



HOUSING PROSPECTS

Sample Report

THE QUALITY OF OUR ANALYSIS IS MATCHED BY NONE

This sample report explains the contents and analysis within our **Housing Prospects** reports. On reading this sample report you will soon realise that this is not another economic report filled with the half-baked ideas of an economist! The quality of our analysis is matched by none and will provide you with a valuable tool in your business risk management strategy and/or investment decisions.

The **Housing Prospects** reports contain the most rigorous and insightful analysis available of housing prospects, including: the year-ahead outlook for the national median house price; an assessment of whether it is a good, a bad or an indifferent time to invest in housing; analysis of section price prospects; analysis of the outlook for immigration and emigration; our summary views on interest rate prospects; and analysis of house price prospects for 24 cities/districts.

On the first page of the report is a concise executive summary. The reports are comprehensive and generally run to around 17 pages. They are written in plain English and illustrated with enlightening leading indicator charts, so as well as containing the best analysis available they are comprehensible, with a bit of fun thrown in along the way.

The rest of this **Sample Report** contains examples of the analysis within the **Housing Prospects** reports, including an explanation of our leading indicator chart analysis. Once you have seen how our leading indicator approach to analysis works you will better appreciate why we have a superior track record at predicting, be it house prices, immigration numbers, interest rates or the exchange rate.

Of course, forecasting the future is an art not a science, so even armed with the best analytical techniques in the world we will not always get it right. Who knows when “nuclear bombs” might start falling on Chicken Licken’s head. However, we can confidently assert that our track record in our specialist areas is matched by none, while in the event of a major shock we will issue a **Special Report** to help clients negotiate the chaos.



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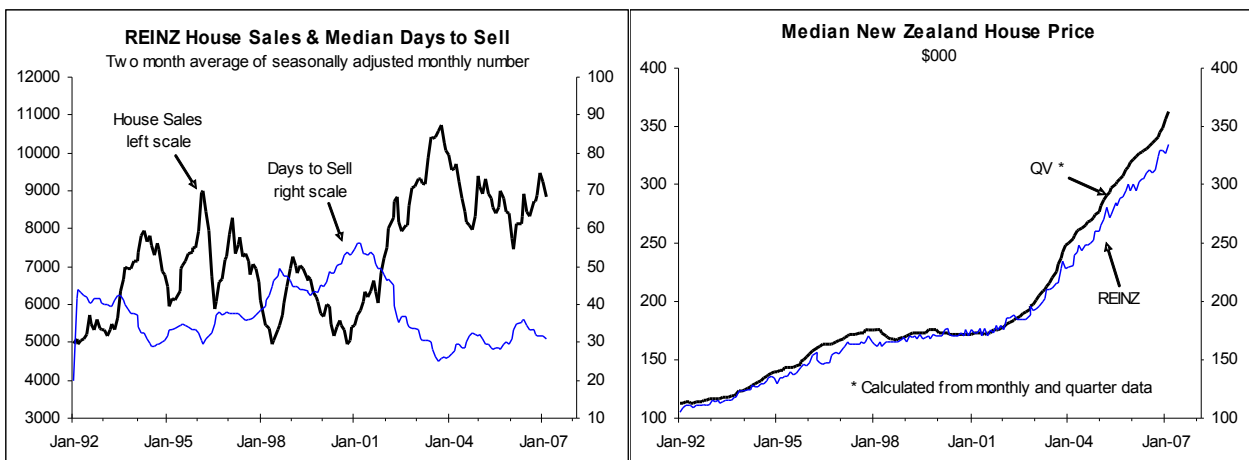
HOUSE PRICE PROSPECTS

Grey clouds are gathering, but the boom in house prices is not over yet

The ideal time to invest in housing is at the start of a multi-year rise in prices. If you subscribe to **Housing Prospects** you will get advanced warnings of such periods and valuable insights into house price prospects over the next year.

When the number of houses sold nationally remains high for a protracted period of time and the average number of days it takes to sell houses remains low (see 1993-1997 and 2002 onwards in the left chart), there will be a multi-year increase in house prices (the right chart). Our analysis of housing demand, migration and interest rates enable us to forewarn of such periods.

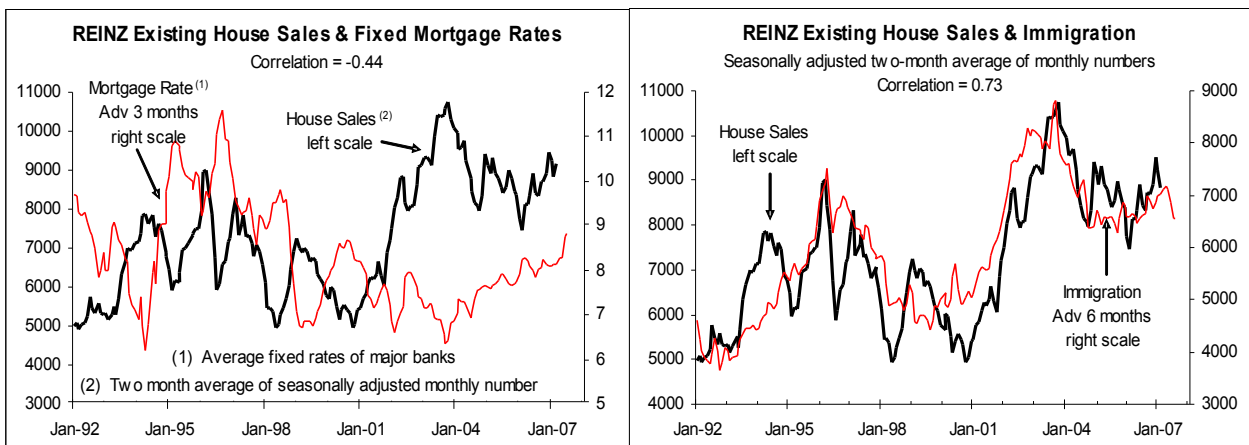
However, if house sales are low and days to sell are high (see January 1992 to mid-1993 and January 1998 to January 2002 in the left chart), then house prices will either stagnate or fall (see the right chart). If you subscribe to **Housing Prospects** you will get advanced warnings of whether we are heading for one of these periods, which could be a time to reduce your investment in housing but certainly is not a time to be investing in housing in general (although there can be exceptions to such general rules).



The primary drivers have turned less favourable, with downside in house sales ahead

If the national level of house sales increases or falls materially it takes three months on average for this to impact on the national median house price, so we can have an educated view on the outlook for house prices over the next three months based on the recent behaviour of house sales and the average number of days it takes to sell houses (the left chart above). But what drives house demand and sales?

Immigration and mortgage interest rates are the primary drivers of housing demand and explain both the major and minor cycles in the national number of house sales as reported by the Real Estate Institute (REINZ). The **Housing Prospects** reports contain our leading indicator charts which show explicitly the impact of interest rates and immigration on house sales. The left chart below shows the impact of mortgage interest rates on house sales and the right chart shows the impact of immigration.



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These charts give an excellent lead on what will happen to the level of house sales over the next 3-6 months. And if we can reliably predict house sales for the next 3-6 months we can predict what will happen to the national median house price for the next 6-9 months with a good degree of accuracy.

The left chart at the bottom of the previous page shows the relationship between the number of houses sold national each month (the black line and the left hand scale) and mortgage interest rates (the red line and right scale). Analysis of the relationship between interest rates and house sales shows that it takes three months for changes in interest rates to impact on house sales. Reflecting this, the red mortgage interest rate line has been advanced or shifted to the right by three months (see “Adv 3 months” under the “Mortgage Rate” label for the red line). Consequently, the red line points three months into the future relative to the black line, giving a lead on what should happen to house sales over the next three months based on the inverse relationship between interest rates and house sales.

The right chart at the bottom of the previous page shows the relationship between house sales (black line and left scale) and immigration (red line and right scale). The best fit is with the red immigration line advanced or shifted to the right by six months. It makes sense that most immigrants do not buy a house the first day they are in the country; they might rent for a while, or stay with relatives or friends. Our statistical analysis shows that on average it takes six months for the majority of those immigrants who are going to buy a house to buy one. So what has happened to the immigration numbers over the last six months gives us a lead on what will happen to house sales over the next six months. When we combine the predictions of both charts we have a powerful tool for predicting near-term house sales.

In the same way we analysis the near-term outlook for house sales by identifying the key drivers and using leading indicator charts, we also analyse the outlook for interest rates (this analysis is contained in our **Interesting Times** and **Monetary Policy Briefing** reports) and the outlook for immigration (see below). Armed with quality analysis of interest rate and migration prospects we can predict house demand and hence house prices even further into the future.

House price inflation, consumer confidence and the state of the economy

While interest rates and immigration are the primary drivers of house sales and house prices, we also take into account the impact of factors like the state of the labour market, consumer confidence, government policy (e.g. bribing people in election years), and international economic and interest rate prospects.

Our summary views on interest rate and economic prospects are contained in the **Housing Prospects** reports, while our **Interesting Times** reports have the best available analysis of the prospects for these secondary and tertiary drivers of the housing market, as well as providing the only quality analysis available of interest rate and exchange rate prospects.

There are indications that housing supply has run ahead of end-user demand for houses

We assess whether we are building too few or too many new houses relative to what is needed given population growth; specifically whether there is insufficient or too much spec building occurring. This has implications for house price inflation.

The role of investors and what happens when the get-rich-quick train leaves town

We assess the extent to which house prices are being driven by investors relative to end-user demand for housing. Investors play an important role in the housing market, but when large numbers of unsophisticated investors get involved in any market it warrants investigation because it raises the risk of a boom-bust cycle.

IS IT A GOOD TIME TO INVEST IN HOUSING?

From a valuation perspective the only worse time to buy than now will be tomorrow

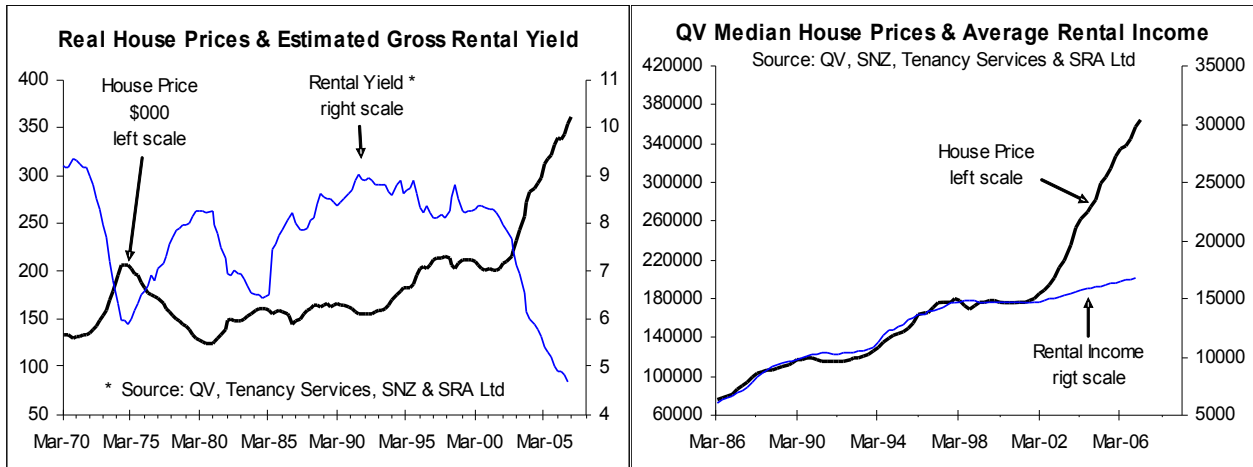
In assessing whether it is a good, a bad or an indifferent time to invest in housing we look at affordability (e.g. house prices relative to incomes, interest costs relative to incomes and rental costs relative to incomes). We assess rental yields and the prospective for rental income growth. We assess the potential for house price increases to beat increases in the general level of prices. Our assessment is aided by long-term charts on the housing market going back to as early as the 1970s, like the two examples below.

However, valuation charts are of limited use without quality analysis of what drives house prices. It is often the case during booms, be it in house prices or share prices, that people who focus too much on valuation measures either stop buying too early or start selling too early. A major value of the **Housing Prospects**

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reports is that they combine quality analysis of both whether housing currently represent good, indifferent or bad value with the best available analysis of near-term house price prospects.



THE RESIDENTIAL SECTION MARKET

Demand for sections should follow the lead of house demand, but there are risks

We analyse the outlook for the national demand for sections and section prices with the same sort of insightful leading indicator charts we use to analyse housing demand and house price prospects. However, where possible we like digging behind the scenes to better understand the state of the market from both a demand and supply perspective.

We use the table below, which is updated monthly, to give useful insights into the supply of sections at the regional level. Regions with a large number of sections advertised for sale relative to historical sales levels are most at risk in a downturn, while regions with few sections advertised for sale relative to historical sales levels should have the best section price prospects in upturns.

REINZ Sections Ads Relative to Annual Section Sales - March 2007

	Number of Section For Sale Ads (1)	Ads expressed as months of sales (2)		
		Average Sales	Maximum Sales	Minimum Sales
Northland	1743	34.7	17.1	80.1
Auckland	1953	12.6	8.7	17.4
Waikato	516	6.5	3.7	11.0
Bay of Plenty	610	9.9	5.4	19.0
Gisborne	57	28.5	11.6	97.7
Hawkes Bay	203	13.1	6.4	53.0
Taranaki	90	8.1	2.7	21.6
Manawatu-Wanganui	245	8.2	4.3	18.8
Wellington	352	6.0	4.4	8.3
Marlborough	188	11.3	5.5	22.6
Nelson-Tasman	242	8.5	3.7	16.1
Canterbury	932	9.3	4.9	19.0
West Coast	289	48.2	16.8	289.0
Southland	223	21.8	9.9	83.6
Central Otago-Lakes	1040	23.8	11.2	120.0
Otago	289	20.4	9.8	59.8

(1) Source: www.realestate.co.nz

(2) Ads relative to the historical annual average, maximum and minimum number of sales

THE OUTLOOK FOR MIGRATION

We analysis what drives immigration and emigration using insightful leading indicators

Our research shows that immigration better explains demand for housing than net migration, although we analyse the prospect for both in this section of the **Housing Prospects** reports. Key to the major cycles in immigration is what the government does with new residency approvals, while the key to emigration is the state of the Australian and international labour market.

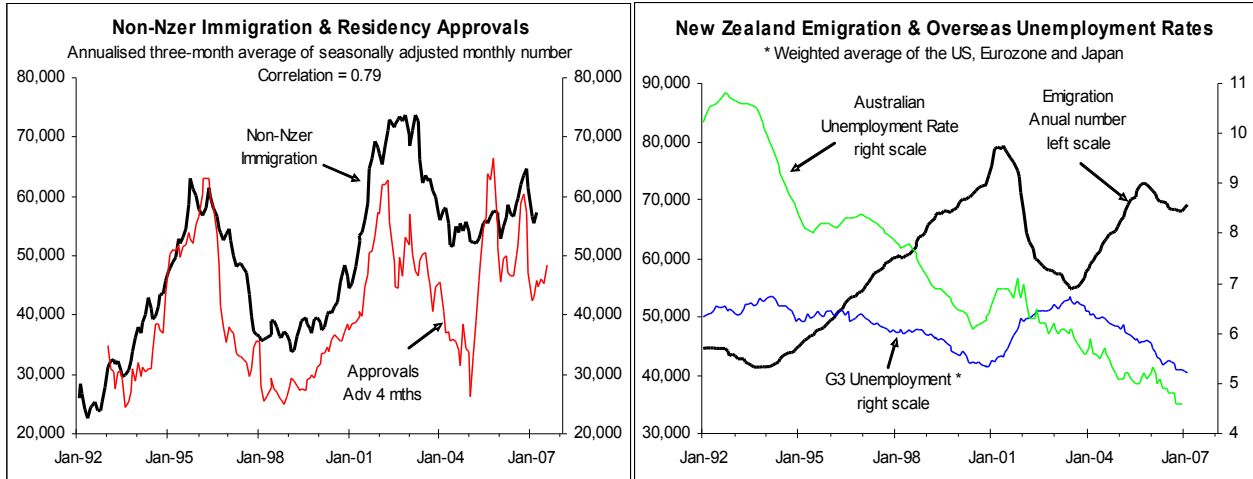
The left top left chart on the next page shows that the best fit between the number of new residency approvals for immigrants (the red line) and immigration numbers of non-Kiwis is with the approvals line

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being advanced or shifted to the right by four months. This chart will give us a warning four months prior to major changes in immigration, while the immigration numbers give us another six month lead on house sales, which in turn give a three month lead on house prices. When we combine the leading indicator charts and analysis we use we can have an informed view on house price prospects – as opposed to the half-baked views often expressed by economists and other commentators – for more than the next year.

The right chart shows that when the unemployment rates fall in Australia and in the major countries then more people leave New Zealand on a permanent or long-term basis (largely Kiwis heading overseas to OE). While when the unemployment rate rises overseas New Zealand's emigration numbers generally fall. The **Housing Prospects** reports have leading indicators of global growth which give advance warnings of prospects for the global labour market, which in turn gives a lead on major emigration cycles.

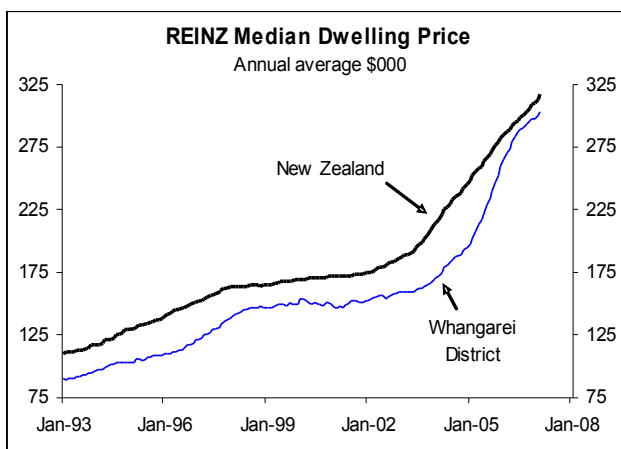


THE CITY/DISTRICT OUTLOOK FOR HOUSE PRICES

The national drivers are relevant to most cities/districts, but major divergences can occur

The **Housing Prospect** reports contain analysis of near-term house price prospects for 24 of New Zealand's 73 cities/districts. This analysis will give early warning signals of when any of the 24 markets are about to under or out-perform national house price inflation, as well as identifying when they are cheap or expensive relative to the national market. Below we use Whangarei District to illustrate the valuable insights supplied by our city/district analysis.

The cities/districts covered are: Whangarei, Rodney, North Shore, Waitakere, Auckland, Manukau, Hamilton, Thames-Coromandel, Tauranga, Rotorua, Taupo, Gisborne, Napier-Hastings, New Plymouth, Palmerston North, Wanganui, Wellington, Hutt (Lower Hutt), Nelson, Marlborough, Christchurch, West Coast (region), Queenstown Lakes and Dunedin.

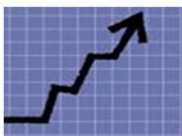


The adjacent chart shows the median house price for the Whangarei District relative to the New Zealand median house price. As is the case for most cities/districts, Whangarei District house prices move roughly in line with national prices. This is the case because interest rates are the same in Whangarei as nationally, while population growth in Whangarei is highly correlated with national population growth.

This means that analysis of the drivers of the national housing market, as contact in the **Housing Prospects** reports, are of major importance in assessing Whangarei District house price prospects.

However, the chart at the top of the next page shows that in terms of annual house price inflation there can be significant differences between Whangarei District and New Zealand (the blue and black lines show the annual % changes in house prices for Whangarei District and New Zealand respectively).

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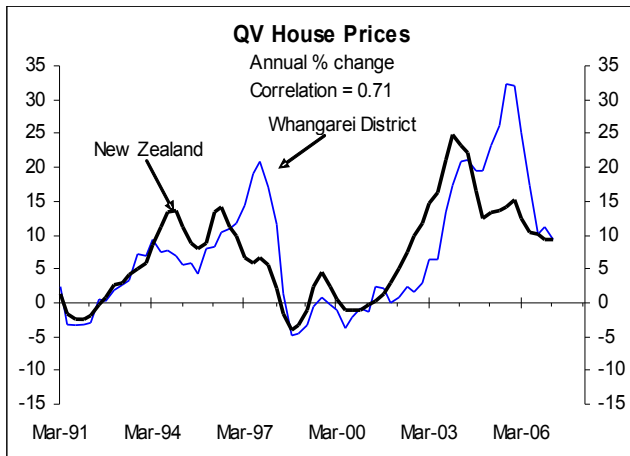


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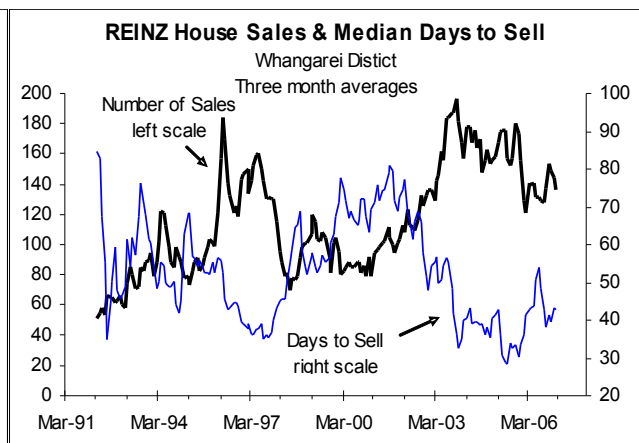
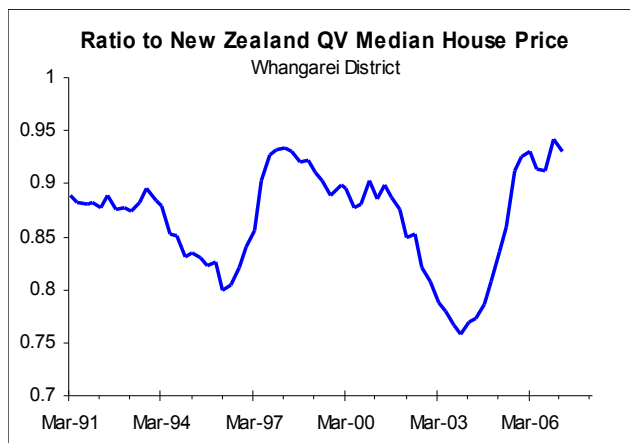
The pattern of behaviour varies from place to place, but in the case of Whangarei District there is a repeated pattern of house price inflation under-performing the national experience in the early years of a multi-year upturn in prices, but then going through a catch-up phase in the latter stages up the upturn. This behaviour is largely associated with investor involvement in the market.



Because Whangarei District house price inflation is not completely in synchrony with national house price inflation the median house price in Whangarei can vary between 75% and 95% of the national average (the left chart below). What appears to happen is that investors are slow to get involved in the local market, so local house prices fall relative to national/Auckland house prices in the initial stages of the upturn. However, when the local prices start looking cheap relative to national prices there appears to be a surge of investor interest in the market and Whangarei house prices subsequently experience a sharp rise. When local prices become expensive relative to national prices the investor binge then seems to wind down.

Whangarei District house prices fell relative to around 80% of the national average in 1995 (the left chart below). It seems at this level Whangarei was discovered as having cheap house prices and the number of houses sold each month in Whangarei District surged (the black line in the right chart) and the average number of days it took to sell houses in Whangarei District plummeted (the blue line in the right chart), which resulted in Whangarei house price inflation surging above the national performance (the left chart above). However, it didn't take too long for investors to realise Whangarei was no longer cheap and in 1997-98 the level of house sales collapsed and the number of days it took to sell houses surged and Whangarei began a period of underperforming on the house price front.

This exact cycle has been repeated since 2001. By late 2003 investors identified that Whangarei was cheap and sales levels subsequently soared. A principal of a local real estate firm told us a couple of years ago that 30% of his firms' sales in Whangarei City were to Aucklanders, dominated by investors. Investors have been conducting a feeding frenzy in the Whangarei market since 2003 and consequently it has experienced house price inflation well in excess of the national norm, but local prices are again expensive on a national comparative basis (the left chart below).



House sales in Whangarei District are still high by historical standards and days to sell are still relatively low (the right chart), so we have not seen the end of the upside in the local median house price. However, because Whangarei is now expensive on a national comparative basis it faces the risk of under-performing once the investors wise up to this situation. The right chart above will tell us when the investors desert the Whangarei market, which will be signalled by plummeting house sales and a sharp rise in days to sell.

The **Housing Prospects** reports contain the same analysis as described above for the Whangarei District for each of the 24 cities/districts listed on the previous page. The charts are supplemented by a table that assesses the level of supply of houses for sale in each of the 24 cities/districts.

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