

# Survey Summary: February 2013 Parcel Survey for IGIC Business Plan

The Iowa Geographic Information Council (IGIC) received a grant from the Federal Geographic Data Committee to write business plans for the development of statewide parcels, address points, and aerial imagery. As part of the information gathering process for the parcel section, a survey was developed through SurveyMonkey.com to understand organizational and individual needs for a statewide parcel program. The parcel survey was sent out in February 2013. Sixty-seven people started the survey and 61 people finished the survey for a 91% completion rate. Survey respondents represented numerous organizations (Fig. 1) including those representing government from municipal government to federal government, as well as non-profit organizations, citizens, educational organizations, and private industry.

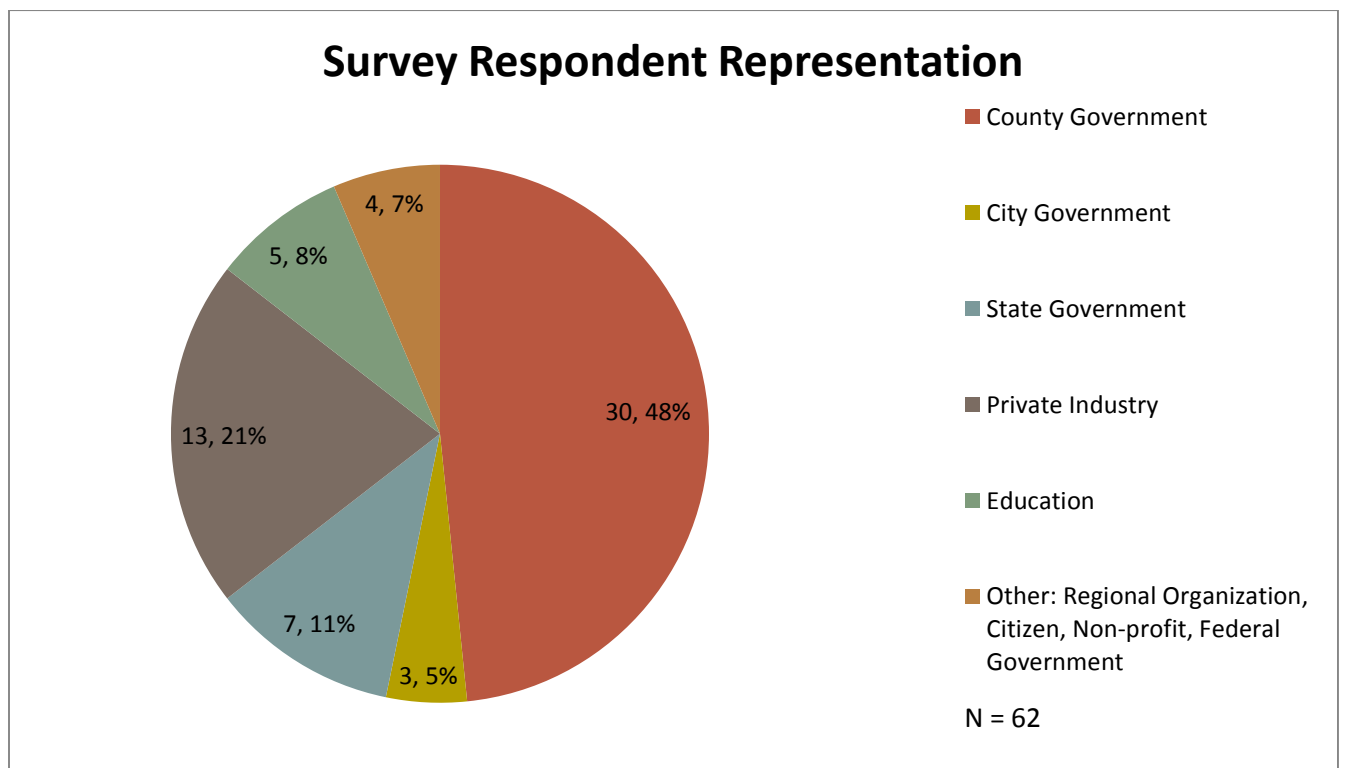
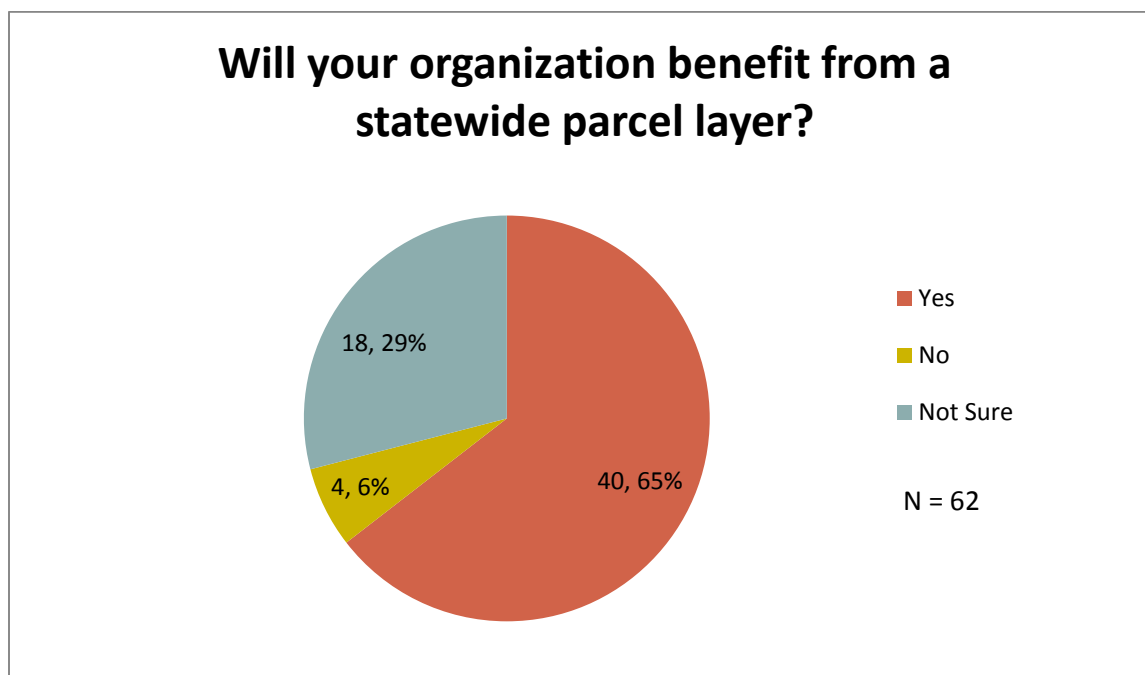


Figure 1: Survey Respondent Representation

## Organizational Benefit of a Statewide Parcel Layer

Survey respondents were asked if they thought a statewide parcel layer would be beneficial for their organization, over half of those surveyed indicated that they thought it would be beneficial (Fig. 2). About one-third indicated that they were not sure if a statewide layer would be beneficial to their organization. Less than ten percent of those surveyed felt that they would not benefit from a statewide parcel layer.



**Figure 2: Organizational Benefit of a Statewide Parcel Layer**

A follow-up question asked participants to explain and provide example for how a statewide parcels layer would benefit their organization. Several common themes emerged from those who thought their organizations would benefit from the statewide parcels layer, the top five responses are included in the table below followed by several comments.

Commonly Identified Benefits of a Statewide Parcel Layer
1) Emergency management response and mitigation (fire, flood, EMS)
2) Consistent data across the state (parcel numbers, edge matching)
3) Would provide ease of access for a) cities that cross county boundaries, b) multi-county projects, c) private industry, d) school districts
4) Access to surrounding counties data
5) Land management and acquisition (IDOT ROW projects, municipal, natural resource)

Comments in favor of a statewide parcel layer:

*"When a project covers an area in several jurisdictions, i.e. two or more counties, it would be very beneficial to have a parcel one-stop shop, rather than contacting each jurisdiction's Assessor's Office. We still have some counties that do not use a GIS parcel layer."*

*"A statewide layer would provide consist data from county to county, which is currently not available."*

*"I work with a State Agency...which provides cost share to landowners who voluntarily implement BMPs to reduce nutrients/sediment to Iowa's Waterbodies. A parcel layer would increase efficiency and effectiveness..."*

*“While we have a fully fleshed out GIS system, several of our neighboring communities do not, so having a statewide layer would allow us to bring in their data also to analysis as needed.”*

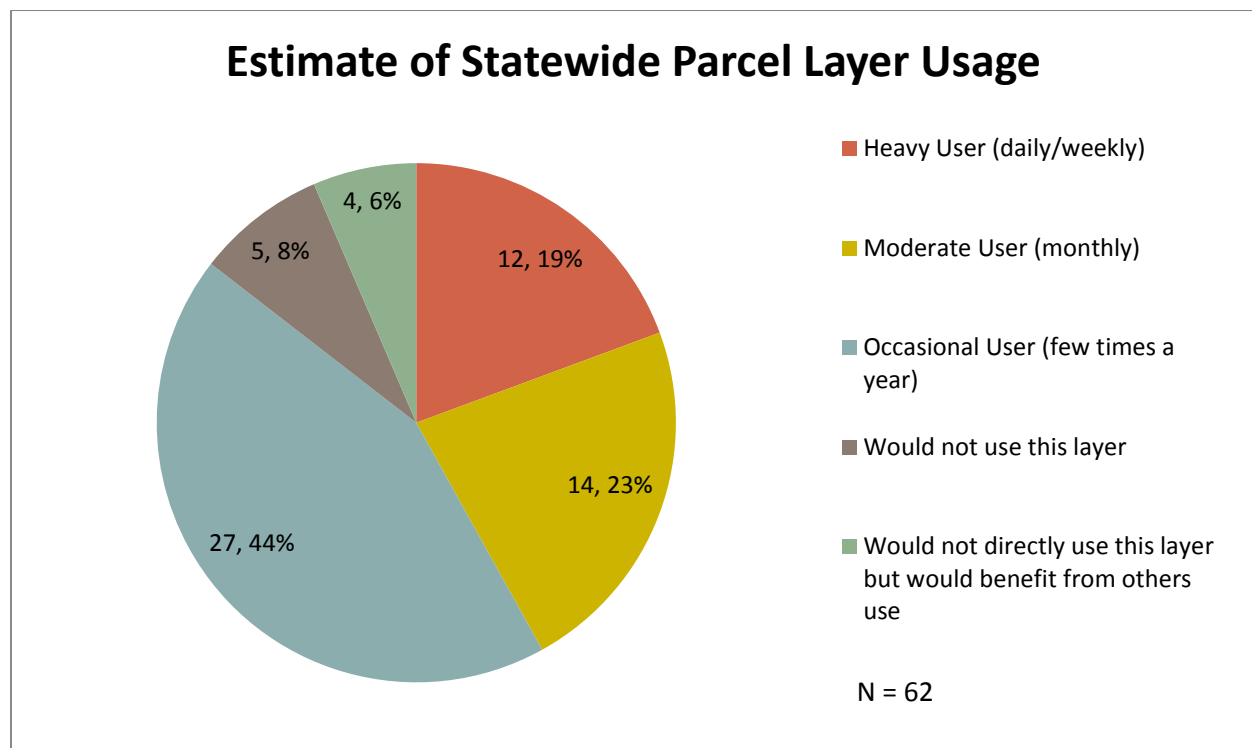
*“Ease of access. Currently, we pay for data from each county which is time consuming and expensive.”*

*“We use data from multiple jurisdictions daily. Quick availability for preliminary research would be useful to our company, and valuable to our clients and county residents in the resulting projects.”*

Common responses from those who were unsure about the benefits from a statewide parcel layer included: a statewide layer is unnecessary because they only need information data for adjacent counties, several didn’t think they would need it at all, and several questioned the ability of such a layer to be kept current and accurate.

### Estimate of Statewide Parcel Layer Usage

Next survey participants were asked to estimate how often their organization would use a statewide parcel layer. Options ranged from a heavy user (daily/weekly) to never using this layer. While the most prevalent response was occasional usage (44%) there were almost as many the estimated they would be moderate to heavy users (42%). Only 14% estimated that they would not use this statewide layer.



**Figure 3: Estimate of Statewide Parcel Layer Usage**

### Support for development of a statewide parcel layer

Survey respondents were asked to describe how they or their organization could contribute to developing a statewide layer. There were 42 individuals that responded to this question. The most common response was providing data to contribute to the statewide layer. Other common responses

include providing technical expertise for the development of the layer, helping to distribute the layer by providing storage or map services, keep data up-to-date, and financial contributions.

### Ideas for financing a statewide parcel layer

When asked how the statewide layer should be financed there were a variety of responses from 41 respondents. The most suggested idea was charging a fee/tax (recorder's fee, land sales tax, ect.) Other funding suggestions included a user's fee, having a state appropriation fund the project, create a consortium of primary stakeholders to pay for the layer, and grant funding.

### Necessary Attributes for a Statewide Parcel Layer

Next the survey asked respondents to rate the importance of ten attributes from Not Important (1) to Necessary (5). The graph below displays the results of the survey by indicating the number of respondents per choice in the bar graph and the average score in the circle. For more information about how the score was calculated see explanation below.

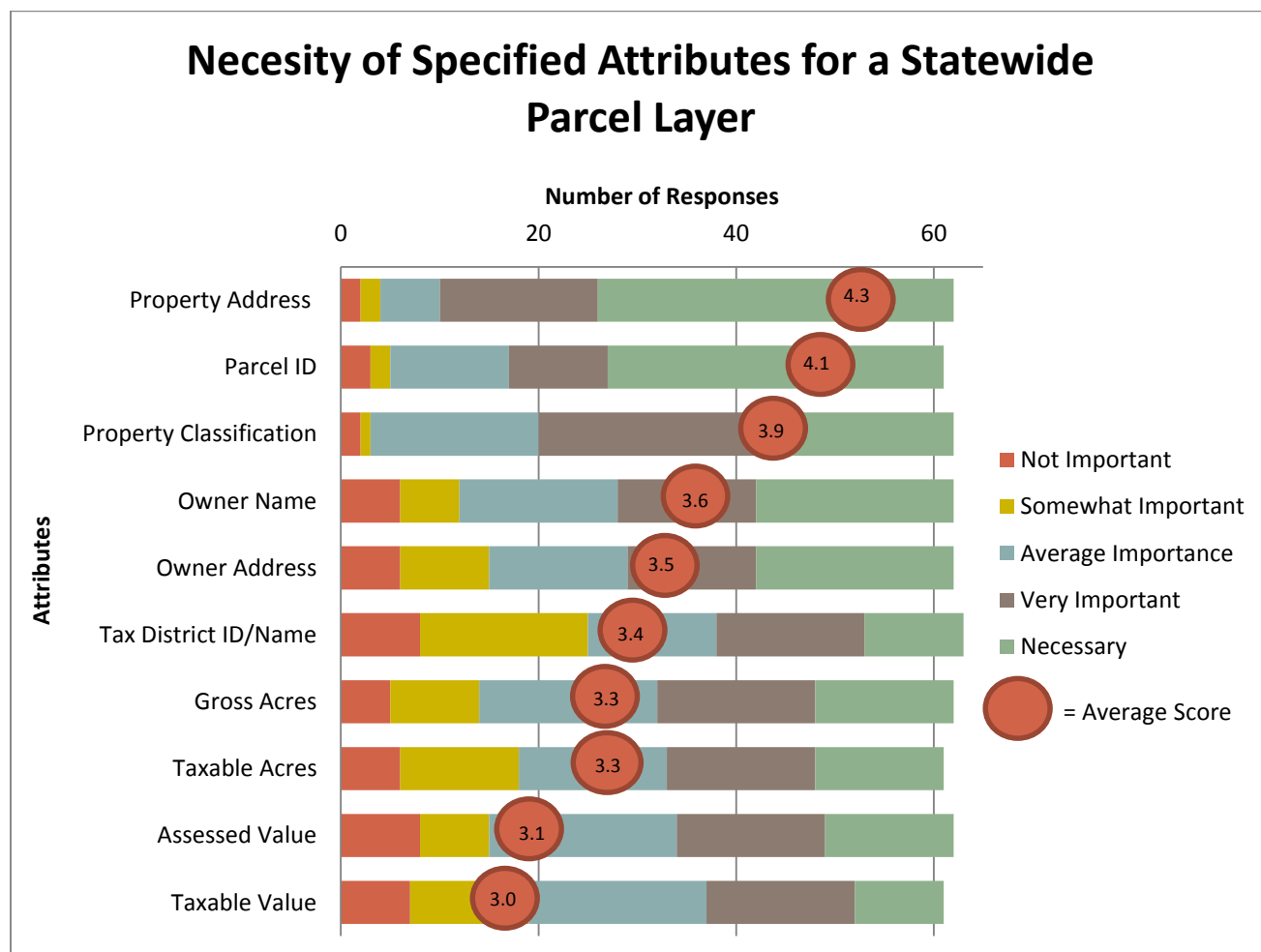


Figure 4: Importance of Attributes to Statewide Parcel Layer (Likert Scale)

The Average Score was calculated by taking the number of responses in each column (Not Important – Necessary) and then multiplying by the value of that column (Not Important = 1, Somewhat Important =2, Average Importance = 3, etc.), adding all five columns together for a total, and divided by the total responses for a final score (Table 1).

**Table 1: Example Calculation for the Average Score of Property Address**

	1 – Not Important	2 – Somewhat Important	3 – Average Importance	4 – Very Important	5 - Necessary	Total	
Property Address	2	2	6	16	36	62	
	2x1=2	2x2=4	6x3=18	16x4=64	36x5=180	268	
						268/62=	4.3

There were also a number of “Other” suggested attributes including: number of structures per parcel, number of floors per building, date (parcels should be from the same tax year), jurisdiction field, statewide PIN, hyperlinks (recorder, assessor, GIS), contract holder, districts (fire, law, school, ambulance, etc.), multiple address per parcel, contract buyer’s property address, legal description, and property classification.

### **Specific Value-added Applications of a Statewide Parcel Layer**

Survey respondents were asked to identify specific value-added applications that would benefit their organization. The most widespread response to this question was an emergency services related application. Several people explained how they would use this layer for research or planning purposes. Other responses included uses related to natural resources, web mapping, more equitable taxation, and to improve individual workflows.

### **Preference for Statewide Update Frequency**

Survey respondents were asked how often a statewide parcel layer should be updated. This question was fairly divided with most respondents indicating that it be updated annually, followed by monthly, and a variation of monthly in high change areas and annually everywhere else (Fig. 5). There were also several comments that provided other potential ideas including several suggestions of updating quarterly and several other suggested daily updates. The following is quote in support of daily updates, “We would suggest nightly for everything. We current[ly] do this...and could be a part of this solution. Frequency doesn’t have to equate to costs.”

## Preference for Statewide Parcel Layer Update Frequency

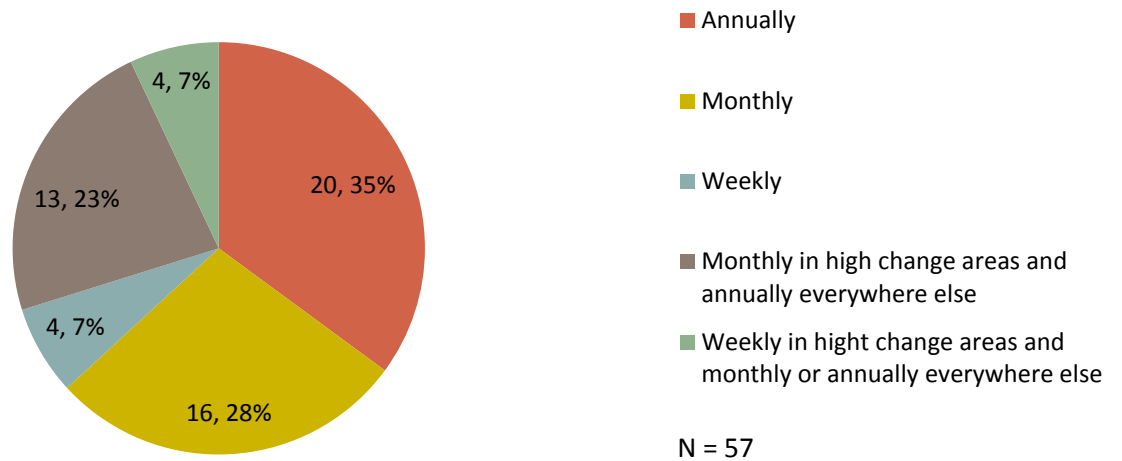


Figure 5: Preference for Update Frequency

## Preference for Distribution and Access to the Parcel Layer

When respondents were asked who should have access to the statewide parcel layer, half of respondents indicated that they would be in favor of having the layer be free and available to everyone.

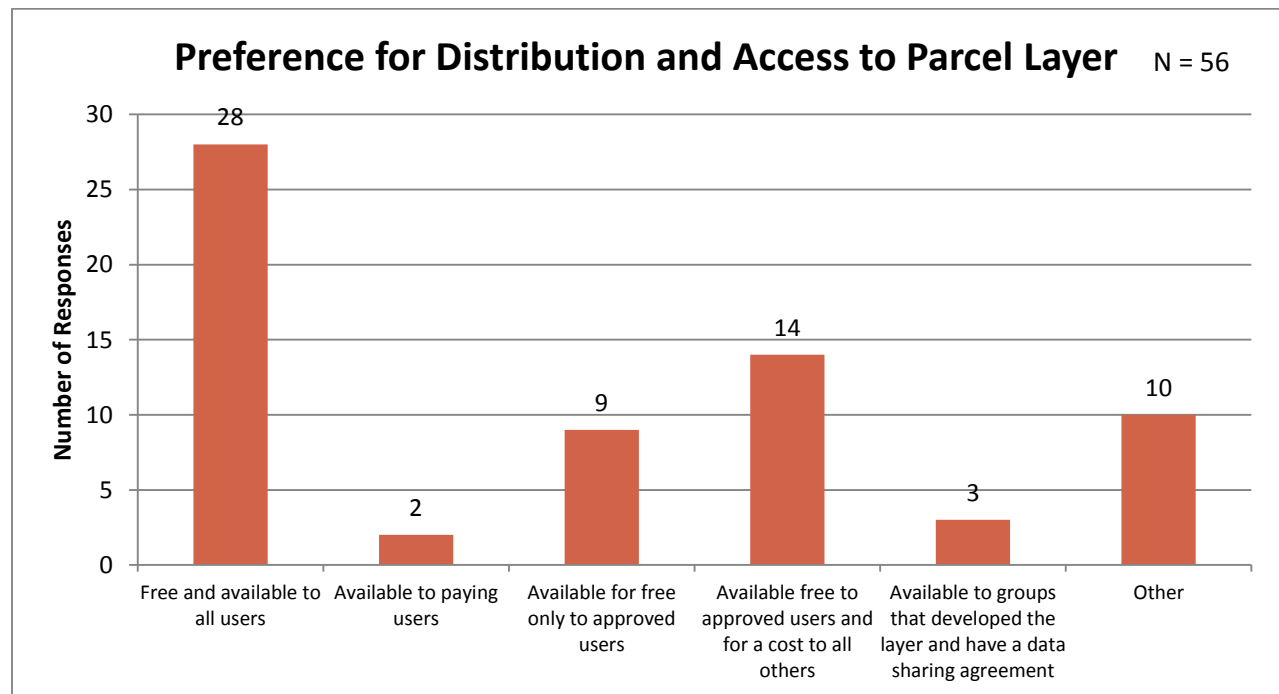


Figure 6: Preference for Access to Parcel Layer

Below are selections from the comments section as you will see these comments raise important issues about definitions of approved users and what data should be freely available.

*"Should be public record you are just adding location."*

*"Free to individuals, pay-for-use to others."*

*"Dependent on the form the data is available for free. I think that for the general public, a ArcGIS applicaiton much like the Sidwell, Beacon, etc websites would suffice. If companies want access to this information and turn it around for marketing, they should pay for it. If a gov't entity needs the data, I think they should be able to be approved to use it for free since the parcels are paid for using tax dollars and citizens would benefit from gov't utizing this data."*

*"It depends on the attributes used. Parcel geometry and PIN should be freely available. with addresses and owners it should be free to approved users."*

*"'Approved' would be the contributing governmental users."*

*"Approval just means their name goes on a list for record keeping."*

*"The producer should make the determination."*

*"May distinguish levels of users...some info free to all; some only to 'approved' users...some only to paying groups."*

*"I think certain sized selections should be free, maybe up to 2000 parcels, bulk data use should come with a reasonable fee."*

## Barriers to a Statewide Parcel Layer

Survey respondents were asked to identify any barriers they felt there were to creating a statewide parcel layer. The biggest barriers that were identified by the survey were institutional and financial barriers.

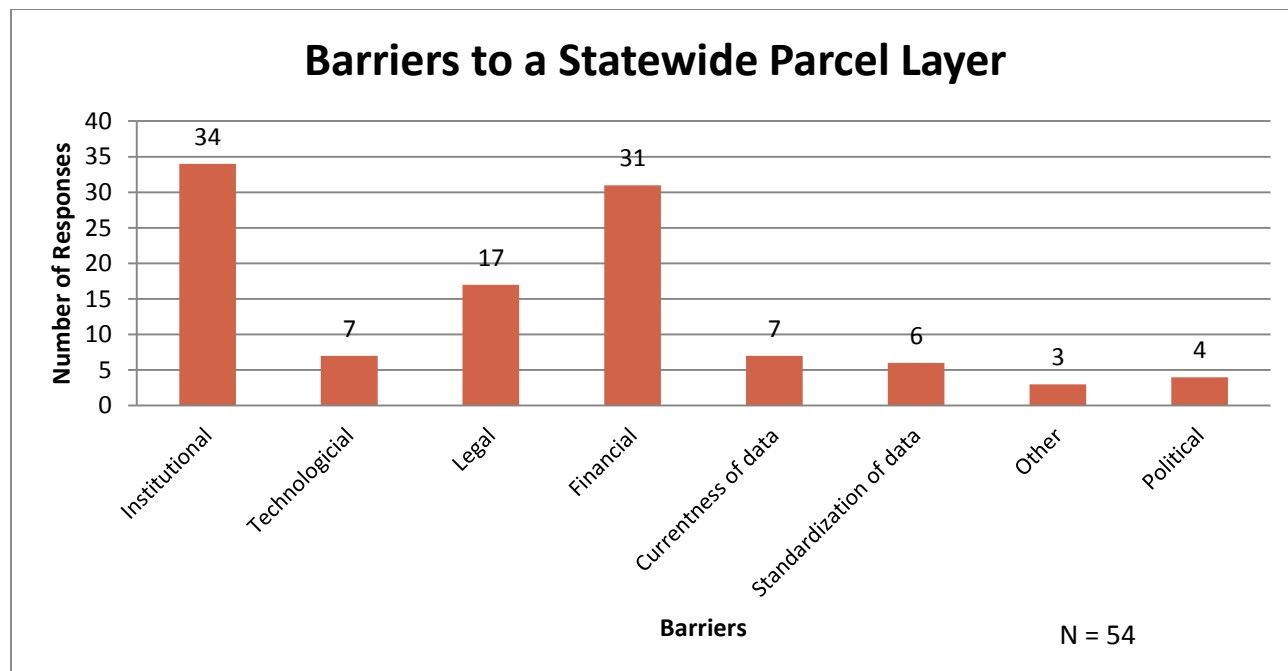


Figure 7: Barriers to the Creation of a Statewide Parcel Layer

The next section of the survey was intended to gather information specifically from those producing and maintaining parcel data. In order to separate these participants from the other respondents we asked survey respondents if their organization is the responsible for maintaining a GIS parcel layer. Thirty-four people answered “Yes” and 30 answered “No”. Those who answered “Yes” were given extra questions regarding data production that follow below.

## Parcel Maintenance

Data producers were asked to identify who maintains their parcel layer. A majority responded that their parcel layer is maintained in house. There were several that indicated having a combination of in house and vendor maintenance for their parcel layer.

## Local Parcel Update Frequency

The next survey question asked respondents how often their parcel layer is updated. Of the thirty respondents, 22 reported that their parcel layer is updated daily.

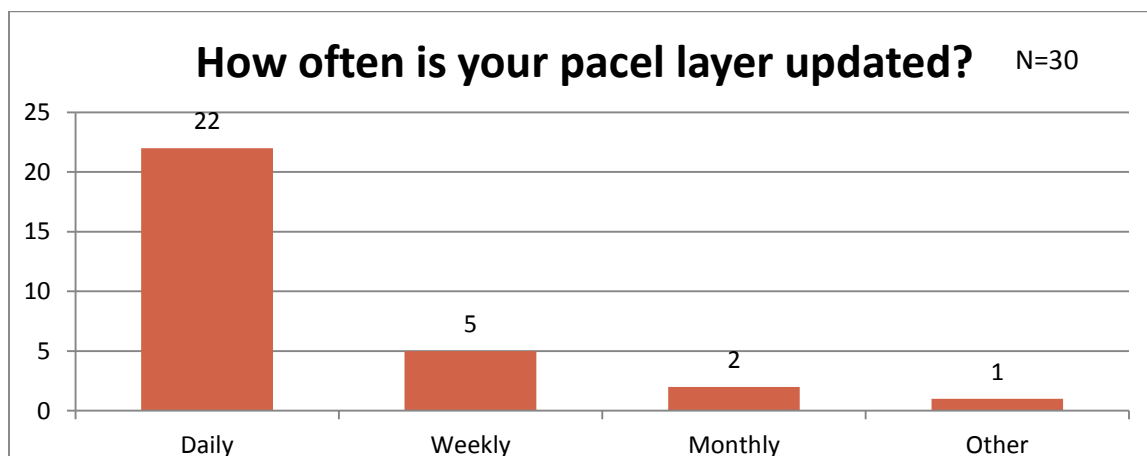


Figure 8: Local Parcel Update Frequency

## Local Parcel Data Requests and Distribution

Respondents were asked how their organization approaches GIS parcel data requests. About half of

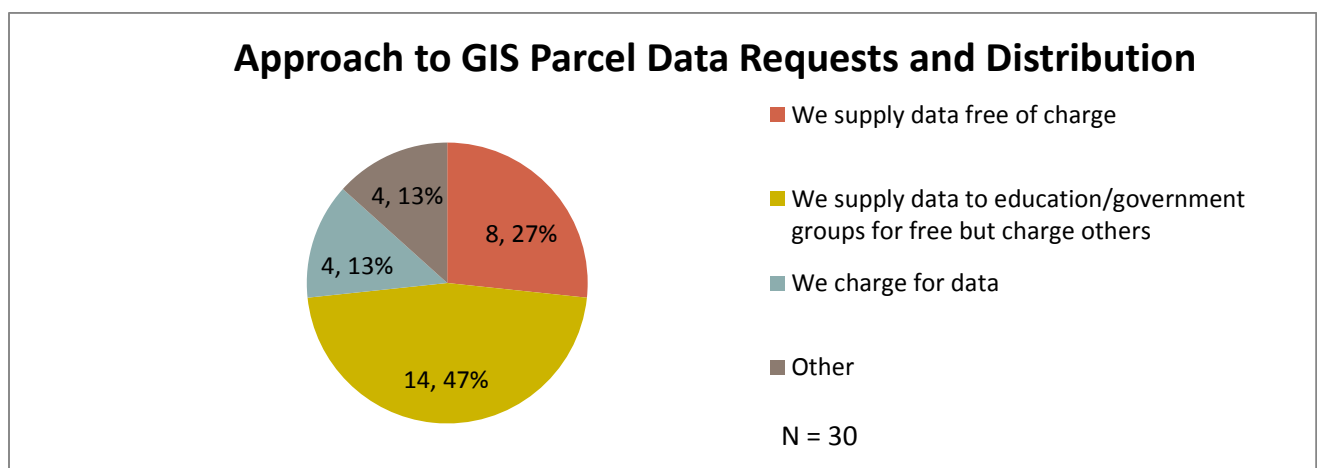


Figure 9: Local Approach to Parcel Data Requests and Distribution



respondents commented said that they provide free data for educational or government group but charge other users. Over a quarter of respondents provide their data free of charge.

### Data Fees

As a follow up to the previous question, survey respondents were asked to provide more information about how much they charge for data and how that figure was decided on.

### GIS Coordinator

Almost all of the respondents indicated that their organization employs a GIS coordinator who is responsible for managing a Geographic Information System.

### Estimated Difficulty of Intregrating Local Parcel Data into a Statewide Layer

When survey respondents were asked to estimate the difficulty of integrating their local parcel data with into a statewide parcel layer a majority responded that they did not think it would be technically difficult. Five were not sure of the difficulty of integrating local data into a statewide layer and one person estimated that it would be difficult and take a long time.

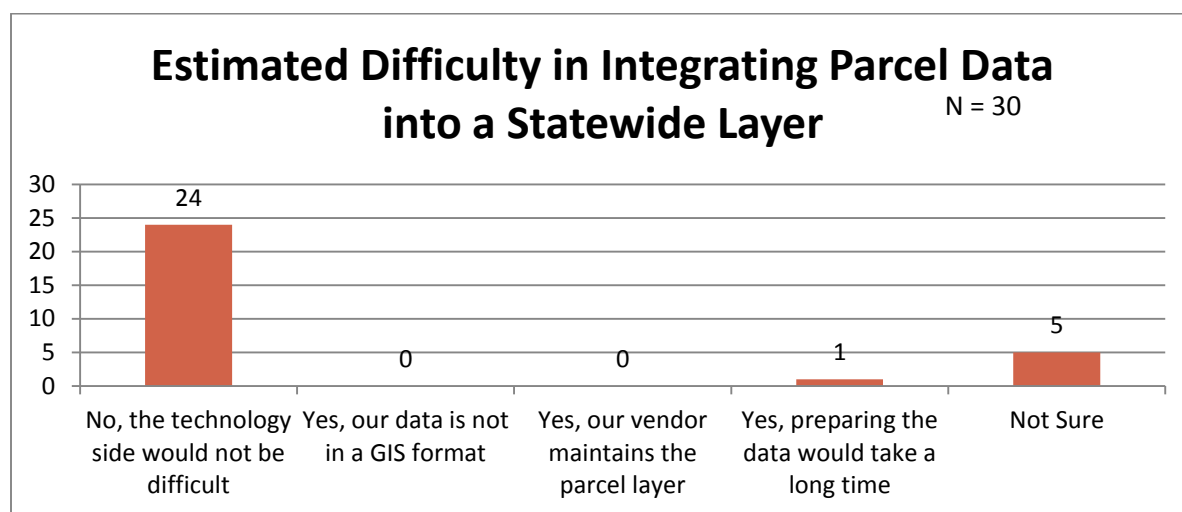


Figure 10: Estimated Difficulty of Integrating Local Parcel Data into a Statewide Layer

### Additional Comments

There were several general comments of positive feedback in support of this effort. Below are several additional comments.

*"I think resources and funds should be spent on getting the few counties left in the state that don't have their parcel data in GIS format."*

*"Concerning [the] question [of integrating parcel data into a statewide layer], the level of complexity to push County parcel data to a statewide service will largely depend upon the data schema required to send this information. It may be simple for one County, but possibly very difficult for another depending on what data is required and the number of offices that may be required to play nice."*

*"Here's my two cents: To understand what it would take to create and maintain a statewide parcel dataset, you must first ask yourself, 'Why isn't there already a statewide parcel dataset?'. Here's why. It seems like almost everything at the county level is defined by code, sometimes defined down to the nitty-gritty. GIS at the county level is the opposite. We have nothing. We're all on our own. There are no standards and there are no rules. What we have is an every man for himself type system. Some of us keep track of tax parcels only. Some of us keep track of easements, drainage districts, ROW, historic lot lines, and a million attributes. The best thing that could be done for uniformity would be for the state to legislate parcel-based datamodel standards that are universal to all counties (See ESRI Parcel Fabric). This would make a statewide dataset more realistic. If all counties are using a different datamodel it will be a constant battle (See ESRI Community Basemap). If all counties maintained parcels the same way, they would be inherently useful."*

*"Very concerned about the maintenance of this data - just as I am with the addressing layer. It's great to collect it all but can be out dated very quickly."*

*"I think this is a great idea, and something that would prove useful to many agencies. Funding and completion will be a challenge, but by looking at other states, such as Massachusetts, that have done similar projects some good lessons learned may be out there."*

*"I would encourage IGIC to collect and distribute case studies on how selling GIS data actually hurts/restricts the growth of the technology within the community it serves. I will find some that I have referenced in the past and make them available."*

*"This is a good thing and can be beneficial to smaller counties, particularly those who can't afford to distribute their own data. I think a searchable web tool they do not have to fund would be appealing as a carrot for many counties."*