

# Exploring Evaluation Measures for Space Grant Behind-the-Scenes Labor

Space Grant P3 Meeting  
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# Format

1. Background (5 min)
2. Survey results (10 min)
3. Activity 1: Review Survey and Brainstorm (10 min)
4. Activity 2: Your Stories (10 min)
5. Wrap up and next steps (5 min)



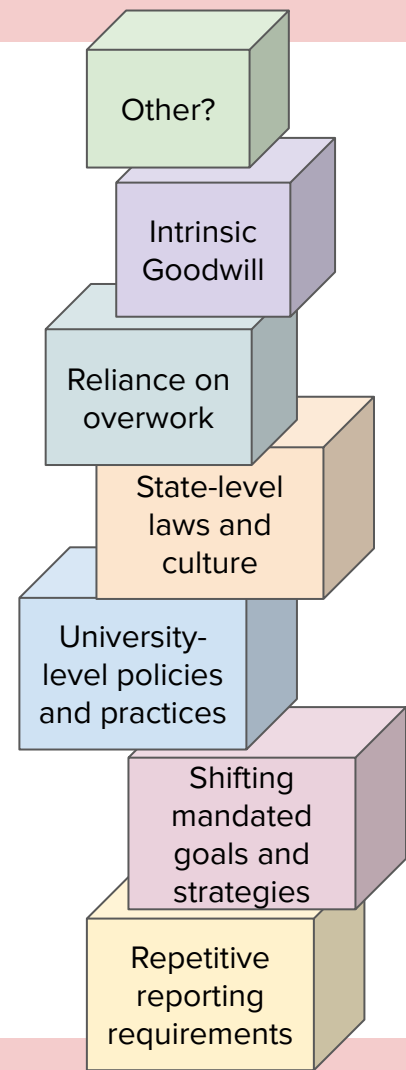
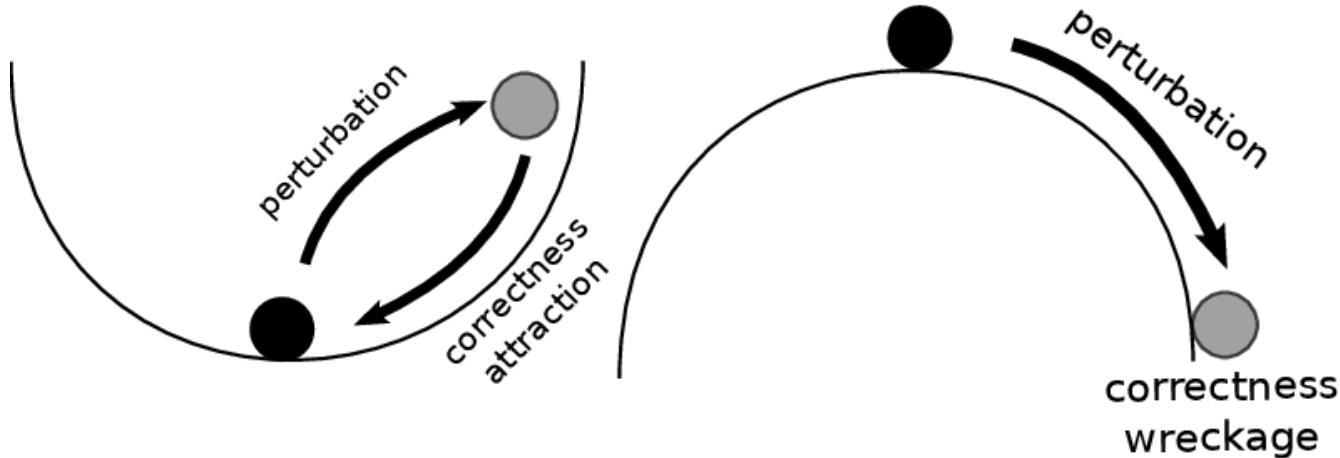
# Goals

1. Generate a better understanding of the “behind-the-scenes” challenges of Space Grant leaders and staff
2. Pilot test experimental evaluation questions
3. Crowd-source new evaluation questions for future assessment



# Motivation

While extant evaluation data shows that Space Grant ***impacts on students are meaningful and long-lasting***, the valiant ***"behind-the-scenes" efforts of Space Grant leaders and staff*** to achieve those student impacts ***may be unsustainable***. To what extent do burdensome reporting requirements, shifting mandated goals and strategies, university- and state-level policies and practices, and reliance on overwork and the intrinsic goodwill of Space Grant leaders and staff create an ***unstable equilibrium*** and/or ***risk to program outcomes over the long-term?***



# My Biases

- ★ I was a Space Grant Fellowship recipient as a graduate student and received Space Grant funds as a faculty member in the past.
- ★ I helped design the ASGC K-12 program and want to see it succeed.
- ★ I want to continue to contract with ASGC in the future for earth and space science education projects.
- ★ I want ASGC-supported student clubs to be healthy spaces for supporting diverse students.
- ★ I want ASGC's partnerships to be strong and synergistic.
- ★ I want ASGC staff to be healthy and fulfilled.
- ★ I live in Alabama and I want to have good relationships with other people who live here.
- ★ I have personally experienced burnout and feelings of exclusion and am emotionally attuned to spotting it (ex: “Hey, are you okay?”).

# Literature Review

- ★ Program Sustainability and Organizational Capacity (Ref: National Implementation Research Network (NIRN))
  - Ex: Short Program Sustainability Assessment Tool (PSAT) - can be used as a self-assessment for different programs within an organization. Included dimensions of: Environmental support, funding stability, partnerships, organizational capacity, program evaluation, program adaptation, communications, and strategic planning. Perhaps some survey questions could be adapted to a Space Grant survey?
- ★ “Mattering” and Validation Theory (Ref: Salazar et al. 2024)
  - Used for evaluating student affairs programming, especially for minority STEM majors
  - Accounts for feelings on significance and importance to others, with 5 dimensions:
    1. Attention, feeling noticed by others
    2. Importance, perception that others care about them
    3. Ego-extension - individuals believe that others will be proud of their accomplishments and concerned when they fail
    4. Dependence - notion that an individual depends on others and also feels needed by others
    5. Appreciation - an individual perceives their efforts are appreciated by other people
- ★ Red Tape and Administrative Burden (Ref: Campbell, J.W., Pandey, S.K., & Arneson, L 2022)
  - Used for evaluating public administration and political or governmental organizations

# Methods

- ★ Basic Exploratory Quantitative Descriptive Statistics
- ★ Basic Exploratory Qualitative Inquiry - discover phenomena through storytelling and in-depth meaning-making conversations with participants
- ★ Case study and cross case analysis - allows for nuance; considers the contexts surrounding the case.
- ★ Participatory Action Research (ref: [Cornish et al 2023](#)) - building relationships, establishing a common understanding of the issue; collaborative analysis

My job description accurately captures the effort I put into making sure I meet Space Grant requirements and produce desired outcomes for students.

- strongly agree
- agree
- slightly agree
- neutral
- slightly disagree
- disagree
- strongly disagree

I feel like it's hard to keep up with NASA's changing reporting requirements.

- strongly agree
- agree
- slightly agree
- neutral
- slightly disagree
- disagree
- strongly disagree

I feel like I have to frequently re-package the same reporting information in different ways.

- strongly agree
- agree
- slightly agree
- neutral
- slightly disagree
- disagree
- strongly disagree

I feel like I understand all of the policies and procedures that I need for accomplishing my job.

- strongly agree
- agree
- slightly agree
- neutral
- slightly disagree
- disagree
- strongly disagree

I feel cared for and valued by NASA.

- strongly agree
- agree
- slightly agree
- neutral
- slightly disagree
- disagree
- strongly disagree

I feel that I make a real difference in the lives of students and those I work with for Space Grant.

- strongly agree
- agree
- slightly agree
- neutral
- slightly disagree
- disagree
- strongly disagree



How much time do you estimate you spend on paperwork and reporting requirements per week, on average?

- Just a few hours
- About 1 full day
- About 2 full days
- About 3 full days
- About 4 full days
- More than 4 full days
- I don't know
- Other

The stressors of my job have caused me to think about quitting

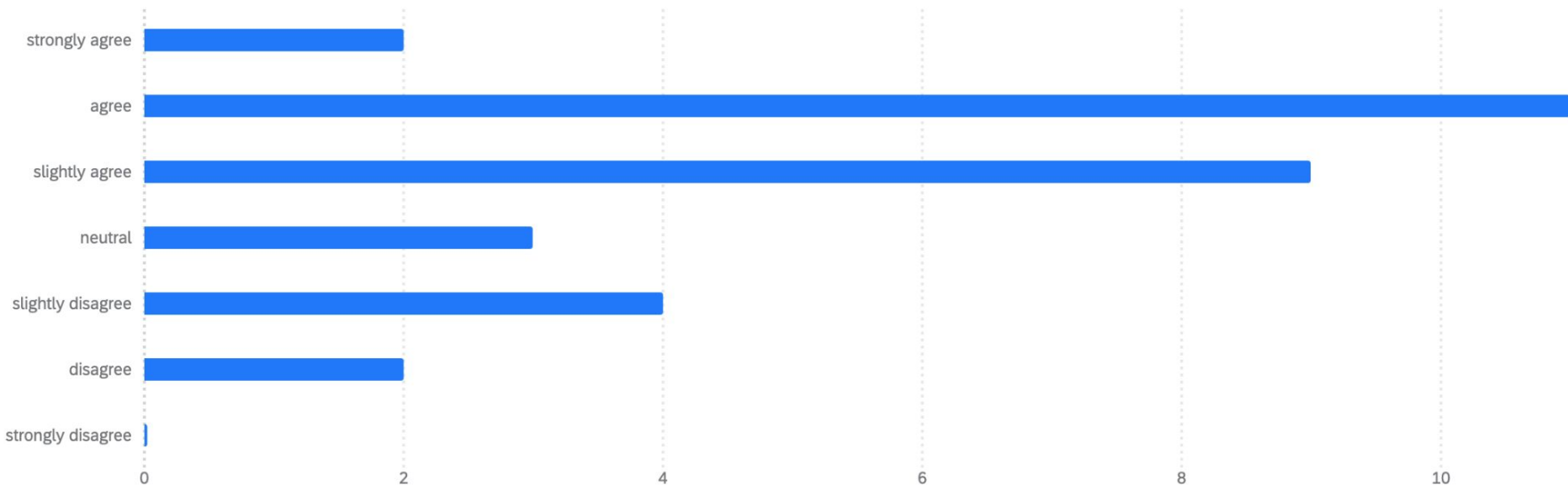
- Never
- About once a year
- About once every few months
- About once a month
- About once a week
- All the time

What is your favorite thing about working for Space Grant?

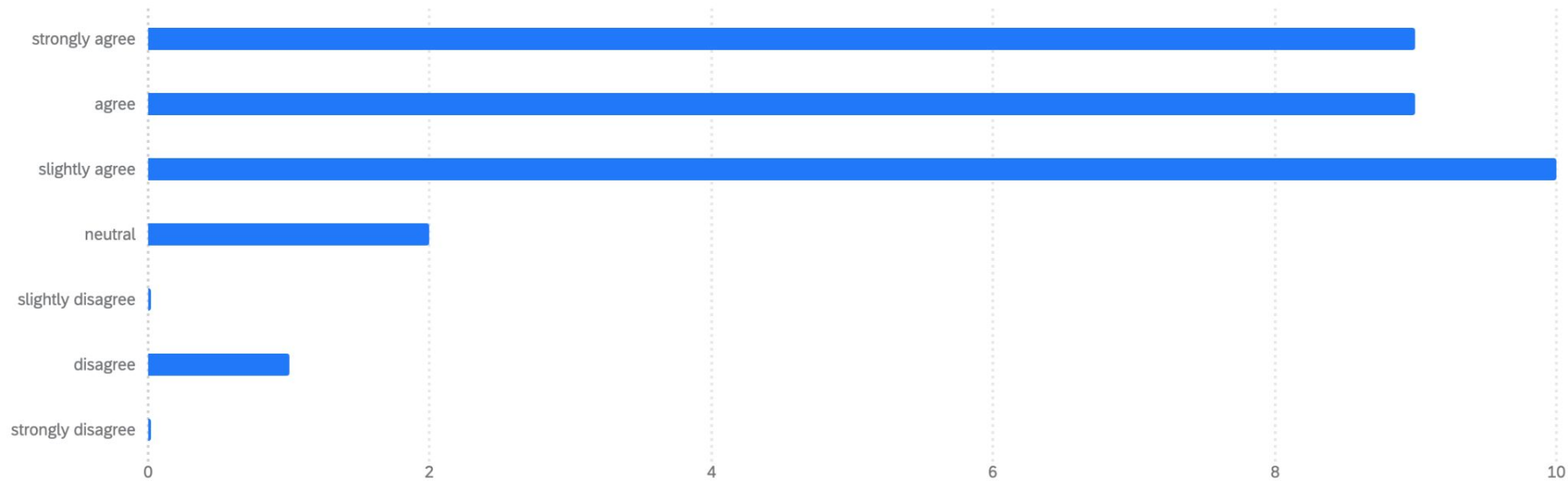
What, if anything, could NASA do to support your "behind-the-scenes" work?

Is there anything else you'd like to provide input on regarding your "behind-the-scenes" work that has not been mentioned previously?

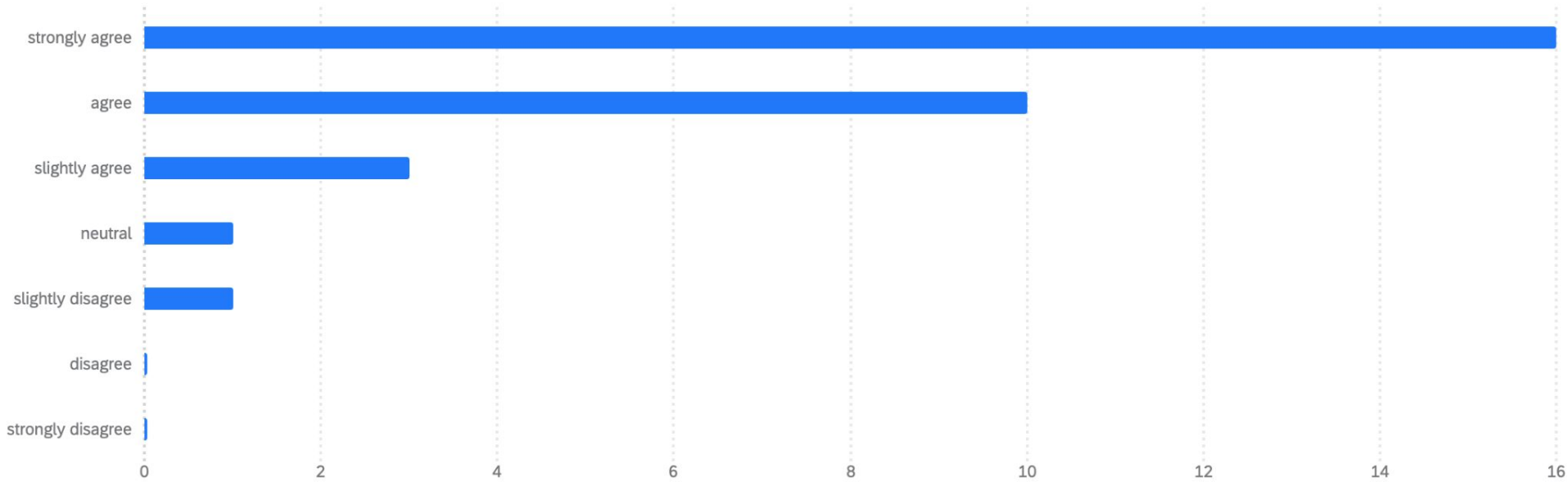
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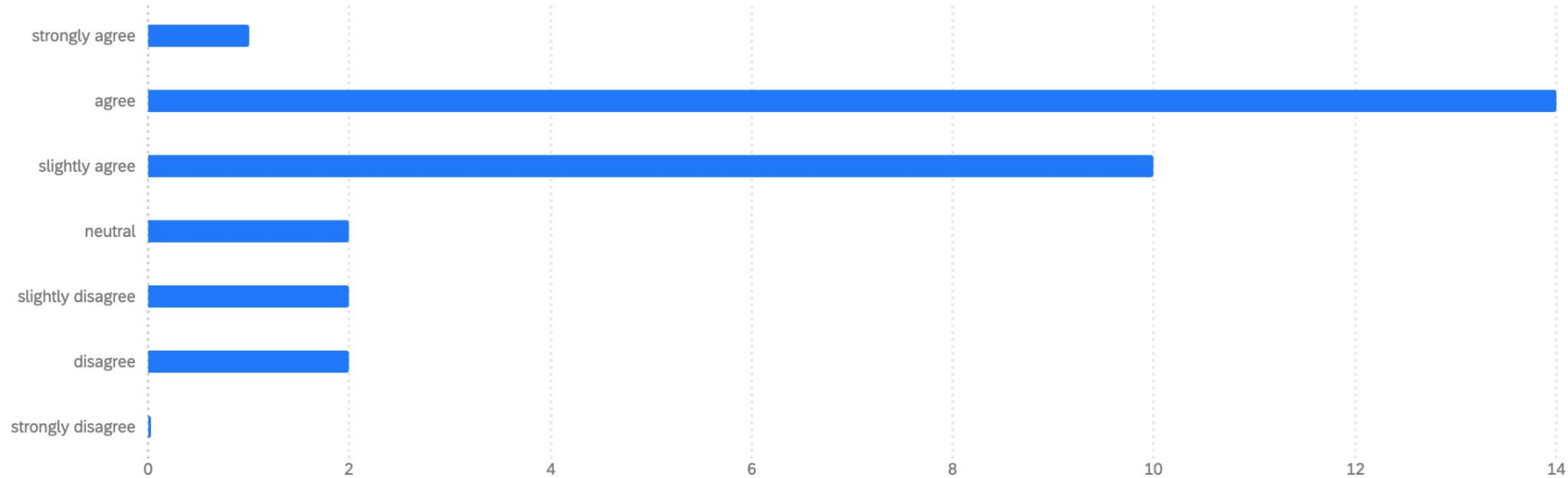
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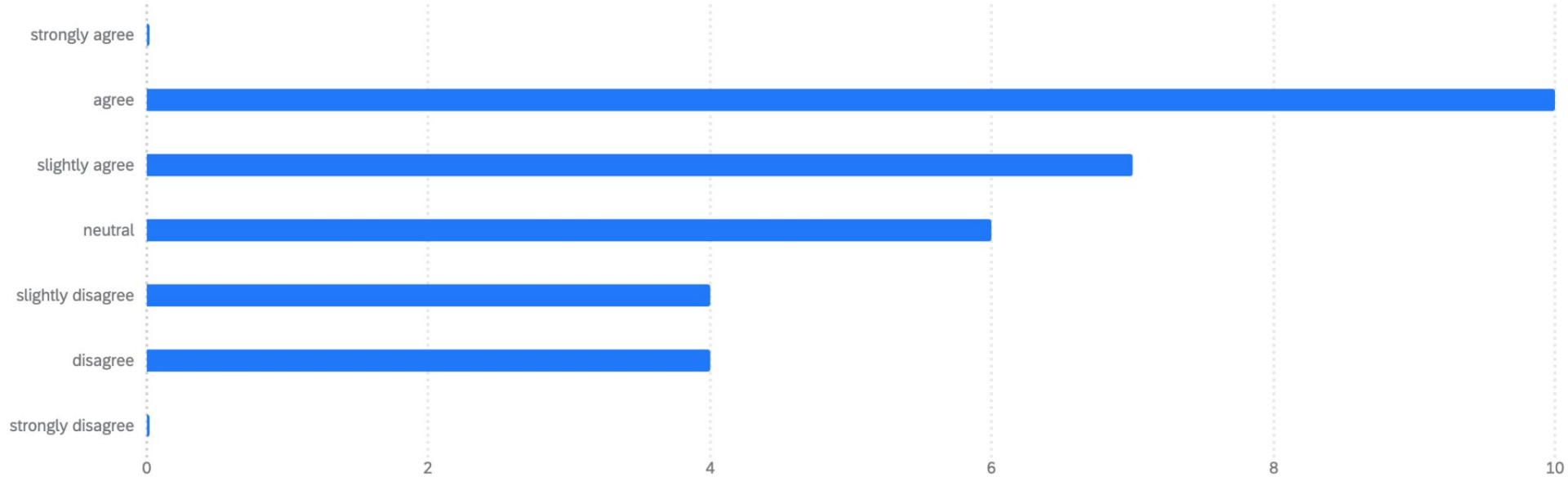
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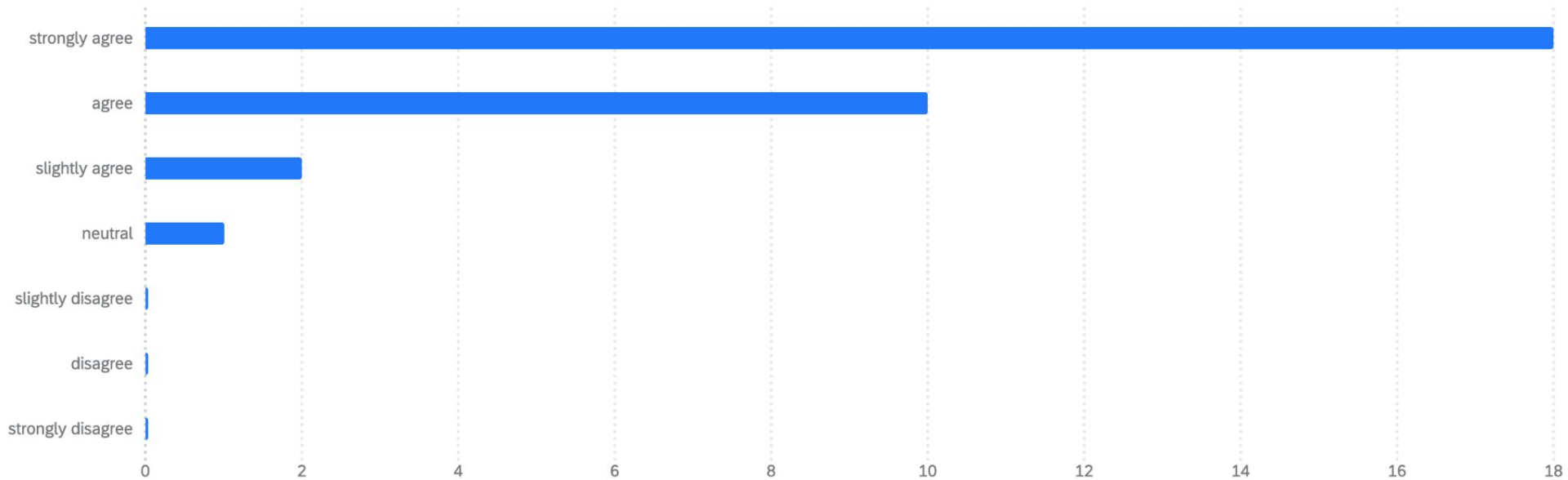
I feel like I understand all of the policies and procedures that I need for accomplishing my job.



I feel cared for and valued by NASA.

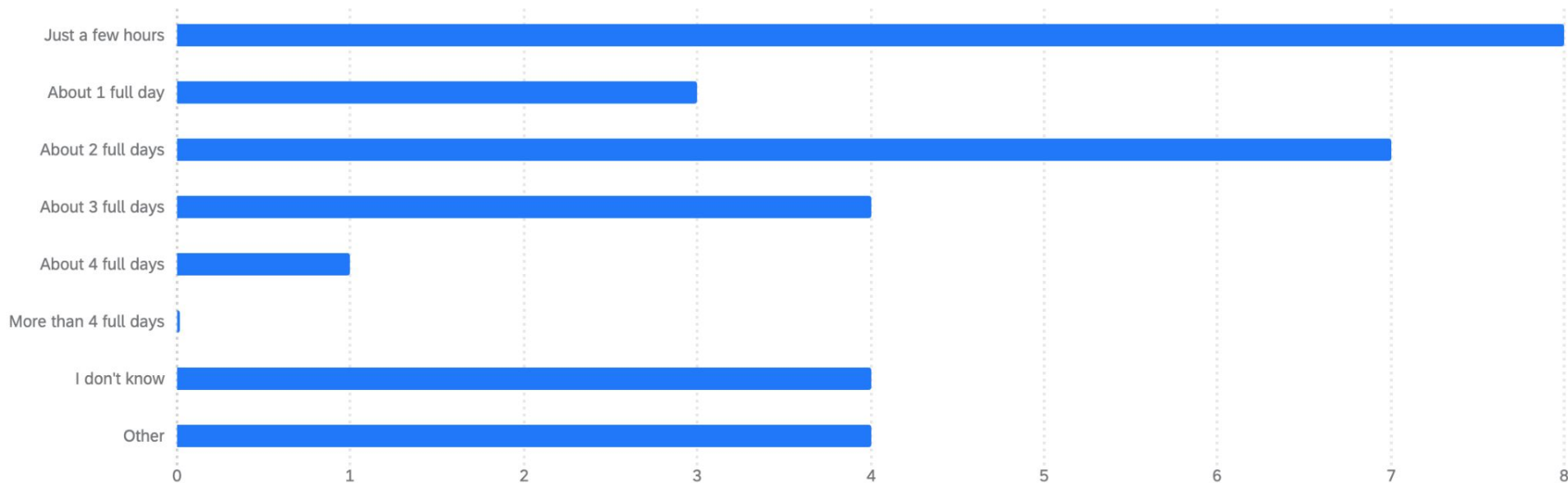


I feel that I make a real difference in the lives of students and those I work with for Space Grant.



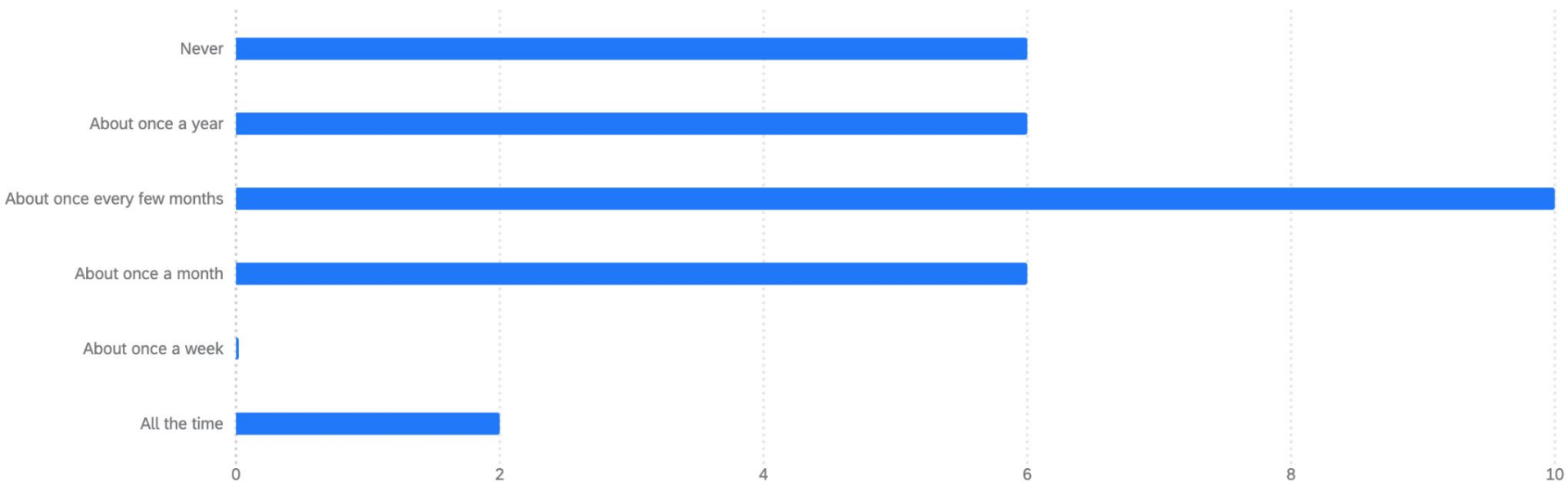


## How much time do you estimate you spend on paperwork and reporting requirements per week, on average?



Other: not sure yet (transitioning to new role); there are “major pushes” for a few weeks a few times per year in addition to the regular few hours per week making sure reporting is on track; unclear what “paperwork” means so not sure; less than hour depending on the time of year

# The stressors of my job have caused me to think about quitting...



# What is your favorite thing about working for Space Grant?

Helping students succeed and grow, seeing where they go after graduation, seeing the positive impact of Space Grant, especially for students who would not otherwise have them (ex: community colleges, smaller institutions); having students personally thank you

Being part of a collaborative and supportive environment with key team members and wonderful people in the Space Grant community

Doing “Good Work,” making a difference, creating new, real-world, hands-on opportunities, and having fun

Supporting a safe space in STEM, showing STEM is for everyone, making it more inclusive

Supporting the development of new technologies for NASA

Travel

Informal education and outreach is satisfying and enjoyable

Note: one comment indicated these enjoyable parts were becoming a smaller part of their job due to administrative duties

The satisfaction from tweaking programs based on student/mentor feedback and making them better over time.

# What, if anything, could NASA do to support your "behind-the-scenes" work?

Administrative effort is important and not necessarily wasteful.  
(value? mattering?)

Consider University- and State- level timelines and requirements; there is a big disconnect; Processing cooperative agreements and revisions can be highly disruptive with unknown time commitments (organizational capacity?)

Recognize that Space Grant has unique needs (ex: Gateway vs OEPM reporting; ex: different resources, capabilities, and support for NASA Centers vs Space Grants)

Streamline the excessive and repetitive reporting; paperwork burden (ex: don't require mid-year reports); stop changing the rules and timelines; faster response times (red tape?)

It should be properly resourced and valued, which may include hiring additional personnel.  
(organizational capacity?)

Better organize student internships, mentoring, and accommodating moving

Provide swag again!

Clearer communication; monthly webinars

Genuinely consulting with, listen to, and value the community; provide real feedback on reports and site visits; share how reporting data is actually used (mattering?)

Provide an active OSTEM Specialist

# Anything else you'd like to provide input on regarding your "behind-the-scenes" work?

A lot of time is needed to build relationships

Feeling like NASA expects more despite limited and reduced funding

How much minutia there is to keep everything running and working.

Requirements passed on from NASA tend to minimize (or sometimes erase) the state requirements and goals.

How much help is needed for the massive responsibility and long list of tasks (reporting, grant writing, new programs, applying for new Challenges, making sure billing is processing timely, setting up subawards and competitive internships, running the internship and fellowship program, including seeing up the competitive process, reviewing, hiring, payments, and more); Being responsible for some K-12 programs, ballooning program, setting up student events and workshops; Having a huge running list of "want to do in the future," and "want to improve," but never having the time to complete.

There can be tension between NASA Centers and Space Grants. With fewer resources, Space Grant can take a "bad guy" role in having to say no.

Endless augmentation proposals that take additional time and effort; too many meetings that waste time and budget for too little impact.

Due dates for reporting keep changing over the last 20 years; proposal submission increasingly stringent/difficult

Compensation is not the only piece of a satisfactory work situation. Feels like NASA sends a message of "what you've done is okay, but you need to do more/better in the future." More is required of the same resource pool.

Colleagues do not get their money because of burn rate to get augmentation rule.

**Activity 1:  
Review Survey &  
Brainstorm**

## Activity 1a: How well do you think these survey items are getting at the “heart” of your behind-the-scenes efforts?

One of our largest problems is getting our accounting office to bill NASA as quickly as possible so we don't lose our augmentation funds. I guess we should monitor the accounting office once per week.

I think they need to be shared with NASA HQ leadership so they can see our concerns.  
I second this.  
And get their feedback

We are told (and retold) what reporting we need to provide, and when, but not to “who”. It would probably help to know who the final audience is for our reporting, and how that is used. I think once they aggregate the data, it is congress.

Pretty well; I think we need to dig deeper on the “paperwork” because it's a big part of more than just reports and proposals.

Fairly well. A lot of administrative duties center around more direct support of our state students/faculty/institutions beyond NASA requirements. Maybe a different poll could more clearly separate the two.

Maybe I missed it but I guess I don't understand where this survey is coming from, who asked for it, or how it was intended to be used.

## Activity 1a: How well do you think these survey items are getting at the “heart” of your behind-the-scenes efforts?

I think the survey covered most items.

I think the clashing timelines  
(Federal/State/University, etc) need to be

Perhaps measure the way work is distributed. Fully localized to the lead institution team OR is administrative work shared across affiliates?

Seconded

How is your attitude related to the number of people you have on staff for Space Grant (which varies a lot from state to state)?

I think a lot of my behind the scenes efforts (beyond paperwork) have to do with checking in with students and mentors. That quality time that you spend to get to know them, make sure their research is going ok, attending their meet-ups and meetings. The survey asks a lot about paperwork and reporting but working with students often means a lot of behind-the-scenes labor has to do with “caring” too.

Something not captured is that we cannot control the quality or even completion of work outside our team. The time spent chasing faculty and students for reports and PIs/Accounting folks for invoices. It's exhausting and we don't get any breaks from NASA because of it.  
–(diff author) and now with Gateway I feel this has increased of making sure profiles are made for all participants.



## Activity 1a: How well do you think these survey items are getting at the “heart” of your behind-the-scenes efforts?

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Your text here [resize as needed]

Your text here [resize as needed]

## Activity 1b: What other questions should we be asking?

Ask for specifics on the activities that we are doing. For example: does your job include: Administrative tasks - writing proposals, reports, data collection, monitoring invoicing and spending, website maintenance, communication with affiliates, budgets, Outreach activities, Supervising students or other staff, etc.

Might be meaningful to ask what position the survey taker holds, if that can be done with suitable anonymity. I.e. as a coordinator, I know I do a lot less than my director or asst. director do most of the time, though sometimes it's more.

What % of the consortia's FTE are paid vs donated time (i.e. who is doing this work for free, as some affiliate directors often do).

Are you working more than you contracted time each week?

Estimate how many FTEs are working on administration, whether paid directly by your Space Grant or not. And related to that: does your institution waive or reduce indirect costs?

I do not understand the purpose of this exercise so I don't know how to advise on what else should be asked.

## Activity 1b: What other questions should we be asking?

How can you ever find space in a fixed/diminishing budget to take on additional staff for Space Grant?

Could we possibly out-source (or automate) reporting?

How can we better work with our NASA Space Grant regional specialist? (that might improve the feedback loop)

Seconded

Do you ever feel overwhelmed with the duties and expectations of your position with Space Grant?

This is more a question for HQ, but as we're transitioning to Gateway, will they maybe require less direct reporting, since our programs will be better reflected in Gateway?

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# **Activity 2: Your Stories**

## Activity 2a: What are some brief anecdotes of times that you have felt your behind-the-scenes labor was unsustainable?

We received a record-low number of proposals to several of our NIFs-funded programs this spring, which required me to re-open those programs (which means updating several documents, websites, funding announcements), recruiting new faculty to write proposals (which requires answering a lot of questions), and conducting another proposal review session, all during the time when I was supposed to be focused on writing the new multi-year proposal.

Seconded - us too regarding fewer submissions. In the busy spring, we did not get a chance to complete as many affiliate visits

Reporting is always lowest priority, especially when compared to something pressing like preparing to teach a class or run a program. Often I think “I don’t have time for this”, even if it is technically part of my job description. Perhaps I take on more elsewhere than I should, but that is the more-fun part...

I suspect this applies to many of the folks here, but SG is not my main job, but rather 10-25% of my job. My other work is often so demanding, taking 100-150% time in bursts, that it feels like a struggle just to get the basics done in the SG portion of my responsibilities.

Basically I feel this every time that I have to do a ton of student programming during evenings and weekends (observing nights, balloon launches, etc). When discussing how to balance all of this with my supervisor I was told to just take an hour here or there during the week to make up the time. A balloon launch weekend takes about 2 days worth of work on a Friday and Saturday and I don’t have time to ever “make up” the vacation hours. I perpetually don’t get to make it up, so I feel super burned out. (Sorry this is lengthy but I will also note that getting to leave an hour early at 4pm the next week after doing these events to “make up” my time does not equate to the full Friday and Saturday I don’t get to spend with my family. Not equivalent in my opinion.

Augmentation X 6

**Activity 2a: What are some brief anecdotes of times that you have felt your behind-the-scenes labor was unsustainable?**

text

text

text

text

text

text

## Activity 2a: What are some brief anecdotes of times that you have felt your behind-the-scenes labor was unsustainable?

Preparing for the site visit was difficult to shoehorn between other necessary tasks and took extra time (multiple days).  
100% agreement on this comment!  
\*\*\*\*\*Agree completely, too!!\*\*\*\*\*

Having deadlines for our site visit and our multi-year solicitation due the same week was awful (but coincidental).

Competitive proposal are important. But the constant recruitment of external reviewers is way too much effort. Especially since many of us are on the same cycles.

Preparing the augmentations with so many details that I am not sure anyone reads beyond the budget requests.  
Second this.  
Third this.

Submitting the proposal to our SPA office two weeks before the deadline but it not getting reviewed until the day before and working until 8pm so that it can be submitted on time the next day.

Every week is jam packed with critical and necessary tasks. The extra time spent attending the Better Together meeting has not been worth the effort and creates a backlog. Better Together in the middle of the semester impacted teaching a class. Would rather have it outside the semester.

## Activity 2b: Times that you invested extra time or energy (late nights, weekends, *beyond* your normal job expectations)

Presenting at Professional Development/Outreach events on Saturdays.

The expectation that responses to work related communication should be immediate even if after hours, on weekends, or on vacation.

To prepare for our site review last year, my Program Manager came to my house so that my husband could provide us with meals during about 3 weeks of 10-12 hour days. We had site review, 5th year proposal, 4th program proposal reviews/awards, and a sick colleague all at once.

Outreach activities, STEM fairs, etc. Always on nights and weekends.

Unlike those who turn in reports early, we are always scrambling and putting in long hours up to the deadline (and sometimes beyond the deadline). Never fun.

For the system before Gateway, I think it was OEPM, I entered the data at 7AM or weekends because the system wasn't slow at that time...so while it was odd times, it saved me time. Not a big problem.



## Activity 2b: Times that you invested extra time or energy (late nights, weekends, *beyond* your normal job expectations)

As of July 1st I had accumulated 6 weeks of vacation, because for the last year I've hardly been able to take a day off due to work demands, a staff team reduction, and a sick team member. I was literally dreaming about work, waking up with things to add to my to do list, or vague recollections of conversations like explaining EPSCoR eligibility to people. Argh!

The site visit was a major burden. I did not even understand how some of the questions differed from each other.

Often the only time to talk to people or do new programs is "off-hours" like evenings or weekends. Happens all the time.

Second this.

Multiple weeks of accumulated vacation because I don't feel I can take off and leave things. No space grant work gets done if I am not here.

No one to cover for me if I ever take time off.  
Ditto this...not a lot of staff here

Your text here [resize as needed]

**Activity 2b: Times that you invested extra time or energy (late nights, weekends, *beyond* your normal job expectations)**

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Your text here [resize as needed]

## Wrap up and Next Steps

- ★ Should we use the current survey results and try to get more responses or revise and collect data again?
- ★ How to include the qualitative input generated during this meeting?
- ★ Should we generate more qualitative data through interviews? (not sure there is time for a lot of one-on-one interviews, but maybe a focus group)
- ★ What kind of “final report” should be generated and how it should be used?  
Space Grant Directors decide?