I think I found one error, “fish recruits all”, the amount doesn’t line up with additional recruit data.

Let me know where you are with data assembly. I may be able to correct this in the next day or so.

**From:** Simoes, Jody (FWE)   
**Sent:** Wednesday, February 13, 2019 9:32 AM  
**To:** Daniel Kary; Lisa Parks  
**Cc:** McCarthy, Kris (FWE)  
**Subject:** RE: Dashboard Methodology

Dan-

I wanted to get this to you ASAP.

I’m going to review it later today- but let me know if you see any red flags.

Thanks.

**From:** Daniel Kary [<mailto:Dan@SouthwickAssociates.com>]   
**Sent:** Monday, February 04, 2019 12:51 PM  
**To:** Simoes, Jody (FWE)  
**Subject:** RE: Dashboard Methodology

Jody – In case this is helpful, I provided an example of how I structure license data to facilitate production of the dashboard summaries. Not sure if this level of detail is overkill, but it might be handy to look at during our call.

**Dan Kary** / *Senior Research Analyst*

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cid:image001.jpg@01D4C37C.61A0B4B0

**From:** Simoes, Jody (FWE ) <[jody.simoes@state.ma.us](mailto:jody.simoes@state.ma.us)>   
**Sent:** Monday, February 4, 2019 9:50 AM  
**To:** Daniel Kary <[Dan@SouthwickAssociates.com](mailto:Dan@SouthwickAssociates.com)>  
**Subject:** RE: Dashboard Methodology

That works. I’ll call you then.

Thanks.

**From:** Daniel Kary [<mailto:Dan@SouthwickAssociates.com>]   
**Sent:** Monday, February 04, 2019 9:49 AM  
**To:** Simoes, Jody (FWE)  
**Subject:** RE: Dashboard Methodology

Hi Jody. I’m happy to discuss. How about 1pm ET?

**Dan Kary** / *Senior Research Analyst*

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cid:image001.jpg@01D4C37C.61A0B4B0

**From:** Simoes, Jody (FWE ) <[jody.simoes@state.ma.us](mailto:jody.simoes@state.ma.us)>   
**Sent:** Monday, February 4, 2019 8:17 AM  
**To:** Daniel Kary <[Dan@SouthwickAssociates.com](mailto:Dan@SouthwickAssociates.com)>  
**Subject:** RE: Dashboard Methodology

Dan-

I think I’d benefit from a discussion about the hunt, fish, sport/combo “buckets”.

Based on your example, it seems like if I create a binary “hunt” or “fish” group designation, it’ll be too coarse to capture churn and recruits.

Let me know when it might be best to give you a call.

I’m free any time before 2:30 today and tomorrow.

(I think I’m having trouble with this because I’m not stellar with R!)

**From:** Daniel Kary [<mailto:Dan@SouthwickAssociates.com>]   
**Sent:** Thursday, January 31, 2019 1:00 PM  
**To:** Simoes, Jody (FWE); Lisa Parks  
**Subject:** RE: Dashboard Methodology

Sounds good Jody. Feel free to drop me a line whenever is convenient!

**Dan Kary** / *Senior Research Analyst*

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cid:image001.jpg@01D4C37C.61A0B4B0

**From:** Simoes, Jody (FWE ) <[jody.simoes@state.ma.us](mailto:jody.simoes@state.ma.us)>   
**Sent:** Thursday, January 31, 2019 12:14 PM  
**To:** Lisa Parks <[Lisa@SouthwickAssociates.com](mailto:Lisa@SouthwickAssociates.com)>; Daniel Kary <[Dan@SouthwickAssociates.com](mailto:Dan@SouthwickAssociates.com)>  
**Subject:** RE: Dashboard Methodology

Thanks for the responses and the data example (both times, ). Very helpful.

Once I get started I’ll likely need more clarification on the hunt/sport/fish designation.

Dan, I may reach out to you early next week to talk that through.

Thanks.

**From:** Lisa Parks [<mailto:Lisa@SouthwickAssociates.com>]   
**Sent:** Thursday, January 31, 2019 12:01 PM  
**To:** Daniel Kary  
**Cc:** Simoes, Jody (FWE)  
**Subject:** RE: Dashboard Methodology

Hi Dan, Jody requested and I sent a copy yesterday. 😊

**Lisa Parks** / *Project Manager*

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cid:image002.jpg@01D285FA.18DC3A90

**From:** Daniel Kary <[Dan@SouthwickAssociates.com](mailto:Dan@SouthwickAssociates.com)>   
**Sent:** Thursday, January 31, 2019 11:59 AM  
**To:** Lisa Parks <[Lisa@SouthwickAssociates.com](mailto:Lisa@SouthwickAssociates.com)>; Simoes, Jody (FWE ) <[jody.simoes@state.ma.us](mailto:jody.simoes@state.ma.us)>  
**Cc:** McCarthy, Kris (FWE ) <[kris.mccarthy@state.ma.us](mailto:kris.mccarthy@state.ma.us)>  
**Subject:** RE: Dashboard Methodology

Jody – We also forgot to send this data example previously. It is intended to be a companion to the word document; providing a concrete example of what we are looking for data.

Best,

**Dan Kary** / *Senior Research Analyst*

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cid:image001.jpg@01D4C37C.61A0B4B0

**From:** Lisa Parks <[Lisa@SouthwickAssociates.com](mailto:Lisa@SouthwickAssociates.com)>   
**Sent:** Thursday, January 31, 2019 8:11 AM  
**To:** Simoes, Jody (FWE ) <[jody.simoes@state.ma.us](mailto:jody.simoes@state.ma.us)>  
**Cc:** McCarthy, Kris (FWE ) <[kris.mccarthy@state.ma.us](mailto:kris.mccarthy@state.ma.us)>; Daniel Kary <[Dan@SouthwickAssociates.com](mailto:Dan@SouthwickAssociates.com)>  
**Subject:** RE: Dashboard Methodology

Hi Jody,

Yes, we’ll need the data by 2/15 to give us time to incorporate it into the regional/national dashboard and run down any issues before the North American conference.

Dan has revised the documentation to address your question about missing data – attached. Also, please see his response to your questions, highlighted below.

Just let us know if you need additional information. Thanks!

**Lisa Parks** / *Project Manager*

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cid:image002.jpg@01D285FA.18DC3A90

**From:** Simoes, Jody (FWE ) <[jody.simoes@state.ma.us](mailto:jody.simoes@state.ma.us)>   
**Sent:** Wednesday, January 30, 2019 12:26 PM  
**To:** Lisa Parks <[Lisa@SouthwickAssociates.com](mailto:Lisa@SouthwickAssociates.com)>; Daniel Kary <[Dan@SouthwickAssociates.com](mailto:Dan@SouthwickAssociates.com)>  
**Cc:** McCarthy, Kris (FWE ) <[kris.mccarthy@state.ma.us](mailto:kris.mccarthy@state.ma.us)>  
**Subject:** RE: Dashboard Methodology

Lisa and Dan-

That was helpful.

From what I read, that datasheet you sent represents the format and the full analysis you need.

I can run it, but I’m assuming you need this by what, mid-February? **I’ll need a hard deadline.**

So far, my questions / caveats are:

* We only have digital data 2012-2018. We’ll take what data you have available!
* We have three broad license types (fish, hunt, sport). Sporting (i.e. combo) licenses allow for fishing and hunting privileges. Perfect. For our processing, we count sport license purchasers among both anglers and hunters
* For “recruits” and churn calculations- are we strictly examining based on the category they purchased (e.g. fish or hunt). Are we not worried about catching upgrade or downgrades. Yes only fish or hunt. For example, if someone bought only a fishing license for 5 years, and then a combo in their sixth, s/he would be a hunter recruit that year.
* How shall I deal with missing data. I don’t think it’s rampant, but for example, I may be missing gender on handfuls of records.  Great question. I’ve always based breakouts on percentage estimates, and drop missing before estimating those. For example, assume 100K people: 69% male, 30% female, 1% gender unknown. Number of males = 100K \* 69 / (100-1) and number of females = 100K \* 30 / (100-1). As long as the percentage of missing is small, than this is probably a reasonable estimate.

**From:** Lisa Parks [<mailto:Lisa@SouthwickAssociates.com>]   
**Sent:** Wednesday, January 30, 2019 11:29 AM  
**To:** Simoes, Jody (FWE)  
**Cc:** McCarthy, Kris (FWE)  
**Subject:** RE: Dashboard Methodology

Sure, attached.

**Lisa Parks** / *Project Manager*

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cid:image002.jpg@01D285FA.18DC3A90

**From:** Simoes, Jody (FWE ) <[jody.simoes@state.ma.us](mailto:jody.simoes@state.ma.us)>   
**Sent:** Wednesday, January 30, 2019 9:17 AM  
**To:** Lisa Parks <[Lisa@SouthwickAssociates.com](mailto:Lisa@SouthwickAssociates.com)>  
**Cc:** McCarthy, Kris (FWE ) <[kris.mccarthy@state.ma.us](mailto:kris.mccarthy@state.ma.us)>  
**Subject:** RE: Dashboard Methodology

Lisa-

Can you provide the document referenced in the 5th footnote- “Dashboard state-prepared Data Example.xlsx”.

**From:** Lisa Parks [<mailto:Lisa@SouthwickAssociates.com>]   
**Sent:** Wednesday, January 30, 2019 8:41 AM  
**To:** Simoes, Jody (FWE)  
**Cc:** McCarthy, Kris (FWE); Daniel Kary  
**Subject:** RE: Dashboard Methodology

Hi Jody,

We’re working to have the first regional/national dashboard that includes through 2017 completed by the North American conference (first week of March), then the 2nd iteration (through 2018) out in May.

Is this feasible from your side?

Thanks,

**Lisa Parks** / *Project Manager*

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cid:image002.jpg@01D285FA.18DC3A90

**From:** Simoes, Jody (FWE ) <[jody.simoes@state.ma.us](mailto:jody.simoes@state.ma.us)>   
**Sent:** Wednesday, January 30, 2019 8:34 AM  
**To:** Lisa Parks <[Lisa@SouthwickAssociates.com](mailto:Lisa@SouthwickAssociates.com)>  
**Cc:** McCarthy, Kris (FWE ) <[kris.mccarthy@state.ma.us](mailto:kris.mccarthy@state.ma.us)>  
**Subject:** FW: Dashboard Methodology

Lisa-

I’m sure I’ll have questions- but for now, **what’s the timeframe for getting data/results back from states**?

**From:** McCarthy, Kris (FWE)   
**Sent:** Tuesday, January 29, 2019 4:14 PM  
**To:** Simoes, Jody (FWE)  
**Subject:** FW: Dashboard Methodology

**From:** Lisa Parks [<mailto:Lisa@SouthwickAssociates.com>]   
**Sent:** Tuesday, January 29, 2019 1:45 PM  
**To:** McCarthy, Kris (FWE)  
**Cc:** Emily Beach; Data Dashboards  
**Subject:** Dashboard Methodology

Hi Kris,

Emily asked me to forward information regarding how Southwick compiles and standardizes dashboard data. Attached is a document Dan Kary prepared to share with states that are creating dashboards in-house and it allows us to fold their summarized data tables into the larger regional/national dashboard.

Please share with your data people and let us know if you have any questions. We’d also be happy to arrange a conference call if you’d like.

Best regards,

**Lisa Parks** / *Project Manager*

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cid:image002.jpg@01D285FA.18DC3A90