



PROJECT BRIEF

SUBREGIONAL INFRASTRUCTURE RESEARCH PROJECT

(ELECTRICITY)

1. Background:

Substantial population and urban growth has occurred in the Western Bay of Plenty (WBOP) Sub-region for many decades. Strong growth is expected continue in the foreseeable future.

To manage this growth the SmartGrowth Strategy for the WBOP sub-region was developed in 2004. This Strategy provides a 50 year vision for the development of the sub-region. An integral part of the Strategy is the Settlement Pattern. The Settlement Pattern identifies the geographic areas where urban development (residential, industrial and commercial) is expected to occur in the future within the sub-region as well as the general timeframes for this development based primarily on the adopted SmartGrowth population projections. The Strategy and the Settlement Pattern are currently in the process of being updated.

The SmartGrowth partners are now finding for a number of reasons that there is likely to be insufficient land identified within the SmartGrowth Settlement Pattern to accommodate expected growth in the coming 40 to 50 years. The reasons for this are:

- Lower densities being achieved in growth areas like Wairakei and Te Tumu and less residential intensification taking place (more land than previously anticipated is required to house approximately 11,750 people)
- Likelihood of further reductions to minimum residential yields below 15 lots per hectare resulting from the settlement of an appeal to the Tauranga City Plan (effect of this is unknown at this stage)
- Working to a higher total population in the sub region (approximately 300,000 people) because the SmartGrowth Strategy is likely to look out to 2061 instead of 2051 to retain a 50 year vision.
- The identified long-term shortage of industrial land (this is currently estimated to be 300 hectares but may change as the result of further research being undertaken on this issue)

In addition to this, additional land may need to be found because of:

- The possibility that the infrastructure costs associated with servicing growth in some of the areas already identified in the settlement pattern may be prohibitive which, if true, would necessitate growth being relocated.

- The possibility that research underway by SmartGrowth into residential infill and intensification development may result in less growth being allocated to this form of development.

On the other hand, there is currently significant uncertainty about likely long-term population growth rates which have in recent years reduced substantially. This issue will become clearer once the 2013 census data is available and has been used as a basis for determining new long-term growth forecasts for the sub-region.

The SmartGrowth *Residential Land Capacity and Suitability Study 2011* identifies and assesses a number of additional areas where urban development could occur in the sub region and some issues around the servicing of such areas with suitable network infrastructure. Each of these areas identified in that report has specific infrastructural challenges associated with providing appropriate water, wastewater, transportation and other infrastructure to service urban development.

The Settlement Pattern options set out in the *Residential Land Capacity and Suitability Study* need to be examined in terms of effectiveness, efficiency, financial viability and affordability of providing this infrastructure. A sub regional perspective on aligning infrastructure with new urban land options is necessary.

It is noted that there has already been significant recent public investment in key network infrastructure to support existing and planned sub-regional growth. For example, the southern and Omokoroa wastewater pipelines, Route K, Harbour Link and the Tauranga Eastern Link. In general all the public agencies involved in SmartGrowth are seeking to maximise the efficient use of existing investment before committing significant capital investment into new infrastructure projects. Examining options in this regard is a key part of this research project.

Some of the other projects that are progressing in conjunction with this study and are due for completion in August, are:

1. Wastewater investigation into servicing the sixteen identified areas.
2. Water investigation into servicing the sixteen identified areas.
3. Stormwater investigation into servicing the sixteen identified areas.
4. Transportation
5. Social Impact Assessment.
6. Demographic Rationale
7. Demographic Drivers and Housing Preferences.
8. Regional Economic Drivers.
9. Economic Development.
10. Growth Management Approaches.
11. Industrial Land Study.
12. Residential Intensification.
13. Sub Regional Infrastructure Capacity.
14. Commercial Land Study.
15. Development of Maori Land and post Treaty Land Use Issues.
16. Natural and Cultural Environment.
17. Enhanced Lifestyles
18. SmartSpace (Open space, sports, arts and leisure)
19. Education
20. Health
21. Community Development.
22. Affordable Housing

2. Project Goal:

The goal of this project is to identify any potential challenges to ensuring a satisfactory electricity supply to a population of 300,000 people to the Western Bay of Plenty Sub Region by 2061.

3. Project Manager:

The project manager is to be Lee Jordan – Utilities Planner, Tauranga City Council. Phone – (07)577 7064, Email – lee.jordan@tauranga.govt.nz

4. Project Scope:

The scope of this project is to consider the potential electricity supply to the existing communities (Katikati, Omokoroa, Te Puna, Tauranga City, Te Puke and Paengaroa) as well as the 16 areas identified in the *SmartGrowth Residential Land Capacity and Suitability Study* between Paengaroa and Katikati. This should identify any significant issues and developer/consumer costs that may arise in providing a electricity supply to those areas. Some of these issues may include topics such as supply from the national grid, reticulation routes etc. It should be noted that while there are sixteen areas under consideration, not all of these may necessarily be developed. The final areas for future development within the identified planning timeframe will be selected at the end of this SmartGrowth investigation.

5. Project Inputs:

SmartGrowth will supply the following;

- A copy of the *SmartGrowth Residential Land Capacity and Suitability Study 2011* report
- Plans giving the location and scale and projected populations for each area. .
- Any other information that we may be able to assist with.

6. Project Outputs:

The outputs required from this project are:

- a) A high level report on the future electricity supply to the Western Bay of Plenty sub region to cater for a population of 300,000 people by 2061 located in the 16 areas identified in the *SmartGrowth Residential Land Capacity and Suitability Study 2011* report as well as the existing centres.
- b) The report should identify any areas where a electricity supply would be difficult to achieve.
- c) Working in today's dollars, what cost implications would there be to the developer/consumer?

7. Methodology:

This is to be left to the report author.

8. Project Resources:

The SmartGrowth Infrastructure Research Team is a resource that can be called upon for information.

9. Consultation Requirements:

As Required

10. Timeframes:

Project inception meeting	29 th June
First cut report completed.	17 th August
Draft report completed. (this is a critical milestone)	24 th August
Presentation of draft report to IMG	4 th September
Presentation of draft report to SGIC	19 th September
Presentation of findings to IMG	2 nd October
Presentation of findings to SGIC	End of October