

## Appendix 7

### PNA Maps

29 January 2018

## Executive Summary

### Aims and Objectives

List of documents that are to be considered supplemental to the PNA document.

May or may not be included in the final document

Support statements made in the main text but deemed best not to include in the main document due to size (page or electronic)

## Table of Contents

<b>Executive Summary .....</b>	<b>1</b>
<b>Appendices.....</b>	<b>4</b>
<b>A Spatial variation in ‘need’ and ‘provision’ .....</b>	<b>5</b>
A.1 Need based on population aged under 18 – LSOA .....	6
A.2 Need for EHC (females aged 15 to 44 as proxy) – LSOA.....	7
A.3 Need for medicine use reviews (all persons aged 75 or older as proxy) – LSOA.....	8
A.4 Deprivation.....	9
<b>B Drive and walking time analysis .....</b>	<b>10</b>
B.1 Walking time to County Pharmacies.....	11
B.2 Walking time to 100hr Pharmacies.....	12
B.3 Walking time to all pharmacies including neighbouring areas.....	13
B.4 Drive time to all County pharmacies.....	14
<b>C Location of pharmacies commissioned to provide specific services .....</b>	<b>15</b>
C.1 Advanced - Appliance Use Reviews.....	16
C.2 Advanced – Flu Vaccination.....	17
C.3 Advanced – Medicines Use Reviews (MUR) .....	18
C.4 Advanced – New Medicine Service (NMS).....	19
C.5 Advanced – NHS Urgent Medicine Supply (NUM).....	20
C.6 Advanced – Stoma Appliance Customisation.....	21
C.7 Locally commissioned – Out of Hours Rota (Christmas and Easter opening) .....	22
C.8 Locally commissioned – Emergency Supply Service.....	23
C.9 Locally commissioned – Palliative Care Drug Stockists Scheme.....	24
C.10 Locally commissioned – Pharmacy First.....	25
C.11 Core – Contracted Hours – 100 hours .....	26
C.12 Commissioned by Nottinghamshire County Council - CCard Scheme – Pick-up only .....	27
C.13 Commissioned by Nottinghamshire County Council - CCard scheme – Registration and pick-up.....	28
C.14 Commissioned by Nottinghamshire County Council – Emergency Hormonal Contraception .....	29
C.15 Commissioned by Nottinghamshire County Council – Needle Exchange Programmes .....	30
C.16 Commissioned by Nottinghamshire County Council – Supervised Consumption .....	31
C.17 CCG Commissioned – Full clinical multi-disciplinary medications review.....	32
C.18 Weekend opening – Open both days.....	33
C.19 Weekend opening – Open either Saturday or Sunday .....	34
C.20 Weekend opening – Open only Saturday .....	35
C.21 Weekend opening – Open Saturday .....	36
C.22 Weekend opening – Open Sunday .....	37
<b>D Care and residential homes.....</b>	<b>38</b>

D.1	Location of care homes.....	39
<b>E</b>	<b>Teenage conceptions.....</b>	<b>40</b>
E.1	Table of number and rate of teenage conceptions by District.....	41
E.2	Map of hotspot wards.....	42
E.3	Table of number of hotspot wards by District .....	43
<b>F</b>	<b>County overview.....</b>	<b>44</b>
F.1	Map.....	45
<b>G</b>	<b>District detail.....</b>	<b>46</b>
G.1	Ashfield.....	47
G.2	Bassetlaw .....	48
G.3	Broxtowe.....	49
G.4	Gedling .....	50
G.5	Mansfield .....	51
G.6	Newark and Sherwood.....	52
G.7	Rushcliffe.....	53

## Appendices



## A Spatial variation in 'need' and 'provision'

Need/ provision maps for:

- Population aged under 18 (high use population)
- Emergency hormonal contraception (females aged 15 to 44)
- Medicine use review/ population aged 75 or older
- Deprivation

### Need by age

These maps are based on small areas – LSOAs – with the relevant populations. The pharmacies with/ without MUR or EHC are plotted on top of these.

The underlying assumption for need for MUR is population aged 75 or older. These maps can thus also be used to assess need for this age group (a high use population).

### Need by deprivation

This map is based on small areas – LSOAs. The data shown is the overall Index of Multiple Deprivation (IMD). All community pharmacies are shown.

From the "The English Indices of Deprivation 2015 report:"

*"The Indices of Deprivation 2015 provide a set of relative measures of deprivation for small areas (Lower-layer Super Output Areas) across England, based on seven different domains of deprivation:*

- *Income Deprivation*
- *Employment Deprivation*
- *Education, Skills and Training Deprivation*
- *Health Deprivation and Disability*
- *Crime*
- *Barriers to Housing and Services*
- *Living Environment Deprivation*

*Each of these domains is based on a basket of indicators. ... The Index of Multiple Deprivation 2015 combines information from the seven domains to produce an overall relative measure of deprivation."*

The overall Index of Multiple Deprivation is represented as a national decile where LSOAs labelled as decile '1' are those in the most deprived 10% of LSOAs in England.

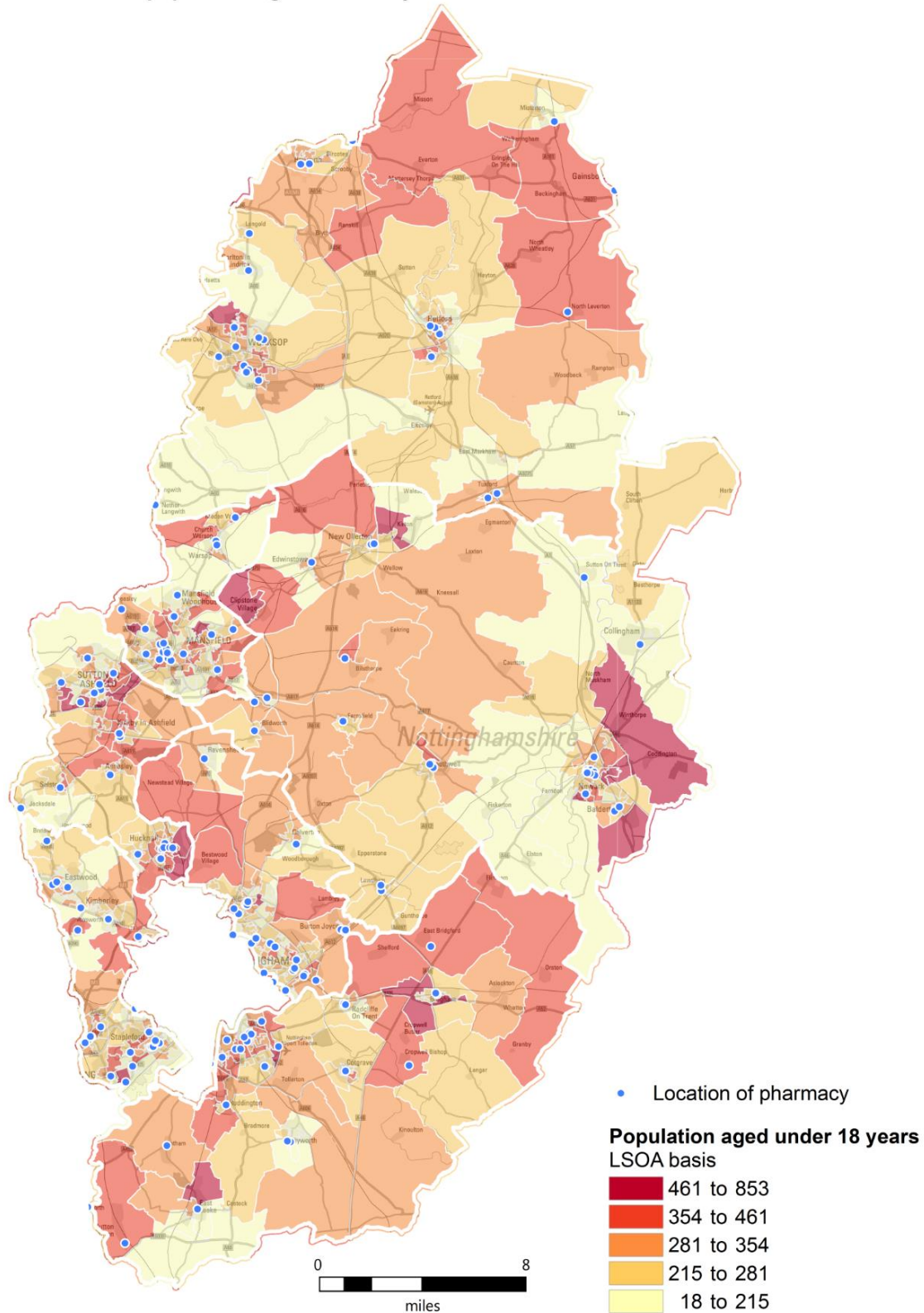
### Sources

All **population** data: ONS 'Lower Super Output Area Mid-Year Population Estimates for mid-2015', URL: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/lowersuperoutputareamidyearpopulationestimates> , last accessed October 2017

**Deprivation** data: "English indices of deprivation 2015", URL: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015> , last accessed November 2017.

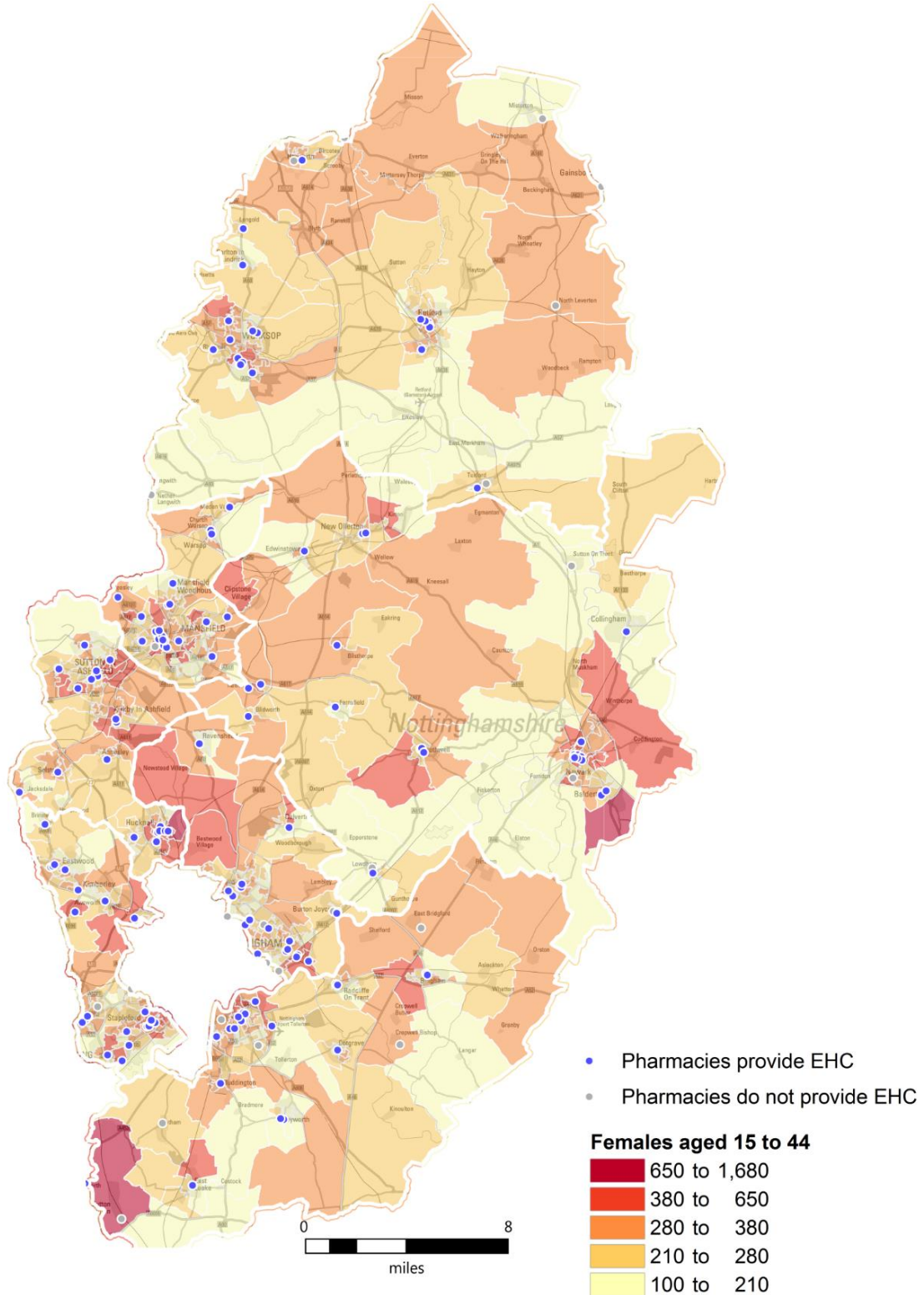
## A.1 Need based on population aged under 18 – LSOA

Need based on population aged under 18 years



## A.2 Need for EHC (females aged 15 to 44 as proxy) – LSOA

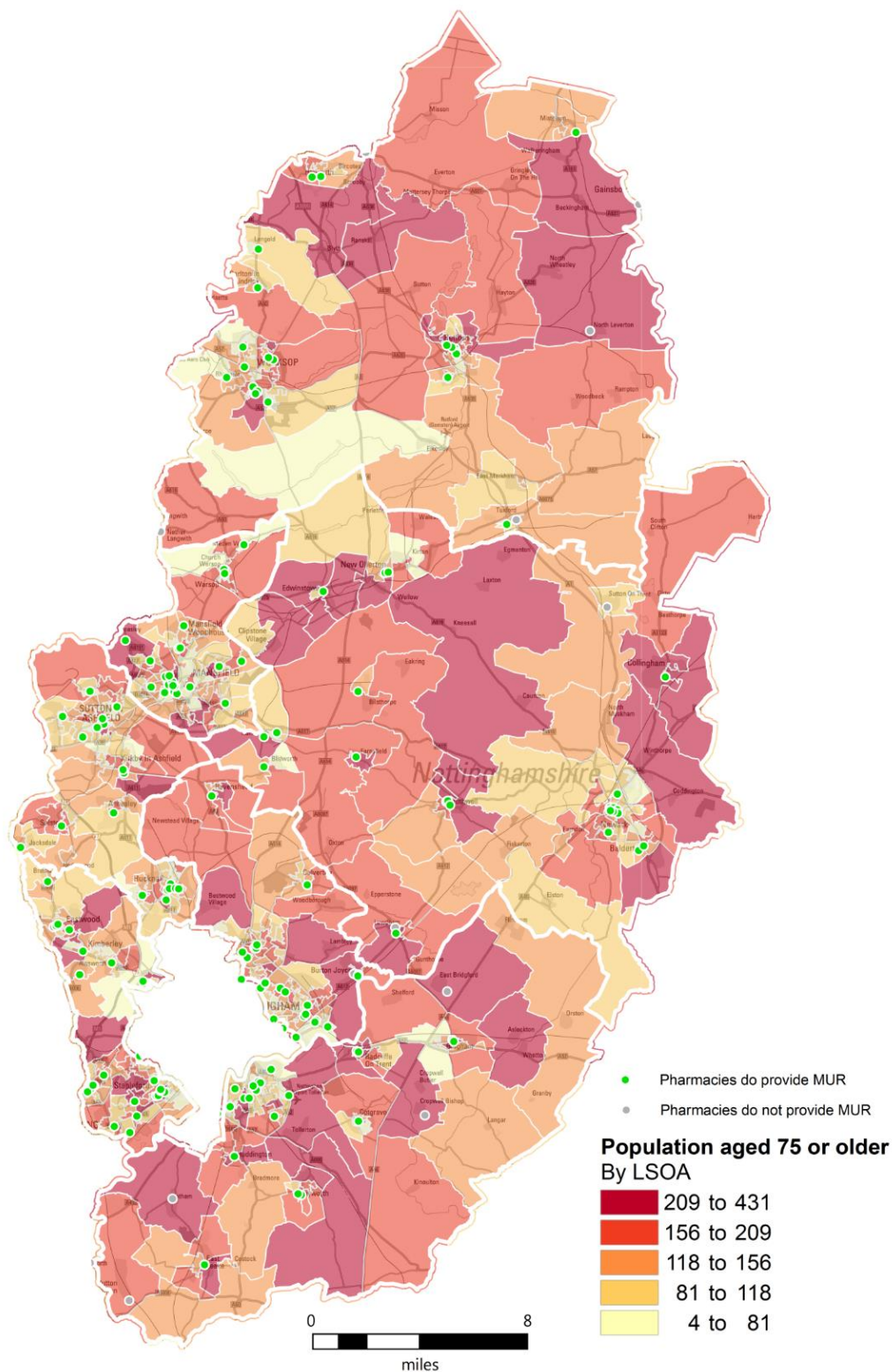
Need for EHC (all females aged 15 to 44 as proxy)





### A.3 Need for medicine use reviews (all persons aged 75 or older as proxy) – LSOA

Need for medicine use reviews (all persons aged 75 or older as proxy)



## A.4 Deprivation

### Nottinghamshire County

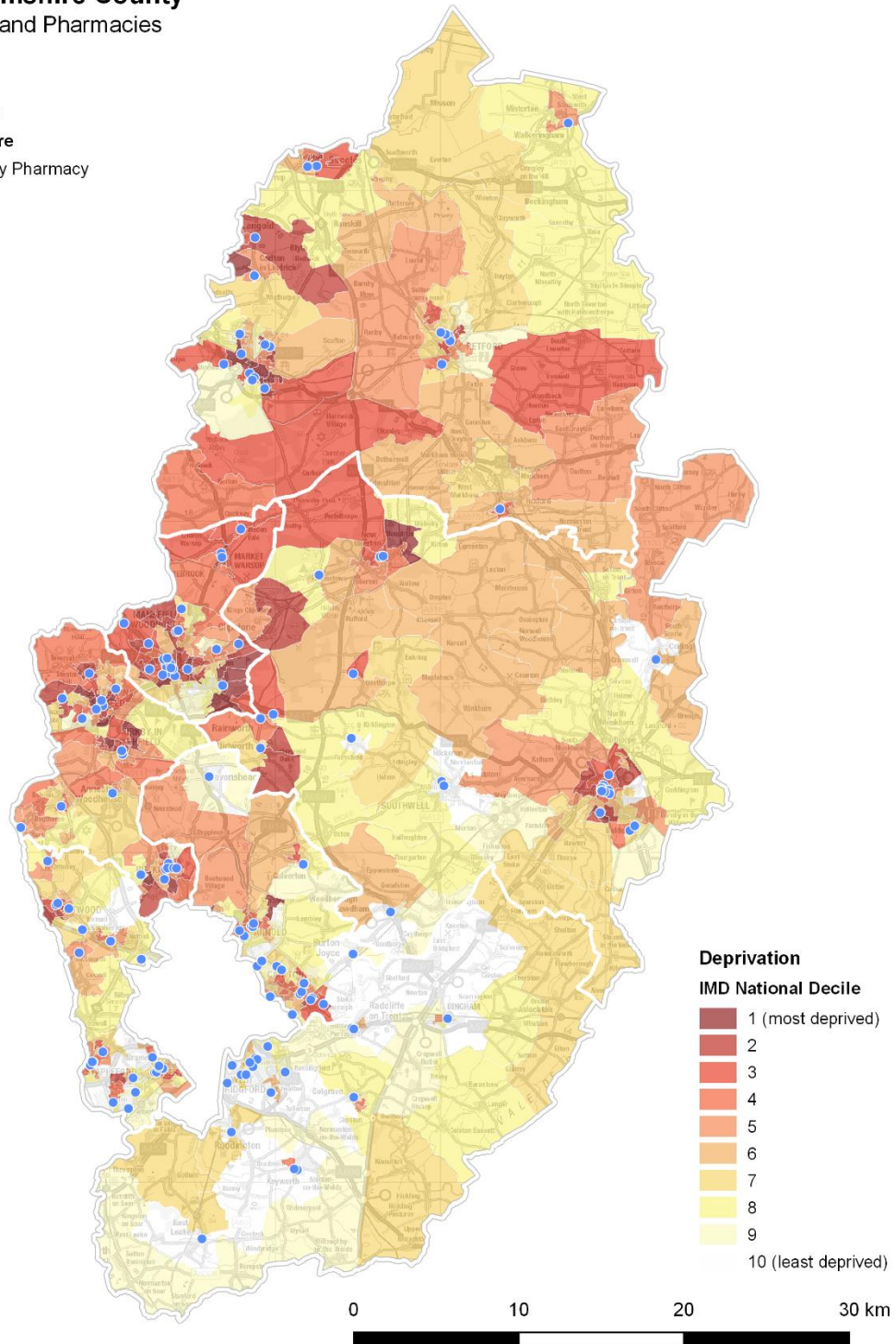
#### Deprivation and Pharmacies

#### Legend

##### Organisations

##### Nottinghamshire

- Community Pharmacy



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers, DCLG indices of deprivation

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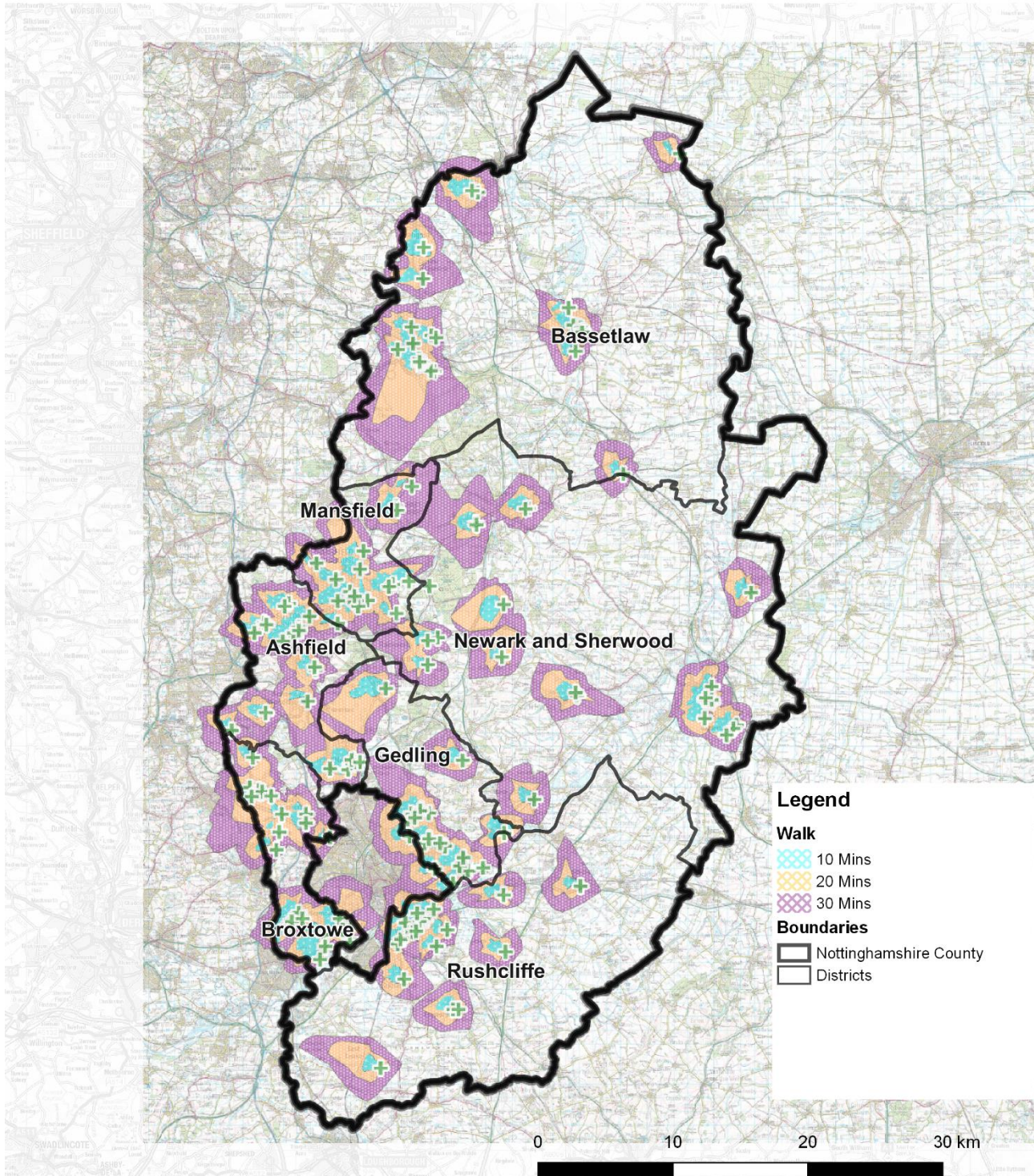
Produced by Nottinghamshire County Public Health Intelligence Team (IB)

## **B Drive and walking time analysis**



## B.1 Walking time to County Pharmacies

### Nottinghamshire County Pharmacies - Walk and Drive time



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

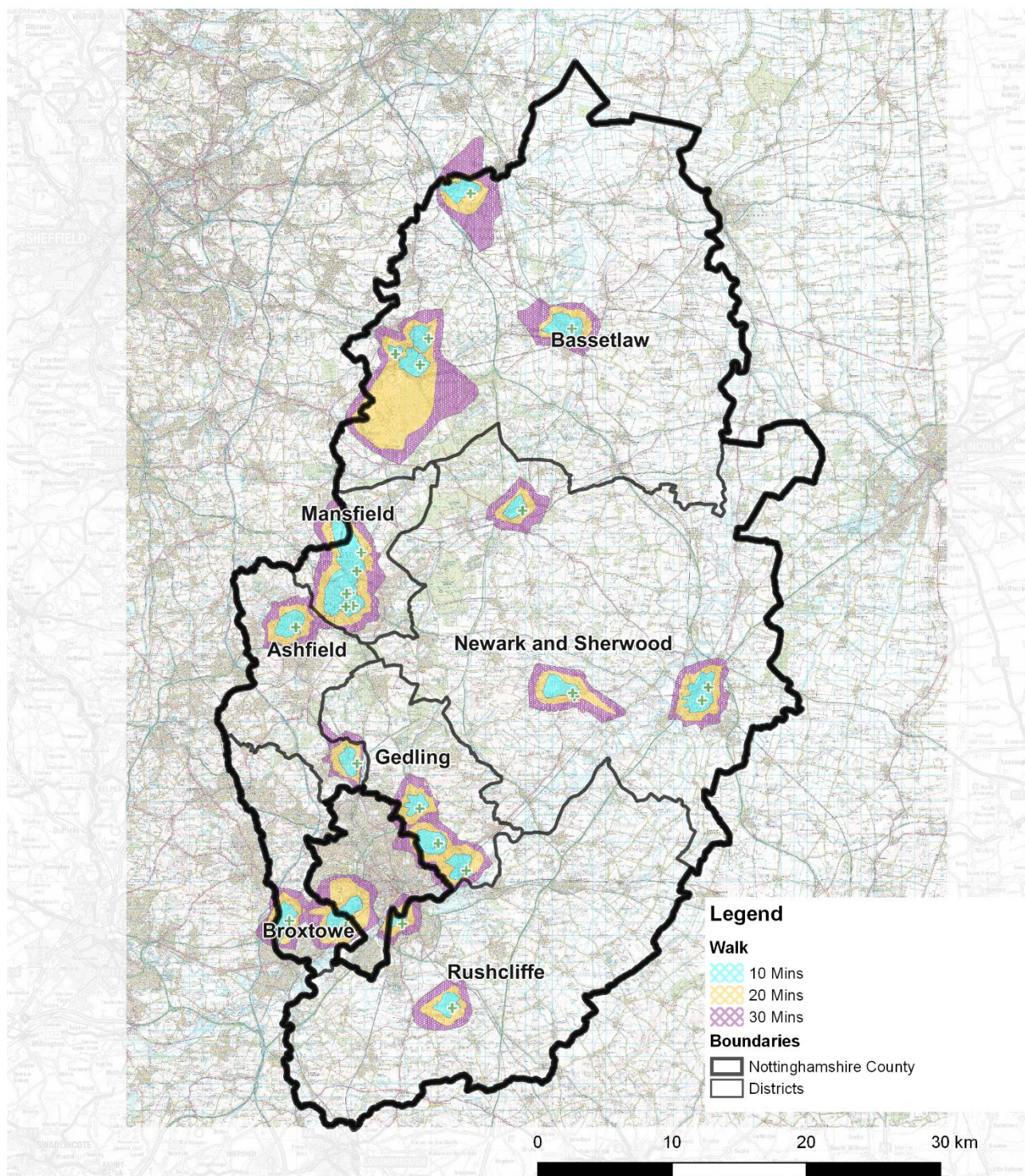
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## B.2 Walking time to 100hr Pharmacies

### Nottinghamshire County Pharmacies - Walk and Drive time



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

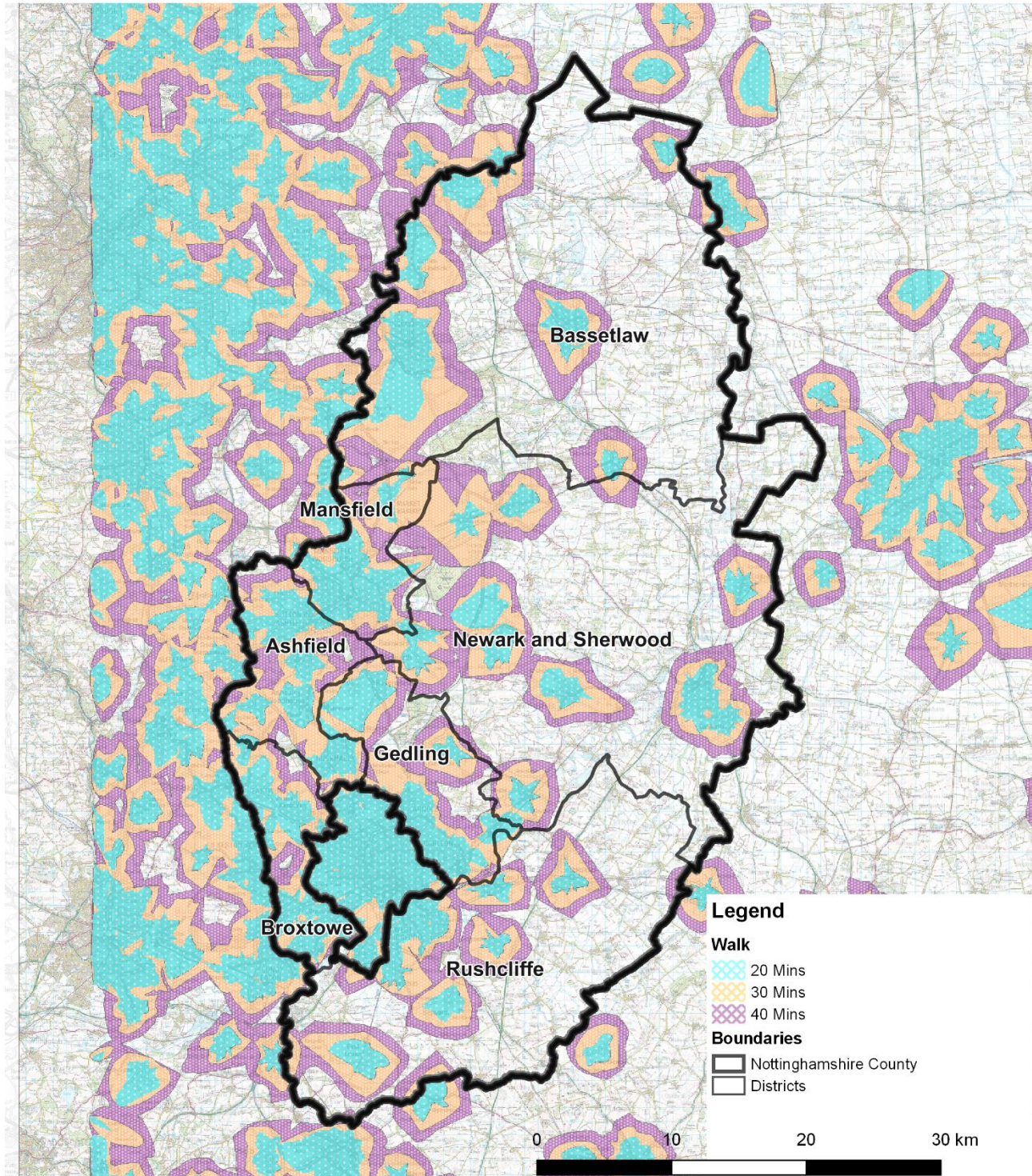
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Produced by Nottinghamshire County Public Health Intelligence Team (IB)



### B.3 Walking time to all pharmacies including neighbouring areas

#### Nottinghamshire County Pharmacies - Walk and Drive time



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

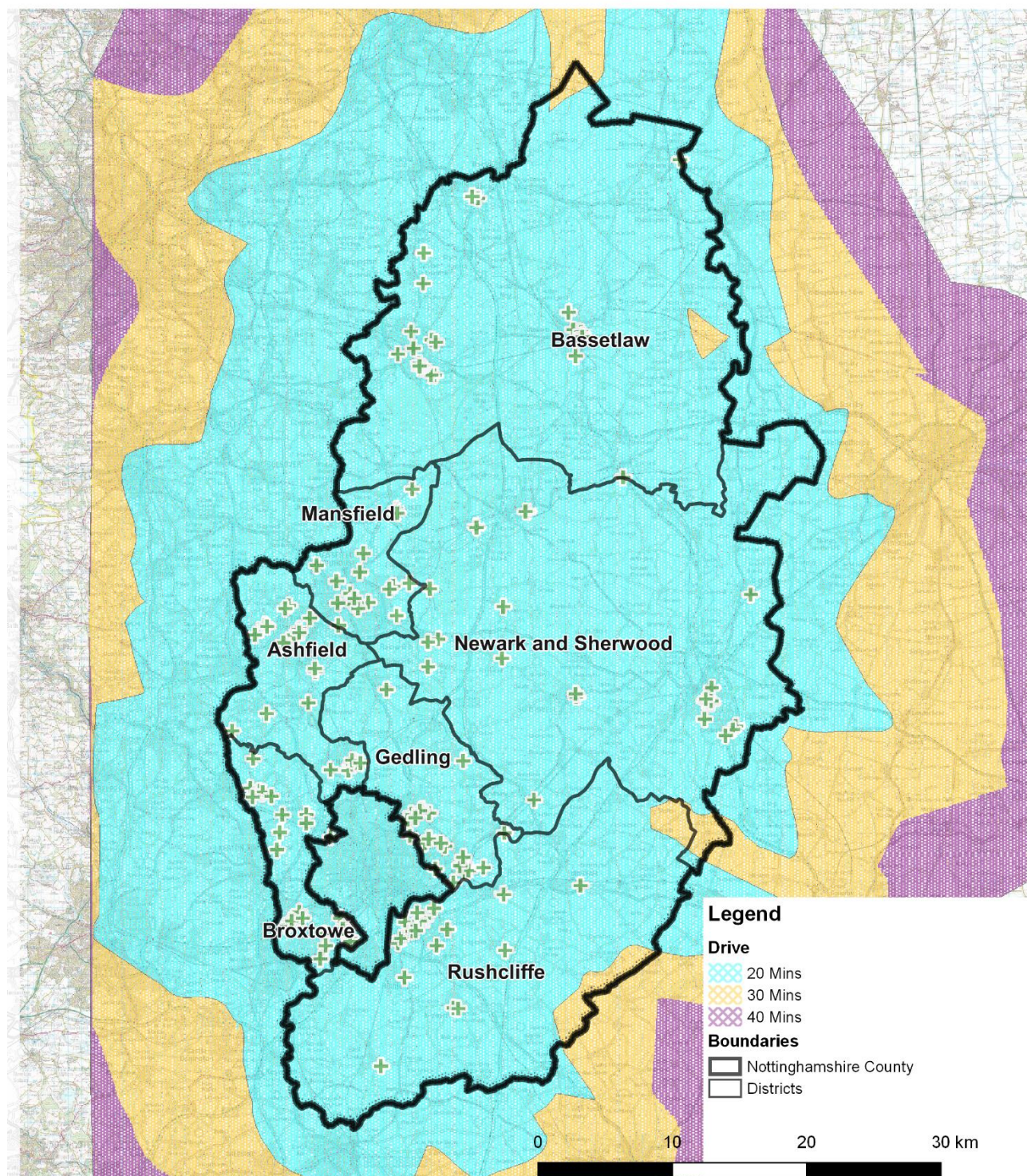
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## B.4 Drive time to all County pharmacies

### Nottinghamshire County Pharmacies - Walk and Drive time



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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## **C Location of pharmacies commissioned to provide specific services**

Services known to commission a service are shown

Simple distance buffers around these pharmacies are included – crude way to assess walk time’ – to aid inspection of gaps – see calculated walk-time figure for a more accurate walk-time determination

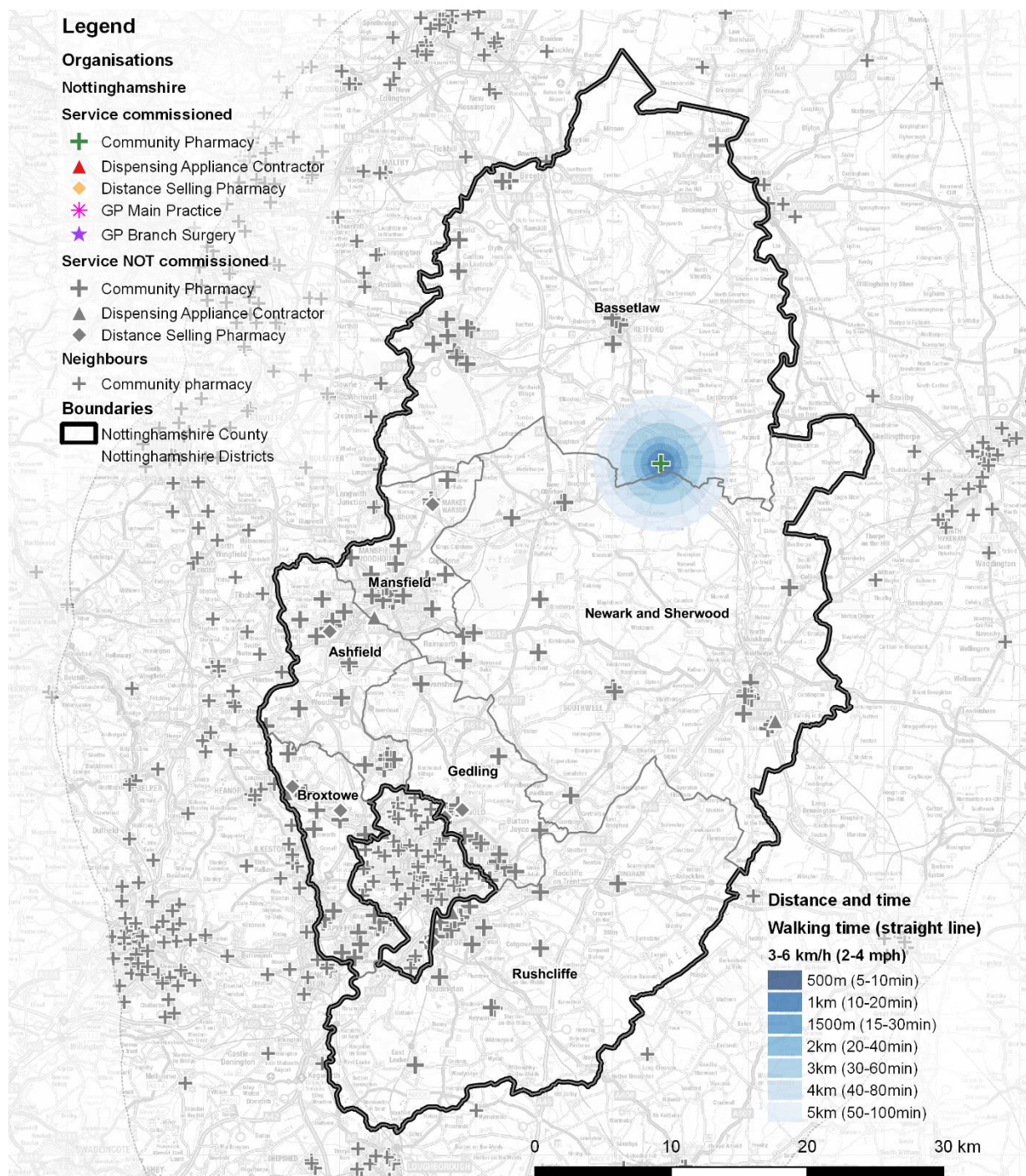


## C.1 Advanced - Appliance Use Reviews

aur

### Nottinghamshire County

Pharmacies providing Advanced service - Appliance Use Reviews



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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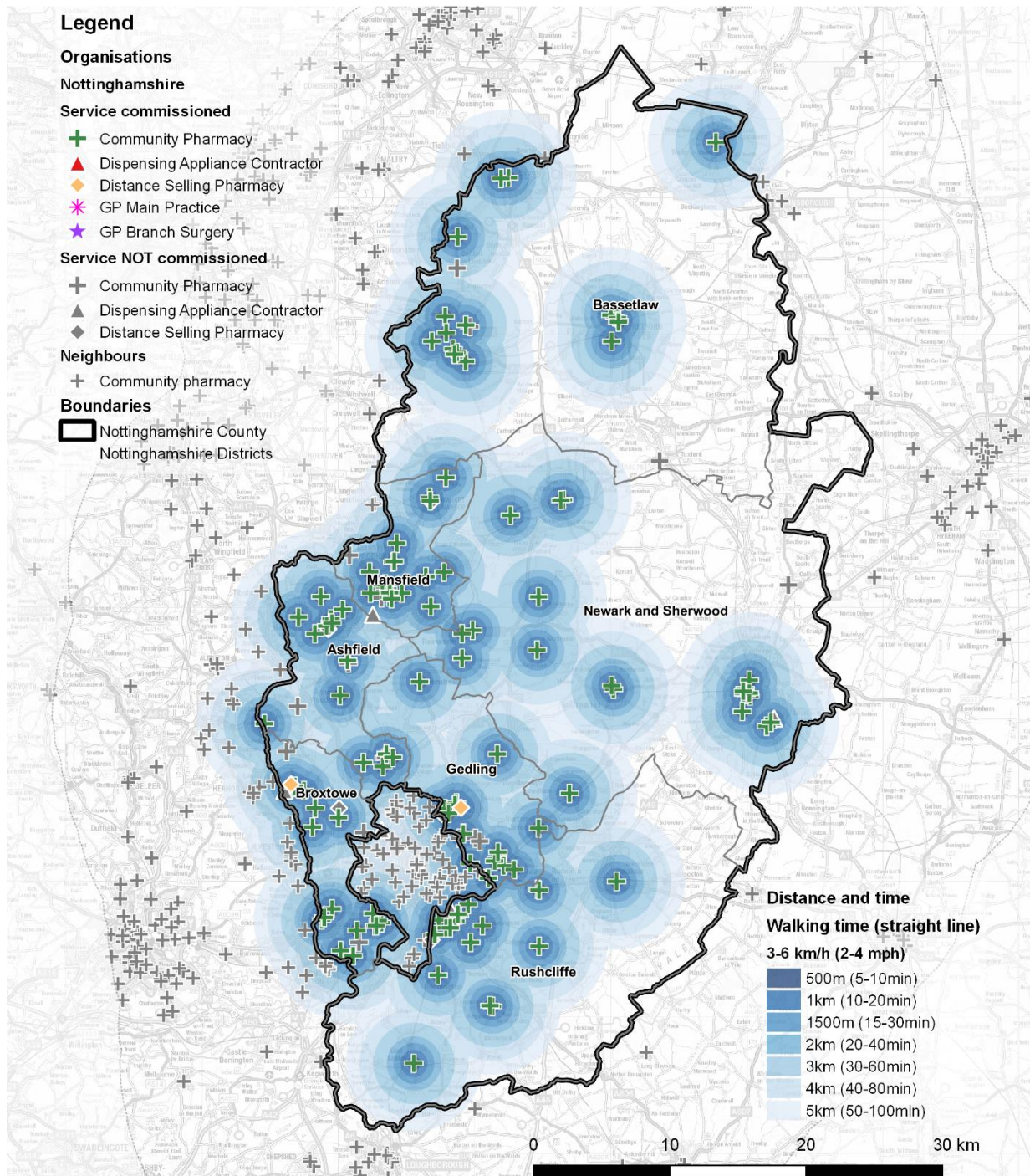


## C.2 Advanced – Flu Vaccination

flu

### Nottinghamshire County

Pharmacies providing Advanced service - Flu Vaccination



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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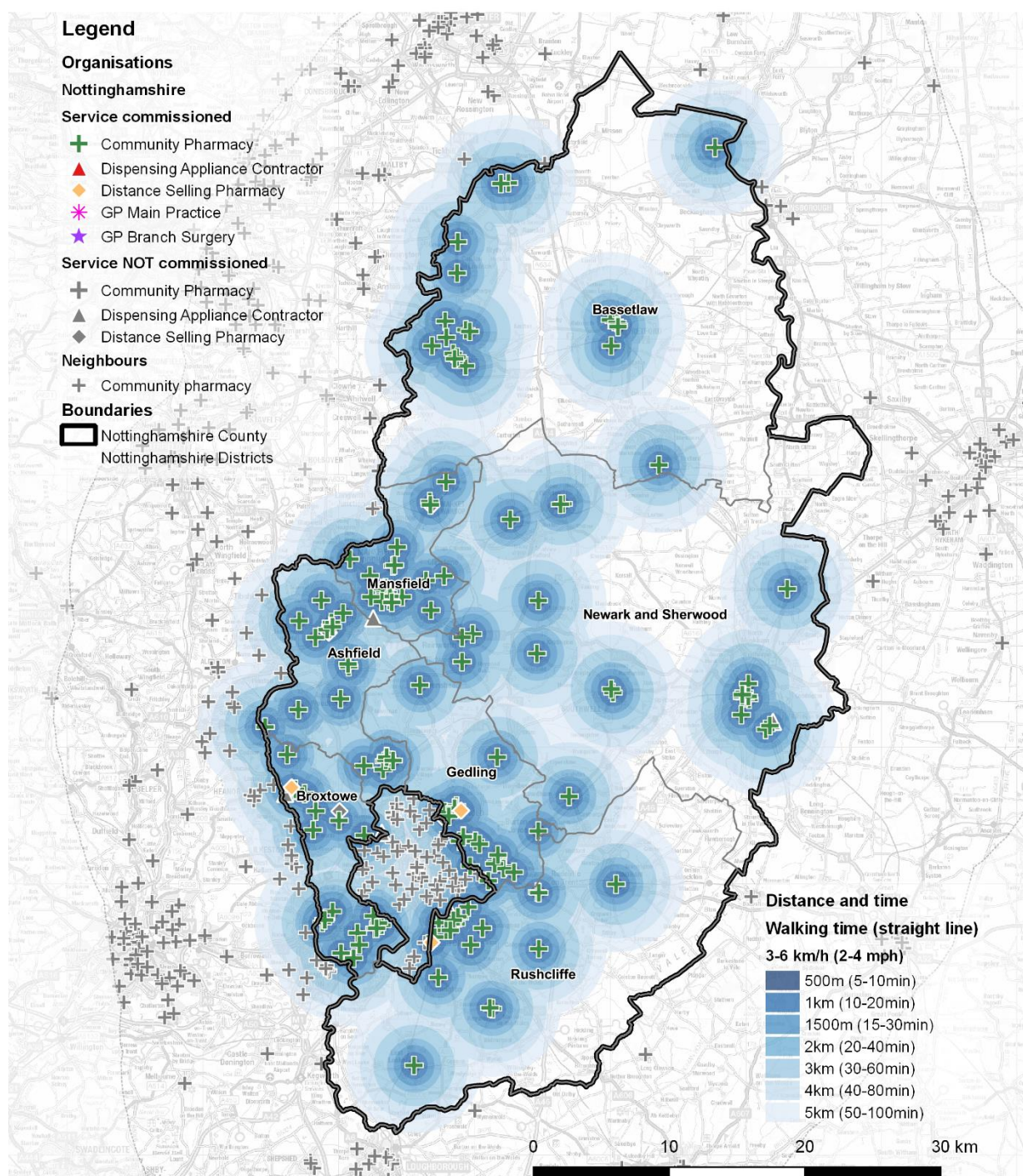


## C.3 Advanced – Medicines Use Reviews (MUR)

mur

### Nottinghamshire County

Pharmacies providing Advanced service - Medicines Use Reviews



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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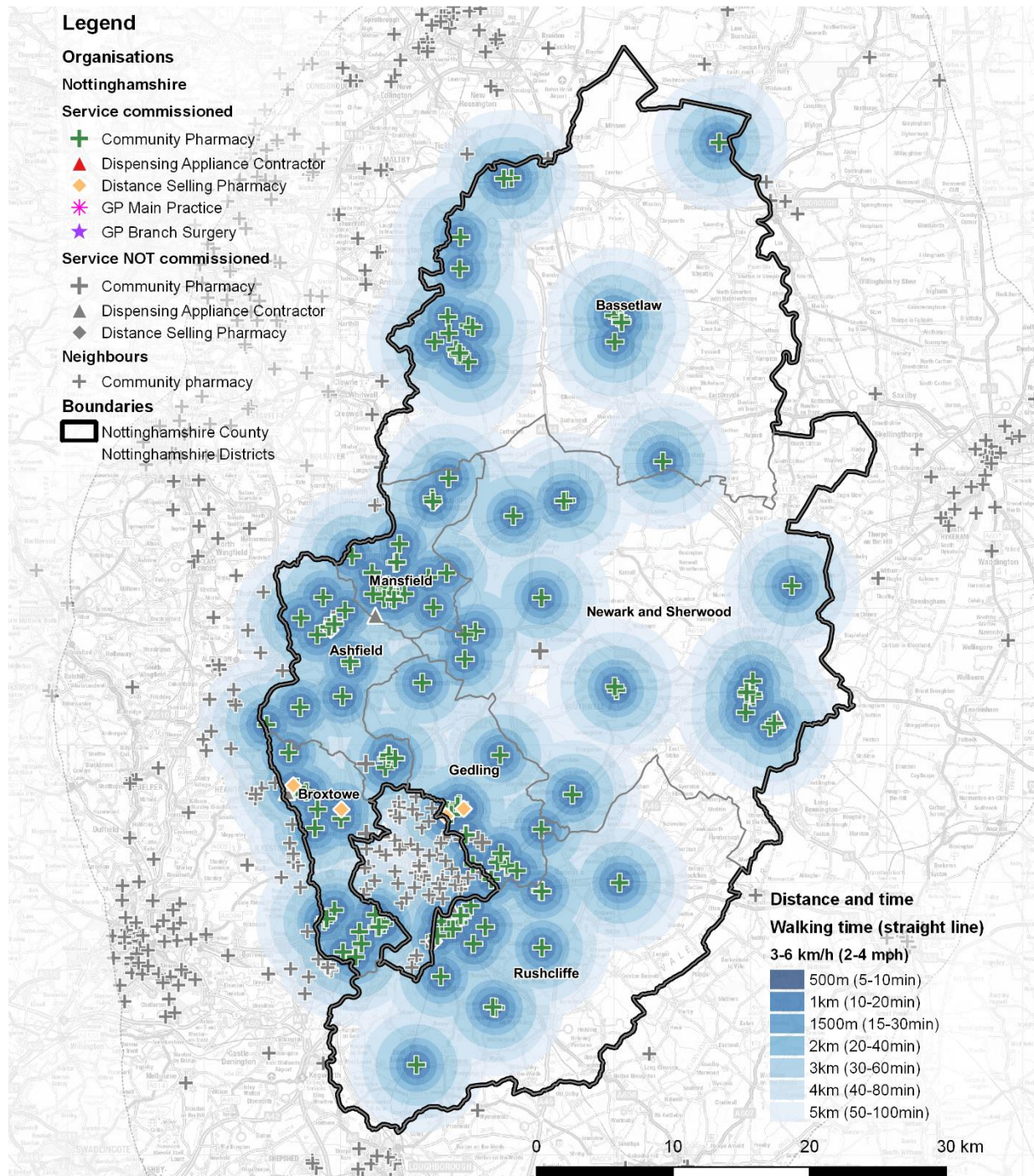


## C.4 Advanced – New Medicine Service (NMS)

nms

### Nottinghamshire County

Pharmacies providing Advanced service - New Medicine Service



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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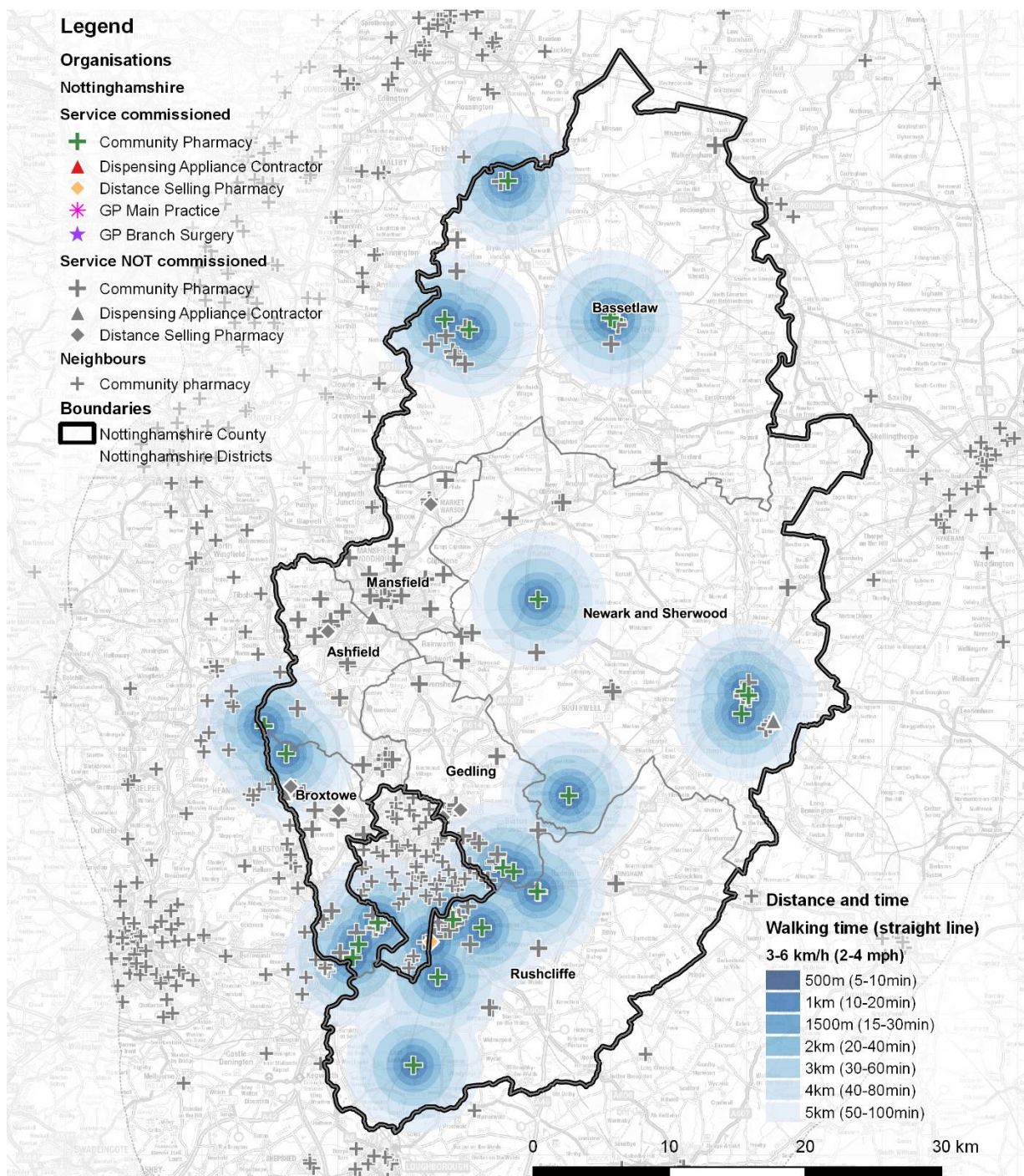


## C.5 Advanced – NHS Urgent Medicine Supply (NUM)

num

### Nottinghamshire County

Pharmacies providing Advanced service - NHS Urgent Medicine Supply



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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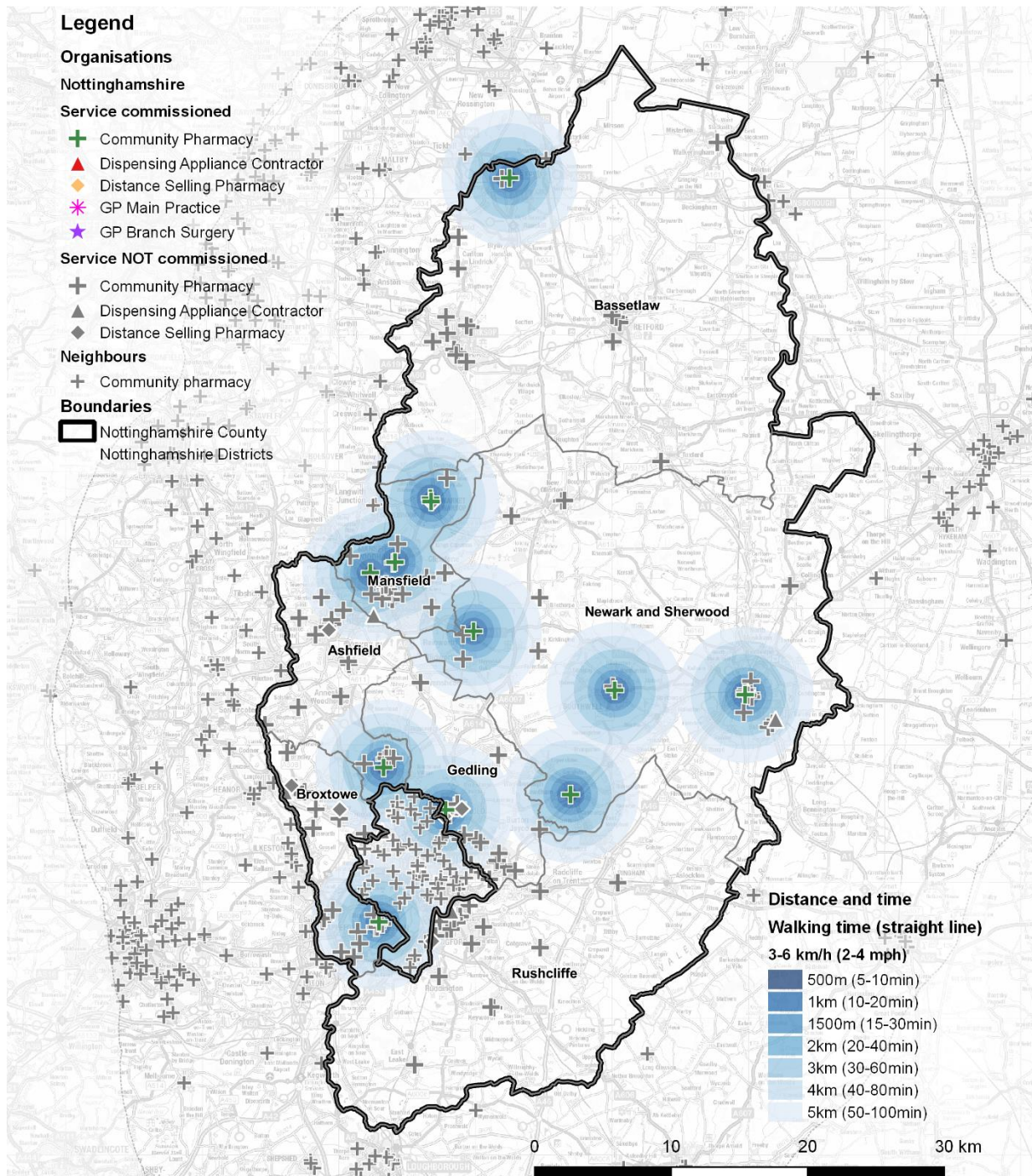


## C.6 Advanced – Stoma Appliance Customisation

sac

### Nottinghamshire County

Pharmacies providing Advanced service - Stoma Appliance Customisation



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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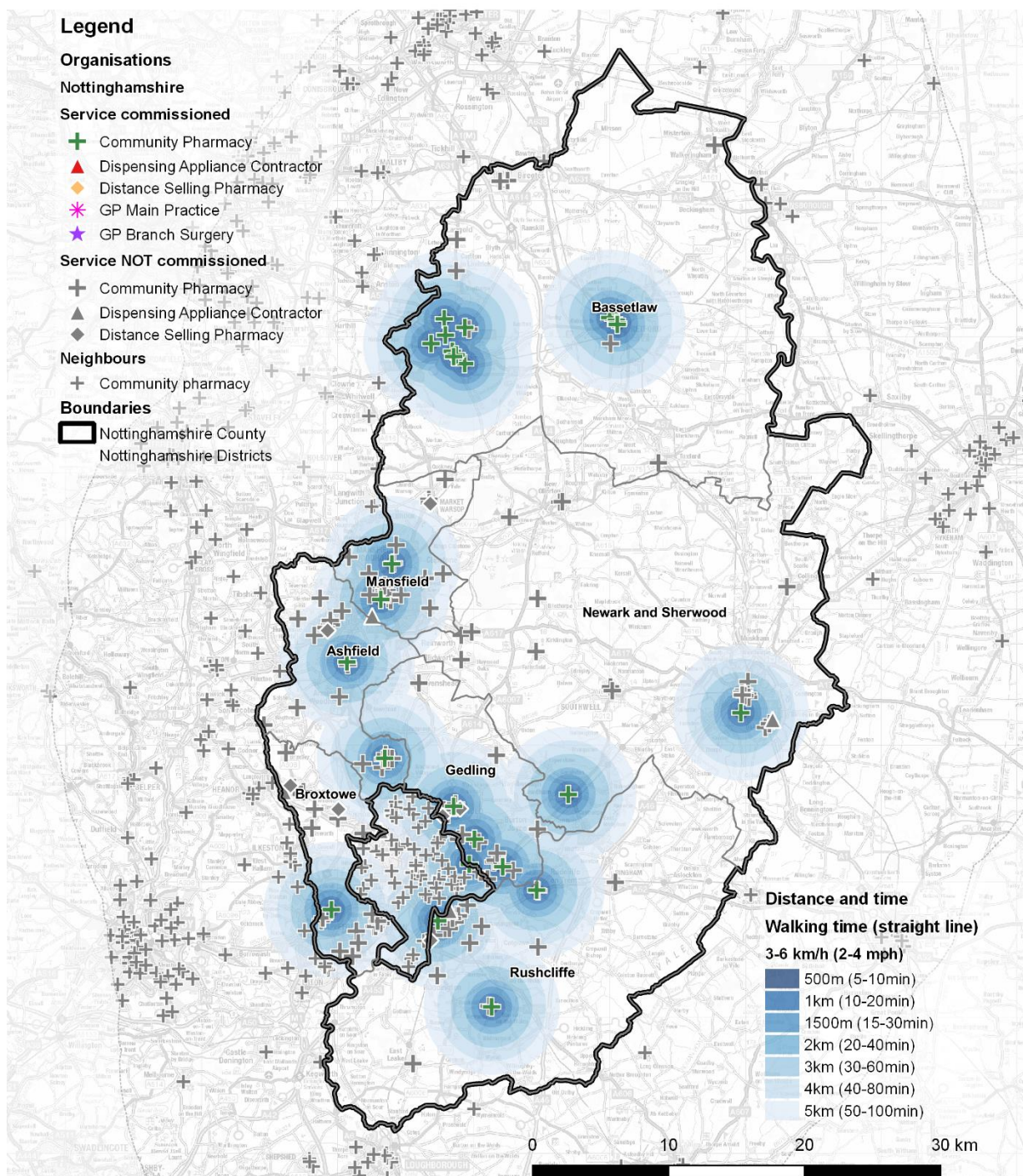


## C.7 Locally commissioned – Out of Hours Rota (Christmas and Easter opening)

che

### Nottinghamshire County

Pharmacies providing Locally Commissioned service - Out of Hours Rota



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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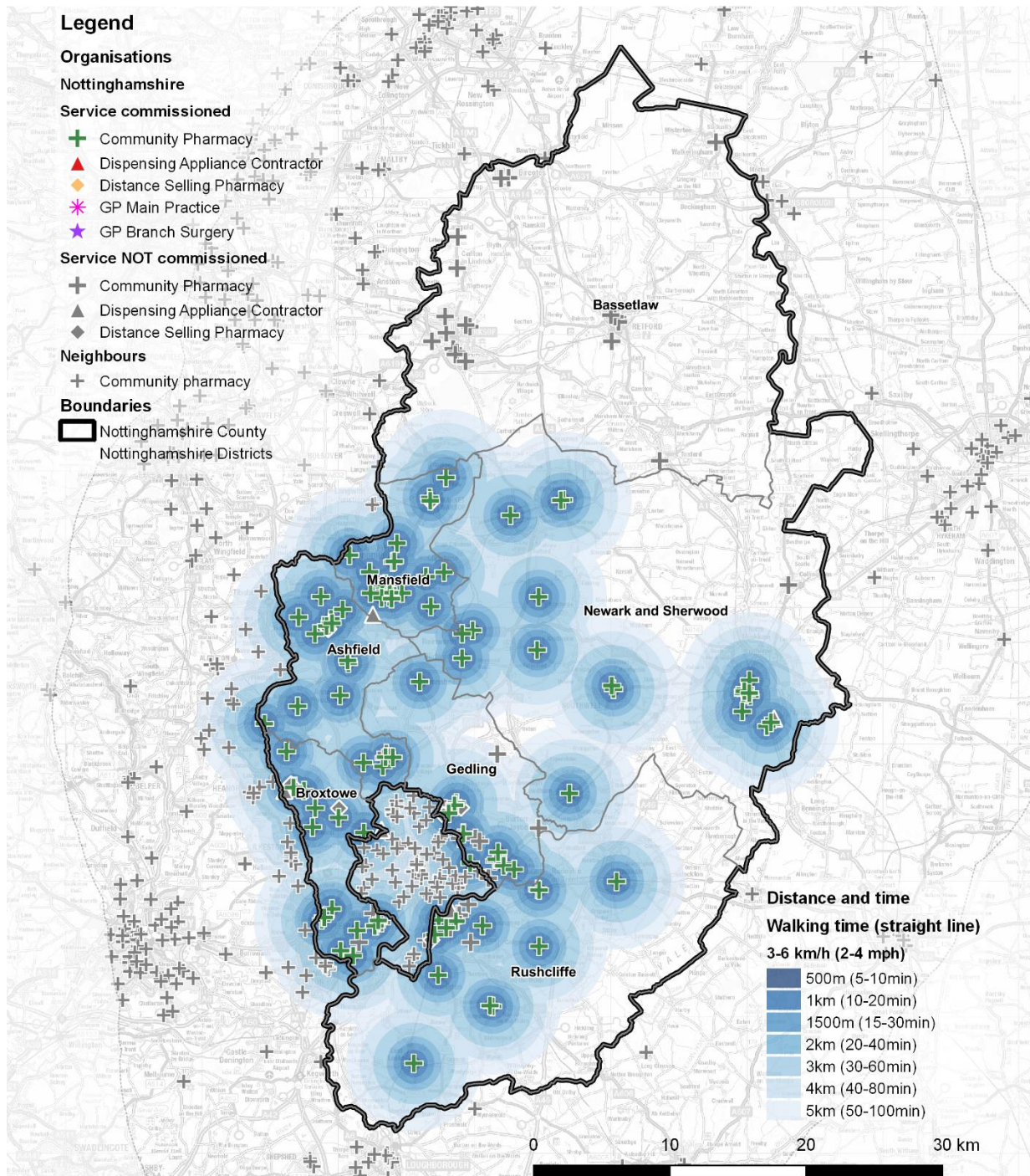


## C.8 Locally commissioned – Emergency Supply Service

ess

### Nottinghamshire County

Pharmacies providing Locally Commissioned service - Emergency Supply Service



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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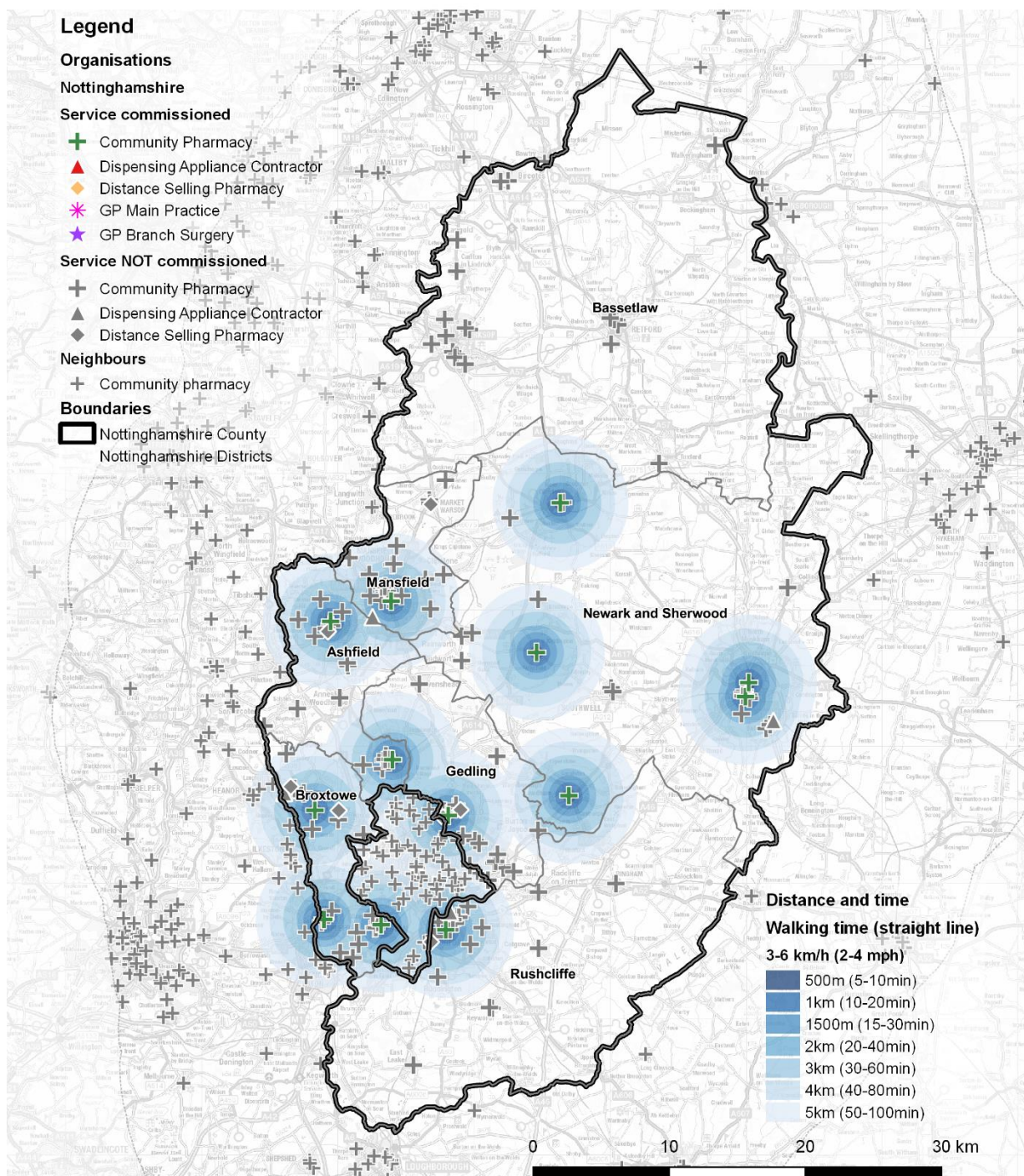


## C.9 Locally commissioned – Palliative Care Drug Stockists Scheme

pcd

### Nottinghamshire County

Pharmacies providing Locally Commissioned service - Palliative Care Drug Stockists Scheme



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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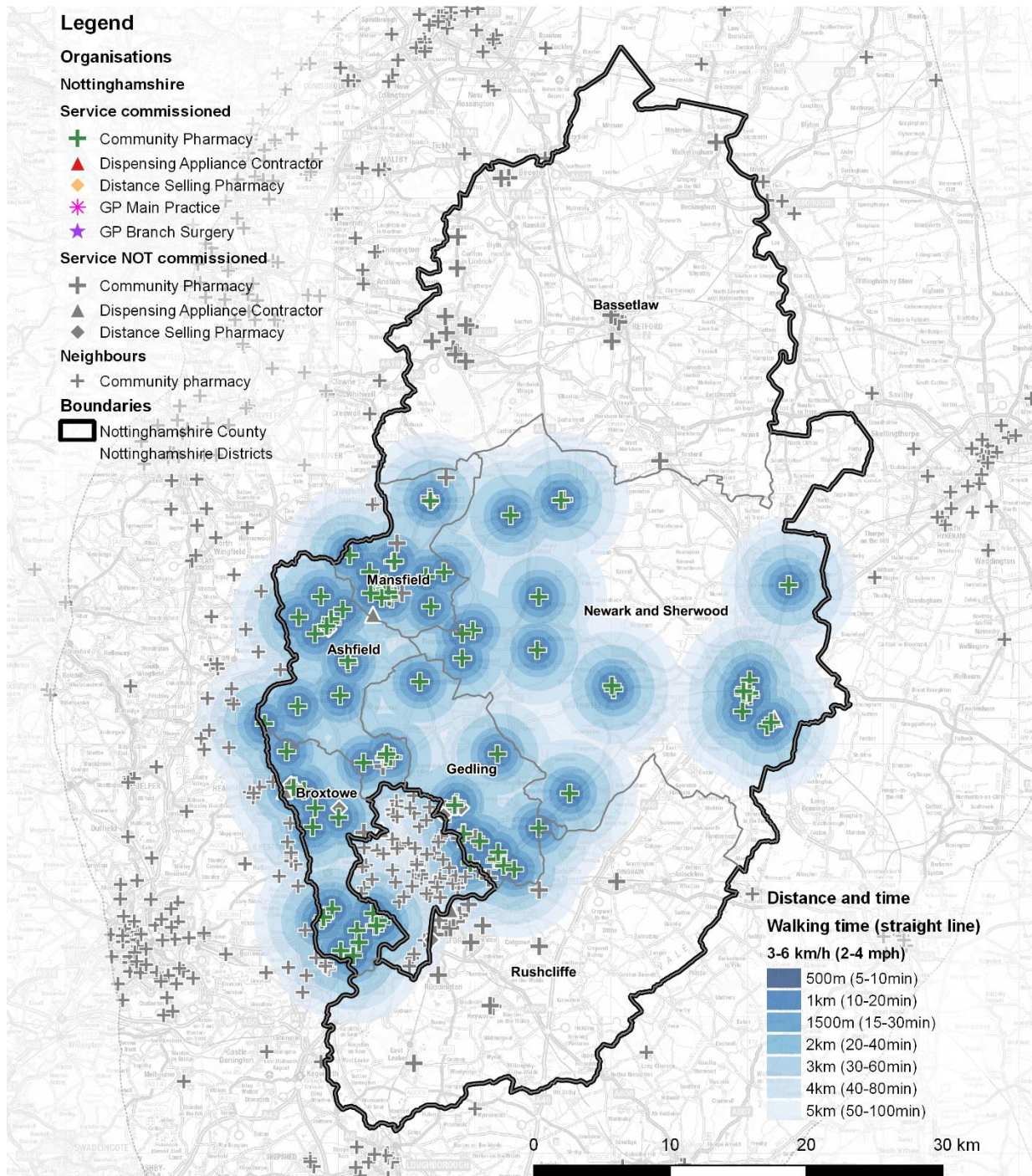


## C.10 Locally commissioned – Pharmacy First

ph1

### Nottinghamshire County

Pharmacies providing Locally Commissioned service - Pharmacy First



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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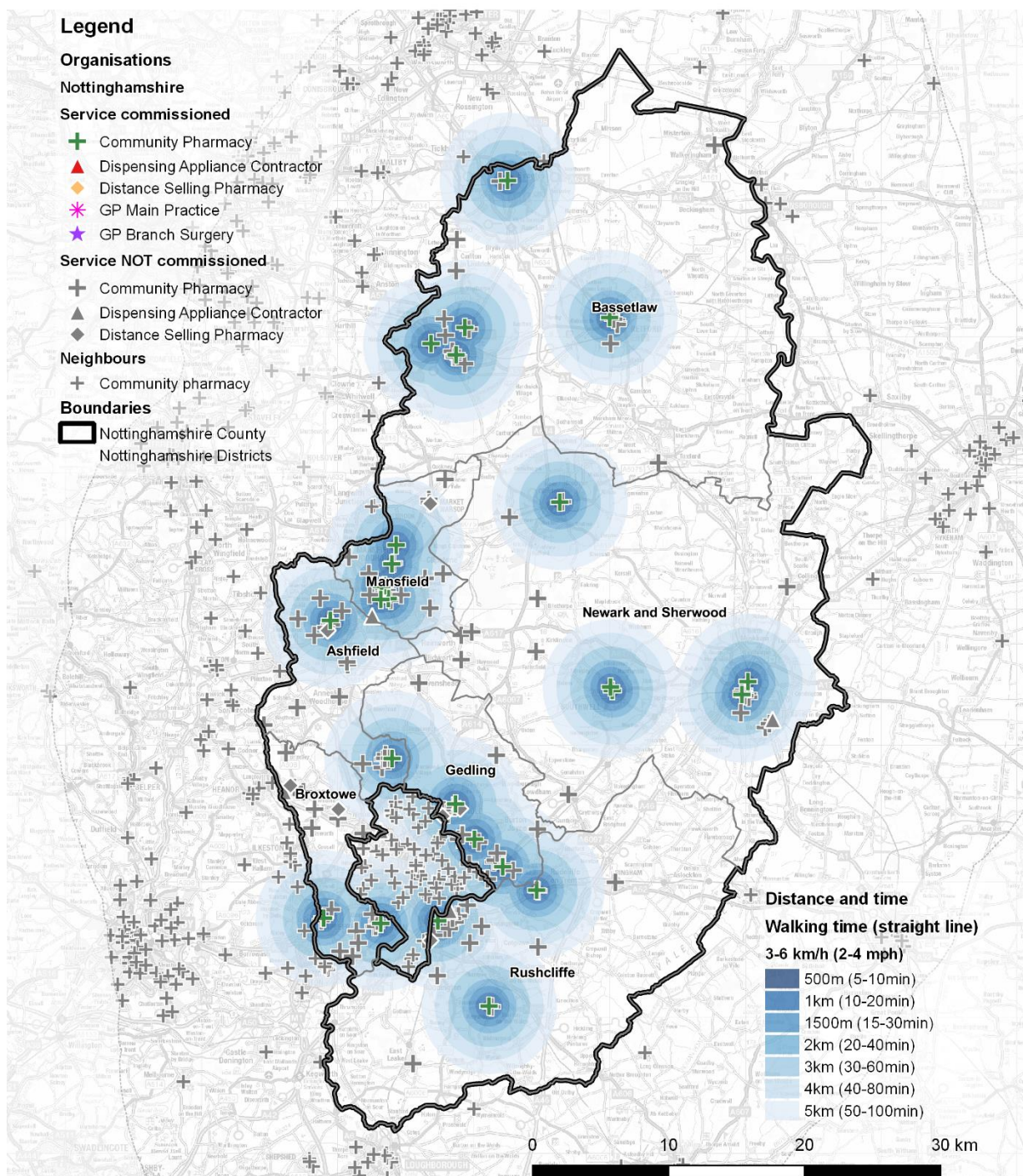


**C.11 Core – Contracted Hours – 100 hours**

cho

**Nottinghamshire County**

Pharmacies providing Core service - Contracted hours - 100



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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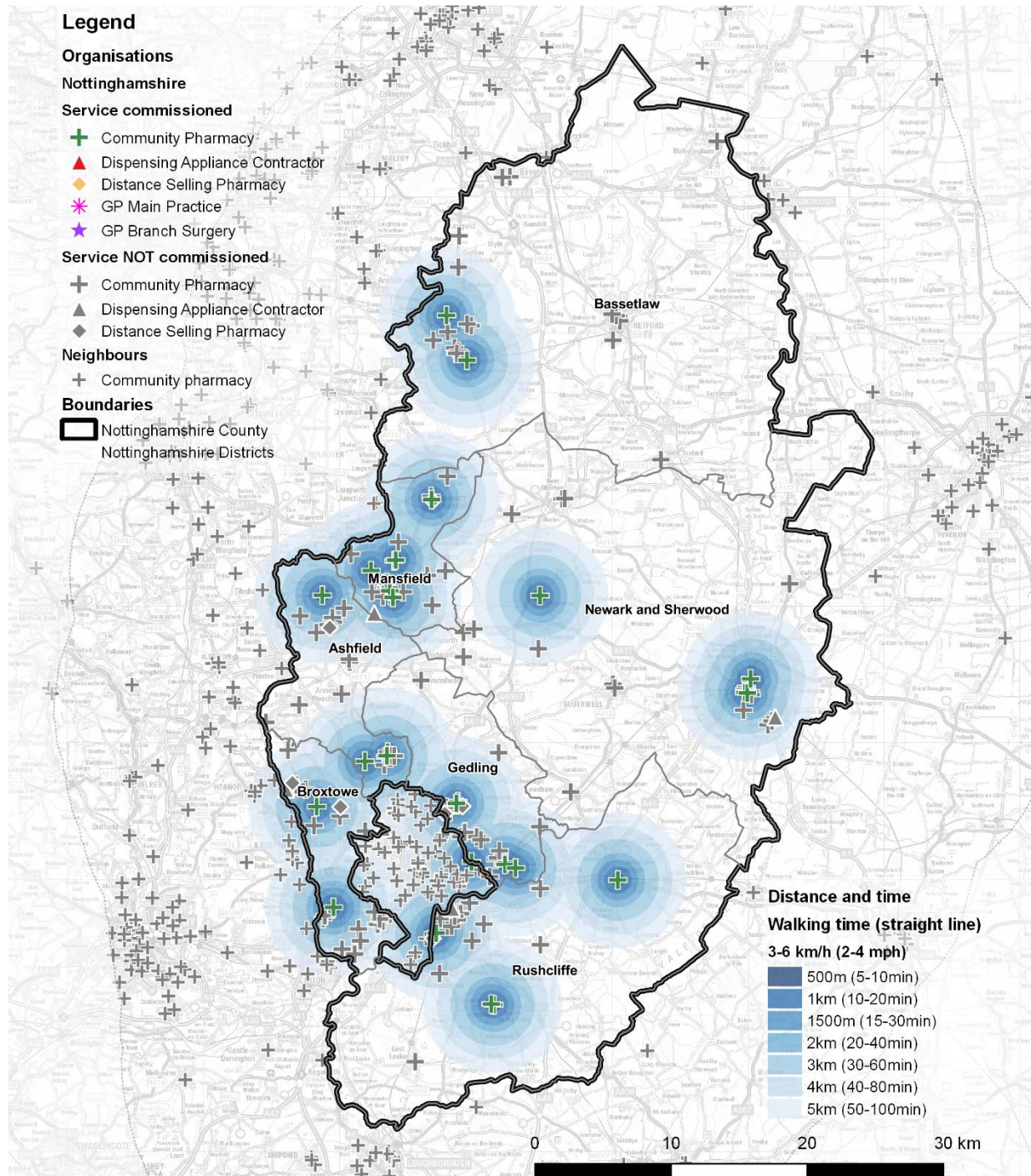
## C.12

### Commissioned by Nottinghamshire County Council – C-Card Scheme – Pick-up only

ccd

#### Nottinghamshire County

Pharmacies providing Commissioned by Nottinghamshire County Council service - C-Card scheme. Pick-up only



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

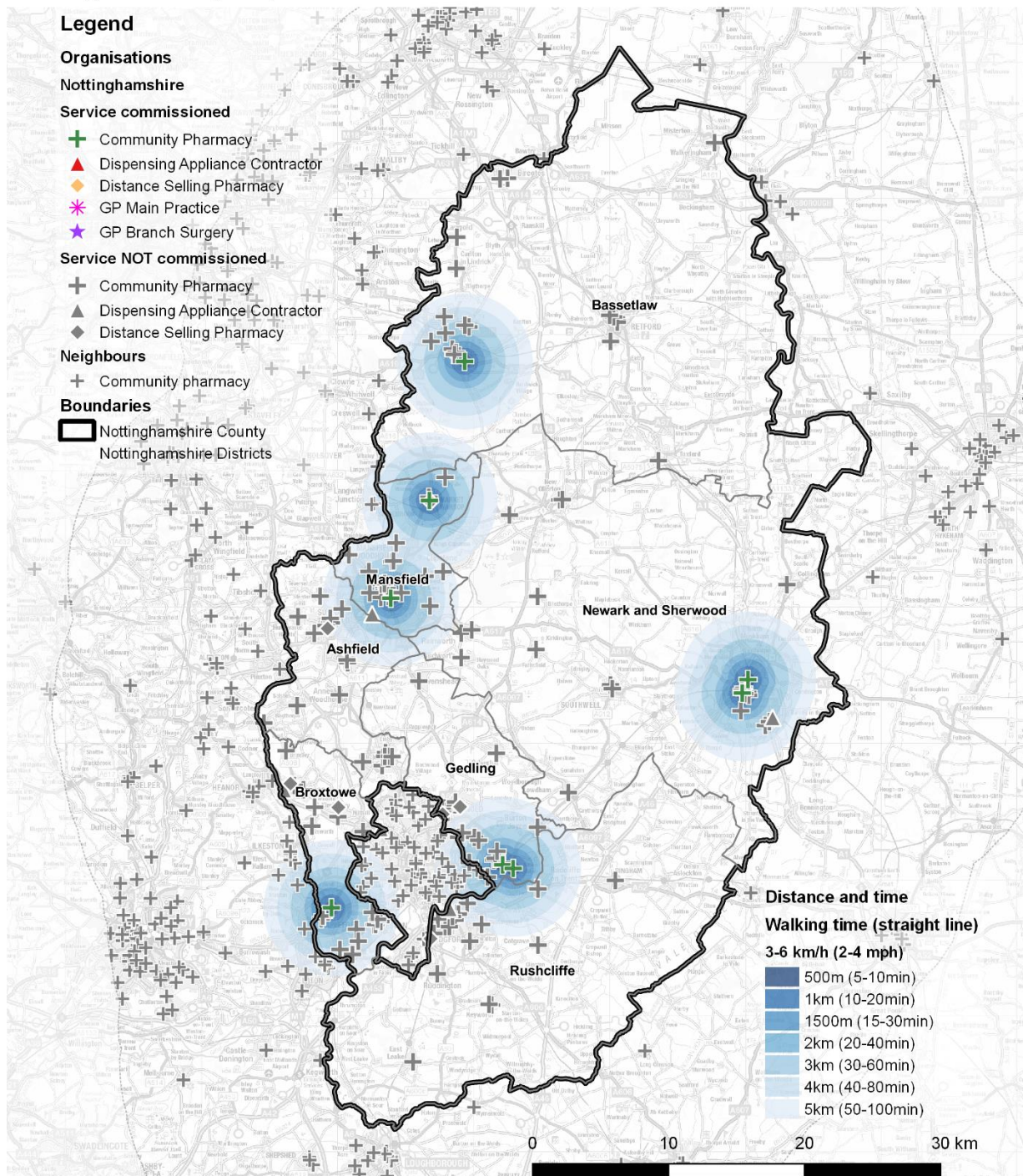
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## Nottinghamshire County

Pharmacies providing Commissioned by Nottinghamshire County Council service - C-Card scheme.  
Registration and pick-up



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

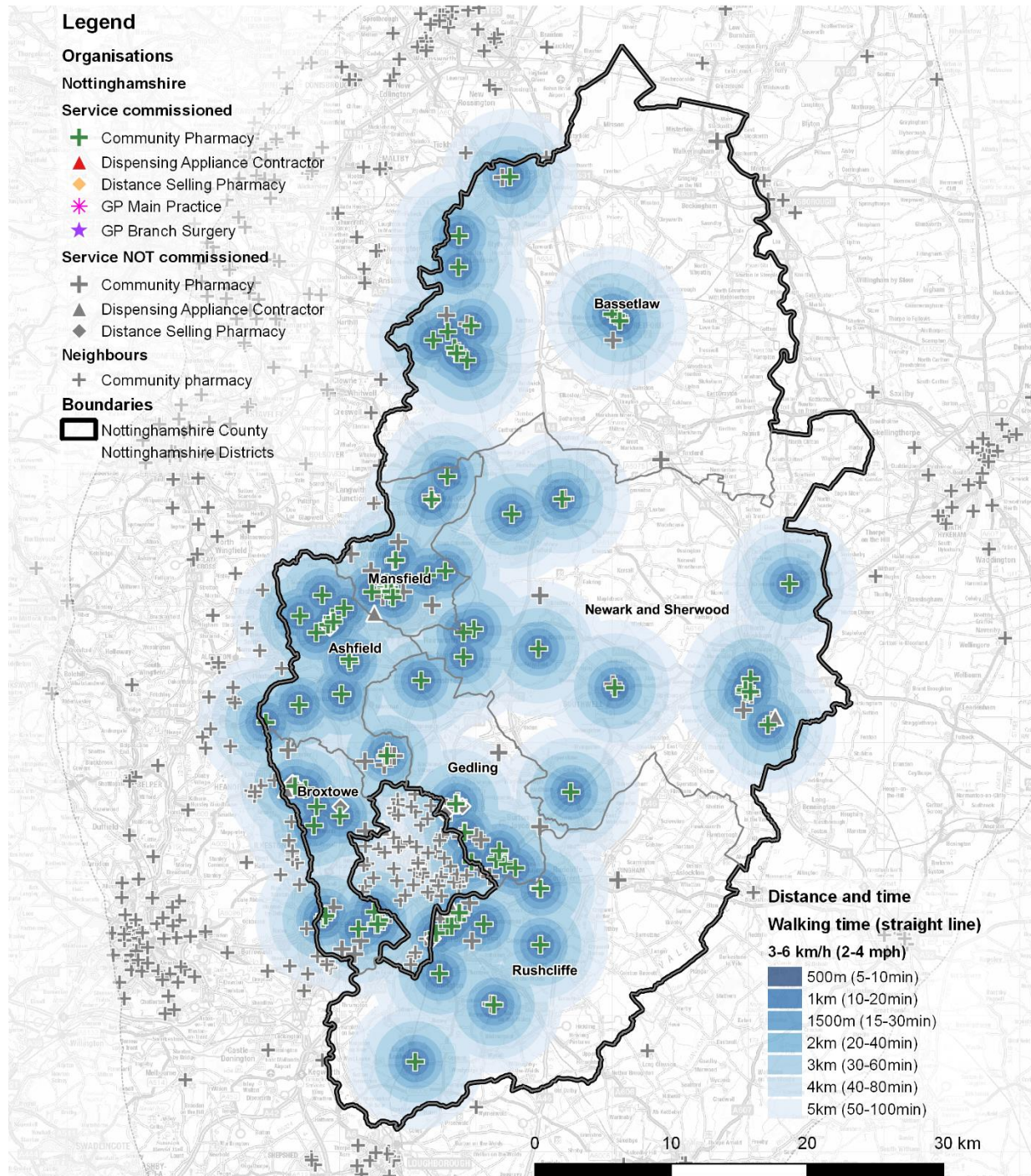
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**Nottinghamshire County**

Pharmacies providing Commissioned by Nottinghamshire County Council service - Emergency Hormonal Contraception



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

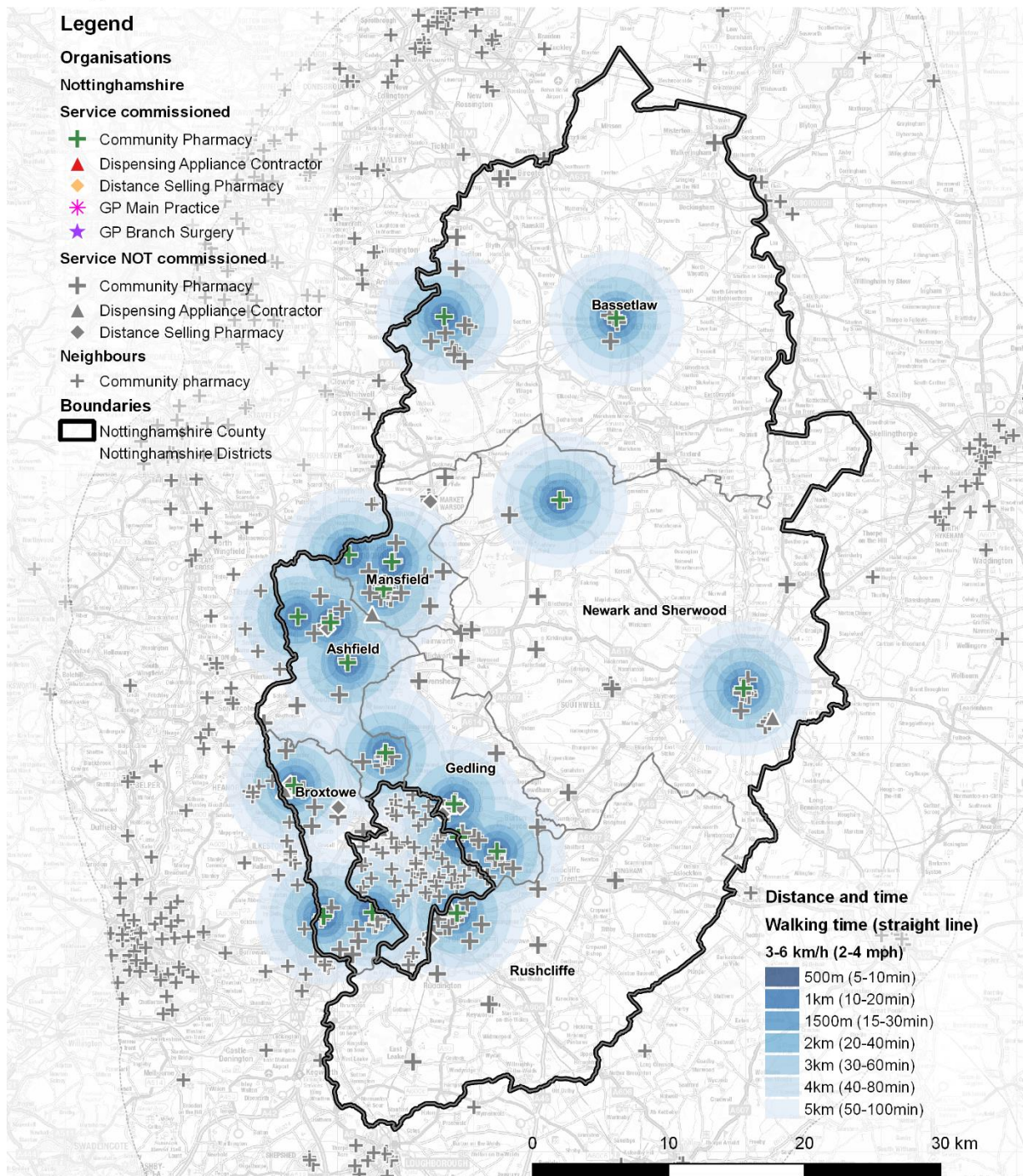
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**Nottinghamshire County**

Pharmacies providing Commissioned by Nottinghamshire County Council service - Needle Exchange Programmes



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

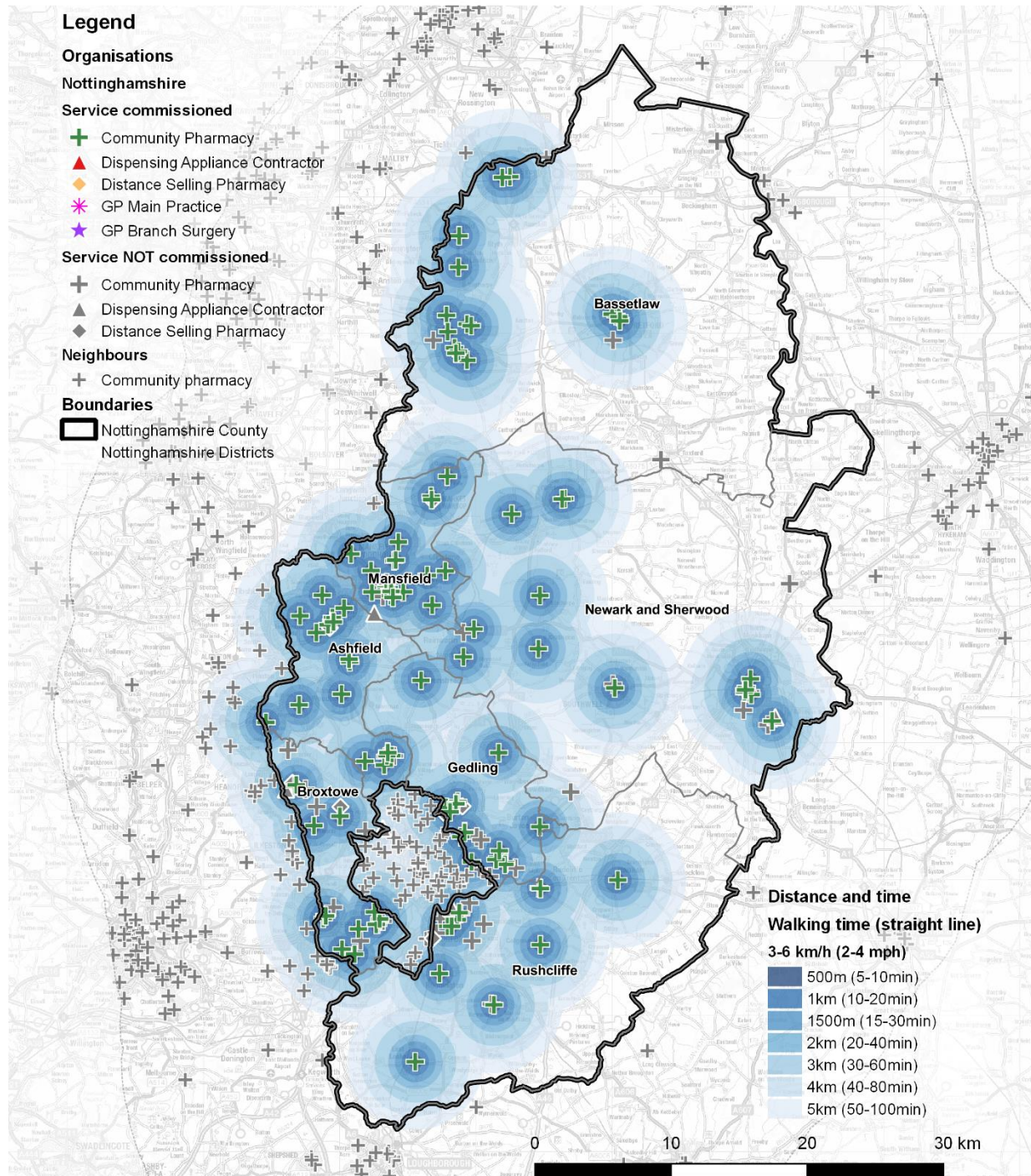
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**Nottinghamshire County**

Pharmacies providing Commissioned by Nottinghamshire County Council service - Supervised Consumption



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

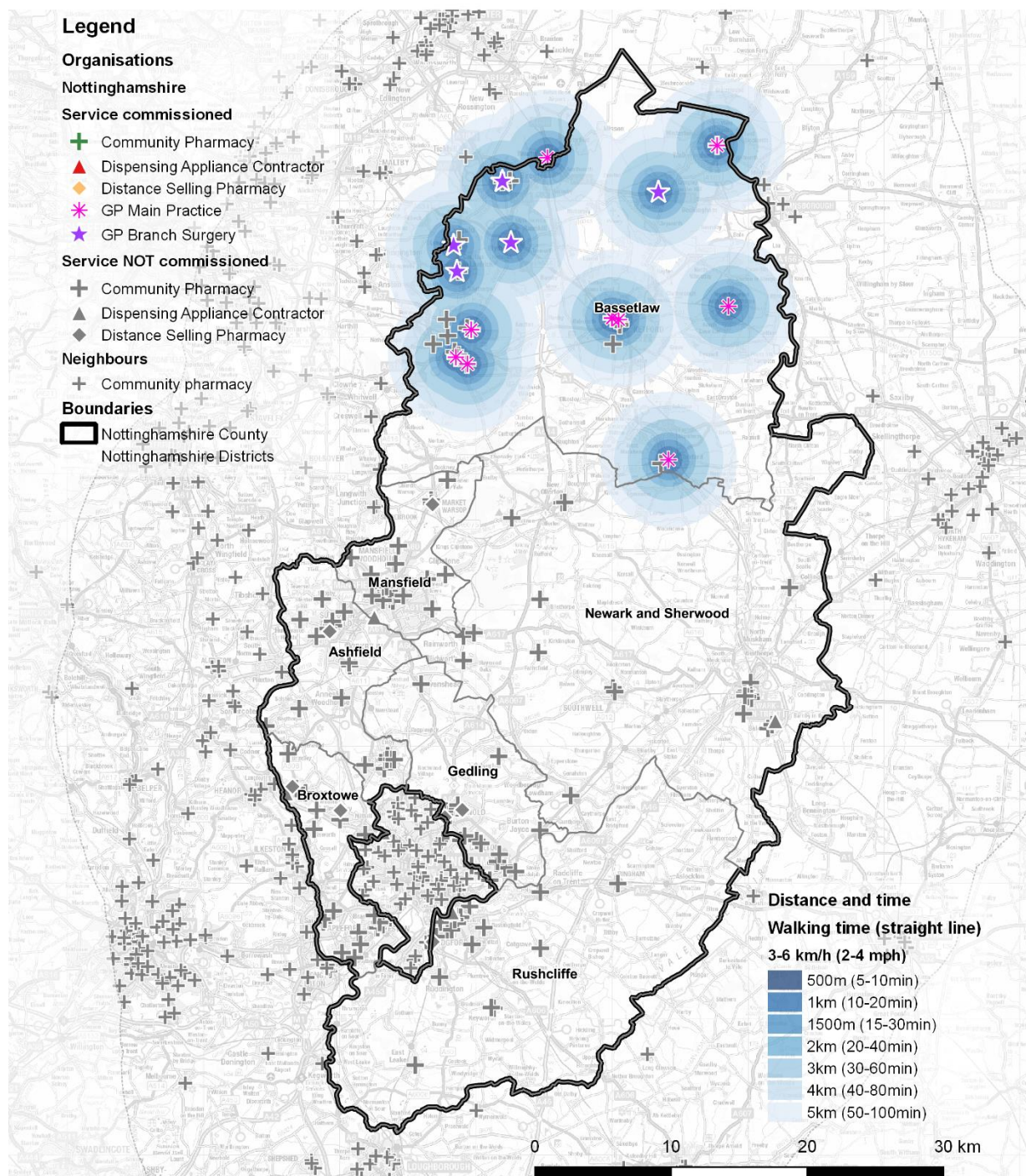
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## Nottinghamshire County

Pharmacies providing CCG Commissioned service - Full Clinical Multi-Disciplinary Medications Review



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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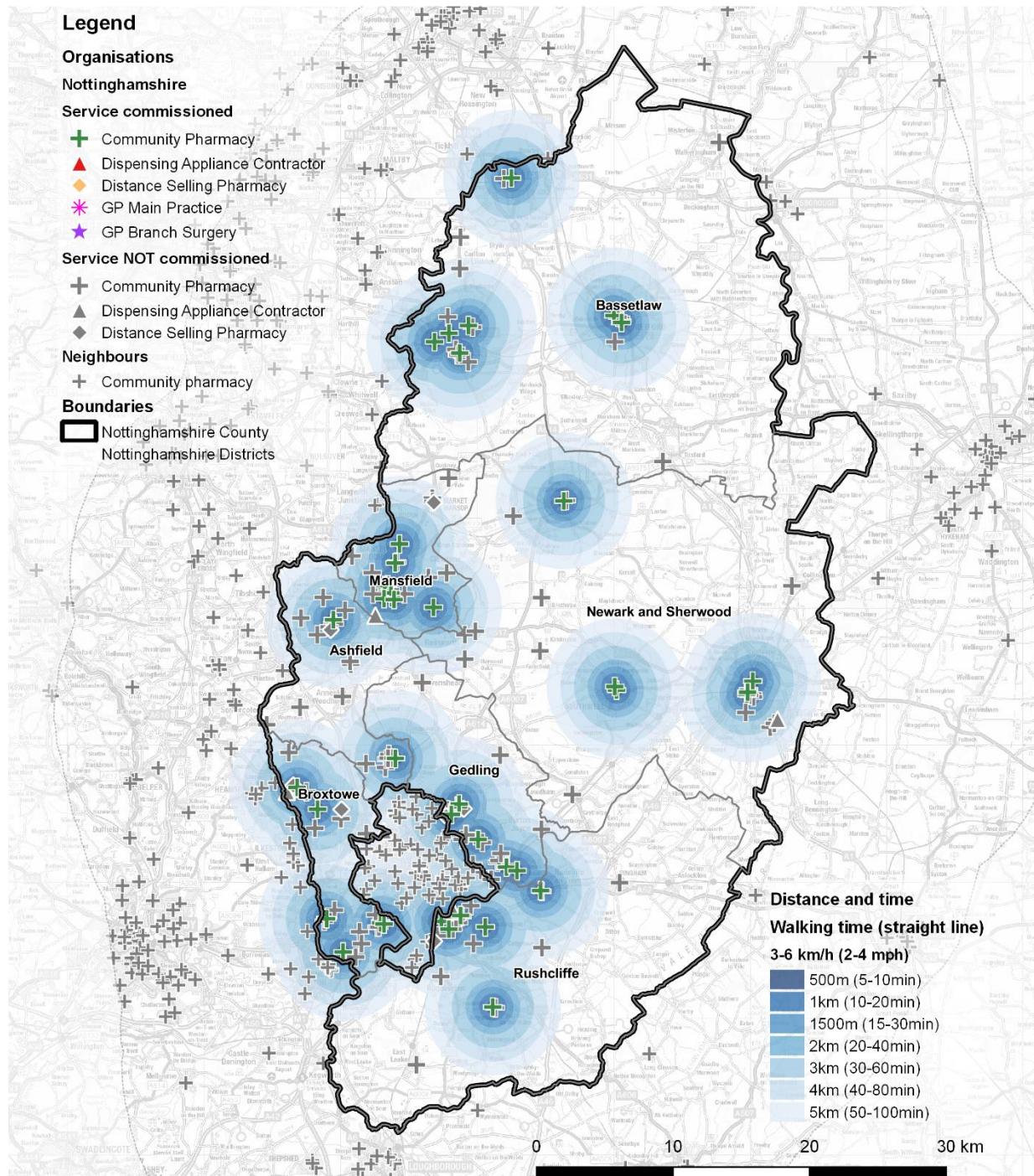


## C.18 Weekend opening – Open both days

all

### Nottinghamshire County

Pharmacies providing Weekend Opening service - Open both days



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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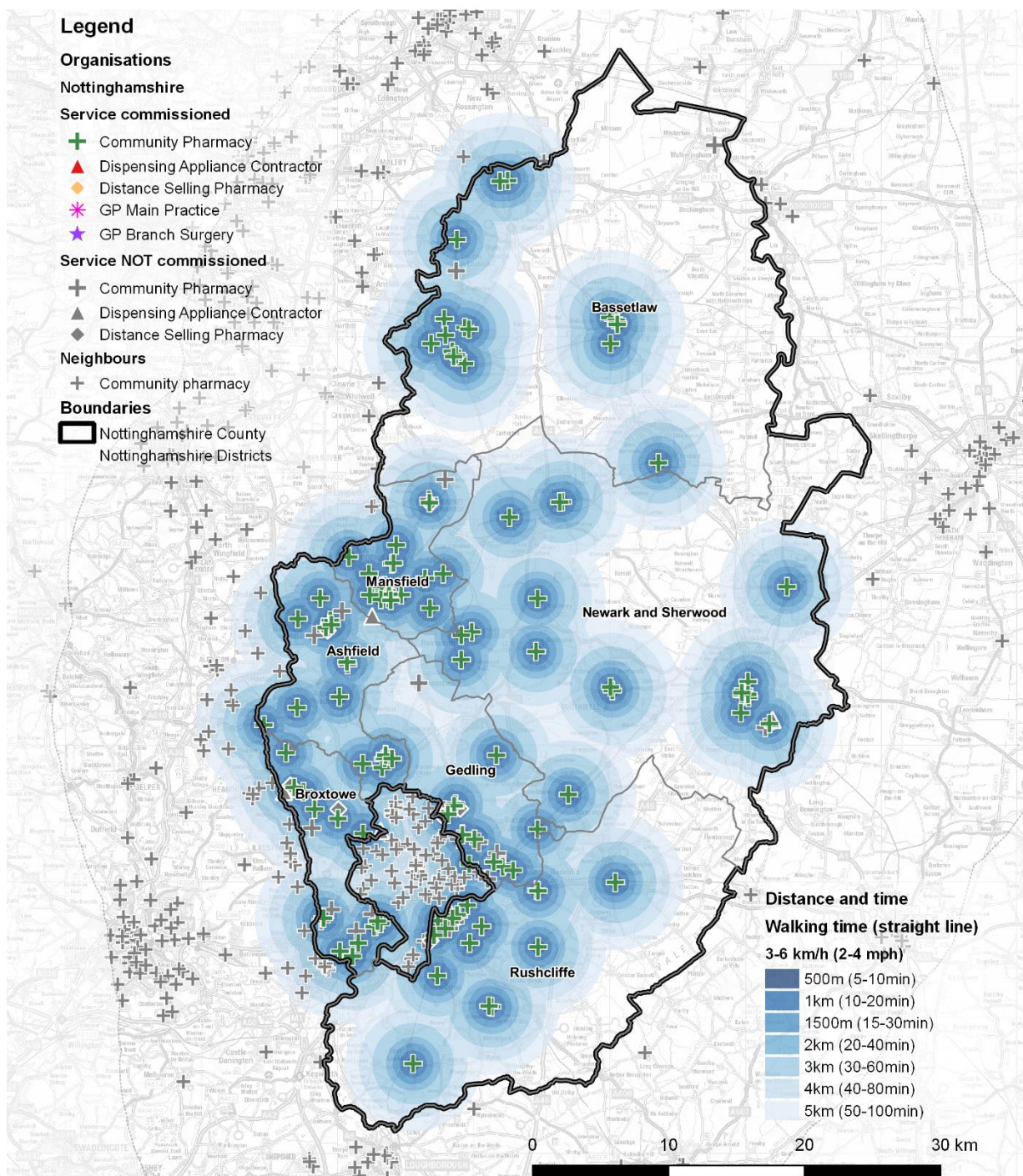


## C.19 Weekend opening – Open either Saturday or Sunday

any

### Nottinghamshire County

Pharmacies providing Weekend Opening service - Open either Saturday or Sunday



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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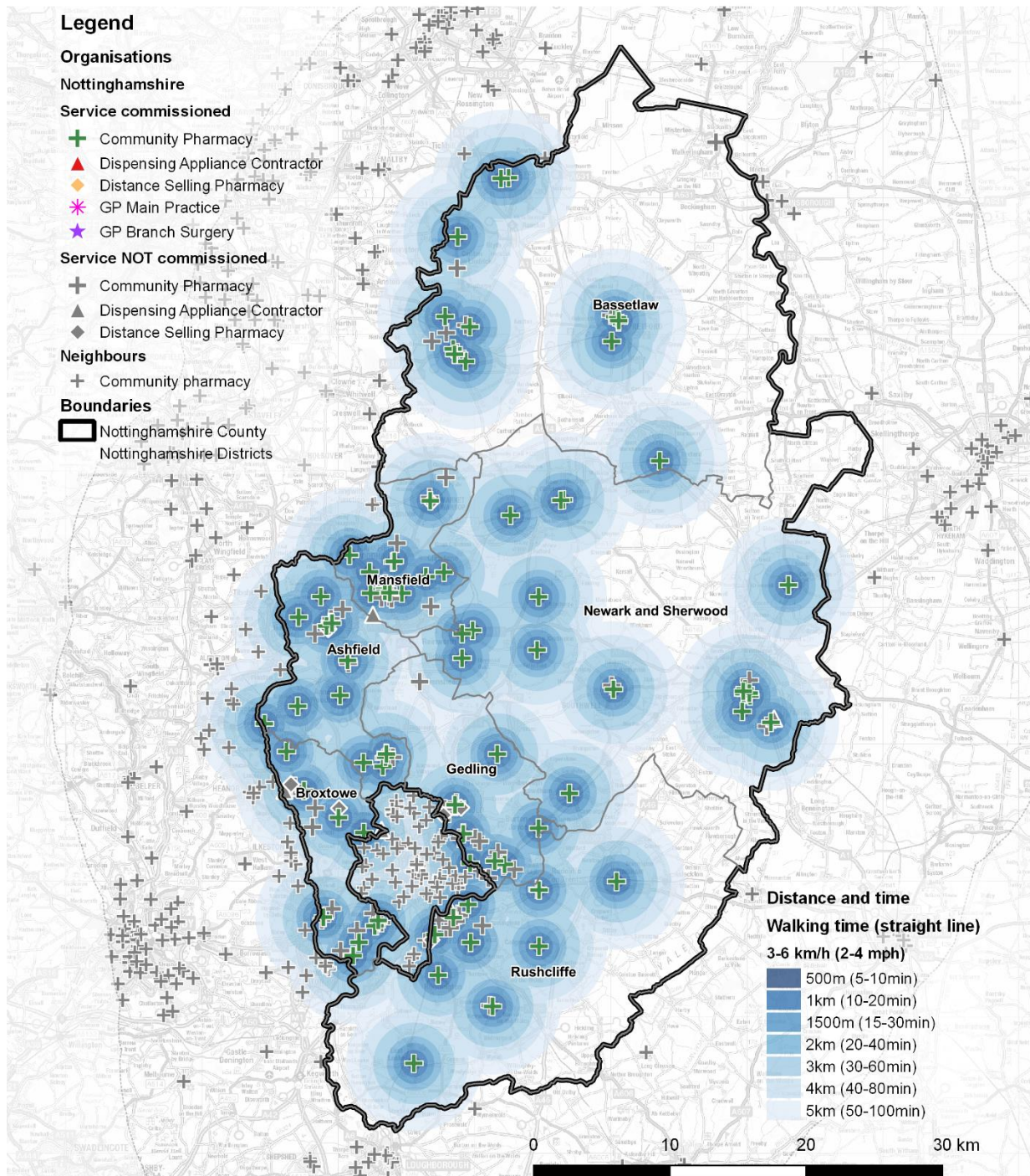


## C.20 Weekend opening – Open only Saturday

osa

### Nottinghamshire County

Pharmacies providing Weekend Opening service - Open only Saturday



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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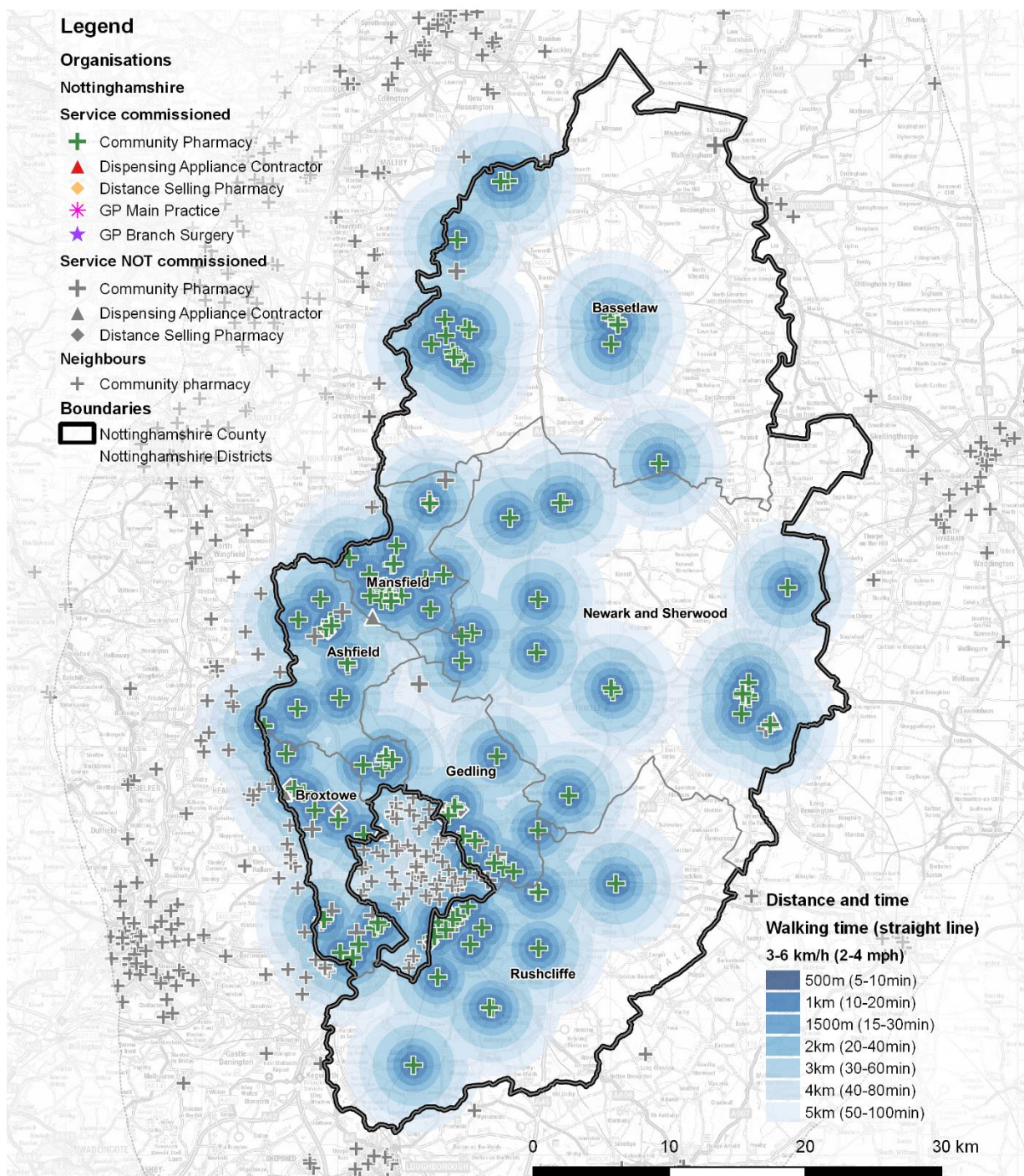


**C.21 Weekend opening – Open Saturday**

sat

**Nottinghamshire County**

Pharmacies providing Weekend Opening service - Open Saturday



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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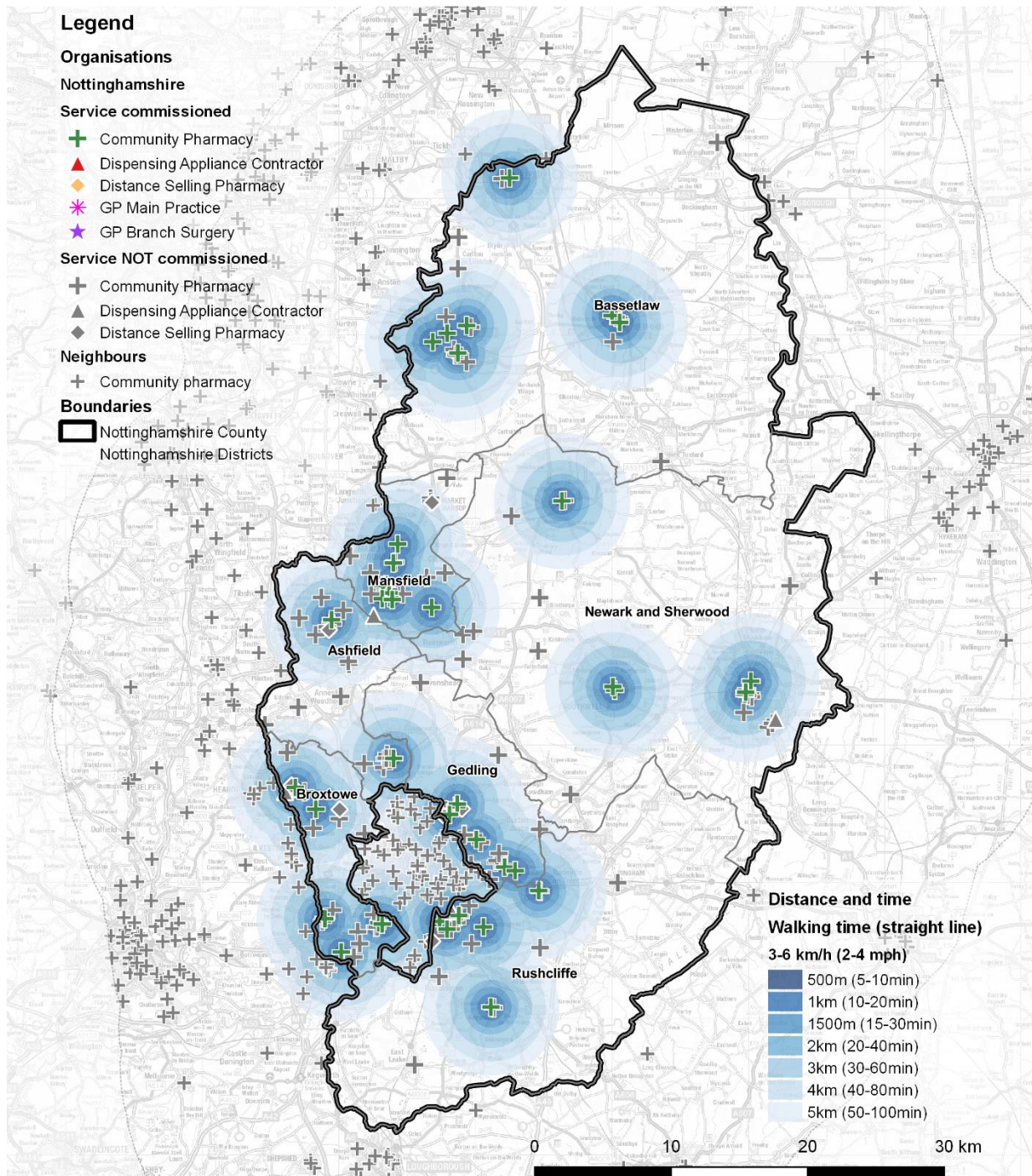


## C.22 Weekend opening – Open Sunday

sun

### Nottinghamshire County

Pharmacies providing Weekend Opening service - Open Sunday



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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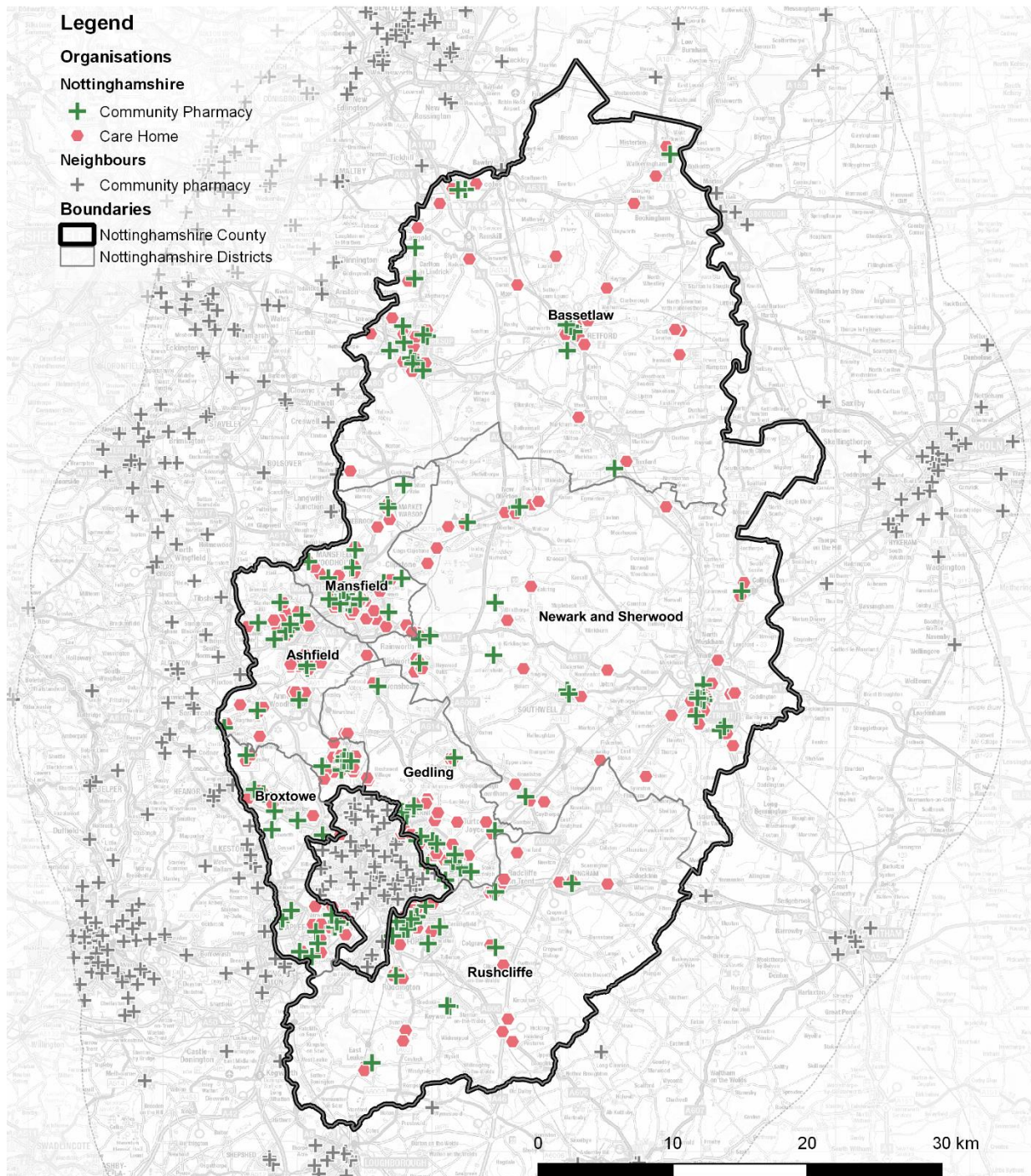
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## **D Care and residential homes**



## D.1 Location of care homes

### Nottinghamshire County Care Homes and Pharmacies



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers, CQC Care home locations

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## **E**      **Teenage conceptions**

District level teenage conception data is the public domain

Only comparative ward level data is available

- we can determine local 'hotspots' as rates that lie in the top 20% of wards nationally
- We can show wards whose rates are statistically different to the England rate

*Sources: ONS conceptions data, ONS ward level conception data (official –restricted)*

## E.1 Table of number and rate of teenage conceptions by District

- Decrease since baseline across all districts – more than 50%
- Decrease over last three years seen across all districts
- Variable change (increases and decreases) in rates over since the last year
- District rates are broadly high in the north of the County and lower in the south of the County

Area Type	Area Name	2015		2014	2012	1998
		No. of conceptions for 15-17 year old females	Conception rate per 1,000 15-17 year old females	%change in conception rate 2014 to 2015	%change in conception rate 2012 to 2015	%change in conception rate 1998 to 2015
<b>County</b>	Nottinghamshire	271	20.3	-3.8%	-31.0%	-56.3%
<b>District</b>	Bassetlaw	41	19.9	-19.4%	-22.9%	-55.8%
	Mansfield	45	27.0	8.4%	-34.6%	-52.2%
	Ashfield	63	29.8	16.4%	-19.7%	-59.2%
	Newark and Sherwood	46	23.6	27.6%	-31.6%	-44.6%
	Gedling	37	18.8	-8.3%	-32.4%	-63.2%
	Broxtowe	27	15.8	-16.4%	-18.1%	-59.1%
	Rushcliffe	12	6.3	-55.3%	-66.5%	-61.8%
<b>City</b>	Nottingham UA	152	31.2	-4.9%	-17.2%	-58.2%

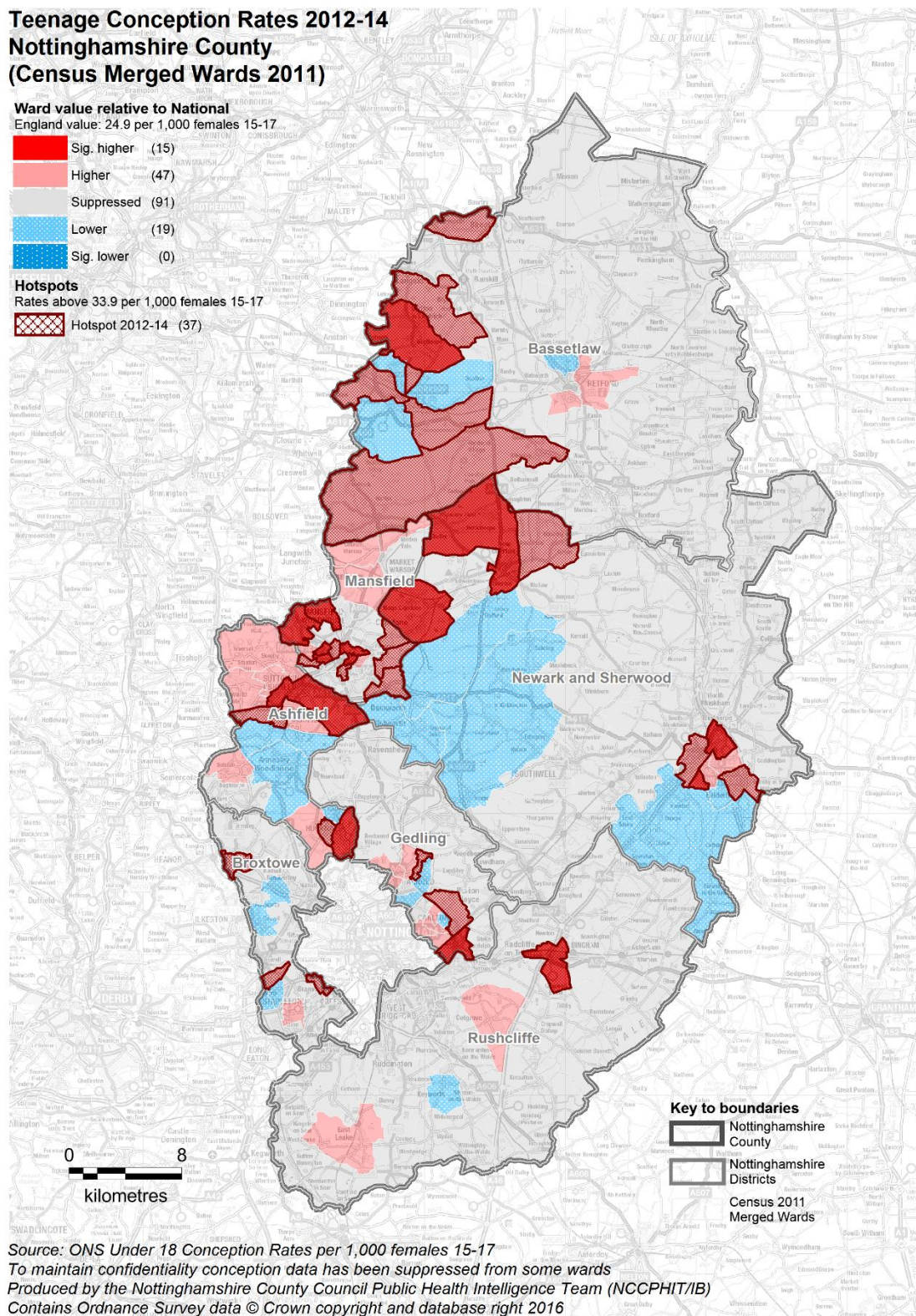
Decrease	-50.0%
Increase	50.0%

Source: ONS Conceptions 2015



## E.2 Map of hotspot wards

- Rates vary spatially below district level – here shown based on census merged wards (equivalent to electoral wards at the time of the 2011 census)
- Note: data pooled over three years to reduce effect statistical variation



### E.3 Table of number of hotspot wards by District

- 37 wards in Nottinghamshire County were in the top 20% nationally by rate
- 28 of these wards were hotspots in the preceding period
- Districts towards the north of the County have higher number of hotspot wards
- Districts towards the south of the County have fewer hotspot wards

District	District rate	CMW2011 Ward Name	Hotspot status	Conception rate 'Hotspot' (above a certain cutoff)		Conception rate significance relative to England	
				Top 20% National			
				2012-14	2011-13	2012-14	2011-13
ENGLAND	24.9	ENGLAND	-	*	*	Similar	Similar
Nottinghamshire	24.9	Nottinghamshire	28	37	38	Similar	Similar
Mansfield	34.2	Mansfield	8	12	12	Higher	Higher
Ashfield	30.3	Ashfield	4	4	7	Higher	Higher
Newark and Sherwood	27.1	Newark and Sherwood	7	7	8	Similar	Similar
Bassetlaw	25.5	Bassetlaw	4	7	5	Similar	Similar
Gedling	23.9	Gedling	2	3	3	Similar	Similar
Broxtowe	17.7	Broxtowe	2	3	2	Lower	Lower
Rushcliffe	15.1	Rushcliffe	1	1	1	Lower	Lower

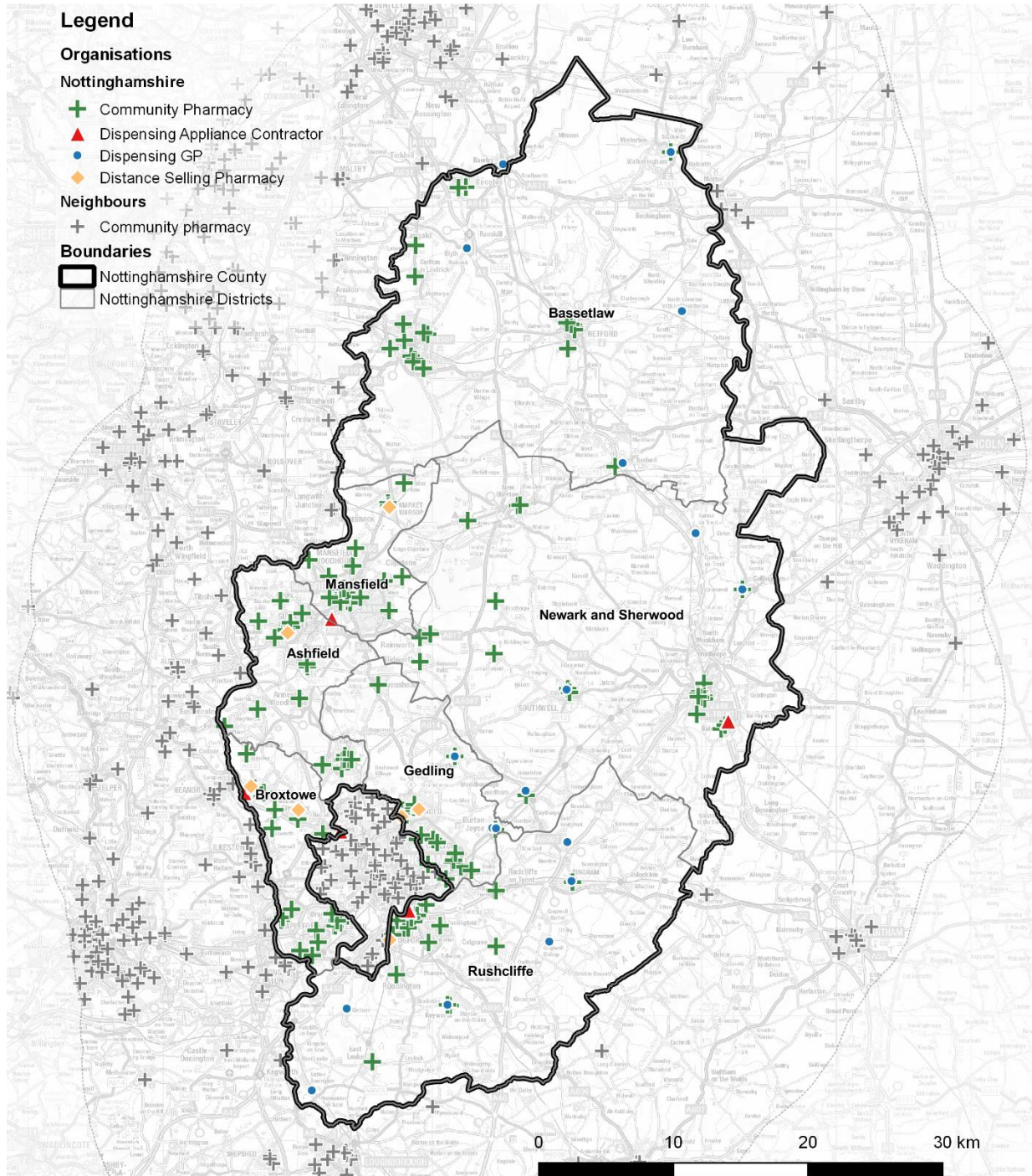


## **F** County overview

## F.1

## Map

### Nottinghamshire County Pharmacies



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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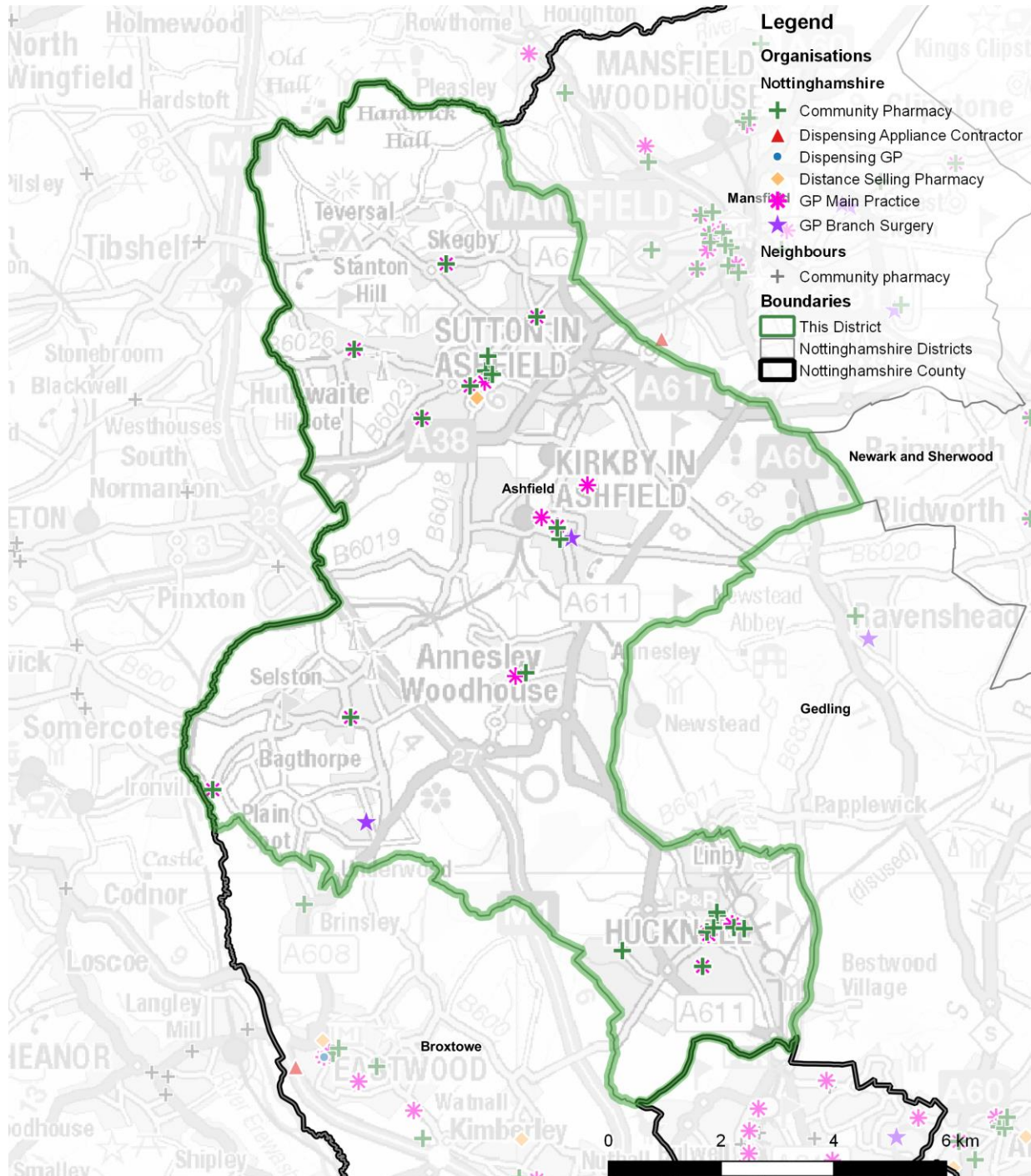
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## **G District detail**

**G.1 Ashfield**

**Nottinghamshire County - Ashfield District**  
Pharmacies and GPs



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

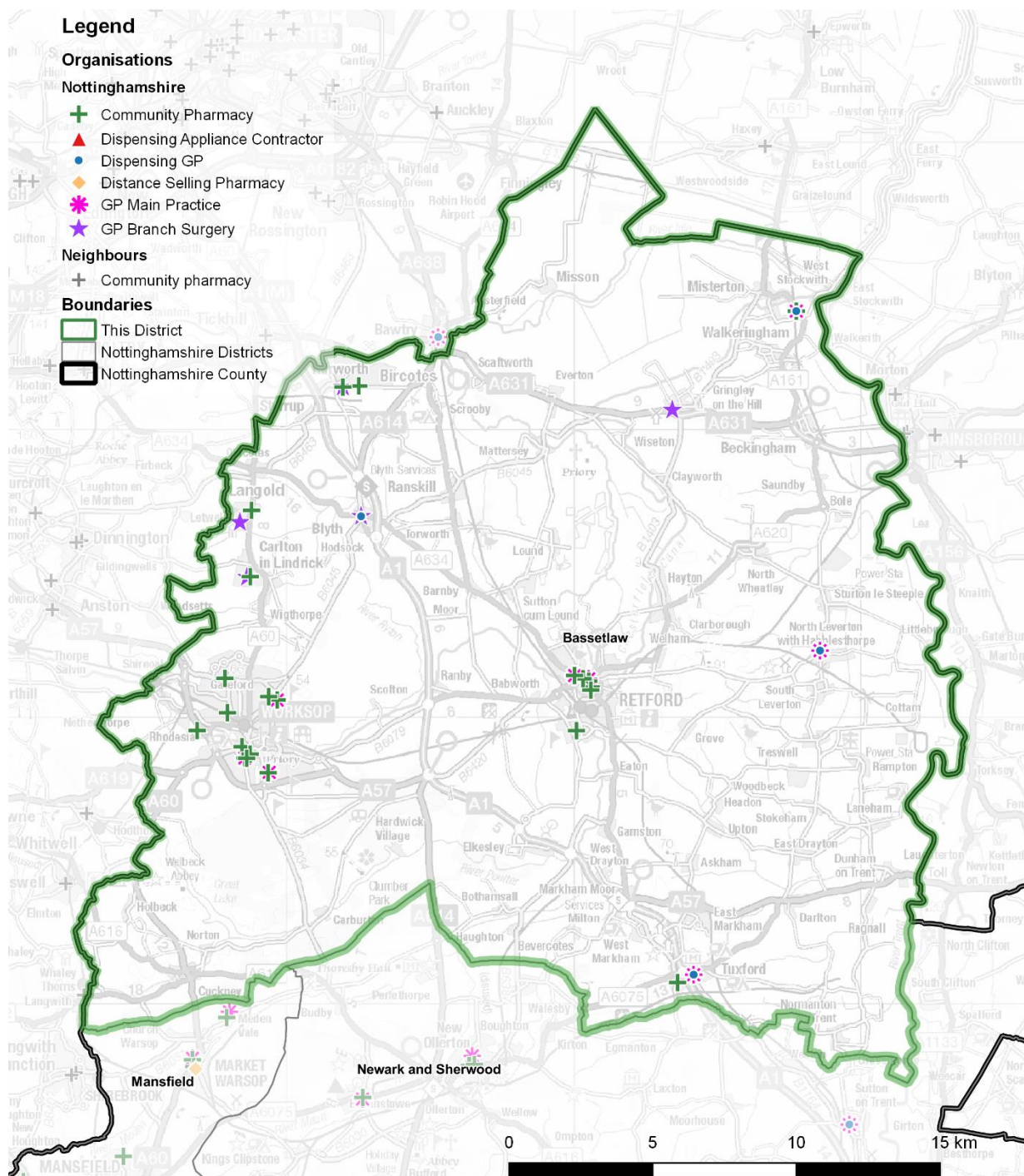
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**G.2 Bassetlaw**

**Nottinghamshire County - Bassetlaw District**  
Pharmacies and GPs



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

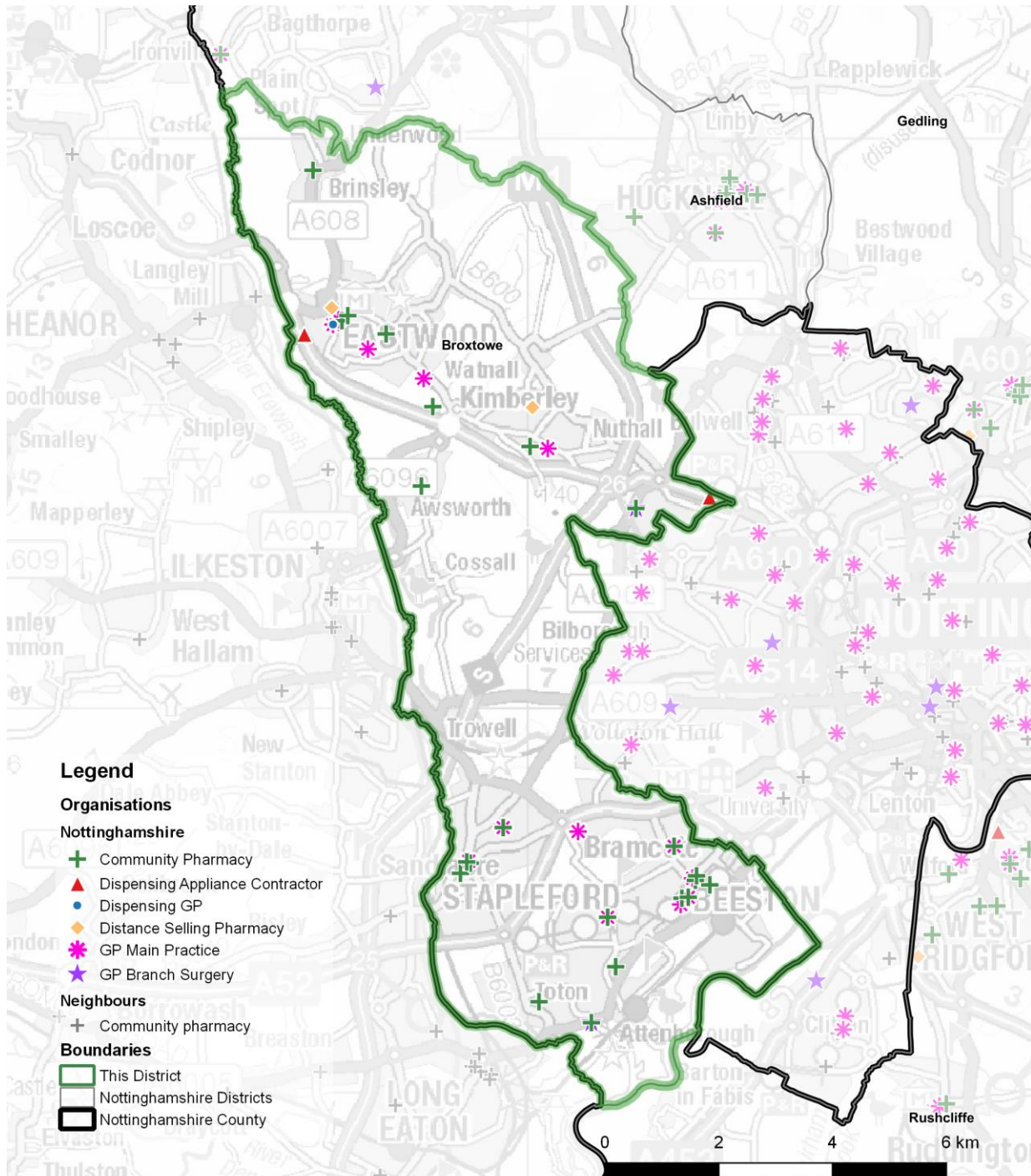
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### G.3 Broxtowe

#### Nottinghamshire County - Broxtowe District (B)

Pharmacies and GPs



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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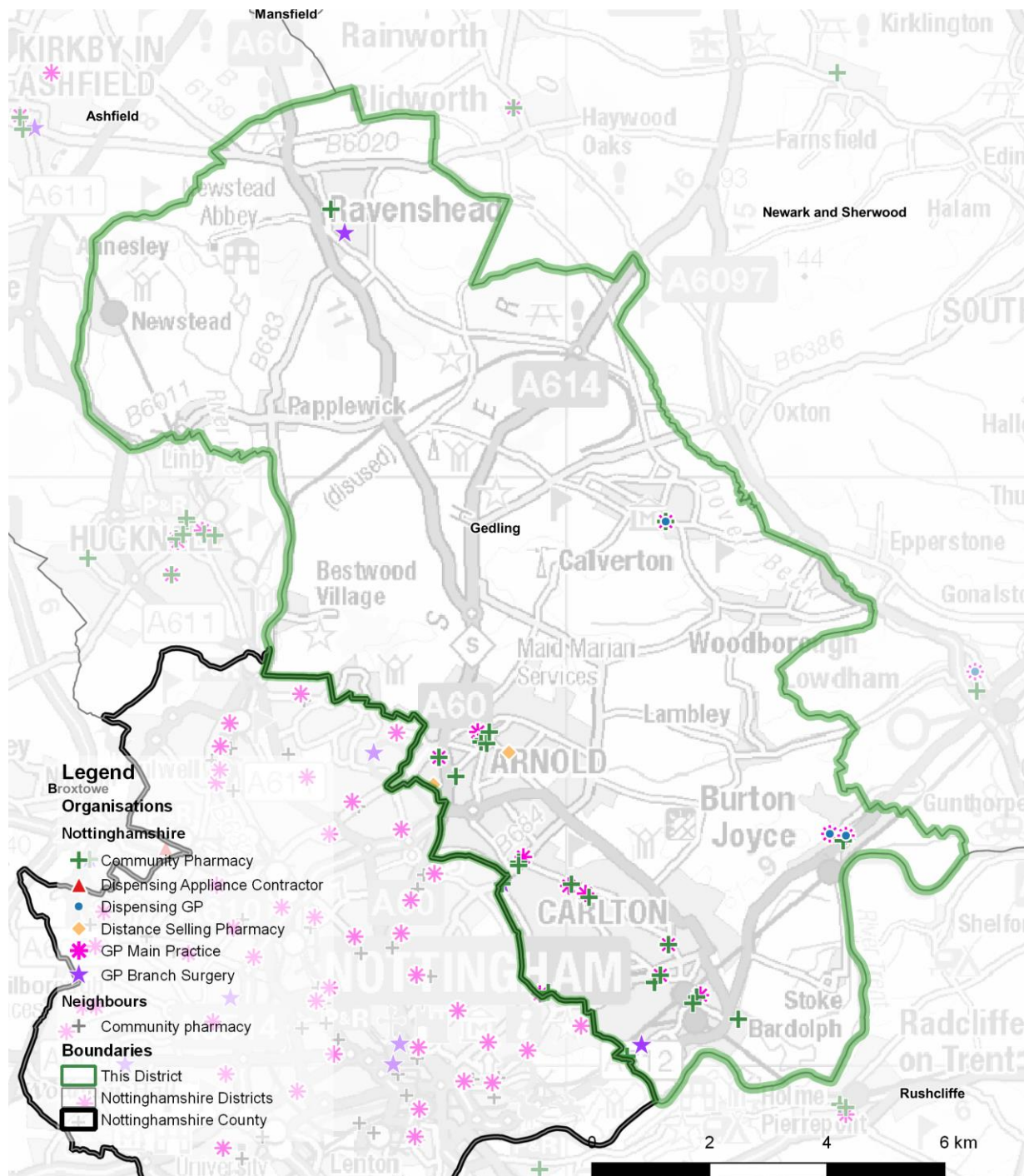
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**G.4 Gedling**

**Nottinghamshire County - Gedling District (B)**

Pharmacies and GPs



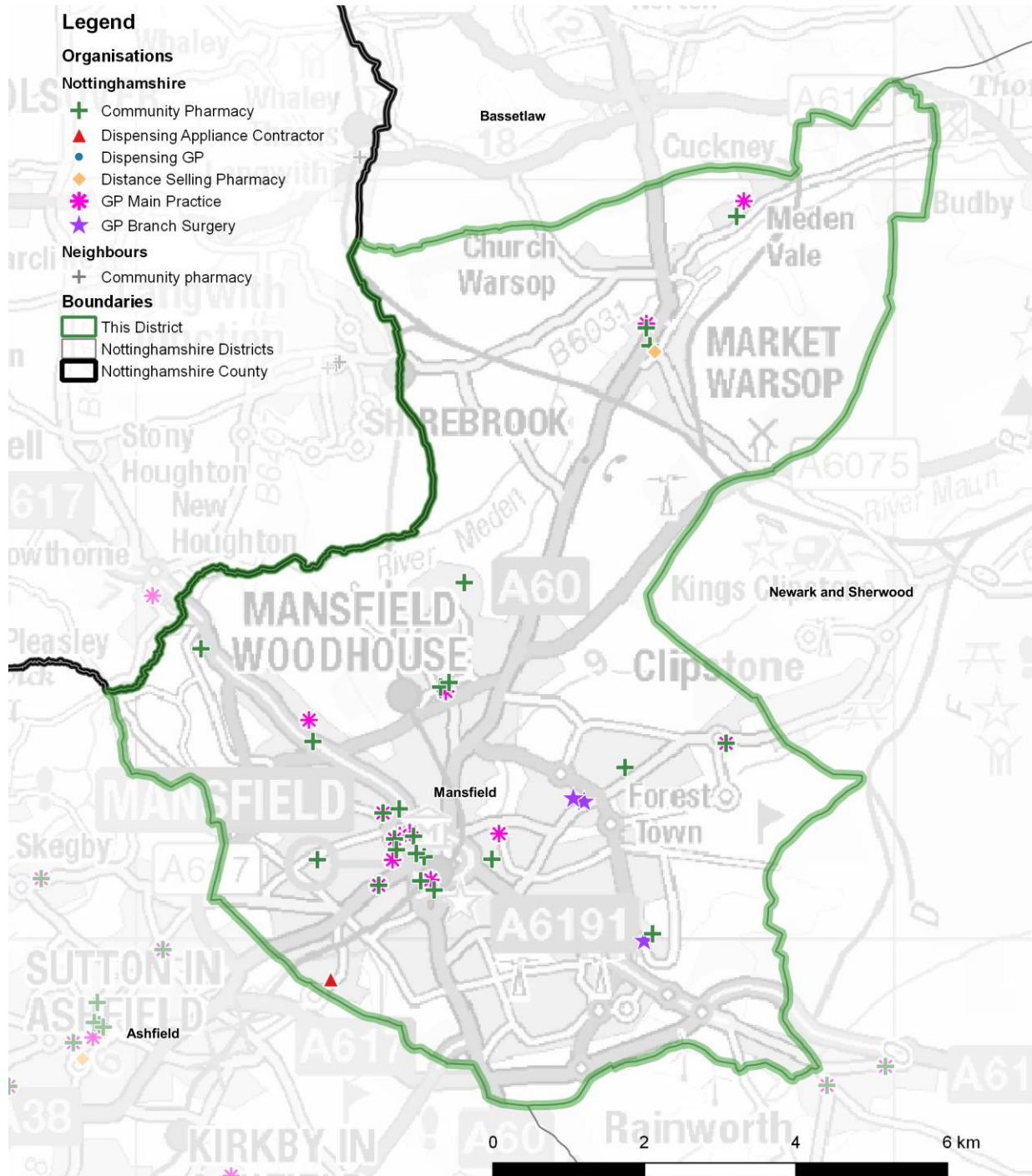
Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

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**G.5 Mansfield**

**Nottinghamshire County - Mansfield District**  
Pharmacies and GPs



Sources: Various, including NHS England, NHS Digital, Local Authority Public Health Commissioners and Commissioned Providers

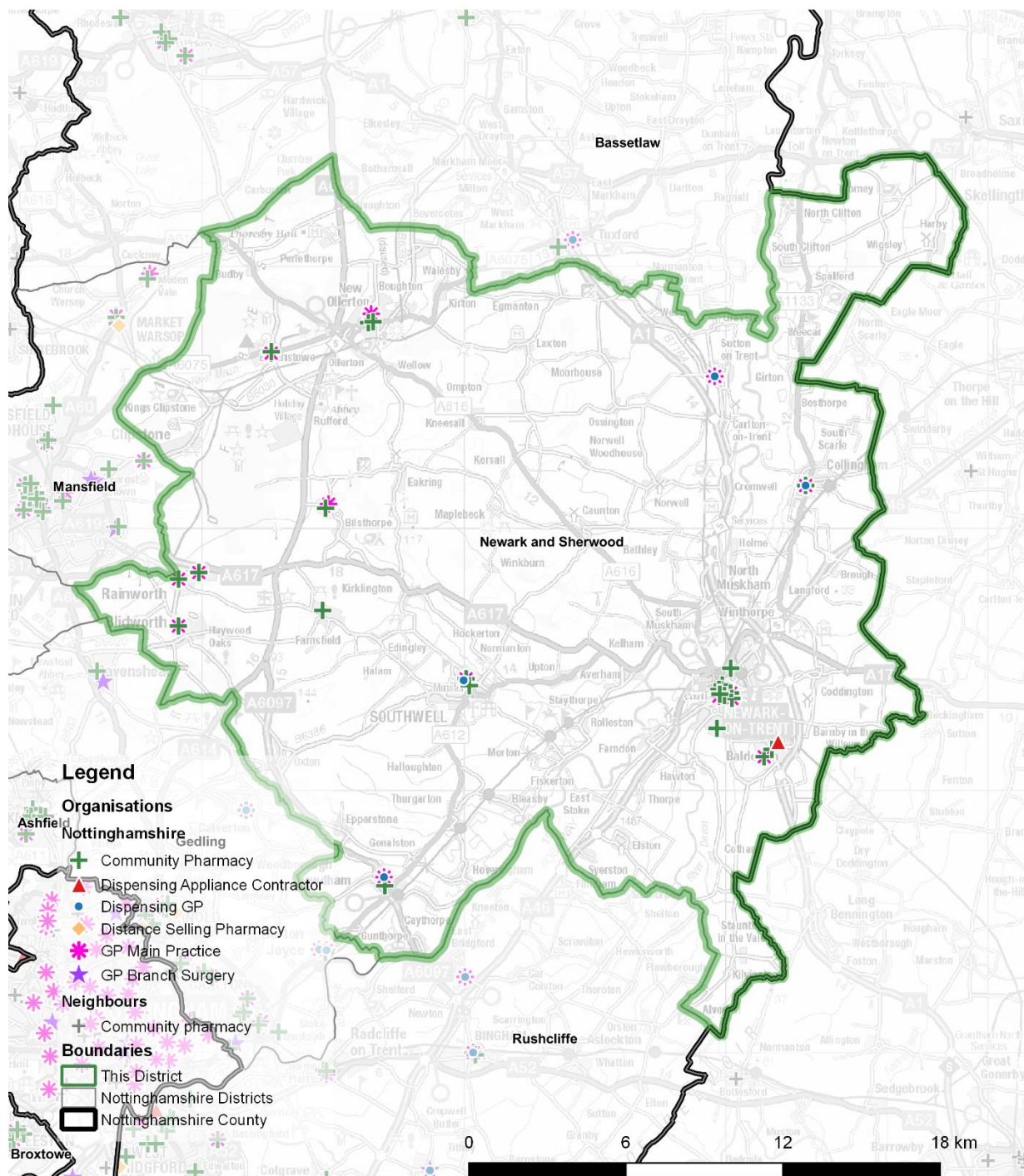
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**G.6 Newark and Sherwood**

**Nottinghamshire County - Newark and Sherwood District**  
Pharmacies and GPs



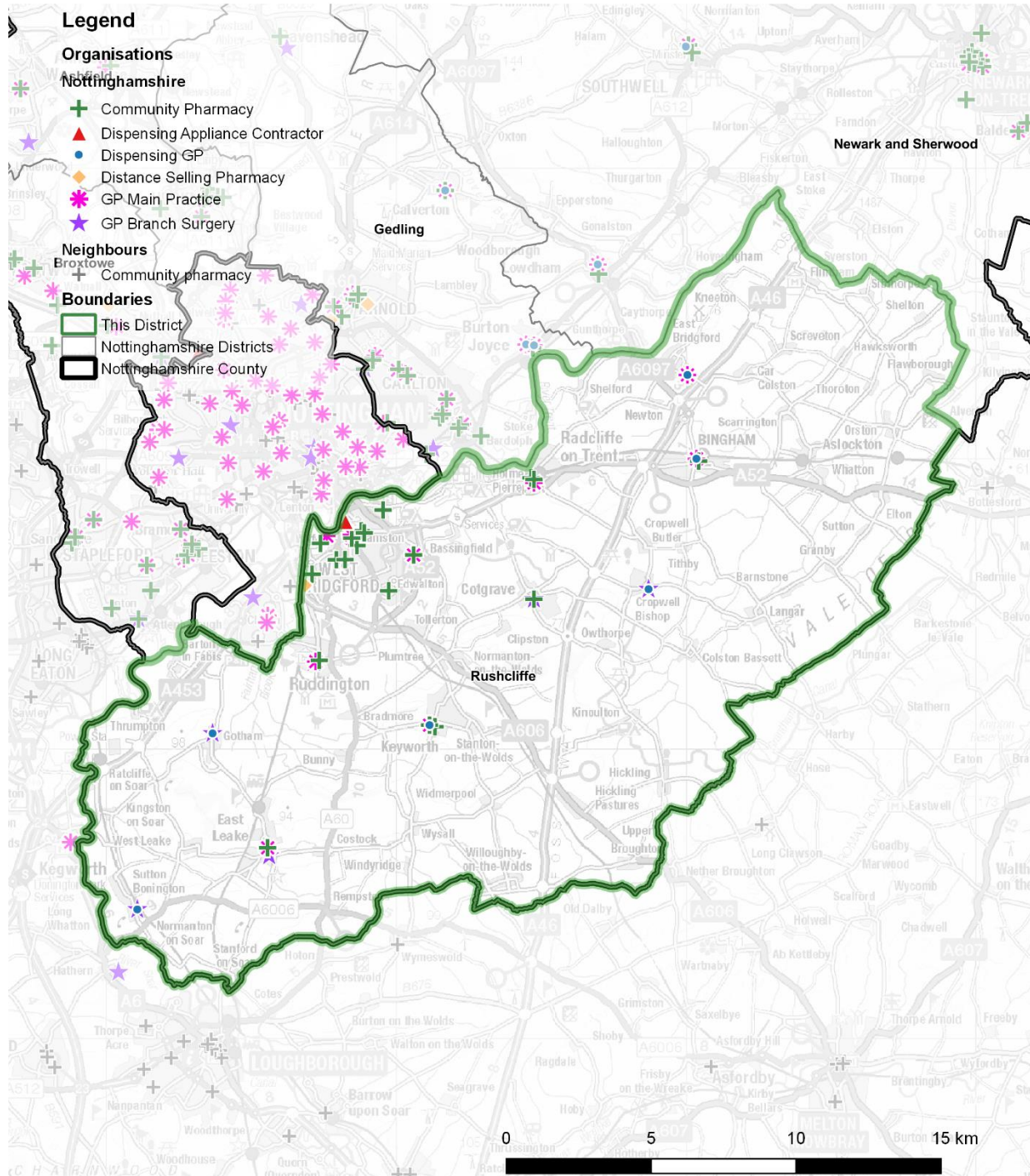
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## G.7 Rushcliffe

### Nottinghamshire County - Rushcliffe District (B) Pharmacies and GPs



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