



COST EFFECTIVE DELIVERY AND ANALYSIS OF
ON- TIME, USER SPECIFIC RESEARCH, DATA ANALYTICS AND
OUTPUT

By Cr Veronica Freay

SPEAKER: CR VERONICA FLEAY

Experience:

- Current Shire President Kojonup Shire WA

Previous:

- President Exmouth Shire WA
 - Chair Gascoyne Development Commission
 - Chair WALGA Gascoyne Zone
 - WALGA State Councillor
 - WA Planning Commission Regional Rep
-

Hello and welcome to my presentation.
I am Cr Veronica Fleay, I am President of the Shire of Kojonup in WA.

On both a local & State level, I have sat on a number of Business, Community & Government Boards & Committees.

My background is in small business but since joining Local Government in 2003, I have been heavily involved in Strategic Planning and Regional Development.

PROBLEM WITH CURRENT ANALYTICS METHODS

- Securing accurate, quality data
- Relevance to current needs
- Frustrating to source
- Collected in Silos
- Slow to gather
- Staff tied up = lost productivity



In my role within Local Government, I, like many of my colleagues, find the task of securing accurate, quality data which is relevant to current needs, frustrating at best.

Data is generally collected in Silos, using different sources which slow the process for completion of important Business cases, Strategic Plans, Grant applications and other documents, many of which have tight deadlines.

The time taken to complete a report is lengthened significantly by this slow data collection and ties up valuable staff resources.

HAVING AN IN-HOUSE DATA SPECIALIST -THE POSITIVES

- Quality information increase
- Timely production of Documents
- Quicker response on Projects
- Consistent approach to data based information into the market place
- Quality data relevant to our LGA



In-House Data analytics provide both positives and negatives, as most in this audience will have experienced.

On the positive side, in house data specialists provide an increase in quality of information for the organisation, increased productivity completing documents, quicker and more consistent data both coming in and going out of the organisation.

THE NEGATIVES

- Cost, cost, cost:
 - Software
 - Dedicated skilled staff
 - Implementing a new system and software
- Introducing new systems, training & processes
- On going skills and training as staff changes



Resulting in reliance on expensive external consultants

Unfortunately, in reality, the Negative often outweighs the positive.

The chief negative is COST! Cost of Software, Cost of staff with high level analytic and research skills, Cost of introducing new systems and processes, Cost of up-skilling, Cost of on-going training with staff turnover.

As a result, many Local Governments find they have to rely heavily on the use of external consultants which is expensive, or existing staff face the daunting task of identifying and sourcing the best data.

DATA FOR LGA REQUIREMENTS

Local government today need to provide reports and data to many varied groups including:

- Regional Development
- Community groups
- Environmental response
- Housing demand
- Land Development
- Employment
- Social Infrastructure
- Internal and external Government and stakeholders



My passion is in Regional Development, which is becoming the focus for many Local Governments, as are increasing Strategic roles in Social infrastructure, Environmental response, Housing, Community group needs, Community services, Land Development & Employment just to name a few.

CRITICAL REPORTS REQUIRED FOR LOCAL GOVERNMENT

- Business Cases
- Grant Applications
- Statutory reporting
- Strategic and Planning process
- Reports to other agencies
- Private Business groups; and
- Community Groups



To meet Strategic goals, our Local Government needs to complete Reports, Business Cases, Grant Applications, Stakeholder reports, Community consultation, Reports to other agencies, Social & Community Groups as well as to private Business.

Data collection & reporting have become an increasing part of the daily life of a Local Government.

EXAMPLES OF SOME OF THE ONLINE DELIVERY INCLUDE:

- Cloud Data Warehouse for everyone to use
- Demographic reports 
- Housing reports 
- In-house data
- Industry/Economic
- Infrastructure 

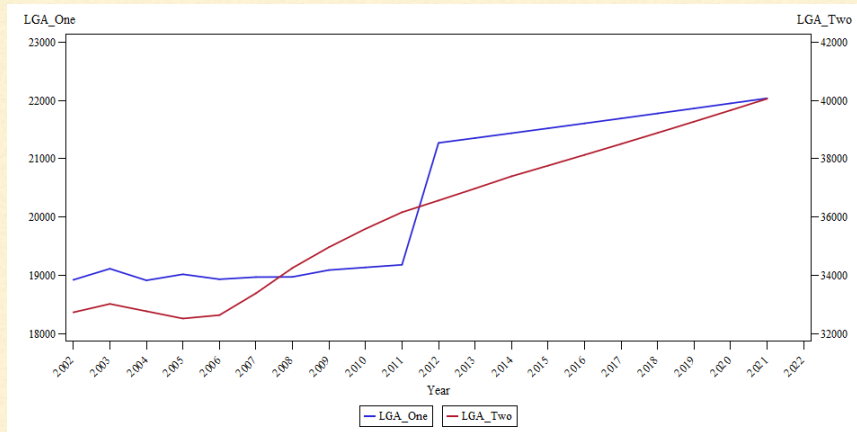


The above are some examples of the reports

This fact is the driver for my investigations into sourcing Relevant Quality data, affordable and specific to my organisation, and identifying a group who can meet these needs.

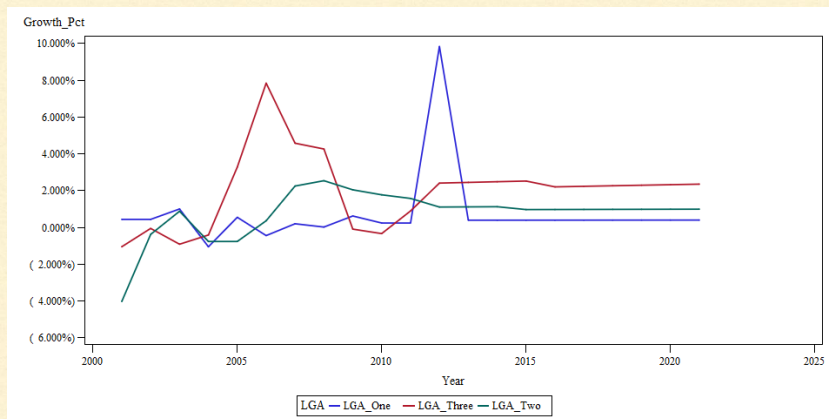
Of particular interest is a group called BUDIS. Through organisations like BUDIS I can secure the data I require from using not only available public sources but also our own In-house data, the group also does the statistical analysis, and we can have the ability to not only access the data, but also to do other manipulations of the data – something that was never possible previously with an external consultants' information.

Demographics Population projections based on ABS data



Drawing on BUDIS example reports, I can see that this chart provides output of Population from ABS census and estimated Residential Population data by age & sex. This can be provided in a diagram and excel spread sheet with all the data on it for further manipulation if required.

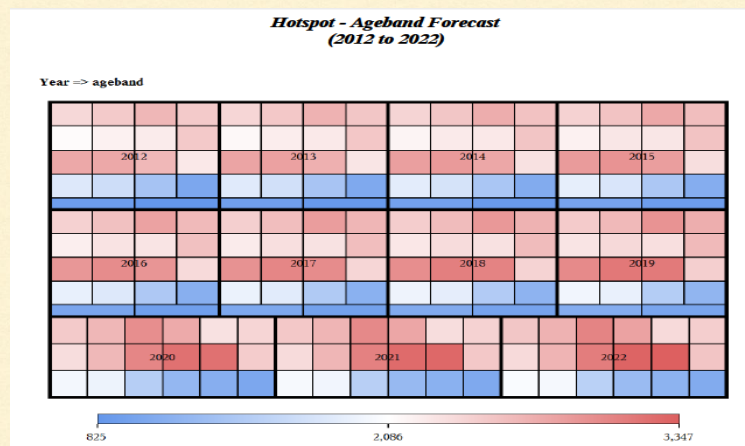
Demographics by Net Change



Another variation of the same data presents in a diagram from the net change in population for planners use in understanding the types of highs and population movement we may be looking at in the future.

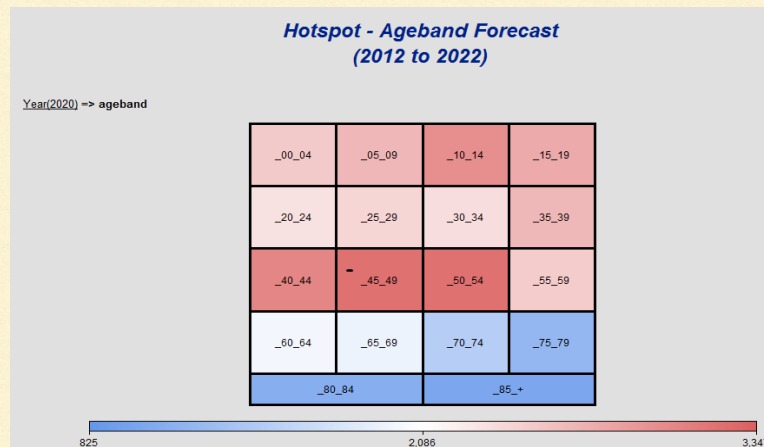
A Local Government like ours can also use it as base data and can build on information such as tourism, new industry, FIFO or other impacts that may happen.

Age Band Hot Spot



Whilst I cannot demonstrate to you the real value of this diagram, it is still interesting to discuss. This is an interactive report that provides overview statistics over forecast period from 2012 to 2022, and permits you to drill into the statistics for an area of interest. The above report has population counts for various age bands as the smaller cells. The forecast high growth age bands show up as hot spots that can be drilled into. For our strategic planning process I can put this diagram up and then role my mouse over the top and it tells me the hot (and cold) spots by age, year and gender. So this is helpful in planning for our social and community requirements. The next screen shot shows what happens when I drill into the statistics for the year 2022.

Another version of the hotspot by age group



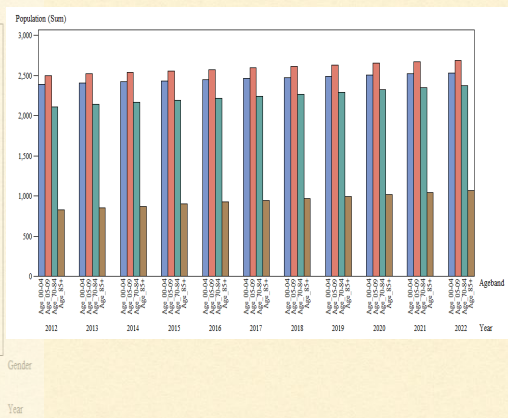
After drilling into the previous web report on the 2020 year square, this shows us the detail age band population forecast statistics for the year 2020. While you cannot see it on this printed report, the web report is active and rolling the mouse over the squares shows the detail population and growth forecast numbers, as well as any other relevant statistics.. These cells again can be further drilled into, breaking down the forecasts for the statistics visually, or even to the actual detail data that can then be extracted from the web page for inclusion in a report or any kind of local office use in excel etc.

Social Infrastructure

Under 5 Child projections by Sex



Under 5 and over 75 years



From the same data I can also identify social infrastructure that we can plan for in the future. In the example there are two age groups, under 5 and over 75, so we can understand our child care requirements, education planning and aged care facilities. It is also valuable for funding applications for these services and being able to provide validated data quickly for any application, business case or discussion with community groups. Again, as a web report it means that it can be linked to other statistics and drilled into by mouse clicks. The particular value beyond reporting is the fact that appropriate forecasting methods have been applied to the data. It is not simple trending, but time-series forecasting methods that take into account cycles. Other reports allow you to enter local knowledge as well and then have the forecast model what would happen with that data included, or perhaps the inclusion of data related to some local initiative, such as the establishment of a new business or industry and model the impact on population and services demand in the area.

Model of Land Development net Benefits

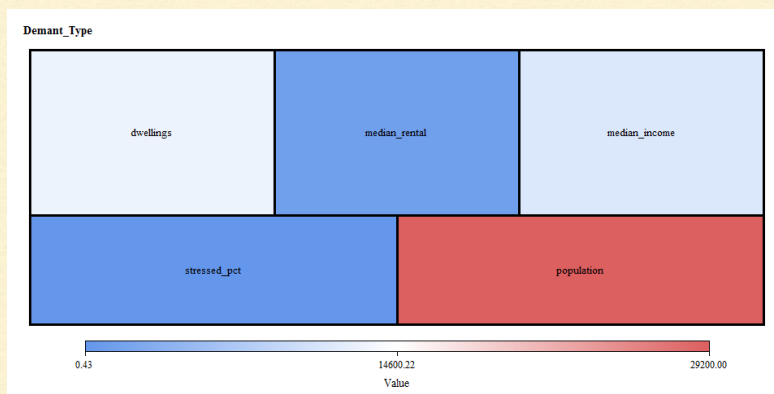
Land Developer Model	2012	2013	2014	2015	2016
Construction	\$55,312,500	\$88,500,000	\$108,750,000	\$120,900,000	\$72,337,500
Land	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000
Total Investment	\$80,312,500	\$113,500,000	\$133,750,000	\$145,900,000	\$97,337,500
Regional Income	\$9,956,250	.	.	.	.
Regional Multiplier	\$10,752,750	\$99,562,500	\$120,825,000	\$142,087,500	\$102,431,250
Population	0	0	405	405	540
Total Value Gene	\$91,065,250	\$99,562,500	\$120,825,000	\$142,087,500	\$102,431,250

	2017	2018	2019	2020	2021	Total
	\$43,200,000	\$31,050,000	\$21,060,000	\$18,743,400	\$16,681,626	\$576,535,026
	\$25,000,000	\$25,000,000	\$25,000,000	\$22,250,000	\$19,802,500	\$242,052,500
	\$68,200,000	\$56,050,000	\$46,060,000	\$40,993,400	\$36,484,126	\$818,587,526
	.	.	.	.	.	\$9,956,250
	\$62,775,000	\$54,067,500	\$42,525,000	\$37,847,250	\$33,684,053	\$706,557,803
	540	297	243	216	192	2838.
	\$62,775,000	\$54,067,500	\$42,525,000	\$37,847,250	\$33,684,053	\$786,870,303

This example model was designed to allow a Local Government to input construction and land details so that they can determine the financial value back to their Shire for the development, potential population and input in local income.

This kind of analysis is clearly very valuable for discussions with Government Land departments as well as with in-house planners and strategic planning processes.

Housing Analysis by Hot Spot



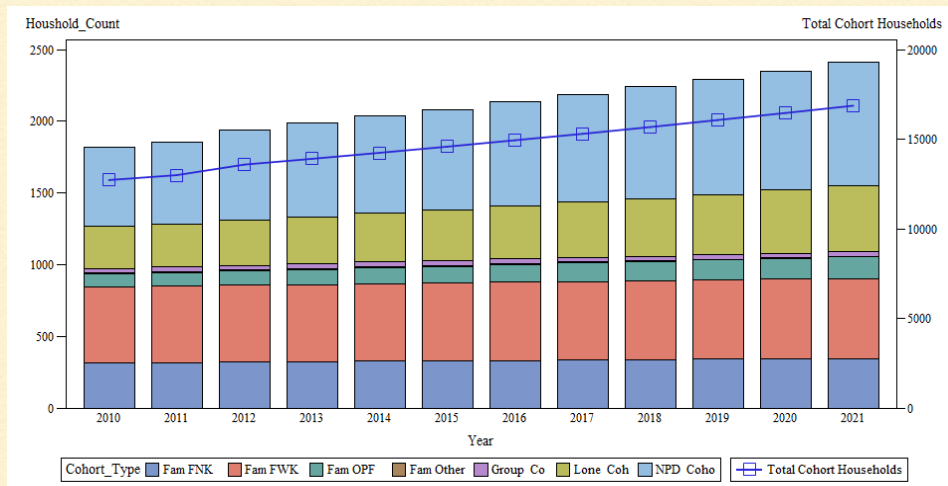
This hot spot diagram chosen for today's presentation provides a quick snapshot for Strategic planning discussions.

It identifies strong population growth and high rental growth. Based on ABS data Local Governments like ours can understand that stress will increase in the Shire as population median incomes will remain relatively static.

Because such data can be supplied on spreadsheet or other tools, we can see how useful it can be for reviewing against our planning trends and household construction or even discussions with local real estate agents to assess trends.

It also enables clear purpose for providing affordable rental housing which can be discussed with Government and private agencies.

Household Projections

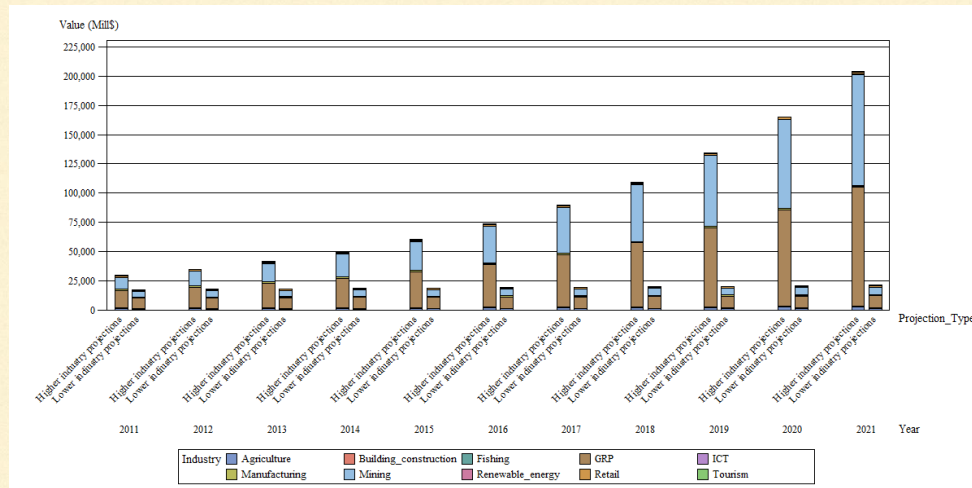


This is another look at the same data and provides a picture of the types of households and their trends in Local Government Areas.

Such information is vital for Strategic Planning, because it can help us understand, for instance, the growth in single households, one parent families, and family groups versus group housing options.

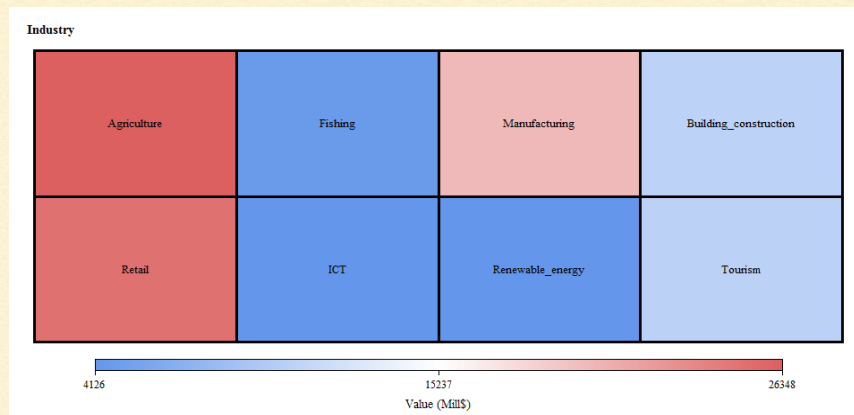
Also development types and potential land requirements can be modelled and forecast.

Economic Development



Information on industry can be gathered from public sources and enhance our internal data to highlight the industry potential and potential growth sectors for more in depth planning purposes, for Council, especially investment, employment and commercial land release.

Industry Hot Spot Analysis



From the same data, we can get an overview of the strong and weak industry sectors for strategic planning and economic development planning.

What is so helpful is the ability to derive data consistently, everyone in our team would have the same access and would not waste hours and days of time re-doing analysis.

Staff can be more productive as they can spend more time interpreting the data and provide better guidance based on real data.

WHAT THIS GAVE ME AS A MANAGER ACCESS TO:

- Updated data to reflect current trends
- Validated Current Information
- Have relative supportive data
- Forecasting for future Priorities



All presented in ease to access outputs as required using the latest and best validated and relevant data

This is the kind of data that gives me access to what I need to manage.

In my experience Local Governments not only need to access this kind of data, but we need to be able to keep it updated to reflect current trends.


We normally also have to go to more than one source of data to determine the current information, and also have supportive data from local businesses or agencies and, most importantly, relate it to our Local Government. What is interesting about the BUDIS is potential to source all of this, combined with our local data, and have it in one place for our use.

Also in my experience. I have found forecasting to be a key priority for the managing the attraction of Investment, Business, Tourism, and a necessary measure to identify gaps for all Planning processes.

BUDIS WILL

- Develop data warehouse
- Collect all available data from other sources
- Make reports and output available at touch of a button
- Becomes single data source for staff in a secured environment
- Conduct the research; and
- Assist with the statistical methodology

All provided at an approximate cost effective level of only 20-30% of using an external consultant



BUDIS laid out their process as follows. The first step is they provide a Data Warehouse for our local area and State and develop it on our behalf, including any data we provide. BUDIS already has the majority of required various sources of data available, and this then enhances our local in-house data.

BUDIS collects all available data from public sites such as the ATO, ABS, State & Federal Government, Reserve Bank, REIWA, Industry and Business groups. They then undertake any statistical analysis we need to develop the final outputs for us to use.

Once done we can download this data at a touch of a button, it is updated regularly, and results in a single data source for the Local Government staff to use.

A list of standard reports, accessed online or optionally received regularly, becomes the single source of information for a variety of uses. These reports can also be provided in excel format so they can be worked up further if needed.

For instance, the demographic report can use historic estimated residential population numbers from the 2001, 2006 & 2011 census. It also provides numbers on gender & age and BUDIS, using standard statistical techniques, provides a projection based on this data. This can be used to determine aged care needs, demographic profiling, social infrastructure, health resources and discussions on Education, Housing & services. Then we can also include and look at trends in household profile such as income, occupation and seasonality due to Tourism and FIFO, and use that to further inform planning processes.

SINGLE SOURCE REPORTING

Enables:

- Single source of data for all reporting has meant a greatly improved quality of reporting that is relevant and timely for us
- It has assisted in up-skilling the users to be more confident in the use of data
- Improved dramatically the time it can take to collect the information
- The cost to do this was only 20% of the cost for an external consultant and there was no major learning curve to commence the relationship with BUDIS

The housing report then uses the demographic report as the base with other valid data (so that all the numbers correlate, unlike most data collection processes) to identify household demand projections, type of households demanding homes, mortgage and rental profiles, a housing supply estimate based on census data, planning approvals, land availability and current land use from our In-house data. Thus we have a total model of our housing which is then updated as new data becomes available. For Industry Reporting, using both public and internal government sources, we can plot the current types of industry and, using the Industry growth dynamics provided by ABS, determine the growth or decline of industry in our local area which allows us to identify opportunities or gaps for investment and strategic planning. In the same way Infrastructure can be modelled to provide data for our planning process.

BENEFITS OF READY ONLINE DATA

- Relevant & Timely Reporting
- User Confidence
- Efficient collection of Information
- Cost competitive
- Capture complex information easily
- Specialised Forecasts & Projections



The chief benefits of using BUDIS that I have identified;

- Single source of data that is relevant and timely
- Assists in up-skilling the users to confidently use data
- Improved collection of complex information
- All reports available in an i-Cloud location for ease of access, creating a library of information
- Most importantly, the Cost to do so is only 20-30% of the cost for an external consultant
- There is no major learning curve to commence the relationship with BUDIS.

Impressive for any Local Government authority!

Note from the sponsor: BUDIS

Business Decision Intelligence Services

www.Budis.com.au

Online-Services

When an LGA needs quality data, research and statistical based information to support a funding proposal or a council business decision, BUDIS Online Services have the reliable single source of Business Decision Intelligence that incorporates your local and internal data.

BUDIS delivers the critical Business Decision Intelligence. No LGA is too small to afford it.

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