



THE POWER TRANSFER COHORT

# HELP THE U.S. ARMY BRING POWER TO ELECTRIC VEHICLES

The U.S. Army wants to join forces with new industry partners through the Power Transfer Cohort to help fast-track our transition to electric vehicles.

## BACKGROUND ON THE PROBLEM

The U.S. Army has a vehicle fleet that operates at an unrivaled scale. Yet this fleet is still wholly dependent on fossil fuels. That dependence creates serious risks for Soldiers, so the Army has begun to investigate and prototype electric replacements for legacy vehicles. But the transition to electric vehicles (EVs) will not be an easy one for the Army — it must still develop an infrastructure that can power them anywhere in the world.



Fortunately, the commercial market is working to solve some of the same EV issues that impact the Army. Widespread commercial adoption will also depend on a broadly available infrastructure that can provide fast recharging to alleviate range anxiety and meet user demands. The Army is encountering similar issues but on an industrial-scale where inconvenience isn't the concern as much as Soldier safety and mission success.

With similar challenges facing both the military and the commercial market, the Army wants to join forces and fast-track its transition to EVs while giving innovators a chance to prove their EV-enabling technology at scale.

## ABOUT THE POWER TRANSFER COHORT

The Army Applications Laboratory (AAL) is partnering with the Next Generation Combat Vehicle Cross Functional Team (NGCV CFT) and the Ground Vehicle Systems Center (GVSC) to stand up the **Power Transfer Cohort**.

Created and managed by a contractor team from Alion Science and Technology, this program will identify and explore technologies to help power the Army's move to EVs and allow the Army to use electric power in remote locations. Specifically, we want to find solutions in the following areas:

- Rapid recharging for Army EVs
- Transportable power for EV recharging
- Scalable infrastructure for EVs and other systems
- Integration of new EV infrastructure with the Army's legacy infrastructure

The Power Transfer Cohort will bring together commercial experts, military experts, and Army customers to explore whether EV-enabling technology can work across the diverse fleet of ~225,000 Army vehicles operating in the most demanding environments.

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With the right technologies, we can modernize our fleet to put fewer people in harm's way, reduce our dependence on fuel, and save taxpayer dollars.

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## HOW IT WORKS

The Power Transfer Cohort is designed for companies that are developing EV charging and import/export technology that may also apply to a military use case. We are especially interested in those who are working on power electronics, EV supply equipment, and distributed energy resources.

### THE COHORT PROCESS

**Step 1** — Identify and select top-tier, untapped commercial businesses working on EV-enabling technology to join the Power Transfer Cohort

**Step 2** — Share insight with the cohort companies on specific business and technical challenges the Army is facing with EVs

**Step 3** — Introduce how these systems will be implemented and how current systems and end-users will use their technology

**Step 4** — Help cohort participants iterate on solution concepts with one another and with a cross-functional team of Army stakeholders

**Step 5** — Present solution concept designs from cohort members to senior Army leadership for the opportunity to move on to the next phase of development

**Step 6** — Move into a proof of technology phase of work with cohort companies that are selected based on their solution concept design

## GET INVOLVED

To be considered for the Power Transfer Cohort, follow the instructions to apply at [aal.army/cohortprogram](https://aal.army/cohortprogram).

Your application should tell us more about your company, your technology, and what you could bring to this Army

## REASONS TO JOIN

**Get paid for research and development that you already plan to do.**

Companies selected to participate in the Power Transfer Cohort receive \$100k to complete an 8-week program that culminates in a concept presentation to Army stakeholders with the chance for a follow-on contract.

**Partner with experts and end users in a collaborative Solution Design Teams.**

Inform your solution design by working alongside other commercial experts, military experts, and Army end users to refine and develop new EV-enabling concepts as one team.

**Help the largest industrial consumer of fossil fuel in the world go electric.**

Companies in the Power Transfer Cohort will get insight into this major logistical challenge facing the Army as well as information on the related technology priorities to further inform a go-to-market strategy.

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problem. If we think you're a good fit, you'll receive an interview request within two weeks of the application closing. Companies selected to join the Power Transfer Cohort will be notified within 30 days of application close.

The Power Transfer Cohort is scheduled to kick off early in 2021. So we need to move quickly and find the right companies to participate. By teaming up with the Army, you can impact the future of transportation in our society, reduce the nation's carbon footprint, and help transform our armed forces for good. Join us to become part of the solution.

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### ABOUT THE ARMY APPLICATIONS LABORATORY

We're not a laboratory in the traditional sense of the word. As the U.S. Army's innovation unit, we don't make things — we make things possible. The Army Applications Laboratory (AAL) is fundamentally reshaping how the Army works with industry to reunite American innovation and national security. Together, we question *why* and deliver *what if*. Learn how we do it at [aal.army](https://aal.army).



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