

Scrutiny Board (Sustainable Economy And Culture)

26 January 2012

Transport Planning Inquiry – Session 1

Supplementary Information: Transport Planning And Forecasting Data

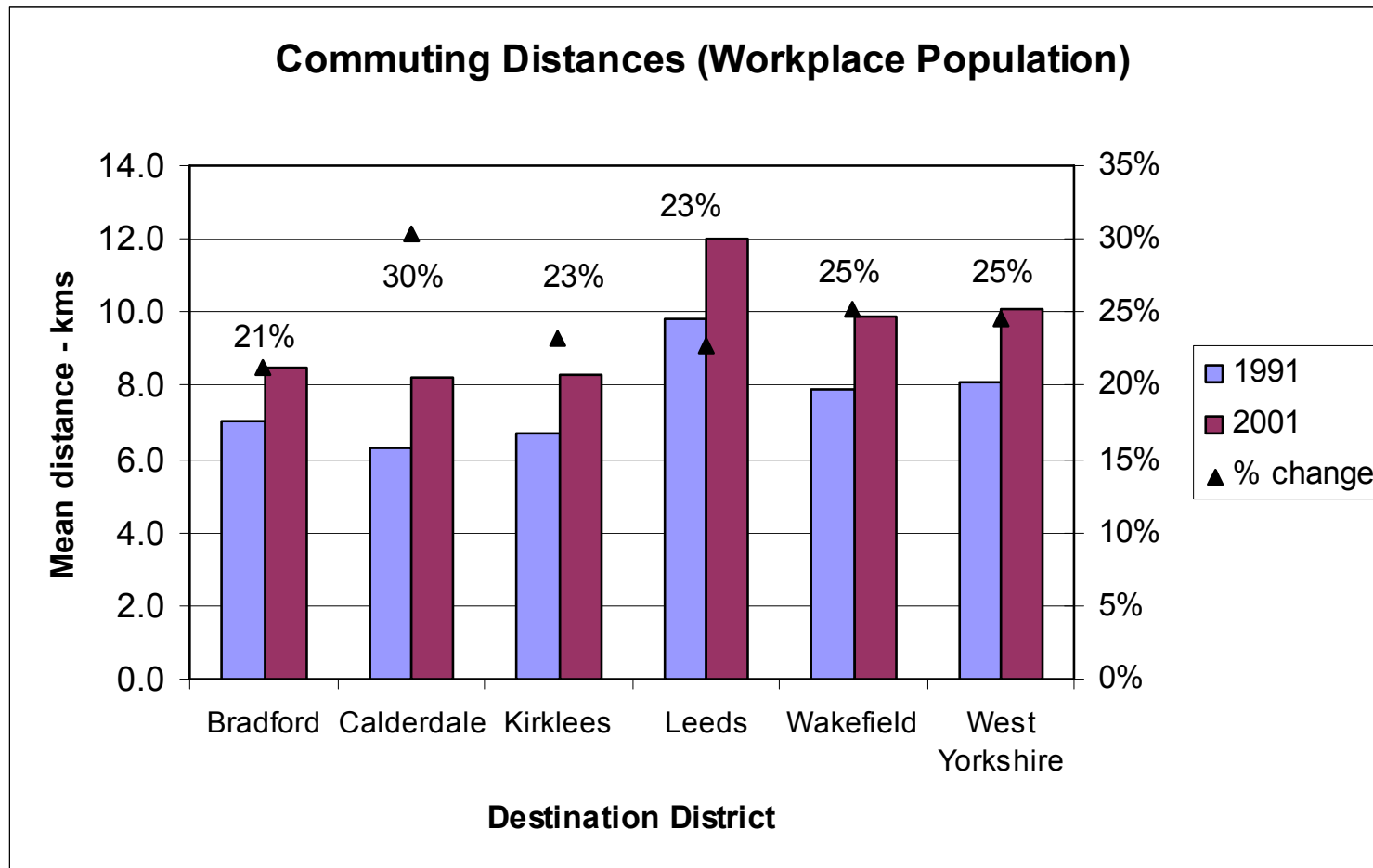
Introduction

1. A key element in forecasting is the understanding of past trends. These can provide an indication of the scale of change that might be expected over time, as well as the direction of travel of future changes.
2. Some indicators are monitored annually through surveys undertaken by Leeds City Council or its partners. Other data may only be available from national sources, the census being a prime example.

Commuting Travel Distance Trends (West Yorkshire by District)

Trends in commuting over time have been for average journey lengths to increase. Census data shows that the average distance travelled by people working in Leeds District rose 23% between 1991-2001, and that the average distance is markedly greater than for the other Districts in West Yorkshire. This reflects the wider travel to work area of Leeds. See Figure 1.

Figure 1

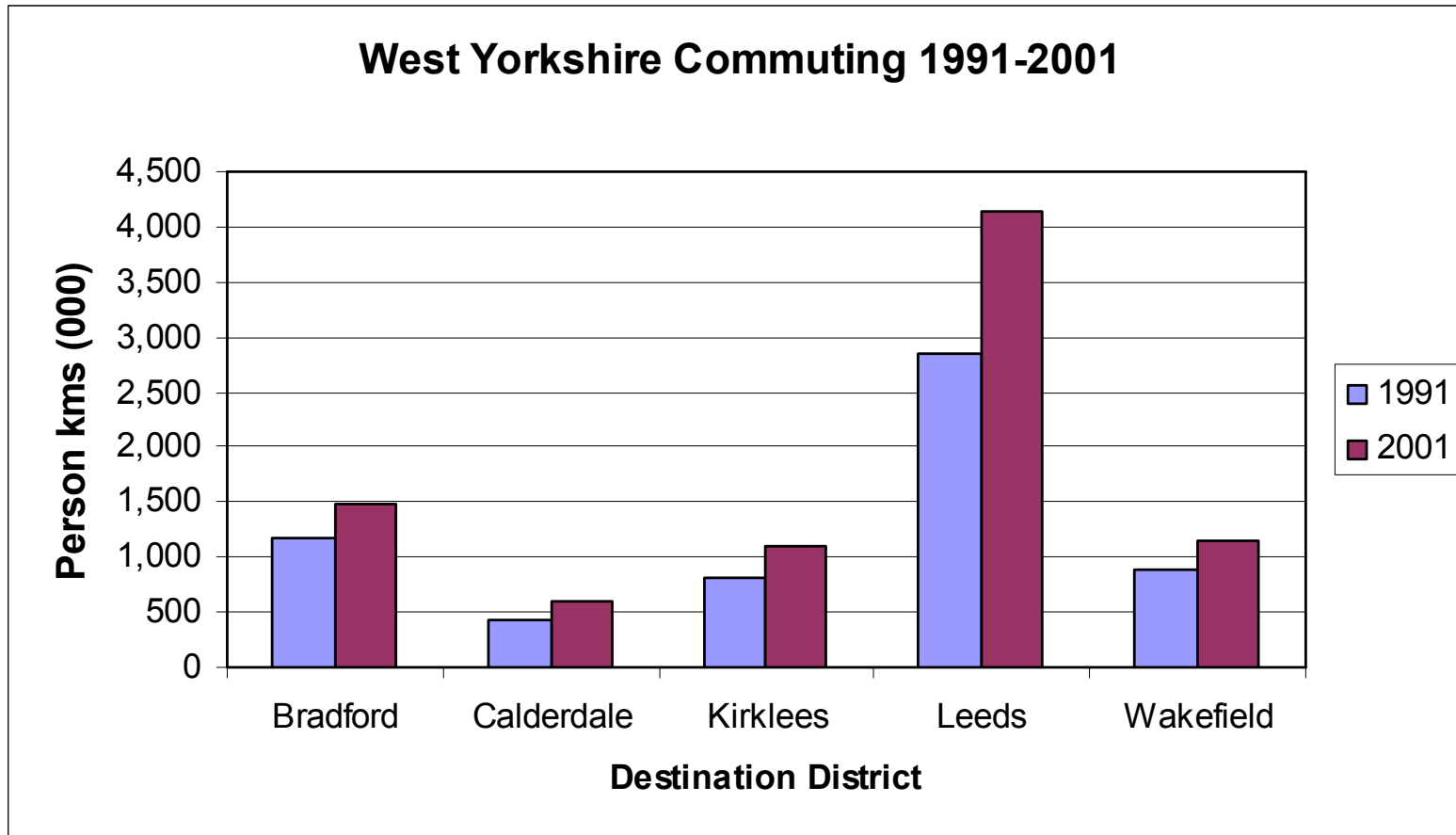


Source: Census data 1991 and 2001

Commuting Person-kms Travelled (West Yorkshire by District)

The combination of greater employment levels and longer distances means that the total person-kms travelled by Leeds commuters is substantially greater than that of the other districts. (Figure 2).

Figure 2

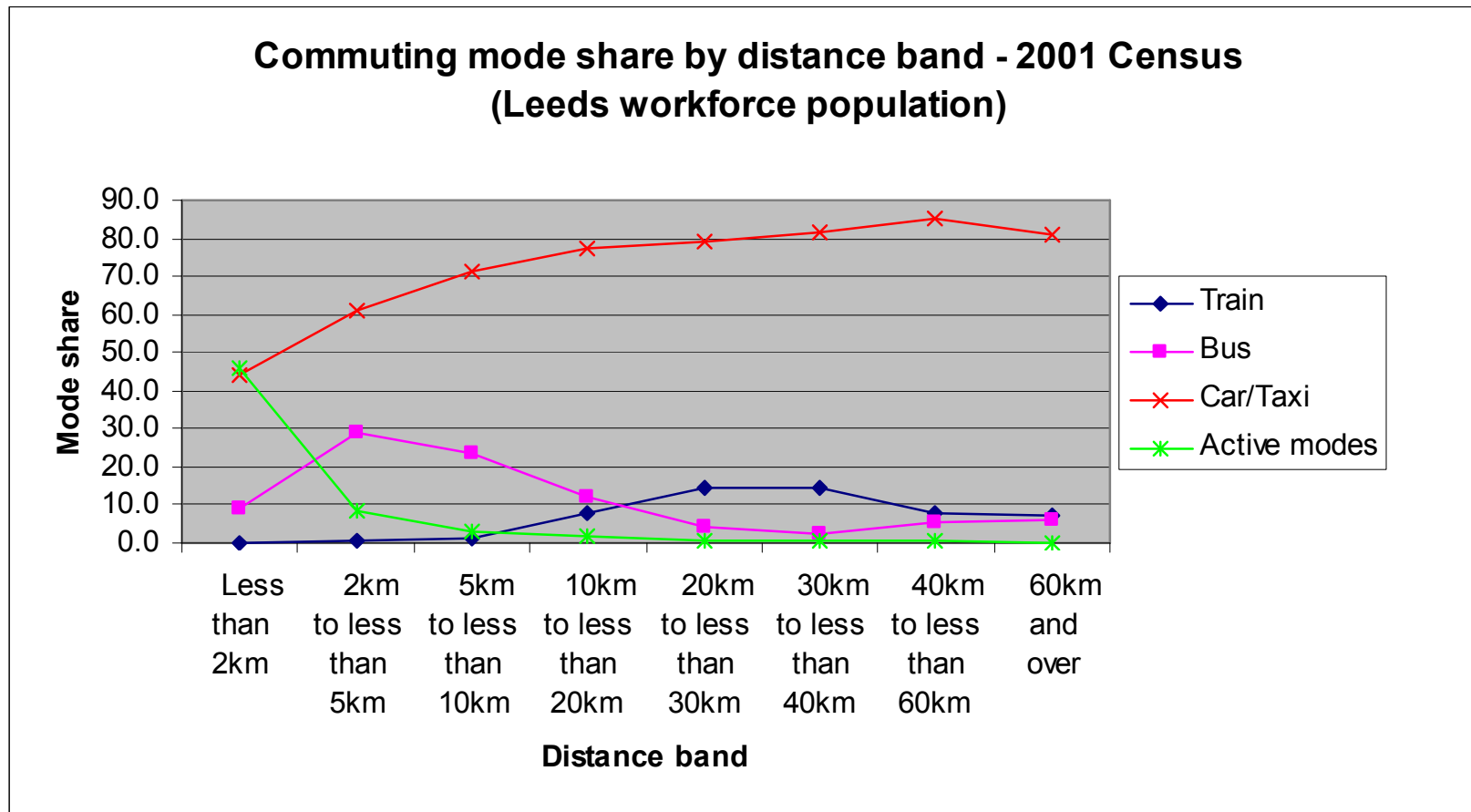


Source: Census data 1991 and 2001

Commuting Mode Share by Distance (Leeds District)

Figure 3 shows how the mode of travel is influenced by distance, with the majority of bus journeys being less than 20km (12 miles), while rail journeys peak at between 20-30 kms (12-18 miles). Even for the shortest journeys where active modes are highest, car still accounts for around 45% of journeys to work, rising to around 80% from 10km (6 miles).

Figure 3



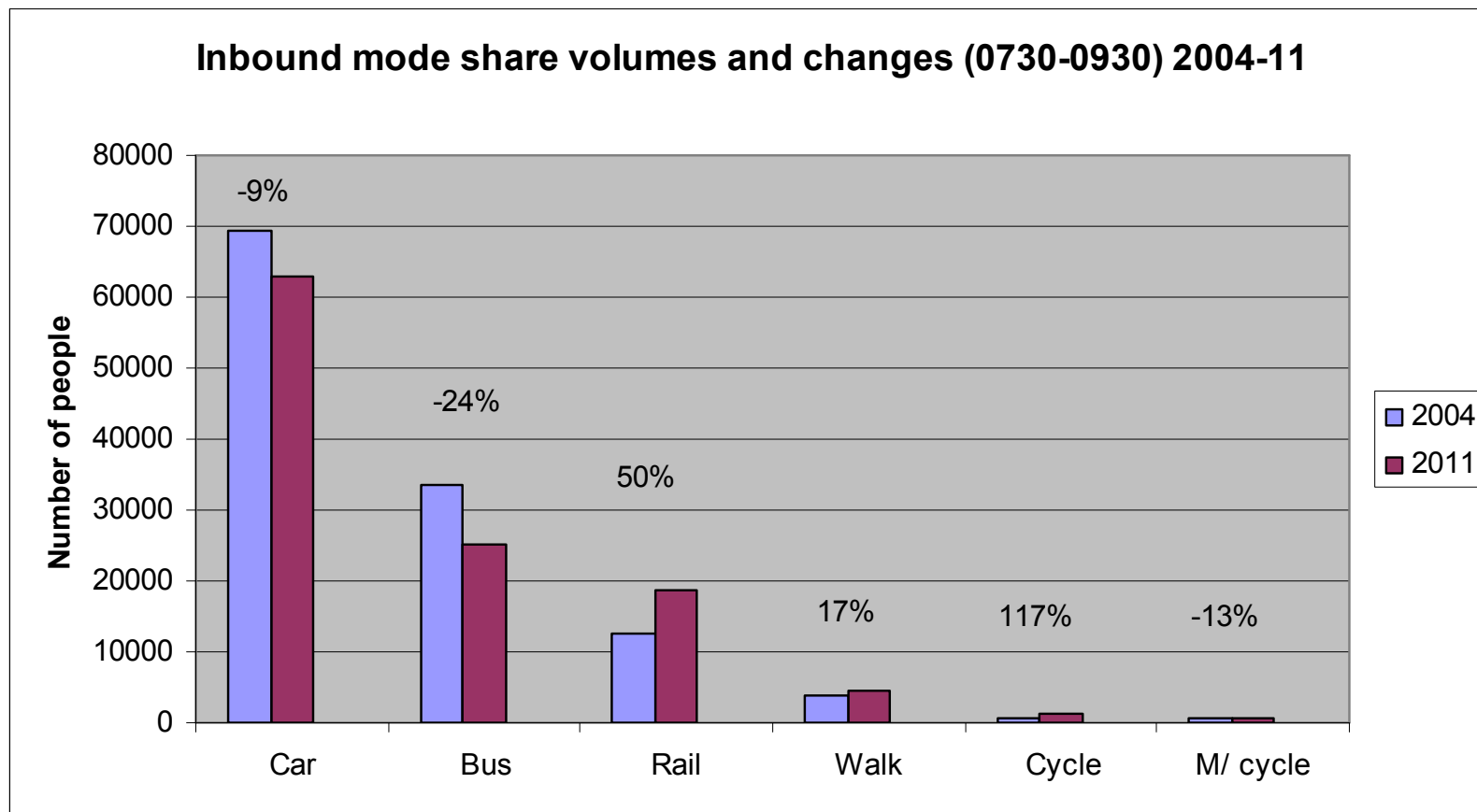
Source: Census data 2001

Mode Share of Travel (Morning peak period, approaching Leeds City Centre) – Volumes and changes

The mode share of people travelling during the morning peak period is monitored annually. This covers everyone approaching the city centre on radial roads and the railways, so it includes both people working in the city centre plus those travelling round it on the inner ring road or interchanging.

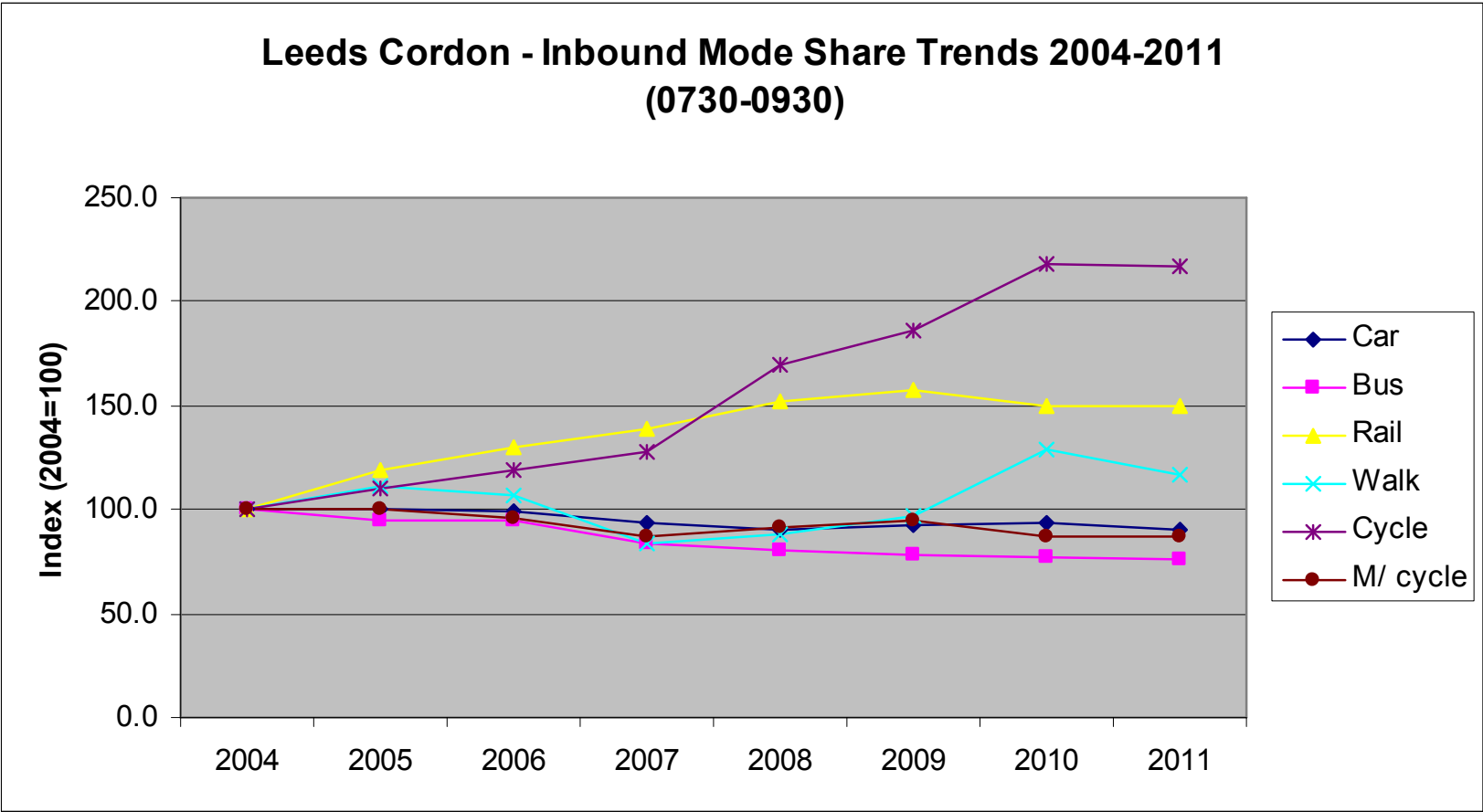
Figures 4 and 5 show that since 2004 there have been significant increases in rail usage and cycling, with a smaller rise in walking. Bus travel in particular has fallen, alongside car usage. As the second figure shows, some of these trends appear to have levelled out in the past few years, possibly reflecting the impacts of the recession.

Figure 4



Mode Share of Travel (Morning peak period, approaching Leeds City Centre) - Trends

Figure 5

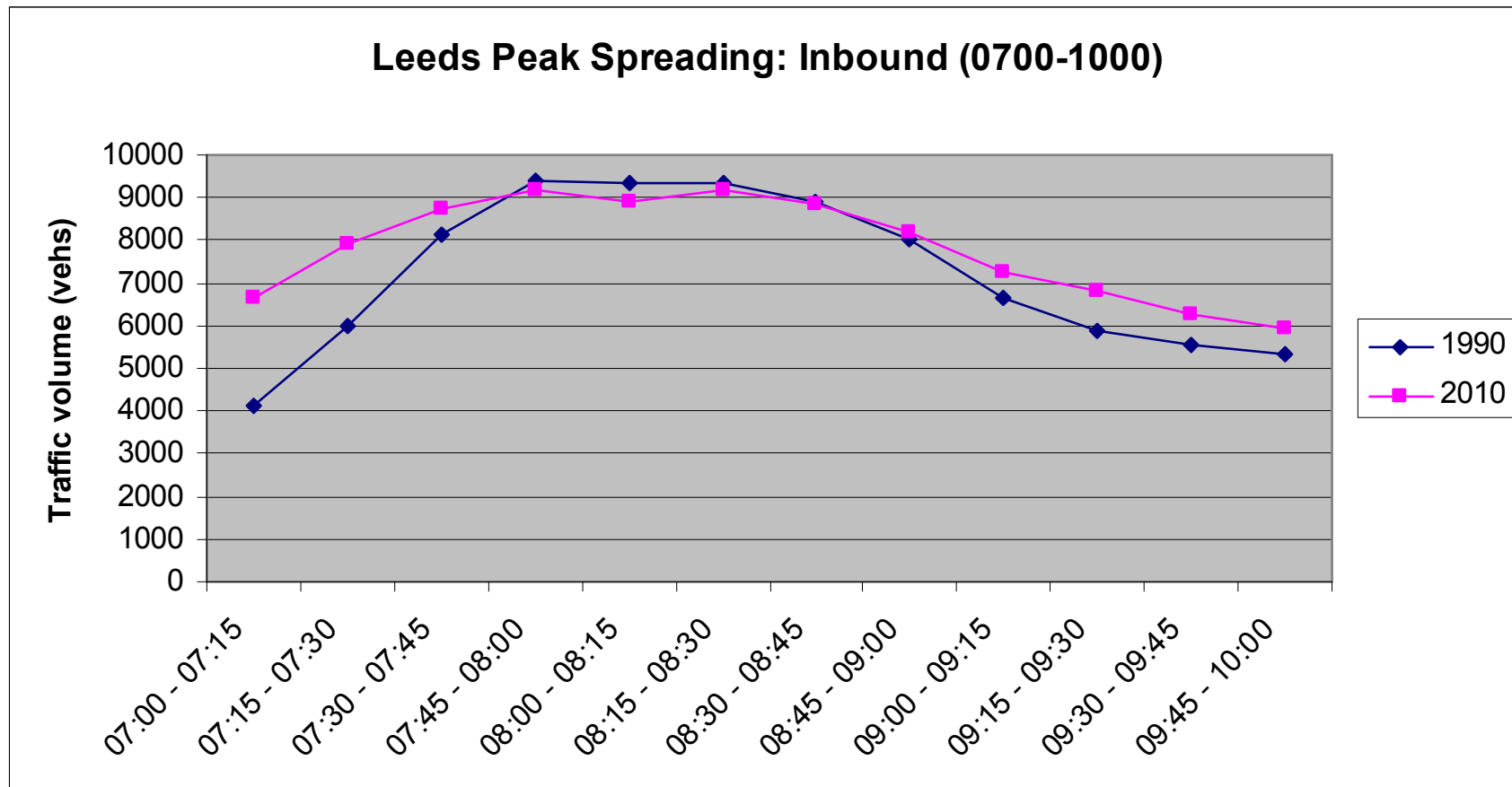


Source: Leeds City Council /Metro surveys 2004 and 2011

Traffic Growth (Morning peak period, approaching Leeds City Centre)

Traffic levels on the same radials have been monitored for many years. Figure 6 shows the changes since 1990, and clearly demonstrates how peak spreading has resulted in significant increases in traffic from 7 a.m. onwards, while volumes in the peak hour have actually fallen slightly. Peak spreading reflects both the capacity limitations of the network and the impact of flexible working.

Figure 6



Source: Leeds City Council surveys 1990 and 2010

Traffic Speeds (Morning peak period, Leeds District)

Figure 7 : Average Speeds in Leeds District (0730-0930) 2009-10

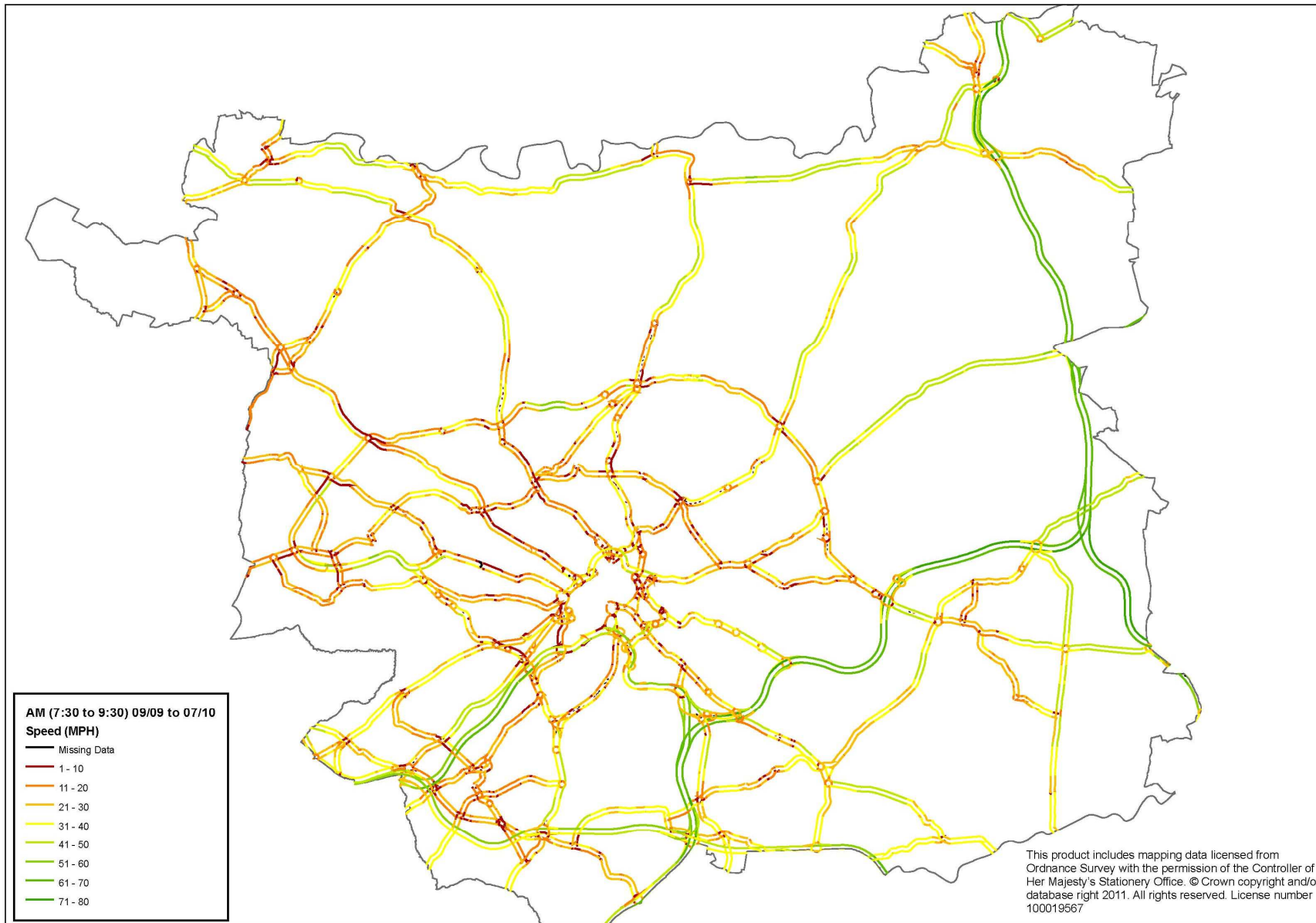


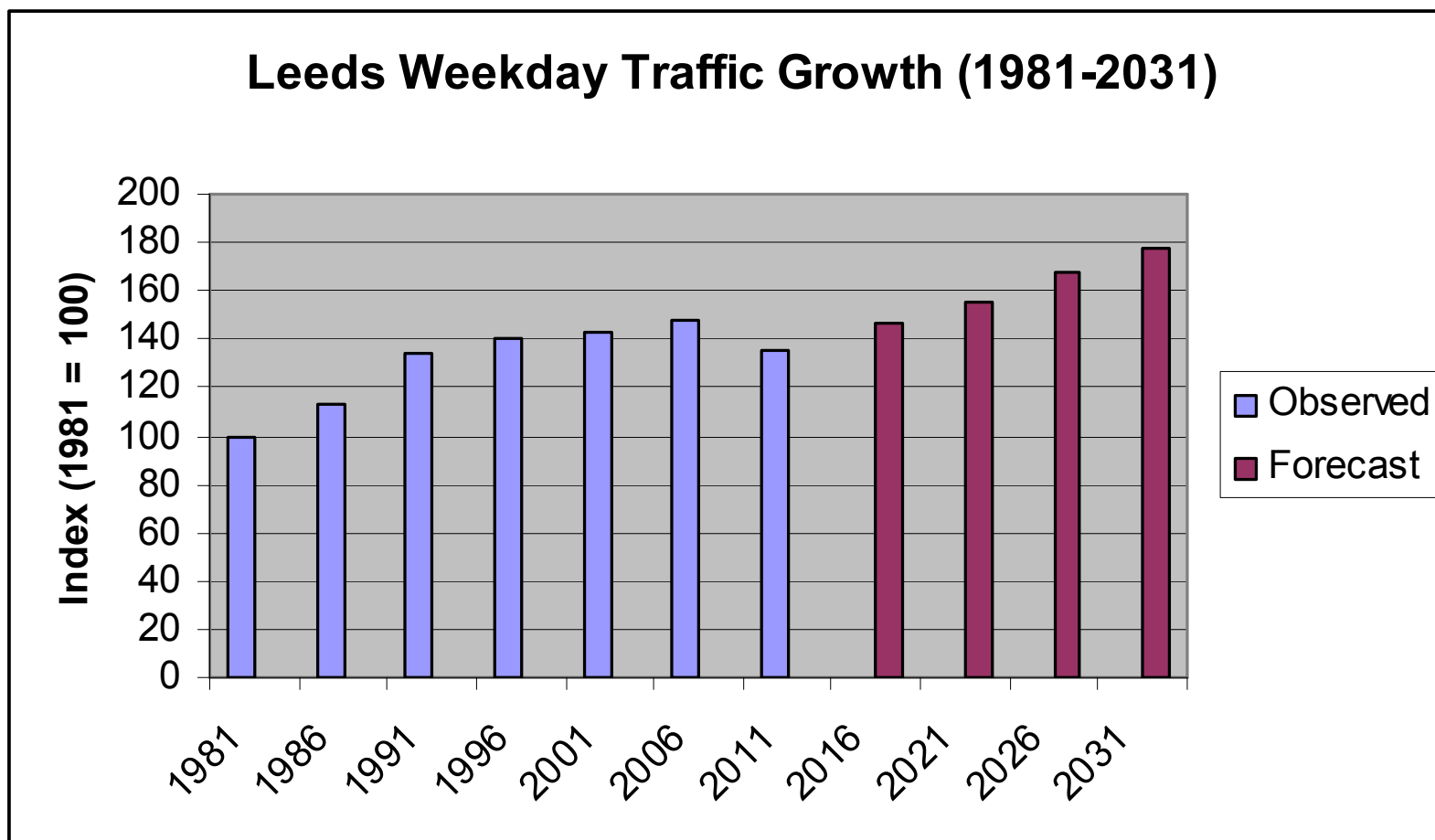
Figure 7 shows the impact of morning peak traffic on average speeds, with significant areas of the main urban area showing speeds below 20 mph.

This information is derived from analysis of Global Positioning System data (TrafficMaster) provided to the Council through the Department for Transport.

Traffic Growth (Weekdays, Leeds District)

Traffic levels throughout the District are monitored annually, and as Figure 8 shows, have remained fairly constant for the past 20 years after rising significantly during the 1980's. DfT forecasts, however, suggest that they are likely to increase markedly over the next 20 years as the population rises.

Figure 8

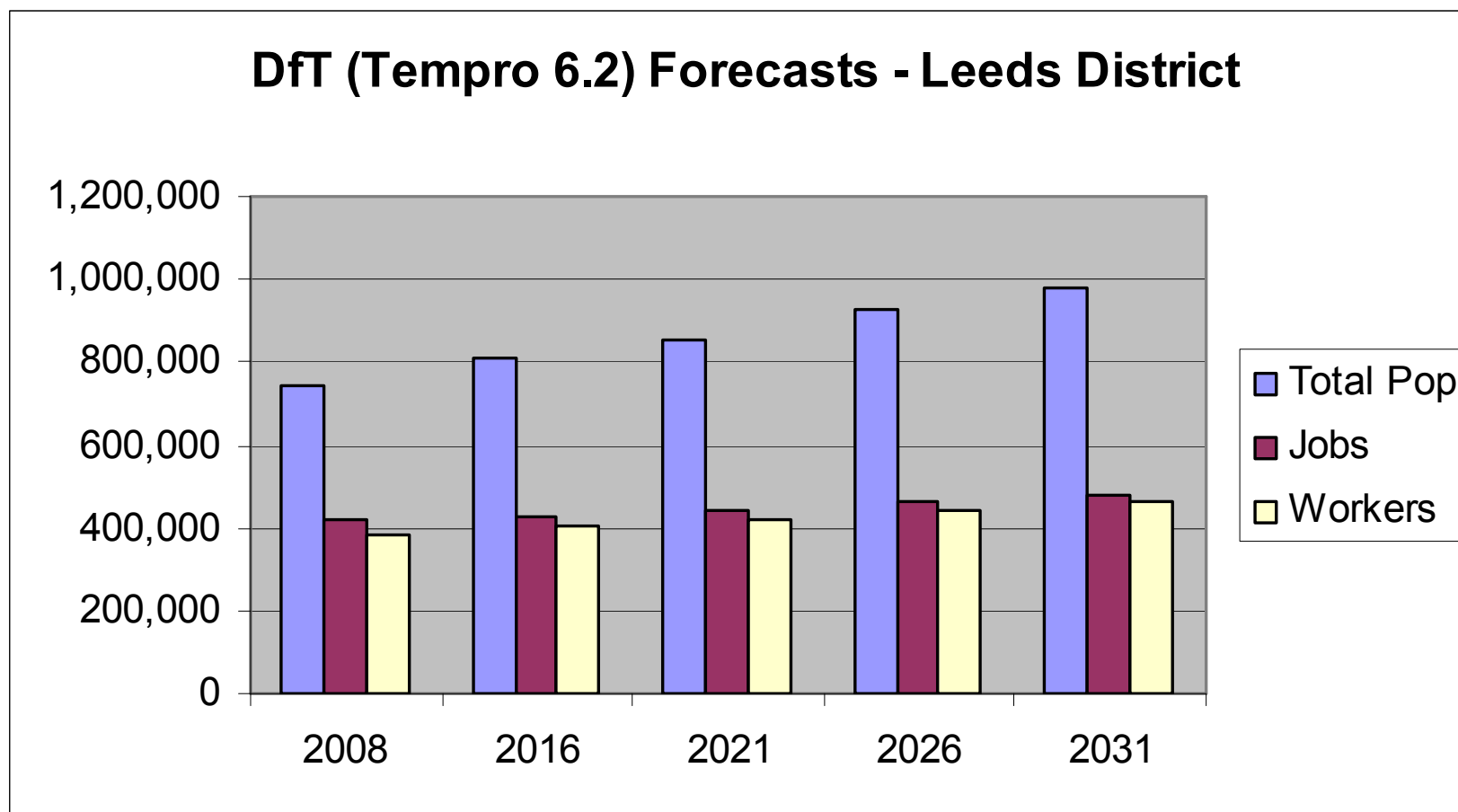


Source: Leeds City Council surveys 1981-2011; DfT (Tempo 6.2) Forecasts

Population and Employment Forecasts (Leeds District)

Department for Transport (DfT) forecasts for growth in Leeds (Figures 9 and 10) show a significant increase in population over the next 20 years. These forecasts are in line with those produced by ONS. The growth in employment is much slower, reflecting the impacts of the economic downturn, but are broadly comparable with the latest Regional Econometrics Model projections.

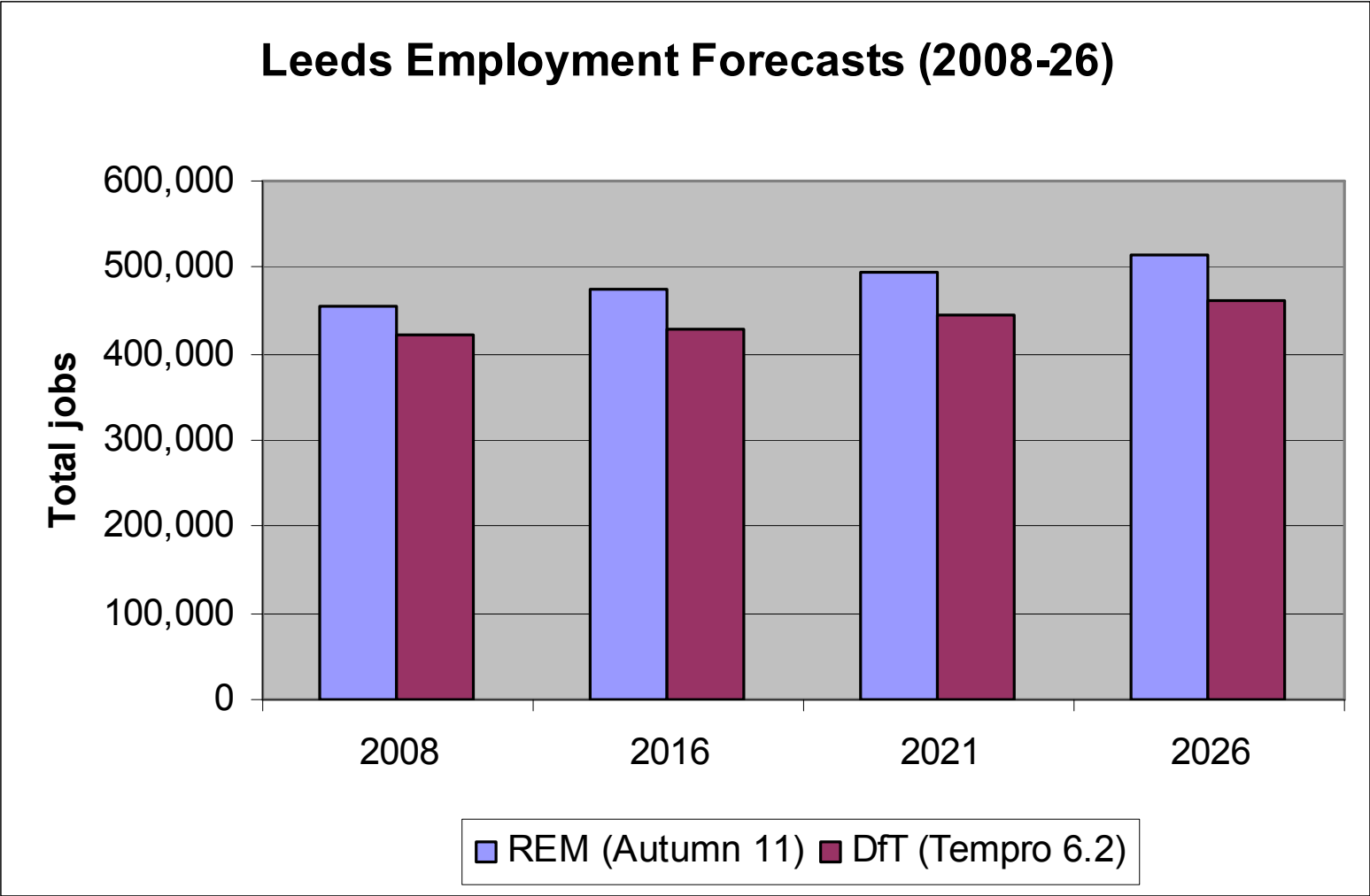
Figure 9



Source: DfT (Tempo 6.2) Forecasts

Population and Employment Forecasts (Leeds District) - continued

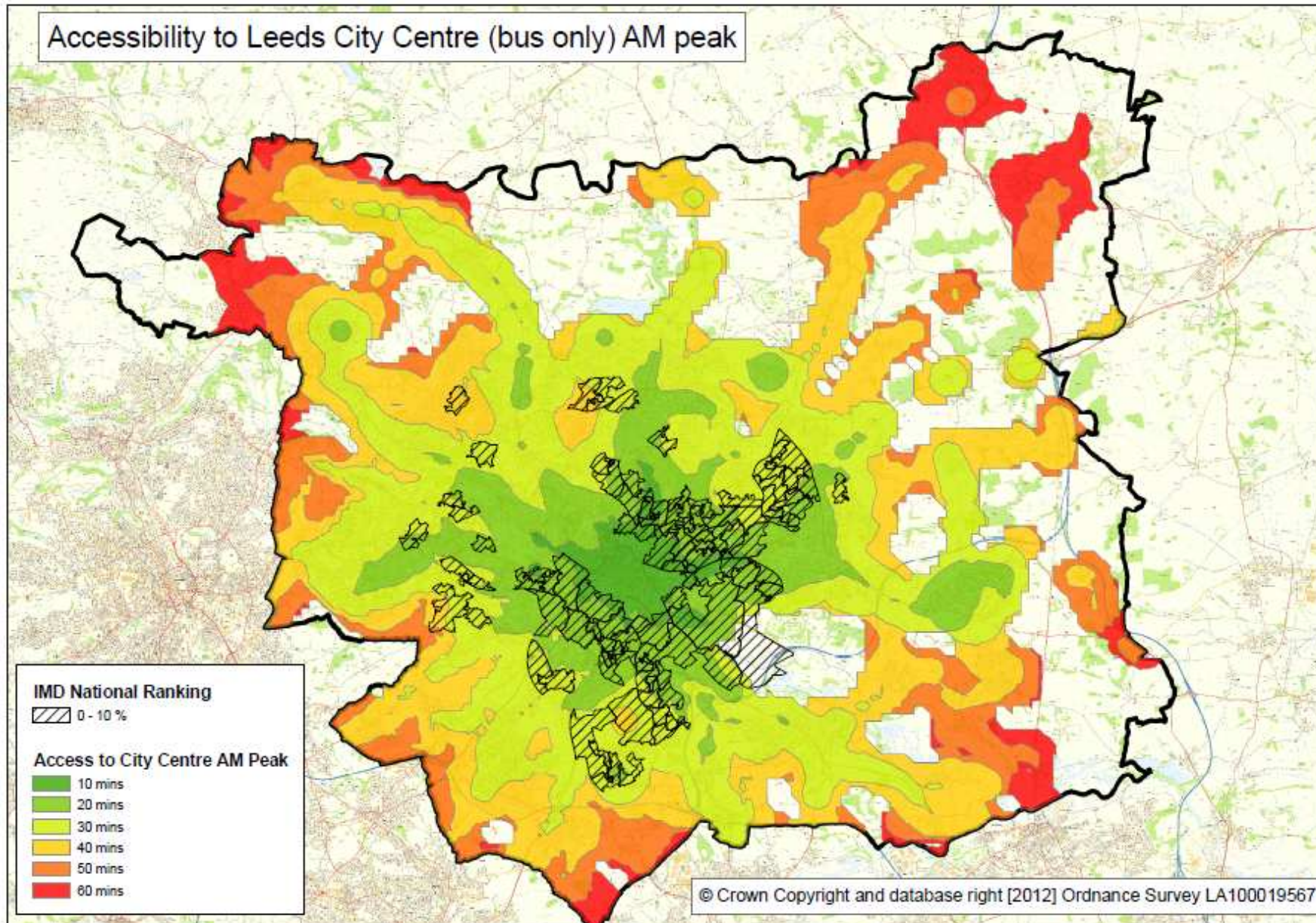
Figure 10



Source: Regional Econometrics Model Forecasts; DfT (Tempro 6.2) Forecasts

Bus Accessibility to Leeds City Centre (Am peak period, Leeds District)

Figure 11



Accessibility plots of journey by bus during the morning peak period (0700-0900) show that the majority of the Leeds urban area is within a 30 minute travel time (including walking) of the city centre. (Figure 11). When this is combined with information showing the areas of Leeds falling within the most deprived communities in the city, this demonstrates that the majority of the 10% most deprived communities are within the 30 minute travel band.

Source: Accession Modelling of Bus Timetable Data