When flawless execution is always a must

Getting materiel and people to the right place at the right time is an imperative when it comes to military logistics. Especially when lives are on the line. But, it’s not always as simple as choosing the shortest route or the least expensive mode of transportation. The best route isn't always the safest, and even our strongest allies can’t always be counted on. Assessing your options ahead of time is vital to a successful operation.

What can you do with the right tools?

Mitigate risks

Whether it's a conflict zone or in response to a natural disaster, military and defense forces need to be ready for just about anything. Demand for materiel and personnel can rise at a moment's notice, and traditional supply routes and methods can be cut off.

Optimize transport

Air. Sea. Truck. Rail. Each has its advantages and disadvantages. Sometimes it hard to figure out which mode of transportation – or combination of modes – will help you best reach your objectives.

Minimize lead times

Supply depots are key to having the right material and equipment in the right place at the right time. But as operations and objectives change, you need to ensure your supply network keeps up.

Improve asset utilization

Supply chain assets are expensive, so you'll want to ensure you're using them to their fullest capacity.

When the importance of the decision requires the smartest analysis, innovative manufacturers rely on LLamasoft to show them trade-offs and options for how their supply chain should be designed to create desired business outcomes. The LLamasoft Digital Design and Decision Center puts powerful answers in the hands of supply chain decision makers - across strategic, mid-range and operational time horizons – making data-driven decisions a reality.
within and across supply chain functions. With the ability to visualize, simulate and optimize your end-to-end supply chain processes, you'll be able to answer the most complex supply chain transformation questions.

Specialists in Supply Chain Design

LLamasoft is dedicated solely to supply chain optimization, and our work with military logistics and operations leaders has earned us a coveted spot on the preferred supplier list of many of the departments we work with. Here are some of the assets LLamasoft can bring to your operations planning.

- **Mixed Mode Solving**: LLamasoft integrates network, transportation, inventory and simulation algorithms into a single tool
- **Mapping and Visualization**: GIS mapping allows you to view, edit and analyze key inputs and outputs visually for geocoding, routing or solving for distance.
- **Automatic Scenario Generation**: Powerful multiple scenario analysis within a single model database offers the ability to adjust any combination of key cost or model elements to do sensitivity analysis, simulate the impact on the supply chain over time and optimize decision-making.
- **Cloud Solving**: LLamasoft's remote-solving solution allows you to offload large and complex solving problems and generate faster results with less overhead.

How are Military and Defense Organizations Leveraging Smarter Supply Chain Decisions?

LLamasoft military and defense customers include some of the largest and most innovative operations in the world. Here is a story of the DoD's achievements with LLamasoft solutions:

**DoD Works With LLamasoft to Keep Material Flowing to Troops in Afghanistan**

Supporting the troops in Afghanistan is one of the most challenging logistics problems in modern military history. War-time shipments of cargo usually go by sea, but Afghanistan is a landlocked country with no port. This means that the US Department of Defense must rely on partner countries to provide an overland route to access the theater of operations. For many years, the US relied on Pakistan for most of their access, with alternate lines of transport through the north as a backup. Using LLamasoft to build a network optimization flow model of the supplies flowing into Afghanistan, analysts could quantify the impact on both cost and travel lanes if the road routes through Pakistan were to be closed—something that happened for approximately eight months during operations there.