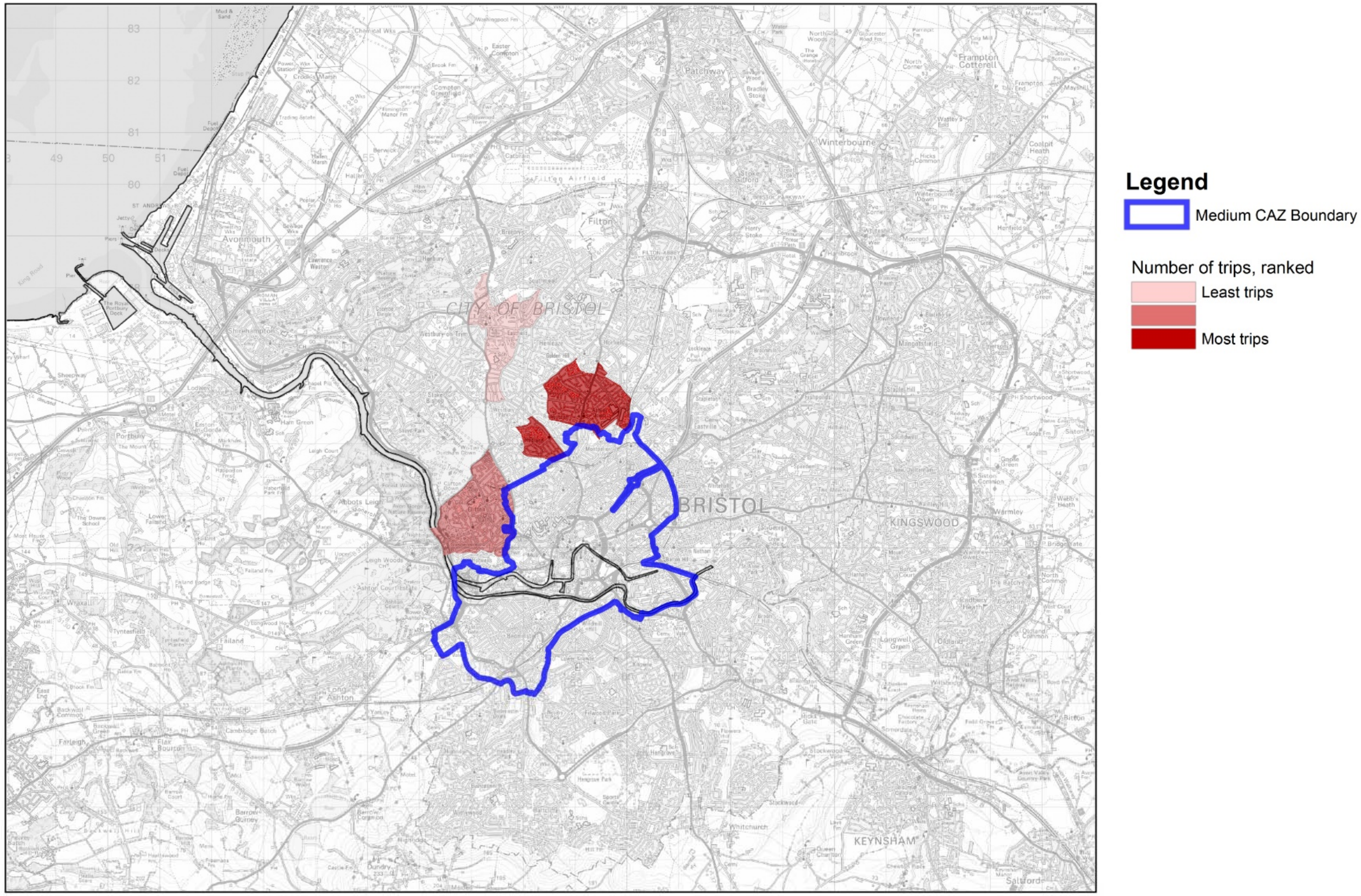
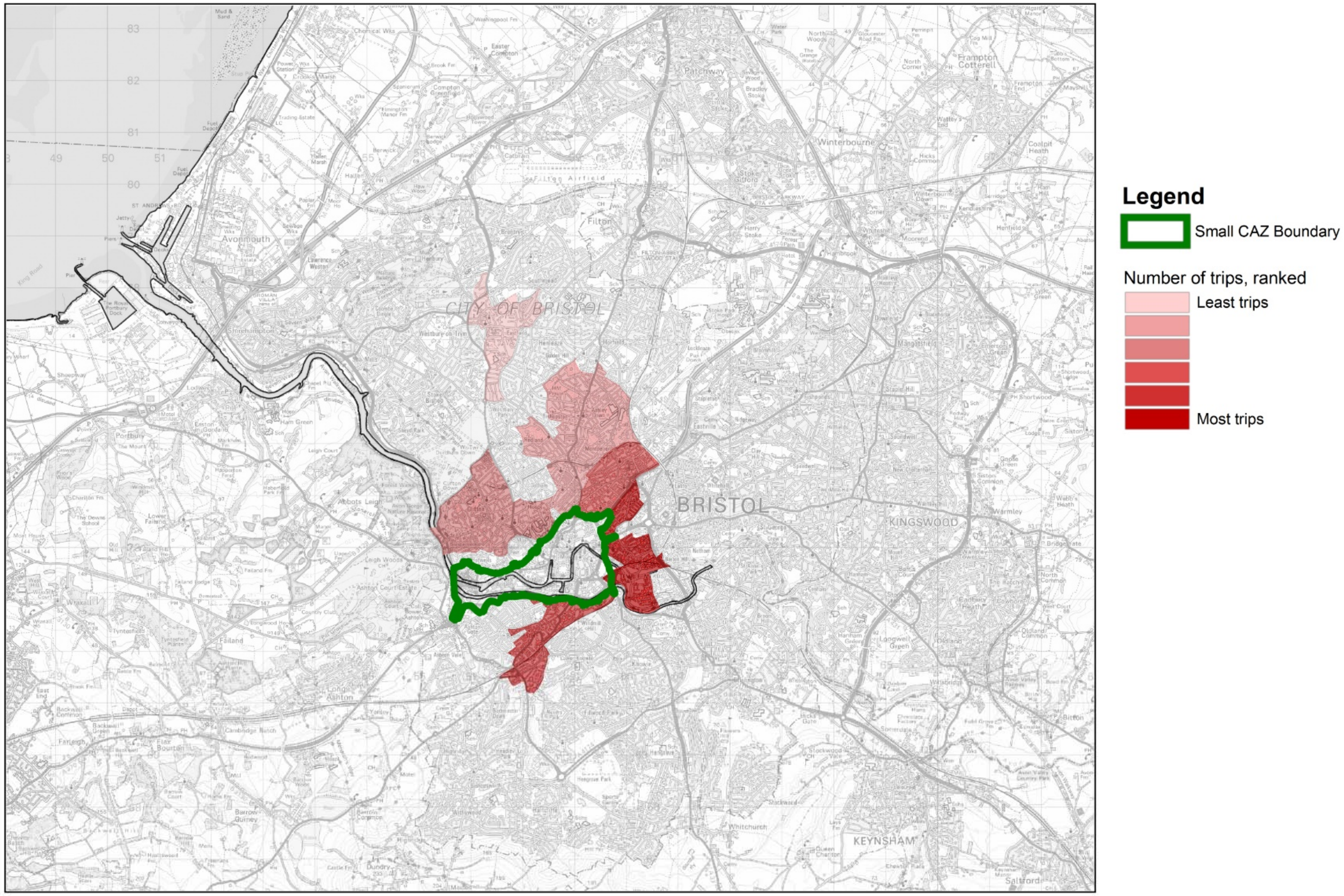


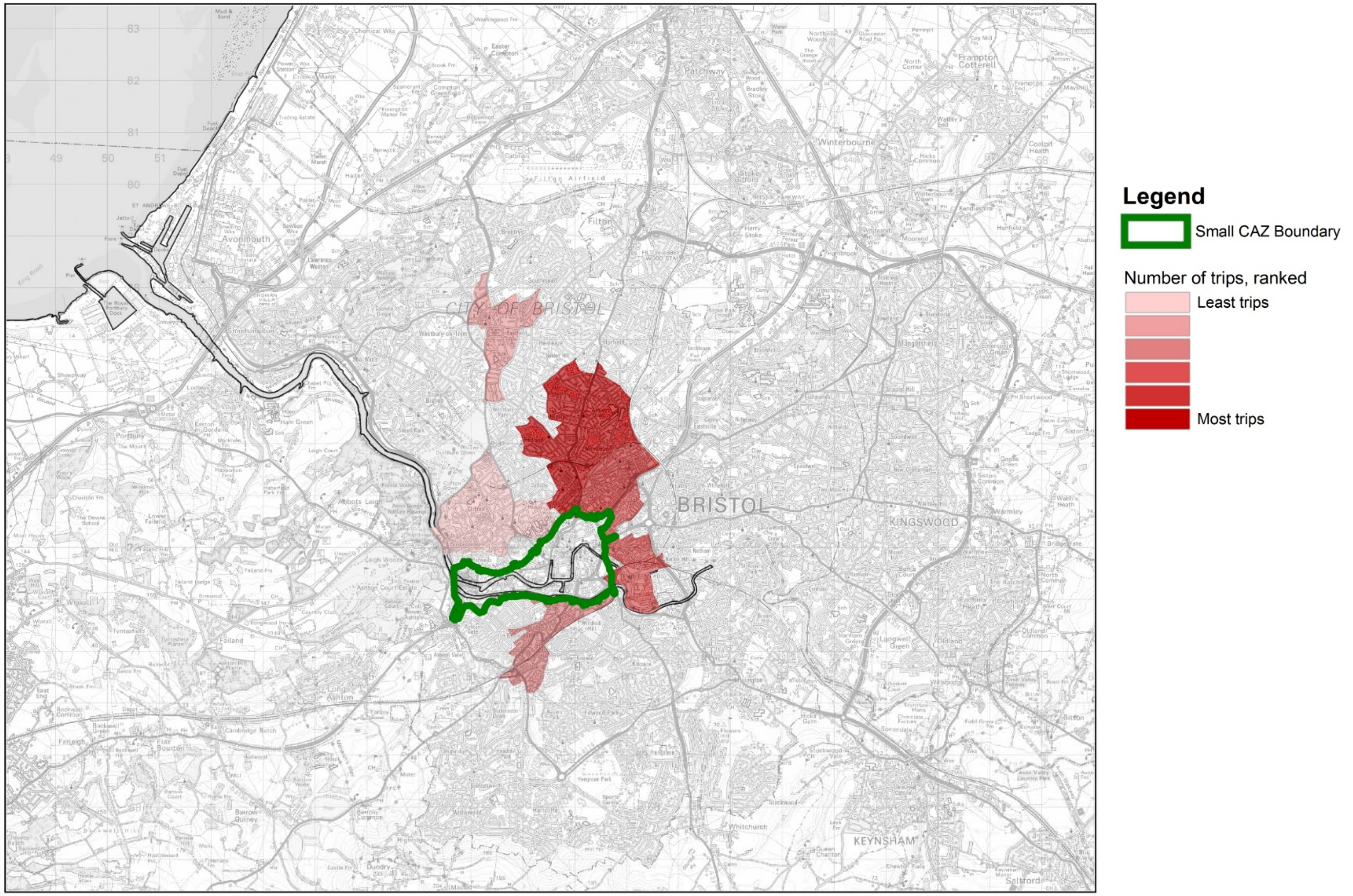
Retail areas: number of trips (ranked) made by non-compliant HGV's from Medium CAZ in the PM Peak

Figure 5.10: Retail areas – number of trips (ranked) made by non-complaint HGVs to Medium CAZ in PM peak



Retail areas: number of trips (ranked) made by non-compliant HGV's to Small CAZ in the AM Peak

Figure 5.11: Retail areas – number of trips (ranked) made by non-complaint HGVs to Small CAZ in AM peak



Retail areas: number of trips (ranked) made by non-compliant HGV's from Small CAZ in the PM Peak

Figure 5.12: Retail areas – number of trips (ranked) made by non-complaint HGVs to Small CAZ in PM peak

5.4 Other Impacts on Businesses

As well as the affordability impacts outlined above, businesses are affected in a number of other ways. Firstly, either CAZ could deter footfall in central Bristol as consumers and tourists opt to visit alternative locations. This is a particular concern given that 50% of all retail employment is located within the medium CAZ area (a quarter of which is within the small CAZ area). Further, more than 40% of all employment in tourism-led sectors such as ‘accommodation and food services’ and ‘arts, entertainment and recreation’ are located within the medium CAZ boundary (albeit less than half of this is within the small CAZ boundary). These sectors could be particularly vulnerable to the potential negative effects of a CAZ, such as decreased footfall. Overall though, this is not atypical, as some 56% of all jobs in Bristol are located within the medium CAZ boundary, and 37% within the small CAZ area,

Secondly, either CAZ could result in increased charges for deliveries to/from businesses located in the central area, providing additional costs that would either need to be absorbed by the business (affecting profitability) or passed on to consumers (increasing prices and potentially deterring custom). Most businesses located within the CAZ are likely to be reliant on LGVs and HGVs to supply/undertake deliveries.

In total, there are more than 7,300 business located within the medium CAZ area and over 3,000 in the small CAZ area, the majority of which are micro business (6,000 and 2,200 respectively) or SMEs (1,300 and 800 respectively). This relates to 33% of all businesses in Bristol that will be directly affected by the medium CAZ based on their geographic location, though this is 14% by the small CAZ.

In addition, there are a range of businesses located outside the CAZ areas that require routeing of LGVs/HGVs through the CAZ areas as part of their day-to-day activities (e.g. for trades people or for suppliers/deliveries). Although these businesses are not directly affected by either CAZ based on their geographical location, their business practices may mean regular entry to either CAZ, potentially resulting in charges being imposed.

Thirdly, many businesses rely on employment sourced from a wide geographic labour market; imposing a charge on non-compliant vehicles could cause a contraction of this market as labour located in the wider geographic area choose to work in other locations that are unaffected by a CAZ. Employees using non-compliant LGVs throughout the region could be deterred from undertaking work requiring entry to the CAZ boundary. This is reflected in Figures 4.8 and 4.9 showing LGV reliant businesses and retail businesses respectively.

Further, around 40% of labour demand in the both CAZ areas is supplied from outside the Bristol City Council area. Significant labour supply is sourced from the other authorities in the West of England. Over 60% of all labour sourced from outside of Bristol travels into central Bristol via private car, so a significant proportion of the labour supply to central Bristol could be directly affected by either CAZ intervention. This could make central Bristol a less attractive place to work (and consequently to set up business). Employees with non-compliant vehicles that currently drive into central Bristol could be incentivised to look elsewhere for employment opportunities, contributing to a labour supply deficit in the short term.

6. Key Findings

Tables 6.1 to 6.3 present a summary of the key findings of the distributional and equalities analysis. The analysis conducted relates to the locations where the benefits/disbenefits accrue and it has been mapped to the individuals that live in those areas. The analysis represents the relative distribution of impacts on socio-economic quintiles compared to the quintiles' population share across the Bristol City Council area. The key conclusions are:

- Air quality benefits are felt by all neighbourhoods. The positive impacts of improved air quality disproportionately fall on the least income deprived communities alongside those communities with the most children and elderly residents. These impacts are summarised in Table 6.1.

Table 6.1: Air Quality Impacts on Relevant Socio-Economic/Business Groups

Socio-Economic/Business Group	Quintiles					Are the Impacts Distributed Evenly?
	0-20% (most deprived)	20-40%	40-60%	60-80%	80-100% (least deprived)	
Medium CAZ Low-Income Households (Income Deprivation)	✓	✓✓✓	✓✓	✓✓	✓✓	Yes
Small CAZ Low-Income Households (Income Deprivation)	✓	✓✓	✓	✓✓	✓✓	Yes
Socio-Economic/Business Group	**Quintiles**					**Are the Impacts Distributed Evenly?**
	0-20% (fewest grouping population)	**20-40%**	**40-60%**	**60-80%**	**80-100% (most grouping population)**	
Medium CAZ Children	✓	✓	✓✓✓	✓✓	✓✓✓	No
Small CAZ Children	✓	✓	✓✓✓	✓✓✓	✓✓✓	No
Medium CAZ Elderly people	✓✓	✓	✓✓✓	✓✓	✓	No
Small CAZ Elderly people	✓	✓	✓✓✓	✓	✓✓	No

- Accessibility impacts are adverse across the full range of relevant socio-economic groups. Accessibility impacts fall most heavily on the middle quintiles of income deprived communities, those communities with the most children and those communities that have the lowest proportions of females. Further, impacts are disproportionately felt by those communities towards the higher quintiles in terms of concentration of ethnic minorities, middle quintiles for disabled residents and more evenly for elderly residents. It should be noted that this assessment considers a relative comparison between the quintiles of the various communities identified, and does not consider the quantum of impacts themselves. These impacts are summarised in Table 6.2; note that in this table (and Table 6.3):

  ✓ = proportion of affected group less than proportion in population overall

  - = proportion of affected group similar proportion to population overall

  X = proportion of affected group greater than proportion in population overall

Table 6.2: Accessibility Impacts on Relevant Socio-Economic/Business Groups

Socio-Economic/ Business Group		Quintiles					Are the Impacts Distributed Evenly?
		0-20% (most deprived)	20-40%	40-60%	60-80%	80-100% (least deprived)	
Medium CAZ Low-Income Households (Income Deprivation)	AM	-	✓	x	✓	x	No
	PM	✓	xx	xx	✓✓	✓	No
Small CAZ Low-Income Households (Income Deprivation)	AM	✓✓✓	xxx	x	✓	✓	No
	PM	✓✓	x	x	xx	✓	No

Socio-Economic/ Business Group		Quintiles					Are the Impacts Distributed Evenly?
		0-20% (smallest grouping population)	20-40%	40-60%	60-80%	80-100% (largest grouping population)	
Medium CAZ Children	AM	x	-	x	✓✓	x	No
	PM	x	-	x	-	✓	Yes
Small CAZ Children	AM	x	✓	xx	xx	✓✓✓	No
	PM	x	x	xx	✓✓	-	No
Medium CAZ Elderly residents	AM	xx	✓✓	x	x	✓✓	No
	PM	✓	xx	-	✓	x	No
Small CAZ Elderly residents	AM	✓	✓	xx	x	✓	No
	PM	x	✓	-	xx	✓✓	No
Medium CAZ Disabled residents	AM	xx	✓✓	✓	x	✓	No
	PM	-	✓	✓	✓	xx	No
Small CAZ Disabled residents	AM	✓	x	✓✓	✓	xx	No
	PM	✓	x	✓	✓	x	Yes
Medium CAZ Women	AM	✓✓✓	-	✓	xx	x	No
	PM	-	-	✓	x	✓	Yes
Small CAZ Women	AM	✓✓✓	xxx	xxx	xxx	✓✓✓	No
	PM	✓✓✓	xxx	xxx	xxx	✓✓✓	No
Medium CAZ Ethnic minorities	AM	-	-	-	-	-	Yes
	PM	-	-	x	x	✓	Yes
Small CAZ Ethnic minorities	AM	-	x	xxx	xxx	✓✓✓	No
	PM	-	-	x	-	✓	Yes

- Affordability impacts are adverse across the full range of relevant socio-economic and business groups. Impacts are disproportionately felt by the most income deprived communities. They also fall on businesses operating non-compliant LGVs and HGVs who are either based in the CAZ areas or operate within central Bristol. These impacts are summarised in Table 6.3.

Table 6.3: Affordability Impacts on Relevant Socio-Economic/Business Groups

Socio-Economic/ Business Group		Quintiles					Are the Impacts Distributed Evenly?
		0-20% (most deprived)	20-40%	40-60%	60-80%	80-100% (least deprived)	
Medium CAZ Low-Income Households (Income Deprivation)	AM	-	✓	x	✓	x	No
	PM	✓	xx	xx	✓✓	✓	No
Small CAZ Low-Income Households (Income Deprivation)	AM	✓✓✓	xxx	x	✓	✓	No
	PM	✓✓	x	x	xx	✓	No