Section 3:

Identified health needs

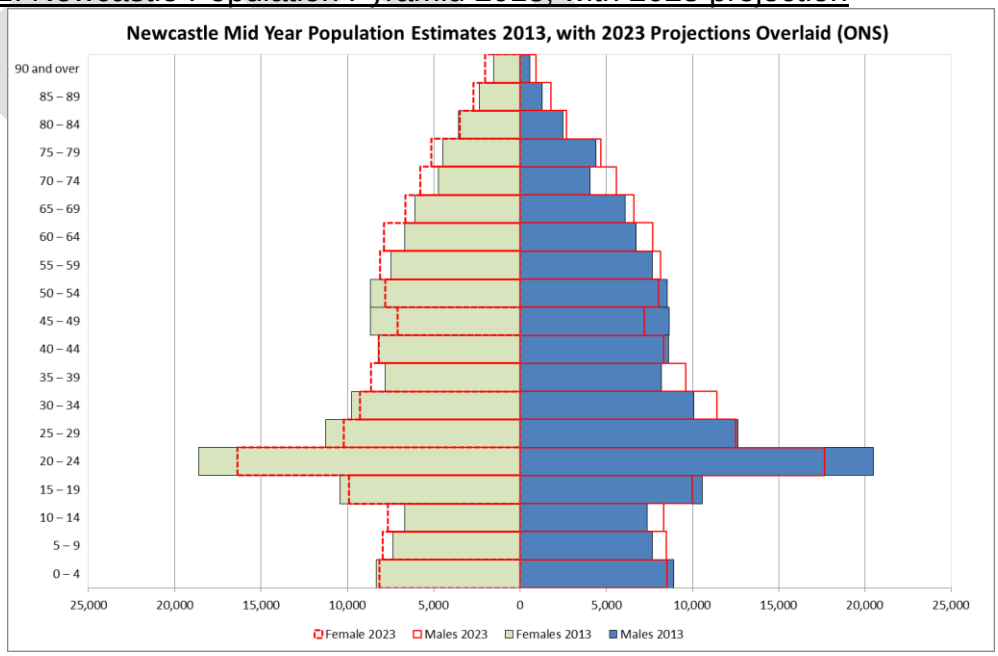
The following chapter provides an overview of the health needs of the residents of Newcastle, concentrating particularly on those needs which may be amenable to intervention by services delivered through community pharmacies either with existing service provision or new future services throughout the life of this PNA until 2018. Further information can be found within the Newcastle Future Needs Assessment[5].

3.1 Population profile

Between 2001 and 2011, the population of Newcastle upon Tyne has increased by 7.95%, from 259,536 to 280,177, the second largest increase in the North East region.

- The most recent mid-year 2013 population estimates show Newcastle has an estimated population of 286,821; projected to increase to 291,219 by 2023
- About 14% of the Newcastle population is aged between 20 and 24 reflecting the large student population at the city's universities
- Newcastle has the lowest proportion of people aged 65 and over in the North East region (14%)
- Between 2004 and 2013 the number of births in Newcastle increased by 17%. However, there has been a decline in the conception rate from 70.3 per 1,000 women in 2009 to 67.1 per 1,000 in 2012
- There are higher resident populations seen in the North (106,622) and West (111,841) than the East (85,630) localities

Figure 1: Newcastle Population Pyramid 2013, with 2023 projection



[5] www.knownewcastle.org.uk

3.1.1 Ethnicity

Culture and ethnicity may influence health beliefs and behaviours, and may therefore impact on health and wellbeing:

- In 2011, 14.7% of the Newcastle population were non-White; this has increased from 6.9% in 2001.
- 9.8% of the Newcastle population are Asian[6], which equates to 27,017 people and 1.9% (no. = 5160) of the population are Black[7]
- In 2011 86.6% the Newcastle population were born in the UK compared to 93.2% in 2001.
- 89.7% of households in Newcastle have English as a main language; however 5.9% of households have no people who have English as their main language (6,927 households) in 2011.
- Around 59% of Newcastle's Asian population and 47% of Newcastle's Black population reside in the Newcastle West Area
- In the 2013 School Census, BME children accounted for 23% of the school population compared to 16% in 2007.

3.1.2 People with long term health problems or disability

- 18.7% of the population reported that their day-to-day activities were limited by a long term health problem or disability. 9.5% felt that their day-to-day activities were limited a lot
- There are an estimated 13,246 adults aged 18-64 with a moderate physical disability, and an estimated 3,705 adults with a serious physical disability
- There are an estimated 4,664 adults aged 18-64 years with a learning disability in the city.

3.1.3 Carers

"A carer is a person of any age, adult or child, who provides unpaid support to a partner, child, relative or friend who couldn't manage to live independently or whose health or wellbeing would deteriorate without this help. This could be due to frailty, disability or serious health condition, mental ill health or substance misuse". Being a carer can impact both psychically and psychologically on a persons health, for example increased rates of stress and depression, physical health problems, and earlier death.

- Almost one in ten (9.2%) of the population in Newcastle provide some kind of unpaid care. This compares with 11.0% in the North East and 10.3% in England and Wales.
- 2.4% provide 50 or more hours a week (6,840 people), similar to national proportions (2.4%) and marginally fewer compared with the North East (3.0%)

[6](including Indian, Pakistani, Bangladeshi, Chinese and Other Asian),
[7](Black, African, Caribbean and Black British)

3.1.4 Older people

An ageing population can impact significantly on health and social care demand, as this group tend to live with higher levels of morbidity and require more support to manage their conditions, including medicine reviews delivered by community pharmacy. There are a range of conditions which are more likely to impact on this group, including long term illness or disability, and age related conditions such as osteoarthritis, sensory impairments or dementia.

- There are an estimated 3,040 Newcastle residents with dementia[8], more than double the number currently on GP practice registers (1,603) and this is projected to increase by 16% by 2020.
- There were 2,369 injuries due to falls in the over 65s per 100,000 in 2012/13, which is significantly worse than the national rate. Emergency hospital admissions for hip fractures in people over 65 years are similar to England.
- The number of people aged 65 and over predicted to have a moderate or severe visual impairment in 2012 was around 3,585 and a further 17,600 with a moderate or severe hearing impairment. Both of these numbers are projected to continually increase by 2020, with the greatest increases in those aged 75 and over.

3.2 Deprivation

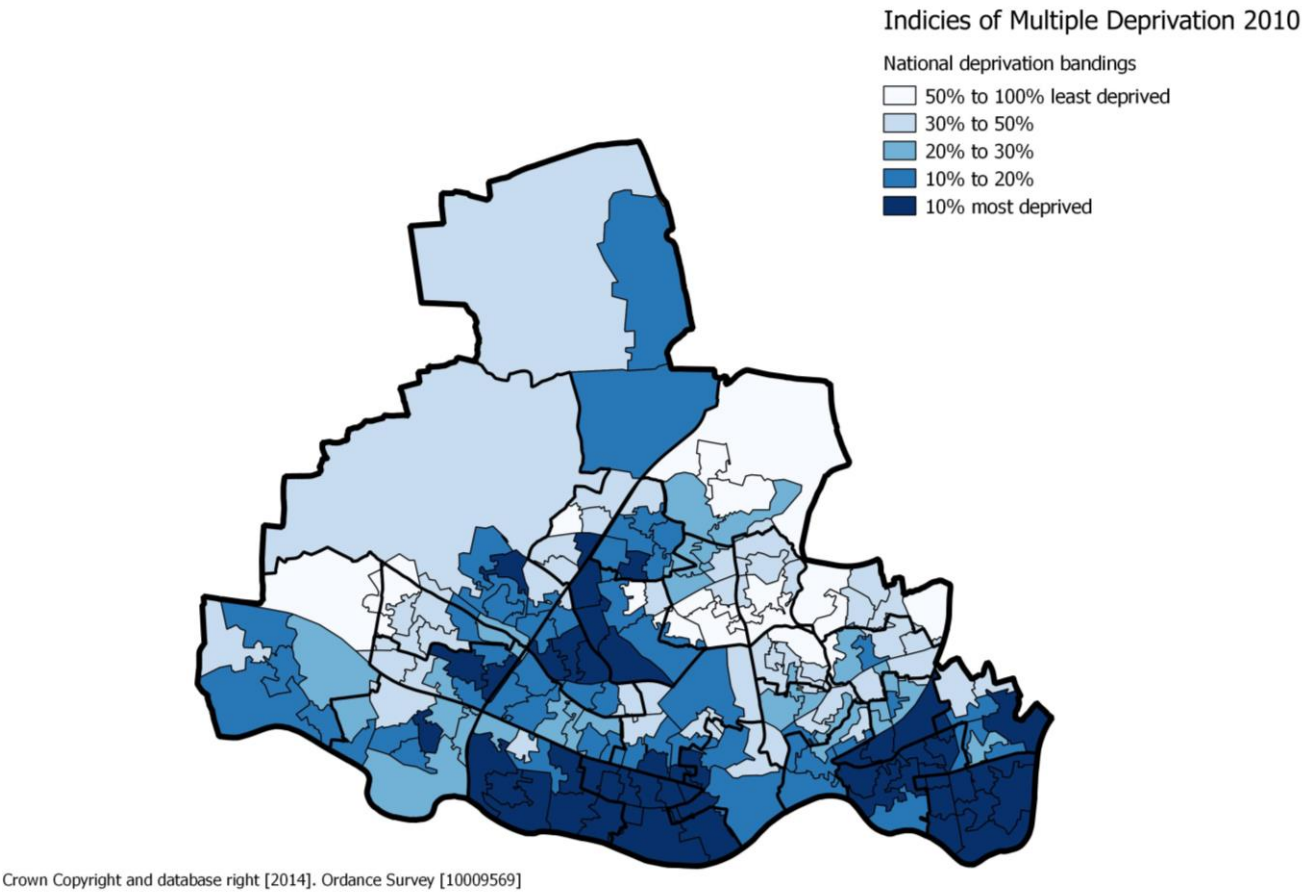
The link between social and economic deprivation and poor health has long been recognised. People living in areas with higher levels of deprivation tend to have poorer health than those living in more affluent areas. The Index of Multiple Deprivation (IMD) 2010[9] provides an overall deprivation score for small areas known as 'lower layer super output areas' (LSOAs) (see Map 2).

Newcastle is the 40th most deprived authority in the country (IMD 2010) but this hides significant differences across the city. Almost 25% of people in Newcastle live in the 10% most deprived areas nationally and around 7% live in the 10% least deprived areas nationally. As illustrated, Newcastle North is substantially less deprived than either Newcastle West or Newcastle East.

[8] Projecting Older People Population Information System (POPPI) / Projecting Adult Needs Service information (PANSI), 2013

[9] The Index of Multiple Deprivation is comprised of 'domains' which reflect different aspects of deprivation: Income deprivation, Employment deprivation, **Health deprivation and disability**, Education, Skills and Training deprivation, Barriers to housing and services, Living environment deprivation, and Crime. There are 32,482 LSOAs in the country and 173 in Newcastle. http://webarchive.nationalarchives.gov.uk/20100410180038/http://www.communities.gov.uk/communities/neighbourhoodrenewal/deprivation/deprivation07/

Map 2: Index of Multiple Deprivation 2010 for SOAs in Newcastle



3.3. Life expectancy and disease prevalence

Life expectancy at birth for an area is the average length of time someone born today could survive based on current death rates in that area.

- The average life expectancy for males in Newcastle is 77.5 years and for females 81.4 years. Life expectancy at birth has improved over time for both males and females, however not as fast as England.
- Females in the most deprived areas of Newcastle can expect to live 9.1 years and males 11.9 years less than the least deprived areas

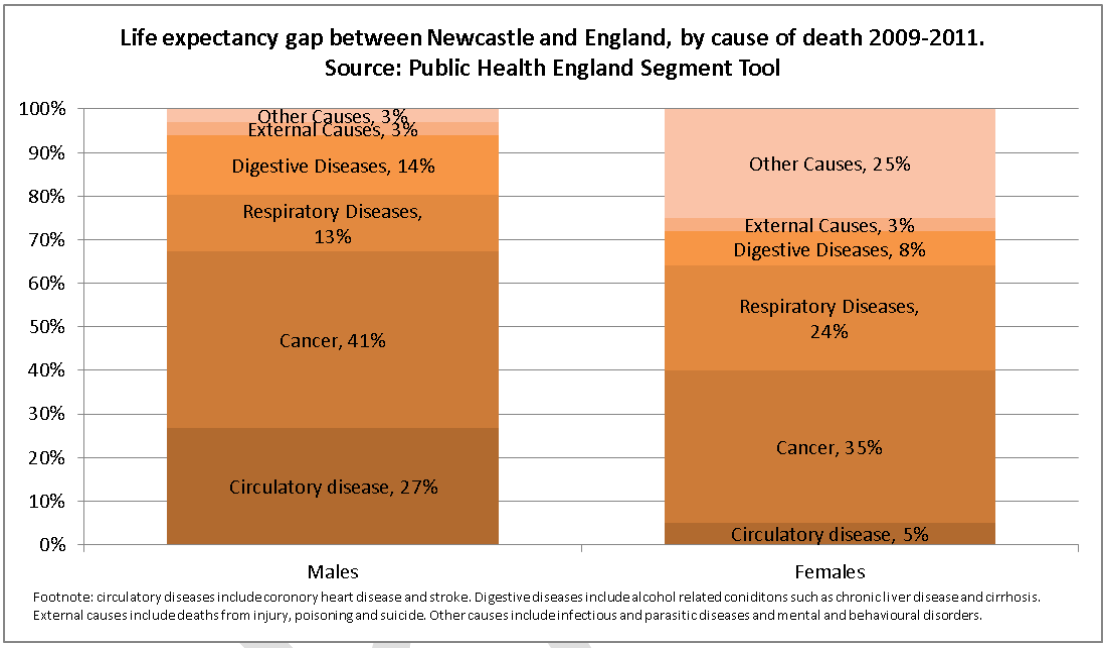
Healthy life expectancy (HLE) shows the average number of years a person can expect to live in good health:

- The HLE at birth for males in Newcastle is 59.8 years and for females 60.9 years. This is significantly worse than the England average.

Premature mortality can also be used as an important measure of the overall health of the population, with reductions over time demonstrating improvements in the health status of the overall population. This sends out a clear message in the importance of prevention as well as treatment in reducing avoidable deaths. Premature mortality can contribute significantly to the life expectancy gap between Newcastle and England (figure 2):

- Overall premature mortality of 441 deaths per 100,000 in Newcastle is amongst the worst in the country. (131st worst out of 150 local authorities)
- Premature mortality rates for cancer, cardiovascular, respiratory and liver disease are all significantly worse than the England average, and although we have seen reductions over time, a significant gap remains between Newcastle and the England average in the rate of change
- Key contributions to poor life expectancy and health inequalities for both males and females are cancer, circulatory and respiratory diseases

Figure 2: Life expectancy gap between Newcastle and England, by cause of death



Early intervention, prevention, diagnosis and treatment of disease can help to improve quality of life and reduce rates of premature mortality. Prevalence modelling suggests there are a range of conditions where not all cases are identified (table 2). There are several diseases which contribute to health inequality and early death in Newcastle, these include:

- The incidence of **cancer** in Newcastle is higher than the England average for both sexes (2008-10, the latest years for which data are available).The most prevalent cancers which contribute to mortality rates include lung and bowel cancer.
- Death rates from **cardiovascular disease** in 2010-12 were 21% higher in Newcastle than for England as a whole
- **Coronary heart disease** (3.4%) prevalence is higher than the national average (3%)
- **Hypertension** (12.5%) prevalence is lower than the national average (13.8%)
- **Stroke and transient ischaemic attack** prevalence (1.9%) is similar to the national average (2%)
- The prevalence of **chronicobstructive pulmonary disease (COPD)** (2.09%) is higher than the national average (1.74%)
- **Diabetes** prevalence (5.6%) is lower in Newcastle than nationally (6%), though follows an increasing trend

- Estimated rates of common **mental health** issues (such as anxiety and depression) equate to around 20% of the adult population at any one time. Around 13% of the GP registered population are recorded on the Depression register which is higher than the national average (11.7%)

Table 2: Diagnosed Coronary Heart Disease, Hypertension, Stroke, COPD and Diabetes 2012/13 compared to estimated prevalence 2011

	No. on disease register (QOF 12/13)	Estimated prevalence (2011)	Difference	% of estimated on disease register
Coronary Heart Disease (CHD)				
Newcastle	9,780	13,325	3,545	73.8%
Hypertension				
Newcastle	35,767	64,389	28,622	55.5%
Stroke & Transient Ischaemic Attack				
Newcastle	5,377	5,848	471	91.9%
COPD				
Newcastle	6,031	10,377	4,346	41.8%
Diabetes				
Newcastle	12,828	15,549	2,727	82.5%
SOURCE: Monitoring data on Quality and Outcomes Framework 2012/13, Health and Social Care Information Centre © Crown copyright and ERPHO Modelled estimates of prevalence 2011				

3.4 Lifestyle risk factors

A variety of lifestyle or health related behaviours, structural and material factors (environment and living standards, employment); and psychosocial factors (stress, risk taking) can have a major impact on a person's health. These factors can all contribute to inequalities and ill health; however public health bodies all have a role to play in protecting, promoting and improving the population's health and wellbeing and reducing inequality.

3.4.1 Smoking

Smoking remains the greatest contributor to premature death and disease across Newcastle. It is estimated that up to half the difference in life expectancy between the most and least affluent groups is associated with smoking.

- It is estimated that 87% of deaths from lung cancer are attributable to smoking, as are 73% of deaths from upper respiratory cancer and 86% of chronic obstructive pulmonary disease (COPD).
- Smoking is also a major factor in deaths from many other forms of cancer and circulatory disease.
- The prevalence of smoking in Newcastle for all groups is higher than the England average. The current prevalence for all adults aged 18 and over is 23.7%, Routine and manual occupations is higher still at 32.7%, and mothers who are smoking at the time of delivering their baby at 16.6%

3.4.2 Substance Misuse –Alcohol

Alcohol misuse is an increasing problem for Newcastle and England as a whole. It impacts not only on the health and wellbeing of the individual drinker but also on families, society (through crime and disorder), accidents, injury, sexual and other risk taking behaviours and contributes to the escalating costs of health and social care.

- An estimated 28% (n=64,232) of over 16s in Newcastle are considered to partake in increasing or high risk drinking behaviours[10]. The estimated prevalence of binge drinking is also significantly higher than the England average at 33.7%
- Respondents to a perceptions survey indicated 50% were drinking at an increasing to high risk level[11].
- 5% of respondents were either fairly or very concerned with how much alcohol they drink, and 22% of respondents had thought about reducing the amount of alcohol they consume.

3.4.3 Substance Misuse– Drugs

Drug addiction is a complex, but treatable condition, which can be incredibly damaging to an individuals' physical and mental health and to those around them, and often goes hand in hand with poor health, homelessness, unemployment, family breakdown and offending

- The estimated rate of opiate and crack use for Newcastle of 11.4 per 1000 (n=2221) is higher than the regional (9.9 per 1000) and national average (8.4 per 1000). The estimated injecting population is 659, with equates to 3.37 per 1,000 of the population, which is above the England average of 2.49
- Newcastle has seen a 21% decline in the number of people accessing structured treatment between 2009/10 – 2012/13. Newcastle has an ageing treatment population (25% are 30-34 years old). The majority of those in treatment have opiates as their primary substance, or opiate and crack. There are declining numbers who are successfully completing drug treatment.
- In 2012/13 42.5% of those in adult drug treatment in Newcastle cited using prescription or over the counter drugs as well as illicit drug use
- 21% of clients in structured treatment were also classed as dual diagnosis, with a mental health condition. There are also high rates of unemployment (71%) and housing issues (21%) amongst those entering treatment.
- Demand for harm reduction services is increasing, with a much larger proportion of young people accessing the service (41% aged 15-24 years). 70% of new registrations to the service report steroid use, 25% heroin and 16% cocaine in 2012/13.
- The use of Novel Psychoactive Substances (NPS or "legal highs") is a significant and growing problem for Newcastle. NPS are synthetic substances which produce similar effects to illegal drugs (such as cocaine, cannabis and ecstasy) but that are not controlled under the Misuse of Drugs Act

[10] Public Health England (2014), Local Alcohol Profiles for England, available from: www.lape.org.uk
[11] North East Alcohol Behaviour and Perceptions Survey, conducted by Balance (2013

- In Newcastle around 40% of referrals entering drug treatment annually come through the criminal justice system.

3.4.4 Obesity

The Foresight Report 2007[12] indicated that most adults in the UK are overweight and without action, by 2050, 60% of men and 40% of women could be obese. Obesity related diseases could cost an extra £45.5 billion per year. If a person is obese, they are more likely to develop type 2 diabetes, some cancers, cardiovascular disease and a range of other conditions. The prevalence of obesity in adults has risen in England from 15% to 25% between 1993 and 2012; whilst the increase has slowed since 2001 the trend is still upwards[13].

- For Newcastle, 60.3% of adults were estimated in 2012 to be overweight or obese[14] compared to 63.8% nationally.
- The National Child Measurement Programme (NCMP) shows within Newcastle that the prevalence of excess weight amongst children in Reception and Year 6 is significantly worse than the national average.
- 26.3% of Reception Year and 37.9% of Year 6 children were overweight or obese in 2012/13

3.4.5 Sexual health

Sexual health and wellbeing is a major public health challenge with Sexual ill health increasing. The highest burden is borne by gay and bisexual men, young people and black and minority ethnic groups. Improving sexual health is a priority at both national and local level. Chlamydia and Gonorrhoea screening services are in place for the 15 – 24 age group who are the highest risk for these infections. In 2013:

- 3,451 acute sexually transmitted infections (STIs) were diagnosed in residents of Newcastle, with nearly 75% of cases diagnosed in young people aged 15-24 years old. This is above the North East average rate.
- Chlamydia is the most commonly diagnosed STI in Newcastle, with a rate of 2,492 per 100,000, which is within the recommended thresholds of 2,300 – 3,000 per 100,000.
- This is followed by genital warts at 248.9 per 100,000 (North East – 142.0 per 100,000), gonorrhoea 83.2 per 100,000 (NE 47.8 per 100,000), herpes 77.5 per 100,000 (NE 51.9) and syphilis (NE 4.8 per 100,000).

3.4.6 Teenage conceptions

Work to reduce unplanned teenage conceptions is focussed on three key areas: sex and relationship education, access to services and support for teenage parents. Existing key actions to reduce teenage conceptions include work targeted towards schools and communities in teenage pregnancy “hot spot” areas, the main aims of which are to improve access to sex and relationship education (SRE) and improving

[12]Government Office for Science, Foresight, Tackling Obesities: Future Choices – project report 2nd edition. Department of Innovation, Universities and Skills, 2007
[13] National Obesity Observatory, UK and Ireland Prevalence and Trends, http://www.noo.org.uk/NOO_about_obesity/adult_obesity/UK_prevalence_and_trends
[14] Public Health England, Public Health Outcomes Framework, www.phoutcomes.info

access to contraceptive services, particularly increased use of long acting reversible contraception (LARC).

- Rates of teenage conception amongst under-18s in Newcastle are 33.3 per 1,000 in 2012, which is significantly worse than the rate for England (22.7 per 1,000).
- There are 11 electoral wards in the city with significantly higher under-18 conception rates compared to the England average (Benwell, Blakelaw, Byker, Elswick, Fawdon, Lemington, Monkchester, Moorside, Walker, Westgate, Woolsington).
- Trends over time show a significant reduction in the local under-18 conception rate, from a peak of 66.3 per 1000 in 2004 and a narrowing of the gap between the Newcastle and England rate.

3.5 Immunisation and Vaccinations

Newcastle compares favourably with England with regard to immunisation rates for children. It also compares favourably with regard to influenza vaccine rates for the elderly and at risk groups.

- 77.7% of persons aged 65 and over, and 55.3% of those in at risk groups received a flu vaccination in 2012/13, both of which are higher than the national average

3.6 Holiday and Travel in Newcastle

Newcastle attracts a significant number of weekend visitors. Their basic health needs are usually met through community pharmacies providing self care and emergency supply of medicines. Pharmacy related travel needs for Newcastle residents venturing outside of the city are normally for Travel Accessories (First Aid Kits, Repellent Products, OTC Medications), Anti-Malarial Treatment and Vaccinations Advice.

3.7 Housing

Newcastle has seen very low rates of housing development over the life of the last PNA (since 2011) with net past housing completions in 2010-2013 of 331 dwellings. Newcastle City is however on the verge of significant housing and economic growth. Due to be adopted in 2014/15, the Joint Gateshead and Newcastle Core Strategy and Urban Core Plan support plans for new growth in the city (14,000 new jobs and 21,000 new homes in Newcastle by 2030). The City delineated by physical and green belt constraints has had a lack of a 5 year residential land supply and the Core Strategy addresses this, deleting land from the green belt and allocating sites for 6,000 homes in 7 Neighbourhood and Village Growth Areas.