

# **APPENDIX FOUR – ALTERNATIVE DEVELOPMENT PATTERNS – NEW SETTLEMENTS (1993) (EXTRACTS)**



DEPARTMENT OF THE ENVIRONMENT

PLANNING RESEARCH PROGRAMME

# Alternative Development Patterns: New Settlements

**Michael Breheny, Tim Gent and David Lock**

University of Reading and David Lock Associates

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# Table of Contents

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|  | <i>Page No.</i> |
|--|-----------------|
| <b>Acknowledgements</b>  | v               |
| <b>Executive Summary</b>   | vi              |
| <b>Chapter 1</b>   |                 |
| <b>Introduction</b>  | 1               |
| 1.1 The Scale and Location of Urban Growth, and the Revival of the New Settlement Solution | 1               |
| 1.2 Purpose of the Research  | 1               |
| 1.3 Structure of Report  | 2               |
| 1.4 Adopted Approach   | 2               |
| <b>Chapter 2</b>   |                 |
| <b>Alternative Development Patterns: Establishing Criteria for Assessment</b>              | 5               |
| 2.1 The Scale and Nature of the Accommodation Problem                                      | 5               |
| 2.2 Defining Alternative Forms of Urban Growth   | 7               |
| 2.3 Defining Criteria: Economic, Social, Environmental                                     | 10              |
| <b>Chapter 3</b>   |                 |
| <b>Alternative Development Patterns: Assessment</b>  | 15              |
| 3.1 The Economic Consequences of Alternative Development Patterns                          | 15              |
| 3.2 The Social Consequences of Alternative Development Patterns                            | 23              |
| 3.3 The Environmental Consequences of Alternative Development Patterns                     | 28              |
| 3.4 Summary Assessments of Alternative Development Patterns                                | 34              |
| <b>Chapter 4</b>   |                 |
| <b>One Strategy for Accommodating Growth: New Settlements and Their Characteristics</b>    | 37              |
| 4.1 A Recent History of New Settlement Proposals   | 37              |
| 4.2 A Typology of New Settlement Proposals   | 38              |
| 4.3 The Promotion of Privately-Sponsored New Settlements                                   | 42              |
| 4.4 The Design Characteristics of New Settlements  | 43              |
|  | iii             |

|   |   |            |
|---|---|------------|
| <b>Chapter 5</b>  |   |            |
| <b>Recommended Practice in the Design and Implementation of New Settlements</b> |   | <b>45</b>  |
| 5.1   | Economic Considerations   | 45         |
| 5.2   | Social Considerations   | 46         |
| 5.3   | Environmental Considerations                                      | 48         |
| 5.4   | Further Observations on Size and Mix                              | 50         |
| 5.5   | From Promoters to Planners  | 52         |
| <br>  |   |            |
| <b>Chapter 6</b>  |   |            |
| <b>New Settlements and the Planning System</b>                                  |   | <b>53</b>  |
| 6.1   | Government Policy on New Settlements                              | 53         |
| 6.2   | Local Authorities and New Settlements                             | 59         |
| <br>  |   |            |
| <b>Chapter 7</b>  |   |            |
| <b>New Settlements and the Planning System: Recommended Practice</b>            |   | <b>73</b>  |
| 7.1   | National Guidance   | 73         |
| 7.2   | Regional Guidance   | 74         |
| 7.3   | Structure and Local Plans   | 75         |
| <br>  |   |            |
| <b>Chapter 8</b>  |   |            |
| <b>Conclusions</b>  |   | <b>79</b>  |
| 8.1   | Purposes of the Research  | 79         |
| 8.2   | The Scale and Location of New Housing                             | 79         |
| 8.3   | The Merits of Different Forms of Urban Development                | 80         |
| 8.4   | The Case of New Settlements                                       | 81         |
| 8.5   | New Settlements and the Planning Process                          | 82         |
| <br>  |   |            |
| <b>Appendices</b>   |   | <b>83</b>  |
| 1.  | The New Settlement Proposals Database                             | 83         |
| 2.  | Energy Consumption, Transport and Urban Form                      | 95         |
| 3.  | Combined Heat and Power Systems and Forms of Urban Development    | 105        |
| 4.  | Identifying Economies of Scale and Proximity in Urban Development | 109        |
| 5.  | The Geography of the Affordable Housing Problem                   | 117        |
| 6.  | Alternative Methods of Promoting New Settlements                  | 119        |
| 7.  | The Design Characteristics of Recent New Settlement Proposals     | 125        |
| 8.  | List of Consultees  | 139        |
| <br>  |   |            |
| <b>References</b>   |   | <b>141</b> |

# Acknowledgements

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## **Steering Group**

The research was conducted, and this report prepared, under the guidance of a Steering Group, which comprised representatives of the Department of the Environment, its Regional Offices and the Rural Development Commission.

## **Advisory Group**

The Research Team drew upon the expert knowledge of an Advisory Group comprising of:

- Ms. Anneta Arno, (University of Reading)
- Dr. David Banister (University College, London)
- Professor Alan Evans (University of Reading)
- Dr. Susan Owens (University of Cambridge)

In addition to giving general advice, members of the Advisory Group have made written contributions to:

section 2.1 (Ms. Arno), section 3.1 (Professor Evans), section 3.3 (Dr. Banister and Dr. Owens), Appendix 3 (Dr. Banister and Dr. Owens), Appendix 4 (Professor Evans). Robert Wilcox and Paul Murrain, of David Lock Associates, provided valuable assistance part way through the project, and made particular contributions on the planning policy and design sections respectively.

## **Consultees**

The help of the local authorities who acted as case study areas for the project is gratefully acknowledged, as is the help of all of those people who gave advice and opinions during the course of the research. A list of consultees is presented as Appendix 8.

# EXECUTIVE SUMMARY

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1 This work was commissioned because of increasing political, public and professional concerns about how best to accommodate new development: its scale, location, and consequences. The Department of the Environmental brief required that three questions be addressed:

- (i) What are the merits and demerits of different ways of accommodating development?
- (ii) If new settlements are to be developed, what characteristics should they have?
- (iii) How should the planning system best deal with new settlement proposals?

2 Each of these questions is considered in some detail in the report. This executive summary simply lists:

- **the major findings of the report – presented in bold;** and
- ***the major recommendations – presented in bold italics.***

Conclusions and recommendations are presented under each of the three basic questions.

## (i) **The Relative Merits of Alternative Ways of Accommodating Development**

3 The starting point for a consideration of the merits of alternative ways of accommodating development is an assessment of the scale of likely future development. Largely because of continuing household formation from a virtually static population, it is likely that the future housing requirements will be substantial, albeit lower than that experienced during the 1980s.

4 Much of the current anxiety over development concerns location rather than scale, with growth being resisted in many rural areas, and increasingly being resented in some urban areas. A simple calculation of where development is likely to take place leads to the fundamental conclusion that:

- **unless much tougher containment policies are introduced – at the very time when concerns are being expressed over urban intensification – it is inevitable that significant greenfield/village development will take place in the UK.**

5 Given the intense debate that surrounds the development question, and the multitude of arguments in favour of various solutions, a more objective assessment of the merits and demerits of alternative locational solutions is desirable. Here five alternative development types are identified and examined: urban infill; urban extensions; key villages; multiple village extensions; and new settlements.

6 It is stressed that in many areas development will take place in a permutation of these types. The intention here is not to identify a single, ideal development type, but to try to make explicit the general merits and demerits of each type. These general observations will, of course, be subject to amendment to take into account specific features of any locality.

7 The five alternatives are assessed against three sets of criteria: economic; social; and environmental. An explanation of the detailed criteria chosen is given, followed by a detailed assessment. The overall assessment of options leads to the following findings:

- **The *urban infill* option performs well against certain economic criteria, but**

badly in terms of public costs and planning gain potential. It generally performs well on social criteria. It has a mixed environmental performance, scoring well on loss of land and habitats, and on energy consumption; but potentially less well on 'greening' and 'town cramming' issues.

- **Peripheral urban extensions** perform consistently well on economic performance because of average costs, but provide potentially good planning gain prospects. On social and environmental criteria, urban extensions score well, if not outstandingly. Only on loss of land is performance poor. Towns and cities cannot extend indefinitely, however, without stress to social and environmental criteria. Caution is advised in applying the general conclusions to specific instances.
- **Key villages** perform modestly on virtually all criteria. Planning gain and affordable housing prospects are poor, but costs and social provision are potentially good. High car dependence counts against key settlements on environmental criteria.
- **Multiple village extensions** give overall the weakest performance. Costs may be high with no compensating public gains. Extensions to many villages are unlikely to be a social success, and there are few compensating environmental gains.
- **New settlements** tend to perform to extremes. The cost of housing is likely to be low, as are costs to the public sector because of high planning gain prospects. Energy consumption from travel is likely to be high in smaller new settlements, as is land and habitat loss, but prospects for CHP in larger new settlements are good. Social merits are modest.
- **The overall findings on the merits of the five alternatives** depend on the weighting attached to the sets and to individual criteria. Urban extensions perform well on virtually all criteria. Urban infill and new settlements both perform well, but are susceptible to changes in weighting because they attract extreme judgements on certain criteria. Key villages and multiple village extensions tend to perform evenly across criteria and hence judgements on these are not susceptible to weighting.

8 A simple cross-tabulation of the five development types against a range of criteria is given in the report

(Table 3.5). Scores are placed in the boxes. These are far from sacrosanct. They are intended to focus discussion, rather than present a definitive assessment. Readers are invited to produce different scores, weight criteria, and consider their judgements on the relative merits of the alternatives.

#### (ii) The Characteristics of New Settlements

9 The research commenced with a loose definition of a 'new settlement', in order that no aspects of the debate were excluded. Later in the work, a new settlement is defined as:

A free-standing settlement, promoted by private and/or public sector interest, where the completed new development – of whatever size – constitutes 50% or more of the total size of settlement, measured in terms of population or dwellings.

10 The report explains the recent history of the new settlement debate, and the response of both central and local government.

11 The review of extant new settlements proposals has found that:

- 184 new settlement schemes, proposed since 1980, have been identified in England as at 1 June 1992;
- the largest share (60) is in the South East;
- the large majority of recent schemes, since 1988, are just beyond the South East regional boundary, in the South East Fringe. Indeed, 116 of the schemes are in the Greater South East; that is the South East region and immediately adjacent counties;
- some of the schemes are competing, usually in localities where the planners have indicated that one scheme may be acceptable. If competing schemes are accounted for, there were, at 1992, 120 new settlement proposals nationally that could, potentially, be built;
- most recent schemes are small in scale: less than 1,500 dwellings;
- increasingly schemes are not speculative, but are promoted through the planning system. Government statements have had a profound effect in bringing about this change;
- all current proposals are privately-promoted;
- Central Government could promote new settlements, using the New Towns Act of 1981;

- legislation, under Part IX of the Town and Country Planning Act 1990, allows local authorities to promote such developments; and
- the design features of new settlement proposals leave a lot to be desired.

12 If new settlements are an appropriate solution to the accommodation problem in some areas, then what should they be like? What lessons can be learned from existing and proposed schemes? What design characteristics are implied by current economic, social and environmental objectives? By way of answers to these questions, the following recommendations are made:

- \* *developers need to have full control over the land before promoting a scheme;*
- \* *developers need to make available detailed financial appraisals of schemes, albeit in strict commercial confidence;*
- \* *public involvement – of both existing and new residents – in the new settlement planning process is both desirable and necessary if popular support for planning and its results is to be maintained;*
- \* *a social development programme for new settlements is necessary in order to establish a sense of community as soon as possible;*
- \* *the schemes adopted for affordable housing need to be realistic and deliverable;*
- \* *schemes should be designed to incorporate as environmentally-sustainable features; balance compactness with greenness; consider CHP schemes; and give priority to non-car means of transport;*
- \* *the transport energy consumption associated with new settlements will be minimised if they are: remote or close to existing urban areas; large in size; and incorporate high levels of public transport provision. Intermediate locations – neither remote nor close – should be avoided;*
- \* *larger schemes are more desirable than small schemes. These will deliver: greater self-containment; better prospects for CHP schemes; more affordable housing; better prospects for public transport; a more diverse economic structure; and greater social cohesion;*
- \* *the minimum viable size should be that which will support a primary school (750-1,000 houses). Preferably, a new settlement would support a secondary school*

*and the range of services and facilities that such a size would support (3,000-5,000 houses). Environmental considerations would point to schemes even larger than this;*

- \* *planning agreements should fund a considerable proportion of the costs of providing non-profitable amenities. The source of this contribution should be the increase in land value arising from the grant of planning consent;*
- \* *larger-scale new settlements above the range currently coming forward (up to 6,000 houses) should not be precluded from consideration. It is likely that schemes above this would have to be promoted by some form of public initiative; and*
- \* *if sustainability is given great weight, new settlements of a scale of 10,000 dwellings (25-30,000 population) – with supporting employment and other services – could be the most desirable form of urban development other than urban infill.*

### (iii) New Settlements and the Planning System

13 A detailed survey of local authority policies found that:

- a number of county councils have now adopted policies that promote new settlements, or consultation drafts that consider new settlements;
- where new settlement policies are adopted, invariably they are intended to relieve growth pressures. The reasoning behind the adoption of new settlement policies is often that 'enough is enough'; that is, that many existing towns and villages have reached physical and environmental capacities;
- county policies can be classified along a continuum from 'outright rejection' to 'direction'. This latter approach is characterised by a positive approach to new settlements and the nomination of search areas;
- where the 'direction' line is taken, county and district authorities are beginning to adopt a competitive 'beauty parade' in order to choose a site(s);
- a similar classification of approaches can be identified at the district level. The positive approach, equivalent to the 'direc-

tion' model, has been called the 'promotional' approach; and

- policy formulation is constrained by short time horizons. With ten-year horizons, many authorities adopt a 'make do' approach; an attitude that is exacerbated by the five-year housing supply requirement. Longer-term thinking may avoid decisions being taken now that will be regretted later, and allow a more visionary approach to growth management.

14 A consideration of current planning practice and a detailed knowledge of the new settlement schemes being proposed leads to the following recommendations:

#### National Guidance

- \* *clear Central Government guidance on new settlements and related matters is required. It is effective, and is appreciated by planners and developers alike;*
- \* *the advice on new settlements should be related to Government thinking on housing, sustainable development, urban renewal, and transport, at least;*
- \* *the promotion of new settlement proposals through the planning system should continue to be encouraged. Speculative proposals should be discouraged; and*
- \* *guidance from Government on new settlements – within further revisions of PPG3 or as a separate PPG – should be kept under review.*

#### Regional Guidance

- \* *Regional Planning Guidance should not seek to promote new settlements, either generally or specifically, or nominate areas of search or sites, unless schemes on a scale approaching that of the Garden Cities or New Towns are envisaged (in excess of 10,000 dwellings);*
- \* *the question of future housing requirements and their allocation across the region must be thoroughly researched and debated at the regional level, and specified in Regional Planning Guidance; and*
- \* *for Regional Planning Guidance to have any value, it must lead, not follow the debate at the country level. Longer time-scales will help. They force both Regional Offices and county councils to think in genuinely strategic terms.*

#### Structure Plans

- \* *the tensions between structure and local plans in dealing with new settlement issues can best be dealt with through co-operation between the two tiers of government;*
- \* *the structure planning process should provide an opportunity for debate about the relative merits of the new settlement option for accommodating development;*
- \* *larger new settlement proposals, of strategic significance, should be required to be identified in structure plans;*
- \* *allocations of housing and employment land requirements between districts should be adjusted to ensure the viability of the larger new settlement proposal;*
- \* *to ensure a thorough consideration of the merits of new settlements as a growth option, structure plans should adopt 15-year time horizons;*
- \* *a new settlement is likely to be of strategic significance to county structure plans if certain characteristics are exhibited by the proposal (listed at para 7.14);*
- \* *structure plans including a new settlement proposal should: describe the strategic role of the scheme; indicate the desired initial size of the scheme; identify an area of search; and*
- \* *Broad locational criteria should be stated (listed at para 7.15).*

#### Local Plans

- \* *the 'promotional' approach, similar to the structure plan 'direction' model, is the most appropriate model to follow when a district is positively promoting a new settlement; it allows planners the greatest degree of control over the process; it gives developers an opportunity to promote schemes competitively; and it is the most likely to give maximum planning gain; and*
- \* *the statement of requirements in the local plan should address the following matters: the role of the new settlement in the urban structure of the district; housing and employment mix (in broad terms); phasing and timescale; planning gain; attributes required of master planning team; the scope, scale, form and content of the necessary development framework (or flexible master plan); arrangements for qual-*

***ity control; arrangements for public consultation and participation throughout the planning and development process; arrangements for the involvement of the local planning authority; design standards where applicable; sustainability performance targets; and management and maintenance regime of the public realm.***

15 The report concludes with a brief synthesis of the main findings and conclusions of the research.

16 Appendices present certain issues in more detail than is appropriate in the main text. These cover: the new settlements proposals database; energy consumption, transport and urban form; combined heat and power systems and forms of urban development; economics of scale and proximity in urban development; the geography of affordable housing; alternative methods of developing new settlements; the design characteristics of recent new settlement proposals; and a list of consultees.

## **APPENDIX FIVE – EMPLOYMENT ESTIMATES PAPER (DLA)**





## Waterbeach: employment estimates 4<sup>th</sup> July 2016

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### Introduction

The note has been prepared by David Lock Associates on behalf of Urban&Civic in response to queries made by South Cambridgeshire District Council on the employment estimates for Waterbeach New Town. The employment estimates were originally provided to inform the CSR inputs of the A10 Corridor Study (email sent 8<sup>th</sup> February). A number of clarifications have been sought by South Cambridgeshire District Council, email dated 28<sup>th</sup> June. Principally the queries relate to:

- explanation of the approach of not seeking large-scale strategic B uses on site;
- clarification of the employment density assumptions used for other B use classes;
- a suggested alternative approach to estimating Cambridge Research Park jobs; and
- clarification on the home working estimate and how it relates to 'other uses'. And validation sheet on workforce population.

Each query is below:

### Approach to employment uses (B uses)

Draft Policy SS/5 of the Proposed Submission South Cambridgeshire Local Plan sets out that the new town should include: *“Employment provision to meet the needs of the town and provide access to local jobs, and support the continued development of the economy of the Cambridge area”*

Urban&Civic and RLW have agreed not to pursue a strategy of large-scale strategic B uses (employment parks) at Waterbeach. This is principally to avoid undermining existing employment centres, such as at Cambridge Research Park, Cambridge northern fringe and Waterbeach industrial parks, and to allow for small and medium scale business to be supported on site.

A draft Development Framework Document (DFD) has been prepared jointly and has involved engagement with the local community and the Councils. The draft DFD sets out objectives and principles for meeting the employment needs of the town and supporting the wider economy. The key principles include: a focus on providing the right mix of homes and new infrastructure to support the wider Greater Cambridge economy; support for small and medium, to be fine grain and integrated; focussing new employment at the town centre and railway station as 'hubs'; support for homeworking and an enterprising culture; and continued temporary use of existing buildings at the barracks. Relevant extracts of the draft DFD are attached.



The draft DFD was considered by the Cambridgeshire Quality Panel (15<sup>th</sup> June) and one of the conclusions of the panel was that micro-employment should be encouraged on site rather than business parks.

### **Employment densities for B1 uses.**

Occupiers at Waterbeach are not known therefore a general estimate of employment density for the B1 uses has been applied at 1 job per 20 sqm. A mix of general office uses and other B1 uses is considered to be reasonable. The HCA Employment Density Guide 3<sup>rd</sup> Edition (November 2015) sets out office employment densities of between 8 and 13 per sqm depending on type of occupier. The guidance also includes a new 'Mixed B class' for small workspaces including co-working uses (10-15 per sqm), studios (20-40 per sqm), incubators (30-60 per sqm) and maker spaces (15-40 per sqm). A *reasonable judgement* has been made therefore to apply jobs density of 1 per 20 sqm to reflect a mix of general office and mixed B1.

It should also be noted that the assumed 8,000 sqm of B uses floorspace is a conservative estimate. Additional B1 floorspace may be applied for through emerging planning applications but work is on-going and not definitive at this stage.

### **Comments on estimates for Cambridge Research Park**

Future occupiers at Cambridge Research Park (CRP) are also not known. The detailed approach to estimating future employment at CRP (on the attached spreadsheet provided by SCDC) is based on applying Employment Land Review 2012 approach and different B uses have been allocated evenly where not known. This approach has been reviewed and is accepted as a reasonable alternative to applying a general 1 job per 15 sqm density. Including the hotel estimate, this shows an estimate of 2,249 at CRP instead of 2,507.

In addition, however, there is an extant planning permission at Stirling House, Denny End Road, for 2,846 sqm (2,536 sqm for offices). This was not included originally in the estimates but given it immediately adjoins the site it should be counted. The applicant provided a specific employment estimate for this floorspace of 225 jobs. This would show a total estimate for CRP and Stirling House combined of 2,474 jobs (2,249 + 225 jobs).

### **Home working estimates**

A judgement has been made to what will be a reasonable estimate on home working by completion of the new town (expected to be post 2031). Home working comprises those who are self-employment or freelance based at home *and* those employed elsewhere but able to work from home as their main location. It is not 'use specific' (i.e. not linked to specific floorspace) and could comprise a wide range of different employment activities. An estimate of 20% is considered reasonable for the following reasons:

- National and regional trends: The East of England average is 15.1%. Moreover, home working nationally has grown from 2.9 million in 1998 to 4.2 million in 2014 in the United Kingdom, meaning a national average of 13.9% of all people in employment. There is no evidence to suggest the growth in



home working will slow, especially given lifestyle and technological change, and by post 2013 20% is reasonable.

- Characteristics of the local labour market: South Cambridgeshire and Cambridge have significantly higher proportions of a highly skilled workforce, and similarly of manager/professional occupations (SOC 1-3), than the East of England or national average. This is in part associated with the Cambridge phenomenon and the high concentration of technology companies. Of the 4.2 million home workers in the UK at 2014, 73.4% work in the highest skilled occupations (ONS 2014 Characteristics of Home Workers).
- Development strategy: There is a deliberate strategy by the development promoters to actively encourage an enterprising community, including home working, through flexible dwelling design, work-hubs and telecommunications infrastructure. Moreover, the creation of a new mixed use and well-designed place is considered to be a positive factor encouraging some home workers to live at Waterbeach.

The allowance for 400 jobs from other uses has been made to capture employment currently unforeseen developments outside of the stated primary land uses. Places change and evolve over time and a land use/employment density approach may under-represent such changes. Jobs associated with the relocated railway station, motor sales/maintenance, social care, petrol filling stations, taxis or night clubs. It constitutes less than 5% of the total estimate and is considered a reasonable allowance.

The validation work contains analysis undertaken by WSP (on behalf of RLW). The two approaches cannot be directly linked as the validation has involved an analysis of other towns of a similar size proposed to Waterbeach and the workforce population by industry based on 2011 census data. As such the data does not differentiate between work place employment and home working. The validation has been included to demonstrate that the land use/employment density approach is reasonable and, if anything, is a conservative, approach to estimating employment for modelling purposes.

## **Conclusion**

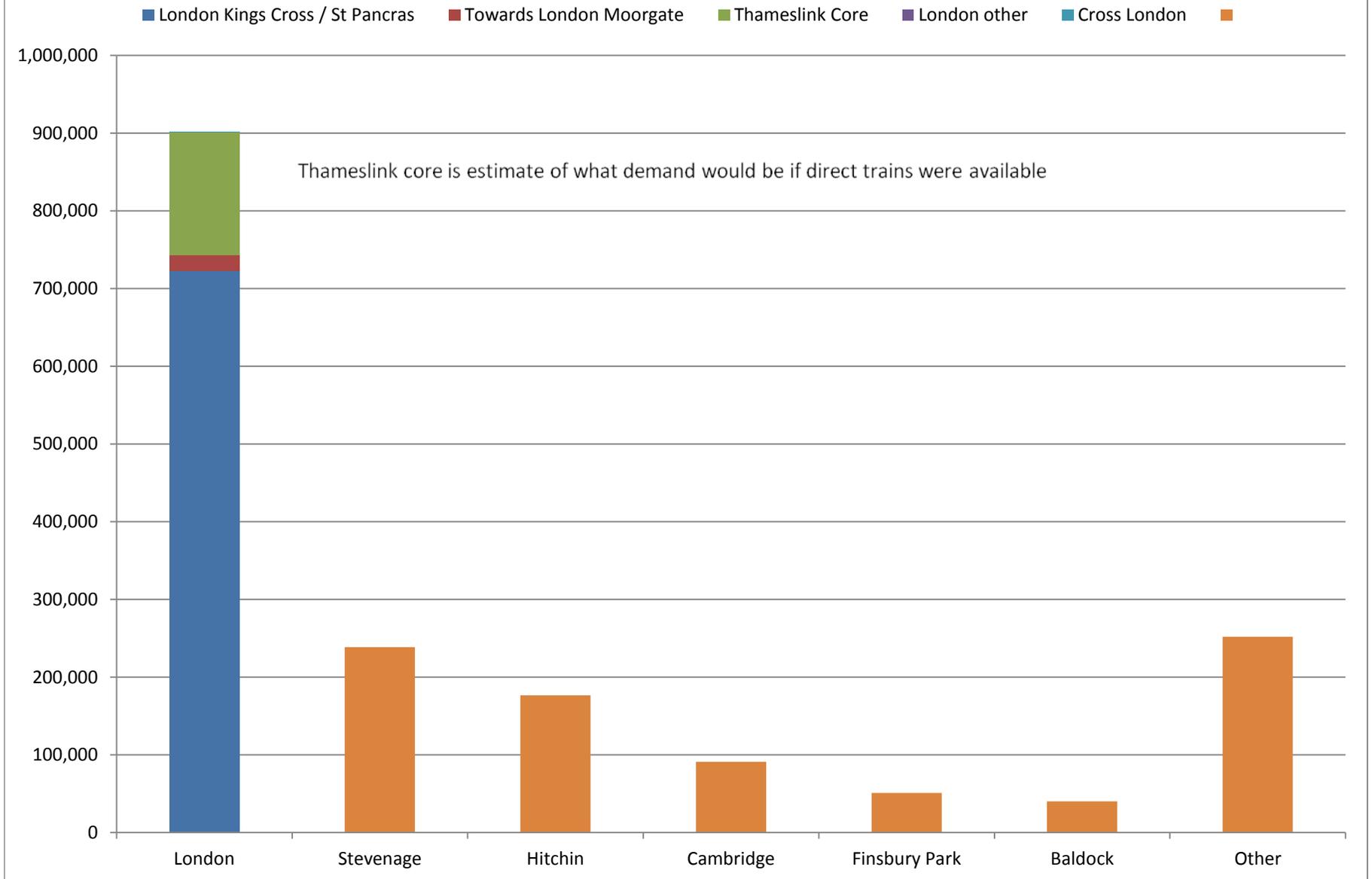
The employment estimates are considered reasonable for the purposes of CSRMs inputs to the A10 study. The alternative approach suggested to Cambridge Research Park employment is accepted but it is also suggested extant planning permission at Stirling House, Denny End Road be counted. This change means a reduction in the CRP employment future from 2,507 to 2,249 (-258) but the inclusion of an additional 225 jobs at Stirling House (based on the estimates included within the application). Overall therefore this indicates a reduction of 33 jobs meaning an overall estimate of 8,573 jobs (previously 8,606).

## **APPENDIX SIX – GTR CONSULTATION ON 2018 TIMETABLE**



# Letchworth top 6 passenger flows

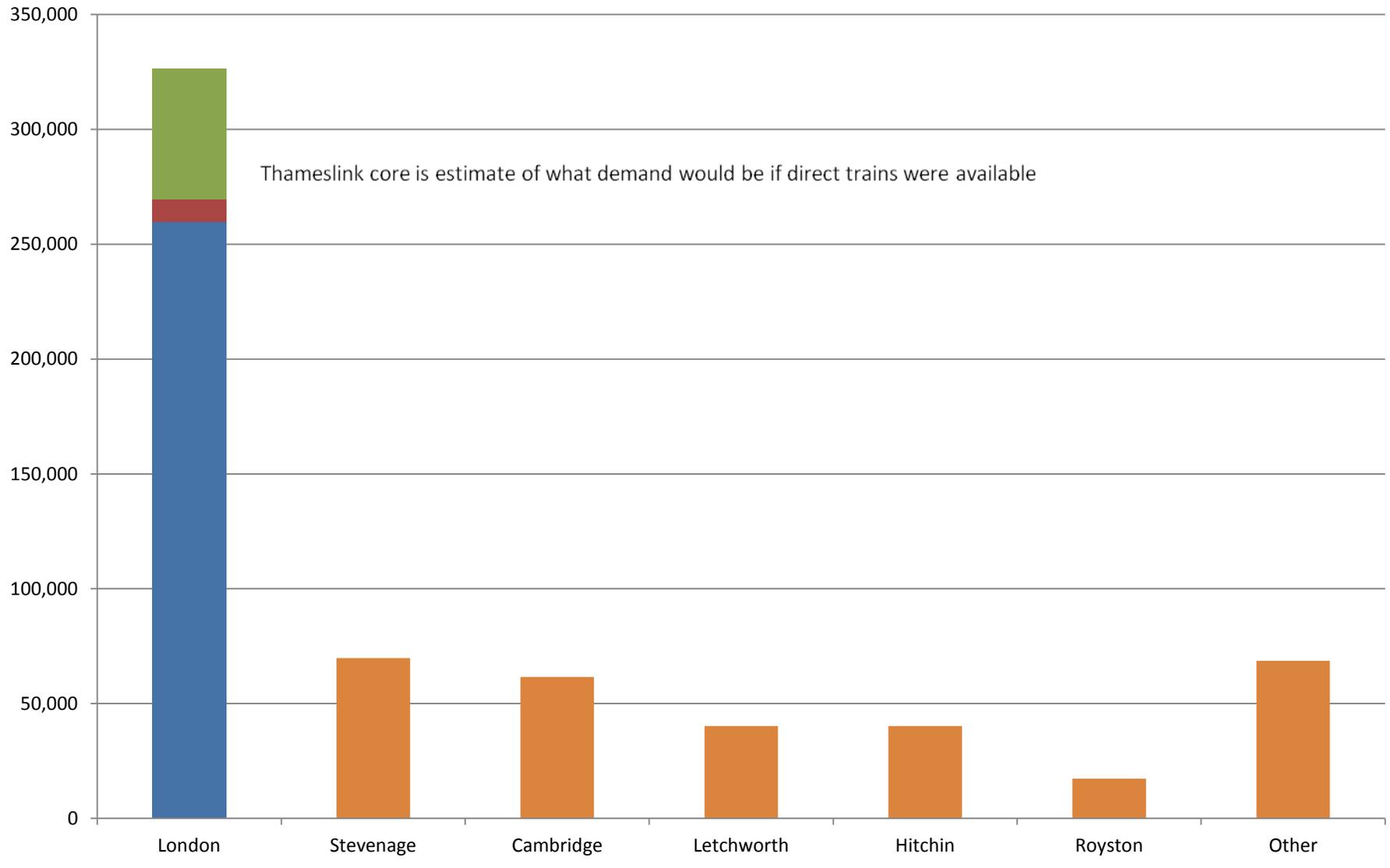
Journeys Year to March 2015



# Baldock top 6 passenger flows

Journeys Year to March 2015

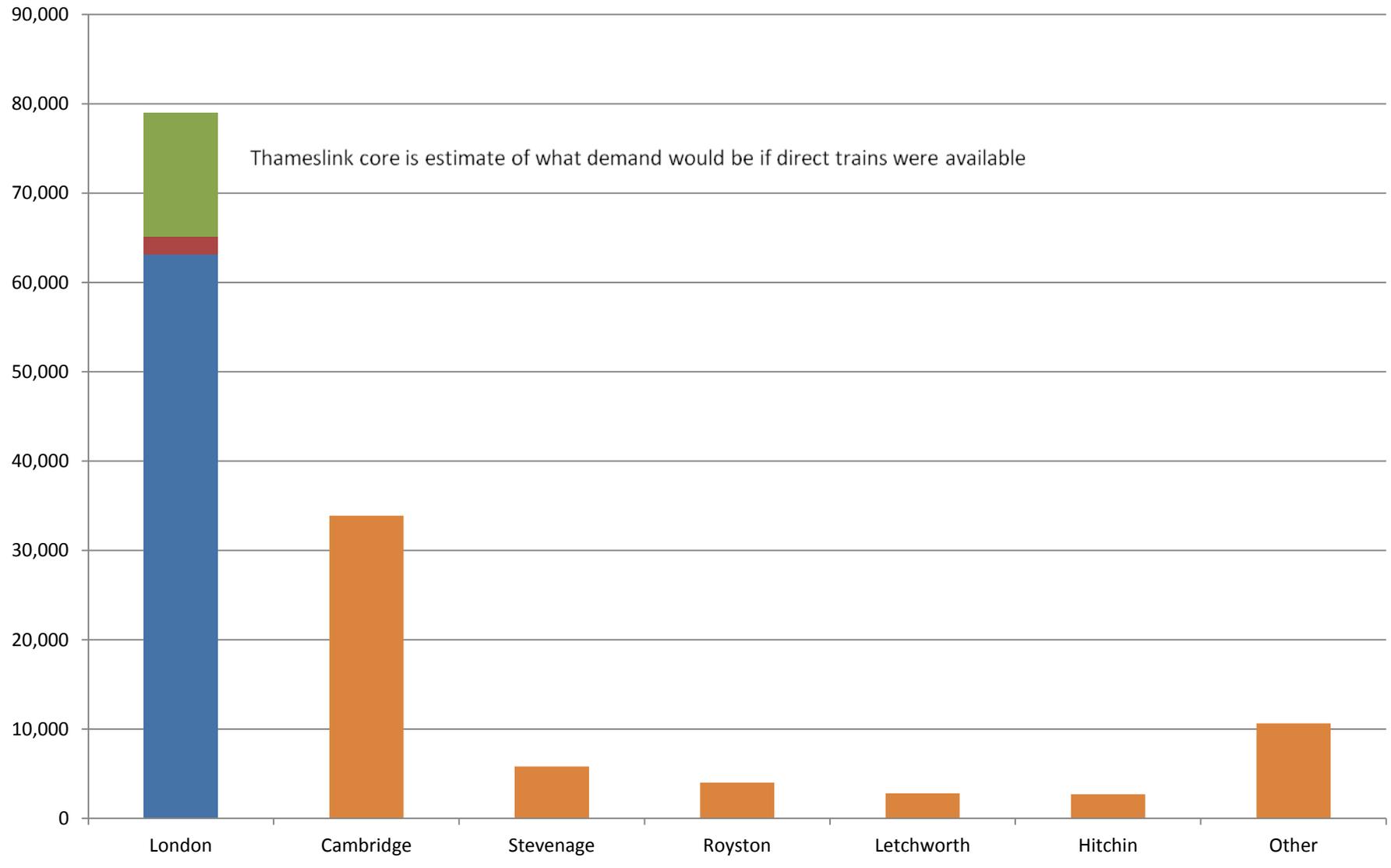
London Kings Cross / St Pancras   Towards London Moorgate   Thameslink Core   London other   Cross London   Other



# Ashwell & Morden top 6 passenger flows

Journeys Year to March 2015

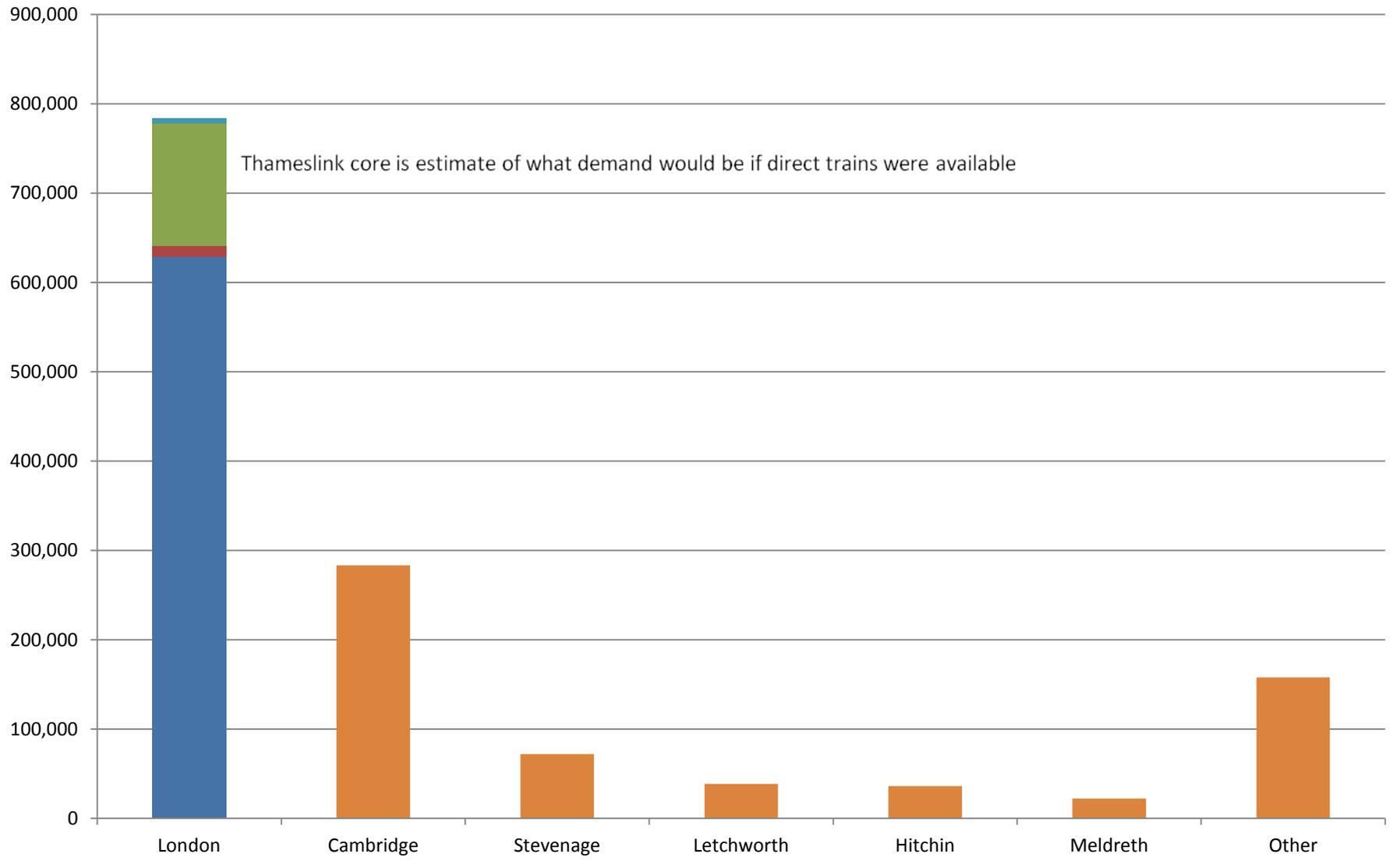
London Kings Cross / St Pancras    Towards London Moorgate    Thameslink Core    London other    Cross London    Other



# Royston top 6 passenger flows

Journeys Year to March 2015

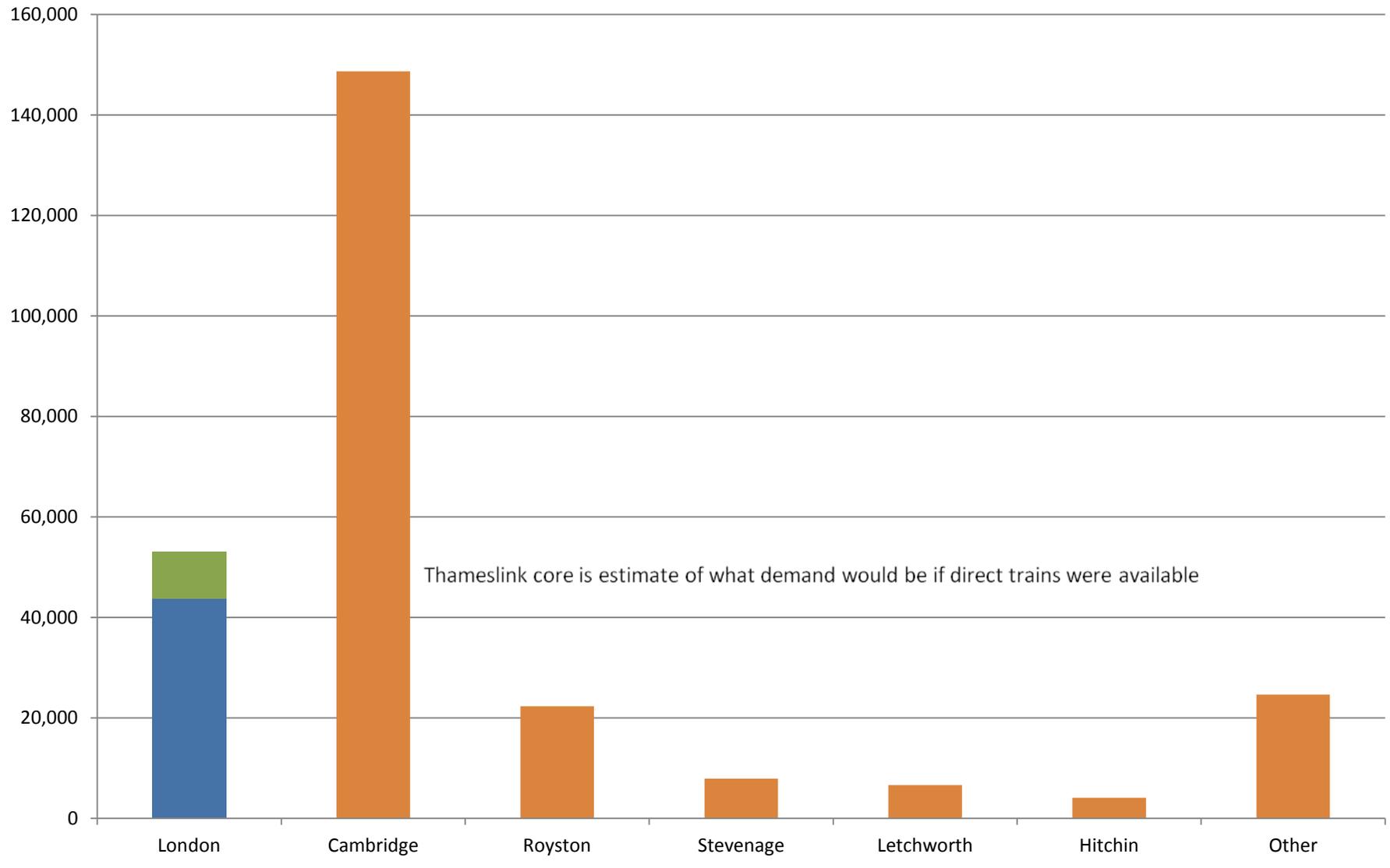
London Kings Cross / St Pancras    Towards London Moorgate    Thameslink Core    London other    Cross London    Other



# Meldreth top 6 passenger flows

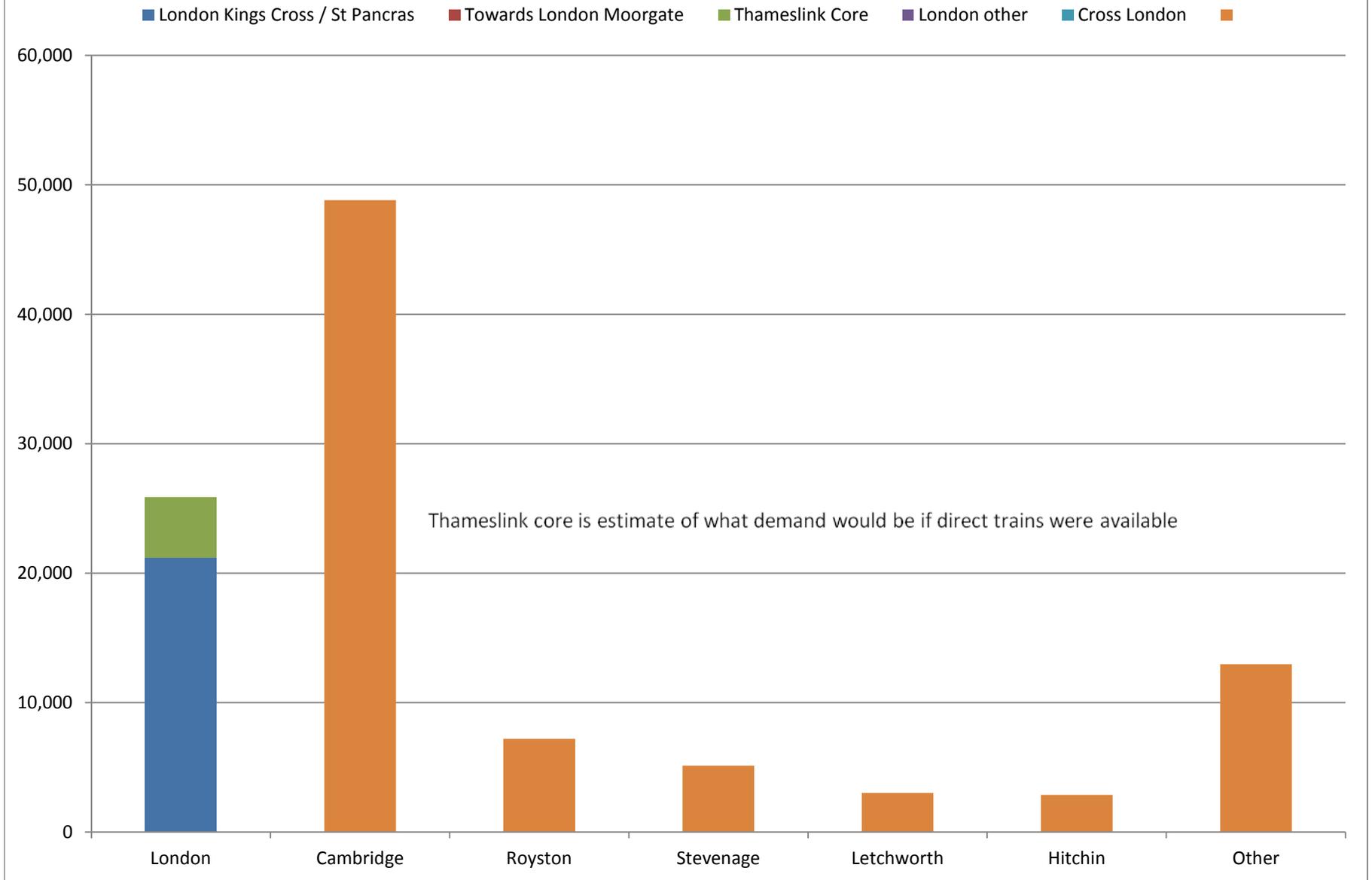
Journeys Year to March 2015

London Kings Cross / St Pancras    Towards London Moorgate    Thameslink Core    London other    Cross London    Other



# Shepreth top 6 passenger flows

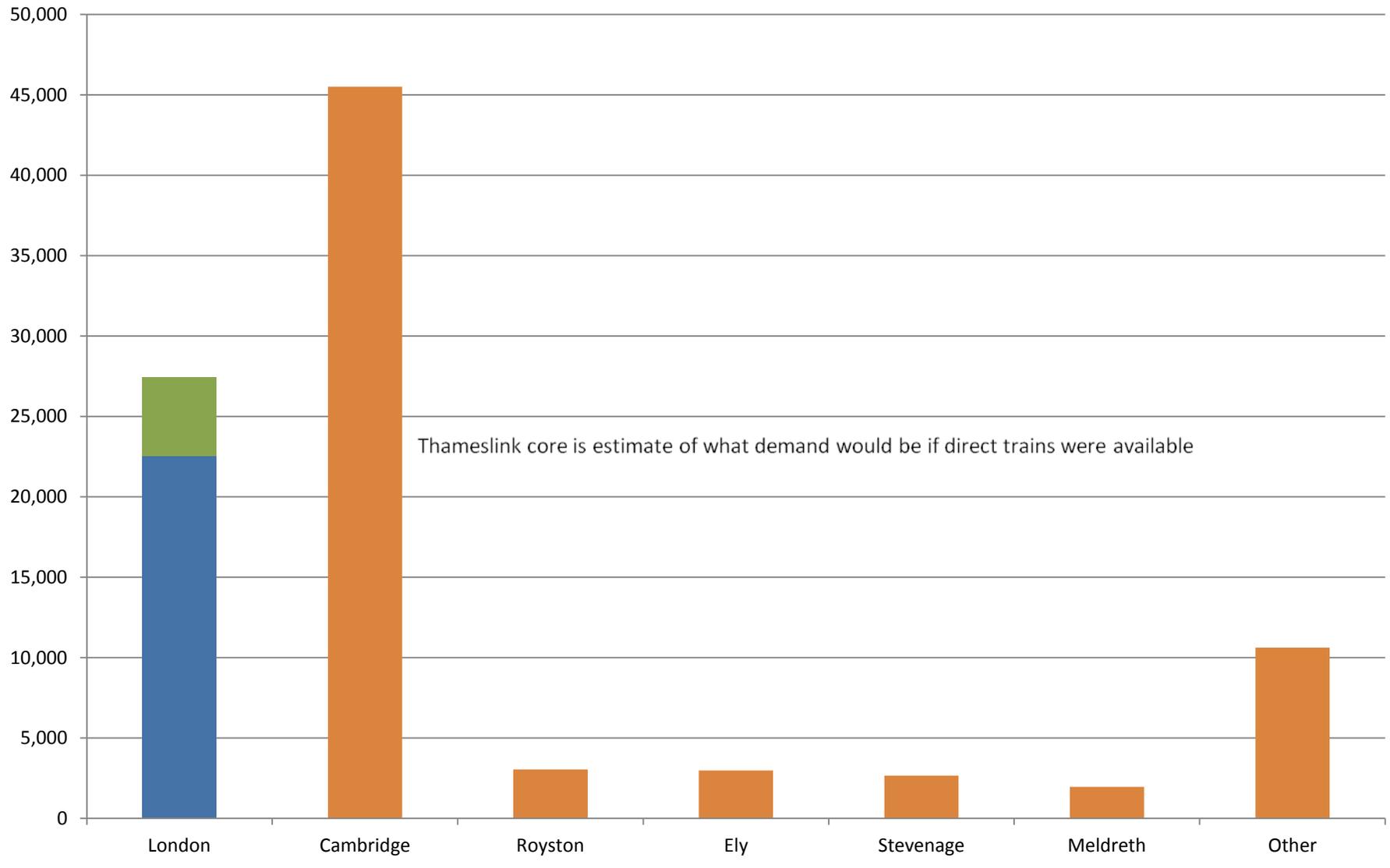
Journeys Year to March 2015



# Foxton top 6 passenger flows

Journeys Year to March 2015

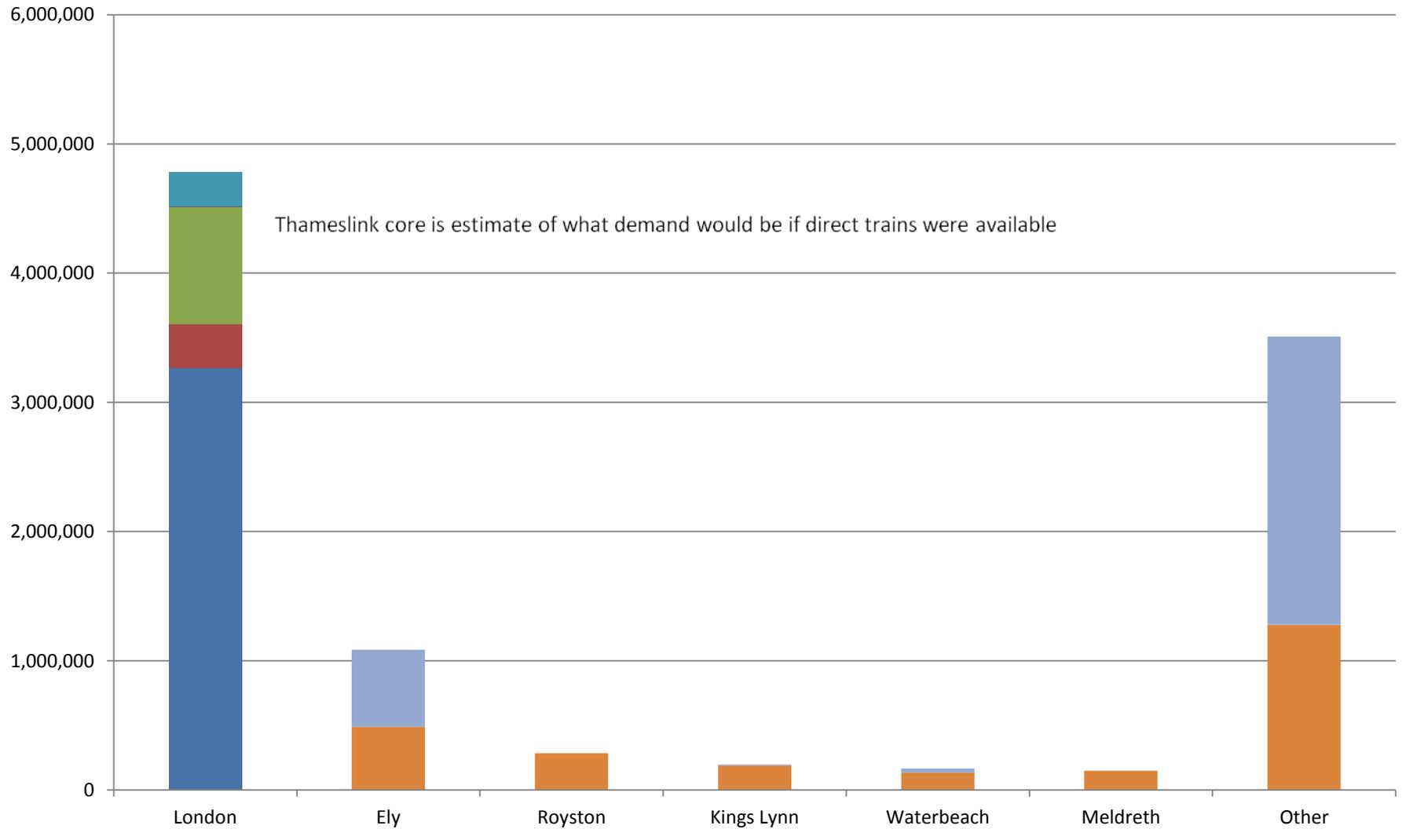
London Kings Cross / St Pancras   Towards London Moorgate   Thameslink Core   London other   Cross London   Other



# Cambridge top 6 passenger flows

Journeys Year to March 2015

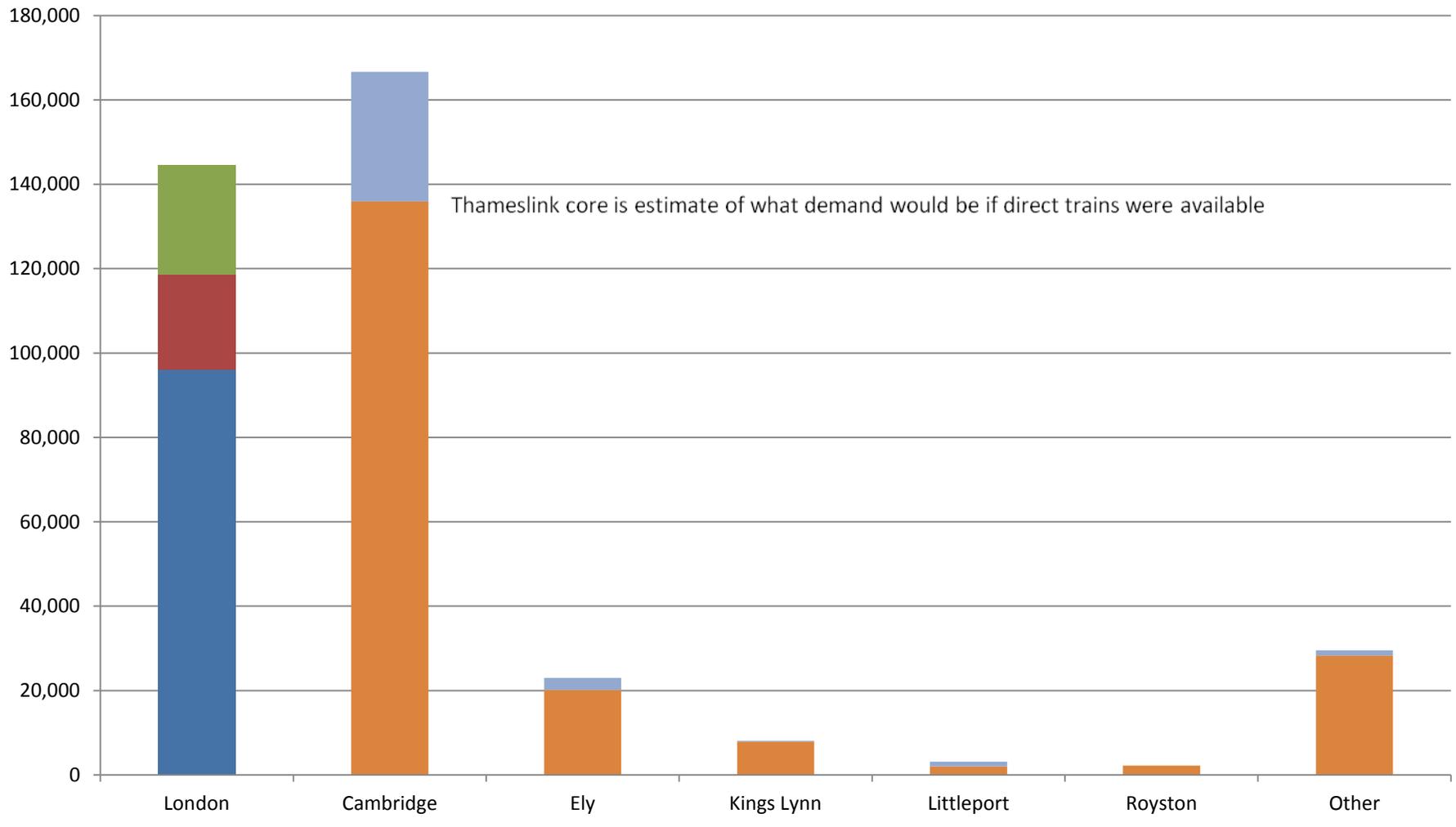
- London Kings Cross / St Pancras
- London Liverpool Street
- Thameslink Core
- Towards London Moorgate
- Cross London
- Great Northern
- Other TOCs



# Waterbeach top 6 passenger flows

Journeys Year to March 2015

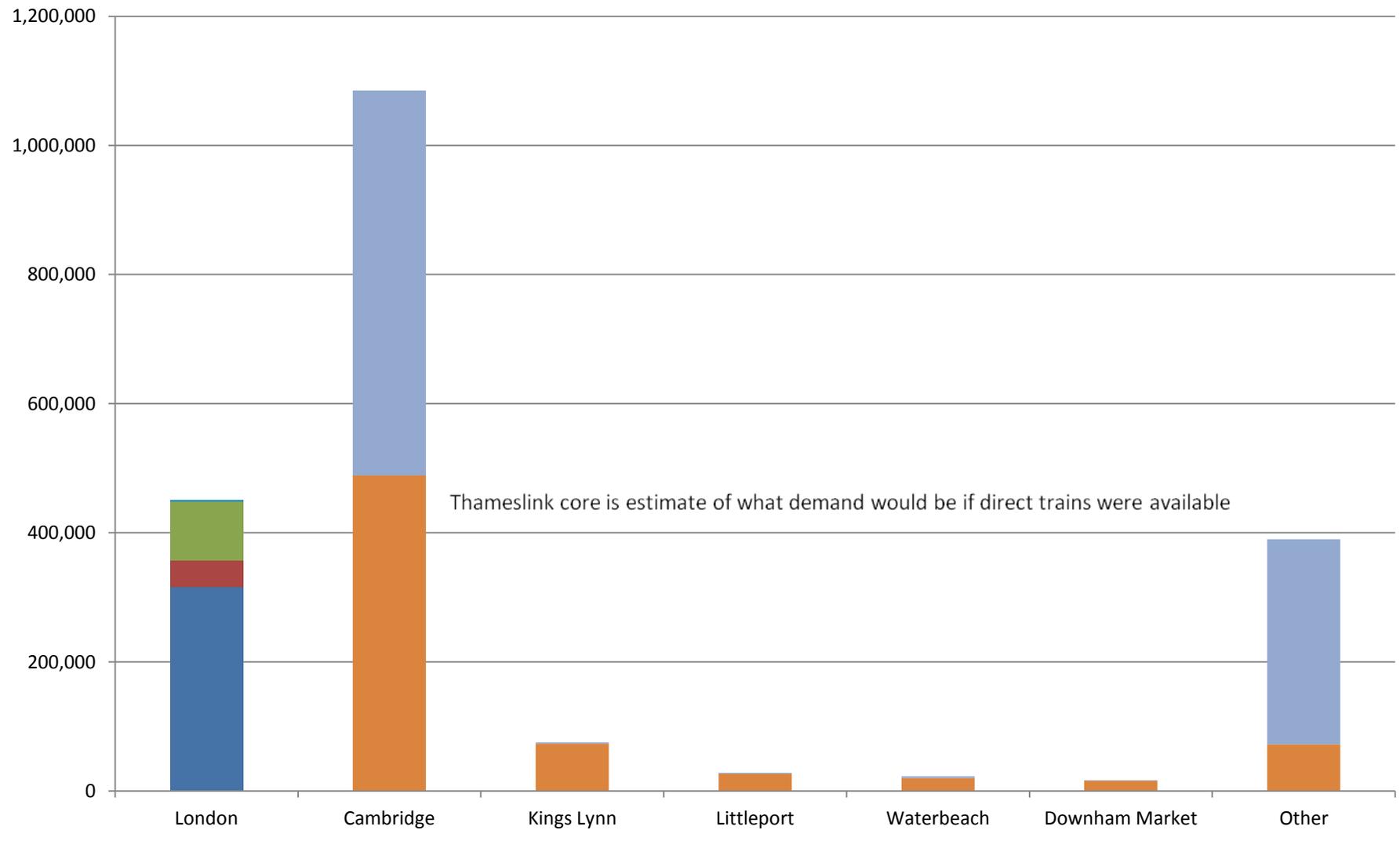
- London Kings Cross / St Pancras
- London Liverpool Street
- Thameslink Core
- Towards London Moorgate
- Cross London
- Great Northern
- Other TOCs



# Ely top 6 passenger flows

Journeys Year to March 2015

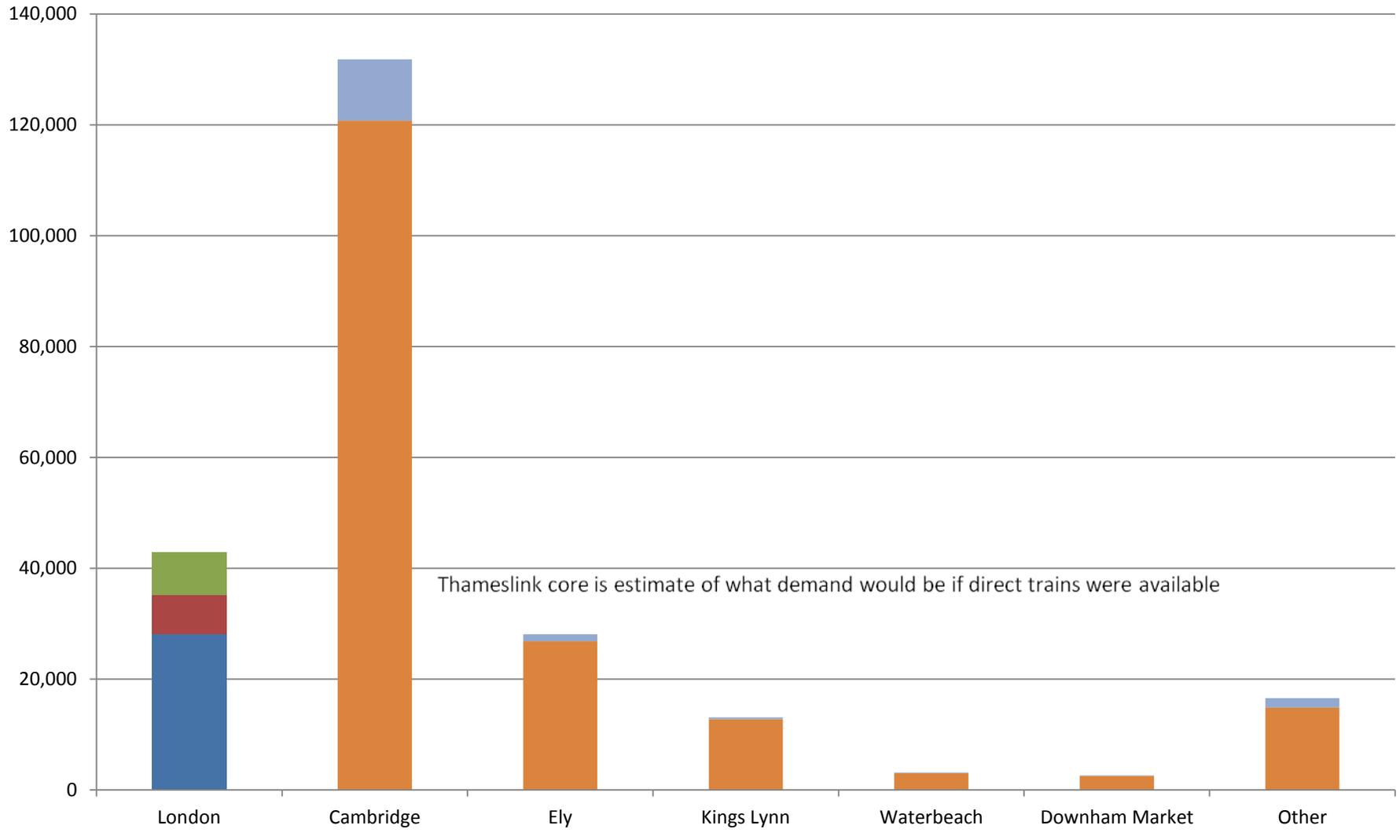
- London Kings Cross / St Pancras
- London Liverpool Street
- Thameslink Core
- Towards London Moorgate
- Cross London
- Great Northern
- Other TOCs



# Littleport top 6 passenger flows

Journeys Year to March 2015

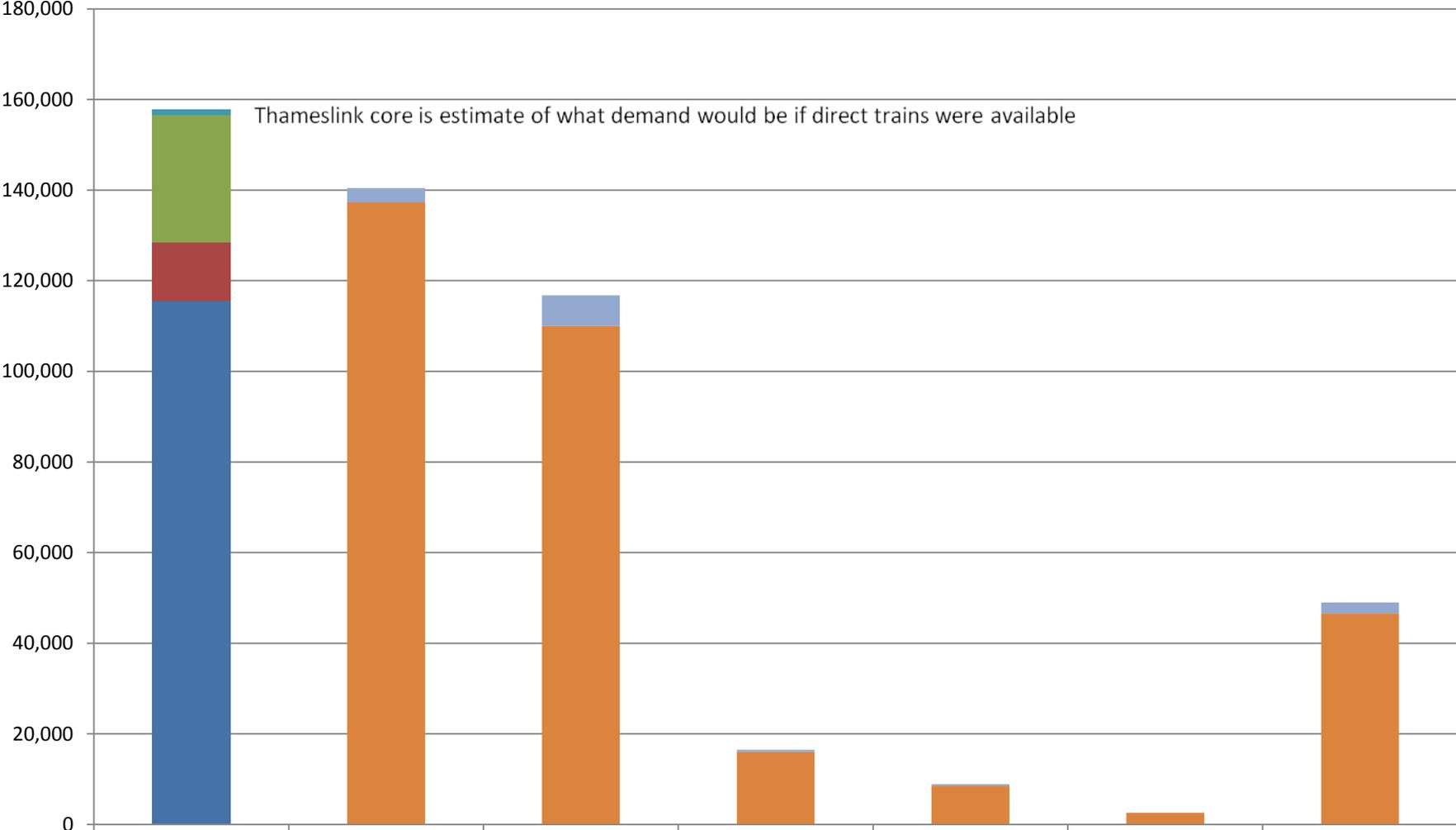
- London Kings Cross / St Pancras
- London Liverpool Street
- Thameslink Core
- Towards London Moorgate
- Cross London
- Great Northern
- Other TOCs



# Downham Market top 6 passenger flows

Journeys Year to March 2015

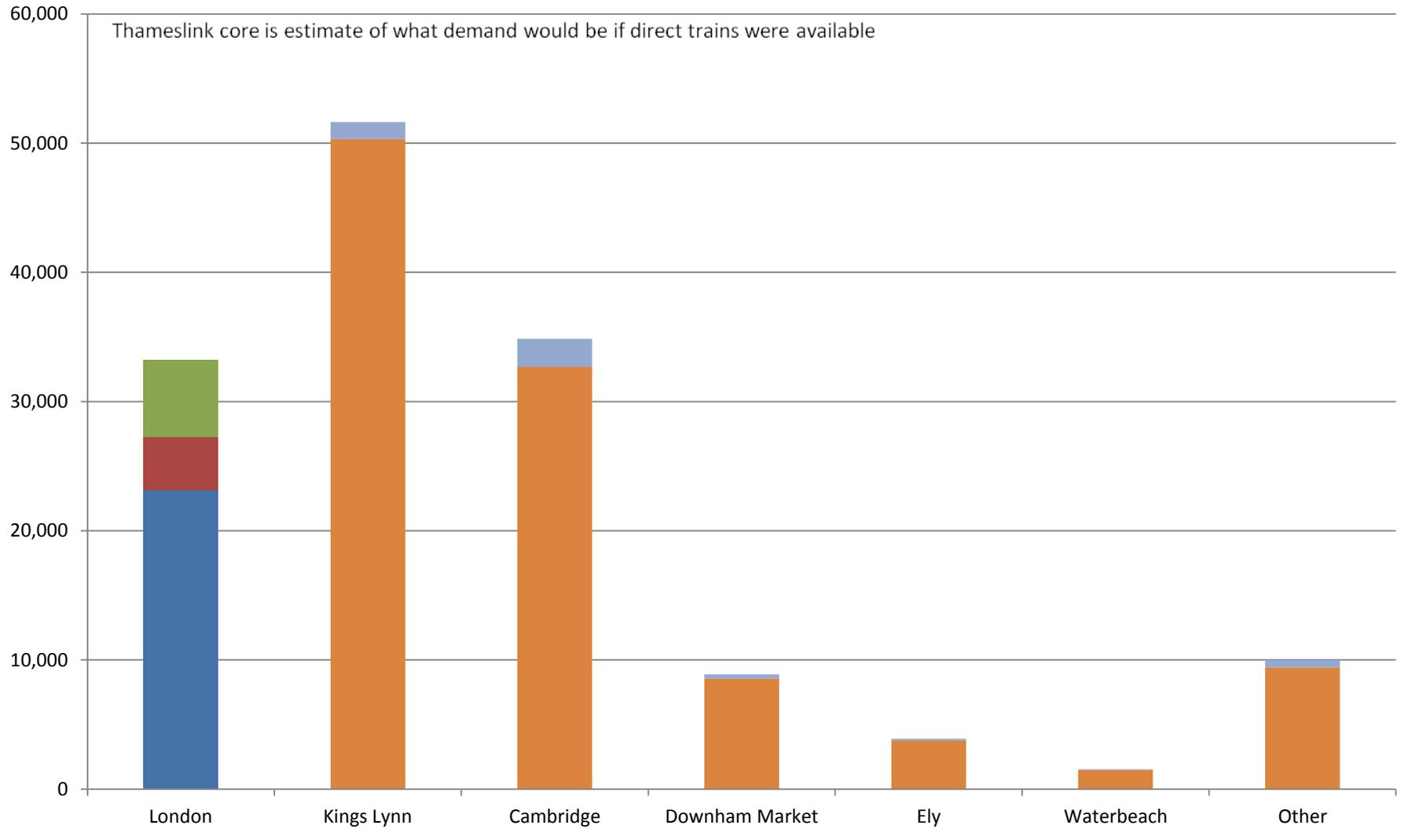
- London Kings Cross / St Pancras
- London Liverpool Street
- Thameslink Core
- Towards London Moorgate
- Cross London
- Great Northern
- Other TOCs



# Watlington top 6 passenger flows

Journeys Year to March 2015

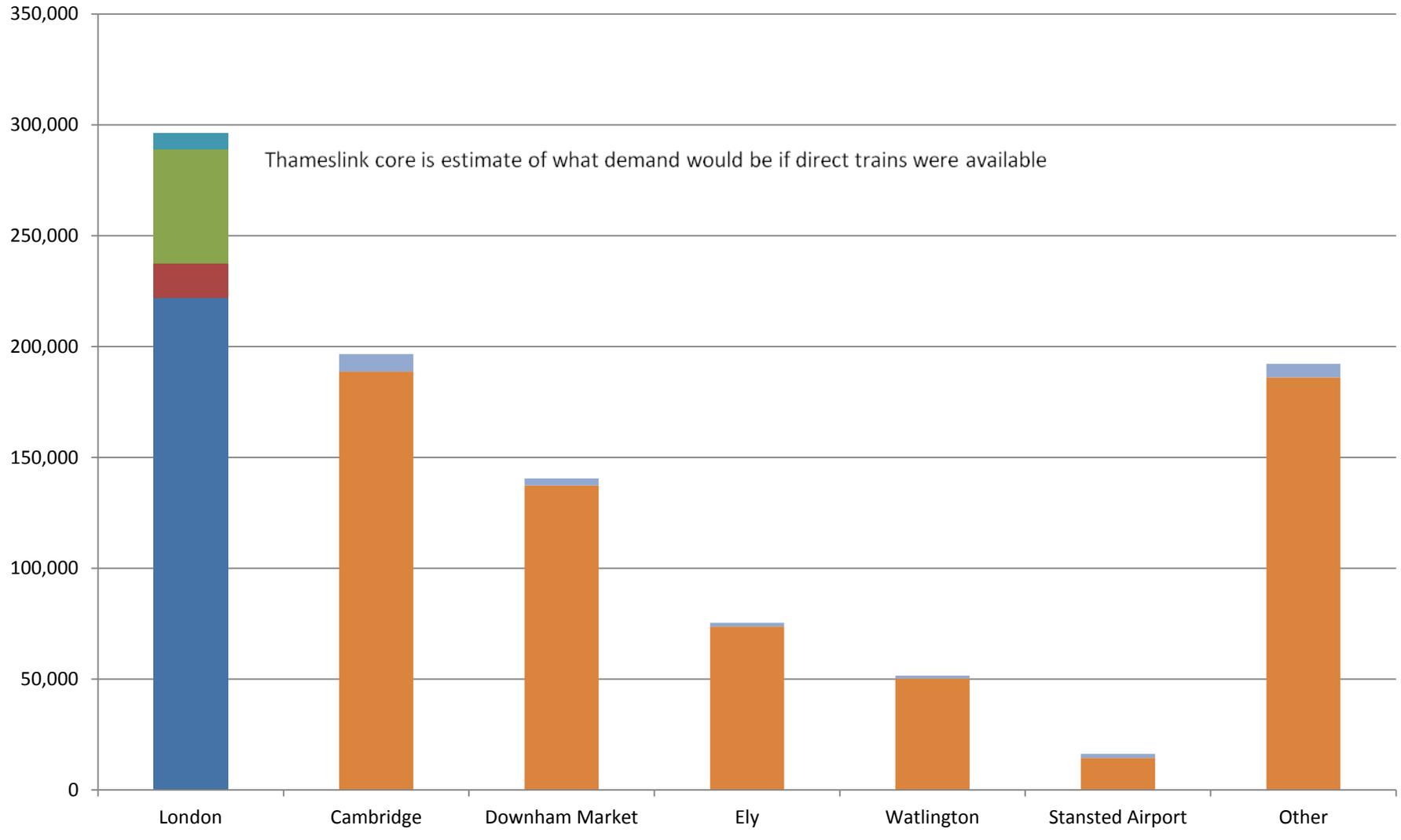
- London Kings Cross / St Pancras
- London Liverpool Street
- Thameslink Core
- Towards London Moorgate
- Cross London
- Great Northern
- Other TOCs



# Kings Lynn top 6 passenger flows

Journeys Year to March 2015

- London Kings Cross / St Pancras
- London Liverpool Street
- Thameslink Core
- Towards London Moorgate
- Cross London
- Great Northern
- Other TOCs

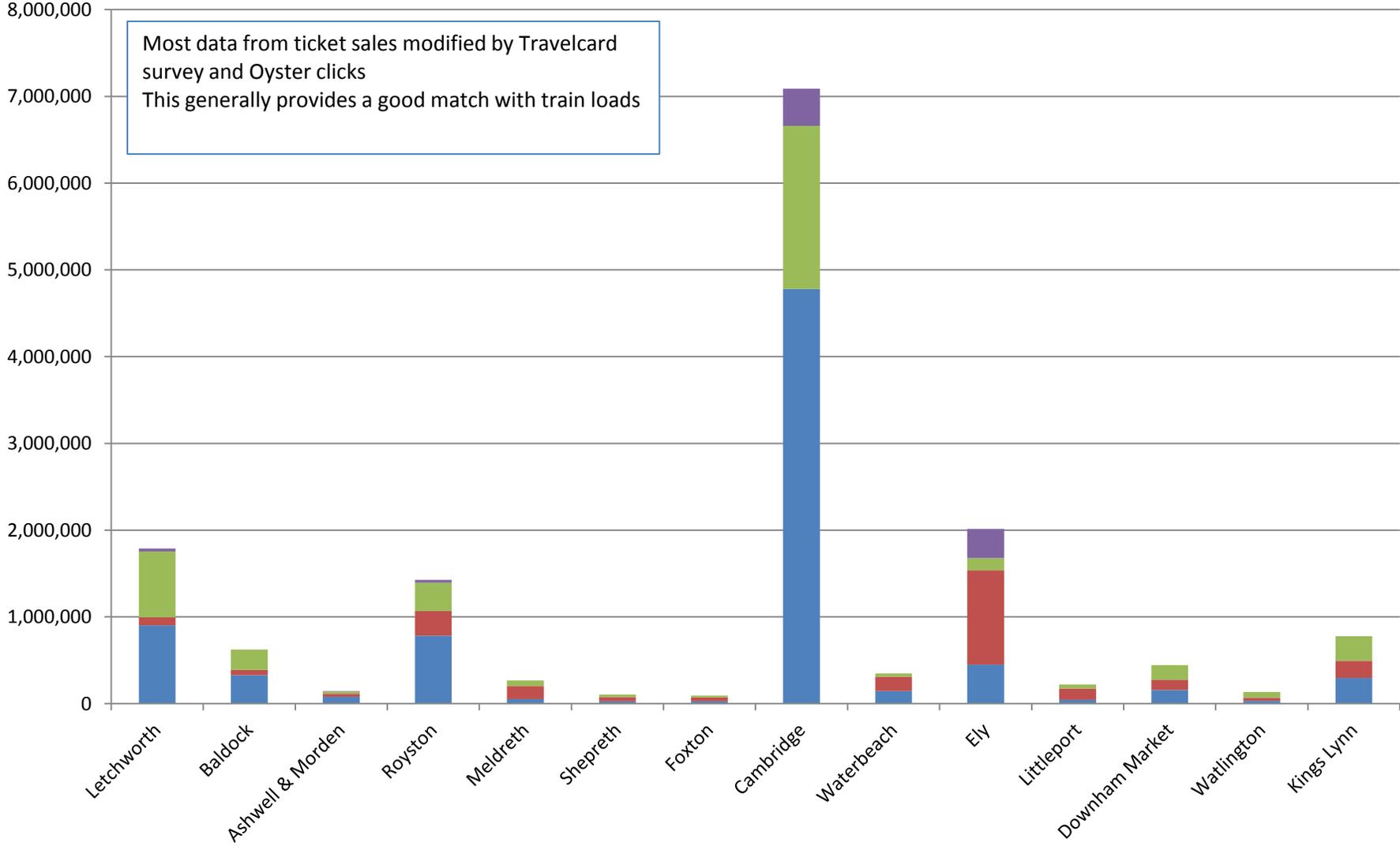


# Cambridge Line Summary

Journeys Year to March 2015

London and Cross London Cambridge Other Interchange

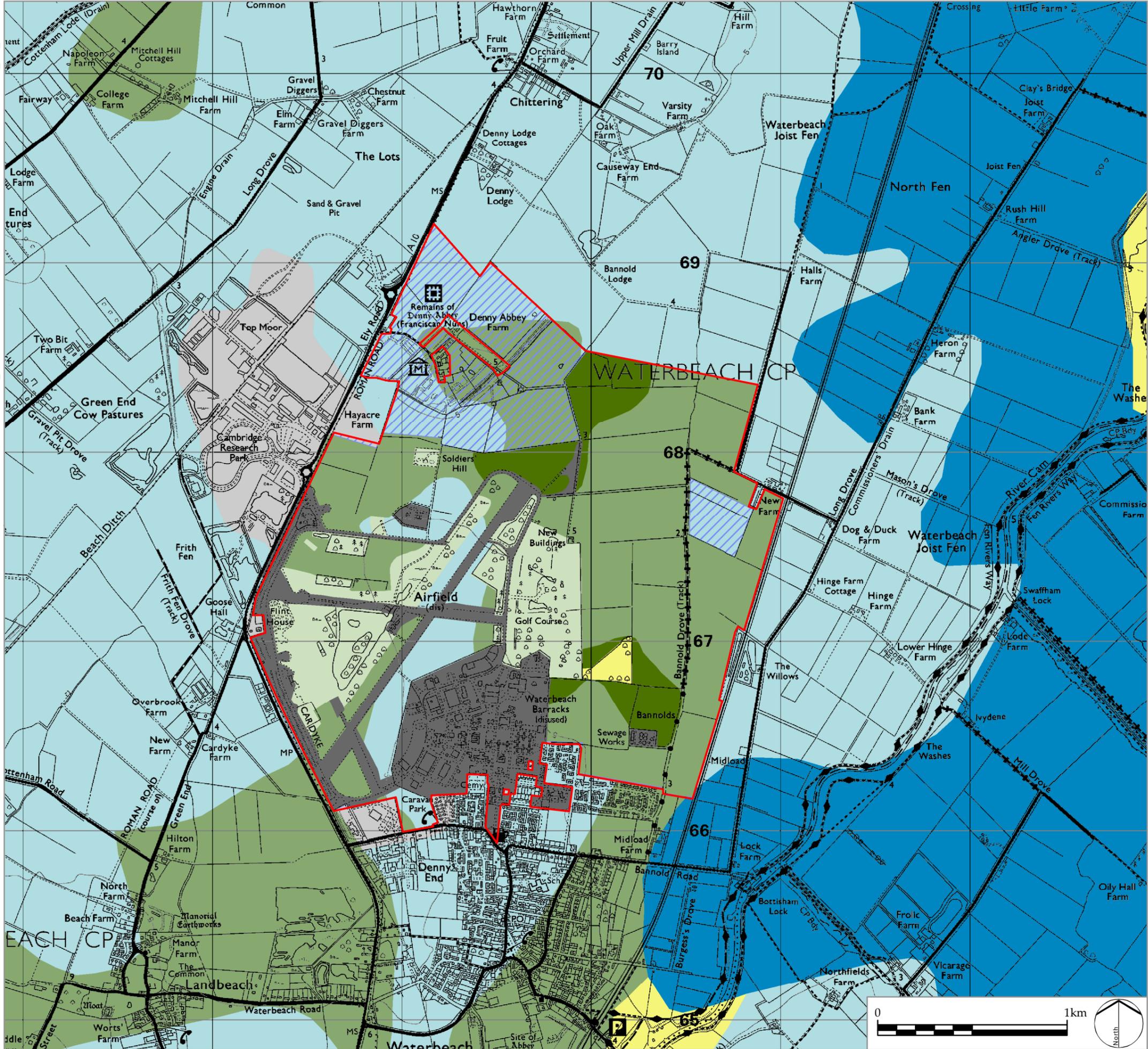
Most data from ticket sales modified by Travelcard survey and Oyster clicks  
This generally provides a good match with train loads



## **APPENDIX SEVEN – AGRICULTURAL LAND CLASSIFICATION MAP**



X:\JOBS\3321\_DENNY ST FRANCIS\GIS\PROJECTS\151217 SITE VISIT PLANS\3321\_010\_ALC.MXD



LEGEND

-  DFD Boundary
- Agricultural land Classification**
-  Grade 2
-  Grade 3a (Grade 3 outside of Site)
-  Grade 3b
-  Grade 4
-  Not Surveyed within the Site (ALC shown is sourced from Natural England Dataset)
-  Urban
-  Woodland/Scrub

# LDĀDESIGN

PROJECT TITLE  
DENNY ST FRANCIS

DRAWING TITLE  
Agricultural Land Classification

|           |          |                  |
|-----------|----------|------------------|
| ISSUED BY | Oxford   | T: 01865 887 050 |
| DATE      | Jan 2017 | DRAWN RP         |
| SCALE @A3 | 1:20,000 | CHECKED VP       |
| STATUS    | Final    | APPROVED IH      |

DWG. NO. 3321\_010\_ALC

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Nextmap, Natural England, N.A.Duncan & Associates

# **APPENDIX EIGHT – RELOCATION OF WATERBEACH STATION: STATEMENT OF PURPOSE, COSTS, BENEFITS AND TIMESCALE**



## APPENDIX EIGHT

### The Relocation of Waterbeach Station: Statement of Purpose, Costs, Benefits and Timescale

- 1 The relocation of the station is a requirement of Policy SS/5. The basis for that requirement is:
  - meeting the sustainable travel requirements of the new settlement and achieving a significant shift of travel mode towards public transport
  - the need for a new station to meet Network Rail operational requirements (in terms of the capacity of the line) and the fact that its potential revenue generation will offset the cost of its provision
  - the unsatisfactory condition of the existing station (in terms of safety, convenience and facilities) and the significant difficulties associated with addressing these issues at the existing location, even as an interim measure, in terms of cost and practicality
  - Specific benefits of the new station in terms of improved accessibility and facilities.

#### Station Sustainable Travel Benefits

- 2 The availability and proximity of rail services to Cambridge and other destinations is a fundamentally important benefit of Waterbeach as a location for a new settlement. This has a major impact in generating sustainable travel patterns for new residents and, when combined with investment in bus services (to improve services, frequency and access), cycling and pedestrian facilities, provides an exceptional opportunity to reduce car dependence.
- 3 The proposals for a relocated station are intended to realise and maximise the inherent benefit of access to rail services for this location.

#### Station Operational Requirements

- 4 The provision of the new station is directly linked to Network Rail's assessment of train lengthening for 8-car operation (to address overcrowding) at all stations between Kings Lynn and Cambridge. Network Rail's intention is for all the stations on the line including Waterbeach to be operable for 8-car Govia Thameslink (GTR) services.

#### Station Cost and Revenue

- 5 The business case shows "very high" value for money for public sector investment. The total additional rail industry revenues are estimated to be £66,000,000 when discounted over a 60-year appraisal period. This is significantly in excess of the predicted capital and operational costs (c. £35,000,000).
- 6 The up-front cost of the prospective new Waterbeach station will be met by RLW Estates, the Developer funding the proposal, and will not introduce an additional capital expenditure to Network Rail.
- 7 Full details of the total costs of the new station are set out in Section 6 of the GRIP 2 report (Appendix 9).

### Benefits of the Station

- 8 The benefits to rail operation and the local community include:
- Rail access commensurate with a larger population base to serve the new settlement and new A10 connections.
  - Improved accessibility for cars, taxis, buses, cyclists, and pedestrians (see Appendix 14 which provides walking time isochrones for the relocated and existing stations with graphs showing the number of households served within specific walking distances)
  - improved safety at the existing Waterbeach Station level crossing (due to decreased use, shorter barrier closure times and reduced road congestion)
  - Provision of a modern high quality station, with a wider range of passenger facilities including wheelchair accessible lifts, pedestrian bridge and increased parking capacity (cars and cycles)
  - Potential future proofing, such as provision for extended station platforms and turnback facility, potential for a Park & Ride to reduce car commuting to Cambridge, reduced parking congestion in the village.
- 9 The specification of the relocated station is provided at Section 5 of Appendix 9.
- 10 It is a fundamental principle that the station will have direct access to the A10. This avoids the current need for traffic to access the station via the village. It also provides routes to the new station that do not pass through the village.

### Timescale for Provision of Station

- 11 It is envisaged that a planning application for the new Station will be submitted in mid to late-2017, with construction starting in 2018 and the new station opening in 2019. A letter from the Director of Planning and Economic Development at SCDC to the Department for Transport (Appendix 10) sets out the Council's support for the proposal and for its early implementation.