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Letter from the Chief Resilience Officer

Just over a year ago, I had the immense honor of stepping into the role of Chief Resilience Officer for the City of Tucson. Having dedicated a decade to conservation, environmental justice, and climate policy, this role felt like the natural progression of my journey—a culmination of experiences that shaped my passion for driving meaningful change. Along the way, I've been fortunate to work alongside incredible teams and under the leadership of Mayor Regina Romero, whose vision and unwavering commitment to climate action have inspired and guided me.

When the Tucson Resilient Together Plan was adopted in March 2023, City Manager Tim Thomure outlined an ambitious implementation strategy: to significantly advance 59% of the plan's actions in its first year. I am proud to report that we not only met this goal but surpassed it, advancing 76% of the plan's actions. This milestone reflects the collective effort of many hands and minds—city departments, external partners, and our passionate community members—working together toward a shared vision.

From 2023 to 2024, our departments translated Mayor and Council's direction into transformative investments, investing nearly \$120 million to climate action and securing \$94 million in grant funding. The Climate Action Team (CAT) has been a cornerstone of these efforts, providing strategic insight, fostering cross-departmental collaboration, and ensuring that high-level plans are translated into on-the-ground actions. This unprecedented collaboration has created a strong foundation for innovation and meaningful impact across the City of Tucson.

To the Tucson community: thank you. Your input, enthusiasm, and participation have been instrumental in advancing our TRT climate action plan. Whether through providing feedback, sharing ideas, or participating in community projects, your passion drives the progress we celebrate today.

Reflecting on the first TRT implementation year, I am struck by how much we have accomplished. Early on, much of my focus was on leveraging unprecedented federal climate investments. These efforts culminated in the successful design and submission of a proposal for what is now a nearly \$20 million EPA Community Change Grant. The process of dreaming big—collaborating with community partners to imagine bold solutions—was as inspiring as the projects that are now set to become reality.

In 2024, we made significant strides in heat resilience, an area close to my heart. Highlights include hosting Tucson's first-ever Southern Arizona Heat Summit, adopting the Heat Action Roadmap, enacting a Heat Protection Ordinance and Administrative Directive, distributing hundreds of heat relief kits, and maintaining coordinated efforts throughout an exceptionally challenging summer. We also laid the foundation for the Community Resilience Leadership Academy, which will empower vulnerable communities to prepare for and address the dangers of extreme heat.

Amid these accomplishments, my biggest dream is deeply personal. As the mother of three children, ages 14, 9, and 7, I dream of a Tucson where they and future generations can thrive in our beautiful desert city. A Tucson that not only sustains but nourishes them—a city prepared for the challenges of tomorrow.

As we move forward in 2025, I invite you to join me in this work. Let's continue to dream big and act boldly—not only for ourselves but for the generations to come. Together, we can create a resilient and thriving Tucson.

Together for a resilient future,

Fatima Juna

Fátima LunaChief Resilience Officer
City of Tucson





Land Acknowledgment The City of Tucson acknowledges the tribal nations in the S-cuk-Son land. Tucson was founded on the unceded territory of the Tohono O'odham peoples - caretakers of this land from time immemorial. The City further acknowledges the Pascua Yaqui tribe and their multi-millennial presence and stewardship in the region. By appreciating Indigenous knowledge, as well as the wealth of Tucson's diverse cultures and experiences, the City seeks to implement an intersectional approach to achieving climate equity for present and future residents of Tucson, all while honoring the history of this land and its original stewards. The City of Tucson seeks to build reciprocity with sovereign tribal nations and Indigenous communities to address local climate change impacts, build frontline community resilience, and inspire Tucsonans today and tomorrow to love and care for the land we share and call home. 2025 Climate Action Plan ANNUAL REPORT

Introduction

In 2020, the City of Tucson Mayor and Council declared a Climate Emergency, committing to carbon neutrality for city operations by 2030 and community-wide by 2045. After extensive community engagement, the City adopted its first climate action plan, *Tucson Resilient Together* (TRT), in 2023, outlining 5 categories, 24 strategies, and 122 actions to achieve these goals.

Since the plan's adoption, the Climate Action Team (CAT) has led implementation efforts and provided quarterly updates. This report is the first annual assessment, summarizing progress through the end of 2024.

While some initiatives predate the plan, others align with the **C**ity Manager's 2023 Climate Implementation Strategy (CIS-FY24), which targeted significant advancement of 72 TRT actions by fiscal year 2024. The CAT exceeded this goal, advancing 92 actions by prioritizing opportunities and collaboration.

These achievements lay a solid foundation for progress, and the CAT remains dedicated to driving impactful action and fostering cross-sector collaboration, ensuring a more resilient and sustainable future for Tucson.



Highlights

The City of Tucson continues to lead in climate action, surpassing its FY24 implementation goals with over 70% of planned Tucson Resilient Together (TRT) actions advanced across all categories. Notable achievements include progress in governance, energy, transportation, and community resilience. This success reflects the collective efforts from city departments, partners, and the Tucson community to build a sustainable, resilient future.

Transformative Climate Grant Awards

The City secured **\$93.9** million in climate-related grants to support key initiatives for resilience and sustainability. Highlights include:

- \$21.5M from the US Federal Transit Administration (FTA) to replace all remaining diesel-fueled buses in the Sun Tran fleet.
- \$19.9M from the US Environmental Protection Agency (EPA) for home retrofits, solar panels, shaded bus stops, workforce development, and more.
- \$11.5M from the US Department of Housing and Urban Development (HUD) to rehabilitate and replace manufactured housing, improving efficiency and long-term affordability.

Departmental Climate Leadership and Investments

City departments invested \$121.3 million in climate-related projects, including:

- Transportation and Mobility: \$92.8M in ADA ramps, bike lanes, shared mobility, and stormwater infrastructure.
- Parks and Recreation: \$5.7M for splash pads, shade structures, and cooling centers.
- Environmental and General Service: \$12.8M toward fleet electrification, zero-waste initiatives, and recycling innovations.
- **Tucson Water:** \$7.9M for conservation programs and stormwater infrastructure.
- Housing and Community Development: \$2.1 million for energy-efficient upgrades, solar installations, and weatherization for public housing.



Highlights

Building Heat Resilience

Tucson advanced heat resilience by adopting and implementing the **Heat Action Roadmap**, **Heat Protection Ordinance**, and **Administrative Directive**. Additionally, over 900 **heat relief kits** were distributed to high-risk populations, including unhoused individuals and mobile home residents.

Urban Forestry and Green Infrastructure

The **Tucson Million Trees** initiative has planted or distributed over 120,000 trees to promote Tree Equity and increase shade in vulnerable neighborhoods. The first urban **tree inventory** will guide future tree planting and management efforts. Additionally, \$3.8 million was invested in green stormwater infrastructure to mitigate flood risks and restore ecosystems.

Clean Energy Innovation

Tucson expanded solar installations to **72 municipal projects** in FY24, generating 18,485 kW of clean energy and saving \$860,734 annually. Gaspowered **landscaping equipment** transitioned to **electric**, reducing greenhouse gas emissions and noise pollution.

Outreach and Engagement

Public engagement remains a cornerstone of the TRT Plan. In FY24, over 300 participants engaged in quarterly Climate Stakeholder Conversations (CSC). The Climate Action Newsletter reached over 5,600 subscribers, and Tucson launched its first public-facing climate dashboard, providing real-time updates on city energy usage.

These accomplishments demonstrate that meaningful progress is possible when collaboration drives bold action. As Tucson continues to lead in climate resilience, we must build on this momentum to deliver even greater results in the years ahead. Together, we can create a thriving, sustainable future for all.



Category 1



This category, comprising **four strategies and 23 actions**, highlights the City of Tucson's commitment to leading by example in advancing regional climate resilience. By integrating climate priorities into city operations and investments (G-1), fostering community and regional partnerships (G-2), and enhancing educational and outreach initiatives (G-3), Tucson aims to accelerate climate mitigation and adaptation. The City also emphasizes emissions monitoring and reporting to refine decarbonization strategies (G-4), ensuring accountability and continuous progress.

Progress To Date

22% 26% 9% 43%

FY24 Goal VS Actual Progress



FY24 Goal

Per CIS-FY24, 13 of 23 actions

were to be significantly advanced.



Progress

16 of 23 actions are in the "Completed | Ongoing" and "In Progress" categories.

Progress Key



Actions Completed | Ongoing

Actions are finalized, either successfully completed (on time or early) or with adjustments. This category also includes ongoing actions maintained without a set end date.



Actions Not Started | Future Years

Action are planned but have not yet commenced. Reasons may include prioritization, constraints, funding limitation, or scheduling for future years.



Actions In Progress

Work is underway on actions, including those started early, progressing well, scaling beyond scope, or partially completed but requiring additional effort to finish.



Actions Delayed

Actions face delays due to obstacles, risks, pauses, or evaluation needs, requiring intervention, resolution, or adjustments to resume progress effectively.

The City surpassed the FY24 goal, advancing 70% of actions compared to the 57% outlined, with two actions planned for FY26. Delayed actions include integrating climate and equity goals into departmental reviews, adopting climate projections for planning, creating multilingual climate toolkits, launching a Resilient Tucson Awards program, and organizing sustainable infrastructure tours. Most delays will be addressed this and the next fiscal year, supported by the October 2024 hiring of a Community Relations Coordinator to drive these efforts forward.



G-1 Formalize climate action and resilience priorities in city operations, budgeting, processes, performance monitoring, and investments.

This strategy focuses on institutionalizing climate action through a dedicated team, integrating climate and equity goals into operations, issuing regular progress reports, fostering public engagement, using forward-looking climate data, developing inclusive outreach guidelines, divesting from harmful investments, and exploring funding opportunities to support equitable and community-driven climate initiatives.

Climate Action Team (CAT)

Since April 2023, the City Manager established the Climate Action Team (CAT) to advance Tucson Resilient Together and institutionalize climate work across departments. The CAT comprises key city staff, bringing extensive knowledge and expertise, with the Office of the Mayor and Vice Mayor participating as advisory participants. Within the CAT, the CORE CAT handles day-to-day efforts, including strategic planning, grant writing, and crossdepartmental support and coordination. The CAT's collaborative, cross-departmental approach ensures the integration of diverse expertise and resources, strengthening Tucson's ability to address climate challenges effectively.



Kristina Swallow

Office of the Manager



Office of the Manager



Office of the Manager



Karina Martinez



Environmental and Office of the Manager General Services



Office of Equity



Office of Equity



Jeremiah Dean

Housing and Community Development



Frank Bonillas

Environmental and



Blue Baldwin



Jaimie Galayda

Tucson Water



Greg Jackson

Nick Gasior

Transportation and Mobility



Planning and Services



Chris Mazzarella

Economic Initiatives



& Wellness Program



Chris Mazzarella

Information



Since its inception, CAT members have held 17 meetings, dedicating 345 hours collectively to advancing climate initiatives, excluding additional time spent on cross-departmental collaboration and coordination. These efforts have been pivotal to many successes outlined in this report.

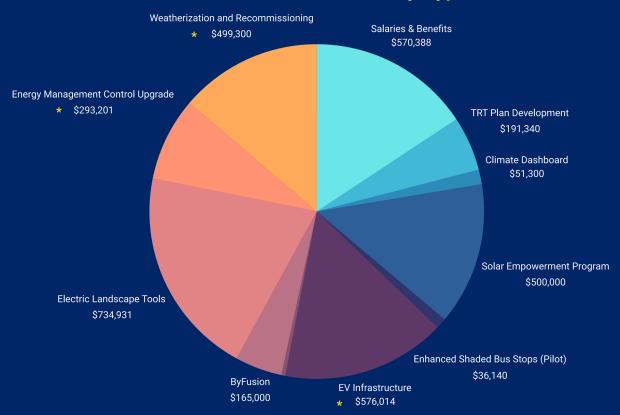
CAT Members: Michael Catanzaro, Eryck Garcia, Karina Martinez, Blue Baldwin, Frank Bonillas and Chris Mazzarella



CAT Budget

When Mayor and Council approved the creation of the Climate Action Team (CAT), they allocated a one-time **\$9M budget** to support the implementation of the TRT Plan. An additional **\$2M** from the City Manager's Investment Plan (IP*) were designated for climate resilience. This combined funding, hereafter the "Climate Fund", enables the CORE CAT to collaborate across departments and advance climate actions that might otherwise be delayed due to funding constraints.

"Climate Fund" Investments by Type



To date, \$3.6 million from the Climate Fund have been invested in climate initiatives across departments. The Environmental and General Services Department (EGSD) has utilized 42% of this funding for key projects, including:



- Weatherization and Recommissioning: Replacing windows in three of the four main buildings at Randolph Park to enhance comfort, improve building envelope security, and generate energy savings.
- Energy Management Control System: Integrating seven City buildings into the Energy Management Control system to improve energy efficiency, optimize control and scheduling, reduce HVAC wear and tear, and enhance occupant comfort.
- **EV Infrastructure:** installing stationary and mobile electric vehicle charging stations for City-owned vehicles, supporting other departments.
- **ByFusion:** Supporting the ByFusion project, which transforms non-recyclable plastics into building blocks.

The Department of Housing and Community Development (HUD), in collaboration with Technicians for Sustainability (TFS) and Sonoran Environmental Research Institute (SERI), is implementing the **Solar Empowerment Program**. Additionally, multiple departments have transitioned **gas-powered landscape equipment to electric** using the Climate Fund. A detailed update on this action is provided below.

Other projects supported by the Climate Fund are underway but have not yet expended funds. These include the City of Tucson's first-ever tree inventory, an energy sourcing study, and a greenhouse gas emissions inventory.

The CAT will continue coordinating the implementation of the TRT Plan and the use of the Climate Fund with guidance and approval from Mayor and Council. Additionally, the CAT remains committed to securing federal and state grants. This effort has already proven successful, with the CORE team securing two major awards: a \$19.9M EPA Community Change Grant and a \$5M USDA Urban Forestry Grant.



Mayor Regina Romero and the City of Tucson's Chief Resilience Officer discuss the recently awarded \$19.9M EPA grant.



https://www.instagram.com/reel/DDQpc4hpChQ/



City Departments: Driving Climate Investments

In addition to Climate Fund investments, city departments integrate climate action into their daily operations, driving projects that directly impact Tucson residents while advancing long-term sustainability goals. These efforts encompass infrastructure improvements, resource efficiency, public engagement, and policy development. Since 2023, City departments have invested nearly \$121.3M to enhance climate resilience and sustainability.

While not exhaustive, these examples underscore the vital role city operations play in institutionalizing climate action. Beyond the outlined departmental operational investments, other departments, programs and divisions across the City contribute to building climate resilience in meaningful ways. For instance, Risk Management ensures compliance with the recently adopted Heat Protection Ordinance, Economic Initiatives attracts green businesses to the city, and PDSD facilitates solar panel permitting. The data provided represents only a small portion of the City's broader operational efforts to advance climate resilience and sustainability.

The Department of Parks and Recreation (P&R) not only manages public parks but also installs and maintains cooling infrastructure such as shade structures, drinking fountains, and splash pads. P&R oversees recreational centers, six of which serve as cooling centers during summer. In collaboration with Tucson Water, P&R has also implemented green stormwater infrastructure and reduced turf in parks. Since adopting the TRT plan, P&R has \$5.7 million in infrastructure, excluding additional costs for extended cooling center operations during summer weekends.

The Department of Transportation and Mobility (DTM) advances climate resilience through sustainable infrastructure policies. Since 2023, DTM has invested over \$92.8 million in enhanced sidewalks, ADA ramps, protected bicycle lanes, shared mobility (transit, bikeshare, and e-scooters), adaptive traffic signals, and improved stormwater systems. These initiatives promote equity, reduce greenhouse gas emissions. and enhance Tucson's preparedness for climate challenges.



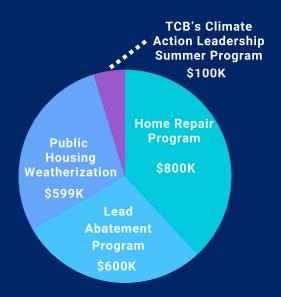




The Housing and Community Development Department (HCD) invested over \$2.1 million in climate resilience initiatives, enhancing housing sustainability and tenant support. Efforts include weatherization, solar installations, water conservation, lead abatement, and energy-efficient upgrades for public housing and low-income families. HCD also promotes sustainable building design, electric vehicle adoption, and recycling. To guide future efforts, HCD is developing a comprehensive Sustainability Roadmap. aiming to become the greenest Public Housing Authority (PHA) in the nation.

Tucson Water (TW) has one of the nation's successful conservation most programs, funded by the Conservation Fund, which invested \$4.1 million in FY23-24 to provide high-quality conservation and education programs along with robust efficiency incentives. Additionally, TW's Storm to Shade program invested \$3.8 million building and maintaining green stormwater infrastructure. Together, these programs enhance community resilience and support sustainable water management.

The Environmental and General Services Department (EGSD) has invested over \$12.8 million in key sustainability programs to advance Tucson's environmental goals and Zero Waste Roadmap. Highlights include an initiative to convert hard-to-recycle plastics building into reusable materials. the Household Hazardous Waste Collection Program, and fleet electrification, including Tucson's first EV refuse collection vehicle. These programs reduce greenhouse gas emissions, divert waste from landfills, and promote a circular economy, demonstrating EGSD's commitment to sustainability and climate resilience.

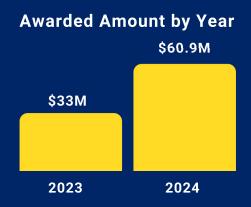


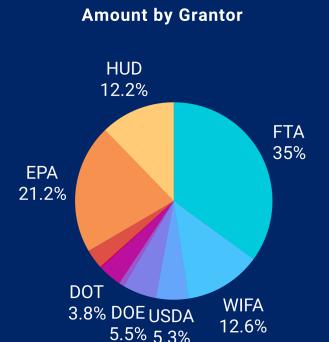




Grant-Funded Climate Action

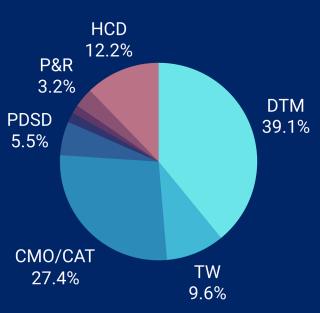
In addition to city departments' operational investments in climate action, departments and programs actively seek funding opportunities to advance climate action and sustainability efforts in Tucson. Since 2023, the City has secured \$93.9 million for climate-related projects, with 35% obtained in 2023 and 65% in 2024.





Percent of Awarded





More than 80% of the funds received have come from major grantors, including the Federal Transit Administration (FTA), Environmental Protection Agency (EPA), Water Infrastructure Finance Authority (WIFA), and the U.S. Department of Housing and Urban Development (HUD). The departments securing the most award amounts include the Department of Transportation and Mobility (DTM), the City Manager's Office Climate Action Team (CMO/CAT), Housing and Community Development (HCD), and Tucson Water (TW).

Additionally, City departments have submitted \$158.7 million in grant applications and are awaiting responses. For details on awarded, submitted, non-selected, and indevelopment grants, refer to Appendix A.



Communicating Progress and Fostering Public Engagement

The CAT communicates Tucson Resilient Together (TRT) progress and engages Tucsonans through various channels.

Tucson Climate Action Newsletter

Since June 2022, the monthly newsletter has reached over 5,600 subscribers. It features spotlights on city climate initiatives, focused stories, TRT progress updates, sustainability and behavioral change tips, climate education, and ways for residents to get involved. Sing up for the newsletter: https://public.govdelivery.com/accounts/AZTUCSON/subscriber/new

Climate Action Hub

The City's <u>Climate Action Hub</u> serves as a central platform highlighting climate initiatives across city departments. During the 2024 summer, it proved invaluable as the CAT collaborated with the Pima County Health Department and partners to provide updated information on cooling and respite centers. The Hub also features the newly adopted Heat Action Roadmap, Heat Protection Ordinance, and Heat Awareness Resolution.



Public-Facing Climate Dashboard

The CAT partnered with Esri to enhance the Climate Action Hub, aligning it with the five TRT Plan categories and creating a streamlined system connected to a public dashboard displaying key performance indicators (KPIs). Departmental interviews revealed varying tracking methods, with some relying on paper records. To start, the CAT focused on categories with accessible data, beginning with Energy. The dashboard now features city building energy use, GHG emissions (2016–2021), and solar projects. Inspired by NYC's Climate Dashboard, further enhancements and integrations are ongoing.



Explore the Dashboard: https://climate-action-2024-cotgis.hub.arcgis.com/pages/energy



Climate Stakeholder Conversations (CSC)

In September 2023, Mayor Romero launched the Climate Stakeholder Conversation (CSC) to engage community members, provide updates on Tucson Resilient Together (TRT), and gather support for implementation. Since then, five quarterly CSCs convened nearly 300 participants, alternating between in-person and online gatherings. Online meetings focus on climate updates and Q&A, while in-person sessions are hands-on, such as assembling heat relief kits in June 2024 and workshopping the Community Resilience Leadership Academy curriculum in December 2024. The CSC fosters public engagement and collaboration, offering practical opportunities to collectively advance TRT's goals.













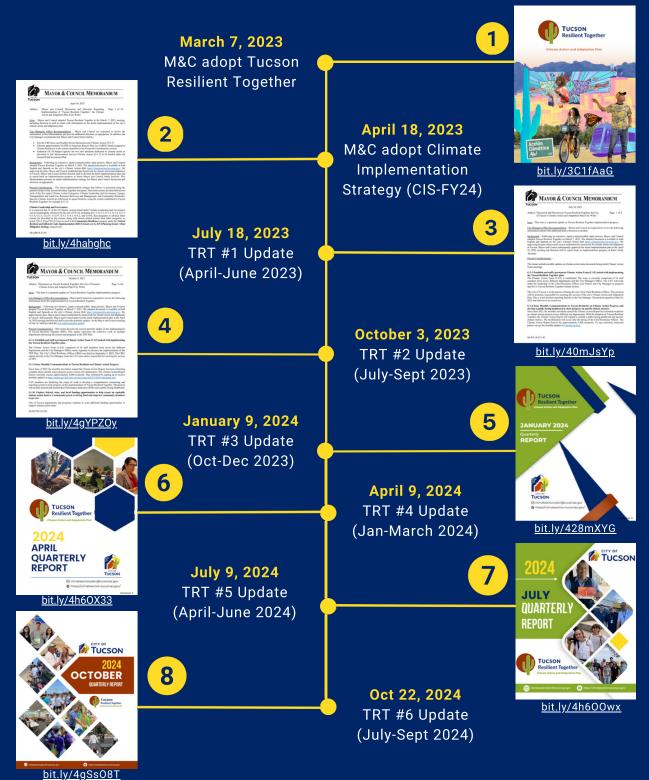






Quarterly TRT Public Updates

Since adopting the Climate Implementation Strategy (CIS-FY24), the City Manager and CAT have provided six quarterly public updates during Mayor and Council (M&C) meetings. These updates have evolved from memos to visually engaging reports, which are widely shared with the public and will soon be published on the updated Climate Hub.





G-2 Accelerate climate action, adaptation, and resilience strategies though community and regional partnerships.

This strategy emphasizes collaboration to advance climate resilience by engaging TRT community partners, promoting sustainable business practices, training for building decarbonization, creating youth employment in climate sectors, and partnering with tribes and jurisdictions to share resources and implement coordinated climate strategies, fostering community engagement, workforce development, and regional resilience.

TRT Community Partners

The CAT team continues to engage TRT community partners through Climate Stakeholder Conversations (CSCs) and by attending their events. For example, the Josefina Ahumada Worker Center (formerly Southside Worker Center) welcomes the City to their quarterly asambleas, where we provide updates on relevant topics, such as the City's heat protection initiatives for workers.

We also strengthen partnerships by collaborating on grant proposals with community groups. Since the approval of TRT, the CAT has collaborated with organizations such as:

- San Xavier Coop
- International Indian Treaty Council
- Flowers and Bullets
- Community Food Bank of Southern Arizona
- Tucson Clean and Beautiful
- Amistades
- The Primavera Foundation
- SERI
- Pima Community College
- J-TED
- Watershed Management Group
- Iskashitaa
- Tucson Bird Alliance
- The Nature Conservancy
- CLIMAS
- YWCA
- Regeneration
- Paisanos Unidos
- Josefina Ahumada Worker Center



While not all proposals have been funded, these collaborations have reinforced relationships and advanced shared goals. Grant proposals are intentionally developed to accelerate climate action, adaptation, and resilience strategies through community and regional partnerships. As outlined in Appendix A, awarded grants align with the following categories, actions, and potential impacts:

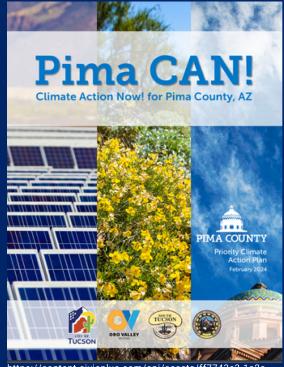


| Grant Categories | Summary of Actions | Potential Impact |
|---|--|--|
| Clean Transportation and Mobility | Replace diesel buses; build bridges, bike boulevards; improve bus stops and bike share access. | Reduce emissions, improve connectivity, and enhance multimodal transport options. |
| Water Efficiency and Infrastructure | Implement advanced water metering; replace fixtures; expand SHARP for water recharge and storage. | Improve water tracking, increase efficiency, and ensure long-term water sustainability. |
| Green Spaces and Urban Heat Mitigation | Create green spaces; reduce turf and asphalt; plant trees and install green infrastructure. | Cool urban areas, mitigate heat, boost workforce readiness and enhance community well-being. |
| Climate Resilience and Community Adaptation | Develop resilience hubs and leadership programs, support retrofits, solar, rainwater harvesting, and housing resilience. | Increase community resilience, reduce energy costs, enhance emergency preparedness. |
| Building Codes and Energy Conservation | Develop climate-adapted building codes | Lower building emissions, improve energy efficiency. |
| Parks and Public Spaces | Implement turf removal; expand SHARP to enhance water recharge and sustainability | Reduce water usage, enhance urban sustainability, and improve public spaces. |
| Workforce Development and Youth Training | Train workforce in urban forestry, energy-efficient construction, retrofits, solar installation, rainwater harvesting, and housing resilience. | Build a skilled, climate-ready workforce. |

Sharing Resources and Coordinating with Tribes and Jurisdictions

The CAT has been actively sharing resources and coordinating efforts across jurisdictions through two key initiatives:

- Heat Preparedness and Relief Efforts:
 Detailed under the Community Resilience category, these efforts focus on mitigating the impacts of extreme heat and enhancing community readiness.
- Pima County's Coordinated EPA Climate Pollution Reduction Grant (CPRG): This initiative, which includes representation from the Tohono O'odham Nation, aims to advance regional climate initiatives by fostering collaboration, resource sharing, and coordinated action among stakeholders. The CPRG team holds monthly meetings to ensure consistent communication and progress on shared goals.



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Commission on Climate Energy and Sustainability

The City's Commission on Energy, Climate, and Sustainability (CCES) is an important climate action partner for the CAT, providing input on plans and surveys, supporting community engagement efforts, and collaborating on projects like the Microgrid white paper. CCES helped gather community input for the Heat Action Roadmap at a 100+ participant event, ensuring it reflected Tucsonans' heat resilience priorities. Through these efforts, CCES actively supports the implementation of the City's climate action strategies.



Promoting Tucson's Climate Leadership

CAT members play a key role in promoting Tucson's climate leadership by engaging with professional networks like 10Across, showcasing the City's initiatives at conferences and panels, and building cross-sector collaborations. These efforts strengthen community and regional partnerships while amplifying Tucson's climate action and resilience strategies on a broader scale.











Youth Employment and Workforce Development

The City of Tucson actively supports youth employment and workforce development through various programs. A fellowship program places high school and college students across departments to gain hands-on city government experience. The City supports Tucson Clean and Beautiful (TCB) Climate Action Leaders Summer Program to teach youth climate leadership, environmental stewardship, and sustainable practices. Mayor Romero's Tucson Million Trees supports TCB's Youth Tree Leader Program, training youth in tree care and planting.

The \$5M USDA grant funds workforce training for 30 Youth Tree Leaders, young adults, neighborhood representatives, and certified specialists. Additionally, the recently awarded \$19.9M EPA grant will support certifications, internships, and climate resilience career promotion.





















G-3 Develop educational, communications, and outreach resources and assets promoting climate action and adaptation

This strategy focuses on education and engagement by creating multilingual climate toolkits, launching a Resilient Tucson Awards program, providing resources for climate-positive behavior change, partnering on sustainable infrastructure tours, and enhancing Tucson-specific climate curricula through school partnerships, fostering widespread awareness and action on climate resilience and sustainability.

Climate Action Awareness, Education and Engagement

The CAT actively engages and educates stakeholders on climate risks and city actions. Members present to groups like Arizona Forward's Emerging Leaders Program and Nature

Conservancy's Water Leadership Institute.

In 2024, the City of Tucson, Pima County Health Department, and University of Arizona launched the Southern Arizona Heat Summit, engaging nearly 120 participants, including public health professionals, urban planners, and community members, to address heat illness and kick off the heat preparedness season. Planning is underway for the 2025 Heat Summit, which will highlight regional heat resilience efforts, provide opportunities for hands-on learning and workshopping, and serve as a coordination starting point for the upcoming heat season.

Sustainable Infrastructure Tours

Every Valentine's Day, the Department of Environmental and General Services (EGSD) offers tours of the landfill and recycling center. Residents gain insights into waste management, recycling processes, and the City's sustainability efforts. These tours aim to raise awareness about proper waste disposal, promote recycling practices, and encourage community involvement in reducing environmental impacts.





The CAT will collaborate with community organizations to offer tours of sustainable infrastructure projects and provide related public education, drawing from existing initiatives.



Tucson-Specific Climate Curricula

Since 1998, the City of Tucson Water Department has partnered with Environmental Education Exchange (EEE) to deliver water conservation and climate change education programs. In 2022, a twoday climate change program for grades 8-12 was introduced, teaching climate science, local impacts, and Tucson's resilience plans. During the 2023-2024 school year, it reached 17 schools and 2,662 students.



As part of a FEMA-funded project, the CAT is developing the Community Resilience Leadership Academy (CRLA) to educate and empower vulnerable communities on climate risks and resilience. CAT has drafted learning modules and is gathering feedback from stakeholders before finalizing curriculum materials. The CRLA will be piloted, refined, and offered in English and Spanish to ensure accessibility.





COMMUNITY RESILIENCE LEADERSHIP ACADEMY (CRLA) - Draft

Module 1: Understanding Climate Change and Climate Justice

- Understand the basics of climate change
 Understand natural hazards and disasters in the context of climate

Module 2: Understanding Local Climate Risks and Resilience Strategies

- · Uderstand and explore local climate risks
- Understand climate mitigation and adaptation strategies
 Understand climate resilience

Module 3: Understanding the components in a communitybased resilience plan

Understand the components of a community-based resilience plan
 Learn how communities are implementing resilience strategies at home, neighborhood, and community levels.

Module 4: Designing Resilience Hubs

- . Understand the components and functions of resilience hubs Explore local examples and identify gaps in current resilience
- Design a resilience hub tailored to participants' communities.

Module 5: Planning and Preparing for Climate Resilience

- Understand the importance of preparation, including education, messaging, and identifying infrastructure before climate disasters.
 Identify existing community-led initiatives that enhance preparedness and potential gaps.

Module 6: Mitigate Climate Risks

- Understand the role of mitigation in reducing climate risks.
 Explore nature-based and built-environment solutions for risk mitigation.
 Learn about local regulations and policies that support mitigation efforts.

Module 7: Responding, Recovering, and Adapting to Climate Events

- Learn how to respond to climate disasters with effective, coordinated effe
 Understand the recovery process, focusing on rebuilding stronger
- Explore adaptation strategies to minimize future risks.

Module 8: Transformative Solutions - Going Beyond Emergency Response

- Understand the role of equity and accessibility in transformative climate
 Explore structural and institutional barriers to resilience and how to over-
- Revise community resilience plans to include transformative, long-term







G-4 Monitor and report emissions performance to adapt decarbonization strategies

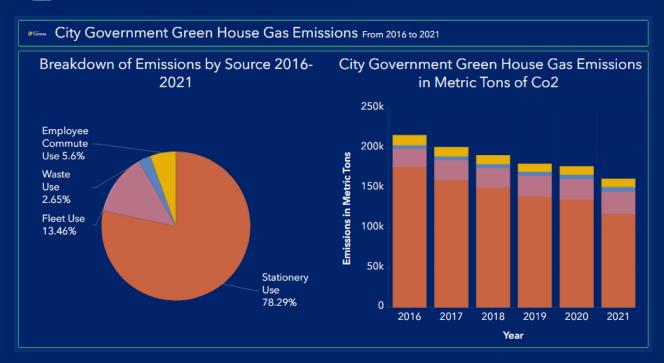
This strategy focuses on enhancing emissions monitoring by maintaining municipal greenhouse gas (GHG) inventories, quantifying fugitive emissions, assessing Scope 3 emissions, collaborating with the Pima Association of Governments on community-wide emissions, and developing a consumption-based inventory. These actions ensure comprehensive tracking and inform strategies for reducing greenhouse gas emissions effectively.

City of Tucson GHG Inventory

The City of Tucson's Energy Manager collaborates with the Pima Association of Governments (PAG) to produce the City's greenhouse gas (GHG) inventory using the latest data from City operations. The most recent <u>inventory</u>, completed in 2023, covers 2016–2021. Through the CPRG partnership (see pg. 21), the County is updating the regional GHG inventory, including Tucson, with additional metrics like fugitive emissions. This updated data will help the City identify gaps, improve emissions monitoring, and adjust strategies to enhance greenhouse gas reductions.



Tucson Climate Action Hub





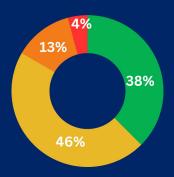
Category 2



This category includes **four strategies and 24 actions** aimed at building community resilience: establishing accessible resilience hubs (CR-1), enhancing heat mitigation for vulnerable populations (CR-2), implementing nature-based solutions to reduce emissions and improve ecosystems (CR-3), and strengthening community and regional networks for emergency response and resource sharing (CR-4).

Progress To Date

FY24 Goal VS Actual Progress







FY24 Goal
Per CIS-FY24, 14 of 24 actions

Progress

Per CIS-FY24, 14 of 24 actions 2 were to be significantly advanced.

20 of 24 actions are in the "Completed | Ongoing" and "In Progress" categories.

Progress Key

Actions Completed | Ongoing

Actions In Progress

Actions are finalized, either successfully completed (on time or early) or with adjustments. This category also includes ongoing actions maintained without a set end date.

Work is underway on actions, including those started early, progressing well, scaling beyond scope, or partially completed but requiring additional effort to finish.





Actions Not Started | Future Years



Action are planned but have not yet commenced. Reasons may include prioritization, constraints, funding limitation, or scheduling for future years.

Actions Delayed

Actions face delays due to obstacles, risks, pauses, or evaluation needs, requiring intervention, resolution, or adjustments to resume progress effectively.

The City surpassed the FY24 goal, advancing 83% of actions compared to the 58% outlined, with six actions planned for FY26. Delayed actions include integrating climate and equity goals into departmental reviews, adopting climate projections for planning, creating multilingual climate toolkits, launching a Resilient Tucson Awards program, and organizing sustainable infrastructure tours. Most delays will be addressed this and the next fiscal year, supported by the October 2024 hiring of a Community Relations Coordinator to drive these efforts forward.



CR-1 Establish accessible resilience hubs to provide resources for climate preparedness and response.

This strategy focuses on establishing resilience hubs to support vulnerable communities, creating guidelines for emergency response and resource mobilization, collaborating with partners for best practices, and developing multilingual resources to ensure accessibility and preparedness for climate-related emergencies.

Resilience Hubs and Preparedness Resources

The City of Tucson is working to establish resilience hubs to support residents before, during, and after emergencies, enhance community resilience, and provide essential services. Guided by the Urban Sustainability Directors Network (USDN) model, these hubs focus on five foundational areas:

SERVICES & PROGRAMS



Offering additional services and programs that build relationships, promote community preparedness, and improve residents' health and well-being.

COMMUNICATIONS



Ensuring the ability to communicate within and outside the service area year-around and especially during disruptions and throughout recovery.

BUILDING & LANDSCAPES



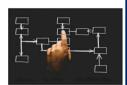
Strengthening the resilience of the facility to ensure that it meets operational goals in all conditions.

POWER



Ensuring reliable backup power to the facility during a hazard while also improving the costeffectiveness and sustainability of operations in all three operating modes.

OPERATIONS



Ensuring personnel and processes are in place to operate the facility in all three modes.

Source: https://resilience-hub.org/core-components/

Using this framework, CAT is assessing the readiness of existing cooling centers to function as resilience hubs by creating an asset map and evaluating their usability. This effort emphasizes strategic placement of cooling centers to maximize impact within limited resources.

Through the Community Resilience Leadership Academy (CRLA), CAT will gather input on community priorities and desired features of resilience hubs while training participants to develop community-based resilience plans (CBRPs) and apply for funding to implement resilience-related projects.

Additionally, the \$19.9M EPA grant will fund three resilience hubs, including one at the Donna Liggins Center. The City is collaborating with Tucson Electric Power (TEP) and the Pacific Northwest National Lab (PNNL) to install a microgrid or battery storage system at the Center. TEP has committed to covering system and grid-connection costs, enabling the Center to operate during power outages.



As "power" is a key USDN foundational area, this partnership would allow grant funding to enhance the building's resilience, ensuring it meets operational and communication goals year-round, particularly during disruptions. PNNL's role includes conducting an energy justice assessment and incorporating recommendations into the microgrid's design to address energy equity challenges.

CAT will align these efforts with guidance from Mayor and Council and City leadership to ensure impactful partnerships and outcomes.

Strategy 2

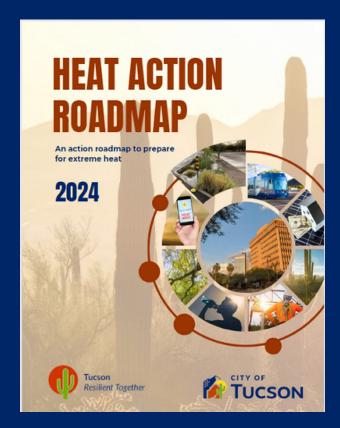
CR-2 Bolster community-wide heat mitigation resources to protect vulnerable individuals and communities

This strategy focuses on comprehensive urban heat mitigation through shade equity, cool surfaces, and urban greening. It includes enhancing cooling infrastructure, piloting reflective surfaces, creating climate-resilient building codes, supporting heat safety for workers, and developing a cool corridor network to connect residents to essential cooling resources during extreme heat events.

Heat Action Roadmap and Worker Heat Safety

The summer of 2024 marked significant advancements in the City of Tucson's heat resilience initiatives. Key accomplishments included the adoption of the award-winning **Heat Action Roadmap** by Mayor and Council, which outlines strategies to mitigate heat impacts and enhance community preparedness.

To further prioritize worker safety, the City implemented new protections through Ordinance No. 12100, requiring all city contractors to develop and enforce Heat Safety Plans. Additionally, Administrative Directive A.D. 2.03-8 extended similar provisions to city employees. Together, these measures ensure that all city departments and contractors take proactive steps to address heat-related risks.



The Heat Advisory Committee, co-led by the Mayor's and Manager's Offices, guides the implementation of the Roadmap. Composed of diverse experts, the committee fosters collaboration and equity-focused solutions for heat resilience, meeting quarterly with additional working groups as needed.



Cooling Infrastructure

The City of Tucson has been actively enhancing cooling infrastructure throughout the community. Since 2023, as part of the Prop 407 bond project, the Parks and Recreation Department has installed 405 trees, 25 shade structures, 44 drinking fountains, and 5 splashpads.

Additionally, the Department Transportation and Mobility (DTM) piloted multiple cool pavement technologies - on East Country Club Road, Paseo Vista/Vista del Pueblo, Westside and Sunset Villa neighborhoods, Barrio Santa Cruz Lane, and in Sunset Villa.

Climate-Resilient Building Codes

The \$3.5M Resilient and Efficient Code Implementation (RECI) grant, awarded by the Department of Energy (DOE), brings together the New Buildings Institute (NBI), local governments, state agencies, researchers, industry experts, and community-based organizations through the Resilient Southwest Building Code Collaborative. The grant focuses on creating climate-adapted building codes for the Southwest to ensure new construction is both highly energy-efficient and affordable.

Cool Corridors

The Department of Transportation and Mobility (DTM) and CAT have secured two high-impact grants to enhance heat resilience at bus stops, including an \$11.5 million grant from the Federal Transit Administration. These grants, along with other initiatives, will integrate green infrastructure and heat mitigation resources into Tucson's transit network, improving comfort and safety for transit users.





CR-3 Nature-based solutions that reduce/sequester emissions, improve ecosystem health

This strategy promotes nature-based solutions by advancing the Tucson Million Trees initiative, implementing an urban forest master plan, integrating green infrastructure at city facilities, mitigating flooding through restoration projects, and collaborating with community organizations to support urban agriculture and community farming, enhancing environmental resilience and equity across Tucson.

Tucson Million Trees

The Mayor's Office, Urban Forestry Program, and community partners are driving progress on the Tucson Million Trees initiative. Since 2020, approximately 120,000 trees have been planted or distributed throughout Tucson neighborhoods to promote Tree Equity. This number is expected to grow significantly with the launch of the City's TREE Center and the USDA-funded Grow Tucson urban forestry project.

Urban Forest Master Plan

The <u>Community Forest Action Plan</u> (CR-3.2) outlines a comprehensive strategy with clear roles and responsibilities for developing a thriving and sustainable urban forest in Tucson.



It includes an action plan for City staff, community partners, and opportunities for broader community engagement. In 2024, the City completed its first Tree Inventory, which will be integrated into City management systems and made publicly accessible in 2025.

Green Infrastructure at City Facilities

The City will be investing in turf reduction projects for non-recreational turf that can be converted into additional shaded, lower water use public spaces.

Flood Mitigation and Restoration Projects

Since the execution of a 2021 Intergovernmental Agreement (IGA) between the City of Tucson and Pima County, Storm to Shade (S2S) has forged a partnership with the Pima County Regional Flood Control District. This collaboration facilitates the construction and long-term maintenance of flood control facilities within the city, offering multiple additional benefits through green stormwater infrastructure (GSI). Do date over \$3 million in projects have been completed to reduce community flooding and enhance washes.



CR-4 Bolster community and regional networks to improve emergency response and resource-sharing

This strategy enhances community resilience by training local groups on emergency response, collaborating with businesses to sustain operations, developing mutual aid networks, training staff to support residents, establishing heat illness preparedness plans, and pursuing projects like broadband expansion to strengthen interconnectivity and response during extreme climate events and disasters.

Heat Relief Kit Distribution Initiative

The CAT spearheaded a pilot project to distribute over 900 heat relief kits to vulnerable populations, including unhoused individuals and residents of mobile home parks. Partnering with the Mayor's Office, Housing First's MDOT, faith-based groups, and the Red Cross, CAT focused on high-risk areas identified through 911 heat-related call data. Supported by contributions from the Pima County Health Department and TEAM Choir, the initiative engaged 117 volunteers contributing 211 hours.

This effort highlights the critical need for proactive measures to prevent heat-related tragedies in vulnerable communities.







Multi-Jurisdictional Joint Heat Action Team (J-HAT)

After the 2024 Southern Arizona Heat Summit, the City of Tucson Pima County collaborated to address heat preparedness through weekly meetings. This effort led to the creation of the Joint Heat Action Team (J-HAT), a multijurisdictional initiative dedicated to resource-sharing and coordinated heat strategies. As a result, the region went from having 12 cooling center in 2023 to over 40 in 2024 to support residents during extreme heat events.

Reflection and Improvements: 2024 Heat Season Hot Wash

The Pima County Health Department hosted a hot wash session with tribal representatives, emergency responders, cooling center providers, and local officials to evaluate the 2024 heat season. The session celebrated achievements, including expanded cooling infrastructure and public awareness campaigns, while identifying opportunities for improvement, such as increased support for manufactured homes.





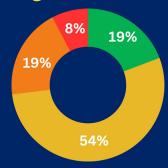
Category 3



This category consists of **five strategies and 26 actions** focused on reducing greenhouse gas emissions from energy use in City operations and the community. Key strategies include decarbonizing the grid (E-3), advancing energy efficiency (E-2), and expanding access to solar programs (E-4). Notable actions involve partnering with Tucson Electric Power for renewable electricity (E-3.1), incentivizing solar storage installations (E-4.7), and promoting community solar co-ops (E-4.4). These initiatives aim to ensure equitable access to clean energy, enhance resilience, and achieve Tucson's carbon neutrality goals.

Progress To Date

FY24 Goal VS Actual Progress





Per CIS-FY24, 14 of 26 actions were to be significantly advanced.



Progress

19 of 26 actions are in the "Completed | Ongoing" and "In Progress" categories.

Progress Key



Actions Completed | Ongoing

Actions are finalized, either successfully completed (on time or early) or with adjustments. This category also includes ongoing actions maintained without a set end date.



Actions Not Started | Future Years

Action are planned but have not yet commenced. Reasons may include prioritization, constraints, funding limitation, or scheduling for future years.



Actions In Progress

Work is underway on actions, including those started early, progressing well, scaling beyond scope, or partially completed but requiring additional effort to finish.



Actions Delayed

Actions face delays due to obstacles, risks, pauses, or evaluation needs, requiring intervention, resolution, or adjustments to resume progress effectively.

The City surpassed the FY24 goal, advancing 73% of actions compared to the 54% outlined, with three of eight future actions in progress. Delayed actions include exploring vehicle-to-grid (V2G) capabilities and streamlining solar incentives and permitting. The CAT, in collaboration with the Energy Manager, is advancing energy initiatives, including bidirectional charging opportunities at Donna Liggins and developing the City's Solar Empowerment Program with Solar United Neighbors, which includes assessing opportunities to streamline permits.



E-1 Decarbonize City-owned and operated buildings and facilities

This strategy focuses on decarbonizing city-owned buildings and facilities by benchmarking energy use, introducing a carbon tax, improving energy efficiency through weatherization and ESCO partnerships, piloting clean energy technologies, and transitioning landscaping equipment to battery-powered tools, advancing sustainability and reducing the City's carbon footprint.

Energy Benchmarking and efficiency upgrades

The Energy Office is actively benchmarking energy use for 250 municipal buildings, with 20% completed and another 20% targeted for FY25. Additionally, the City of Tucson replaced most street lights with LED street lights, improving energy efficiency, reducing greenhouse gas emissions, and enhancing nighttime visibility while lowering operational costs.

Transitioning Municipal Landscaping Equipment to Electric

Under the City Manager's direction, departments began transitioning gas-powered landscaping equipment to electric, supported by nearly \$800,000 from the "Climate Fund." This shift reduces emissions, noise pollution, and operational costs, advancing the City's sustainability goals while minimizing environmental impact.

Strategy 2

E-2 Support the electrification and decarbonization of existing and new residential and commercial buildings

This strategy promotes building electrification and decarbonization by implementing home energy retrofits, developing regional energy codes, creating a loan fund for small businesses, replacing gas-powered systems with electric alternatives, and launching a net zero accelerator program.

Home Energy Retrofits

The Housing and Community Development Department (HCD) provides essential energy retrofit services to support low-income families and public housing residents. Through the Home Repair Program, HCD conducts vital repairs, including HVAC upgrades and weatherization, to enhance resilience. The Lead Abatement Program includes weatherization efforts like window replacements alongside lead removal.



HCD also partners with Tucson Electric Power (TEP) to implement weatherization in single-family and multifamily public housing units and leads a water conservation initiative to replace water fixtures in tenant-paid units. Additionally, using "Climate Funds" HCD is installing solar panels at 15 public housing sites to reduce energy costs and improve sustainability.

Additionally, through the **newly awarded \$19.9 EPA grant**, project partner **S**ERI will perform energy audits and efficiency upgrades for **350 low-income households**. This initiative includes installing Energy Star appliances, upgrading HVAC systems, and applying roof coatings to improve energy efficiency, reduce energy costs, and enhance comfort. This program will significantly lower energy burdens and promote equitable energy solutions for vulnerable households across Tucson.

Strategy 3

E-3 Procure zero-emission electricity and decarbonize City and community power supply

This strategy focuses on transitioning to zero-emissions electricity for the City and community. Key actions include collaborating with Tucson Electric Power (TEP) and Trico to accelerate renewable energy adoption, exploring a community choice energy program for 100% renewable power, assessing the feasibility of a public power utility, and utilizing solar service agreements (SSAs) or virtual power purchase agreements (PPAs) to meet municipal energy needs. These efforts aim to decarbonize the power supply and support Tucson's sustainability goals.

Energy Sourcing Study

GDS Associates, Inc. is conducting the Energy Sourcing Study for the City of Tucson. The study explores the feasibility of establishing a public power utility or a Community Choice Aggregation (CCA) program to lower emissions and increase renewable energy use. Key focus areas include cost analysis, asset acquisition, renewable energy targets, and separating systems from Tucson Electric Power. Additionally, the study evaluates solar service agreements (SSAs), microgrids, and virtual power purchase agreements (VPPAs). Public feedback will be integrated into the findings. Preliminary results will be presented to the Mayor and Council on January 21, 2025, with the final report expected by Summer 2025.





TEP's Green Tariff

The City of Tucson is considering joining TEP's green tariff system and establishing a power purchase agreement to source 100% of its operations from renewable energy. This initiative stems from an agreement between TEP's CEO and Mayor Regina Romero to advance the City's carbon neutrality goals. If the City joins TEP's green tariff, it would achieve a 44% reduction in total emissions for city operations.

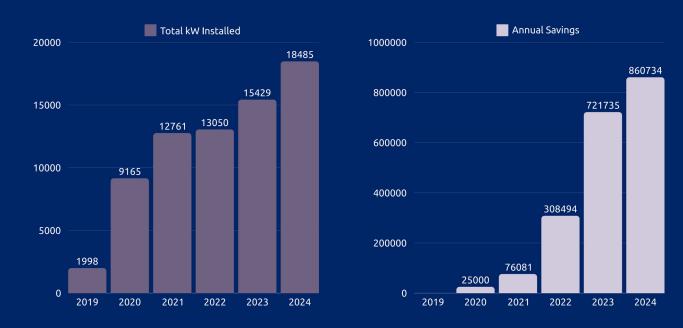
Strategy 4

E-4 Install and promote distributed energy resources (DERs) such as rooftop solar to provide local renewable energy and enhance energy resilience

This strategy aims to expand distributed energy resources (DERs) to boost renewable energy use and resilience. Key actions include installing solar on City properties, integrating battery storage, streamlining solar permitting, exploring community solar models, and incentivizing residential and commercial solar adoption.

Solar Energy at City Facilities

The City of Tucson is dedicated to expanding solar energy on municipal properties, increasing from 8 projects totaling 2,000 kilowatts (kW) in 2019 to 72 projects totaling over 18,000 kW in 2024.



Annual savings from these systems have increased because of the number of systems installed and rate increases from TEP.



| Status | Total Sites | System Size (kWdc) |
|-----------------|-------------|-----------------------|
| Completed | 72 | 18,485 |
| Contracted | 7 | 2,278 |
| In Construction | 1 | 8,602 |
| Proposed | 13 | 720 |
| Total | 93 | 30,086 |

As outlined in the TRT Plan, the City committed to installing 30 MW of solar panels on municipal facilities. This goal will soon be achieved based on the identified solar projects.

SolarAPP+

The City of Tucson participates in the SolarAPP+ program, developed by the National Renewable Energy Lab, to streamline same-day solar permitting. This has significantly increased the number of residential solar permits processed by the City.

Solar Empowerment Program

The City of Tucson contracted Solar United Neighbors (SUN) to develop a city-operated Solar Empowerment Program to support solar panel installations in low-income households. SUN will complete eight key tasks, including assessing the local solar market, ensuring regulatory compliance, proposing program eligibility and approach, designing an incentive structure, conducting financial analysis, engaging with the community and stakeholders, and establishing monitoring and evaluation processes.

The program is critical for advancing energy equity, reducing energy costs for vulnerable households, and contributing to the City's renewable energy and climate resilience goals.



E-5 Pursue additional local sources of renewable energy, including resource recovery and heat exchange

This strategy focuses on harnessing additional local renewable energy sources to advance sustainability. Key actions include implementing a methane capture project at the Los Reales Sustainability Campus to convert biogas into renewable energy, exploring renewable thermal energy options such as geothermal heat pumps, and monitoring academic research on safely blending hydrogen into natural gas systems.

Los Reales Landfill Gas Recovery Project

The Environmental and General Service Department (EGSD), in collaboration with the Procurement Department, issued a Construction Manager at Risk (CMAR) solicitation and is currently negotiating with a firm to develop a Landfill Gas (LFG) Utilization Project at the Los Reales Landfill. The project aims to refine LFG into Renewable Natural Gas (RNG) for injection into a regional gas pipeline, benefiting the transportation industry, or to generate electricity to power City operations. This initiative supports the City's sustainability goals by reducing emissions and promoting renewable energy use.





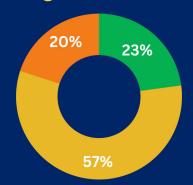
Category 4



This category consists of six strategies and 35 actions to promote sustainable, climate-resilient transportation and land use in Tucson. Key efforts focus on walking, biking, and rolling (T-1); investing in safe, convenient public transit (T-2); adopting smart-growth approaches for car-free living (T-3); expanding electric vehicle infrastructure (T-4); transitioning public fleets to zero-emission vehicles (T-5); and encouraging City employees to reduce commute-related emissions (T-6). Together, these initiatives support a sustainable and accessible future for Tucson.

Progress To Date

FY24 Goal VS Actual Progress







28 of 35 actions are in the "Completed | Ongoing" and "In Progress" categories.

Progress Key



Actions Completed | Ongoing

Actions are finalized, either successfully completed (on time or early) or with adjustments. This category also includes ongoing actions maintained without a set end date.



Action are planned but have not yet commenced. Reasons may include prioritization, constraints, funding limitation, or scheduling for future years.

Actions In Progress

Work is underway on actions, including those started early, progressing well, scaling beyond scope, or partially completed but requiring additional effort to finish.

Actions Delayed

Actions face delays due to obstacles, risks, pauses, or evaluation needs, requiring intervention, resolution, or adjustments to resume progress effectively.

The City exceeded its FY24 goal by advancing 80% of actions, surpassing the 60% target.

Of the eight projects planned for FY26, four are already in progress. While all actions are underway, certain sub-actions, such as installing shower facilities for employees, remain unstarted. The Climate Action Team (CAT) will collaborate with departments to prioritize and advance the actions and sub-actions with the greatest impact.



T-1 Champion walking, biking, and rolling as sustainable and climate resilient mobility options

This strategy focuses on promoting walking, biking, and rolling as sustainable, energy-efficient transportation options. By enhancing infrastructure such as sidewalks, bike lanes, paths, and shaded seating, it aims to create safer and more accessible neighborhoods. Additionally, the strategy emphasizes the importance of heat-resilient designs to protect residents from rising temperatures and more frequent heat waves, ensuring sustainable and comfortable mobility for all.

Pedestrian Improvements

The Department of Transportation and Mobility (DTM) has made significant strides in advancing sustainable and climate-resilient infrastructure, focusing on measurable outcomes that improve accessibility, safety, and sustainability across Tucson.

DTM repaired over 20,000 square feet (5,078 linear feet) of sidewalks, improving walkability and safety for residents. The Sidewalk Repair Cost Share Program supported low-income property owners in maintaining sidewalks, enhancing accessibility for vulnerable communities. Additionally, 2,736 new ADA-accessible ramps were installed under Prop 101 and Prop 411, and 7 existing ADA ramps were repaired, significantly improving accessibility for individuals with mobility challenges and ensuring safer, more inclusive pathways throughout the city.





Bikeways and Shared Use Paths

To promote active transportation, DTM designed 11 centerline miles of **new bicycle boulevards** and began construction on 5.6 centerline miles of additional boulevards. Completed projects include 1.5 miles of **protected bike lanes** on Maclovio Barraza Parkway and 23.3 miles of Prop 407 connections, including bike boulevards and shared-use paths. These projects provide safer, interconnected routes for cyclists and pedestrians, reducing dependence on personal vehicles and lowering emissions.

Bike Racks

DTM has installed over 500 bike racks since 2014, providing free racks to businesses and public installations to enhance biking accessibility. In 2024, Park Tucson added 11 bike lockers from Sun Tran, expanding secure bike parking options across the city.

Community Safety Initiatives

DTM funded **10 traffic-calming projects** through **Safe Streets Mini-Grants**, encouraging walking and biking while reducing accidents. Additionally, **rider training and mobility classes educated 152 attendees**, further promoting safe and accessible transit options.

Partnerships and Collaborative Efforts

Partnerships with Pima County through the **Safe Streets and Roads for All** (SS4A) program resulted in **Safe Routes to School** initiatives, public outreach campaigns, and transportation safety improvements. These collaborations have expanded the City's capacity to implement impactful, community-focused projects.







T-2 Invest in safe, comfortable, and convenient public transit as the backbone of a sustainable and resilient transportation system

This strategy focuses on enhancing buses and streetcars as the most efficient modes of transportation for moving large numbers of people over longer distances. These systems reduce road congestion, minimize pollution, and maximize societal benefits compared to private vehicles. Prioritizing investments to make buses and streetcars safer, more comfortable, and more convenient will ensure they become the preferred choice for longer trips, supporting sustainable and efficient urban mobility.

Fare Free Transit

Since the pandemic, Tucson Mayor and Council have invested in maintaining a fare-free transit system, making public transportation more accessible and equitable for all residents. This initiative has supported increased ridership, with 1.7 million riders on the Sun Link streetcar in FY 2024, while reducing car dependency, lowering emissions, and promoting sustainable transportation.





Shared Mobility Programs

Shared mobility initiatives have facilitated **over 120,000 trips** from March 2023 to December 2024, with **32,603 trips on Tugo Bike Share** and **92,379 trips on e-scooters**. These programs provide flexible and sustainable transportation options, helping to reduce traffic congestion and emissions. A **Better Bike Share Partnership Living Lab Grant** has enabled DTM to evaluate equity in these programs, focusing on co-locating mobility hubs with transit stops to enhance access for underserved communities.









Sun On Demand Transit Service

Sun On Demand Transit Service offers shared, curb-to-curb rides within designated zones. Curb-to-curb service involves picking up and dropping off riders at the curb of their chosen start and stop locations. Reservations can be made one to seven days in advance, and same-day reservations are accommodated when possible. The service operates on a first-come, first-served basis, offering door-to-door transportation within the service areas of Ward 1 or Ward 5. Sun On Demand utilizes smaller shuttle-style vans enhancing mobility within residential streets compared to standard 40' buses.





Roadway and Traffic Optimization

DTM installed adaptive traffic signals at **72** intersections, reducing delays, improving traffic flow, and lowering red-light running incidents by nearly 70%. These upgrades saved an estimated **22.8** million seconds of travel time and reduced emissions equivalent to planting **17,000** acres of forest. The improved efficiency also saved residents approximately \$1.5 million in annual fuel costs.

Transit Infrastructure Enhancements

With federal funding support, DTM will install **80 new bus shelters** featuring green infrastructure and accessibility upgrades, creating safer and more comfortable stops for riders. The department is also planning a **new CNG station to eliminate the remaining diesel buses in the Sun Tran fleet**, a milestone in achieving a carbon-neutral transit system.



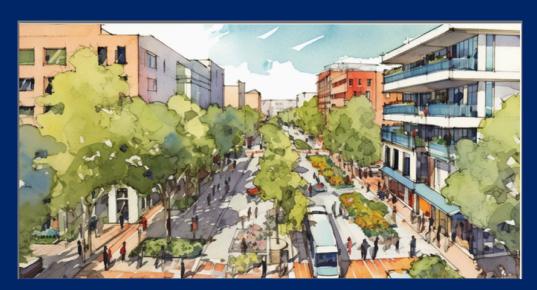


T-3 Adopt a "smart growth" approach that supports car-free and car-lite living throughout the City of Tucson and concentrates public services and infrastructure investments in existing neighborhoods

This strategy addresses the climate impacts of Tucson's ongoing population and economic growth by guiding development in a sustainable and equitable way. Encouraging the creation of affordable housing along transit corridors can reduce car dependency and the associated financial and environmental costs. By prioritizing "infill" development, the city can enhance walkability, allowing more daily destinations to be conveniently located in the same area. However, to ensure this growth benefits everyone, it must be paired with robust anti-displacement measures that protect and uplift existing residents and small businesses.

Corridor Redevelopment Project

The City of Tucson's **Planning and Development Services Department** (PDSD) is advancing the **Corridor Redevelopment Project**, aimed at revitalizing underutilized commercial corridors to address housing affordability and support sustainable urban development. This project seeks to remove zoning barriers and enable higher-density, mixed-use, and transit-oriented developments, focusing on affordable and workforce housing. Proposed amendments to the Unified Development Code will streamline regulations for housing and community-serving uses, reduce parking requirements, and increase building height allowances in certain zones. The project prioritizes walkability, bikeability, and shade through climate-adapted design standards.



This redevelopment effort has a profound impact on Tucson's climate action goals. By promoting transit- and pedestrian-oriented developments, the project reduces reliance on personal vehicles, thereby lowering greenhouse gas emissions. Mixed-use developments encourage more compact urban growth, decreasing urban sprawl and preserving natural ecosystems. Furthermore, climate-adapted designs such as increased shade, open spaces, and energy-efficient building requirements enhance resilience to rising temperatures and extreme weather events. The initiative aligns with Tucson's long-term sustainability vision by fostering equitable, livable, and environmentally conscious communities.



T-4 For unavoidable vehicular trips, promote electric vehicles via charging infrastructure expansion, building codes, partnerships, and advocacy

This strategy focuses on transitioning from fossil fuel-powered cars and trucks to electric vehicles (EVs) to achieve Tucson's climate goals. While consumer choices are beyond the City's direct control, efforts can be made to facilitate EV adoption by expanding charging infrastructure and implementing supportive measures. By reducing barriers to EV ownership, the City can accelerate this critical shift toward a more sustainable transportation system.

EV Readiness Roadmap

The City of Tucson's award-winning <u>EV Readiness Roadmap</u> (2022) outlines strategies and actions to accelerate the adoption of electric vehicles (EVs) in City operations and across the community. As part of these efforts, the City has implemented EV-ready standards for new developments, including residential, multi-family, commercial, retail, and office spaces. These standards are currently under review to identify potential improvements.

Green Fleet Transition Plan (GFTP)

In 2023, the City adopted the Green Fleet Transition Plan (GFTP) to reduce greenhouse gas emissions and align with the EV Readiness Roadmap. Key actions include fleet "rightsizing," reducing vehicle miles traveled (VMT) and idle times, prioritizing EV replacements, deploying EV charging stations, and educating staff on eco-driving practices.

Annually, light-duty vehicles are evaluated for replacement, prioritizing EVs, followed by plug-in hybrids, hybrids, or alternative fuel options if EVs are unavailable. Departments seeking exemptions must submit a Non-EV Purchasing Waiver with operational justification for approval. To date, 133 waivers have been approved for departments including Tucson Police, Tucson Water, and Housing and Community Development.

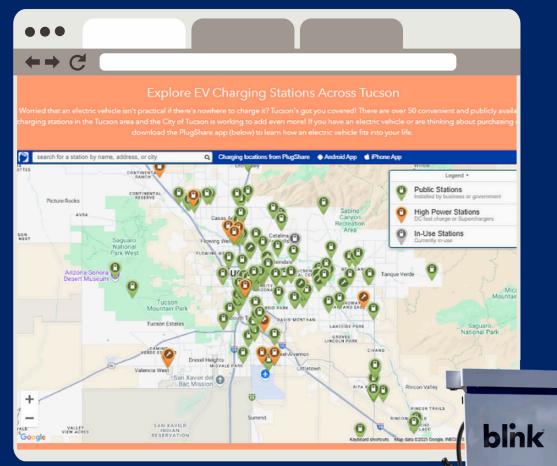




Expanding EV Charging Infrastructure

The City is collaborating across departments and with external partners, including Tucson Electric Power (TEP), to expand its EV charging network. Charging infrastructure remains a significant challenge nationally, but Tucson is actively addressing this through funding opportunities. In partnership with Pima County, TEP, and Trico, the City applied for an \$11.5 million Federal Charging and Fueling Infrastructure Grant. This funding would support the installation of 80 EV charging stations in historically disadvantaged areas, with \$2.5 million dedicated to City-led efforts.

The Environmental and General Services Department (EGSD) deployed five solar-powered, grid-independent EV chargers using "Climate Funds," with a mobile trailer arriving soon to enhance charging flexibility.



Link to Plug and Share Map: https://www.plugshare.com

More than 80 locations with multiple charging stations across the city:

- Park Tucson has 2 Blink charging stations.
- Sun Tran has 11 fast-charging stations for the city's bus fleet.
- The city has identified over two dozen public and fleet charging sites.
- The city is using 5 solar-powered mobile EV chargers.

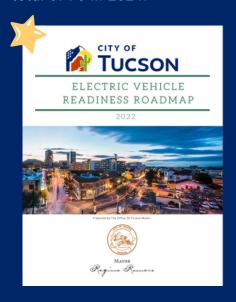


T-5 Transition public agency fleets to zero-emission and near-zero-emission vehicles

This strategy commits the City to leading the transition to electric vehicles by replacing its fossil fuel-powered fleet. While battery electric options for medium- and heavy-duty vehicles remain limited, the City will prioritize adopting vehicles that use zero and near-zero-emission fuels. By taking this proactive approach, the City aims to set an example and drive progress in reducing emissions across all vehicle types.

City Fleet Decarbonization and Electrification

The City of Tucson is actively working to decarbonize and electrify its fleet in alignment with Mayor and Council climate goals. Since the adoption of the EV Readiness Roadmap in 2022, the City has increased its light-duty electric vehicle fleet from just two vehicles to a total of 70 in 2024.







The Department of Transportation and Mobility (DTM) and Sun Tran have integrated 10 electric buses into their fleet, with 10 more pending. DTM is planning a CNG station to replace the last diesel buses in the Sun Tran fleet by 2025. These efforts align with the City's transition to a zero-emission public transit system, reducing greenhouse gas emissions and advancing sustainability goals.

Additionally, the Department of Environmental and General Service (DEGS) has purchased one electric side-loader refuse truck, expected to enter service in Fiscal Year 2025.

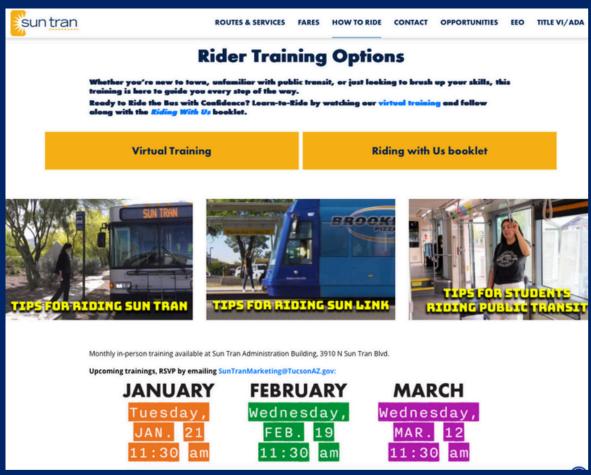


T-6 Encourage City employees to reduce the carbon footprint of their commutes and work-related travel

This strategy emphasizes the City's role as a major employer in promoting sustainable transportation choices among its workforce of over 4,500 employees. By encouraging staff to adopt eco-friendly commuting and work-related travel options, the City aims to lead by example, demonstrating its commitment to reducing emissions and supporting a more sustainable transportation system.

Shared Mobility Education and Safety

DTM and Sun Tran hosted rider training and mobility classes for 152 attendees, promoting safe and accessible transit options. These programs support City employees and residents in adopting sustainable transportation methods. Sun Tran has different options, the virtual training, the riding with Us booklet option, and a monthly in-person training available at Sun Tran Administration Building, 3910 N Sun Tran Blvd.



Link to Virtual training: https://www.youtube.com/watch?v=IBJ_9Id8JPs&t=3s



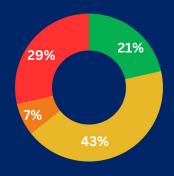
Category 5



Resource Recovery & Management

This category includes **5** strategies and **14** actions to promote sustainable waste management and minimize environmental impacts. Key initiatives include implementing a Zero Waste Plan by 2030 for City operations and 2050 community-wide (RR-1), establishing an organics collection program (RR-2), developing a sustainable procurement policy (RR-3), diverting waste through new technologies and partnerships (RR-4), and expanding the Storm to Shade program to promote green infrastructure (RR-5). These efforts aim to create a more sustainable, resilient Tucson.

Progress To Date



FY24 Goal VS Actual Progress



FY24 Goal

Per CIS-FY24, 10 of 14 actions were to be significantly advanced.



Progress

7 of 14 actions are in the "Completed | Ongoing" and "In Progress" categories.

Progress Key



Actions Completed | Ongoing

Actions are finalized, either successfully completed (on time or early) or with adjustments. This category also includes ongoing actions maintained without a set end date.



Action are planned but have not yet commenced. Reasons may include prioritization, constraints, funding limitation, or scheduling for future years.



Actions In Progress

Work is underway on actions, including those started early, progressing well, scaling beyond scope, or partially completed but requiring additional effort to finish.



Actions Delayed

Actions face delays due to obstacles, risks, pauses, or evaluation needs, requiring intervention, resolution, or adjustments to resume progress effectively.

The City advanced 64% of FY24 actions, below the 71% target. Two of three FY26 actions are in progress, while delayed actions include incorporating Zero Waste goals into waste contracts, establishing curbside organic waste collection, developing a comprehensive strategy to divert organic waste, and completing an inventory of City-procured goods and emissions. The CAT will collaborate with the Environmental and General Service Department (EGSD) to identify collaboration opportunities to advance delays and accelerate progress on in-progress tasks.



RR-1: Implement a Community-wide Zero Waste Plan and accompanying initiatives to achieve zero waste for City operations by 2030, and community-wide zero waste by 2050

This strategy focuses on adopting and implementing the City's Zero Waste Roadmap to significantly reduce waste sent to landfills. By prioritizing waste diversion efforts both within City operations and throughout the community, the City aims to lead the transition toward a more sustainable, circular economy that minimizes environmental impact.



Zero Waste Roadmap

In 2021, Tucson Mayor and Council renamed Los Reales Landfill to **Los Reales Sustainability Campus** (LRSC), reframing waste as a valuable resource rather than a hazard. To advance this vision, the Environmental and General Services Department (EGSD) developed the City of Tucson's Zero Waste Roadmap, adopted in May 2023.

The roadmap outlines a strategy to achieve 50% waste diversion by 2030 and zero waste by 2050, focusing on expanding organics composting, reducing recycling contamination, and fostering partnerships for reuse and recycling. LRSC serves as a hub for piloting innovative technologies, enhancing waste management infrastructure, and fostering regional collaboration.

Grounded in community input, public-private partnerships, and strategic policy development, the roadmap reflects Tucson's commitment to sustainability, environmental justice, and climate resilience, guiding transformative actions in waste management.



Zero Waste Events

Since April 2022, EGSD has hosted bi-annual Zero Waste Events, offering residents a safe way to dispose of expired medications, textiles. electronics, and more. The November 2023 event attracted over 480 vehicles, highlighting strong community participation. These events help divert waste from landfills, prevent environmental contamination from hazardous materials, and recycling promote and reuse. Bv raising and sustainable awareness encouraging practices, these events contribute to Tucson's Waste goals and support environmentally responsible community.



Household Hazardous Waste (HHW) Collection Program

Monthly Household Hazardous Waste (HHW) events attract an average of 445 participants, providing a safe way to dispose of harmful materials. These efforts have diverted over 270 tons of hazardous waste from landfills, reducing environmental contamination risks, promoting public health.

Strategy 2

RR-2: Create a community-wide organics collection and treatment program

This strategy aims to reduce organic waste and divert it from landfills through food waste prevention, rescue, and composting. It includes establishing a citywide curbside collection program and developing a comprehensive management plan to promote sustainability, reduce emissions, and support a circular economy in Tucson.

FoodCycle At-Home Program

This program allows residents to drop off food scraps for composting at 7 collection sites in Tucson, including four 24-hour locked locations. EGSD plans to expand to 12 fully locked sites. Supporting a circular economy, the compost benefits local community gardens and parks. With over 600 newsletter subscribers, the program has gained significant popularity.





Green Waste Diversion

All green waste collected by the City of Tucson is now directed to the Los Reales Sustainability Campus, where it is processed for compost production. The Brush and Bulky program plays a key role in collecting green waste from residential neighborhoods, including branches, leaves, and yard clippings. Additionally, green waste generated through the Parks and Recreation Department's maintenance activities in city parks is also diverted to Los Reales, where it is transformed into compost.



Strategy 3

RR-3 Develop a sustainable procurement policy for city operations

This strategy focuses on developing a sustainable procurement policy for City operations by inventorying procured goods and their emissions and adopting guidelines for sourcing, certification, and disposal. The policy aims to reduce emissions, support local businesses, promote waste diversion, and minimize environmental impacts, aligning procurement practices with Tucson's sustainability goals.



Green Procurement Policy

The procurement division is updating the "Sustainable Procurement Policy Status Report," which compiles existing sustainability-related procurement policies, such as those for recycled paper. While individual policies exist across departments, the City currently lacks a Mayor and Council-approved comprehensive Green Procurement Policy. The procurement division's update presents an opportunity to recommend the creation of a citywide Green Procurement Policy.

The CAT has researched national best practices and identified key social, environmental, and economic factors to guide the development of the policy:

Social Factors

- 1. Diversity and Inclusion: Prioritize purchases from Women-Owned, Disadvantaged, and Service-Disabled Veteran Business Enterprises.
- 2. Fair Labor and Worker Safety: Ensure vendors comply with labor laws, protect workers' rights, and provide safe workplaces.
- 3. Workforce Development: Promote skill-building and job creation through procurement.
- 4. Environmental Justice: Address disproportionate impacts on marginalized populations through equitable procurement practices.
- 5. Community Engagement: Support local businesses and promote transparency in procurement processes.
- 6. Community Impact: Evaluate procurement decisions based on their benefits to underserved communities.

Environmental Factors

- 1. Energy and Water Efficiency: Prioritize energy- and water-efficient products, aligned with certifications like ENERGY STAR and WaterSense.
- 2. Pollution and Toxin Reduction: Reduce emissions and toxins through sustainable product selection.
- 3. Waste Minimization: Promote products that support recycling, composting, and landfill diversion while reducing single-use plastics.
- 4. Sustainable Landscaping: Use eco-friendly products and practices to protect ecosystems and enhance biodiversity.
- 5. Lifecycle Analysis: Assess the environmental impact of products from production to disposal.

Economic Factors

- 1.Life-Cycle Cost Analysis: Evaluate total ownership costs to ensure sustainability and long-term savings.
- 2. Leveraging Buying Power: Use the City's purchasing power to support sustainable markets.
- 3. Social Cost of Carbon: Account for carbon-related social and environmental costs in procurement decisions.
- 4. Durability and Performance: Focus on long-lasting, repairable products to minimize replacements.
- 5. Technology and Innovation: Incorporate new technologies that improve efficiency and reduce waste.
- 6. Vendor Accountability: Require vendors to meet sustainability standards through certifications and transparent reporting.

This proposed policy aims to align procurement practices with the City's sustainability goals while fostering equity, environmental responsibility, and economic resilience.



RR-4: Use new technologies and partnerships to divert waste from landfill

This strategy focuses on leveraging innovative technologies and collaborative partnerships to reduce landfill waste. It includes piloting zero waste technologies, such as ByFusion blocks, and developing metrics to evaluate their effectiveness. Additionally, the City will partner with businesses to identify opportunities for waste reduction, facilitate the adoption of new technologies, and share best practices. These efforts promote a circular economy, reduce environmental impacts, and support Tucson's Zero Waste goals.

ByFusion

The City of Tucson's partnership with ByFusion repurposes non-recyclable plastic waste into construction-grade building blocks. The ByFusion facility at Los Reales Sustainability Campus (LRSC) will break ground in January 2025. In the interim, the City collects 5-6 tons of plastic waste weekly at drop-off locations, sending it to ByFusion's California facility for processing. Once operational, the LRSC facility will divert up to 200 tons of plastic waste monthly, significantly reducing landfill contributions and advancing Tucson's sustainability goals.





Hard -to-Recycle Plastic Program

The City of Tucson's Orange Bin or Hard-to-Recycle Plastics Program, in partnership with Hefty® ReNew™ and ByFusion, offers residents a voluntary way to recycle plastics not accepted in curbside blue bins. Participants collect these materials using orange bags, which are then diverted from landfills and repurposed into valuable resources, such as ByFusion construction blocks.





Sustainable Pavement Resurfacing Initiatives

The Department of Transportation and Mobility (DTM), in partnership with VSS International, integrates recycled materials into pavement resurfacing to reduce landfill waste. In 2023, repaving efforts used recycled tire rubber equivalent to 19,564 passenger tires (166.2 tons) and incorporated over 15,000 tons of Recycled Asphalt Pavement (RAP).

DTM recycles over 99% of old pavement, stored at Los Reales Sustainability Campus (LRSC), with up to 25% RAP used in new mixes. Future efforts include crushing 100,000 tons of RAP, advancing sustainability by reducing the need for virgin materials and minimizing environmental impact.



Strategy 5

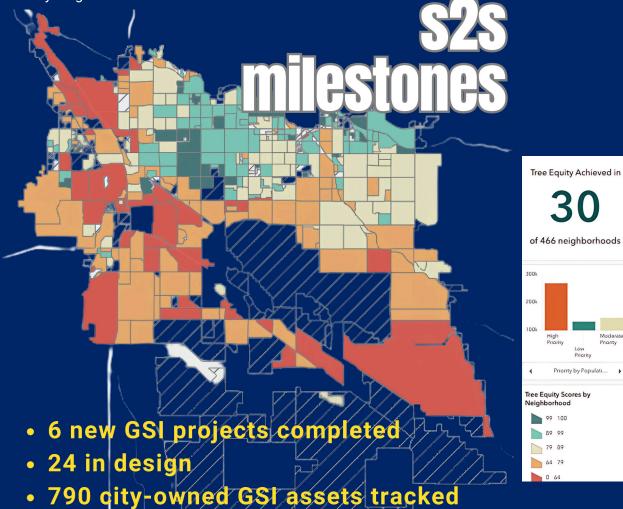
RR-5: Build on the existing work of the Storm to Shade Program to encourage green infrastructure

This strategy aims to expand the City's green infrastructure efforts by addressing barriers to implementing small-scale projects, such as code amendments and property-level improvements. It promotes neighborhood-scale and lot-scale green infrastructure through enhanced partnerships and the expansion of the Storm to Shade program. The strategy also focuses on updating landscaping requirements for homeowners associations to include climate-adaptive practices and interconnected green infrastructure. Additionally, it seeks to restore existing riparian areas and create new, climate-resilient riparian zones to enhance ecological health and urban sustainability.



Storm to Shade (S2S): Advancing Green Stormwater Infrastructure

Storm to Shade (S2S) is Tucson's green stormwater infrastructure (GSI) program, designed to capture and infiltrate stormwater runoff while supporting native vegetation. These GSI features cool urban areas, improve soil, air, and water quality, and enhance community aesthetics through added green spaces. S2S prioritizes equity investments in underserved areas, and fosters interdepartmental collaboration and partnerships with entities like Pima County Regional Flood Control and local schools.





Engagement Strategy Implemented



Tucson Water: Climate Resilience Efforts

While most city updates related to water are included in the City's <u>One Water 2100 Plan</u>, this plan and the TRT remain aligned. Tucson Water continues to make significant strides to ensure our most precious resource is managed sustainably and effectively, addressing the challenges of climate change and urban growth.

Infrastructure Resilience

Tucson Water has been hardening its infrastructure to address the increasing impacts of extreme weather. Pipelines, treatment plants, and pump stations are being upgraded to withstand harsh conditions and ensure long-term reliability.

Tucson Water is also replacing aging neighborhood distribution mains through its neighborhood main replacement program. This effort reduces service interruptions and water losses from leaks and failures, while being coordinated with the City's Proposition 411 street improvement initiative.



Efficiency and Demand Management

Tucson Water has made significant advancements in efficiency and demand management. The adoption of Advanced Metering Infrastructure (AMI) enables the detection of leaks and promotes water conservation through the use of smart meters.

The utility's Conservation Program has been in place for over 15 years, offering services such as water audits, low-income plumbing repairs, and rainwater harvesting grants. The program also provides education to encourage water-saving practices in the community. Additionally, rebates and incentives are available to residential, multifamily, and commercial customers, helping to offset costs for conservation solutions such as rainwater harvesting systems, gray water installations, and high-efficiency appliances. These efforts are instrumental in reducing water demand and promoting sustainable water use across Tucson.

Water Supply and Storage Enhancements

Tucson Water is enhancing its water supply and storage capacity to ensure resilience during droughts and other challenges. Aquifer recharge projects maximize groundwater replenishment during wet periods, supported by ongoing maintenance of recharge facilities to optimize infiltration rates. Innovative techniques, such as using goats to manage vegetation at recharge basins, are being piloted to improve sustainability.



Plans are also underway to expand the Shirley Scott South Houghton Area Recharge Project (SHARP) with an additional recharge basin, which will double the project's recharge capacity by 2025. Furthermore, reservoir upgrades and efficiency evaluations of booster stations are being conducted to extend infrastructure longevity and ensure operational reliability.

Energy Optimization

Energy optimization is a critical focus for Tucson Water as it integrates renewable energy and improves operational efficiency. Solar panels are being installed at various facilities to reduce reliance on non-renewable energy sources, while pumps and motors are being upgraded to minimize energy consumption. The department is also evaluating advanced technologies and data systems to optimize water distribution across its 400-square-mile service area, ensuring efficient use of electricity while maintaining water delivery reliability.

Ecosystem Restoration and Protection

Tucson Water is committed to protecting and restoring local ecosystems as part of its water management strategy. Through partnerships with stakeholders, the department engages in watershed management to protect wetlands and natural areas that contribute to water quality and storage. Additionally, collaboration with Pima County Flood Control focuses on restoring vegetation along waterways, which reduces erosion, enhances riparian buffers, and improves ecological health.

Data and Predictive Modeling

To address the challenges of climate change, Tucson Water is investing in data and predictive modeling. Tools are being developed to forecast and mitigate risks related to drought, flooding, and heatwaves. Real-time monitoring systems are also being implemented to continuously track water quality and infrastructure health, enabling quick and effective responses to emerging challenges. These initiatives position Tucson Water as a leader in proactive water resource management.







Conclusion

The 2025 Tucson Resilient Together Annual Report reflects a year of significant accomplishments, demonstrating the City of Tucson's unwavering commitment to climate action and resilience. Surpassing initial goals, the City advanced over 70% of planned climate actions, while leveraging \$94 million in grant funding and investing \$120.5 million in transformative projects across departments. Milestones such as achieving urban forestry goals, implementing heat resilience strategies, expanding transportation infrastructure, and enhancing sustainable underscore Tucson's leadership in building a sustainable future.

This progress is the result of collaboration across City departments, external partners, and an engaged community committed to driving impactful change. The first year of implementation has not only set a strong foundation but also fostered partnerships that amplify the momentum for continued progress.

As Tucson continues to lead on climate resilience, the achievements highlighted in this report serve as a call to action to sustain and expand these efforts. Together, we can create a more equitable, sustainable, and resilient future for all Tucsonans. Let us celebrate this shared success and embrace the challenges ahead with renewed dedication.



THANK YOU!

We want to express our deepest gratitude to all our elected officials whose visionary leadership makes everything we do possible. Your dedication and commitment are the foundation that drives our efforts, and without your guidance, achieving our goals would not be possible.

We also extend our heartfelt thanks to the collaboration of the various departments who work alongside us to build a more resilient and sustainable future. This synergy between leadership and teamwork is what turns ideas into tangible actions that benefit our entire community. Thank you for being an essential part of this joint effort

State of Arizona Governor's Office

Southern Arizona Office of Governor Hobbs

City of Tucson

Mayor's Office
City Manager's Office
Tucson Water
Climate Action Team
SunTran
Public Safety Communication Department
Environmental and General Services Department
Planning and Development Services Department

City of Tucson Commissions

Commission on Climate Energy and Sustainability

Community Safety, Health and Wellness Program

Tohono O'odham Nation

Pima County

Tucson House

Board of Supervisors Districts 1 and 5 Department of Environmental Quality Health Department Office of Emergency Management

National Oceanic Atmospheric Administration

National Weather Service Tucson



To our invaluable community members, we want to extend a special thank you for your constant presence and participation. You are the heart of every event, meeting, and project we carry out. Your feedback and perspectives not only enrich our work but are vital to ensuring that the projects we develop truly reflect the needs and aspirations of our community.

- 4Tucson
- A23 Studios
- Activate 48 Coalition
- American Lung Association
- Arid Lands Resource Sciences
- Arizona Builders Alliance
- Arizona Capitol Consulting
- Arizona Council for Occupational Safety and Health
- Arizona Faith Network
- Arizona Health Professionals for Climate Flowers and Bullets Action
- Arizona Institute for Resilience
- Arizona Jobs with Justice
- Arizona Luminaria
- Arizona Multi-housing Association
- Arizona Youth Climate Coalition
- Arizonans for Community Choice (AZ4CC)
- Barrio Anita Neighborhood Association
- Barrio Hollywood
- Barrio Kroeger Lane
- Barrio Neighborhood Coalition
- Barrio Santa Rosa
- Barrio Viejo Neighborhood Association
- Bourn Companies
- BrightView Commercial Landscaping
- Broadmoor Broadway Village
- CAPLA
- Chispa AZ
- Citizens Climate Lobby
- Climate Assessment for the Southwest
- Climate NXT
- Climate Reality Project
- Climate Tucson
- Community Food Bank of Southern Arizona
- Community Gardens of Tucson
- Community Home Repair Projects of Arizona
- Compost Cats
- Cypress Civil
- Diamond Ventures, Inc.
- Downtown Tucson Partnership

- Drachman Institute, University of Arizona
- Dunbar Spring Neighborhood Association
- Dust Studios
- EcoBlue
- Economic growth and sustainability
- El Presidio Neighborhood Association
- El Rio Health
- Engberg Anderson Architects
- Fourth Avenue Merchants Association
- Flowers & Bullets
- Food security
- FORS Architecture
- Friends of Santa Catalina Trails
- Gadsden Company
- Global Athletes Alliance
- Greater Tucson Climate Coalition
- Healthy homes
- Historic 4th Avenue Coalition
- Hispanic Chamber of Commerce
- Holualoa Companies
- Interstate Renewable Energy Council (IREC)
- International Alliance of Theatrical Stage **Employees Local 336**
- Iron Horse Neighborhood Association
- Jefferson Historic District
- JL Investments
- Las Milpitas
- Labor
- Lazarus & Silvyn, P.C.
- Life Along the Streetcar
- Living Streets Alliance
- Local First Arizona
- Medical Reserve Corps of Southern Arizona
- Menlo Home and Garden
- Menlo Park Neighborhood Association
- Metropolitan Pima Alliance
- Moms Clean Air Force
- Neighborhood Associations
- NexoTerra LLC-Repurposing Waste
- No Dreams Lost Foundation



- Pima Children and Nature Collaborative
- Pima Community College
- · Physicians for Social Responsibility
- Pueblo Vida
- Repp + McLain
- Rio Nuevo
- Ross Rulney
- R+R Develop
- RTX Corporation
- SAHBA
- Sam Hughes Neighborhood Association
- Santiago Hills Neighborhood Association
- Sierra Club
- Solar Possibilities Consulting
- Solar United Neighbors
- Southside Worker Center
- Southwest Environmental Health Sciences Center
- Southwest Urban Corridor Integrated Field Laboratory
- Sundial Energy, Inc.
- Sustainable Tucson
- The Tucson Climate Report

- Third Act
- Thrive in the 05
- Tucson 2030 District
- Tucson Artisan Builders & Averde Sustainability Consulting
- Tucson Association of Realtors
- Tucson Audubon Society
- Tucson Clean & Beautiful
- Tucson Climate Coalition
- Tucson Electric Power
- Tucson for Everyone
- Tucson IDA
- Tucson Metro Chamber
- Tucson Residents for Responsive Government (TRRG)
- Tucson Unified School District
- Tucson Verde Rotary Club
- Union of Concerned Scientists
- University of Arizona
- University of Arizona Cooperative Extension
- Visit Tucson
- Watershed Management Group
- West University Neighborhood Association
- Western Environmental Science Technical Assistance Center for Environmental Justice
- · Whirlygig Properties
- Wilderness Society
- YWCA of Southern Arizona

Thank you all for raising your voices, sharing your time, and contributing to building a better future for all.

Your support and commitment are our greatest inspiration





APPENDIX A - CITY OF TUCSON AWARDED GRANTS DETAILS

| Grant | Purpose |
|--|---|
| Amount: \$21.5M Grantor: Federal Transit Administration (FTA) Year Awarded: 2023 Lead Dept: DTM | Replace all remaining high emissions producing diesel-fuel buses in Sun Tran's fleet. |
| Amount: \$3M Grantor: Water Infrastructure Finance Authority (WIFA) Year Awarded: 2023 Lead Dept: TW | Begin the transition to Advanced Metering Infrastructure (AMI) to improve customer water usage tracking, information access, and accountability. |
| Amount: \$5M Grantor: USDA Year Awarded: 2023 Lead Dept: CMO/CAT | Increase green spaces and enhance workforce development. |
| Amount: \$3.5M Grantor: Department of Energy (DOE) Year: 2023 Lead Dept: PDSD | Create a southwest climate-adapted building codes in collaboration with partners. |
| Amount: \$829,696 Grantor: Federal Emergency Management Agency (FEMA) Year Awarded: 2024 Lead Dept: CMO/CAT | Resilience hub planning and Creation of Community Resilience Leadership Academy. |
| Amount: \$1.5M Grantor: WIFA Year Awarded: 2024 Lead Dept: TW/P&R | Implement a Turf Removal Program. |
| Amount: \$1M Grantor: Department of Transportation (DOT) Year Awarded: 2024 Lead Dept: DTM | Build a connecting (Nebraska) bridge with micro mobility features. |
| Amount: \$2.6M Grantor: Department of Transportation (DOT) Year Awarded: 2024 Lead Dept: DTM | Build a east-west (Blacklidge Blvd) connecting bicycle boulevard from Oracle to Columbus. |
| Amount: \$3M Grantor: WIFA Year Awarded: 2024 Lead Dept: TW | Continue transitioning to AMI to improve customer water usage tracking, information access, and accountability. |
| Amount: \$1.3M Grantor: WIFA Year Awarded: 2024 Lead Dept: TW/HCD | Upgrade water fixtures and appliances in City-owned public housing |
| Amount: \$3M Grantor: WIFA Year Awarded: 2024 Lead Dept: TW | Expand SHARP facility. |
| Amount: \$200,000 Grantor: Better Bike Share Partnership Year Awarded: 2024 Lead Dept: DTM | Assess and more equitably distribute existing bike share actions and assets. |
| Amount: \$11.4M Grantor: FTA Year Awarded: 2024 Lead Dept: DTM | Replace aging infrastructure and enhance bus stops. |
| Amount: \$3M Grantor: Department of Interior (DOI) Year Awarded: 2024 Lead Dept: P&R | Reduce turf and asphalt, install green stormwater infrastructure, and plant over 300 trees at Jacobs Park. |
| Amount: \$1.7M Grantor: DOE Year: 2024 Lead Dept: PDSD | Support workforce development to improve implementation of energy conservation building codes in Arizona. |
| Amount: \$19.9M Grantor: Environmental Protection Agency (EPA) Year: 2024 Lead Dept: CMO/CAT | Home retrofits and upgrades, solar panels, rainwater harvesting tanks, stormwater infrastructure, shaded bus stops. resilience hubs, workforce development. |
| Amount: \$11.5M Grantor: Department of Housing and Urban Development (HUD) Year: 2024 Lead Dept: HCD | Support the rehabilitation and replacement of manufactured housing, enhancing resilience, efficiency, and long-term affordability |



GRANT APPLICATIONS UNDER REVIEW

City departments and programs have submitted several grant applications that are currently under review. While the City served as the lead applicant for most of these proposals, the two additional EPA's Community Change Grant proposals were submitted by our partners at the Flowers & Bullets and Amistades. Together, the proposed projects, including both lead and non-lead applications, total over \$158.7 million.

- \$70.8M Bureau of Reclamation Lower Colorado Conservation Program for the Advanced Water Purification Demonstration Project.
- \$30M WRDA for Reclaimed Water System Southlands Loop.
- \$20M WRDA 2024 for Santa Cruz River Heritage Project Phase 3.
- \$20M EPA Community Change Grant with Flowers and Bullets for heat resilience.
- \$11.5M Federal Charging and Fueling Infrastructure Grant, in partnership with Pima County, TEP, and TRICO, to install 80 EV charging stations in historically disadvantaged communities, with \$2.5M allocated to the City.
- \$3M Bureau of Reclamation WaterSMART Grant for AMI Phase 3.
- \$3M EPA Community Change Grant with Amistades for community climate preparedness.
- \$368,353 USDA Composting and Food Waste Reduction Project in partnership with Tucson Unified School District and Iskashitaa, expanding the City's FoodCycle at Home Program through education and community engagement in underserved areas and Title I schools

GRANT APPLICATIONS NOT SELECTED

When grants are not awarded, city departments often pursue alternative funding or reapply later. For instance, while the \$4M PROTECT grant was not selected, its activities were included in the \$11.4M FTA award.

Non-selected grants:

- \$500M EPA Climate Pollution Reduction Grant, including \$144M for City of Tucson projects.
- \$20M RAISE Grant for the Drexel Road Bridge project.
- \$4M U.S. Department of Transportation PROTECT Grant to enhance bus shelters.
- \$3.6M SWIFR Grant for organics recycling programs in Tucson.
- \$1.2M SMART Grant for the Traffic Signal Pre-emption for Public Safety Program.
- \$720,000 WIFA Water Conservation Grant (Round 5) for a GIS project at El Pueblo Center.

GRANT APPLICATIONS UNDER DEVELOPMENT

The City of Tucson is committed to making the most of unprecedented federal investments in climate initiatives to advance local sustainability efforts. With new funding opportunities available, staff across departments actively pursue these resources to benefit the community. To ensure these investments advance climate work across Tucson, the City is partnering with community-based organizations (CBOs) to reach and support residents effectively.

The Climate Action Team is preparing to apply for the "Solar for All" initiative to expand access to solar panels in low-income communities.



APPENDIX B - TRT CATEGORIES PROGRESS TO DATE







Work is underway on actions, including those started early, progressing well, scaling beyond scope, or partially completed but requiring additional effort to finish.



Actions Not Started | Future Years

ongoing actions maintained without a set end date.

or early) or with adjustments. This category also includes

Action are planned but have not yet commenced. Reasons may include prioritization, constraints, funding limitation, or scheduling for future years.



Actions Delayed

Actions face delays due to obstacles, risks, pauses, or evaluation needs, requiring intervention, resolution, or adjustments to resume progress effectively.

Category

Progress To Date

FY24 Goal VS Actual Progress







FY24 Goal

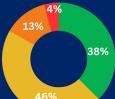
Per CIS-FY24, 13 of 23 actions were to be significantly advanced.

Progress

16 of 23 actions are in the "Completed | Ongoing" and "In Progress" categories.



Community Resilience





FY24 Goal

Per CIS-FY24, 14 of 24 actions were to be significantly advanced.



Progress

20 of 24 actions are in the "Completed | Ongoing" and "In Progress" categories.



Energy







FY24 Goal

Per CIS-FY24, 14 of 26 actions were to be significantly advanced.



Progress

19 of 26 actions are in the "Completed | Ongoing" and "In Progress" categories



Transportation & Land Use



21% 29%



FY24 Goal

Per CIS-FY24, 21 of 35 actions were to be significantly advanced.



Progress

28 of 35 actions are in the "Completed | Ongoing" and "In Progress" categories.



Resource Recovery & Management





FY24 Goal

Per CIS-FY24, 10 of 14 actions were to be significantly advanced.



Progress

7 of 14 actions are in the "Completed | Ongoing" and "In Progress" categories.



