



REFORM
Interreg Europe



European Union
European Regional
Development Fund

Greater Manchester 2040 Transport Strategy Vision and Modelling the Future

Iosif Stroumtsas

TfGM

iosif.stroumtsas@aeom.com

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2040 Vision, Strategy and Delivery Plan Structure



Our Vision



Supporting sustainable economic growth

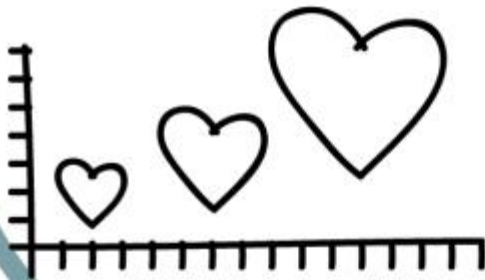


Protecting our environment

Transport Vision

World class connections that support long-term, sustainable economic growth and access to opportunity for all

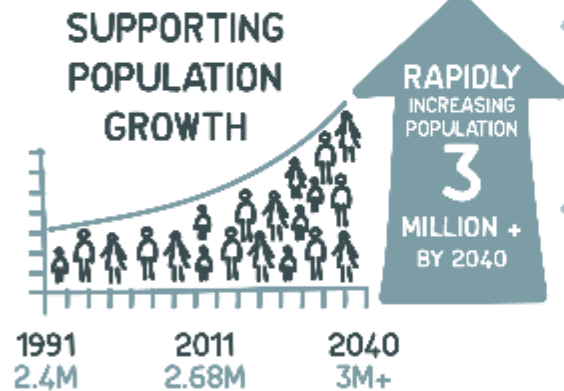
Improving quality of life for all



Developing an innovative city-region



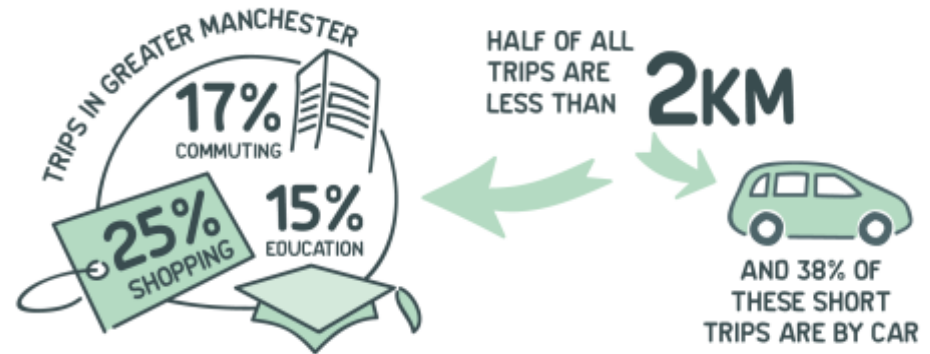
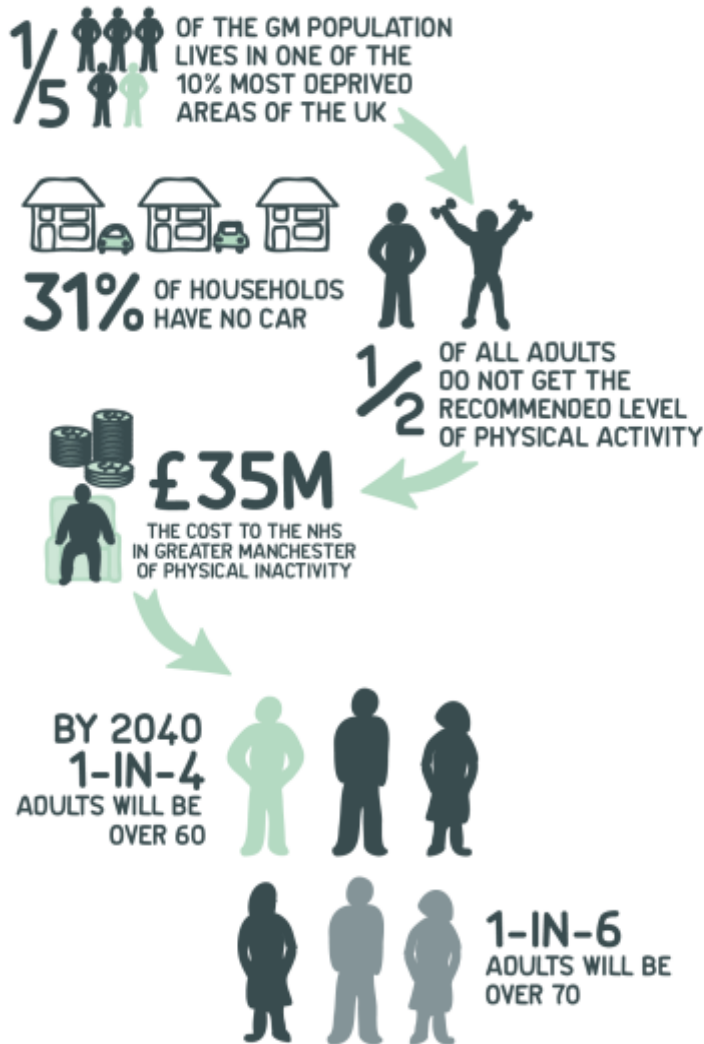
AN INCREASE IN EMPLOYMENT



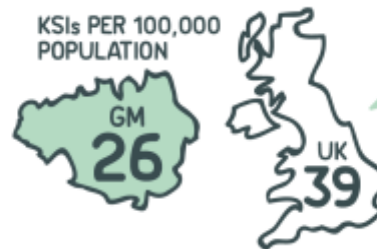
+600,000
MORE TRIPS ON OUR
TRANSPORT NETWORKS
EVERYDAY
BY 2035



IMPROVING THE QUALITY OF LIFE



Greater Manchester has reduced accident rates to below the national average



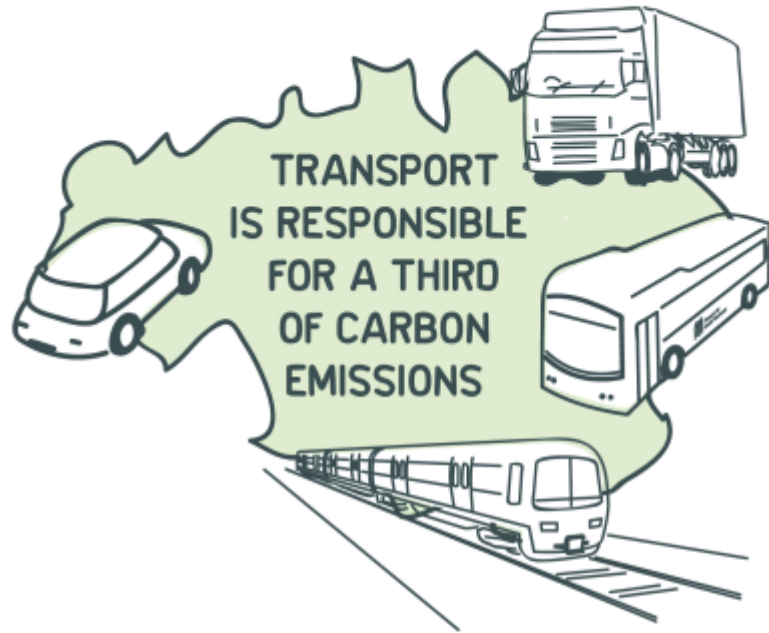
but we still have a high number of pedestrian and cycle injuries



and many of these involve children



PROTECTING OUR ENVIRONMENT



48%
CARBON
REDUCTION
BY 2020

CO₂

£20bn

ECONOMIC
COST IF WE DO
NOT TACKLE
CLIMATE CHANGE



13%

INCREASE IN
WINTER RAINFALL



AND ANNUAL MEAN
TEMP RISE OF UP TO

+2.3°C

BY 2050



1000 DEATHS
PER YEAR
FROM AIR POLLUTION

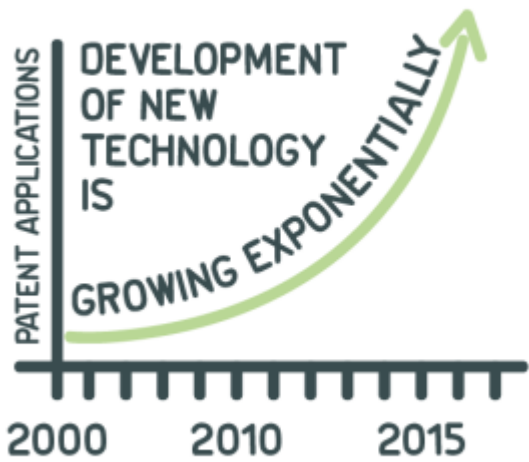
TECHNOLOGY AND INNOVATION

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

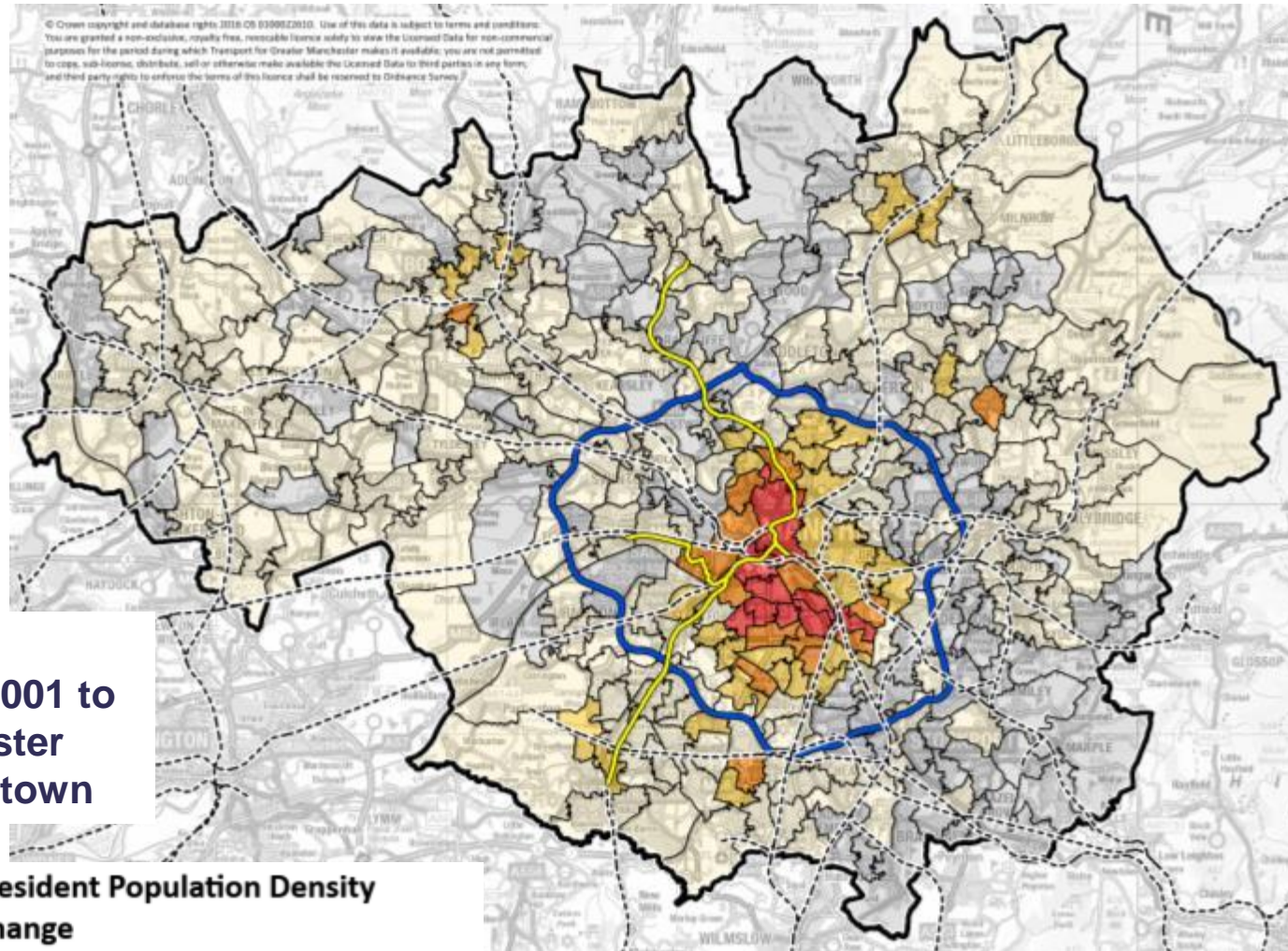


AUTOMOTIVE
TECH WORTH
ESTIMATED
£900bn
GLOBALLY BY 2025



AN EVIDENCE-BASED STRATEGY

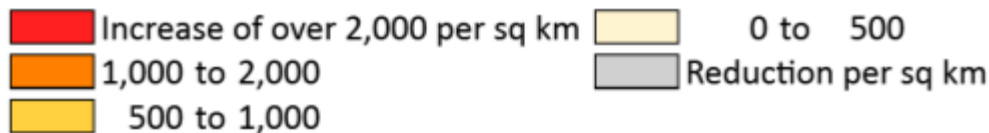
More people living in urban areas...



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



Integration at the heart of our 2040 Strategy

Old way

By mode



By district



Integration at the heart of our 2040 Strategy

Old way

By mode



By district



New way



People



Places

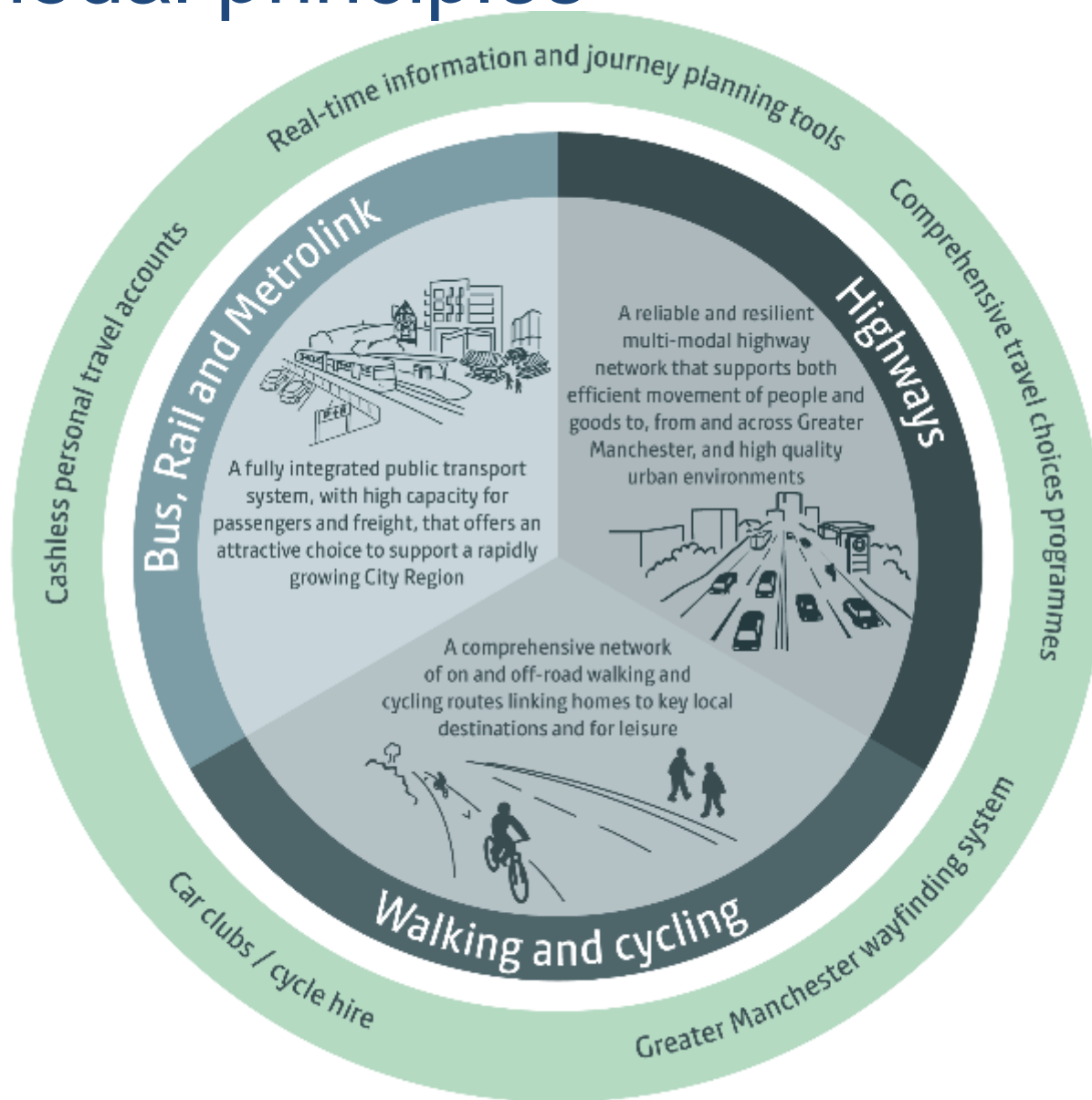


Seamless journeys

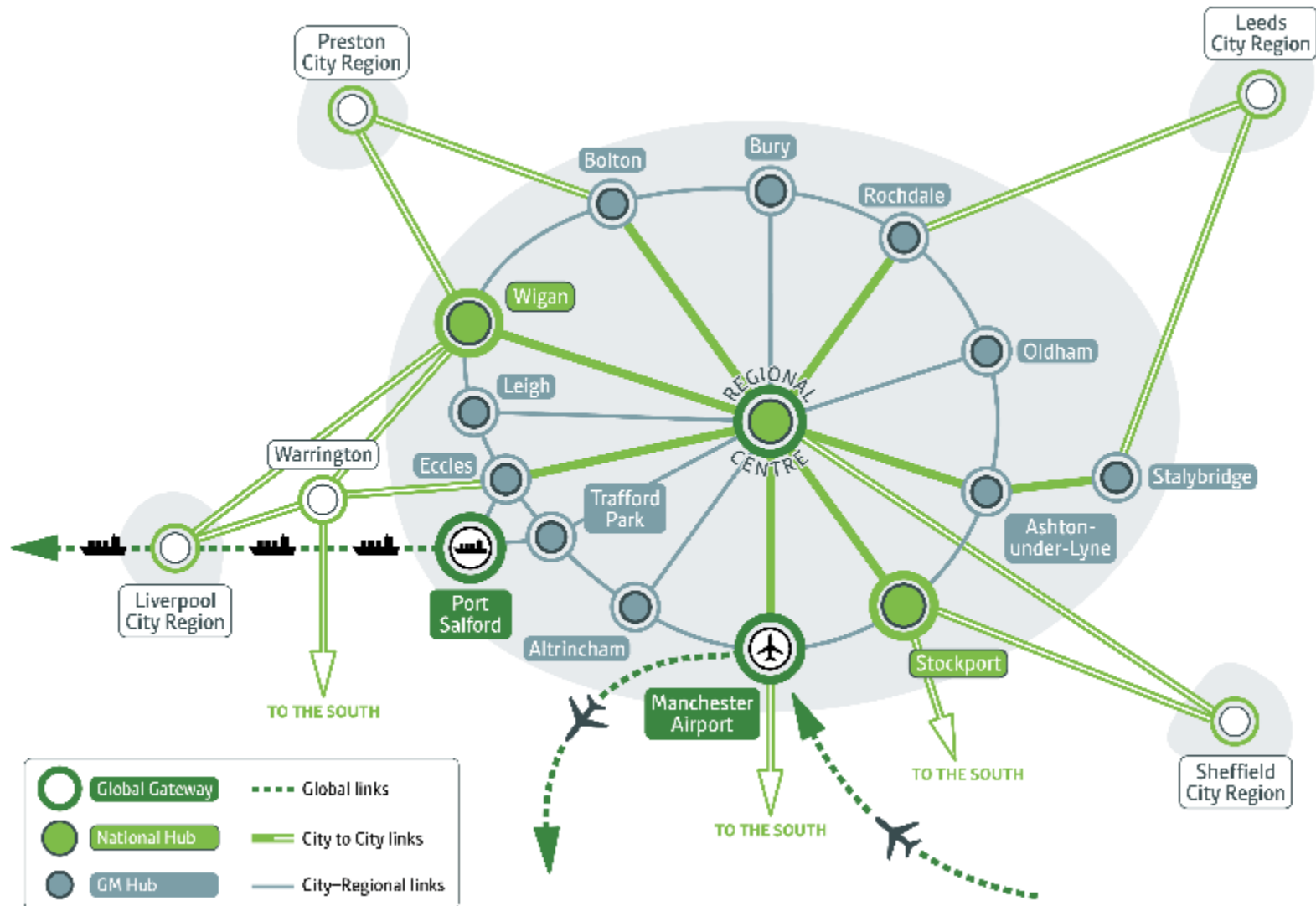
Our network principles



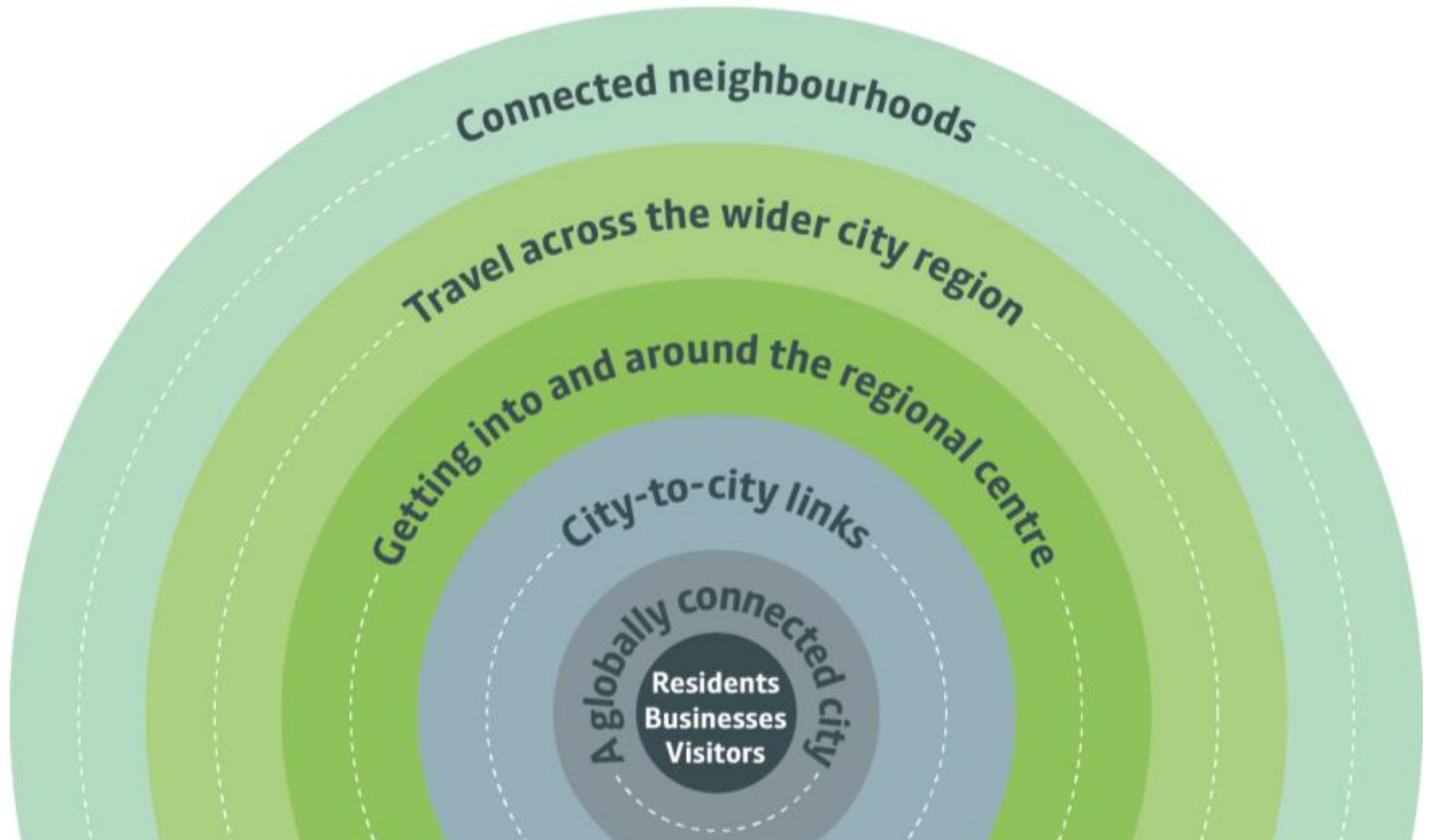
Our modal principles



A full integrated PT network



Our 2040 spatial themes



New Investment

- Global connectivity
- City-to-city links
- Regional centre connectivity
- Travel across the city-region
- Connected neighbourhoods
- GM-wide programmes

Service Delivery

- Integrated planning and funding
- Key route network
- Rail station devolution
- Integrated bus network

Maintenance and Renewal

- Highways
- Rail and Metrolink
- Passenger facilities
- Off-road pedestrian and cycle routes

PUBLIC CONSULTATION...

Overall Approach

12-week consultation

- TfGM, GMCA and GMLEP
- Challenges on engaging the public
- Maximise TfGM assets
- Raise awareness of the public and stakeholders

Consultation Method

Launch Event

- 140 stakeholders (Government Agencies, Transport Authorities, etc.)

Public Engagement

- Social Media
- Vision 2040 printed copies
- TfGM Assets

Consultation Method

Printed Copies

- 800 copies for libraries and public buildings including prints for people with disabilities

Social media – Facebook, Twitter and LinkedIn

- 40,000 twitter accounts reached
- 15-day press coverage in Manchester Evening News with two-page spread
- #gm2040
- 2040@tfgm.com
- Website

TfGM Assets

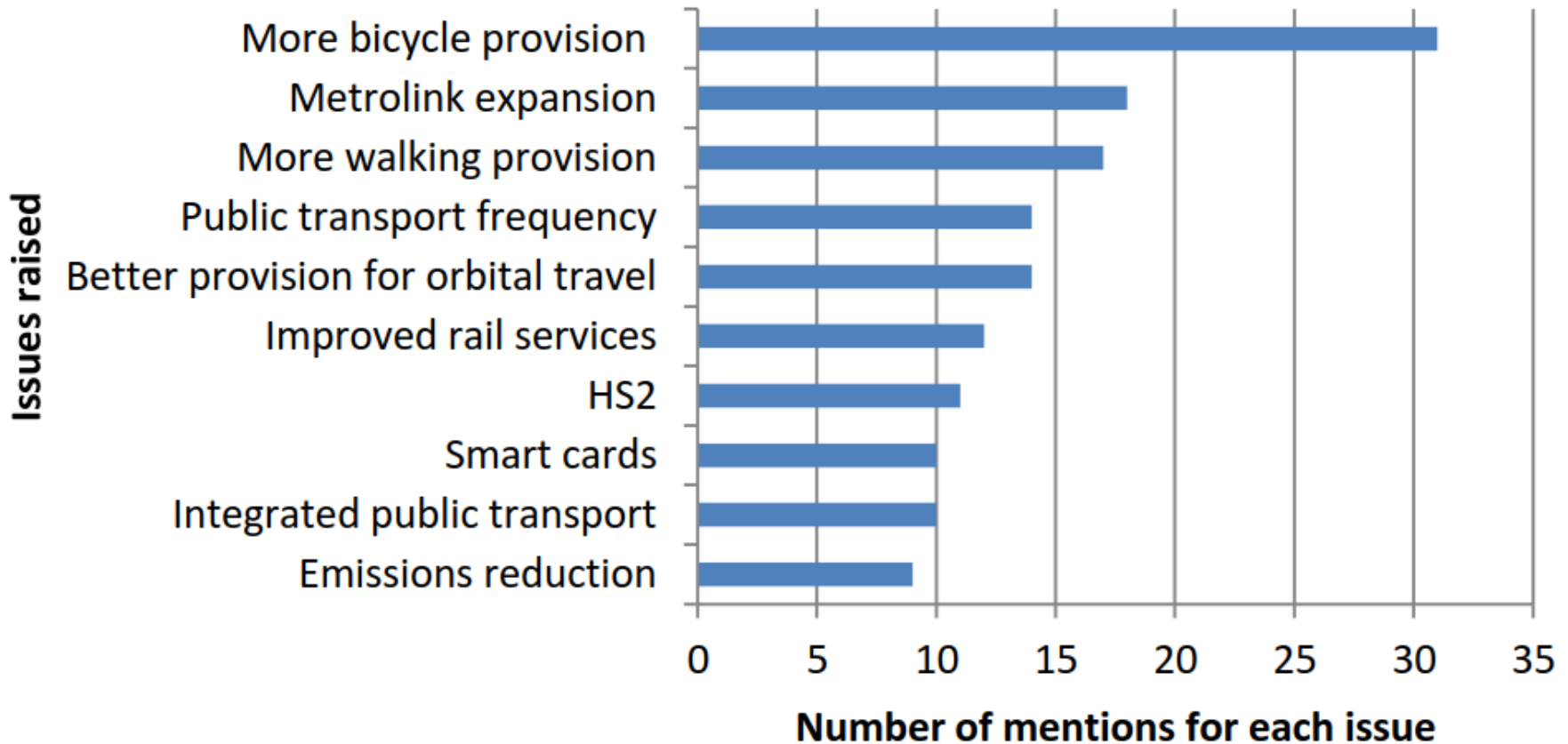
- Bus stops, rail stations and Metrolink

Responses

	Online Submissions	Email and Written Submissions
Public	99	1
Organisations and Business Stakeholders	28	34

- A Global Connected City;
- City-to-city links;
- Getting into and around regional centre;
- Travel across the wider city region; and
- Connected neighbourhoods

Issues Raised

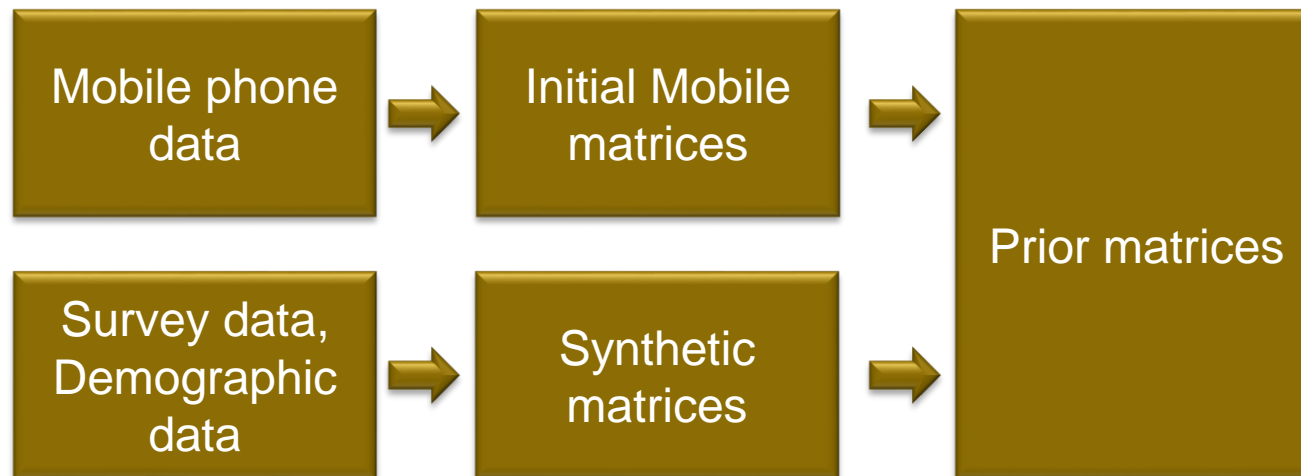


Key Points and Next Steps

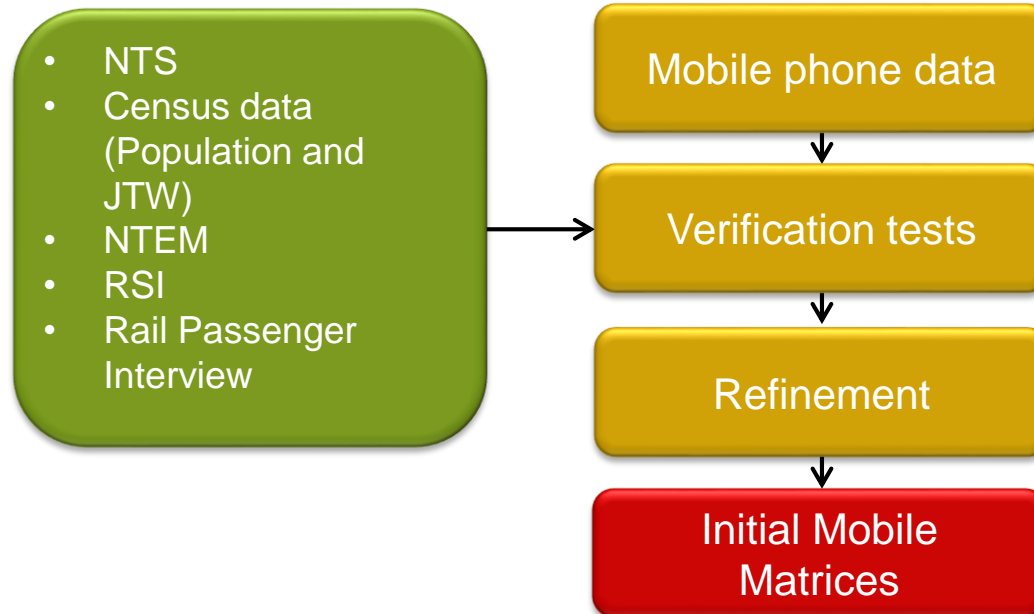
- Integrated public transport solutions with a strong focus on how the system is promoted in an integrated manner, including integrated and smart ticketing systems, and better real-time information on travel options by different modes of transport.
- More detailed exploration of opportunities and development of deliverable solutions to support orbital public transport movements to key destinations in Greater Manchester
- Identification and development of opportunities to improve cross-boundary transport, including improved city-to-city road and rail links
- A clear and deliverable strategy for our rapid transit network, including priorities for delivering the Greater Manchester tram-train strategy.
- A clear and deliverable strategy to support greater levels of active travel (walking and cycling) across Greater Manchester;
- Clear proposals to support our ambitions for an ultra low-emission transport system; and
- Continued alignment of the 2040 Transport Strategy and a clear and deliverable strategy so as to ensure integrated land use and transport planning in Greater Manchester

MOBILE DATA AND MATRIX DEVELOPMENT...

Matrix Development Process



Mobile Phone Data



Data verification test results

Test ID	Demand Indicator	Data Check / Comparison	Result	
A	Trip Ends	All day vs. population	High level of correlation between trip numbers and population ($r^2 \approx 0.85$ at both MSOA and LSOA level)	
		All day HBW from home vs. Census JTW	High level of scatter at MSOA level for home locations ($r^2=0.3$) High correlation in work locations ($r^2>0.9$)	
	Symmetry	From home vs. to home (all day, all purposes)	The data shows a very high degree of symmetry between outbound and inbound home based trips. $R^2 \approx 1.00$	
B	Trip Rates	From home trip rates vs. NTS	Overall trip rates are close to NTS rates. Rates appear high for HBW and low for HBO consistent with education being included in HBW.	
C	Trip Distribution	Home based from home vs. census JTW district level	High level of correlation for inter district trips $R^2=0.95$	
		Investigation of work trips to and from Warrington	Generally reasonable fit between JTW proportions and mobile phone proportions. Apparent under estimate of trips to Manchester and Liverpool	
D	Trip Length Profile	Comparison between RSI on cordon and MPD external – internal trips	Mismatch between RSI and MPD for shortest and longest bands Overall Coincidence Ratio ≈ 0.75 , increases to 0.85 when trips $< 6\text{km}$ and $>100\text{km}$ removed	
E	Trip Purpose	Comparison with NTS and NTEM	HBW trips consistent with inclusion of education. Overall good match between HB trip rates and NTS	
	Trip Purpose (Rail)	Comparison with NTEM and Rail Interviews	MPD appears to over estimate non home based rail trips MPD identifies trips to some districts (eg Manchester) much better than others (eg Liverpool)	

FINAL THOUGHTS...

The Engagement Challenge

Town and city centres are no places for private vehicles. Make life hard for drivers, make life easy for people following sustainable travel options. A private car takes up huge amounts of space and rarely carries more than one person, you must banish these from our busiest environments.

You wish to drive car users off the roads, I do not want to use unsafe, unclean, and expensive public transport! I live in Trafford and if I wish to use my car, I should under a free democratic society be allowed to do so!



REFORM

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Thank you!

www.tfgm.com/2040

Questions welcome



Project smedia