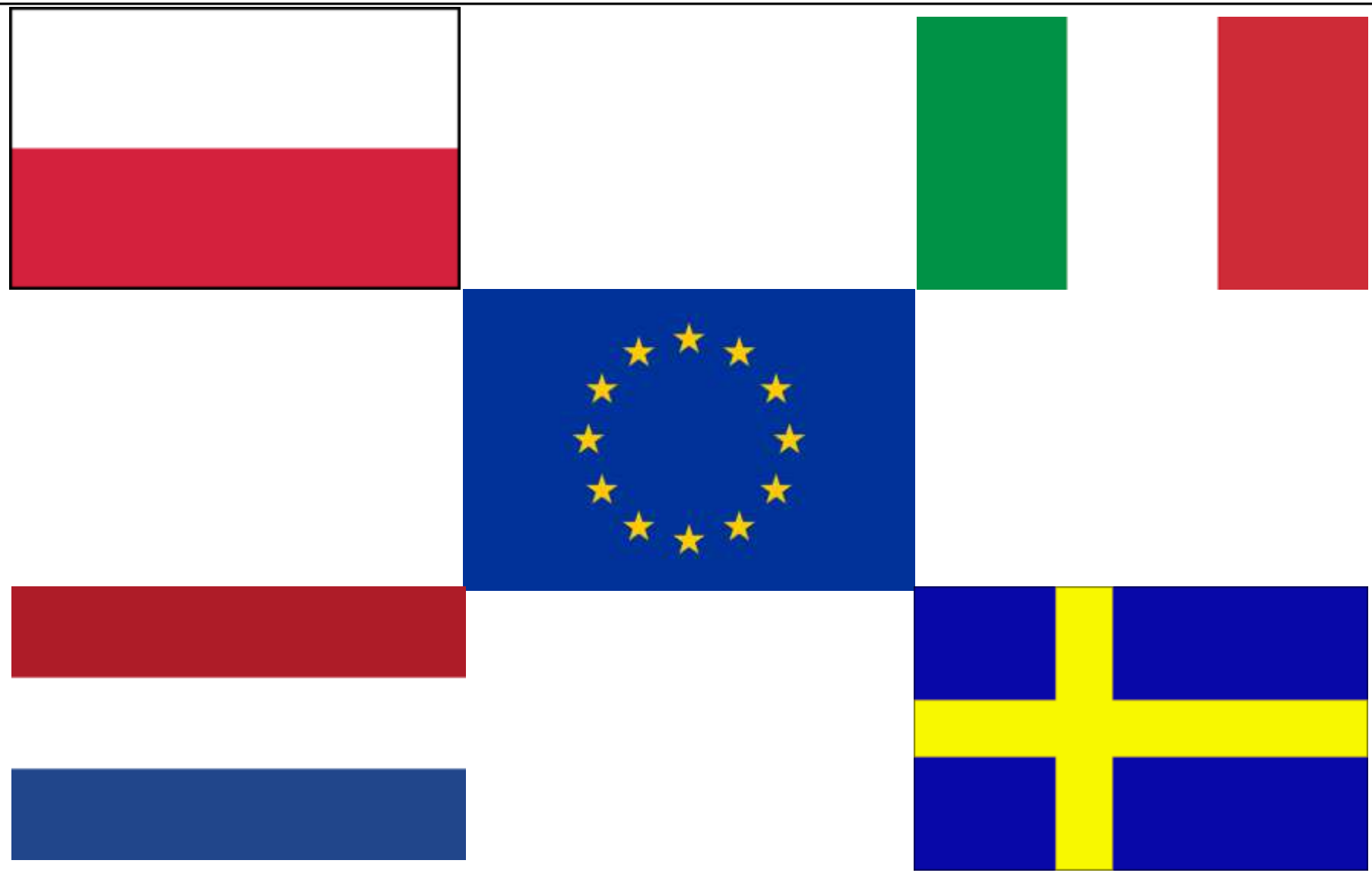
BUILD2LC
Interreg Europe

European Union
European Regional
Development Fund

Resolve Study Visit: Manchester

- 19th January | Greater Manchester Study Visit

Transport for Greater Manchester



BUILD2LC
Interreg Europe

European Union
European Regional
Development Fund

Resolve Study Visit: Manchester

Welcome to the Programme
Stephen Rhodes: Customer Operations Director

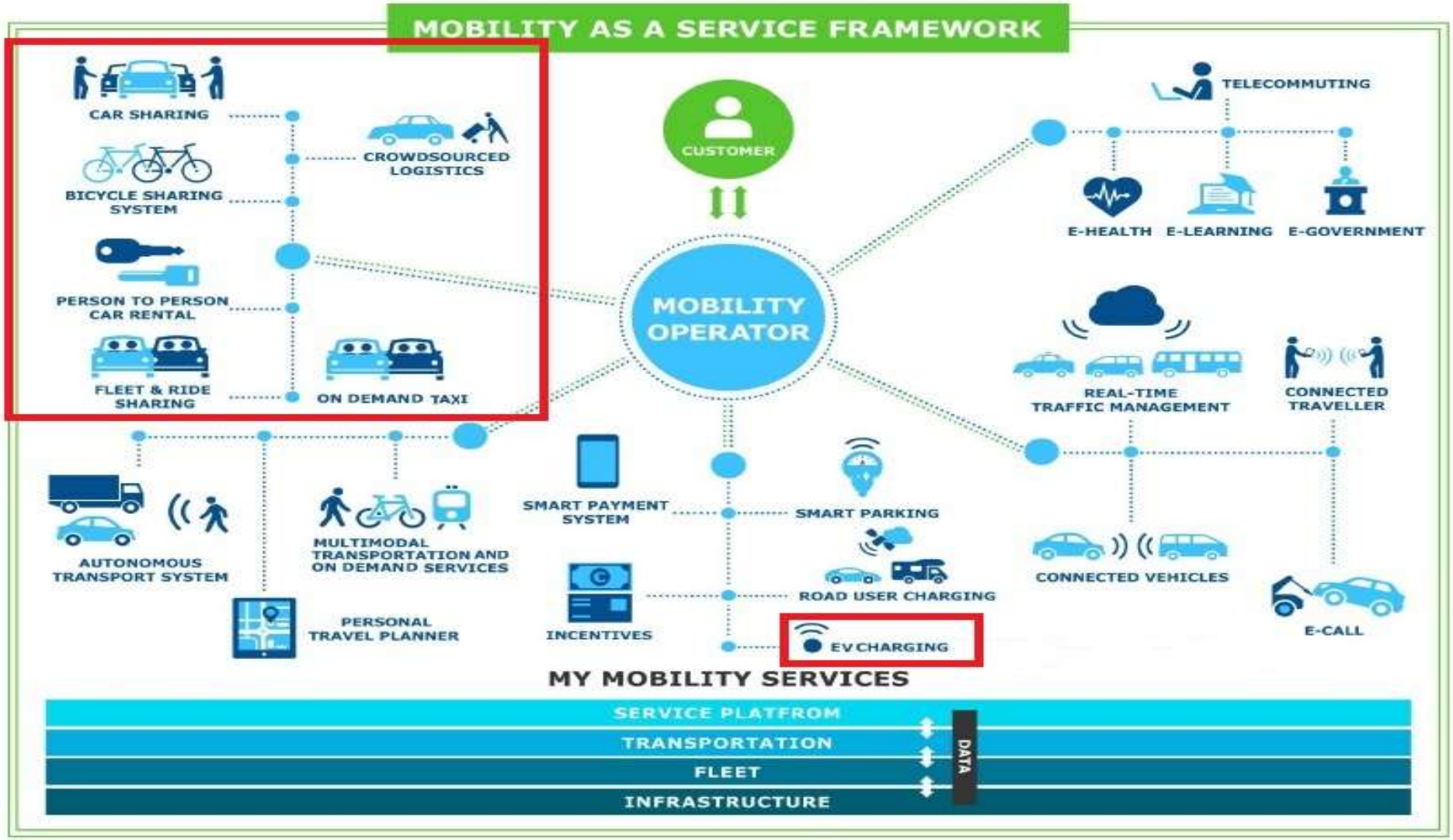
- 19th January | Greater Manchester Study Visit

Greater Manchester Electric Vehicle Charging Network - GMEV

David Bland – Highways Network Development Manager

Kevin Toye – Advanced Solutions Officer

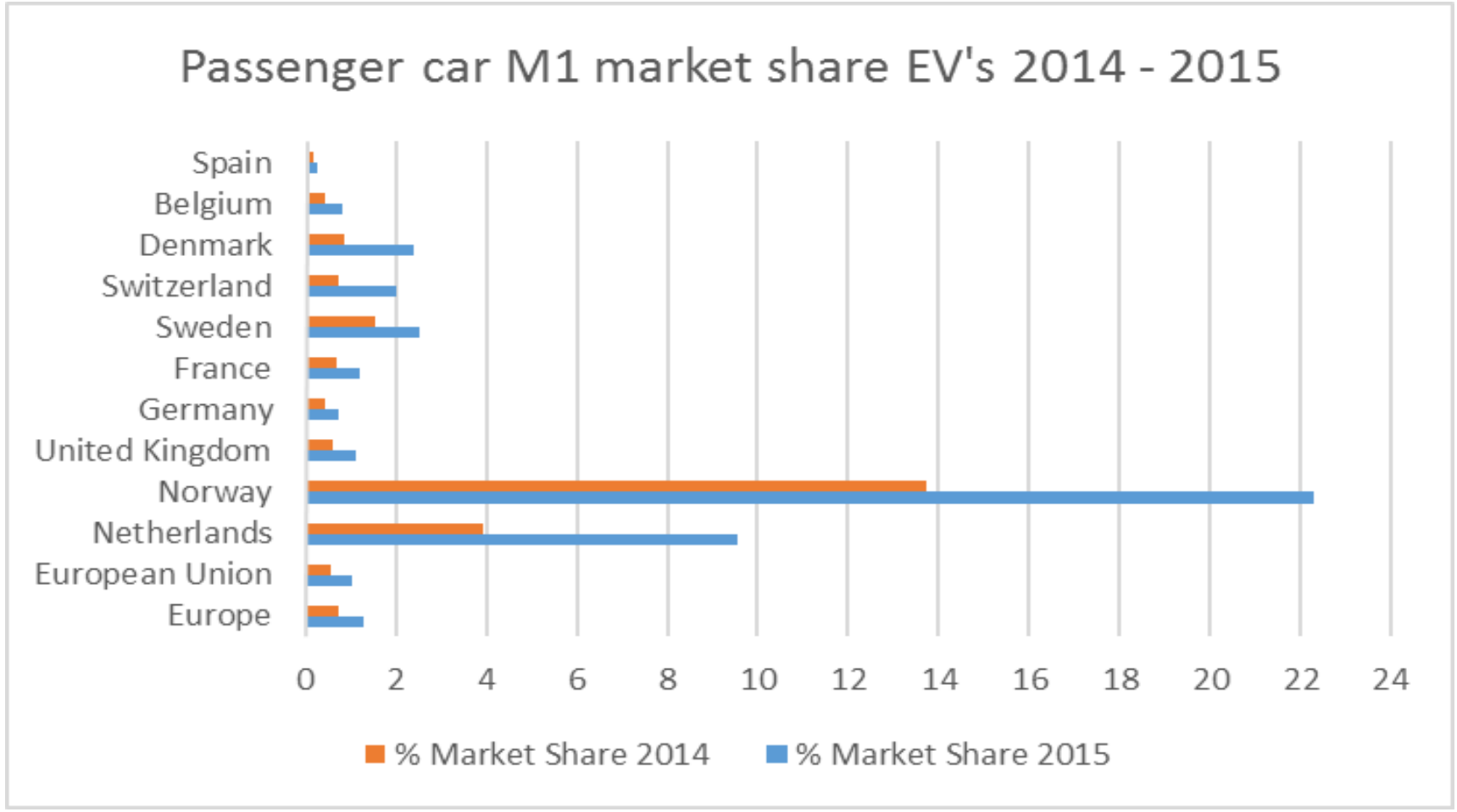
Development of Transport Eco-System



UK Ultra Low Emission Vehicle Ambitions

- Office of Low Emission Vehicles (OLEV) was established to kick-start growth in the electric vehicle market. Current UK objectives are set as;
- **every new car an ULEV from 2040** and an effectively **decarbonised fleet by 2050** to meet our Carbon Plan targets;
- a network of **supporting infrastructure** that ensures ULEVs are an attractive customer proposition;
- world class skills and facilities for the **development and manufacture of ULEV technologies, exporting vehicles globally**;
- a **smarter electricity grid** that maximises the benefits to vehicle owners and the electricity system from the shift to ULEVs; and
- All of the above combining to make the UK the best place in Europe.
- *(Driving the Future Today - A strategy for ultra-low emission vehicles in the UK. OLEV Sept 2013)*

UK position in EV Growth Market



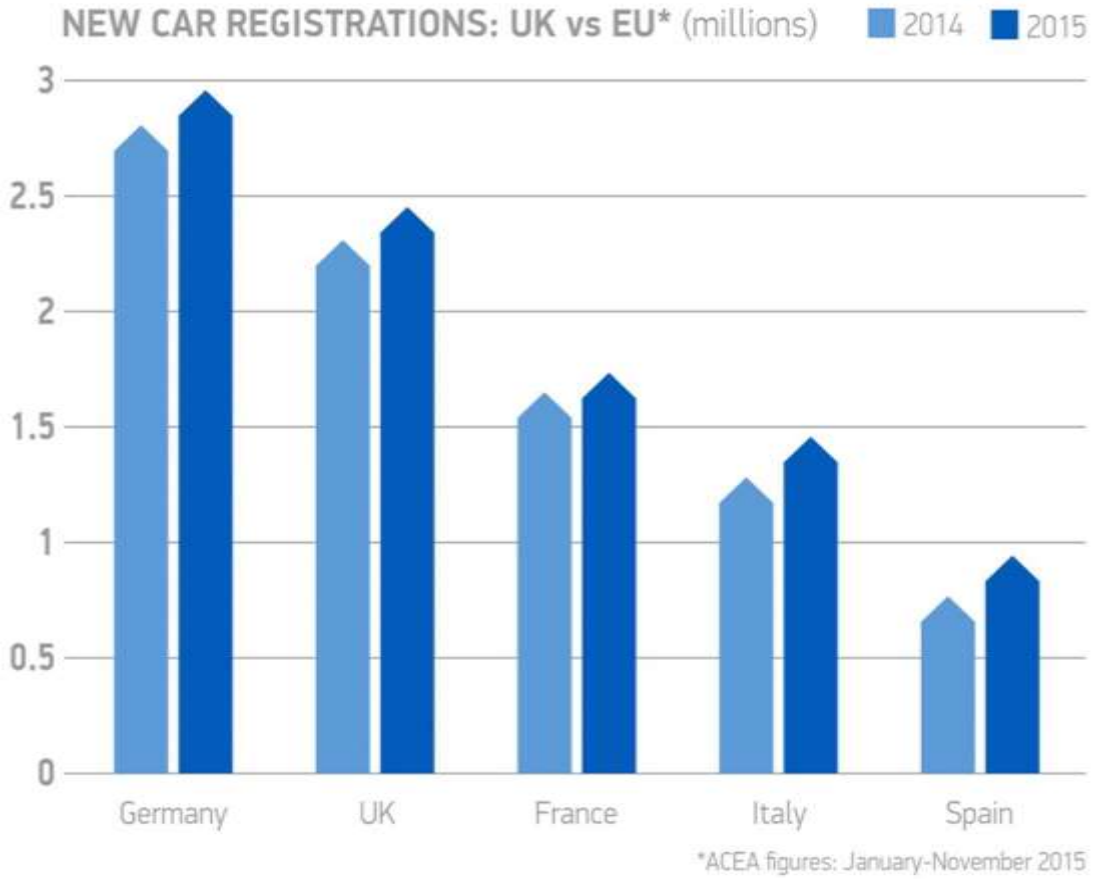
Transport for Greater Manchester

Main Challenge – Scale of UK Vehicle Market to switch to ULEV

United Kingdom	
All Vehicles Licensed	**2016 Q2**
Cars	**31,646,347**
Motorcycles	1,339,307
Light Vans	3,843,221
HGVs	513,755
Buses	168,639
Total	**37,511,269**

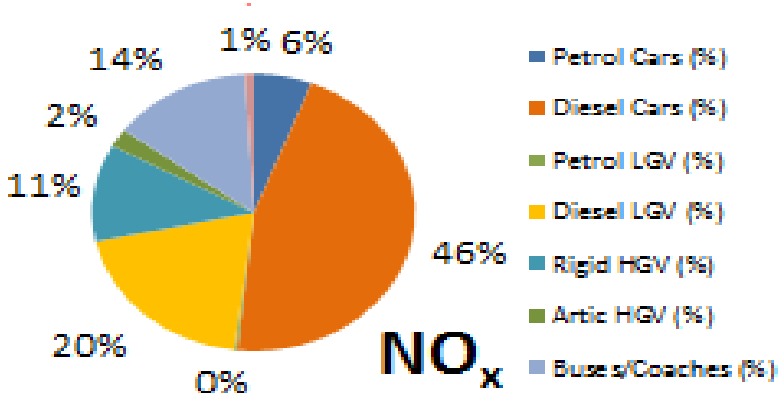
Table VEH0120 DfT Vehicle Licensing Statistics

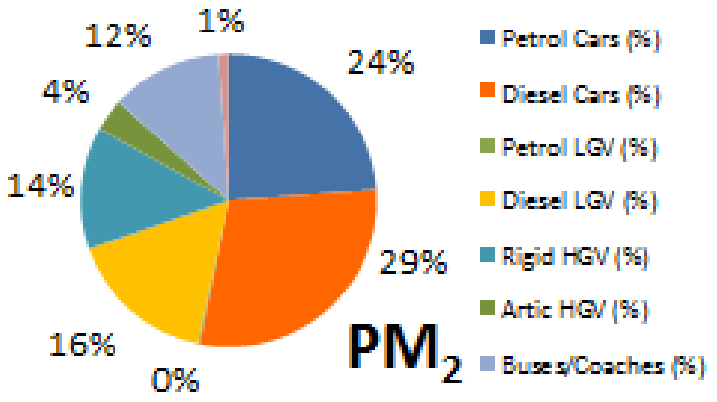
Plug-in Car sales so far	
Total plug-in car	85,000
Total plug-in van	5000
	90,000
% of all cars + vans	**0.25**



Greater Manchester Air Quality Challenge

- 75% NOx and 81% PMs in Greater Manchester derived from Road Transport with 50% of transport emissions from petrol/diesel cars.



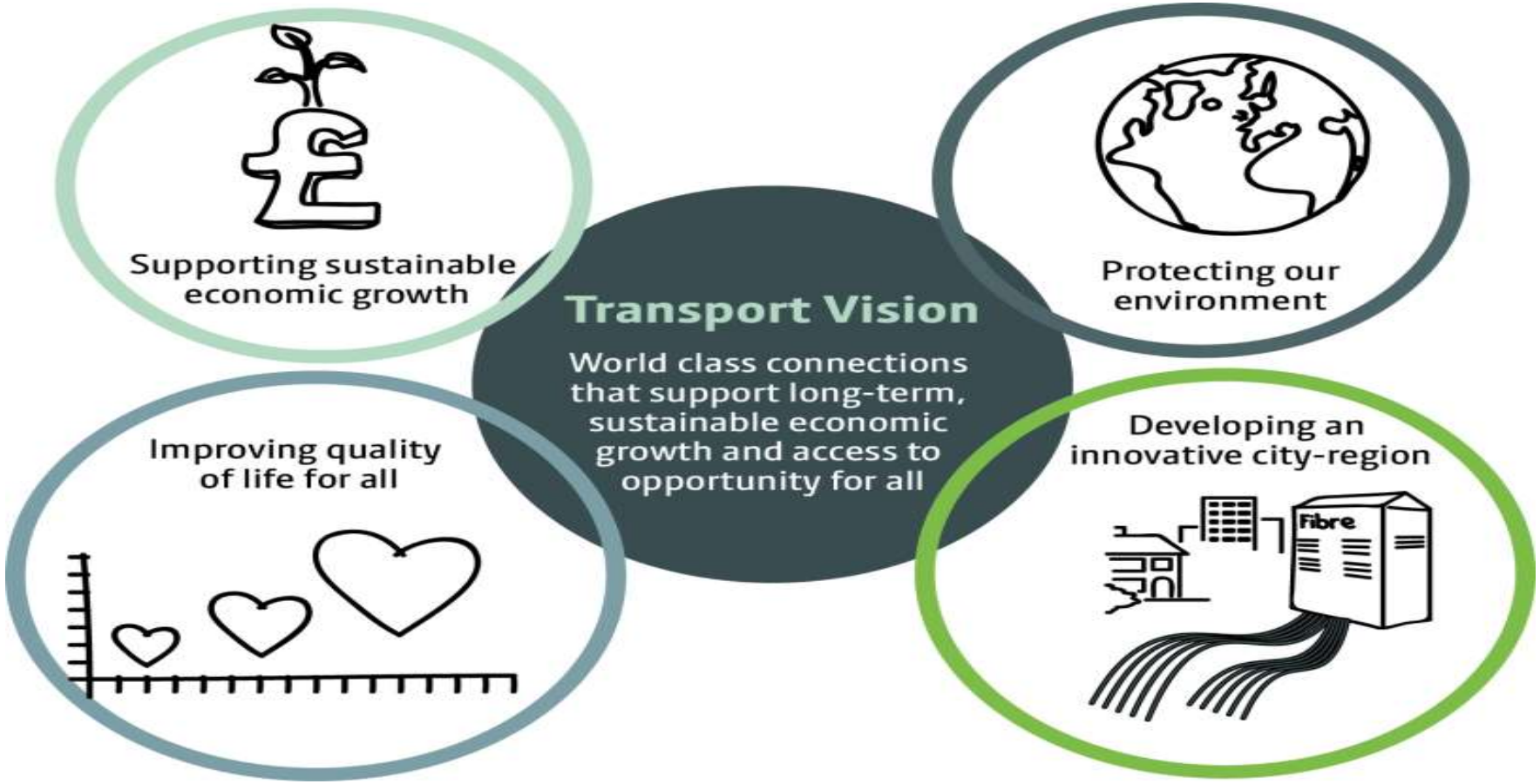


- EU target has been set to reduce emissic
- rates per vehicle from 164.9g/km CO2 in
- 2007 to 95g/km CO2 by 2020

Greater Manchester Ambitions

- 2040 Transport Strategy
- GM Air Quality Action Plan
- Carbon Reduction Plan
- EV Position Paper
- Alternative Fuel Strategy
- Development of Low Carbon Transport proposals
- Review of policy, regulatory, infrastructure and supportive measures for decarbonisation of the transport sector.

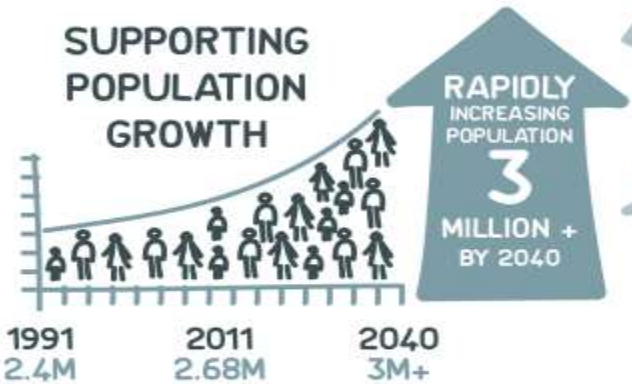
Greater Manchester Transport Strategy 2040:
A Sustainable Urban Mobility Plan for the Future



SUPPORTING SUSTAINABLE ECONOMIC GROWTH

AN INCREASE IN EMPLOYMENT

SUPPORTING POPULATION GROWTH



REQUIRING AT LEAST 200,000 MORE HOMES

+800,000 MORE TRIPS ON OUR TRANSPORT NETWORKS EVERYDAY

IMPROVING THE QUALITY OF LIFE

1/5 OF THE GM POPULATION LIVES IN ONE OF THE 10% MOST DEPRIVED AREAS OF THE UK

31% OF HOUSEHOLDS HAVE NO CAR

1/2 OF ALL ADULTS DO NOT GET THE RECOMMENDED LEVEL OF PHYSICAL ACTIVITY

£35M THE COST TO THE NHS IN GREATER MANCHESTER OF PHYSICAL INACTIVITY

BY 2040
1-IN-4
ADULTS WILL BE OVER 60

1-IN-6
ADULTS WILL BE OVER 70

HALF OF ALL TRIPS ARE LESS THAN 2KM

AND 38% OF THESE SHORT TRIPS ARE BY CAR

Greater Manchester has reduced accident rates to below the national average

KSIs PER 100,000 POPULATION

but we still have a high number of pedestrian and cycle injuries

1000 PEDESTRIANS INJURED ON GM ROADS (2014)

569 CYCLIST INJURED ON GM ROADS (2013)

and many of these involve children

OVER 1/3 WERE CHILDREN (AGED 0-15yrs)

TECHNOLOGY AND INNOVATION

BY 2020

68%

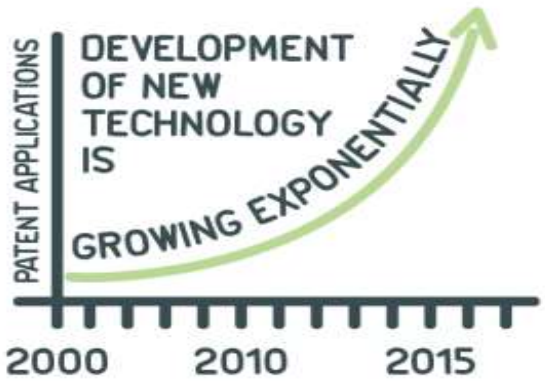
OF UK ADULTS WILL BE DAILY MOBILE INTERNET USERS

60% OF ONLINE CONSUMERS WILL USE MOBILE SOCIAL NETWORKING APPS

MORE THAN

50 BILLION

THINGS WILL BE CONNECTED TO THE INTERNET BY **2020**



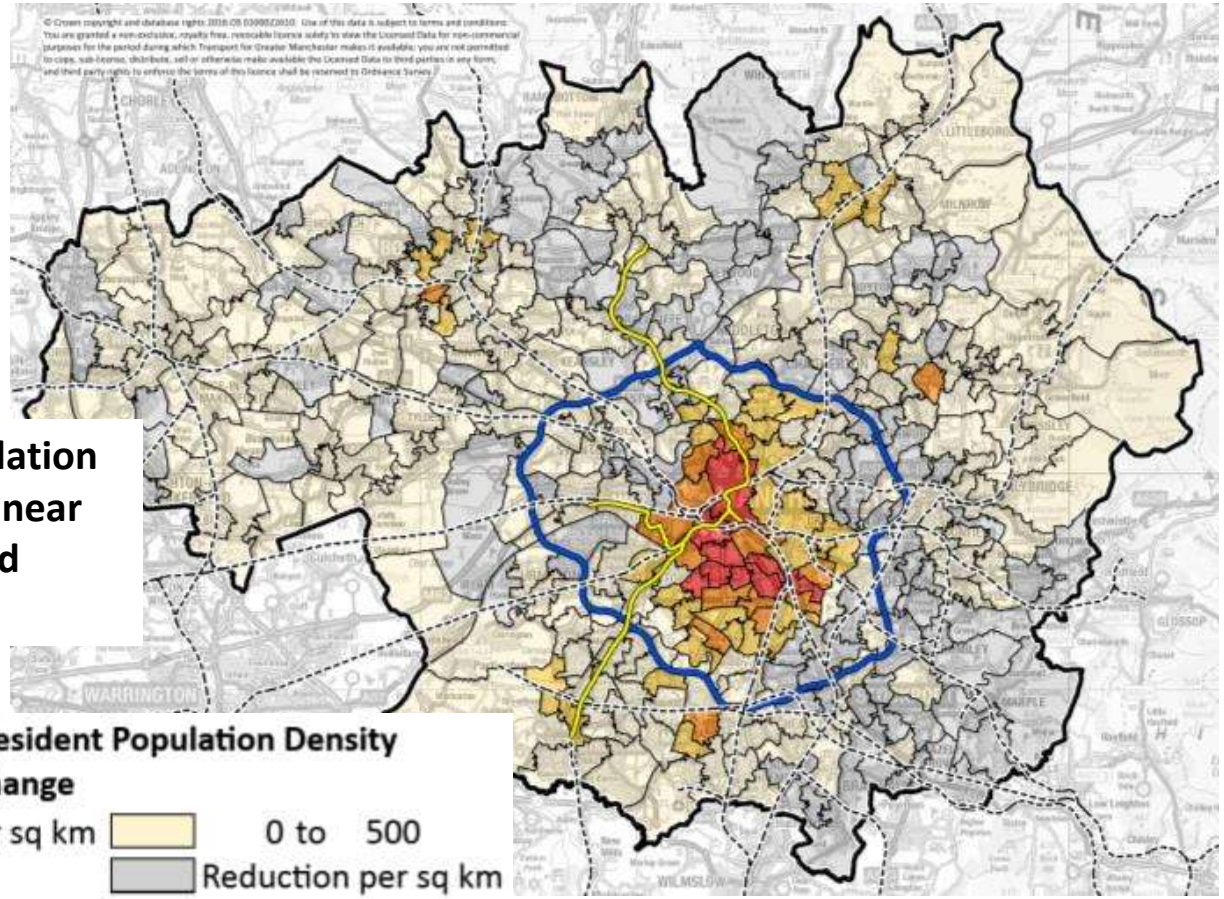
AUTOMOTIVE TECH WORTH ESTIMATED

£900bn

GLOBALLY BY 2025

Increasing Urban Living - Densification

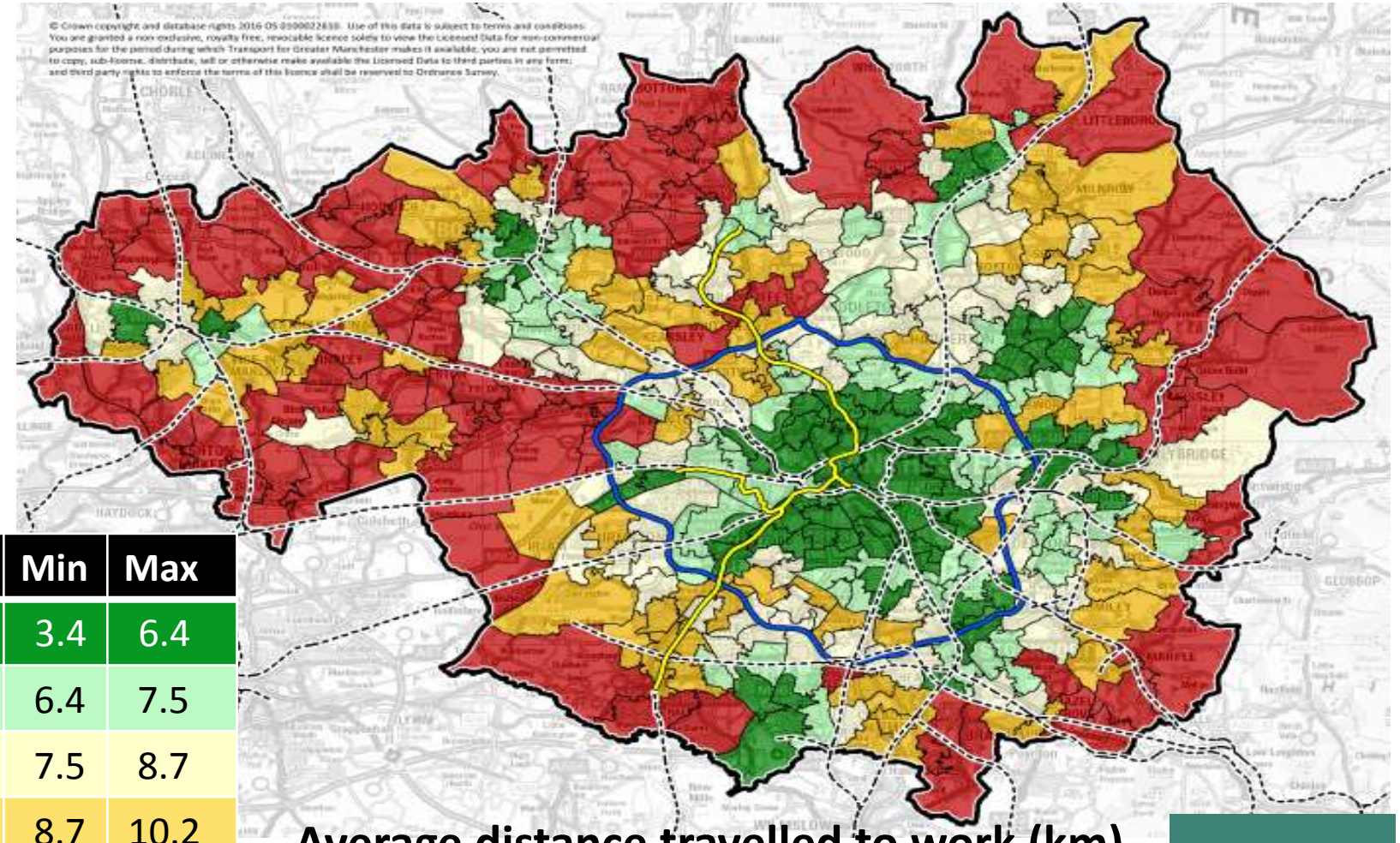
Greatest increases in population densities 2001 to 2011 are near Manchester City Centre and some town centres.



Census 2001 and 2011: Usual Resident Population Density
Population Density Absolute Change

- Increase of over 2,000 per sq km
- 1,000 to 2,000
- 500 to 1,000
- 0 to 500
- Reduction per sq km

Car-Dependence?

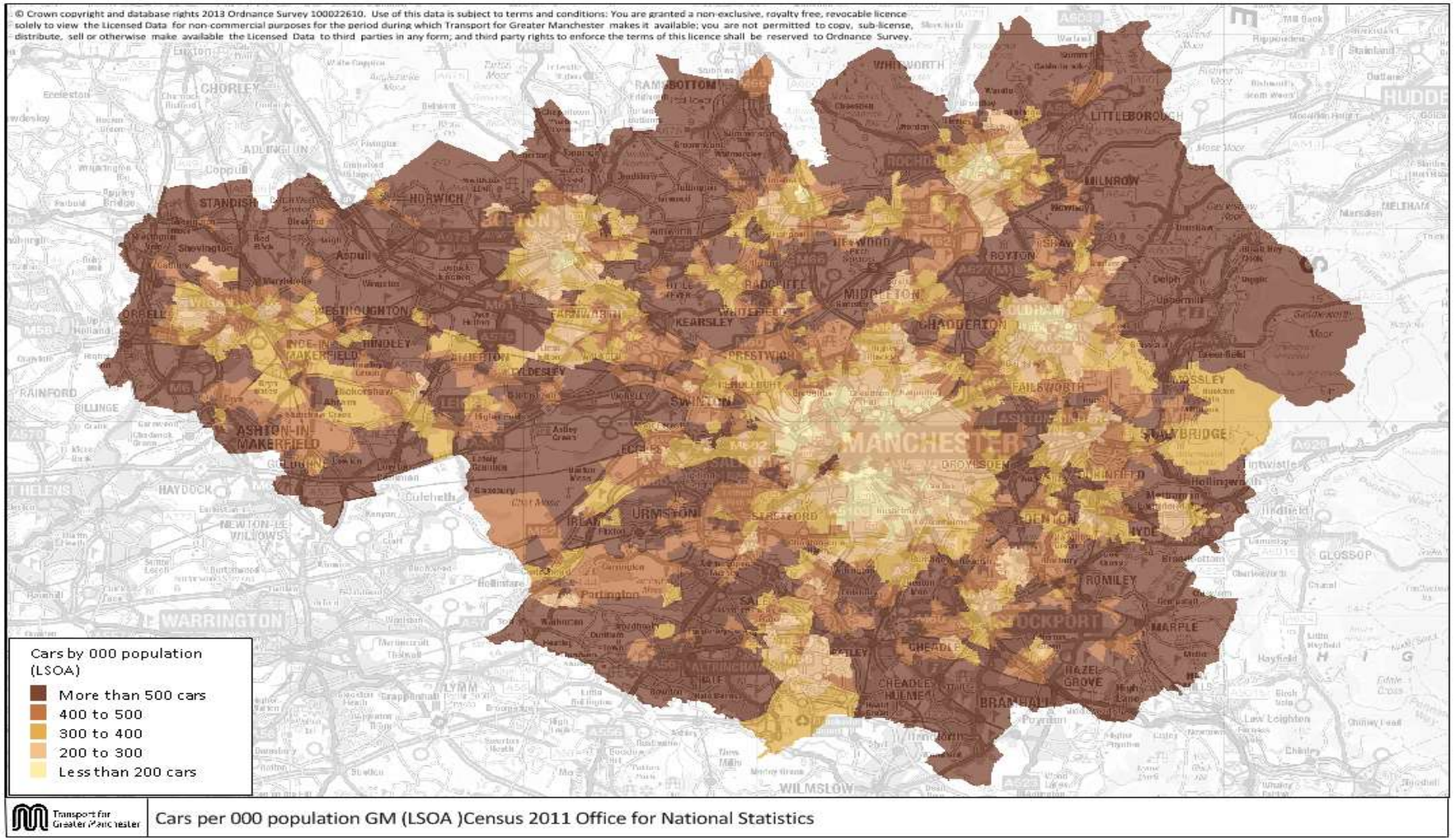


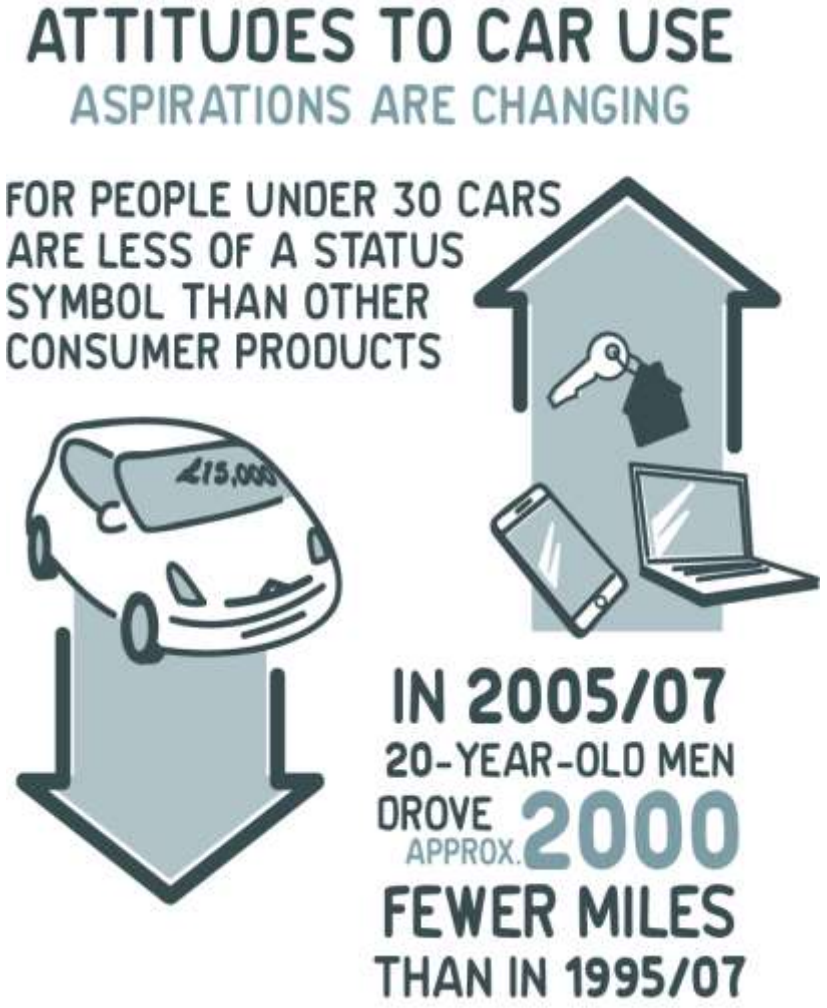
Quintile	Min	Max
5 (least)	3.4	6.4
4	6.4	7.5
3	7.5	8.7
2	8.7	10.2
1 (most)	10.2	14.3

Average distance travelled to work (km) by car per resident worker

2011

Car-Ownership





77% of 18–35 year olds plan to live in urban centres – "*In vibrant, compact, and walkable communities full of economic, social and recreational activities*."

(2010, Brookings Institution)

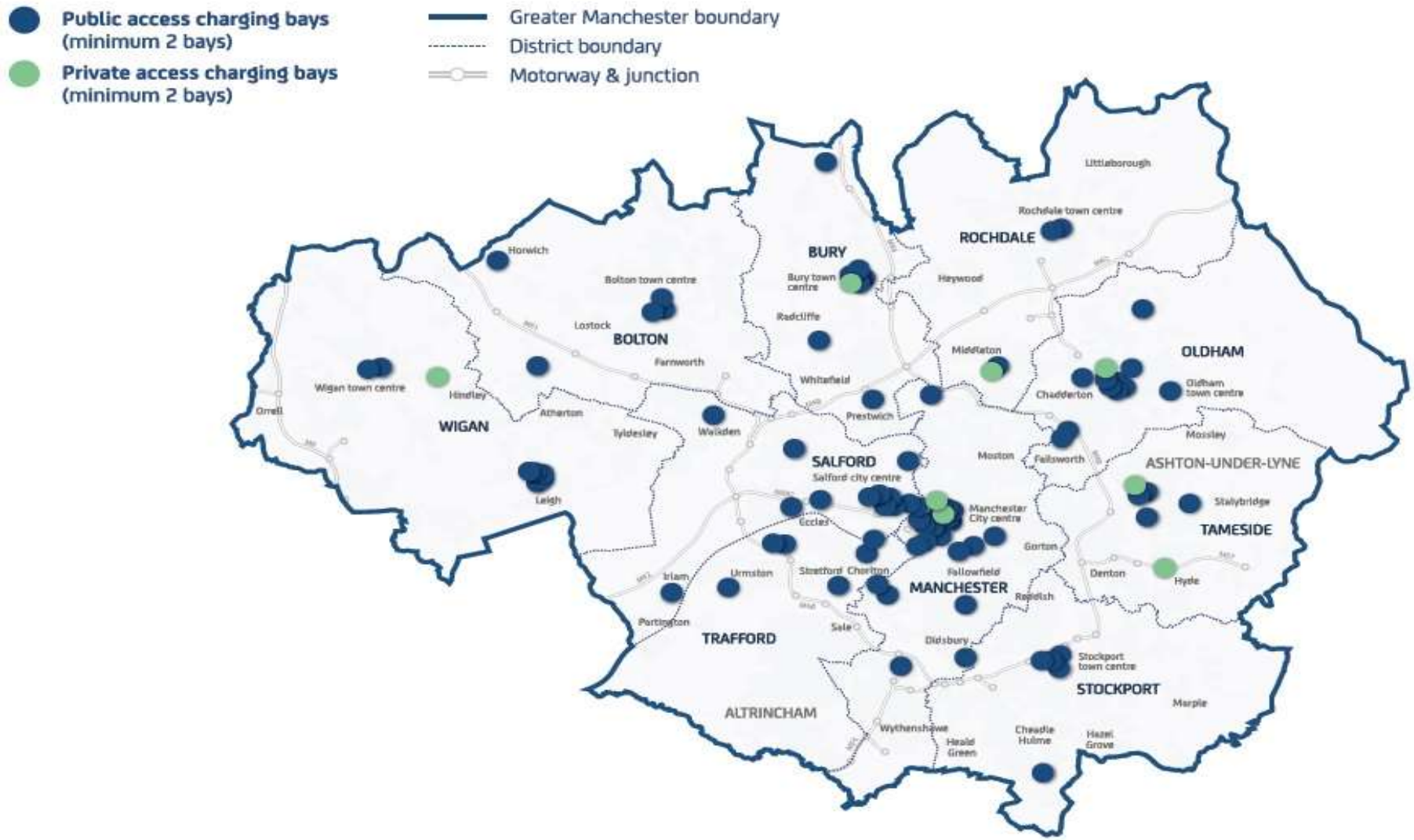
Establishment of the GMEV Charging Network

- In 2010, Q1, only **11,232 ULEVs** had been licensed across U.K.
- No clear business models existed for EV Network Development and the customer base was non existent for private investment (particularly in first generation technology).
- Office of Low Emission Vehicles (OLEV) ran a Plugged in Places (PiP) funding competition in 2010, with funding award in 2011.
- PiP Funding Call focused on exploring business models, infrastructure solutions, and market demand.
- In Greater Manchester, a private sector led ‘Manchester Electric Car Company’ (MECC) was established, sponsored by public sector, to deliver EV ambitions.

Business Model - from Manchester Electric Car Company to TfGM GMEV Network

- The **'Manchester Electric Car Company'** was established to deliver 300 charge points plus 6 stations (Pod Centres) at key locations acros GM, with long term ambitions for 25 pod centres.
  - **Pod Centre Concept -** where people can buy/lease/charge a range of electric vehicles including cars, vans, scooters and bikes plus purchase domestic charging systems
- Unfortunately after a period of 2yrs, MECC did not deliver on plans, citing difficulties in securing sites for development coupled with low customer demands bringing challenges to commercial viability.
- A decision was made (in agreement with OLEV) to transfer the funding to TfGM. The **business model** therefore changed **from private/public** to entirely **public sector owned and match-funded**
- TfGM installed a public Greater Manchester Electric Vehicle (GMEV) Charging Network at a total cost of £2.7m (largely funded by PiP Grant), procuring Charge Your Car (an EV Network Operator) to operate and maintain the GMEV Network.

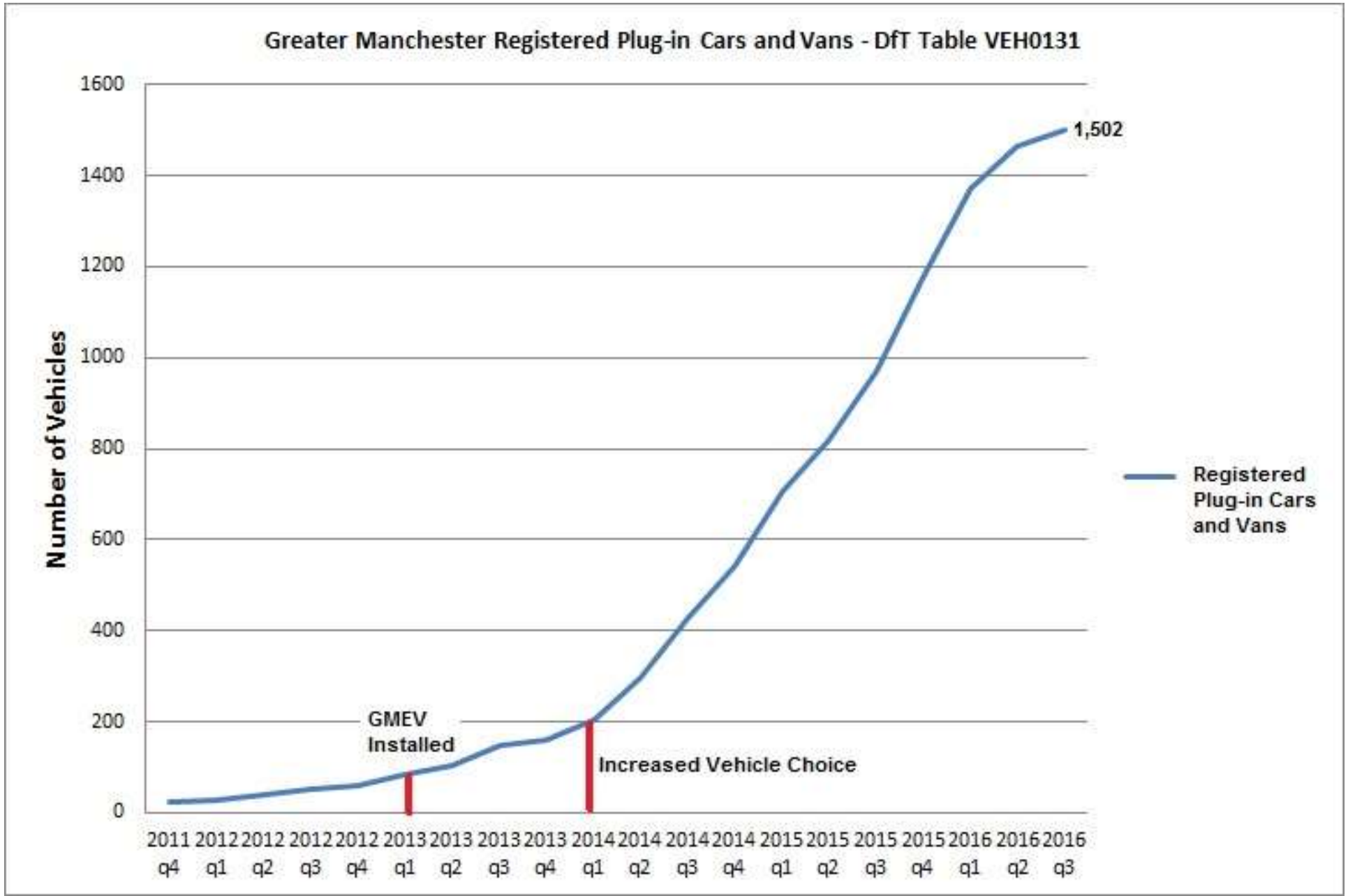
GMEV Charging Network – Free to use

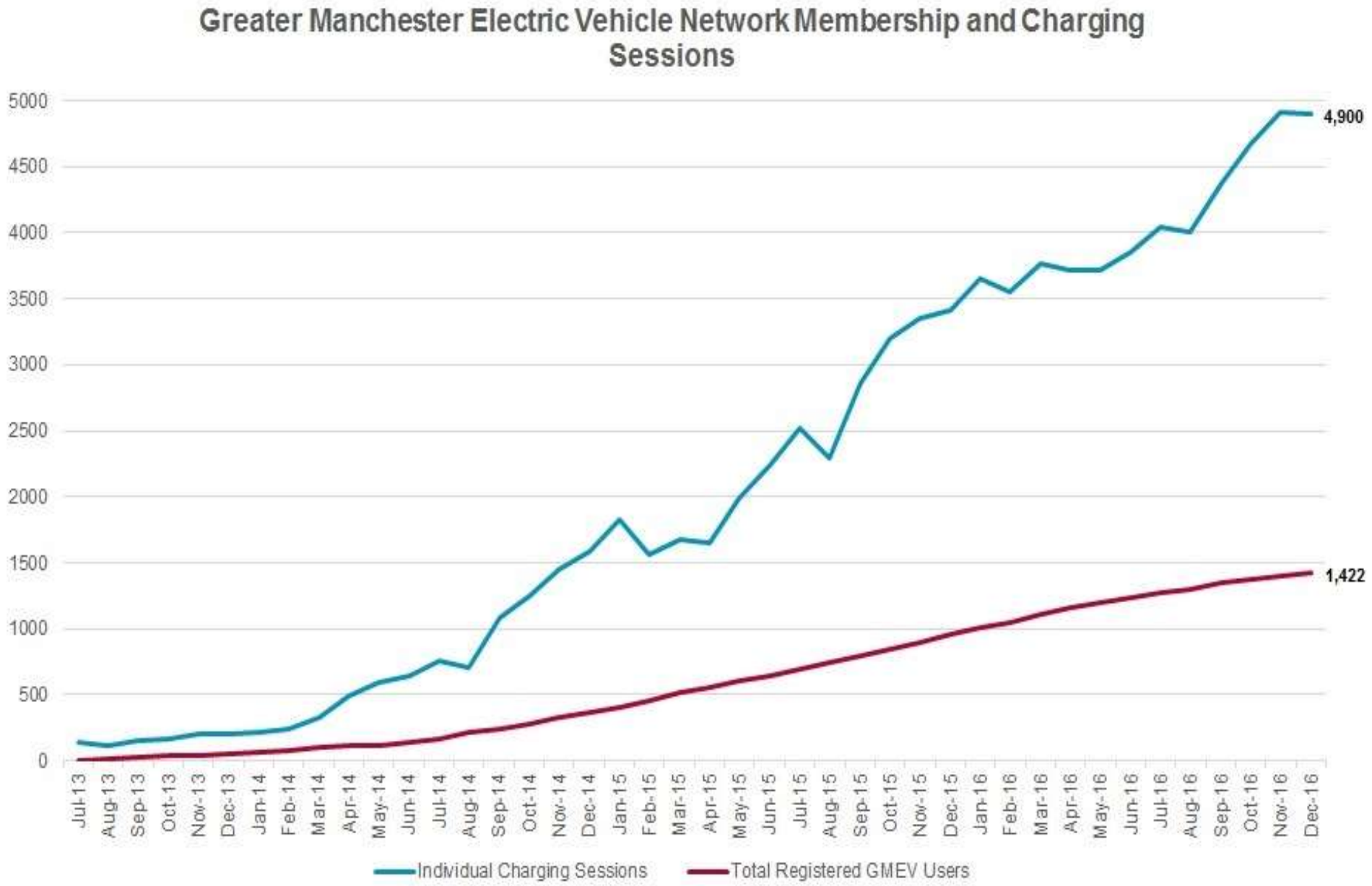


GMEV Infrastructure – current provision

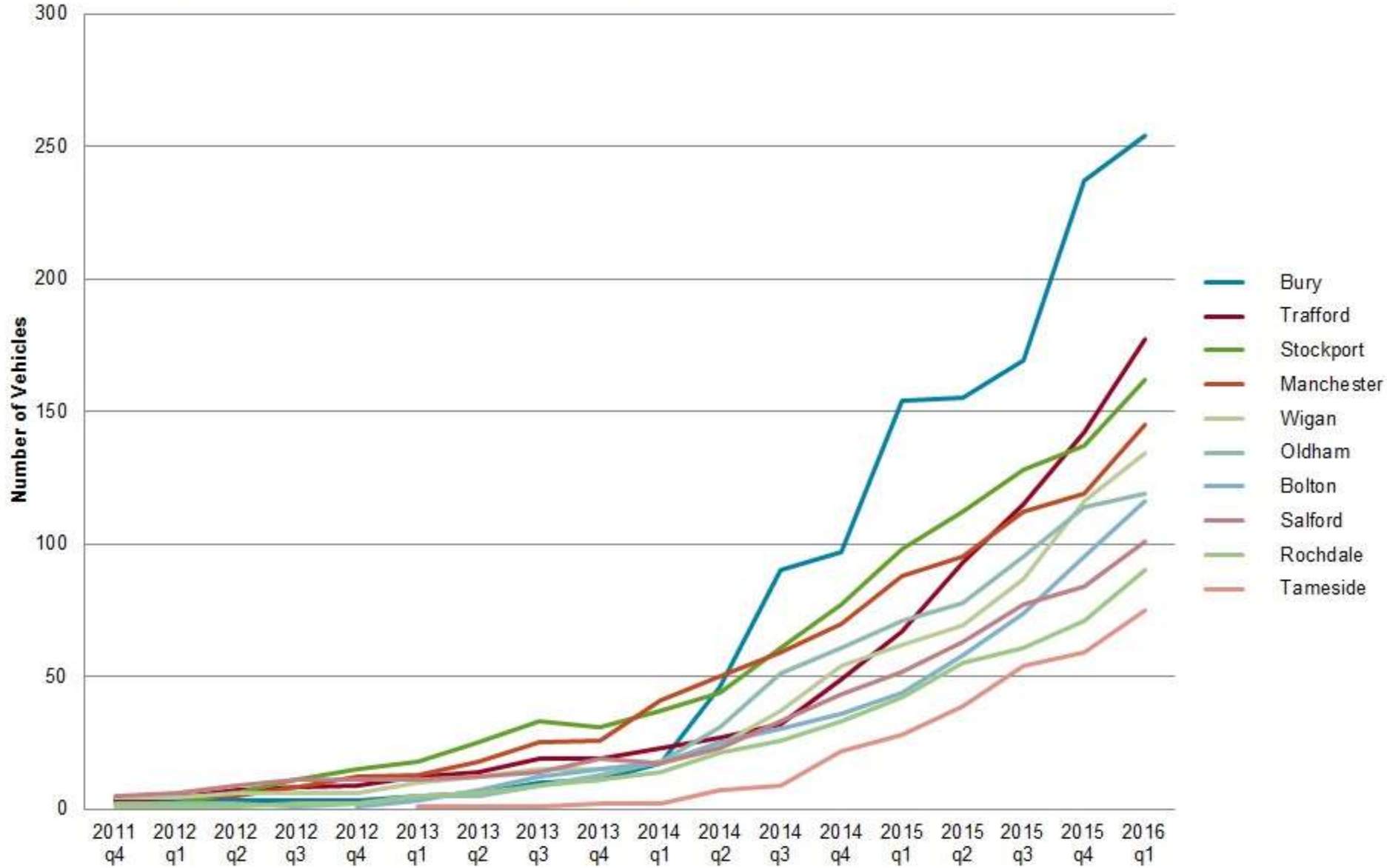
160 ‘Fast’ Chargers

4 Rapid Chargers


Greater Manchester Registered Plug-in Cars and Vans - DfT Table VEH0131
Number of Vehicles
1600
1400
1200
1000
800
600
400
200
0
1,502
GMEV Installed
Increased Vehicle Choice
Registered Plug-in Cars and Vans
2011 q4
2012 q1
2012 q2
2012 q3
2012 q4
2013 q1
2013 q2
2013 q3
2013 q4
2014 q1
2014 q2
2014 q3
2014 q4
2015 q1
2015 q2
2015 q3
2015 q4
2016 q1
2016 q2
2016 q3


Greater Manchester Electric Vehicle Network Membership and Charging Sessions
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
4,900
1,422
Jul-13
Aug-13
Sep-13
Oct-13
Nov-13
Dec-13
Jan-14
Feb-14
Mar-14
Apr-14
May-14
Jun-14
Jul-14
Aug-14
Sep-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Individual Charging Sessions
Total Registered GMEV Users

Registered Plug-in Cars and Vans by Greater Manchester District



GMEV – Summary Statistics

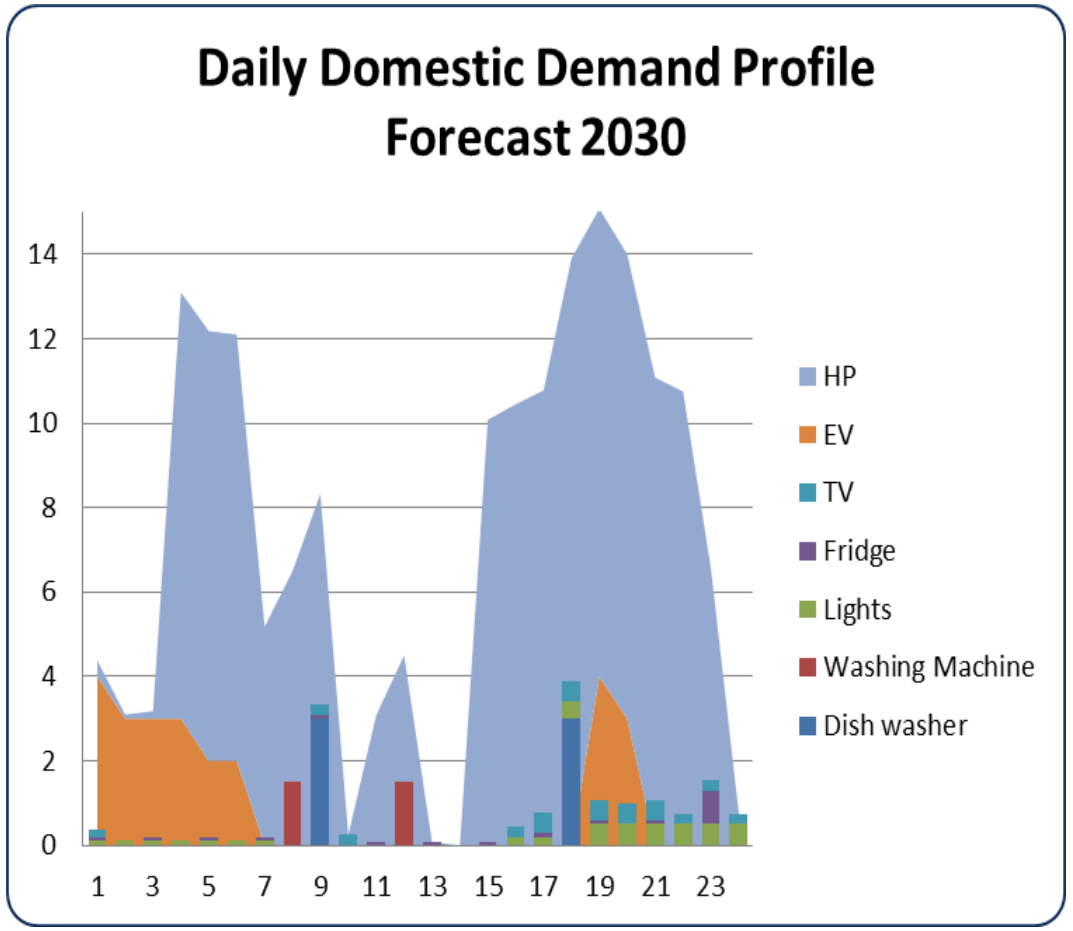
- **324 public charging sockets** are available for use each month
  - Comprised of 160 dual headed 15kKW posts (7KWper unit) with 4 rapid chargers
- **1,422 Members** are now registered to GMEV, with membership growing monthly
- **88,109 Individual Charging Sessions** since installation, likely to reach 100,000 by April
- **680,000 KW/h** in total drawn from the GMEV Network (41,630KW/h in December 2016 alone)
- Members are accessing the network on average **41 times** each per year with an average power drawn per charging session of **7 KW/h**

Customer Demand Challenge – From Early Adopters to Mass Market

- OLEV established plugged in places at a time where an electric vehicle customer base was almost non-existent across U.K.
- It would not have been viable at the time for any commercial operator to install infrastructure and get a return on investment when so few customers were available.
- It is clear from UK and local trends and continued incentivisation of ultra low emission vehicles that the customer base is now rapidly increasing and will soon move from early adaptors to an increasing mass take-up.
- This brings with it the need to upgrade/replace existing infrastructure and expand provision to support the decarbonisation of transport

Transport for Greater Manchester

Power Demand Challenge - Electricity North West 2030 Forecast



- Assumes in Region by 2030;
- 720,000 domestic EVs
- 80,000 Electric Vans
- Drawing 3- 8kw for 8hours (mostly topping up over -night)
- This would add an additional demand of 2 GigaWatts
- As a reference point, all of Manchester currently draws 400 MegaWatts

EV Network Infrastructure Challenge

- GM has a comparatively strong well performing EV Network in place that is becoming increasingly well used, however
- GMEV network does need expanding to meet increasing demands and support/encourage sectors to make transition to ULEVs
- The existing network is largely a first generation infrastructure solution and would therefore not meet current recommendations on Open Charge Point Protocol Standards
- The network is predominantly 15kw dual headed ‘fast’ charge posts meaning a 3 to 4 hours for a full charge. More rapids are required.
- The network is free to use for customers but at cost to the transport authority, with no dedicated funding for expansion. Private Finance (as opposed to competing for funding) is now needed to bring stability to investment and long-term decarbonisation plans

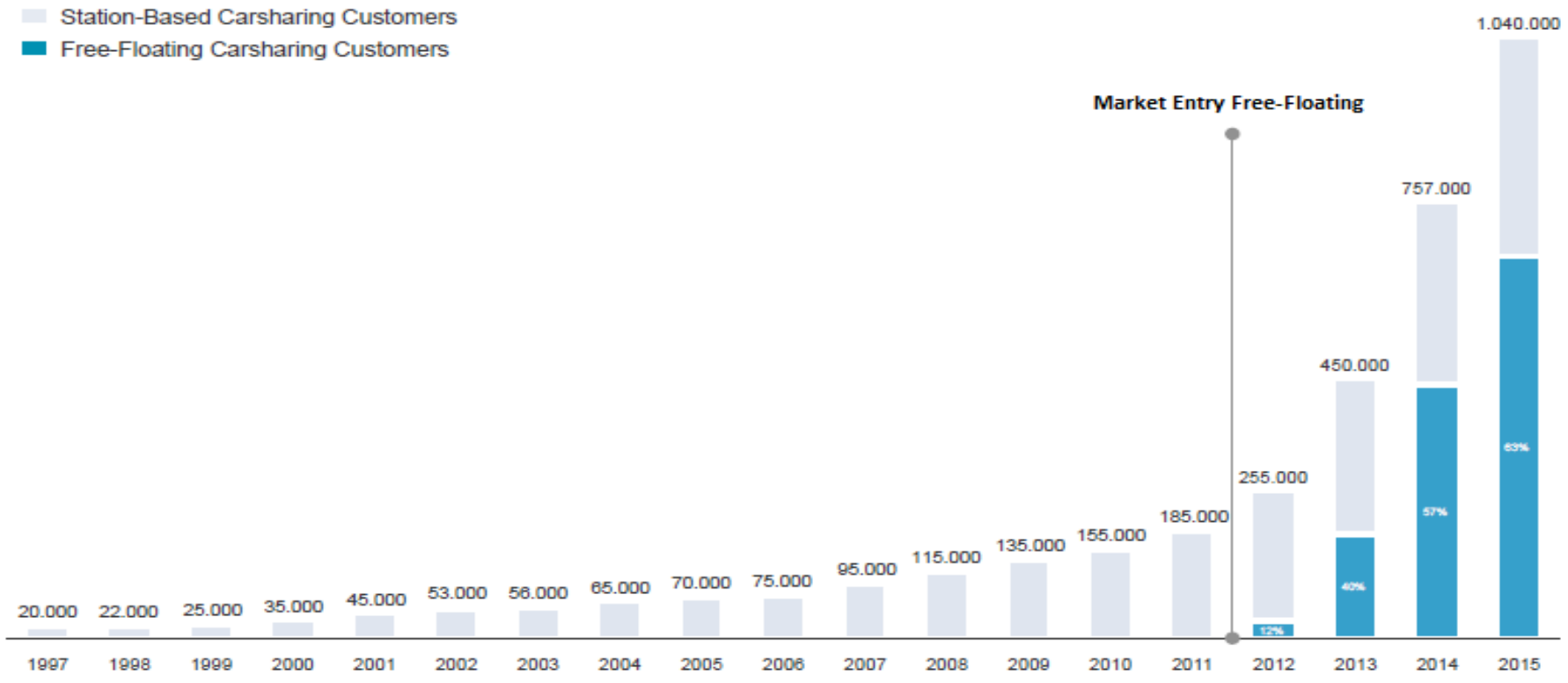
Decarbonisation Challenge – Sector needs

- The GMEV Network requires further development to support;
- Private vehicle access (residents and visitors)
- Corporate / business staff needs (transport and travel savings)
- Taxi sector (heavy operational needs)
- Freight / Last mile delivery – to support switch to ULEVs
- Increasing ultra low emission bus fleet
- Other vehicle types – i.e. e-motorcycle / scooter, etc
- **Car Clubs**

Greater Manchester Shared Mobility Market

- **Regional Centre Car Share**
  - **Enterprise-City Car Club** (Commercial Car Club Operator) provide 42 vehicles (currently no EVs)in the Regional Centre within designated bays
  - **Co-Wheels** (Not for Profit Car Club Operator) provide 22 vehicles (incl. 4 fully electric Nissan Leafs) within designated car club bays in Salford.
- GM Car Share Market is currently small with capacity to grow (**358 members** Co-Wheels, **1626 active members** Enterprise-City Car Club) Total **1984 Members** and **64 vehicles**.
- **Carplus** grant award to TfGM allowed a detailed car club business case to be carried out for Oldham and outline business cases to be carried out for Manchester, Rochdale, Stockport, Trafford and Wigan.
- **GM RideShare** - http://www.carsharegm.com/ **59 employers** are registered with CarShare GM with **867** recorded members
- **GM Bike Share** – a request for services for a 2 stage cycle hire feasibility study recently issued – responses by 29th March
- **GM ULEV Taxi Feasibility Study** – relevant to shared mobility, recently completed an exercise on capturing views from taxi operators and drivers as to what would encourage a transition to ULEVs

Growth of on-demand flexible car share services enabled by technology (European Market)



Source: Bundesverband CarSharing (2015)

Car Club Operating Models

Point-to-Point
fully flexible

DriveNow

- Locationless
- No need to return car to same spot/area
- Spontaneous use

Station-to-Station
semi flexible

AutoLib

- Fixed locations
- Return to a station
- Reserve in advance or sponateous use

Back-to-Base
traditional

ZipCar

- Fixed locations
- Return to same pick up spot
- Reserve in advance or sponateous use

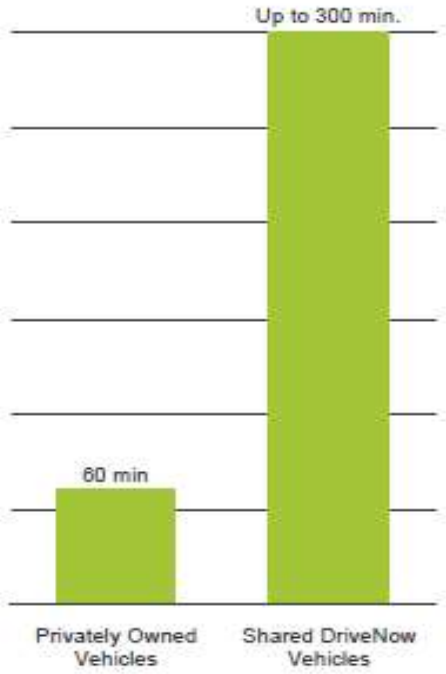
Example Customer Experience Free-floating Model (DriveNow)

Efficient Vehicles and Efficient Utilisation

Approx. 7 older, **high-emission** vehicles are substituted …

… through 1 brand new, **low-emission** or **zero-emission** vehicles …

… which is **3-5 times better utilized** than privately owned vehicles.



Car Club Member Travel Behaviour (CarPlus Ltd - Car Club Annual Survey)

- Car Club Members have a higher propensity to use a mix of transport modes for journey needs.
- Car club members use public transport and walk and cycle more than average.
- Travel by train by members is more than double the average for England and Wales, with bus use a third higher than average.
- Car club members are three times more likely than the average person in England and Wales to be regular cyclists.

GM Joint Tender - ULEV Shared Mobility Services

- Developing a GM Tender with potential for all GM Districts to access
- Will be offered as one tender with 2 Lots on a 10yr co-terminus basis;
  - Lot 1 – GMEV Network – Operation, Maintenance, plus Supply & Install (private finance) supported by introduction of a Customer Access fee
  - Lot 2 – ULEV Greater Manchester Car Share Service
- **Timescales**
  - By end of Jan 2017 — Finalising of ITT Questions
  - March 2017 — Approvals to formally issue
  - April 2017 — Invitation to Tender issued

Autumn Statement – Electric Vehicles

- Government will invest an extra **£290m** (in addition to existing funding of more than £600m) to help UK achieve our target of nearly every car and van being zero emission by 2050.
- This new funding includes;
- **£150m** to support the cleanest buses and taxis and
- **£80m** to support charging infrastructure.
- With continued Business incentives
  - enhanced capital allowances for businesses installing recharging infrastructure,
  - a continuation of the salary sacrifice scheme for ULEVs
  - new lower company car tax bands for the lowest emitting cars
- OLEV will release strategy next year detailing how UK will continues on its path to zero emission road transport and to deliver a mass market for ultra low emission vehicles in the UK.
-

Conclusion

- Fully expect more funding opportunities to come through due to UK underperformance on Air Quality plus wider commercial developments
- Historically, funding has been released competitively with Greater Manchester having success early on (funding for current GMEV network). A commercial tender will help **stabilise investment** providing a basis to support expansion.
- It is clear that decarbonisation of transport is inevitable and growth in ULEVs has been sustained since q1 2014, therefore we do expect a rapid increase of ultra low emission vehicles on our roads in time.
- There is considerable work to be done to bring forward objectives, a strong partnership with public sector and business is needed to meet all needs.

Transport for Greater Manchester

- **Questions?**

- Contact Details
- Kevin Toye
- Advanced Solutions Manager
- Innovation Department
- Transport Strategy Portfolio
- Transport for Greater Manchester
- Kevin.toye@tfgm.com
- 0161 244 1645

Greater Manchester Freight & Logistics Strategy

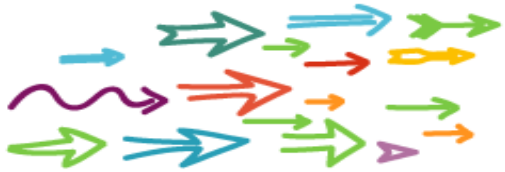
January 2017

Mathew Roberts

Transport for Greater Manchester

Transport for Greater Manchester

Leading the vision for a connected North



This brings economic opportunities…

Population Over 183,000 growth in the past decade,

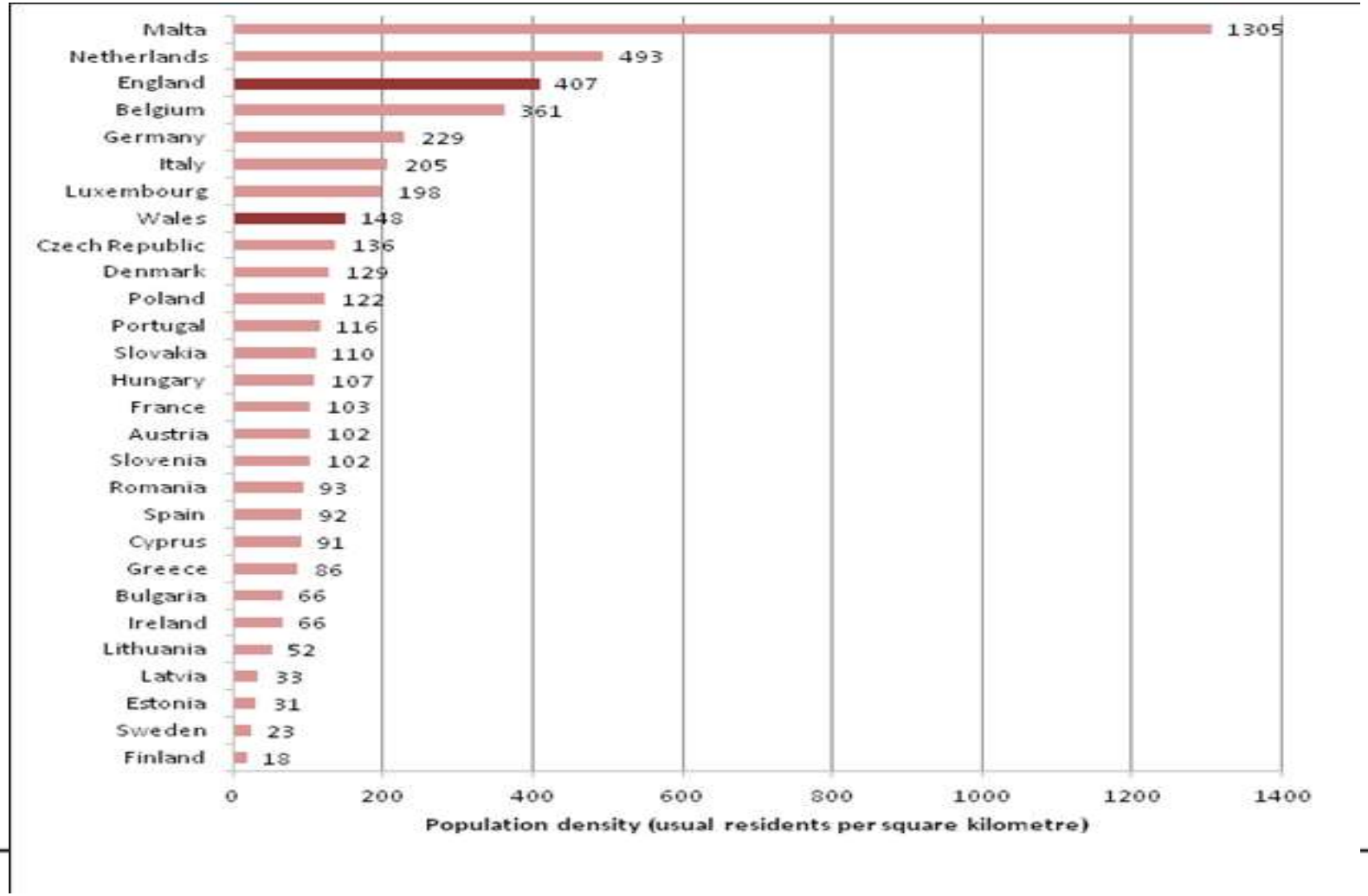
Employment 1.4 million people already work in GM.

Economy Over 110,000 additional jobs forecast plus an **additional** £17bn GVA over next 10 years.

Housing House sales grew by 7.3% over the last year.

Transport for Greater Manchester

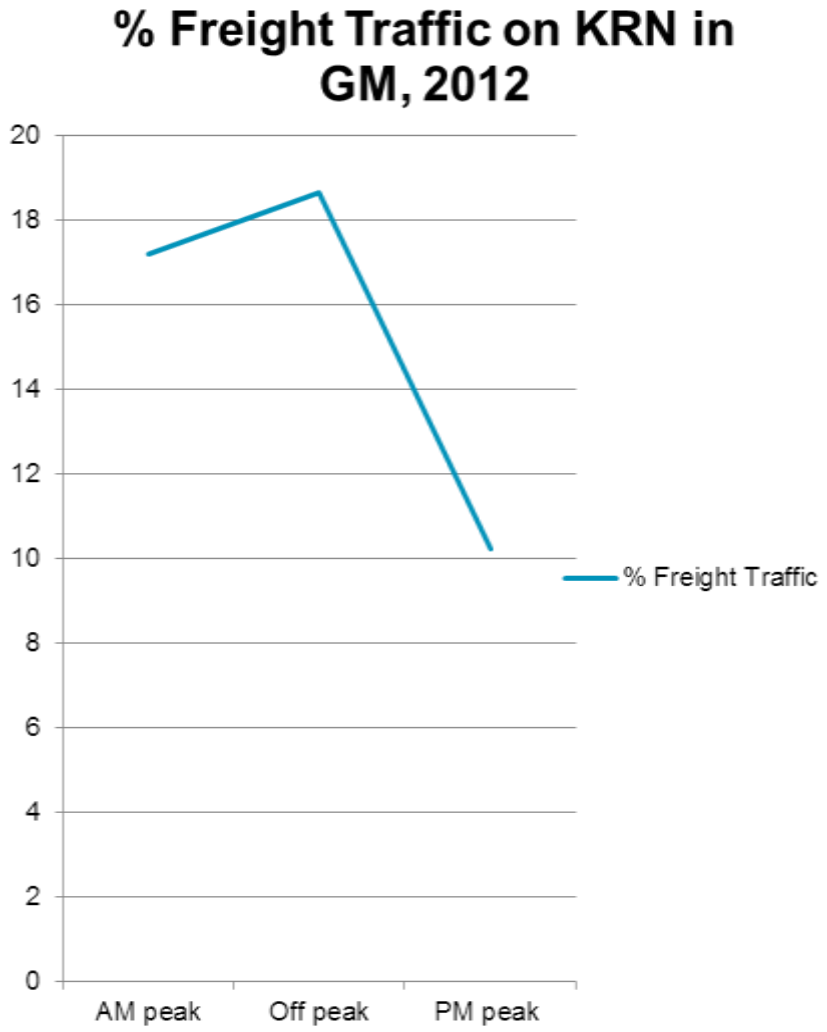
…but also new logistics challenges



Transport for Greater Manchester

Highways Congestion

- 95% of goods are transported by road.
- In 2012 a total of 2.4 million goods vehicles travelled from GB to mainland Europe
- Significant increases anticipated



Transport for Greater Manchester

• Changing Demands

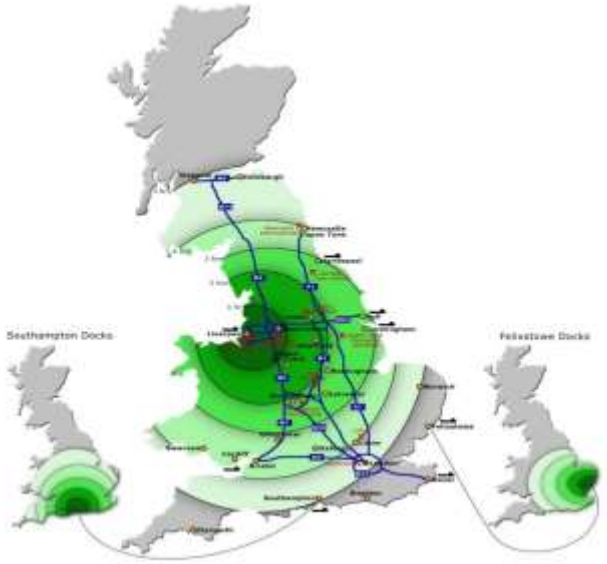
- Customer driven demand has led to the rise of e-commerce.
- Significant impacts on the type and amount of commercial traffic on GM roads.
- 10% of all retail spending and growing

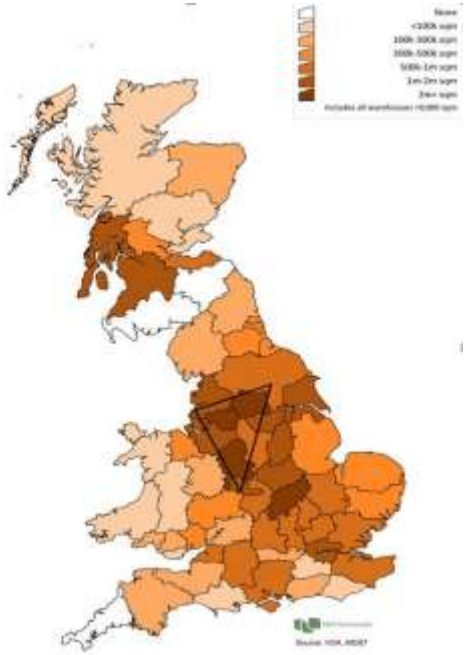
Changing Demands

- Suppliers are relocating to the North to be closer to clients, and meet requirements of Just In Time manufacturing and Lean processes

- Is the ‘Golden Triangle’ of warehousin
- the East Midlands

- Or is it centred
- somewhere furthe
- north?





Freight and Logistics Strategy

- Any intervention selected as part of the package must:

- Reduce externalities AND

- Increase the economic efficiency of the freight and logistics industry and/or increases GM economic activity AND

- Move GM closer to achieving the vision for freight and logistics in 2030

Transport for Greater Manchester

• The GM Freight and Logistics Strategy

- **Five areas of focus:**
-

Focus Areas	**Priority Interventions**
Strategy and engagement	-Logistics forum
Safety and regulation	-Clean Air Zone feasibility
Operational activity	-Delivery servicing plans
Infrastructure	-Consolidation
Planning and research	-Modal shift

Multi-modal freight

- Seek to explore alternatives to dominant mode -road freight
- Existing rail freight but limited by conflict with passenger services.
- Tri-modal freight interchange at Port Salford should see increase use of other modes.

The Atlantic Gateway

- Concept based on unique sea and inland waterway assets between Liverpool-Manchester
- –Ports / Liverpool Two
- –Ship Canal
- –Rail
- –Road

- Key development/freight sites

- By 2030, potential for 250,000 new
- jobs to be created

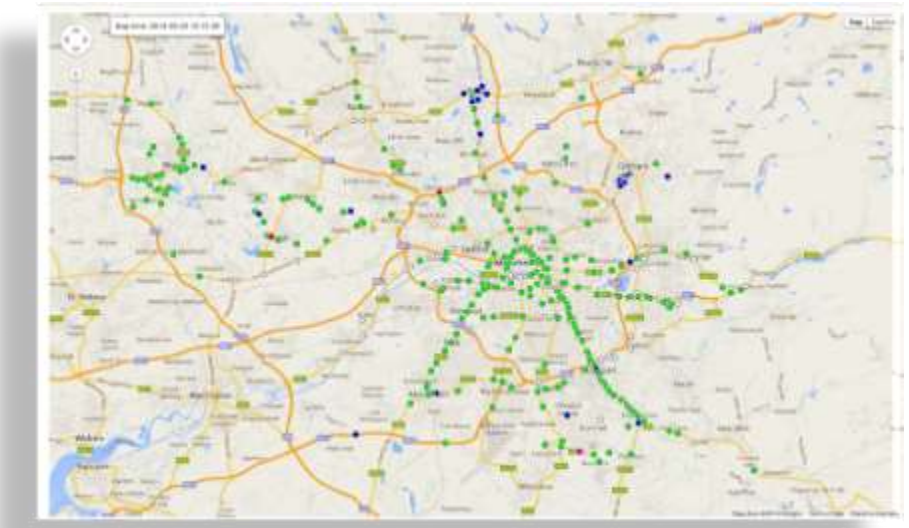
- **Highways**

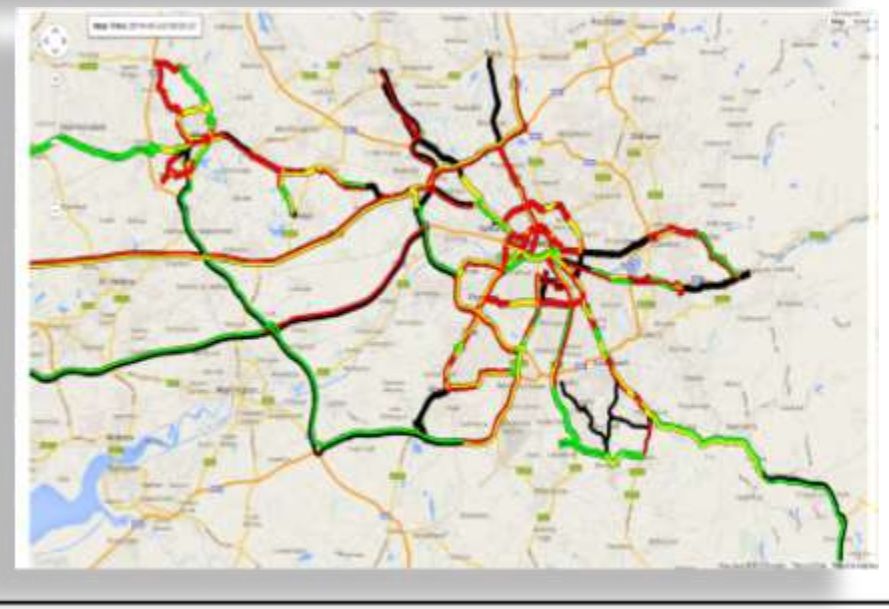
- Strategic highways responsibilities
- Coordinating role – working with 10 authorities and Highways Agency.
- Overseeing highways investment.
- Installing and maintaining traffic signals.
- Recognising importance of highways to the regional economy.

Transport for Greater Manchester

Using intelligent transport systems data to improve information provision

- Pre-emptive knowledge of network conditions and accurate journey times
- Accurate data to enable faster and better decisions
- Integration of ITS and network control can improve reliability for all links in the logistics chain
- Interoperability of systems to maximise existing infrastructure capacity

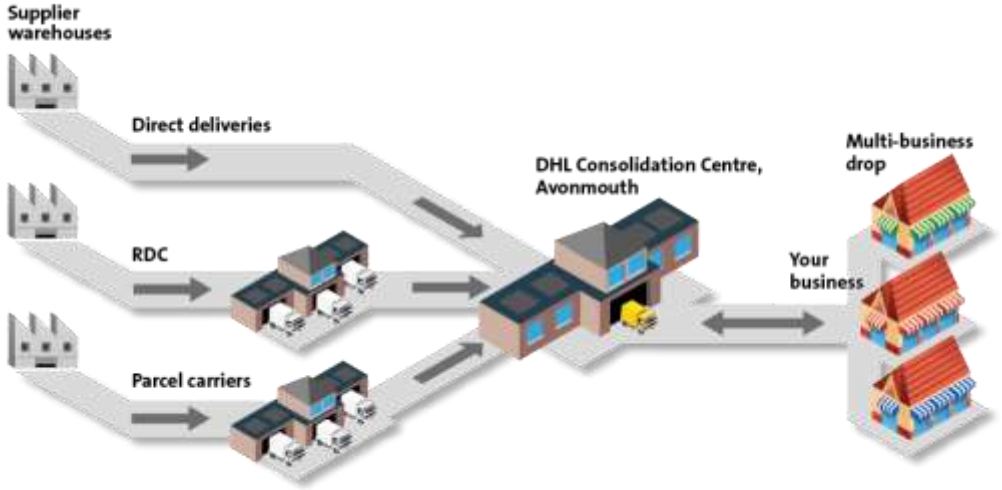




Freight consolidation

- Changing nature of logistics has seen the “last mile” shift from consumer to direct delivery. Disrupting existing networks.

- Retailers and property owners can drive change.



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Delivering more together

- Fleet accreditation
- Consolidation
- PCNs
- Alternative Fuels
- Mode shift
- Existing restrictions
- Loading/unloading
- DSPs & CLPs

What is success?

- We should see an increase in:
- Economic Growth
- Employment
- Regional investment
- And a reduction in…
- Congestion
- Journey time
- Missed delivery slots
- Fuel consumption
- Emissions

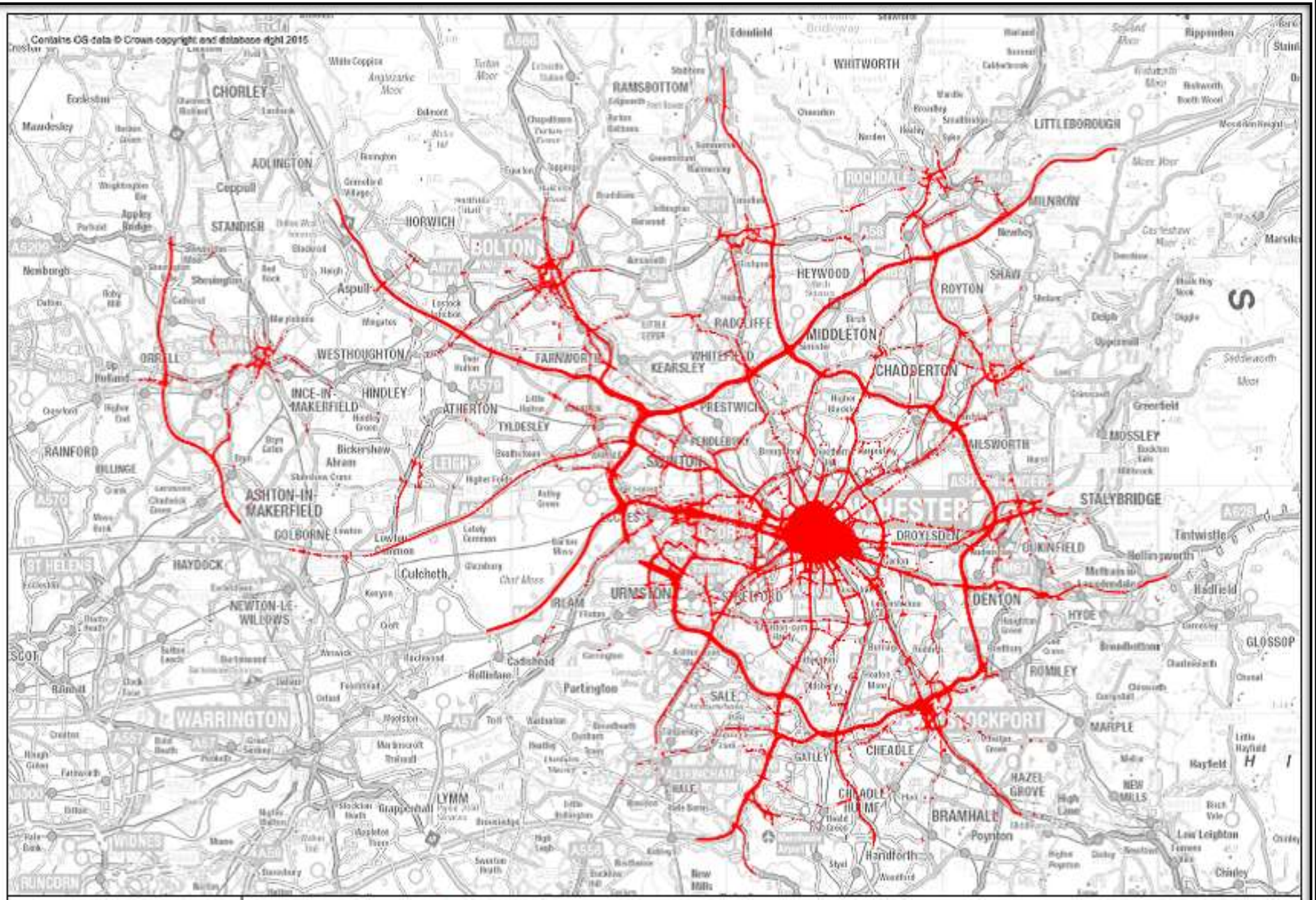
Questions

Air Quality in Greater Manchester

- **Matthew O'Neill**
- Lead Air Quality Officer,
  Transport for Greater Manchester

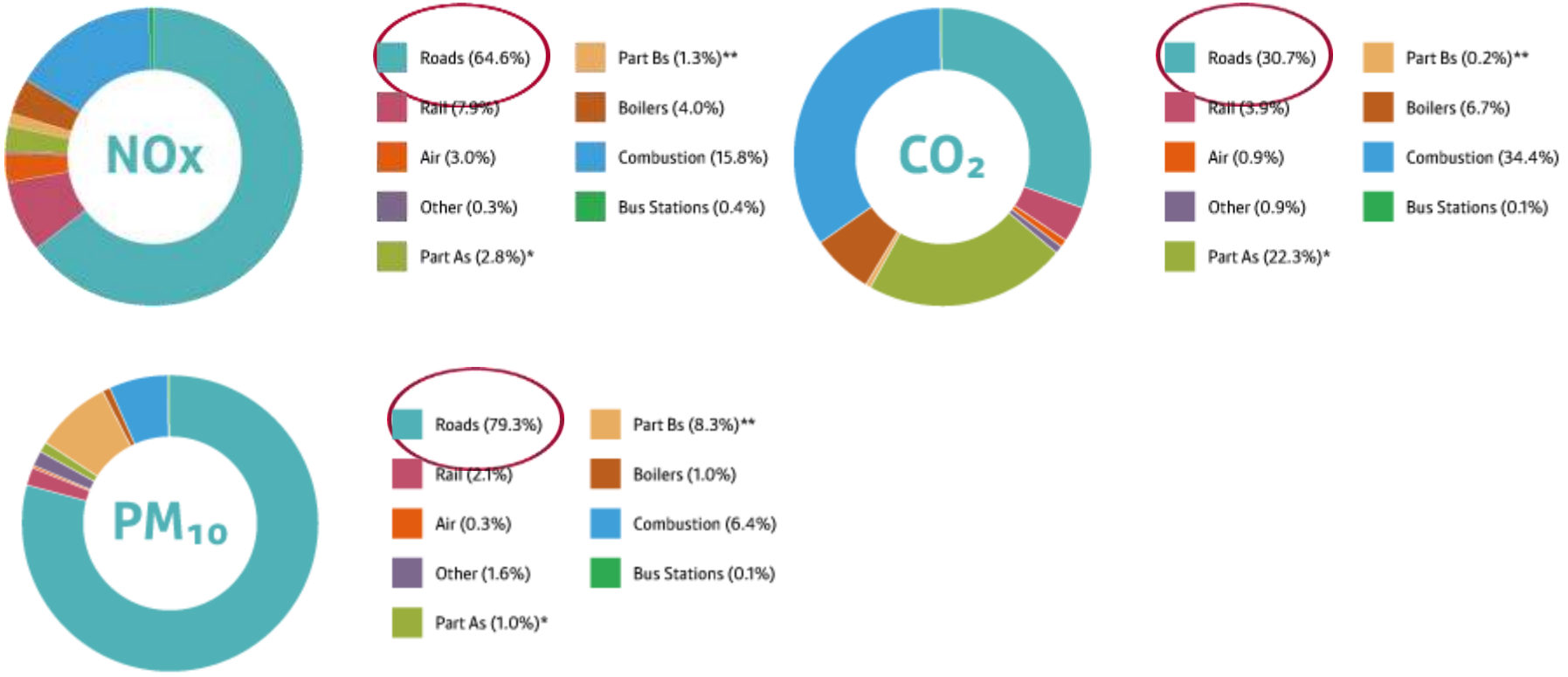

The challenge

Sc



Transport for Greater Manchester 2 Piccadilly Place, Manchester, M1 3BG	Modelled 2016 NO2 35+ µg/m3 contour			
	Drawn By : I Hull	Scale : NTS	Date : 11/11/2015	

Road Emissions in Greater Manchester



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Air Quality Data – Nitrogen Dioxide

- National Objective Annual Mean Concentration 40 µg/m3

Site ID	Local Authority	Site Type	NO_2 Annual Mean Concentration (µg/m^3)				
			2011	2012	2013	2014	2015
Manch Oxford Rd	Manchester	Urban Traffic	**66**	**62**	**55**	**68**	**66**
Salford M60	Salford	Urban Traffic	**64**	**62**	**61**	**60**	**52**

Transport for Greater Manchester

Air Quality Data – Particulate Matter

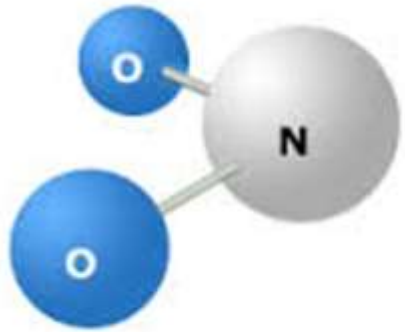
- National Objective Annual Mean Concentration PM_{10} - 40 µg/m3

Site ID	Local Authority	Site Type	PM_{10} Annual Mean Concentration (µg/m^3)				
			2011	2012	2013	2014	2015
Manch Oxford Rd	Manchester	Urban Traffic	32	30	31	28	28
Salford M60	Salford	Urban Traffic	25	23	26	24	19

Transport for Greater Manchester

Low Emissions Strategy – an integrated approach

- Greater Manchester and TfGM have produced integrated climate change and low emissions strategies.
- Greater Manchester strategy aims to reduce CO_2 emissions by 48% by 2020 from 1990 levels.
- Given the need to meet EU limits for NO_2 as soon as possible, the short-term focus will need to be on NO_2.
- Air Quality and Health in Greater Manchester will improve



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Current action

- Improved transport infrastructure

- Metrolink expansion –2nd City Crossing and Manchester airport
- Rail electrification and capacity increase – “Northern Hub”
- Smartcard ticketing system
- Over 300 electric vehicle charging stations in place
- Improved bus fleet
- Improved network management

Future action – Air Quality Action Plan

- 1. Development Control and Planning Regulation
- 2. Cars
- 3. Freight & Heavy Good Vehicles
- 4. Buses
- 5. Cycling & Walking
- 6. Travel Choices
- 7. Information & Resources.

LEV and ULEVs

- ULEV numbers in GM are currently low
- Price of vehicles and infrastructure are key to expansion

- Key measures;
- Expansions of rapid charging points
- Improving taxi and car club EV infrastructure
- Leasing schemes for businesses to trial EVs

Buses

- largest number of hybrids outside London
- All electric buses
- TfGM have introduced a voluntary bus operator's code of conduct
- Natural vehicle fleet turnover
- Will look to Set minimum standards for bus vehicles using the Cross-city Bus Infrastructure and future bus priority schemes

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Bus Priority Packages

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Oxford Road

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Goods Vehicles

- HGVs have a disproportionate impact on AQ
- Potential impact of measures is high
- Improvements in the short to medium term:
  - Accelerating vehicle replacement
  - Consolidation and DSPs
  - Encourage more mode shift to rail/water

Cycling & Walking

- Cycle Hubs
- Planned improvements through CCAG – cycle way expansion
- Oxford Road Corridor – Dutch Style Cycle Lanes
- Make walking more accessible

Transport for Greater Manchester

Metrolink

Schools

- Appraise opportunities to reduce impacts from school car travel.
- Green Screens/ Walls
- Possible interventions will be identified in consultation with the local authorities,

Awareness Raising

- Air quality awareness programmes to encourage people to take action against air pollution

- Greater Manchester Clean Air Day – June 15th 2017
- Engage with schools & businesses – Workshops/ competitions
- Car Free Day/ Anti Idling campaign
- Working with Health partners to deliver messages to the specific audiences

Air pollution case in High Court

- ClientEarth won its High Court case against the Government over its failure to tackle illegal air pollution across the UK.

- The case is the second the government has lost on its failure to clean up air pollution in two years

- Defra has announced it will consult on a revised Air Quality Plan by 24 April 2017 and publish a final plan by 31 July 2017.

- The previous plan mandated 5 cities to implement Clean Air Zones – Greater Manchester was NOT included

Transport for Greater Manchester

Clean Air Zones Feasibility

- 2 geographical zones looked at
- Economic Analysis
- Health Impact Assessment

Clean Air Zone class	Vehicles included
A	Buses, coaches and taxis
B	Buses, coaches, taxis and heavy goods vehicles (HGVs)
C	Buses, coaches, taxis, HGVs and light goods vehicles (LGVs)
D	Buses, coaches, taxis, HGVs, LGVs and cars

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Intelligent Transport Sys

- Sensors placed at traffic signals

- Periods of high pollution the signalling can me changed to improve the traffic flow

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DOING
NOTHING
IS NOT AN OPTION

Questions

‘Normalising’ in Greater Ma

Dominic Smith

Cycling Infrastructure Manager

Transport for Greater Manchester

Greater Manchester's Cycling Vision

Vision: Make cycling a mainstream, everyday and aspirational form of transport for everyone

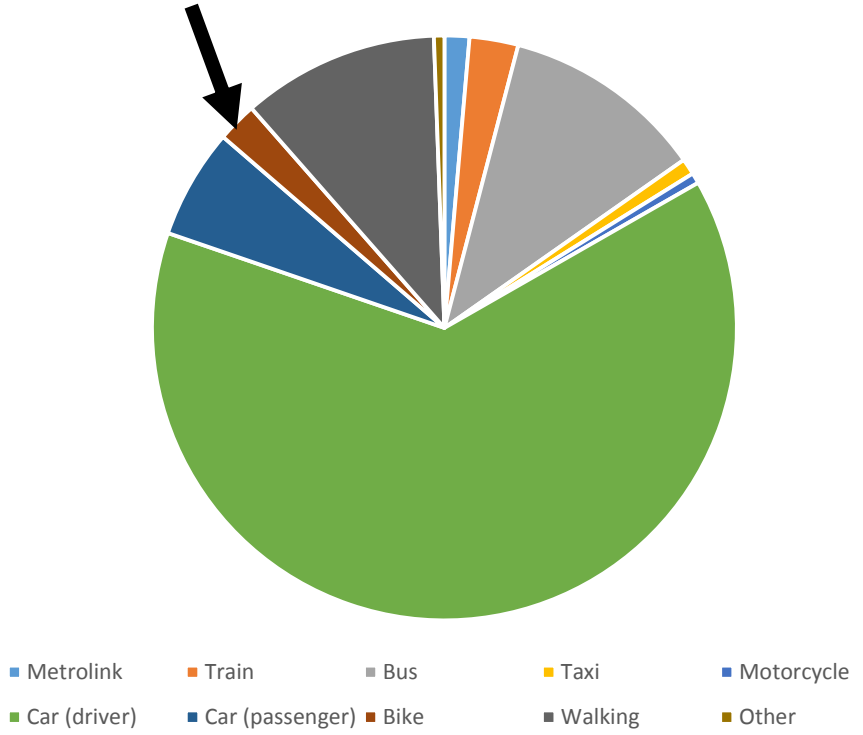
Context: Cycling is an important part of our plans for a city region that is fit for the future - a place where people want to live, work and visit

Aim: For cycling to be the natural choice for shorter trips, particularly for commuting

Support: 75% of people want to see more money invested in cycling

Why don’t people cycle?

Only 2% of GM commutes are currently by bike (2011 census):



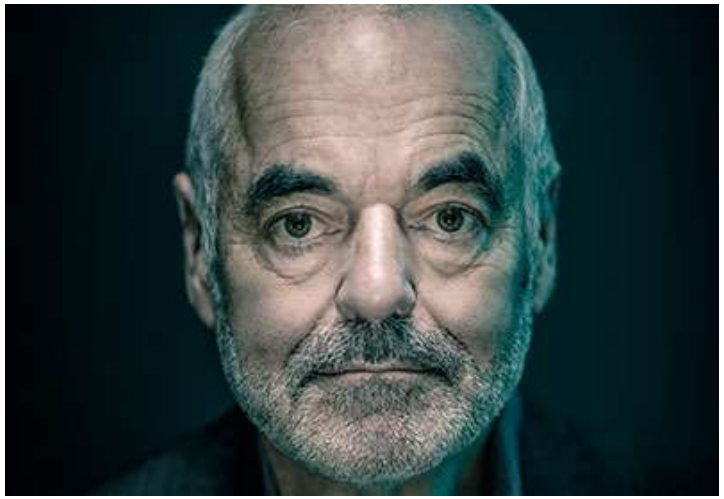
Deterrents to taking up cycling amongst non-cyclists in London (source: TfL ‘Attitudes to cycling survey, 2014)

Why don’t people cycle?

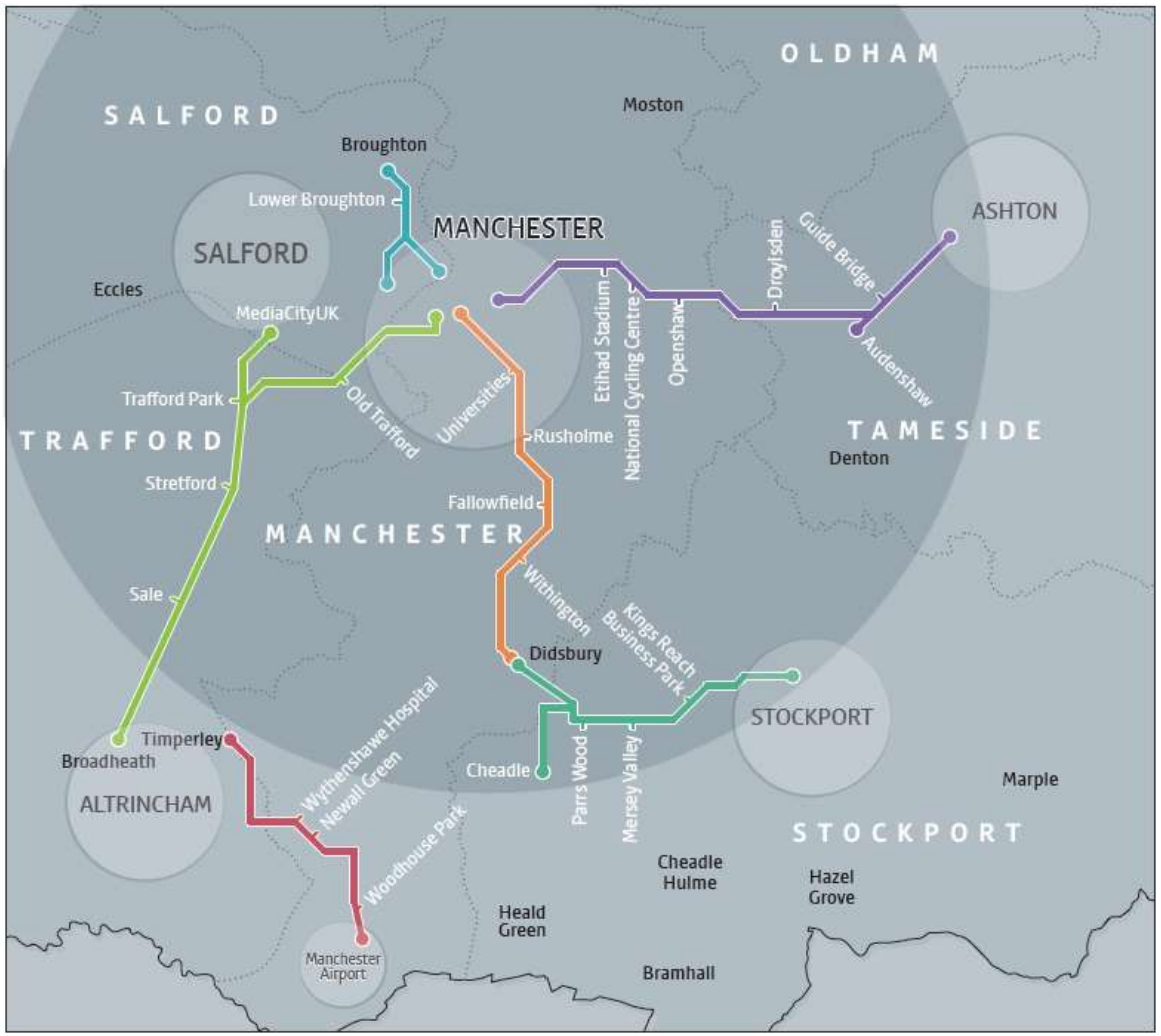
“Every hour a person spends cycling adds about an hour to that person’s life expectancy”

BUT…

(Professor David Speigelhalter FRS: Winton Professor for the Public Understanding of Risk)

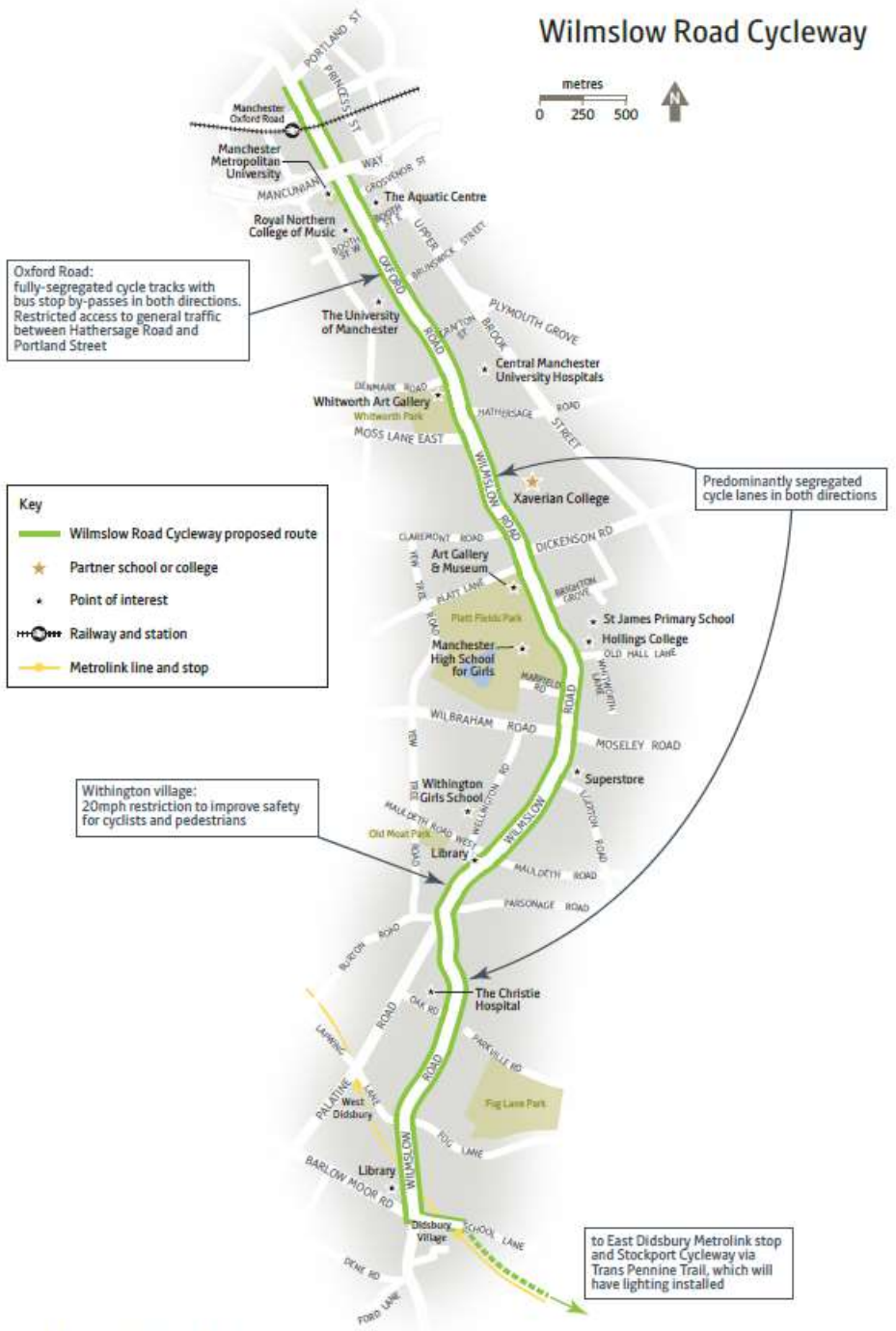


Cycle City: Phase 1 (Completed spring 2016)



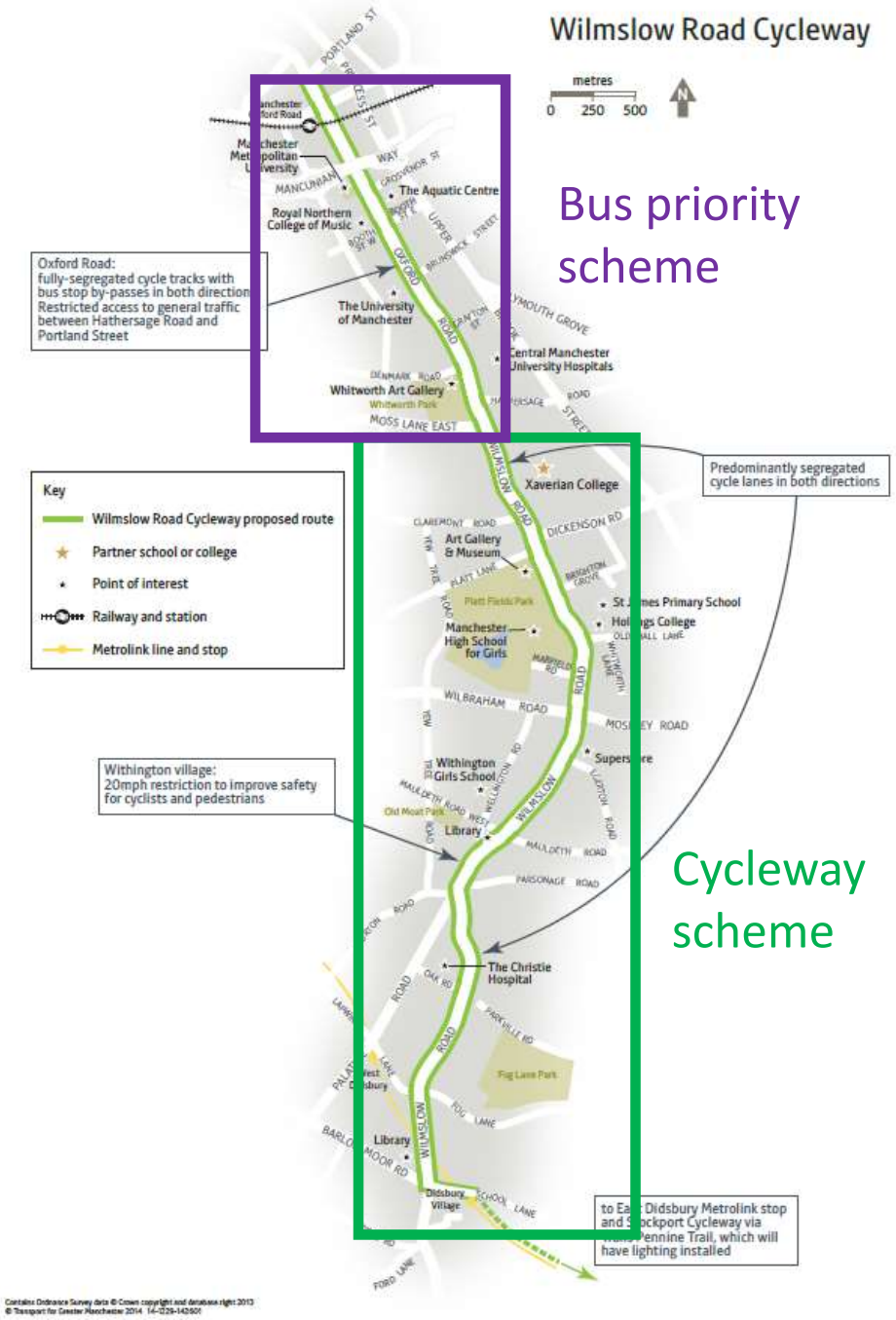
Wilmslow Road Cycleway

- Major city centre radial
- Connects city centre, university, and main student living areas
- >2,000 cycles per day
- >3,000 buses per day



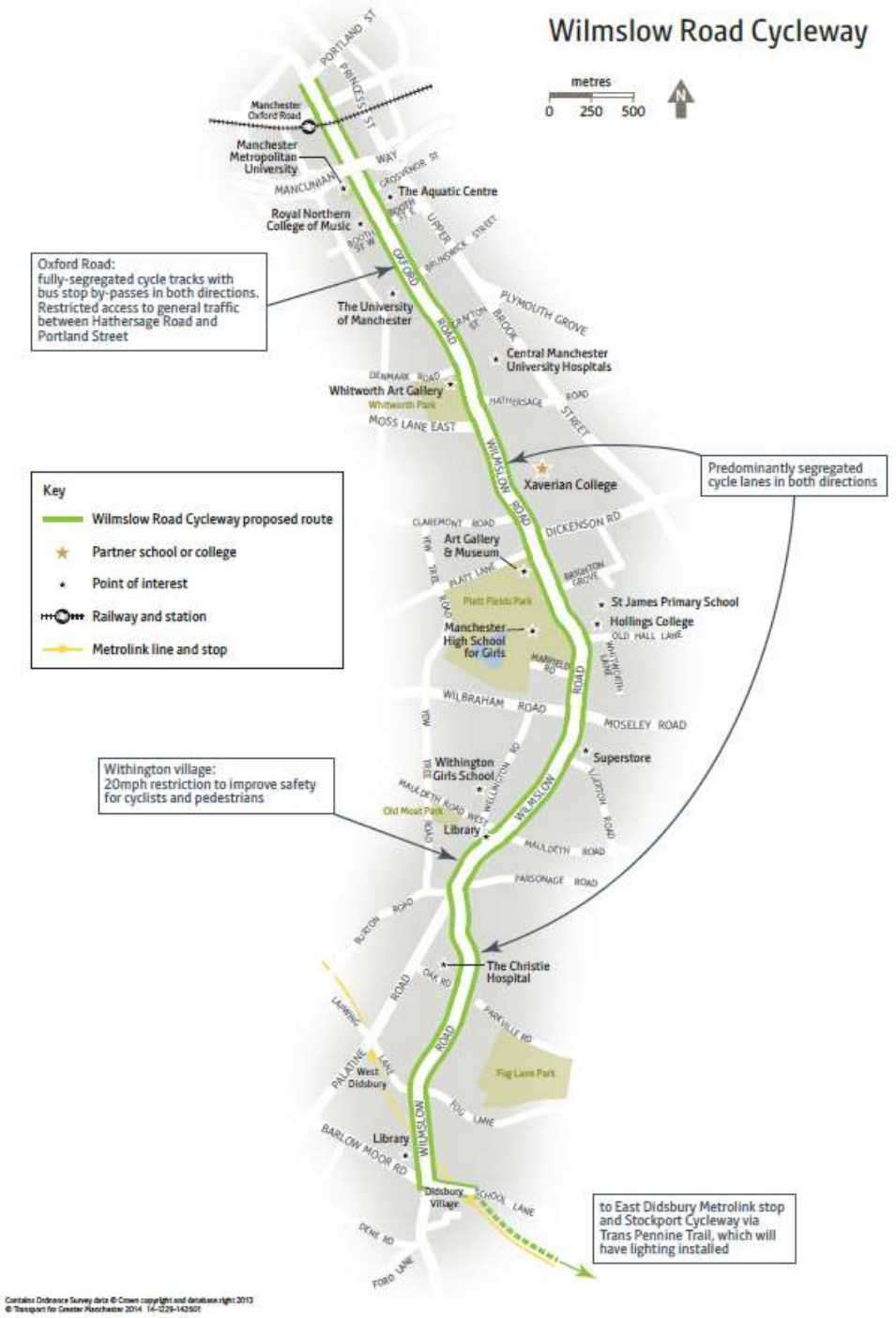
Wilmslow Road Cycleway

- £6m cycle scheme complementing £20m bus priority scheme: over 7km in length
- Opportunity taken to expand scope of planned bus scheme for cyclists both in terms of geographical extent and quality



Wilmslow Road Cycleway

- Principles consistent throughout:
  - Largely segregated
  - Protection at bus stops
  - Priority at side roads
  - Developed in consultation with cyclists



Wilmslow Road Cycleway

Wilmslow Road Cycleway

Wilmslow Road Cycleway

Wilmslow Road Cycleway

Broughton Cycleway

Ashton Canal Cycleway

Transport for Greater Manchester

Bridgewater Way

better bycycle

Airport Cycleway

Stockport & Mersey Valley Cycleway

Cycle & Ride Stations

Transport for Greater Manchester

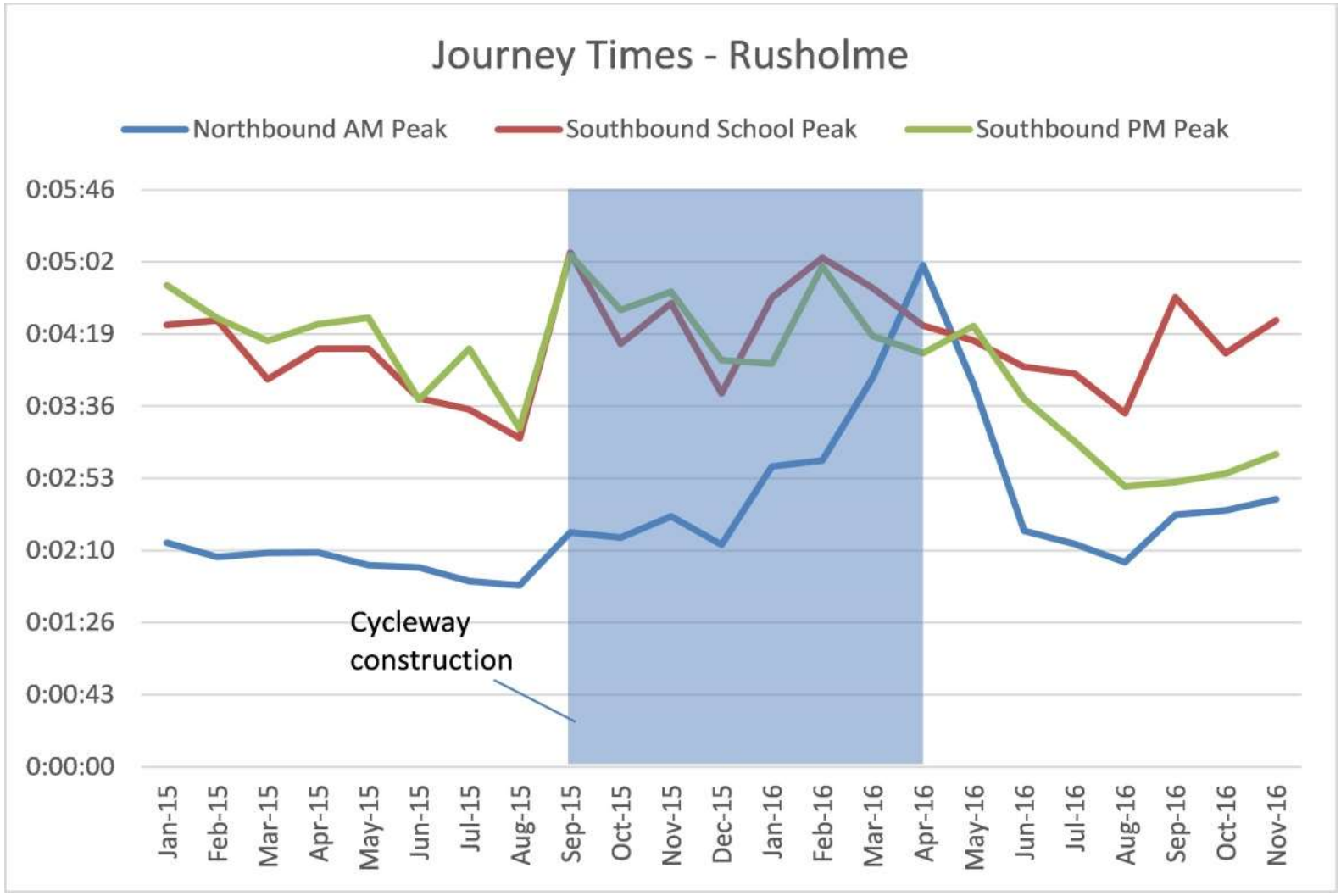
Partner Schools

Phase 2 Summary

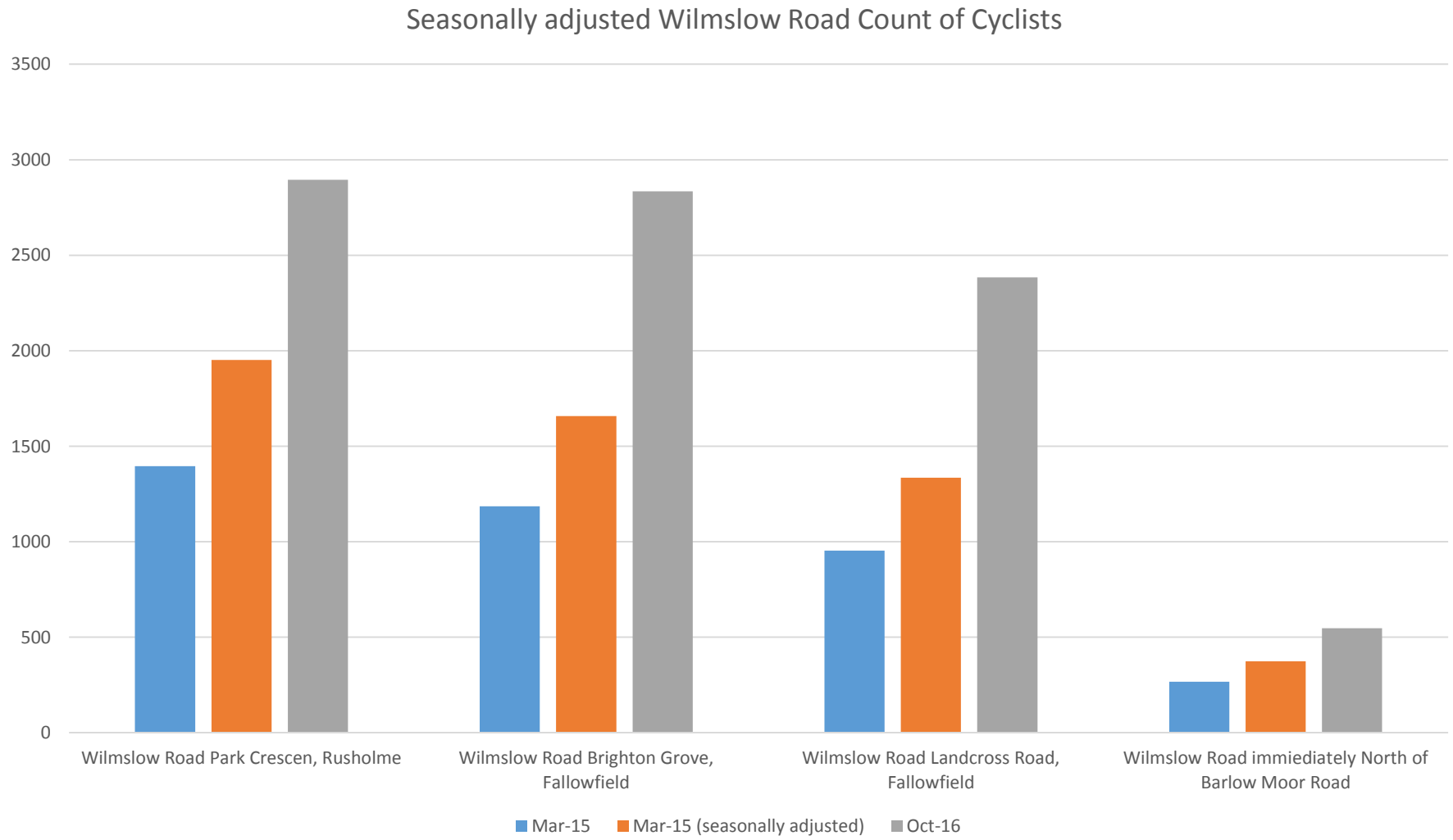
Cycleways/ routes	Cycle Friendly District Centres	Cycle and Ride	Partner Schools and Colleges	Cycle Parking
Chorlton Cycleway	City centre	Wigan (2 stations)	10 further schools	Business grants
Stretford Cycleway	Wigan	Cheadle Hulme		Social Landlords
Salford Cycleway	Oldham	Walkden		Other targeted locations
MB&B Canal Cycleway	Radcliffe	Radcliffe		
Rochdale Cyclelinks	Cheadle Hulme	Stalybridge		
Bolton Cyclelinks				

Challenge of delivering ambition

Challenge of delivering ambition



Cycling Infrastructure Investment: it works!

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Caspian
Restaurant
MOONLIGHT
Lycamob
OFF LICENCE
VALUATIONS - REPAIRS

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