

CAPTURING ECONOMIC BENEFITS FROM LOCATION-BASED INFORMATION

OBJECTIVE: Boost economic growth and improve government efficiency by better connecting government's location-based information.

Summary

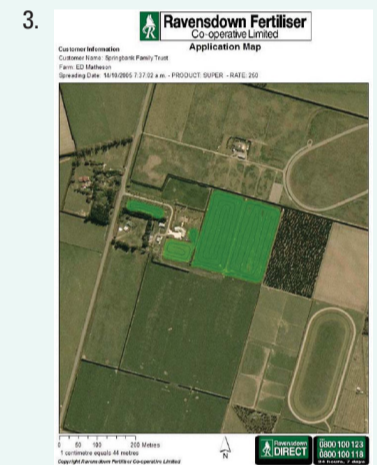
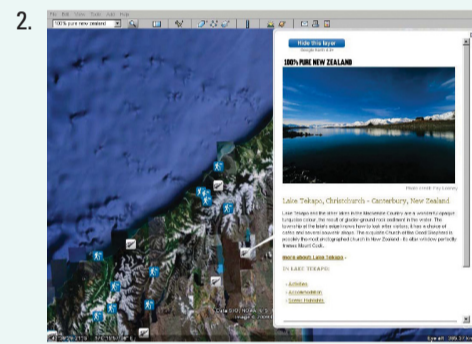
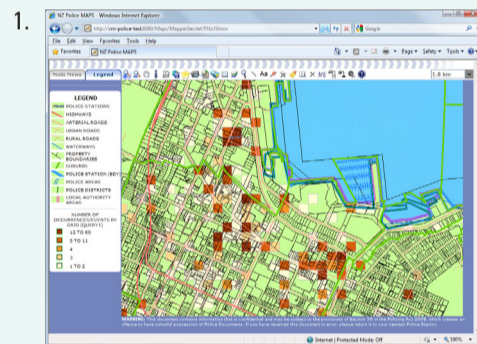
- Better use of government's location-based information – knowing where things are compared to other things – can significantly contribute to boosting the New Zealand economy and improving government efficiency.
- To capture the benefits of the government's location-based information asset, New Zealand needs to accelerate the development of a framework that connects providers and users of location-based information – a national spatial data infrastructure – in which government agencies participate.

Value proposition for Government

- Location-based information is widely used in New Zealand and already contributes over \$1.2 billion a year to the economy.
- Location-based information forms a part of New Zealand's knowledge infrastructure and enables innovation and better decision-making. Greater benefits can be reaped from unlocking this information.
- Removing key barriers to connecting location-based information could add a further \$500 million a year and generate an extra \$100 million in government revenue.
- Government (central and local), Crown agents, academia and the private sector collect and use location-based information.
- Improved access to government's location-based information through a national spatial data infrastructure has been identified as the best low-cost value-for-money intervention for government.

Examples of how location-based information can help grow New Zealand's economy and improve government efficiency

1. New Zealand Police uses centrally managed and maintained location-based information to provide data entry, map viewing and crime analysis to 10,000 users and 300+ crime analysts.
2. Statistical analysis and visualisation by location can identify opportunities for growth, such as in tourism and retail.
3. Fertiliser application using location-based technology enables farmers to reduce costs, increase productivity and support environmental compliance.



Source: *Spatial Information in the New Zealand Economy – Realising Productivity Gains (2009)*

Opportunities

Environmental

- helps communities and businesses through better spatial planning, such as Auckland's Spatial Plan
- optimises physical infrastructure investment, such as the broadband rollout
- measures and improves the 'clean' economy

Security

- enables multi-agency intelligence and operations
- makes New Zealand more resilient to disaster, with faster recovery, minimising economic damage, and reassuring residents and investors.

Community

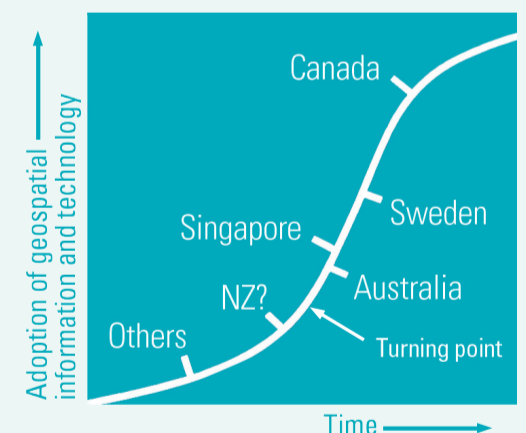
- more accessible, accountable government
- demonstrating an understanding of community needs
- supporting community planning and development.

BUT...

Barriers and issues

- Significant resources used to collect, maintain, store, develop and share location-based information by multiple agencies.
- Potential to be more cost-effective by meeting the multiple needs from collecting and maintaining information.
- Duplication in some areas, gaps in others.
- Hard to know what information is available, how to access it and the use of standards to make it easy to use.
- Applying common standards can make location-based information easier to use and share

New Zealand – behind the leaders



Government action

- The Ministerial Committee on Government ICT will oversee this work.
- Land Information New Zealand will drive the agenda.
- With government agency involvement and in collaboration with industry, local government and academia, Land Information New Zealand (LINZ) and New Zealand Geospatial Office (NZGO) will develop a national spatial data infrastructure framework.
- Government agencies, Police, Defence and some Crown agencies will use the spatial data infrastructure framework, unless there is a compelling reason not to. They can receive advice and support from the NZGO.

Elements of a national spatial data infrastructure framework

- **Raising awareness** of the power of location-based information
- **Governance** and legislation to set the direction
- **Compiling fundamental datasets** that have the greatest potential
- **Standards and interoperability** to allow greater use of location-based information
- **Capability development** to professionally meet demand
- **Research** to inform continuous improvement.

For more information visit www.linz.govt.nz and www.geospatial.govt.nz