



Local Government

Spatial Reference

Group

GIS Good Practice Framework



Assessment: December 2015

<http://futureoflocalgovernment.org.au/lgsrg-home/>

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Executive Summary

Spatial (location) information and technologies are increasingly vital to Councils to support making decisions on investments in facilities, asset and services; reporting to government, and responding to customers and emergencies.

In 2013 a strategic vision was developed for the Victorian Local Government spatial sector: *Appropriate and effective spatial capability is established across all Local Councils and is recognised as fundamental to council efficiency and service delivery.*

Since 2013 the MAV and the Local Government Spatial Reference Group (LGSRG) have driven an annual GIS Good Practice Framework (GPF) assessment. In 2015, the assessment was completed by 80% of Councils, an increase over last year’s figure of 75% of Councils.

Officers have reported that previous GPF Assessment Reports have highlighted potential areas for improvement, including the need to integrate GIS practices into the Corporate Strategy and Disaster Recovery Plan as well as opportunities to enhance linkages to asset management, property & rates and other essential business systems.

Statewide averages for the five proficiency focus areas.

Proficiency Focus Areas	2013	2014	2015
Spatial Capability	C	C	C
Core Data Maintenance	C	B	B
Property and Rates Integration	B	B	B
Asset Management to GIS Integration	N/A	C	C
Community Engagement & Self Service	N/A	N/A	D

The 2015 assessment introduces a new benchmark for community engagement and self-service. The lower rating for this proficiency is indicative of this being relatively new area for Councils to invest their limited resources.

A	B	C	D	E
(Best grade)				(Lowest grade)

The following report presents the statewide GPF assessment results. Councils that have subscribed to the Local Government Spatial Reference Group and participated in this year’s GPF Assessment will also receive a report presenting their responses against statewide averages.

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1. Introduction

In 2013 a strategic vision was developed for the Victorian Local Government spatial sector.

“Appropriate and effective spatial capability is established across all Local Councils and is recognised as fundamental to council efficiency and service delivery”

GIS Good Practice Framework (GPF)

To progress toward the strategic vision, the Local Government Spatial Reference Group, with the support of Spatial Vision, developed a GIS Good Practice Framework (GPF).

The purpose of the GPF is to assist Councils in assessing their awareness and level of adoption of sector-wide accepted ‘good practices’. The GPF is based on the Spatial Capability framework presented below in Table 1. This framework was referenced in the 2013 Local Government Spatial Capability Strategy.

Elements	Operational Goals for 2015
1. Planning & Operations	Spatial capability is embedded in planning and operations at councils ensuring business data is appropriately captured to support planning and operations.
2. Service Delivery & Community Engagement	Spatial capability is recognised and valued as part of effective service delivery and community engagement.
3. Technology & Information Management	Councils have robust and well managed spatial data and technology platforms available to a broad range of users.
4. People, Capability & Governance	Spatial skills are recognised as valuable within councils. Effective sector-wide collaboration and governance frameworks are in place supporting whole-of-sector outcomes.

Table 1 – Spatial Capability Framework

1.1 Proficiency Focus Areas

The GPF focuses on five areas of proficiency relating to Council practices. These are presented in Table 2. The type of spatial technology used by Council is not relevant.

Proficiency Focus Areas	Description
Spatial Capability	Recognition of spatial capability to support council service delivery
Core Vicmap Data Maintenance	Support for core Vicmap data for use by Council and the public
Property and Rates Integration	Effective integration between GIS and Property & Rates data
Asset Management Integration	Effective integration between GIS & Asset data
Community Engagement & Self Service	Spatial technologies support relationships with the community and delivery of services when and where required

Table 2 - Proficiency Focus Areas

1.2 Objectives of the Good Practice Framework

The objectives of the GPF include:

- Establishing a practical approach for councils to deliver consistent and standardised output.
- Ensuring the approach is sufficiently flexibility to account for different Council capabilities.
- Enabling levels of GIS good practice adoption to be measured (and tracked).
- Developing sector influence (bargaining power) to lobby agencies, solution vendors and consultancies to recognise and adhere to agreed standards.
- Supporting future Council directions such as increasing movement towards cloud based systems and platforms.

1.3 Application of the Good Practice Framework

To date, the Good Practice Framework has received praise from many Officers throughout Victoria as this process highlighted potential areas for improvement, including the need to integrate GIS practices into the Corporate Strategy and Disaster Recovery Planning. Additionally, opportunities for enhancing linkages to asset management, property & rates and other essential business systems have been identified in Good Practice Framework reports.

2. Methodology

A GIS Good Practice Framework questionnaire was developed with significant input from members of the Spatial Reference Group Committee.

This years' assessment retains the same questions as the 2014 questionnaire, enabling comparison of assessment grades over time.

This year's assessment includes eight new questions pertaining to *Community Engagement and Self Service* as a proficiency focus area (PFA). Two questions have been removed from the Spatial Capability PFA since these are very similar to new questions included in the two included in the *Community Engagement and Self Service* PFA.

An email was sent to each council with a link to the questionnaire. Respondents were requested to complete the questionnaire and ensure the manager overseeing GIS reviews and authorises the response prior to submission.

Reponses were received between 5 November 2015 and 23 November 2015.

3. Findings

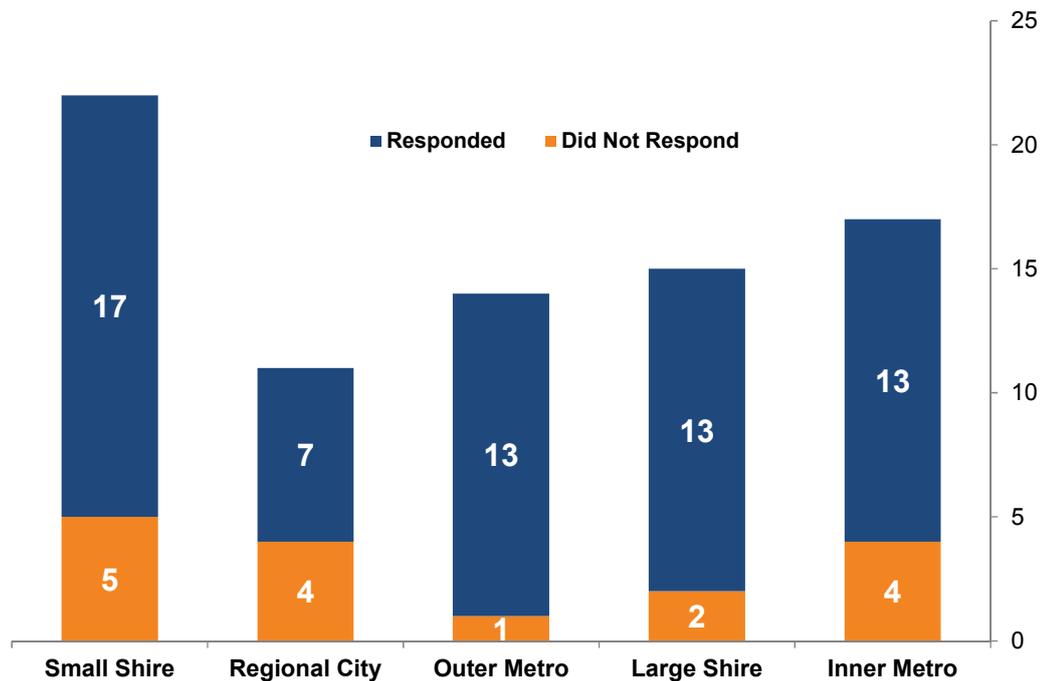
3.1 Response Overview

A total of 63 valid responses were received for 2015.
Responses have increased each year: 59 for 2014, and 49 for 2013.

3.2 Council Breakdown by Type

Respondents represented a range of metropolitan, rural and regional city councils.
Figure 1 below presents the count of responding and non-responding councils by the MAV council classification.

Figure 1 - Breakdown of participating and non-participating councils by classification



Assessment Legend

The following assessment legend is intended to assist councils in interpreting their summary grades for each of the five Proficiency Focus Areas: 1) Spatial Capability, 2) Core Vicmap Data Maintenance, 3) Property and Rates Integration, 4) Assets to GIS Integration and 5) Community Engagement and Self-Service, relative to the state average. These grades are provided at the beginning of Sections 4, 5, 6, 7 and 8 of this report.

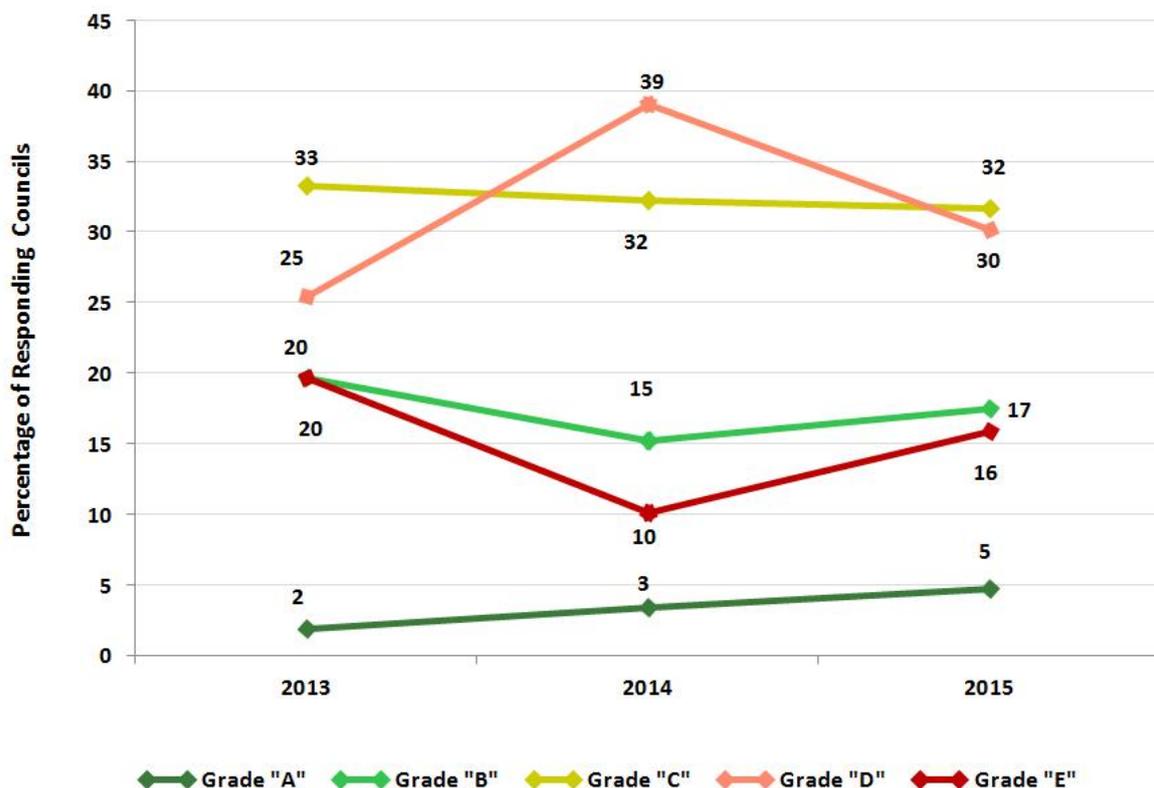
A	B	C	D	E
(Best grade)				(Lowest grade)

4. Spatial Capability

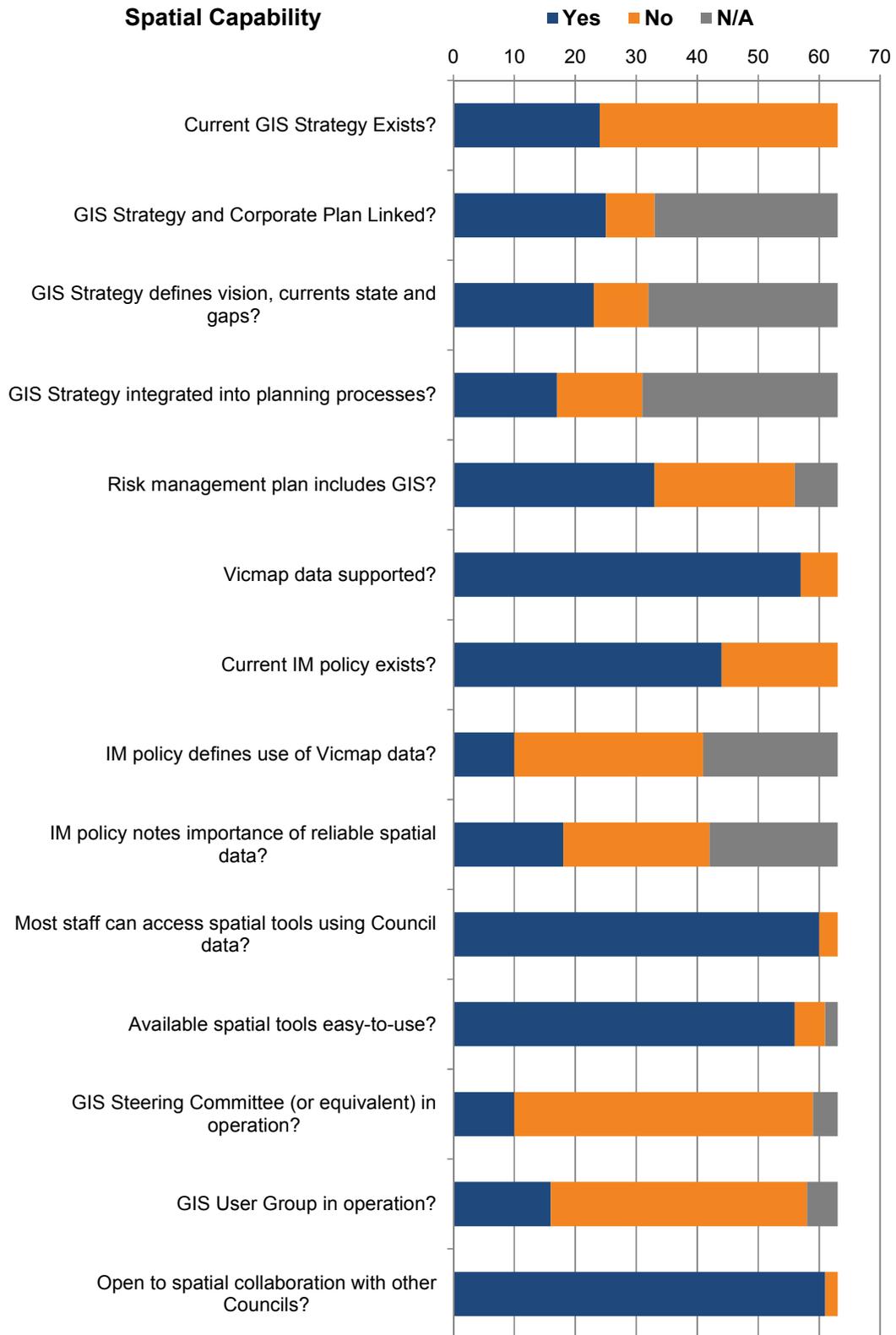
<i>Composite Score: "Recognition of Spatial Capability to Support Council Service Delivery."</i>	2013	2014	2015
State average	C	C	C

The average Spatial Capability grade for the sector has remained steady at a "C" over the past three years. However, the figure below provides a more granular view of trends. Notably, the percentage of participating councils receiving grades of "A" has increased.

Change in Councils' GIS Good Practice Grades: Spatial Capability



Statewide Responses (count): Spatial Capability

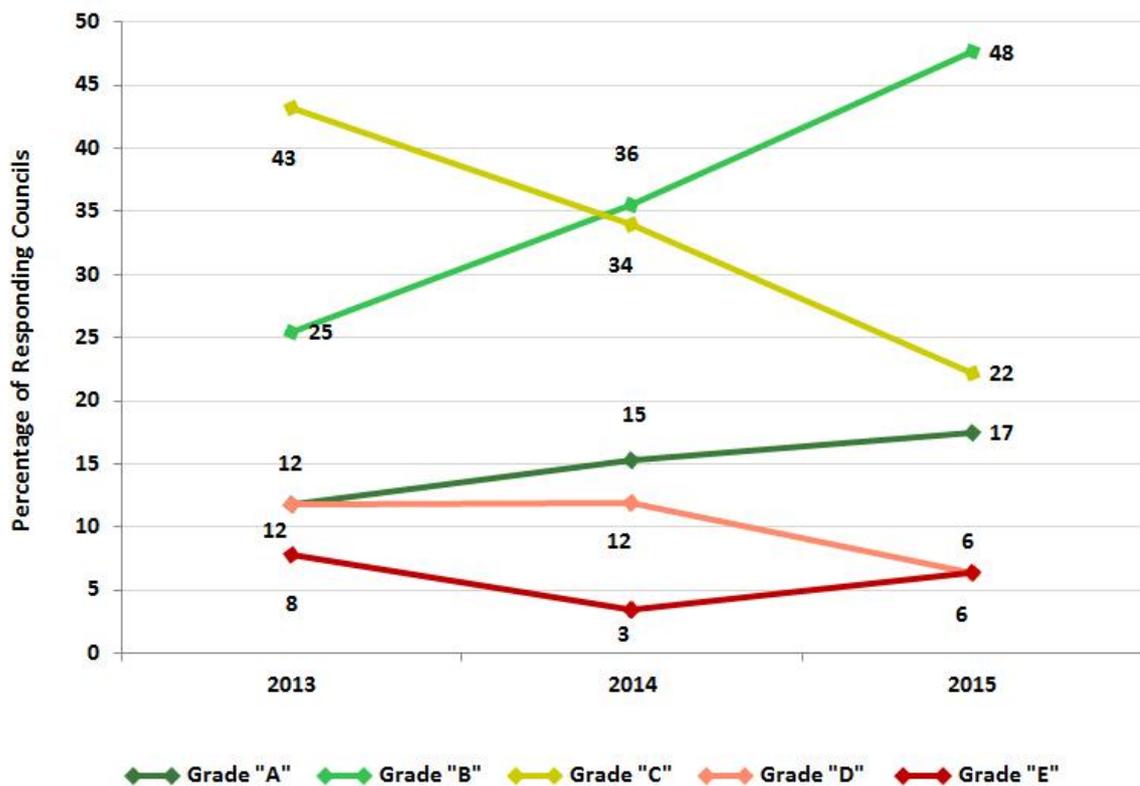


5. Core Vicmap Data Maintenance

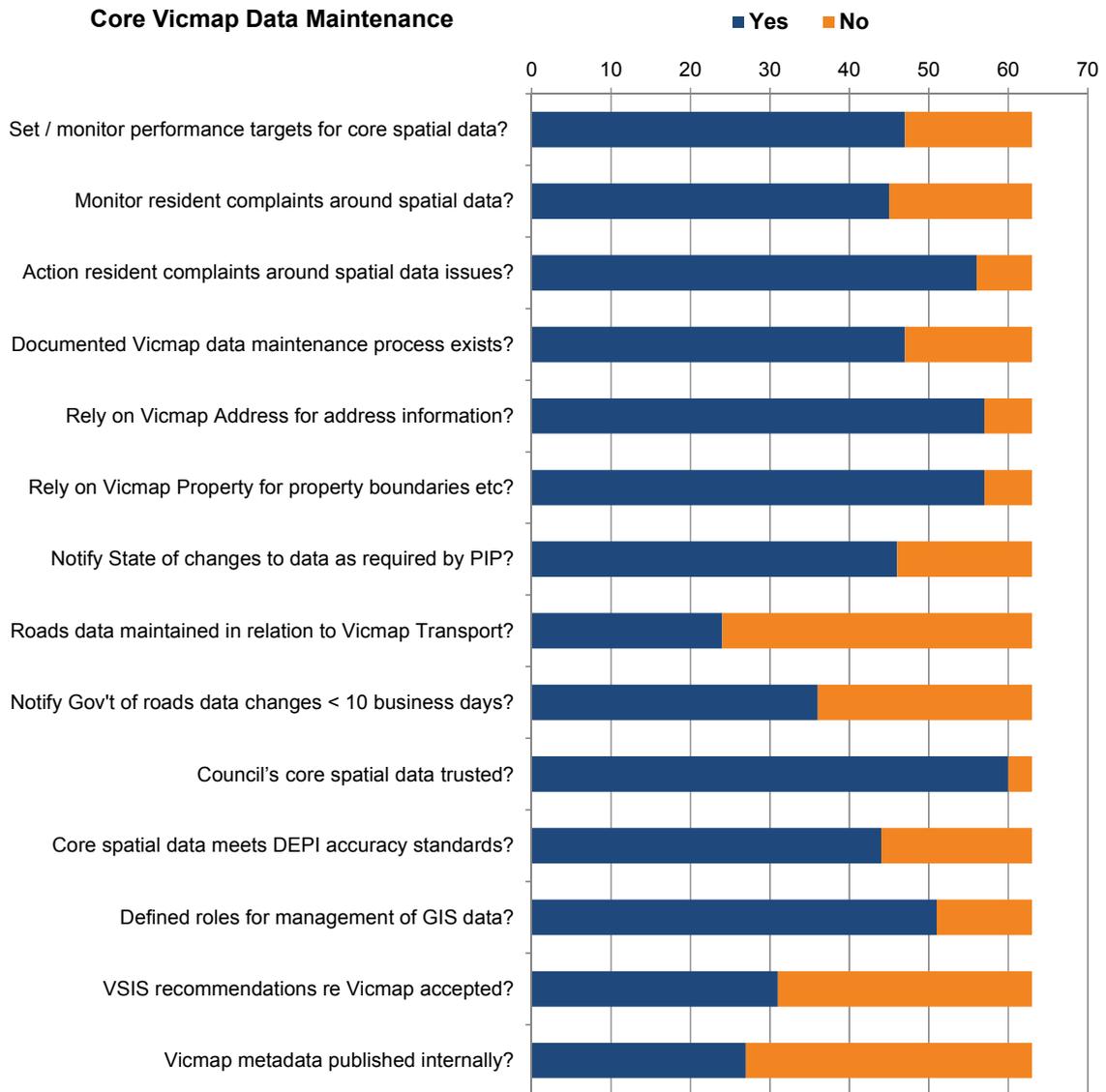
<i>Composite Score: "Support for Core Vicmap Data for use by Council and the public"</i>	2013	2014	2015
State average	C	B	B

The average Core Vicmap Data Maintenance grade for the sector improved from a "C" in 2013 to a "B" in 2014 and this remained at a "B" in 2015. However, it is apparent from the figure below that there has been a noteworthy increase in the percentage of participating councils receiving grades of "B", with this figure nearly doubling from 25% in 2013 to 48% in 2015. The percentage of councils receiving grades of "A" has also increased.

Change in Councils' GIS Good Practice Grades: Core Vicmap Data Maintenance



Statewide Responses (count): Core Vicmap Data Maintenance

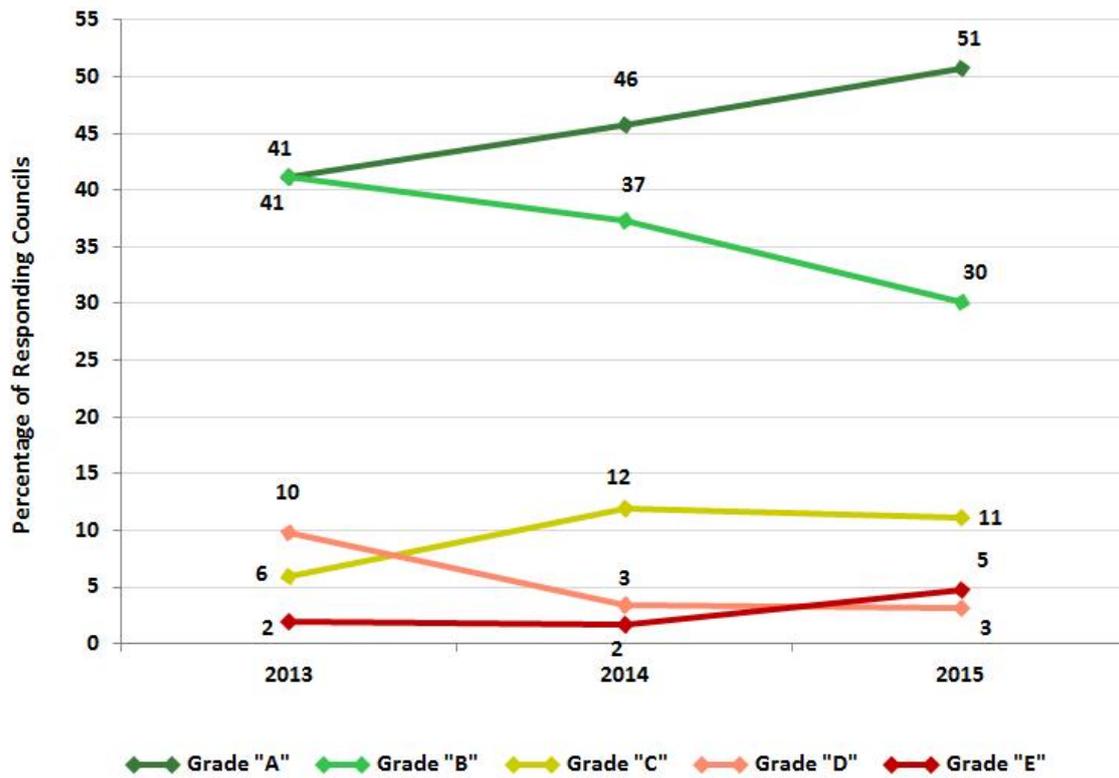


6. Property and Rates (P&R) Integration

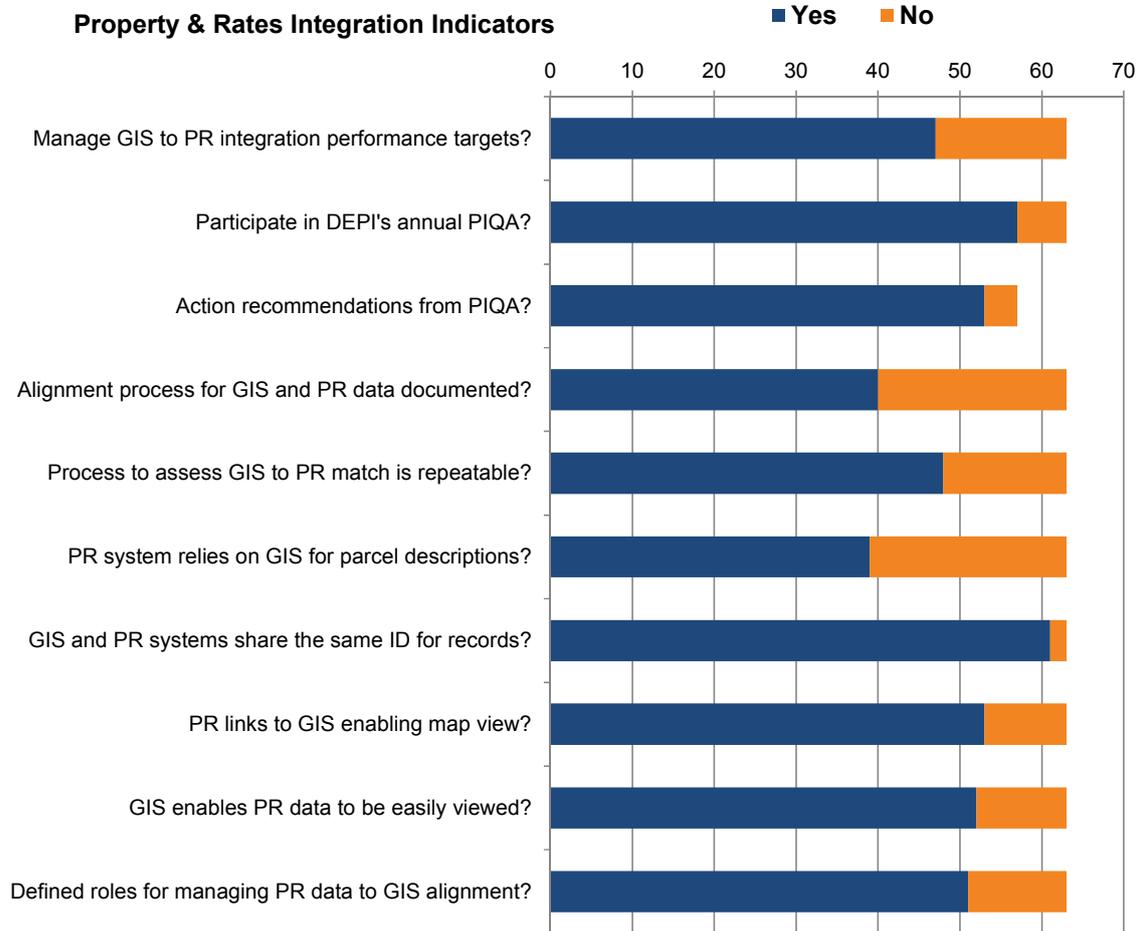
<i>Composite Score: "Effective Integration between GIS and Property & Rates Data"</i>	2013	2014	2015
State average	B	B	B

The average Property & Rates Integration grade for the sector remained steady at a "B" across the three GPF assessment years (2013, 2014 and 2015). It is apparent from the figure below, however, that there has been a noteworthy increase in the percentage of participating councils receiving grades of "A" in the GIS proficiency focus area.

Change in Councils' GIS Good Practice Grades: Property & Rates Integration



Statewide Responses (count): Property & Rates Integration

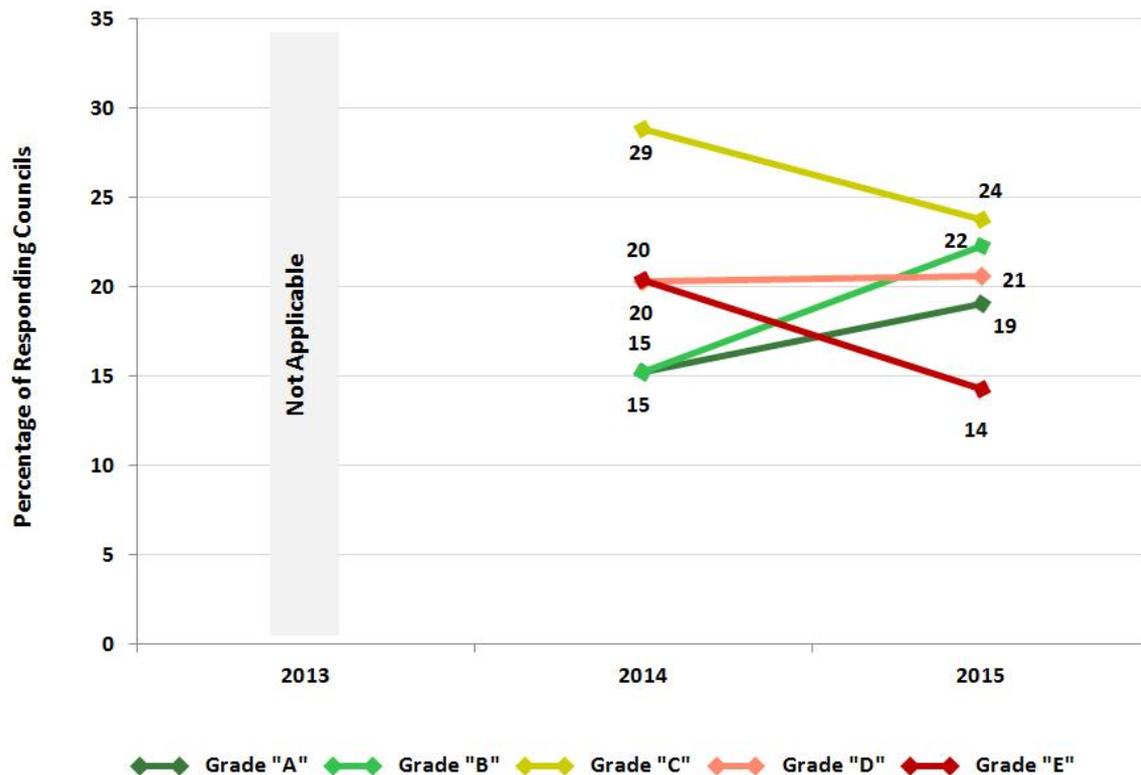


7. Asset Management to GIS Integration

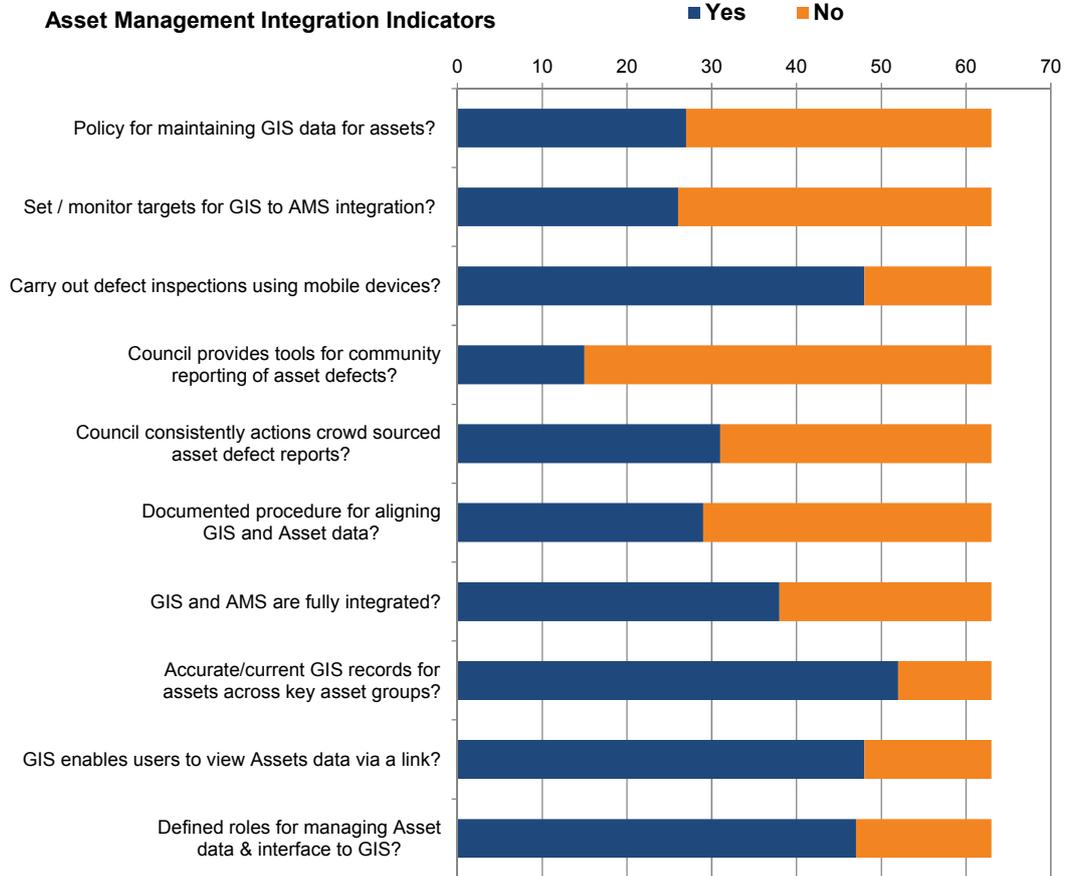
<i>Composite Score: "Effective Integration between GIS & Asset Data"</i>	2013	2014	2015
State average	N/A	C	C

The average Asset Management to GIS integration grade for the sector remained steady at a "C" over the past two GPF assessment years. The figure below provides a more granular view of trends and shows that the percentages for participating councils receiving grades of "A" and "B" have increased.

Change in Councils' GIS Good Practice Grades: Asset Management Integration



Statewide Responses (count): Asset Management Integration



8. Community Engagement & Self Service

<i>Composite Score: "Spatial technologies support relationships with the community and delivery of services when and where required"</i>	2013	2014	2015
State average	N/A	N/A	D

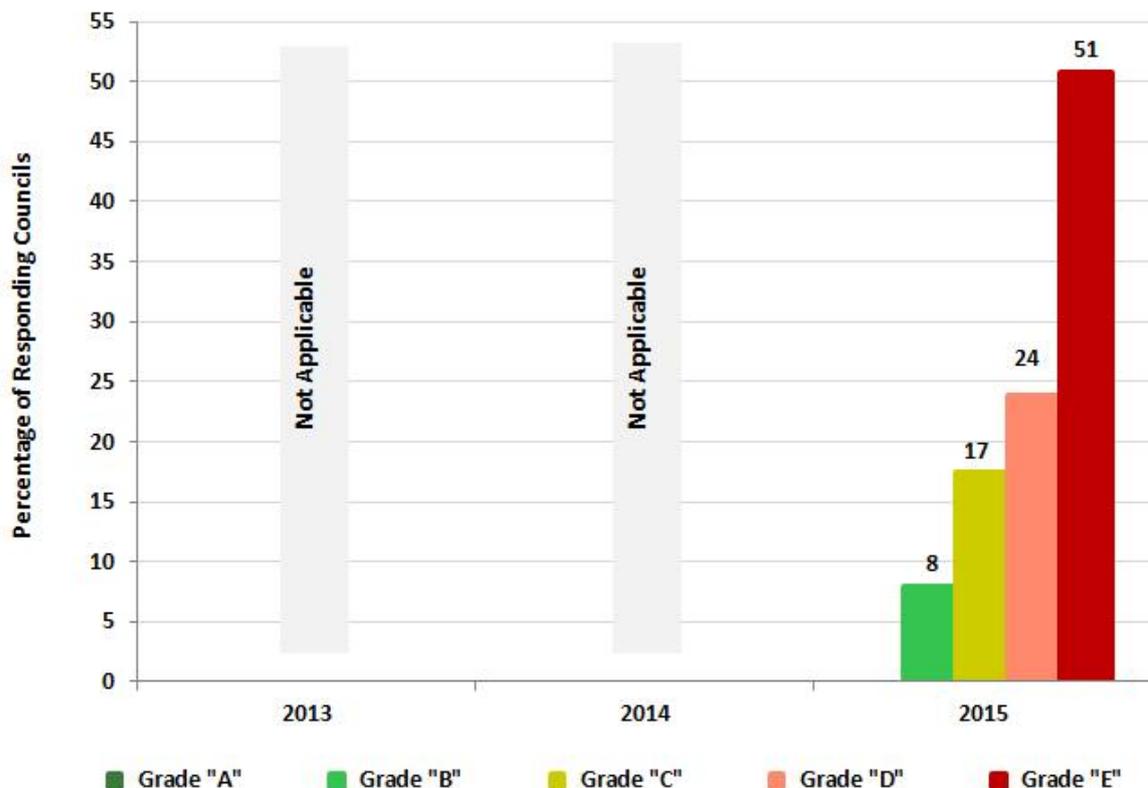
This year's GPF assessment included a series of new questions pertaining to *Community Engagement and Self Service* as a proficiency focus area.

The average composite grade for this proficiency focus area was "D" whilst the most common grade, received by over half of participants, was "E".

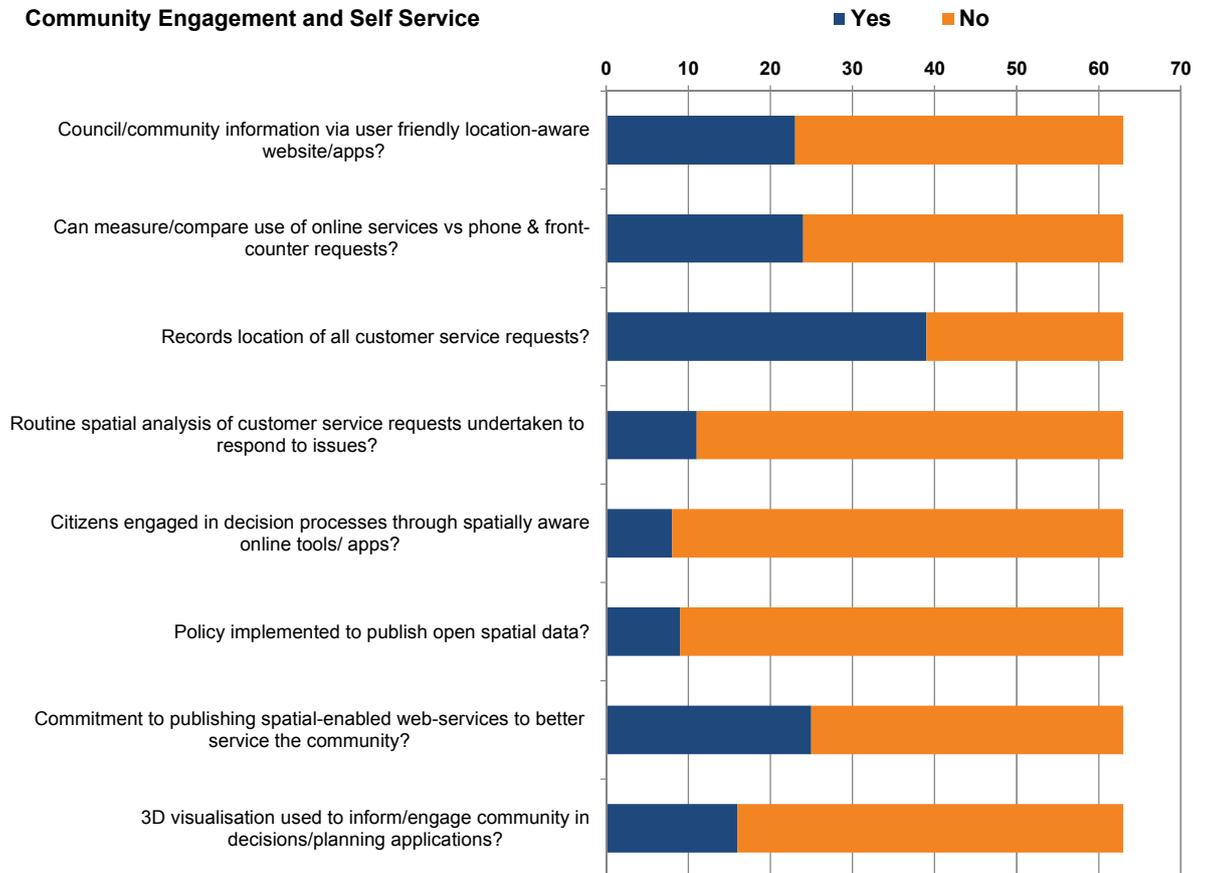
Although it is not yet possible to view trends for Community Engagement and Self Service, this year's assessment will provide a baseline for future assessment years.

As councils' awareness of this area of GIS best practice becomes more mature, it is expected that grades for this proficiency focus area will improve.

**GIS Good Practice Grades: Community Engagement & Self Service
(Percentage of Responding Councils)**



Statewide Responses (count): Community Engagement and Self Service



Appendix A: GPF Assessment Questionnaire

1) Spatial Capability	
Long Form (as asked in online questionnaire)	Short Form (as presented in charts)
Does your Council have a current GIS Strategy?	Current GIS Strategy Exists?
Is there a direct relationship or link between the Council's GIS Strategy and its Corporate Plan?	GIS Strategy and Corporate Plan Linked?
Would you say the GIS Strategy clearly defines the future vision for GIS and identifies gaps between Council's current and future states?	GIS Strategy defines vision, current state and gaps?
Is Council's GIS Strategy integrated into Council's annual planning and/or budgeting processes?	GIS Strategy integrated into planning processes?
Does Council have a risk management plan that includes GIS software, resources and data?	Risk management plan includes GIS?
Is Council formally committed to supporting Vicmap data?	Vicmap data supported?
Does Council have a current Information Management policy?	Current IM policy exists?
Does Council's Information Management policy acknowledge that relevant spatial business data should be based on or derived from Vicmap data when relevant?	IM policy defines use of Vicmap data?
Would you say Council's Information Management policy sufficiently acknowledges the importance of reliable spatial data?	IM policy notes importance of reliable spatial data?
Do the majority of Council staff have access to useful spatial tools (e.g. GIS or web mapping) underpinned by Council data?	Most staff can access spatial tools using Council data?
Would you say that Council staff generally find the available spatial tools (e.g. GIS or web mapping) easy-to-use?	Available spatial tools easy-to-use?
An effective GIS Steering Committee is one that maximises opportunities for utilising capabilities and monitoring performance. Does your Council have an effective GIS Steering Committee (or equivalent) in operation?	GIS Steering Committee (or equivalent) in operation?
An effective GIS User Group is one that engages appropriate staff to generate ideas and gather feedback. Does Council have an effective GIS User Group in operation?	GIS User Group in operation?
If it could be demonstrated that collaboration with other Councils can deliver improved spatial capabilities, would your Council be open to such collaboration?	Open to spatial collaboration with other Councils?
2) Core Vicmap Data Maintenance	
Long Form (as asked in online questionnaire)	Short Form (as presented in charts)
Does Council set and monitor performance targets for core spatial data? (e.g. frequency of update, match rates etc)	Set / monitor performance targets for core spatial data?
Does Council monitor resident complaints around incomplete or inaccurate data for address, property, roads or locality?	Monitor resident complaints around spatial data?
Does Council action or follow up resident complaints around incomplete or inaccurate spatial data?	Action resident complaints around spatial data issues?
Does Council have a documented procedure for maintaining core Vicmap data?	Documented Vicmap data maintenance process exists?
Does Council rely on Vicmap Address for address information?	Rely on Vicmap Address for address information?
Does Council rely on Vicmap Property for Council and ratepayer property boundaries and attributes?	Rely on Vicmap Property for property boundaries etc?
Does Council notify State Government typically within 10 business days of changes or corrections in properties, parcels and addresses?	Notify State of changes to data as required by PIP?
Is Council road asset data maintained in relation to Vicmap Transport roads?	Roads data maintained in relation to Vicmap Transport?
Does Council notify State Government typically within 10 business days of changes or corrections to roads data?	Notify Gov't of roads data changes < 10 business days?
Would you say that most users of Council's core spatial data trust it as authoritative?	Council's core spatial data trusted?
Does Council's core spatial data meet documented DEPI standards for spatial and attribute accuracy?	Core spatial data meets DEPI accuracy standards?
Would you say that your Council has clearly defined roles and responsibilities for managing its GIS data?	Defined roles for management of GIS data?

Has Council formally accepted the Victorian Spatial Information Strategy (VSIS) recommendations with respect to custodianship for relevant Vicmap data?	VSIS recommendations re Vicmap accepted?
Councils receive metadata for Vicmap data. Does your Council publish such metadata for internal use?	Vicmap metadata published internally?
3) Property and Rates Integration	
Long Form (as asked in online questionnaire)	Short Form (as presented in charts)
Does Council set and monitor performance targets for integration between GIS and Property & Rates systems? (e.g. match rates)	Manage GIS to PR integration performance targets
Does Council participate in DEPI's annual Property Information Quality Audit?	Participate in DEPI's annual PIQA?
Does Council action the recommendations of the Property Information Quality Audit?	Action recommendations from PIQA?
Does Council have a current documented procedure for aligning data between GIS and Property & Rates systems?	Alignment process for GIS and PR data documented?
Does Council have repeatable processes to measure the reliability of matching between spatial and Property & Rates business data?	Process to assess GIS to PR match is repeatable?
Does Council's Property & Rates system rely on GIS property data for parcel descriptions?	PR system relies on GIS for parcel descriptions?
Do the GIS and Property & Rates systems share the same identifier for property records?	GIS and PR systems share the same ID for records?
Would you say that users can easily link from the Property & Rates system to GIS (or to a map within the Property & Rates system) to find and view properties and parcels?	PR links to GIS enabling map view?
Does Council's GIS or web map enable users to easily view the Property & Rates data via a link?	GIS enables PR data to be easily viewed?
Would you say that Council has clearly defined roles and responsibilities for managing Property & Rates data and its interface to GIS?	Defined roles for managing PR data to GIS alignment?
4) Asset Management to GIS Integration	
Long Form (as asked in online questionnaire)	Short Form (as presented in charts)
Does Council have a policy for maintaining GIS data for assets?	Policy for maintaining GIS data for assets?
Does Council set and monitor performance targets for integration between GIS and Asset Management Systems?	Set / monitor targets for GIS to AMS integration?
Does Council carry out defect inspections using location-enabled mobile devices (smartphones, tablets, trimbles etc)?	Carry out defect inspections using mobile devices?
Does Council provide a web- or mobile-enabled means for members of the community to report the location of an asset defect?	Council provides tools for community reporting of asset defects?
Does council consistently action 'crowd sourced' asset defect reports e.g. from third party apps such as 'Snap Send Solve' or from a council provided tool or app?	Council consistently actions crowd sourced asset defect reports?
Does Council have a current documented procedure for aligning data between GIS and Asset Management systems?	Documented procedure for aligning GIS and Asset data?
Is Council's GIS fully integrated (two-way integration) with its Asset Management System?	GIS and AMS are fully integrated?
Are there accurate and up to date GIS records for assets across the major relevant asset groups? NOTE: relevant groups include Roads (e.g. kerb, channel, footpath) Drainage, Marine (e.g. jetties, boat ramps), Properties, council managed buildings, parks, gardens and reserves)	Accurate/current GIS records for assets across key asset groups?
Does Council's GIS or web map enable users to easily view Assets data via a link?	GIS enables users to view Assets data via a link?
Does Council have clearly defined roles and responsibilities for managing Assets data and its interface to GIS?	Defined roles for managing Asset data & interface to GIS?

5) Community Engagement and Self Service	
Long Form (as asked in online questionnaire)	Short Form (as presented in charts)
Are people able to access dynamic information about Council services and their local community through user friendly location-aware website or apps?	Information about Council/local community via user friendly location-aware website/apps?
Is Council able to measure and compare the similar uses of online services (website or apps) to telephone and front-counter requests?	Can measure/compare use of online services vs phone & front-counter requests?
Does Customer Service record the location of all customer service requests?	Records location of all customer service requests?
Does Council undertake routine spatial analysis of customer service requests to proactively respond to issue hotspots?	Routine spatial analysis of customer service requests undertaken to respond to issues?
Are citizens dynamically engaged with Council and its decision-making processes through geospatially aware online tools (or apps)?	Citizens engaged in decision processes through spatially aware online tools/ apps?
Has Council implemented a policy to regularly publish Open spatial data to demonstrate transparency and encourage innovation in the delivery of services by other providers?	Policy implemented to publish open spatial data?
Is Council committed to publishing spatially enabled web-services to better service the community and activate their city or townships for visitors, for example parking availability, dial-before-your-dig, notification of events?	Commitment to publishing spatially enabled web-services to better service the community?
Does Council use 3D visualisation to inform and engage the community in significant decisions such as Precinct Structure Plans, Capital Works Plans or major planning development applications?	3D visualisation used to inform/engage community in decisions/planning applications?

Additional 2015 Survey Release Notes

With this years' introduction of the *Community Engagement and Self Service* priority focus area, we have removed two questions from the *Spatial Capability* priority area to avoid duplication of content – “*Would you say Council is effectively using web mapping and/or spatial apps to facilitate input from the community?*”; And,

“*Would you say Council is effectively using web mapping and/or spatial apps to facilitate input from the community? (e.g. notifying Council of damaged assets etc)*”

This may slightly impact the 2015 composite assessment grades for the Spatial Capability Assessment.