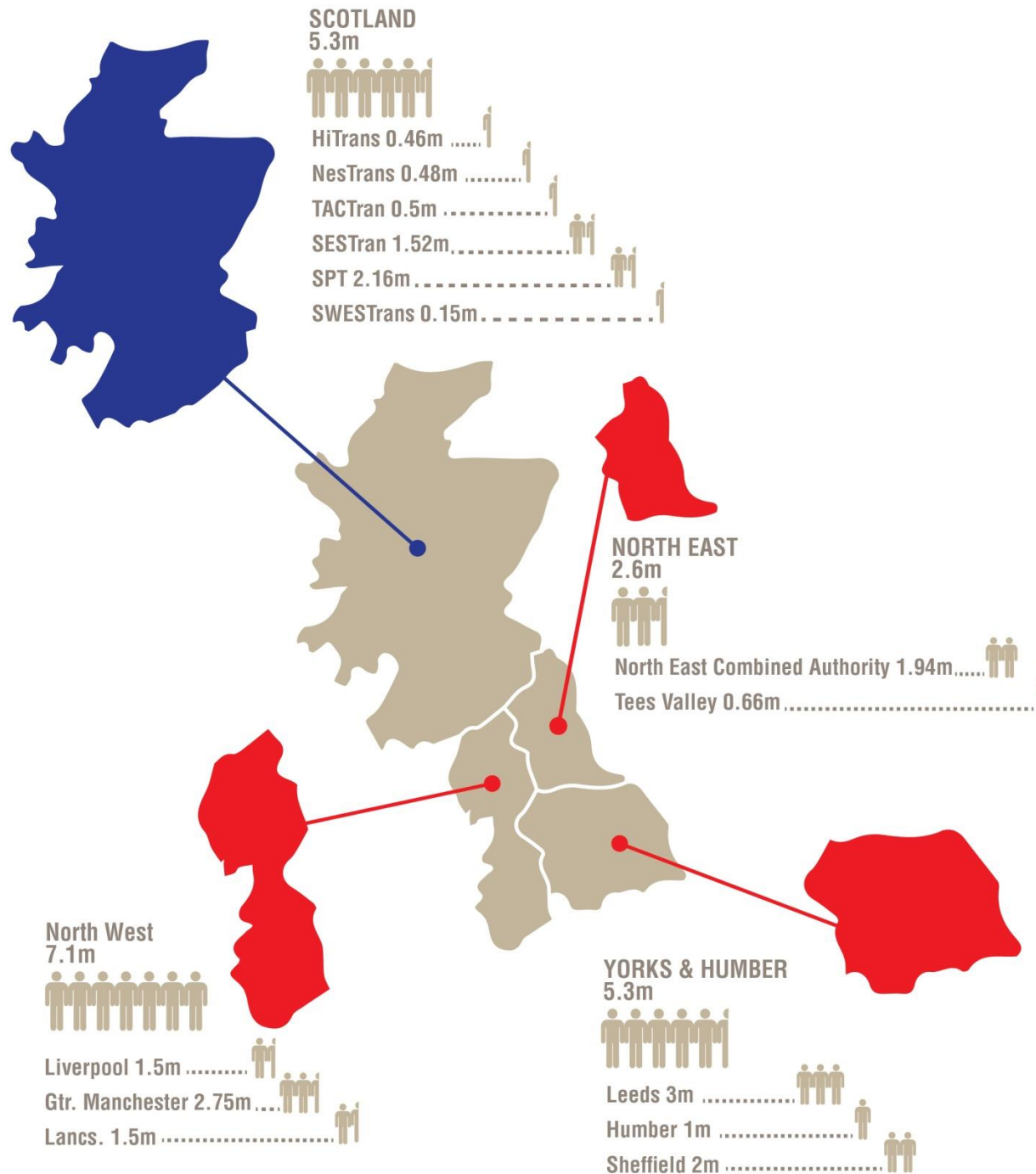
**Scottish Transport Summit**  
June 15<sup>th</sup> 2017 Glasgow

**Alan Beswick**

Director of Transport Economics SYSTRA Ltd

# Scotland and Northern England are Sizeable Economies SYSTRA



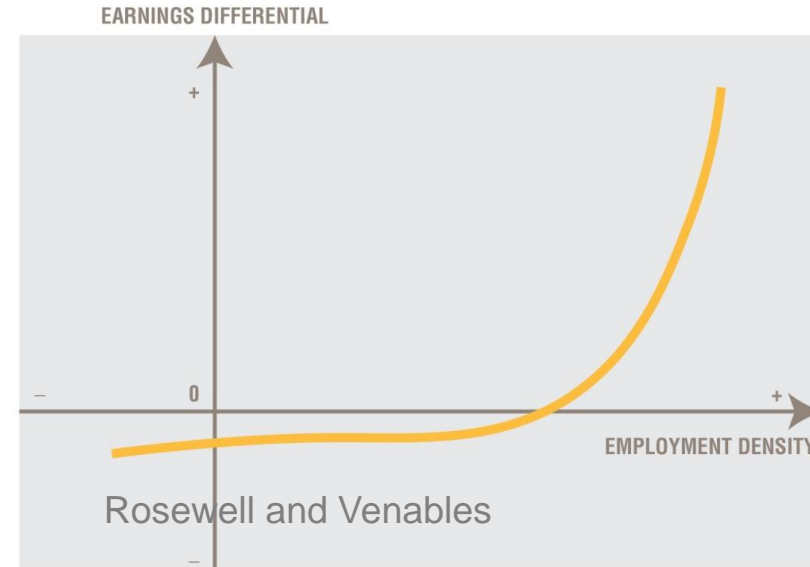


With some significant functional economic areas

# How improved connectivity benefits the economy (i)

## BY EXPANDING PLACES.....

- Facilitating larger & more effective labour markets
  - allowing constrained places to grow and
  - more productive economic activity within city centres

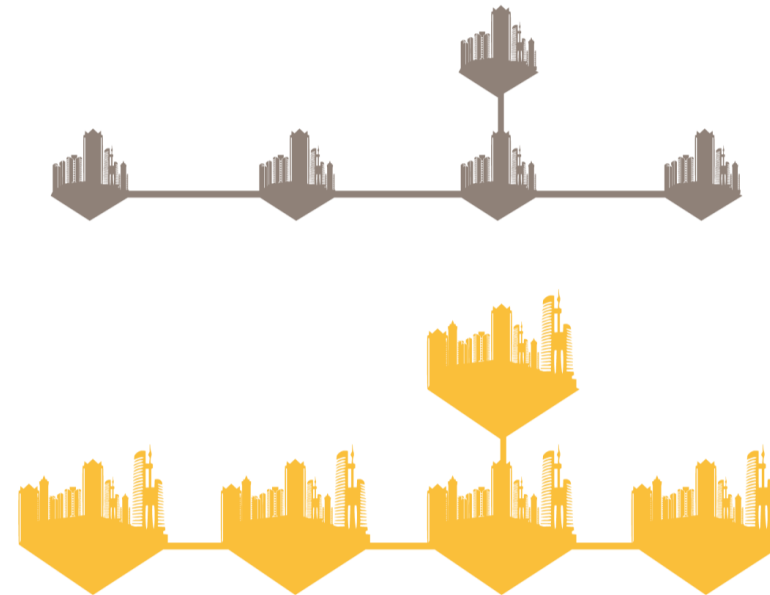


# How improved connectivity benefits the economy (ii)

## BY CONNECTING PLACES.....

- Better connectivity improves access to markets and access to suppliers
- *Similar* economies can grow
- *Different* economies tend to specialise
- Productivity gains can be realised

SYSTRA



,

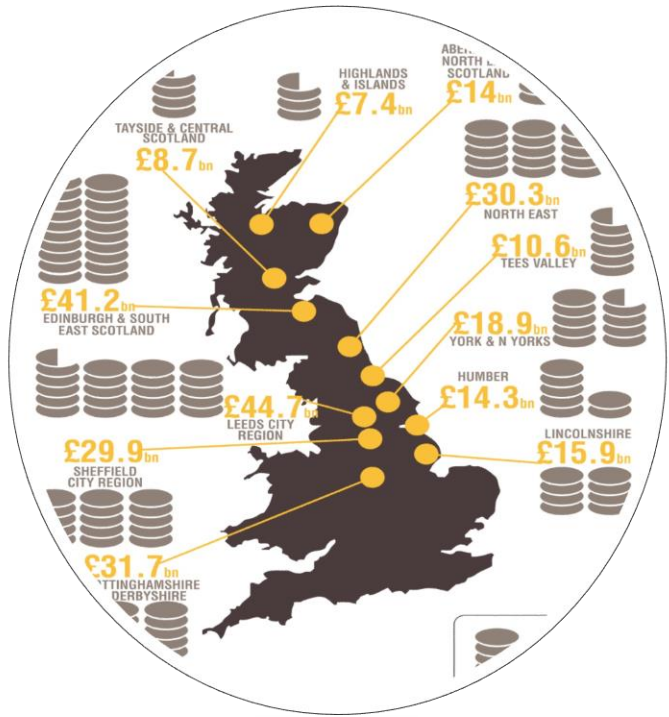
# The East Coast Main Line Study

**SYSTRA**



Our manifesto

The Consortium of  
East Coast Main  
Line Authorities



The combined economy is not only substantial, but diverse....



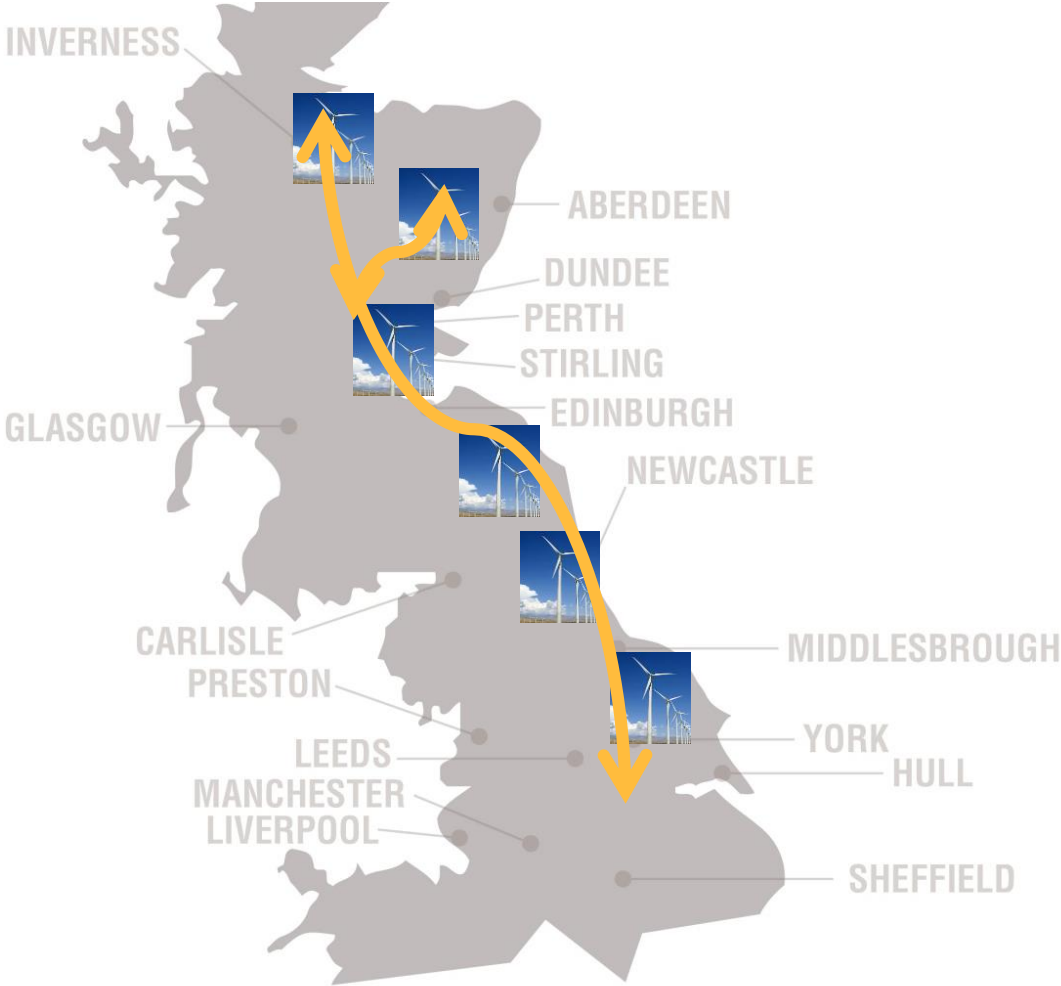


Manufacturing specialism's – both advanced and applied: requiring links to important freight routes





Finance and  
business  
service sectors  
require good  
business-to-  
business  
connections



The growing renewable energy sector along the North East coast is increasing the need for collaboration



Biotech and “science city” sector is growing and creating demand for new business-to-business connections



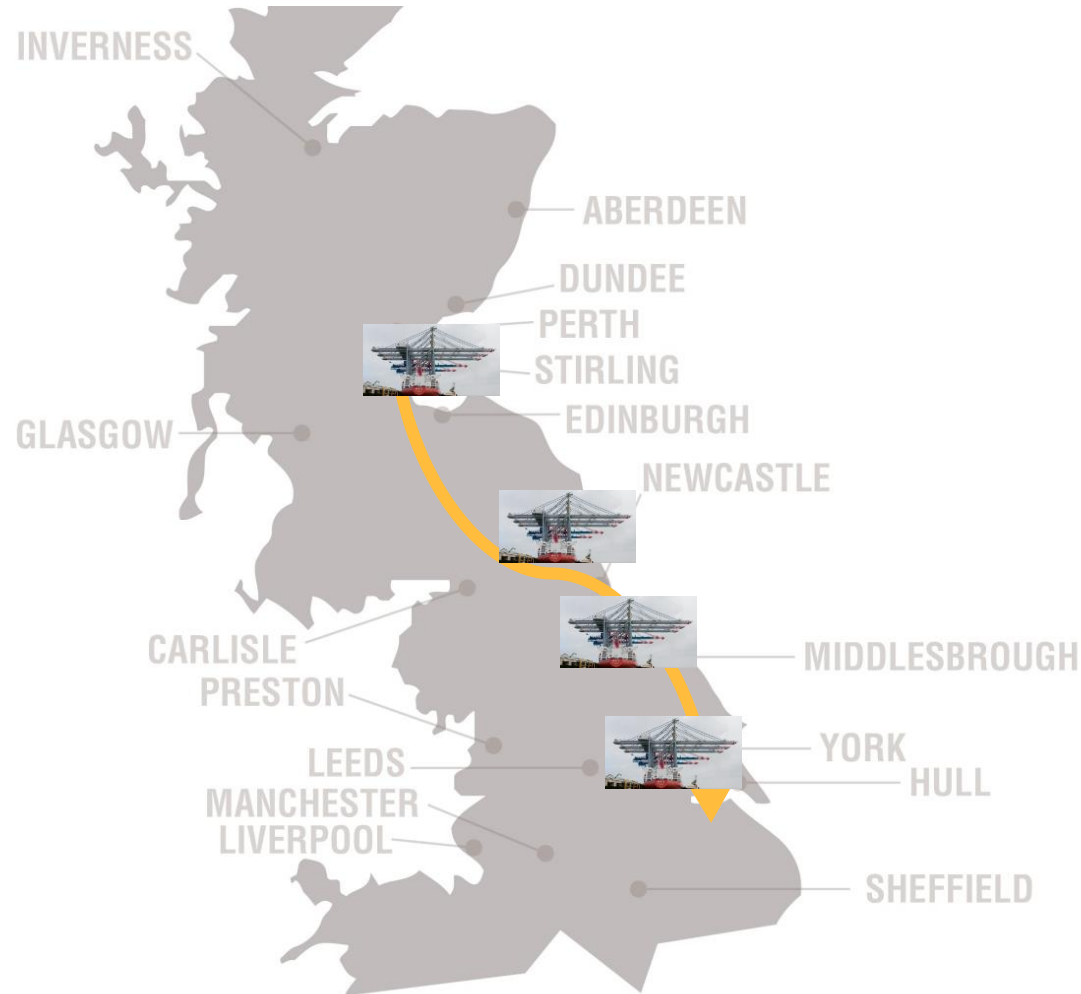
Emerging digital  
and creative  
sectors



Tourism is important along the whole length of the corridor and particularly in Scotland



The North Sea oil and gas industry: still an important driver for connectivity, including to related sectors



International Links – and connections to the East Coast ports are important for trade

# Modelling these linkages: the SYSTRA Economic Model:

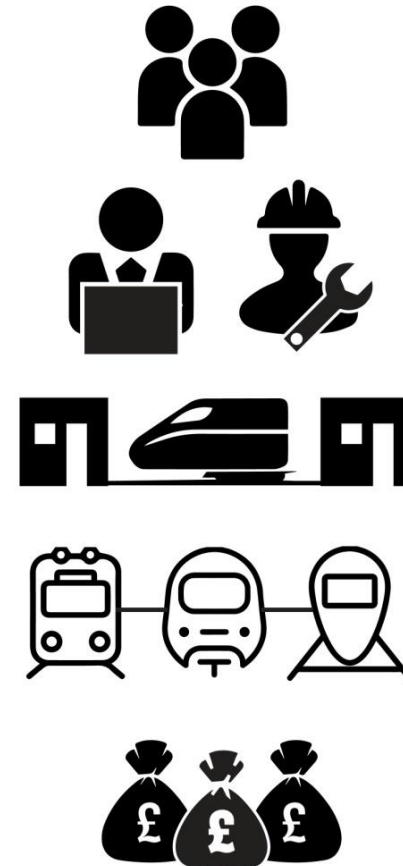
SYSTRA

## Inputs:

- Size of the economies (No of jobs)
- Structure of the economies (type of jobs)
- How far apart they are
- The connectivity improvement between them

## Outputs:

- The marginal uplift in GDP from one level of connectivity to another



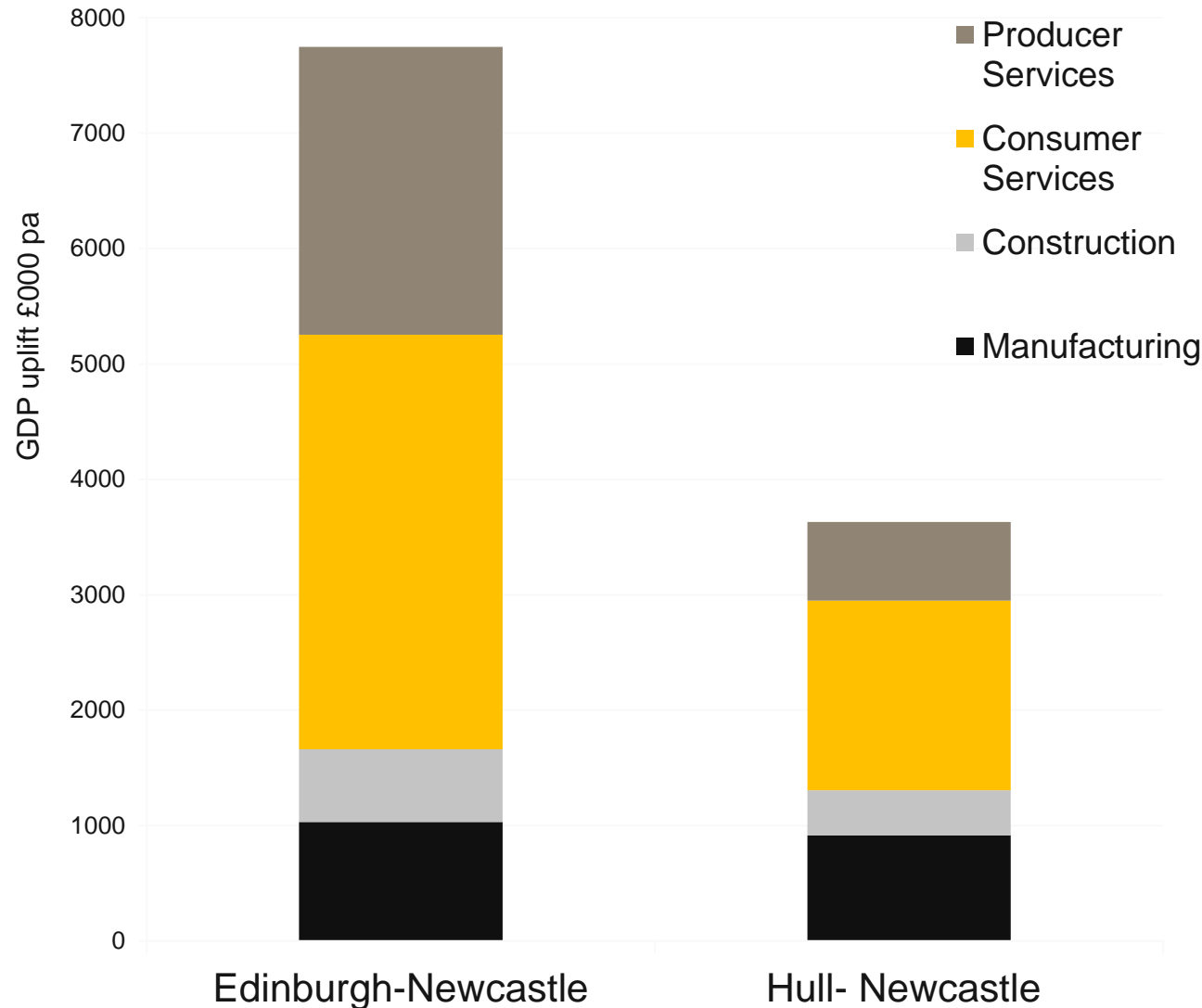


Observations 1: Size is important. But not the whole story...

Size of Absolute GDP Increase per Economy Pair	% Total Net GDP	% of Economy Pairs
>£5m pa	38	3
£1m- £5m pa	41	15
<£1m pa	21	82
	100%	100%

A small numbers of connections between the largest economies generate most of the potential benefits  
 .....however uplifts in smaller economies can be proportionately more valuable

## Observations 2: Economic structure affects the scale of economic benefits

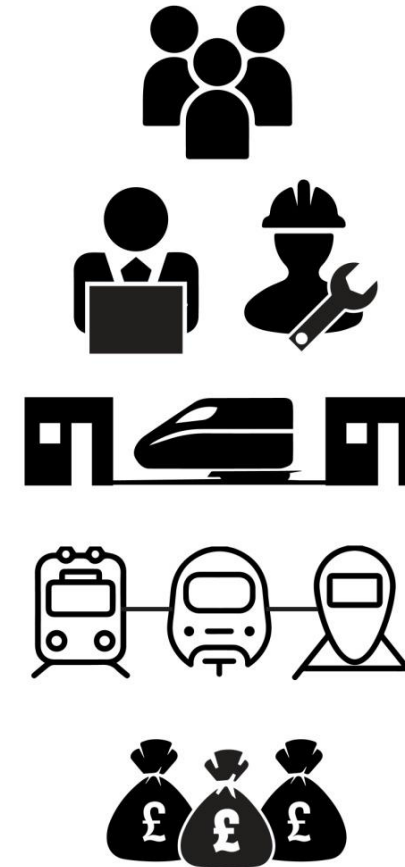


Hull and Edinburgh have different sized economies but they are also structurally different ...the graph shows how the GDP uplift from improved connectivity is affected by this

# In Summary – Does better connectivity make a difference?

- Yes, noting the caveats about scale, structure, proximity etc earlier
- ‘Necessary but not sufficient’ condition
- Requires substantial political capital behind it
  - Define goals
  - Strategy to deliver
  - Provide certainty (stick to it)
  - Deliver it

SYSTRA



Thank you for listening

Alan Beswick

[abeswick@systra.com](mailto:abeswick@systra.com)

[www.systra.co.uk](http://www.systra.co.uk)

[WWW.INVESTINEASTCOAST.CO.UK/](http://WWW.INVESTINEASTCOAST.CO.UK/)



Our manifesto

The Consortium of  
East Coast Main  
Line Authorities