

Firefly Survey 2019

Aaron Kaufman and Robert Ward, Firefly Survey Core

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Basic Overview

We collected from 495 consenting respondents, representing more than 40% of the event. We asked about 50 questions across several categories:

- 1) Firefly basics
- 2) Demographics
- 3) Safety and Comfort
- 4) Participation
- 5) Experience in 2019
- 6) Looking Forward

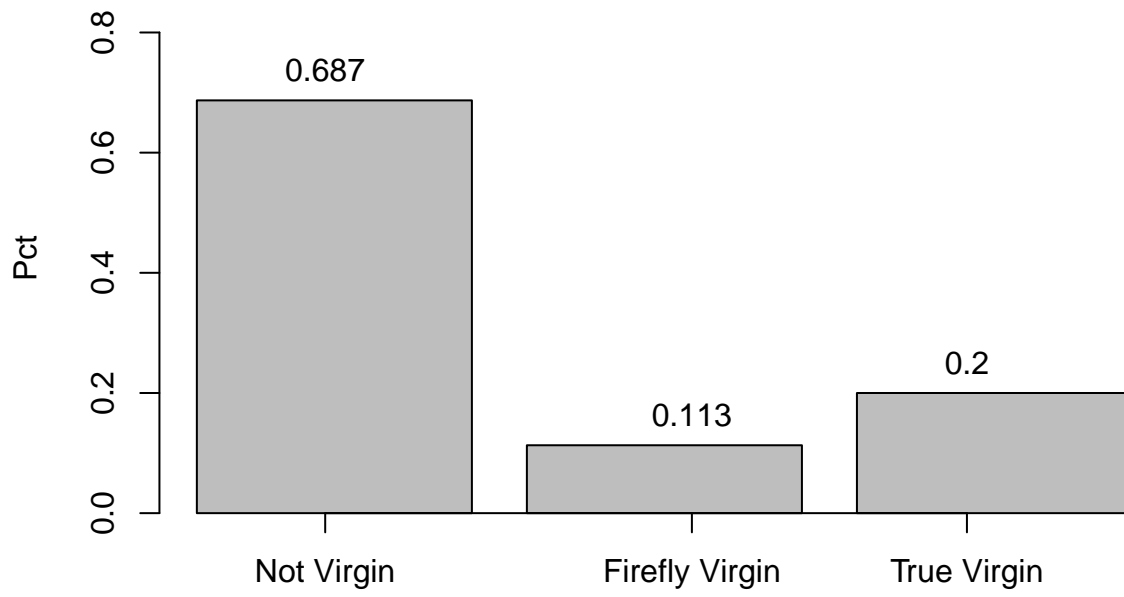
This is the fourth year I've run the survey, so alongside the 2019 data, I have 789 survey responses from 2016 through 2018 which I incorporate into time series analyses.

Technical note: In 2016 and 2017, I analyzed the Firefly survey as if it were a random sample of the event, which it is not. In 2018 I first implemented entropy balancing weights. Using first name (to impute sex) and date of birth from the ticketing database, I constructed weights so that overrepresented survey respondents count for less and underrepresented ones count for more. All further analyses using 2019 data include these weights.

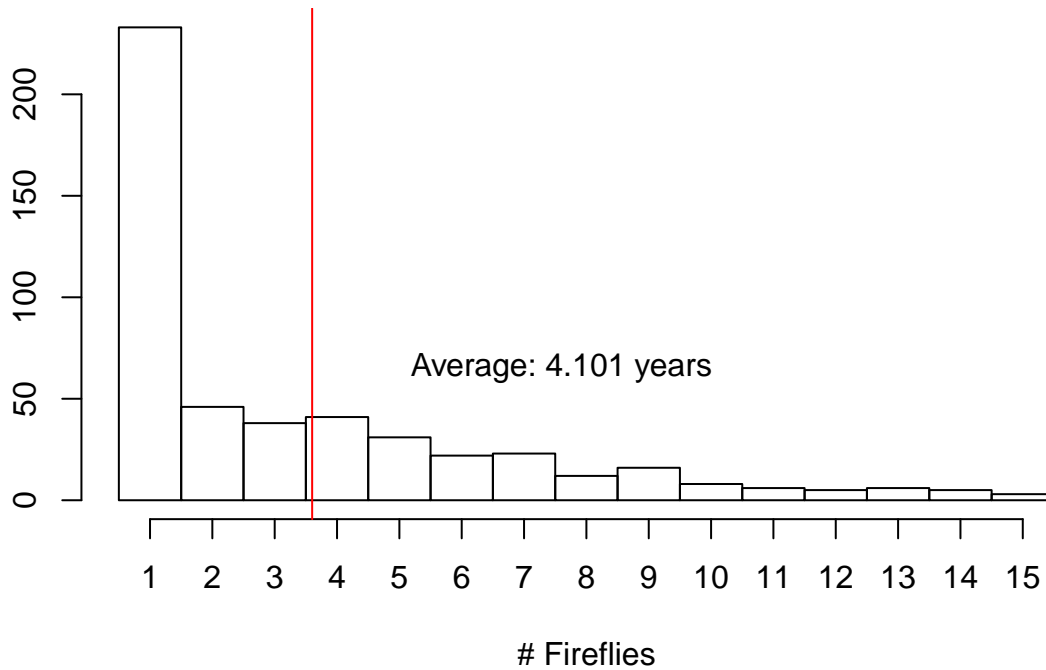
Firefly Basics

Firefly was more than 11.3% newcomers in 2018, despite an average of 4 years of attendance. Some terminology: A Firefly Virgin is someone who has never been to Firefly, but has been to other burns. A True Virgin is someone who has never been to any burn at all. The survey estimate is thus that about 31% of Firefly 2019 was participants who had never been to a Firefly before, and roughly one third of those had been to another burn before.

Firefly Virgins



How many Fireflies have you attended, including this one?

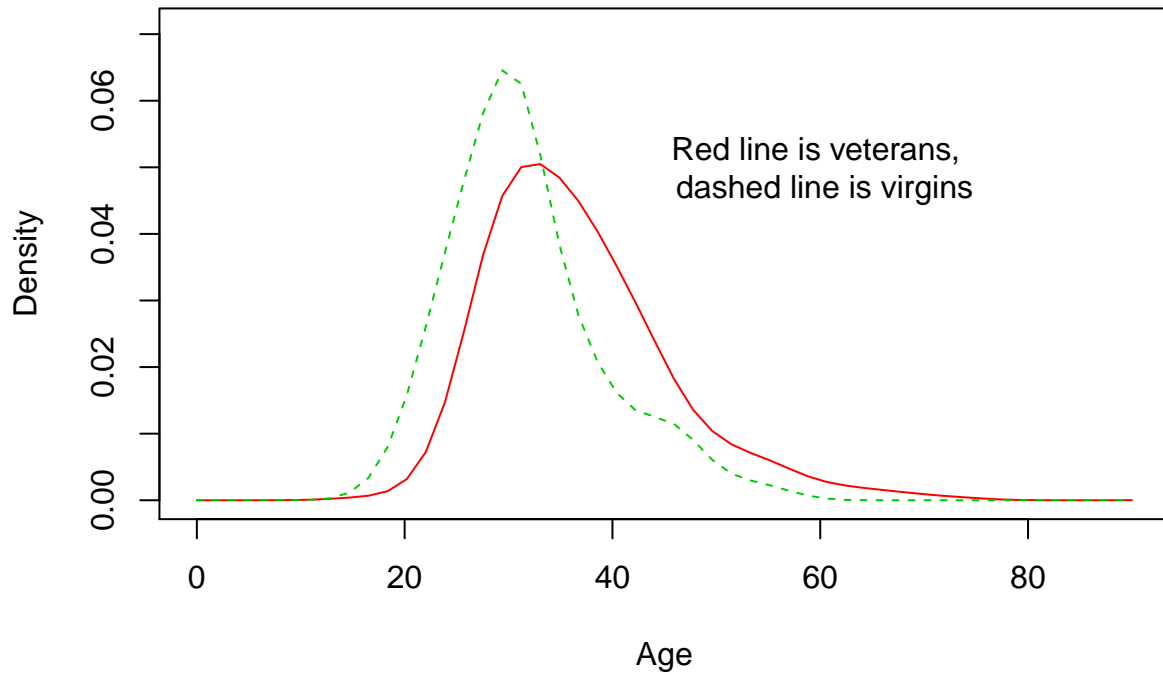


Demographics

Firefly 2019 was 3.2 percent Hispanic, 88.5 percent White, 1 percent African-American, 3.4 percent Asian, and 3.2 percent some other category. 8.3 percent identify as belonging to two or more races.

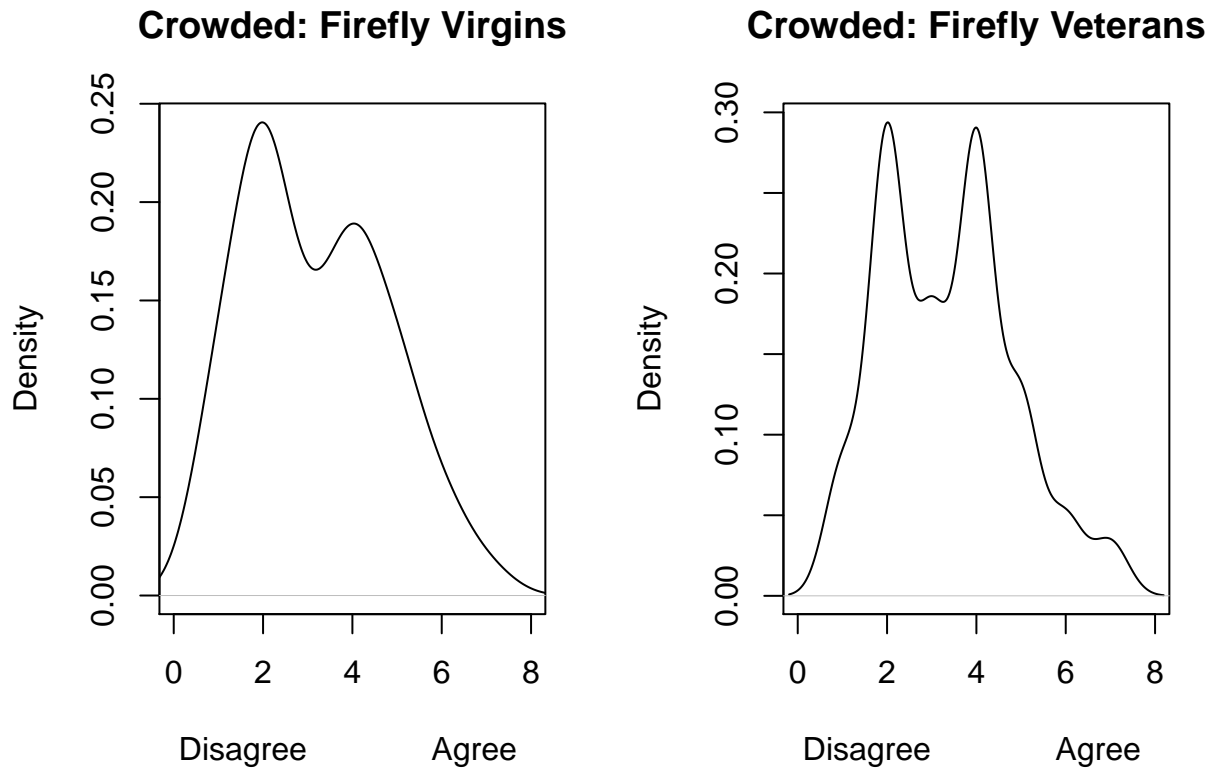
Additionally, 83.4 percent identify as either male or female. The rest mostly identify as non-binary or genderqueer.

Regarding age, Fireflies have a right-skewed distribution:



Comfort & Safety

I asked respondents, on a 7-point scale, to tell me how they felt about Firefly. Is it comfortable? Is it safe? Is it well-managed? Is it crowded? Do they plan on coming back? 85 percent said that they Agree or Strongly Agree that Firefly is safe; 80.2 percent said that they Agree or Strongly Agree that Firefly is comfortable; 95.2 percent said that they Agree or Strongly Agree that Firefly is well-managed; 81.8 percent said that they will probably or definitely return. An interesting side note is that Firefly virgins were, on average, more comfortable than the veterans.

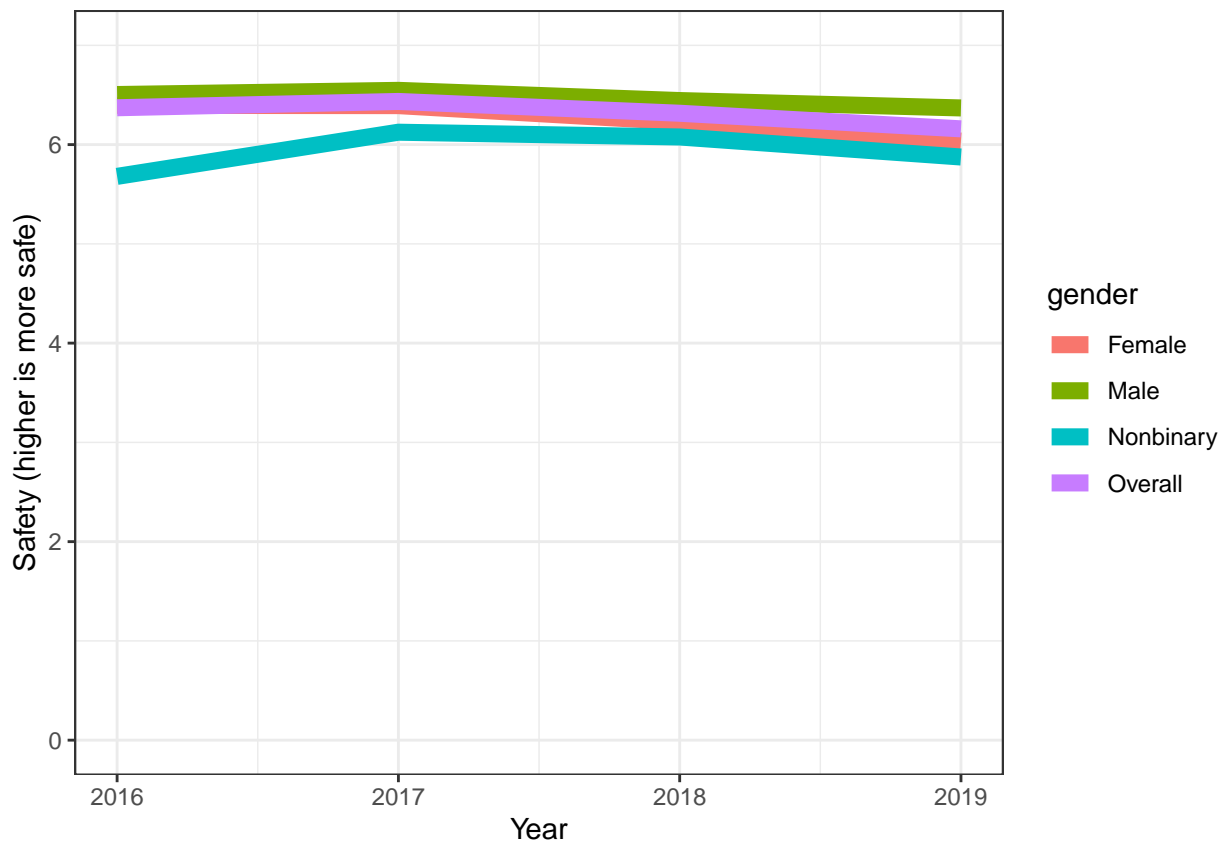


I also asked two questions related to health and first aid. 76 percent said that they Agree or Strongly Agree that they feel prepared to deal with health problems at Firefly, and 80 percent said that they Agree or Strongly Agree that they know how and whom to find regarding help with first aid.

We can look at how safety and comfort vary by gender as well, and note that those who identify as female are slightly but not significantly less likely to describe Firefly as safe than those who identify as male. The average safety score among female-identified individuals is 6.035 while the average safety score among male-identified individuals is 6.369 (this difference is statistically significant).

Finally, we can explore how safety, and safety by gender, have changed over time. We notice that, despite a downward trend over the last two years, perceptions of safety still remain very high.

```
##
## One Sample t-test
##
## data: dat$safe_num[dat$gender == "Female"]
## t = 76.889, df = 198, p-value < 0.00000000000000022
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
## 5.880389 6.189963
## sample estimates:
## mean of x
## 6.035176
```



Finally, I asked a question inspired by conversations last year about the presence of minors. 71.2% of respondents said that Firefly handles minors either extremely well or somewhat well; only 2.7% think Firefly handles minors either somewhat or extremely poorly. This suggests that poor behavior by minors is a problem we either solved or has been exaggerated.

Participation: How much money did we spend in Bethel?

I asked respondents to estimate how much money they spent in Bethel, then I did some statistical adjustments to account for survey nonresponse.

I estimate that we spent \$71,410 in Bethel and the surrounding area.

In comparison, in 2016 we spent \$33,455, in 2017 we spent \$69,656, and in 2018 we spent \$81,055.

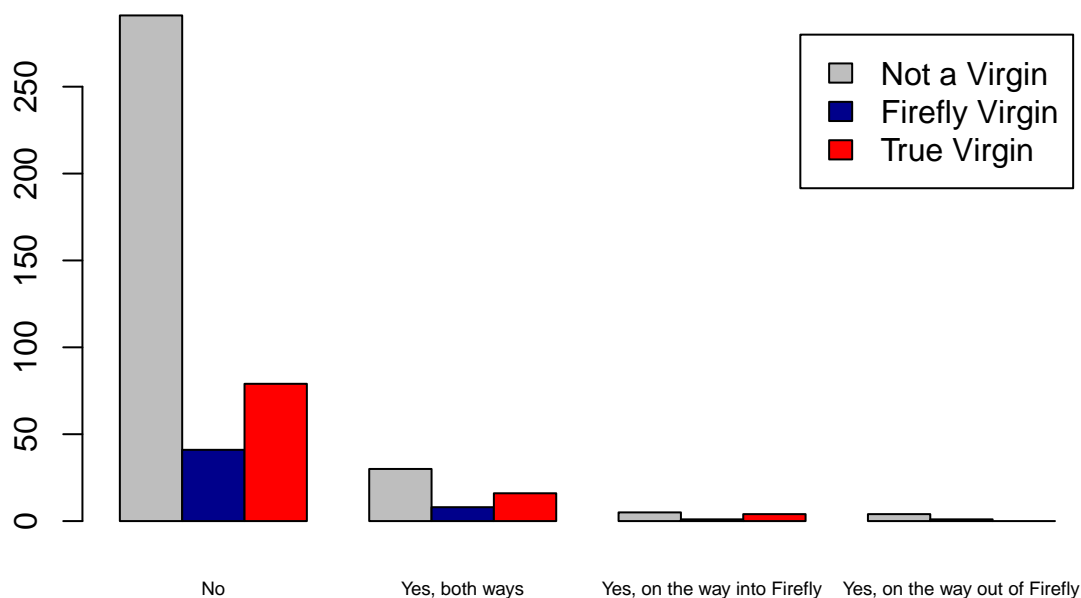
This year, I also asked how much money people spent overall for Firefly 2019.

I estimate that people spent \$955,559 for Firefly 2019, of which 7.5% was spent in Bethel or nearby.

Participation: Taking the Bus

This year, 13.9% took the bus at least once. Of those, 94.2% will either probably or definitely take the bus again. Of the people who did not take the bus, the most common reasons were Early Arrival, or the need to bring large amounts of infrastructure or art. A smaller number of people come from an area not serviced by the bus. Two helpful suggests from the comments are: 1) Add a bus stop somewhere in between Boston and Bethel; 2) More widely publicize the bus cargo truck (and subsequently get a bigger one). Of the people who do not intend to take the bus again, the need to bring more infrastructure was the most common reason.

Taking the Bus



Side note: while true virgins were more likely to take the bus, Firefly virgins (that is, people who have been to other burns but not Firefly) were much less likely to do so.

Participation: Volunteering

As well, 18.6 percent of people report being on either the board or volunteering for a core, and 24.2 percent of people report attending a work weekend. Among volunteers, the average amount of time spent was 6.171 hours.

I solicited comments for why people don't volunteer. Among the non-volunteers, 21 percent of people don't know what each core does, 20 percent of people had too many other responsibilities. 11.9 percent of people cite a complicated online process, 8.7 percent of people couldn't figure out how to sign up during the event, 8.7 percent of people didn't have time to sign up after getting a late ticket offer, and 5.1 percent of people were uncomfortable with volunteering.

Incidentally, the correlation between number of hours volunteered and number of fireflies attended is 0.345, indicating only a weak relationship between volunteerism and experience.

I also asked people what would make them volunteer more. Some people blamed poor coordination among core leads, in particular rangers, for not responding to inquiries. Others think that cores have unofficial requirements that are not well-stated, and that the physical requirements of cores are not well-stated. One cute idea I saw is to reserve some volunteer slots for first-timers to help them get acclimated.

Another cool idea is to have filters on the website based on certain selections: How are you able to volunteer (check all that apply):

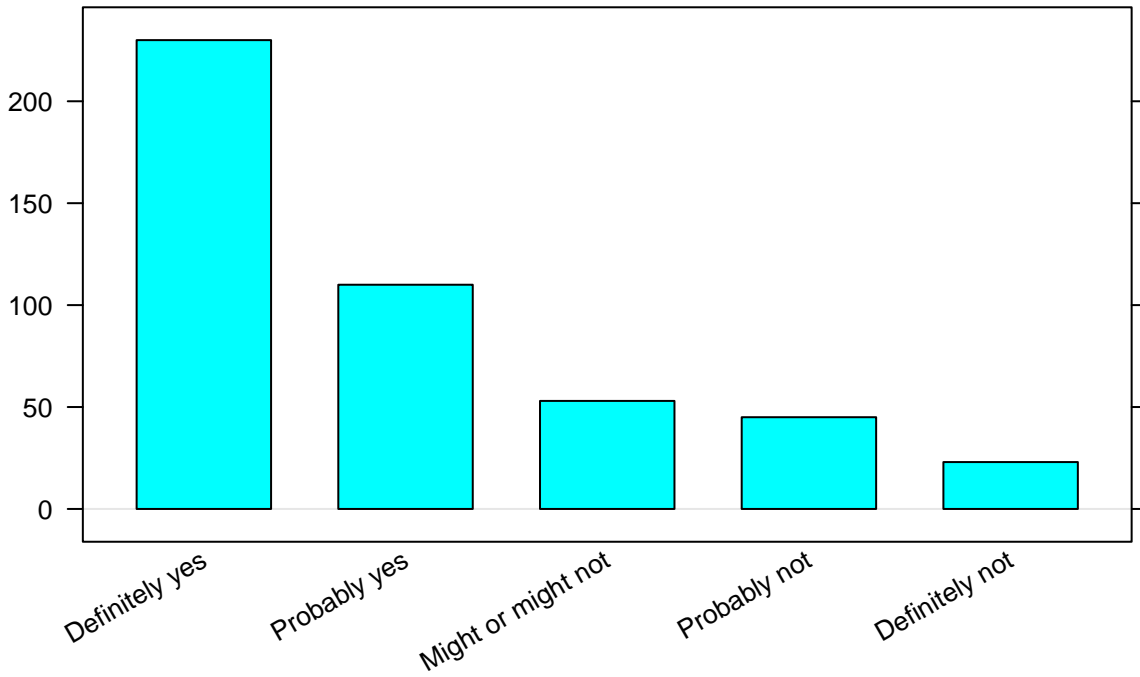
- stay in a place and interact with people
- offer emotional support
- lift heavy things

[] provide medical expertise

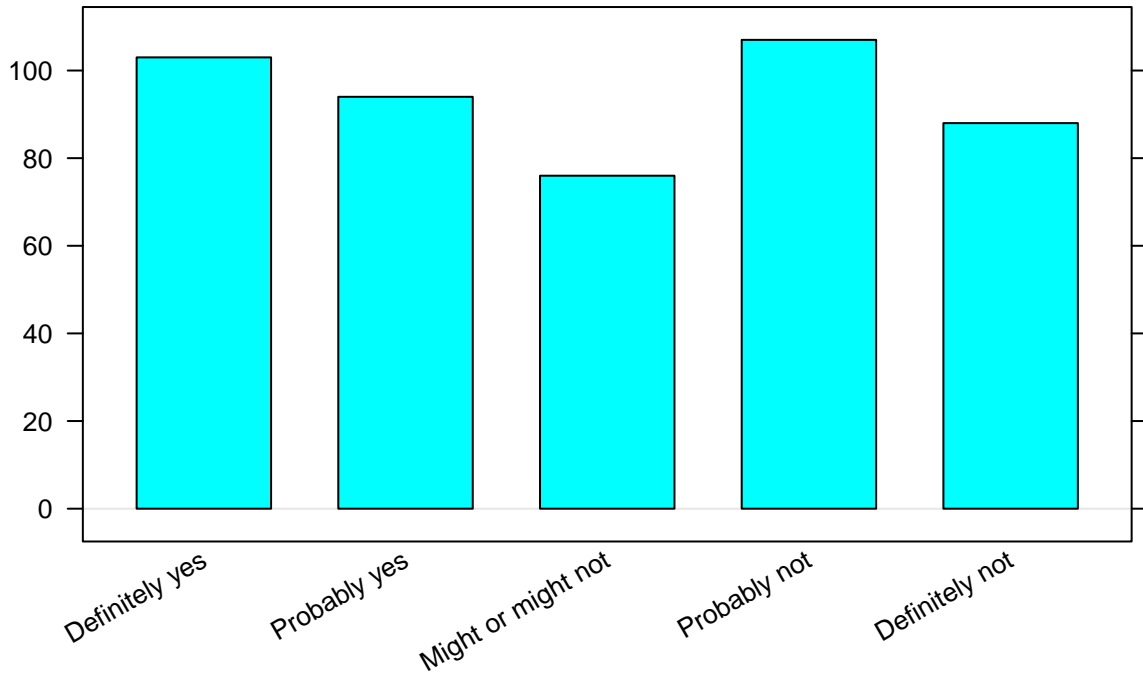
Firefly 2019 Experience: Transformational Experiences

According to some, one of the “core deliverables” of Firefly is to produce “transformational experiences,” however participants may define them. I asked participants if they have had “transformational experiences” at Firefly, or at Burns in general. 68.7% report either definitely or probably having a transformative experience at a Burn at least once, and 42% report either definitely or probably having a transformative experience at Firefly 2019.

Transformational Experiences at Burns



Transformational Experiences at Firefly 2019



Firefly 2019 Experience: Well, Actually

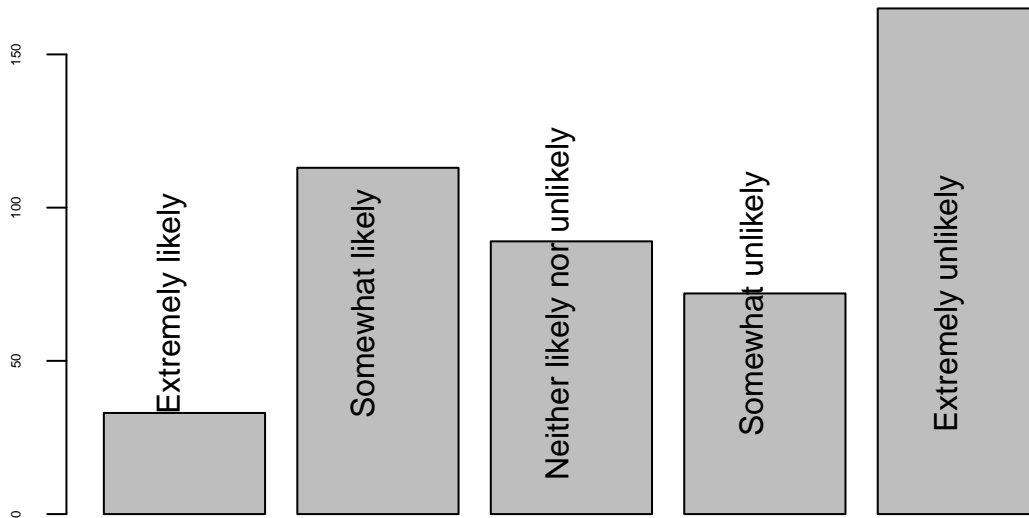
I asked three questions about the Well, Actually project: satisfaction, number of visits, and additional comments. The percentage of people satisfied with the well is 78.4 and the average number of visits was 3.8306122. The only complaints about the well relate to the filter clogging and rendering it hard to pump, noting that it started to leak or spurt out the top by the end of the week. Some individuals also wish that it could be easily operated by one person, though others comment that they like how its difficultly produced spontaneous collaboration.

Firefly 2019 Experience: Medical Contractors

I asked participants about their interactions with our medical contractors. 54.7% of participants report no interactions with the contractors. Of the 271 who did report an interaction, 177 said it was positive.

Looking Forward: Cargo Truck proposal

On last year's survey, a common thread in discussions of carpooling was that people could not carpool more because they needed to haul their stuff in their cars. This year, I asked respondents if they would consider renting space on a cargo truck, available to anyone attending the event, and instead pack their car with passengers.



I find that 29.5% respondents report that they are either extremely likely or somewhat likely to reserve space on that truck.

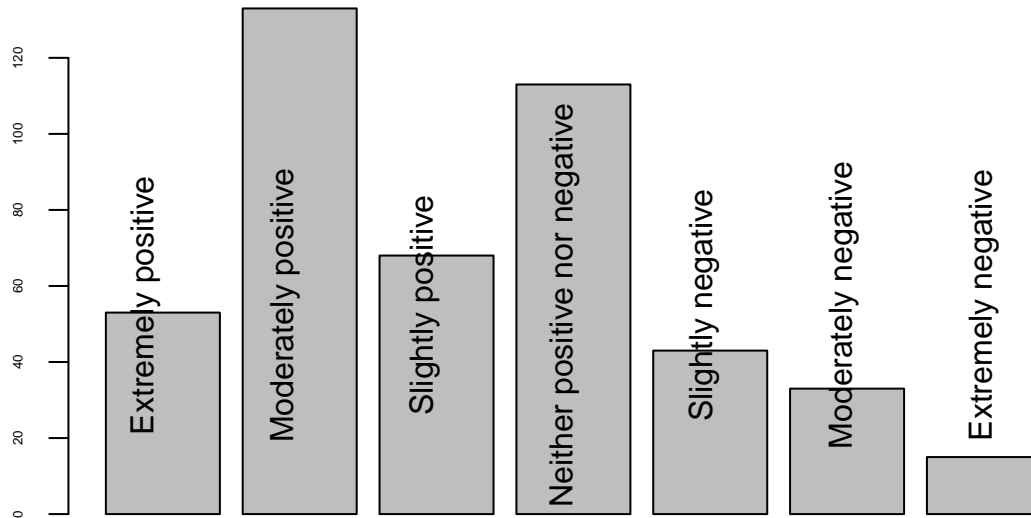
Looking Forward: Ticketing improvements?

Ticketing is a perennial source of contention. But how much of this is internet bluster? In fact, 397 people are either extremely or moderately satisfied, which is 86.7 percent of the people who answered this question.

One interesting suggestion is that by now we have very good data on ticket returns, so it might make sense to oversell tickets initially to help people make their firm plans earlier and then take some tickets out of circulation rather than return them to the waitlist.

Looking Forward: Facebook

After last year's event and again prior to this year's event, the Firefly Arts Collective Facebook group took on a negative tone. I asked two questions about the Facebook group, the first about approval and the second about an interest in some form of stricter moderation over the group. Overall, about 3 times as many people have positive views of the Facebook group as have negative views.



As well, 28.7% of people support some kind of stronger moderation of the Facebook group, while 23.6% oppose, and the remainder have no opinion. This does not seem like a mandate for stronger moderation.

My notes from reading comments

I read through a lot of comments and tried to summarize some of the key themes that are more prevalent this year than in previous years.

- 1) Theft. I'd never seen comments about theft before, but this year there were at least a dozen.
- 2) More comments than usual expressing lack of trust in the Board and in Conduct Committee. We learned last year that most people approve of ConComm when they know more about them, so maybe ConComm just needs to do some good PR.
- 3) A lot of calls to prioritize volunteers for tickets now that the waitlist didn't clear for the first time. I think maybe people need an explanation of why that's not in our values.
- 4) Lots of comments about size compared to previous years – calls to grow very slightly and stop, stay the same, or even reduce size.
- 5) Calls for more Porto infrastructure – tarps or shade cloths, in particular.