

# JAGUAR LAND ROVER DRIVES INNOVATION IN GLOBAL AUTOMOTIVE MANUFACTURING

With customers on every continent, the UK's largest automotive manufacturer has to account for a huge variety of driving conditions when designing new car models. Esri's ArcGIS gives the company the global understanding it needs to engineer vehicles that are safe and satisfying to drive, anywhere in the world.



Such is the popularity and quality of Jaguar and Land Rover vehicles that they are sold in 172 countries around the globe. Designers at [Jaguar Land Rover](#) therefore have to ensure that any amendments to vehicle designs and planned new models are engineered appropriately, so that they can be driven in diverse environments, ranging from the deserts of Saudi Arabia to the frozen wastelands of Siberia and the treacherous mountain passes of the Himalayas.

A specialist Customer Correlation team uses [ArcGIS Desktop](#) to gain an accurate understanding of the actual driving conditions, prevalent in each of its target markets. Taking advantage of global data resources, the team models and analyses a broad array of factors including weather, average rainfall,

temperature, humidity and altitude, at each of its 172 customer locations. This environmental data is then overlaid onto road network maps, giving the team a unique understanding of customer requirements.

This highly valuable insight is used by designers and engineers at Jaguar Land Rover to help them optimise the design of vehicles in all terrains and finalise vital manufacturing design decisions. In some circumstances, for example, electrical connectors might be raised up to avoid water damage in areas where monsoons are an everyday part of life. Equally, different types of radiators might be developed to cope with hotter climates. By engineering its vehicles in this way, the company can deliver a better, more capable driving experience for its customers all over the world, whatever their location.

“ ArcGIS gives us an easy way to rapidly assess driving conditions in different parts of the world and ensure that our iconic British cars continue to meet the needs of global customers. ”

Andrew Tarpey, Customer Correlation, Durability & Robustness, Vehicle Engineering, Jaguar Land Rover