

QLIS Benefit Study

Business Information Requirements Workshop Reports

Volume III (Part 2 - Industry)

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Alexander - Tomlinson

DISCLAIMER

The Workshop Summaries included in this report are compiled from information supplied by participants at the Workshops. They are intended to provide a framework for the Benefit Study. Participants have provided 'best estimates' of potential benefits related to the use of spatial information in their work environment. Alexander - Tomlinson has endeavoured to validate workshop information, but does not accept responsibility for the accuracy of statements made, nor for the subsequent use of this information outside the context of this report.

Volume 111 - Part 2 (Industry)

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INTRODUCTION

QLIS Benefit Study

In October 1996, the Department of Natural Resources (DNR), on behalf of the Queensland Land Information Council (QLIC), commissioned Alexander - Tomlinson to carry out a Benefit Study for the Queensland Land Information Strategy (QLIS), *'in terms of its development and impact across government and industry'*. The duration of the Study is 3 months.

This Report . . .

Industry Business Information Requirements Workshops - Preliminary Benefit Assessment

The first of six Business Information Requirements Workshops commenced on 26 November, 1996 and concluded on 5 December, 1996. A total of 24 industry and government representatives attended the workshops, providing an outline of business information requirements for the following industry sectors:

- Primary Production
- Local Government
- Tourism & Recreation
- Property & Finance
- Mining & Energy
- Conservation & Environment

The intention of the Workshops is to identify where spatial information is currently of benefit to industry, or where it has the potential to be of benefit to key business areas.

From the Workshops, potential information products (and their potential benefits), will be identified for inclusion in the Benefit Study report.

Benefit Scan Methodology

Business Information Requirements Workshops are primarily addressed at identifying business information needed for the efficient operation of the industry sector, - some of which may be spatially related. It is Alexander - Tomlinson's task to identify spatial information opportunities and benefits arising from the information provided by workshop participants.

Benefit Scan methodology used in Business Information Requirements Workshops provides a structured approach to identifying industry business information requirements. However, it must be regarded as a **'first cut'** - **working draft** that progressively leads to sharply focussed applications of spatial information technology, ie. optimised benefit - cost applications.

Senior management input is essential at these workshops, to maintain a strategic perspective of the major business issues facing industry.

The Workshop Notes included in this report are a record of the views of workshop participants. They are unsorted, except that the most important points in each section are noted in bold type.

Some of the information presented in these Workshop Notes may have no spatial relevance.

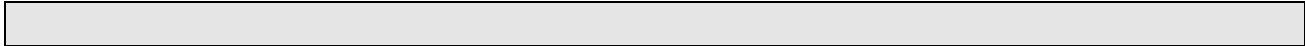
The benefits listed in these Workshop Reports were provided by industry representatives, and reflect their views at the time. They could be expected to increase or decrease as further information is obtained in subsequent stages of the spatial information planning process.

The Benefit Scans are listed as 6 separate reports. No attempt has been made at this stage to resolve duplication, or to address cross industry sector benefits (synergies).

The 6 Benefit Scans, together with the 10 Government Department - Benefit Scans (Report 1) form the basis of the Benefit Study Report, including the selection of 5 Case Studies which will be examined in greater detail.

For further information about this report, contact Mr David Teufel, QLIS Coordination Unit, Department of Natural Resources, telephone (07) 3896 3338. □

QLIS Benefits Study
for
Queensland Land Information Council
Industry Business Information Requirements Workshops
November - December 1996



Workshop Title:

#I-1

Primary Production

| Agency Business Information Requirements Document Management System | Date | Sent for Information | Comments Received |
|--|---------------------------------|-------------------------|----------------------|
| Venue: DNR Vulture Street Offices B.I.R Document Compiled - Version # 1.0 Attendance: 1 - Richard Hassall Econ. / Govt Policy Adviser Qld. Fruit and Vegetable Growers 2 - Joseph Evans Ag. Econ. Qld Canegrowers Association 3 - Mark Needham Manager IT&T Qld Canegrowers Association 4 - John Roberts Principal Veterinary Officer (APHS) Dept. Primary Ind. 5 - Colin Reugebrink Sen. Project Officer GIS QDPI - Forestry 6 - Chris Bragg Manager Resources QDPI Forestry 7 - John Pollock QDPI 8 - David Teufel QLIS Benefit Study Project Coordinator Revision - Version # 1.1 | 26 / 11 / 96 6 / 12 / 96 | | |

| QLIS Benefits Study Project Coordinator Approval | Approval Requested | Approval Received |
|--|-----------------------|----------------------|
| David Teufel | | |

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Workshop Report

Gross State Product Sector: Agriculture, Forestry & Fisheries

GSP Sector 1995/96:

\$ 2.978 billion

Ministerial Portfolios:

The Hon. Trevor Perrett MLA (Minister for Primary Industries, Fisheries & Forestry)
Director General (Roly Nieper) Department of Primary Industries, Fisheries & Forestry

The Hon. Howard Hobbs MLA (Minister for Natural Resources)
Director-General (Tom Fenwick)

Key Sector Programs / Agency Budgets & Staff

Table 1.1 Agency Budgets & Staff (Source: Primary Industries Ministerial Program Statement)

| | Program / Sub Program | Budget | Staff | SIS Users (# Expert) | SIS Users (# Casual) |
|----------|---|-----------------|----------------------------------|-------------------------|-------------------------|
| 1 | Agriculture | \$ 163 m | 1598 | 5 | 45 |
| | - Forest Industry | \$ 4 m | | | |
| | - Beef | \$ 31 m | 486 | | |
| | - Sheep & Grazing Game | \$ 7 m | 85 | | |
| | - Intensive Livestock | \$ 14 m | 197 | | |
| | - Field Crops | \$ 26 m | 296 | | |
| | - Horticulture | \$ 20 m | 287 | | |
| | - Product Quality & Market Ass. | \$ 18 m | 247 | | |
| | - Allocation of Corporate Services | \$ 41 m | | | |
| 2 | Fisheries | \$ 41 m | 308 | 6 | 10 |
| | - Fisheries Resource Protection | \$ 14 m | 137 | | |
| | - Fisheries Resource Management | \$ 12 m | 119 | | |
| | - Aquaculture & Industry Dev. | \$ 4 m | 52 | | |
| | - Allocation of Corporate Services | \$ 10 m | | | |
| 3 | Drought & Rural Dev. | \$ 49 m | 287 | 6 | 30 |
| | - Rural Enterprise Dev. | \$ 10 m | 102 | | |
| | - Centre for Food Technology | \$ 15 m | 124 | | |
| | - Drought Mgmt. & Regional Dev. | \$ 11 m | 61 | | |
| | - Allocation of Corporate Services | \$ 12 m | | | |
| 4 | Forest Production (Commercial Operation - no sub program Structure) | \$ 96 m | 970 (S) 369 (W) 601 | 15 | 140 |
| 5 | Corporate Perf. & Strategies | \$ 12 m | 644 | 0 | 10 |
| | - Corporate Strategies | \$ 10 m | 101 | | |
| | - Policy & Legislation | \$ 4 m | 42 | | |
| | - Corporate Infrastructure | \$ 31 m | 121 | | |
| | - Corporate Performance | \$ 20 m | 124 | | |
| | - Corporate Service Agency | \$ 10 m | 256 | | |
| | - Allocation of Corporate Services | (\$ 64 m) | | | |
| | | \$360 m | 3,807 | 32 | 235 |

Primary Production

Workshop Report

(Agriculture, Forestry & Fisheries)

Table 2 Selected State GSP Comparisons

| State | GSP 1994 / 95 (\$ Billion) | Sector Contribution to State GSP (\$ Billion) | Sector % of State GSP | Sector % Contribution to National Total (\$12.62 Billion) |
|-----------------|-------------------------------|---|--------------------------|--|
| Queensland | 65,280 | 2,978 | 4.6 | 23.6 |
| New South Wales | 137,091 | 2,809 | 2 | 22.3 |
| Victoria | 103,178 | 2,739 | 2.6 | 21.7 |
| Australia | 399,107 | 12,620 | | 3.2 |

1. Industry Goals / Objectives

(italicised / bold = most important)

- 1.1 *To generate public and private sector benefits from primary production (ie. involves growing new industries and expanding existing industries to support economic development in Queensland).*
- 1.2 *Provide an efficient industry framework for primary producers to conduct their business (ie. so that industry is competitive, sustainable, and achieves best practice).*
- 1.3 *Promote development of the primary production sector that is compatible with sustainable use of the environment and resources (sustainable guarantees; regulations; codes of practice).*
- 1.4 Develop risk management strategies (ie. strategies to address risks associated with market instability, the availability of resources, and natural disasters).
- 1.5 Optimise land use for public benefit (multiple use options).
- 1.6 Maximise the efficiency of government services provision to add value to primary producers businesses (adopting the principles of the National Competition Policy).
- 1.7 Establish the government as an independent provider of information to the sector, through grower / producer information channels; (one - point of access to integrated information services).
- 1.8 Promote the 'clean and green' image of the rural sector.

3 levels

Workshop Report

- 1/ industry (economic viability; yields; production vs inputs) > Benefits to producers.
- 2/ Macro land use patterns - regional scale.
- 3/ Parcel / individual landholder scale.

2. Major Issues Relating to Industry Objectives

- 2.1 ***Lack of information to define “what constitutes sustainable practice”? (information is typically concentrated in urban areas).***
- 2.2 The number of industries required to reach critical mass; ie. ensure their long term viability - (and the importance of supply guarantees to safeguard long term infrastructure investments).
- 2.3 Uncertainty surrounding forecast production volumes / requirements.
- 2.4 Risk management associated with natural conditions - eg. weather, diseases, pests, residues).
- 2.5 The price of inputs - costs of chemicals and fertilisers.
- 2.6 Environmental constraints imposed on primary producers / the expansion of primary production areas, to protect surrounding areas.
- 2.7 The need to build and retain market access, to protect producer’s position and identity in the market place.
- 2.8 The suitability of current products (quality etc.); compared to market requirements (requires a review of the current production against industry benchmarks and market requirements).
- 2.9 Queensland primary producers lack control over international market requirements - vertical markets dictate product value adding. Requires coordination / integration / customisation of products to remain competitive in global markets).
- 2.10 Availability of land suitable for expansion of the primary production sector.
- 2.11 ***Product certification - world requirement to specify quality / status of produce. (required to the individual property level; eg beef cattle). Marketing advantages of products derived through processes that are ecologically sustainable.***
- 2.12 ***Lack of demand information to support market forecasts; (eg. pricing, trends, threats, opportunities).***
- 2.13 The need for better links to ABARE statistics / forecasts.
- 2.14 The expansion of production into marginal (high risk) areas (eg. flood plains).

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- 2.15 Government regulation / availability / cost of water for cane / cotton production.
- 2.16 The depletion of Queensland's river systems.
- 2.17 *The availability of information throughout rural Queensland; (which requires provision of services and telecommunications infrastructure).***
- 2.18 State and local community infrastructure, (roads / railways - provision / location; pricing / access to services).
- 2.19 The need to involve the rural sector in regional development decision - making processes. (this sector generates wealth and economic growth).
- 2.20 The importance of educating urban dwellers about the needs of rural communities.
- 2.21 Security of access to resources to plan investment and economic development (Commonwealth potential to over ride State decisions eg. Forestry, Trade Policies).
- 2.22 Inconsistencies between regulations and legislation developed across the 3 levels of government (Federal, State, Local Government); concerning investment / industry development.
- 2.23 Internal competitiveness in the marketplace - reduces the flow of information between potential users.
- 2.24 The limited accuracy / availability of information at the individual landholder scale of operation.

3. Measures of Successful Program Performance

- 3.1 Clearer statements of desired environmental outcomes, by various rural sectors.
- 3.2 Reduction in the rate of increase of resource degradation (natural pastures, plants, soils, river systems).
- 3.3 Measurable economic increase in value - added primary production, as a percentage of primary production contribution to GDP.
- 3.4 *Percentage increase in GDP returned from the primary production sector.***
- 3.5 Increased percentage of products meet (clean - green) levels of certification / comply with codes of practice.
- 3.6 Absence of / or infrequent critical incidents (ie. low product rejection, non compliance).
- 3.7 Public conservationists level of acceptance of 3.1, above.

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- 3.8 Reduced incidence of unsustainable farm business's (bankruptcies), (increased farm viability).
- 3.9 Return on primary production investment - viable family farms.
- 3.10 Increased percentage of farmers meeting industry benchmarks.
- 3.11 Information services easily accessible to farmers to assist them to work towards achieving industry benchmarks.
- 3.11 Cost of farm inputs versus the value of primary production.
- 3.12 The success of primary producers 'self regulation' for environmental sustainability, across the sector.
- 3.13 Primary producers ability to maintain their terms of trade (retain buying power with level of income).
- 3.14 Information available on the status of primary industries (including geographic variability of production / yield / quality etc).

4. Assessment of Risks

- 4.1 Lack of information to certify sustainable production status may lead to lack of confidence in the certification process (or collapse of the certification scheme); loss of markets and the likelihood of a decline in the condition / quality of the resource base.

The potential impacts on the State include loss of credibility of 'clean - green' image, lower GDP emanating from the sector, lower levels of investment and consequently lower standards of living for primary producers.

- 4.2 Lack of information to support market forecasts may lead to an under or over supply of produce and missed customer opportunities.

Potential impacts on the State include 'boom - bust' cycles, and lower prices where production is mis-matched to market requirements.

- 4.3 Failure to establish an easily accessible on - line information network for primary producers will cause a gradual loss of competitiveness of industry sectors; and threaten the viability of individual producers.

The potential impact will be a less profitable primary sector more exposed to external risk factors. Significantly, the vast resources of information available to assist primary producers will decrease in value if it is not utilised to full advantage.

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- 4.4 Failure to establish risk management strategies will leave producers unprepared for adverse events and vulnerable to a range of external unknowns (eg. Brazilian Sugar Policies).

Potential impacts on the sector include reduced viability of producers and at worst, producers forced out of business.

Threats:

- 1 Over-regulation.
- 2 Loss of markets - (National Competition Policy) (GATT - competition from imports).
- 3 Changing government policy eg. environmental legislation.
- 4 Natural / introduced disasters.
- 5 Macro-economic factors.
- 6 Economies of scale (size of industry) to achieve market viability.
- 7 Loss of workforce skills / aging workforce.
- 8 High labour costs restrict international market opportunities for value - adding.

Opportunities

- 1 Clean / Green image product certification.
- 2 Proximity to growth markets (Pacific Rim countries).
- 3 Cooperative arrangements leading to farm viability.
- 4 Information collection / dissemination - using a range of new technologies.
- 5 Rural community prosperity through value - adding (secondary manufacturing processes).
- 6 Improved processing technologies.
- 7 Enhanced profile / understanding of the rural portfolio by urban communities.

5. Targets

- 5.1 (not completed)

6. Potential Partners / Collaborators

- 6.1 Queensland Farmers Federation
- 6.2 Forestry Companies - Heine & Sons (Maryborough); CSR Softwoods; Boral
- 6.3 Livestock (Michael Prendergast)
- 6.4 Grain Growers (Ian McFarlane)
- 6.5 Cotton

Workshop Report

7. Potential Benefits of Spatial Information to the Primary Production Sector

Table 3 Potential Source of Benefits

| Description of Benefit / Potential Source of Benefit | \$ Benefits |
|--|-------------|
| <p>7.1 If risks are not managed in the hardwood sector of the Timber Industry, the viability of businesses directly and indirectly involved in the industry will be threatened by lower returns. Spatial information has the potential to significantly assist the industry to remain competitive; and to assess impacts of ecologically sustainable strategies.</p> <p>There is an objective to double value adding production from processed hardwoods over the next 10 years (mainly business strategies).</p> <p>There is also a target to improve grower rates of return for softwoods from 7 % to 12 % over the next 10 years (mainly business decisions).</p> | |
| <p>7.2 Spatial information will assist the industry to maintain its worldwide recognition as an efficient, ecologically sustainable producer.</p> | |
| <p>7.3 Codes of practice lead to increased costs of production. (To counter increased costs, the industry needs to increase production, or increase value - adding activities). A comprehensive spatial information base is considered to be crucial to assess impacts of increased production on industry and the environment.</p> | |
| <p>7.4 Fully integrated spatial information systems underpin the State's ability to prove ecologically sustainable development of forest resources (ESD); a significant marketing edge in global markets. It is also essential for the development of sound strategies / policies to mitigate / avoid environmental problems.</p> <p>Spatial information will be essential to assist the State to develop strategies that address the need to both pay for, and capitalise on ESD.</p> | |

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7.5 Fully integrated information bases supporting the various primary production industry sectors will assist to analyse whether producers can maintain their terms of trade under increased production / environmental protection requirements (potentially through exports).

7.6 A comprehensive industry information and market intelligence base will also increase primary producers' ability to target niche markets with customised products.

7.7 A comprehensive industry information and market intelligence base will also assist to better target Research, Development and Extension (RD&E) industry funding. The RD&E budget for the cane growing industry is \$34 million pa., which could achieve 5% - 10 % increased effectiveness of this budget with strategic information on the performance of the industry.

7.8 The present value of research and development is restricted unless it can be turned into useful information for the producers. Information value - adding and dissemination through regional networks and/or the Internet will assist to capitalise on existing R&D development.

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QLIS Benefits Study
for
Queensland Land Information Council
Industry Business Information Requirements Workshops
November - December 1996

Workshop Title:

#I-2

Local Government

| Agency Business Information Requirements Document Management System | Date | Sent for Information | Comments Received |
|---|-----------------------------|-------------------------|----------------------|
| Venue: B.I.R Document Compiled - Version # 1.0 | 27 / 11 / 96 2 / 12 / 96 | | |
| Attendance: 1 - Paul Weston BIMAP Business Support Brisbane City Council 2 - Ben Pow GIS Manager Caloundra City Council | | | |
| 3 - David Teufel QLIS Benefit Study Project Coordinator | | | |
| Revision - Version # 1.1 | | | |

| QLIS Benefits Study Project Coordinator Approval | Approval Requested | Approval Received |
|--|-----------------------|----------------------|
| David Teufel | | |

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Workshop Report

Gross State Product Sector: (Not specific to GSP Classification)

GSP Sector 1995/96:

(Not Applicable)

Ministerial Portfolios:

The Hon. Di McCauley MLA (Minister for Local Government & Planning)
A/Director - General Kevin Yearbury

Table 1 Selected State GSP Comparisons

| State | GSP 1994 / 95 (\$ Billion) | Sector Contribution to State GSP (\$ Billion) | Sector % of State GSP | Sector % Contribution to National Total (\$ Billion) |
|-----------------|-------------------------------|---|--------------------------|---|
| Queensland | | | | |
| New South Wales | | | | |
| Victoria | | | | |
| | | (Not Applicable) | | |
| Australia | | | | |

1. Industry Goals / Objectives (italicised / bold = most important)

- 1.1 *To define satisfactory levels of service (from a community perspective - and achieve these levels of service with greatest economic efficiency).*
- 1.2 To create progressive and livable urban communities.
- 1.3 To develop strong economic development plans (maintain a strong and diverse economic base).
- 1.4 Maintain an efficient, effective customer oriented workforce.
- 1.5 To undertake balanced, environmentally sustainable development.
- 1.6 To foster harmonious relationships / coordination across levels of government.
- 1.7 *To increase the performance accountability of local government (quality management).*
- 1.8 To provide the community with an avenue for input into local government decision - making.

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2. Major Issues Relating to Industry Objectives

- 2.1 *Lack of benchmarks for service delivery.*
- 2.2 Establishing mechanisms to receive community feedback on local government performance, (- to initiate action that avoids potential complaints).
- 2.3 The need to re-engineer inefficient processes.
- 2.4 *Lack of progress / reform caused by entrenched methods and procedures.*
- 2.5 The inefficiency of over-servicing (providing a level of service beyond that considered 'fit for the purpose').
- 2.6 Information transfer to support innovation; (- to support the local government vision for improved livability in communities).
- 2.7 Acceptance of innovation in local government by the public and workforce.
- 2.8 The cost of changed methods / work practices.
- 2.9 Limited water availability restricts economic development.
- 2.10 The conflicts / trade-offs between maintaining environmental amenity and economic development.
- 2.11 Remoteness of many local government agencies limits economic development (- high transport costs, limited skills base).
- 2.12 *Political processes may override ecologically sustainable development (ESD) requirements.*
- 2.13 Lack of community recognition of value of environmental assets.
- 2.14 The risks / uncertainty of natural disasters on economic viability of rural communities.
- 2.15 The barriers to development caused by vested interests (- extremes from development at all costs - to conservation with no compromise).
- 2.16 Information systems are not yet fully developed to support local government performance accountability.
- 2.17 Many staff are inadequately trained to use information effectively.
- 2.18 The lack of digital data, eg on the location of assets.
- 2.19 Different rules for Local Government and the private sector in work practices (eg. safety - adds to costs), restrict local government's success in competitive tendering.

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- 2.20 Community service obligations in remote areas - provision of infrastructure and services, eg. library, transport.
- 2.21 Avenues for community access to information / input to local government are not user friendly.
- 2.22 Lack of knowledge of the existence of government data / information, accessibility, completeness, fitness for purpose (eg. environmental data). Local Government expectation that State government will provide data.
- 2.23 The higher resolution (more detailed) information required by local government (- compared to state government).
- 2.24 The need for cooperation / collaboration between State and Local Government to capture, maintain and distribute data eg. DCDB, Valuations.

3. Measures of Success

- 3.1 *Customer satisfaction, (number of complaints; - satisfaction surveys).*
- 3.2 *Levels of service maintained or improved - best practice identified and achieved.*
- 3.3 *Reduced local government operating costs - against benchmark levels.*
- 3.4 *The strength of the local economy; - employment, - investment, - population growth.*
- 3.5 Improved timeliness of response to client requests for service / approvals / assistance.
- 3.6 *Protection of natural assets: (sustainable environmental management practices).*
- 3.7 Urban consolidation achieved where desired; - with increased efficiency of existing infrastructure.
- 3.8 Full life cycle costs understood (- sustained levels of service, - reduced operating costs).
- 3.9 Rural adjustment leads to economically viable communities.
- 3.10 *Socially, environmentally and economically sustainable development at local government level.*

(Order of importance: 3.2; 3.1/3.3; 3.4; 3.6; 3.10).

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4. Assessment of Risks

- 4.1 Failure to address low customer satisfaction with local government services may lead to higher re-engineering costs, budget adjustment, staff training, downsizing and a high percentage of management time allocated to change management.

The potential impact is low morale of local government, poor community perception of local government; and diversion of finite resources, causing lower customer satisfaction in other areas.

- 4.2 Failure to identify benchmark levels of service may lead to poorly timed asset maintenance, and an inability to target the best use of limited resources.

Potential impacts include non functioning infrastructure (frequent breakdown), major costs associated with catastrophic failure; and lack of strategic asset management.

- 4.3 Failure of local government to address economic growth may result in a loss of momentum of the local economy, lost investment opportunities, slowed growth rates and lower rating revenues.

The potential impacts include reduced quality of life for the community and loss of income.

- 4.4 Failure to protect natural assets may lead to a less attractive environment, (environmental degradation) and loss of species.

The potential impacts on the State's economy include loss of industry and slowed economic growth across all industry sectors.

5. Targets

- 5.1 (not completed)

6. Potential Partners / Collaborators

- 6.1 (not completed at Workshop)

Workshop Report

7. Potential Benefits of Spatial Information to Local Government Programs

Table 4 Potential Source of Benefits

| Description of Benefit / Potential Source of Benefit | \$ Benefits |
|--|-------------|
| 7.1 Provision of a comprehensive, integrated local government information base will lead to improved and more timely decision - making at an operational and strategic level ie. better global management of local government resources. | |
| 7.2 Local government should achieve a benefit - cost ratio of 4 : 1 from using automated mapping and analysis tools, compared to conventional methods (ANZLIC Benefits Study). | |

Table 4 Benefits of a Spatial Information System for a typical Local Government Program:

| Procedures | Saving over Manual Techniques (\$) | % Saving over Manual Techniques | Saving (Time in Hours) | % Saving over Manual Techniques |
|---|------------------------------------|---------------------------------|------------------------|---------------------------------|
| • Development Appraisal | | | 750 | |
| • As constructed Civil Infrastructure | \$37,000 | | | |
| • GIS Survey / Design | \$280,000 | | 940 | |
| • Pavement Management System | \$32,000 | | 400 | |
| • Street Lighting Maintenance | \$29,000 | | 120 | |
| • Park Maintenance / Scheduling | | | 7,280 | |
| • Base Data for E.I.S | \$7,200 | | | |
| • Map Products | \$18,600 | | 1,400 | |
| • Town Planning / Future Planning Base Data | \$8,000 | | 156 | |
| • Environmental Protection / Policy Impacts | | | 240 | |
| • Inventory of Civil Infrastructure | | | 920 | |
| • Maintenance record of passive / active assets | | | 3,450 | |
| • Enhancement to data | \$23,000 | | | |
| • Interaction / Reduce Tasks | \$11,000 | | 1,350 | |
| - Property data section | | | | |
| - rates section | | | | |
| - corporate services | | | | |
| - Council meetings | | | | |
| | \$445, 000 | | | |

Workshop Report

Gross State Product Sectors:

Cultural & Recreational Services Accommodation, Cafes & Restaurants

GSP Sector 1995/96:

Cultural & Recreational Services \$ 0.941 billion

Accommodation, Cafes & Restaurants \$ 2.106 billion

Ministerial Portfolio:

The Hon. Bruce Davidson MLA (Minister for Tourism, Small Business & Industry)
Director General (Loftus Harris)

The Hon. Michael Viewers MLA (Minister for Sport & Minister for Emergency Services)

Table 1.1 Selected State GSP Comparisons - Cultural & Recreational Services

| State | GSP 1994 / 95 (\$ Billion) | Sector Contribution to State GSP (\$ Billion) | Sector % of State GSP | Sector % Contribution to National Total (\$6.8 Billion) |
|-------------------|-------------------------------|---|--------------------------|--|
| Queensland | 65.280 | 0.941 | 1.4 | 13.7 |
| New South Wales | 137.091 | 2.537 | 1.8 | 37 |
| Victoria | 103.178 | 1.841 | 1.8 | 26.8 |
| Australia | 399.107 | 6.856 | | 1.7 |

Table 1.2 Selected State GSP Comparisons - Accommodation, Cafes & Restaurants

| State | GSP 1994 / 95 (\$ Billion) | Sector Contribution to State GSP (\$ Billion) | Sector % of State GSP | Sector % Contribution to National Total (\$9.21 Billion) |
|-------------------|-------------------------------|---|--------------------------|---|
| Queensland | 65.280 | 2.106 | 3.2 | 22.9 |
| New South Wales | 137.091 | 3.371 | 2.46 | 36.6 |
| Victoria | 103.178 | 1.898 | 1.84 | 20.6 |
| Australia | 399.107 | 9.213 | | 2.3 |

Workshop Report

Key Sector Programs / Agency Budgets & Staff

Table 2 Agency Budgets & Staff (Source: Tourism, Small Business & Industry Ministerial Program Statement)

| | Program / Sub Program | Budget | Staff | SIS Users (# Expert) | SIS Users (# Casual) |
|----------|------------------------------------|------------------|--------------|---------------------------------|---------------------------------|
| 1 | Tourism | \$ 46 m | 38 | | |
| | - Tourism Development | \$ 2 m | 16 | | |
| | - Tourism Planning & Research | \$ 2 m | 19 | | |
| | - Qld Olympic 2000 Task Force | \$ 5 m | 3 | | |
| | - Qld Tourist & Travel Corporation | \$ 30 m | | | |
| | - Qld Events Corporation | \$ 2 m | | | |
| | - IndyCar Grand Prix | \$ 8 m | | | |
| | - Corporate Services Allocation | \$.8 m | | | |
| 2 | Liquor Licensing | \$ 5 m | 55 | | |
| | - Industry Development | \$ 1 m | 11 | | |
| | - Investigation & Complaints | \$ 1 m | 18 | | |
| | - Licensing Administration | \$ 2 m | 26 | | |
| | - Corporate Services Allocation | \$ 1 m | | | |
| 3 | Business | \$ 12 m | 88 | | |
| | - Strategic Planning & Policy | \$ 2 m | 18 | | |
| | - Business Regulation & Review | \$ 1 m | 12 | | |
| | - Business Information | \$ 2 m | 23 | | |
| | - Retail Shop Leases | \$.5 m | 6 | | |
| | - Quality Development | \$ 1 m | 7 | | |
| | - Qld Small Business Corporation | \$ 4 m | 22 | | |
| | - Corporate Services Allocation | \$ 1.5 m | | | |
| 4 | Industry & Technology | \$ 31 m | 113 | | |
| | - Industry Development | \$ 2 m | 17 | | |
| | - Innovation Science & Technology | \$ 5 m | 16 | | |
| | - National Ind. Extension Service | \$ 15 m | 60 | | |
| | - Information Industries | \$ 4 m | 20 | | |
| | - Corporate Services Allocation | \$ 5 m | | | |
| 5 | Regional & Project Dev. | \$ 46 m | 78 | | |
| | - Project Management & Assistance | \$ 38 m | 54 | | |
| | - Reg. Economic Dev. & Planning | \$ 5 m | 24 | | |
| | - Corporate Services Allocation | \$ 3 m | | | |
| 6 | Corporate Services | (\$ 11 m) | 105 | | |
| | - Corporate Development | \$.5 m | 5 | | |
| | - Finance | \$ 2 m | 17 | | |
| | - Support Services | \$ 3 m | 27 | | |
| | - Marketing | \$ 1 m | 8 | | |
| | - Information Technology | \$ 2 m | 16 | | |
| | - Human Resource Management | \$ 2 m | 17 | | |
| | - Executive Support | \$ 1 m | 10 | | |
| | - Internal Audit | \$.5 m | 5 | | |
| | | \$136 m | 477 | | |

Cultural & Recreational Services

Workshop Report

Accommodation, Cafes & Restaurants

1. Industry Goals / Objectives

(italicised / bold = most important)

- 1.1 To achieve economic and social benefits from the industry in Queensland, within a (globally) competitive framework.
- 1.2 To achieve planned and coordinated growth of the tourist industry.
- 1.3 *To maintain the quality and diversity of Queensland landscapes and cultures.***
- 1.4 To achieve critical mass in the tourist and recreation industry so that it becomes self sufficient; sustainable and self directing.
- 1.5 *Achieve a high level of training and awareness (internally, ie. within the industry; and externally, within local government and the community). Lack of understanding of the flow - on benefits of tourism to community inhibits acceptance of tourist development initiatives, and hence the growth of the industry.***
- 1.6 Increase the level of private sector involvement; (and community acceptance of the role of the private sector), in the ownership of land for outdoor recreation.
- 1.7 *Encourage the integration / coordination of policy and statutory frameworks across the three levels of government.***
- 1.8 *Develop a regional vision for tourism / recreation to support long term strategic planning of infrastructure required for the development of the industry eg. power, roads, facilities.***
- 1.9 Ensure that the value of the states tourist / recreation assets is recognised, (ie. valued in terms of state and international significance ratings).
- 1.10 Implement government systems that support efficient public and private sector investment decision - making.

2. Major Issues Relating to Industry Objectives

- 2.1 *Fragmented information resources inconvenience both developers and clients of tourist industry.***
- 2.2 The clients expectations compared to the quality of service delivered (ie. customer satisfaction through a positive tourist / recreation experience).
- 2.3 Urban encroachment on significant environments / landscapes.

Workshop Report

- 2.4 'Trade - offs' between economics; and environmental and social amenity. (Industries and infrastructure competing with the recreation and tourist industry - eg. extractive industries / mining).
- 2.5 Lack of understanding of the magnitude of flow - on benefits of the tourist industry.
- 2.6 The declining quality at key tourist sites / along major travel routes (eg. inland highways).
- 2.7 Overuse of sites / lack of knowledge of the fragility of sites: - requires an understanding of the impacts of people on / in the environment.
- 2.8 Competing strategies across agencies; - industry development / tourism compete for funding eg. investment in freeways benefits major cities while rural tourist routes remain unsealed.
- 2.9 *Critical lack of research into new market opportunities, resource utilisation and strategic development of the industry - lack of measurement of outcomes / effectiveness of past strategies.***
- 2.10 *Preservation of opportunities to undertake recreational activities in particular settings, eg. (white water rafting in wilderness areas) is impeded by a lack of understanding of the fundamental resource - requires categorisation of market segments. (See also 6 & 7)***
- 2.11 Current land laws impede tourists from traversing the landscape outside road networks; eg. access to stream frontages through private land.
- 2.12 Industry / grazier focus of Queensland development - tourism / recreation suffers.
- 2.13 Lack of training infrastructure to assist industry to deliver better services.
- 2.14 Diversity and variability of skills of tourist industry service providers.
- 2.15 Fee and permit inconsistencies - changes occur across jurisdictional boundaries (industry inconsistencies).
- 2.16 *The need for a framework to integrate agency strategies, policies, plans and regulations to protect the aesthetics, amenity and culture of the state's assets, in the long term.***
- 2.17 Lack of an integrated inventory of the state's tourist / recreation facilities and assets.
- 2.18 The unsustainable use of prime tourist and recreational sites.
- 2.19 *The need for increased emphasis on risk management to avoid litigation.***

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2.20 The need to develop government systems to support efficient public and private sector investment decision - making.

2.21 The maintenance of quality and diversity of the resource to continue to support outdoor recreation opportunities, landscape appeal and cultural diversity over the long term.

2.22 The lack of local government support for Tourism activities.

3. Measures of Successful Program Performance

3.1 Repeat business; and visitor satisfaction with recreation / tourist experience (through surveys).

3.2 Maintaining quality and diversity of the recreation and tourism resource (ie. sites meet world standards for habitat condition / status, etc.).

3.3 A diversity of focussed research projects meet the needs of operators, developers, and clients in marketplace.

3.4 A 'minimum' or 'core' dataset (established to common industry standards), is available for general use across the industry.

3.5 Infrastructure is in place to support the exchange of information within the industry, and between the industry and end users.

3.6 Boundaries of areas of interest / regulatory responsibility are clearly defined. - with a defined hierarchy of appeal in place to resolve disputes.

3.7 Common and statute law revised, with respect to risk management strategies operating within the industry.

3.8 Increased visitor numbers; and per capita spending in the recreation / tourist industry.

3.9 Increasing level of investment in the recreation and tourism industry; with increased industry yields, leading to critical mass being achieved to sustain the future of the industry.

3.10 Increasing number of industry operators capable of self regulation.

3.11 Defined career structures / business pathways deliver improved client outcomes, with an increasing number of operators involved in value - adding jobs (eg. interpretive skills in marine parks).

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4. Assessment of Risks

- 4.1 If the industry does not undertake focussed research, investors may make uninformed decisions, (and hence poor investments), increase the potential for duplication of resources and lead to competition between private and public sector service providers.

The potential impact on the industry includes loss of competitiveness in the global marketplace, a down turn in the tourism industry with subsequent flow -on socio - economic impacts on the community.

- 4.2 Failure to maintain the quality and diversity of the resource may lead to a decline in the extent and distribution of the resource base, higher restoration costs, and lower returns on tourism investment.

The potential impact on the state is a less competitive tourist industry in the global marketplace.

- 4.3 If an integrated information base is not developed, the industry may be faced with increased development and operational costs; and hence higher unit costs of industry products.

The potential impact on the industry will be lower operator profit margins, less competitive industry, potential for monopolies to develop in niche market areas and loss of control over planned industry development and integration.

- 4.4 Failure to revise common / statute law relating to litigation may lead to increased costs to industry; and further restrictions on access to land (eg. stream frontages).

The potential impact on the industry includes loss of both client and investor confidence in the industry, loss of industry and subsequent increased unemployment across the sector.

Opportunities

- 1 Private sector involvement (in the ownership of land used for tourism and recreation purposes).
- 2 Increased economic performance of the industry.
- 3 Increased employment opportunities.
- 4 Increased utilisation of tourism and recreation resources eg. cultural pursuits, leisure activities, arts, and the establishment of the identity of specific tourist areas.

Threats

- 1 Decline in the quality and diversity of the resource.
- 2 Failure to share information will severely impede coordination activities.
- 3 Bureaucracy and litigation.

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5. Targets

5.1 (not completed)

6. Potential Partners / Collaborators

6.1 (not completed)

7. Potential Benefits of Spatial Information to the Tourism and Recreation Sector

Table 3 Potential Source of Benefits

| Description of Benefit / Potential Source of Benefit | \$ Benefits |
|---|-------------|
| 7.1 The recreation industry is expected to expand over the next 10 years to become the State's third largest industry behind mining and tourism. Information on market requirements is required to assist in the strategic and coordinated development of the industry. | |
| 7.2 Targeted development of recreation and tourism based on a comprehensive information base (markets and resources), will lead to increased employment in an industry that is both clean and sustainable. | |
| 7.3 A strong recreation and tourism industry in Queensland will have flow - on benefits to local communities (increasing economic prosperity, leading to an improved quality of life for Queenslanders), and to the national standing of the country in the broader (global) community. | |
| 7.4 Growth in the recreation and tourism sector will increase the State's ability to further develop Australian culture, a major attraction for the international tourist market. | |
| 7.5 Growth in the recreation and tourism sector will lead to increased state revenue and increased economic activity across the State. (The return on soundly based recreation and tourism developments is very high compared to other state development options). | |
| 7.6 Development of well planned and coordinated recreation and tourism opportunities has the potential to create local employment opportunities where they are most needed, and across a range of age barriers eg. in remote towns. | |

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| | |
|---|--|
| <p>7.7 A sustainable local recreation and tourist industry has the potential to maintain the economic viability of communities.</p> | |
| <p>7.8 The recreation and tourism industry offers a convenient form of job replacement eg. from adjustments to local industry employment (or industry closure), forced by ecologically sustainable development requirements.</p> | |
| <p>7.9 Growth in the recreation and tourism industry presents opportunities for re-investment in construction ie. flow on benefits to the construction industry.</p> | |
| <p>7.10 Providing the recreation and tourism industry with the tools needed to make Queensland more competitive in national and global markets, (such as a comprehensive, fully integrated on - line information base), has the potential to increase the State's share of the national tourism market by at least 5 %, on the current national market share of 40 %.</p> | |

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QLIS Benefits Study
 for
Queensland Land Information Council
Industry Business Information Requirements Workshops
 November - December 1996



Workshop Title:

#I-4

Property and Finance

| Agency Business Information Requirements Document Management System | Date | Sent for Information | Comments Received |
|--|----------------------------|-------------------------|----------------------|
| Venue: B.I.R Document Compiled - Version # 1.0 | 3 / 12 / 96 3 / 12 / 96 | 13 / 12 / 96 | |
| Attendance: 1 - Geoff James Senior Vice President Urban Dev. Inst. of Australia Principal - Design Management & Marketing | | | |
| 2 - Margaret North Director Body Corporate Managers Institute | | | |
| 3 - Tony McNamara Executive Officer - AIVLE | | | |
| 4 - Jack DeLange Chief Exec. Officer Assoc. of Consulting Surveyors Qld | | | |
| 5 - John Hayes Institution of Surveyors Australia - Qld Division | | | 23 / 12 / 96 |
| 6 - David Teufel QLIS Benefit Study Project Coordinator | | | |
| Revision - Version # 1.1 | | | |

| QLIS Benefits Study Project Coordinator Approval | Approval Requested | Approval Received |
|--|-----------------------|----------------------|
| David Teufel | | |

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Workshop Report

Gross State Product Sectors

Property & Business Services Finance & Insurance

GSP Sector 1995/96:

Property and Business Services \$ 4.3 billion
Finance and Insurance \$ 1.9 billion

Ministerial Portfolios:

The Hon. Joan Sheldon MLA (Deputy Premier, Treasurer and Minister for The Arts)
Mr Doug McTaggart - Under Treasurer

The Hon. Bruce Davidson MLA (Minister for Tourism, Small Business & Industry)
Director General (Loftus Harris)

Table 1.1 Selected State GSP Comparisons - Property & Business Services

| State | GSP 1994 / 95 (\$ Billion) | Sector Contribution to State GSP (\$ Billion) | Sector % of State GSP | Sector % Contribution to National Total (\$35 Billion) |
|-------------------|-------------------------------|---|--------------------------|---|
| Queensland | 65.280 | 4.3 | 6.6 | 12.3 |
| New South Wales | 137.091 | 13.8 | 10 | 39.4 |
| Victoria | 103.178 | 9.6 | 9.3 | 27.5 |
| Australia | 399.107 | 35 | | 8.8 |

Table 1.2 Selected State GSP Comparisons - Finance & Insurance

| State | GSP 1994 / 95 (\$ Billion) | Sector Contribution to State GSP (\$ Billion) | Sector % of State GSP | Sector % Contribution to National Total (\$15.3 Billion) |
|-------------------|-------------------------------|---|--------------------------|---|
| Queensland | 65.280 | 1.9 | 2.9 | 12.4 |
| New South Wales | 137.091 | 6.5 | 4.8 | 42.8 |
| Victoria | 103.178 | 4.2 | 4 | 27.2 |
| Australia | 399.107 | 15.3 | | 3.8 |

Workshop Report

Property & Business Services Finance & Insurance

1. Industry Goals / Objectives

(italics / bold = most important)

- 1.1 *To have access to integrated, timely and accurate land related state and local government spatial information through a single, 'on - line' access point. ('one - stop - shop').*
- 1.2 *To ensure commercial and residential property development in Queensland is based on accurate land, demographic and infrastructure information.*
- 1.3 *To have access to information that supports quality commercial and residential development / investment.*
- 1.4 To support the State's objective to establish an infrastructure for the supply of geographic information / data (taking into account industry requirements for data quality / content / and accessibility).
- 1.5 Attract investment to Queensland through the availability of quality / timely information to support developer / investor decision - making.
- 1.6 Achieve the right investment in Queensland, in the right place, at the right time - to optimise the use of infrastructure (existing and planned).
- 1.7 Develop exportable skills / expertise in GIS/LIS.
- 1.8 Minimise risks to developers of making poor investment decisions based on inadequate information.
- 1.9 Rationalise legislation to support staged building development (- an estimated \$350 million of investor funds is tied up in staged developments awaiting legislative reform).

2. Major Issues Relating to Corporate Objectives

- 2.1 Lack of flow through of information (Industry to Government to Industry).
- 2.2 Initial land information systems were designed for taxing purposes (eg. State land tax, Local Government rates, Grants Commission and for establishing rents for leasehold lands) (Source: - Valuation Review - Len Evans).
- 2.3 Mechanisms for casual industry users to extract meaningful data from existing data sources; eg. ABS data (level of aggregation impacts on usefulness of data).
- 2.4 Difficulties associated with accessing state and local government data / information.

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- 2.5 Lack of availability / access to historical data for trends analysis.
- 2.6 *Timeliness of data update - quality of data (accuracy, lineage).*
- 2.7 The risks to the commercial and residential property industry of using poor information for investment decision - making.
- 2.8 *Lack of liaison, lack of partnering between government and industry associated with the development of spatial information; (lack of market research on what spatial data / information industry wants.*
- 2.9 The high price of data.
- 2.10 *Access to data - competitive advantage may be diminished by open access - confidentiality may restrict access to data.*
- 2.11 Sound investment planning depends on accurate property sales data (by type of property) to establish market demands (trends and directions).
- 2.12 The high cost to clients of duplication of data acquisition - analysts don't know that data already exists.
- 2.13 Funding of the information industry is outside the scope of government infrastructure funding supported by taxation (eg. information has a public benefit, similar to the road network infrastructure).
- 2.14 Funding is required to attract industry representatives to future planning sessions with government (QLIS requires a budget to carry out market research into industry data requirements).
- 2.15 The high failure (liquidation) rate of commercial and residential developers - ie. property development is a high risk business.
- 2.16 A downturn in the housing / property development industry has a major impact on the whole economy (Cairns 1800 housing starts down to 600, in 2 years).
- 2.17 The length of time (eg. 20 years) for developments to reach critical mass and mature.
- 2.18 Industry and Local Government are creating alternatives to BLIN, IVAS etc. (duplication).

3. Measures of Successful Program Performance

- 3.1 *Direct access to land data / information (- 'on - line' service).*
- 3.2 Duplication of effort minimised (State/Local Government).

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- 3.3 Consistent information available on building development across the State.
- 3.4 *Confidence in data availability - accuracy, integrity, currency, historical data.***
- 3.5 The right commercial / residential property investment is occurring in the right place.
- 3.6 Demographic data can be integrated with cadastral and sales data.
- 3.7 Planning schemes have access to an integrated demographic, cadastral, sales module, to support sequencing of development.
- 3.8 The spatial information industry is earning export dollars in the application of commercial / residential property information systems.
- 3.9 Legislative reform (Building Units and Group Titles Act) -with consultation, and timely implementation.
- 3.10 Electronic conveyancing and lodgement of survey information.
- 3.11 *Affordable data for practitioners.***
- 3.12 *Metadata in place to locate data.***
- 3.13 Less severe peaks and troughs in the industry (levelled out).

4. Assessment of Risks

- 4.1 The risks associated with not having access to an integrated information base include development costs may continue to increase with higher risks that development may occur in the wrong place; investors will have a preference to invest in areas with greater certainty, the community may be faced with increased living costs through higher development costs; and there is the potential that service infrastructure may be over or underutilised.

The potential impacts include Queensland may become less competitive for investors (lost development opportunities because of higher / unknown development risks), continued high failure rate of developers, a decline in the level of investment by retirees in Queensland, a reduced quality of life in areas of inappropriate development, higher unemployment in building and related trades, further densification of cities (conversely, emptying of the interior); and lost opportunities to increase the tax base through steady growth in development.

- 4.2 Lack of liaison between the private sector and government to determine property and finance industry sector requirements for land information, may lead to industry frustration with government causing industry to operate in isolation of government, duplication of effort and hence increased costs to the community and business; and generally loss of confidence in the QLIS coordination effort.

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The potential impacts include loss of business opportunities; loss of confidence by the private sector in the government's ability to deliver land information programs; reduced turnover in the property and finance industry sector; reduced quality of life of communities in developing areas, and a requirement for increased taxation to cover higher social servicing costs.

5. Targets

- 5.1 Integrated, affordable on - line data / information system to support commercial and residential property development, by December 1997.
- 5.2 Broad hectare study completed across the State within 7 years.
- 5.3 Demographics fully integrated by 2002.
- 5.4 Industry exports show a 5 % increase over 3 years ????
- 5.5 Rationalised legislation (Building Units and Group Titles Act) by July 1997.
- 5.6 Rationalisation of the Survey Infrastructure Act (December 1997).

6. Potential Partners / Collaborators

- 6.1 Marketing agencies
- 6.2 Venture capitalists / developers
- 6.3 Valuers
- 6.4 Surveyors
- 6.5 Bankers / Private Lenders
- 6.6 Real Estate
- 6.7 Body Corporate Managers
- 6.8 BOMA (Property Council)
- 6.9 Infrastructure Providers
- 6.10 Local Government

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7. Potential Benefits of Spatial Information to the Property & Business Services; - Finance & Insurance Sectors

Table 2 Potential Source of Benefits

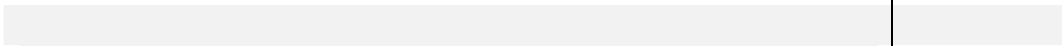
| Description of Benefit / Potential Source of Benefit | \$ Benefits |
|--|-------------|
| <p>7.1 Approximately 30,000 new allotments are created each year representing a \$1.5 billion industry in land development, together with a further \$2 billion in building construction.</p> <p>An integrated state information base will assist investors to construct better planned / located developments, matched to community lifestyle requirements.</p> | |
| <p>7.2 An integrated information base will assist developers to provide more cost effective infrastructure and maintenance (based on 'whole of life' asset costing) and make more effective use of existing infrastructure.</p> | |
| <p>7.3 A comprehensive information base will support more cost - effective development of growth areas making housing more affordable, supporting lower living costs (energy, transportation etc.), improved quality of life; and employment growth.</p> | |
| <p>7.4 Readily accessible information will assist to attract property investors to Queensland, and lead to increased business confidence in Government policy and decision - making.</p> | |
| <p>7.5 It has been estimated that red tape in the property planning and development process costs industry \$6 billion pa. (Dr Bob Graham - 1988, TASQ). Better information has the potential to reduce these costs by at least 1 %, ie. \$6 million pa.</p> | |
| <p>7.6 Electronic lodgement of 'as constructed' information in Moreton Local Government Area (4th largest LGA) saves an estimated \$500,000 pa. Significant potential for on - line data to save property developers \$ millions through electronic lodgement of plans, applications and assessment reports.</p> | |

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7.7 Potential to achieve a 35 % - 40 % reduction in the cost of changing Title details (boundaries on existing allotments); and a 20 % reduction in survey operations to establish new allotments using digital data entry / mapping techniques.

For 30,000 new lots per year and an estimated saving of \$150 / lot in recording title information, the cost of registering new allotments will be reduced by an estimated \$4.5 million pa.



7.8 Significant ‘flow - on’ benefits accrue to the community and the economy from the provision of appropriate information at the conceptual stage of project investment; ie. to avoid inappropriate developments such as Inala and Woodridge.



7.9 Government coordination of data to support the Property and Finance Sector will save the private sector considerable costs involved in data duplication.



Workshop Report

GSP Sectors

Mining Electricity, Gas & Water

GSP Sector :

Mining \$ 3.038 billion
Energy, Gas & Water \$ 2.215 billion

Ministerial Portfolio's:

The Hon. Tom Gilmore MLA (Minister for Mines and Energy)
Director - General Dr Robert Day

The Hon. Howard Hobbs MLA (Minister for Natural Resources)
Director-General (Tom Fenwick)

Table 1.1 Selected State GSP Comparisons - Mining

| State | GSP 1994 / 95 (\$ Billion) | Sector Contribution to State GSP (\$ Billion) | Sector % of State GSP | Sector % Contribution to National Total (\$16.9 Billion) |
|-------------------|-------------------------------|---|--------------------------|---|
| Queensland | 65.280 | 3 | 4.65 | 17.9 |
| New South Wales | 137.091 | 2.7 | 2 | 16.2 |
| Victoria | 103.178 | 3.2 | 3.1 | 19.4 |
| Australia | 399.107 | 16.9 | | 4.2 |

Table 1.2 Selected State GSP Comparisons - Electricity, Gas & Water

| State | GSP 1994 / 95 (\$ Billion) | Sector Contribution to State GSP (\$ Billion) | Sector % of State GSP | Sector % Contribution to National Total (\$13 Billion) |
|-------------------|-------------------------------|---|--------------------------|---|
| Queensland | 65.280 | 2.2 | 3.4 | 17 |
| New South Wales | 137.091 | 4.4 | 3.2 | 33.5 |
| Victoria | 103.178 | 3.7 | 3.6 | 28.3 |
| Australia | 399.107 | 13.052 | | 3.3 |

Workshop Report

Mining Electricity, Gas & Water

1. Industry Goals / Objectives

(italicised / bold = most important)

- 1.1 *Maintain a viable energy sector that supports wealth generation in the community.*
- 1.2 *Achieve certainty of process to develop energy resources; (eg. particularly Native Title, Environment Protection Policies (EPP) etc.).*
- 1.3 Achieve community acceptance of benefits and costs of energy and mining sector activities.
- 1.4 Achieve optimised use of non renewable resources through Ecologically Sustainable Development (ESD).
- 1.5 Develop alternatives to the use of non renewable resources (energy conversion).
- 1.6 Develop integrated longer term plans for the provision of the State's energy infrastructure, supported and facilitated by government information systems.
- 1.7 Maintain flexibility in government processes to support / capitalise on discoveries of new mineral deposits.
- 1.8 Increase Queensland's share of national / international energy market.
- 1.9 *Provide easy access to a comprehensive state information base (integrated, and current).*
- 1.10 Promote conservation (wise use) of energy resources (industry optimisation).

2. Major Issues Relating to Industry Objectives

- 2.1 *Complex regulations add to the cost of energy generation (without adding value). (see 7)*
- 2.2 *Community perception / acceptance of energy development alternatives (- environmental health "outrage" issues incur high costs to the industry; and take significant time to re-educate the community).*
- 2.3 Lack of clarity in native title and cultural heritage issues impedes mining and energy development in Australia.
- 2.4 Industry is unclear about Government department lead agency roles for data custodianship and data collection.

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- 2.5 Industry has inadequate knowledge of data availability (public and private sector).
- 2.6 Information required by the industry for decision - making, must be readily available, realistically priced and of high quality.
- 2.7 *Disjunctive approvals process in dealing with 3 levels of government. (See 2.1)***
- 2.8 Lack of two - way data flow between the government and the private sector: Private sector input / reporting to improve government databases is extremely difficult; eg. input of cultural heritage data gathered during environmental impact assessments.
- 2.9 Lack of community understanding of benefits to the State of mining / energy development.
- 2.10 The impact on land values of energy / power development.
- 2.11 The inequities in Federal tax law relating to compensation for easements over private land.
- 2.12 *Negative media coverage. (See 2.2)***
- 2.13 Common interpretation / understanding / agreement on what Ecologically Sustainable Development (ESD) means.
- 2.14 The added costs to industry and consumers of meeting ESD requirements; (- projects are potentially unviable).
- 2.15 Lack of information on where the next power generation site is required in the State.
- 2.16 The need for improved 'demand - side' management to conserve energy resources - requires community cooperation.
- 2.17 *Lack of synchronisation of energy development plans between industry and State and Local Government, leads to potential conflicting land uses that restrict / prohibit the development of alternative energy sources.***
- 2.18 Little provision is made in long term planning schemes for power generation sites (eg. require 1,500 ha for a power station) and service corridors for gas and electricity. Suitable sites are favoured by the community for development purposes.
- 2.19 The long lead time required to develop alternative forms of energy generation using renewable resources (eg. wind energy generation), requires preservation of suitable sites in conjunction with state and local government.
- 2.20 The State needs to complete an audit of Queensland industries and their energy requirements for value - adding, to determine existing and long term energy and supporting infrastructure (energy transmission) requirements.

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3. Measures of Successful Program Performance

- 3.1 95 % of the community accept State energy operations plans by 2001.
- 3.2 Community acceptance of energy transmission routes increased from 10 % acceptance to 50 % acceptance by 2001.
- 3.3 Cooperative arrangements in place for energy generation and distribution with all levels of government. (- with transmission routes recognised in local government strategic development plans).
- 3.4 Streamlined approvals process shortens the lead time to develop new mining and energy projects (significant \$ benefits).
- 3.5 Prospectivity potential in Queensland is known; and leads to increased mining investment in the State.
- 3.6 Exploration data is readily available and easily accessible (ie. matches or exceeds exploration data available in other states / countries).
- 3.7 Industry - government partnerships developed with regulatory bodies (to improve / supplement data resources held by government, to specify required services, and to streamline legislation).
- 3.8 *Data required for environmental impact statements is readily available and accessible to assist mining and energy industries to comply with Environment Protection Policy (EPP). (- requires lifecycle site information from pre - disturbance to post rehabilitation) (Note that the cost of an Environmental Impact Assessment for a power station is in the order of \$5million) (impact assessments require the DCDB to be accurate to avoid propagating errors in other data sets).*

4. Assessment of Risks

- 4.1 Failure to develop a comprehensive, integrated environmental information base may lead to longer lead times to develop projects, greater expense to industry and the community, and potentially cause projects to become unviable.

The potential impact on the State is higher energy costs to Queensland, making the state less competitive and attractive to investors.

- 4.2 Lack of long term land use planning may lead to land use approvals that restrict mining and energy development eg. a site that may be used for mining or power generation may represent a potential development conflict between two projects of considerable economic value to the State and local area.

The potential long term impacts include higher costs of energy if alternative sites cannot be found, or missed opportunities for wealth generation from the mining sector

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if other land use options are pursued. Information to support long term macro - level state planning could avoid poor (irreversible) decisions relating to the future prosperity and growth of the State.

5. Targets

5.1 (not completed)

6. Potential Partners / Collaborators

- 6.1 Queensland Mining Council (Barry Mathias)
- 6.2 Would be Investors
 - NRG Gladstone - Comalco joint venture
 - Mission power Trans Alta Canada
 - Sinclair Knight Mertz (information for brokers)
- 6.3 Distribution Corporations
 - (Queensland Transport and Supply Corporation) (Graeme Francis, Frank Sutton)

7 Potential Benefits of Spatial Information to the Mining and Energy Sector

Table 2 Potential Source of Benefits

| Description of Benefit / Potential Source of Benefit | \$ Benefits |
|--|-------------|
| 7.1 Comprehensive spatial information base supports optimised impact assessment to expedite the assessment process eg . on a \$5million power station impact assessment, there is potential to reduce the cost by up to 80%. At the pre feasibility stage, it will also assist to reduce the time required to obtain community input to development proposals; and to reach the “go” or “no go” decision point. | |
| | |
| 7.2 Comprehensive spatial information will reduce the time required to complete impact assessments. | |
| | |
| 7.3 Comprehensive spatial information will ensure completeness of development proposal assessments, assisting to minimise the potential for community dissatisfaction. | |
| | |

| | |
|--|--|
| 7.4 Comprehensive spatial information base increases the attractiveness of | |
|--|--|

Workshop Report

| | |
|---|--|
| | |
| <p>the state to large investors (of projects in the \$1 billion + category).</p> | |
| <p>7.5 Flow - on impacts of faster development approvals and increased investment in the mining and energy sector in Queensland, include growth in value - adding industries and hence increased employment opportunities.</p> | |
| <p>7.6 Risk management is improved with better information. Risks to community health and safety; and the environment are reduced. (Requires benchmark data to monitor changes against a baseline condition).</p> | |
| <p>7.7 Planned development of the State's energy resources taking into account environmental and socio-economic impacts will lead to cheaper, cleaner energy for Queensland.</p> | |
| <p>7.8 Planned development of the State's energy resources in conjunction with state and local government will ensure that transmission corridors for power, water, gas etc. will be preserved into the future.</p> | |
| <p>7.9 Spatial data resources collected and held by the private sector could be integrated with government data resources for use by the community. (Partnership arrangements for data collection between government and industry could facilitate a vastly expanded State Data Infrastructure, - with incentives for those involved in contributing to the Data Infrastructure.)</p> | |

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Workshop Report

Conservation & Environment

Gross State Product Sector:

(Not Specific to GSP Classification)

Ministerial Portfolio's:

The Hon. Howard Hobbs MLA (Minister for Natural Resources)
Director-General (Tom Fenwick)

The Hon. Brian Littleproud MLA (Minister for Environment)
Director - General Tom Tolhurst

Table 1 Selected State GSP Comparisons

| State | GSP 1994 / 95 (\$ Billion) | Sector Contribution to State GSP (\$ Billion) | Sector % of State GSP | Sector % Contribution to National Total (\$ Billion) |
|-----------------|-------------------------------|---|--------------------------|---|
| Queensland | | | | |
| New South Wales | | | | |
| Victoria | | | | |
| | | (Not Applicable) | | |
| Australia | | | | |

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1. Industry Goals / Objectives

(italicised / bold = most important)

- 1.1 To protect and enhance the quality of the environment through licensing and local government environmental management systems.
- 1.2 To protect community health through licensing and health promotion activities.
- 1.3 *To encourage land use planning and management that accommodates environmental values.***
- 1.4 Encourage industry participation, extension and education for responsible environmental management.
- 1.5 Encourage the collection of environmental data of high quality / integrity.
- 1.6 Provide information to landholders on the ecological sensitivity of the land.
- 1.7 Provide information to the community on native title and cultural heritage significance of land.
- 1.8 *Provide the public with access to environmental information (to empower landholders to take appropriate action).***

2. Major Issues Relating to Industry Objectives

- 2.1 Educating the community about environmental and health issues - (facilitate information transfer and easy public access to information).
- 2.2 *Define performance indicators to measure the effectiveness of environmental strategies.***
- 2.3 *The quality of collected data has a major influence on the integrity of information, and hence the quality of decision making. Production of poor data (ie. lack of standards) is counter - productive.***
- 2.4 *Subjective environmental assessments are often translated into quantitative terms (which can be misleading).***
- 2.5 The unknown long term ecological impacts of development.
- 2.6 The availability of information to validate environmental significance status (eg. significance status claimed by the 'green lobby'.

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- 2.7 The “Goodwill” component of environmental assessments (where the perceived (intangible) value of the asset is stated on transfer of ‘ownership’ of the asset).
- 2.8 Environmental values are not widely recognised. (Environmental capital is not used up in Queensland (as it is in many other states.), hence public apathy given the perceived abundance of resources).
- 2.9 The rate of environmental change - benchmarks are required across a range of resources eg. the clearing of native remnant vegetation.
- 2.10 The difficulty associated with balancing economic gains against environmental loss; (including social impacts; - and including the Community’s acceptance of environmental loss).
- 2.11 Quality (point source) indicators for specific areas / requirements; - versus comprehensive mapping statewide.
- 2.12 The value of specialised small area spatial analyses - using quality data.
- 2.13 Indicators, eg. soils, biodiversity, etc. are available to assess the ecological sensitivity of land.
- 2.14 Delays to development associated with native title claims - (and the right to negotiate provisions of Native Title Act (6 months).
- 2.15 *Surety of title - freeholded land / crown land. eg. stream reserves etc. noting that 80 % of Queensland is under pastoral lease.***
- 2.16 The need to obtain a ‘site clearance’ before development occurs, indicating the absence of assets / features that have cultural significance; - (data on culturally significant sites is stored in the Department of Environment).
- 2.17 The role of local government in integrated Environmental Planning - Regulations / procedures are required to allow private companies to contribute digital data to local government, for input to regional plans.

3. Measures of Successful Program Performance

- 3.1 Increased public awareness - political will to protect the environment.
- 3.2 Industry is compelled to be more environmentally aware.
- 3.3 Greater community, industry emphasis on the environment.
- 3.4 Reduced risk to developers of proposals failing.

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- 3.5 Clearer picture of native title interests, more informed negotiations - less compensation pay out.
- 3.6 Ability to assign values to resources.
- 3.7 Better management of scarce resources.
- 3.8 *Metadata is in place to support site specific enquires throughout the State.*
- 3.9 *Data is available to support a user defined profile of an area.*

4. Assessment of Risks

- 4.1 If the community doesn't have access to an integrated environmental information base, environmental management will be more costly, the environment will be placed at greater risk, scarce resources may be used inefficiently and it will be difficult to assess the impacts of land use management practices on the environment.

The potential impact on the State will be less environmental protection leading to loss of certain environmental values, less development (because timely decisions cannot be easily made), and adverse impacts on health (including social, recreational and economic health).

5. Partners/Collaborators

- 5.1 Environment Institute of Australia. (Paolo Martinelli) (3225 1501)
- 5.2 Local Government Association.
- 5.3 Environmental Industry Development Network. (Ian Prince - 3229 8599)
- 5.4 Dames and Moore. (Chris Piggot - 3832 3222)
- 5.5 SKM (Hunter Brownscombe). (3244 7100)
- 5.6 Environmental Industries. (Alan Cole)
- 5.7 Golders. (Jim Dodds)

6. Targets / Benchmarks

- 6.1 No net loss of vegetation in Queensland

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7 Potential Benefits of Spatial Information to the Conservation and Environment Sector

Table 2 Potential Source of Benefits

| Description of Benefit / Potential Source of Benefit | \$ Benefits |
|--|-------------|
| 7.1 A comprehensive, integrated spatial information base will assist to streamline the environmental approvals process. | |
| 7.2 A comprehensive, integrated spatial information base will reduce the risk to investors associated with having access to inadequate information resources. | |
| 7.3 A comprehensive, integrated spatial information base will lead to improved environmental protection, based on information on the true value of environmental capital. | |
| 7.4 A comprehensive, integrated spatial information base will assist The Department of Environment to better target their environmental protection budget; - (off park conservation). | |
| 7.5 A comprehensive, integrated spatial information base will assist landholders to better target their investment in land care / property planning. | |
| 7.6 Establishment of a comprehensive, integrated spatial information base will give the community greater confidence in the government’s environmental decision - making processes. | |
| 7.7 A comprehensive, integrated spatial information base will enhance the State’s ability to validate “uniqueness” claims, saving time and money. | |
| 7.8 A comprehensive, integrated spatial information base will assist State / Local Government / Regional planning bodies to develop appropriate / integrated environmental management plans. | |

Appendix 1

List of Attendees

Business Information Requirements Workshops (November - December 1996)

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Appendix 1

List of Attendees Industry Business Information Requirements Workshops

Appendix Table 1 List of Attendees - 6 X Business Information Requirements Workshops

| Workshop 1 | Primary Production |
|------------------------|---|
| 1 - Richard Hassall | Econ. / Govt Policy Adviser Qld. Fruit and Vegetable Growers |
| 2 - Joseph Evans | Ag. Econ. Qld Canegrowers Association |
| 3 - Mark Needham | Manager IT&T Qld Canegrowers Association |
| 4 - John Roberts | Principal Veterinary Officer (APHS) Dept. Primary Ind. |
| 5 - Colin Reugebrink | Sen. Project Officer GIS QDPI - Forestry |
| 6 - Chris Bragg | Manager Resources QDPI Forestry |
| 7 - John Pollock | QDPI |
| 8 - David Teufel | QLIS Benefit Study Project Coordinator |
| Workshop 2 | Local Government |
| 1 - Paul Weston | BIMAP Business Support Brisbane City Council |
| 2 - Ben Pow | GIS Manager Caloundra City Council |
| 3 - David Teufel | QLIS Benefit Study Project Coordinator |
| Workshop 3 | Department of Local Government & Planning |
| 1 - Peter Allen | Chair, Fitness, Sport, Recreation Industry Training Council |
| 2 - Dave Batt | Principal Development Officer, (Outdoor Recreation) - Office of Sport and Recreation |
| 3 - Peter Rice | Manager, Toowoomba & Golden West Regional Tourist Association |
| 4 - David Teufel | QLIS Benefit Study Project Coordinator |
| Workshop 4 | Property & Finance |
| 1 - Geoff James | Senior Vice President Urban Dev. Inst. of Australia |
| 2 - Margaret North | Principal - Design Management & Marketing |
| 3 - Tony McNamara | Director Body Corporate Managers Institute |
| 4 - Jack DeLange | Executive Officer - AIVLE |
| 5 - John Hayes | Chief Exec. Officer Assoc. of Consulting Surveyors Qld |
| 6 - David Teufel | Institution of Surveyors Australia - Qld Division QLIS Benefit Study Project Coordinator |
| Workshop 5 | Mining & Energy |
| 1 - David Crevola | Acting Secretary - Austa Electric |
| 2 - Graham Muggerridge | Principal Geologist - RTZ-CRT Exploration |
| 3 - Ian Cook | Manager, Environment and Compliance - Oil Company of Australia (Boral Energy) |
| 4 - Bill Buikstra | Land & Environmental Services Manager - Powerlink Queensland |
| 5 - David Teufel | QLIS Benefit Study Project Coordinator |
| Workshop 6 | Conservation & Environment |
| 1 - Brian Lund | Business Manager - Greening Australia |
| 2 - Michael Asnicar | Env. Health Officer - Redland Shire Council |
| 3 - Craig Emerson | Director - ECO Managers |
| 4 - David Teufel | QLIS Benefit Study Project Coordinator |