

## Victorian Spatial Information Industry

# CENSUS

### *REPORT*

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27<sup>th</sup> October 2005

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## EXECUTIVE SUMMARY

This report presents the results of a survey of Victorian businesses which are involved in the Spatial Information (SI) Industry.

The survey, undertaken in September 2005, asked about products, overall revenue, full time equivalent staff (FTE) numbers and the percentage of total work which was spatial in nature and that which was undertaken outside Victoria.

400 businesses were identified initially as potential SI Industry members. This list was reduced to 200 through a process of thorough data matching and online research. Based on the survey responses, 176 identified businesses appear to be currently active in the sector.

89 businesses replied to the survey - in writing, by email or by phone. Some replies only answered some questions but most were complete.

The replies show:

- Respondents employ 2,228 FTEs, of whom 1,838 work in spatial information.
- Respondent businesses generate \$164M in annual revenue, of which \$138M is for spatial work.
- Two thirds of these businesses are involved solely in spatial work.
- The majority of work outside Victoria - elsewhere in Australia and overseas - is undertaken by the largest respondent companies (each with revenues of over \$10M pa).

The data has been projected to provide estimates for the whole Victorian SI Industry. This takes account of businesses identified by the consultancy but which did not reply, as well as an allowance for businesses which are trading but were not found. Using assumptions set out in the full report, the overall sector statistics would be:

Total number of SI businesses	223
Total revenue	\$410M
Total Full Time Equivalent staff	5,570
Total value of work outside Victoria	\$143M

The types of services and goods provided by the industry include:

- \* **Data collection and measurement** including surveying and remote sensing
- \* **Data management** including data storage, curation and distribution
- \* **Sale and supply of specialised hardware and software**
- \* **Systems development and application** including information analysis
- \* **Sales of specialist data and information**
- \* **Consulting and services** including planning, specialist analysis, project management, specialist recruitment and technical services
- \* **Data information and presentation** including development of maps both hardcopy, digital and online.

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## 1. BACKGROUND

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### *About the Census project*

The project was commissioned by ASIBA with the cooperation of ACSV and with the support of MultiMedia Victoria. Its purpose was to seek objective data about the size and diversity of the spatial information sector in Victoria and to understand trends within the faster changing parts of the industry.

### *Approach*

The project comprised three main activities.

Fivenines Consulting commenced the project by facilitating an investigative workshop with a group representing a range of industry, government and research entities. The purpose of this workshop was to confirm the boundaries around the sector.

The consultants then constructed an inventory of industry participants active in Victoria. This inventory was constructed based on the workshop, nominations from ASIBA members together with industry directories and online sources.

The consultants then undertook a survey to gather data through direct contact with Victorian based members of the industry. The approach used a short questionnaire to gather data.

The analysis and findings contained in this report are based on these activities.

### *Project Plan*

There were five key steps in the project:

1. Gain agreement to the project plan and deliverables. This was signed off by the ASIBA Vic steering committee.
2. Run an industry workshop.
3. Gather a list of businesses to contact for the survey using web based research (primarily using phone directory listings and search engines, as well as affinity group sites nominated by workshop participants).
4. Run a survey programme via phone, mail and email, seeking to reach as many active business members of the Victorian-based spatial information provider sector as possible.
5. Analyse the survey results, consolidate them with the qualitative comments from the industry workshop, and prepare this report.

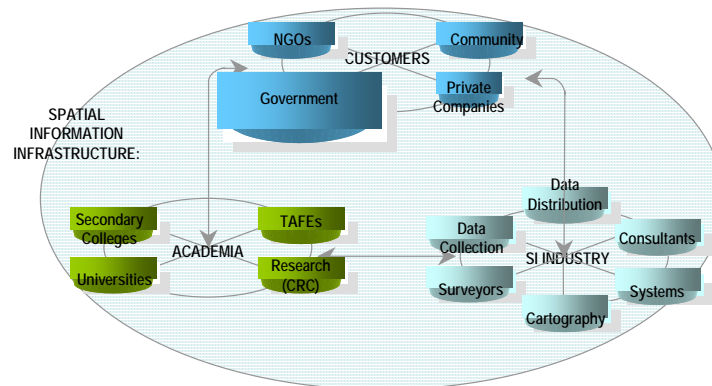
## 2. RESEARCH

### 2.1 WORKSHOP

The industry workshop was run on 24<sup>th</sup> August 2005. The workshop was attended by a cross section of representatives of the Victorian industry and ran for two hours.

#### *Scope of the sector.*

Workshop participants were shown a model of the Spatial Information (SI) sector previously developed for the 2003 Development Plan for the industry<sup>1</sup>. This model, shown below, segments the spatial information community into Customers, Academia, the SI Industry and the SI Infrastructure. The components of the Industry broadly cover: measurement (notably surveying and remote sensing), data and systems, and transformation (for instance cartography) as well as consulting services.



Although the discussion was introductory rather than comprehensive, workshop participants raised some important issues which helped to clarify the definition of the sector.

1. The concept of an SI Industry is only meaningful if it is restricted to those businesses which provide goods and services specifically related to SI, and where genuine spatial knowledge or understanding is required to operate successfully. On this basis, end users of SI data and retailers of equipment that present geographic information (such as car mounted GPS systems) are not considered to be members of the SI industry.
2. Although not all participants agreed, there was a widely held view that government should not be considered a member of the SI Industry and that the census should be restricted to private sector participants in keeping with ASIBA's essential charter.

<sup>1</sup> P4, A Development Plan for the Victorian Spatial Information Industry. ASIBA Vic, April 2003.

3. Many organisations are partially involved in the sector - with activities that cover other sectors as well. Major consulting firms that offer specialist spatial services were included in the census.
4. Trade associations support the SI Industry but are not necessarily active participants, in the view of most members of the workshop. While it is vital that they are represented in consultative and decision making processes, not everyone felt that they added value to spatial information directly. Similarly, recruitment businesses servicing this sector, and specialist consultancies that provide advice which is generic to all sectors, fall close to the boundary line for many participants. In this Census, the Associations were not included but the recruiting businesses and specialist consulting firms capable of providing specialist advice were.
5. The census was applied to Victorian businesses. In some cases however, these businesses had offices in other States or the business had its head office in another State and the Victorian office was a branch office. Businesses with a Victorian presence were included in the Census wherever possible.
6. It was understood that we would not be able to identify all of the businesses in the Industry. The Census would provide us with a glimpse of an emerging industry and a basis for developing strategic policies and strategies for developing that industry. The framework it thus provided would need to be robust enough to incorporate other businesses as they emerged or were subsequently identified.

### *Industry participants*

The workshop also helped to identify businesses involved in the sector, including provision of categories, keywords and specific business nominations.

## **2.2 CONTACT DATABASE**

Sources for the contact database included:

- The Australian Spatial Industry Business Association (Victoria) and the Association of Consulting Surveyors, Victoria<sup>2</sup>.
- Directories
- ASIBA members
- Yellow Pages and Google based searches
- White Pages searches (for contact details)

Prior to issuing the survey form, the list was culled to remove duplicates and businesses which were clearly not within the sector definition. 400 businesses were identified initially as potential SI Industry members. This list was reduced to 200 through data matching and online research.

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<sup>2</sup> The Institute of Surveyors, Victoria was consulted but did not provide contact details on the basis that their members are individual surveyors and, where they are involved in commercial work, belong to ACSV on a corporate basis.

### **2.3 SURVEY**

The survey, undertaken in September 2005, asked about products, overall revenue, full time equivalent staff (FTE) numbers and the percentage of total work which was spatial in nature and that which was undertaken outside Victoria.

Based on the preparatory research and on the survey responses, 176 of the identified businesses appear to be currently active in the sector.

89 businesses replied to the survey - in writing, by email or by phone. Some replies only answered some questions but most were complete.

The approach to developing the contact database and the background to the survey are set out in more detail in the appendix.

### **3. FINDINGS AND ANALYSIS**

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This section provides qualitative and quantitative observations based on the project research. The quantitative analysis uses figures from the responses provided by census participants.

The final section makes projections of the data received in survey responses and provides estimates for the corresponding values for the whole sector.

Some key assumptions were made in consolidating the responses and then interpreting the data. The detailed assumptions are set out in the appendix.

## Victorian Spatial Information Industry size

Survey respondents employ a total of 2,228 full time equivalent staff in their businesses.

The total revenue of the businesses surveyed totalled \$164M per annum.

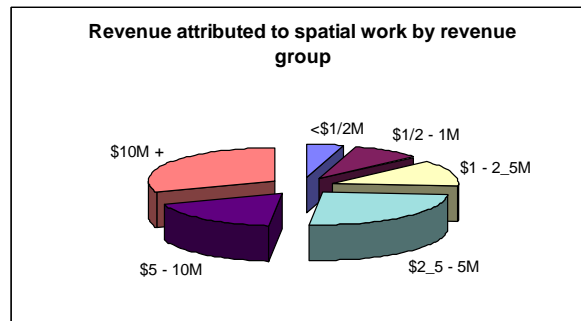
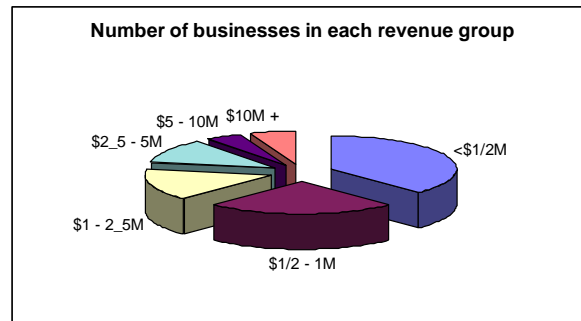
Of this, \$138M of revenue is directly attributable to spatial work.

1,838 Full Time Equivalent (FTE) staff are engaged in spatial work with these companies.

While the two largest revenue groups constitute about 10% of the total sector

by number of businesses, their revenue represents nearly half of the turnover of the sector.

While it is not possible to objectively assess how representative the respondents are of the whole sector, there is no noticeable difference within the cross-section of companies between those that did and did not respond to this question.



## Characteristics of the Industry

The average revenue reported per Full Time Equivalent staff member (FTE) is \$73,609, using the assumptions for specific values within the reply bands explained in Appendix 4.2. This is a surprisingly low revenue figure (compared with \$117,000 reported by a similar survey undertaken in Queensland during 2002 (Spatial Queensland - Industry Research by McDonnell-Phillips). The small number of businesses and wide bands of revenue and FTEs in the higher ranges may distort the average figure.

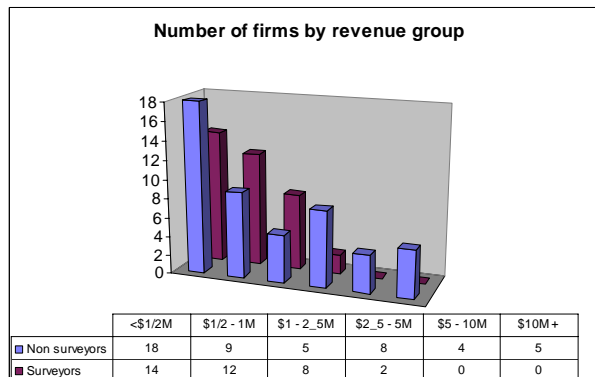
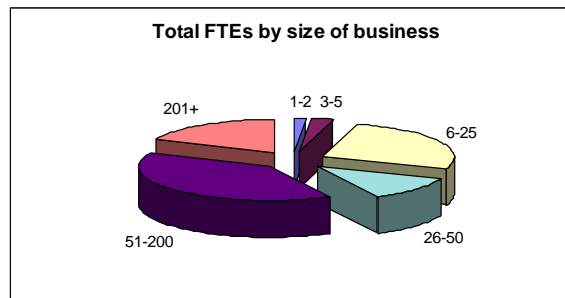
Taking only those businesses reporting up to \$5M in revenue and 50 or fewer staff, the average revenue would be \$98,303.

Land Survey businesses seem to have some significantly different characteristics from the rest of the census population.

Using the product descriptions provided by respondents, the survey respondents were divided into two groups - separating businesses which reported that their activities were primarily land survey (including cadastral and town planning work) from the remainder.

Using this breakdown, the land survey businesses are concentrated at the smaller end, and the number of these businesses declines as their size increases.

Businesses which have other products and services, or combine land survey with other activities, show a more mixed profile. In particular, this group includes the larger consultancies and businesses which have a spatial arm, but are not solely spatial product or service providers.



## Spatial and non-spatial work

It is important to acknowledge the proportion of work which is spatial in nature when estimating the total amount of spatial work undertaken in Victoria by the SI industry.

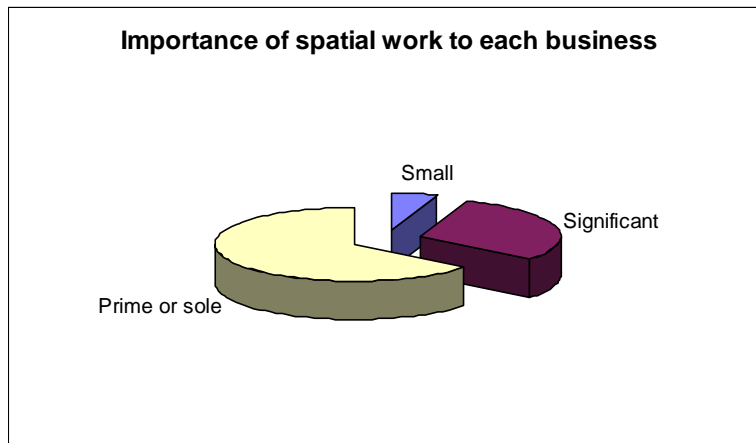
However, the responses also tell us about the profile of businesses within the sector.

By number, two thirds of all businesses are exclusively involved in spatial work. This includes the majority (but not all) of the land surveyors, and many other spatial businesses.

Of the rest, one quarter derive a significant proportion (75-25%) of their

revenue from spatial work. This group includes companies with a level of product diversity that includes spatial work. In many cases these businesses use spatial skills as a key part of their overall offering (rather than simply having a spatial business unit).

The remaining group of businesses derive 25% or less of their revenue from spatial work. Most of these are large businesses whose core activities involve other products and services, and their contribution to the sector is through specialist spatial teams.



## Changes in the industry

Discussion with participants on the phone highlighted a strong focus on digital aspects of data, regardless of the way it is used.

There is a significantly increasing interest amongst existing businesses and professional participants in digital products and services.

In parallel, new applications are evolving in areas such as precision agriculture and navigation. These areas, which previously did not use precision locational data at all, now make intensive use of spatial data and computer driven solutions.

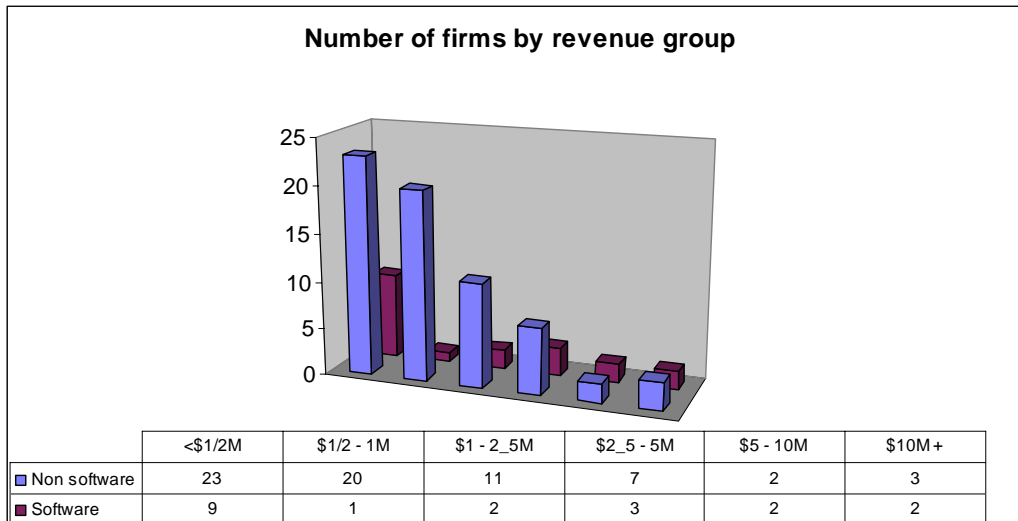
This survey has not been undertaken on a longitudinal basis so there is no time series history on which to plot trends. However, by identifying businesses which are providing internet and software-oriented services, it is possible to draw

some conclusions about trends as this sector has only existed for the past few years.

Generally, the firms providing 'traditional' services (which include the land survey group identified in earlier analysis) show a distribution in which the number of firms declines as the revenue increases.

In contrast, the software group has a number of small entities, which include start ups, and then an even spread of businesses across the larger revenue bands.

The small size of the group makes it difficult to speculate, but some of the larger businesses in the software group include entities which on-sell licensed software and keep a smaller margin of their revenue.



## Goods and Services exported outside Victoria

The final quantitative question asked businesses what proportion of their total revenue was earned outside Victoria - whether overseas or elsewhere within Australia.

Modern working practices, such as remote working, make it difficult to clearly define what is genuinely export work. From an industry point of view, it is more important to understand how much revenue is being earned from outside the State, than to know where the work is physically based, or where the staff undertake the work (though the latter of course affects where the salaries are ultimately spent).

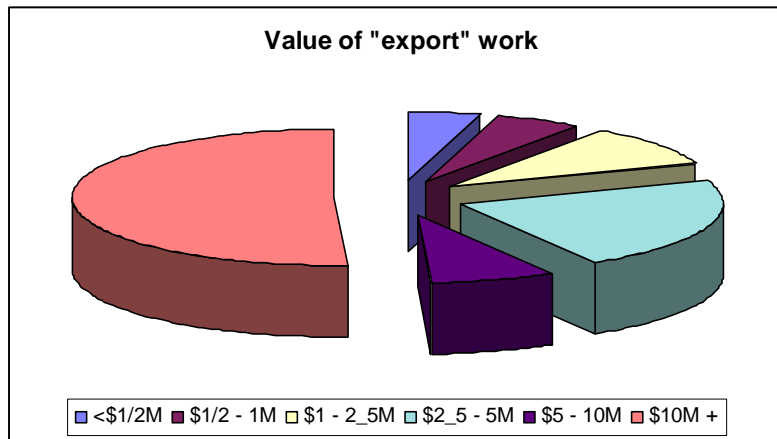
The question in the survey therefore asked what percentage of sales (ie

revenue earned) was derived from outside Victoria.

Since the question only asked for an estimate, and since about one fifth of respondents did not complete this question, it would not be wise to rely too heavily on the resulting number.

That said, the total export sales from firms which responded total approximately \$57M per annum. 20% of firms reported that more than half of their sales were made outside Victoria, while almost 60% reported that all their work is sold entirely within Victoria.

The highest revenue firms (over \$10M) generate the majority of export revenue.



## Whole Industry Projections

As already discussed, the data from the survey covers only part of the SI Industry. In this section we have attempted a projection of this data to cover the whole Industry.

The first assumption made is that we can project the results on a pro rata basis from businesses that did reply to those that did not.

In doing this we are assuming that our list of "Found but did not reply" businesses is correct. Whereas we are almost certain (subject to respondents replying honestly) that the data in the previous section is from genuine businesses operating in the sector, the "Found but did not reply" list has not been directly validated with the companies (apart from those who refused to participate in the survey but confirmed they were active).

We also assume that those that did not reply have similar profiles as those that did. The only comment we can make on the safety of this assumption is that the non-respondents seem to have the same profile by type of business - traditional land surveyors, the new IT firms, and consultancies for instance are represented in similar proportions in both "halves".

The second key assumption we need to make concerns the number (and profile) of firms we have not found. This is the most difficult assumption to substantiate and can only be based on our view and that of experts in the sector. For the purpose of the data in this section, we have assumed that we located 80% of all businesses currently operating in this sector which would meet our general definition. We have also assumed this group has similar profiles to the group of businesses which responded to the survey.

On this basis, we estimate that the Victorian SI industry has the following key characteristics:

Total number of SI businesses	223
Total revenue	\$410M
Total Full Time Equivalent staff	5,570
Total value of work derived from outside Victoria	\$143M

## Services and products

The survey responses included service and product information about participant businesses. These are terms which are chosen by the businesses themselves, and do not fit a formal taxonomy. However, the list below represents a consolidation of these terms into a preliminary, logical grouping.

### **Data Collection and Measurement**

- Data capture services including spatial data
- Land survey including cadastral
- Soil surveys
- Remote sensing including aerial surveying, precision photogrammetry
- Laser scanning
- High resolution digital imagery

### **Data Management**

- Data management
- Data storage & curation
- Data migration
- Data distribution

### **Hardware and Software (Sales and supply)**

- Survey and engineering software
- GPS and positioning hardware and software
- GIS software and products
- Supplier of Aerial photography services and products

### **Systems (Information analysis and development)**

- GIS Software development
- Special value added GIS solution products
- Developing spatial -based solutions
- Spatial and terrain modelling including 3D models
- Web-based systems/maps
- Information services
- Network modelling

### **Sales**

- Spatial data sales
- GIS Software and services sales
- Spatial equipment sales

### **Consulting and Services**

- Data specification
- GIS services and consulting
- Geospatial analysis
- Outsourced services
- Title surveying
- Development approvals
- Development advice & management
- Town planning
- Sub-division

Feature plans  
Strategic advice  
User needs analysis  
Intellectual property services  
Tender writing & Evaluation  
Project management  
Consulting services  
Project facilitation  
Recruitment  
Training  
Technical support  
Irrigation design & mapping  
Environment & water

**Data & Information Presentation**

Web-based mapping  
Street directories  
Map design and publishing  
Geophysical maps  
Topographic and other map reproduction

## 4. APPENDICES

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### 4.1 ABOUT THE SURVEY

#### *Identification of a preliminary contact list*

To draw meaningful conclusions from a census such as this, it is critical to have a representative list of participant businesses, both in size and cross section. The database underpinning the survey must ensure that the survey will do two things:

- Get sufficient responses to allow us to be confident that the data is representative of the whole sector in Victoria.
- Reach a significant enough proportion of the sector to allow us to be confident to assert how large the sector is.

There is no generally accepted definition of the spatial information industry and so there are no published groupings of firms which might be contacted.

Fivenines drew from some particular sources of company lists. The key sources were associations, directories, referrals and online sources.

The two Victorian associations whose lists were included in the database were ASIBA and ACSV. Fivenines had discussions with the State body of the Institute of Surveyors (ISV) but their view was that ISV is a professional association rather than a business association, and those members who are within our definition of the SI Industry will be covered through separate ACSV membership.

We consulted a small number of directories, of which the only really relevant one was the annual directory published by Position magazine. This list provided many of the non-survey businesses in the sector, and was probably the most complete list covering the whole sector. We only included Victorian based organisations from this directory (apart from some which appeared to have a significant physical presence though headquartered interstate).

The ASIBA steering committee members and a couple of workshop participants provided other contacts. In many cases these included full contact details, but many were names only, and a proportion of these could not be tracked down.

We also conducted a Yellow Pages and Google search across a number of search terms. This was notably unproductive - the Yellow Pages classifications were not sufficiently useful (and the software too ungainly) for us to identify many additional businesses while Google produced many search results, but few genuinely new businesses.

In all, we generated almost 400 records in our preliminary database.

#### *Refining the database*

We then undertook a number of tasks prior to approaching target companies.

Given the number of sources, a number of records were duplicated (though we generally undertook a name search before creating a new record) and it was vital to ensure that the

survey did not double count businesses. De-duplication activities included sorting the database by company name, postal address, contact person name and email address to identify apparent duplicates.

It was noticeable that a significant number of businesses use more than one trading name, or have absorbed other businesses. As we worked through the list, we found that a number of business names which initially appeared to be businesses in their own right were in fact trading names or brand names. We also identified a limited amount of consolidation within the sector - some businesses have merged or been absorbed into others though we cannot comment on whether the SI Industry is untypical in this.

The final list comprised around 200 businesses which appear to exist or to have traded recently.

### *Contact details*

The final preparatory task was to gather actual contact details where these were not already in the database. In many cases, we had company or business names but no contact details. Wherever possible, we sought personal names, postal addresses and email details. We searched White Pages and Google for this additional addressing information.

While we were able to populate the database with full details for some companies, in most cases one or more of the addressing details could not be located.

We identified 176 businesses which appear to be active and genuine members of the SI Industry.

Interestingly, although we drew business nominations from a number of sources, it was very apparent that the same business lists appeared from each source. As a result, we do not believe that there is a significant number of additional businesses within the SI definition which have not been suggested by our sources.

### *Survey methodology*

The Queensland survey questionnaire formed the basis for the survey. Six questions were asked by the Queensland researchers, and this Victorian census covered five of these (the additional Queensland question concerned ASIBA, which was out of our scope).

The questions covered five aspects:

1. Description of the spatial products or services provided
2. Number of people employed by the business
3. Percentage of company business generated from spatial work
4. Total revenue generated from spatial information sales
5. Proportion exported outside Victoria (interstate and internationally)

In contrast to the Queensland survey consultancy, we adopted a multi channel approach to businesses. Our experience in conducting business, rather than consumer, research suggests that whereas consumers are able to answer questions about themselves, business respondents need to seek answers or authority to provide answers. On the other hand,

while consumers are often unwilling to participate in market surveys, businesses generally will - provided the research is clearly of benefit to their industry.

We therefore took an approach which first encouraged businesses to respond "offline" rather than during a phone call. We wrote to all businesses for which we had addresses. We then sent all non-respondents for whom we had an email address a copy of the survey electronically. Finally, where we'd had no response, but had a phone number, we phoned the business and asked for the survey responses over the phone.

We deliberately kept the survey form brief. While some businesses will provide extensive and detailed responses to questionnaires, most businesses will not spend much time on activities which do not generate revenue for themselves. We also provided ranges in our response boxes. While this significantly reduces the precision of the data totals, our experience is that businesses can often provide approximate figures readily, but have great difficulty providing precise numbers. The ranges were suggested by ASIBA, in line with other categorisations used.

### *Responses*

The response rate for the survey was good. Our experience with business to business surveys in the past has been that a 25% response rate is typical. Of the 176 'real' businesses, we received 89 replies which had data we could include in our quantitative analysis and a further 23 other responses. Of the other responses, some businesses refused to participate and some felt they were not part of the industry. The remainder included some returned mail to sender (but noticeably less than other mail outs we have run).

Another positive aspect of the survey was that respondents accepted the survey instrument. Unlike other business surveys, we did not get any replies where the questions or definitions were challenged, the answer ranges ignored, or the survey instrument itself challenged. Our conclusion from this is that the survey, while brief, seemed to be accepted by respondents.

Our telephone calls were particularly interesting. While the brief was to get responses to the five questions, we took the opportunity to discuss the answers and the broader census with a number of respondents. We found that there are strong feelings about the industry and how it sees itself, about other participants, and about some quite intellectual aspects of the sector. Some of the more representative observations are covered in the Findings and Analysis section of the Report.

A small number of businesses refused to participate in the survey. We cannot tell how many chose not to participate as their silence may alternatively indicate that they had not received or had not organised a response to the survey. However, some businesses responded to say they did not wish to participate. Apart from those whose reply was essentially "we do not participate in surveys", we also had three reasoned objections. These were:

- "The survey contains personal questions which I'm not going to answer"
- "We don't wish to be a part of any survey associated with ASIBA"
- "I'm not prepared to take part in any survey for government."

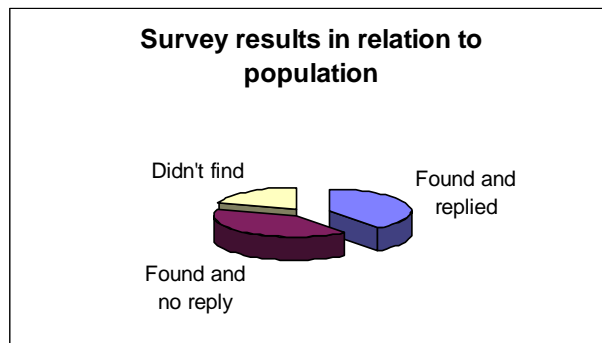
*Proportion of sector reached*

A survey such as this can only reach a proportion of the sector. Without a universal definition (used by all) and mandatory reporting, it will never be possible to identify all businesses in the sector. While we have taken a thorough and rigorous approach to identifying businesses, an unknown number have been overlooked.

It is worth briefly considering why some companies might have been missed. There are probably three groups that did not appear on our lists.

- a) Companies that may be sector participants, but have not met our definition of the sector. This may have meant that we didn't search for their type of work, and that our informants didn't consider them to be part of the sector.
- b) Some businesses are low profile and do not advertise, appear in listings, or have a web presence. While this might be surprising, there are a number of successful small businesses who operate entirely on referral, serving a small group of clients with whom they are essentially in a long term partnership.
- c) Some spatial work is undertaken by businesses for whom it is not core. While we have identified and had responses from a number of these, there will be others who do not have contact with the sector in any way, and are missed by listings.

A graphical representation of this problem, scaled to illustrate what we believe is the approximate size of the gap, is shown below.



**4.2 QUANTITATIVE ANALYSIS - ASSUMPTIONS**

The major assumptions about the data in this analysis are explained here.

Three of the questions offered ranges for the responses: FTE numbers, Revenue and Percentage of work which is spatial.

- We based our calculations on the mid-point value in each range for FTEs and revenue, apart from the highest category where the low point was used (so where a business has 201+ FTEs, we calculated their headcount as 201).

- We used the top point of the bracket for spatial percentages, partly because the majority of the respondents only undertake spatial work (100%) and partly because our phone interviews gave us additional information about some businesses which suggested this was a reasonable assumption.
- Where respondents did not offer a spatial percentage, we assumed 100%. Although this is not a conservative assumption, our limited knowledge of each business concerned suggests that their activities are spatial in nature.

Where respondents did not reply to the export percentage, we assumed that all their work is performed within Victoria. We believe this is reasonable as the majority of these firms are small businesses which appear to operate in a small local area (based on the product descriptions and in many cases the business name).

### ***4.3 SECTOR DEFINITION - METHODOLOGICAL COMMENT***

The scope of work for this project included developing a working definition of the sector to enable the survey to be run. This is explained in the body of the report.

That said, the discussion at the workshop, subsequent discussions with telephone respondents, and discussions with ASIBA committee members continued to explore the theme.

This section explores how an approach to defining the sector might be established and proposes three alternatives.

#### ***Test***

A simple approach to defining group membership is to set a test - if the subject 'passes' the test then they are a member, otherwise they are not.

In this instance the test set by our definition is made up of three parts:

- i) Is the business value adding?
- ii) Does it deal with geographic, locational or spatial subjects?
- iii) Is it commercial?

It would appear that any entity which passes all three of these tests could be considered part of the SI Industry.

This test is closest to the definition used to build this report.

#### ***Taxonomy***

A taxonomy is a classification system. Many business activity taxonomies have been developed, and unlike biology where evolution has provided a hierarchical relationship between species, there is no sequential relationship between business activities, and hence many fundamentally different taxonomies.

A simple taxonomy might be usefully developed as an explanatory tool, however, based around high level functions such as:

- Data gathering (for instance survey work)
- Data representation (for instance cartography)
- Data transformation (for instance planning overlay data)
- Data processing (which covers software activities)

### *Terms*

A third approach is to use a word list, allowing businesses that describe themselves using one of a set of defined words to be part of the sector.

While this approach is very approximate, and does not lend itself to quantitative analysis, it has the merit that it allows the definition to remain flexible as new aspects of the spatial industry emerge.

Other industries (such as information technology) use term lists to define sub categories of jobs within their sector.

A starting point for such a term list is the list of words used by our survey respondents to describe their own businesses.

## **4.4 WORKSHOP INVITEES**

Elizabeth Abrahams, Oracle  
 Andrew Bashfield, Bentley Systems Pty Ltd  
 Brian Beckor, Callpoint  
 Chris Bellman, SSI  
 Cathy Chipchase, DSE SII  
 Glenn Cockerton, Spatial Vision  
 Jeremy Conversi, ESRI  
 Frank Culliver, ISV  
 Michael de Lacy, Fugro Spatial Solutions Pty Ltd  
 Brendan Francome, AAM Surveys  
 Clive Freegard, United Photo  
 Richard Gijsbers, Stockdale ACS  
 Ken Harkin, Omnilink  
 George Havakis, Workforce Solutions Pty Ltd  
 Peter Holland, Geoscience Australia

Graeme Kernich, CRC SI  
 Tony Kishazi, Infomaster  
 Peter Loughrey, Intergraph  
 Patrick Meehan, Max Braid Surveyors  
 Simon Nazaretian, LICS Pty Ltd  
 Chris O'Connor, MMV  
 Peter O'Neill, Sinclair Knight Merz  
 Richard Simpson, ACSV  
 Mike Smith, CTL Pty Ltd  
 Elizabeth Thomas, DSE SII  
 Andrew Watts, QASCO  
 Ian Williamson, Melbourne Uni  
 Jan Wondek, AusSoft  
 Geoffrey Zhou, Virtual Map  
 Veronica Stephen, Map Info  
 Mitch Oake, AusSoft  
 Terry Mawson, ACSV  
 Alan Norman, ACSV

## **4.5 DATA**

Survey participants were asked to provide commercially sensitive information. To ensure that as many as possible provided useful data, participants were guaranteed that their

responses would be kept confidential at a detailed level and would only be reported in aggregate.

This report therefore does not contain details of participant responses.

However, as part of the deliverable of the assignment, Fivenines Consulting will separately provide ASIBA with a name and address listing of all businesses that, in the opinion of Fivenines Consulting, are active and operating within the SI industry.

#### **4.6 SURVEY FORM**

To maintain data integrity, the same questions were used for all versions of the survey form. However, slightly different introductory text was used depending on whether the survey was sent to a named or unnamed addressee and whether it was mailed, emailed, or distributed by third parties.

The cover page and the survey form itself follow on the next two pages.

## Victorian Spatial Information Industry Census

The Victorian Government is funding a project to research the spatial information industry in Victoria. The information gathered will help in planning industry development initiatives and supporting Victorian businesses selling spatial information goods and services.

The survey is sponsored by the *Australian Spatial Information Business Association (ASIBA)*, with the support of the *Association of Consulting Surveyors, Victoria* and the *Institution of Surveyors, Victoria*.

Spatial information broadly covers locational information or information which can be mapped. The spatial information industry generates revenue from selling such information and the associated goods and services.

So, the industry members being surveyed:

- Provide commercial goods and services
- Are physically located in Victoria (but not necessarily headquartered here)
- Add value to spatial information.

Fivenines Consulting has been engaged to undertake the census. They will consolidate the replies and will not provide any of the detailed answers to any other organisation, including ASIBA and the Victorian Government. The only information passed on that is specific to individual businesses will be the names of organisations they have tried to contact.

If your business is a member of this industry and has a presence in Victoria, please either fill in and return the attached survey form, or contact Robert Eames by phone (0414 86 5959) or email ([rje@fivenines.com.au](mailto:rje@fivenines.com.au)) so that he can get in touch.

## Victorian Spatial Information Census

Please complete this survey form if your business generates revenue from selling locational information or information which can be mapped or sells goods and/or services associated with such information (eg consulting services, GPS equipment, and the like). Please reply only in respect of Victorian based operations.

Information will be treated in strict confidence and, apart from company names, will only be presented in aggregate form.

1. What is the name of the business (and of the business division if you are answering on behalf of only part of the overall entity):

2. Please describe the spatial products or services your business provides:

3. How many full time equivalent staff are employed by your business in spatial information? If you employ individual contractors, please estimate the total full time positions and include this in your total. Please do not include sub contracts provided by other Spatial Information businesses. Please circle one option:

1-2	26-50
3-5	51-200
6-25	201+

4. What percentage of your company's business is generated from spatial work? Please circle one option:

<25%	50-75%
25-50%	75-100%

5. What is the total revenue you generate from sale of spatial information goods and services? Please circle one option:

<\$½M	\$2.5M - \$5M
\$½M - \$1M	\$5M - \$10M
\$1M - \$2.5M	\$10M+

6. Roughly what proportion of your spatial information sales of spatial information goods and services are made outside Victoria (interstate and internationally)?

	%
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*Please either:*

Post the completed form to **Fivenines Consulting, PO Box 359, Mt Waverley, Vic 3149**

or if you prefer to discuss your responses: Email [rje@fivenines.com.au](mailto:rje@fivenines.com.au) or phone Robert Eames on **0414 86 5959**

*Thank you in advance for helping with this survey. We appreciate the contribution of time and effort by yourselves and others in the spatial information industry.*

*Conf*