



Triangulation and Employment Projections

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What is triangulation?

- Triangulation is defined as “the combination of methodologies in the study of the same phenomenon”.
- Employment projections on 3 bases:
 - Trend projections – produced by Volterra Consulting
 - Transport Accessibility – produced by Colin Buchanan and Partners
 - Site capacity – currently being updated by Roger Tym and Partners. (Charts use rescaled previous projections done for the London Plan in 2002.)



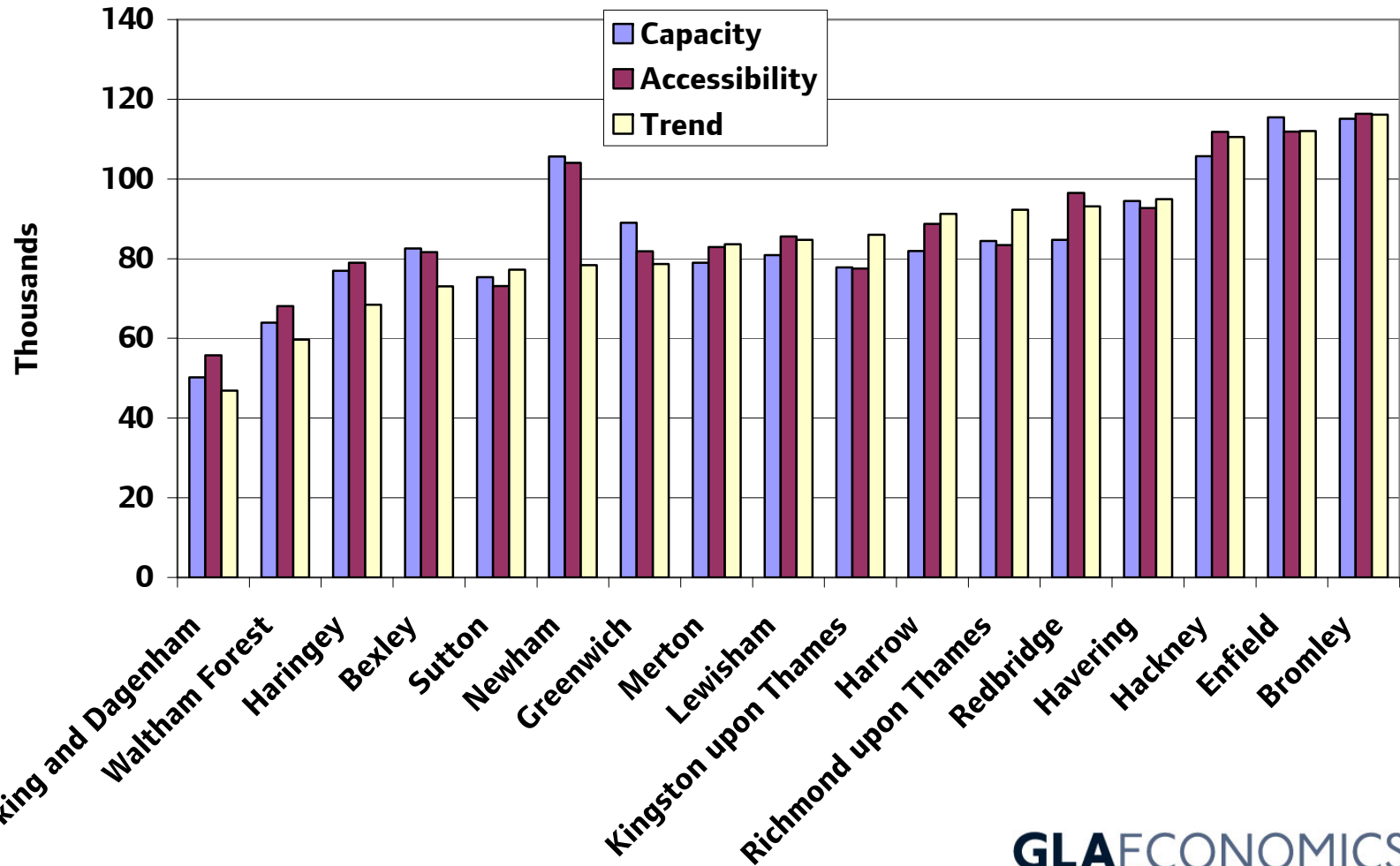
Projections will only extend to 2016

- Transport accessibility based projections require assumptions about what transport infrastructure will be in place and by when.
- Currently have a good idea about this only up to 2016.
- TfL are currently engaged in long term thinking about the future transport needs of London.
- Site capacity numbers will also only run to 2016.
- Further thinking will be needed for post-2016 numbers.

Three views of 2016 (1)



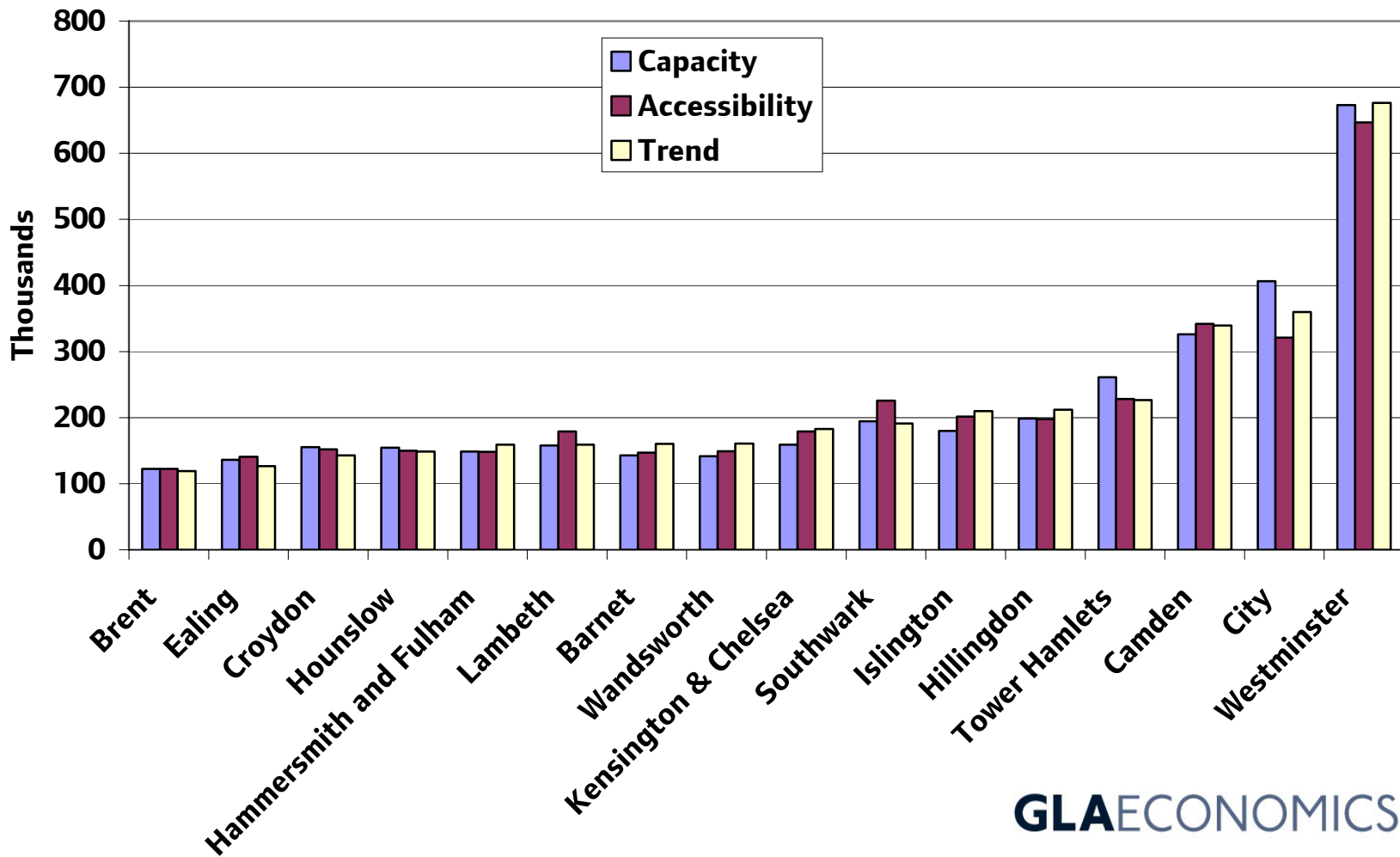
Number of Jobs by Borough in 2016: Three Views



Three views of 2016 (2)



Number of Jobs by Borough in 2016: Three Views



Largest borough differences at 2016



Site Capacity - Trend	Accessibility - Trend	Site Capacity - Accessibility
City +47,000	City -39,000	City +85,000
Tower Hamlets +34,000	Southwark +35,000	Tower Hamlets +33,000
Islington -30,000	Westminster -30,000	Southwark -31,000
Newham +27,000	Newham +26,000	Westminster +26,000
Kensington and Chelsea -24,000		Islington -22,000



How can we triangulate the three sets of projections?

- Take trend projections as our starting point.
- Consider the ease of accessibility and availability of sites as factors that make a borough a more or less attractive place for employers to locate.
- So considering the accessibility and site capacity based projections allows one to consider whether the trend based projections might be exceeded / not attained.



Accessibility as an attraction factor

- Greater accessibility widens the pool of labour that an employer can recruit from at any given location.
- A wider pool of labour lowers the wage required to hire a given quality of labour and, or
- Improves the match of workers to jobs raising productivity levels.



Site Availability as an attraction factor

- Greater availability of sites should:
 - Lower rent levels relative to other parts of London.
 - Improve the chances of being able to find premises that best fit a particular business's needs.



But site capacity is not a completely hard constraint

- If a location is attractive to employers but has a relative shortage of site capacity then we might expect them to “squeeze in” extra workers by reducing floorspace to employment ratios.
- Research for the London Plan suggested:
 - that average floorspace to worker ratios “conceal a significant variation in actual figures”.
 - variation across boroughs is very great and focusing on the middle third of the distribution shows for offices a variation of 13m² to 16 m².

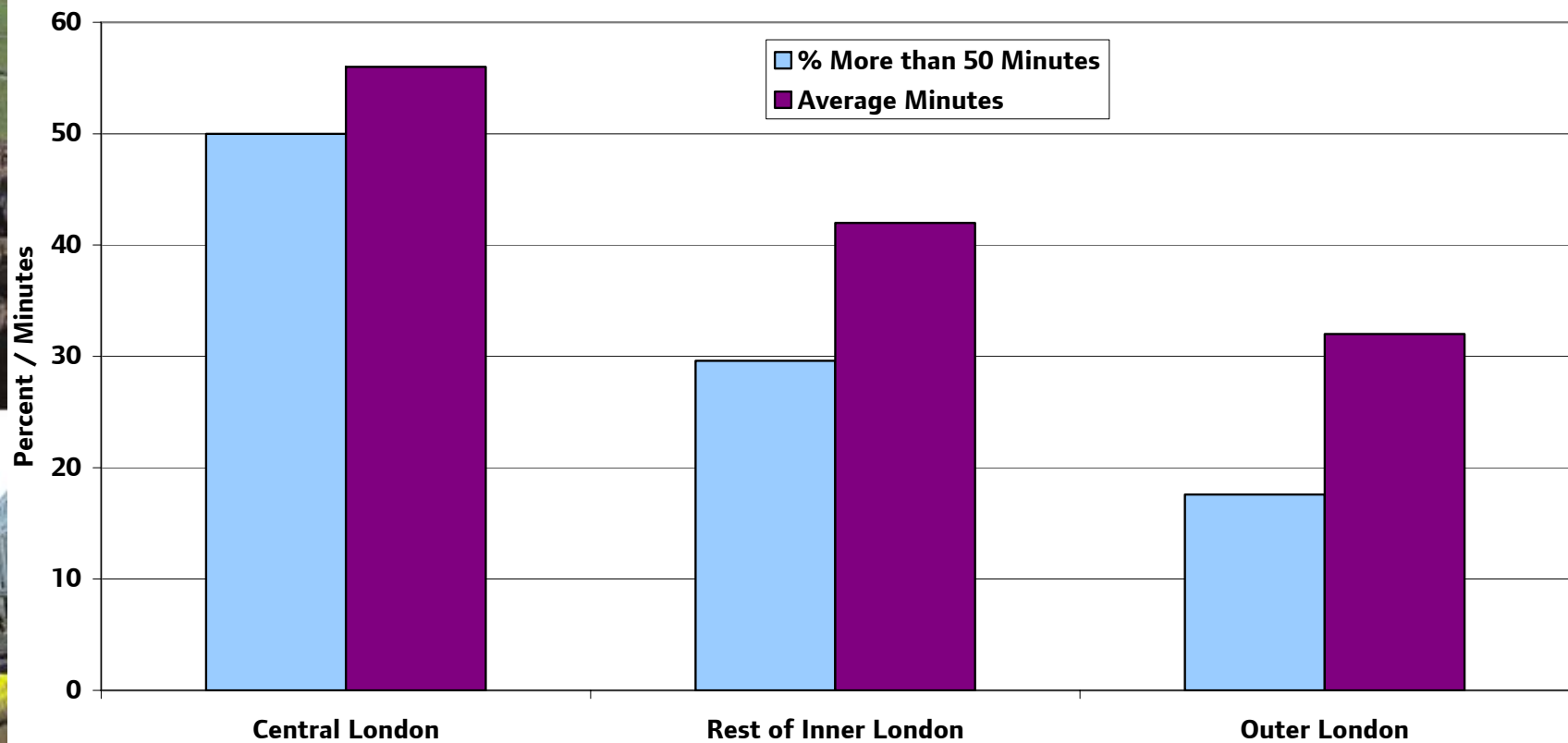


And neither is accessibility

- Measure of accessibility used by CBP research is population within 45 minutes travelling distance.
- This 45 minute cut off point captures the average relationship but we know there is considerable variation in commuting times.
- Individuals are willing to travel further and for longer to higher paid jobs.

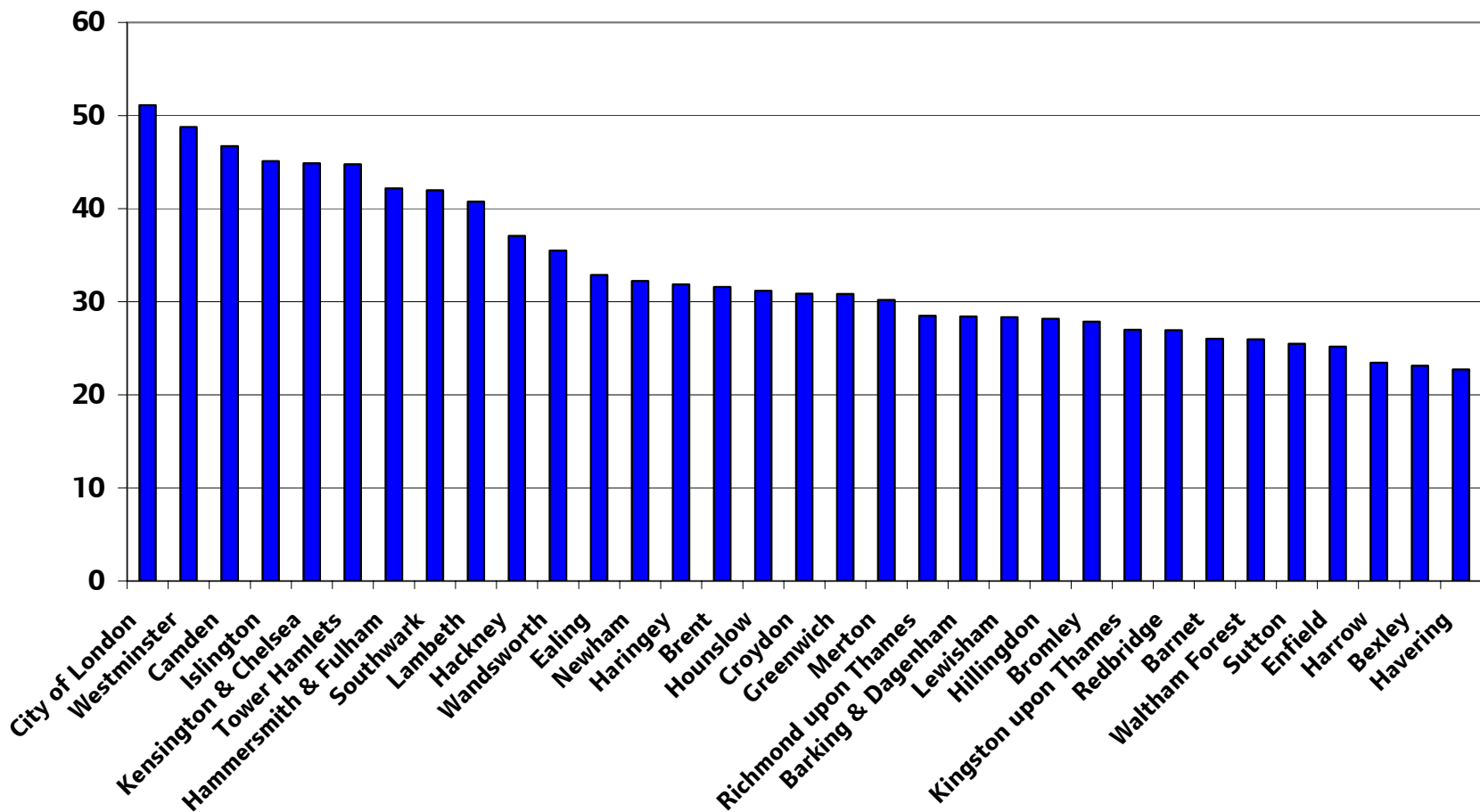
Travel times vary across London

Usual travel times by location of employment



Further evidence on travel times

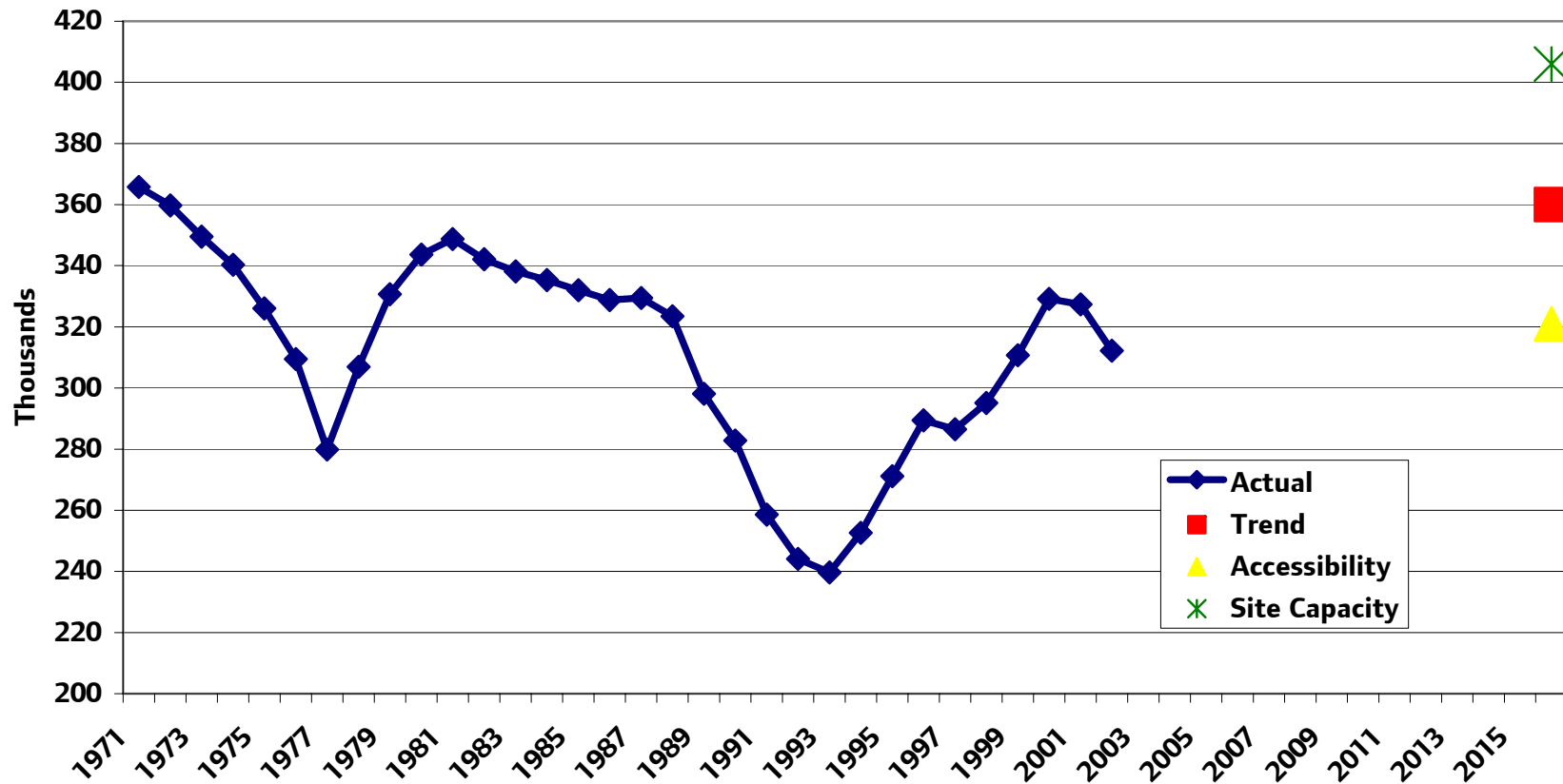
Average Travel Times to Workplace Location by Borough



What level of employment in the City?

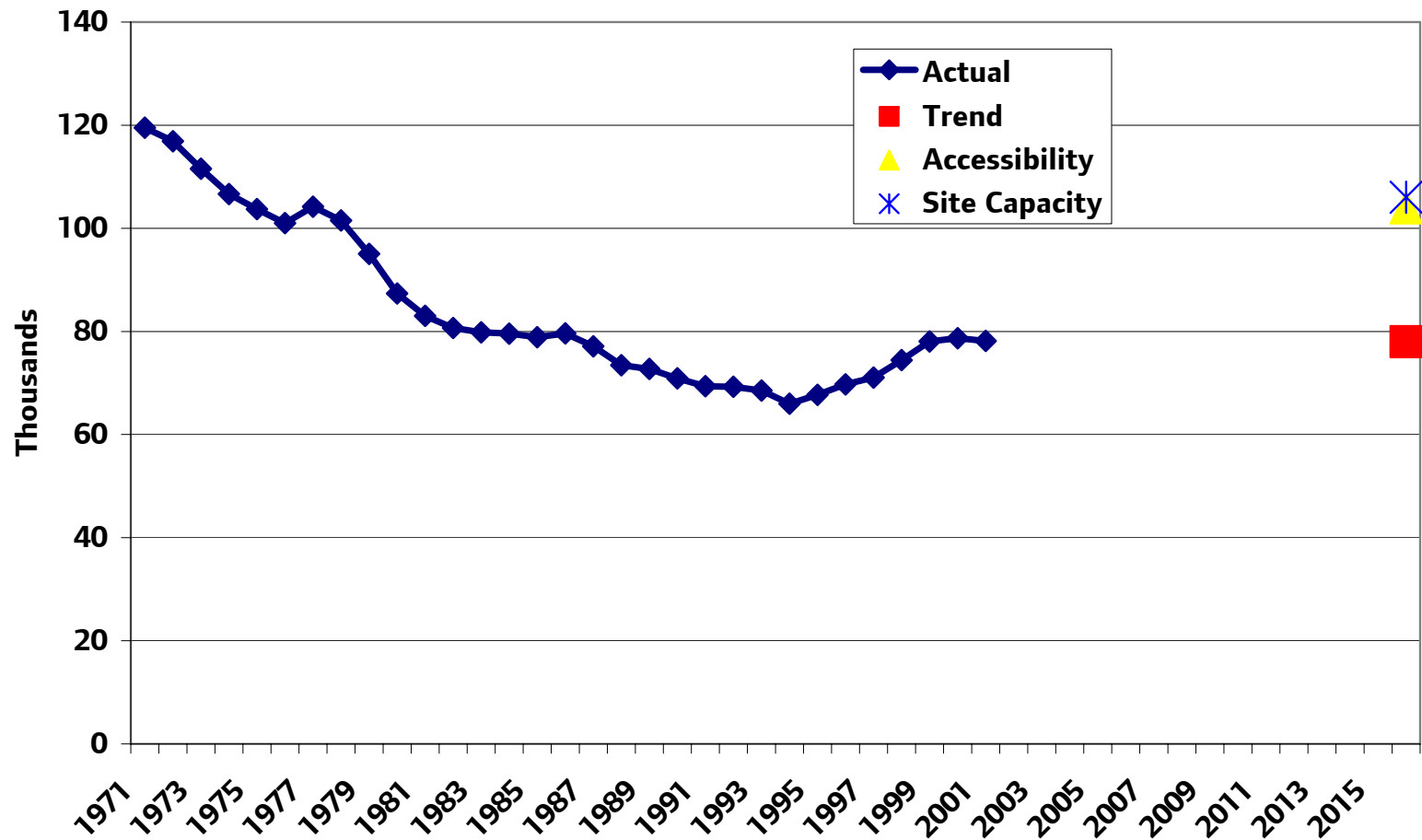


Employment in the City



And Newham?

Employment in Newham



How do we get to a unified projection for the boroughs?

■ Weights

- London Plan used weights; 70% site capacity, 30% trend based on judgement.
- Need 3 weights this time. Possibly do sensitivity analysis to look at the effects of different plausible weightings.

■ Rules

- City example – how much might we expect the accessibility based projection to be exceeded?
- Other boroughs – how much might the site capacity based projection be exceeded?
- Or Newham - strong accessibility / site availability attraction factors – how much above historic trend performance should we expect?





Conclusions

- Triangulation is about combining three sets of employment projections based on historic trends, transport accessibility and site capacity.
- We have employment projections based on these three approaches.
- GLA Economics is working now on methodologies to combine them.
- Methodology agreed on will need to be understood, and accepted as reasonable.