

3. Discussion

3.1 Resource consents

Figure 1 shows the total number of resource consents granted in the last five years, and the associated trend.

The number of resource consents being received (and subsequently granted) by the Whangarei District Council over the five year period decreased overall (see Figure 1). This has three possible implications for development:

1. The level of development is on the decrease for the district as a whole; this does not seem likely, and whilst the actual number of resource consents granted shows a decreasing trend over the five years, the size and complexity of developments may well overcompensate for this decline.
2. The provisions of the District Plan are changing over time, and developments today do not require the same planning permissions as in previous years. Considering that the District Plan has not changed fundamentally during the last five years, this is not likely, and the major changes to the District Plan that have occurred (e.g. subdivision) have made the Plan provisions more restrictive rather than less.
3. Because of the cyclic nature of development apparent in the trend analysis, future figures could alter this trend line. In other words, the time period under scrutiny (five years) is not sufficient to give a true reflection of trends over larger timeframes, and the trend line may be skewed by the high number of consents in the 2002 year.

Resource consents have five years to be given effect to, so it is anticipated that the decline in resource consents will not show up in related data (e.g. building consents and new lots created) for some time. However, this apparent decline in resource consent numbers, along with the cyclic nature of development, should be taken into account by policy-makers when reviewing strategies to cater for future development of the district.

When the data for resource consents is split into subdivisions and land use (see Figure 2), the trends in both data sets sheds some light on the pattern of overall development. The total number of consents granted per year has decreased by approximately 100 consents during the five year period for both subdivision and land use consents, and the trends in both data sets are almost identical. The declining trend in subdivision consents is largely due to the high number of consents granted in the 2002 period. From the 2003 year onwards, the trend is positive, and data collected in future years will determine the long-term trend. There was a substantial decrease in land use consents granted in the 2006 year compared to previous years. The reason for this is not known at this point but future trends should be scrutinized, to determine whether this is a structural change and, if so, why it is occurring.

Where the split between subdivision and land use consents becomes more interesting is in the density of development map for each, and this is discussed below.

3.2 Subdivision consents

Figure 2 shows the number of subdivisions granted during the last five years and the associated trend line. Figures 6 to 14 show the number of subdivisions per Environment of the District Plan. Figure 24 shows the density distribution of subdivision consents in the district.

Subdivision is effectively the basis for development; it creates communities and releases land for commercial development. There are also negative effects to subdivision, such as loss of ecosystem values, loss of versatile soils, sporadic ribbon development, and so on. The issues listed in the District Plan regarding subdivision include the enhancement that subdivisions can provide for, the effects on the environment, conflicts that may arise from incompatible land use activities occurring adjacent to one another, and an increase in demand for infrastructure.

Figures 6 to 14 show subdivisions in the individual Environments of the District Plan. Each of these Environments have different requirements in terms of minimum lot sizes, provision of infrastructure (e.g. stormwater), and cater for different effects on the environment (e.g. earthworks).

The trends for subdivision in the Living 2, Open Space, and to some extent the Business Environments, are affected by the low number of consents granted in these areas. However, these low numbers, in comparison to the much higher figures for the Living and Countryside

Environments, also give a strong indication as to where development is occurring and where the policies, objectives and rules of the District Plan are being tested the most.

To begin with, there is some analysis that can be undertaken regarding the areas where subdivision is not common. In the Business Environments, the variation in the number of subdivisions during the years is quite significant. The overall trend for the Business 2 and 4 Environments is of increasing numbers of subdivisions being granted, whereas Business 3 appears to be in the decrease. Again, caution is required here, as the numbers are low enough that a relatively small change from one year to the next will vary the trends significantly.

Focusing on the Environments with significant numbers of subdivision consents, there is substantial variation between the years for all Environments. Subdivision in the Living 1 and Living 3 Environments show exactly the same pattern from year to year (although on a smaller scale for the Living 3 Environment), with 2003 being the year with the lowest number of subdivisions and 2005 having the highest. In fact the similarity between the two Environments is uncanny – it may be safe to assume that development in the urban areas of the district is reasonably uniform.

The Coastal Countryside and Countryside Environments, however, show declines in both Environments – in fact, it is the trend in these Environments that have resulted in the downward trend in subdivision consents overall. And again, it appears that the high number of consents granted in the 2002 period has unduly affected this trend, Countryside subdivisions in particular. It remains to be seen whether this trend continues, as five years of data is not sufficient to draw firm conclusions. Note that subdivision in these Environments will be discussed in more detail in the section on new lots below.

A more productive analysis of subdivision consents in the district can be made from Figure 24, which shows the spatial density of these consents. There are subdivisions scattered throughout the district, although there have not been many in western parts of the district. The city and immediate surrounds show the most concentrated numbers of consents, with certain areas in the city having the most number of anywhere in the district (between 19 to 26 subdivisions per square kilometre). Hotspots of consents include Maungatapere, Tutukaka, One Tree Point, Ruakaka, Waipu, Waikaraka and Parua Bay. Lang's Cove, Ngunguru, Hikurangi, McLeod Bay and Whangarei Heads have between 4 to 10 subdivision consents per square kilometre.

One of the objectives of the District Plan is that subdivision and development are consolidated in appropriate locations, and sprawling or sporadic subdivision and ribbon development should be avoided. It appears, from Figure 24, that this objective is being achieved in part. However, it needs to be stated that, although subdivision is being concentrated in specific areas (i.e. the city), the scatter of subdivision consents through the rest of the district may indicate that sporadic development is occurring without due regard for the objectives of the District Plan. This may be particularly true for parts of the coastline and rural inland areas, and may well create problems for the orderly and cost effective provision of infrastructure and services, as well as cumulative adverse effects on the natural environment.

3.3 New lots

Figure 3 shows the trend in the number of new lots created during the last five years, and Figures 15 to 23 show the number of new lots per Environment of the District Plan. Figure 28 shows the density distribution of new lots throughout the district.

The trend line in Figure 3 shows that the number of new lots created during the last five years is declining. It is not expected that this trend will continue, as there is a prominent two- to three-year lag between the number of subdivisions and the number of new lots created, and as such, the large number of lots created in the 2004 year is directly attributable to the large number of subdivisions granted in the 2002 period year. The subsequent slump in the number of new lots is therefore attributed to the slump in subdivision consents in years following the 2002 period. However, as can be seen in Figure 2, the number of subdivision consents has climbed since, so it is expected that the number of new lots being created will also rise during the next two to three years, and the trend line overall will become positive.

A more interesting analysis can be made of the number of new lots created per Environment, illustrated in Figures 15 to 23. Here, the two- to three-year difference between subdivisions and new lots created is definitely noticeable; for instance, comparing Figures 6 and 8 (Living 1 and 3 subdivisions) with Figures 15 and 17 (Living 1 and 3 new lots) it can be seen that the graphs are evidently two years out of phase.

Comparing the number of new lots in the Living, Business and Countryside Environments, the following conclusions can be drawn:

- The level of growth in the number of lots in the Living Environments (Living 1 and 3 in particular – the Living 2 Environment does not contribute significantly to the level of growth in general) is fairly stable. On average, new lots are being created at a steady pace.
- The level of growth in the number of lots in the Business Environments is increasing. The trends for all three Environments shown (as stated before, Business 1 subdivisions and new lots were too small for any meaningful analysis) are upwards; this effectively means that there is going to be more land available for industrial and commercial use.
- The level of growth in the number of lots created in the Coastal Countryside and Countryside Environments is decreasing; however, it needs to be pointed out that it is these areas that are most likely to show correlation with subdivision data, as the total numbers of new lots for both Environments are much larger than in any of the other Environments. Consequently, it is expected that this downwards trend will change in the next two to three years as subdivisions during the last two to three years have been on the increase (in contrast to the overall trend in subdivision consents – see Section 3.2 above).

Figure 28 specifically shows where new lots are being created. This figure differs from the other density distribution maps, in that instead of using the one square-kilometre method, the new lots are mapped with respect to the location of the underlying subdivisions and in proportion to the number of lots created. Consequently, the map shows at a glance where the largest number of lots are being created. The urban, peri-urban, Ngunguru/Tutukaka/Matapouri, and One Tree Point/Ruakaka areas stand out immediately.

Other parts of the district have experienced significant (potential) land development in through the creation of subdivision lots. These include Southern Bream Bay/Waipu, Maungatapere/Maungakamea, Three Mile Bush Road, Glenbervie, Parua Bay/Pataua, and to a lesser extent Whangarei Heads and Oakura.

Interestingly, Figure 28 also clarifies the effect of the scatter of subdivision throughout the district. All but a few of these subdivisions were for 12 lots or less. Therefore it can be said that, while sporadic subdivision is widespread, the subdivisions are not large, which has both negative and positive implications. On the positive side, the issue of sporadic development is addressed by ensuring that large-lot, concentrated subdivisions are not frequently occurring in scattered

locations. On the negative side, however, the long-term effects of numerous small-lot subdivisions are similar to large-lot subdivisions, and if effects are not given due consideration, the environmental consequences may be significant, not to mention the problems associated with the provision of infrastructure and services to scattered residential development.

3.4 Land use consents

Figure 2 shows the number of land use consents granted during the last five years and the trend, and Figure 25 shows the density distribution of land use consents in the district.

Land use consents do not receive as much attention as subdivision consents in this report. This is because land use consents can be granted for matters which do not contribute significantly to the overall picture of development (e.g. a land use consent to infringe setbacks does not have an effect on the environment similar to a ten-lot subdivision. However, land use consents can also be granted for major infrastructural developments such as a lumber mill, therefore it would be unwise to ignore them altogether). This report does not distinguish between land use consents for minor activities and land use consents for major activities, therefore the density and five-year images are treated with some caution.

Figure 2 shows that the number of land use consents granted by Council is declining. Apart from anything else, this would corroborate the hypothesis given earlier (in Section 3.1) that the number of consents granted is exhibiting a decline but part of a trend that is cyclic and one that may well change over the next few years. Some caution is needed as five years of data is not sufficient to predict long-term trends in the overall level of development. There has also been a significant decrease in land use consents granted in the 2006 year compared to previous years. The reasons for this are unknown at this point in time, but future trends need to be scrutinized to see whether this continues.

The density map for land use consents (Figure 25) provides interesting insight into the nature of development in the district. It can be seen the city centre is where most land use development is occurring, with up to 36 consents being granted in one square kilometre. Furthermore, the areas surrounding the city centre (i.e. the Whangarei urban area) is where most land use consents have been granted. While there are other areas of the district which have also had land use consents granted, there are no surprises here. Waikaraka, Maungatapere, One Tree Point,

Ruakaka, Lang's Cove, Ngunguru/Tutukaka and Oakura have all had significant land use development. Interestingly, Waipu has not experience as much land use development, and Oakura has experienced higher numbers of land use consents than would be expected (considering that Oakura has not seen a great deal of subdivision development).

Low densities of land use consents are scattered throughout the rest of the district, and, as with subdivisions, the western parts of the district have experienced lesser land use developments over the last five years, as shown through land use consents issued.

3.5 Building consents

Figure 4 shows the number of building consents granted in the last five years, and the associated trend. Figure 26 shows the density distribution of building consents in the district.

Building consents are an important indication of the level of development occurring in the district. While land use consents are not required for every activity, building consents are normally required for most construction and alteration work. However, some of this building work does not have any effect on the environment per se (e.g. a building consent for internal alterations such as a staircase has no measurable environmental effect), so building consents are compared in this report in conjunction with other data. Importantly, the next section deals with building consents for new dwellings specifically.

Figure 4 shows that the number of building consents is, on the whole, increasing. Interestingly, Figures 3 and 4 show remarkably similar shapes, though opposing trends (the number of new lots created, as discussed previously, are declining). It is not surprising to establish a direct correlation between new lots and building consents, for new lots allow for more development, all of which require building consents. Therefore the density distribution of building consents (Figure 26) becomes important in establishing where development is occurring most prominently, compared with the distribution of new lots (Figure 28), which indicates where development will occur in the future.

Figure 26 does not produce any surprises as far as development in the district is concerned – it is patently clear that the city and the peri-urban areas are where building development is most intense. Other prominent areas include Hikurangi, One Tree Point and Ruakaka, with Waipu, Ngunguru/Tutukaka and Maungatapere also showing large numbers of building consents granted.

However, it is also evident in Figure 26 that the entire district has experienced some form of development or other, whether it is minor (such as the construction of a fireplace) or not (construction of a house).

Comparing the density image of land use consents (Figure 25) with building consents (Figure 26), it comes as no surprise that areas with higher densities of land use consents correspond to increased numbers of building consents. Prominent examples of this include the city, Tutukaka, Ruakaka and Whangarei Heads. This suggests that the District Plan is having an effect as far as ensuring that the quality of development is not compromising the environment, so long as adequate resource consent conditions are being used as the mechanism to ensure that the effects of the development are no more than minor.

3.6 New dwellings

Figure 5 shows the number of building consents granted for new dwellings in the last five years, and the associated trend. Figure 27 shows the density distribution of building consents for new dwellings in the district.

Surprisingly, Figure 5 does not resemble the pattern that would be expected, that is, a similarity to the graph of new lots created (Figure 3). This indicates that the construction of homes on new lots is not keeping up with the number of lots that have been created. Population trends become important in this analysis; the more people there are in the district, the more houses required for them to live in. Unfortunately, the figures do not match – subdivision and the creation of new lots are well in excess of the population growth of the district. This is discussed more fully in Section 3.9 below.

The distribution density of new dwellings also shows interesting patterns. The areas which are densest in terms of new dwellings are relatively easy to determine. Kamo/Three Mile Bush, Waikaraka, One Tree Point and Ruakaka have had between 38-74 new dwellings constructed per square kilometre during the last five years. Other areas, such as Parua Bay, Ngunguru/Tutukaka/Matapouri, Southern Bream Bay including Lang's Cove, and Oakura have experience significant residential development. Interestingly, although these areas clearly stand out, areas that have had between 4 and 20 new dwellings per square kilometre constructed during the last five years are widespread.

3.7 Annual growth

Figures 29 to 32 show where development has occurred in the district on a year-by-year basis. Areas showing consistent growth or high growth nodes are highlighted in green, while areas showing sporadic growth or medium growth areas are yellow, and areas with very sporadic growth or lesser growth areas are orange.

Figure 29 shows that subdivisions have consistently been occurring in the urban and peri-urban areas and along the coast, in areas such as Ruakaka/One Tree Point, Waipu/Lang's Cove, and Ngunguru/Tutukaka/Matapouri. Subdivision in the Maungatapere/Maungakaramea and Three Mile Bush Road areas has been sporadic from year to year, and the same can be said of Oakura, Glenbervie, Whangarei Heads and Northern Harbour fringe areas. Interestingly, Hikurangi and other parts of the district (shown in orange in the sequence) have experienced sudden bursts of subdivision activity during the last five years.

Figure 30 shows that land use activity has not been as widespread as subdivisions, but from the sequence it is easy to see that the city area has experienced a consistent number of land use consents, as have the coastal areas of Ngunguru/Tutukaka/Matapouri and Ruakaka. Maungatapere, One Tree Point, and Southern Bream Bay/Waipu along with the North Harbour fringe have had sporadic development, and a few pockets such as Waikaraka and Hikurangi have experienced the occasional surge in land use consents during the five years.

Figures 31 and 32, which show building consents and building consents for new dwellings, are harder to analyse over the five year period due to the large number of consents granted per year and the scattered nature of these consents. In fact, for the building consents data, the size of each 'dot' representing a single consent had to be reduced in order to distinguish the areas of growth. It is obvious that the city and surrounding urban areas have experienced the most consistent growth over the period. The Three Mile Bush Road, Glenbervie and Maungatapere/Maungakaramea areas have likewise experienced consistent growth. Along the coast the Ngunguru/Tutukaka/Matapouri, One Tree Point/Ruakaka, Southern Bream Bay/Waipu, and Whangarei Heads/North Harbour Fringe have all shown consistent numbers of building consents for the last five years.

Other areas such as Pataua, Oakura and parts of Bream Bay have shown sporadic development over the years. This is even more marked for building consents for new dwellings, where the

data for coastal settlements have not been as consistent as building consent data for the same areas.

3.8 A picture of the future

Figures 33 to 38 show 3-dimensional images of parts of the district as they exist today and as they will exist in the future when all lots that have already been created have been built on.

Considering the densities of subdivision (Figure 24) and new lots (Figure 28), Figure 34 in particular comes as no surprise – One Tree Point will be three to four times larger than it presently is (as seen in Figure 33). However, it needs to be emphasized that these images are based on consents that have already been granted and lots that have been effectively created (at the Section 223 stage). In other words, the future images (Figures 34, 36 and 38) will become reality, once the lots have been purchased and built upon.

Ruakaka (Figures 35 and 36) and Parua Bay (Figures 37 and 38) will look quite different when all lots are developed. It is understood that there are plans to continue developing these areas in the future (e.g. there is a proposed 166 lot subdivision south of the Ruakaka racecourse, and a proposed plan change in Parua Bay that may eventually add some 500 lots or more in one development), which means that the images shown in Figures 35 to 38 are not the complete picture. Generally speaking, the images presented are conservative. Taking into account subdivision consents already granted (but not yet legally created) and plan changes lodged or proposed, the true picture of future development is likely to show significantly more residential and commercial use.

The question of when these developments will occur, and these images of growth become a reality, is the subject of the section below on population growth.

3.9 Population growth, subdivision and building consents

The Policy Division of the Whangarei District Council has developed a model which projects the population growth of the district. This growth model has been developed based on population data such as that presented in Table 1 as well as on population projections. Data relating to the

capacity of the district to accommodate projected population has been compared with the actual growth of the district in relation to land supply, with surprising results. Although all previous data presented has been for the five years from 2002 to 2006, the data presented here goes back to the year 2000, which is useful as the overlaps between actual population growth and populations based on subdivisions and building consents can be seen (in some instances, the overlap occurred in the year 2000).

The graphs below (supplied by Dianne Zucchetto of the Policy Team) display three data sets each. The first data set, in brown, is the actual population as determined by census. The second data set, in blue, is the population able to be accommodated in the district, based on the number of building consents for dwellings multiplied by 2.4 – the average number of people per household nationally. The third data set, in green, is the population able to be accommodated in the district, based on the number of lots created (multiplied by 2.4, as with building consents).

There are three graphs, one for the urban population, one for the rural population, and the third for the population of the district as a whole.

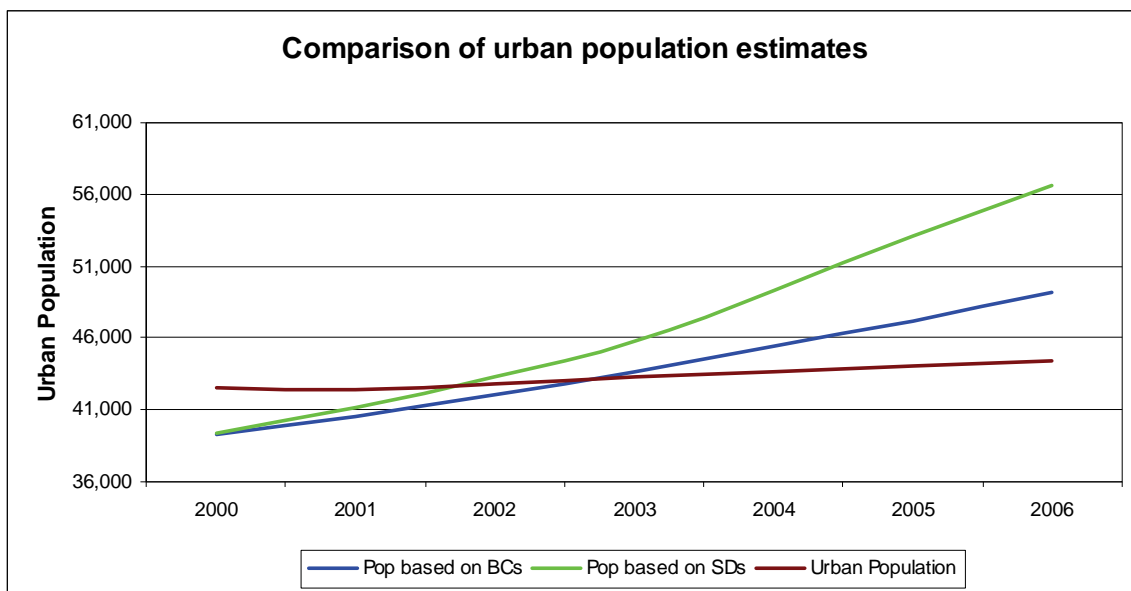


Figure 39 – Comparison of urban population estimates

The urban population of Whangarei is growing. However, in the 2003 period, the capacity for housing this population, in terms of dwellings and new lots created, and assuming a residential population of 2.4 people per lot/residential unit, exceeded the urban population, and this trend is continuing.

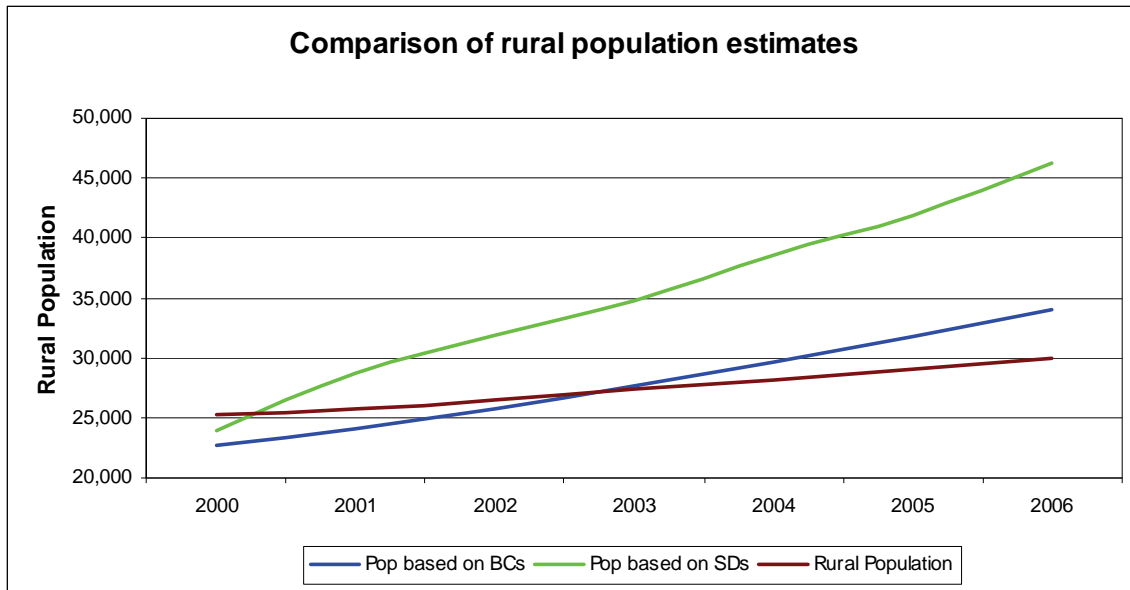


Figure 40 – Comparison of rural population estimates

Whangarei's rural population is also growing, even more so than the urban areas. However, the graph above clearly shows that new lots created from subdivision exceeded the rural population in 2001, and the number of new dwellings exceeded the rural population in 2003, based upon the assumption of 2.4 people per lot/residential unit.

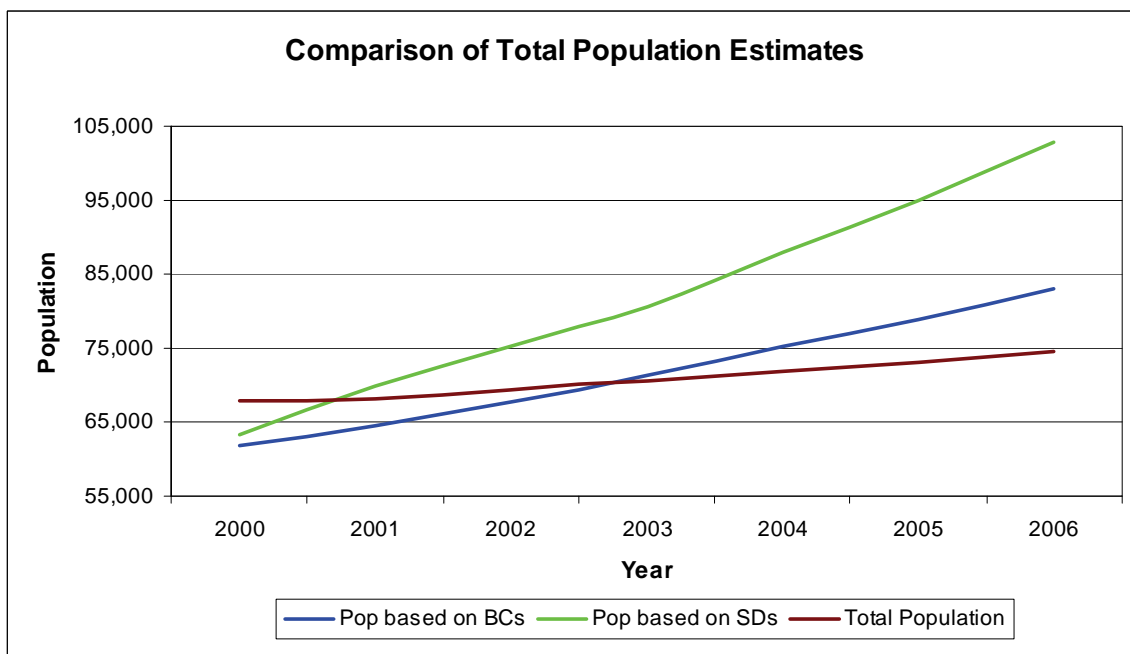


Figure 41 – Comparison of total population estimates

The above graphs (Figures 39 to 41) show three important facts. The first is that, in the urban environment, the number of lots created now caters for 12,000 more people than currently reside in the Whangarei urban area. The second observation is that the rural area caters for 16,000 more people than currently reside in the Whangarei rural environs. Overall, this means that the district has the capacity to support a population of 103,000, almost 28,000 more than presently reside in the Whangarei district, based on the number of lots already in existence and based upon 2.4 people per lot/residential unit.

Note that the figure of 2.4 people per lot/residential unit is conservative. It is quite likely in a town of Whangarei's size that density per household is in excess of 3 people on average. If this is the case, the project capacities based on building consents and subdivisions is actually much higher than the figures given above, and the length of time required to use all lots available on this basis extends proportionally.

There are several possible reasons for the disparity between population growth and populations able to be accommodated based on building consents and subdivisions. These are:

1. Lots are being bought and homes are being constructed by non-residents. This may well be true for the coastal areas of the district; it may be that Whangarei is coming to be increasingly seen as a place to holiday in, similar to other parts of the country like Pauanui and Tauranga/Mount Maunganui.
2. Land is being developed in anticipation of a surge in population; with Auckland growing rapidly, there may well be a spillover into towns close to Auckland such as Whangarei.
3. Land is being developed and banked by property speculators, especially in the coastal areas. If this is the case, and land is not taken up by either a population surge or by non-resident purchasers, the consequences may range from a fall in property prices to on-going loss of productive land which could be better utilized.
4. There is an increasing, unintended incremental oversupply of residential lots in comparison to the demand. This may be in the order of around 10,000 lots over the whole district. This oversupply is likely to be greater or lesser in various locations. It is also likely the result of cumulative individual decisions to undertake subdivisions and enter the property market.