Accommodating Growth Sustainably? Findings of the EERA Regional Scale Settlement Study **Chris Tunnell, Arup**

What is a Regional Scale Settlement?

A large-scale growth location which is able to achieve a high degree of self containment for services and employment

- Free-standing, expansion of an existing settlement or sustainably linked to an existing larger settlement.
- An existing settlement will need capacity to service the growth
- Not unlike a New Town
- Typically:
 - a minimum 15,000 dwellings
 - New geographical focus for growth
 - May incorporate existing small settlements.
 - May form part of a larger settlement
 - Requires 1,200 hectares or more (12 OS Grid Squares)

Study Brief

- 1. To provide a robust evidence base for the appropriateness of designating regional scale settlements, alongside alternatives such as smaller scale new settlements, urban extensions and generally dispersed urban growth
- 2. To provide robust recommendations for the locations of regional scale settlements in the East of England

Assessing Scope Regional Scale Settlement



Settlement Theory



Promoting "Polycentricity"

- Extended decentralisation from larger cities to smaller ones
- Increasingly a policy objective to diffuse/disperse growth
- A way of promoting alternative centres for growth, but linked to the source of growth
- "Metropolis" to "Polyopolis"
- Practice suggests mostly housing-led, employment dispersion has struggled!



Building on Central Place Theory

Emphasis on efficient settlement scale and relationships



- Cambridge is a good example of a K=4 Transport Model Central Place, although surrounded by 7, rather than 6, settlements.
- Each satellite is 10-15 miles from Cambridge and each lies on a major road leading out of Cambridge:
 - Ely A10 north
 - Newmarket A1303
 - Haverhill A1307 southeast
 - Saffron Walden A1301 south
 - Royston A10 southwest
 - St Neots A428 west
 - St Ives A14 northwest

Table 2 Assessment of Alternative Development Forms from (Breheny et al., 1993)

	Urban Infill	Urban Extensions	Key Villages	Multiple Villages	New Settlements
Economic Criteria					
Cost of the and product	Lligh Dovelopment Costs	Medium Values	Medium Values		Con he sheepest
Cost of the end product	High Development Costs			High: premium on scarcity	Can be cheapest
Infrastructure costs	Low provision & use costs	Low provision & use costs	Lower provision & use costs	Can be high	Will be high
Maintenance costs	Connects to old system	May connect to old system	Relatively low, due to major upgrades	Low due to minimal infrastructure	Low: all new systems
Access to employment	Good	Moderate: can be car dependent	Moderate	Poor	Moderate, dependent on local provision
Social Criteria					
Access to social facilities	Good: existing systems	Moderate: can be car dependent	Moderate: depends on size	Poor local provision	Potentially good
Sense of community	Good: existing networks	Moderate	Moderate, tending to good	Good: existing community base	Good/moderate if planned
Social mix	Usually good	Moderate	Moderate	Poor	Moderate
Affordable housing	Moderate & can be negotiated	Moderate at a large scale	Moderate	Poor/moderate	Good thro' planning gain
Local acceptability	Minimal disruption	Reasonable	Moderate, but poor if over- developed	Can be very severe	Could be severe
Environmental Criteria					
Loss of land	Low, by definition	High	High unless infill	High unless infill	High
Loss of habitats	Moderate, dependent on circumstances	Moderate	Moderate	Low/moderate	Could be high
Energy – transport	Low, dependent on congestion	Moderate	High, car dependent	High: very car dependent	High, dependent on location
Energy – space heating	Poor prospects	Moderate/poor prospects	Prospects poor	Prospects poor	Good prospects
Pollution levels	Good/moderate	Relatively high	High because of car usage	High because of car usage	Potentially high
'Greening' contribution	Poor	Good	Moderate	Moderate	Good
Town cramming effect	Poor	Low	Moderate: some village	Moderate: some village	Good

General conclusions on Development Forms

- Urban Infill
 - focus of last decades, capacity now limited
- Urban extensions
 - good where possible and capacity allows
- Key Villages
 - Popular and competitive, but often car dependent
 - Poor environmentally, e.g. energy
- New Regional Scale Settlement
 - Land losses, but offers prospects for eco-features
 - Realising employment takes time, as does community development

Theoretical Interfaces





Significant growth is already planned to 2021 in the East of England Plan (dwellings)

- Cambridge 19,000
 South Cambs 23,500
- Chelmsford 16,000
- Colchester 17,100
- Harlow 16,000
- Stevenage 16,000
- Norwich 14,100
- Broadland 12,200
- South Norfolk 11,200
- Ipswich 10,000
- St Edmundsbury 10,200
- REGIONAL TOTAL 508,000



Employment Growth

Likely to be heavily concentrated in larger centres



Physical Constraints Analysis







Cambridgeshire Constraints



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Norfolk Constraints



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General Findings

- Options for free-standing very large new settlements are very limited (Alconbury and in the London Arc)
- Most employment growth opportunities are in the larger centres, Cambridge, Chelmsford and Norwich, (all are already receiving significant growth in the East of England Plan)
- There may be scope for Bury St Edmunds, Ipswich and Colchester to expand

Towards a Regional Spatial Strategy





Cambridge Sub Region

- Diminishing supply from urban infill?
- Current plan may exhaust urban extensions?
- New Settlements Camborne and Northstowe?
- Possible other areas that have been considered before?
- Future Role of the Market Towns?

"City of Anglia"



Contact Details

For further information, contact:

- Chris Tunnell
- Arup, 13 Fitzroy Street, London W1T 4BQ
- Tel 0207 7755 3959

<u>Christopher.tunnell@arup.com</u>