AR | DC

AMATEUR RADIO DIGITAL COMMUNICATIONS

Grants Evaluation Team Findings
July 2025

Changes Over Time

In 2025, the Grants Evaluation Team (GET) was composed of 10 experienced ARDC volunteers, who were either former applicants, staff, and members of the public. In Q1 and Q2 of 2025, they reviewed 45 final reports submitted between April 2024 and May 2025 from ARDC grant-funded projects.

Each final report was reviewed by a subset of the volunteers and then discussed with the group to identify trends and learnings. The group met every two weeks for a total of six meetings to process the results. Like the prior year, the goal was not to perform a formalized evaluation; instead, the aim was to reflect on the work done from a variety of perspectives and provide the community with an opportunity to identify takeaways for themselves.

Last year, the GET was evaluating several years of final reports that had been submitted up until that point. This year, they were able to focus on recently submitted reports. This made it possible to follow up with projects for additional information, as well as see the impact(s) of recently implemented process changes.

The aim of this informal evaluation was to answer these questions:
- Were these grant projects successful and a good use of funds?
- Are the process changes we're implementing having an impact? If so, what are these impacts? If not, what are other process changes that we should consider implementing?
- What information should we be sharing back with our community?

Ultimately, the GET found that, compared to last year, an even higher majority of grant funded projects were successful and a good use of funds (84%). The process changes we've implemented may be having a positive impact - we're seeing fewer unknown outcomes and a very high rate of grantees complying with submitting their final reports.

Every final report sent into ARDC is now looked at by the GET and assessed to identify what information to share back with the community. We are excited to report that updates on project outcomes are now live on our website and will be consistently added to until all projects are updated. The GET has prioritized sharing out educational materials like curriculums, research papers, links to Github/Gitlab repositories, and other materials created by grantees as potentially the most valuable for the amateur radio and digital communications communities.
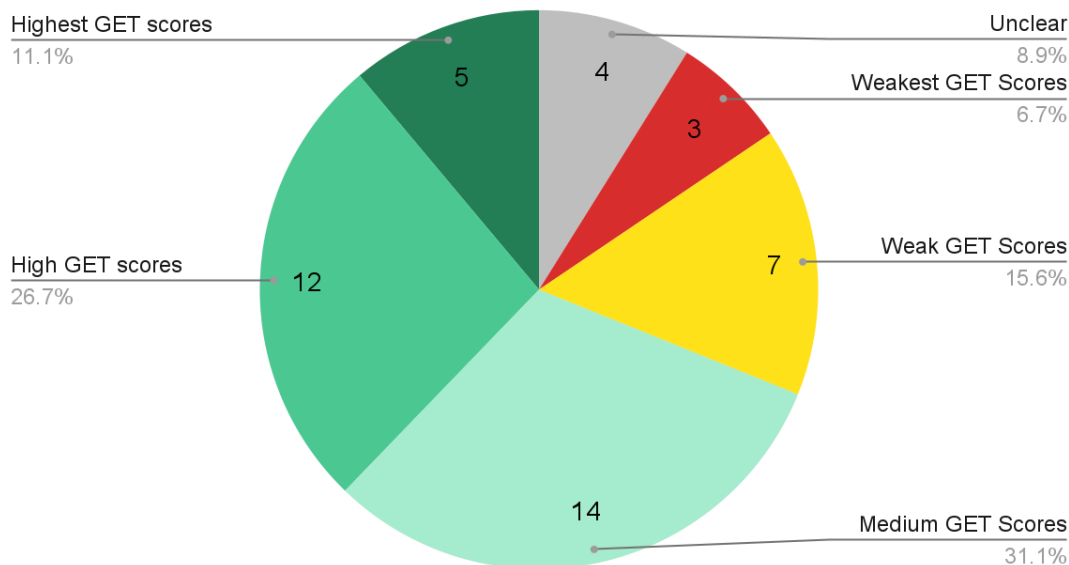
Final reports submitted between April 2024 and May 2025

Less Successful
6.7%

Unclear
8.9%

3

4

Successful
84.4%

38
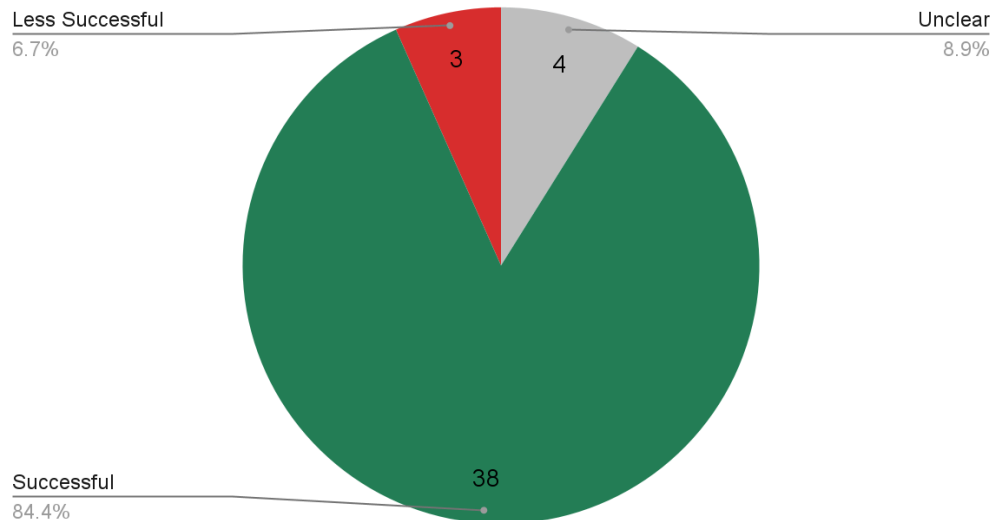
The chart above reflects the success rating of projects that submitted their final reports between April 2024 and May 2025. The GET evaluated the final reports and scored their outcomes ranging them from being not successful to strongly successful. A majority - 84% of projects (38) - had at least an acceptable amount of success towards reaching their goals and ARDC's goals. In the below chart, the portion of successful projects is broken down by degree of success.

Detailed Success Breakdown by Number of Projects

Highest GET scores
11.1%

Unclear
8.9%

5

4

Weakest GET Scores
6.7%

3

High GET scores
26.7%

12

Weak GET Scores
15.6%

7

14

Medium GET Scores
31.1%

The GET assessed each individual project and final report across two metrics - was the project successful and was it a good use of funds? Both of these metrics were rated from "strongly agree" to "strongly disagree."

The answers to these two questions were averaged and turned into the information in the chart above. Projects that received perfect scores of "strongly agree" got the highest GET scores. Projects with weak GET scores (in yellow) averaged a "weak agree" score. Only three projects (indicated in red) received average scores of "weak disagree" or "disagree." The number of projects is shown in each pie slice. 45 total projects are represented.

Recent Changes Have Resulted In Fewer Unclear Outcomes
The most notable change over last year is that the most recent batch of final reports have significantly fewer unclear outcomes. Unclear outcomes dropped from 22% in 2024 to 8.9% in 2025. Of the unclear outcomes above, all are from grant proposals submitted to us before 2022.

This improvement could be due to a number of factors. At the recommendation of the prior year's GET, ARDC implemented a number of changes to add clarity to our application questions, final report questions, grantee instructions, and communications. The hope was that the updates would help grantees clearly identify their goals at the beginning of a project and then communicate back with us if they met those goals or not. It is likely too early for the full effects of some of these changes, namely updated instructions for grantees to identify their goals at the beginning of their project, to show up in these results.

At the same time, last year's large number of unknown outcomes could have been inflated because of COVID. We know that COVID disrupted staffing, volunteering, supply chains, and many other aspects of carrying out a grant. As a result, projects from this era may have had a more difficult time tracking and communicating results. Lastly, as ARDC's grant making has become more competitive, the grants that are awarded may now be going to groups that are better prepared to track outcomes report back.

More Successful Outcomes

So far this year, the GET has found a significant increase in the number of successful projects, from 71.4% to 84.4%.

As we saw the number of unknown outcomes decrease, we saw the number of successful outcomes increase. This supports the stance that it would not be accurate to assume that unknown outcomes mean a project went poorly - it could mean that a group was good at carrying out a project, but not good at documenting it.

The proportion of less successful outcomes stayed the same as last year (6.1% last year, 6.7% this year). Similar to last year's GET, this year we found no evidence of any project that had

absolutely no success or learnings. Each project that reported back to us was able to accomplish something, even if it fell short of what it had hoped to achieve.

Strategies for tracking longer term outcomes

The GET previously identified that tracking longer term outcomes could be especially beneficial for some types of projects. This year, the GET worked to generate a list of possible strategies to get information on those longer term outcomes.

While knowing the long-term impact of all of our grant projects could be useful, there are certain types of projects that do not have clear results at the end of a grant. In particular, these include research projects, museum display projects, and emergency communications projects.

Research and Development Projects
Challenge: For R&D projects in particular, it could be many years before the discoveries made by the project are used by others. This makes it hard to determine the value of a funded research project.

Proposed solution: Not all research is expected to be used in the long run, but checking periodically to see if any ends up having exceptional impact is likely worthwhile. Checking for how many times ARDC-funded papers are cited several years down the road can be a way to show impact on the field. Software tools exist that could allow ARDC staff or volunteers to quickly check a list of papers to see if they have been cited. Additionally, projects with information on GitHub and GitLab can be checked for activity to see if there is a community still involved with a project. The GET proposes generating a list of these projects and checking them once every two or three years. This is an activity they are interested in doing during the remainder of this year.

Museum Projects
Challenge: Projects that put displays about amateur radio or digital communications into museums send in their final reports when the exhibit opens. While historical data on visitation to a museum can show likely future impact, reaching out to museums one year after a project is funded to see if the exhibit is still in place and used for any field trips or other activities can provide better information.

Proposed Solution: It may be useful for ARDC to reach out to past-funded museums to see if their exhibits are still in place. This could start as a one-time check to establish a greater sense of certainty around these kinds of projects. For example, if 90%+ of exhibits are still in place one year later, it is reasonable to assume going forward that historical, one-year visitation numbers are a reliable indicator of impact.

Emergency Communications Projects
Challenge: The full impact of projects that seek to improve emergency communications infrastructure can't be known at the end of a grant when the infrastructure has been put in place. Instead, the real impact comes later in the form of training and education for people using the system, and utilization of the system during emergencies.

Proposed Solution: The GET proposes that ARDC send out a brief survey to projects that have been in operation for a couple of years to ask if it was used in an emergency and if training and readiness is still ongoing. Stories of impact where equipment was used in an emergency would be useful for promoting amateur radio as a service, and would be good evidence to continue to fund this kind of project.

Other long term impacts
ARDC could undertake a number of other strategies to assess long-term impact including:
- Checking if amateur radio clubs are still active a year or two after getting an ARDC grant as a way to see if ARDC-funded equipment is being used.
- Surveying amateur radio clubs to see if they experience growth in membership or more activity after getting an ARDC grant.
- Following up with educational classes and having continued reporting on class sizes or licensing numbers.
- Checking GitHub/GitLab repositories to see if they remain active after ARDC supports an open source project.

These strategies would involve reaching out to a large number of past grantees and may not have as good of a return on effort as the ones identified above. At this time, the GET and staff recommend focusing on research and development projects, museums, and emergency communications as mentioned above.

Changes in trends from last year

As funding for projects has gotten more competitive, are we selecting projects that are having more success?

No. In this batch of final reports, we are not seeing any clear trend where more recently selected grants are getting higher evaluation scores. Our takeaway is that grantees have been doing high quality work since the beginning, and that has continued. We are not seeing any indication that we've more recently been funding "even better projects." This likely means that as our funding has gotten more competitive, we've had to reject more projects that likely would have accomplished good work.

Below, you can see the outcomes for projects evaluated in 2025 vs. 2024. As unknown outcomes have decreased, we've seen varying degrees of success increase across the board. There has not been a sudden increase in projects getting exceptionally high evaluation scores, and there is no clear trend when the 2025 projects are sorted by date submitted.

There is a small cluster of three longer-term, high dollar projects that started in 2021/2 and closed in 2024/5 that had some of the highest scores. These include projects from Case Western University (to replace a tower), Deep Space Exploration Society, and Internet Archive. This may indicate that large, ambitious projects that need a few years to be completed can end up being a good return on investment.

The below charts compare this year with last year's detailed success rating breakdown. Keep in mind that 2024 includes a larger number of evaluated final reports (99) from a longer time frame. It appears that there has been no significant shift towards a larger proportion of high scoring projects.
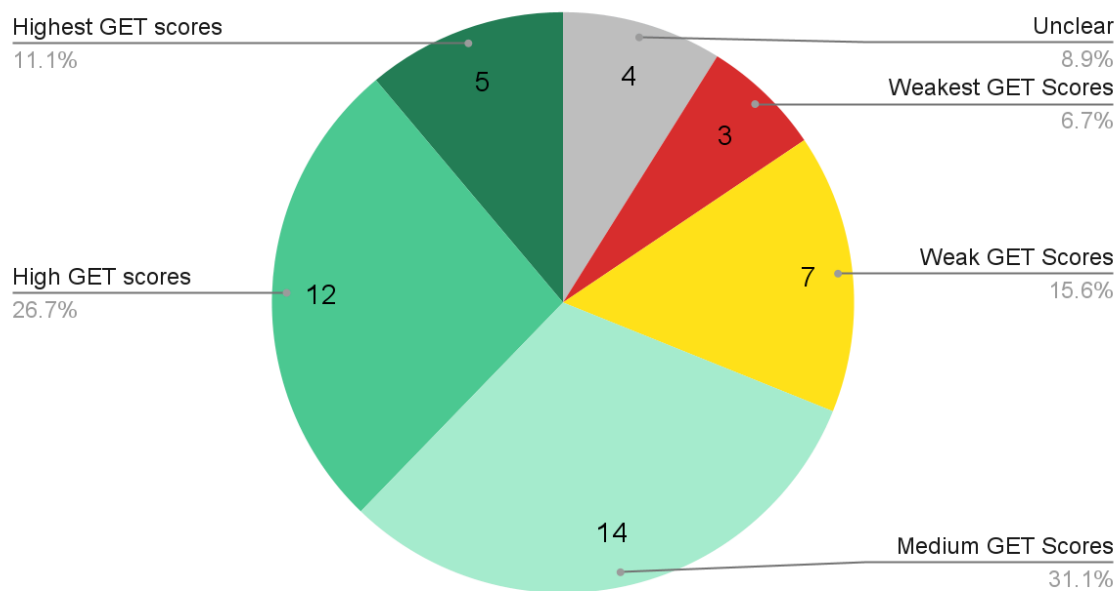
ARDC Proposal Acceptance Rate Over Time

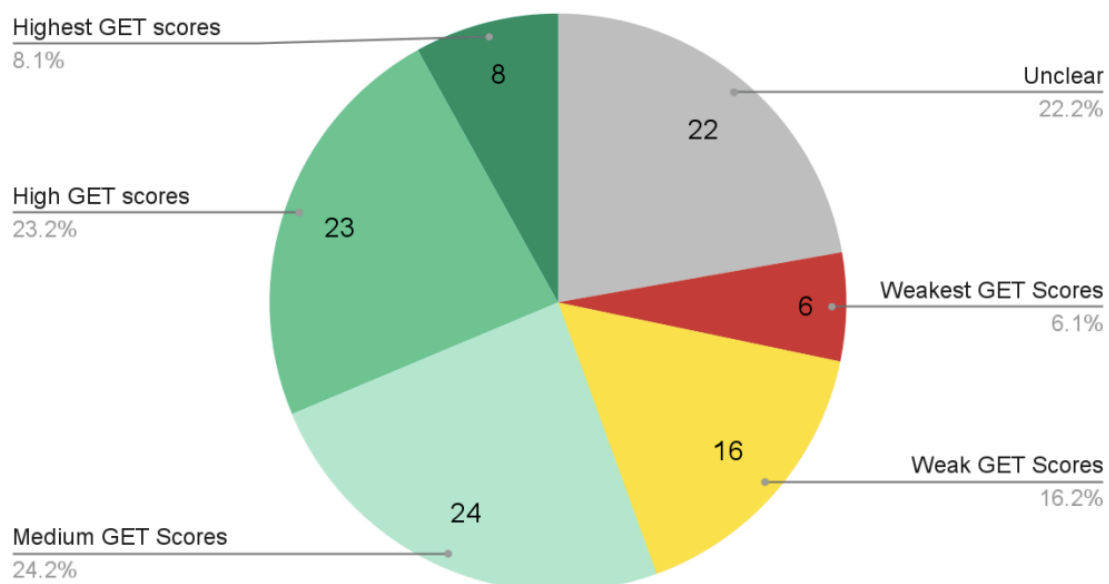| 2022	46%
2023	34%
2024	28%

The above table shows how ARDC's project selection has become more competitive over time.

2025 - Final Reports Submitted in the Last Year (between April 2024 and May 2025)

Highest GET scores
11.1%

High GET scores
26.7%

5

12

4

3

7

14

Unclear
8.9%

Weakest GET Scores
6.7%

Weak GET Scores
15.6%

Medium GET Scores
31.1%

2024 - All Final Reports Submitted before April 2024

Highest GET scores
8.1%

High GET scores
23.2%

Medium GET Scores
24.2%

8

23

24

22

6

16

Unclear
22.2%

Weakest GET Scores
6.1%

Weak GET Scores
16.2%

Ranking	2024 Number of Projects	2024 Percentage	2025 Number of Projects	2025 Percentage
Highest GET Scores	8	8.1%	5	11.1%
High GET Scores	23	23.2%	12	26.7%
Medium GET Scores	24	24.2%	14	31.1%
Weak GET Scores	16	16.2%	7	15.6%
Weakest GET Scores	6	6.1%	3	6.7%
Unclear	22	22.2%	4	8.9%

For this batch of evaluations, which kinds of projects were most successful? Which were less successful?

- Education projects at schools and universities remain high scoring and make up 3 out of 5 of our highest scoring projects. Our other highest scoring projects include internet archive's efforts to build out DLARC and the Deep Space Exploration Society facility upgrade. These two findings support the general impression that our volunteers are most excited about large, ambitious projects like DLARC and DSES, and small dollar classroom education projects with involved teachers.

- Many medium-sized amateur radio infrastructure projects and scholarships fell into the high scoring range this year. The clear, positive impact of scholarships on students and excellent community engagement of some of our most common types of infrastructure projects kept these projects high scoring as well.

- Research and development projects have far fewer unknown outcomes than in our last evaluation, but the outcomes tend to be rated as medium or weak. It seems that for these projects, it's now much easier to see if they met their intended goals or not, but the impact of reaching those goals may be more nebulous or long term. The GET expects that R&D projects are more risky, and expects that these outcomes may be less clear in the short run. The current level of success for these projects is acceptable to the GET given these factors.

- Of the weakest scoring projects, one was a R&D project where the grantee had to dramatically change a number of goals after the grant was awarded, making it difficult to evaluate in the end. Another was an education project that ran into a number of obstacles and had limited success - failing to attract the number of students it had hoped to, running into challenges with hands-on activities working correctly during the class,

and no plans to pivot or continue the classes. This project was able to positively impact some students, so it was not a complete loss.

Final reports that were never submitted

New this year, the GET requested information regarding the number of final reports that were never submitted.

We found that over all time (2019 - Present), 6 out of 199[1] projects failed to complete a final report. That's 3% of projects. These are grantees that, after numerous attempts to contact them, never responded about what happened with their projects in any way.

In most cases, we do not know why a final report was never submitted. In a few cases, we do. In one instance, the lead on the grant application suffered a stroke, and no one else was available to complete the reporting. In another instance, a project was student-led, and it appears that the students graduated without completing the report.

Most of the missing reports seem to be from 2020/2021. The COVID-19 pandemic may have played a role in why some of these reports are missing. At that time, we saw frequent disruptions to staffing and volunteering. We also have automated our final report collection since then to have an escalating series of reminders which may also have helped with reminding folks to reply to us. Since 2021, our reporting requirements have also changed to be clearer and communicated more frequently.

The GET's recommendation is that the percentage of missing final reports is not significant enough for staff to invest additional efforts into reducing this number.

Suggestions for Continued Process Improvement

In addition to the trends mentioned above, a few common issues stood out to the GET.

For the Board and Grants Advisory Committee to consider when selecting which projects to fund:

- Site permissions should be secured and documented before a grant is awarded. Too many grantees end up not having permissions to install antennas or a repeater. In some cases, having the applicant identify a back-up plan for the funds could be a good option

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[1] Over the last two years, the GET has reviewed final reports from a total of 144 out of 199 completed projects.

if their permissions are still in negotiation. For example, universities may need extensive permissions that would be difficult to get in advance. A back up plan for funds can prevent funds from sitting unused or needing to be returned years later. Alternatively, if a project is large enough, ARDC may want to choose to make an award conditional upon receiving approvals.

- The GET noticed a few trends with sustainability that may be useful for the GAC and Board to consider. Mainly, having a strong, active group of volunteers participating in an organization is key for long term sustainability. Oftentimes, projects run into issues because there is no succession plan for leadership in a project or at an organization. Unfortunately, having something happen where the lead on a project is no longer able to do so is not unusual. For larger club and volunteer run projects, making sure there is a plan to maintain a healthy and growing membership is essential, as well as multiple people who can take over leadership on a project.

- For education projects in particular, classes are not guaranteed to occur multiple times in the future. One consideration is if a project is worthwhile as an activity that occurs as a one-off versus something that occurs over time. In the case that ARDC would expect an activity to happen multiple times in the future to make the cost of the project worthwhile, getting clarity that this is the grantee's intention will be a good step. In some cases, it may make sense to extend the project timeline to allow a class to be taught a couple of times before the project ends and reporting happens.

For ARDC Staff to implement

- ARDC should add tagging to online grant descriptions to make these more searchable and usable for future applicants and those hoping to use the results of grantee work.

- Grantee final reports have a large number of suggestions for ARDC. Our new final report form has encouraged more people to respond to the feedback section. Since we have recently made a number of changes to our instructions, a next step is to look at the most recent suggestions and incorporate any needed tweaks to make sure no areas are confusing.

- Clarify in the final report instructions that we'd like to know if there were any unexpected outcomes. The new questions focus on outcomes originally identified, and this may lead to grantees thinking we don't care about unexpected benefits or challenges.

- Sharing examples of metrics that applicants could consider tracking may be helpful for planning for their project and eventually writing their final report. These would not be required, but could be helpful examples when applicants are planning.

- Ask in the final report for grantees to share if they plan to continue the work. In the case where equipment is used for multiple rounds of a class or for multiple years in a row, it makes the value of the project much higher.

Follow up from the 2024 GET Findings

One main goal of continuing to convene the GET in 2025 was to make sure that ARDC was staying accountable on identified action items from 2024. Now that one year has passed, we are happy to report that all action items are complete with the exception of a few that are in progress:

- Add examples of both good proposals and good final reports to our website. This will hopefully help grantees know what is expected of them. (DONE)

- Incentivize grantees to provide audio, photos, or a video walkthrough at the end of the project by offering to elevate their work on our website and expressing that these materials are preferred. (DONE)

- Update the grant application form to ask how outcomes will be measured and what difference the project is trying to make. This will make it easier for the grantee to assess at the end of their project whether or not they reach their original stated goal. (DONE)

- Update the final report form to ask grantees to compare outcomes to their originally stated goal. Prompt the grantee to describe how unexpected project changes impacted outcomes. (DONE)

- Staff will ideally review and respond to final reports when they are submitted, rather than waiting to review in batches. This would enable ARDC to take action to resolve issues and follow up with the grantee on project-specific questions to better understand impact. Volunteer subject matter experts can assist staff in understanding final reports. (DONE - With the conclusion of this report, ARDC is "caught up" on reports submitted in the last year and is now responding to final reports as they are submitted.)

- Curate the final report form based on the dollar amount funded and type of work proposed. For example, R&D projects have more questions to answer than a simple repeater project. In the first case, the final report serves many purposes for internal learning and potential communications. In the second case, the final report can be very brief and serve as a compliance check. (DONE for R&D, ultimately we decided not to customize based on dollar amount at this time.)

- Airtable (the software previously used to collect final reports) is not the best tool for the job. Future final report collection will happen in Hypha (our grant application software) to make it easier to view and document project and budget changes. Final report

requirements will continue to support and encourage formats other than written documents. Keeping reports in the same software as our applications will make it easier for the GAC, the GET, staff, and grantees to find the information they need in a user-friendly manner. (DONE)

- Develop a plan for tracking longer-term impact of grants. For example, a museum display may open, and that may be when ARDC gets the final report. A year after the project closes would be a better time period to understand long term visitation. (DONE - see plan above.)

- South America, Africa and Asia are currently underrepresented in ARDC's grant making. This can only be changed with a more aggressive, targeted outreach strategy. A first step might be to set up regional points of contact or "ARDC ambassadors" who can reach out to their regional organizations, attend fairs, ham meetings and conferences, publish articles in local communication media, etc. (IN PROGRESS - This targeted international outreach is scheduled to be a focus for staff in the summer of 2025.)

- The US has many territories in the Caribbean and the Pacific, including Puerto Rico, Guam, and Saipan that ARDC may be able to target to expand new grant making with minimal cost. (IN PROGRESS - This targeted international outreach is scheduled to be a focus for staff in the summer of 2025.)

Other GET Work

One main goal of the GET in 2025 was to read through final reports and identify any cases where it may be helpful for ARDC to take action, whether to get additional information to reduce unknown outcomes, offer assistance if needed, or to collect and promote useful materials.

So far, the GET has been incredibly helpful to staff in assisting with these tasks. In one case, a grantee assumed that they could not continue with their work because the grant end date had passed. In their final report, they stated that they were disappointed to only partially have been able to meet their goals. After reviewing in detail, the GET recommended staff reach out and clarify if the grantee understood that they could extend their timeline. After doing so, the grantee was pleasantly surprised and resumed work instead of returning funds. This level of detailed reading between the lines for 315 projects could not be accomplished with staff alone.

In three cases, the GET identified areas where requests to share out materials like lesson plans could benefit the public. In one case, the GET discovered that a teacher had left a school in the middle of a two year program, meaning that a project wasn't actually completed in full.

In total, the GET identified areas for action or follow up questions with an estimated 10% of final reports.

Lastly, and most helpfully, the GET provided clarity on project outcomes for staff, which was particularly useful for writing descriptions of project outcomes that are [now published to our website.](#) Having the GET discuss which parts of a project were most interesting or important helped staff know what to focus on for these updates.

Going forward, the GET will assist with responding to final reports as they come in and continue to provide staff with guidance on interpreting results. They will also investigate longer-term impacts as mentioned above and assist with progress reporting for R&D projects that require expertise to understand their work.

Successful Projects vs. A Good Use of Funds

GET Members scored projects based on two broad questions - was this project successful, and was this project a good use of funds?

Success was defined broadly as advancing both the grantee's goals and ARDC's goals in some way - we intended to leave this open-ended to incorporate unanticipated impacts. We also wanted to capture the different perspectives and values of the various GET volunteers who represent the amateur radio and digital communications communities we serve. "A good use of funds" was similarly left open-ended for individual interpretation and discussion.

For the vast majority (71%) of projects, if a project was scored as successful, it was scored equally as a good use of funds and vice versa. However, there were several projects where this was not the case. In general, these differences were minor – a "strong agree" versus "agree" vote, for example. These minor differences reveal trends in both what ARDC likes to see in a project and results that cause hesitation.

The projects that scored lower for success but higher for a good use of funds were all education programs that got particularly strong scores for being a good use of funds that out paced the programs success. For example, ARDC funded a 4-H youth program that had difficulties engaging the youth participants in the radio aspects of the program, but had a lot of success with other STEM topics like microcontrollers, coding, and robotics. Given that the grantee learned from the pilot class and still managed to provide high-quality STEM education for 30 kids, there was consensus among the GET members that the project was less successful at promoting radio, but still a good use of funds.

Several projects got notably higher scores for success with lower scores for being a good use of funds.[2] These projects tended to have low reach (2), uncertain long term benefit (2), unclear

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[2] In one unusual case, a project scored exceptionally high for success for putting up a repeater network and documenting the work extremely well, but given that it was not a particularly exceptional project in terms of impact, it only got high scores for being a good use of funds.

community impact (2), or seemed to end up being unnecessarily high cost (2). One project did not finish their work and had to return funds. For the work that was partially completed, it was difficult to assess if it was useful to the community.

A common theme with regards to a number of these factors - cost, reach, and long term benefit - was the value of a project occurring year after year. This motivated the suggestion to ask grantees to tell us if they hope to continue their work.

Conclusion

Despite GET focus on areas for continual improvement and areas of risk, the general impression is that ARDC grantees are doing great work to benefit our communities. Compared to last year, confidence in this work continues to grow.

Our staff and GET members were not surprised to see that most projects were successful to at least some degree - our applicants are highly motivated groups of volunteers and service driven nonprofits hoping to achieve something worthwhile for their communities. We are honored to be a part of what they accomplish, and our hope is that this information will enable us to continue to improve how we support them.

Appendix A: List of GET Members

A huge thank you to our Grants Evaluation Team volunteers! We could not have done this work without your time and helpful insights.

- Willi Kraml – *OE1WKL*
- Scott Czeck – *KC1GHT*
- Darryl Smith – *VK2TDS*
- Lad Nagurney – *WA3EEC*
- Don Prosnitz – *N6PRZ*
- Dan Romanchik – *KB6NU*
- Wayne Heinen – *N0POH*
- Falcon Momot – *AF7MH*

Appendix B: GET Scores & Success Rating By Dollars
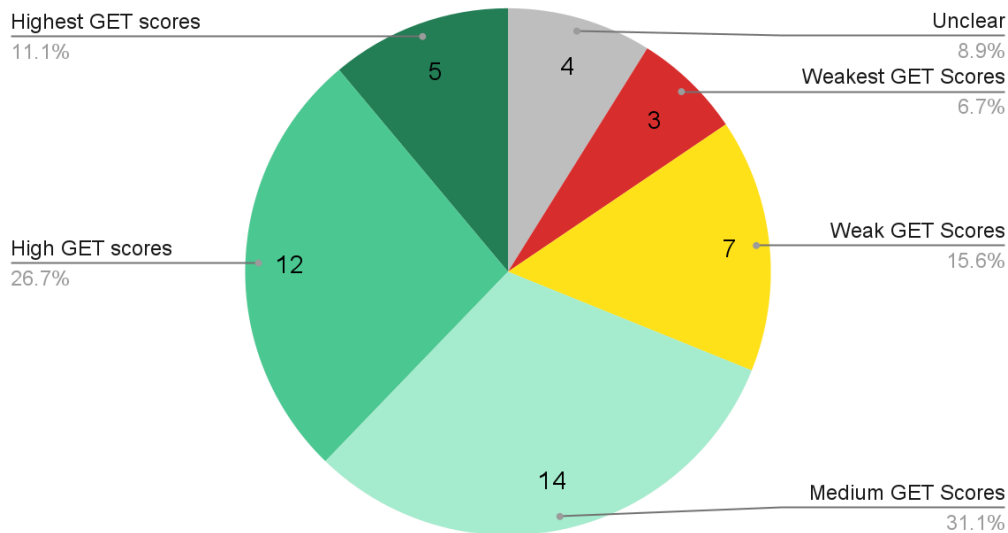
Detailed Success Breakdown By Dollars
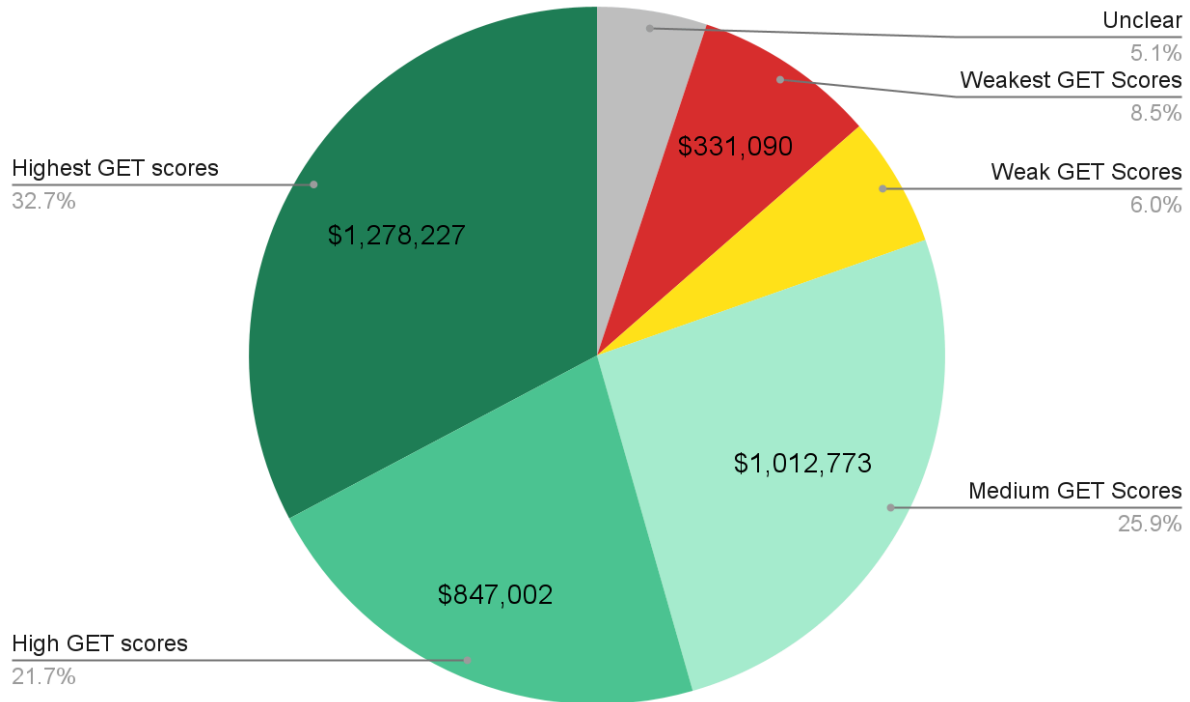
The portion of "Highest GET Scores" makes up almost a third of our results by dollars, mainly because of the Internet Archive project, which was awarded nearly $900,000. If this outlier is removed, then this section makes up 12.9% of our outcomes by dollars - similar to looking at it by number of projects. When sorting by dollar amount, there was no obvious trend where smaller dollar projects tended to get higher scores than large dollar projects, or vice versa.

Scoring	Dollars
Highest GET scores	$1,278,227
High GET scores	$847,002
Medium GET Scores	$1,012,773
Weak GET Scores	$235,767
Weakest GET Scores	$331,090
Unclear	$199,281
Total	$3,014,735

What may be of interest is that, though a smaller number of projects received the highest GET scores (~11% in the below chart), they represented nearly one third of the overall expenditure (~32% in the chart above). The weak and weakest GET projects had the opposite effect – fewer dollars spent on more projects.

Detailed Success Breakdown By Number of Projects

Highest GET scores
11.1%

Unclear
8.9%

Weakest GET Scores
6.7%

High GET scores
26.7%

Weak GET Scores
15.6%

Medium GET Scores
31.1%

5
4
3
12
7
14

Detailed Success Breakdown By Dollars - Outlier Removed

Highest GET scores
12.9%

Unclear
6.6%

Weakest GET Sc…
11.0%

High GET scores
28.2%

Weak GET Scores
7.8%

Medium GET Sco…
33.5%

$388,822
$331,090
$235,767
$847,002
$1,006,498