



SA CLIMATE READY

Climate Action & Adaptation Plan Implementation Update

Presented by: Douglas Melnick, AICP, ISSP-SA, CNU-A
Community Health and Equity Committee- February 25, 2021
Item #2

Paris Climate Agreement

On June 22, 2017, City Council passed Resolution No. 2017-06-22-0031R in support of the Paris Climate Agreement, directing city staff to develop a plan to help San Antonio meet the objectives of this agreement.

After extensive public input, City Council adopted the SA Climate Ready Plan by Ordinance 2019-10-17-0840 on October 17, 2019.

President Biden rejoined the accord on January 20, 2021.



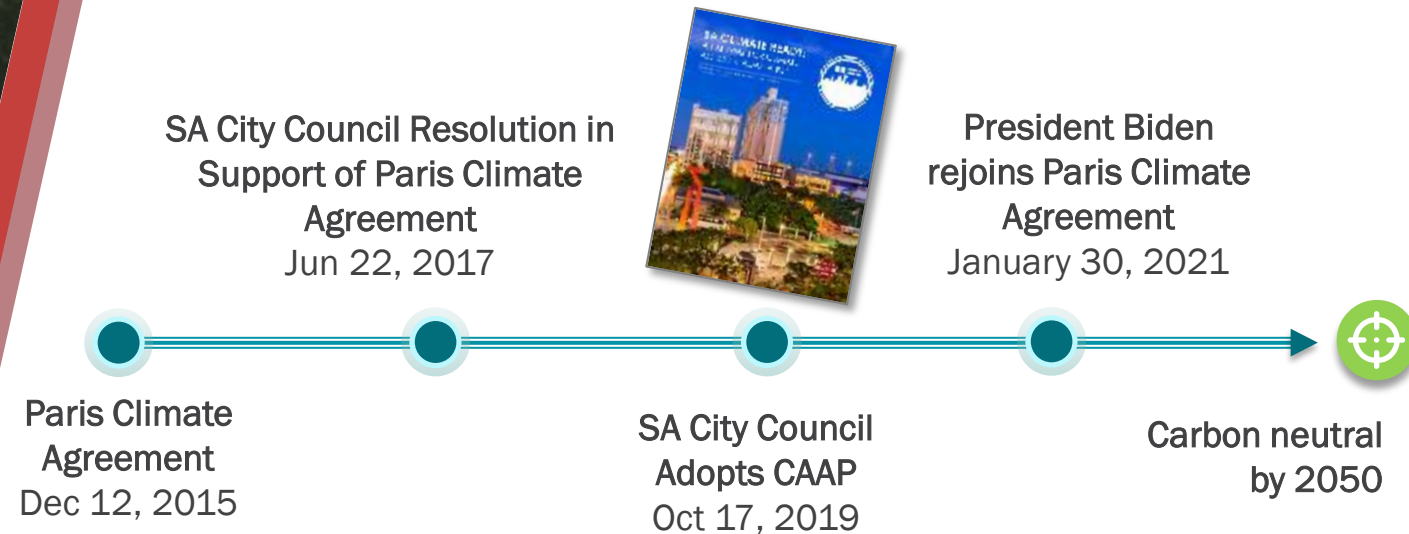
United Nations
Climate Change

Office of Sustainability



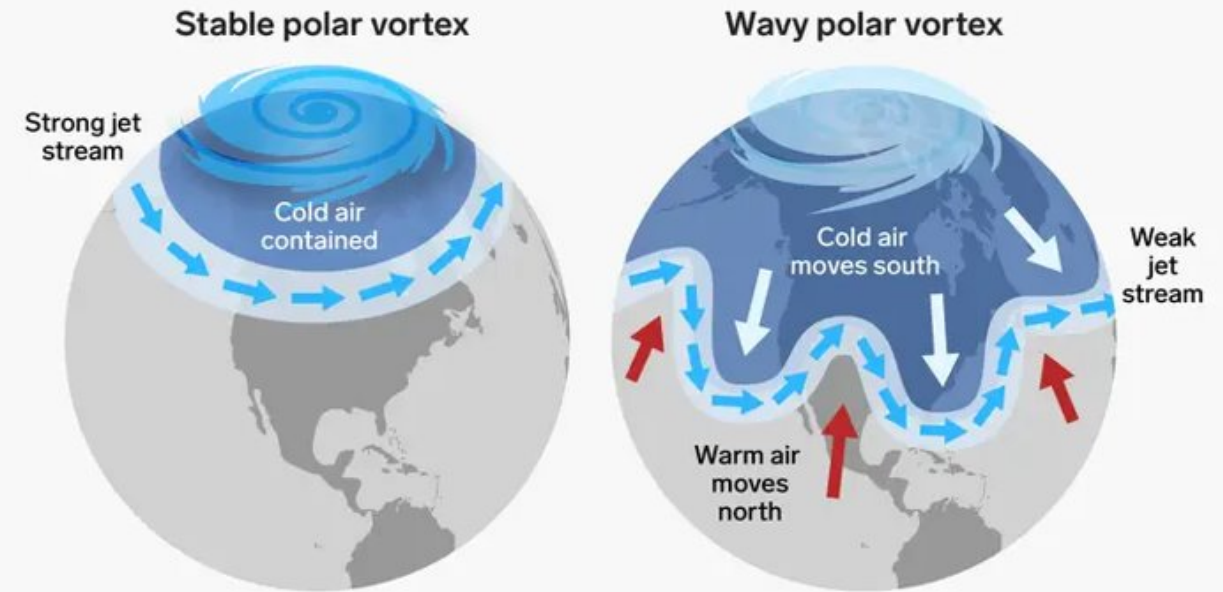
CoSA's Commitments

- Climate equity
- Carbon neutral by 2050
- Climate adaptation
- Reporting requirements



Climate Impacts

How the polar vortex works



Source: NOAA

Insider Inc.

Climate Projections, End of Century



	Low Emissions Pathway	High Emissions Pathway
Summer Maximum Temperature	+6°F	+10°F
Hot Days (Maximum Temperature >100 °F)	+48 days	+94 days
Warm Nights (Minimum Temperature >80 °F)	+10 nights	+55 nights
Annual Precipitation	-3 inches	-4 inches

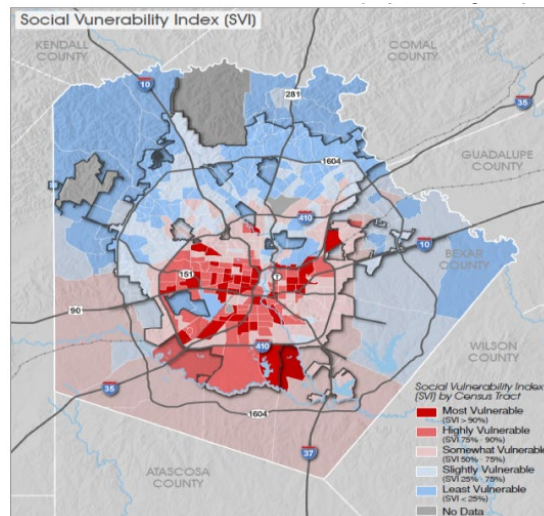
- Increased flooding
- Increased extreme storms
- Increased cold weather events

Climate Equity + Adaptation for Extreme Events



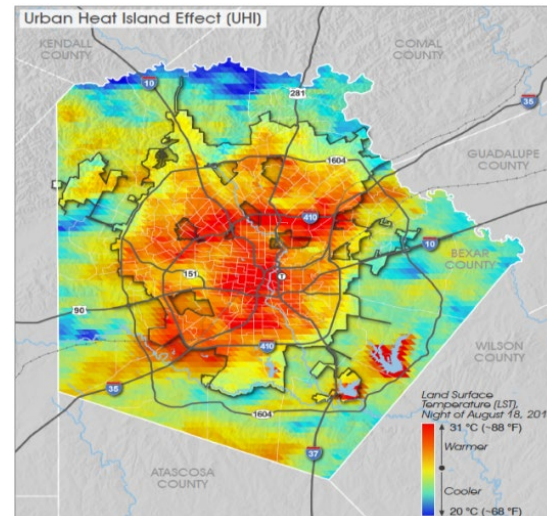
A climate equity framework prioritizes the communities burdened the most by climate change. Climate equity ensures these communities play a central role in the just transformation of the systems that have established, and continue to perpetuate, the unequal burden of climate impacts.

1 Most vulnerable population



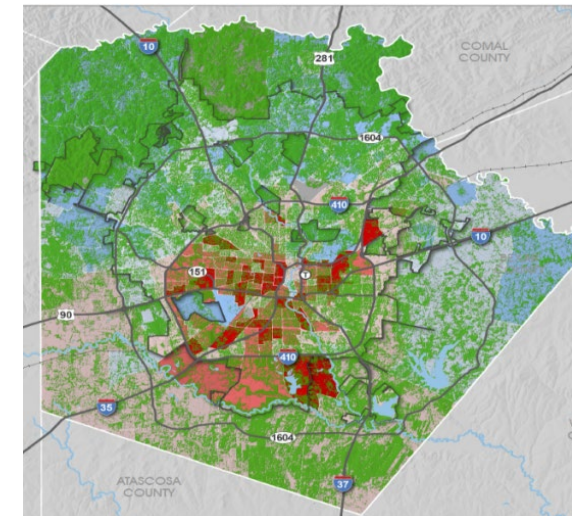
Social Vulnerability Index (SVI)

2 Hottest area of our city



Urban Heat Island Effect (UHI)

3 Lowest area of tree canopy



Social Vulnerability Index (SVI) with Tree Canopy

Why is equity important?



Climate change affects everyone, but not all people are impacted equally.



Vulnerable communities

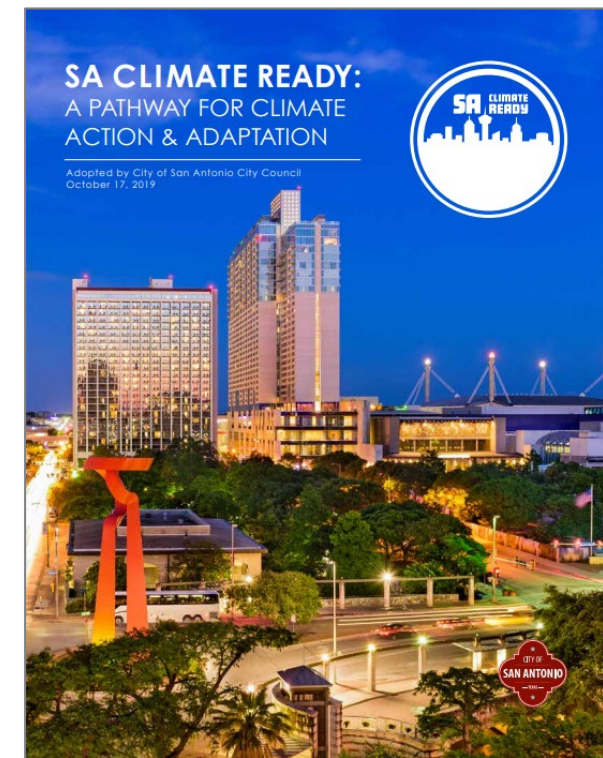
- Communities of color
- Low-income communities
- Seniors
- People with disabilities

Risk Factors

- Increased vulnerability to heat-related illnesses, respiratory illnesses, or vector borne diseases
- Increased risk to the impact of extreme cold and related impacts on housing lacking adequate weatherization
- Reduced mobility due to flooding, extreme weather, extreme heat and related impacts to transportation infrastructure
- High exposure to GHGs emission sources and environmental pollution
- Lack of representation in local government
- Lack of financial means to respond to environmental and economic stresses

Image Source: San Antonio Office of Equity

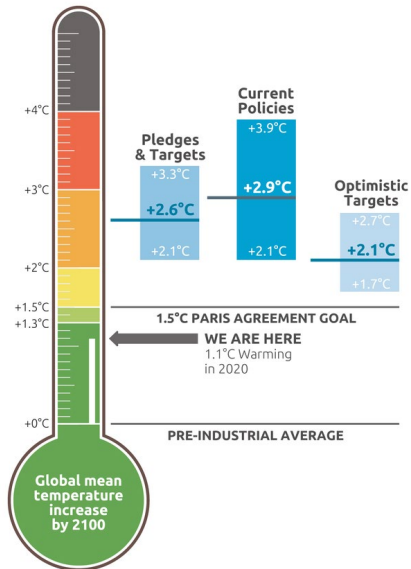
Winter Storm 2021 and SA Climate Ready



Addressing climate change requires mitigation and adaptation

MITIGATION

Actions to reduce or prevent emissions from greenhouse gases



Greenhouse Gas Reduction Strategies

- 1) Increase Carbon-Free Energy
- 2) Reduce Building Energy Consumption
- 3) Reduce Transportation Energy Consumption
- 4) Advance the Circular Economy
- 5) Promote Biodiversity and Healthy Ecosystems
- 6) Educate & Empower

- **28 Community Strategies**
- 12 Near-Term initiated by 2021
- **13 Municipal Strategies**

ADAPTATION

Actions that help reduce the negative effects of climate change

Adaptation Strategies

- 1) Increase Infrastructure Resilience
- 2) Strengthen Public Health Systems
- 3) Enhance Emergency Management & Community Preparedness
- 4) Promote, Restore, and Protect Green Infrastructure & Ecosystems
- 5) Protect Local Food Security
- 6) Increase Resiliency Awareness & Outreach
- 7) Ensure Equity in Adaptation

- **45 Community & Municipal Strategies**

Key SA Climate Ready Strategies



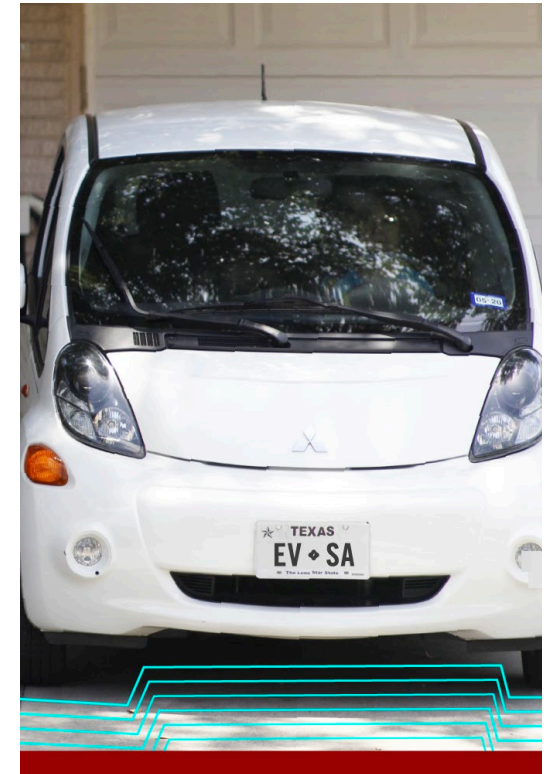
Mitigation

- M4 - Commercial and Multi-Family Benchmarking
- M6 - Zero Net Energy Building Codes
- M7 - Energy Efficiency Financing and Programs
- M25 - Residential and Commercial Energy and Water Rating System
- M28 - Electric and Water Rate Structures

Adaptation

- A1 - Utility Preparedness for Climate Impacts
- A2 - Risk Assessment of Critical Infrastructure
- A6 - Building Retrofits for Vulnerable Populations
- A7 - Climate Risk in the Development Review Process
- A11 - Resilience in Building Codes and Programs
- A21 - Damage Cost Assessment Protocols
- A22 - Assess Emergency Shelter Policies & Resilience Hubs
- A23 - Emergency Planning for Vulnerable Groups
- A44 - Prioritization of Vulnerable Residents

What's Next?



Mitigation and Adaptation Strategies



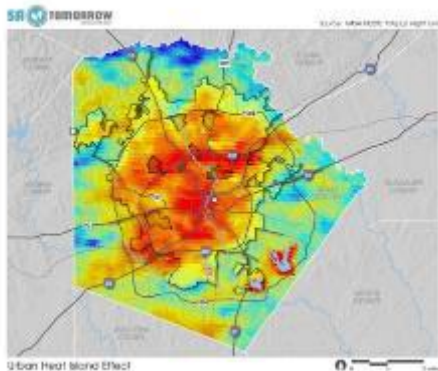
ENERGY

- Procure electricity for municipal operations from renewable sources
- Develop Municipal Energy Policy



TRANSPORTATION

- Publicly-accessible EV charging infrastructure on City property
- Vehicle Fleet Environmental Acquisition Policy Update
- EV and Solar Readiness



ADAPTATION

- Heat Vulnerability Assessment Tool (HVAT)
- Cool pavement pilot projects
- Sandia National Laboratory Grid Resilience Project

Governance and Communications



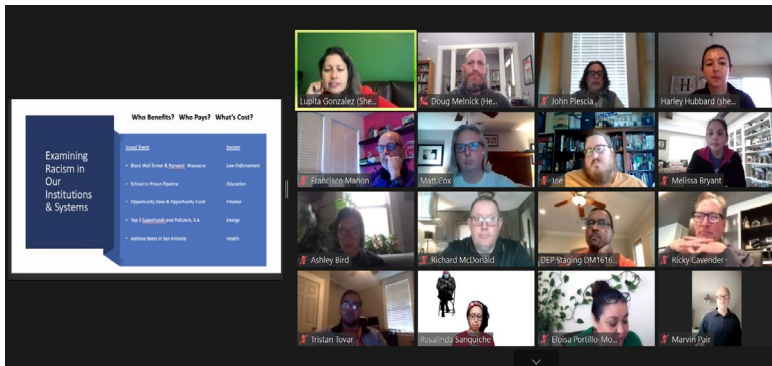
Quarterly Advisory Committee Meetings

Climate Equity Advisory Committee

- March 2, 2021

Tech & Community Advisory Committee

- March 3, 2021



The CAAP goals support recovery & resilience



Human Health

- Protect San Antonians from detriments to health and well-being associated with a changing climate

Source: San Antonio Office of Equity



Resilience

- Build a city that can maintain normal function in response to external stresses and disruptions

Source: San Antonio Express / Billy Calzada



Economic growth

- Mitigate infrastructural losses attributed to climate change that impede the rate of economic growth

Source: City of San Antonio

Questions?

