



Board Meeting

Date	17 February 2017
Report title	Movement for Growth and Transport Monitoring
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Report has been considered by	<ul style="list-style-type: none">• STOG 5 December 2016• TDC on 9 January 2017• WMCA Programme board on 3 Feb 17

The Combined Authority Board is recommended to:

1. Approve the Movement for Growth strategic transport plan monitoring process, which is compatible with the West Midlands Combined Authority's performance management framework, as set out in the report.
2. Approve the ongoing monitoring to support the themes within the Movement for Growth strategic transport plan

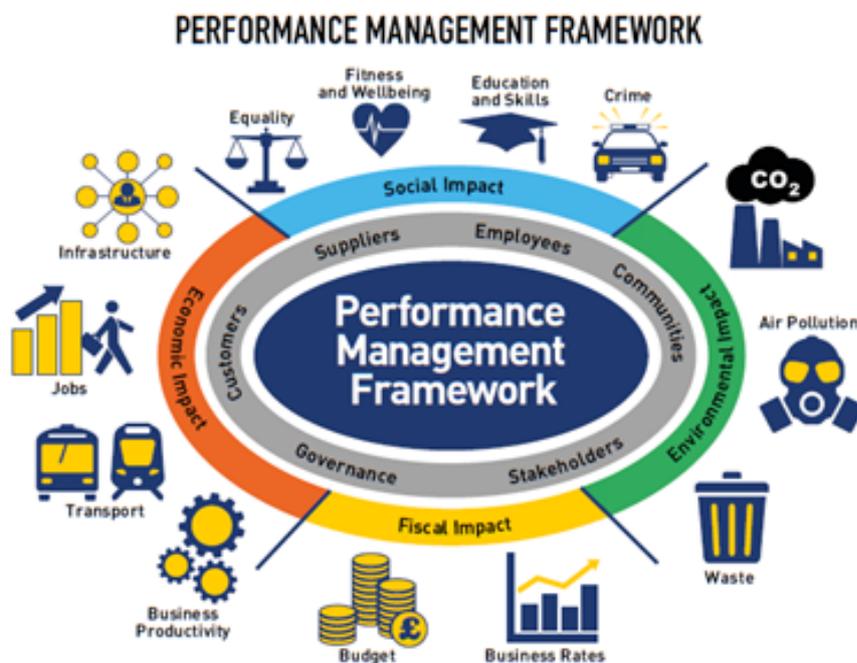
1.0 Purpose

1.1 Monitoring and evaluation are important in the development and delivery of the Movement for Growth strategic transport plan; the tracking of progress of the Strategic Economic Plan and the WMCA Performance Framework. Monitoring is needed to see whether the overall delivery of schemes and measures is achieving our vision and objectives and evaluation to understand what is work best. This report highlights how we will measure our success against headline and supporting measures and how, through ongoing research and evidence gathering, we will inform and shape the policies and programmes.

2.0 Background

2.1 The WMCA Performance Management Framework contains a number of strategic headline indicators which measure the impact of the various programmes of the WMCA Strategic Economic Plan and the Movement for Growth Strategic Transport Plan. These indicators cover a range of theme areas including economic, social, fiscal and environmental impacts, as illustrated in Figure 1 below. The Performance Management Framework will provide a framework against which WMCA success can be measured.

Figure 1:



2.2 A more effective transport system benefits many of the Combined Authority's growth ambitions considered in the WMCA Performance Management Framework. This is achieved by improving the connectivity of people and businesses to jobs and markets; unlocking hard to access sites to improve the quantity of high quality readily available development sites; enabling access to skills; improving air quality; reducing carbon emissions; and reducing health inequalities. Figure 2 provides an example of this using a draft logic chain/impact pathway under the accessibility theme.

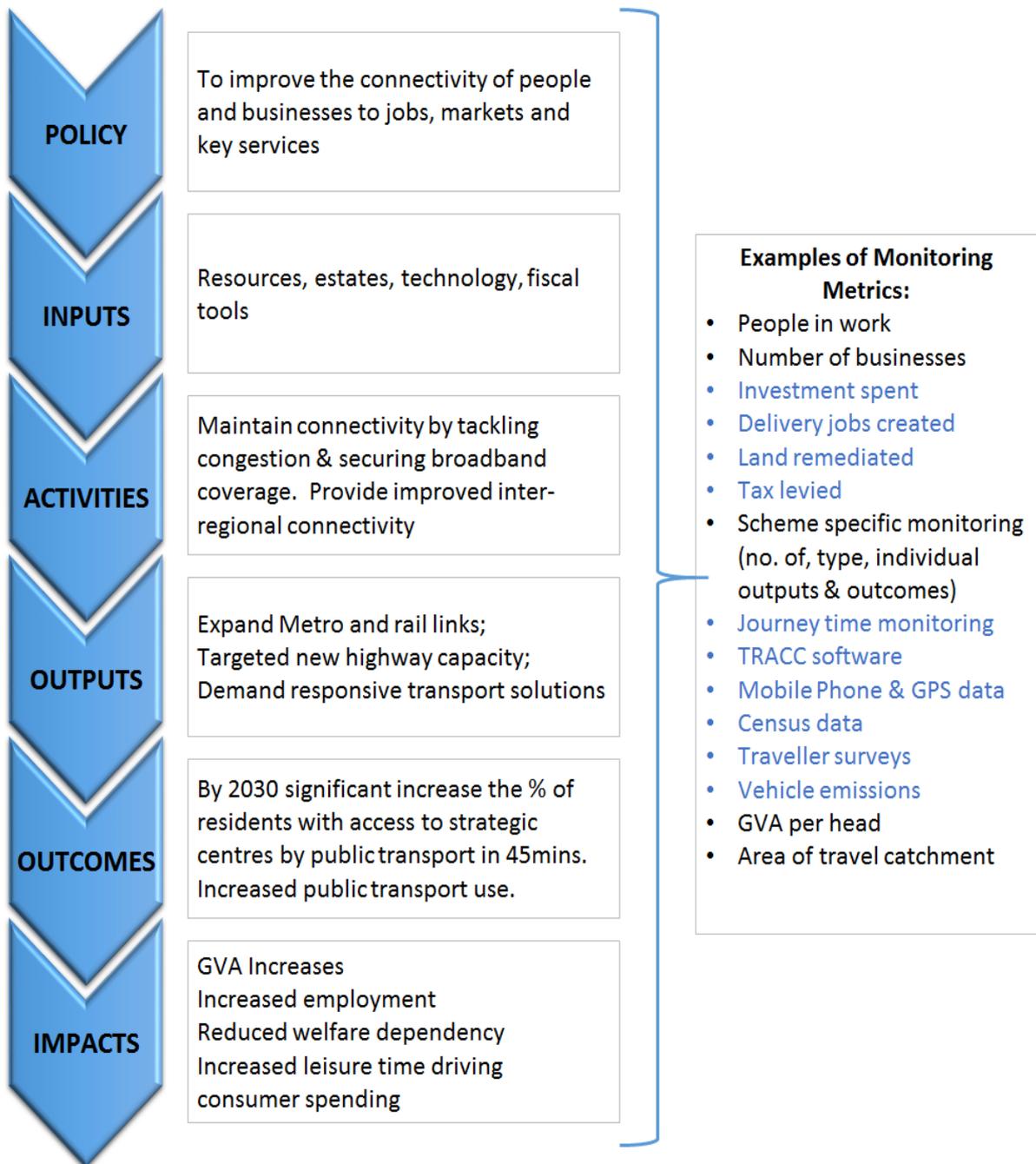


Figure 2: Logic Chain/Impact Pathway: Accessibility (Economic Impact) - Increase in % of residents able to access strategic centres by public transport in 45 mins.

- 2.3 Following from this, the indicators within the Movement for Growth have been reviewed in line with the WMCA Performance Management Framework and a revised set of indicators can be seen in Appendix 1.
- 2.4 Movement for Growth sits alongside the WMCA Strategic Economic Plan as a complementary set of policies and plans that will guide transport improvements delivered by a number of organisations. These improvements will provide the overarching approach to

the development of a transport system which is fit for the challenges of economic & housing growth, social inclusion and environment change.

- 2.5 Progress against The Movement for Growth strategy will be tracked against the indicators through a formal annual monitoring report, enabling us to appraise and prioritise our delivery of schemes and programmes.
- 2.6 Success will also be measured through the continual monitoring and evaluation of schemes and programmes to ensure they are delivering against the overall strategic objectives. Ongoing research of trends will help us to influence and shape our future policies.
- 2.7 Responsibility for monitoring of the Movement for Growth will lie with Transport for West Midlands Policy and Strategy Team, who will assess changes to the operational performance of the transport system, the resulting changes in usage of the transport system and the outcomes these lead to, alongside supporting background indicator monitoring.
- 2.8 The work will ensure we understand changes of the performance of the transport system arising from schemes, e.g. reliability of vehicles, bus route reliability, and public transport accessibility. Changes to perceptions and usage arising from these changes will also be measured, including mode share for all journeys, volumes of journeys by mode and customer satisfaction. This will include changes to outcomes related to transport improvements (which will be measured in partnership with the other WMCA organisations) such as GVA, jobs, transport emissions, and the number and severity of road traffic accidents.

3.0 Impact on the Delivery of the Strategic Transport Plan

- 3.1 The proposed monitoring and evaluation for transport will be a key tool in helping to deliver effective transport policies and building on those set out in the 'Movement for Growth' Strategy. This will affect all transport interventions across the Four Tiers of the transport system:
 - National and Regional Tier;
 - Metropolitan Tier;
 - Local Tier; and
 - Smart Mobility Tier.

4.0 Wider WMCA Implications

- 4.1 The Movement for Growth Strategic Transport Plan monitoring metrics will track performance within the constituent Authority 'Transport for West Midlands' area but does not directly monitor aspirations and delivery in the wider WMCA area for which the WMCA is not a statutory transport authority. Within the TfWM area the monitoring aligns with WMCA's overarching Performance Management Framework.

5.0 WMCA Monitoring Headline - Performance of the System

- 5.1 Aligned to the strategic indicators within the Performance Management Framework the Movement for Growth measures the connectivity of people to jobs and markets by improving the accessibility to strategic centres and the journey time reliability.

- 5.2 Increasing the number of jobs accessible by public transport across the West Midlands will support growth and economic development without large increases in additional car travel demand at busy times. Journey time reliability is also a high priority for the movement of freight and people. Unknown variability of journey times leads to unpredictability for businesses and people, the building in of extra time of journeys and wasted time.
- 5.3 Clear measures of success help us to track progress in achieving a more connected and efficient transport network, ensuring people can access main centres in reasonable time and travel around the conurbation with ease and with as little delay as possible.
- 5.4 The Movement for Growth strategy establishes a vision for improved metropolitan connectivity, with an aspiration for centres in the wider journey to work area to be within 45 minutes travel time of the regional centre of Birmingham by rail, and for Coventry to offer attractive rail times to centres in Warwickshire and the East Midlands.
- 5.5 Currently 49% of residents within the Combined Authority Constituent Authority (TfWM area) are within 45 minutes of 3 strategic centres. Current performance shows that Birmingham City Centre is accessible within 45 minutes travel time from 57% of rail stations in the wider journey to work area (based on timetables). Within Warwickshire and the East Midlands, 31% of rail stations are accessible within 45 minutes from Coventry. Appendices 2, 3 and 4 of this report set out WMCA stations and rail travel times to Birmingham, Wolverhampton and Coventry.
- 5.6 The monitoring framework and Movement for Growth Strategy also sets out proposals for monitoring and improve the ease of accessibility by addressing congestion and delays on the Key Route Network that is having a negative effect on travel times and the economy.
- 5.7 Reliability is a top customer priority for bus services, slow bus services hinder the ability to access jobs and services across the West Midlands in what people consider an acceptable time. Slow traffic speeds, related to congested conditions, hinders the connectivity of people and businesses and undermines the attractiveness of the West Midlands. While poor condition of main roads leads to unplanned road works leading to poor reliability and also damage to vehicles.
- 5.8 It is recognised during the life of the strategic transport plan there is significant amount of infrastructure works across the West Midlands which will have an adverse impact on the journey time reliability measure. This will be closely monitored to minimise the impact and to secure a resilient and robust transport network.

6.0 Monitoring – Satisfaction, Demand and Modal Choice

- 6.1 Aligned to the Performance Management Framework strategic indicators, the Movement for Growth monitoring will measure the take up of more active travel (walking and cycling) and the use of private vehicles. The right transport can positively influence public health issues like obesity and diabetes through promotion of active travel.
- 6.2 Key metrics are whether the mode share of public transport, cycling and walking are increasing year in year out in accord with the strategy of successfully accommodating growth in the West Midlands; and it is important to track the amount of car journeys carrying more than 1 person (linked to more efficient use of road space). A significant percentage of car trips in the West Midlands Metropolitan area are made by a single driver without

passengers, and predominantly for the purpose of commuting and business. Non-single occupancy car use accounts for only 19% of trips made in the AM peak.

- 6.3 Supporting metrics within the Movement for Growth monitoring provide a more detailed understanding of demand, modal choice and satisfaction. Poor customer satisfaction of public transport, along with walking and cycling will lead to lower use of an important means to accommodate future travel demand. Latest satisfaction results shows 85% of passengers are satisfied with bus services, 80% with metro and 89% with rail.
- 6.4 To better understand the experience of people who regularly drive, cycle or walk, TfWM are commissioning a survey to capture their perceptions around a number of attributes, including parking costs, congestion and delays and maintenance of roads. All respondents will be asked to rank their top 3 priority areas for improvement to the local highways. The TfWM customer insight will manage this and provide regular updates and insights into customer experience.

7.0 Monitoring – Wider Outcomes

- 7.1 The Movement for Growth monitoring plan will be informed by the social, economic and development measures within the Performance Management Framework, ensuring we understand the economic growth of the region, employment and housing opportunities and the environmental impact of the Policies and Programmes implemented across partner organisations.
- 7.2 Whilst difficult to break down the exact contribution with the other background factors involved, a high performing transport system contributes to economic growth, increased employment, unlocks sites for housing development and helps to improve air quality. Each of these will be measured.
- 7.3 There is currently a £14,000 shortfall in GVA per head from baseline of £19,423 to the 2030 target of £33,604. Better transport is essential to improve economic growth in the West Midlands by widening labour markets, unlocking sites for development, providing attractive centres for business location and giving people access to skills, education and training, encouraging high value growth clusters and agglomeration, and reducing business costs for links from suppliers to producers to markets.
- 7.4 Road transport emissions from exposure to fine particle account for around 1,460 premature deaths in the West Midlands. Deaths attributable to nitrogen dioxide may be in the region of around half that figure. The need to reduce emissions from the transport sector in the West Midlands is therefore important. Work is in progress to produce a West Midlands wide low emissions strategy, measuring concentrations of nitrogen dioxide.

8.0 Next Steps

- 8.1 Monitoring of the metrics identified will ensure a baseline is in place in which we can track progress. This will be reported in a formal monitoring report provided annually in July enabling us to appraise and prioritise our delivery of schemes and programmes.
- 8.2 The themes underlying the Movement for Growth and Performance Management Framework will also be monitored on an ongoing basis in collaboration with WMCA partners, with policy whitepapers and 'infographics' produced to provide a robust evidence

based approach to shape WMCA's formal policies and programmes. Customer experience will be captured to ensure we are meeting the needs of the public. Working with partners we will look to identify any gaps in knowledge and fulfil these through research and analysis.

8.3 Work is underway to allow the sharing of monitoring and evaluation data across partner organisations, through the use of data integration and visualisation tools. This will enable us to provide live updates of measures within the Movement for Growth and Performance Framework, ensuring access to current and robust evidence base.

8.4 We will continue to review the sources of data available to monitor our success and work with partners to ensure that the best methodology and data set is available to us, and where necessary make recommendations for alternative solutions. The JDT re-let will influence this, with the contract specifying three main functions around data collection, data dissemination and analysis. Wider exploitation of the data, tools, services and resources will facilitate efficiency saving, through innovation development.

9.0 Financial implications

9.1 The 2016/17 costs of the monitoring arrangements as set out within this report can be met from existing budgets held by WMCA. Costs for future years monitoring will be integrated within the financial planning process accordingly and efficiency savings made as part of the JDT contract re-let. Wider exploitation of the data, tools, services and resources will generate income and facilitate efficiency savings.

10.0 Legal implications

10.1 There are no legal implications arising from this report

11.0 Equalities implications

11.1 No equality implications arising from this report.

12.0 Schedule of background papers

12.1 Strategic Transport Plan:
https://westmidlandscombinedauthority.org.uk/media/1178/2016-06-01-mfg-full-document_wmca.pdf

13.0 Appendices

APPENDIX 1: Measures and Methodology

APPENDIX 2: Rail travel times to Birmingham City Centre from rail stations within the wider journey to work area.

APPENDIX 3: Rail travel times from Coventry City Centre from rail stations within Warwickshire and the East Midlands.

APPENDIX 4: Rail travel times to Wolverhampton City Centre from rail stations within the wider journey to work area.

Appendix 1: Measures and Methodology

1.0 Performance of the System

Headline measures of success within the CA Performance Framework;	Source
% of residents in the metropolitan area able to access 3 or more strategic centres ¹ in 45 minutes by public transport in the am peak	TRACC – transport accessibility tool
Journey time reliability	Trafficmaster

Supporting measures within the Movement for Growth;	Source
Reliability of bus services	AVL
Average speed of key bus services	AVL
Journey Speeds	Trafficmaster
AM peak total delay time compared with free flow journey time	Trafficmaster
Condition of Key Route Network & Local Road Network	Local Authorities

- 1.1 Strategic centres are made up of 10 key centres within the West Midlands Metropolitan area, namely Birmingham City Centre, Sutton Coldfield town centre, Coventry City centre, Wolverhampton City Centre, Solihull town centre, UK Central Hub, Walsall town centre, Dudley town centre, Brierley Hill and West Bromwich town centre.
- 1.2 Journey time reliability on the Key Route Network is currently measured using am peak journey time compared to free flow journey time. (Delay or “time lost” is calculated by subtracting derived ‘free flow’ travel times from observed travel times for individual road sections) Average delay on local roads is estimated to be 45 seconds per vehicle per mile when compared to free flow.
- 1.3 The Journey Time Monitoring System (JTMS) automatic number plate recognition cameras (ANPR) from the Urban Traffic Control Major Scheme (UTCMS) will help to inform this measure across the Key Route Network. The location of the JTMS units fits well with the West Midlands Key Route Network. Work is underway to fully commission and validate the units and establish an ongoing maintenance regime.
- 1.4 Bus reliability is a top priority for bus passengers, and continual monitoring utilising Automatic Vehicle Location (AVL) data and continued liaison with operators will help us to improve this measure. Latest results show that 79% of services within the West Midlands Metropolitan area are reliable, with buses turning up within 1 minute early and 5 minutes late of the publicised timetable.
- 1.5 Using AVL data we can also monitor the average speed of bus services, with latest results showing average speed of 18 kph (12 mph) in am peak, compared with private vehicle with an average speed of 40.6 kph (25.4 mph) in the am peak.
- 1.6 Condition of principal roads and non-principal classified roads is monitored by Local Authorities who report on the % of roads in need of resurfacing. The reporting system will be modified to ensure that the Key Route Network is included. Other measures which can

help to support this is the kilometres of roads resurfaced and roads exceeding anti-skidding intervention levels.

2.0 Satisfaction, Demand and Modal Choice

Headline measures of success within the CA Performance Framework;	Source
Mode share of all journeys by car, public transport, cycling and walking	National Travel Survey
% of car journeys non-single occupancy	West Midlands Met Area Cordon Counts

Supporting measures within the Movement for Growth;	Source
Overall satisfaction with Bus, Metro, Rail (and Sprint when operational)	Transport Focus
Travel by bike, foot and car	TfWM
Car ownership per 1,000 population	DfT
Number of journeys by public transport per annum	TfWM
Mode share of am peak journeys to the strategic centres by motorised modes	West Midlands Met Area Cordon Counts
Mode share of journeys to work including work from home	TfWM

- 2.1 From the National Travel Survey (NTS) we can better understand how people in the West Midlands Travel. The NTS is a household survey designed to monitor long term trends in personal travel. Mode share of all journeys shows public transport in the West Midlands accounts for 12% of all trips with car representing the greatest share at 62% and taxi trips at 2%. Walking accounts for 23% but is mainly predominant for very short distances. Cycling accounts for only 1% of all trips.
- 2.2 Satisfaction with public transport is regularly monitored across a number of attributes affecting service provision, including security, frequency, and facilities. An overall rating is obtained to get a feel of overall service provision.
- 2.3 To better understand the experience of people who regularly drive, cycle or walk, TfWM are commissioning a survey to capture their perceptions around a number of attributes, including parking costs, congestion and delays and maintenance of roads. For pedestrians, the survey will include ease of travelling, safety and maintenance of pavements. For cyclists, the survey will identify journey stage (multi or single modal journey), perceptions of cycle routes, and security and safety. All respondents will be asked to rank their top 3 priority areas for improvement to the local highways.
- 2.4 Trends in car ownership plays an important influence on choice of mode to travel. Historical figures shows a continual trend in annual growth in licensed cars. Latest figures for the West Midlands Metropolitan area shows 487 cars are licenced per 1,000 population, and as we have seen earlier in the report car trips account for 64% of all trips made.
- 2.5 When considering journey to work, a recent survey of employees carried out by TfWM identified that 73% travel by car to work, and 18% by public transport, with the remaining 9% choosing active travel choices.

- 2.6 It is important that the car journeys that are made have very little impact on the environment, with improved efficiency and lower carbon dioxide emissions. Ultra-low emission vehicles (vehicles with emissions of CO₂ below 75 g/km, or fully electrically powered) represented 1.1% of all new registrations, compared with 0.8% over the previous year and 0.2% over the year prior to that. Most of the increase in ULEV registrations has been accounted for by vehicles eligible for plug-in car and van grants covering up to 35% of cost price.
- 2.7 Approximately 325 million public transport trips were made in the West Midlands Metropolitan Area, representing 115 journeys made per 100,000 population a slight decline from 118 in 2015. In the am peak we see that 38% of all trips are made by public transport into the strategic centres, this differs by centre with Birmingham seeing 63% of trips being made by public transport in the AM peak.

3.0 Monitoring – Wider Outcomes

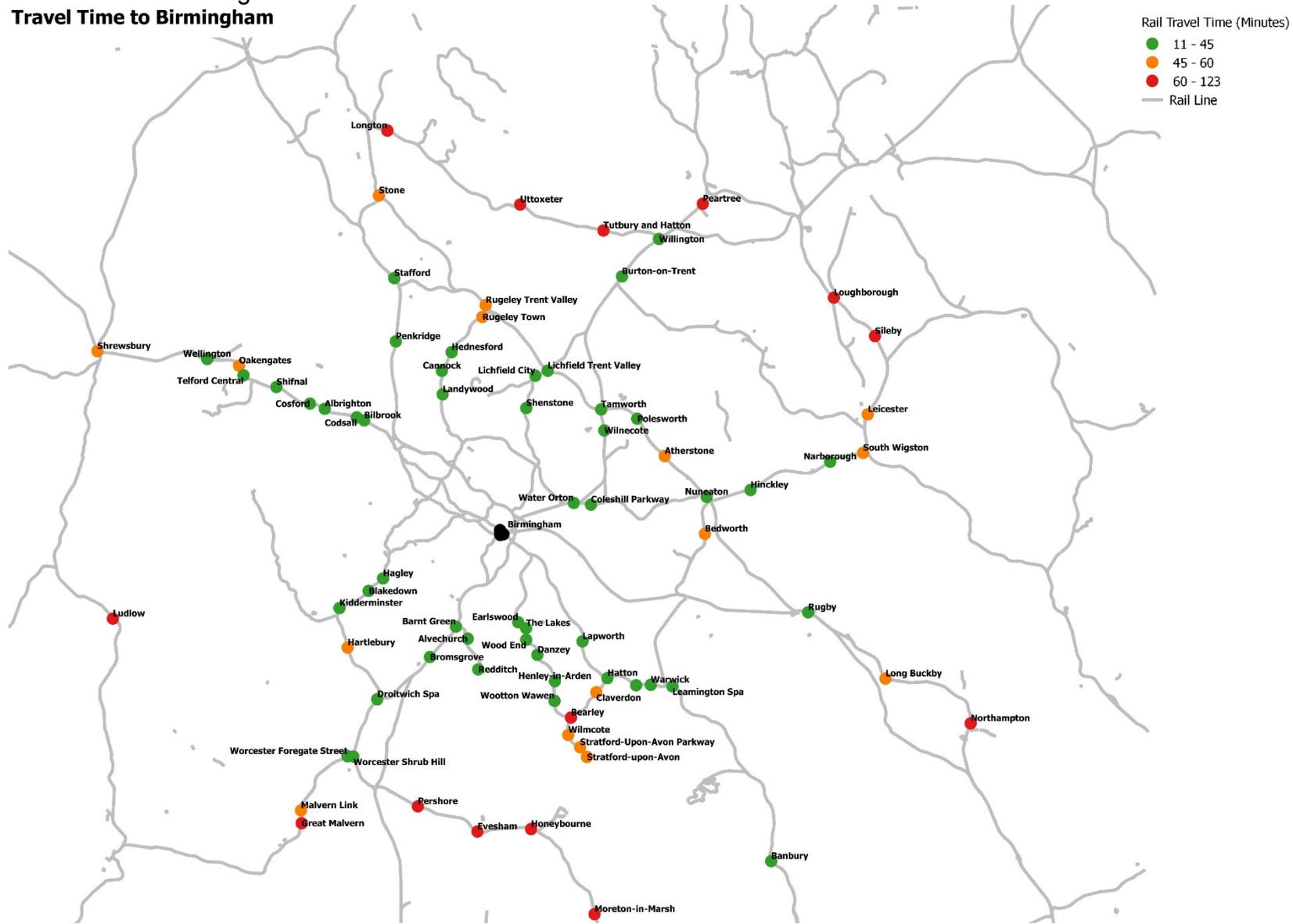
Headline measures of success within the CA Performance Framework;	Source
GVA per head	ONS
Employment Rate	ONS
Number / Ha available for housing developments	DCLG
CO ₂ emitted within the SEP area by Transport, Businesses and Homes	DECC
Number of Poor Days Air Quality per year (rated 4 or higher on the Daily Air Quality Index)	Defra
Health Inequality by years between the best and worst areas in LEP and SEP areas.	Public Health England

Supporting measures within the Movement for Growth;	Source
Nitrogen dioxide levels in the metropolitan area	Public Health England
Number of Killed and Seriously Injured Casualties	Spectrum
Killed and Seriously Injured Casualty Rate by mode per 100,000 km travelled	Spectrum
Number of recorded crime incidents on public transport	Safer Travel Partnership

- 3.1 Most of these indicators can be measured through open data released by Government Offices, including Office of National statistics (ONS), Department for Communities and Local Government (DCLG), Department of Energy and Climate Change (DECC), Department for Environment Food and Rural Affairs.

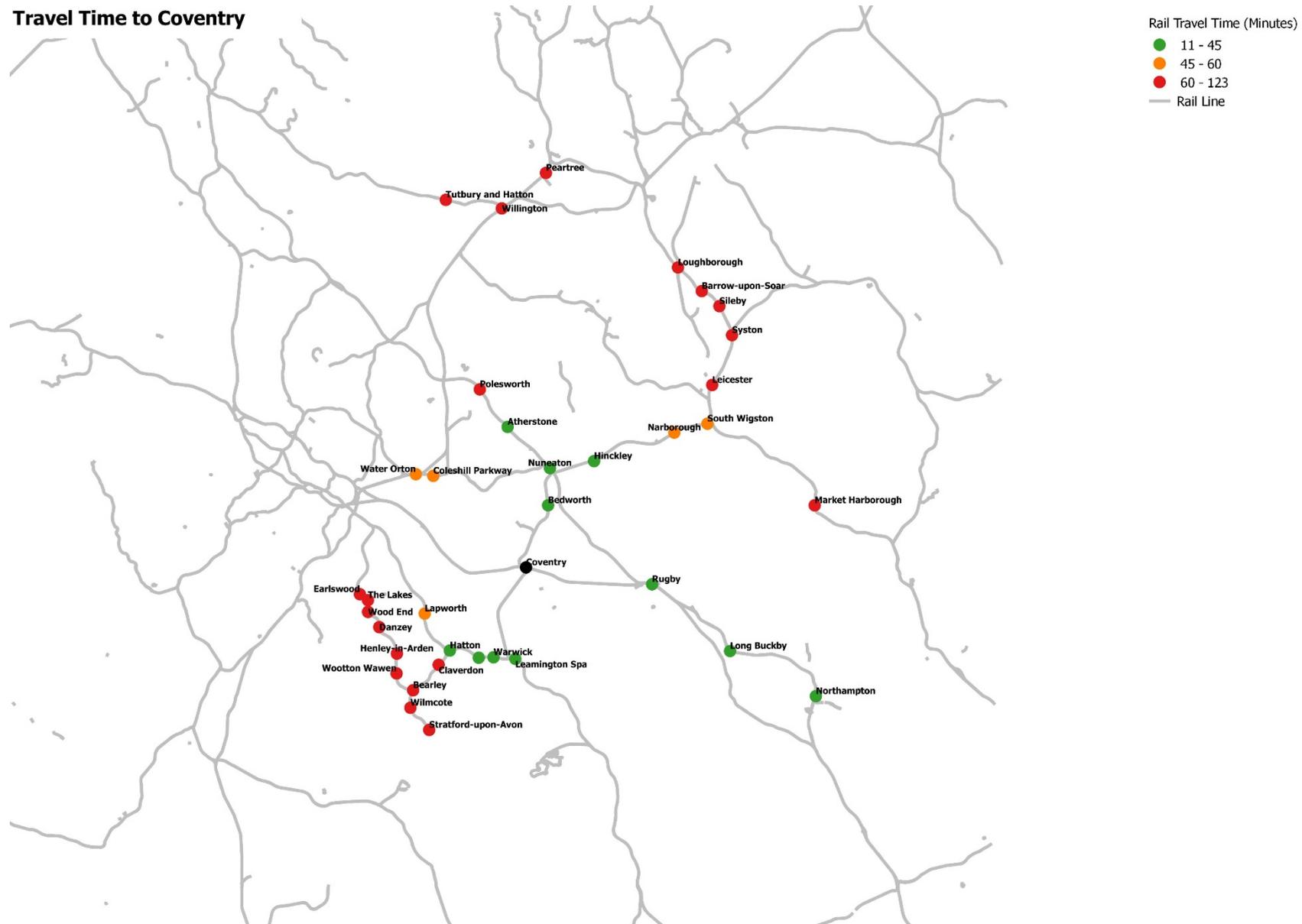
Appendix 2: Rail travel times to Birmingham City Centre from rail stations within the wider journey to work area. The target is for 45 mins or better travel time.

Travel Time to Birmingham



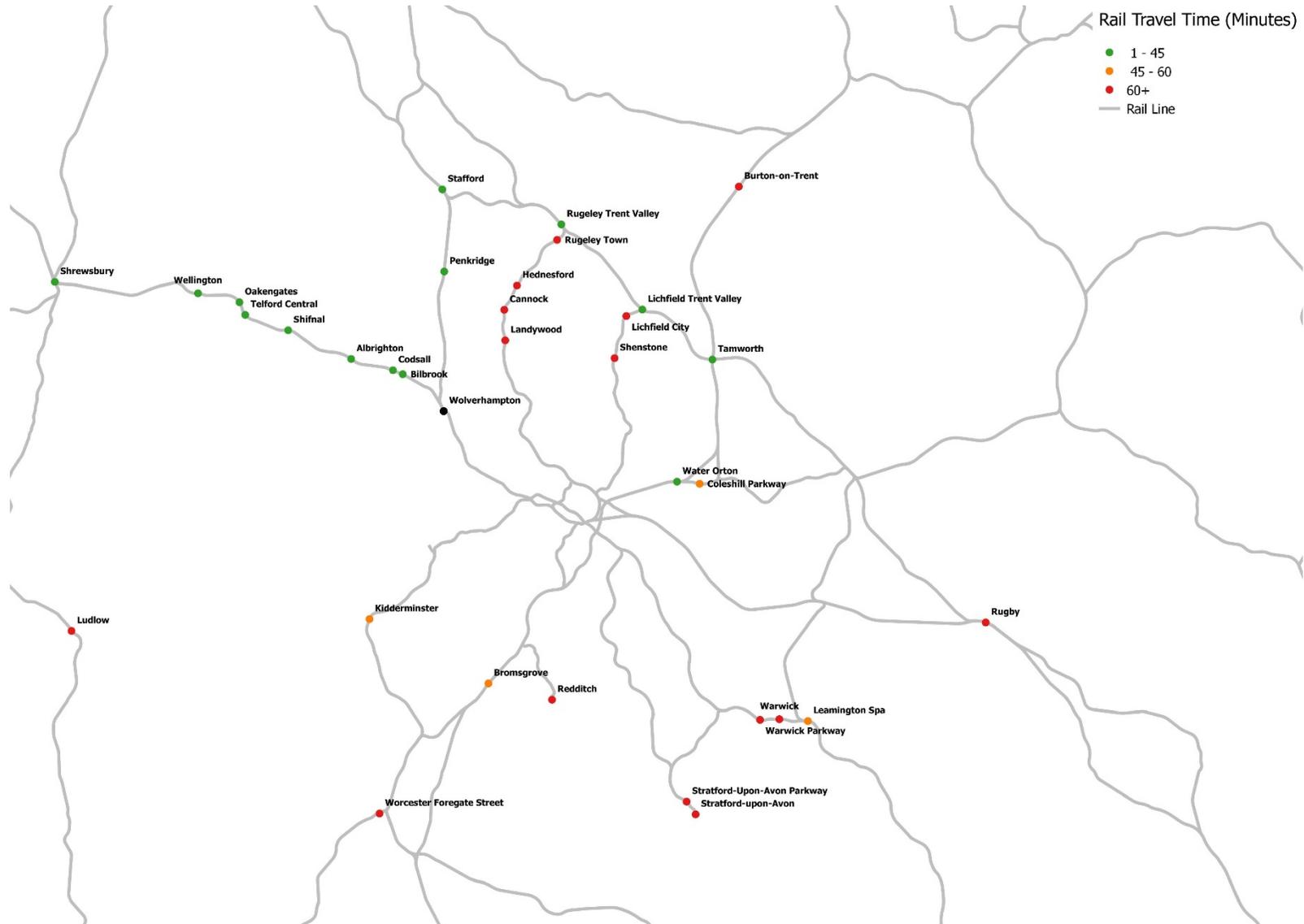
Appendix 3: Rail travel times from Coventry City Centre from rail stations within Warwickshire and the East Midlands.

Travel Time to Coventry



Appendix 4: Rail travel times to Wolverhampton City Centre from rail stations within the wider journey to work area.

Travel times to Wolverhampton



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