



**GREATER
CAMBRIDGE
PARTNERSHIP**

Growing and sharing prosperity
— Delivering our City Deal —



South Cambridgeshire Parish Council Forum

27 November 2018



Key City Deal Commitment

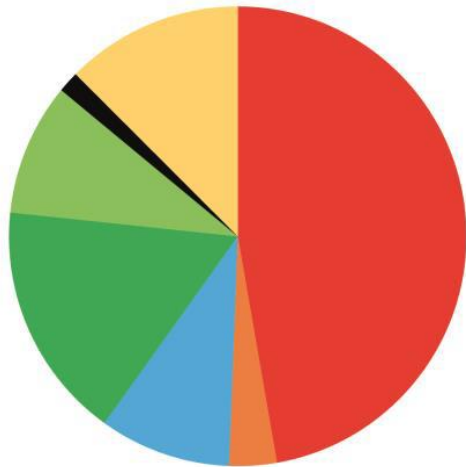
- 10-15% reduction in vehicles from 2011 figure
- Equivalent to a 24% reduction today
- Continued growth increases the challenge
- In addition, since the deal air quality has become a more prominent issue

CPIER Recommendation #7

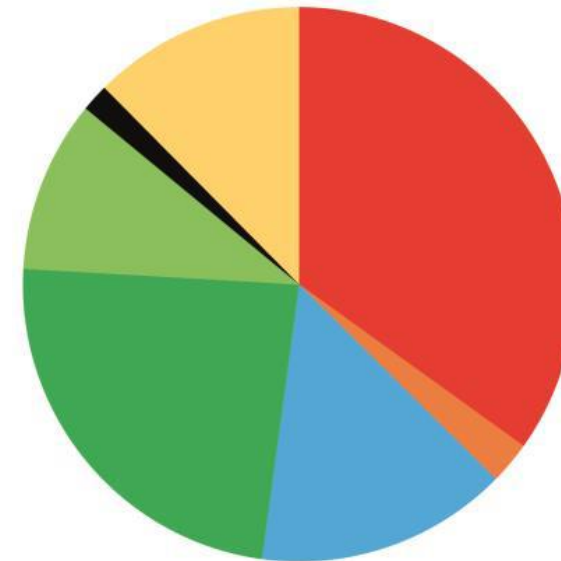
“A package of transport and other infrastructure projects to alleviate the growing pains of Greater Cambridge should be considered the single most important infrastructure priority [...] in the short to medium term”.

Significant growth of cycling, walking and use of public transport is required

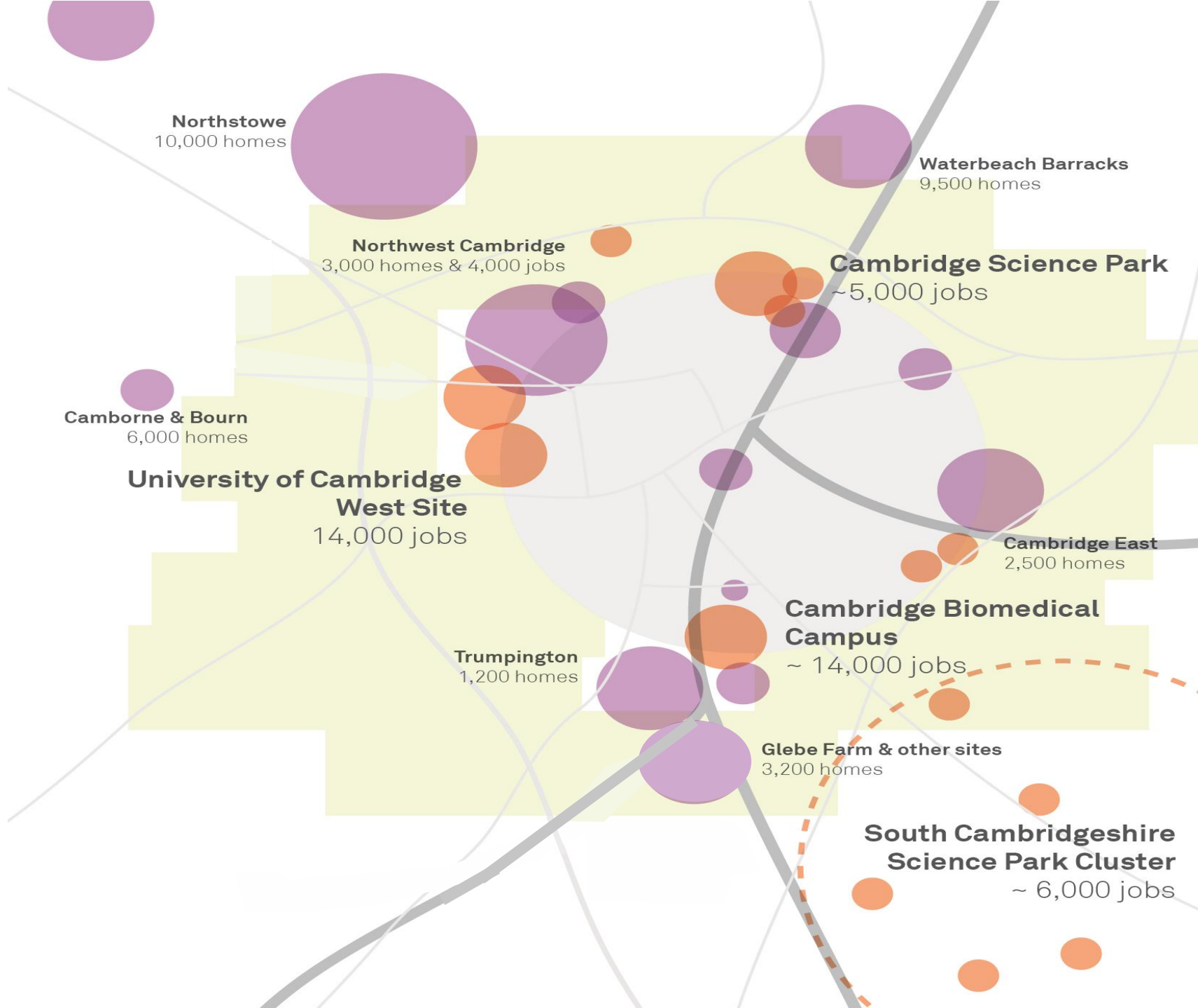
2011
88,000 jobs in Greater Cambridge



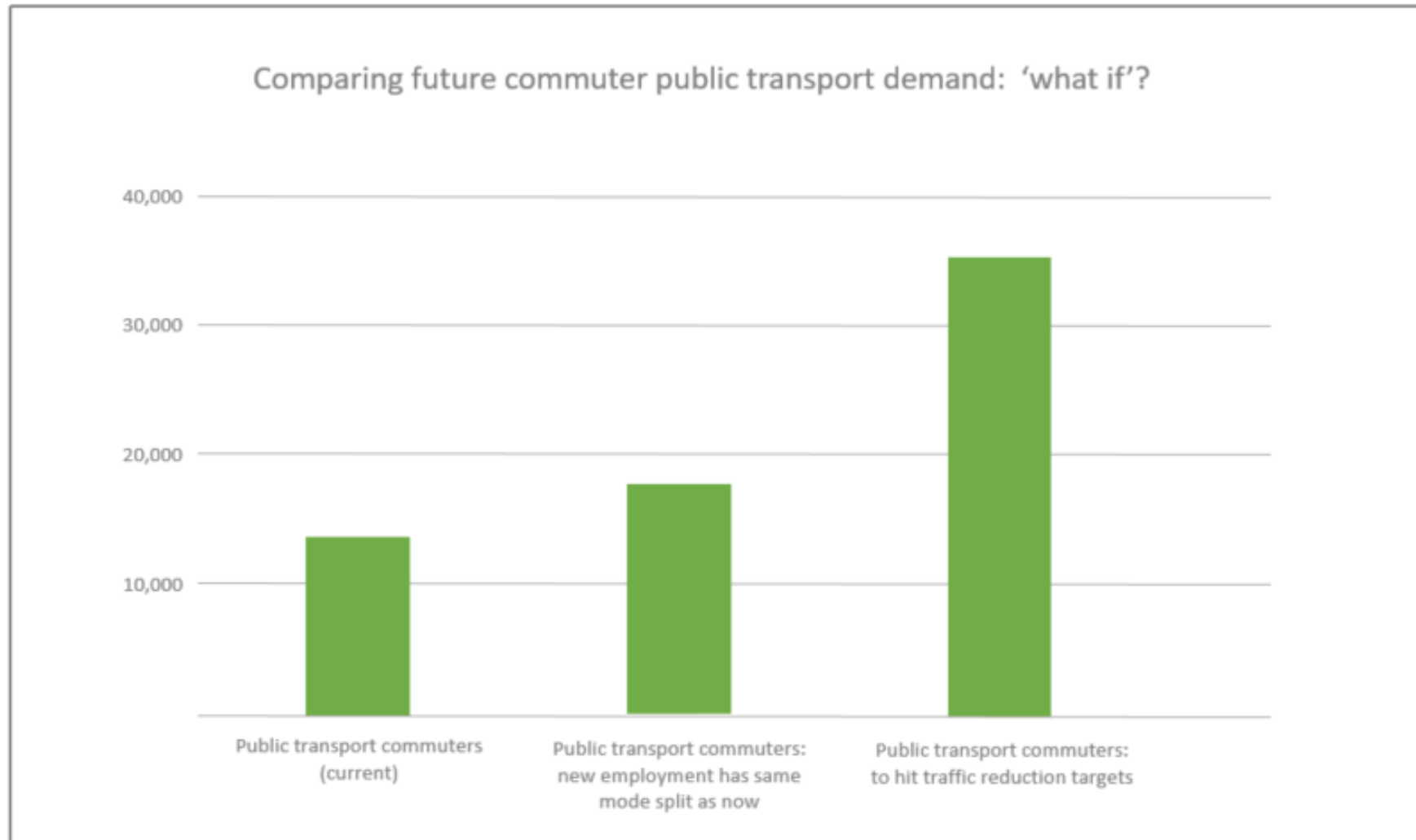
2031
132,000 jobs in Greater Cambridge



- Car driver
- Car passenger
- Public transport
- Bike
- Walk
- Other
- Work at home



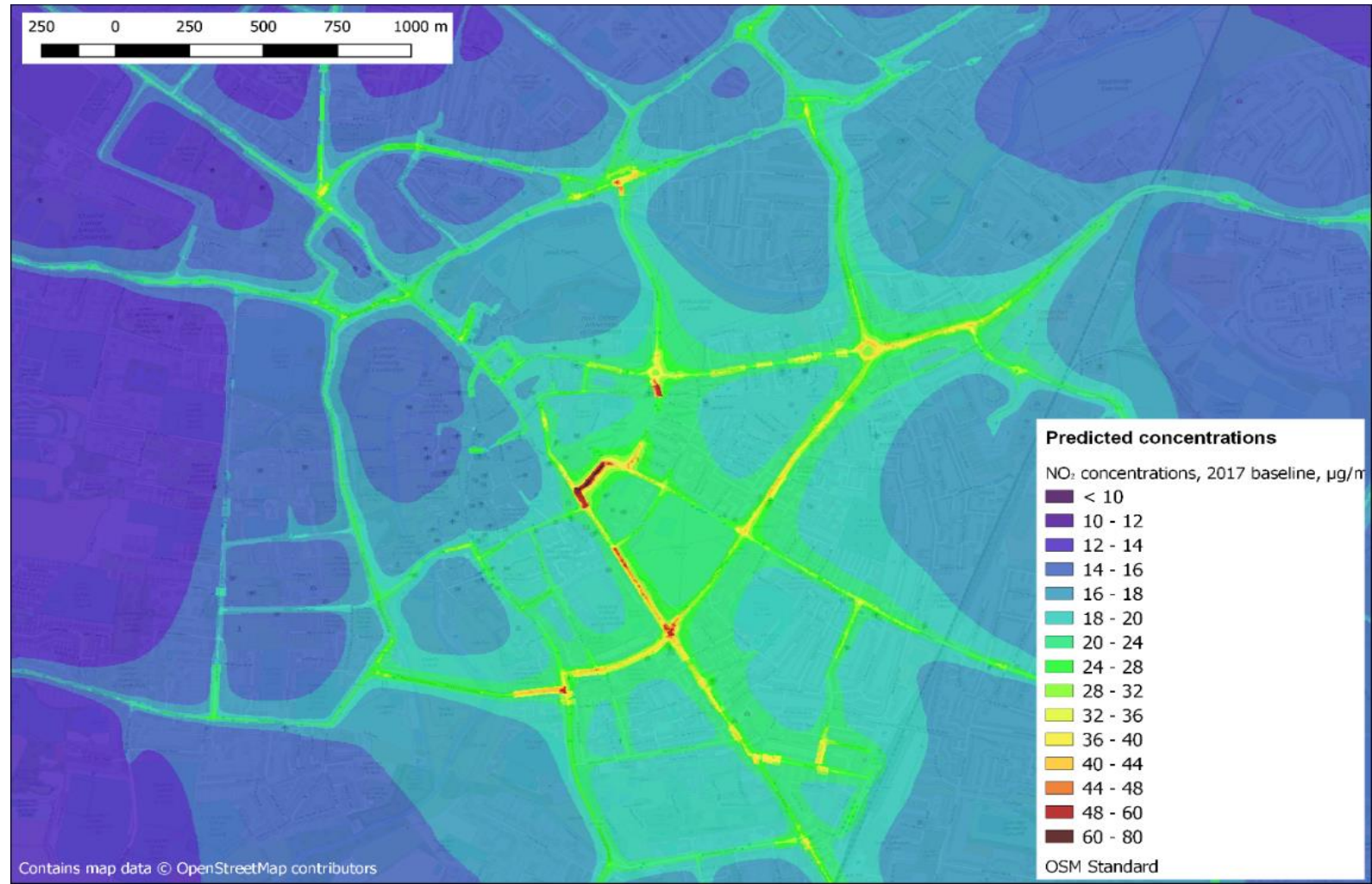
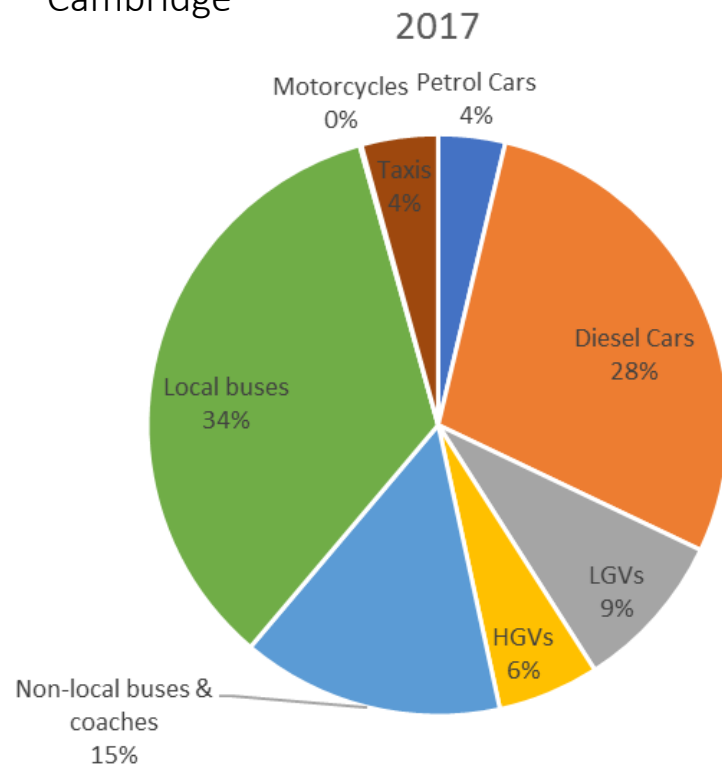
44,000 more jobs: implications for public transport



Air quality affects life expectancy

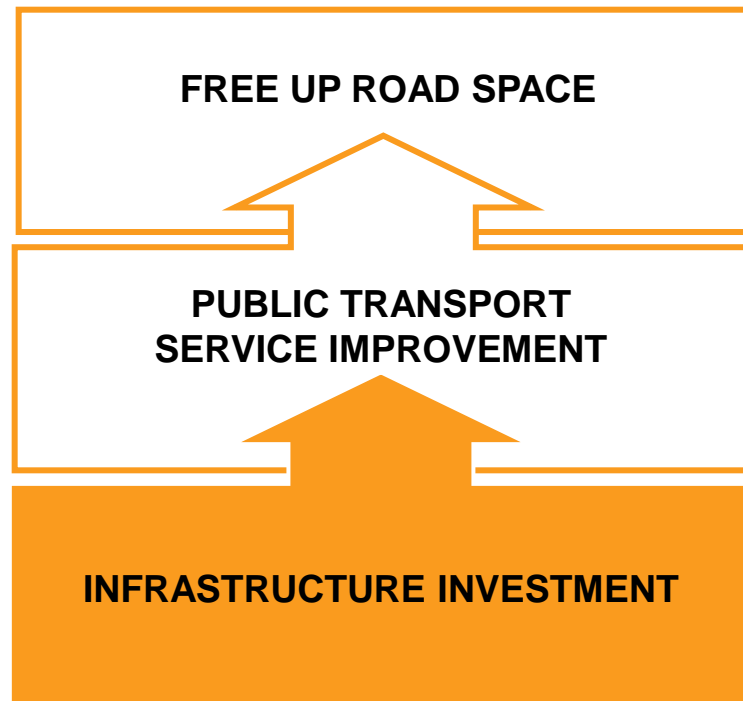
Around 100 deaths in Greater Cambridge per annum attributed to poor air quality**

Vehicles contributing to high NO₂ levels in Cambridge



** this figure is an approximation and further analysis is ongoing

Our strategy to deliver a world class public transport system has three parts:



This will deliver:

Rapid mass transit will connect communities with key employment locations. Services will be frequent, fast and segregated where possible.

26,000+ commuters will have public transport as their most competitive journey option.

50% of commuter routes with more than 500 journeys/day will have public transport as their most competitive journey option

The offer:

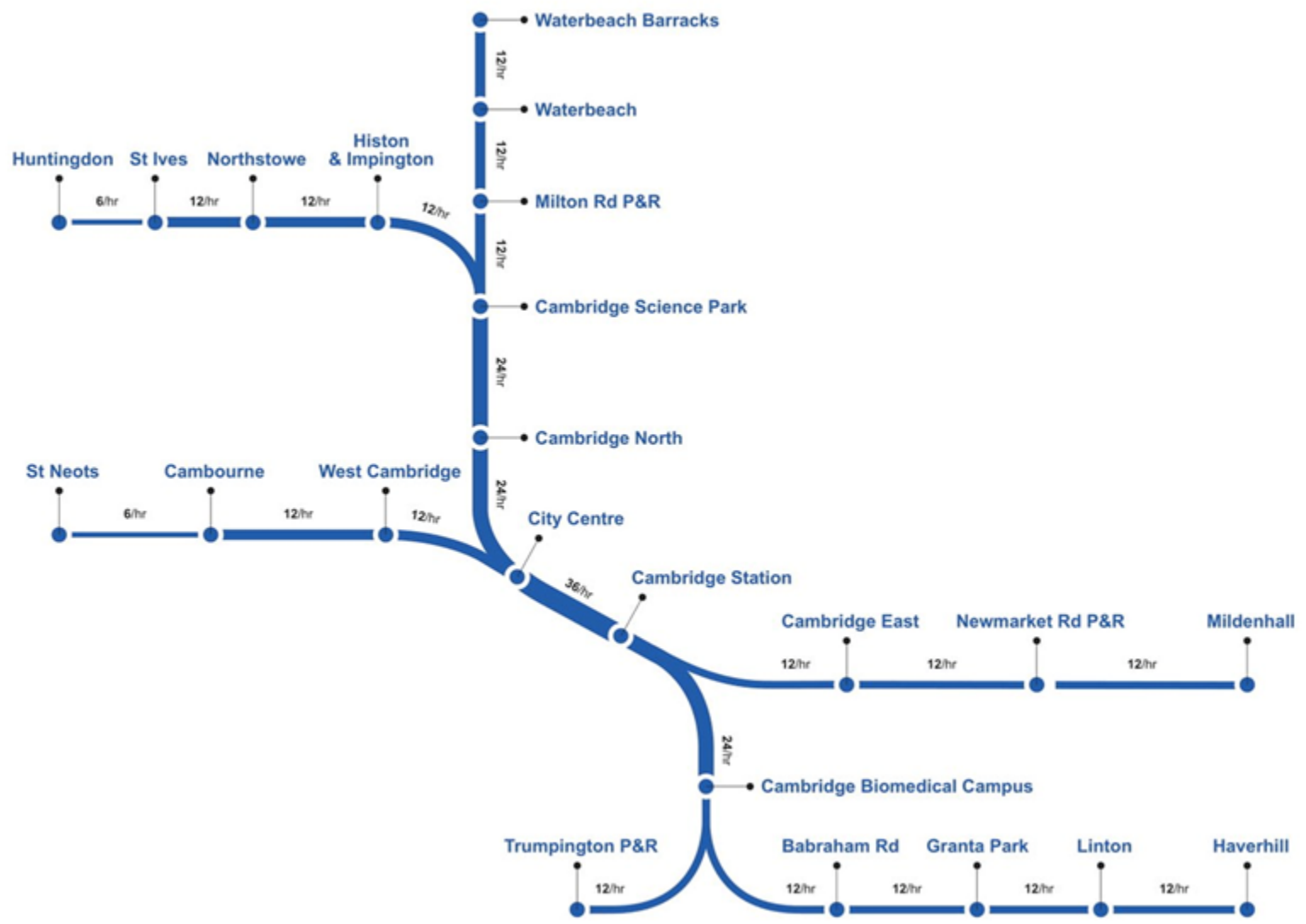
- CAM routes linking job growth locations with housing growth locations
- Milton and Histon Road upgrades to improve cross-city journeys
- Relocated Waterbeach station
- Rural travel hubs
- Walking and cycling improvements

A world class public transport system for Greater Cambridge will:

- Offer a genuinely competitive alternative to car
- Be rapid, reliable and, where possible, segregated from cars
- Integrate bus, rail, mass transit, walking and cycling (physically, timetable, ticketing, information)
- Focus on better serving employment locations outside the city centre, with a wider journey to work geography
- Be affordable, feasible to deliver, and can be sustained

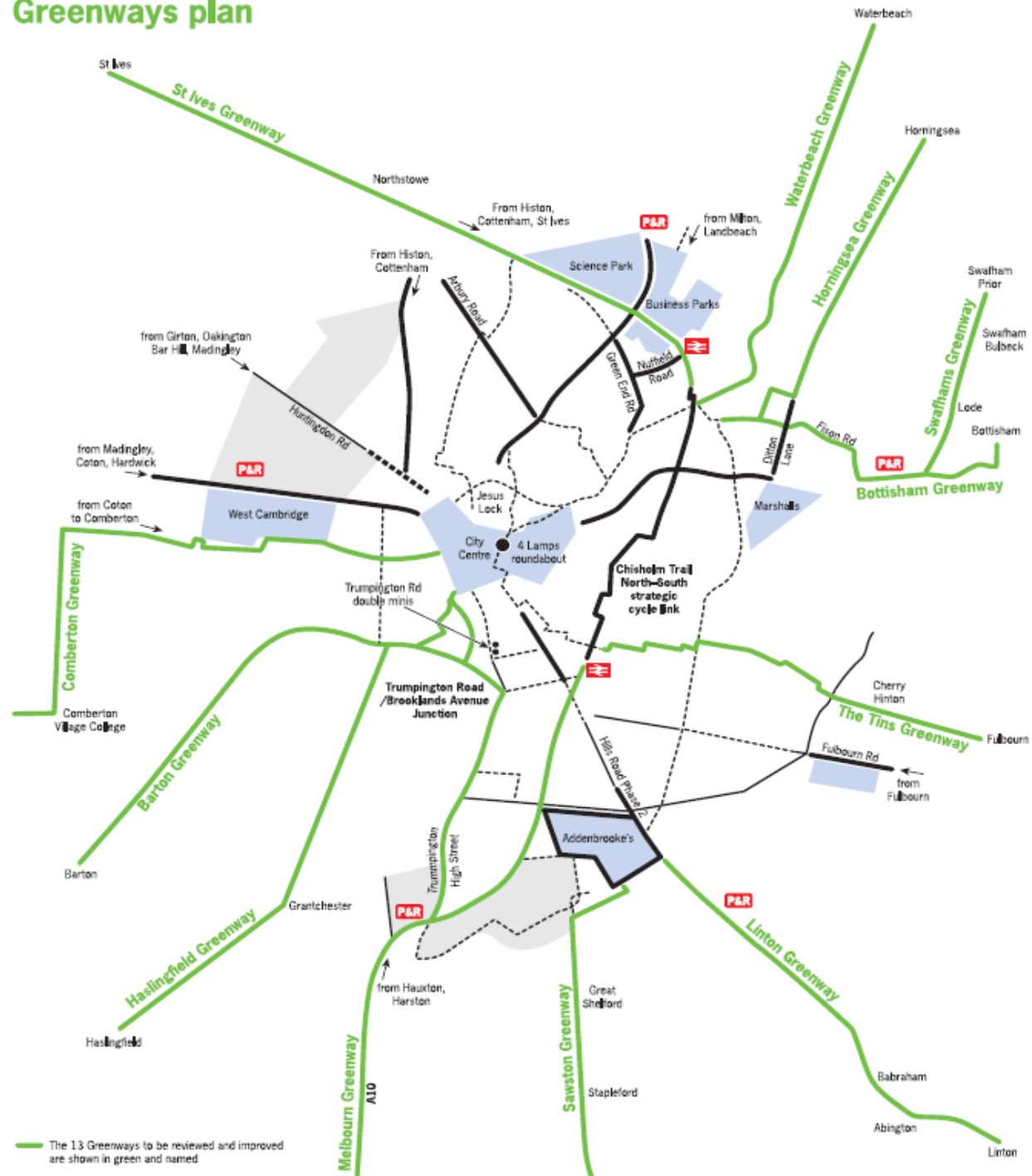


Cambridge Autonomous Metro

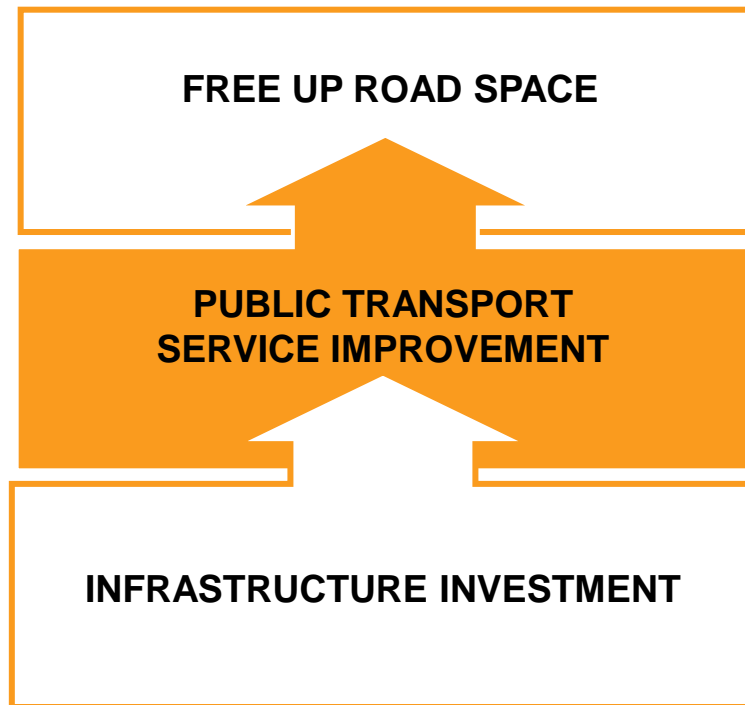


Cycling

Greenways plan



Our strategy to deliver a world class public transport system has three parts:



This could deliver:

Competitiveness analysis suggest we need to double public transport capacity by 2031 to accommodate growth, support modal shift and reduce congestion

38,000+ commuters will have public transport as their most competitive journey option.

73% of commuter routes with more than 500 journeys/day will have public transport as their most competitive journey option

Indicative allocation of £20m – to support targeted service improvements on most important current and future routes

The offer:

- Integrated route planning, information and ticketing.
- Faster trips through the city.
- More frequent services
- Priority through traffic signals and segregated lanes.
- Feeder services for mass transit.

Journeys now and in the future

- **Waterbeach to CBC (7.5-10 miles depending on route)**

Today	Future services (07:30 to 08:30)
Two services (07:30 to 08:30) with 1 change	Four services (two direct + two requiring one change)
Timetabled – > 50 mins travel time (inc 5-10 mins transfer)	< 25 minutes
Actual – 54-73 mins travel time (inc 5-20 mins transfer)	

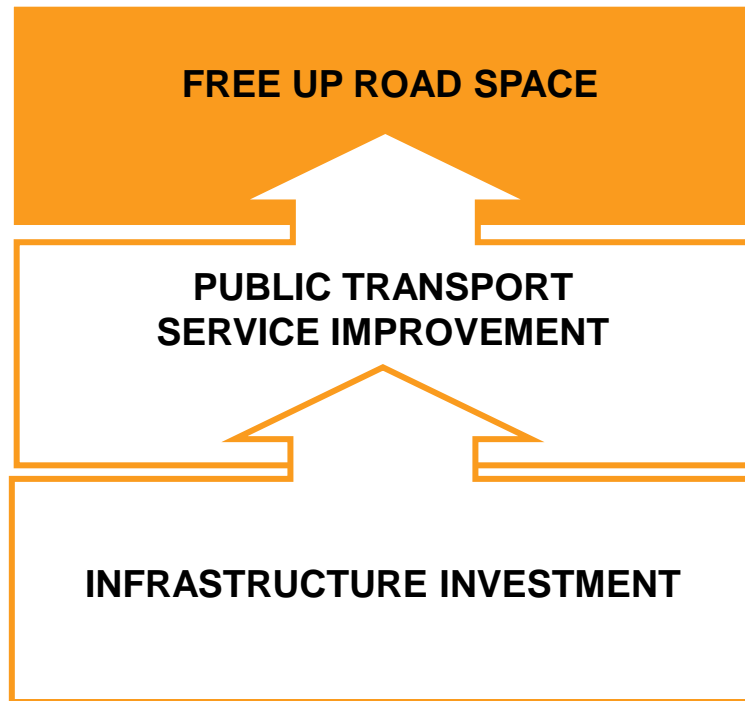
- **Haverhill to West Cambridge Site (23-30 miles depending on route)**

Today	Future services (07:30 to 08:30)
Two services (07:30 to 08:30) requiring 1 change	Six services (two direct + four requiring one change)
Timetabled – 80 mins travel time (inc 10-20 mins transfer)	< 50 minutes
Actual – 94-128 mins travel time (inc 8-29 mins transfer)	

- **Cambourne to the Science Park (around 12 miles)**

Today	Future services (07:30 to 08:30)
Four services (07:30 to 08:30) requiring 1 change	Four services (two direct + two requiring one change)
Timetabled – > 60 mins travel time (inc 10-15 mins transfer)	< 30 minutes
Actual – 80-110 mins travel time (inc 5-20 mins transfer)	

Our strategy to deliver a world class public transport system has three parts:



This could deliver:

- Reallocation of road space to allow bus time improvements to be achieved. Options include:
 - Parking restrictions
 - Physical measures to discourage traffic from key routes
 - Various options for price-based mechanisms (parking charges, workplace parking levy, intelligent charging etc)

- 45,000+ commuters will have public transport as their most competitive journey option.

- 85% of commuter routes with more than 500 journeys/day will have public transport as their most competitive journey option

- Estimated 24% or more reduction of car demand achievable.

- Potential net revenue streams of £40-£60m annually.

The offer:

- Improved air quality in city centre
- Faster, more reliable journey times
- Improved public realm – road space allocated to walking, cycling and other uses

Demand management – options and potential impact

Demand management mechanism	Estimated car traffic reduction	Preliminary estimated annual net revenue
Physical measures - targeted closures	Displacement only	None
Off street parking charges +£5 per use	4%	Potentially ~£16 million
Workplace Parking Levy £1,000 annually	2%	~£13 million
Pollution charging Cars not meeting electric criteria Variable charge rates from £1 to £10.	Meets 24% target by 2025, not sustained	~£40 million not sustained
Intelligent charging Variable charge rates from £1 to £10	Meets/exceeds 24% target by 2025, sustained until 2031	~£40 million
Explore other non-transport revenue sources		Potential revenue

Comparative Analysis of Car and Public Transport

Now

From/To	Cambridge CC	Addenbrooke's / CBC	Cambridge SP	Cambridge Airport	Cambridge West	Cambridge Station
North West Cambridge	-37%	-5%	-4%	-5%	-20%	-15%
Cambourne	24%	61%	91%	66%	42%	47%
Trumpington	0%	-11%	39%	56%	24%	14%
East Cambridge	-25%	24%	4%	-57%	30%	4%
Waterbeach	84%	151%	98%	161%	157%	80%
Northstowe	2%	12%	16%	19%	8%	14%

1. With GCP public transport routes

From/To	Cambridge CC	Addenbrooke's / CBC	Cambridge SP	Cambridge Airport	Cambridge West	Cambridge Station
North West Cambridge	-37%	-5%	-4%	-5%	-20%	-15%
Cambourne	-18%	13%	26%	18%	-3%	7%
Trumpington	0%	-11%	39%	56%	24%	12%
East Cambridge	-25%	24%	4%	-57%	30%	4%
Waterbeach	26%	38%	35%	88%	48%	7%
Northstowe	-10%	-10%	-8%	-2%	-5%	-5%

2. With GCP public transport routes + public transport service improvements

From/To	Cambridge City Centre	Addenbrooke's Hospital / CBC	Cambridge Science Park	Cambridge Airport	Cambridge West	Cambridge Station
North West Cambridge		-20% (-14%)				
Cambourne	-18% (-37%)	-12% (-51%)	-7% (-62%)	-2% (-46%)	-8% (-43%)	0% (-29%)
Trumpington	-1% (-1%)		14% (-25%)	23% (-34%)	3% (-21%)	-2% (-16%)
East Cambridge	-37% (-12%)	9% (-15%)	-5% (-9%)		4% (-27%)	-6% (-10%)
Waterbeach	-1% (-36%)	-4% (-46%)	5% (-48%)	29% (-59%)	4% (-49%)	-5% (-12%)
Northstowe	-10% (-12%)	-18% (-31%)	-2% (-23%)	-2% (-21%)	-5% (-13%)	-5% (-19%)

3. With GCP routes, service improvements and demand management charges

From/To	Cambridge CC	Addenbrooke's Hospital / CBC	Cambridge Science Park	Cambridge Airport	Cambridge West	Cambridge Station
North West Cambridge	-54% (-17%)	-38% (-33%)	-28% (-25%)	-28% (-23%)	-43% (-23%)	-36% (-21%)
Cambourne	-35% (-53%)	-29% (-69%)	-28% (-83%)	-22% (-66%)	-30% (-65%)	-21% (-49%)
Trumpington	-27% (-27%)	-36% (-25%)	-13% (-52%)	-7% (-63%)	-24% (-48%)	-28% (-42%)
East Cambridge	-45% (-20%)	-20% (-44%)	-31% (-35%)	-70% (-13%)	-21% (-52%)	-31% (-35%)
Waterbeach	-23% (-53%)	-25% (-67%)	-23% (-76%)	-4% (-92%)	-19% (-73%)	-25% (-32%)
Northstowe	-30% (-32%)	-34% (-46%)	-29% (-45%)	-23% (-42%)	-26% (-34%)	-25% (-39%)