

# NORTHSTOWE PHASE 2 PLANNING APPLICATIONS

## Environmental Statement (Volume II): Appendix D Traffic and Transport

August 2014



## D1 CSRM Northstowe Modelling Report (WSP)

## Technical Note: CSRM Northstowe Modelling Summary Report

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Version Control

Version	Date	Ву	Reviewed	Authorised	Notes
			by	(TN only)	
1.0	09/07/14	GG			Initial Draft note, based on previous draft for A14 project.
1.1	14/07/14		TJG		Review on comment on re-draft for Northstowe
1.2	15/07/14	GG	TJG		Reviewed in response to TJG comments.
2.0	15/07/14	GG		TJG	Approved for issue to CCC and Hyder
2.1	17/07/14	GG		TJG	In response to Janice Hughes comments

## 1 Introduction

#### 1.1 Purpose of note

- 1.1.1 This technical note outlines the work undertaken by WSP Group to investigate the Northstowe development site. Three tests have been undertaken and reported in the technical note: Northstowe phase 1 (DM), Northstowe phase 2 with Hatton's Road link only (DS1) and Northstowe phase 2 with links to Hatton's Road and Dry Drayton Road (DS2). All of these scenarios include updates to Land Use to fit with NTEM 6.2 growth from 2011 and review of Local Plan housing and transport delivery. These Transport Strategy measures and proposed development have been tested in the Cambridge Sub Regional Model (CSRM) from 2016 through to 2031 at 5 years intervals.
- 1.1.2 This note summarises the land use and transport assumptions used in the Cambridge Sub Regional Model, the analysis of model results.

#### 1.2 Background – Northstowe and A14 runs

- 1.2.1 The work described in this note was contracted by Cambridgeshire County Council on behalf of the Homes and Communities Agency (HCA) who are the ultimate clients and funders of the modelling work. Technical specifications and oversight of the work was carried out by Hyder, who supplied all of the requirements for the run and reviewed assumptions and initial outputs.
- 1.2.2 The runs described in this report are strongly related to the A14 DF2 tests undertaken on behalf of the Highways Agency. Those runs were specified by AECOM though the input assumptions have been discussed and reviewed with Hyder on behalf of HCA.
- 1.2.3 Two key sets of inputs have been taken from the A14 work:
  - The SATURN network coding is based on the Design Freeze 2 (DF2) A14 scheme, provided by AECOM to Atkins, who re-coded this within the Northstowe networks provided for these runs (refer to Atkins for further details of coding).
  - The Land Use assumptions were prepared initially as part of the A14 work, which required the



total employment and housing growth to match NTEM 6.2.

1.2.4 It should be noted that following the test described here, a further Design Freeze 3 A14 test was undertaken, with revisions to the A14 scheme. This test was requested by the Highways Agency specifically for the A14 scheme design, and does not form part of the Northstowe testing work.

#### 1.3 CSRM Run Details

1.3.1 The study includes two scenario tests listed in Table 1.1 below:

Scenario	Year	Transport	Saturn	Northstow	Local Plan	Land Use	TDM Run
		Schemes	Network	e Developm ent		Run Reference	Reference
Northstowe Phase 1(DM)	2021, 2026, 2031	DM scheme	v160_0_0	Northstowe Phase 1 developme nts	Updated Local Plan 2014	2021-2031 M286a	2021- 2031T560a
Northstowe phase 2 (DS1)	2021, 2026, 2031	with Hatton's Road link only	v161_0_0	Northstowe Phase 1 and 2 developme nts	Updated Local Plan 2014	2021-2031 M287a	2021- 2031T561a
Northstowe phase 2 (DS2)	2021, 2026, 2031	with links to Hatton's Road and Dry Drayton Road	v162_0_0	Northstowe Phase 1 and 2 developme nts	Updated Local Plan 2014	2021-2031 M288a	2021- 2031T562a

Table 1.1	–Scenario	Tests	Outline
	000110110		outino

1.3.2 The SATURN networks were provided by Atkins on 1 April 2014. All runs start from 2021 and use the 2016 A14 run T556b transport costs as input.

- 1.3.3 The local plan inputs for Huntingtonshire, South Cambridgeshire and Cambridge City were reviewed and updated in the model as part of this work, to develop land use assumptions which are used in all scenarios. Using information from the Districts, the spatial distribution of dwellings and employment has been input to the model. However, this work required that the growth in households and employment be matched against NTEM 6.2. Therefore a scale factor has been applied on the CSRM input data in order to ensure the household and employment growth in CSRM matches the growth in NTEM 6.2. It is important to note that this scaling has not been used in Local Plan and Transport Strategy tests, which solely used County and District estimates of household and employment growth without reference to NTEM.
- 1.3.4 The Northstowe phase 1 and phase 2 developments were discussed with Hyder on 21 February 2014, further details and refinements to the Phase 1 and 2 assumptions for Northstowe were made and finalised in March 2014. These changes involved some minor adjustments to floorspace and dwellings for Northstowe phase 1. These changes were not included in the original A14 DF2 tests but included in Northstowe tests reported here. The changes are listed below:
  - The 1500 dwellings in Northstowe phase 1 development were proposed to be assigned to the model evenly through year 2015 to 2023 rather than assigned to the model in 2016- 2021 period as a whole. The change is minor and will not significantly affect the results. After discussion with Hyder, it was agreed that the 1500 dwellings in Northstowe Phase 1 development will be assigned to the model in 2016-2021 period as a whole in order to keep consistency between A14 DF2 runs and Northstowe tests.
  - A 630 pupils Primary school was proposed in March 2014 while no primary was modelled in the previous tests as it was treated as part of internal land uses. The school inputs are discussed in



section 2.2 in more detail.

The Northstowe phase 1 land use figures were updated to the current figures supplied by HCA in March 2014. These updatess were included in the input for Northstowe as detailed in section 2.1.

#### 1.4 Structure of Note

- 1.4.1 This note contains the following sections:
  - Section 2: Summary of Land Use Assumptions. An overview of the dwelling and employment assumptions used for these model tests and the source of the assumptions.
  - Section 3: Run Results. An overview of the main run results, showing the land use and transport demand responses to the A14 upgrade.
  - Appendix 1: Residential Development Sites. A list of the residential development sites in each district included in the model.
  - Appendix 2: Employment Development Sites. A list of the employment development sites in each district included in the model.



## 2 Land Use Assumptions

## 2.1 Northstowe Development Assumptions

- 2.1.1 The DM scenario includes Northstowe Phase 1 development and associated transport improvements. The DS scenarios include both Northstowe phase 1 and phase 2 developments, together with related transport improvements.
- 2.1.2 The Northstowe development land use assumptions are based on the following documents received from Hyder in February 2014:
  - NS Land Use quantum of development- 140207 NS land use schedule quantum development rev 03 with Hyder amendments.xlsx (17 Feb 2014),
  - Evolved master plan Busway- Northstowe Development Details 16 February 14.docx (17 Feb 2014),
  - Arup Drawing No 001 Land Use Northstowe Development Details 16 February 14.docx (17 Feb 2014).
  - Northstowe Phase 1 Land Use.docx Northstowe Phase 1 Development Land Use (14 March 2014)
- 2.1.3 The planning application outline and the location of the Northstowe Phase 2 development are specified in the documents provided. This assumption was sent to Hyder and CCC in February 2014 for agreement. Some subsequent refinements to the assumptions were made later in March 2014.
- 2.1.4 CSRM includes two separate zoning systems: the Land Use Zones into which dwellings and employment are initially allocated, and the smaller Transport Zones for which the trip-making and connectivity is considered. To achieve this, proportions of the population and jobs in each Land Use zone are allocated to each constituent Transport Zone. Therefore as a short-hand, this note will occasionally refer directly to the Transport Zones which are used to specify the locations of development.
- 2.1.5 The Northstowe Phase 1 and 2 developments will be split between Land Use Zones 19 and 20 as shown in Figure 2.1 below.

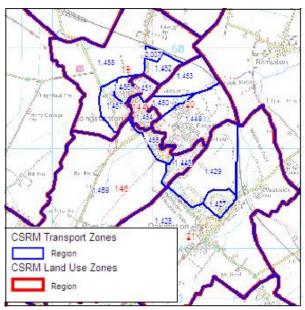


Figure 2.1 – Land Use Zones in Northstowe Models

2.1.6 Previous CSRM tests have included assumptions for Northstowe specified historically by the District



and County Council or by the Phase 1 developer as part of their own transport assessment. In order to avoid double-counting and assess the impact of the proposed developments, these growth figures for both floorspace and dwellings for the Northstowe development zones have been removed from models after year 2016, so that only the most recent site-specific growth is included. The assumptions made regarding Northstowe phase 1 development are listed as below:

- All of the Northstowe Phase 1 developments will be allocated in Transport Zone 1452.
- All of the Northstowe Phase 1 developments will be assigned in the model between year 2016 and 2021.
- 2.1.7 The inputs for Northstowe phase 1 development are listed in the two tables following.

CSRM Factor	CSRM Transport zone	CSRM Factor Explanation	2021	2026	2031	Total
701	1452	Manufacturing	3657	0	0	3657
702	1452	Warehouse	4033	0	0	4033
703	1452	Retail	1950	0	0	1950
704	1452	Office	4559	0	0	4559
		Other:				
705	1452	lesiure&health	0	0	0	0
750	1452	Dwelling	1500	0	0	1500

Table 2.1 – Northstowe Phase 1 Assumption and Inputs

2.1.8 The details of Northstowe phase 2 application outline provided is listed in Table 2.2. Note that the detailed distinction of development types are not used in the model. The model inputs are defined by the CSRM factor and do not distinguish the detailed types of development in each factor (i.e. the model inputs do not distinguish Apartments and Houses but treat them both as Dwellings).

CSRM Factor	Factor Explanation	Developments	Quantity	Measurement
750	Dwelling	Houses	2,986	Houses
		Apartments	546	Apartments
703	Retail	Convenience Retail*	11,000	Sqms
		Comparison/ Service Retail*	27,500	Sqms
701	Industrial			
		Light Industrial*	5,500	Sqms
705	Other: leisure	Food and Drink*	3,850	Sqms
	& health	Light Industrial*		
		Leisure*	11,000	Sqms
	Health, Community and Fitness Centre*	6,600	Sqms	
		Youth Facility*	2,200	Sqms
		Place of Worship*	1,100	Sqms
704	Office	Office*	17,820	Sqms

Table 2.2 – Northstowe Phase 2 Application Outline



- 2.1.9 Assumptions made regarding the Northstowe Phase 2 development are listed as below:
  - All of the Northstowe Phase 2 developments will be allocated in Transport Zone 1449.
  - All of the Northstowe Phase 2 developments will be assigned in the model from year 2021 to 2031.
- 2.1.10 The model allocates employment to the Phase 2 development based on the floorspace made available and also the requirements of the local population for services (for example, teaching staff at schools).
- 2.1.11 Table 2.3 lists the requested school places. The Phase 1 development was initially allocated 630 primary school places. However, it was agreed after discussion with Hyder on 4 April 2014 that the number of primary school pupils should be reduced to 350 to provide a more acceptable ratio of places/pupils living locally. The remaining 280 primary school pupils was moved from Northstowe Phase 1 to Northstowe phase 2 development in order to keep the number of pupils per household consistent between DM and DS1.

		Factor	Zone	2016	2021	2026	2031
Phase 1	Primary School	621	19	0	350	0	0
	Secondary School	622	19	0	0	0	0
	Sixth form	623	19	0	0	0	0
Phase 2	Primary School	621	20	0	0	700	420
	Secondary School	622	20	0	0	0	1050
	Sixth form	623	20	0	0	0	200

Table 2.3– Northstowe Phase 1 and 2 Education Application

2.1.12 The resulting inputs for floor space and dwelling data for phase 2 are summarised in Table 2.5

Table 2.4 – Northstowe Phase 2 Assumptions and Inputs

CSRM Factor	CSRM Transport zone	CSRM Factor Explanation	2021	2026	2031	Total
701	1449	Manufacturing	1269	2115	2115	5500
702	1449	Warehouse	0	0	0	0
703	1449	Retail	8885	14808	14808	38500
704	1449	Office	4112	6854	6854	17820
705	1449	Other: lesiure&health	5712	9519	9519	24750
750	1449	Dwelling	815	1358	1358	3531

2.1.13 It was as agreed with Hyder on 11 March 2014 that the proportion of retired households in Northstowe should be set to match that at present in the neighbouring village of Cottenham. This was observed based on the 2011 Census to be 23% of all households, and this figure was used to calculate the number of retired households in Northstowe Phase 1 and 2.



## 2.2 Public Transport Assumptions

- 2.2.1 In the Northstowe DM scenario, the public transport network is the same as the public transport network used in the previous local plan studies. The public transport network used in the Northstowe DS scenario includes the improvement of bus services in Northstowe.
- 2.2.2 For Huntingdonshire, the public transport strategies included in CSRM are listed as below:
  - Guided Bus services to Alconbury (as previously modelled for Urban & Civic as part of the Alconbury Enterprise Zone), were included in the public transport network.
  - New Alconbury Weald Railway station was included in CSRM.
- 2.2.3 For Cambridge and South Cambridgeshire, the following public transport strategies are included in CSRM. More details can be found in the modelling report published on http://www.cambridgeshire.gov.uk/info/20006/travel\_roads\_and\_parking/66/transport\_plans\_and\_pol icies/2
  - Access control close to Cambridge Ring Road Access controls close to Cambridge Ring Road to enhance public transport operations and discourage cross city movements in the built up area;
  - A wide range of bus priority measures in Cambridge and on major routes to/from Cambridge, including segregated bus lanes for major routes into Cambridge (A1303 Madingley Road, B1049 Histon Road, Milton Road, Newmarket Road and Hills Road) were included in CSRM by increasing bus speeds and removing congestion impacts for buses on these routes; High Quality Public Transport services on the St Neots (A428), Haverhill (A1307) and Royston (A10) corridors with high frequencies and guideway quality segregated routes; and an orbital bus service from Cambridge Science Park Station to Addenbrookes Hospital, via North West Cambridge.
  - A major increase in dedicated cycle provision in Cambridge and South Cambridgeshire;
  - Additional Park and Ride sites on the A428, the A1307 and at Hauxton on the A10, and the relocation of Newmarket Road P&R to Airport Way;
  - Improvements in rail services, speed and capacity, including the Thameslink upgrade and improved rolling stock;
  - A busway from Waterbeach to Cambridge, implemented ahead of development of Waterbeach New Town.
- 2.2.4 Bus services through Northstowe have been improved in Do Something scenario by reducing the bus access link and increasing the bus frequency. The details have been listed in Table 2.5.

Network	Scenario	Northstowe	Bus service	Bus service frequency
	Do		The length of bus access link has been	
117	Minimum	Phase 1	increase to actual distance	2 or 3/ hour
	Do		the length of bus access link has been	
116	Something	Phase 1+2	reduced 300 metres	7/hour
			the length of bus access link has been	
116	DS2	phase 1+2	reduced 300 metres	7/hour

Table 2.5 – Northstowe	Phase 2	Assumptio	ons and Innuts
Table 2.5 - NorthSlowe	Fliase Z	Assumption	nis anu inputs

### 2.3 Local Plan Information Received from Districts

2.3.1 Before updating district level dwelling totals, the existing local plan development sites were reviewed. South Cambridgeshire, Huntingdonshire and Cambridge city reviewed the local plan and sent updated information as follows:



- Huntingdonshire: HDC Dwells and Employment Feb 2014.xlsx Received on 20 February 2014
- South Cambridgeshire: Housing Trajectory (Feb 2014).xlsx Received on 19 February 2014 Copy of South Cambridgeshire + City Local Plan Employment for Checks Feb 2014.xlsx -Received on 21 February 2014
- Cambridge City: Update to HT.xlsx Received on 26 February 2014
- 2.3.2 Specifically, some changes were made for the dwelling sites according to the adjustment to the planning permission. The employment sites were not changed significantly. A detail list of dwelling sites and employment sites is given in the Appendices to this report.

#### 2.4 Matching District Level Growth to NTEM

#### DWELLINGS

- 2.4.1 The dwellings increases were calculated from the district planning data at 5 year intervals. Some of the windfall dwelling sites included in the planning data could not be allocated to specific zones in CSRM as spatial information was not available. These windfall dwelling sites are evenly assigned to all of the other zones except Northstowe according to the ratio of the total district dwelling to the district dwelling growth without windfall sites (i.e. the total growth is uplifted to include the windfall element, with the assumption that the windfalls have the same distribution as named developments, but keeping the Northstowe development fixed). Table 2.6 lists the district dwelling growth excluding windfall sites and Northstowe developments from 2016 to 2031. Table 2.7 lists the factor used to scale the windfall dwellings.
- 2.4.2 Table 2.7 shows that windfall scale factors for South Cambridgeshire and Cambridge City are high, which indicates that a number of the development sites in these districts cannot be located properly in CSRM. Although it may not affect the CSRM results, it is suggested that we refine these windfall sites with help from CCC at a later stage.

District	2016	2021	2026	2031
Cambridge City	3,165	4,836	2,734	693
South Cambs	873	3,954	3,500	2,680
Hunts	2,866	5,681	4,286	2,445
East Cambs	2,201	2,723	1,715	1,390
Total CSR	9,105	17,194	12,235	7,208

Table 2.6 – District Dwelling Growth Excluding Windfall Sites and Northstowe Developm	nents
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#### Table 2.7 – Ratio Used to Scale for Windfall Sites

District	2016	2021	2026	2031
Cambridge City	1.00	1.13	1.22	1.89
South				
Cambridgeshire	2.37	1.27	1.29	1.37
Hunts	1.00	1.00	1.00	1.00
East Cambs	1.07	1.10	1.07	1.09

2.4.3 Table 2.8 lists the total district dwellings after windfall sites scale (excluding Northstowe). This step is identical for the Northstowe DM and DS runs.



District	2011	2016	2021	2026	2031
Cambridge City	48,257	51,422	56,873	60,222	61,535
South Cambridgeshire	61,481	63,552	68,568	73,068	76,748
Hunts	71,874	74,740	80,421	84,707	87,152
East Cambs	36,625	38,976	41,972	43,811	45,324
Total CSR	218,236	228,689	247,834	261,807	270,759

Table 2.8 – Total District Dwellings For Northstowe DM

- 2.4.4 The district dwellings growth was then scaled to match the NTEM growth from 2011 to 2031. This scaling process did not include Northstowe sites; Nothstowe phase 1 and phase 2 developments were added after the scaling process (i.e. CSRM growth WITHOUT Northstowe was scaled to match NTEM growth WITHOUT Northstowe, then the Northstowe growth was added back in. This avoids scaling the Northstowe development away from the prescribed values).
- 2.4.5 Table 2.9 lists the scaling factors used to adjust the CSRM dwelling growth to match the 2011-2031 growth in NTEM6.2. The scaling is applied for the sub-region as a whole, and matches NTEM in 2021 and 2031, with scaling smoothed across the interim years. This pattern of scaling was agreed with AECOM in the A14 DF2 tests to avoid inconsistent scaling for 2016 and 2026 which were caused by a mis-match between the assumed development profile in NTEM and the current plans. The same methodology was adopted in the Northstowe test in order to keep consistency to A14 tests. It was agreed that though the NTEM totals should be adhered to, the timing was better informed by current local knowledge. Table 2.10 lists the total district dwelling used as input for DM scenario (including Northstowe Phase 1) and Table 2.11 lists the total district dwelling used as input for DS scenarios (including Northstowe Phase 1 and Phase 2).
- 2.4.6 The tables show that the dwellings for Cambridge, Huntingdonshire, and East Cambridgeshire are consistent in DM scenario and with DS Scenario. DS scenarios have more dwellings than DM scenario in 2021, 2026 and 2031 since Northstowe phase 2 is added in DS scenarios. Table 2.11 also compares the total dwellings in the CSR with the absolute NTEM 6.2 dwelling figures. This demonstrates the close match in all years: there is a small mis-match of 500 dwellings (0.2%) in 2011 which is maintained as the process scaled only the growth, not the absolute figures.

Year	2016	2021	2026	2031
Scale factor	1.13	1.07	1.12	1.19

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l able	2.9 -	Scale	Factor	used t	o Ma	atch	Ntem	6.2

	<i></i>
Table 2.10 – Dwelling Input for Northstowe DM	(including Northstowe Phase 1 development)

DM					
District	2011	2016	2021	2026	2031
Cambridge City	48,363	51,925	57,749	61,512	63,078
South Cambridgeshire	61,375	63,705	70,565	75,621	80,011
Huntingdonshire	71,874	75,099	81,169	85,985	88,902
East Cambridgeshire	36,625	39,270	42,472	44,538	46,343
Total CSR	218,236	230,000	251,955	267,655	278,333



DS						
District	2011	2016	2021	2026	2031	
Cambridge City	48,363	51,925	57,749	61,512	63,078	
South Cambridgeshire	61,375	63,705	71,380	77,794	83,543	
Huntingdonshire	71,874	75,099	81,169	85,985	88,902	
East Cambridgeshire	36,625	39,270	42,472	44,538	46,343	
Total CSR	218,236	230,000	252,770	269,829	281,865	
NTEM 6.2 Dwellings	218,734	237,508	253,267	266,862	282,362	

 Table 2.11 – Dwelling Input for DS scenario (including Phase 1 and 2 Northstowe, and scaled to match NTEM 6.2 at Total CSR level in 2021 and 2031)

#### EMPLOYMENT AND FLOORSPACE

- 2.4.7 The approach to future growth of employment and floorspace is analogous to that described above for dwellings in that:
  - The employment and commercial floorspace growth for the Cambridge Sub Region (CSR) as a whole has been based on NTEM growth;
  - The spatial patterns of growth (including relative growth rates between the Districts) are based on information provided by the Districts during the Local Plan (with an update as outlined in Section 2.3 above).
- 2.4.8 Tables 2.12-2.14 illustrate how this adjustment was made.
- 2.4.9 Table 2.12 shows the percentage growth rates as agreed for the Local Plan with the districts, which were based on the East of England Forecasting Model (EEFM).
- 2.4.10 Table 2.13 shows the equivalent growth in NTEM for the entire sub-region. Note that this table shows jobs figures counted using the same methodology as in CSRM, and aligned to the 2001 base figure in CSRM. Note that the absolute figures are not easily compared with CSRM. The CSRM figures are lower than the published NTEM and EEFM figures as they count only the FIRST job occupied by each worker (double-jobbing is ignored) and do not include jobs taken by full-time students. For this reason, we focus on adjusting the employment growth rate from the 2011 base.
- 2.4.11 Table 2.14 then shows the adjustment factor which was required to be applied to CSRM growth in each 5 year period to match NTEM growth. This factor was applied both to the employment growth in each period and any relevant additional floor space.
- 2.4.12 It should be noted that this method preserves all zonal and district spatial level assumptions inherited from the Local Plan work, and also all assumptions on the relative growth of industry sectors. Those assumptions were provided in various forms by the District Authorities during the Local Plan work in 2012 and 2013.
- 2.4.13 For Cambridge City and South Cambridgeshire, detailed information on employment development sites was provided along with specifications of their relative size and the industry sectors located. This pattern of development has been maintained throughout the work, with reference to the Districts to confirm any changes and updates. The East Cambridgeshire assumptions are similarly based on patterns of floor space development provided by the East Cambridgeshire District Authority and CCC in 2012.
- 2.4.14 For Huntingdonshire, employment sites were specified with development areas and broad industry categories, but no estimates of employment at each site were provided. For this reason, WSP and Atkins collaborated during the Local Plan work to produce a synthesised estimate of the required floor area and employment based on a combination of the development information provided and the



EEFM forecasts by Industry for the District.

	2016	2021	2026	2031
Cambridge	8%	13%	19%	24%
South Cambs	3%	9%	18%	29%
Hunts	4%	9%	13%	18%
East Cambs	6%	12%	18%	24%
Total CSR	5%	11%	17%	24%

Table 2.13 – Employment Growth Rates (NTEM, cumulative %age growth from 2011)

Total CSR 6% 10% 14% 16%
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Table 2.14 – Scale factor Used for Employment and Floorspace (by 5 year period)

2016	2021	2026	2031
1.19	0.72	0.55	0.35

#### BASE YEAR MODEL

- 2.4.15 In the Northstowe Phase 2 Scope issued on 5 February 2014 (CSRM Northstowe Ph 2 WSP Scope Draft for CCC v2.pdf), two 2011 base year model options were discussed, as listed below:
  - Current CSRM 2011: The existing CSRM 2011 run, produced as a forecast year using the existing 2006 Base Year. The most recent 2011 run includes some updates to match the actual dwellings in 2011, but no other improvements to represent observed 2011 conditions. This base year was used for previous A14 and Local Plan work.
  - 2011 Highway Validation: An improvement to validation in 2011 being undertaken by Atkins at that time.
  - A14 2011 PYV: Further to the above, a separate 2011 running year has been prepared for the Highways Agency, during A14 work in 2013. This was termed the 'Present Year Validation' (PYV) SATURN model. That model incorporated adjustments to SATURN by Atkins to improve validation, improvements to the validation of the Cambridge Guided Busway usage, and updates to Dft WebTAG inputs. Since no CSRM runs for other years (i.e. 2016+) were conducted, the impact on future results is not known.
- 2.4.16 It was agreed in the Specification note issued by AECOM in 17 February 2014 (TN CSRM Land Use Runs DF2\_v5.doc) that based on the timescales available, the improved 2011 validation and 2011 PYV run would not be used for the A14 test project, as neither was sufficiently progressed to allow this. Therefore we made use of the existing CSRM 2011 run (T440E) in A14 tests. In the Northstowe tests, the start year is 2021 and the 2016 A14DF runs (T556b TDM5) transport cost was used as an input. .



# **3 CSRM Northstowe Run Results**

#### 3.1 Introduction

3.1.1 The 2021, 2026 and 2031 matrices were issued to Hyder on 8 April 2014. An initial summary of results was issued to Hyder in 9 April 2014 and the results were discussed with Hyder in the meeting held in 28 April 2014. A summary of the results with commentary was also issued to Hyder on 19 May 2014. This included the comparison of generated trips in different scenarios for the AM period (7 AM – 10 AM) and PM period (4 PM -7PM). Table 3.1 and Table 3.2 show the details of scenarios and the results issued for Hyder.

Description	Scer	nario
Growth in Trips by Origin and		
Destination Sector	2031 DM vs 2031 DS1	2031 DS1 vs 2031 DS2
Person Trips Volumes (Origin		
-Destination) by Car Mode/All		
Mode	2031 DM V	S 2031 DS1
NStowe Trips - Zn20	2031 DM V	S 2031 DS1
CSRM Land Use		
Characteristics for		
Northstowe Phase 2	2031 DM V	S 2031 DS1
Land use results		
(Dwellings/Persons/Employed		
Residents/Total Jobs)	2031 DM vs 2031 DS1	2031 DS1 vs 2031 DS2

Table 3.1 – Details of Scenario Results Provided for Hyder

Table 3.2 – Scenario	Results	and Run ID	Provided for	Hyder

Scenario	Transport Run Number	Land Use Run Number	Run Date
2031 DM	T560a	M286a	04-April-14
2031 DS1	T561a	M287a	04-April-14
2031 DS2	T562a	M288a	04-April-14

3.1.2 The following section compares the differences in dwellings, population, employed residents and total jobs in different scenarios. Section 3.3 shows the comparison of generated trips for different scenarios. They are consistent with the results issued to Hyder.

#### 3.2 Land Use Results

- 3.2.1 This section compares the difference in dwellings, population, employed residents and total jobs in DM, DS1 and DS2 models. Table 3.3 shows the changes in DM scenario runs from year 2016 to year 2031, changes between DS1 and DM models, and changes between DS2 and DS1 models for year 2021, 2026 and 2031. Table 3.4 shows the percentage changes for these comparisons.
- 3.2.2 The results demonstrate the dwelling increase for the Northstowe DM from year 2021 to 2031. In the DM scenarios, the rise of 1,500 dwellings in Northstowe by 2031 is consistent with the rise of dwelling in Northstowe phase 1 developments outlined in section 2. In the DS1 scenarios, the rise of 3,533 dwellings in Northstowe by 2031 is consistent with the dwelling input in Northstowe Phase 2. No significant change is observed in other districts in DS scenarios compared to DM scenario, which is consistent with the input. No change in Dwellings between DS1 and DS2 runs is observed because both scenarios adopt the same development assumptions.



	2016		2021			2026		2031			
District	A14DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	
Cambridge	51,950	5,779	0	0	9,555	0	0	11,132	1	0	
South Cambs	63,966	5,363	0	0	10,428	1	0	14,835	1	0	
Northstowe	75,220	1,464	810	0	1,500	2,174	0	1,500	3,533	0	
Hunts	39,408	6,077	0	0	10,895	1	0	13,819	1	0	
East Cambs	230,544	3,202	0	0	5,269	0	0	7,077	0	0	
Study Area Total	51,950	21,884	810	0	37,647	2,176	0	48,362	3,536	-1	

Table 3.3 – Model Dwelling Comparison DM, DS1 and DS2 from 2021-2031

Table 3.4 – Model Dwelling Comparison DM, DS1 and DS2 from 2021-2031 (Diff%)

	2016		2021			2026		2031			
District	A14DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	
Cambridge	51,950	11%	0%	0%	18%	0%	0%	21%	0%	0%	
South Cambs	63,966	8%	0%	0%	16%	0%	0%	23%	0%	0%	
Northstowe	75,220	2%	41%	0%	288%	108%	0%	288%	175%	0%	
Hunts	39,408	15%	0%	0%	14%	0%	0%	18%	0%	0%	
East Cambs	230,544	1%	0%	0%	13%	0%	0%	18%	0%	0%	
Study Area Total	51,950	42%	0%	0%	16%	1%	0%	21%	1%	0%	

3.2.3 Table 3.5 and Table 3.6 compare the population assigned in DM, DS1 and DS2 scenarios. As for dwellings, the major growth is in Northstowe, associated with the increased development at Northstowe. In addition, there are slight population rise in Huntingdonshire and East Cambridgeshire in DS1 model, and a slight decrease of population in Cambridge in year 2021, 2026 and 2031. This may be due to increased jobs in area, or Guided Bus improvements. The percentage of the difference is very small, less than 0.5%, as are differences between DS1 and DS2 scenarios.

	2016	20	021			2026			2031	
District	A14DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM
Cambridge	133,277	9,443	-83	0	16,314	-301	-39	20,410	-444	-83
South Cambs	161,617	10,363	14	0	19,877	39	-10	28,449	-147	-27
Northstowe	1,084	3,542	1,415	0	3,516	3,894	-0	3,535	6,488	44
Hunts	173,890	10,595	233	0	16,603	576	21	20,036	763	33
East Cambs	90,274	2,728	102	0	5,126	253	23	6,342	511	15
Study Area Total	560,141	36,671	1,682	0	61,436	4,460	-5	78,773	7,171	-18

Table 3.5 – Model Population Comparison DM, DS1 and DS2 from 2021-2031



	2016		2021		:	2026		2031			
District	A14DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	
Cambridge	133,277	7%	0%	0%	12%	0%	0%	15%	0%	0%	
South Cambs	161,617	6%	0%	0%	12%	0%	0%	18%	0%	0%	
Northstowe	1,084	327%	41%	0%	324%	108%	0%	326%	175%	0%	
Hunts	173,890	6%	0%	0%	10%	0%	0%	12%	0%	0%	
East Cambs	90,274	3%	0%	0%	6%	0%	0%	7%	0%	0%	
Study Area Total	560,141	7%	0%	0%	11%	1%	0%	14%	1%	0%	

Table 3.6 - Model Population Comparison DM, DS1 and DS2 from 2021-2031 (Diff%)

- 3.2.4 There is also a rise in workers living in Hunts and East Cambridge, most likely due to the increased accessibility of jobs in Northstowe and demand for services. The difference between DS1 and DS2 scenarios is small. In DS2 model, a small number of employed residents moved from Northstowe areas to South Cambridgeshire in 2031. This may be caused by the network change in Northstowe in DS2 scenario.
- 3.2.5 Table 3.7 and Table 3.8 compare the changes in Employed Residents in the DM, DS1 and DS2 scenarios. There is an overall rise in Employed Residents available due to the rise in housing in both scenarios in the sub-region from 2021 to 2031. As expected, this is concentrated at Northstowe, with some shift in residents from Cambridge and South Cambridgeshire. The employed residents rise in Northstowe in DS1 scenario, which has led to a rise of 3659 employed residents in 2031. There is also a rise in workers living in Hunts and East Cambridge, most likely due to the increased accessibility of jobs in Northstowe and demand for services. The difference between DS1 and DS2 scenarios is small. In DS2 model, a small number of employed residents moved from Northstowe in DS2 scenario.

	2016		2021		:	2026			2031	
District	A14DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM
Cambridge	55,639	7,200	-49	0	12,557	-138	-25	15,507	-170	-53
South Cambs	80,605	5,105	-65	0	9,114	-99	-32	12,024	-281	319
Northstowe	619	1,664	880	0	1,665	2,239	23	1,671	3,659	-312
Hunts	86,263	5,992	107	0	8,416	292	12	8,988	398	17
East Cambs	43,738	1,750	45	0	2,850	125	16	2,705	275	8
Study Area Total	266,864	21,711	917	0	34,601	2,419	-6	40,895	3,881	-20

Table 3.7 – Model Employed Residents Comparison DM, DS1 and DS2 from 2021-2031

Table 3.8 – Model Employed Residents Comparison DM, DS1 and DS2 from 2021-2031 (Diff%)

District 2016 2021 2026 2031
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	A14DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM
Cambridge	55,639	13%	-0%	0%	23%	-0%	-0%	28%	-0%	-0%
South Cambs	80,605	6%	-0%	0%	11%	-0%	-0%	15%	-0%	0%
Northstowe	619	269%	39%	0%	269%	98%	1%	270%	160%	-5%
Hunts	86,263	7%	0%	0%	10%	0%	0%	10%	0%	0%
East Cambs	43,738	4%	0%	0%	7%	0%	0%	6%	1%	0%
Study Area Total	266,864	8%	0%	0%	13%	1%	-0%	15%	1%	-0%

3.2.6 Table 3.9 compares the employment changes for DM, DS1 and DS2 scenarios. The results demonstrate the job increase in DM scenario from year 2021 to 2031 in the whole sub region area. The comparison of DM and with DS1 scenarios in year 2021, 2026 and 2031 confirms that the overall job numbers were kept mainly fixe and there is a shift of jobs within South Cambridgeshire to Northstowe. The slight rise in jobs overall is due to services demanded by the increased population. The comparison of DS1 and DS2 scenarios also confirms the difference between DS1 and DS2 is small.

Table 3.9 – Model Total Jobs Comparison DM, DS1 and DS2 from 2021-2031

	2016		2021			2026			2031	
District	A14DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1-Nst DM	Nst DS2- Nst DM
Cambridge	85,230	3,958	43	0	6,926	64	0	8,878	54	-1
South Cambs	69,255	2,746	-263	0	6,093	-908	0	8,966	-1,758	-6
Northstowe	440	635	290	0	645	970	-0	650	1,836	5
Hunts	76,073	3,102	30	0	5,122	65	0	6,434	73	-1
East Cambs	30,967	1,577	14	0	2,643	29	0	3,289	33	-0
Study Area Total	261,965	12,018	114	0	21,427	219	1	28,218	238	-3

Table 3.10 – Model Total Jobs Comparison DM, DS1 and DS2 from 2021-2031

	2016		2021			2026		2031			
District	A14DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	Nst DM growth from 2016	Nst DS1- Nst DM	Nst DS2- Nst DM	
Cambridge	85,230	5%	0%	0%	8%	0%	0%	10%	0%	-0%	
South Cambs	69,255	4%	-0%	0%	9%	-1%	0%	13%	-2%	-0%	
Northstowe	440	144%	27%	0%	146%	89%	-0%	148%	168%	0%	
Hunts	76,073	4%	0%	0%	7%	0%	0%	8%	0%	-0%	
East Cambs	30,967	5%	0%	0%	9%	0%	0%	11%	0%	-0%	
Study Area Total	261,965	5%	0%	0%	8%	0%	0%	11%	0%	-0%	



#### 3.3 Transport results

- 3.3.1 This section compares the trips generated in 2031 DM, 2031 DS1 and 2031 DS2 models. Only the results in AM periods are compared here since PM periods show very similar patterns. PM results and more detailed transport results were issued to Hyder on 19 May 2014. The matrix was issued to Hyder on 8 April 2014.
- 3.3.2 Table 3.11 compares the trips generated in the 2031 DM and the trips generated in 2031 DS1 model. The growth in trips matches well against development assumptions used in models, notably growth in Northstowe Zone 20 Phase 2 and no significant growth in Northstowe Zone 19 (Phase 1). There is a large fall in 'external' trip origins due to the reduction in in-commuting (more employed residents within the region). Car mode share for trips is 68%, and PT mode share is 6% which are both equivalent to that on the Outer Fringe of Cambridge. The public trips are increased in DS1 due to the improvement of Bus service in Northstowe areas.
- 3.3.3 Table 3.12 compares the trips generated in 2031 DS2 model and 2031 DS1 model during the AM periods. The trips generated in the DS2 model are very similar to the trips generated in the DS1 model since both models adopt the same development assumptions. There is a rise in the number of car trips originating/terminating within Sector 5.9 (Northstowe Ph2), though this is not too large. The changes of trips are caused by the network change in the Northstowe area. In general, the network changes in DS2 do not have significant impact on the trips generated.
- 3.3.4 Table 3.13 compares the Origin-destination trips in 2031 DS1 model to the Origin-destination trips in 2031 DM model. These are CSRM flow volumes for origin-destination person trips by car mode. This shows the increase in trips in Northstowe and decrease in trips in many areas due to the shift of activity to Northstowe. Note the fall in origin trips is large ONLY for the external zones (reduced incommuting), and both East Cambridgeshire and N/Stowe rise. Destination trips fall for all districts except Northstowe Phase 2 zone due to a migration of jobs to Northstowe. In DS1 model, with Northstowe Phase 2 developments, the total car trips in the study area increase by 1177.



					Main mo	de	
Data	Scenario	Origin Sector	Car	PT	Walk	Cycle	Grand Total
		1.1 N Cambridge	-62	148	-145	-52	-112
		1.2 S Cambridge	22	15	-25	-9	2
		1.3 E Cambridge	-182	15	-138	-62	-367
		2 Science Park	-9	5	-1	-2	-8
		3.1 Inner Fringe	-59	42	-86	-41	-144
		3.2 Outer Fringe	-40	5	-48	-13	-96
		4 Waterbeach	-31	-4	-28	-13	-75
		5.1 W SR	-205	50	-68	-18	-242
	2031 DS1	5.2 N SR	-84	35	-10	-7	-66
Growth	(T561a) -	5.3 SE SR	-33	-6	-20	-5	-64
from DS1-	2031 DM	5.4 SW SR	-10	-10	-18	-6	-43
DM	(T560a)	5.8 Northstowe z19	-11	-44	156	12	112
	· · · ·	5.9 Northstowe z20	3679	431	2209	210	6529
		6 Rest of Northstowe	-104	-52	143	0	-13
		7 Bourne	6	3	-30	-2	-23
		8.1 Huntingdon	-214	220	-66	-6	-66
		8.2 Rest of Hunts	94	165	62	7	328
		9.1 Ely	31	24	24	5	83
		9.2 Rest of E Cambs	101	37	31	3	172
		10.1 Greater London	-7	-12	0	0	-19
		10.2 Other External	-1705	-202	-3	-10	-1920
		Total	1177	866	1939	-13	3969
		1.1 N Cambridge	-0.4%	3.7%	-0.6%	-0.4%	-0.2%
		1.2 S Cambridge	0.2%	0.7%	-0.2%	-0.2%	0.0%
		1.3 E Cambridge	-1.4%	0.5%	-0.6%	-0.6%	-0.8%
		2 Science Park	-1.7%	22.3%	-0.2%	-2.2%	-0.8%
		3.1 Inner Fringe	-0.4%	1.7%	-1.2%	-1.0%	-0.5%
		3.2 Outer Fringe	-0.4%	0.4%	-1.4%	-0.7%	-0.5%
		4 Waterbeach	-0.8%	-0.7%	-2.2%	-2.0%	-1.2%
		5.1 W SR	-1.7%	2.9%	-2.2%	-2.5%	-1.4%
	2031 DS1	5.2 N SR	-1.4%	3.3%	-0.5%	-1.4%	-0.7%
Growth	(T561a) -	5.3 SE SR	-0.3%	-0.5%	-0.7%	-0.7%	-0.4%
from DS1-	2031 DM	5.4 SW SR	-0.1%	-0.5%	-0.4%	-0.6%	-0.2%
DM	(T560a)	5.8 Northstowe z19	-0.6%	-12.5%	27.7%	12.1%	4.1%
	· · · ·	5.9 Northstowe z20	1806.7%	805.7%	3831.8%	1901.6%	2003.8%
		6 Rest of Northstowe	<b>-9</b> .1%	-27.8%	50.5%	-0.5%	-0.8%
		7 Bourne	0.1%	0.1%	-0.8%	-0.4%	-0.1%
		8.1 Huntingdon	-0.7%	5.3%	-0.5%	-0.2%	-0.1%
		8.2 Rest of Hunts	0.2%	2.4%	0.3%	0.2%	0.4%
		9.1 Ely	0.3%	2.0%	0.4%	0.4%	0.4%
		9.2 Rest of E Cambs	0.3%	1.1%	0.3%	0.2%	0.4%
		10.1 Greater London	-0.3%	-4.6%	#NULL!	#NULL!	-0.6%
		10.2 Other External	-3.9%	-5.6%	-1.1%	-5.7%	-4.0%
		Total	0.4%	2.1%	1.4%	0.0%	0.7%

Table 3.11 -AM (7AM-10AM)Trips (Difference between 2031 DS1 no 2031 DM)



					Main r		
Data	Scenario	Origin Sector	Car	PT	Walk	Cycle	Grand Total
		1.1 N Cambridge	-10	-4	-3	-3	-20
		1.2 S Cambridge	-7	0	-2	-1	-11
		1.3 E Cambridge	-19	-7	-10	-7	-43
		2 Science Park	0	0	0	0	(
		3.1 Inner Fringe	-10	-1	-2	-1	-14
		3.2 Outer Fringe	-3	0	-5	-2	-9
		4 Waterbeach	1	-1	-2	-1	-:
		5.1 W SR	-5	-1	-2	-1	-{
		5.2 N SR	11	0	-3	0	1
	2031 DS2	5.3 SE SR	-10	1	-4	-1	-14
Growth from DS2-	(T562a) - 2031 DS1	5.4 SW SR	-3	2	-2	-1	-4
DS1	(T561a)	5.8 Northstowe z19	6	0	-3	0	
DOT	(10010)	5.9 Northstowe z20	96	3	-10	-1	89
		6 Rest of Northstowe	3	0	-2	0	(
		7 Bourne	1	2	-4	-1	-
		8.1 Huntingdon	3	-1	-3	-1	-:
		8.2 Rest of Hunts	14	1	5	1	20
		9.1 Ely	4	0	3	0	
		9.2 Rest of E Cambs	0	1	1	0	
		10.1 Greater London	-1	1	0	0	
		10.2 Other External	3	1	0	0	
		Total	76	-4	-49	-20	
		1.1 N Cambridge	-0.1%	-0.1%	0.0%	0.0%	0.0%
		1.2 S Cambridge	-0.1%	0.0%	0.0%	0.0%	0.0%
		1.3 E Cambridge	-0.2%	-0.2%	0.0%	-0.1%	-0.19
		2 Science Park	0.0%	0.2%	-0.1%	-0.1%	0.0%
		3.1 Inner Fringe	-0.1%	0.0%	0.0%	0.0%	0.0%
		3.2 Outer Fringe	0.0%	0.0%	-0.1%	-0.1%	-0.19
		4 Waterbeach	0.0%	-0.2%	-0.2%	-0.1%	-0.19
		5.1 W SR	0.0%	0.0%	-0.1%	-0.1%	0.0%
		5.2 N SR	0.2%	0.0%	-0.1%	-0.1%	0.1%
	2031 DS2	5.3 SE SR	-0.1%	0.1%	-0.1%	-0.1%	-0.19
Growth	(T562a) -	5.4 SW SR	0.0%	0.1%	0.0%	-0.1%	0.0%
from DS2-	2031 DS1 (T561a)	5.8 Northstowe z19	0.3%	0.0%	-0.5%	-0.4%	0.19
DS1	(1501a)	5.9 Northstowe z20	2.5%	0.7%	-0.4%	-0.6%	1.39
		6 Rest of Northstowe	0.3%	-0.2%	-0.5%	-0.4%	0.0%
		7 Bourne	0.0%	0.1%	-0.1%	-0.1%	0.0%
		8.1 Huntingdon	0.0%	0.0%	0.0%	0.0%	0.0%
		8.2 Rest of Hunts	0.0%	0.0%	0.0%	0.0%	0.0%
		9.1 Ely	0.0%	0.0%	0.0%	0.0%	0.0%
		9.2 Rest of E Cambs	0.0%	0.0%	0.0%	0.0%	0.0%
		10.1 Greater London	0.0%	0.0%	#NULL!	#NULL!	0.07
			0.0%	0.4%	#NOLL! 0.0%	-0.1%	0.0%
		10.2 Other External					
		Total	0.0%	0.0%	0.0%	0.0%	0.0

Table 3.12 – AM (7AM-10AM)Trips (Difference between 2031 DS2 and 2031 DS1)



						Destir	nation					
Scenario Type	OrigSect	1 Cambridge	2+3 City Fringe	4+5 S Cambs (rest)	5 S Cambs	5+6 Northstow	7 Bourne	8 Hunts	9 E Cambs	10 Externa	Northstowe F	Grand Total
	1 Cambridge	-359	-205	-15	-177	-34	-21	-67	-13	-68	736	-222
	2+3 City Fringe	-161	-247	-16	-210	-35	-26	-79	-21	-49	735	-109
	4+5 S Cambs (rest)	-9	-15	-29	-20	-4	-2	-7	-11	-6	72	-31
2031 DS1-DM	5 S Cambs	-147	-240	-17	-536	-93	-56	-263	-60	-95	1,174	-332
	5+6 Northstowe	-58	-72	-5	-178	-44	-14	-88	-25	-26	396	-114
	Northstowe Phase 2 Z20	670	357	62	626	220	92	426	154	271	801	3,679
	7 Bourne	-21	-35	-2	-67	-10	-56	-53	-2	3	249	6
	8 Hunts	-102	-131	-9	-204	-47	-36	-402	-40	-94	945	-120
	9 E Cambs	-6	-43	-8	-60	-21	-3	-54	-52	-39	418	132
	10 External	-407	-247	-43	-483	-41	-30	-631	-271	0	440	-1,712
DS Total		-600	-878	-81	-1,309	-110	-152	-1,219	-342	-100	5,967	1,177
	1 Cambridge	-2.08%	-2.94%	-2.71%	-3.68%	-10.90%	-3.40%	-3.31%	-1.08%	-1.32%	6045.88%	-0.57%
	2+3 City Fringe	-1.87%	-3.70%	-3.26%	-4.80%	-12.04%	-4.56%	-4.96%	-2.02%	-1.18%	8580.43%	-0.39%
	4+5 S Cambs (rest)	-1.04%	-1.97%	-3.90%	-4.37%	-10.70%	-3.55%	-3.85%	-2.68%	-1.62%	7880.70%	-0.79%
	5 S Cambs	-2.10%	-4.83%	-4.57%	-4.20%	-17.43%	-4.52%	-5.46%	-4.62%	-0.86%	6638.64%	-0.75%
2031DS1-DM %	5+6 Northstowe	-10.21%	-19.97%	-11.16%	-26.53%	-23.11%	-20.01%	-19.70%	-18.14%	-6.38%	4567.77%	-3.94%
2031031-0017.	Northstowe Phase 2 Z20	1548.79%	1411.91%	1467.67%	1284.46%	1615.04%	1558.44%	1385.94%	1487.65%	1367.55%	46334.69%	1806.72%
	7 Bourne	-0.99%	-2.58%	-2.74%	-3.72%	-12.03%	-2.84%	-2.49%	-1.26%	0.17%	8471.10%	0.05%
	8 Hunts	-2.97%	-4.85%	-3.97%	-4.22%	-13.30%	-2.27%	-0.74%	-2.48%	-0.50%	7120.02%	-0.14%
	9 E Cambs	-0.15%	-1.46%	-1.11%	-2.83%	-11.72%	-2.01%	-3.09%	-0.25%	-0.50%	6778.34%	0.32%
	10 External	-5.79%	-5.20%	-8.47%	-4.70%	-12.59%	-2.79%	-3.84%	-4.43%	#NULL!	2342.19%	-3.68%
DS Total		-1.18%	-2.78%	-2.19%	-3.11%	-4.72%	-2.07%	-1.45%	-1.03%	-0.20%	6563.36%	0.39%

Table 3.13 –AM (7Am-10AM) Person Trips Volumes by Car Mode 2031 DS1 vs 2031 DM)



# **Appendix 1 Residential Development Sites**

				Changes	5	
		2012-	2017-	2022-	2027-	2011-
District	Site Name and Address	2016	2021	2026	2031	2031
CCiC	Station Area Blue Phase	169	0	0	0	169
CCiC	Station Area- Pink Phase	80	57	25	0	162
CCiC	190 - 192 Histon Road	14	0	0	0	14
CCiC	Sandy lane	0	0	23	0	23
CCiC	Cambridge City Football Ground, Milton Road (11/0008/FUL)	0	138	0	0	138
CCiC	379-381 Milton Road	0	0	40	55	95
CCiC	Willowcroft, Histon Road	0	67	11	0	78
CCiC	Henry Giles House, Chesterton Road	0	20	28	0	48
CCiC	295 Histon Road	0	32	0	0	32
CCIC	Milton Infant and Junior School, Milton Road	5	0	0	0	5
CCiC	169-173 High Street Chesterton	12	0	0	0	12
CCiC	Romans Court	16	0	0	0	16
CCiC	North Area SHLAA Windfall	0	153	154	155	462
CCiC	141 Ditton Walk, Cambridge	0	14	0	0	14
CCiC	Sorrento Hotel, 190 - 196 Cherry Hinton Road	0	0	0	0	0
CCiC	89a Cherry Hinton Road	14	0	0	0	14
CCIC	British Telecom, Cromwell Road (11/0902/REM)	136	0	0	0	136
CCIC	Cambridge Water Company, Rustat Road (07/1223/REM)	0	143	0	0	143
CCIC	Neath Farm business Park, Church End (09/0403/FUL)	27	0	0	0	27
CCiC	9-15 Harvest Way (11/0219/FUL)	75	0	0	0	75
CCiC	20 Occupation Road (09/0743)	0	0	0	0	0
CCiC	71 - 73 New Street (11/1097)	0	6	0	0	6
CCiC	30 - 31 Occupation Road (12/0628)	13	0	0	0	13
CCiC	23 - 29 Occupation Road (10/1067)	0	0	0	0	0
CCiC	64 - 66 Peverel Road	0	10	0	0	10
CCiC	Seymour Court, Seymour Street (11/0970)	34	0	0	0	34
CCiC	Ridgeons, Cavendish Road	0	0	28	0	28
CCiC	315-349 Mill Road & Brookfields	0	30	0	0	30
CCiC	315-349 Mill Road & Brookfields 2	0	0	98	0	98
CCiC	The Paddocks Trading Estate, Cherry Hinton Road	0	0	123	0	123
CCiC	Travis Perkins, Devonshire Road (11/1294/ful)	15	28	0	0	43
CCIC	Camfields Resource Centre and Oil Depot	0	15	20	0	35
CCIC	636 - 656 Newmarket Road	0	0	0	75	75
CCiC	149 Cherry Hinton Road	0	0	0	33	33
CCIC	Mill Road Depot	0	0	0	167	167
CCiC	Horzon Resource Centre	0	0	40	0	40
CCiC	Ridgeons, Cromwell Road	0	0	190	27	217
CCiC	Clifton Road Industrial Estate	0	0	250	300	550
CCiC	115-119 Perne Road	0	12	0	0	12



				Changes	5	
		2012-	2017-	2022-	2027-	2011-
District	Site Name and Address	2016	2021	2026	2031	2031
CCiC	East Area SHLAA Windfall	0	155	153	155	463
CCiC	Land to the Rear of 99-105 Shelford Road	13	0	0	0	13
	Junction of Cherry Hinton Road and Hills Road					
CCIC	(08/0505/FUL)	133	0	0	0	133
CCiC	Betjemen House, Hills Road (06/0552)	0	156	0	0	156
CCIC	Homerton College, Hills Road (07/1093)	0	0	85	0	85
CCIC	Government Offices (06/0527, 06/0524)	0	0	0	0	0
CCIC	CUP Site, Clarendon Road (06/0584)	190	0	0	0	190
CCIC	British Telecom, Long Road	0	55	0	0	55
CCiC	British Telecom, Long Road - 2	0	0	21	0	21
CCiC	Land north of Worts Causeway	0	0	200	0	200
CCiC	Land south of Worts Causeway	0	0	230	0	230
CCiC	Glebe Farm2	0	35	0	0	35
CCiC	Cambridge Profesional Development Centre, Padget Road	0	15	52	0	67
CCiC	Michael Young Centre, Purbeck Road	10	40	0	0	50
CCiC	82 - 90 Hills Road and 57 - 63 Bateman Street	0	0	10	10	20
CCiC	South Area SHLAA Windfall	0	154	154	155	463
CCiC	Firestation, Parkside (10/0523)	0	0	0	0	0
CCIC	The Old Maltings, Prospect Row	0	0	0	0	0
CCIC	Brunswick Site (11/0327)	130	0	0	0	130
CCiC	16 Mill Lane	0	100	50	0	150
CCiC	Police Station, Parkside (remainder of site)	0	50	0	0	50
CCiC	Mount Pleasant House	0	25	25	0	50
CCiC	18-19 Regent Terrace	11	0	0	0	11
CCiC	West Area SHLAA Windfall	0	153	154	155	462
CCiC	Clay Farm & Showground	1149	997	0	0	2146
CCiC	Bell School	0	275	0	0	275
CCiC	Glebe Farm	231	0	0	0	231
CCiC	TM (Monsanto)	267	192	0	0	459
CCiC	Cambridge University	216	834	860	0	1910
CCiC	NIAB Main	150	1443	0	0	1593
CCiC	NIAB Frontage	45	0	0	0	45
CCiC	Land north of Teversham Drift	0	0	325	26	351
CCiC	Land north of Coldhams Lane	10	47	0	0	57
CCiC	Land north of Newmarket Road	0	0	0	0	0
ECDC	Land south of Tunbridge Hall, Bottisham	14	0	0	0	14
ECDC	Phase 3, land off Prickwillow Road, Ely	66	0	0	0	66
ECDC	Highfield Farm, Ely Road, Littleport	200	177	0	0	377
ECDC	West of 93-135 Lynn Road, Ely	0	81	0	0	81
ECDC	Residue at Highfield Farm, Littleport	0	130	0	0	130
ECDC	Land off Bell Road, Bottisham	38	0	0	0	38
ECDC	Land adjacent 105 North Street, Burwell	6	0	0	0	6



				Changes	;	
		2012-	2017-	2022-	2027-	2011-
District	Site Name and Address	2016	2021	2026	2031	2031
ECDC	Dullingham Motors, Brinkley Road, Dullingham	5	0	0	0	5
ECDC	Ely House, 1 Redman Close, Ely	5	0	0	0	5
ECDC	Land rear of 19 West Fen Road, Ely	7	0	0	0	7
ECDC	136 Lynn Road, Ely	7	0	0	0	7
ECDC	5-6 Soham Road, Fordham	32	0	0	0	32
ECDC	27 Market Street, Fordham	5	0	0	0	5
ECDC	5 The Green, Haddenham	6	0	0	0	6
ECDC	Land north of 21 Beck Road, Isleham	15	0	0	0	15
ECDC	55 Sun Street, Isleham	5	0	0	0	5
ECDC	Land rear of 88-96 Wisbech Road, Littleport	24	0	0	0	24
ECDC	Land east of 33 The Holmes, Littleport	8	0	0	0	8
ECDC	Old Station Goods Yard, Littleport	30	0	0	0	30
ECDC	1 Grange Lane, Littleport	16	0	0	0	16
ECDC	Land rear and south of 24 Barkhams, Littleport	6	0	0	0	6
ECDC	Land at 21-23 Lynn Road, Littleport	5	0	0	0	5
	Land between Beech Court & Village College, Parsons Lane,					
ECDC	Littleport	51	0	0	0	51
ECDC	Land rear of 48 to 64 Station Road, Soham	13	0	0	0	13
ECDC	Lion Mills, Soham	71	0	0	0	71
ECDC	Church Hall, High Street, Soham	8	0	0	0	8
ECDC	8 Market Street, Soham	5	0	0	0	5
ECDC	Land rear of 140 Paddock Street, Soham	2	0	0	0	2
ECDC	Land rear of 7 and 7a Townsend, Soham	17	0	0	0	17
ECDC	Land rear of 50 and 52 Foxwood South, Soham	10	0	0	0	10
ECDC	Land rear and side of Windayle, 27 Hall Street, Soham	11	0	0	0	11
ECDC	AA Griggs, 46 Townsend, Soham	41	0	0	0	41
ECDC	Keith Leonard House, Soham	44	0	0	0	44
ECDC	44 The Butts, Soham	17	0	0	0	17
ECDC	Land rear of 31 High Street, Soham	6	0	0	0	6
ECDC	Land rear of 16 Townsend, Soham	13	0	0	0	13
ECDC	Land rear of 82-90 Paddock St., Soham	7	0	0	0	7
ECDC	Land north of Plantation Gate, Stretham	3	0	0	0	3
ECDC	73-79 High Street, Sutton	11	0	0	0	11
ECDC	West Lodge, 125 High Street, Sutton	5	0	0	0	5
ECDC	Land adjacent to Water Tower, Mill Hill, Swaffham Prior	2	0	0	0	2
ECDC	Land west of Rosendale, Whitecross Road, Wilburton	6	0	0	0	6
ECDC	Whitecross Farm, Whitecross Road, Wilburton	11	0	0	0	11
ECDC	Garages to north of 7 Manor Court Road, Witchford	5	0	0	0	5
ECDC	Barons Cove, Weirs Drove, Burwell	35	0	0	0	35
ECDC	Land North West of Regal Drive, Fordham Road, Soham	66	30	0	0	96
ECDC	Sennitt Way/ Newmarket Rd, , Stretham	14	0	0	0	14
ECDC	Aldreth	2	0	0	0	2



				Changes	i	
		2012-	2017-	2022-	2027-	2011-
District	Site Name and Address	2016	2021	2026	2031	2031
ECDC	Ashley	2	0	0	0	2
ECDC	Bottisham	4	0	0	0	4
ECDC	Burwell	17	0	0	0	17
ECDC	Cheveley	5	0	0	0	5
ECDC	Chippenham	2	0	0	0	2
ECDC	Coveney	3	0	0	0	3
ECDC	Dullingham	3	0	0	0	3
ECDC	Ely	19	0	0	0	19
ECDC	Fordham	5	0	0	0	5
ECDC	Haddenham	9	0	0	0	9
ECDC	Isleham	8	0	0	0	8
ECDC	Kirtling	2	0	0	0	2
ECDC	Little Downham	7	0	0	0	7
ECDC	Littleport	10	0	0	0	10
ECDC	Lode	5	0	0	0	5
ECDC	Mepal	1	0	0	0	1
ECDC	Newmarket Fringe	1	0	0	0	1
ECDC	Pymoor	3	0	0	0	3
ECDC	Prickwillow	3	0	0	0	3
ECDC	Queen Adelaide	3	0	0	0	3
ECDC	Reach	1	0	0	0	1
ECDC	Saxon Street	1	0	0	0	1
ECDC	Snailwell	-1	0	0	0	-1
ECDC	Soham	39	0	0	0	39
ECDC	Stetchworth	1	0	0	0	1
ECDC	Stretham	4	0	0	0	4
ECDC	Sutton	12	0	0	0	12
ECDC	Swaffham Prior	1	0	0	0	1
ECDC	Wardy Hill	3	0	0	0	3
ECDC	Wentworth	1	0	0	0	1
ECDC	Westley Waterless	5	0	0	0	5
ECDC	Wicken	6	0	0	0	6
ECDC	Wilburton	7	0	0	0	7
ECDC	Witcham	3	0	0	0	3
ECDC	Witchford	5	0	0	0	5
ECDC	Ashley	1.4	3.5	3.5	3.5	11.9
ECDC	Bottisham	3.7	9.25	9.25	9.25	31.45
ECDC	Brinkley	0.2	0.5	0.5	0.5	1.7
ECDC	Burrough Green	0.5	1.25	1.25	1.25	4.25
ECDC	Burwell	7.7	19.25	19.25	19.25	65.45
ECDC	Cheveley (excluding Newmarket Fringe)	3.7	9.25	9.25	9.25	31.45
ECDC	Chippenham	0.2	0.5	0.5	0.5	1.7



				Changes	5	
		2012-	2017-	2022-	2027-	2011-
District	Site Name and Address	2016	2021	2026	2031	2031
ECDC	Wardy Hill (Coveney)	1	2.5	2.5	2.5	8.5
ECDC	Dullingham	1.1	2.75	2.75	2.75	9.35
ECDC	Ely (excl. ChettishamQ.AdelaidePrickwillow & Stuntney)	12.6	31.5	31.5	31.5	107.1
ECDC	Chettisham (Ely)	0.3	0.75	0.75	0.75	2.55
ECDC	Prickwillow (Ely)	3	7.5	7.5	7.5	25.5
ECDC	Queen Adelaide (Ely)	0.2	0.5	0.5	0.5	1.7
ECDC	Stuntney (Ely)	0.8	2	2	2	6.8
ECDC	Fordham	4.3	10.75	10.75	10.75	36.55
ECDC	Haddenham (excluding Aldreth)	7.2	18	18	18	61.2
ECDC	Aldreth (Haddenham)	1.3	3.25	3.25	3.25	11.05
ECDC	Isleham	6.1	15.25	15.25	15.25	51.85
ECDC	Kennett	0.3	0.75	0.75	0.75	2.55
ECDC	Kirtling	0.2	0.5	0.5	0.5	1.7
ECDC	Little Downham (excluding Pymoor)	8.3	20.75	20.75	20.75	70.55
ECDC	Pymoor (Little Downham)	0.6	1.5	1.5	1.5	5.1
ECDC	Little Thetford	0.8	2	2	2	6.8
ECDC	Littleport (excluding Black Horse Drove)	13.9	34.75	34.75	34.75	118.15
ECDC	Black Horse Drove (Littleport)	0.8	2	2	2	6.8
ECDC	Lode (excluding Long Meadow)	0.8	2	2	2	6.8
ECDC	Long Meadow (Lode)	0.3	0.75	0.75	0.75	2.55
ECDC	Mepal	2	5	5	5	17
ECDC	Newmarket Fringe (CheveleyWoodditton)	3.7	9.25	9.25	9.25	31.45
ECDC	Reach	1.1	2.75	2.75	2.75	9.35
ECDC	Snailwell	1.3	3.25	3.25	3.25	11.05
ECDC	Soham (excluding Barway)	21.2	53	53	53	180.2
ECDC	Barway	0.2	0.5	0.5	0.5	1.7
ECDC	Stetchworth	1.4	3.5	3.5	3.5	11.9
ECDC	Stretham	4.5	11.25	11.25	11.25	38.25
ECDC	Sutton	10.1	25.25	25.25	25.25	85.85
ECDC	Swaffham Bulbeck	0	0	0	0	0
ECDC	Swaffham Prior	1	2.5	2.5	2.5	8.5
ECDC	Wentworth	1.3	3.25	3.25	3.25	11.05
ECDC	Wicken	1.8	4.5	4.5	4.5	15.3
ECDC	Wilburton	2.9	7.25	7.25	7.25	24.65
ECDC	Witcham	1.1	2.75	2.75	2.75	9.35
ECDC	Witchford	3.5	8.75	8.75	8.75	29.75
ECDC	Woodditton (excluding Saxon Street and Newmarket Fringe)	0.5	1.25	1.25	1.25	4.25
ECDC	Saxon Street (Woodditton)	0.3	0.75	0.75	0.75	2.55
ECDC	Land to the North-East of 20-42 Arber Close, Bottisham	5	0	0	0	5
ECDC	Land adjacent The Bungalow, Newmarket Rd, Burwell	0	0	15	0	15
ECDC	35 North Street, Burwell	10	0	0	0	10
ECDC	Home Office bungalows, Little Green, Cheveley	0	23	0	0	23



				Changes	5	
		2012-	2017-	2022-	2027-	2011-
District	Site Name and Address	2016	2021	2026	2031	2031
ECDC	Land east of St. John's Avenue, Newmarket, Cheveley	18	0	0	0	18
ECDC	Land off Carey Close, Ely	25	0	0	0	25
ECDC	Standens, Station Road, Ely	0	36	0	0	36
ECDC	32 Lisle Lane, Ely	0	0	13	0	13
ECDC	Old Dairy, Beald Way, Ely	10	0	0	0	10
ECDC	Old Woolworths, Fore Hill, Ely	0	10	0	0	10
ECDC	Paradise area, Ely	0	64	0	0	64
ECDC	The Grange, Nutholt Lane, Ely	0	50	0	0	50
ECDC	Bassingbourn Manor Farm, Fordham	0	36	0	0	36
ECDC	Fordham Garden Centre, Fordham	0	28	0	0	28
ECDC	Land rear of 85-87 Ely Road, Littleport	5	0	0	0	5
ECDC	Land at 89 Ely Road, Littleport	5	0	0	0	5
ECDC	Land north of Grange Lane, Littleport	35	36	0	0	71
ECDC	12 Woodfen Road, Littleport	10	3	0	0	13
ECDC	Land at Orchard Lodge, Ely Road, Littleport	0	21	0	0	21
ECDC	Land south of The Paddocks, Littleport	0	69	0	0	69
ECDC	21-27 Lynn Road, Littleport	4	0	0	0	4
ECDC	Old Station Goods Yard, Littleport	9	0	0	0	9
ECDC	Land adjacent Weatheralls School, Soham	0	9	0	0	9
ECDC	Land between 16 and 26 Mill Corner, Soham	0	12	0	0	12
ECDC	Land off Gimbert Road (rear of Croft House), Soham	34	0	0	0	34
ECDC	Land rear of 41 Fordham Road, Soham	86	0	0	0	86
ECDC	Pemberton, Fordham Road, Soham	0	5	0	0	5
ECDC	Land west of Red Lion Lane, Sutton	10	25	0	0	35
ECDC	Land adjacent 123 High Street, Sutton	23	0	0	0	23
ECDC	Land to the north of 76 High Street, Sutton	0	5	6	0	11
ECDC	Kings of Witcham, Witcham	11	0	0	0	11
ECDC	Land east of Barton Close, Witchford	14	0	0	0	14
ECDC	Barkways extension, Burwell	12	0	0	0	12
ECDC	Sheriffs Court, Burrough Green	6	0	0	0	6
ECDC	199-209 High Street, Cheveley	6	0	0	0	6
ECDC	West of Lynn Road, Ely	26	0	0	0	26
ECDC	Northumbria Close , Haddenham	24	0	0	0	24
ECDC	Corner of Fordham Road, Isleham	20	0	0	0	20
ECDC	Keys Croft, Soham	10	0	0	0	10
ECDC	Wilburton Road, Stretham	9	0	0	0	9
ECDC	Land off Station Road, Wilburton	8	0	0	0	8
ECDC	Field End, Witchford	16	0	0	0	16
ECDC	Lisle Lane, Ely	50	50	100	0	200
ECDC	North Ely, Ely	285	215	0	0	500
ECDC	Station Road, Soham	0	100	0	0	100
ECDC	Brook Street, Soham	0	250	50	0	300



				Changes	5	
		2012-	2017-	2022-	2027-	2011-
District	Site Name and Address	2016	2021	2026	2031	2031
ECDC	Eastern Gateway, Soham	0	250	250	50	550
ECDC	Newmarket Road – phase 1, Burwell	0	100	0	0	100
ECDC	Bell Road, Bottisham, Bottisham	0	50	0	0	50
ECDC	Lisle Lane, Ely	0	0	0	0	0
ECDC	North Ely, Ely	100	510	725	725	2060
ECDC	unknown, Soham	0	0	108	267	375
ECDC	Littleport west sites, Littleport	0	0	100	0	100
ECDC	Potential estimated extra allocations	100	150	0	0	250
ECDC	Rural exception windfall sites	49.4	123.5	123.5	123.5	419.9
SCDC	Cambridge East	0	555	700	155	1410
0000	Land between Huntingdon Road, Histon Road & A14 (NIAB 2	<u> </u>	000	700	100	1110
SCDC	or Darwin Green 2)	0	450	450	0	900
SCDC	Orchard Park - parcel K1	36	0	0	0	36
SCDC	Orchard Park - additional land parcels (L2 & Com4)	30	0	0	0	30
SCDC	Northstowe Phase 2					0
SCDC	Fulbourn & Ida Darwin Hospitals	30	220	0	0	250
SCDC	Papworth Everard West Central	37	30	0	0	67
SCDC	Trumpington Meadows (Cambridge Southern Fringe)	83	454	0	0	537
SCDC	North-West Cambridge (University site)	20	645	490	0	1155
SCDC	Orchard Park - parcel G	16	0	0	0	16
0000	Orchard Park - additional land parcels (Q, former HRCC site	10	Ŭ	Ŭ	Ŭ	10
SCDC	& Com2) including local centre	140	0	0	0	140
SCDC	Cambourne	6	0	0	0	6
SCDC	Cambourne (additional 950 dwellings)	385	477	0	0	862
SCDC	Former Bayer Cropscience site	90	195	0	0	285
SCDC	Historic Rural Allocations with planning permission	217	53	0	0	270
	Windfall Sites: Estate sized (9 or more dwellings) Near			-		
SCDC	Certain	545	36	0	0	581
	Windfall Sites: Small Sites (8 or less dwellings) already Under					
SCDC	Construction Near Certain	98	0	0	0	98
	Windfall Sites: Small Sites (8 or less dwellings) Not Under					
SCDC	Construction Near Certain	170	75	0	0	245
	Planning applications for 9 or more dwellings where decision					
	to grant planning permission either awaiting the signing of a s106 agreement or resolution of outstanding issues (at 31					
SCDC	March 2013) NEAR CERTAIN	82	44	0	0	126
3000	Land between Huntingdon Road, Histon Road & A14 (NIAB 3	02		Ŭ	Ŭ	120
SCDC	or Darwin Green 3)	0	0	100	0	100
SCDC	Northstowe Phase 1	0	1500	0	0	1500
SCDC	Waterbeach New Town	0	0	0	1400	1400
SCDC	Bourn Airfield New Village	0	0	600	1100	1700
SCDC	Cambourne West	0	500	700	0	1200
SCDC	Dales Manor Business Park, Sawston	0	0	200	0	200
SCDC	Land north of Babraham Road, Sawston	0	80	0	0	80



				Changes	;	
		2012-	2017-	2022-	2027-	2011-
District	Site Name and Address	2016	2021	2026	2031	2031
SCDC	Land south of Babraham Road, Sawston	0	35	200	25	260
SCDC	Land north of Impington Lane, Impington	0	25	0	0	25
SCDC	Land west of New Road, Melbourn	0	65	0	0	65
SCDC	Green End Industrial Estate, Gamlingay	0	30	60	0	90
SCDC	Land at Bennell Farm, West Street, Comberton	0	90	0	0	90
SCDC	East of Rockmill End, Willingham	0	50	0	0	50
SCDC	Land at Linton Road, Great Abington	0	35	0	0	35
	Land at junction of High Street & Pampisford Road, Great					
SCDC	Abington	0	12	0	0	12
SCDC	Land at Bancroft Farm, Church Lane, Little Abington	0	6	0	0	6
SCDC	Land at Manor Farm, High Street / Papworth Road, Graveley	0	0	0	0	0
SCDC	Land at Toseland Road, Graveley	0	0	0	0	0
SCDC	Windfall Sites MORE THAN LIKELY	0	800	1000	1000	2800
SCDC	Windfall Sites: Estate sized (9 or more dwellings)	10	0	0	0	10
SCDC	Windfall Sites: Small Sites (8 or less dwellings)	28	54	0	0	82
	Planning applications for 9 or more dwellings where decision					
	to grant planning permission either awaiting the signing of a s106 agreement or resolution of outstanding issues					
SCDC	(between 1 April and 31 December 2013) NEAR CERTAIN	48	0	0	0	48
HDC	Alconbury Weald	120	1225	1225	1225	3795
HDC	Eastern Expansion, St neots	500	1859	1341	0	3700
HDC	Wyton Airfield & Wyton on the Hill	0	100	1220	1220	2540
HDC	North of Ermine St	0	0	0	0	0
HDC	South of Ermine St	0	0	0	0	0
HDC	California Road	115	95	0	0	210
HDC	Forensic Science Laboratory	10	45	0	0	55
HDC	South of Fern Court	14	0	0	0	14
HDC	Constabulary Land	13	32	0	0	45
HDC	West of Railway	0	0	0	0	0
HDC	George St/Ermine St	50	150	0	0	200
HDC	Chequers Court	0	0	0	0	0
HDC	Fire Station	0	0	0	0	0
HDC	St Mary's St	0	0	0	0	0
HDC	Red Cross & Spiritualist Church	0	0	0	0	0
HDC	Gas Depot, Mill Common	20	0	0	0	20
HDC	Tyrell's Marina	0	15	0	0	15
HDC	Main Street, Hartford	0	25	0	0	25
HDC	Hinchingbrooke Hospital, Huntingdon	0	50	0	0	50
HDC	Hinchingbrooke Country Park	0	0	0	0	0
HDC	RAF Brampton	80	320	0	0	400
HDC	Park View Garage	0	020	0	0	0
HDC	Bearscroft Farm	190	560	0	0	750
HDC	Wigmore Farm Buildings	15	0	0	0	15



				Changes	5	
		2012-	2017-	2022-	2027-	2011-
District	Site Name and Address	2016	2021	2026	2031	2031
HDC	North of Clyde Farm	0	35	0	0	35
HDC	RGE Engineering, Godmanchester	0	35	0	0	35
HDC	Loves Farm Reserved Site	41	0	0	0	41
HDC	Former Youth Centre, Priory Rd	14	0	0	0	14
HDC	Huntingdon St	7	8	0	0	15
HDC	Fire Station & vacant land	0	0	0	0	0
HDC	Regional College & adjoining land	0	0	0	0	0
HDC	St Mary's Urban Village	0	40	0	0	40
HDC	Cromwell Road Car Park	20	0	0	0	20
HDC	St Ives West	245	255	0	0	500
HDC	Former Car Showroom, London Rd	0	0	0	0	0
HDC	Giffords Farm, St Ives	0	0	0	0	0
HDC	Vindis Car Show Room, Low Road, St Ives	0	50	0	0	50
HDC	St Ives Football Club	0	0	35	0	35
HDC	South of the Foundry	0	0	0	0	0
HDC	Ramsey Gateway	0	90	0	0	90
HDC	Ramsey Gateway (High Lode)	110	0	0	0	110
HDC	Field Road, Ramsey	0	70	0	0	70
HDC	Whytefield Rd	0	0	35	0	35
HDC	RAF Upwood & Upwood Hill House	0	0	325	0	325
HDC	Cambridge Road, west of bridge over A14, Fenstanton	0	100	0	0	100
HDC	Ivy Nursery	15	10	0	0	25
HDC	Former Dairy Crest Factory, Fenstanton	10	80	0	0	90
HDC	West of Station Rd	0	20	0	0	20
HDC	Land adjacent Bicton Industrial Estate, Kimbolton	0	0	0	0	0
HDC	East of Brookside	0	0	0	0	0
HDC	East of Glebe Farm	0	60	0	0	60
HDC	West of St Andrews Way	0	30	0	0	30
HDC	South of St Andrews Way	0	0	0	0	0
HDC	North of Black Horse Industrial Estate, Sawtry	0	0	0	0	0
HDC	Bill Hall Way	0	0	0	0	0
HDC	Newlands	15	15	0	0	30
HDC	The Pasture, Somersham	20	0	0	0	20
	Somersham Town Football Ground and Pond Closes,					
HDC	Somersham	0	40	0	0	40
HDC	Chatteris Rd, Somersham	0	0	0	0	0
HDC	North of the Bank	0	50	0	0	50
HDC	South of Farriers Way	0	10	85	0	95
HDC	West of Ramsey Road, Warboys	0	25	20	0	45
HDC	Rear of 64 High Street, Warboys	0	14	0	0	14
HDC	Askew's Lane	0	15	0	0	15
HDC	Land inc Snowcap Mushrooms	44	31	0	0	75



				Changes	5	
		2012-	2017-	2022-	2027-	2011-
District	Site Name and Address	2016	2021	2026	2031	2031
HDC	Yax Pak	0	0	0	0	0
HDC	Huntingdon Racecourse	0	0	0	0	0
HDC	Corpus Christi Lane, Godmanchester	0	4	0	0	4
HDC	Cromwell Road North	20	20	0	0	40
HDC	Eaton Court	30	20	0	0	50
HDC	East of Silver Street	0	8	0	0	8
HDC	West of Station Road, Warboys	60	60	0	0	120
HDC	Manor Farm Barns, Warboys	0	10	0	0	10
HDC	North of Broadway, Yaxley	7	0	0	0	7
HDC	North of Manor Farm, Yaxley	21	0	0	0	21
HDC	Church St, St Neots	43	0	0	0	43
HDC	Brookside, Huntingdon	43	0	0	0	43
HDC	Land Adjacent 25 St Giles Close, Holme	8	0	0	0	8
HDC	Hinchingbrooke Park, Huntingdon	16	0	0	0	16
HDC	London Road, Godmanchester	1	0	0	0	1
HDC	Knights Park Barford Road, Eynesbury	220	0	0	0	220
HDC	East of the Railway (Loves Farm), St Neots	494	0	0	0	494
HDC	Slepe Meadow, North of Houghton Rd, St Ives	86	0	0	0	86
	Greenacres (former St Ives Golf Course), Houghton Rd, St					
HDC	Ives	128	0	0	0	128
HDC	Land west of Woodland Lodge, Christie Drive, Huntingdon (Hollyhocks)	13	0	0	0	13
HDC	Woodlands, Warboys	8	0	0	0	8



# **Appendix 2 Employment Development Sites**

	Strategic expansion locations
District	
	Alconbury Weald
HDC	
HDC	Eastern Expansion, St neots
HDC	Wyton Airfield & Wyton on the Hill
HDC	West of Railway
HDC	George St/Ermine St
HDC	RAF Brampton
HDC	Park View Garage
HDC	Bearscroft Farm
HDC	Huntingdon St
HDC	Giffords Farm, St Ives
HDC	RAF Upwood & Upwood Hill House
HDC	Former Dairy Crest Factory, Fenstanton
	Land adjacent Bicton Industrial Estate,
HDC	Kimbolton
HDC	Yax Pak
City	Wider City Centre
City	Addenbrooke's
SCDC	Northstowe
SCDC	Cambourne
SCDC	Granta Park
SCDC	Hinxton
SCDC	Babraham
SCDC	Landbeach
City	West Cambridge & North West Cambridge (City)
SCDC	West Cambridge & North West Cambridge (SCDC)
City	Northern Fringe (City)
SCDC	Northern Fringe (SCDC)
City	ARM / Capita Park (City)
City	Elsewhere (City)
SCDC	Others (SCDC)
SCDC	Bourne Airfield
SCDC	Waterbeach
SCDC	Hauxton
SCDC	Sawston
SCDC	West Wratting
SCDC	Duxford
SCDC	Papworth Everard
SCDC	NorthStowe



# Appendix 3 Resources for the Tables Used in the Note

- Table1.1 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xls
- Table 2.1 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab Northstowe Assumptions
- Table 2.2 from W:\70002457 CSRM NStowe Phase2\D Design and Analysis\Northstowe Model\Land Use Assumptions\LandUseAssumptions\_V1.5.xlsx
- Table 2.3 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab Northstowe Assumptions
- Table 2.4 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab Northstowe Assumptions
- Table 2.5 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab 2031 DS1 vs DS2 Main Mode Tab Bus Service and Saturn
- Table 2.6 from W:\70002457 CSRM NStowe Phase2\D Design and Analysis\Northstowe Model\01 Review Phase 7 Scenario O\Scenario with updated land use assumptions\_v4.2\_DM.xlsx tab Scenario P
- Table 2.7 from W:\70002457 CSRM NStowe Phase2\D Design and Analysis\Northstowe Model\01 Review Phase 7 Scenario O\Scenario with updated land use assumptions\_v4.2\_DM.xlsx tab Scenario P
- Table 2.8 from W:\70002457 CSRM NStowe Phase2\D Design and Analysis\Northstowe Model\01 Review Phase 7 Scenario O\Scenario with updated land use assumptions\_v4.2\_DM.xlsx tab Scenario P
- Table 2.9 from W:\70002457 CSRM NStowe Phase2\D Design and Analysis\Northstowe Model\01 Review Phase 7 Scenario O\Scenario with updated land use assumptions\_v4.2\_DM.xlsx tab Scenario P
- Table 2.10 from W:\70002457 CSRM NStowe Phase2\D Design and Analysis\Northstowe Model\01 Review Phase 7 Scenario O\Scenario with updated land use assumptions\_v4.2\_DM.xlsx tab Scenario P
- Table 2.11 from W:\70002457 CSRM NStowe Phase2\D Design and Analysis\Northstowe Model\01 Review Phase 7 Scenario O\Scenario with updated land use assumptions\_v4.3\_DS.xlsx tab Scenario P
- Table 2.12 from W:\70002457 CSRM NStowe Phase2\D Design and Analysis\Employment\Employment
   SCDC + CCiC\_1.5.xlsx tab Empl by District
- Table 2.13 from W:\70002457 CSRM NStowe Phase2\D Design and Analysis\Employment\Employment
   SCDC + CCiC\_1.5.xlsx tab Empl by District
- Table 2.14: from W:\70002457 CSRM NStowe Phase2\D Design and Analysis\Employment\Employment
   SCDC + CCiC\_1.5.xlsx tab Empl by District
- Table 3.1 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx
- Table 3.2 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx
- Table 3.3/ 3.4 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab Dwellings
- Table 3.5/ 3.6 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4



with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab Persons

- Table 3.7/ 3.8 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab Employed Residents
- Table 3.9/ 3.10 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab Total Jobs
- Table 3.11 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab 2031 DM vs DS1 Main Mode
- Table 3.12 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab 2031 DS1 vs DS2 Main Mode
- Table 3.13 from W:\70002457 CSRM NStowe Phase2\F Record of Issue\14-05-13 Run Control V4 with More commentary\Run\_Control\_CSRM\_NStowe Phase2\_V4.xlsx tab 2031 Org -Des DM vs DS1 Car

