



Wellbeing Board Meeting

Date	6 th October 2017
Report title	West Midlands health and transport strategy
Cabinet Member Portfolio Lead	Councillor Roger Lawrence – Transport
Accountable Chief Executive	Keith Ireland, Managing Director, City of Wolverhampton Council & Monitoring Officer for West Midlands Combined Authority Email: keith.ireland@wolverhampton.gov.uk Tel: 01902 554500
Report of	Duncan Vernon, TfWM, Strategic Health Advisor Email: Duncan.Vernon@tfwm.org.uk Tel: 0121 214 7230
Report to be/has been considered by	Wellbeing board

Recommendation(s) for action or decision:

The Combined Authority Wellbeing Board is recommended to:

1. Note the work done to analyse health data that relates to transport and identify cross-cutting issues
2. Note the results of the transport and health consultation workshop
3. Endorse the proposed structure of the health and transport strategy
4. Agree the four strategic themes to structure actions that link transport and health

1.0 Purpose

- 1.1 To update the Wellbeing Board on the progress that TfWM are making in developing a health and transport strategy.
- 1.2 The board are asked to review the outline of the strategy.

2.0 Background

- 2.1 The Senior Transport Officer's Group (STOG) previously agreed the proposal to develop a transport and health strategy. This will set out actions to meet the health objectives in Movement for Growth.
- 2.2 The strategy also links with the aims of the wellbeing board and the population health plan. The wellbeing board has agreed to receive updates about the development of the strategy.
- 2.3 The proposed approach to develop the strategy was:
 - i. An analysis of health data relevant to transport to establish the main health and health inequalities issues, and literature review helping to establish what the potential role of transport can be.
 - ii. Consultation with constituent members about current work and opportunities.
 - iii. Workshops to help agree an overarching health and transport policy response and identify a set of actions that build health considerations into transport planning and achieve the health objectives in Movement for Growth.
 - iv. A set of KPIs relevant to the healthy transport objectives to monitor progress.
- 2.4 This work has been completed and an outline strategy has been produced for consultation.

3.0 Financial implications

- 3.1 There are no financial implications to WMCA envisaged in relation to developing this strategy. The work is being carried out by Duncan Vernon, a senior public health registrar on secondment to TfWM.

4.0 Discussion

- 4.1 Health issues that transport can influence are physical inactivity, air pollution, injuries, climate change, noise, community severance and social capital, and developing the sense of place to improve wellbeing. Transport has a positive role in promoting health that extends beyond these by providing equitable access to employment, education, parks, or health and social services.
- 4.2 An analysis of health issues related to transport shows how they are clustered around specific groups and places.
- 4.3 In more deprived areas, which typically have lower healthy life expectancies:
 - i. Serious and fatal child pedestrian injuries are higher in more deprived areas.
 - ii. Both overall physical activity and travel to work by physically active forms of transport are lower
 - iii. Air quality tends to be worse despite lower transport emissions per household.
 - iv. Mental health problems are more common in areas of areas of deprivation

- 4.4 Several transport issues impact on children:
- i. Children are more vulnerable to poor air quality because their organs are still developing and they breathe in a greater volume of air relative to their size
 - ii. The number of children walking and cycling to school has declined over time
 - iii. Similar to most predominantly urban areas, there is a higher rate of serious or fatal child pedestrian injuries in many local authorities in the West Midlands compared to the England average
 - iv. As children sleep for longer and have not developed the same coping mechanisms as adults, they are more at risk of harm from night time noise.
 - v. Daytime noise can impact on children's performance in schools.
- 4.5 Elderly adults can be impacted by several transport injuries:
- i. The elderly are less likely to be physically active, even though evidence suggests that physical activity has positive health benefits at all ages
 - ii. Elderly individuals are more susceptible to the effects of poor air quality.
 - iii. Many of the factors that increase loneliness are more common in elderly individuals, and this can have an impact on health.
 - iv. Some characteristics of streets are less likely to be tailored to the needs of older individuals, crossing times at pedestrian crossings is one example.
 - v. Elderly individuals are more at risk from heat waves, which is a likely impact of climate change in the West Midlands.
- 4.6 There are a range of other protected characteristics that transport can influence:
- i. Women are less likely to cycle than men and have a greater preference for dedicated cycle infrastructure.
 - ii. Many ethnic groups are less likely to commute by walking or cycling.
 - iii. Individuals with disability and long term health conditions are less likely to be physically active.
- 4.7 A health and transport workshop was conducted on the 20th September, involving local authority public health and transport professionals as well as national bodies such as Public Health England, the Department for Transport and Sport England.
- 4.8 In discussions, the workshop participants identified and explored opportunities to:
- i. Develop a process to consider the breadth of health impacts when planning transport schemes, so that the social value is fully considered and appraised.
 - ii. Draw upon health evidence and data during the development of transport business cases, especially in relation to how transport and health issues can impact on some groups more.
 - iii. Develop a vision for healthy and active street design in the West Midlands that could have a cross cutting impact on a range of health issues.
 - iv. Include community voices and groups to understand local assets and needs that transport schemes can help to address, and to inform behaviour change approaches

5.0 Legal implications

5.1 There are no legal implications arising from this paper and its recommendations.

6.0 Equalities implications

The analysis has helped to identify health equity issues in groups with protected characteristics.

7.0 Other implications

7.1 The next step will be to develop actions to help TfWM and other transport professionals in the West Midlands to address the points identified in the workshop.

8.0 Appendices

Appendix 1 - Draft Transport and Health Strategy

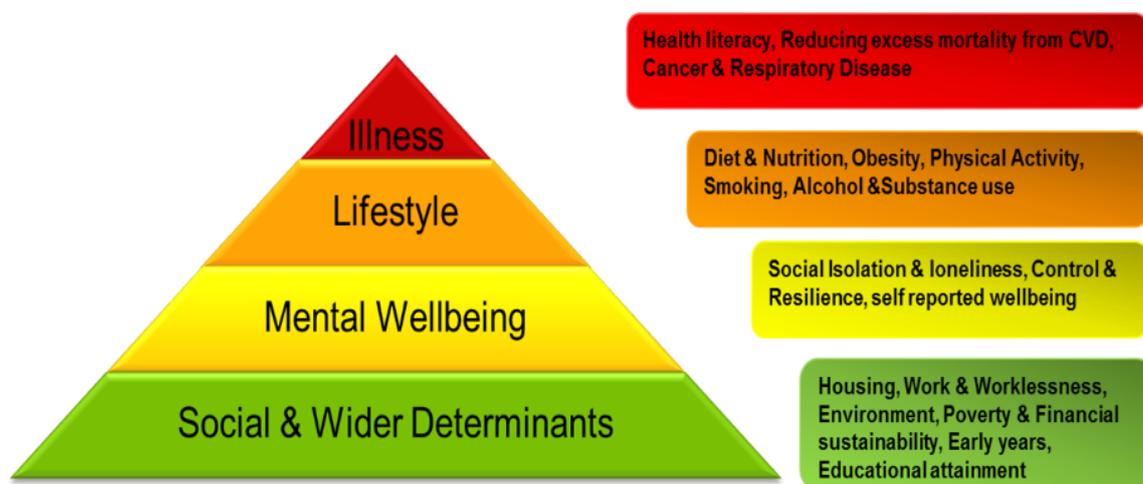
Appendix 1

Transport for West Midlands Draft Transport and Health Strategy

1. Introduction

2. Transport and health in the West Midlands

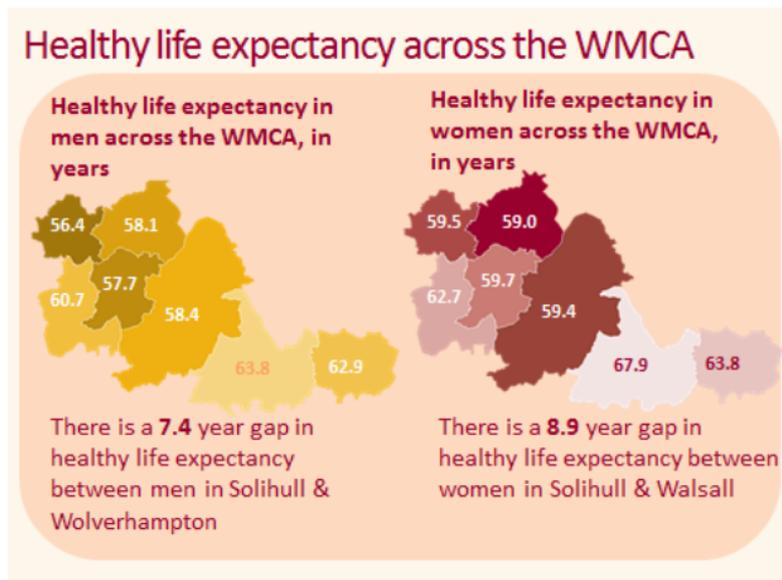
- Transport has a crucial role in promoting good health and protecting people from harm.



- Transport has a wide ranging impact and can encourage positive mental wellbeing, healthy lifestyles and reducing the risk of illness.
- Action can be taken to reduce the negative impacts of transport such as air quality, noise and injuries.
- There are already some objectives in Movement for Growth.
 - ENV1 To significantly improve the quality of the local environment in the West Midlands Metropolitan Area.
 - ENV2 To help tackle climate change by ensuring large decreases in greenhouse gas emissions from the West Midlands Metropolitan Area.
 - PUBH1 To significantly increase the amount of active travel in the West Midlands Metropolitan Area
 - PUBH2 To significantly reduce the number and severity of road traffic casualties in the West Midlands Metropolitan Area
 - PUBH3 To assist with the reduction of health inequalities in the West Midlands Metropolitan Area
 - SOC1 To improve the well-being of socially excluded people.
- There is the opportunity to look at the whole of transport and health to understand the connection between the different issues. This helps to develop the process of how health is addressed and thought of within transport.

3. Action to improve health will have wide benefits

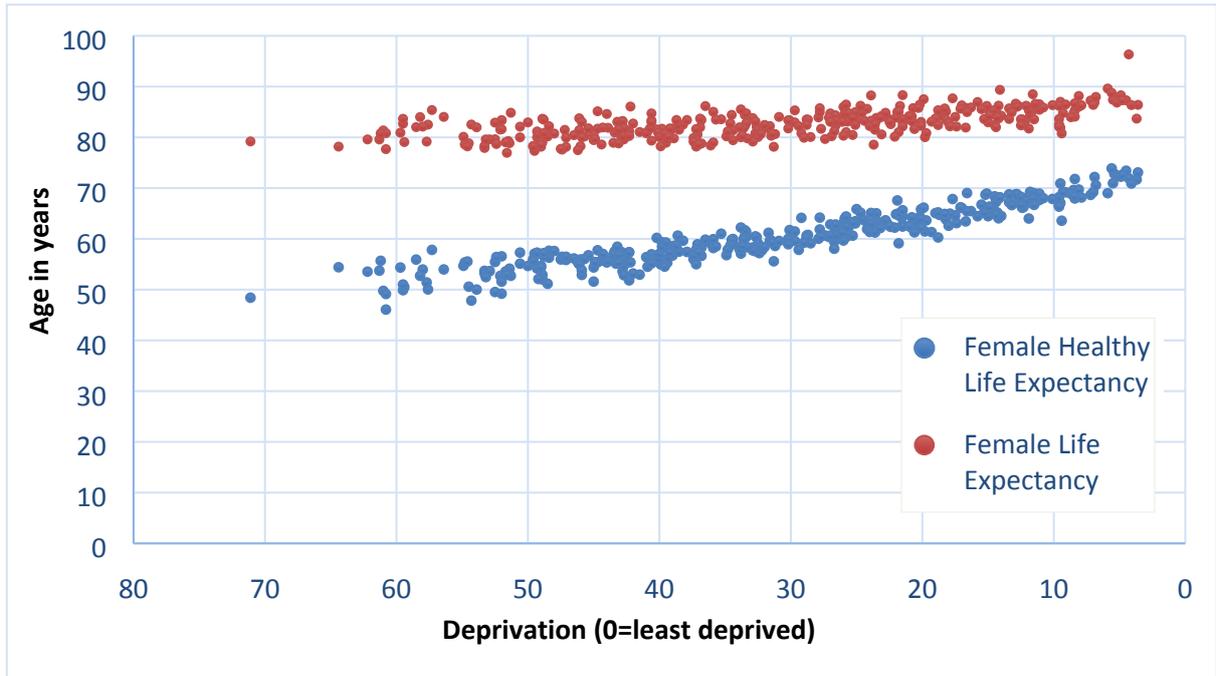
- The West Midlands population health plan sets out the reasons for improving health and as well as improving quality of life also helps to grow the economy and reduce demand on public services.
- There are areas of both good and poor health within the West Midlands, and this is often described using healthy life expectancy.
- Some local authorities have a higher healthy life expectancy than others. In Wolverhampton, the healthy life expectancy at birth for men is 56.4 years, compared against 63.8 years in Solihull. Women generally have higher healthy life expectancies than men but there are still differences. Amongst women the lowest healthy life expectancy is 59 years in Walsall and the highest is 67.9 years in Solihull.



- Better healthy life expectancies correlate with higher employment and fewer people with long term sickness and disability.

Differences in health within the West Midlands

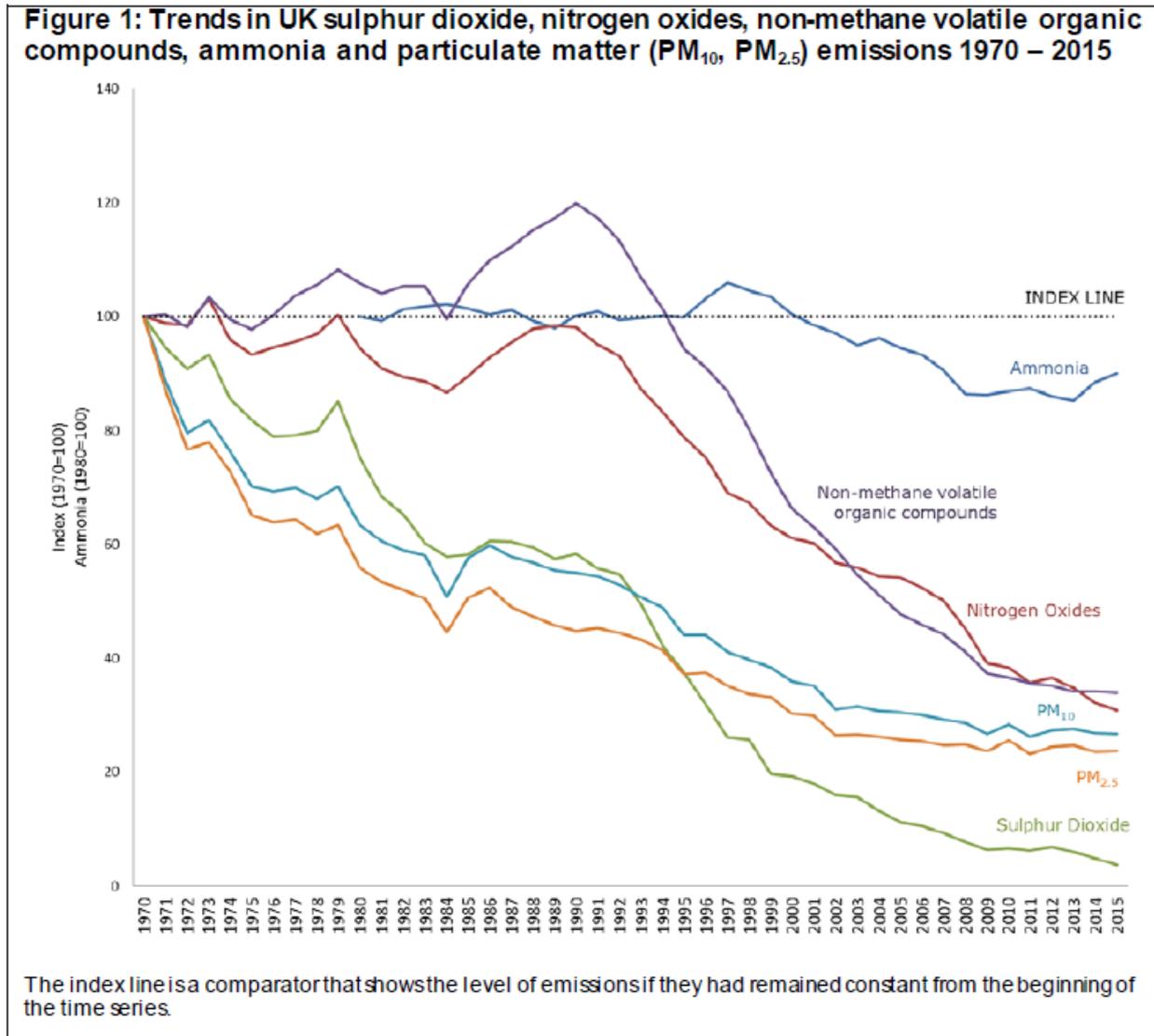
- Looking at smaller areas, there is around a 20 year difference in healthy life expectancy between the most and least deprived areas in the West Midlands.



4. Connections between transport and health

Cleaner air

- In the UK between 1970 and 2015 the total emissions of harmful pollutants across all sectors been downwards.



- Particulate matter and nitrogen dioxide are identified as particularly important because of the current harm and the potential to reduce the contribution of transport emissions.

Nitrogen Dioxide (NO₂)

- Nitrogen Dioxide is produced by combustion, such as in car engines. In high concentrations, it can cause people's airways to become enflamed.
- Despite the reductions in Nitrogen Dioxide emissions, in many areas the concentration of this pollutant hasn't reduced to the same extent. This is especially true of many urban areas

- There is a legal target to reduce roadside concentrations of NO₂ to 40ug/m³ by 2020. DEFRA air quality models have predicted that some roads in Birmingham and Coventry will be above this threshold, and Birmingham has been instructed to introduce a Clean Air Zone in response.
- DEFRA estimated that the transport was responsible for around 90% of all NO₂ pollution, with 70% being from vehicles travelling on that road.

Fine Particulate Matter (PM_{2.5})

- Particulate matter are small particles suspended in the air and are usually categorised by their size. Vehicles emit particulate matter from their exhausts, but also the wearing down of tyres, brakes and roads also contributes to the amount of fine particulate matter.
- There is very strong evidence now that reducing particulate matter, especially PM_{2.5}, can have a significant impact on health.
- Over the whole of England, it is predicted that eliminating all manmade PM_{2.5} would add 6 months to the national life expectancy.
- Children are more vulnerable as their organs are still developing and they breathe in more air relative to their size.
- The more elderly are also more susceptible to the effects of poor air quality.

Increased physical activity

- Through West Midlands on The Move, the WMCA has a vision to increase physical activity.
- One of the most convenient ways for people to get more physically active is to build it into their daily travel routine.
- In total there are an estimated 580,000 people who achieve less than 30 minutes of physical activity a week in the West Midlands. If the West Midlands could improve physical activity levels to the England average then 92,000 fewer people would be inactive.
- Data from across England shows that over half of people older than 75 years are likely to be physically inactive and that people in lower paid work are also less likely to be physically active.
- People who cycle for transport purposes are 4 times more likely to meet physical activity guidelines.
- Across the whole of the UK, if physical inactivity was eliminated then it would add an additional year to the average life expectancy.
- The more intensive the physical activity, or the longer people are physically active for, the greater the protective effect.
- There are significant benefits from starting to be physically active, even if it has not been a life-time habit.

Good wellbeing and social connectedness

- Thrive West Midlands sets out the ambition to improve mental wellbeing.
- Noise, physical activity, traffic injury and perceived safety all influence mental health and wellbeing
- The design of the transport system and street environment can directly influence it too.
- PHE have estimated that there are over 200,000 adults aged between 16-74 who have either a mixed anxiety and depressive disorder.
- There is a direct relationship between the built environment and mental health.
- There is a need to develop the evidence base on road design and mental health, as there is notably less than for physical health.
- The walkability of the local neighbourhood and number of vehicles that travel through the street where people live influence wellbeing.

Transport and social isolation

- Social contact and social networks are an important asset for improving wellbeing and resilience in children and adults, as well as reducing the risks of depression and having a wider impact on community cohesion.
- The walkability of a street directly impacts on social contact.
- As well as the local area, characteristics of the street that people live on or near can have a direct impact on social networks.
- High traffic flow can also create a barrier within communities causing severance, reduced walkability and poorer access to destinations by foot.

Safer streets

- Reducing road danger decreases the risk of injury
- Improving perceived safety encourages people to walk or cycle.
- There are well understood ways to reduce road injuries, such as increasing seat belt use, lowering vehicle speeds and preventing drink and drug driving.
- The design of the roads is well recognised as a way of encouraging activity and reducing the number of injuries. In recent years many local authorities have introduced 20mph speed limits over wide areas.
- This approach is in line with international best practice such as vision zero in Sweden or Sustainable Safety in the Netherlands.
- Children aged 10-14 in the most deprived 20% of households are four times more likely to be killed or seriously injured as a pedestrian compared to the least deprived 20%.
- Nationally most childhood injuries occur on 30mph roads, and before and after school hours.
- Within the WMCA area, injury rates have been decreasing over time and performance is generally better than the England average.
- There are higher rates of childhood traffic injury than the England average, and this is consistent across the 6 authorities that are more urbanised.
- Improvements in health care have reduce the numbers of fatal injuries.
- Collisions can also result in psychological distress or other mental health issues for up to three years following the crash.

Noise

- Transport is a source of noise in the urban environment. Loud noises produced at a distance can have a negative impact.
- The largest direct impacts of noise on health and wellbeing is predominantly through sleep disturbance and annoyance. Noise also has an impact on cardiovascular events.
- Even at low-levels, sound can be perceived as negative and can act as a cause of stress.
- At night, sounds of around 55db and above are considered by WHO as hazardous to human health.
- Around 200,000 people in the Birmingham and Black Country urban conurbation are exposed to road traffic noise above this level at night.
- Self-reported sleep disturbance and waking can occur at much lower thresholds of around 40dB
- Groups who spend longer sleeping or have a fragmented sleep structure are considered more at risk of night time noise.
- Noise can impact on school performance and higher levels of noise exposure impacts on memory and performance in tests.

Sustainability

- Sustainability cuts across a wide range of health and transport issues including inequalities in health and air quality.

Climate change

- In 2014, 22,708 kilotons of CO₂ were emitted across constituent and non-constituent members. There has been a 14.5% reduction since 2010.
- Increasing average temperatures can exacerbate the health impacts of health waves.
- Air pollution can be worse during warmer weather, in part due to the formation of ground level ozone.
- In the West Midlands, there is likely to be a 1.2 to 3.2 degrees increase in winter temperatures and 1.1 to 4.3 increase in summer temperatures.
- Action to reduce carbon emissions can have a significant positive impact on other health conditions.
- As people adapt to higher temperatures and lower summer rain fall, active travel may increase.

5. Developing a cross cutting approach

- Health issues are clustered around specific groups and geographies.
- Need to develop a process to consider the breadth of health impacts when planning transport schemes, so that the social value is fully considered and appraised.

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- Health evidence is an important resource to draw upon and check during the development of transport business cases.
- Opportunities for a healthy and active street design to address a range of issues.
- The community voice can help to understand local assets and needs that transport schemes can help to address, and to inform behaviour change approaches.