

Working Together to Tackle Congestion

Monitoring and managing traffic flow in Manchester

TfGM Highways

TfGM Highways have delegated responsibilities (from GMCA) for providing services to the 10 Districts of Greater Manchester under 4 Protocols

- Protocol 1: Traffic Signals (UTC)
 - Protocol 2: Transport Studies/Forecasting (HFAS)
 - Protocol 3: Network Management and Development (KRN)
 - Protocol 4: Road Safety (JRSG)
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TfGM Control Room

- Control Room operational 24/7
- Monitoring the highway network across GM, utilising 75 TfGM cameras and accessing CCTV owned by Manchester, Stockport and Highways England.
- Bus operator co-located in Control Room to allow greater visibility and quicker response to network incidents.
- Producing twice daily peak reports for a “lookback” on network performance across all modes.
- Providing Incident alerts to highlight major disruption.
- Providing real time traffic updates to Social Media.
- Identify roadworks that are likely to impact the highway network, supporting planned diversions.
- For Events, represent TfGM in Silver and Gold planning meetings to ensure a multi agency response is coherent and cohesive
- Maintaining strong relationships with key stakeholders to ensure disruption around planned events are minimised.
- Implementing a VMS strategy to support planned events.



Event Management

Regular event management for:



The
Bridgewater
Hall



Annual and 'one-off' event management for:



great  manchester
run[®]

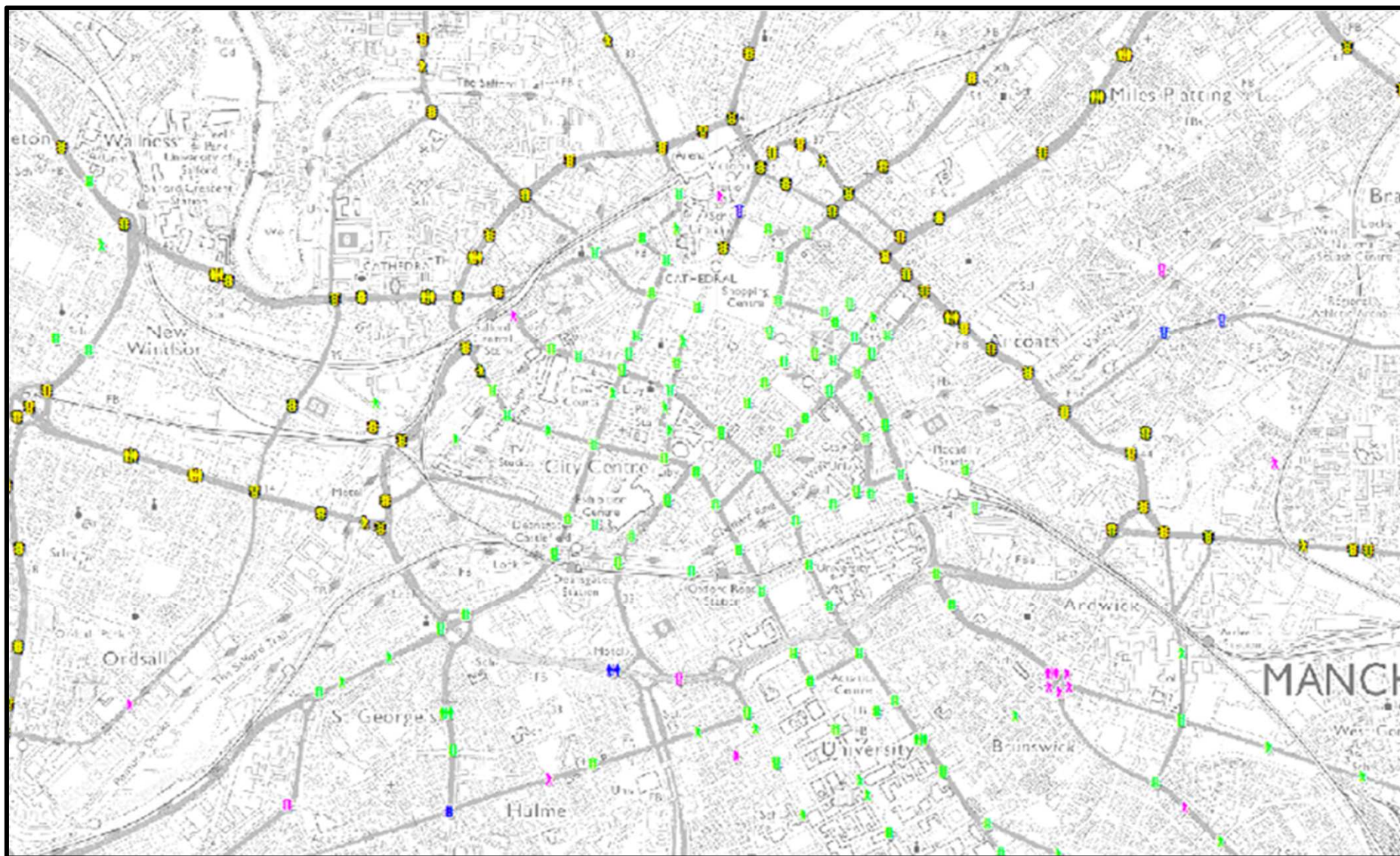
Supporting Special Events

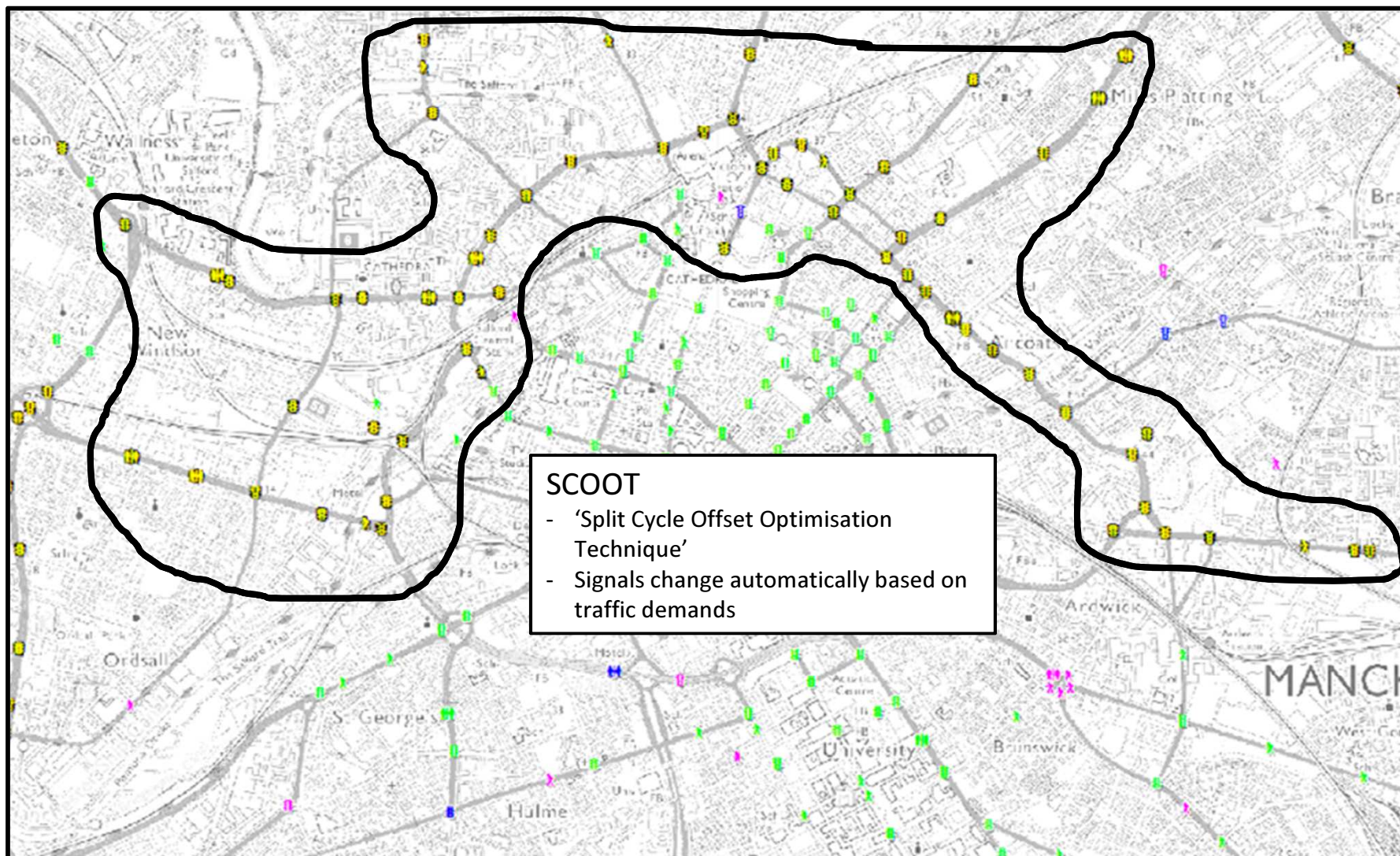
FOOTBALL MATCH
OLD TRAFFORD
TUES 27TH NOV 8PM
INNER RING RD
CONGESTION FROM
3PM – PLAN JNY NOW

MUFC V YOUNG BOYS
OLD TRAFFORD
TODAY 20:00
CONSIDER METROLINK
TO GET TO THE GAME
PLAN @TFGM.COM



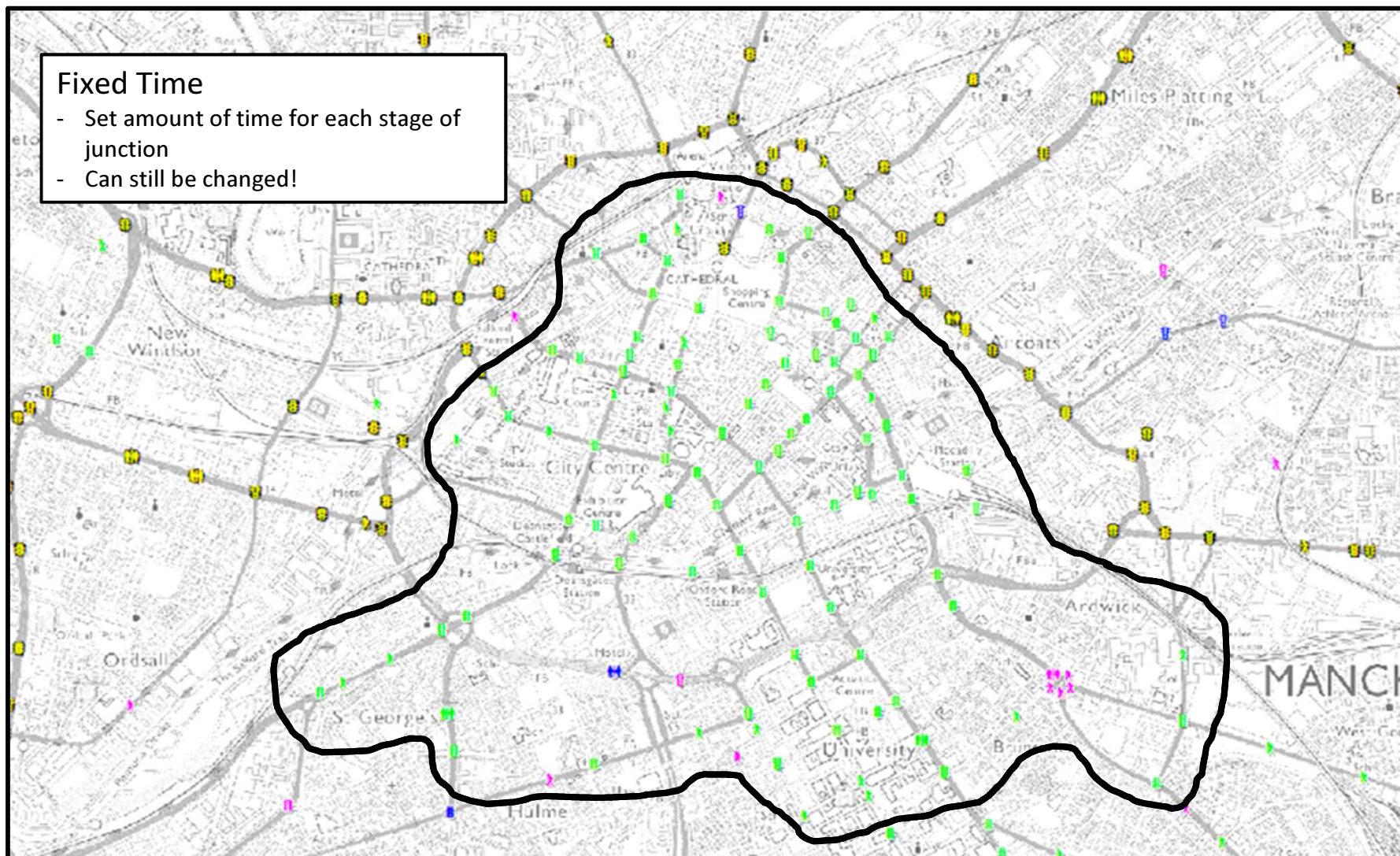
Map of all the traffic signals in Manchester City Centre.



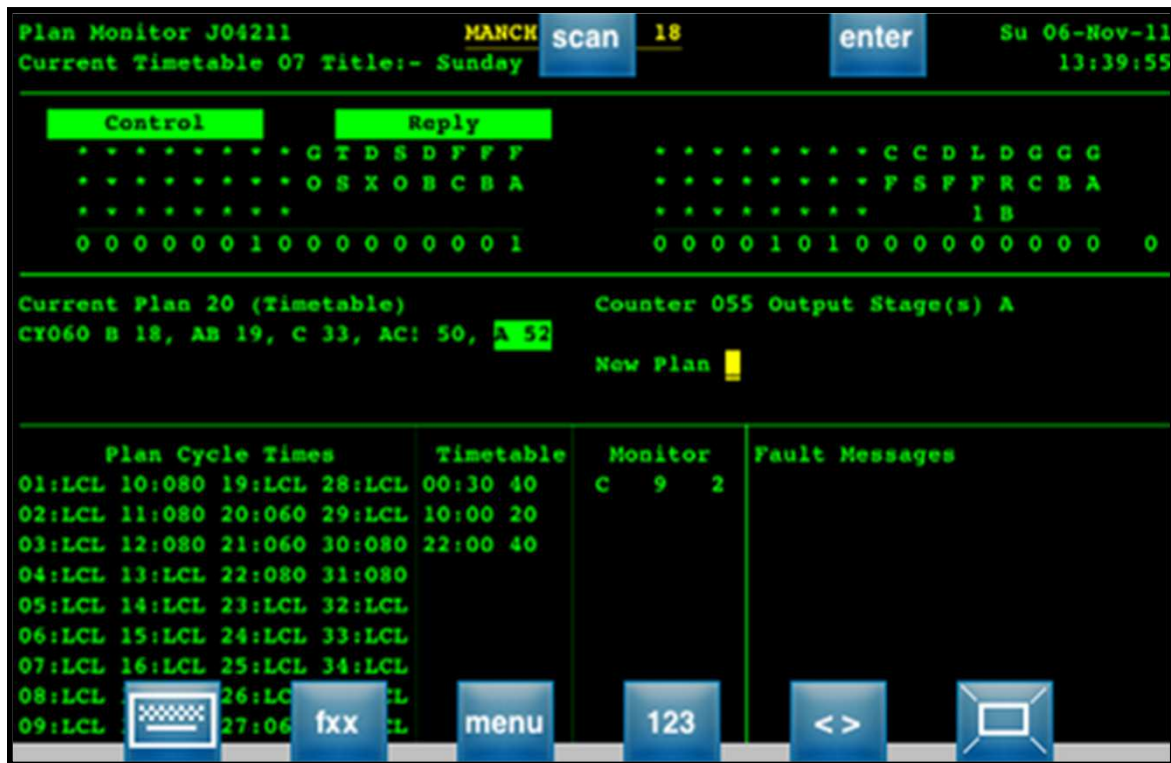


Fixed Time

- Set amount of time for each stage of junction
- Can still be changed!



Urban Traffic Control System





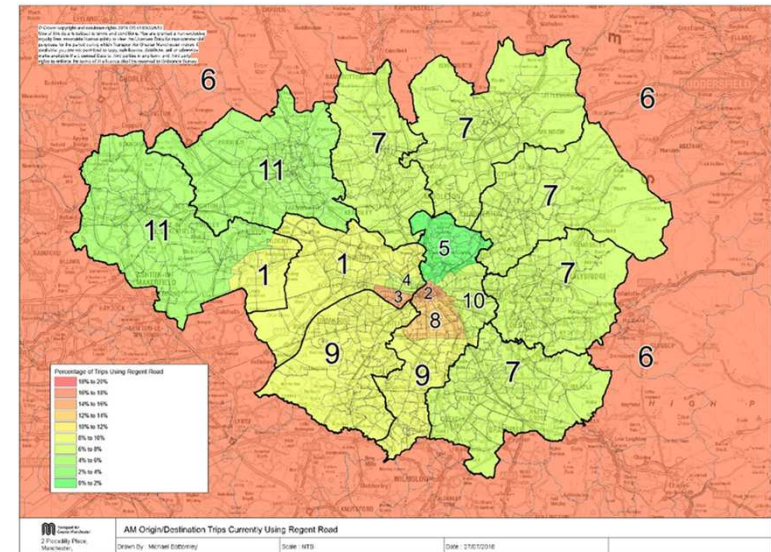
Transport for
Greater Manchester

HFAS Modelling – informing decisions



MANCHESTER
CITY COUNCIL

- HFAS used the GM SATURN traffic model to understand traffic currently using Regent Road, specifically their origins and destinations.
- Nearly 35% of traffic using Regent Road either starts or finishes its journey outside Greater Manchester
- Used by Manchester's and TfGM's Communication's Team to inform the communications strategy and potential other interventions to encourage changes in driver behaviour





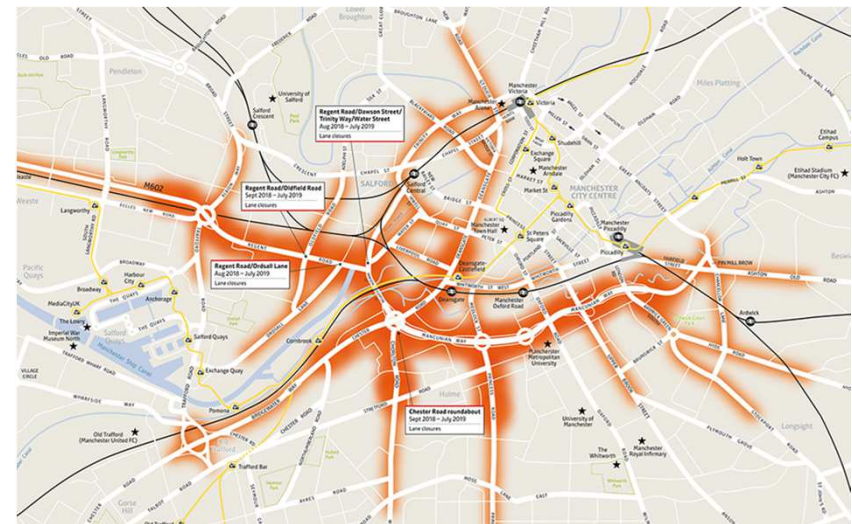
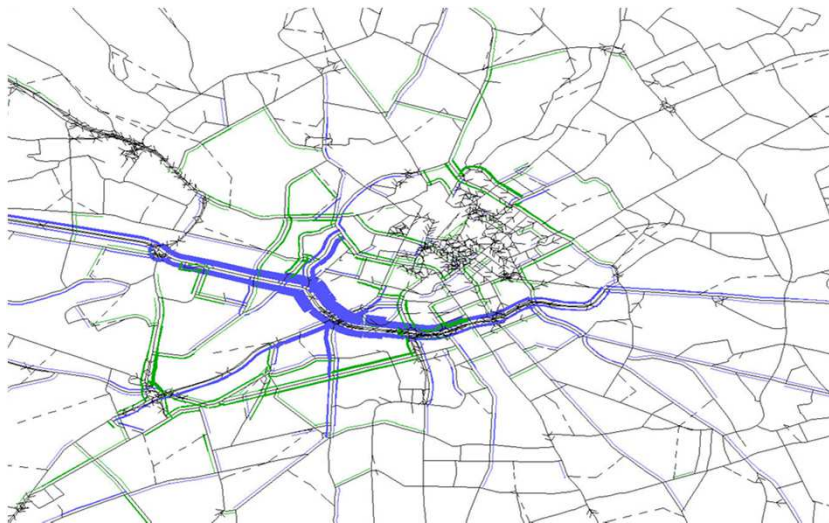
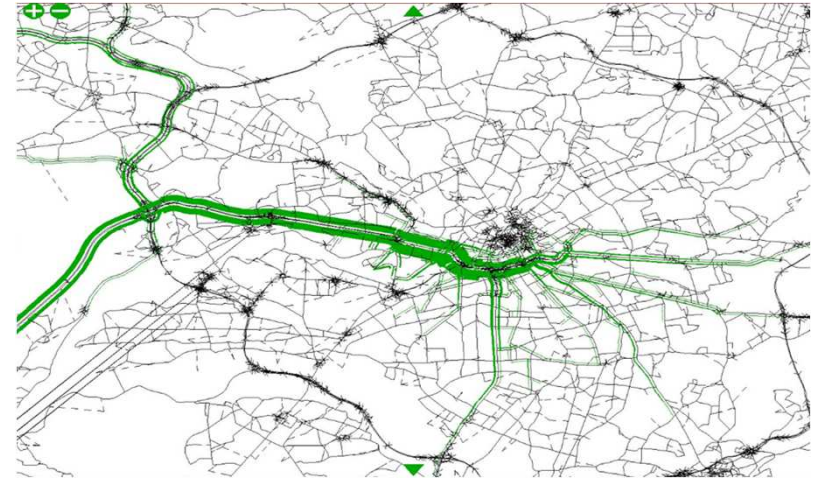
Transport for
Greater Manchester

HFAS Modelling – informing decisions



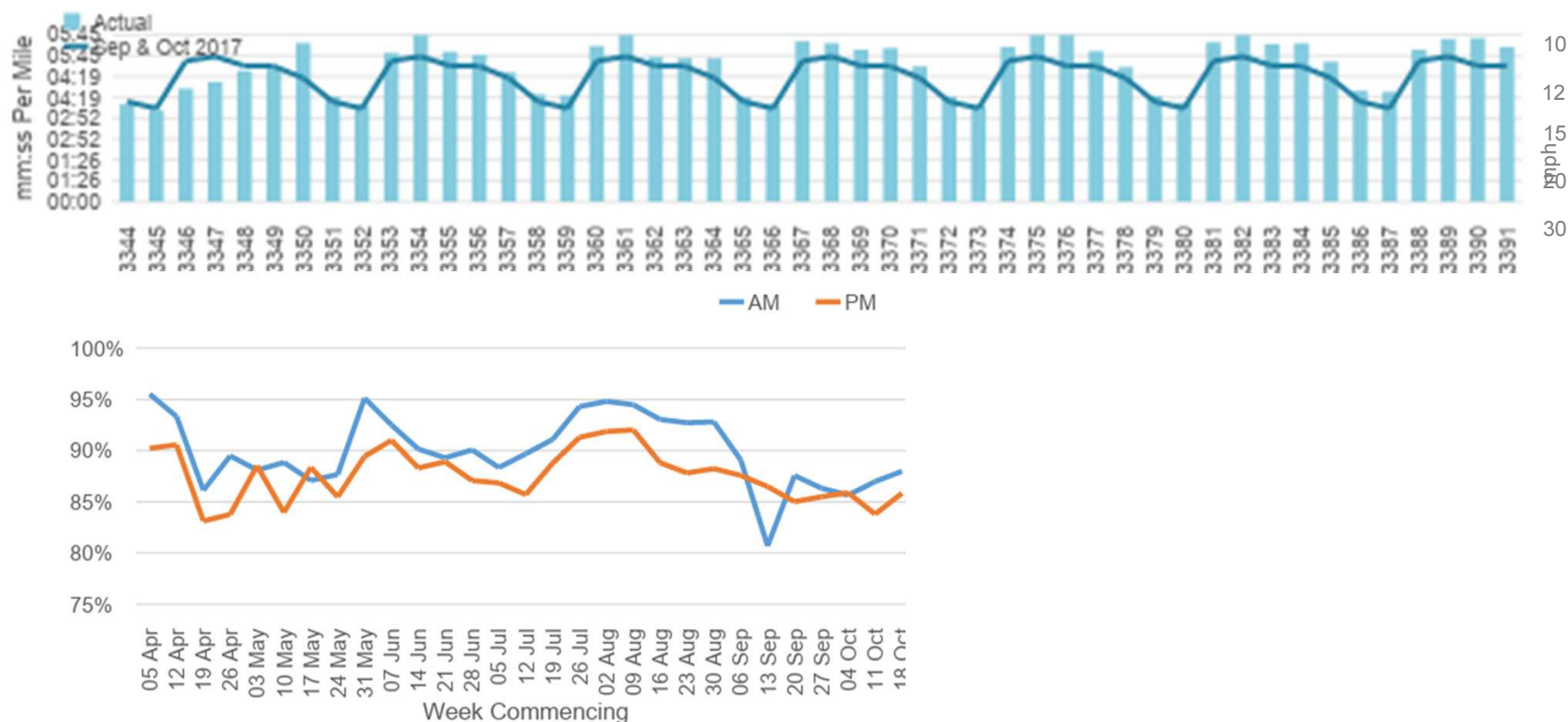
MANCHESTER
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- The plot to the right shows the main routes of traffic currently using Regent Road
- Modelling of the construction traffic management identified changes in routes used by traffic (below)
- This modelling formed the basis of the congestion heatmaps provided to the public by the TfGM Communications team.

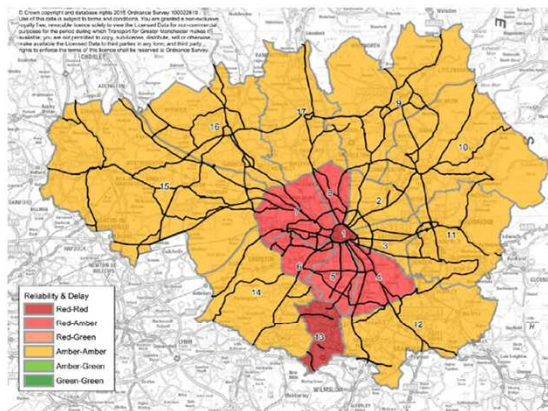


TfGM also monitor the performance of the key route network and report on overall performance and delays.

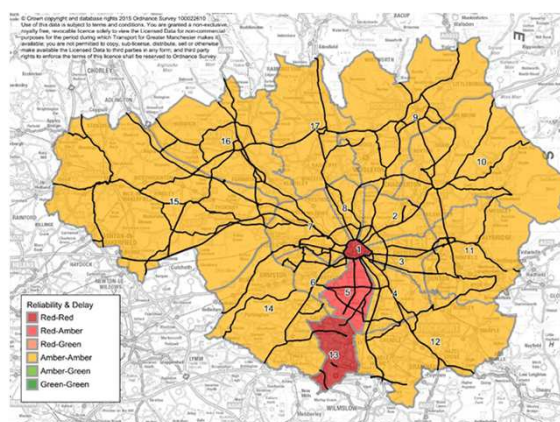
Data



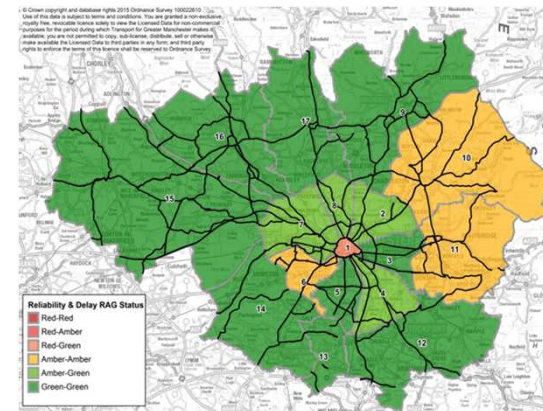
Overall level of reliability & delay during the AM and PM peak across the KRN.



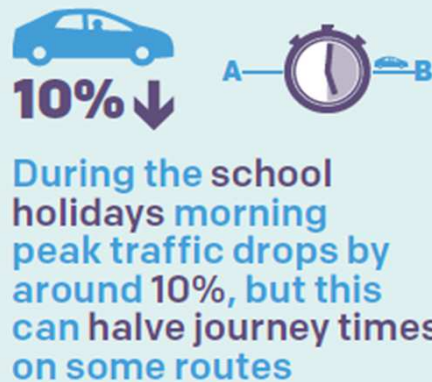
20-26 April 2018



14-20 Sept 2018



19-25 Oct 2018



Greater Manchester Congestion Deal



Manage the network
more effectively



Provide more
travel choices



Provide more capacity for
moving people and goods

Managing disruption to traffic flow

Measures to minimise disruption

- MCC seeks to coordinate all works, development and events
- For all Major schemes, and many Minor and Standard schemes, MCC Highways engage in advance with scheme promoters.
- Contractors are encouraged to look at ways to minimise disruption
- Advice from MCC could cover:
 - Working longer hours (reduce length of works)
 - Working out-of-hours/weekends
 - Using innovative working practices or traffic management techniques to reduce impact

GMRAPS system – TfGM and MCC review roadworks proposals to ensure disruption is minimised and coordinated

Measures to minimise disruption

- MCC hosts quarterly co-ordination meetings to ensure opportunities to co-ordinate road works are fully considered
 - MCC will meet more regularly with utilities providers and contractors to improve collaboration
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Pre-roadwork management – GMRAPS System

- GMRAPS is a system managed by TfGM for MCC to assess and approve all works on the highway
 - TfGM consider strategic context and manage the overall system
 - MCC review detailed proposals and approve scheme and implementation details
 - Contractors must apply for permit, setting out full details of works proposed
 - Proposals are assessed based on impact on strategic networks and local impact
 - Work must be carried out in accordance with the approved permit
 - On-going monitoring and management of schemes is managed through GMRAPS
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Pre-roadwork management – GMRAPS System

- Permits through GMRAPS include operation conditions
 - The conditions reflect nationwide practice, and cover:
 - methodology,
 - road occupation dimensions,
 - material and plant storage,
 - time and date constraints
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Pre-roadwork management – other measures

- Advance warning signs are installed on site
 - All key MCC and external stakeholders are informed, including legal publicity in the press
 - MCC liaise with public transport providers (buses and Metrolink)
 - Modelling of road closures in advance to inform messaging
 - Localised letter drops prior to closures and diversions
 - Face to face liaison with local residents and businesses
 - Continue business forums
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Major infrastructure traffic management – ‘strategic’

- Pre–construction advertising campaign :
 - Letter drops
 - Radio advertising
 - Business forums
 - Website
 - VMS signage on site
 - During construction:
 - TfGM and MCC websites
 - Social media messaging
 - Road closure updates
 - Members’ briefings
 - Minimise working constraints such as embargos
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Major infrastructure traffic management – ‘on the ground’

During construction:

- Work is monitored and managed during implementation through the GMRAPS system
 - Free vehicle recovery
 - Scheme signboards on local and strategic routes with website & public liaison officer contact details
 - Respond and react quickly to complaints and queries
 - Work with 3rd party works to amalgamate tm and minimise disruption
 - Daily monitoring of all road user traffic management inc. Pedestrians & cyclists
 - Regular meetings - cross border and multi stakeholder:
 - Traffic management coordination
 - Communications strategy
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Licences

- MCC issues licences for skips, scaffolding and hoarding
 - Applications for these licences are managed using the Symology licensing system
 - Management is similar to GMRAPS, and MCC considers similar issues:
 - Promoting safety of road-users, especially pedestrians
 - Minimise Disruption
 - Co-ordinate work
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Conclusion

- Managing traffic flow is a key challenge for a busy city like Manchester
 - Managing change (new developments), maintenance (roadworks) and events all add complexity to the challenge
 - Important that there is monitoring and planning across stakeholders to manage traffic effectively
 - Members are key stakeholders, and comments/questions from the Committee on the approach set out are welcome
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