

Sustainable GDAL Sponsorship Prospectus



Overview

GDAL is one of the most successful open source projects in the world, and its importance to the entire geospatial industry can't be understated. The vast majority of software used to make maps or run geospatial analysis relies on GDAL, usually in a fundamental way. It provides a shared commons that enables everyone to focus on higher level problems - if GDAL didn't exist then every single organization would need to write (or buy) much more low level code before they even started on their unique value proposition. For more about GDAL see this [great article](#) by Matt Asay from AWS.

One would expect that such a foundational project would have all the resources it needs, since so many organizations, large and small, rely on it. Unfortunately that's far from the case, and indeed it's actually close to a breaking point. A common metric in software projects is the '[bus factor](#)' - defined as 'the minimum number of team members that have to suddenly disappear from a project before the project stalls due to lack of knowledgeable or competent personnel'. GDAL's bus factor is currently 1: the sole project maintainer, who has been making a truly heroic effort these last few years. And it is clear that the work to maintain GDAL is more than he alone can handle, and if the current situation continues then he will burn out and GDAL will stall.

So it's time for the Geospatial Industry, and indeed anyone who relies on geospatial technology in any way, to enable GDAL to shift from begging for scraps to long-term sustainability. We need to pool our resources so that GDAL not only survives, but thrives.

There have been a number successful ‘barn raising’ efforts in the past where the community has come together for particular features and improvements, but each requires a substantial organization effort and doesn’t quite get at the core sustainability of the project. This time we are aiming for sustained financial investments to transform GDAL to a truly sustainable project, expanding to a team of maintainers who don’t just ‘keep up’ but are able to advance GDAL to be faster, more reliable, more secure, easier to use and just ‘better’.

What is Sponsorship For?

Sustainable GDAL sponsorship funds are used to support the holistic tasks that keep the project healthy and the code quality high:

- **Performance and efficiency work**, to ensure the backbone of data access and processing is as fast as possible.
- **Code quality and security review**, to catch and repair security and reliability issues before they become bugs.
- **Patch review and comment**, to bring contributions up to a high standard, and ensure new contributions do not degrade the overall project quality.
- **Infrastructure maintenance and modernization**, to ensure automated builds and tests exist and are run automatically so that the code can evolve quickly, with high reliability.
- **Community communications and education**, to ensure that the users of the software know what it can do, and make the best use of it.

We will also be aiming to increase our ‘bus factor’, by cultivating new contributors, and enabling them with funding to actively support various community tasks. So this funding will go to a team of people, supporting each with a percentage of their time on the tasks above. We will generally aim for no single individual to have more than 60% of their work time solely supported by sponsorship, to enable a broader base of GDAL contributors.

Who Should Sponsor?

If your organization:

- Uses GDAL directly, as a tool or a library in your system
- Has customers who use GDAL on your platform, or in their workflows when utilizing your products
- Wants to add features to GDAL

Then you have a stake in the ongoing health of the GDAL project, and your organization will benefit from sponsoring. If you use GDAL then you are benefiting from an incredible virtuous cycle, where different organizations fund the improvements they need and the results are

available to everyone else. It's a continual cycle of 'pay it forward', leading to the library getting better with every release, benefitting every user.

Sponsorship dollars ensure that there is ongoing development to the core of the GDAL code and infrastructure that keeps the code fast, reliable and ready to contribute to, enabling that virtuous cycle.

Investing in this shared resource together ensures that GDAL remains a solid foundation that you can rely upon, and the pooled funding will enable a continual upgrading of its core capabilities. Everyone who sponsors shares the core maintenance load together, so everyone can benefit as new features and improvements land.

The alternative is a slow devolution and eventual forking into multiple incompatible versions, that will break the virtuous cycle of the GDAL community that has brought us so far.

With this round of sponsorship we are aiming for enough money to not just stave off slow devolution, but to accelerate the virtuous cycle by providing enough funds for the core project contributors to tackle the bits that everyone benefits from but no one has yet funded.

What is Sponsorship Not For?

The Sustainable GDAL sponsorship dollars are not designed to be directed towards specific developments of features or bugs by sponsors. The usual mechanisms for that type of work have been quite healthy, and remain in place. These sponsorship funds will be used for global maintenance tasks, as determined by the Project Steering Committee.

Specific feature developments or bug fixes can still be submitted as pull requests, and the existence of maintenance funds will help ensure they are promptly reviewed and incorporated, but again sponsors cannot direct that the funds be used to accept particular submissions.

To direct funds to particular tasks, preferred features or specific bugs, you can still contract with a [GDAL service provider](#) to work on your needs, within your timeframes and contractual requirements.

Sponsorship Levels & Benefits

Platinum: Platinum Sponsors pledge \$50,000 or more per year to sustain GDAL. They are thanked with top billing on all communications about the 'Sustainable GDAL' fundraising effort,

including their logo. Their logo will be included at the top of the <http://gdal.org/sponsors> web page, and on a 'sponsors' slide included in all public presentations given by GDAL core members. Platinum Sponsors also get to designate one member on the 'GDAL Advisory Board' (details below). Their logo will also be included in the special edition GDAL t-shirt & sweatshirt created for sponsors, and will receive up to 5 t-shirts or sweatshirts.

Gold: Gold Sponsors pledge \$25,000 or more per year to sustaining GDAL. They get thanked on all communications about the 'Sustainable GDAL' fundraising effort, including their logo. Their logo will be included near the top of the <http://gdal.org/sponsors> web page, and on a 'sponsors' slide included in all GDAL public presentations. The group of Gold sponsors also gets to select at least one representative for the 'GDAL Advisory board' (details below). They will also receive 2 special edition GDAL sweatshirts (or t-shirts if preferred).

Silver: Silver Sponsors pledge \$10,000 or more per year to sustaining GDAL. They will get thanked on the majority of communications about the 'Sustainable GDAL' fundraising effort. Their logo will be included on the <http://gdal.org/sponsors> web page, and will be mentioned (in either text or logo) on a 'sponsors' slide included in all GDAL public presentations. The group of Silver sponsors also gets to select one of their group to represent them on the 'GDAL Advisory board' (details below). They will also receive 2 special edition GDAL t-shirts (or one sweatshirt).

Supporter: Supports pledge \$1,000 or more per year to sustaining GDAL. They get thanked on at least one of the communications about the 'Sustainable GDAL' fundraising effort. Their name will be included on the <http://gdal.org/sponsors> web page. They will also receive 1 special edition GDAL t-shirts (or one sweatshirt). There may also be a special 'bonus' for supporters who pledge \$5000 or more.

Sponsoring

If you are interested in becoming a sponsor just email gdal-sponsors@osgeo.org. We are in the process of finalizing our fiscal sponsor, and once that is done there will be an updated process.

GDAL Advisory Board

The GDAL Advisory Board is a newly forming group that is tasked with ensuring the project is evolving to meet the needs of its largest supporters. There will be periodic meetings with the advisory board, GDAL PSC members wishing to participate, and persons benefiting from funding providing a forum to give feedback on the latest GDAL work. Board members will also be expected to share how they are using GDAL in their organization (in as much detail as is possible, understanding that some can only talk in general terms). Though the GDAL PSC owns the decision making around how the sponsorship money is allocated, the advisory board will provide key input on the maintenance priorities of the sponsors.

Our hope is that these sessions can also lead to new feature development in GDAL through joint funding initiatives between top sponsors, providing more structure to the way GDAL features are funded today. This ideally leads to more cost-sharing as organizations will be able to be more strategic when they know what everyone else is interested in. These efforts will be above and beyond the core maintenance sponsorship, but the Advisory Board will be a key forum to enable it.

The Advisory board will have an email list, with members of the GDAL PSC on it, and will meet on a periodic schedule, to be determined as the group forms. It will consist of one representative from each of the Platinum sponsors, one representative for every three Gold sponsors, and one representative from Silver sponsors.