



**Call for Applications
2022 Direct Funding Assistance (DFA)
Technical Collaboration with National Laboratories**

The Lightweight Materials Consortium (LightMAT) assists the automotive industry in the development and commercialization of innovative lightweight materials and process technologies through domain expertise and capabilities unique to the National Laboratories.

To accelerate innovation and adoption of new lightweighting technologies for on-highway vehicles, LightMAT, sponsored by the Vehicle Technologies Office, is announcing its annual 2022 opportunity for the automotive industry to leverage technical assistance from the U.S. Department of Energy (DOE) national laboratories. Effective today, through August 15, 2022, LightMAT is seeking proposals that identify key technical challenges limiting the applicant's use of lightweight materials that can further improve the energy efficiency of conventional and electric vehicles.

Applicants will partner with one or multiple DOE national laboratories within the LightMAT consortium to address research needs for overcoming the identified challenges. Proposals should address a specific component or vehicle sub-system for lightweighting that will directly benefit from the application of an advanced material or manufacturing process to enable significant weight reduction¹. This call focuses on lightweighting of the glider, comprising of the body-in-white, closure panels, chassis and suspension system, interior, structural battery enclosure, and wheels. Excluded from this call are applications that include batteries, power electronics, or other powertrain systems. Priority will be given to proposals targeting components or sub-systems that are not currently part of the Vehicle Technologies Office lightweight materials [research portfolio](#).

Applicants are encouraged to prioritize and submit proposals addressing their most pressing lightweighting challenges and associated research needs. Partnership with a LightMAT national laboratory is required and can be established either through existing relationships, or by the applicant identifying the type of research capabilities needed to accomplish the desired scope of work. With the latter, the LightMAT [Concierge](#) will work to match the applicant's needs with the best LightMAT laboratory capabilities and experts.

¹ 25% glider weight reduction at less than \$5/kg-saved by 2030
<https://www.energy.gov/eere/vehicles/lightweight-and-propulsion-materials>

Eligibility

All U.S. domestic businesses serving the automotive market are eligible to apply.

Foreign entities, whether for-profit or otherwise, including U.S. incorporated subsidiaries with a foreign-owned parent company, are eligible to apply; however, a waiver request will be required. Approval of this waiver is subject to DOE discretion, and is necessary to complete the CRADA contract. All project work under this opportunity must be performed in the United States (100 percent of all direct labor).

Interested applicants wanting to collaborate with research experts and leverage unique materials capabilities at the DOE national laboratories are encouraged to apply.

Award Terms

Selected projects will receive up to \$500,000² of LightMAT technical assistance from the partnering national laboratory(ies), over a maximum project duration of two (2) years (lesser period of performance is acceptable). LightMAT anticipates selecting five new projects as part of this technical assistance opportunity. Applicants will fund their own labor, materials, and other expenses directly, which will contribute towards a required 50 percent minimum cost-share. Contractual terms will be managed through a non-negotiable, pre-established LightMAT Cooperative Research and Development Agreement (CRADA)³.

How to Apply

Industry applicants are asked to submit a proposal package that includes: 1) an application for sponsored research, and 2) a detailed statement of work describing the technical tasks to be performed. Templates are available for download on the LightMAT [Funding Opportunities](#) website.

Additionally, applicants need to identify the LightMAT [Capabilities](#) that can assist in accelerating the development of solutions. Applicants can either identify a single or multiple preferred national laboratories to work with, or alternatively describe in the application template the type of research capabilities needed, in which case LightMAT will recommend the most appropriate national lab(s) with the capability and experience to help address the proposed research.

All applications should succinctly describe the opportunity for market impact, the technical barrier and approach to developing a solution, the impact anticipated towards vehicle lightweighting goals, and what LightMAT capabilities are needed and why DOE resources are necessary. The downloadable application [template](#) includes instructions and the evaluation criteria associated with this LightMAT opportunity.

Applications need to provide a detailed accounting of how the proposed lightweight material and/or process will contribute towards meeting the DOE program goal of 25 percent reduction in vehicle glider weight by 2030, and at no more than a \$5/kg-saved cost penalty. Details about the expected weight reduction of the targeted component/sub-assembly should clearly describe how the percentage of weight reduction will be achieved as compared to a 2021 model year vehicle.

The statement of work will be used to augment the application and provide details to aid reviewers in understanding the approach that will be taken to achieve the project objectives,

² Subject to available DOE budget and work authorization to the LightMAT program

³ CRADA terms and contract conditions available upon request of the LightMAT Concierge

plus what are the expected deliverables, milestones and schedule. Additionally, if the application is selected for award, the statement of work will be utilized for the CRADA Annex A: Statement of Work.

Submitting Applications

Proposal packages are to be emailed to dfa@lightmat.org no later than August 15, 2022 at 11:59 pm ET. All applications will be reviewed after August 15 with notifications of award expected by September 15, 2022.

About LightMAT

The Lightweight Materials National Laboratory Consortium, or [LightMAT](#), is a network of national laboratories with technical capabilities and domain expertise relevant to lightweight materials research and development and the automotive market. LightMAT provides straightforward access to resources and capabilities in this network via a single point of contact and works to match industry research needs with expertise and unique equipment found at the DOE national laboratories.

Questions?

For more information about LightMAT, please refer to the [LightMAT website](#) or contact the [LightMAT Concierge](#).