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# HEALTHINN A HURRY

The impact of rush hour commuting on our health and wellbeing



### Foreword

The growth and widespread availability of high-speed transport has transformed our working culture. We are now able to travel further afield for work and have fewer restrictions on where to live - a flexibility unknown in previous centuries.

At what cost however, to our health and wellbeing? These changes have been accompanied by a growing number of commuters using largely non-active methods of transport, such as cars, trains and buses, and in recent years, a growth in the average time spent travelling to work, with a transport system struggling to keep up with this demand.

Over the past decade, we have seen greater discussion and recognition of the importance of workplace health; however, the impact of the rush hour commute to and from work is often ignored, despite the growing evidence of the detrimental impact for our health and wellbeing.

The wide ranging benefits of active travel such as cycling or walking are well established, and we must continue to do more to support as many people as possible to take up these methods.

For those however, that do not currently have this option, it is crucial for both the health, wellbeing and productivity of the workforce that we mitigate many of the pitfalls associated with commuting.

Our commute is often a strain on both the finances and free time of workers, with a lasting impact on their stress levels and wider wellbeing long after reaching work or returning home.

But it doesn't have to be like this - transport companies have a captive audience for health promotion, be it throughout the journey or during dwell time in stations – providing ample opportunity to encourage healthier lifestyles and introduce interventions to make the commute a less stressful experience. These opportunities are not currently being utilised, with the commute for many being characterised by stress, frustration and a reduction in the time available and motivation for health promoting activities, such as healthy food preparation, physical activity and sleeping.

Transport is inextricably linked to the health and wellbeing of our workforce – this must no longer be treated as a separate issue and instead, we call on Government and transport operating companies alike to ensure that the public's health is a central consideration for all transport planning decisions.



Shirley Cramer CBE Chief Executive Royal Society for Public Health

### Executive summary

- Over 24 million people commute to and from work each day in England and Wales, for an average of 56 minutes. The vast majority of these currently utilise 'non-active' modes of transport, such as cars, buses and trains. <sup>1,2</sup>
- The benefits of active travel such as walking or cycling for our health and wellbeing are well established; conversely, there is a growing evidence base demonstrating the detrimental impact that non-active commuting can have on our health and wellbeing, be it in terms of mental wellbeing, physiological measures such as blood pressure or the time available for activities like healthy food preparation or sleeping.
- Inactivity poses a major challenge to the public's health, and so, encouraging a
  greater number of commuters to adopt a wholly or partly active commute is more
  important than ever.
- However, for those that are restricted to a largely non-active commute, we must ensure that the commuting experience is more health promoting, creating a less stressful experience for workers and encouraging a greater number to use public transport.
- Transport operating companies have a captive audience for health promotion during both journey time and waiting times in transport hubs. However, these opportunities are not currently being utilised.
- It is vital for the wellbeing and productivity of the workforce that 'health and wellbeing' features to a greater extent in transport policy.
- Opinion polling indicates that the factors seen as most detrimental to health and wellbeing by commuters themselves are; 1) Journey delays, 2) Overcrowding, 3) Anti-social behaviour, 4) Uncomfortable temperature, 5) Long commute.
- To achieve a healthier workforce, and a less stressful commuting experience; we call for greater adoption of flexible working and remote working, enabling workers to commute outside of the rush hour or reduce the time spent commuting altogether.
- Alongside this, we call for 'health and wellbeing' to be included as a specification in transport franchises, encouraging operating companies from the outset to consider ways of creating a healthier, less stressful experience.
- To achieve a healthier experience, operating companies should look to;
  - · Declassify all first class carriages on commuter trains
  - · Restrict unhealthy food and drink outlets in stations
  - Routinely publish information on train and bus capacity
- <sup>1</sup> Office of National Statistics. 2011 Census Analysis – Method of Travel to Work in England and Wales Report. Available online at: http://webarchive.nationalarchives.gov. uk/20160105160709/http://www.ons.gov.uk/ ons/dcp171766\_299766.pdf (last accessed 22nd July 2016)
- <sup>2</sup> Trade Union Congress. Commute times increase as the UK's transport system gets more crowded. Available online at: https:// www.tuc.org.uk/economic-issues/labour-market-and-economic-reports/industrial-issues/ transport-policy/commute-times (last accessed 22nd July 2016)

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# Introduction

The employment culture of today would be almost unrecognisable to the workforce of previous generations. The 20th century saw a shift from a workforce built around the idea of a 'job for life', with workers employed in a wide range of sectors and industries, to one of exceptional fluidity, with workers switching positions with far greater regularity and increasingly employed in deskbased roles.

Alongside these changes, and the growth in motor-vehicle ownership and public transport, we have seen a substantial increase in the number of workers commuting longer distances to get to and from work. The average time spent doing so increased from 53 minutes in 2008, 60 minutes for men and 47 minutes for women to 56 minutes in 2013, 63 for men and 50 for women.<sup>1</sup>

For many years, health professionals and academics alike have been extolling the virtues of 'active commuting' for the environment, public health and the finances of travelers. The benefits of cycling or walking to work for both physical and mental health is well established, with potential to lower risk of obesity, diabetes and cardiovascular disease and reduce feelings of stress and anxiety. These benefits hold even when faced with high levels of pollution in urban areas, with one study demonstrating that even in the most polluted cities in the world, such as Delhi, an individual would need to cycle for more than 5 hours per week before the risks outweigh the benefits.<sup>2,3</sup>

Our modern lives are characterised by increasingly sedentary behavior. From office-based working to the growth of the internet and television, inactivity presents a significant challenge to public health. In this climate, the importance of active travel is clear, enabling workers to build physical activity into their daily routine.

The majority of commuters however, are currently opting for modes of 'passive travel' via car, bus or train, which for some present the most practical or time-efficient options. For many, the time spent commuting provides a much needed opportunity to get some work done, catch up on sleep or engage in a leisure activity, such as reading a book.

For others however, the 'rush hour' is synonymous with crowding, frustration and stress. Research indicates that commuting can indeed be deleterious to the health and wellbeing of workers, with several studies highlighting the detrimental impact that commuting can have on for example, mental wellbeing, objective measures of health such as BMI or blood pressure and also, an individuals' ability to engage in health promoting activities, such as physical activity, healthy food preparation or spending time with family and friends.

There is no 'one call solves all' solution for improving the public's health - we must take a whole system approach, embedding health and wellbeing across the full breadth of policy areas, from town planning, the school curriculum to transport policy. The need to commute is undeniably restrictive for the working population - it presents however, both challenges and opportunities. Where these opportunities exist, it is imperative for the public's health and the productivity of the workforce that the Government, transport companies and employers alike seek to capitalise on these, making the commute more health promoting. This must include both encouraging greater active travel and also, seeking to create a healthier experience for those confined to methods of largely non-active travel, particularly via public transport; the latter of which is the focus of this report.

The number of workers commuting two hours or more has increased by

**72%** since 2004, from 1.7 to 3 million people

Source: Trade Union Congress analysis of unpublished Office for National Statistics Labour Force Survey data.

# The commuting workforce

An estimated 90% of the workforce in the UK commute to work, with the vast majority of these taking a 'non-active' mode of transport; according to data from the Office for National Statistics, in 2011, 15.3 million people commuted to work by driving and a further 1.4 million as a passenger in a car or van.<sup>4</sup> A sizeable percentage of the commuting workforce also uses public transport to get to work; in 2011, 1.9 million commuted by bus or coach, and a further 2.4 million commuted by either train or light rail, compared with 2.8 million who walk to work and roughly 760,000 who cycle.<sup>4</sup>

#### Average commute for UK areas\*

London	79 mins
South East	60 mins
East of England	60 mins
Scotland	54 mins
East Midlands	52 mins
North West	51 mins
West Midlands	51 mins
Yorkshire and the Humber	50 mins
South West	49 mins
North East	48 mins
Northern Ireland	45 mins
Wales	44 mins

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Scotland

There are also notable regional variations; in London, for example, in 2011, just under 50% of workers commuted using public transport, a figure considerably higher than other parts of the UK. Conversely, in the South West, a mere 6.3% commuted using public transport.<sup>4</sup>

Commuters in London also tend to spend a much higher proportion of their day travelling to work; in 2013, workers in London spent on average 79 minutes commuting each day.<sup>1</sup> This amounts to just over 6 and a half hours, compared with an average weekly commute of 6 hours 18 mins in New York, 5 hours 25 mins in Chicago and 4 hours 38 mins in Los Angeles. <sup>5</sup> The regions with the second longest commutes are the South East and East of England at a considerably lower 60 minutes per day.<sup>1</sup>

In recent years, we have also seen increased discussion of the so-called 'extreme commuter' - individuals willing to travel more than 90 minutes each way to get to work, with indications that this may be a growing trend; a survey in 2008 found that more than 1 in 20 workers were 'extreme commuters', rising to almost one in ten by 2013.<sup>6</sup>

Lengthy commutes are disproportionately associated with work in London, with employees being priced out of the city and immediate commuter belt, and workers across the UK often having to look to London for career progression opportunities.

# What is the impact on our health and wellbeing?

The commute arguably frames the workday, with the potential to set the tone of an individual's day at work and impact their behavior elsewhere. It is often assumed that those who commute long distances receive pay-back in terms of enhanced job prospects, higher wages or the ability to live in more affordable areas. However. when one considers the health implications of a long, passive commute, it is less clear whether workers are actually achieving this.

#### **Mental wellbeing**

A study using data from the British Household Panel Survey found that subjective health measures such as selfreported health status and satisfaction were indeed lower for individuals who commute longer distances. Interestingly, this research also found a correlation between length of commute and a greater number of GP appointments, potentially due to a feeling of lower health status amongst this group. <sup>7</sup> These findings mirror those of the Office for National Statistics, who found that commuters have on average lower life satisfaction, a lower sense that their daily activities are worthwhile, lower levels of happiness and a higher level of anxiety, with effects being particularly marked for those commuting between 61 and 90 minutes per day.<sup>8</sup>

Several studies have sought to understand this link, with some indicating that crowding, perceived lack of control and unpredictability are all major factors. Cox, Houdmont and Griffiths argue that crowding is a subjective perception of commuter density, which can then lead to passenger stress. <sup>9</sup> From their research, they state that perceived control and journey predictability may impact whether a commuter perceives their journey to be crowded and thus, impacts the level of stress they experience.<sup>9</sup>

There is some disagreement in the literature over which method of transport has the greatest impact on the health and wellbeing of commuters. Wener and Evans for example, argue that motor vehicle commuting may be more unpredictable and requires more effort.<sup>10</sup> Whereas, Williams, Murphy and Hill argue that drivers have a greater feeling of control and therefore, experience lower stress levels.<sup>11</sup> The research by the Office for National Statistics found that bus/coach commuters experience lower levels of life satisfaction and a reduced sense that their daily activities are worthwhile than car commuters, while train commuters experience higher levels of anxiety.<sup>8</sup>

#### **Physiological effects**

A potential corollary of this is the various trends in objective health measures seen in commuters. White and Rotton for example, found that commuting can lead to physiological effects, such as an increased pulse rate and higher systolic blood pressure.<sup>12</sup> Similarly, other studies have demonstrated a connection between commuting and a higher BMI. Sugiyama et al for example, who studied car commuting in Australia found that for male commuters, spending more than 1 hour each day travelling by car was significantly associated with higher BMI and higher waist circumference than those who spend less than 15 minutes travelling by car.13



Gateway to health?



their commute reduces the time they spend on these activities. Opinion polling commissioned by RSPH, August 2016. Sample = 1,500

#### **Time scarcity**

Some of these effects may be the result of 'time scarcity' or 'time crunch' - a difficulty faced by those seeking to achieve a positive work-life balance, but struggling with ever-increasing demands on their time. Working hours being held constant, researchers have sought to understand the time re-allocation undertaken by workers, including those with lengthy commutes. Christian found that longer commutes were associated with modest reductions in time spent preparing food, exercising, spending time with family and particularly, sleeping.<sup>14</sup> Over the course of a year, Christian found that commuters who travel up to 90 minutes per day will 'trade-off' 24.2 hours of physical activity when compared with a 60-minute commuter.<sup>14</sup> Whilst this is a concerning finding, the study also highlights that even for 2-3 hour commuters, individuals still watch an average of 100 hours of television per year, indicating that encouraging healthy lifestyles may require a multi-faceted approach to effect a cultural shift.<sup>14</sup>

Research also suggests that the commute may affect men and women differently; Chatzitheochari and Arbar found that male commuters are at greater risk of sleep deprivation, with men being more likely to get less than 6.5 hours of sleep.<sup>15</sup> Several studies, however, indicate that overall women experience the negative effects of commuting more strongly. When controlling for factors such as lower occupational position and different working hours, Roberts, Hodgson and Dolan argue that differences may be due to many women bearing primary responsibility for household tasks and consequently, being more likely to 'trip-chain', i.e. seeking to accomplish household errands as part of their journey to and from work, such as collecting children from child care, potentially making it more stressful.<sup>16</sup>

# Distress-o-meter of commuting

### What are the top 5 aspects of commuting that impact on the public's health?



The evidence base clearly demonstrates the impact that commuting can have on the health and wellbeing of workers; from the commute length to overcrowding, the commuting experience has the potential to decrease the wellbeing of workers and limit the time available to them for health promoting activities.

We sought to explore this further through the use of opinion polling, enabling us to understand the factors viewed by commuters themselves as the most detrimental to their health and wellbeing.

Our distress-o-meter of commuting, informed by this opinion polling, (weighted sample = 1060) highlights the 5 aspects of commuting seen as having the greatest impact on health and wellbeing.

### Recommendations

#### Greater adoption of flexible and home working and move away from the 9-to-5 culture

The 9-to-5 culture, and the necessity of travelling during the rush hour, is arguably a relic of the 20th century. With the advent of the internet age and the widespread availability of portable technology, such as smart phones and laptops, it is no longer an imperative for employees to be present in the office. Instead, we now have huge opportunities for flexible working, giving employees a freedom previously unknown in the workplace.

By allowing employees greater flexibility to structure their workday in terms of their hours and location, workers are able to amend their commuting times to avoid the 'rush hour', or reduce the amount of time spent commuting altogether. This approach is arguably more conducive to balancing work and home responsibilities, and may enable workers to build health promoting activities into their day, such as visiting a gym or attending medical appointments.

In recent years, the number of organisations allowing their employees to work remotely has grown exponentially; in 2014, a survey conducted by The Work Foundation found that remote-working was the norm for over one-third of respondents, with the expectation that this will rise to over half by 2017.<sup>17</sup>

There is clear appetite for this – one survey found that 83% of respondents who do not currently have the option

to work remotely would do so if this was offered to them – with research indicating that this is beneficial for both the health and wellbeing of staff and workforce productivity.<sup>17</sup>

A survey of managers conducted by The Work Foundation for example, found that 54% felt that they 'get more done' when working remotely.<sup>17</sup> A study conducted by CIPD also found that 56% of employers reported a drop in absenteeism since the introduction of flexible working, 58% reported increased productivity and 73% reported increased motivation.<sup>18</sup>

Many employers have already embraced this new working culture; Netflix for example, and subsequently, Virgin, gained notoriety for their 'unlimited vacation' policy based on the idea that 'we should focus on what people get done, not how many hours or days worked'.<sup>19,20</sup> This is a unique approach, but presents an interesting look at what workplace policies could be possible in an employment culture where results matter and the 'when', 'where' and 'how long' are increasingly irrelevant.

For some workplaces, flexible working may not be practicable, for example in a face-to-face or hands-on role, and there is undeniably a balance to be struck between remote and officebased working in terms of building team relationships and morale. However, for the wellbeing of the working population, it is crucial that where this is possible, employers seek to facilitate this option. In this age of technology and connectivity, we call on employers to consider the necessity of the 9-to-5, office-based culture. The introduction of the Flexible Working Regulations in 2014 established the right of all employees, who have given over 26 weeks of service, to request flexible working and we encourage employees to embrace this. We also call on employers that have already adopted this approach to conduct greater evaluation and share best practice examples with those who are yet to follow suit.

To facilitate greater flexible working and ensure that this is a realistic option for workers, we also support calls for the introduction of part-time season ticketing, thus ensuring that home working is a financially viable option and does not mean that workers are also expected to waste money on a full-time season ticket.

### Almost 60%

of commuters feel that flexible working or greater opportunity to work remotely would increase their health and wellbeing.

#### Department for Transport to introduce 'health and wellbeing' as a specification in transport franchises

To tackle many of the chronic public health issues faced by the UK, there is widespread agreement that we must take a 'whole-system' approach, looking at the role all aspects of society can play in promoting health and wellbeing. In recent years, there has been growing calls for 'health' to be considered in all policy areas, rather than as a separate, stand-alone issue. This has led many in local authorities for example, to call for 'health and wellbeing' to be introduced as the fifth objective in licensing decisions, an approach already taken in Scotland.<sup>21, 22</sup>

With an estimated 4.5 million people using buses, trains or light rail to get to work each day, our transport network is undoubtedly an integral part of this.<sup>4</sup> Nevertheless, 'health and wellbeing' has hitherto been largely ignored when it comes to public transport.

Since the implementation of the Railways Act 1993, railways in the UK have been run on a franchise basis. Put simply, this is an arrangement in which private companies bid to provide a particular service for a period of time based on the specifications outlined by the Government. The franchise is then awarded to the company that best meets these specifications, generally in terms of for example, performance or promised upgrades. This is often accompanied by the company also leasing stations from Network Rail for the duration of their franchise agreement. <sup>23</sup> Buses on the other hand, currently operate under a free market arrangement, with franchises being limited to buses in London. <sup>24</sup> Although, the Bus Services Bill, currently progressing through Parliament, will see responsibility for buses transferred to elected mayors as part of devolution, with potential for greater bus franchising in future.

The literature clearly demonstrates the impact that commuting can have on the health and wellbeing of commuters; many contributory factors can be influenced by the train and bus operators themselves, be it in terms of the 'foodscape' in stations, cleanliness and hygiene or measures to reduce stress. In spite of this, 'health and wellbeing' does not currently feature as a specification in franchise agreements.

By building 'health and wellbeing' into invitations to tender and franchise agreements, this encourages the view from the very beginning that the public's health must be taken into consideration and calls on operating companies to create a healthier travelling experience, be it in terms of the food on offer, the comfort of travelers or the information provided. There are some examples of good practice, namely the provision of water by operating companies on hot days and free wifi. However, more could be done, for example the introduction of reduced light or noise carriages - a move supported by one-third of commuters (according to RSPH opinion polling).

We call on the Department for Transport and in future, local authorities with responsibility for bus franchising, to include 'health and wellbeing' as a key consideration in the planning of transport services. This will not only improve the commuting experience for workers, but also has the potential to encourage a greater number to use public transport, thus easing overcrowding on roads and helping to support environmental responsibility.

Greater inclusion of 'health and wellbeing' as a consideration in transport policy must be accompanied by further research to understand the impact on travelers; the research conducted by Transport Focus for example, provides a valuable insight into the experiences of passengers. We therefore call for a continued and in some areas, increased focus on health and wellbeing in this research as a means of informing transport policy.

• I haven't even got on the train yet and I already feel really stressed. It's like a race to be able to get on your own train – it's absolutely ridiculous, all I want to do is get home and you're stuck in queues with thousands of people.

London train commute

### Greater restrictions on unhealthy food and drink outlets in stations

Many stations across the UK, particularly larger city-based stations, are no longer simply locations in which to catch a train, but are also increasingly providing a venue for other commercial and leisure activities, such as shopping or visiting a restaurant. This is most clearly evidenced by 'destination' stations like St Pancras and Liverpool Street in London.

This is undoubtedly a lucrative strategy for businesses and train operators alike; the re-development at King's Cross and Cannon Street stations in London for example, led to a 20% increase in sales, most notably for food outlets (22.5%), followed by card/stationary shops (14.9%) and pubs/bars (12.6%).<sup>25</sup>

The unhealthy 'foodscape' created in many stations by the growing prevalence of fast food outlets, coffee shops selling high calorie drinks/snacks and pubs/ bars creates a potential health pitfall for the thousands of commuters travelling through these stations each year, often in a tired and stressed state. Opinion polling by the RSPH indicates that more than one in four commuters feel that the food and drink outlets in stations and along their commuting routes increases the frequency with which they purchase unhealthy snacks and fast food items. This polling also indicated that workers feel their commute adds an average 767 calories to their diets each week outside of their regular meals, in terms of food and drink consumed during and because of their commute, for example as a reward for a stressful journey.

To encourage healthier lifestyles and crucially, help tackle the overweight and obesity crisis, it is vital that stations offer travelers a range of options rather than outlets selling primarily unhealthy options or 'grab bag' portions.

Transport companies have a captive audience for health promotion, be it in terms of journey time or the waiting time in stations or at bus stops; we should take full advantage of the opportunity this presents, minimising the temptation of unhealthy behaviors through station outlets, vending machines and advertising, and instead promote healthy activities through a more diverse array of outlets, including station-based healthy living pharmacies.

Alongside the inclusion of 'health and wellbeing' as a franchise specification, we call on Network Rail, who has responsibility for 19 of the largest and busiest stations in the UK, with infrastructure ownership of 2,500 franchised stations, to amend their station design guidelines to introduce 'health and wellbeing' as a key consideration in designing station retail and catering facilities and station advertising.23 We also call for local authorities to be given greater powers to restrict the types of advertising present in locations for which they have responsibility such as bus stops and bus shelters on the basis of health and wellbeing.

#### Routinely publish information on passenger capacity on trains and buses

Stress is a universal problem for workers; and none more so than those who have a lengthy commute to and from work. A major factor impacting this stress is the issue of overcrowding on both public transport and UK roads.

With rail passenger demand at its highest level since the 1920s, overcrowding is an endemic problem on UK trains. In many areas, service and rolling stock availability is struggling to keep up with this demand, meaning that a growing number of commuters face an uncomfortable daily commute without a seat, often in a highly crowded carriage.<sup>26</sup>

We call on train and bus companies to publish information on the average crowding levels on train and bus services. The Department for Transport already publishes information on the most crowded trains in England and Wales, but user-friendly train line or bus route specific information is currently unavailable. We call for this information to be presented in stations, at bus stops or online providing passengers with information on service usage, perhaps as a percentage of maximum capacity.

The literature indicates that a commuter's perception of control over their journey can influence the stress they experience; by providing this type of information, travelers could be empowered to plan their journey's more effectively, potentially enabling them to avoid the busiest train and bus times.

### Declassification of first class carriages on all commuter trains

'Standing room only' is the reality for a growing number of commuters, particularly in the UK's largest cities. London tops this list with passenger levels exceeding capacity by 4.1% and an estimated 155,000 passengers standing on arrival into London during the morning peak, an increase of 16,000 since 2014.<sup>26</sup>

Commuter trains in London are some of the most crowded trains in the UK; the 6.31am train from Reading to Paddington for example, runs at a staggering 176% capacity and similarly, the 6.35am train from Caterham to Victoria runs at 164% capacity. <sup>27</sup>

This is a problem mirrored in several other cities; at the morning peak, an estimated 14.1% of passengers are standing on arrival into Birmingham, 12.4% on arrival into Manchester and 14.1% on arrival into Leeds.<sup>26</sup> Overcrowding is recognised as one of the most pressing issues facing UK transport, with several studies demonstrating the detrimental impact it can have on the stress and anxiety of travelers. To ease this overcrowding, calls have been made to increase rolling stock and lengthen platforms, thus facilitating longer trains.

Alongside this, we call for the permanent declassification of all first class carriages on commuter trains. Some have already moved in this direction; for example, Chiltern railways abolished their first class seating on the Bicester to London line in the nineties and have since abolished it on their Birmingham to London line, replacing it with a 'business zone'.<sup>28</sup> First class carriages are chronically underused and declassification offers a simple solution for freeing up some additional, much needed seating. "I think taking public transport actually has a really good effect on my health in that way...I don't have a car, I have the flexibility of getting off a few stops early and having some time outdoors...I'm not restricted by car parking or places and having to think about that every time...

<sup>6</sup> It's like going from one box into another box, you don't really get to escape it. I could go for a walk after work...but realistically, I just want to get home...

South West car commuter



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