



ClimateIQ™

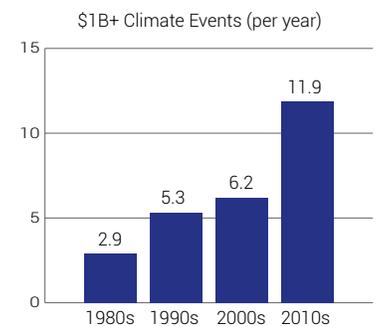
Informing Decisions to Manage Mission Risks

Climate risks present a significant threat to federal infrastructure, equipment, and supply chains, but no two agency risk profiles are the same. With the ClimateIQ™ decision framework, LMI creates tailored, data-driven climate risk mitigation strategies for each customer's unique mission needs and operational environment. With ClimateIQ™, LMI supports federal leaders in a wide range of decision-making, disclosure, and risk management responsibilities:

- Asset and capital planning
- Disaster response
- Infrastructure assessment
- Procurement
- Budgeting and financial reporting
- Environmental compliance
- National security
- Workforce management.

Climate Risks Rising

Climate-related events, such as drought and flooding, are occurring with greater frequency. The annual average of extreme-weather events causing at least \$1 billion in damages and loss, adjusted for inflation, has quadrupled since the 1980s according to the National Oceanic and Atmospheric Administration (NOAA). The surge continues within this decade. An average of 14.7 events per year since 2017 portends the likelihood of more than one billion-dollar disaster a month in the 2020s.



Source: www.ncdc.noaa.gov/billions/.

Tailored Solutions



To counter these escalating and pervasive risks, federal agencies should understand their unique vulnerabilities and the most effective mitigation techniques for their resources, policies, and procedures. LMI has this customer knowledge, rooted in six decades of federal sector experience and complemented by data analytics from industry leader The Climate Service (TCS). This combination enables customers to leverage ClimateIQ™ for practical, empirically sound risk mitigation recommendations.

The TCS-proprietary Climanomics™ platform is integral to the ClimateIQ™ framework, enabling customized features for mission- and agency-specific insights on climate risks:

- Worldwide coverage, consistently applied across specific locations
- Multiple emission scenarios (Representative Concentration Pathway [RCP] 8.5 and RCP 4.5)
- The highest available spatial resolution, evolving and scaling with more climate data

- Multiple hazards (including temperature, coastal flood, tropical cyclone, drought, and wildfire) and risk types (chronic, acute, physical, and transition) consistent with recommendations from the Task Force on Climate-Related Financial Disclosures
- Specific vulnerability functions tailored to asset type.

The Climanomics™ platform translates data from academic, public, and commercial sources into consistent formats overlaid on coherent spatial and temporal grids. Analysis starts at the property level, using localized, downscaled data to consider risk to each asset separately. Results can be segmented by location, time period, or hazard risk or aggregated to the portfolio- or enterprise-level, supplying a comprehensive risk profile.

Available to federal customers through LMI's exclusive partnership, Climanomics™ is the sole analytics tool to pair climate-related hazard data with econometric models at the asset- and damage pathway-levels, articulating climate risks clearly in a financial or mission-relevant context.

Meaningful Results

LMI's technical, programmatic, and analytic expertise has supported climate adaptation and mitigation efforts for the Department of Defense and Department of Homeland Security as well as federal clients such as the General Services Administration and NASA.

Reducing climate risk to the F-35 program. LMI assessed the physical climate risks to 34 facilities globally, including five U.S. Air Force bases, supporting readiness of the F-35 aircraft. Using the Climanomics™ platform, our location-based assessment incorporated facility condition and criticality information to identify coastal flooding, temperature extremes, and storm damage as major risks with potential for significant material effect over the next 30 years. The results and subsequent recommendations will inform master planning and strategic decisions as well as facility infrastructure improvements.

Delivering scenario-based analyses for the Fourth National Climate Assessment. On behalf of the NOAA National Climate Assessment Technical Support Unit, LMI furnished climate modeling analysis for regional and sectoral authors of the Fourth National Climate Assessment. Our experts processed and analyzed high-resolution data for the U.S. from 32 distinct climate models, estimating changes in key variables as well as indicators and detailed metrics for effects on people, infrastructure, and the national economy.

About Us

LMI is a consultancy dedicated to powering a future-ready, high-performing government, drawing from expertise in digital and analytic solutions, logistics, and management advisory services. We deliver integrated capabilities that incorporate emerging technologies and are tailored to customers' unique mission needs, backed by objective research and data analysis. Founded in 1961 to help the Department of Defense resolve complex logistics management challenges, LMI continues to enable growth and transformation, enhance operational readiness and resiliency, and ensure mission success for federal civilian and defense agencies.

➔ [Learn more at lmi.org/ClimatelQ](https://lmi.org/ClimatelQ)