



Hurricane Matthew Resiliency Recovery Plans, North Carolina Emergency Management

AECOM developed 25 plans for individual counties to assess impacts on housing, economic development, infrastructure, and environment, and to create viable strategies to mitigate the impacts of future dramatic climate change.



State-wide Hazard Mitigation and Climate Adaptation Plan, State of Massachusetts

Fulfilled the requirements of Executive Order 569 by developing a climate adaptation plan that outlines a statewide strategy to address climate change impacts through adaptation and resiliency measures and policies.



Climate Risk Management Plan, Confidential Manufacturing Client

AECOM is producing a Climate Risk Management Plan for a high tech manufacturer, which includes an assessment of climate risk at a portfolio of key facilities. In addition to identifying site vulnerabilities and potential impacts and risks to operations, the assessment will detail specific recommendations for adaptation actions that can be taken at the corporate and facility levels.



Water Resilience Assessment, Confidential Utility Client

AECOM developed a water resilience assessment for a confidential energy utility company. AECOM assessed the current and potential future availability of water resources across the client's service and major supply chain areas under a variety of potential climate change scenarios. The final report focused on how changes in temperature and precipitation as a result of climate change may influence water resources and water availability.



Small Business Disaster Resilience Survey, City of New Orleans

An AECOM-led team assessed the disaster preparedness and resilience of small- and mid-size enterprises on six commercial corridors within New Orleans. A survey tool was developed and over 200 businesses provided responses. Data was analyzed and a suite of recommendations was provided for the City as well as for businesses. Corridor-specific training sessions on resilient business practices were also provided to businesses.

Purpose

The climate is changing. The intensity and frequency of natural disasters has led to concerns about how prepared the public and private sectors are for an event. Storms like Hurricanes Florence and Michael, floods, droughts, and wildfires are subjecting population centers to more risk. Climate change is already having an impact throughout the Americas and is expected to continue into the foreseeable future. Changes in temperature, precipitation and sea level, however, are not uniform – there is great variability in what climate change will mean depending on location. Determining the regional and local effects of global climate change is critical to assessing vulnerability and risk, which is necessary information in order to create implementable strategies. **Climate change is a long-term challenge with immediate needs; how we define the problem and present the solutions is critical in gaining public and stakeholder buy-in, political support, and necessary financing.** AECOM offers the multi-disciplinary services and experience needed to help adapt to climate change and enhance resilience to extreme weather.



Services

- **NATURAL DISASTER PREPAREDNESS REVIEW:** Using the *AECOM Disaster Resilience Scorecard for Cities*, develop a baseline of where your company or city is with regard to disaster preparation, response and recovery based upon the United Nations *Ten Essentials for Disaster Risk Reduction*.
- **VULNERABILITY ANALYSIS:** Identify exposures that exist now and in the future as a result of climate change, and how to mitigate and manage these risks. Vulnerabilities should be determined for the main organization, as well as for dependencies, such as utilities, and supply chains.
- **RESILIENT INFRASTRUCTURE DESIGN/BUILD:** AECOM has experience developing building codes and standards that consider sea level rise and other changing conditions to reduce future vulnerabilities to climate change. We design and implement improvements now to save lives and reduce capital losses, while creating more resilient communities to meet current and future challenges.
- **BUSINESS CONTINUITY PLANNING/PLAN UPDATE:** Plans need to be reviewed and updated to consider trends of the last 20 years as well as future projections, considering climate change, land use change, and other changing conditions. AECOM supports the development of robust continuity plans that lead to future risk reduction on assets, operations, supply chains and overall mission.
- **CLIMATE ADAPTATION PLANNING:** For events that cannot be mitigated, options exist to lessen the impact and adapt. AECOM supports planning for a future that considers and incorporates the potential effects of sea level rise, including catastrophic storm events, warming temperatures, and other changes.
- **DISASTER RECOVERY:** AECOM supports organizations and governments dealing with the aftermath of extreme weather events through emergency response contracts with FEMA and other federal, state and local agencies. We offer design and program management of major repairs and reconstruction efforts.
- **GREEN HOUSE GAS (GHS) REDUCTIONS:** AECOM can also help set and meet GHG emission reduction targets, through inventory, identifying reduction strategies, and implementation. AECOM has developed tools, such as the CURB Tool, to map out different emissions reductions action plans and evaluate their cost, feasibility, and impact.
- **LOW-CARBON TRANSITION AND ENERGY RESILIENCE:** Identifying opportunities to increase energy conservation, as well as identifying targets, roadmaps, and implementation of renewable energy and electric vehicle objectives.

Representative Project Locations



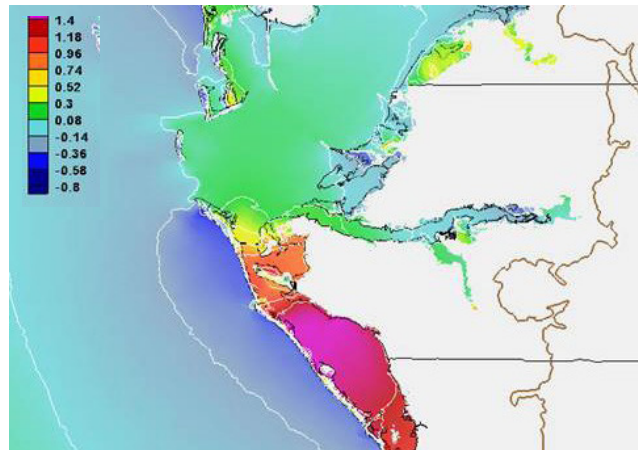
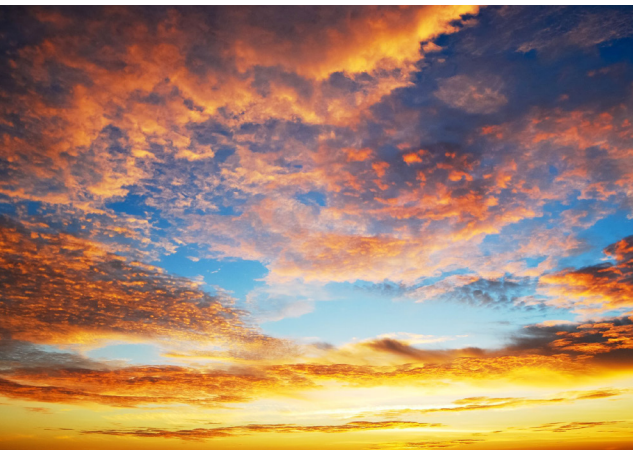
Technical Practice Group (TPG) for Climate Change & Resilience

AECOM's TPG is a global platform for those working in climate change, climate action planning, climate finance and adaptation to share emerging science, technologies, and policies; experiences, qualifications, technical expertise and lessons learned. We share available tools and procedures across geographies to conduct climate change projects and leverage expertise of our global experts to solve client problems.



For More Information

T. Luke Young
Director, Resilience and Climate
Action Planning
t.luke.young@aecom.com
+57 300 498 7877



Value Added Benefits

- Global Experience Providing Over 200 Climate Adaptation and Resilience Projects Worldwide
- Unparalleled Technical and Public Sector Expertise
 - Top ENR Ranking/Sectors Nationwide, including Number 1 Program Management Firm, Number 1 Green Design Firm –Government Offices, 2018
- Ability to Leverage Global Expertise and Experience to Provide Best Practices on Local Projects
- Customized Solution to Client Needs
 - Use of Climate Science, Economics, Engineering, etc.
 - Outputs Conducive to Decision Making & Implementation
- Integrated Offering
 - Hazard Identification – Planning – Design – Implementation – Permitting – Construction



Unique Differentiators

- Staff mix of engineers, planners, scientists that address climate adaptation and disaster resilience needs holistically. Our experience/ expertise covers the full range of climate change services.
- Excellence in hazard modeling and analysis, including coastal and riverine flooding.
- Extensive building engineering expertise qualifies us to mitigate the effects of natural disasters and to set a framework for effective climate adaptation management.
- Wide array of experience in applying climate adaptation considerations across private and public sector operations, assets, and planning.
- Proven expertise working with 100 Resilient Cities, C40, CDP, the UN, the World Bank and others in developing and implementing climate change mitigation, adaptation, and resilience services.
- Extensive experience with community engagement and stakeholder outreach, and leading inclusive workshops on climate resilience.

Climate Change Awards

CCBJ Awards

- **2020** - C&E Low-Carbon Energy Practice: jetBlue Electric Vehicle Charging Infrastructure at JFK
- **2020** - Industry Leadership: New Zealand National Climate Change Risk Assessment
- **2019** - Project Merit: Texas Coastal Resiliency Master Plan
- **2018** - Project Merit: Climate Change Adaptation and Resilience- Commonwealth of Massachusetts
- **2018** - Project Merit: Climate Change Adaptation and Resilience – The City of Olympia



About AECOM

AECOM is the world's premier infrastructure consulting firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to program and construction management. We partner with our clients in the public and private sectors to solve their most complex challenges and build legacies for generations to come. On projects spanning transportation, buildings, water, governments, energy and the environment, our teams are driven by a common purpose to deliver a better world. AECOM is a Fortune 500 firm and its Professional Services business had revenue of approximately \$13.2 billion in fiscal year 2020. See how we deliver what others can only imagine at [aecom.com](https://www.aecom.com) and @AECOM.

Tools and Resources

- **Disaster Resilience Scorecard** – a unique tool designed by AECOM and IBM, and adopted by the UNISDR, to support client understanding, vulnerability and/or risk, as well as serve as a basis for stakeholder engagement and adaptation/strategic planning.
- **Forecasting Local Extremes (FLEx) Tool** – Developed to efficiently manage large downscaled climate model datasets, the tool can quickly and efficiently condense these data to a few key statistics that guide the analysis of local climate projections. Combined with the expertise of planners and engineers, the FLEx Tool has proven to be a cost-effective yet powerful means of facilitating comprehensive local and regional planning initiatives.
- **Climate Action for Urban Sustainability (CURB)** is a carbon abatement planning tool AECOM developed for the World Bank, Bloomberg Philanthropies, and C40 (Cities Climate Leadership Group) – a tool to benchmark successes with an internationally recognized program.
- **Sustainable Systems Integration Model (SSIM)**, AECOM's GIS-based land use spatial planning tool quantifies and compares a range of sustainability and climate change parameters for a masterplan.
- **Adapting to Climate Change Application (ACCA)** is AECOM's tool used on buildings, transportation, water, energy, environmental and waste projects to identify potential future impacts of climate change on assets and operations and helps to find ways to effectively respond and adapt to these impacts.
- **Mobilities™** – a web-based predictive tool developed by AECOM to assess impacts of emerging technologies and behavioral trends that are transforming mobility and re-shaping the future of our cities through economics, vehicle emissions, mode share and transit usage, and development.
- **Economic Framework** for the Analysis of Climate Change Adaptation Options.
- **All hazard modeling, analysis, and mapping** including sea level rise, coastal and riverine flooding, drought and wildfire.
- **Riverine modeling and analysis** considering climate change projections.
- **Becoming Climate Resilient** - Guidebook for Executive Businesses.
- **Silicon Valley 2.0** – Regional study to minimize the anticipated impacts of climate change and reduce the generation of local greenhouse gas emissions. Led to the development of an online tool that allows users to conduct climate risk assessments, adaptation and resilience planning.
- **3D Visualization** – Over 25 years of 3D modeling/rendering experience. Our visualization staff creates and delivers photorealistic renderings, 3D computer animations, and virtual reality tools for use as design aides and public outreach materials. These tools can help a client envision the future of climate change impacts, such as sea level rise, with and without recommended changes.

