



Connecting Cambridge by Rail

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1. Introduction to Railfuture and Railfuture East Anglia
2. Cambridgeshire's need for a good local rail service as shown by the 2011 Census data
3. Cambridge City Deal proposals and underlying objectives
4. A tour of the rail network and projects deliverable in the short to medium term
5. Rail projects deliverable in the medium to longer term
6. Making rail travel more attractive for local commuting
7. End goal of a fully flexible multi-mode passenger transport network

1 Introduction to Railfuture and Railfuture East Anglia

Railfuture

- UK's leading independent organisation campaigning for better rail services for passengers and freight
- 20,000 affiliated and individual members
- Branch members and 300 local rail user groups campaign to get stations and lines reopened, and services and facilities improved, for the benefit of the community, economy and environment

Railfuture East Anglia

- Covers Norfolk, Suffolk, Cambridgeshire, North Essex, North Hertfordshire and East Bedfordshire
- 230 members, 4 public meetings a year, Quarterly magazine RailEast
- Branch activities
 - Responding to consultations
 - Aspirations for the future rail network
 - Public campaigning; information, education, inspiration
 - Influencing franchising
 - Original research and analysis

www.railfuture.org.uk/East+Anglia

 @RailfutureEA

Wisbech Rail Reopening Campaign

- Aim: Reopen 7 miles of railway from March to Wisbech to link 35,000 people to jobs and the National Rail network
- Gather positive public support
- Demonstrate the strength of local feeling
- Change attitudes from “they’ve been talking about this forever” to “it can be done”
- Support the democratic process
- Inform councillors and officials of possibilities

2 2011 Census data: Cambridgeshire's need for a good local rail service

Information gathered and published

- In your main job, what is the address of your workplace?
- How do you usually travel to work (for the longest part by distance of your journey to work)?
- Data published down to groups of several thousand people (e.g. 13 areas covering Cambridge)
- Analysed by Railfuture East Anglia

40 In your main job, what is the address of your workplace?

➤ If you work at or from home, on an offshore installation, or have no fixed workplace, tick one of the boxes below

➤ If you report to a depot, write in the depot address

Postcode _____

OR ☐ Mainly work at or from home
☐ Offshore installation
☐ No fixed place

41 How do you usually travel to work?

➤ Tick one box only

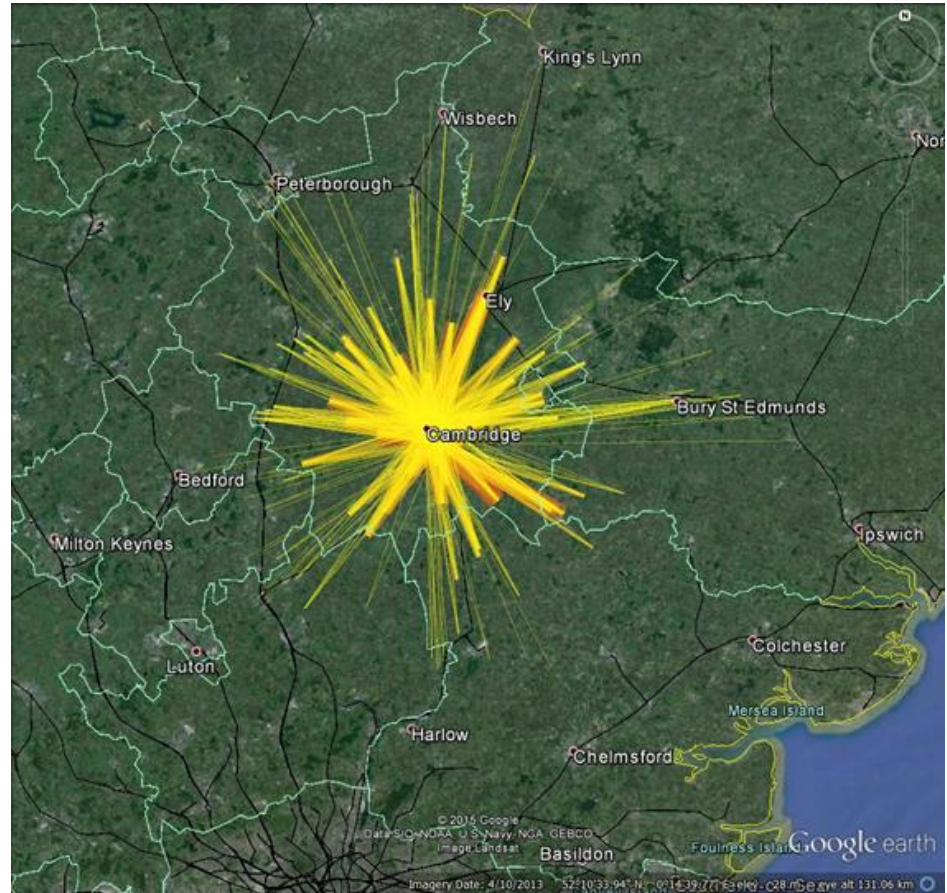
➤ Tick the box for the longest part, by distance, of your usual journey to work

☐ Work mainly at or from home
☐ Underground, metro, light rail, tram
☐ Train
☐ Bus, minibus or coach
☐ Taxi
☐ Motorcycle, scooter or moped
☐ Driving a car or van
☐ Passenger in a car or van
☐ Bicycle
☐ On foot
☐ Other

Commuting into Cambridge

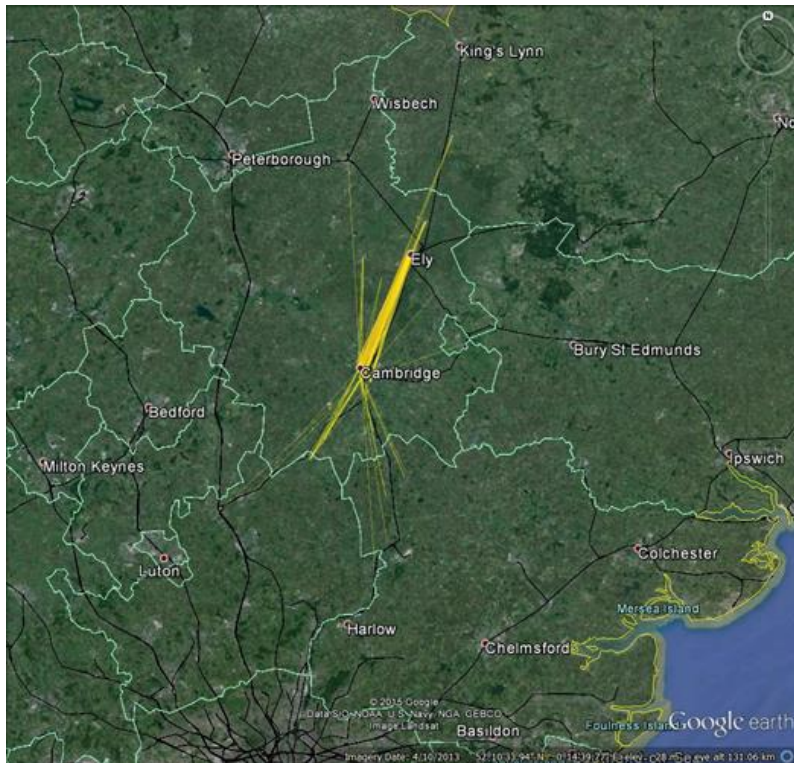
Mode	All to Cambridge	Cambridge to Cambridge
All	84903	33704
Rail	3717	
Bus	7193	2557
Driving	42402	7478
Passenger	3320	852
Bicycle	18409	14572
Foot	8564	7642

- 84903 people commute to a workplace in Cambridge
- 33704 of these live in Cambridge

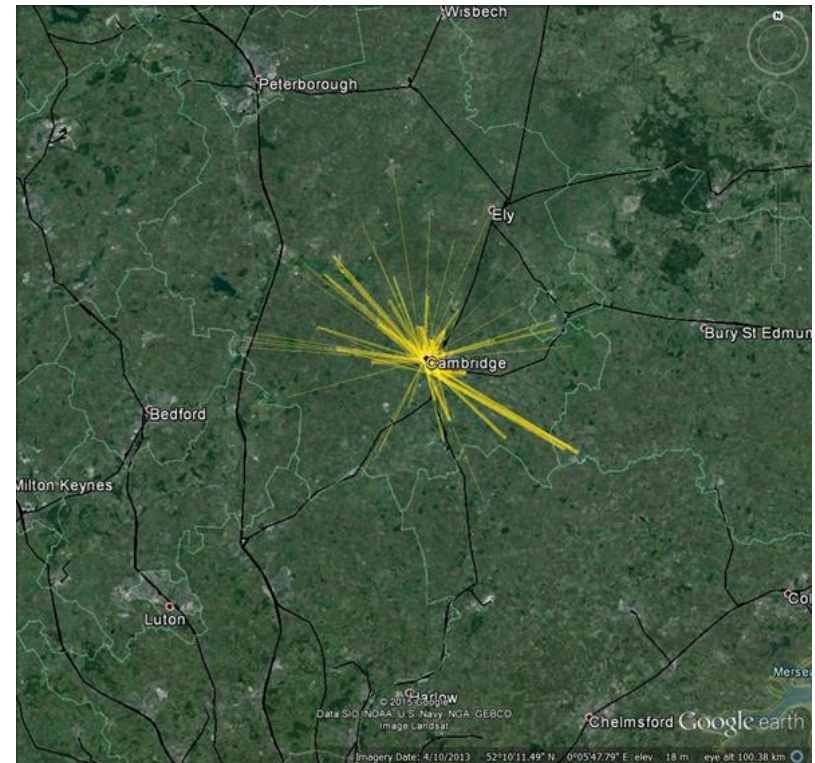


Commuting to Cambridge by Public Transport

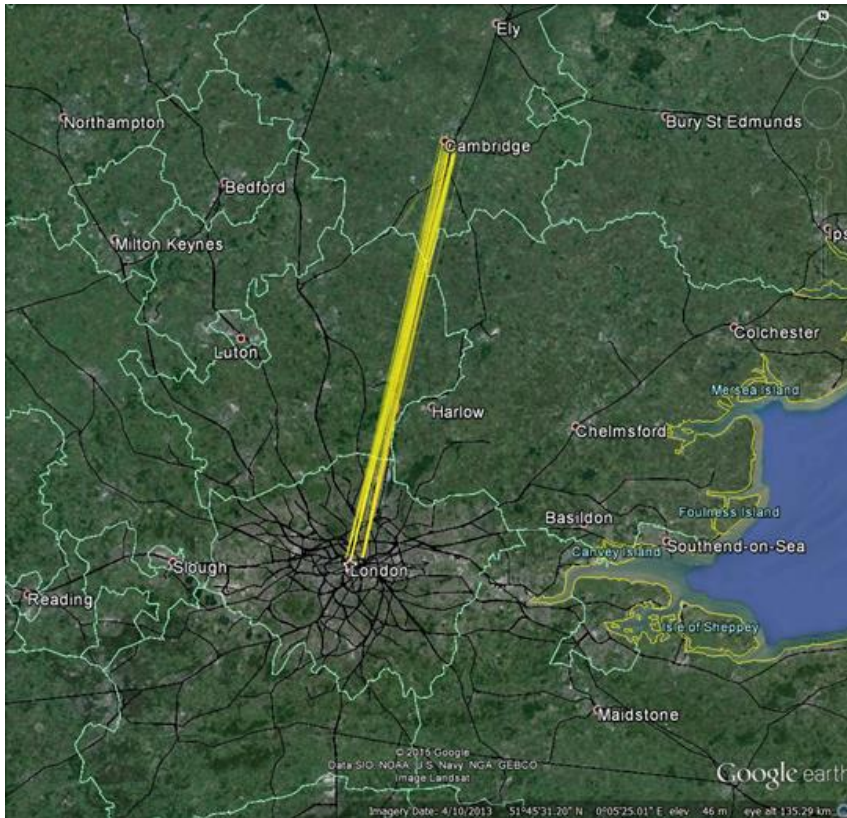
Rail: Ely dominates followed by Royston



Bus: Haverhill dominates for longer journeys

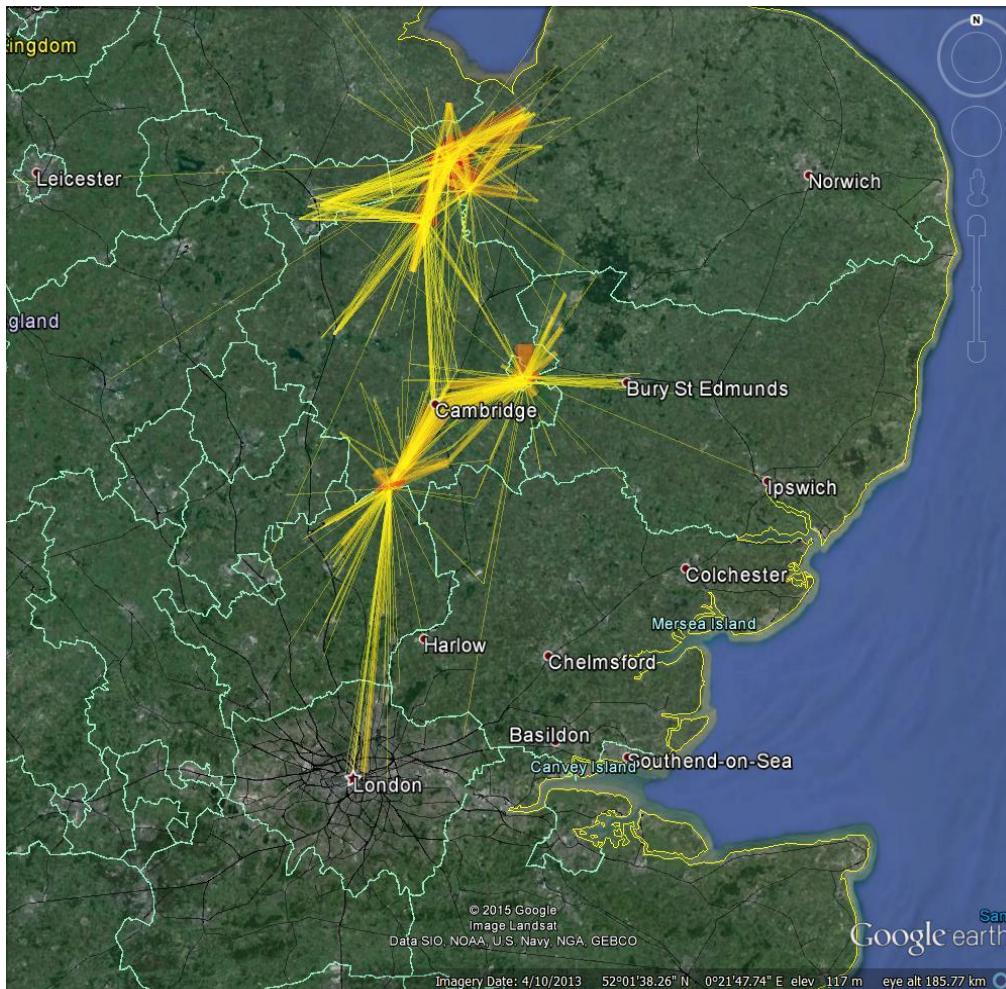


Commuting from Cambridge by Rail



Commuting from Cambridge by rail is dominated by London

Commuting from Cambridgeshire Market Towns



Maps shows commuting by all modes of transport from:

- Wisbech
- March
- Newmarket
- Royston

Commuting from Cambridgeshire Market Towns to Cambridge

Towns of similar size and similar distance from Cambridge

Large differences in the level of rail use for commuting

Ely has the best service frequency, and the highest level of rail commuting

Newmarket has a poor service frequency with low level of rail commuting

	Ely to Cambridge	Newmarket to Cambridge	Saffron Walden to Cambridge	Royston to Cambridge
Mode: All	1994	1177	774	796
Mode: Rail	825	33	67	166
Mode: Bus	53	133	28	29
Mode: Driving	964	911	636	550
Mode: Passenger	88	67	24	33
% by Rail	41%	3%	9%	21%
% by Public Transport	44%	14%	12%	24%
Population	20256	20384	14313	15781
Distance from Cambridge (miles)	15.28	15.04	14	13
Cambridge arrivals 0745 to 0845	6	1	3	2
Station footfall 2011	1,731,956	197,924	746,746	1,193,950
Station footfall 2014	1,976,134	285,062	838,804	1,300,508
Growth in 3 years	14%	44%	12%	9%

Commuting from Littleport, Downham Market and March to Cambridge

March has the lowest level of rail commuting

March is twice the size of Littleport and Downham Market, but has a significantly worse service in terms of frequency and late evening services

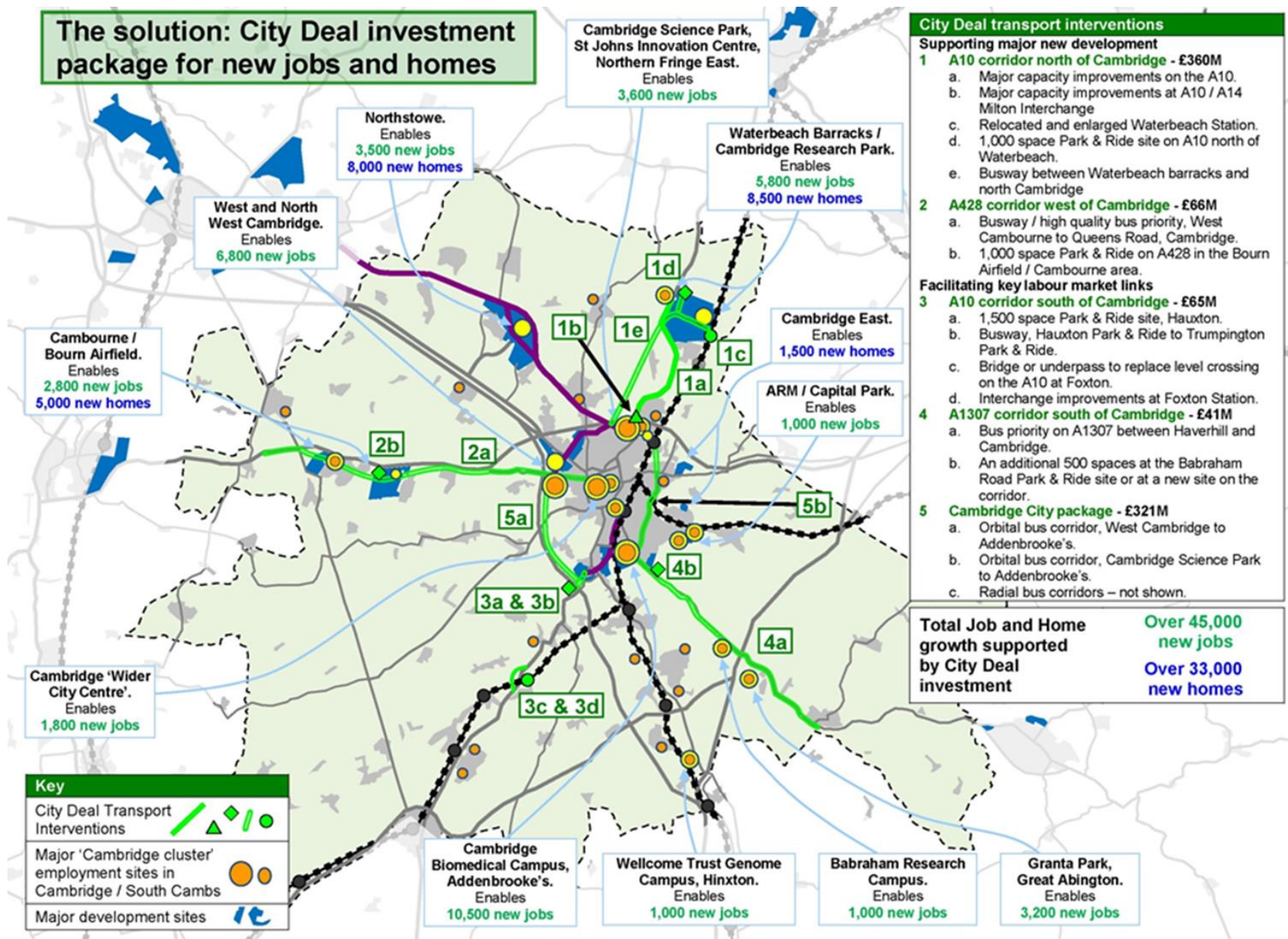
	Littleport to Cambridge	Downham Market to Cambridge	March to Cambridge
Mode: All	540	110	260
Mode: Rail	149	74	51
Mode: Bus	13	0	15
Mode: Driving	318	31	170
Mode: Passenger	38	3	14
% by Rail	28%	67%	20%
% by Public Transport	30%	67%	25%
Population	8738	9994	19042
Distance from Cambridge (miles)	21.3	30.5	30.85
Cambridge arrivals 0745 to 0845	2	3	1
Station footfall 2011	178,254	406,690	316,292
Station footfall 2014	225,024	460,056	357,864
Growth in 3 years	26%	13%	13%

3 Cambridge City Deal proposals and underlying objectives

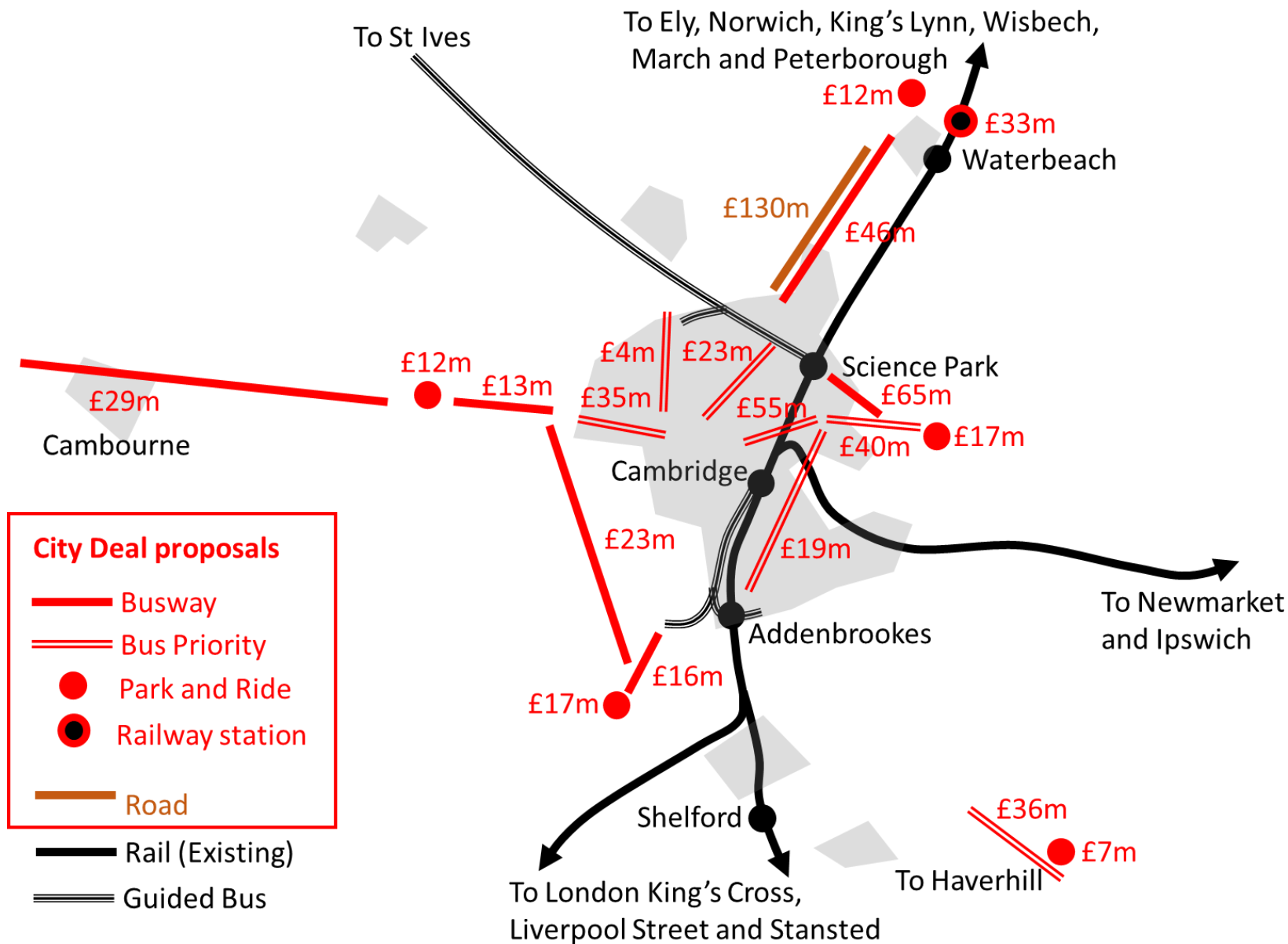
Cambridge City Deal

- 15 year programme including transport infrastructure
- Potentially £1bn to be invested over 15 years
- 1st tranche up to £200m over 5 years (until 2020)
 - £100m with £100 of matched funding
- 2nd tranche from 2020 onwards

The solution: City Deal investment package for new jobs and homes



Map of transport infrastructure proposed by the Cambridge City Deal, and major employment sites



Map of transport infrastructure proposed by the Cambridge City Deal (excluding cycle projects)

Current City Deal proposals

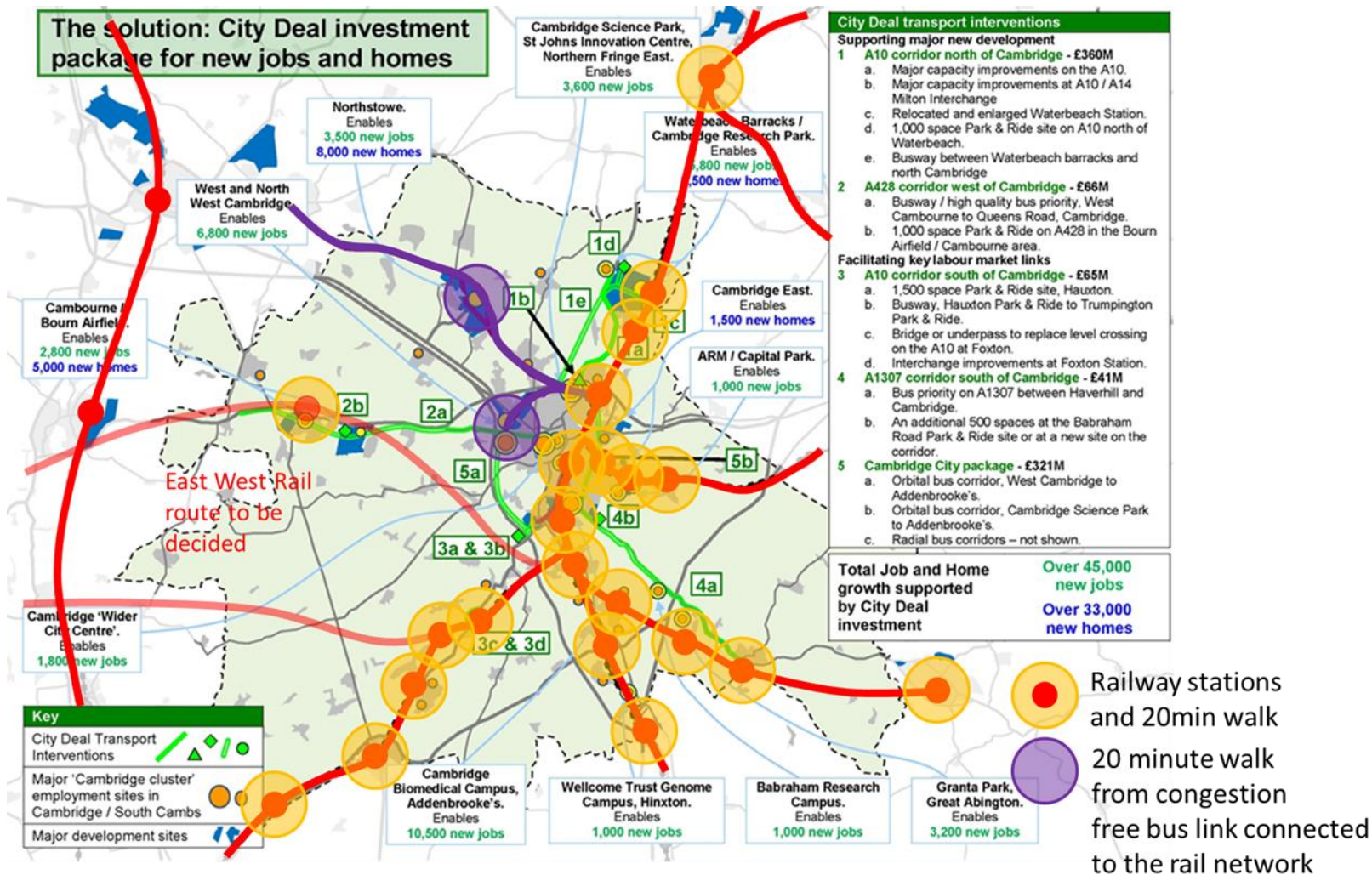
- What is wrong with the current proposals?
- Why not simply prioritise public transport to mimic the main commuter patterns?
 - No, because it may be expensive, contentious or ineffective to build infrastructure across such routes
 - No, because a relatively small reduction in traffic through bottleneck junctions can significantly reduce congestion. No need for this reduction to come from a main commuter pattern
- Current proposals involve bus priority schemes to mimic travel patterns including East Cambridge Orbital and Newmarket Road/Waterbeach links
 - Expensive infrastructure, potentially ineffective due to congestion at junctions, and contentious where new land required
- Instead, target journeys, particularly rail, where infrastructure is cost effective, relatively uncontentious and congestion free

Rail to the rescue

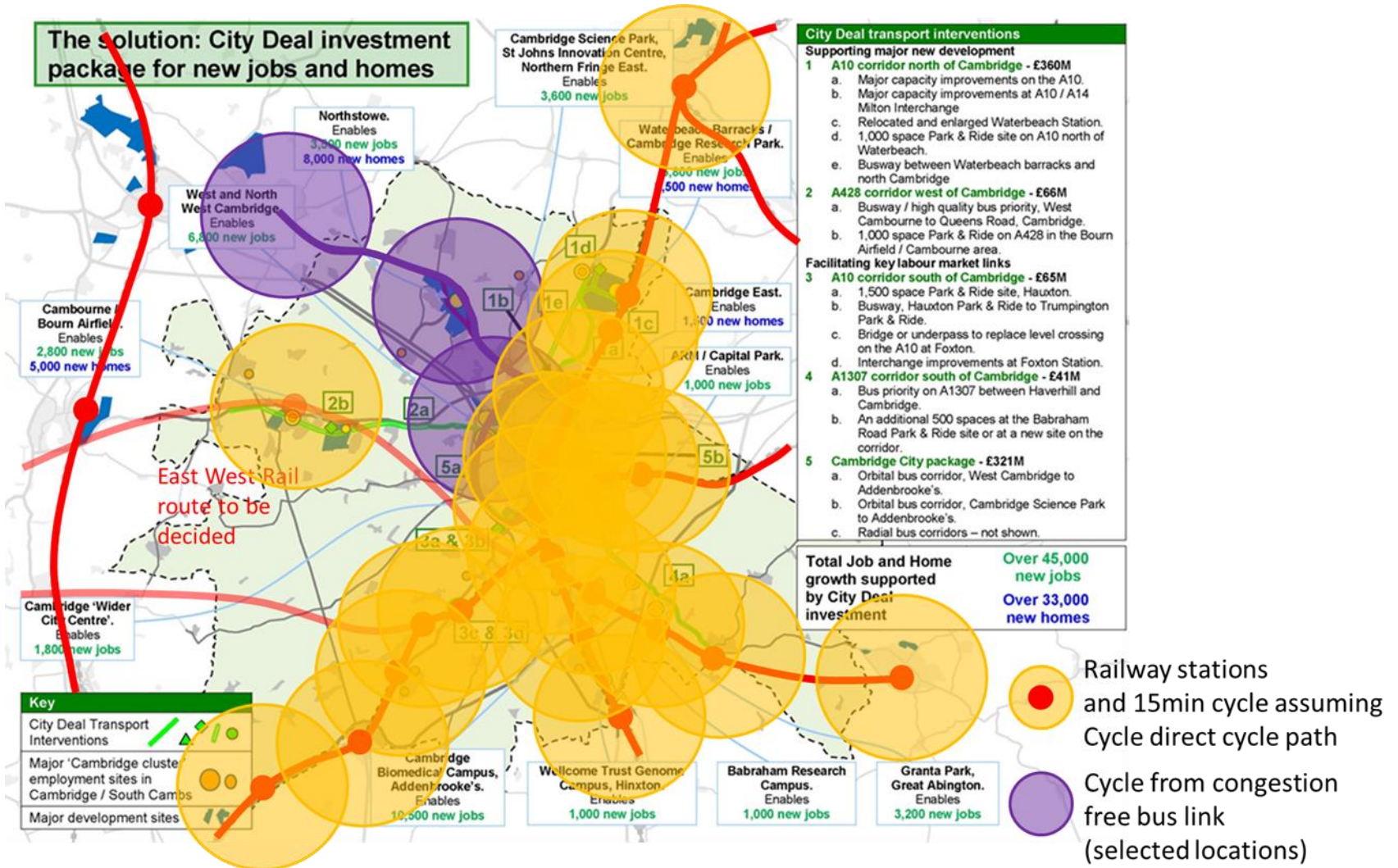
- Rail provides high capacity, high quality, congestion free transport
- Station reopenings in conjunction with cycling, walking and shuttle buses can reach all main areas of employment in Cambridge
- Multi-mode journey can provide a healthy balance; choice of a 40 minute bus journey or 15 minute rail journey and 15 minute walk?
- Currently 50% of people complete their journeys from Cambridge station by walking, so combining rail and walking works
- Rail can (with line and station reopenings) bring people into Cambridge from most of the market towns and major transport corridors; Royston, Saffron Walden, Haverhill, Newmarket, Soham, Bury St Edmunds, Ely, March, Wisbech, St Neots
- Multiple stations in Cambridge: Addenbrooke's, Cambridge, Cambridge North (Science Park), Cherry Hinton and Fulbourn, with guided busway linking Cambridge North to North and North West Cambridge, and Trumpington

Focus on Multi-Mode travel

- Cycle parking and cycle routes
- Pedestrian routes and step free access
- Car parking so every station is a park and ride close to people's homes
- Multimode ticketing; a Cambridgeshire Smartcard
- Flexible choice of transport - out by rail, back by bus, mix travel between different bus operators, effortlessly pay for park and ride, cost effective part time commuting
- Let a passenger plan a journey without having to worry about the artificial constraints imposed by single operator fares
- High quality information; maps, reliable real-time information
- Consistent quality across the network at bus stops and stations; minimum standards met everywhere
- The City Deal should aim for Cambridgeshire to have an exemplary multi-mode transport network



Multi-Mode: Areas within a 20 minute walk from a railway station

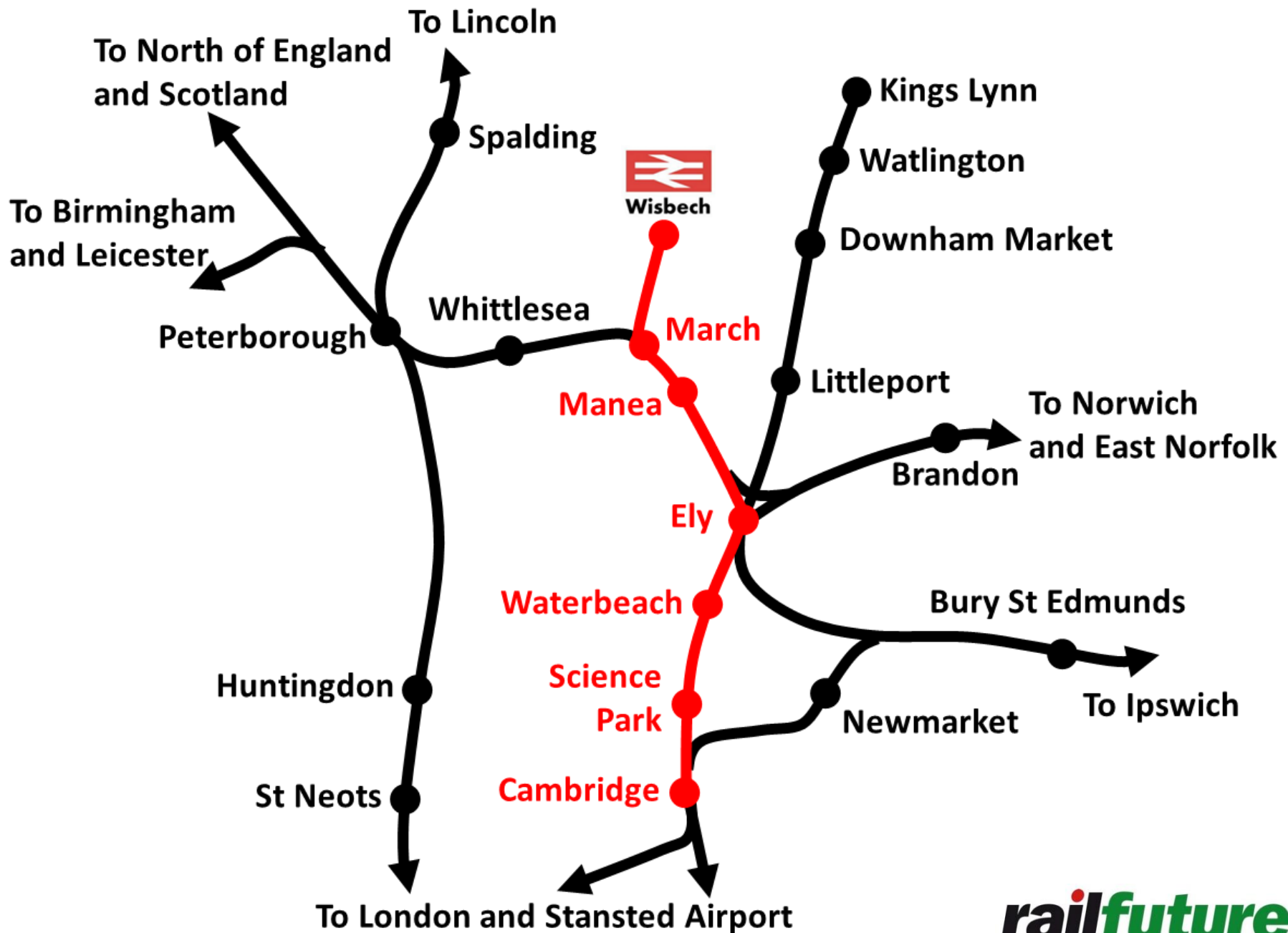


Multi-Mode: Areas within a 15 minute walk from a railway station

4 A tour of the rail network and projects deliverable in the short to medium term

March and Wisbech via Ely

- Current
 - An hourly service. Short trains overcrowded in the peaks
 - Operated as a long distance service so unsuitable for needs of local Cambridge passengers
 - Last train from Cambridge to March at 21:01
 - No service from March to Wisbech (line mothballed)
- Planned or easy improvements
 - Provide trains from Cambridge to March until 23:00
- Medium term
 - Manea Park and Ride for Chatteris. Larger car park at March
 - Reopen the line to Wisbech with a half hourly service linking Wisbech, March and Manea with the Cambridge area



Wisbech rail reopening proposal

Kings Lynn via Ely

- Current
 - Hourly service from Kings Lynn to Cambridge
- Planned or easy improvements
 - Kings Lynn to Cambridge will increase to half hourly all day from 2016
- Medium term
 - Larger car parks
 - Longer platforms to enable 8 car trains to run

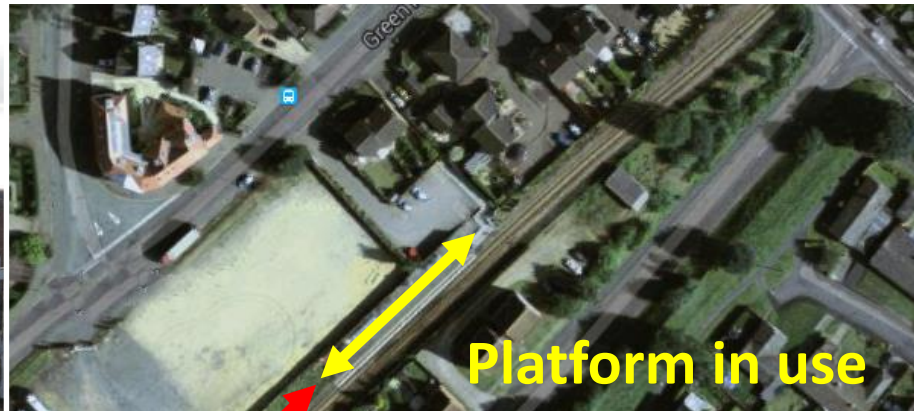
Norwich via Ely

- Current
 - Hourly service from Norwich to Cambridge
- Planned or easy improvements
 - Increase frequency from Norwich to Cambridge to half hourly
- Medium term
 - Electrification and longer trains
 - Large car parks at designated stations and develop these as Park and Ride

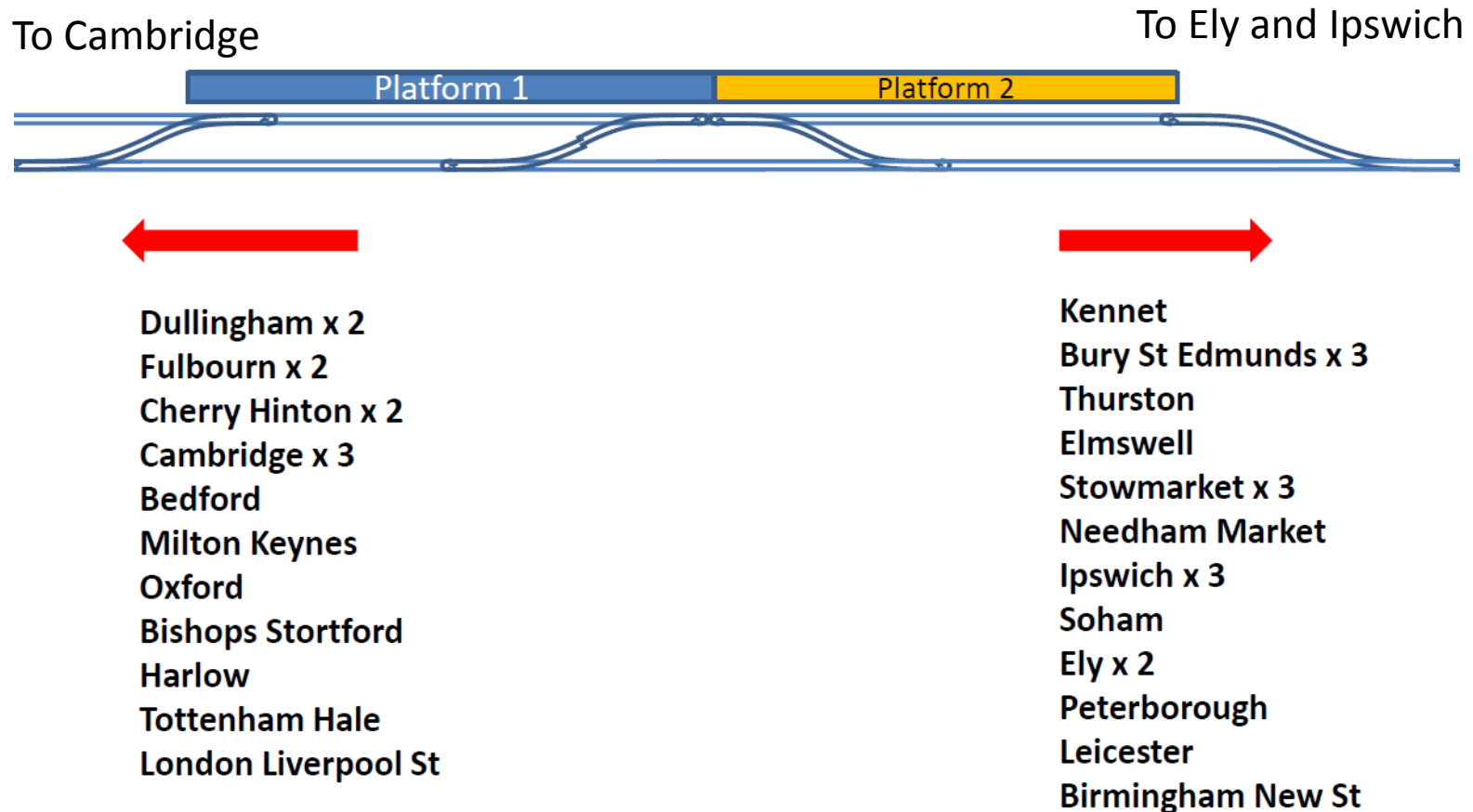
Newmarket

- Current
 - Hourly service of short trains. Poor station facilities and parking at Newmarket station
- Planned or easy improvements
 - The line will be doubled from Ely through Soham in 2018
 - Reopen Soham station (the line doubling makes provision for this)
 - Ensure adequate car parking
- Medium term
 - Reinstate the chord near Newmarket for direct trains from Soham to Newmarket and Cambridge
 - Double track from Cambridge to Newmarket and electrify all the lines in the Peterborough, Ely, Cambridge, Ipswich corridor
 - 2 or 3 trains an hour from Cambridge to Newmarket
 - Ensure adequate Park and Ride facilities at Newmarket and Kennett

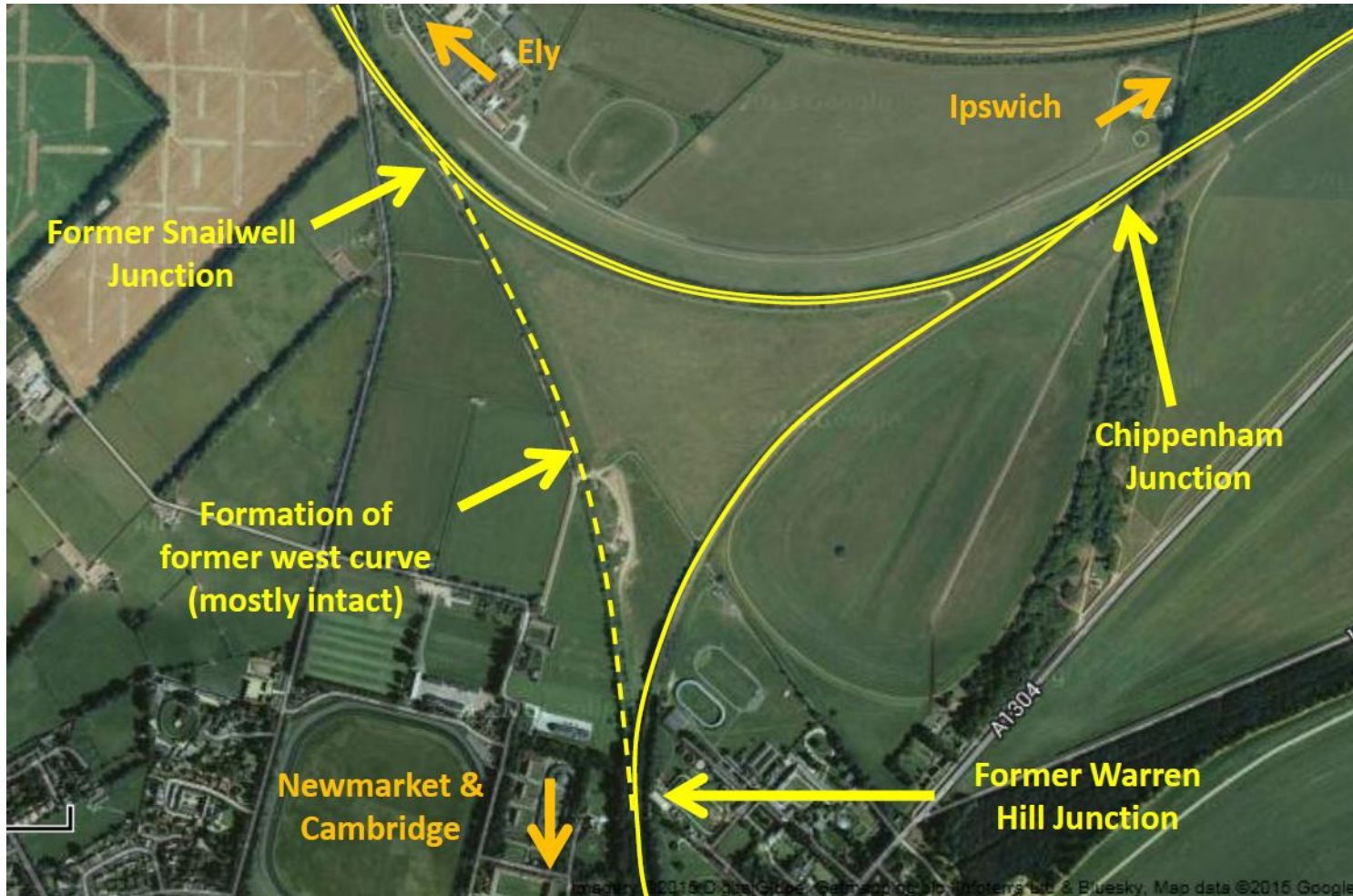
Newmarket Station



Double track to Newmarket Station



Newmarket West Curve



Audley End

- Current
 - 3 trains per hour
- Planned or easy improvements
 - Ensure the trains are timetabled to be evenly spaced
 - Increase frequency at Audley End to 4 trains per hour, 2 to Stansted and 2 to London

Royston

- Current
 - Half hourly service from Royston to Cambridge
 - All trains serve Meldreth, Shepreth and Foxton during the peak, but only served hourly during the daytime
- Planned or easy improvements
 - Thameslink from 2018 with 4 trains an hour from Royston to Cambridge, 2 being extended to Cambridge North
 - Ensure that 2 trains an hour serve Meldreth, Shepreth and Foxton all day
- Medium term
 - Adequate Park and Ride parking at designated stations for Cambridge flow
 - Plan for all trains to serve Cambridge North station

Cambridge stations

- Planned or easy improvements
 - Cambridge North station due to open in 2016
 - Cambridge station; provide pedestrian entrance from east side from Leisure Park area via footbridge
- Medium term
 - Open station at Addenbrooke's concurrently with East West Rail
 - Reopen stations at Cherry Hinton and Fulbourn
 - Open a new station at Coldhams Lane if needed to support local housing developments

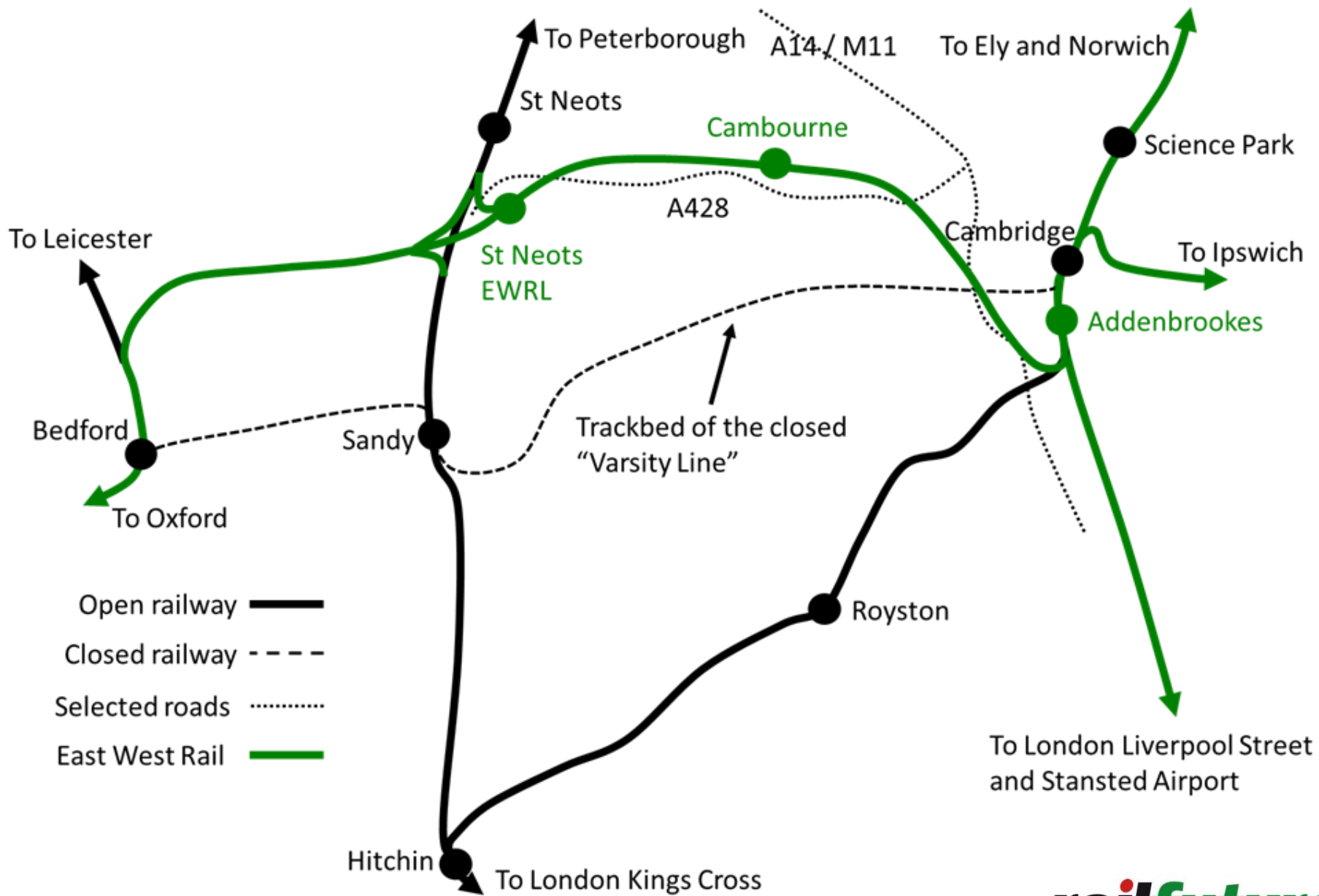
Why Cherry Hinton and Fulbourn?

- Cherry Hinton
 - Within 5 mins of Cambridge station by train
 - Centre of densely populated area
 - Within 10 mins walk of ARM Holdings and other companies totalling 3000 employees
 - Envisage only cycle parking. No car parking. Walking main mode
- Fulbourn
 - Not original site
 - Nearer to Teversham Drift close to redevelopments around former medical sites

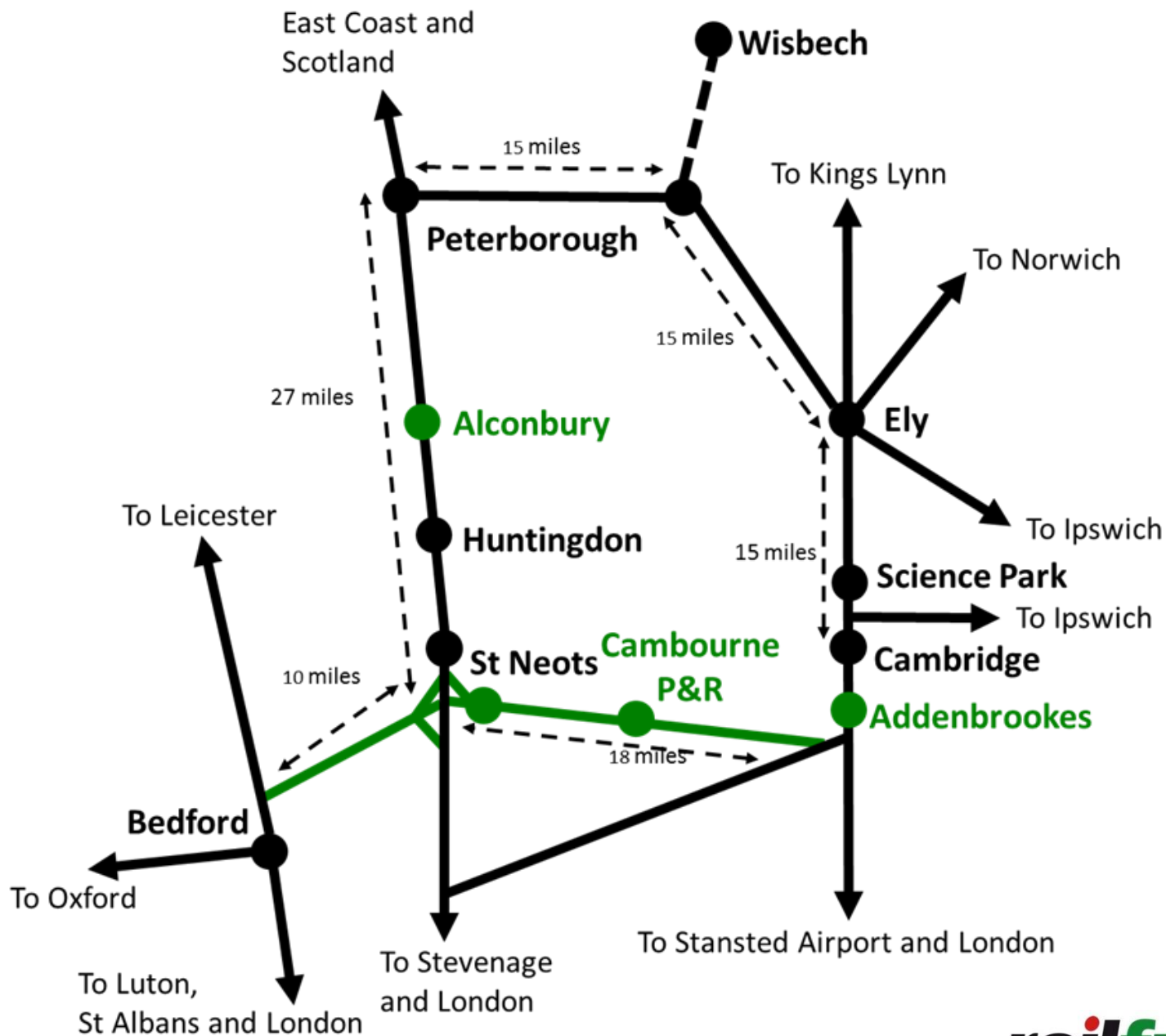
5 Rail projects deliverable in the medium to longer term

East West Rail via St Neots

- Current
 - No service or existing railway
- Medium term
 - Fast direct train could be provided by East West Rail
 - Possible intermediate stations at Cambridge or A1198 parkway depending on the route selected



East West Rail proposal



Links to East West rail in Cambridgeshire

Haverhill

- Current
 - No service. Line closed in the 1960s
 - Reopening campaign and petition
www.railfuture.org.uk/East+Anglia+Haverhill
- Medium term
 - Reinstate the line from Haverhill with a direct half hourly service to Cambridge



Haverhill rail reopening proposal

Felixstowe to Midlands freight, and East Anglia Electrification

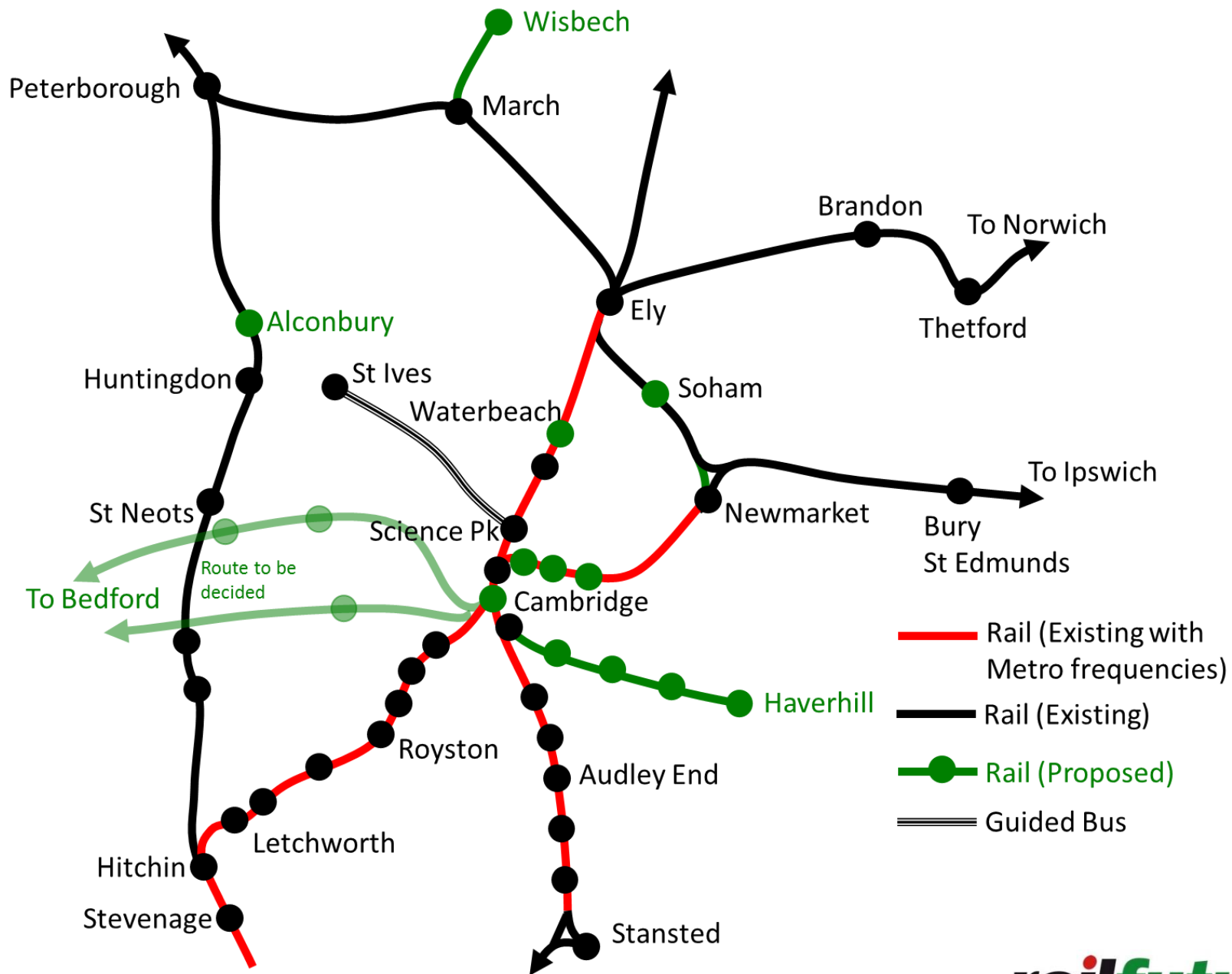
- Major freight route from Felixstowe to the Midlands allowing containers to bypass the A14
- Felixstowe branch needs doubling to allow more trains to operate
- Line through Soham to be doubled
 - including provision for a reopened station at Soham
- Electrification
 - Benefits freight and allows the transformation of passenger services
 - Initially Ipswich to Peterborough and Cambridge including branch to Wisbech
 - Followed by Ely to Norwich

7 Making rail travel more attractive for local commuting

Attracting passengers

- Step free access
- Parking at the right price
- Interchange and connections with bus services
- Cycle parking and cycles routes focussing on the station
- Cycle hire
- Welcoming station environment
- Multi-mode ticketing
- Stations as a community hub

8 End goal of a fully flexible
multi-mode passenger
transport network

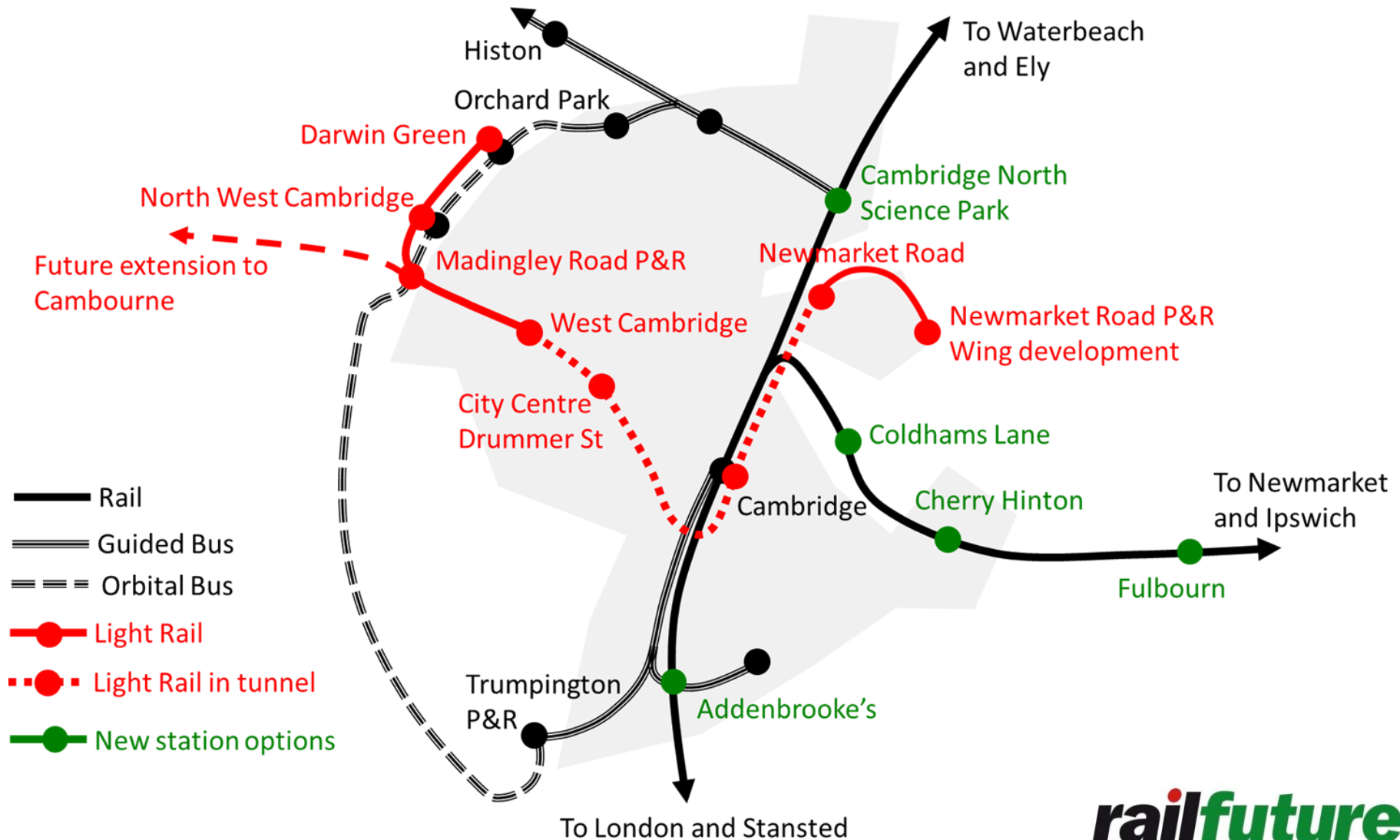


Cambridgeshire future railway network



Rail Network shown the Cambridgeshire County Council Local Transport Plan

Light Rail? Let's start planning for the future

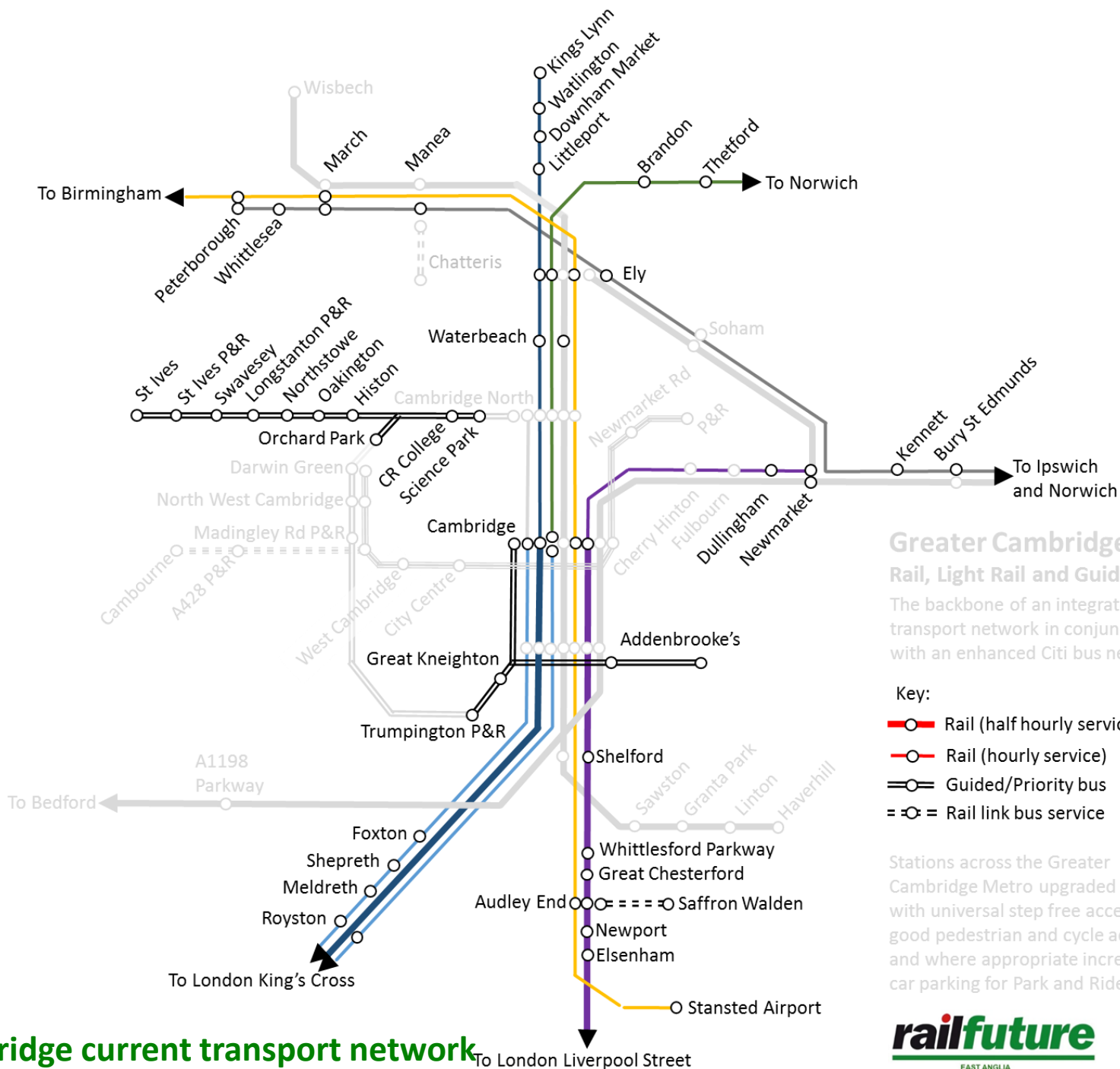


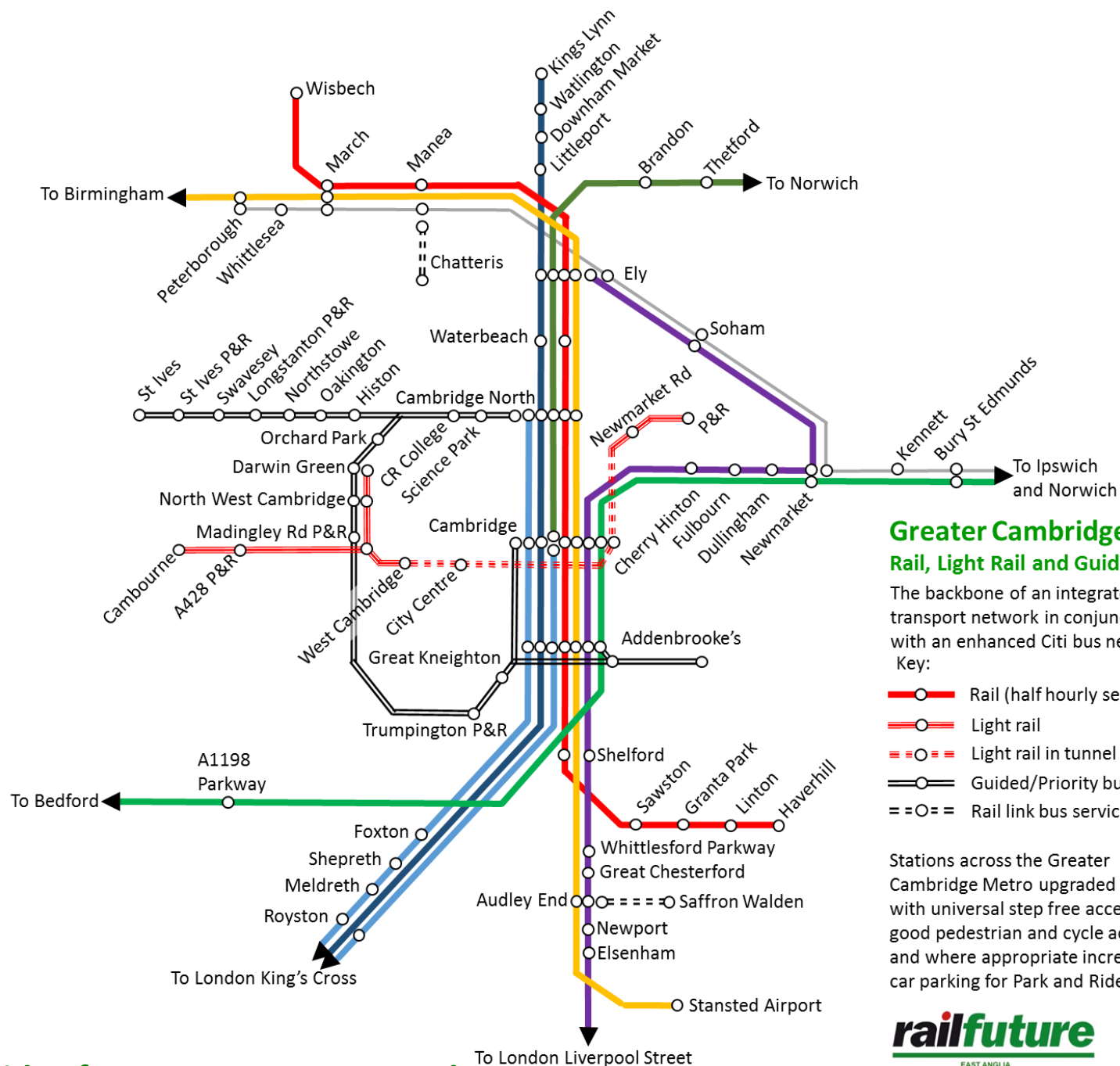
Light Rail for Cambridge

- The city will continue to grow
 - Pressure will be become acute on the city centre
 - Tourism, Leisure, Retail and Work places
 - Light Rail will support all these in a sustainable way, in a quality way.
- World Heritage Centre
 - University College Buildings unique; cannot be physically disturbed
 - Vehicles including buses are becoming part of the problem
 - A vibrant busy living place
- City Edge Growth Settlements
 - North West Cambridge, West Cambridge, Wing etc
 - Can be connected to City Centre within 10 minutes
- City Centre station
 - Drummer Street area
- Connecting Transport Hubs
 - Madingley Road Park and Ride
 - Bus station
 - Cambridge railway station (giving connections to many other local and national destinations)
 - Newmarket Road Park and Ride

Light Rail for Cambridge

- Map shows indicative route only
 - Surface line from Darwin Green through North West Cambridge to Cambridge University West Site
 - Tunnel from starting near Cambridge University West Site to a station in the Drummer Street area then to Cambridge station with tunnel continuing to a Newmarket Road portal near the Cambridge United football ground.
 - Surface route continuing along the former Burwell railway route to Park and Ride and housing developments e.g. Wing
 - Note: Should not street run for the most part. Tunnelling should avoid going under historic buildings
- Potential for extension:
 - Alongside A428 to Cambourne and new A428 Park and Ride
 - Along Busway to Northstowe, St Ives, Addenbrookes / Trumpington. Converting the busway to Light Rail will double capacity
- Cost:
 - Current cost of UK Light Rail schemes approx £30m per mile. Less if no street running as moving services very expensive
 - Tunnelling will be more expensive but essential for the city centre section
 - Plan now for future route and safeguard it





Further Reading

Railfuture East Anglia Cambridge City Deal

www.railfuture.org.uk/East+Anglia+Cambridge+City+Deal