Urban Land Institute (ULI) Austin
Local Climate Impacts Strategic Council

ULI AUSTIN LOCAL CLIMATE IMPACT RESOURCES

Shifts in our global climate are driving environmental change at the regional scale. Regional changes manifest as increases in the frequency and magnitude of extreme weather events; e.g. faster moving rainstorms, more intense high-heat events, longer droughts, and amplified wildfire risk. To better understand Central Texas' unique climate-related challenges, the Document Review Sub-Group of the Urban Land Institute's Austin Local Climate Impacts Strategic Council gathered a sample of publicly available climate-related resources. All council members were invited to contribute to the collection. The resource database is not exhaustive, and new resources can be added as identified. With each submission, council members were asked to record the relevance of each resource using an array of topics and themes developed by the council. This report outlines the topical patterns reflected in the current resource database.

Council members were invited to submit resources related to the council's mission. Members were asked to upload references/URLS and score their own documents according to ***67 criteria*** grouped by primary themes previously developed by council (*ULI-LocalClimateStratCouncil_GapAnaysisMatrix.xlsx*). The database currently includes ***45 references***. Most entries were authored by government entities (city, county, state, and federal). Non-profits and other public and commercial publishers appear as well. Total scores are provided by primary and secondary themes in Table 1. Total scores for the 67 criteria are sorted in ascending order by quartiles in Table 2. Table 2 has been sorted into quartiles, but it is important to recognize that the numerical cuts at each quartile are arbitrary and offered here only as a convenience for observing trends.

Highest Scoring Criteria

1. *Short term climate change impacts (Climate Change Shocks)*
2. *Long term climate change impacts (Climate stresses)*
3. *Extreme Temperatures*

Criteria Themes by Quartiles

Hazards, Disasters and Community Recovery | Q1

> Criteria in the highest scoring quartile tend to be centered around geophysical drivers of extreme events (hazards) and income/economic themes, with the notable exceptions of *Opportunity for impactful Policy, Advocacy, and Education* (Score: 14).

Social Vulnerability | Q2

Criteria in the second highest scoring quartile are more diverse and also include a few criteria related to Hazards, Disasters and Community Recovery. However, there are also many criteria in this quartile related to social vulnerability and resilience, including *Race*, *Communities of Color*, *Housing Security*, *Poverty*, and *Social Networks*.

Human-Environment Interaction | Q3

Criteria in the third quartile are also diverse, with a few criteria that would fit in the two top quartiles. This group contains a number of criteria representing environmental features (e.g. *Loss of Tree Canopy, Degraded Water Quality*, and *Habitat Loss*), urban processes (e.g. *Utility Access, Geographic Sprawl,* and *Quality Providers*), and social/community dimensions (e.g. *Climate Migration, Loss of Cultural Resources*, and *Household Structures*).

Industrial, Transportation, Social Mobility | Q4

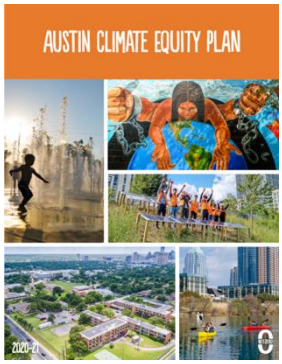
Criteria in the lowest scoring quartile again are diverse and include a few criteria that would fit well into one of the previous three quartiles. There are social/public health criteria in this quartile (e.g. *Mental Health Conditions*, *People with Disabilities*, *Homelessness*, *Immigration Status*, and *Language Access*). This quartile also includes criteria related to energy and manufacturing (*Natural Gas, Manufacturing & Industrial*, and *Waste Generation/Processing*) and transportation e.g. *Transportation [Combustion Engines] and Reliance on Public Transit*).

Topics/Themes Not Represented (What did we miss?)

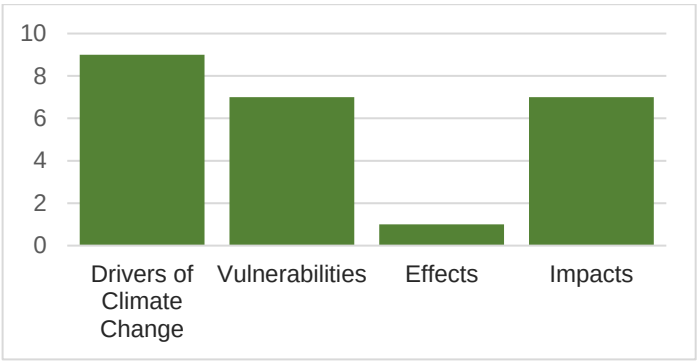
1. Planning and finance tools for economic recovery: individual, community and commercial
2. Planning and finance tools for extreme events, cascading impacts, and unintended consequences
3. Applied mitigation strategies: policies, programs, and projects
4. Clear metrics needed to show current state and progress
5. Comprehensive finance mechanism for more resilient bldg. retrofitting and new construction
6. Data/Tools for assessing financial impact of recent, and projected, shocks/stressors
7. ?

In cataloging and discussing the curated resources, council members generated a wealth of detailed keywords, comments, and questions. In the subcommittee's review of topical patterns, four primary topical themes were identified: Hazards, Disasters and Community Recovery; Social Vulnerability; Human-Environment Interactions; and Industrial, Transportation, and Social Mobility. There is clearly overlap between these themes and they are based on a limited sample, but they do offer insight into the topics most often addressed in recent climate-related publications tied to Central Texas. In this sense, they also reflect our region's recent institutional response to the environmental changes we are experiencing. Exploring the differences between the themes reflected in currently published resources and the needs identified by key-informants in the convening focus groups may suggest the need for new regional resilience objectives to meet our new environmental extremes.

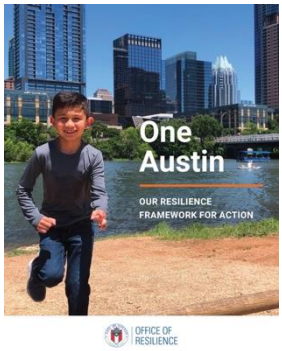
Austin Climate Equity Plan



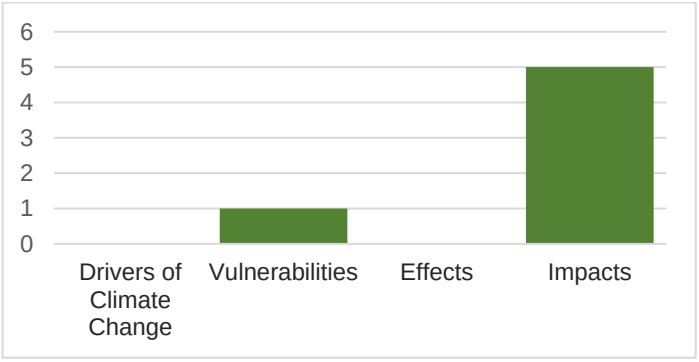
The Austin Climate Equity Plan outlines the city's climate goals and strategies, focusing on five key areas: sustainable buildings, transportation and land use, transportation electrification, food and product consumption, and natural systems. It integrates climate action with social justice to address these interconnected areas comprehensively.



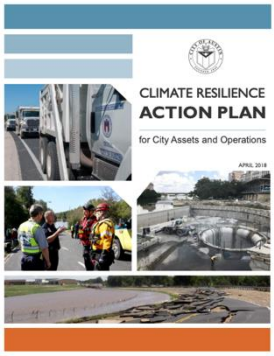
One Austin - Resilience Framework for Action



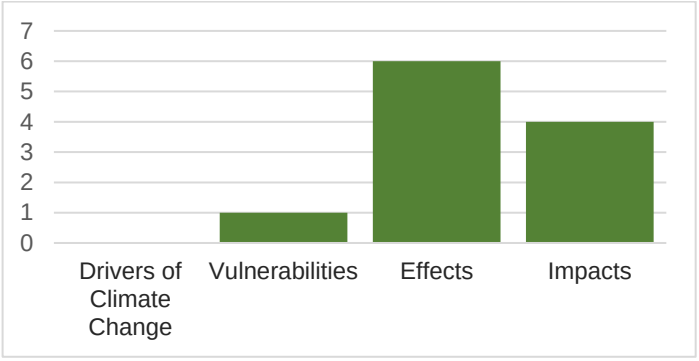
One Austin - Resilience Framework for Action is a strategic plan designed to enhance Austin's resilience to climate challenges. It provides a framework and actionable strategies to improve community preparedness, infrastructure, and address environmental and social vulnerabilities, aiming to build a more resilient city.



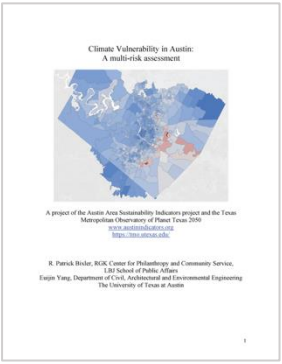
Climate Resilience Action Plan For City Assets And Operations



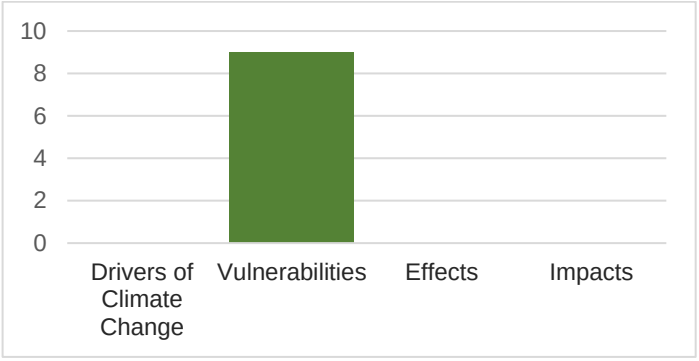
The *Climate Resilience Action Plan* (CRAP) outlines key strategies for the City of Austin's operations, asset management, and long-range planning in response to actual and anticipated climate change.



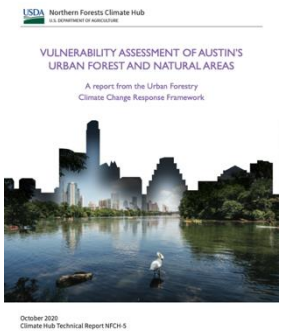
Climate Vulnerability in Austin: A multi-risk assessment



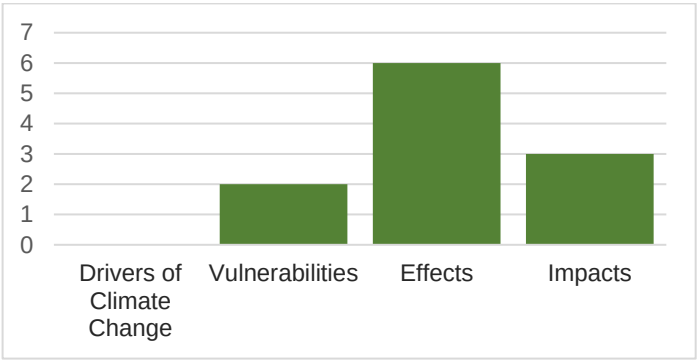
The *Climate Vulnerability in Austin: A Multi-Risk Assessment* evaluates risks and vulnerabilities from climate change, including extreme weather and rising temperatures. It aims to understand these impacts on various areas and sectors in Austin and to develop strategies to enhance citywide resilience and adaptability.



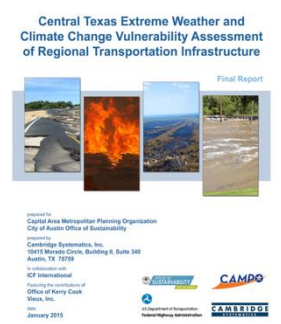
Vulnerability Assessment of Austin's Urban Forest and Natural Areas



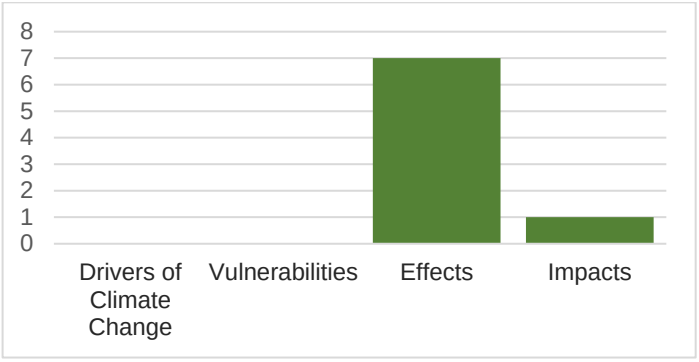
The trees, developed green spaces, and natural areas within the City of Austin's 400,882 acres will face direct and indirect impacts from a changing climate over the 21st century. The *Vulnerability Assessment of Austin's Urban Forest and Natural Areas* evaluates the vulnerability of urban trees and natural and developed landscapes within the City Austin to a range of future climates.



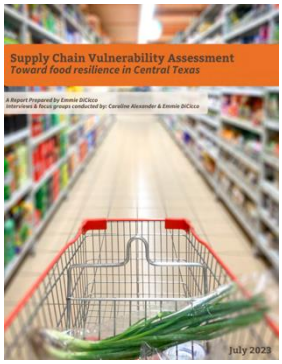
Central Texas Extreme Weather and Climate Change Vulnerability Assessment of Regional Transportation Infrastructure



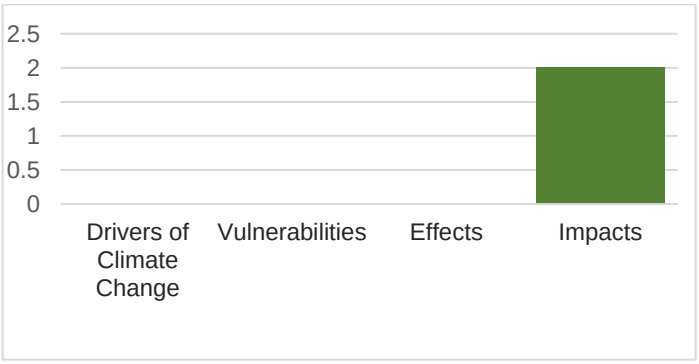
The *Central Texas Extreme Weather and Climate Change Vulnerability Assessment of Regional Transportation Infrastructure* report evaluates the vulnerability of key transportation assets in the CAMPO region to extreme weather and climate impacts, shares lessons learned, and suggests steps to improve the region's transportation infrastructure resilience.



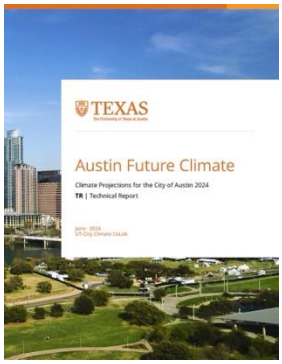
Supply Chain Vulnerability Assessment: Toward Food Resilience in Central Texas



The "Food Supply Chain Vulnerability Assessment" report reviews the regional supply chain, identifies barriers and threats to local food resilience, highlights opportunities for improvement, and offers recommendations for integrating findings into the Austin/Travis County food plan.



Austin Future Climate: Climate Projections for the City of Austin 2024



The Austin Climate Projection Report, created by the UT-City Climate CoLab, outlines future climate scenarios for Austin to guide decision-making and planning. It evaluates potential impacts based on different emissions scenarios to help the city prepare for and adapt to changing climate conditions.