

**Empty homes, longer commutes: one of the many unintended consequences of more restrictive local planning**

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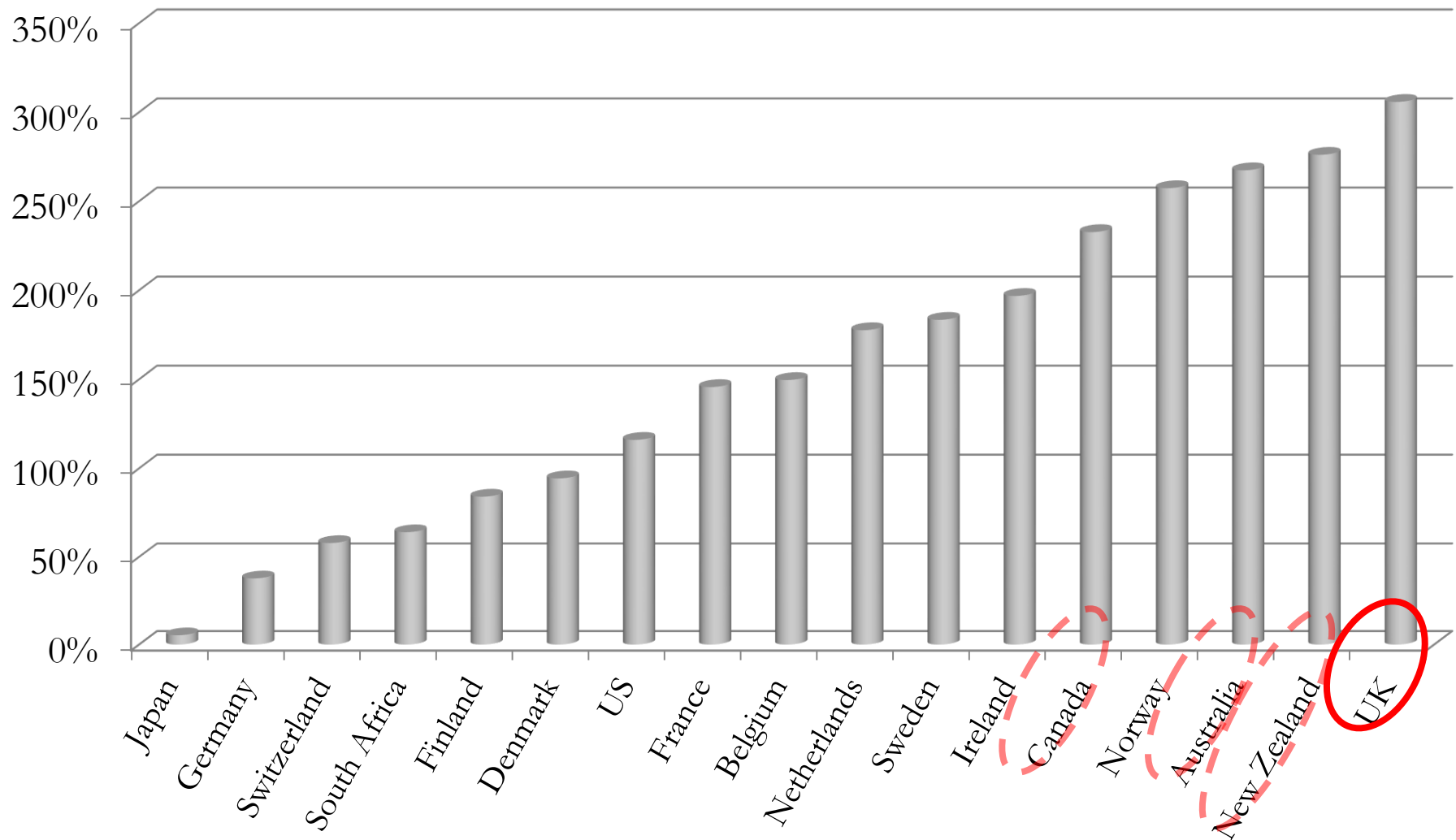


# Housing crisis is long term + more than housing

- Planning serves valuable purpose: land markets have endemic problems of 'market failure';
- But – 1) supply restriction to safeguard public goods e.g. heritage coastline; or 2) generic supply restrictions; too few houses: too many in 'wrong' places;
- Many reasons – broken policy not broken market!
- Here focus is planning system systematically restricting supply; obvious effects (prices) but also less expected ones;
- How?
  - Development control injects (more) risk into development – so higher risk premium and less development;
  - Restricts supply of space directly – Green Belts + height controls;
  - Indirectly - because land supply does not increase with incomes;
  - Locally – the LA says 'no';

# International comparisons?

## (Real HP growth 1970-2015, selected OECD countries)



Sources: BIS, World Bank, Bank of England

# Shortfall of housing close to catastrophic

- Shortfall of house building in England **MAJOR problem: and a long term problem**

25 years 1967-1991 = 5,699,180

25 years 1992-2016 = 3,502,050

- Implies shortfall=2,197,130

- Annual build 'needed' to stabilise affordability (*NHPAU, 2009*)  
= 237,800 to 290,500 – say 260,000

- So over 25 years = 6,500,000

- Implies shortfall=2,997,950

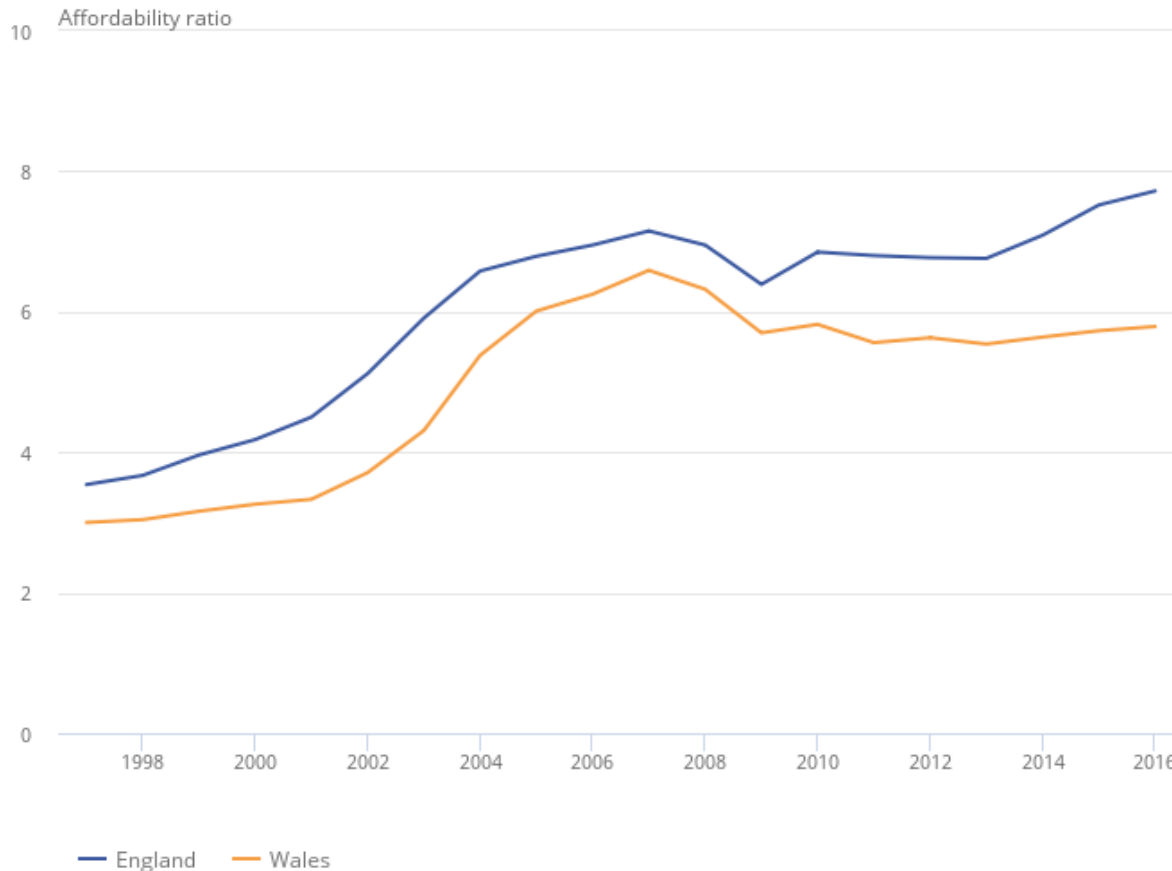
- So: 1992 to 2016 shortfall of between 2,197,130 & 2,997,950

- By 2017 - on reasonable assumptions - new build housing a good 2.5m short of requirements

# And Housing Affordability Worsens

Figure 1: Ratio of median house price to median annual earnings

England and Wales, 1997 to 2016



Source: House Price Statistics for Small areas and Annual Survey of Hours and Earnings, Office for National Statistics

# Development risky: planning (in UK) makes it riskier

- **Costs in the short term, returns in the long term: both over time, so discounted and ‘expected’.**
  - Decisions are made by LAs – political committees apply ‘development control’;
  - Only about half LAs have plans – often do not follow them;
  - Decisions are politicised so subject to local lobbying;
  - Can be appealed to:
    - 1) Inspectorate;
    - 2) Secretary of State;
- So not just profits are subject to uncertainty – ‘normal commercial risk’:
- Additional risk premium, reflecting uncertainty of permission.

# And search for 'planning gains' makes it riskier

## ➤ Then how much 'affordable' housing?

- Add uncertainty over 'planning obligations' (Section 106);
- Not known until very late in process – 3 or 4 days before Planning Committee meets;
- Result? Developer can only then estimate price to pay for land;
- Having agreed that, then needs to secure finance;
- This affects smaller developers most because of information and access to capital.

➤ Effect of extra risk is less projects are viable, so less is built;

➤ Search for affordable housing makes all housing less affordable.

➤ Systematically favours larger developers – monopolisation.

➤ Contrast 'rules-based' systems e.g. Zoning or Master Planning.

**Price of house is  
Structure + Land**

**Restrict land supply?**

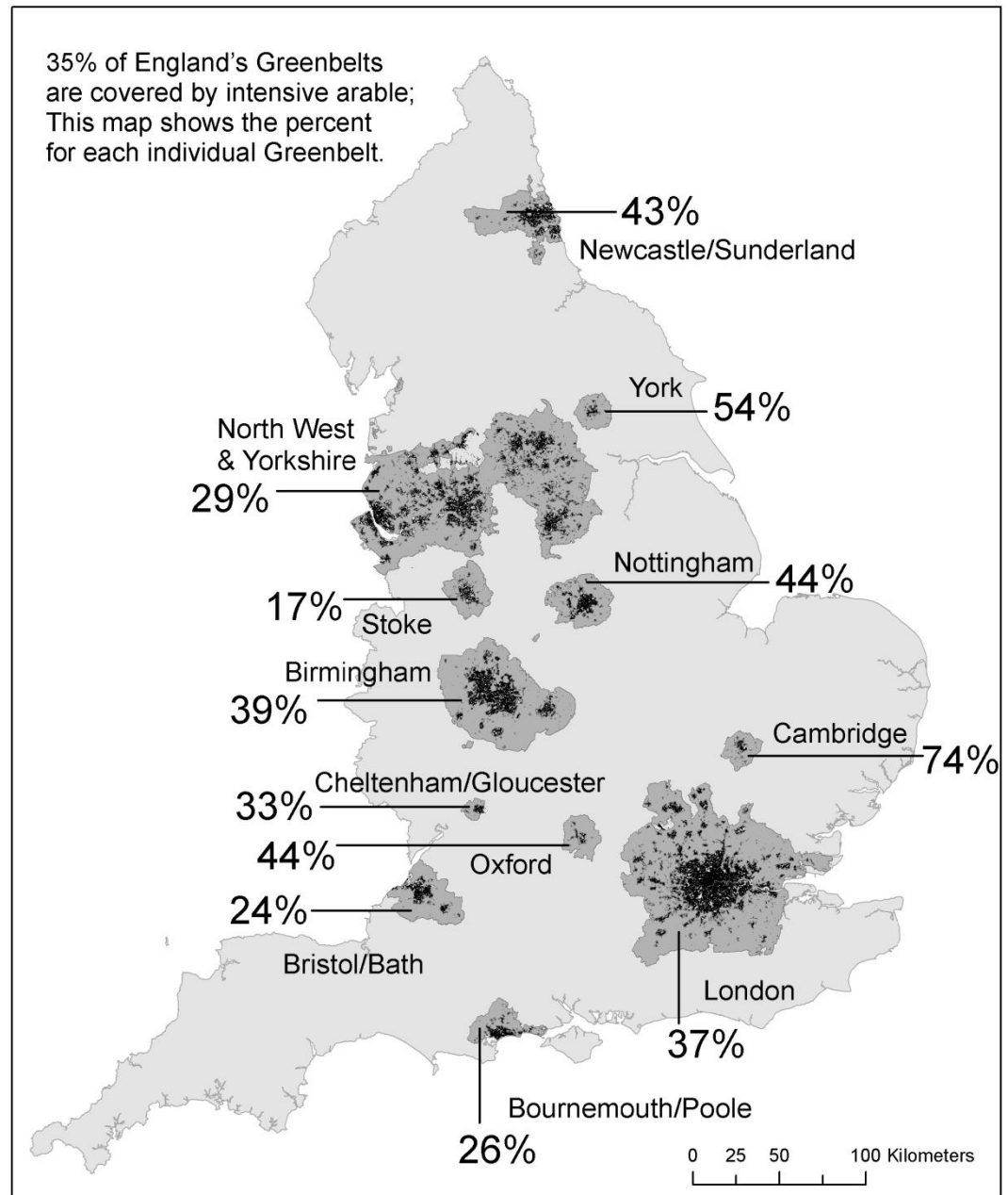
**Greenbelts from 1955:**

*'...the major function of the Greenbelt was...to stop further urban development...' Still is (NPPF, 2012).*

Cover 1.4 as much land as all urban areas; urban less than 10%;

**Not specifically green:** biggest use - intensive arable e.g. Cambridge 74%. No amenity or environmental value.

Intensive Arable Land in English Greenbelts: percent

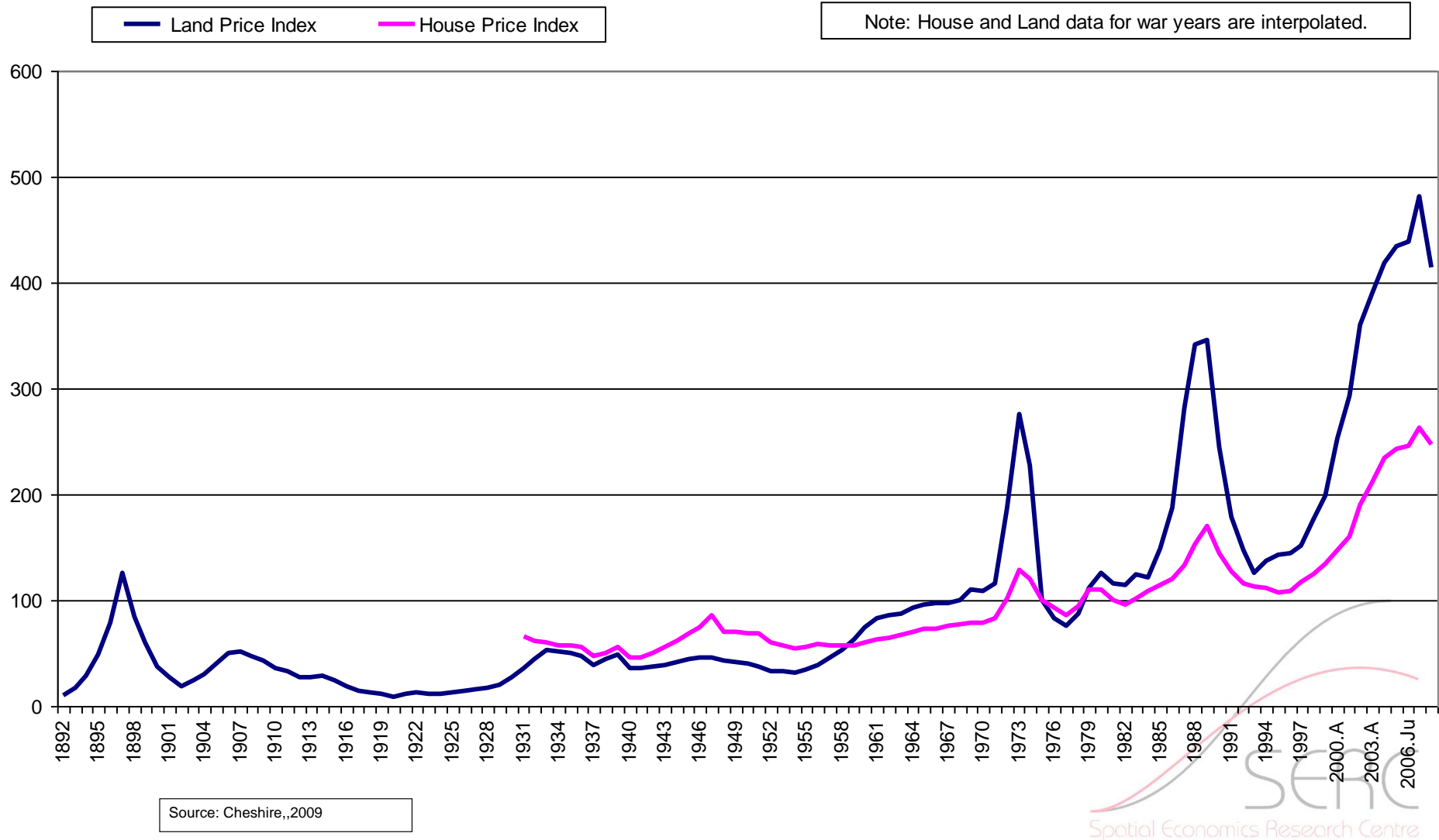


This map was prepared by Sevrin Waights. Calculations are based on Land Cover Map 2000. Intensive arable land was defined as use categories 4.1, 4.2 and 4.3 and so is a conservative estimate of 'intensively farmed agricultural land'.



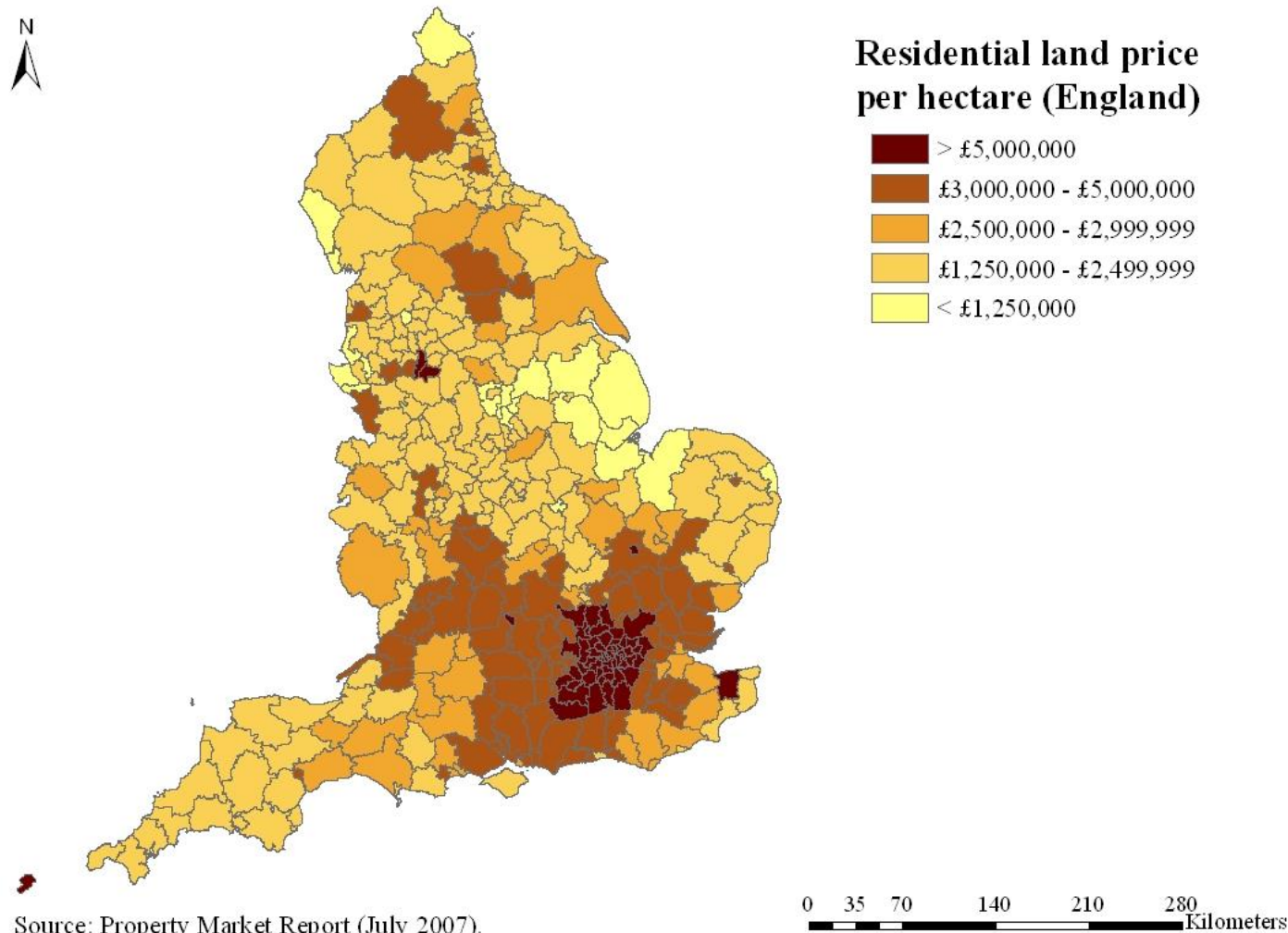
# Result given rising demand for housing (space)? Rising real prices...

Figure 1: Real Land & House Price Indices (1975 = 100)



# What happens to price if you restrict the supply?

- Can identify Green Belt by land price....



Source: Property Market Report (July 2007).

# Can't build here

**Baker St 30 mins**

**£100,000:**

**No humans!**

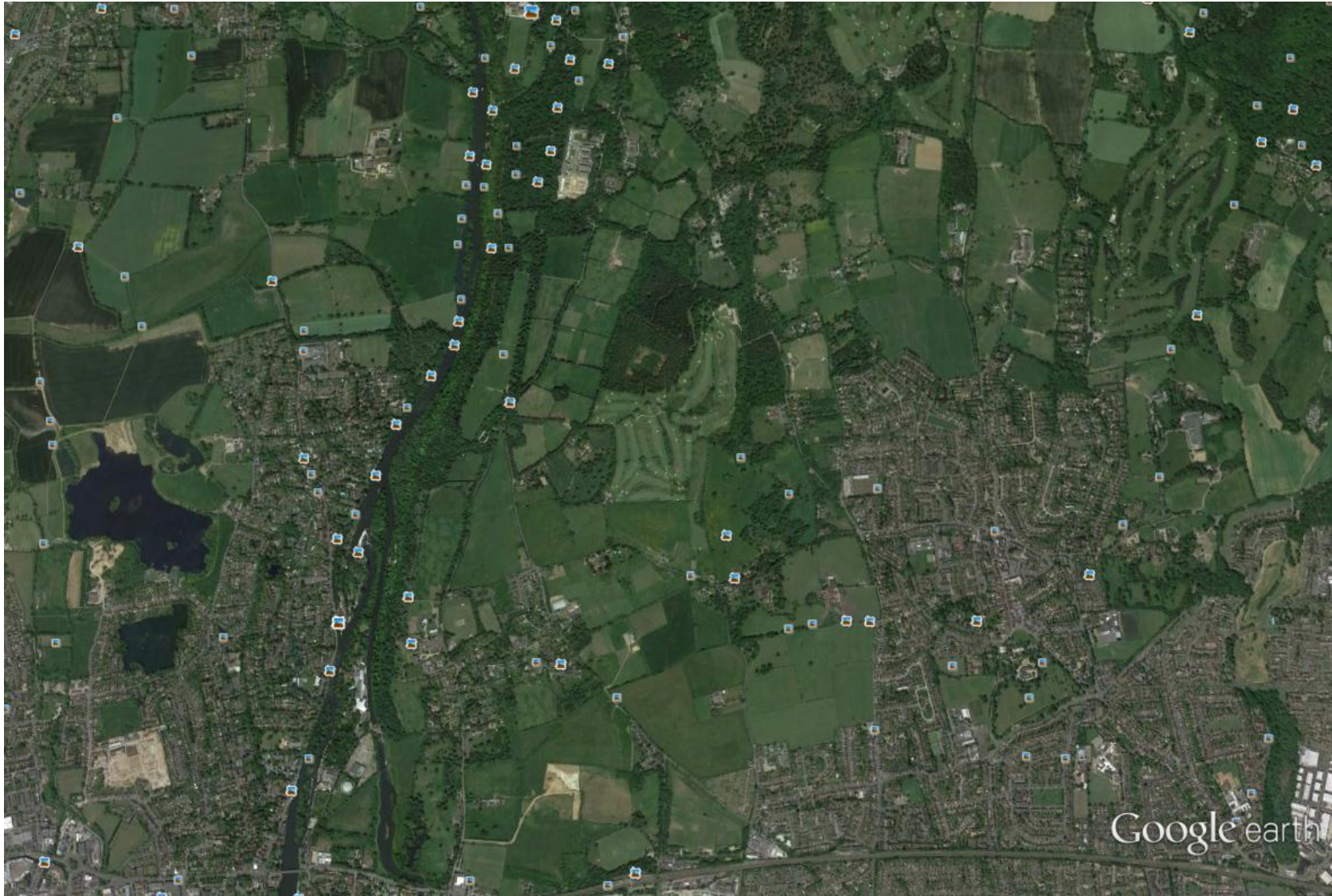


# WWII halted development: one stranded station





# CrossRail: £18 billion spent but NO development here



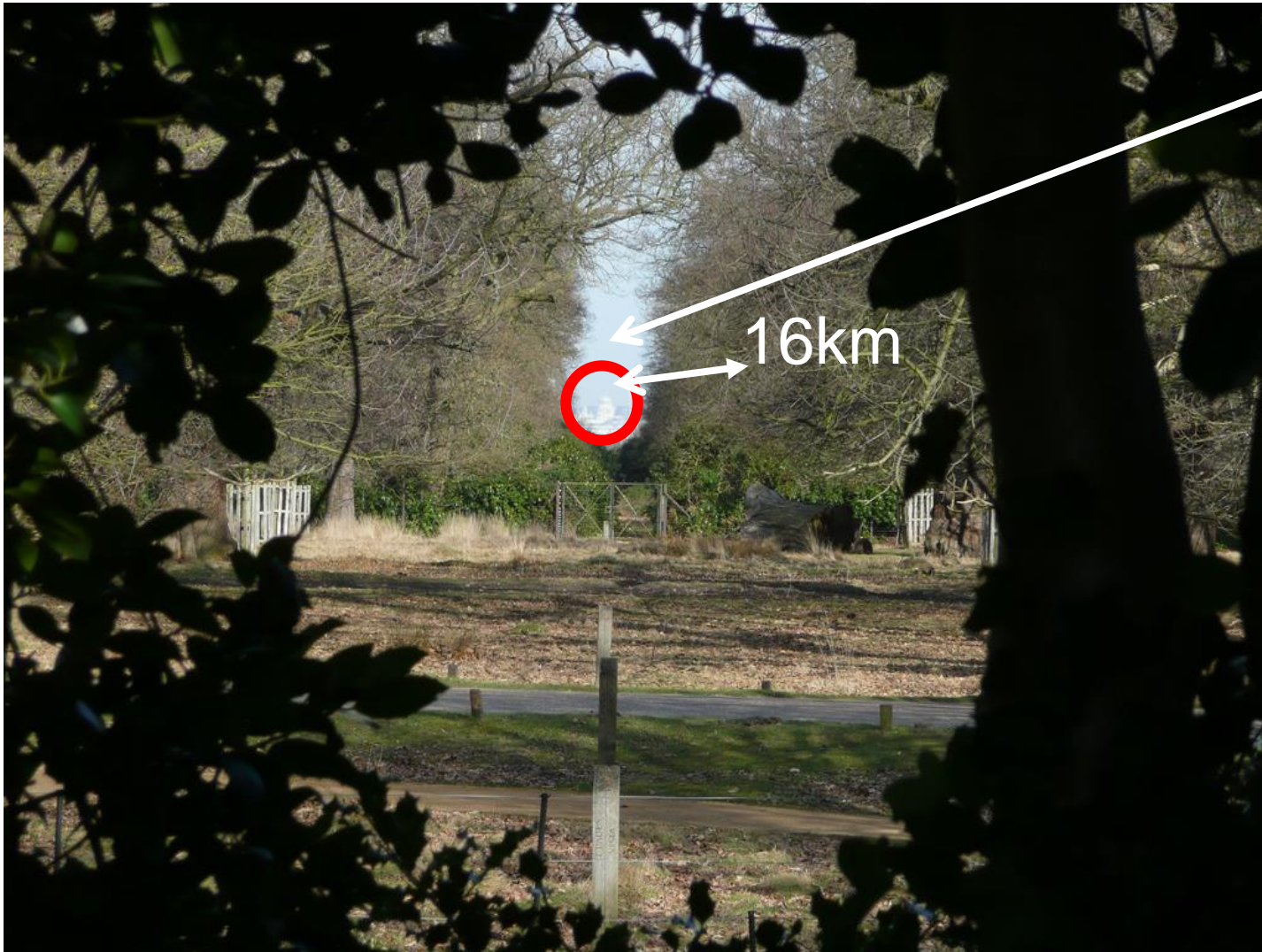
# Not out, not up: Height restrictions e.g. London



Source: Cheshire and Derricks (2014)



# Protected view from King Henry VIII Mound (Richmond Park)



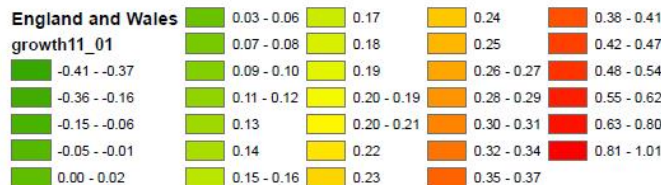
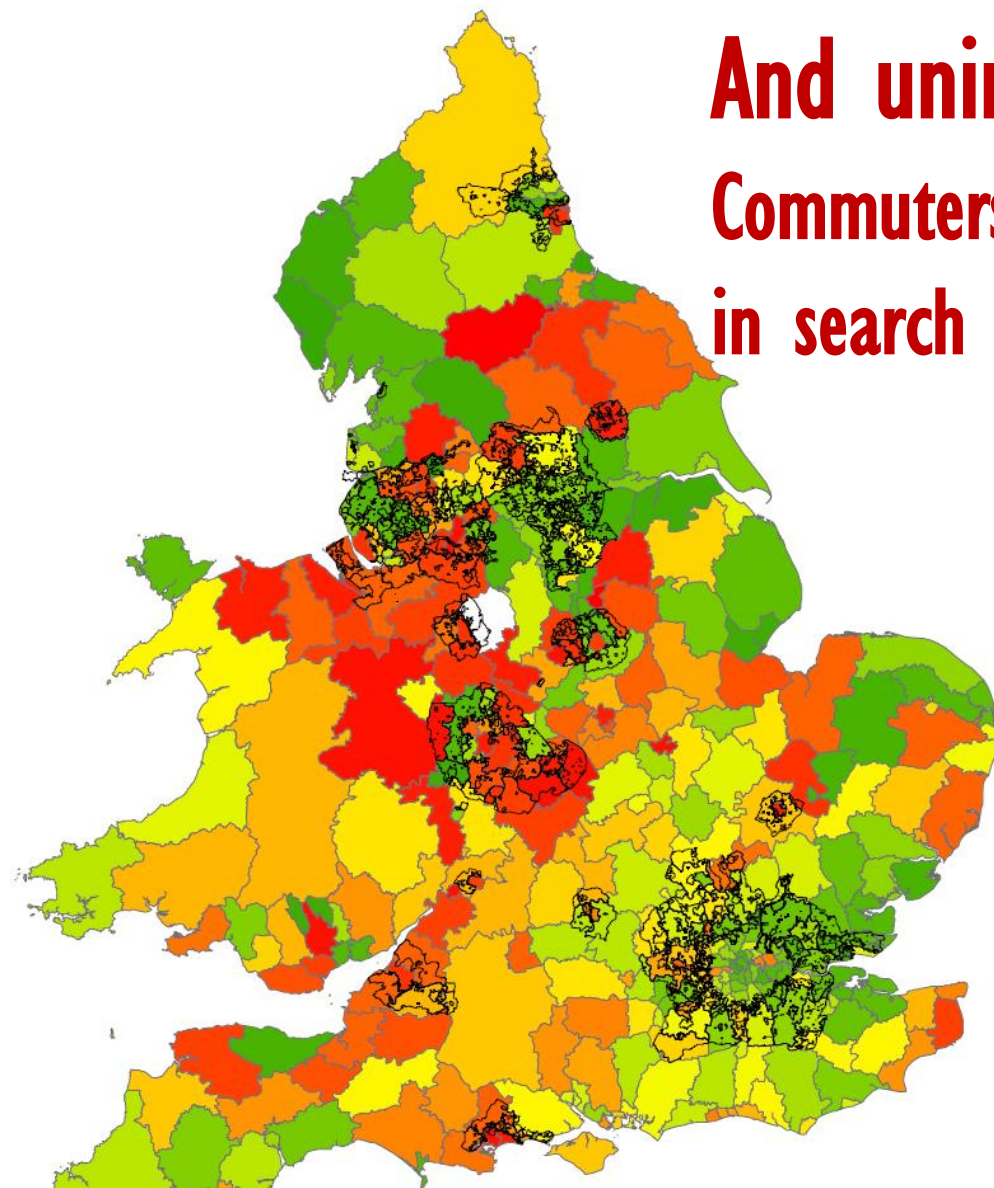
Good  
(economic)  
reasons to  
protect  
townscape:  
but consider  
costs as well  
as benefits!

*This sight  
line also  
'protects'  
backdrop:*

- Liverpool  
St. Station  
area
- Stratford

# And unintended consequences: Commuters jump the Green Belt in search of affordable space

Change in proportion  
of resident working  
population commuting  
to jobs in Inner London  
2001 to 2011:  
Local Authority  
level data.



Source: Census



# Land allocation?

- On the basis of forecast housing ‘need’ – land allocation typically for 5 years.
- But prices reflect balance of supply and demand; What determines demand?
- Economics 101 tells us demand is a function of:
  1. Size of market (number of buyers);
  2. Preferences;
  3. Incomes;
  4. Consumption of complementary/substitute goods.
- System ONLY allocates supply on ‘size of market’!
- So it systematically restricts supply vis à vis demand

# Growing population: The cause of the housing crisis?

- We all know that? But look at London...

- GLA Area

• Period	% Change Pop	%Change Real House Prices
• 1981-2011	+20.5	227.6
• 1951-1981	-16.9	71.9
• 1951-2011	+0.1	+463.2

➤ No we do not! Price results from interaction of **supply** with **demand**;

➤ Population has some impact on demand: but the far more important influence is **real incomes**

# More formal evidence?

- 1997 - commissioned to construct model to estimate impact of alternative land release policies given population forecasts;
- Individual house sales – price + details of houses & location; characteristics of occupants including income and family size.
- So could estimate prices of house attributes inc. space inside and in gardens per m<sup>2</sup>; + structure of demand – how consumption changed with income and price.
- Simulation to 2016 - 60% brownfield (inside urban boundaries);
  - 1996 forecast pop. growth => house prices +4.4%
  - Forecast pop. growth + incomes grow at historic rate – house prices => + 131.9%.

## ➤ **Income growth drives demand.**

- Actual real price growth to 2016? – 125%

# Housing: strong income elasticity

- Space - inside houses and in gardens – is valued;
- As people get richer buy not more beds – bigger beds; bigger bedrooms; a spare bedroom; space outside; garage space...
- Estimates of income elasticity of demand:
  - Cheshire & Sheppard (1998) – about 2 (for space)
  - Meen (2013) – about 2.7 (for houses)
  - OBR (2014) – about 3 (for houses);
  - Since early 1950s real incomes up x 3
  - Car ownership up x 13
- Allocating on the basis of household numbers *systematically* undersupplies land: so increases price of land & housing; **and** increases price volatility.

# Systematic restrictiveness: but also LAs say 'no'

- Proportion of planning applications rejected varies by LA from 50% in several LAs in S. E. to 7% in Middlesbrough.
- Hilber & Vemeulen (2016) estimate effect on house prices of differential local restrictiveness;
- Allow for natural differences in land availability via topography and proportion of LA already built up;
- Result – by far most important source of house price variation is local restrictiveness - % of applications refused.
- Topography and % built are statistically significant but unimportant;
- If average restrictiveness of LAs in the S.E. as low as N. E., house prices in the S.E. at least 25 % lower;
- And lower bound because only from 1974.

# Local restrictiveness, empty houses & commuting

- The ‘scandal of empty homes’...
- “...offset against that is an assumption that vacancies in the existing stock should be reduced by 0.5%...bringing 8,600 dwellings...into use”
- Existence of empty homes used as reason to allocate less land, so ‘no’ more frequently.
- But how does housing market work?
- Houses are complex goods – many attributes including specific location.
- Process of ‘house hunting’ – searching for acceptable housing attributes at an affordable price; akin to labour market search;
- Both buyers and sellers face incentives to sell/buy.

# Opportunity cost versus mismatch?

- Greater local restrictiveness increases house prices (Hilber & Vermeulen, 2016);
- Higher prices generate incentive to occupy houses – so **fewer vacancies**;
- But – house hunting becomes less efficient:
  - Demand for housing attributes is dynamic: family-sized close to better school; with parking/garage space; home office; granny flat; smaller for older people; local jobs grow/decline.
- So the more restrictive LA is, more difficult to adapt attributes & location of housing stock to changing demand;
- So more restrictive local planning generates **more vacancies**:
  - because search gets more difficult for both buyers & sellers – ‘mismatch’ effect.

# Which dominates is an empirical question...

- Focus of Cheshire et al. (2018) – offset for reverse causation and problems of endogeneity – to get unbiased estimates;
- Changes in vacancies and restrictiveness 1981 to 2011 for 350 English LAs.
  - Clear evidence that ‘mismatch’ effect dominates.
- Unconditional relationship shows vacancies lower in more restrictive LAs;
- But add controls and offset for econometric problems –
- A one S.D. increase in local restrictiveness increases vacancy rate by 23%; also increases commuting distance for those with local jobs by 6.1%;
- Also increases share of temporary dwellings; and crowding – more adult children living in parental home.



# Markets complicated: push here, pop out there

- Attempt to 'regulate' vacancies away increases vacancies;
- 'Containment' policy in the long run causes cities to spread – people commute further, searching for affordable space;
- Our policies designed to generate 'affordable' housing make housing less affordable in the long run;
- Function of planning to co-ordinate transport investment and urban development thwarted by Green Belt;
- More restrictive local planning reduces number of local supermarkets & reduces their size: 1 SD increase in local restrictiveness causes 42% reduction in supermarket space in LA – so lengthens shopping trips (Cheshire et al., 2015)...
- As well as the obvious fact that housing is made less affordable....

# Conclusion

- Need to regulate markets because of problems of ‘market failure’;
- Major causes of market failure well-understood by economists;
- A particular problem in land and property markets;
- So need to regulate and to ‘plan’;
- But planning not informed by an understanding of how markets work does substantial damage –
- To economy and to social welfare.

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