MINUTES

eGIS Steering Committee

February 14th, 2018
11:06 am – 12:04 pm
Facilitator - Jeremy Capes, GIS Manager

In Attendance

Committee Members:

Mike Twitty – Chair – Pinellas County Property Appraiser - **ABSENT**
Rahim Harji – Vice Chair – Pinellas County ACA (Parks & Conservation Resources, Public Works, Solid Waste, Utilities)
Marc Gillette – Supervisor of Elections
Jason Malpass – Pinellas County Sheriff Office
Jake Stowers – Pinellas County ACA (Airport, Building Services, Development Review Services, Economic Development, Planning)
Lourdes Benedict – Pinellas County ACA (Animal Services, Emergency Management, Human Services, Marketing and Communications, Safety and Emergency Services) - **ABSENT**
Paul Sacco – Pinellas County ACA (Convention & Visitors Bureau, Management & Budget, Office of Technology and Innovation, Purchasing, Real Estate Management, Risk Management) - **ABSENT**
Megan Ross – Pinellas County Utilities Interim Director

Attendees:

Joe Borries – Emergency Management
Greg Caro – Business Technology Services
Mike Dawson – Business Technology Services, eGIS
Regina Hagger – Emergency Management
Belinda Huggins – Business Technology Services
Blake Lyon – Development Review Services
Alan Shellhorn – Planning
Renea Vincent – Planning

Jeremy Capes – Business Technology Services, eGIS
Rick Cody – Safety & Emergency Services
Pam Grabo – Risk Management
Elizabeth Harper – Utilities
Amantia Kempton – Real Estate Management
Curt Nielson – Property Appraiser (**PROXY for Mike Twitty**) 
Toni Smith – Business Technology Services, eGIS

Agenda

1. Call to Order
2. Approval of Minutes from the December 13th, 2017 meeting
3. Discuss Projects for Budget Considerations
   a. Proposed County 3D Basemap (from ESRI Canada)
      i. Show 3D Demo from Toronto, Canada
      ii. Discuss Quote
   b. Routing Solution (ESRI StreetMap Premium Services)
      i. Department Use Cases
      ii. Discuss Quote
4. Open Discussion

Call to Order

The meeting was called to order at 11:06 after waiting for a quorum to be present. Jeremy mentioned the reason for this special meeting was to discuss two specific budget items that will affect the enterprise. Curt Nielsen will sit in for the absent Chair Mike Twitty and will co-facilitate the meeting with Jeremy.
Approval of Minutes

It was asked by Jeremy Capes if there were any changes to the December 13th, 2017 meeting minutes, none were noted. Marc Gillette motioned to approve, Blake Lyon (temporary proxy for Jake Stowers) seconded, all in favor. Minutes approved.

Project for Budget Consideration – Proposed County 3D Basemap

At the December 13th, 2017 meeting, the Property Appraiser gave a demo on a 3D project that they had contracted with ESRI Canada to create some 3D models of a select number of condominium buildings for appraisal purposes. With that demo, the committee asked eGIS to find out how much it would be to create a 3D basemap of the whole county in preparation for budget. eGIS worked with the Property Appraiser to ask ESRI Canada to provide a quote for consideration for budget. There are 4 levels of detail (LOD) that can be completed. LOD1 provides only a building shell, LOD2 provides a building shell with roof shape/structure, LOD3 provides a building shell but also shows architectural features such as roofs, exterior windows and doors, LOD4 is the total buildings and interior features. There is a LOD5 and above but isn’t necessary at this time. LOD1 and LOD2 models can be generated automatically using building footprints/sketches and LiDAR data. LOD3 and LOD4 require more laborious work using existing building plans. The quote from ESRI Canada was using the LOD2 model on all buildings on parcels, also creating 3D Highway and Road creation and one bridge (since all bridges are different). The quote was $210,000 (see attached slide for more detail).

Marc Gillette asked what the committee what this would save the county or benefit the county? Some of the responses were as follows:

- Joe Borries said that it would help eGIS be able to provide this data without affecting their resources, would also help in the Damage Assessment process and Storm Surge in Emergency Management.
- Rick Cody mentioned it would help Fire and rescue to know more about the buildings, evacuation plans, etc.
- Renea Vincent said that it would help with Planning scenarios.
- Amantia Kempton mentioned it would help Real Estate Management with their maintenance of county buildings.
- Help with Utilities and Stormwater modeling.
- Mike Dawson and Curt Nielsen mentioned that this would provide the foundation, bootstrap/base for the county to build on for 3D purposes. Once this base is created, more can be built on top or enhanced. The campus viewer and traffic data dashboards were shown as products that could be created using this data in the future.

Some concerns were:

- Blake Lyon was concerned about the implied accuracy of the buildings and would it be able to use CAD drawings? Mike Dawson answered that those could be leveraged with the LOD3 or LOD4.
- Jason Malpass asked if this would be made available to the public. The answer was yes but would also have security controls.
- Jason Malpass also asked what the total cost of ownership or implications to the different departments? It was answered by Mike Dawson that the licensing for the product is included in our Arc software, but what could be an issue with departments is the hardware (computers), they require a better graphic card.
- Joe Borries brought up if we would still be receiving the 2D footprints of the county and if you could flatten out the 3D buildings? Curt answered that what ESRI Canada is doing now they are able to turn on and off different levels of detail.
- Jake Stowers asked Curt Nielsen if the LOD2 was enough for Property Appraiser use. Curt Nielsen responded yes, as it is a great starting point/platform in which over the years it can grow into more.
- It was asked who would maintain this new 3D data or would it have to be redone again when new LiDAR is flown (5 years). Both Curt Nielsen and Jeremy Capes said that it would be better to just keep it updated. Curt said that the Property Appraiser would maintain it.

Greg Caro reminded the committee that the reason for this meeting was to approve a decision package being created to present this item in the budget. It would need to have a strategic direction in which the eGIS Steering Committee adopts it as a platform and supports it. The package would need information on how it would benefit multiple departments in the county. Also include in the package additional information on future enhancements. It was also suggested by Jake Stowers to try to get a quote on the LOD3 or LOD4 to add in.

Marc Gillette asked what was needed from the committee concerning this. Jeremy answered that it needed to be approved by the committee to put into the budget. Marc Gillette then motioned for the committee to move forward with presenting this as a budget item/decision package as a “pilot” but then to also include additional costs (future) to provide the full benefits. Jake Stowers seconded, all in favor, budget item approved.
Project for Budget Consideration – Routing Solution

There has been a need for a routable solution in which could be used in applications and be useful in county departments such as 911. Since the current road centerline data is not route capable, ESRI has a solution that the county could use. We can extend this solution with some of our data also. This would be an annual expense of $54,000.

The different departments that have shown interest in a solution as such are:

- 911
  - Currently do not have routing capability in emergency vehicles.
  - 911 Call Center currently uses google maps and not county data, would be good to have in case internet is down, and would be 24/7.
  - Would improve the current road centerline data.
- Supervisor of Elections
  - Would be able to use Polling Places application.
- Building and Review Services
  - Could predetermine inspection routes.

The committee members agreed that this would be beneficial to the county needs. Jake Stowers motioned to approve putting this item into the budget. Marc Gillette seconded, all in favor, motion approved.

Open Discussion

Action items will be to create the two approved budget items for the FY19 budget for eGIS.

Next Meeting

Thursday, March 1st, 1:30pm, Planning Large Conference Room – 310 Court Street

The meeting adjourned at approximately 12:06 pm.

Power Point Presentation
Welcome!

Around the Room Introductions

- Name
- Department
- Favorite Vacation Spot

Approval of Minutes

December 13th, 2017 Meeting

Future Projects for Budget Consideration

Countywide 3D Basemap

Level Of Detail (LOD)

- LoD Description
  - LoD 1: Building Shell
  - LoD 2: Building Shell with roof shape/structure
  - LoD 3: Building Shell shows architectural features such as roofs, exterior windows, and doors
  - LoD 4: Building with interior features
- LoD 1 and LoD 2 models can be generated fully automatically using building footprint/sketches and LiDAR data
- LoD 3 and LoD 4 require labor work. It can be generated using existing digitized building plans, CAD/BIM/Sketchup data.
Future Projects for Budget Consideration

Countywide 3D Basemap

<table>
<thead>
<tr>
<th>Phase</th>
<th>Improvement</th>
<th>Average Cost</th>
<th>High Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D</td>
<td>Baseline</td>
<td>$150,000.00</td>
<td>$170,000.00</td>
</tr>
<tr>
<td>3D</td>
<td>Full visual</td>
<td>$200,000.00</td>
<td>$220,000.00</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Building Creation</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Building creation &amp; export</td>
<td>$120,000.00</td>
<td>Includes purchase of routeable road data and associated server licensing.</td>
</tr>
<tr>
<td>3D Building creation &amp; export, installed on premises and available for all of Department partnered with eGIS to use.</td>
<td>$150,000.00</td>
<td></td>
</tr>
<tr>
<td>3D Building creation &amp; export, added to county road data (alleys, secondary roads, etc.)</td>
<td>$200,000.00</td>
<td></td>
</tr>
</tbody>
</table>

Total Annual Cost: $240,000.00 annually

Future Projects for Budget Consideration

Enterprise Routing Solution

Quote from ESRI Canada

<table>
<thead>
<tr>
<th>Task</th>
<th>Average Cost</th>
<th>High Cost</th>
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<tr>
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<td>$180,000.00</td>
</tr>
<tr>
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<td>$220,000.00</td>
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</table>

Total Annual Cost: $240,000.00 annually

Future Projects for Budget Consideration

Enterprise Routing Solution

Quote

- StreetMap Premium for ArcGIS Desktop Custom Roads License (qty.2) $4,000 annually
- StreetMap Premium for ArcGIS Enterprise Custom Roads USA State (qty.2) $50,000 annually

Examples could be:
- Analysis
- Maps
- Problem Solving
- Share Information
- Applications/Viewers
- Data Collection
- StoryMaps
- Reporting
- More!

Next meeting = March 1st, 2018

Request for volunteers to share how you use GIS in your department at upcoming meetings.

Please contact Jeremy Capes if you’re interested.