

Regional Attendance Analysis

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Objectives

- Analyze Regional attendance
- Provide some membership demographics
- Show potential for data analysis and what it takes to implement it

Collecting and organizing data

- Have received ACBL data from Horn Lake that shows:
 - Each session played for each member in every sectionally rated or higher event from 2007 to late 2018 (data before 2013 are incomplete)
 - Membership data from 2010 to 2019
- Data are stored in a Google Cloud Platform
 - Uses Big Query - SQL based data management software
 - Reasonably user friendly
 - Access password controlled
 - Costs are minimal
 - ***Prospective platform for on-going use by the ACBL***
- We calculated distances traveled by each member to each event
 - Used ZIP codes from membership files and tournament locations
 - Used software that calculates distances between ZIP codes

Regional Attendance

- Analyzed 760 Regionals from 2013 to late 2018
- Attendance is in decline --- why?
- Attendance = Number of members that attend Regionals
 - * Number of Regionals they attend
 - * Number of Sessions they play
- Number of members attending Regionals has declined
 - Most of the decline is for members with < 500 points
- Number of Regionals attended and number of sessions played is relatively unchanged

Number of members attending Regionals

	Year						% change	
# Master Points	2013	2014	2015	2016	2017		2013-2017	Participation
< 50	7210	7390	7250	7355	6752		-6.4%	11.3%
50-100	4607	4549	4323	4265	4061		-11.9%	21.0%
100-200	6520	6581	6249	6178	6106		-6.3%	30.1%
200-500	12876	12624	12222	11635	11535		-10.4%	69.5%
500-1000	10030	10023	9659	9412	9372		-6.6%	52.9%
1000-2500	10341	10162	9847	9585	9593		-7.2%	48.7%
2500-5000	4110	4117	4164	4195	4292		4.4%	60%
> 5000	2043	2160	2238	2311	2402		17.6%	85.7%
Overall	57737	57606	55952	54936	54113		-6.3%	32.6%

Average number of Regionals Attended *

	Year				
# Master Points	2013	2014	2015	2016	2017
0-50	1.2	1.2	1.2	1.2	1.2
50-100	1.4	1.4	1.4	1.4	1.4
100-200	1.7	1.7	1.7	1.7	1.7
200-500	2.0	2.1	2.1	2.1	2.1
500-1000	1.9	1.9	1.9	2.0	2.0
1000-2500	2.1	2.1	2.1	2.1	2.0
2500-5000	2.7	2.7	2.7	2.6	2.5
5000+	4.2	4.1	4.1	4.0	3.9
Overall	2.0	2.0	2.0	1.9	2.0

➤ Is the bump for 200-500 caused by players seeking LM status?

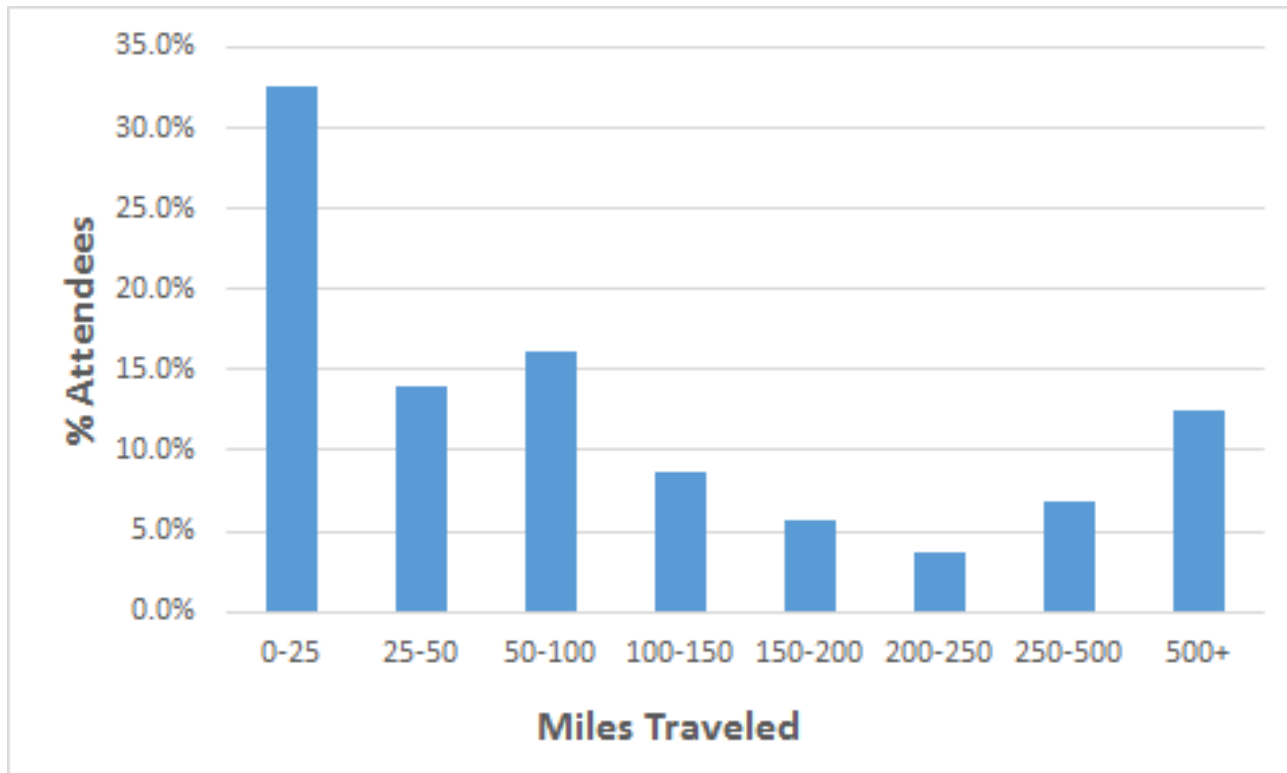
* This average is for those members that attended a Regional in that year

Avg. number of sessions played at Regionals

	Year				
# Master Points	2013	2014	2015	2016	2017
0-50	3.9	3.9	4.0	4.0	3.9
50-100	6.6	6.2	6.5	6.4	6.3
100-200	9.3	9.2	9.1	8.9	8.6
200-500	13.7	13.7	13.6	13.3	13.1
500-1000	13.2	13.1	13.4	13.3	13.4
1000-2500	14.7	14.7	14.9	14.7	14.4
2500-5000	21.0	20.3	20.7	19.9	19.4
5000+	37.6	36.5	36.9	34.9	34.1
Overall	12.9	12.7	13.0	12.7	12.7

- The more MPs you have the more you play
- Note the decline for players with lots of master points

Distances members are traveling to Regionals



- Average distance = 219 miles, median distance = 58 miles
- Most attendance is local, though there is tremendous variation
- Tracking Regional attendance at same location over time can show patterns in changing attendance

E.g., Attendance at Hunt Valley Regional

	Miles Travelled								Total
	<25	25-50	50-100	100-150	150-200	200-250	250-500	>500	Attendance
2013	438	473	408	125	60	16	40	114	1674
2014	396	463	416	111	69	21	71	124	1671
2015	366	445	407	127	67	18	51	126	1607
2016	336	354	386	116	78	13	47	120	1450
2017	329	385	377	79	59	19	32	95	1375
2018	281	371	408	113	63	11	39	110	1396

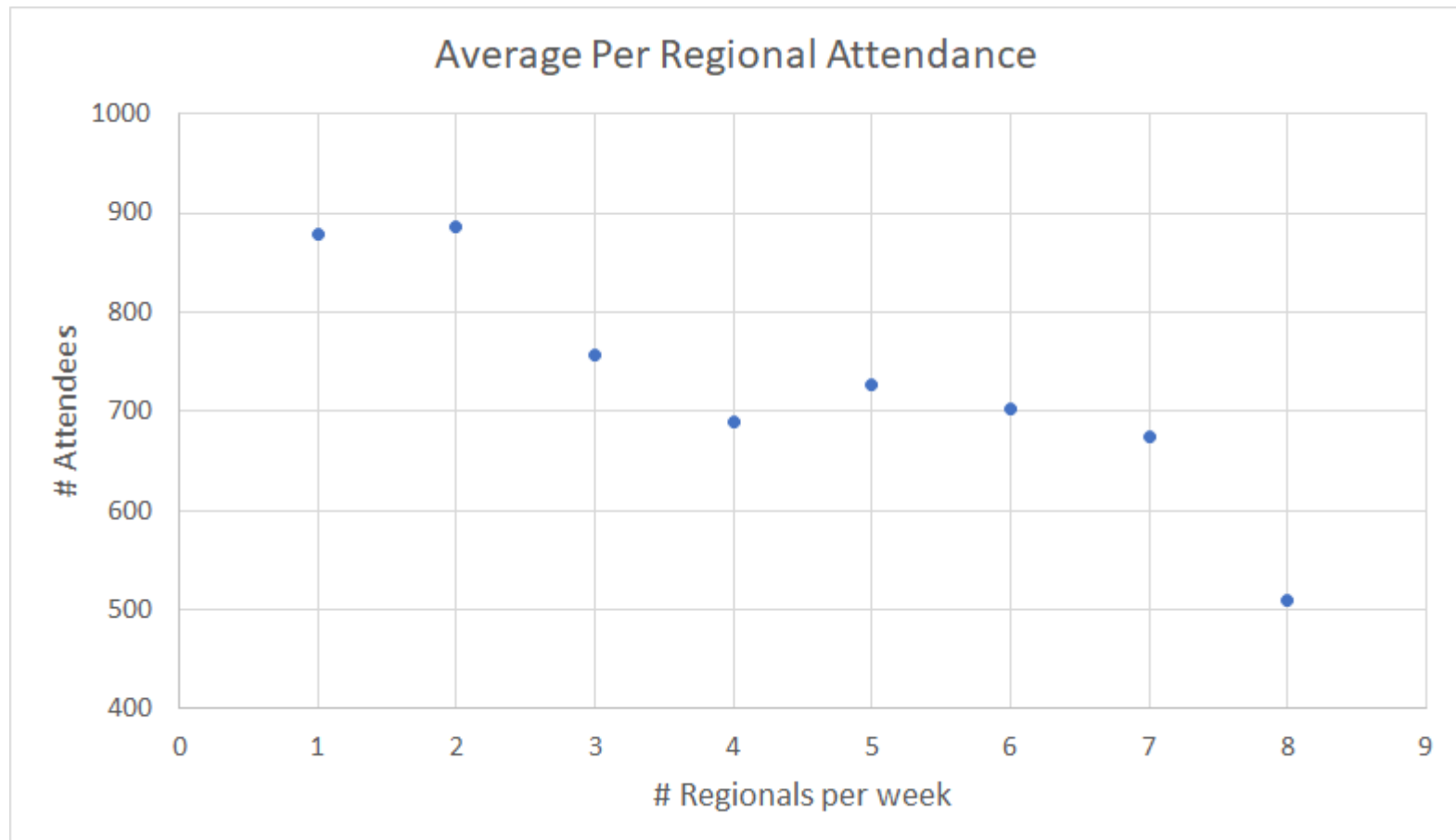
- Attendance at Hunt Valley has declined in past 6 years
- Most of the decline is in local players

Distance Traveled & Master Point Level

Master Points	Median Miles Traveled
< 50	20.0
50-100	29.6
100-200	42.7
200-500	61.7
500-1000	58.1
1000-2500	62.1
2500-5000	81.4
>5000	130.2

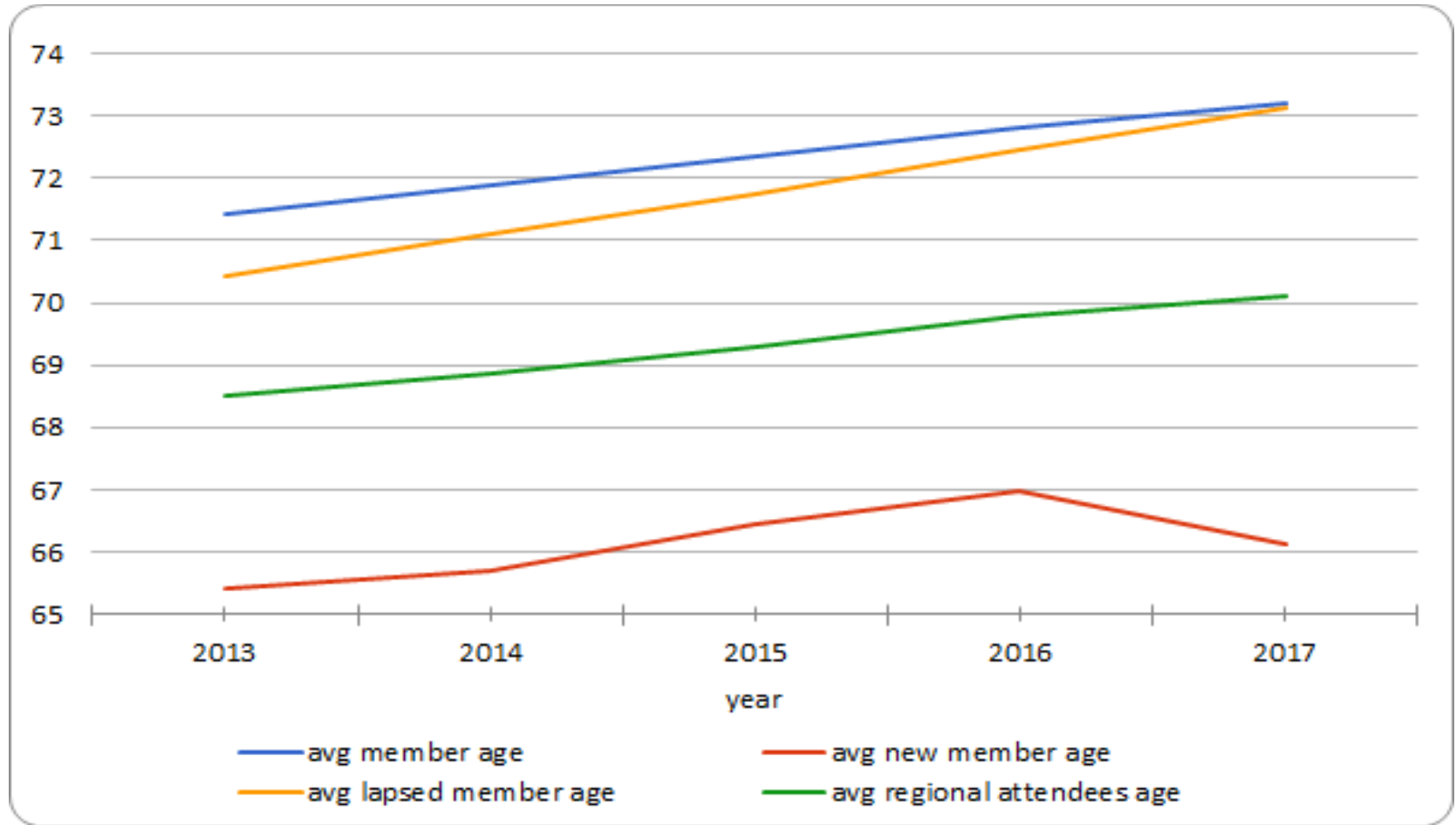
➤ Members with few master points don't travel far

Attendance and competing Regionals

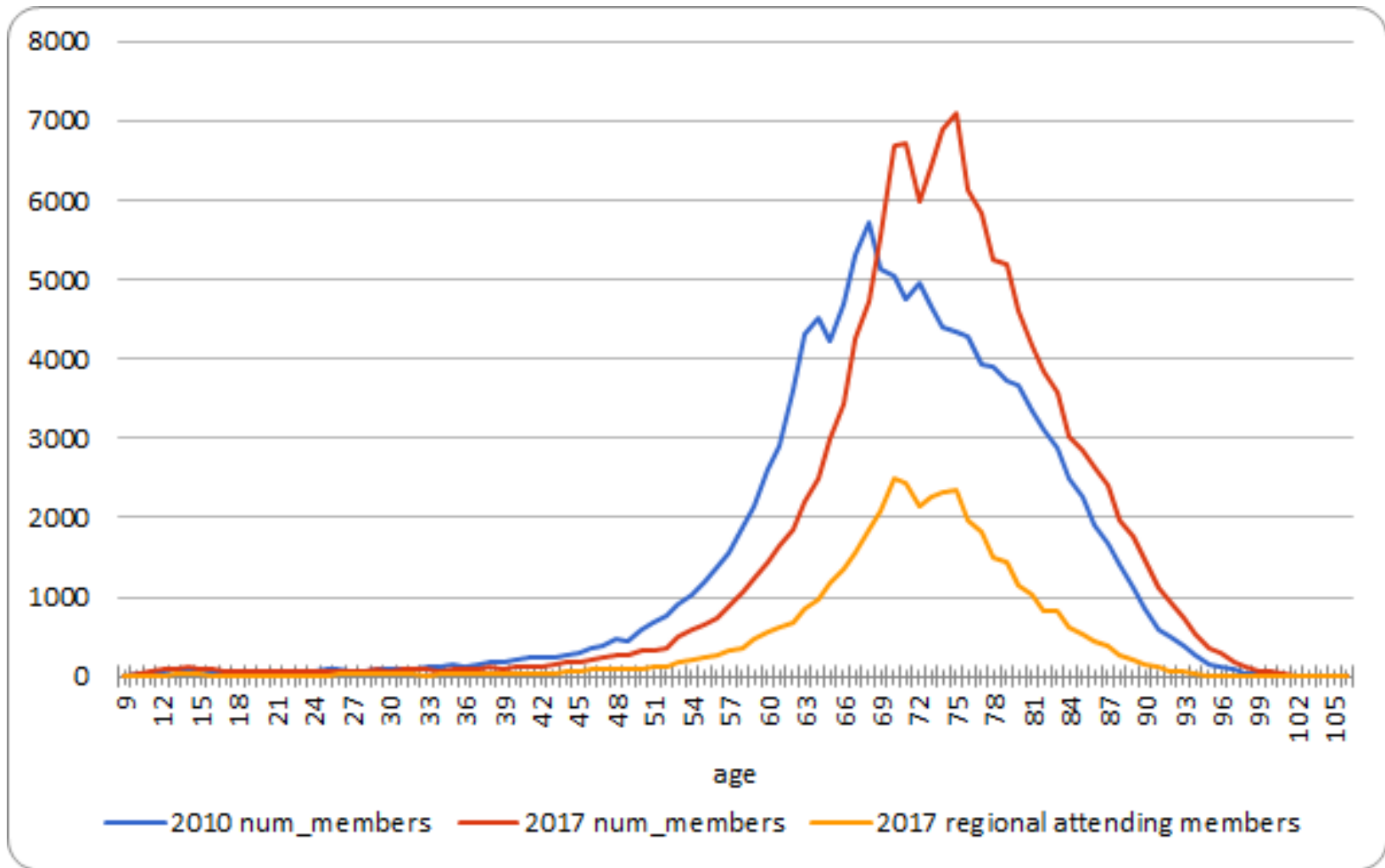


- The number of Regionals in a week varies from 0 to 8
- Average attendance at a Regional is affected by the number of competing Regionals

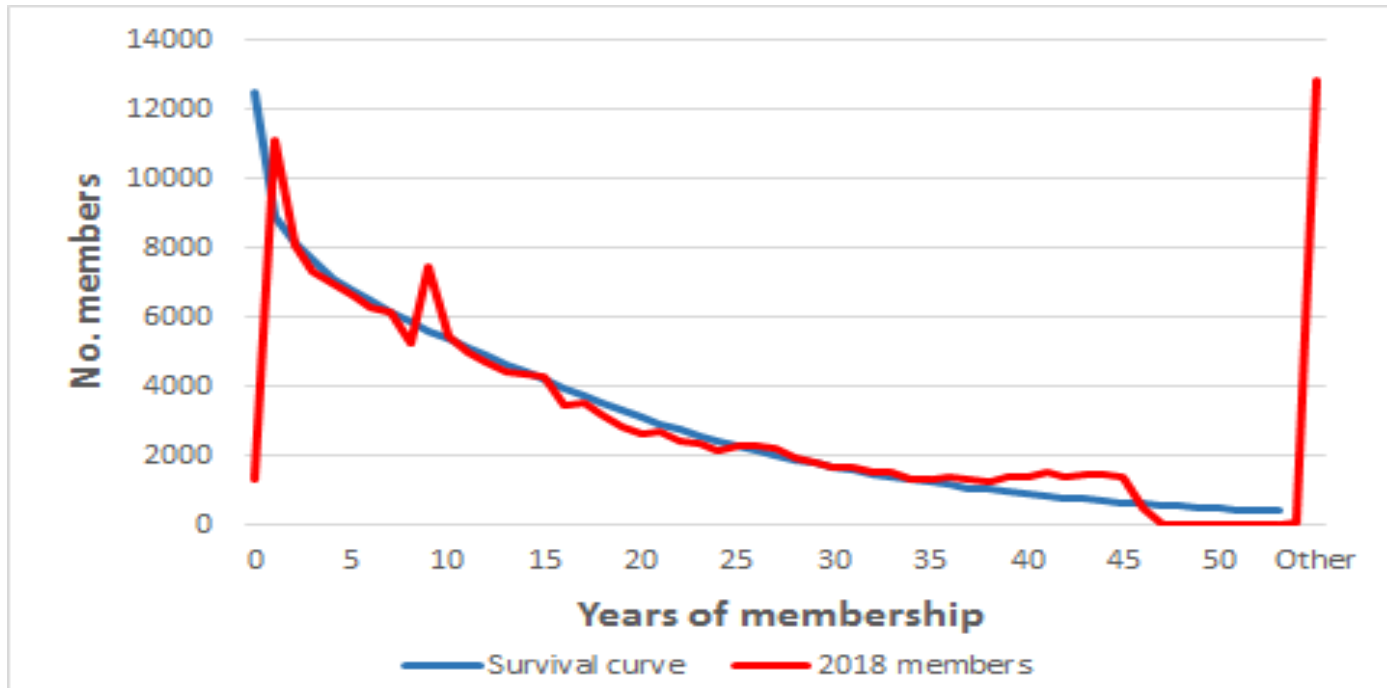
Average member ages over time



Members by age

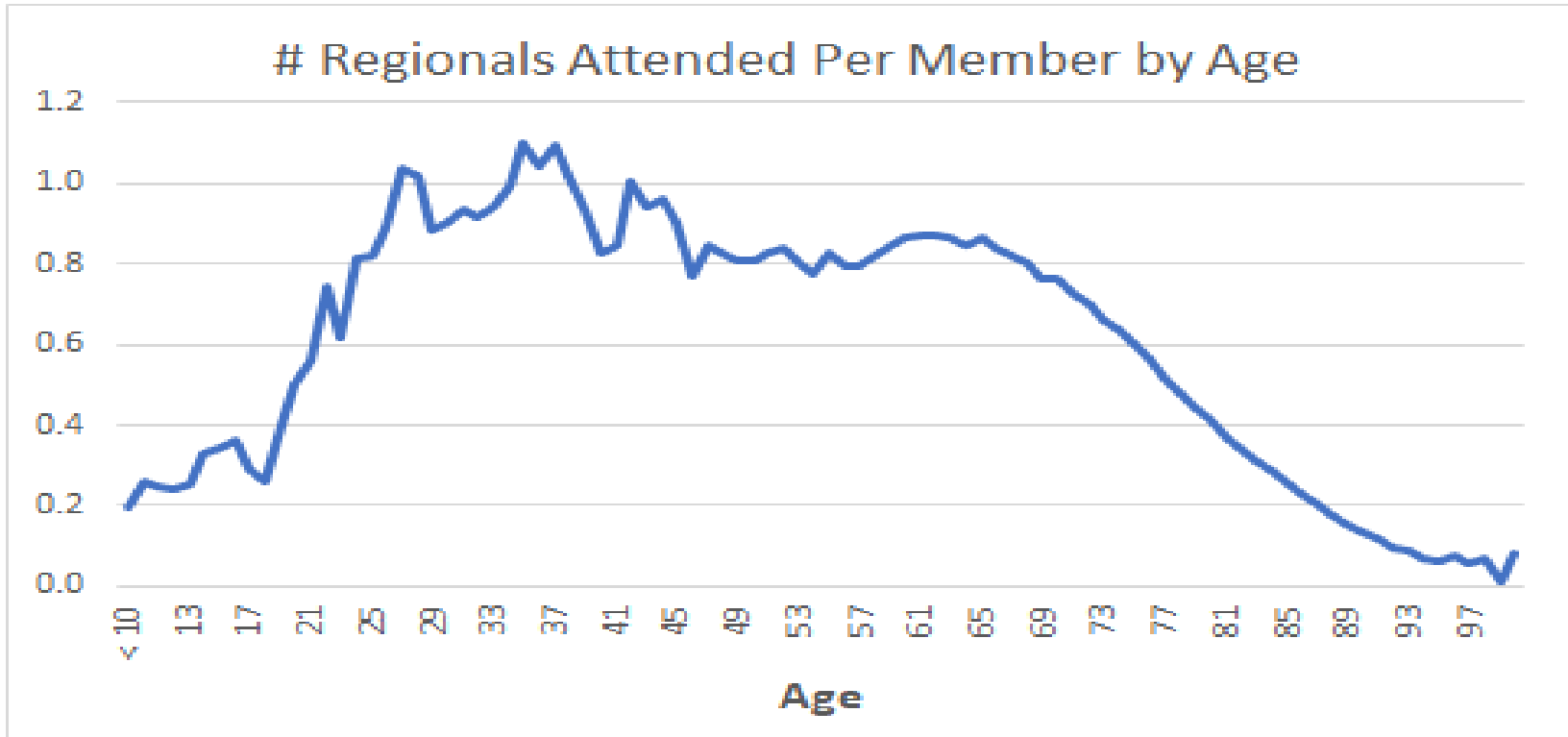


Years of membership and retention



- ~ 167,000 members
 - Over 12,000 have invalid date of membership
- The “survival curve shows how many members ACBL would have if current retention rates continues indefinitely ~ 165000 members
 - 12,500 new members a year
- However, assumes many with 30+ years of membership, not going to happen if we recruit new members when they are 60-65
 - Will require 14,500 -15,000 new members a year to sustain 165,000 members

Impact of Age on Attendance



- The number of regionals attended by each member declines after the age of 70
- These data have been consistent between 2013 and 2017
- The population has been aging and causing a decline in attendance
 - **A 4% decline in attendance between 2013 and 2017 is directly due to aging**
 - **This decline will continue as ACBL membership continues to age**

Way Ahead

- Work with Horn Lake staff on their data analytics reporting

- Regional Analysis
 - Analysis of impact of “close together” Regionals on attendance
 - Further analyze how behavior varies with master point levels
 - Develop some standard reports
 - Analyze effectiveness of advertising

- Expand analysis to Sectionals

- Respond to requests from ACBL leadership

Questions ??