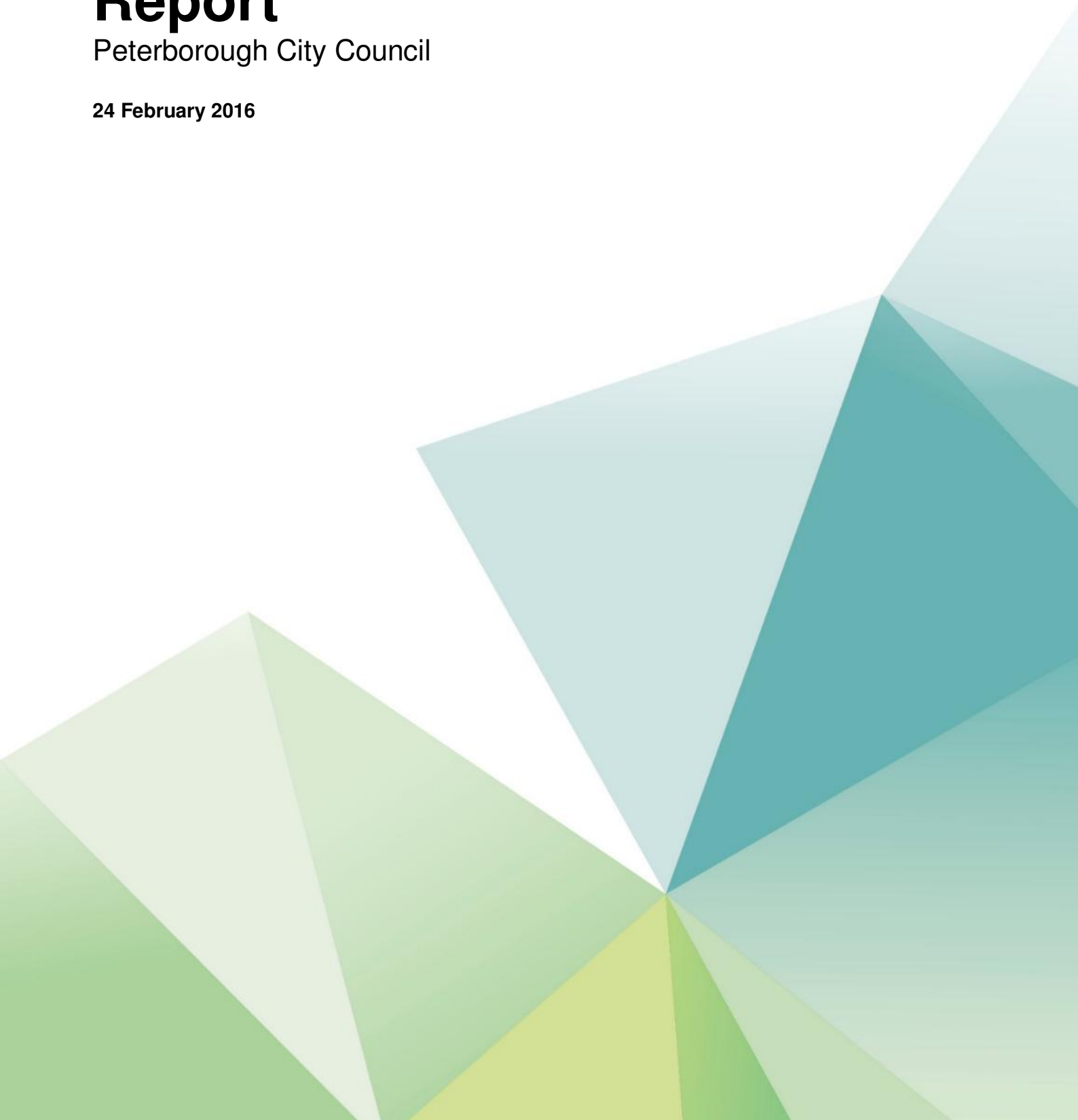


LSTF Data Monitoring Report

Peterborough City Council

24 February 2016



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This document has 33 pages including the cover.

Document history

Job number: 5140463			Document ref: Peterborough Council LSTF Monitoring Report v1			
Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 1.0	For client review	KS	CHan	JW	CHan	29/01/16
Rev 2.0	Revised based on client comments	KS	JW	RB	CHan	24/02/16

Client signoff

Client	Peterborough City Council
Project	Peterborough City Council LSTF
Document title	Peterborough City Council LSTF Data Monitoring Report
Job no.	5140463.003
Copy no.	V2
Document reference	Peterborough Council LSTF Monitoring Report v2

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1. Context & Background

Over the past three years Atkins has been working on behalf of Peterborough City Council's (PCC) Travelchoice team to deliver behavioural change across the city. As part of evaluating PCC's Local Sustainable Transport Fund (LSTF) programme for 2015/16, Atkins has been asked to prepare a summary report on how LSTF has impacted Peterborough. The information presented will support future bids, inform future thinking and set the direction for sustainable travel in Peterborough after the current LSTF funding period has finished.

The objectives of this report are as follows:

- To review mode share, mode shift and commuting patterns;
- To provide summary evidence relating to the impacts of smarter choices on air quality, public health and the environment;
- To provide a value for money assessment of local smarter choices measures;
- To gain an understanding of the impact of growth in Peterborough and the role smarter choices can play in delaying or deferring major spending in road building infrastructure; and,
- To provide recommendations on future priority areas and schemes in the city for smarter choices delivery.

The remainder of this section of the report presents the impact that smarter choices have had on air quality, public health and the environment. Reference is also made to the PCC Environment Capital programme.

1.1. Air Quality

Air quality in a city can provide an insight into the travel choices its inhabitants are making and whether or not there is a high level of sustainable transport use, although background air quality levels from transport may be affected by the amount of freight traffic passing through an area. Standing vehicles also generate significant emissions and therefore air quality levels are influenced much more by congestion levels, rather than vehicle volumes alone.

In the past year a number of test tube locations, used to test levels of air quality have been relocated to more city centre locations due to the increase in the number of developments close to the centre. All results received have been at an acceptable level for the main pollutant tested, Nitrogen Dioxide (NO₂). There are currently no Air Quality Management Areas (AQMAs) in Peterborough related to traffic; but there is one related to emissions from brickworks to the east of the City. This is an encouraging sign and does potentially show that smarter choices are being made in Peterborough resulting in improved air quality.

Nevertheless, Taverners Road is an area of concern, it is close to being declared as an AQMA and is under constant monitoring. The air quality is below acceptable standards in this area due to excessive traffic and properties located close to the kerbline, meaning residents are exposed to high level of pollutants.

1.2. Public Health

There is an abundance of academic evidence that highlights the relationship between public health and active travel. It is not only good for personal health; moving to moderate exercise can reduce the risk of coronary heart disease by up to 10 percent, while active adults have a 35 to 50 percent lower risk of developing Type 2 Diabetes than non-active adults. It also has wide spread economic benefits, Jarrett (2012) states how increased walking and cycling in urban areas and reduced use of private cars could lead to savings of roughly £17 billion for the NHS.

Physical inactivity costs Primary Care Trusts (PCTs) (now known as Clinical Commissioning Groups) in England more than £900 million (2009/10 data). Table 1-1 is a useful indication of the potential costs of physical inactivity in Peterborough.

Table 1-1 Estimated Cost: Physical Inactivity for the Peterborough PCT area, 2013

	Cancer Lower GI	Breast Cancer	Diabetes	CHD	Cerebrovascular Disease	Total Expenditure
Peterborough PCT	£133,227	£94,798	£787,339	£1,463,791	£267,574	£2,746,729

The percentage of adults physically active in Peterborough is statistically similar to the England average, 55 percent of adults achieved at least 150 equivalent minutes of at least moderate intensity physical activity per week in 2013. In Peterborough in 2012, 24.1 percent of adults were estimated to be obese and 65.5 percent either overweight or obese. The UK average for obesity is 24.9 percent of the population and 62.2 percent for overweight or obese.

The fraction of mortality attributable to particulate air pollution in Peterborough is 5.7 percent. This is not significantly different to the national average of 5.6 percent.

1.3. Environment Capital

Peterborough has the potential to be a truly sustainable city. A city which has a thriving local economy, strong communities and a sustainable way of life. A city where residents are healthy, happy and prosperous. A city regarded as the UK's Environment Capital, which is why in 2008 the city adopted the target of 'Creating the UK's Environment Capital'. As part of this aim a number of targets were set.

The 2050 vision for sustainable transport is to be a 'pedestrian, public transport and cycle city first, and 90 percent of all journeys will be zero emissions.' More immediately the 2016 targets include:

- Increasing the number of businesses with travel plans from 30 in 2012/13 to 60;
- Increasing the number of pupils receiving Bikeability training from 951 to 1300 annually; and
- To further develop a robust monitoring network to enable in depth transport modal data to be collected.

An interim target was set for March 2015, of increasing the number of businesses with travel plans to 42. This was achieved. Furthermore, the target for pupils receiving Bikeability training was also achieved in 2015. Progress against these targets was assessed in November 2015 with the results presented in Table 1-2.

Table 1-2 Environment Capital Monitoring (November 2015)

Target	Status	Comment
Increase the number of businesses with travel plans from 30 in 2012/13 to 60	Green	In order to achieve this target by the end of 2016 an interim target of 42 was set to be achieved by the end of March 2015. This has been achieved. Travelchoice are currently targeting a large number of SME's in Fengate which should mean that this target continues successfully
Increase the number of pupils receiving Bikeability training from 951 to 1300 annually	Green	Bikeability training is delivered in schools across the city. The number of pupils that have received training are: Up to the end of June 2014 - 1,339 Up to the end of June 2015 – 1,550
To further develop a robust monitoring network to enable in depth transport modal data to be collected	Amber	The council currently use data produced by the Department for Transport to understand modal shift across the city and to make comparisons at a national level. Advancements have been made using data obtained from TomTom to understand more about vehicle journey times and opportunities for innovative solutions to obtain further data on an ongoing basis will continue to be explored

As presented in Table 1-2 good progress has been made against the targets relating to the number of travel plans and level of Bikeability training, however PCC is still working to develop a monitoring network. Data

made available by TomTom, a provider of navigation and mapping products, are currently being explored to see if they can assist with monitoring data.

1.4. Growth in Peterborough

Table 1-3 to Table 1-6 present anticipated population, housing, workforce and employment growth in Peterborough, as referenced in PCC Local Plan Preliminary Draft (January 2016). These figures are used to assess likely future increase in trip numbers and the amount of additional investment needed to achieve a 12 percent increase in cycling and a 14 percent increase in walking up to 2020.

Table 1-3 Population Growth in Peterborough

Area	Population 2011	Population 2036	Change in Population	% Change
Peterborough HMA	444,553	536,586	92,033	20.70
England	53,107,169	61,886,100	8,778,931	16.50

Table 1-4 Workforce Change in Peterborough

Area	Change in jobs	Adjustment factor	Change in resident workforce
Peterborough HMA	39,488	n/a	37,117

Table 1-5 Forecast Employment Growth in Peterborough

Area	Jobs 2011	Jobs 2036	Change	% Change
Peterborough HMA	224,830	264,318	39,488	17.60%

Table 1-6 Housing Growth in Peterborough

Dwelling provision for 2011 to 2036	Number of Dwellings
Objectively assessed need 2011 to 2036	25,125
Memorandum of co-operation additional dwellings 2011 to 2036	2,500
Local Plan requirements 2011 to 2036	27,625
Dwellings provision 2015 to 2036	Number of Dwellings
Net additional dwellings completed 2011 to 2015	3,718
Local Plan requirement 2015 to 2036	23,907

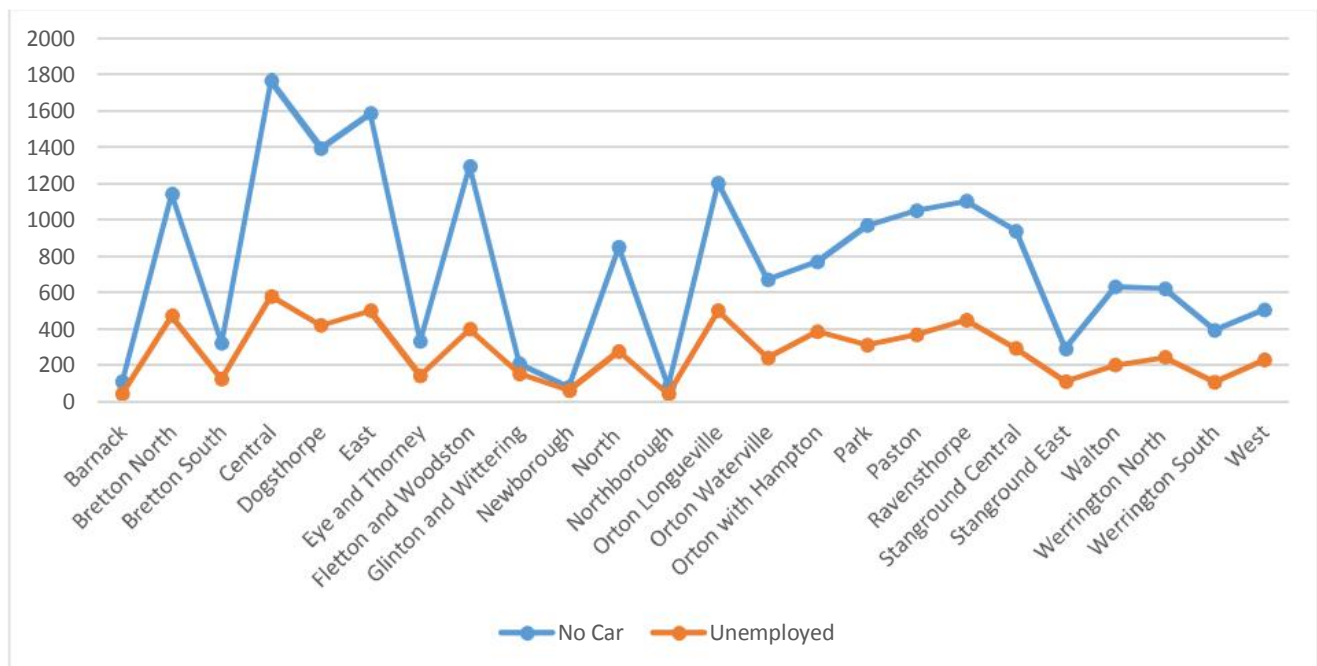
1.5. Local Data Trends

2011 Census Data, as well as Local Health data from Public Health England has been summarised to aid the analysis of the impacts of the LSTF programme in Peterborough.

This data includes car / van ownership within Peterborough and employment levels in Peterborough. This data has been analysed to establish if a relationship between unemployment levels and households with no car / vans exists. A correlation coefficient of 0.96 was calculated which indicates a positive correlation between employment and car ownership. This positive correlation can be seen in

Figure 1-1.

Figure 1-1 Correlation between employment and car ownership in Peterborough (Census Data 2011)



Four indicator maps have been downloaded from the Public Health England website (<http://localhealth.org.uk/>) to provide an indication of the levels of obesity, hospital admissions due to heart disease, income deprived homes and the number of adults claiming benefits on a ward by ward basis in Peterborough, as presented in Appendix A. The maps indicate that:

- The more central Peterborough wards such as Central, Park, East and Ravensthorpe have high percentages in income deprivation, unemployment, obesity and coronary heart disease;
- The wards to the west of Peterborough such as Barnack and Glington and Wittering have very low percentages of the same factors; and
- It should be noted that the central wards of Peterborough are much more densely populated than the outer wards, this may impact upon the data.

2. LSTF Impacts

For the last four years, £5.9 million has been invested from the LSTF to improve the sustainable travel in Peterborough. This section of the report highlight the impacts that have been made by this investment.

2.1. Workplace Data

Data from seven workplace travel surveys in the city has been analysed to determine the distance employees are travelling to work and the mode of travel they are using. The seven workplaces in question are PCH, Mastercard, Cross Key Homes, Atkins, Vivacity, Queensgate and SMEs in the Fengate area. The results show that 64 percent of employees are travelling to work by car, with only 12 percent of employees walking or cycling. It can be determined from the distance travelled results that the majority of the workplace population travel over 5 miles to get to work. This is a large distance and therefore it is not realistic for these individuals to walk or cycle to work on a daily basis. However, the number of employees utilising public transport for their commute was 12 percent, which is relatively low.

2.2. myPTP Data

The aim of the workplace myPTP project in Peterborough was to deliver personalised travel plans (PTP) to employees in the city which in turn promoted alternative, more sustainable journey choices to the workforce. Plans are delivered electronically to employees and are often supported by Travelchoice engagement events at workplaces. To date 8,000 myPTPs have been delivered.

As part of the delivery of myPTPs in Peterborough, follow up travel surveys have been undertaken with 659 respondents to determine the impact of the PTPs on mode share. The results of these follow up surveys are presented in Table 2-1.

Table 2-1 myPTP Mode Share Results

Mode	Before myPTP	% of total	After myPTP	% of total	Overall Change	% Mode share change	% Change in trips
Single Occupancy Vehicle	451	68.44	425	64.49	-26	-3.95	-5.8
Carshare	63	9.56	65	9.86	2	0.30	3.2
Walk	40	6.07	44	6.68	4	0.61	10.0
Cycle	71	10.77	86	13.05	15	2.28	21.1
Train	5	0.76	6	0.91	1	0.15	20.0
Bus	9	1.37	11	1.67	2	0.30	22.2
Taxi	18	2.73	20	3.03	2	0.30	11.1
Motor Cycle	3	0.46	3	0.46	0	0.00	0.0

The results presented in Table 2-1 show that after myPTPs were delivered to employees there was a decrease in the number of Single Occupancy Vehicles (SOV) trips by 5.8 percent. All other modes increased or stayed the same, which is a positive result as these are all more sustainable modes of travel. The bus, cycle and train modes all had significant increases in the number of trips with a change of between 20 percent and 22 percent.

2.3. Mode Share

2001 and 2011 Census Data has been analysed to establish the methods the Peterborough population used to travel to work. The results are shown in Table 2-2.

Table 2-2 Mode Share Data 2001 and 2011 Method of Travel to Work Census Data

Method of Travel to Work (Peterborough)	2001		2011	
	Number	Percentage	Number	Percentage
Work mainly at or from home	5,524	6%	7,158	8%
Train, underground, metro or light rail	5,739	6.5%	2,172	2%
Bus, minibus or coach	747	0.5%	6,434	8%
Driving a car or van	58,092	64%	50,718	58%
Passenger in a car or van	7,087	8%	7,489	9%
Bicycle	5,664	6%	4,990	6%
On foot	6,246	7%	7,506	8%
Other	1,522	2%	1,577	1%

Table 2-2 shows positive results with a 6 percent decrease in SOV mode share between 2001 and 2011, and an increase in nearly all sustainable methods of travelling. There is a 4.5 percent decrease in rail use. However, this is not surprising, as rail is the only method out of these options available in Peterborough which does not serve the immediate area around Peterborough. There is a 7.5 percent increase in bus, minibus or coach mode utilisation. When compared to the national 2001 and 2011 method of travel to work census data results, Peterborough compares well, nationally there is no increase in bus, minibus or coach utilisation over the 10 year period and there is only a 1 percent decrease in SOVs. Furthermore, Peterborough and the national results are the same for cycling levels staying the same, however Peterborough has a 1 percent increase in walking whereas nationally there was no change.

2.4. PTP Data

Peterborough's Residential PTP project sought to approach households across several targeted areas of the city, and provide more than half with travel information tailored to their specific personal needs and circumstances, with a view to increasing the community capacity to choose walking, cycling and active travel. There were three phases of the PTP programme:

- Phase 1 - focused on households within Werrington and Gunthorpe;
- Phase 2 - focused on the Ortons; and
- Phase 3 - focused on Eastern Peterborough.

For all phases, the number of trips were baselined and then a follow-up survey was carried out three months after the PTP interventions took place. Table 2-3 shows the total weekly change in trips under 5 miles for all three phases of the project by mode. It should be noted that the Phase 2 follow up surveys were undertaken in the colder months when conditions can discourage people from travelling sustainably. This has impacted on the results of the programme.

Table 2-3 Estimation of the total weekly change in trips under 5 miles subsequent of PTP

Phase	Travel Mode	Baseline	Follow-Up	Change in Trips
1	Walk	952	1192	240
	Bike	305	491	186
	Car/Van (alone)	1220	997	-223
	Car/Van (shared)	420	329	-91
	Bus	125	139	14
2	Walk	701	625	-76
	Bike	356	224	-132
	Car/Van (alone)	516	285	-231
	Car/Van (shared)	159	150	-9
	Bus	169	119	-50
3	Walk	1939	2059	120
	Bike	649	669	20
	Car/Van (alone)	1630	1382	-248
	Car/Van (shared)	920	585	-335
	Bus	507	484	-23

The results presented in Table 2-3 generally show a decrease in SOVs and an increase in sustainable and active travel modes. Phase 1 and Phase 3 show an increase in both walking and cycling in the follow-up surveys. However, Phase 2 shows a decrease. Despite there being a decrease in sustainable and active travel modes, there was also a large decrease in the number of SOVs. However, there was an overall reduction in trips. Moreover, when the mode share is analysed for the phases, Phase 2 presents an increase in walking as a mode share (7.67 percent) and a small decrease in cycling (-2.76 percent). In regards to the cycling mode share, the reasoning for this is that the Phase 2 follow up surveys were undertaken in the colder months which are less favourable for cycling.

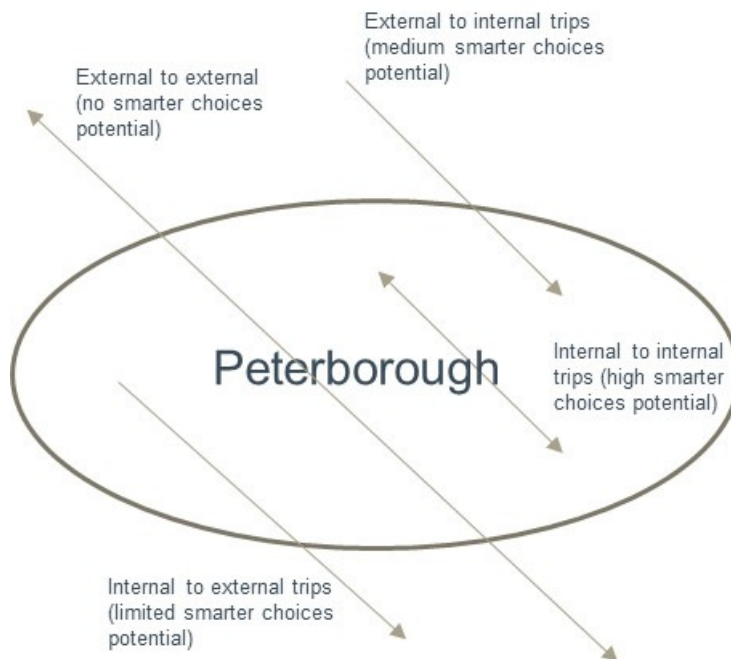
Overall having made contact with over 10000 households and delivering more than 5500 packages to interested households, the evidence presented shows the PTP programme to have delivered positive results.

2.5. Vehicle Usage

Some publicly available datasets suggest vehicle use in Peterborough has risen in recent years. However, there are several explanations why this may not be reflective of the general population:

- The majority of Peterborough's Automatic Traffic Counters are located on strategic road network routes, which do not enter Peterborough city centre itself and serve the rapidly expanding industrial hubs;
- Significantly high external to external trips (vehicles which are not entering Peterborough itself) would have therefore been collected in this data. Such journeys would include HGVs travelling from A1(M) towards Spalding / Boston; and
- These additional freight trips to and from the growing industrial sites around Peterborough are likely to form more than two thirds of all freight movements in Peterborough.

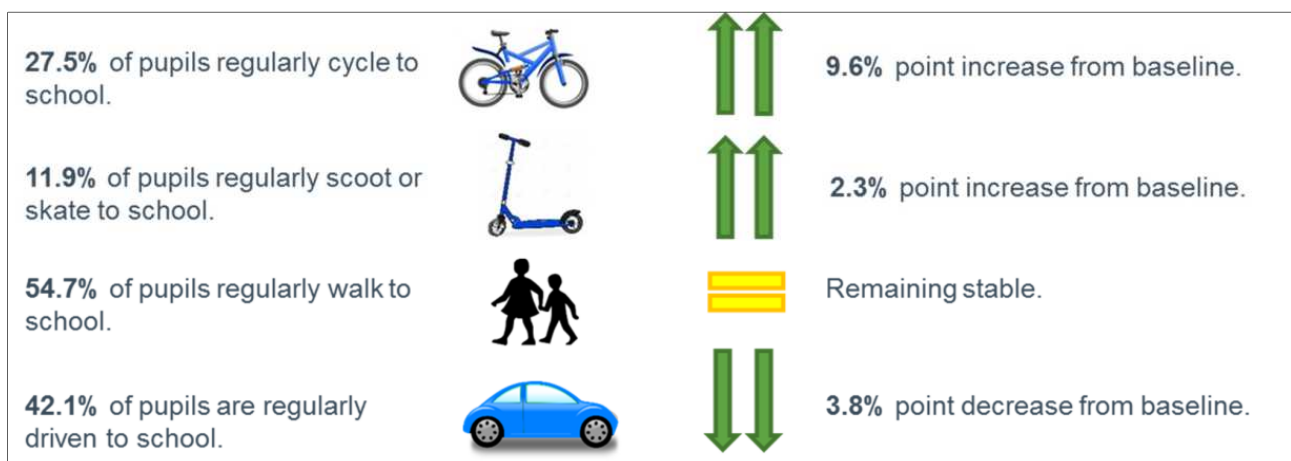
Figure 2-1 Vehicular Trips in Peterborough



2.6. School Data

PCC has the Bike It Programme for schools which is working alongside schools to increase the number of young people travelling to school actively and / or sustainably with an emphasis on increasing cycling levels, reducing car travel and creating a culture of active travel within school which can be sustained. Between 2014 and 2015, the Bike It officers in Peterborough have delivered approximately 200 activities across all schools in city, resulting in them engaging with 14,907 attendees. Figure 2-2 shows the key outcomes of the Bike It programme.

Figure 2-2 Key Outcomes of PCC Bike It Programme



Data from a number of schools which have submitted Travel Plans to PCC between 2006 and 2015 has also been analysed to obtain average mode share change across schools in the city. The results of this analysis are presented in Table 2-4.

Table 2-4 School Travel Plan Mode Data

Mode	Average Mode Share Change (%)
Cycling	7.5
Walking	-10.8
Scoot / Skate	7.7
Park & Stride	4.5
Bus	-1.0
Train	0.1
Car	-7.6

The average mode share for walking has decreased during this time although scoot / skate and park and stride modes have increased. Car travel to schools has decreased during this period, as has bus travel.

Obesity data was also analysed for school children in Peterborough. 25 percent of 4-5 year olds are obese, this is above the 22 percent national average. 30 percent of 10-11 year olds are obese, which is 3 percent below the national average, perhaps reflecting that once children reach school age they become more active.

3. Analysis

This section provides an assessment of local smarter choices measures using the Department for Transport (DfT) Cost Calculator, the WHO HEAT Assessment tool and TRACC Modelling. It also looks at the barriers to travel in Peterborough at both a local and national level.

3.1. DfT Tool

The DfT Tool is an active mode appraisal toolkit, which can calculate the costs and benefits of delivering target interventions such as workplace travel planning over a number of years. Benefits are assigned to the uptake of walking and cycling away from car trips. The tool takes into account the following main parameters:

- Scheme costs;
- Change in walking and cycling trips over the duration of the project;
- Population growth; and
- Decay rate (the drop-out rate of not carrying out the intervention).

The tool was been run to assess the following scenarios:

- 1a. Existing workplace programme under current LSTF maintained over 2016-20;
- 1b. Future workplace delivery using LSTF Focus targets for 2016-20;
- 2a. Existing residential personal travel planning under current LSTF maintained over 2016-20;
- 2b. Future resident personal travel planning using LSTF Focus targets for 2016-20;
- 3a. Existing schools programme under current LSTF maintained over 2016-20; and
- 3b. Future schools programme using LSTF Focus targets for 2016-20.

The costs presented in Table 3-1 have been assigned to the programmes listed above. Costs included all staff resources, marketing costs and complementary initiatives such as Bikeability. The outputs of the cost calculator are presented in Table 3-2.

Table 3-1 Scheme costs 2016-20

Spend	Workplace	Schools	PTP
Year 1	£350,000	£200,000	£300,000
Year 2	£200,000	£100,000	£200,000
Year 3	£200,000	£100,000	£200,000
Year 4	£200,000	£100,000	£200,000
Year 5	£200,000	£100,000	£200,000

Table 3-2 DfT Cost Calculator Outputs

Scenario	BCRs		
	Workplace	PTP	Schools
Current evidence	9.87	8.19	12.37
Travelchoice Focus targets, i.e. 12 % increase in cycling, 14 % increase in walking trips	7.98	8.83	9.32

The main conclusions from this analysis are as follows:

- The schools programmes offer the best value for money, then workplaces and then residential PTP based on current evidence;
- All programmes have positive BCRs;

- Workplace and schools programmes are ahead of the curve in terms of the current programmes and are actually delivering a greater mode shift than outlined in the Travelchoice Focus bid (what Peterborough needs to do to accommodate growth). Residential PTP is slightly behind;
- Current investment is about right in terms of maintaining future mode shift needed, although could potentially be maintained at a reduced cost of around 80 percent of current LSTF funding.

3.2. HEAT Assessment

The World Health Organization (WHO) HEAT assessment tool can be used to value the reduced mortality from past and / or current levels of cycling or walking, such as to a specific workplace or organisations (such as school). This tool can therefore be used to assess the impacts of the various engagement programme in Peterborough on mortality rate. Mortality rate is defined as the number of deaths (in general, or due to a specific cause) in a particular population, scaled to the size of that population, per unit of time. The tool has been used to determine the impact of employees in the city receiving personalised travel plans (myPTP), the school travel planning programme and the Residential Travel Planning programme led by Sustrans. For each programme the number of individuals changing their normal mode of travel by cycling only has been assessed.

The results of this analysis are shown in Table 3-3. The results show how the recorded levels of cycling reduce the mortality risk of individuals compared to those who would not regularly cycle.

Table 3-3 HEAT Assessment Results

Programme	Reduced Risk of Mortality through Cycling (%)
Workplace myPTP	2
School Travel Planning	8
Residential Travel Planning	10

Follow up survey data collected following personalised travel plans (myPTPs) being issued to employees have been used to assess the health impact of the workplace travel planning programme only. This represents the impact that myPTPs had on 659 local employees. If all employees had been included as part of the monitored HEAT impacts, the results would have been more comparable with the school and residential travel planning programmes.

All three programmes have increased the number of recorded walking trips in the city, however the recorded data does not generate enough information for the HEAT Assessment tool to calculate the reduced mortality risk of participants. However the tool does state that individuals who work on a daily basis have a reduced mortality risk of 11 percent compared to individuals who do not walk daily.

3.3. TRACC Modelling

In order to determine the accessibility of Peterborough, TRACC modelling of the city centre has been undertaken. TRACC is the DfT approved accessibility analysis modelling tool and has been used to determine the travel times of residents of the city by foot, bicycle or public transport to the city centre. The Cathedral Square was used as the centre point of the city.

The TRACC modelling results can be summarised as follows:

- Approximately 50 percent of those residents who live within a reasonable public transport commute of the city centre, can complete their inbound and outbound journeys in 30 minutes or less. As there are limited local rail services in Peterborough it can be assumed that the most journeys would be made by bus;
- 35,000 residents live within a 30 minute walk time of the city centre; and,
- 167,000 residents live within a 30 minute cycle time of the city centre.

These results show the potential number of people that could be undertaking active travel in Peterborough. The mapping outputs of the TRACC modelling exercise are presented in Appendix B of this report.

3.4. Barriers to Travel

There are a number of barriers to travel in Peterborough that prevent individuals from travelling sustainably. This section of the report focuses on the barriers which need to be overcome in order to promote sustainable travel. Walk and Cyclefriendly mapping outputs were analysed to assess the quality of on-road cycling and walking routes in Peterborough, as shown in Appendix C. The Walk and Cyclefriendly projects were carried out to consider specifically the level of service quality along key commuting corridors into and out of the city. The studies evaluated particular physical barriers to walking and cycling modes and developed practical action plans to prioritise future capital spending on infrastructure.

In summary the outputs showed that:

- Approximately one third of all walking routes assessed are deemed to be poor. The three with the poorest score are Fengate, A15 between Thorpe Road and Bishop's Road and St John's Street;
- Only one cycle route in the city is listed as excellent – London Road between Fletton Parkway and Cook Avenue; and
- Several are listed as poor – Thorpe Road, Fengate and Lincoln Road.

The areas with the most barriers from this analysis broadly correlate with PCC's proposed areas for investment for future Travelchoice programmes. These include Fengate and Lynchwood.

Barriers to travel that could be alleviated in the future were also included in PCC's Draft Local Plan 4. There are barriers impacting all modes of travel walking, cycling, public transport and cars. The key barriers in Peterborough are;

- Barriers to Walking – physical features restricting the permeability of the walking routes in Peterborough, individuals face health related problems due to inactivity restricting their mobility;
- Barriers to Cycling – cycling network disjointed and focused on radial routes, individuals face health related problems due to inactivity restricting their mobility;
- Barriers to Public Transport – limited public transport information, poor interchanges and integration between different modes of public transport, poor bus punctuality and frequency, congestion impacting on bus reliability; and,
- Barriers to Car Use – congestion impacting on journey times and reliability, air pollution and noise issues, safety concerns, parkway reaching capacity, growth agenda will further accelerate traffic growth into the city.

To further understand the barriers to travel for Peterborough, analysis of the National Highways and Transport (NHT) survey carried out in Peterborough in 2015 was undertaken. There are many questions in the survey with a broad number of areas covered. Outputs are shown in levels of satisfaction / dissatisfaction and results are also compared to the national averages. The results of questions relating to walking and cycling are shown in Figures 3-1 and 3-2.

The data shows the overall level of satisfaction relating to transport is above national average for cycling, however for the question associated with walking all results are below national average. Despite the cycling level of satisfaction showing above national average results, the average level of satisfaction for both walking and cycling was 57 percent, showing that more needs to be done in Peterborough to improve public satisfaction and then in turn potentially increase active travel.

The UKRC Centre for Diet and Activity Research (CEDAR) and the Behaviour and Health Research Unit (BHRU), Institute of Public Health and the University of Cambridge submitted a summary of evidence around travel-mode choice interventions to the Science and Technology Select Committee in 2011 and the key outcome was that it was most likely that multifaceted approaches involving changes to the cycling and walking environment coupled with individual advice and support may be the most effective in more people partaking in active travel. PCC have in some ways used this approach in terms of individual advice and support through the PTP projects complemented by the Walk and Cyclefriendly work. However, further changes to the cycling and walking environment will increase the level of active travel undertaken even further.

Figure 3-1 NHT Public Satisfaction Results (Cycling)

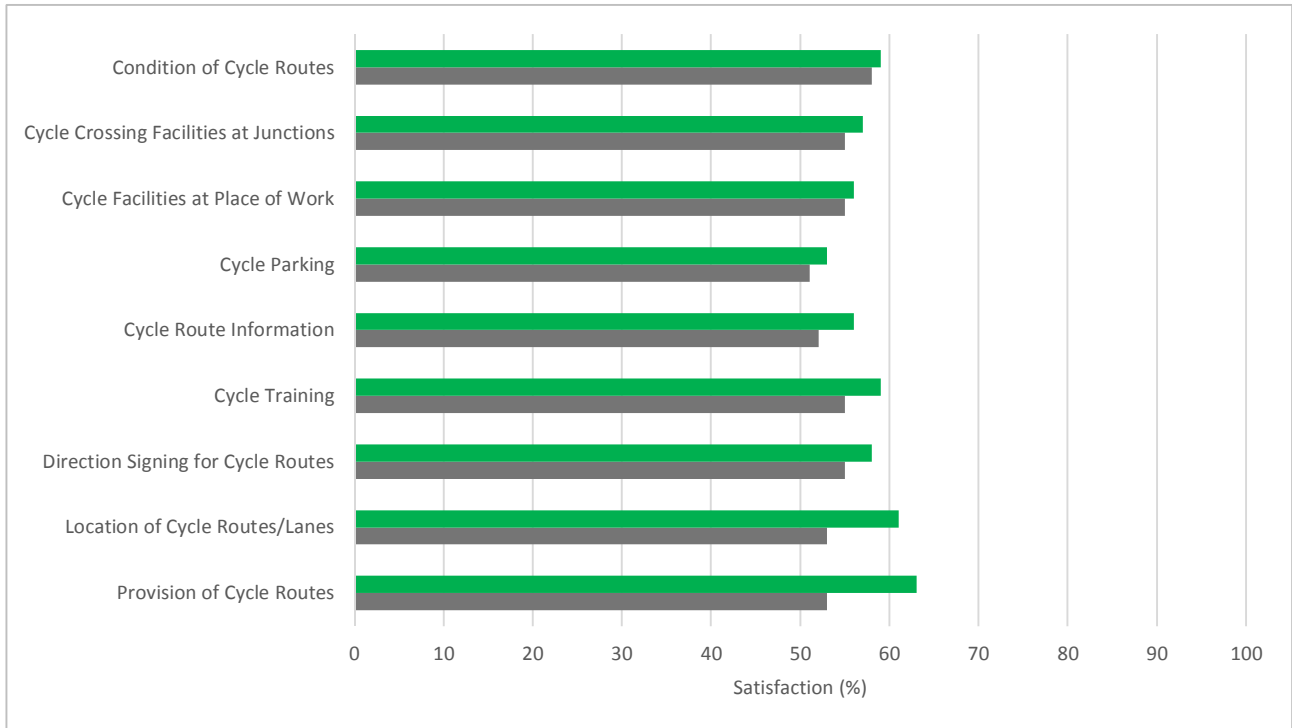
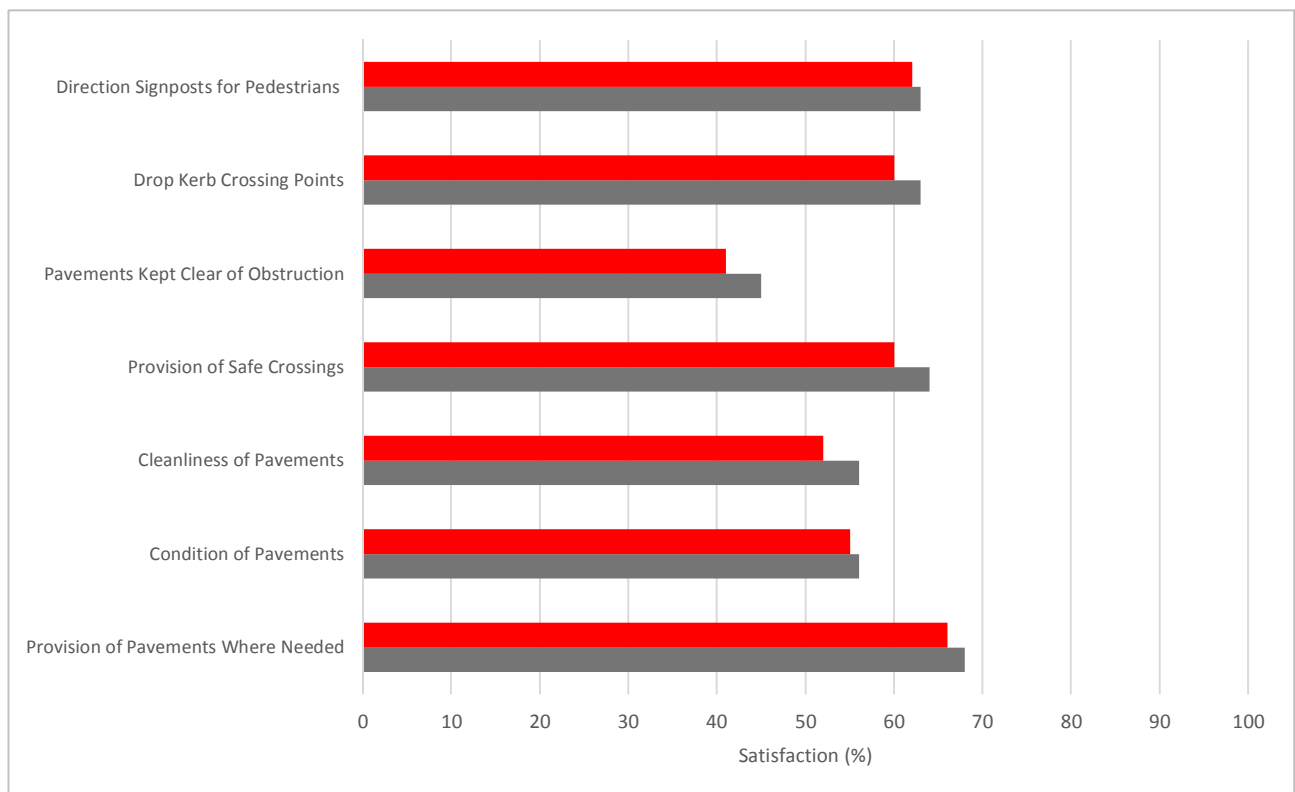


Figure 3-2 NHT Public Satisfaction Results (Walking)



Key : + Below National Average Green + Above National Average + National Average

4. Summary

This report has combined a range of transport, environment and public health data sources to review the current performance of smarter choices in Peterborough and identify where future funding investment should be targeted. Furthermore, the data has been gathered in collaboration with relevant officers at Peterborough City Council and the local Clinical Commissioning Group.

The most significant background factors which strengthen the case for smarter choices delivery 2016-20 include:

- Above average obesity particularly amongst young children and adults in Peterborough. This should mean more priority schemes and joint projects between Public Health and local stakeholders to promote and incentivise the uptake of active modes; and
- Population growth rates for Peterborough are above the UK average; with over a 20 percent population increase over the next 20 years, additional capacity on the local road network will be needed and should be offset by increases in walking, cycling, public transport, car sharing and the promotion of video / tele conferencing.

There is also clear national evidence that a local programme that targets increases in walking and cycling would help to reduce coronary heart disease and type 2 diabetes as well as reduce mortality rates.

In terms of current LSTF programmes (2012-16), where specific workplace interventions have been deployed (for example myPTP), employees have reduced their overall SOV car mode share by nearly 6 percent. This has also potentially helped to reduce the overall mortality rate by 2 percent attributed to increased cycling.

The residential personalised travel planning and schools projects have also had a positive impact on mode share.

The schools project has seen an increase in cycling mode share across all schools surveyed (2012-16) by 7.5 percent while walking based modes (including scooters and park and stride) have increased by 2.3 percent.

For the residential PTP programme there was a 6.5 percent increase in walking and a 0.5 percent increase in cycling mode share.

Existing LSTF programmes that have been the best value for money are workplaces and schools, although the residential PTP programme also had a positive BCR.

In order for Peterborough to meet the targets outlined in the Travelchoice Focus bid for 2016-20 (12 percent increase in cycling trips, 14 percent increase in walking), there needs to be at least 80 percent of a similar financial commitment to current LSTF spend. This will predominantly need to be revenue funding although supporting capital will also help to support upgrades to key walking and cycling corridors.

If Travelchoice is not continued and current traffic levels grow unchecked there would need to be an additional £200 million investment in Peterborough's road infrastructure over the next 10 years. If the 9% reduction in car trips was not achieved, it can be assumed that for every 1% in car trips that are not transferred to other modes, an extra £20-25 million would have to be spent on highway infrastructure costs. This includes capital and revenue costs, based on the Travelchoice Focus bid, which had costs of £2.2 million for the first year and then £1.8 million for subsequent years.

The savings on highway infrastructure costs outlined are similar to the DfT cost calculator BCR scores, particularly for the workplace and schools programmes, although the BCRs would increase slightly if the additional benefits of car sharing and public transport mode shift were considered, alongside the shift in walking and cycling.

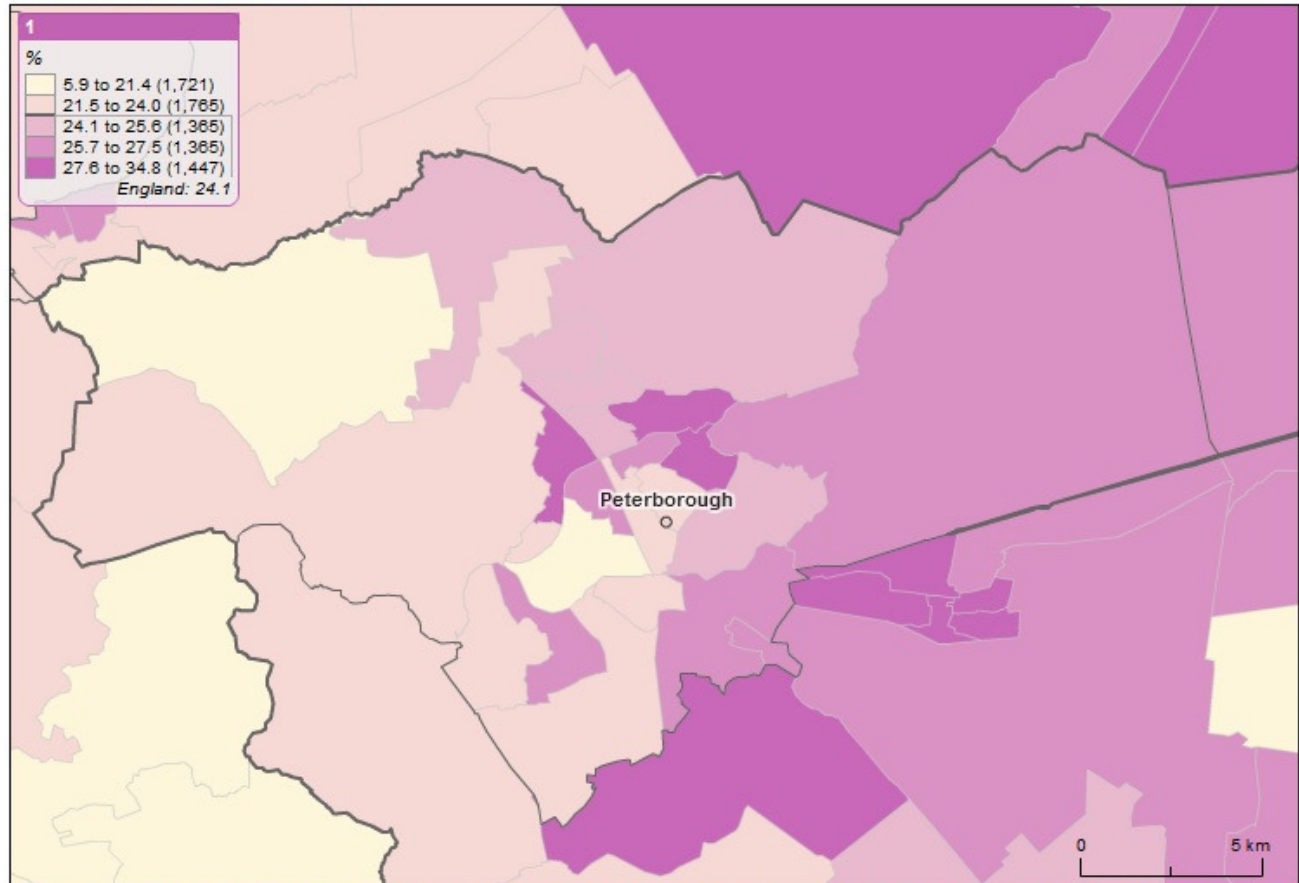
Appendices



Appendix A. Local Health Outputs

Figure A-1 Percentage of Obese Adults

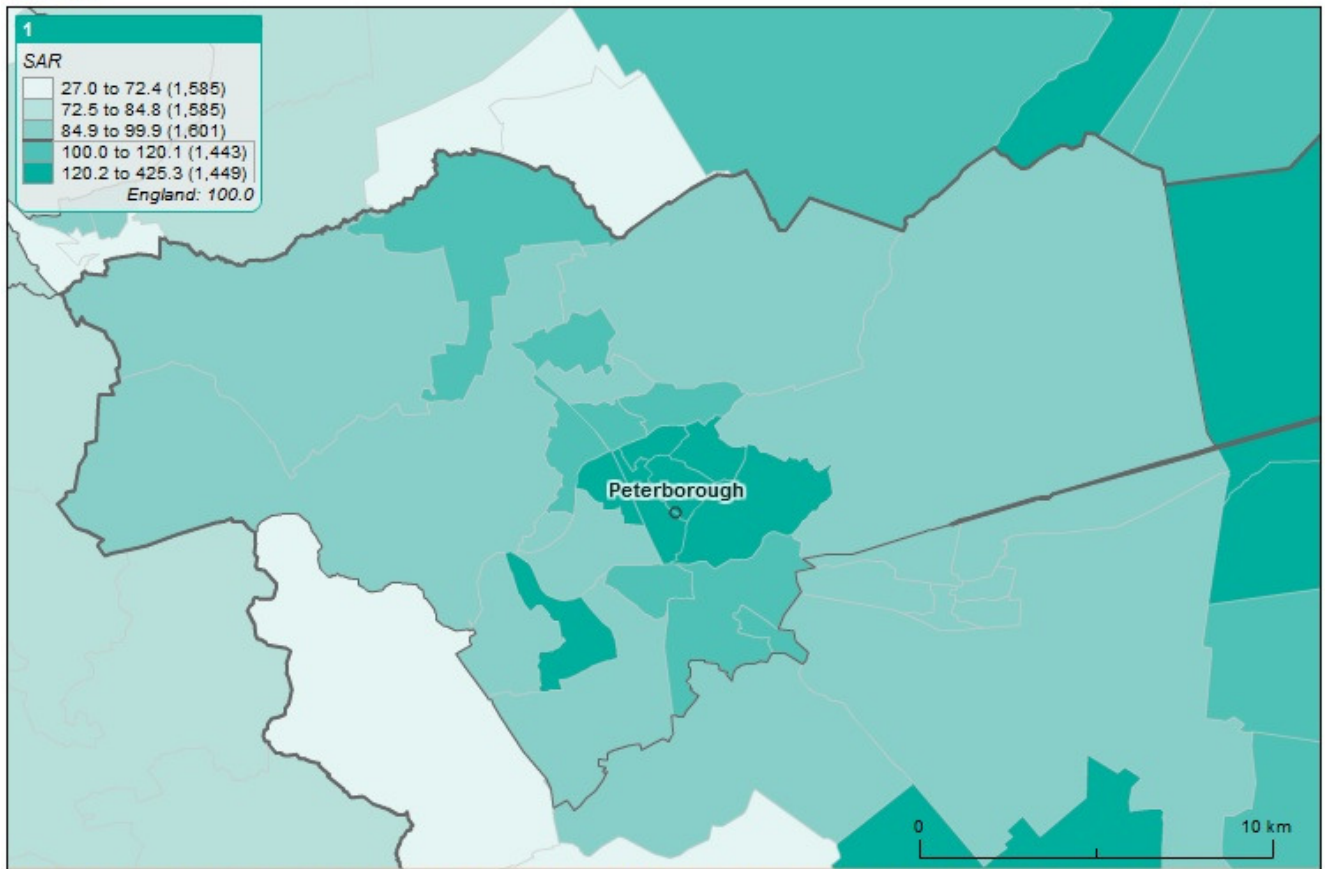
Percentage of the population aged 16+ with a BMI of 30+, modelled estimate, 2006-2008 - source: Public Health England, NHS IC © Copyright 2010



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Figure A-2 Emergency Hospital Admissions for Coronary Heart Disease

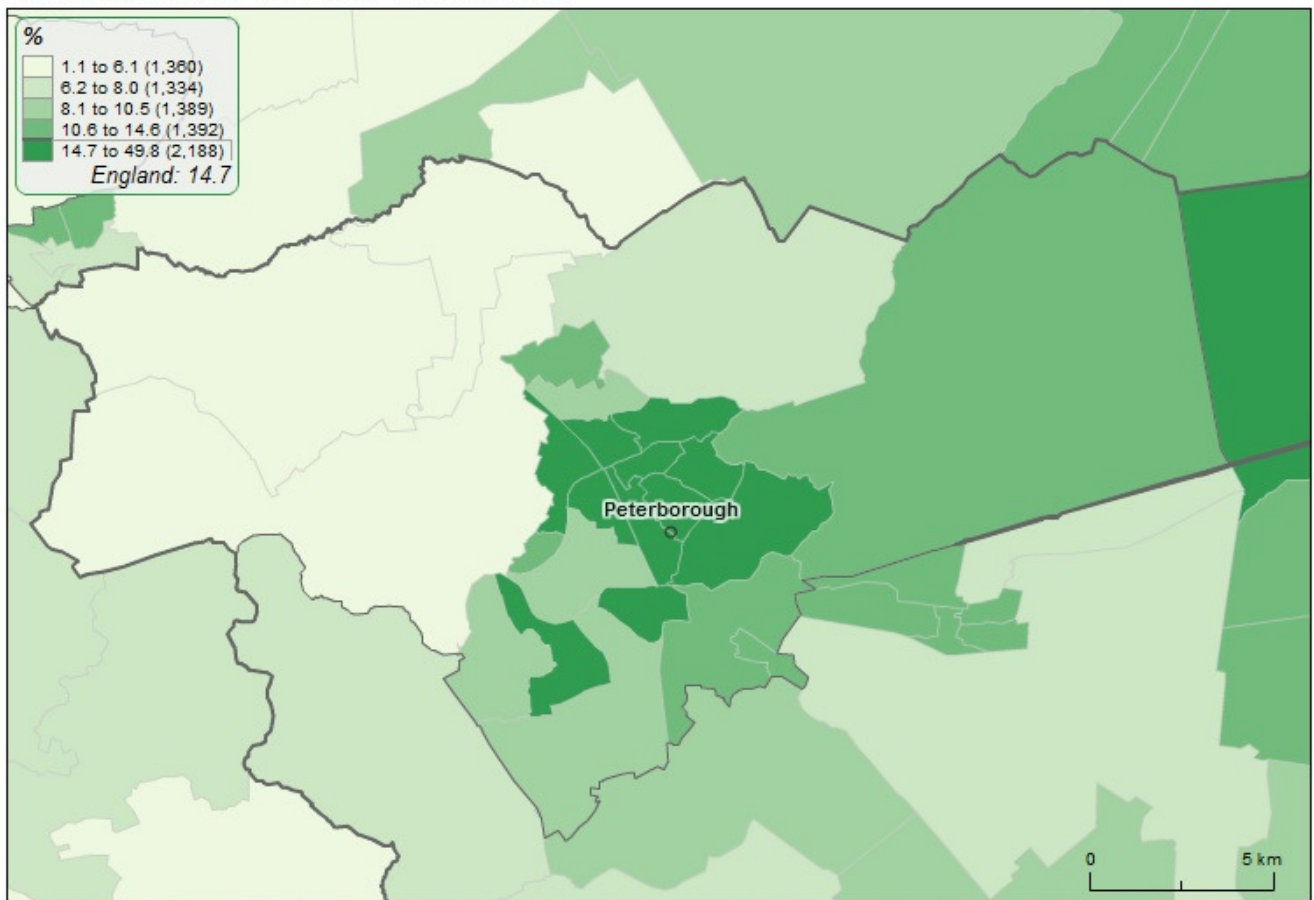
Emergency hospital admissions for coronary heart disease, standardised admission ratio, 2008/9 - 2012/13 -
source: Hospital Episodes Statistics (HES). Copyright © 2014. The Health and Social Care Information Centre. All rights reserved.



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Figure A-3 Income Deprivation

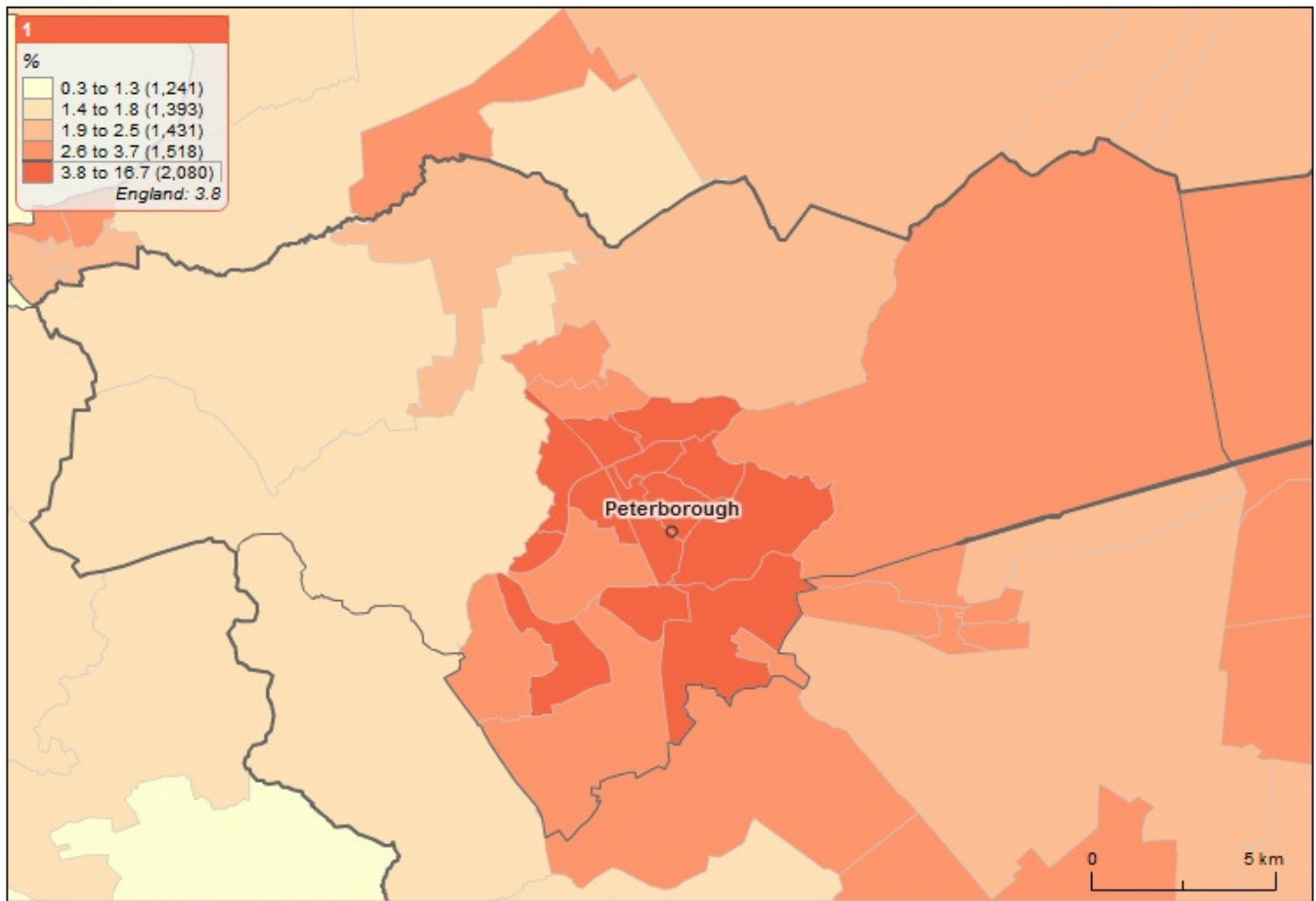
% living in income deprived households reliant on means tested benefit, Income domain score from the Indices of Deprivation, 2010 - source: CLG © Copyright 2010



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Figure A-4 Unemployment Percentage

% of the working age population who are claiming out of work benefit, 2012/13 - source: NOMIS Labour Market Statistics



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Appendix B. TRACC Modelling Outputs

Figure B1 Walking Journey Times

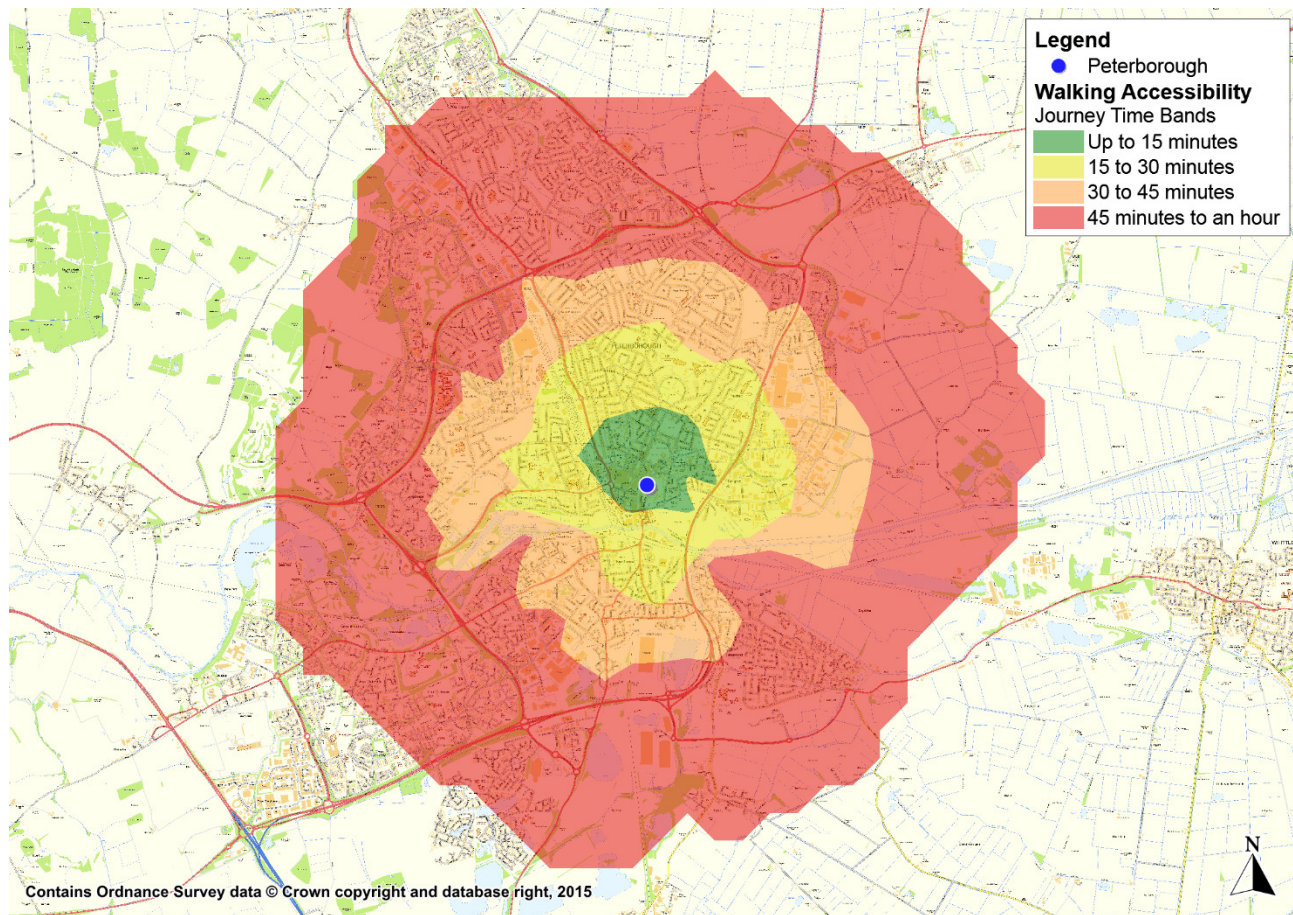


Figure B-2 Cycling Journey Times

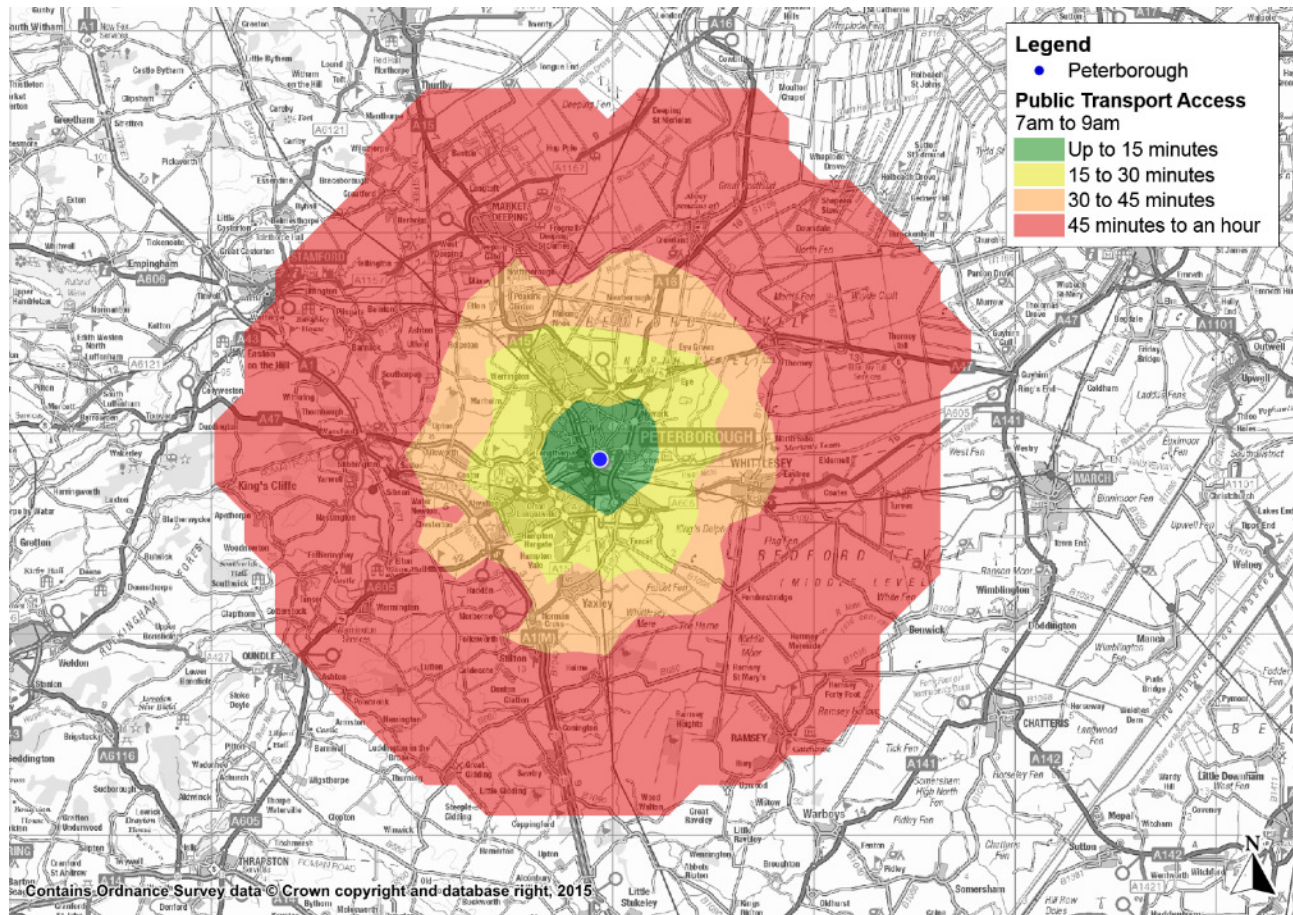


Figure B-3 Public Transport Journey Times (0600 to 0800 hours)

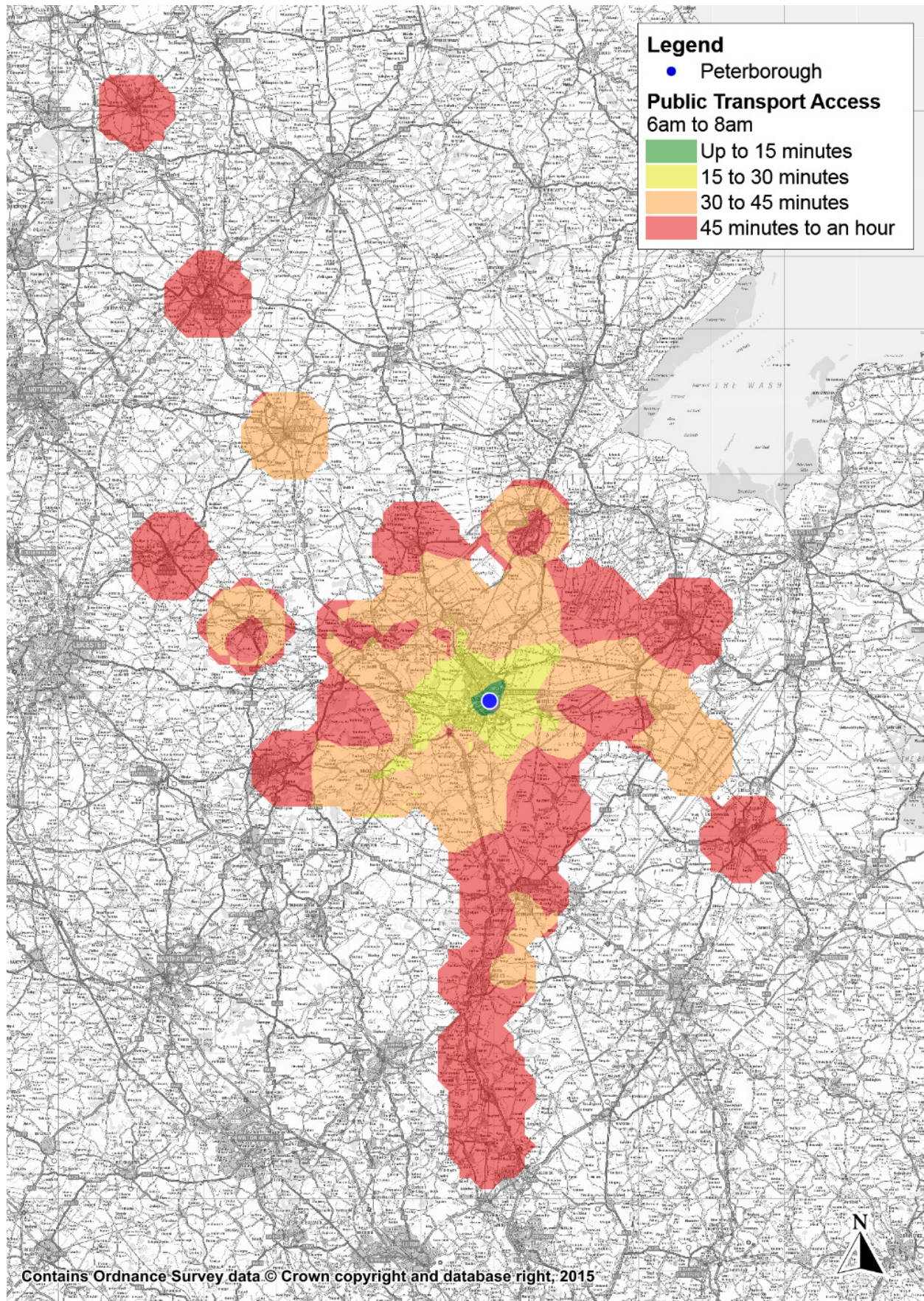


Figure B-4 Public Transport Journey Times (0700 to 0900 hours)

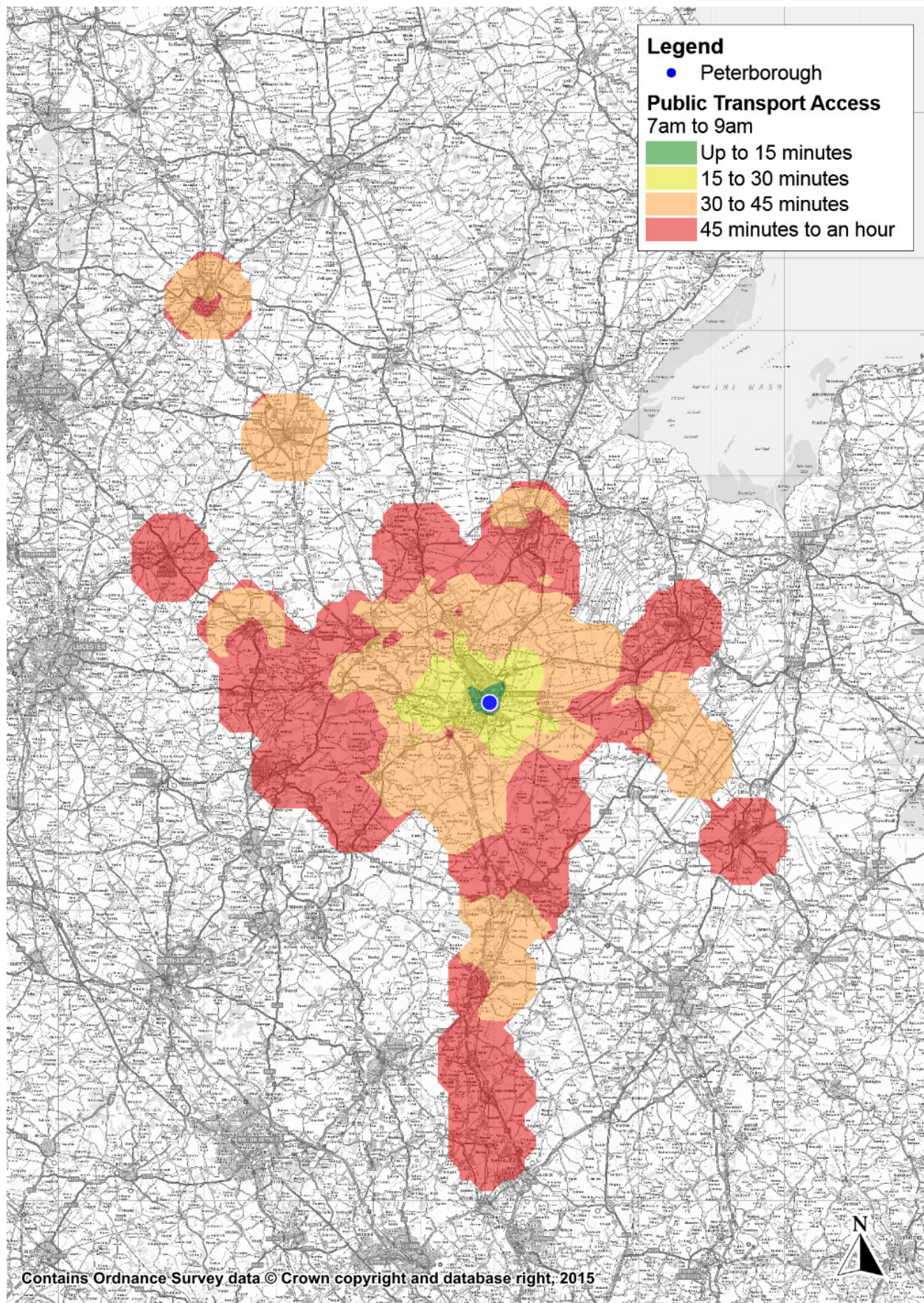


Figure B-5 Public Transport Journey Times (1600 to 1800 hours)

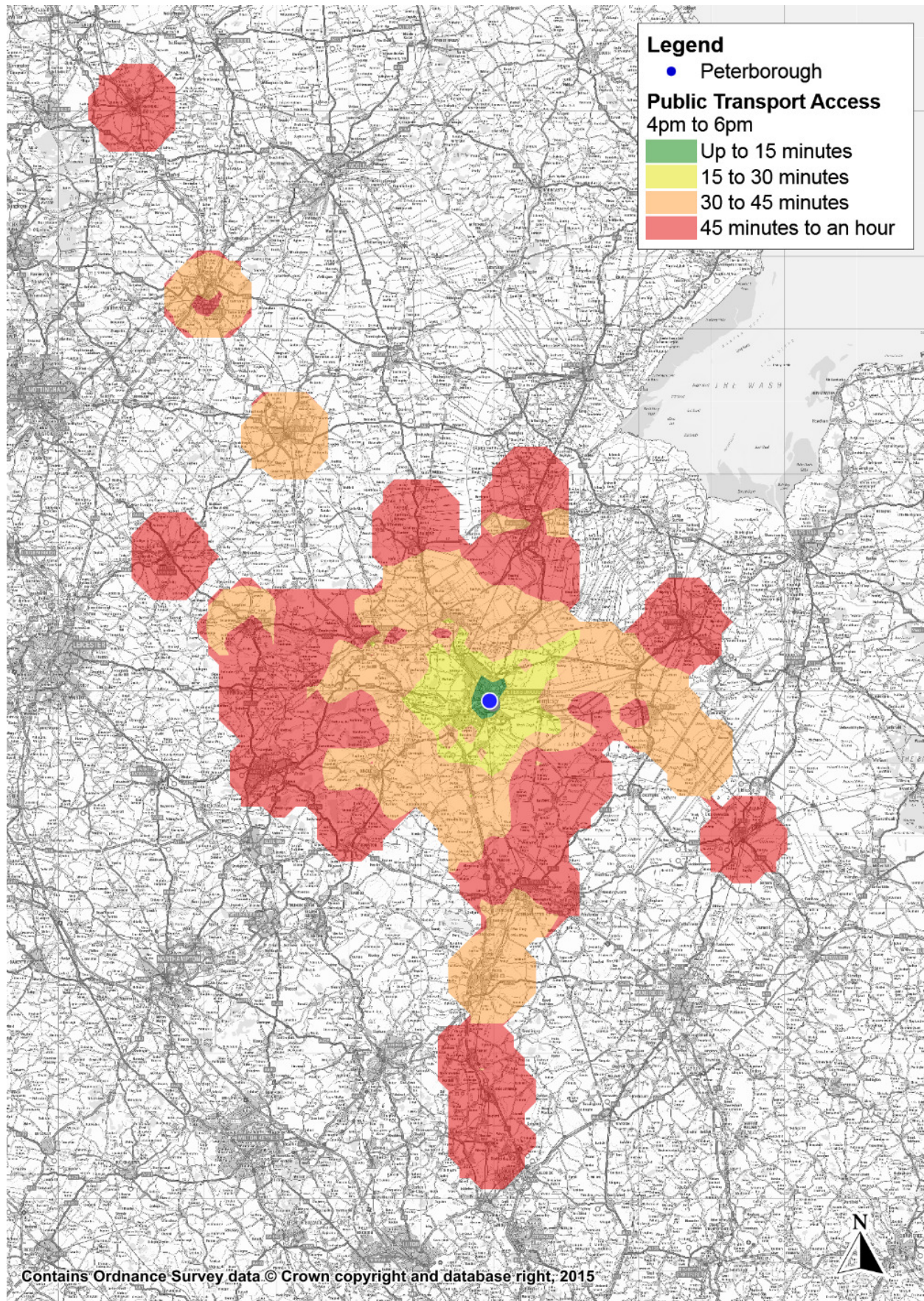
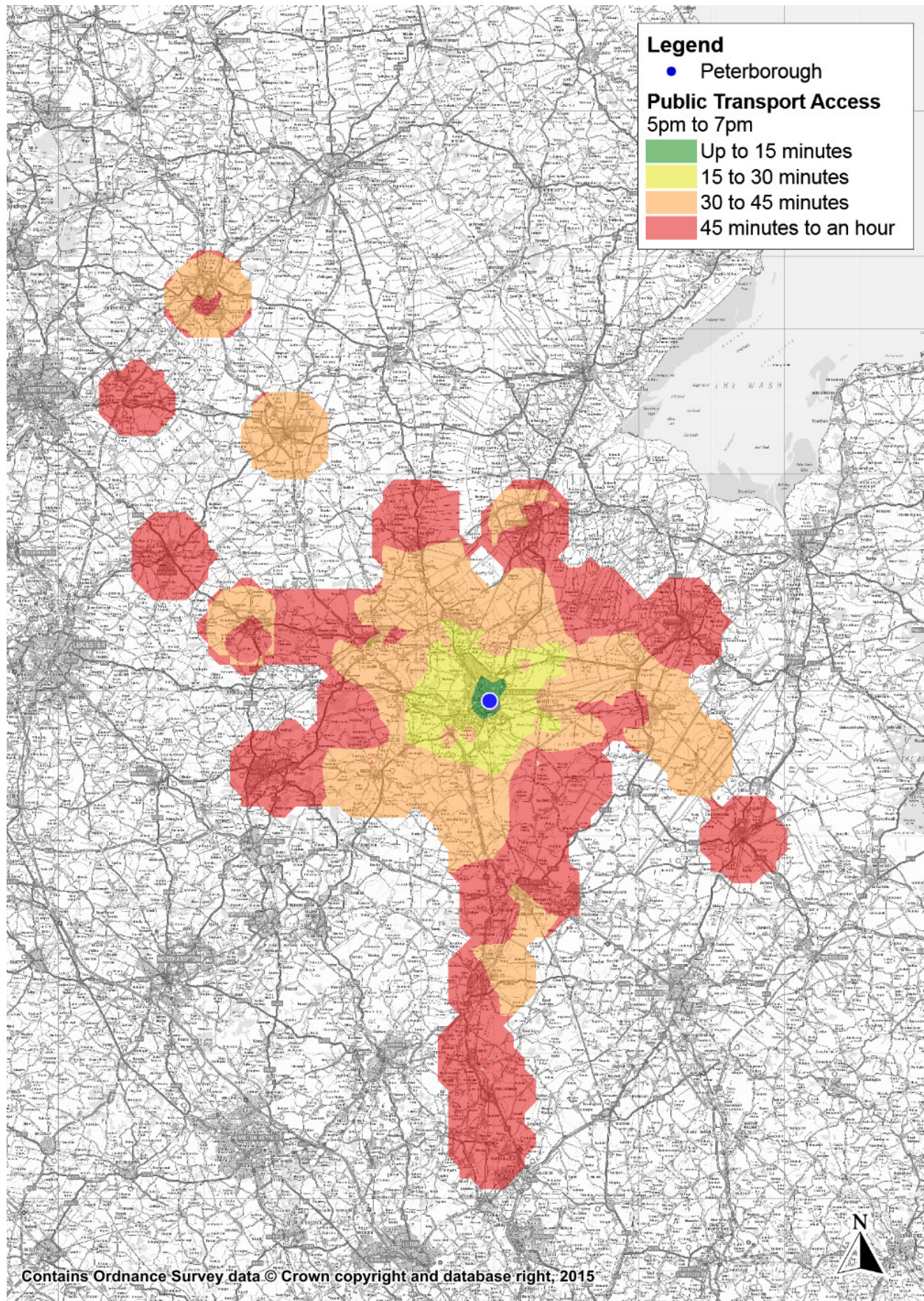


Figure B-6 Public Transport Journey Times (1700 to 1900 hours)



Appendix C. Walk and Cyclefriendly Outputs

Figure C-1 Walkfriendly Mapping Output

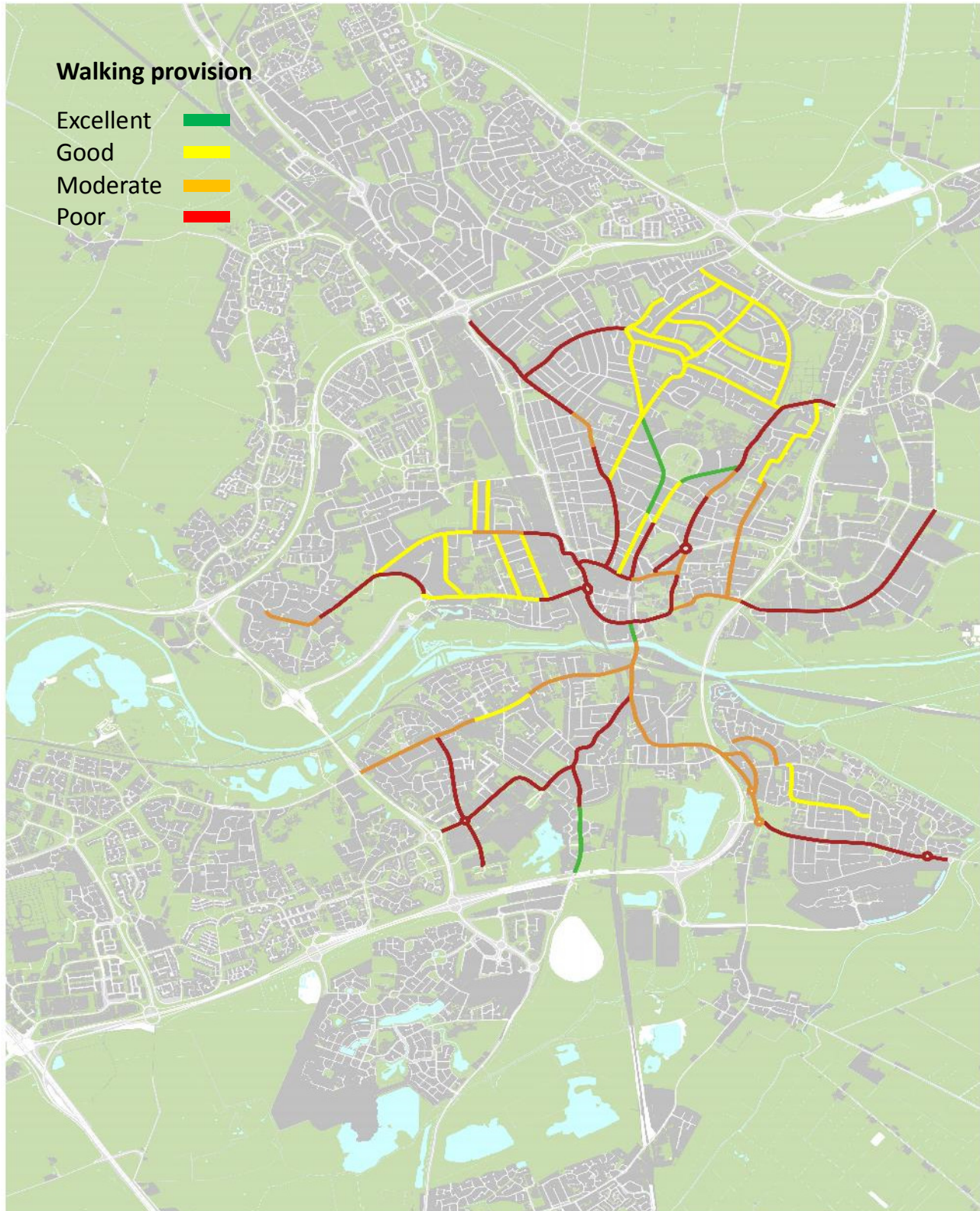
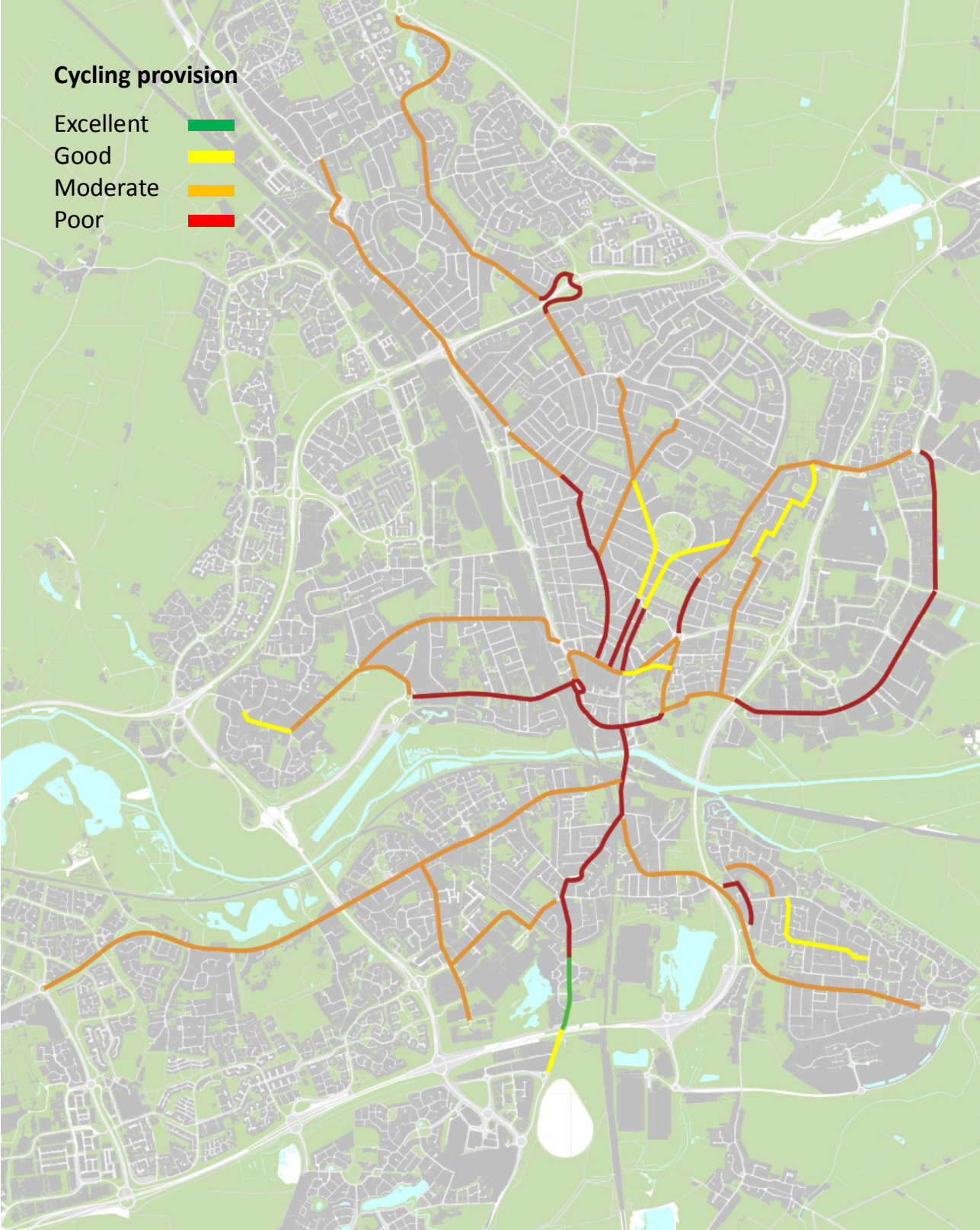


Figure C-2 Cyclefriendly Mapping Output



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