DRAPP 2014

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Agenda

- Presentation of Possible Scenarios and Costs
- Presentation of Ballpark Quotes for Add-ons
- Discussion of Quotes and Scenarios

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Scenarios

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Scenarios

Scenario 1:		
Product	Extent	Cost
6in & 1ft Imagery + DAT	Areas 1,2,3,4	$600,000
WMS (2014-2016)	Areas 1,2,3,4	$55,000
10% Buffer		$65,500
Estimated Total Project Cost		$720,500
Recommendation: Add 50% (2012 cost x1.5)		

- **Identical to the 2012 project in terms of deliverables.**
- **Our WMS was rolled in cost-wise in 2012 because we were a "trial" for the vendor. In 2014, it will cost us more, but we'll also get a formal SLA etc.**
- **This scenario is a given. One tweak would be a WCS (couldn't get a quote in time)**

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Scenarios

Scenario 2:		No Post Process	Contours + Breaklines
Product	Extent	Cost	Cost
6in & 1ft Imagery + DAT	Areas 1,2,3,4	$600,000	$600,000
WMS (2014-2016)	Areas 1,2,3,4	$55,000	$55,000
LIDAR	Area 1,3,4	$354,250	$882,900
10% Buffer		$100,925	$153,790
Estimated Total Project Cost		$1,110,175	$1,691,690
Recommendation: (2012 cost x2 or x3)		Add 100%	Add 200%

- **LIDAR is an additional product.**
- **Quotes for Bare-Earth only vs. Contours + Breaklines from two different companies**
- **Notice I didn't include Eastern Plains.**
- **But before we go down this path…**

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LIDAR… Why do we want it?

Could be used for:

- **Contours**
- **Identifying new development; showing moved dirt in construction projects**
- **Building heights and generalized building footprints (Note: More accurate building footprints would need to come from the imagery itself.)**
- **Vegetation/Tree Canopy mapping**

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LIDAR… Why do we want it?

Considerations:

- **Could require different flight specs, depending on what point density we want.**
- **If LIDAR is to be used for orthorectification, the LIDAR has to be flown and processed before the imagery can be fully processed.**
- **Sanborn tells me it's not great for "really accurate" building footprints – would be better off using photogrammetry.**
- **LIDAR can't be collected in the snow. We may need 25 days of collection time before Feb/March. Can we do this?**
  - Note: The imagery can be processed with an existing DEM and still meet our ortho specs (just like in 2012).
- **So, are there enough other things we'd get from LIDAR to justify its purchase?**

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LIDAR… Why do we want it?

More considerations:

- **Point densities, accuracy, and classification level differ by application**
- **Classification:**
  - Ground vs. unclassified
  - Ground, Vegetation, Buildings, Water etc.
- **Hydro Enforcement/Flattening**
- **Do we want raw LAS data or derivative products?**

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Scenarios

Scenario 3:		
Product	Extent	Cost
6in & 1ft Imagery + DAT	Areas 1,2,3,4	$600,000
WMS (2014-2016)	Areas 1,2,3,4	$55,000
LIDAR	Area 1,3,4	$354,250
3 in imagery	1000sqmi portion of Area 1	$250,000
10% Buffer		$125,925
Estimated Total Project Cost		$1,385,175
Recommendation: Add 200% (2012 cost x3)		

- **3in is an additional product.**
- **Notice that I've only included 1000sqmi.**
- **But before we go down this path…**

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3in resolution

- Likely a different flight height than the rest of the imagery (although this depends on the camera).
- How many partners does this benefit vs. how many it puts at risk?

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Scenarios

Scenario 4:		
Product	Extent	Cost
6in & 1ft Imagery + DAT	Areas 1,2,3,4	$600,000
WMS (2014-2016)	Areas 1,2,3,4	$55,000
LIDAR	Area 1,3,4	$354,250
Planimetrics (2' contours, building footprints, EOP, Parking)	Urban Areas - 2700 sqmi	$1,944,000
10% Buffer		$295,325
Estimated Total Project Cost		$3,248,575
Recommendation: Add 500% (2012 cost x6)		

- **Planimetrics features are an additional product.**
- **Definitely seems cost prohibitive, complicated, and risky.**

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What about Obliques?

- Would we want these?
- What are they useful for?
- Would you mind demoing an oblique service and providing feedback on its utility for your agency?

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Comments on Scenarios?

- Which do you prefer?
- New scenario suggestions?
- What if we want different scenarios? Can someone buy in only for scenario 1 and other people only for scenario 2? Sounds like a management nightmare.
- Do you want any of the add-on products so much that you'd pay more than your share to have it included?

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Comments on Quotes?

- Reasonable?
- Too high?
- Need clarification?

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How to structure the RFPs

- **Always do two RFPs – Imagery and DAT**
- **Do we take WMS on as optional to an existing RFP or does it get its own?**
- **LIDAR as optional or separate RFP?**
  - Also need contingency plan? If it's attempted but not completed in time to inform the ortho delivery, we use the existing DEM instead so the orthos aren't late.
- **Need to ask companies how they would mitigate risk considering these other products.**

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Member suggestion

What do you think about this?

- **Splitting the project area up into two part; have a multi-year contract to capture both parts**
  - Section one the first year
  - Section two the second year

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Prelim Survey Results

- **8 responses**
- **50% like 2012 requirements, 50% want change**
- **Ranking:**
  1. Product/Deliverable
  2. Cost
  3. Timeline
- **If a reliable and fast WMS is available:**
  - 63% wouldn't order actual tiles at all.
  - 100% would be fine with later delivery of actual tiles beyond their small area of interest.

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Prelim Survey Results

- **Post-processing**
  - Re-projecting
    - 38% willing to re-project their own data
    - 75% willing to consider this optional
  - Cutting Tiles
    - 25% willing to cut their own tiles into a custom scheme
    - 88% willing to consider this optional
  - Convert to Other Formats
    - 38% willing to convert data to their format of choice
    - 88% willing to consider this optional

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Prelim Survey Results

- **Hardships of changing the deliverable options**
  - Limiting to 3 projections – 25% said this is a hardship
  - Limiting to 3 formats – 0% said this is a hardship

- **Budgets**
  - 38% can't go over 2012 cost
  - 38% can double
  - 25% can triple

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Next Steps

- I'll continue compiling your Requirements Surveys (Due June 7).
- I'll begin drafting the RFPs for Imagery, DAT, and WMS and send those out for review. Which options would you like me to include?
- When we get bids, you'll get the opportunity to vote on whether we accept the options.

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Timeline

Dates	Actions
April 1 – June 7	Requirements Gathering
June 7 – August 30	Prepare RFPs
September 1– November 1	Release RFPs
November 4 – December 13	Vendor Selection Process
December 18	Board Approval of Vendors
December 19 – January 31	SOWs/Contracting
January	Determine cost share and start LOIs

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