

## 4 Travel and access impacts

This chapter identifies travel and access impacts, which could potentially be experienced as a consequence of implementing the proposals. The chapter presents impacts for blue light ambulance as the journeys by patients for the services assessed would typically be made by this mode of transport; impacts for private car and public transport are included in appendix F. Impacts have been identified through quantitative journey time analysis, as well as a desk review. Detailed analysis by an equality group is included within the equality chapter (chapter 5). Appendix C provides heat maps for changes in travel times and appendix F provides a further breakdown of the changes in travel times.

Travel and access analysis has been undertaken on the basis of available current patient activity for the phase one services. Activity data, rather than population data, has been used so as to provide as accurate picture as possible about the potential impacts for patient journey times and to understand the potential volume of patients which would require longer trips. Data have been analysed at two levels, defined as:

- Overall patient activity: this refers to the number of patients who have accessed services within Oxfordshire CCG, regardless of whether they are resident in Oxfordshire or have come from outside Oxfordshire to access services.
- Oxfordshire patient activity only: this refers to the number of patients who have accessed services within Oxfordshire CCG and are resident in Oxfordshire.

This report has utilised thresholds of 30 and 60 minutes to report on the travel impacts. This allows for a consistent baseline upon which to record the differences between option configurations. Further details of the travel impact for additional travel time bands can be seen in appendix F.

### 4.1 Ambulatory care

Travel and access impacts have not been assessed for ambulatory care. This is because patients will continue to receive care at an AAU at their local hospital site, or because ongoing ambulatory care will be delivered in or closer to patients homes.

### 4.2 Critical care services

Analysis for the change to critical care services has not been assessed for travel and access impacts. This is due to the low volumes of patients receiving level 3 critical care.

### 4.3 Maternity

The tables below highlight the difference in travel times for maternity patients accessing hospitals for the baseline position and under a future scenario with obstetric-led maternity care removed from HGH. Residents living in the north of the county, namely Banbury and Chipping Norton and the surrounding areas, will need to travel further for their care.

The change to maternity services will not affect all patients. The HGH would move from providing 18 per cent of OUHFT's births to 6 per cent under the proposals in Phase One. The remaining 6 per cent (496) of births would be delivered at HGH at the on-site MLU.

#### 4.3.1.1 Quantitative analysis of journey time impacts: overall patient activity

Based on current maternity patient activity data, 73 per cent of maternity patients can access obstetric-led maternity services by blue light within 30 minutes and 93 per cent within 60 minutes. Should obstetric-led maternity services not be provided at the HGH in future, 52 per cent of patients would be able to access obstetric-led maternity services within 30 minutes and 93 per cent within 60 minutes.

**Table 5: Blue light ambulance journey time to obstetric-led maternity services: baseline - including services at the HGH (all patients)**

	Travel time – blue light (baseline - including HGH)						
Journey time (number of minutes)	0-10	11-20	21-30	31-40	41-50	51-60	>60
Number of patients reaching maternity services in journey time range	3,515	2,205	2,692	1,786	543	20	772
Percentage of patients reaching maternity services in journey time range	30%	19%	23%	15%	5%	0%	7%
Cumulative percentage	30%	50%	73%	88%	93%	93%	100%

Source: SUS SEM

**Table 6: Blue light ambulance journey time to obstetric-led maternity services: without services at the HGH (all patients)**

	Travel time - blue light (excluding HGH)						
Journey time (number of minutes)	0-10	11-20	21-30	31-40	41-50	51-60	>60
Number of patients reaching maternity services in journey time range	1,798	1,540	2,676	3,809	910	19	781
Percentage of patients reaching maternity services in journey time range	16%	13%	23%	33%	8%	0%	7%
Cumulative percentage	16%	29%	52%	85%	93%	93%	100%

Source: SUS SEM

#### 4.3.1.2 Quantitative analysis of journey time impacts: Oxfordshire patient activity only

Based on current maternity patient activity data, 79 per cent of patients resident in Oxfordshire can access obstetric-led maternity services by blue light within 30 minutes and 100 per cent within 60 minutes. Should obstetric-led maternity services not be provided at the HGH in future, 57 per cent of patient's resident in Oxfordshire would be able to access obstetric-led maternity services within 30 minutes and 100 per cent within 60 minutes.

**Table 7: Blue light ambulance journey time to obstetric-led maternity services: baseline – including services at the HGH (Oxfordshire resident patients only)**

	Travel time – blue light (baseline - including HGH)						
Journey time (number of minutes)	0-10	11-20	21-30	31-40	41-50	51-60	>60
Number of patient's resident in Oxfordshire reaching maternity services in journey time range	3,515	2,073	2,636	1,742	469	0	0
Percentage of patient's resident in Oxfordshire reaching maternity services in journey time range	34%	20%	25%	17%	4%	0%	0%
Cumulative percentage	34%	54%	79%	96%	100%	100%	100%

Source: SUS SEM

**Table 8: Blue light ambulance journey time to obstetric-led maternity services: without services at the HGH (Oxfordshire resident patients only)**

	Travel time - blue light (excluding HGH)						
Journey time (number of minutes)	0-10	11-20	21-30	31-40	41-50	51-60	>60
Number of patients reaching maternity services in journey time range	1,798	1,532	2,641	3,679	785	0	0
Percentage of patients reaching maternity services in journey time range	17%	15%	25%	35%	8%	0%	0%
Cumulative percentage	17%	32%	57%	92%	100%	100%	100%

Source: SUS SEM

#### 4.4 Planned care services

Travel analysis on the impact of the changes to planned care services has not been possible for this IIA. To robustly assess the impacts on planned care services at the HGH, requires a greater level of disaggregation of the patient data than has been available. However, it is likely that travel times will be reduced for patients using these services, given the additional capacity being proposed at the HGH.

#### 4.5 Stroke services

Stroke services for Oxfordshire will be centralised in the JRH. Direct conveyance of all appropriate Oxfordshire patients to the HASU at the JRH will be supported by the roll out of countywide early supported discharge to improve rehabilitation and outcomes. Residents living in the north of the county, namely Banbury and Chipping Norton and the surrounding areas, will have longer journeys to access care.

##### 4.5.1.1 Quantitative analysis of journey time impacts: overall patient activity

Based on current stroke patient activity data, 71 per cent of patients can access stroke services by blue light ambulance within 30 minutes and 98 per cent within 60 minutes. Should stroke services not be provided at the HGH in future, 55 per cent of patients would be able to access stroke services within 30 minutes and 98 per cent within 60 minutes.

### 5.2.2.1 Maternity

The tables below highlight the travel times to obstetric-led maternity services for maternity patients within one of the scoped-in equality groups; baseline journey times are compared with the future proposal.

**Table 14: Percentages able to reach obstetric-led maternity services in 30 minutes or less by blue light ambulance**

Group	Baseline percentage able to reach obstetric-led maternity services by blue light ambulance in 30 minutes or less (including services at HGH)	Future percentage able to reach obstetric-led maternity services by blue light ambulance in 30 minutes or less (without services at HGH)	Difference
<b>Overall – all patient activity</b>	<b>73%</b>	<b>52%</b>	<b>-20pp change</b>
<b>Oxfordshire patients only</b>	<b>79%</b>	<b>57%</b>	<b>-22pp change</b>
Women aged 15-44 (all patients)	74%	52%	-22pp change
Women aged 15-44 (Oxfordshire patients only)	79%	57%	-22pp change
BAME (all patients)	86%	64%	-22pp change
BAME (Oxfordshire patients only)	92%	68%	-24pp change
Most deprived quintile (all patients)	99%	59%	-40pp change
Most deprived quintile (Oxfordshire patients only)	100%	59%	-41pp change

Source: SUS SEM

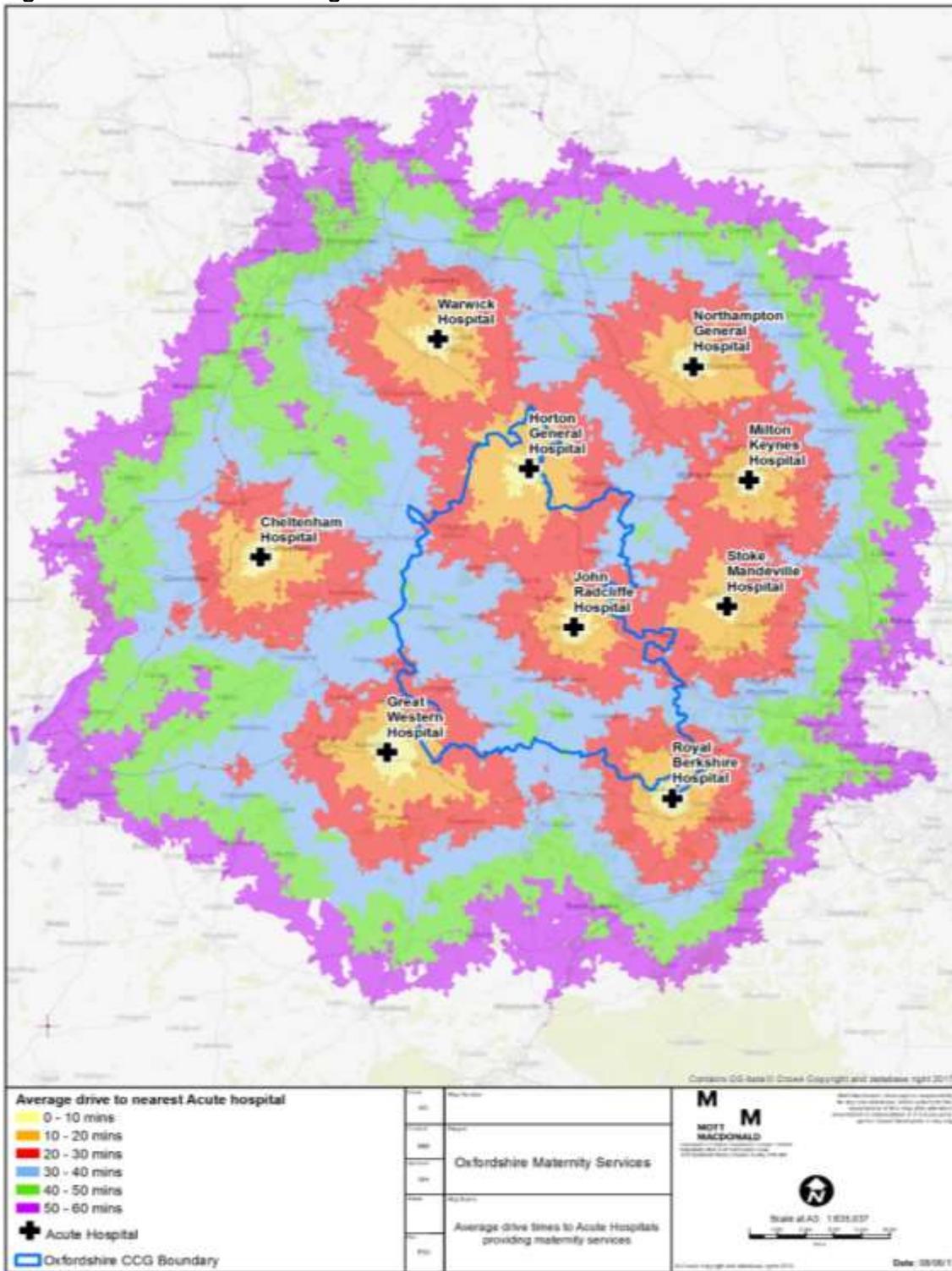
**Table 15: Percentage able to reach obstetric-led maternity services in 60 minutes or less with by blue light ambulance**

Group	Baseline percentage able to reach obstetric-led maternity services by blue light ambulance in 60 minutes or less (including services at HGH)	Future percentage able to reach obstetric-led maternity services by blue light ambulance in 60 minutes or less (without services at HGH)	Difference
<b>Overall – all patient activity</b>	<b>93%</b>	<b>93%</b>	<b>No change</b>
<b>Oxfordshire patients only</b>	<b>100%</b>	<b>100%</b>	<b>No change</b>
Women aged 15-44 (all patients)	93%	93%	No change
Women aged 15-44 (Oxfordshire patients only)	100%	100%	No change
BAME (all patients)	94%	94%	No change
BAME (Oxfordshire patients only)	100%	100%	No change
Most deprived quintile (all patients)	99%	99%	No change
Most deprived quintile (Oxfordshire patients only)	100%	100%	No change

Source: SUS SEM

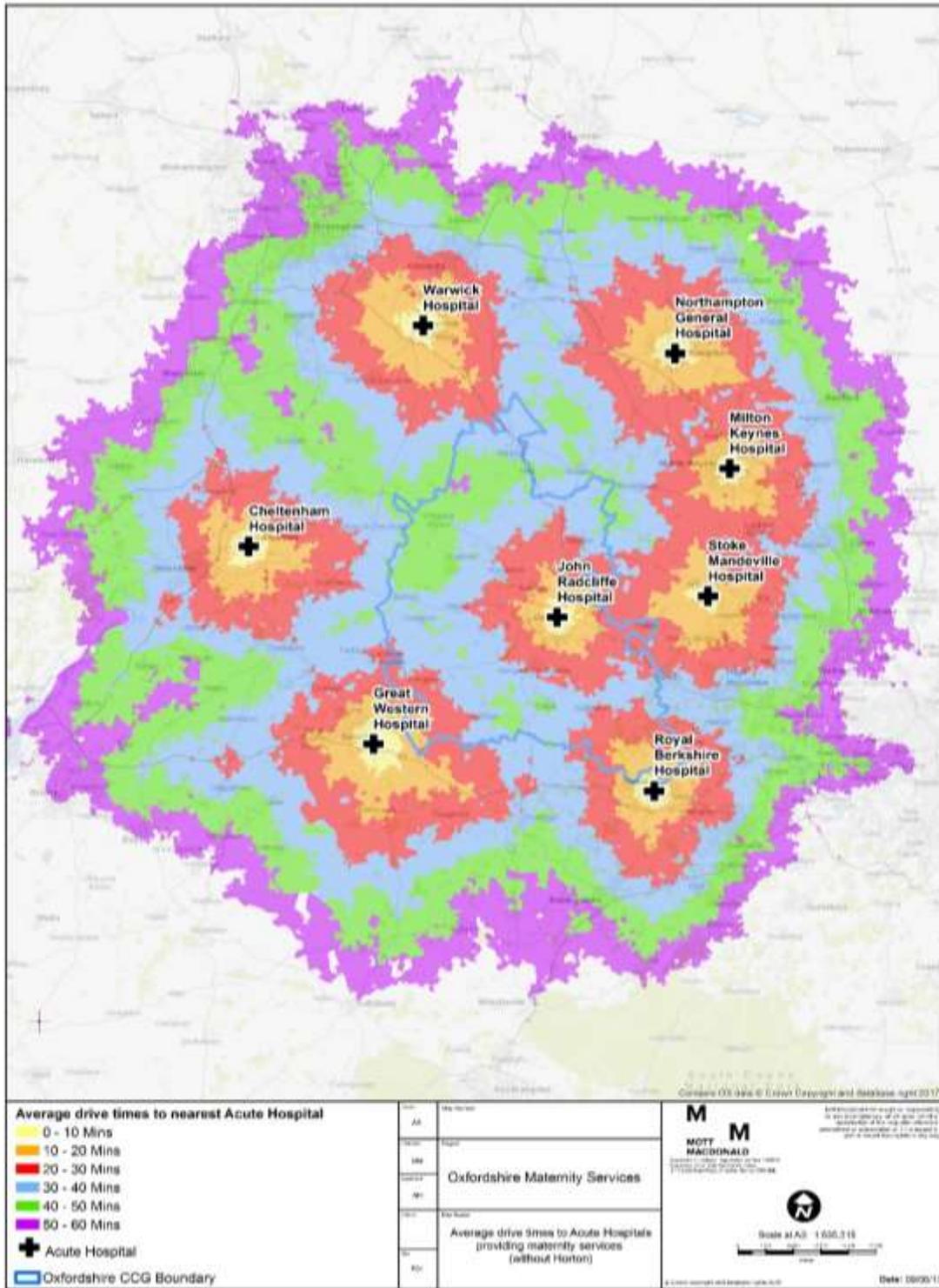
- There is a 40 percentage point reduction in patients from deprived communities being able to reach these services within 30 minutes (by blue light ambulance), compared to a 20 percentage point reduction for the population overall. The change is due to the removal of the HGH as an option, the higher concentration of deprived communities (compared to other protected characteristic groups) in the Banbury area and the longer distances that could be involved in transporting a patient to the JRH.
- Women aged 15-44 will have the lowest percentage of patients who can access maternity services within 30 minutes by blue light (52 per cent - using activity data from all patients); these percentages are in line with access for the overall population.

**Figure 8: Private vehicle average times with Horton**



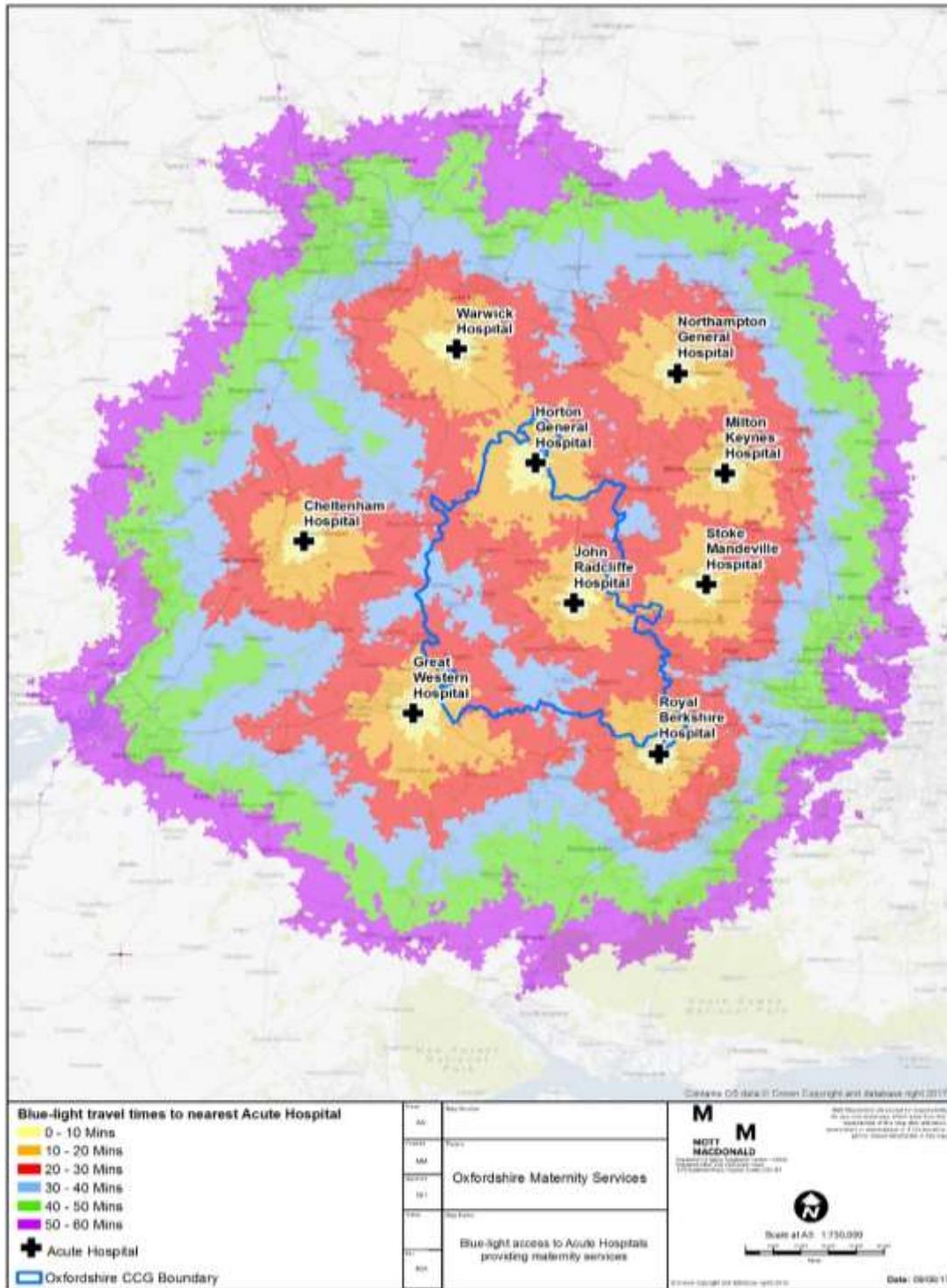
Source: Data provided by the CSU

**Figure 9: Private vehicle average times without Horton**



Source: Data provided by the CSU

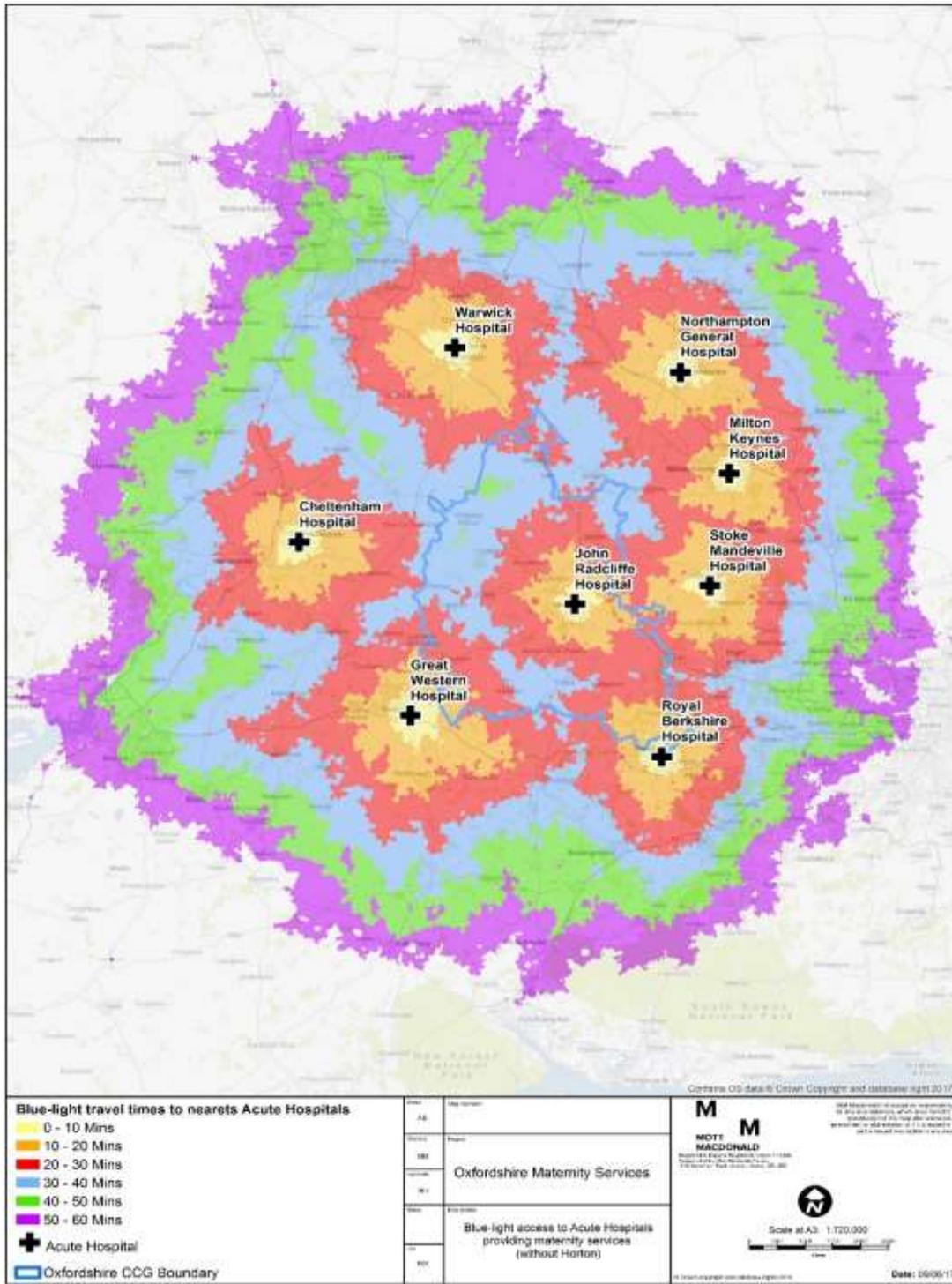
Figure 10: Blue light access with Horton<sup>66</sup>



Source: Data provided by the CSU

<sup>66</sup> Modelling has been done on the basis of pick up to destination both at non peak and peak times.

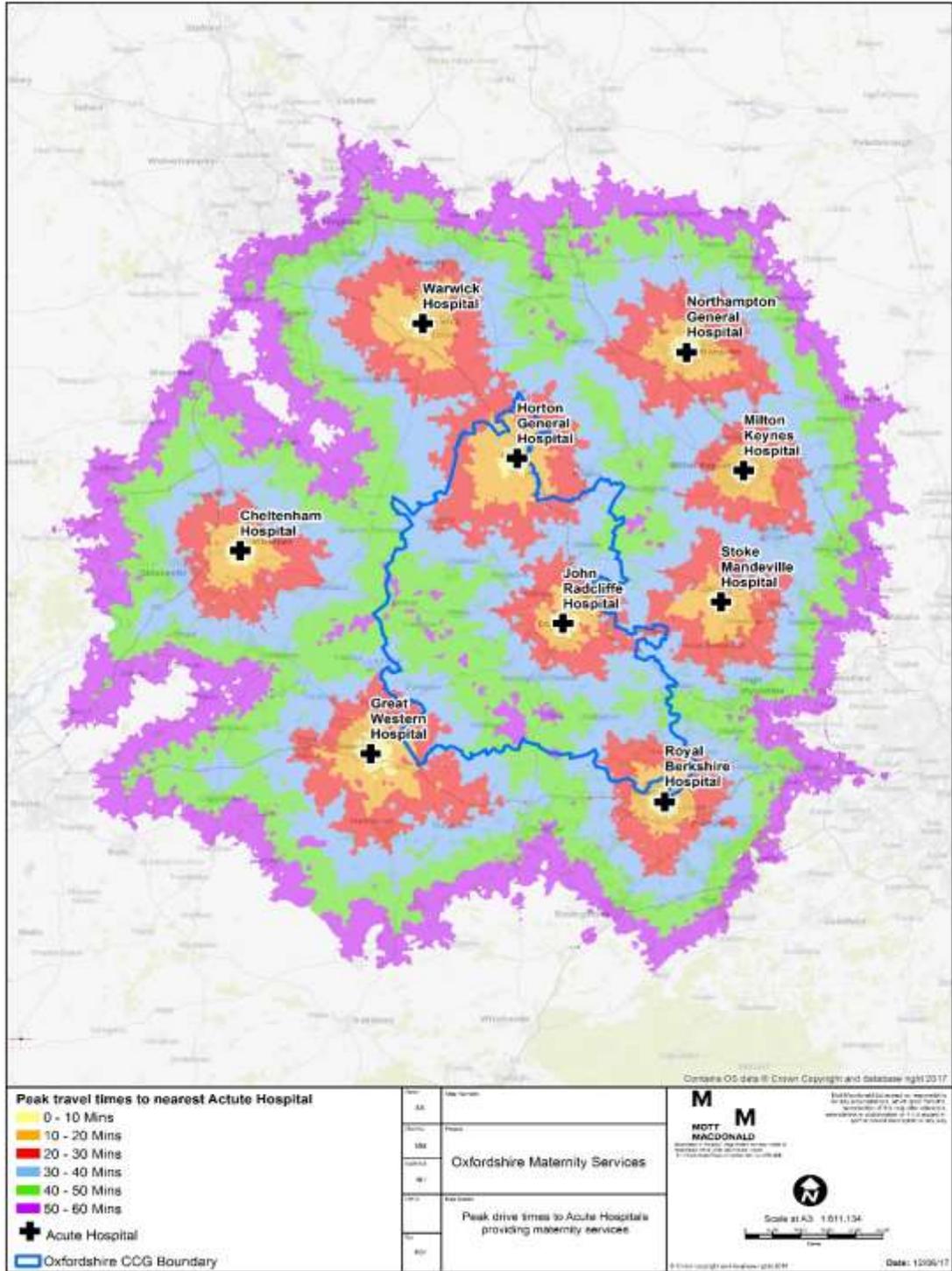
Figure 11: Blue light access without Horton<sup>67</sup>



Source: Data provided by the CSU

<sup>67</sup> Modelling has been done on the basis of pick up to destination both at non peak and peak times.

Figure 14: Private vehicle peak times with Horton



Source: <Insert Notes or Source>

**Figure 18: Private vehicle peak times without Horton**

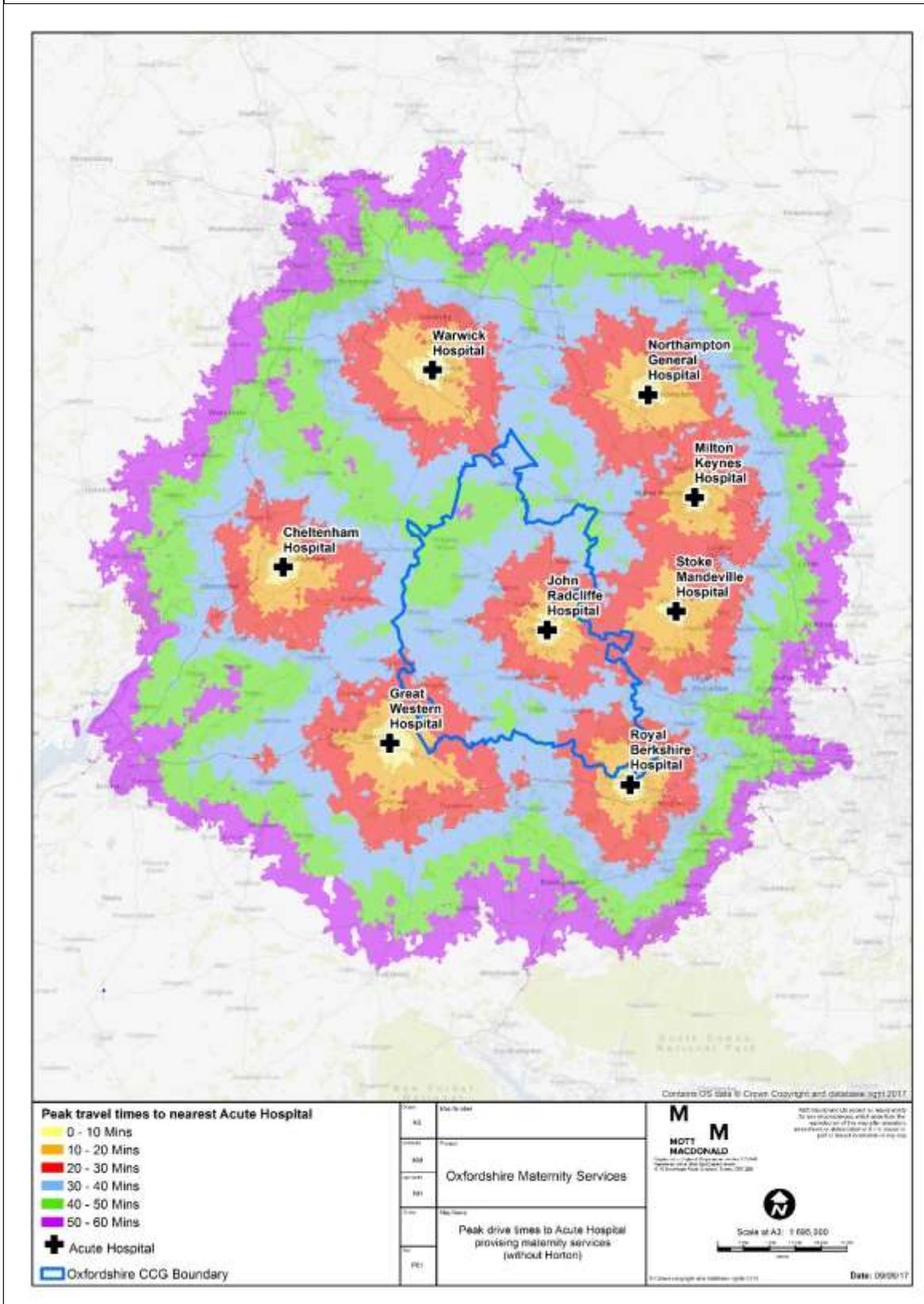
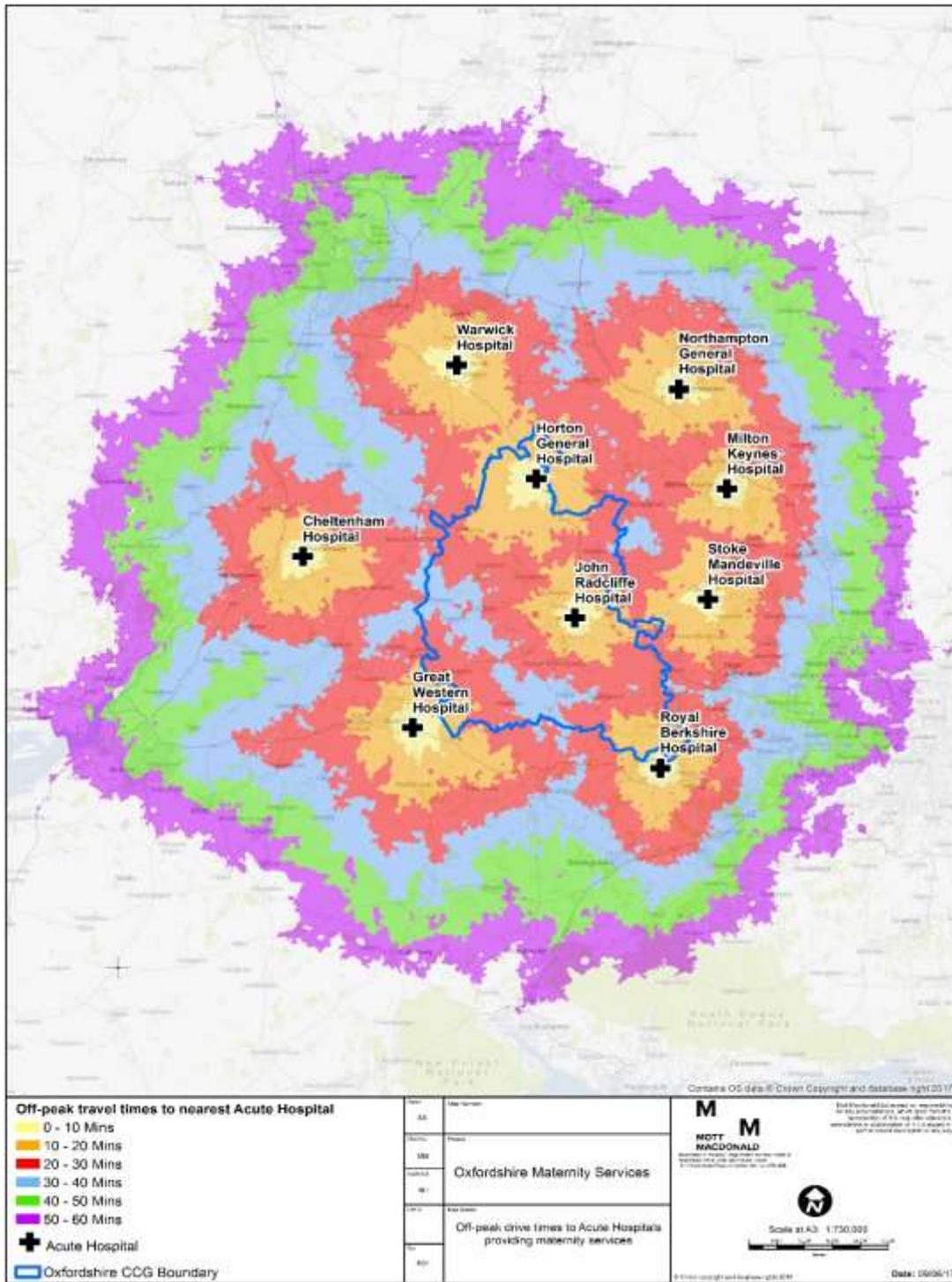


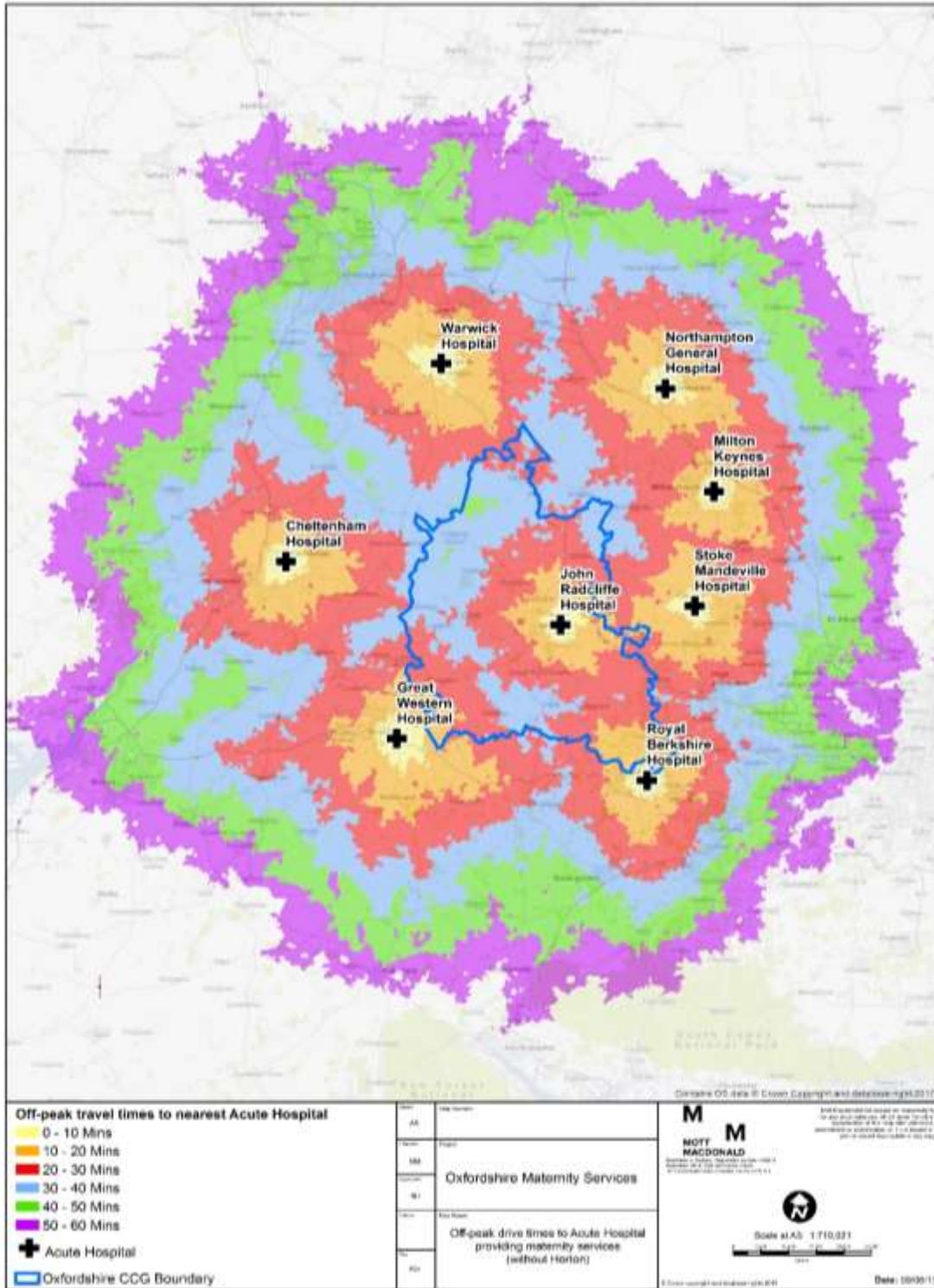
Figure 15: Private vehicle off-peak times with Horton



Source: Data provided by the CSU

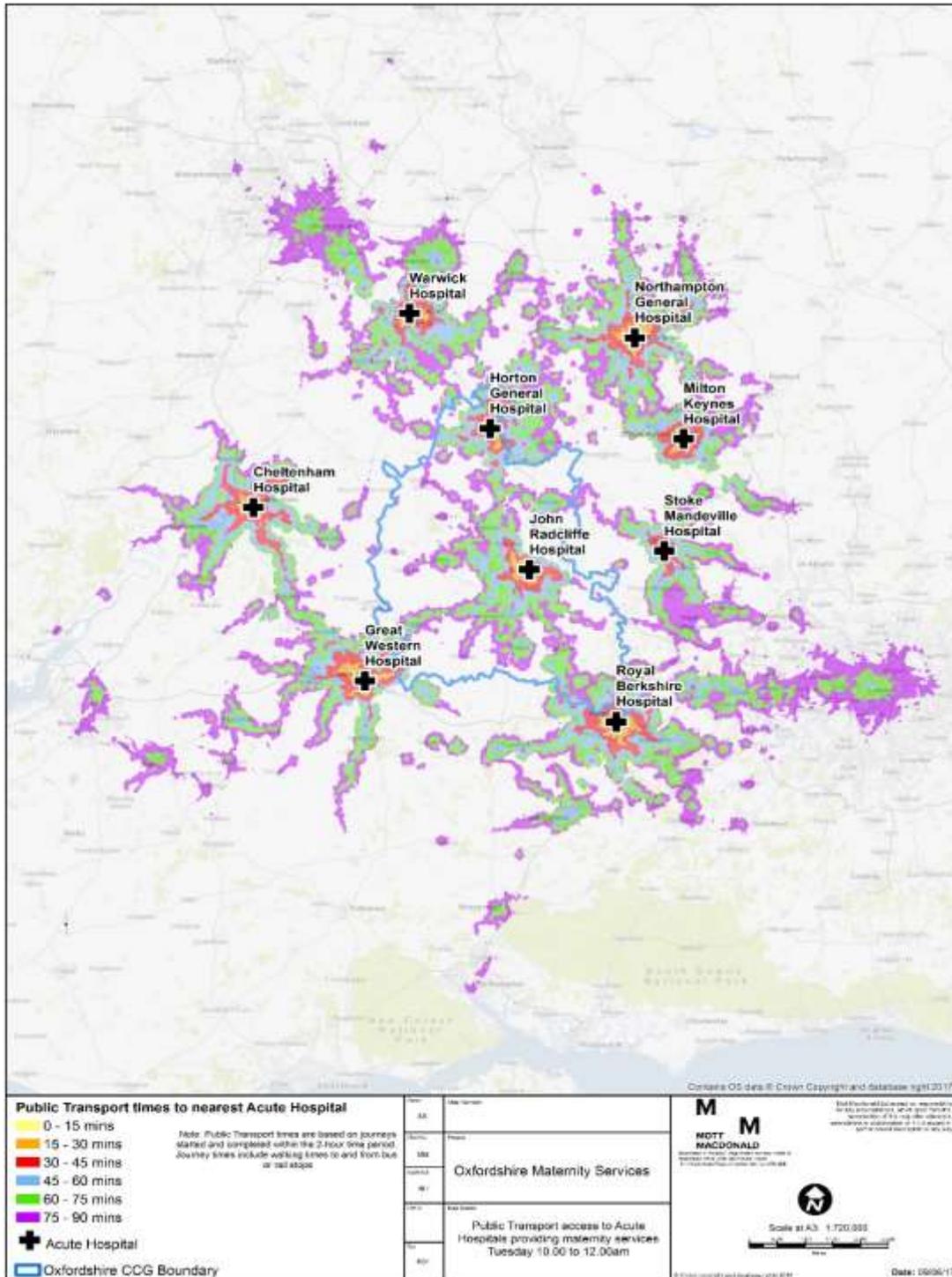
Source: Data provided by the CSU

**Figure 19: Private vehicle off-peak times without Horton**



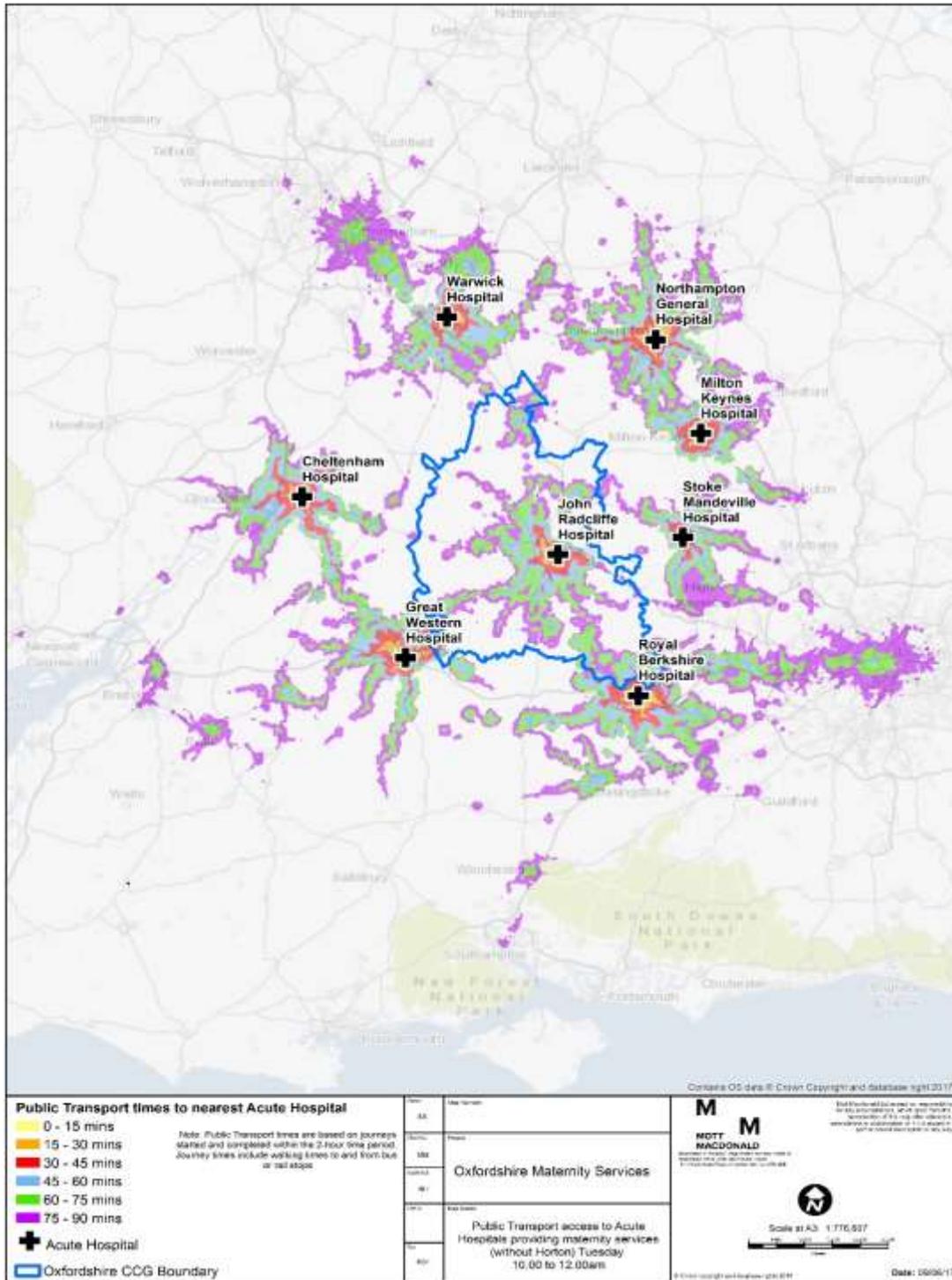
Source: Data provided by the CSU

**Figure 12: Public transport Tuesday 10am-12am with Horton – (e.g. access to antenatal services)**



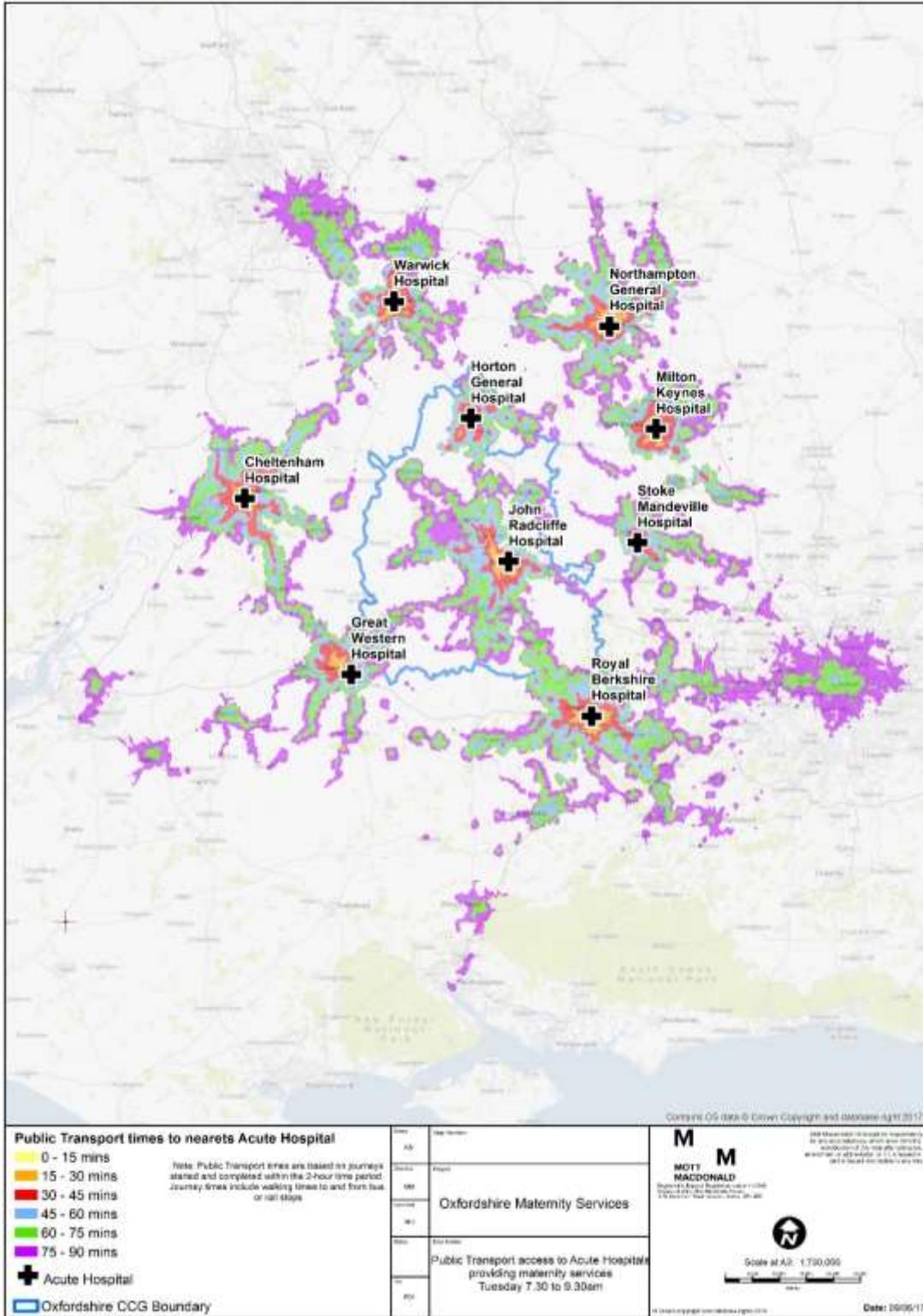
Source: Data provided by the CSU

**Figure 13: Public transport Tuesday 10am-12am without Horton – (e.g. access to antenatal services)**



Source: Data provided by the CSU

**Figure 17: Public transport Tuesday 7.30-9.30 without Horton**  
**Figure 16: Public transport Tuesday 7.30-9.30 with Horton**



Data provided by the CSU

