Austin Parks and Recreation Department (PARD) Sustainability and Resilience Team

In 2024, PARD launched the Sustainability and Resilience Team, which works to increase sustainable practices, including:

- Optimize PARD's environmental impact and increase efficiency;
- Reduce energy, water, and landfill waste;
- Bolster capacity to withstand and bounce back stronger in the face of increasing challenges;
- Ensure PARD meets Citywide and internal sustainability and resilience initiatives and goals (including the Green Building Policy, the Climate Equity Plan, and the Heat Playbook).

The Sustainability and Resilience Team's work is collaborative; the Team partners with other Departments and PARD Divisions to seek new solutions and alternative funding for the work.

Carbon Pools: Land Banking for Carbon Sequestration and Park Development

Before 2023, developers would pay Parkland Development (PLD) Fees during the site permitting process into a parkland development fund. The revenue was used to purchase more parkland or pay for amenities near their development, enabling the Austin Parks and Recreation Department (PARD) to stay abreast of targets to ensure every Austinite can walk to a park within ¼ mile in the urban core and within ½ mile for those outside the urban core. Due to a 2023 change by the Texas Legislature, PLD fees were significantly reduced and are not paid until the end of the project, when the cost of adjacent land has already risen. Acquiring land that will not be developed for multiple years can be challenging due to maintenance concerns and public perception of the land as abandoned. Funding is difficult as bonds only happen once every 6-8 years, project planning, permitting and construction can take multiple years, and construction cost inflation continues, creating additional shortfalls over time. PARD works to add amenities like trails and perform basic perimeter mowing maintenance to provide more recreational space for the public on these "future development" land bank sites.

In 2021, the Austin Climate Equity Plan directed the City of Austin (the City) to land bank properties specifically to provide ecosystem services (especially carbon sequestration) while still undeveloped parkland. Carbon sequestration is accomplished by storing atmospheric carbon in the ground, water, or into vegetation. Vegetation and trees take in carbon dioxide from the air during photosynthesis and convert it to carbon and biomass. The dry weight of a tree is roughly 50 percent carbon, and a tree will continue storing carbon until it decomposes naturally or burns. To enhance carbon sequestration, practices like afforestation, reforestation, and improved forest management can increase carbon storage. According to the Urban Land Institute, a mature tree will absorb about 48 pounds of carbon dioxide per year, equivalent to 56 miles driven by an average gasoline-powered vehicle.

Soil is also valuable for carbon capture, and beneficial strategies for parkland include allowing grass clippings, deadwood, leaf litter, and other organic material to decompose naturally. Wildlife habitat, stormwater infiltration and reduction of stormwater runoff during flooding events, reduction of urban heat island effects, and other ecosystem services increase the value of undeveloped parkland while PARD waits for communities to grow in the direction of these sites destined to become more developed parks.

For more information on Parkland Dedication Fees and park developments funded by PLD fees, please visit: www.austintexas.gov/PLD.

Recycling Implementation Update

In 2018, the Zero Waste Advisory Commission (ZWAC) and the Parks and Recreation Board (PARB) urged City Council to create a Parks and Recreation Recycling Task Force (Resolution No. 20180614-072). Based upon the pilot program developed by PARD and the Task Force recommendations, the subsequent Fiscal Year 2019 City budget included more than $1 million in one-time funding dedicated to expanding recycling in parks Citywide.

A Recycling Program Manager was hired in June 2019 to implement comprehensive recycling and composting standards at all PARD indoor and outdoor facilities to meet Zero Waste goals. In September 2019, City Council awarded bids for the purchase and installation of updated receptacles at parks.

Recycling implementation has led to significant changes in waste management throughout the park system. Where updated receptacle pairs have been added throughout parks, older receptacles have been removed. Pet waste stations have been added where necessary and removed where no longer needed. Several pocket parks and some remote trailheads have transitioned to "Pack It In, Pack It Out" as part of PARD's commitment to Leave No Trace principles. "Pack It In, Pack It Out" signage is added to these outdoor park spaces, there are no receptacles provided, and park patrons are expected to take any trash they generate during their visit when they leave the park. Adding recycling receptacles in so many new park spaces necessitated reconfiguring City of Austin dumpster contracts as well.

While the program has experienced some growing pains from vandalism and receptacle placement issues, overall recycling implementation has proceeded smoothly over four years and park patrons have been excited to see the new receptacles in their local parks. Using a phased approach over four years, the Recycling Implementation Program installed 800 pairs of newly purchased Max-R landfill and recycling receptacles and 108 pairs of Pilot Rock landfill and recycling receptacles.

To date, the Recycling Implementation Program has seen an outcome of a 20% reduction in recyclable material going to the landfill (based on visual inspections) by deploying new collection receptacles. Visual waste audits in 2019 and 2020 found 25% – 33% of the trash was comprised of recyclable material. For parks that now have recycling receptacles paired next to the landfill receptacles, that number is down to 5% – 10% of recyclable material in landfill receptacles in 2021 and 2022. At the beginning of the Recycling Implementation Program, only 20% of parks had recycling in outdoor spaces, and those were typically metropolitan parks.

Since the Recycling Implementation Program began in 2019, 100% of metropolitan parks, district parks, pools, golf courses, tennis courts, softball and baseball fields, neighborhood parks, and prioritized greenbelt trailheads now have recycling receptacles available outdoors alongside the landfill receptacles. Most pocket parks have transitioned to "Pack It In, Pack It Out" with exceptions made for pocket parks with amenities such as picnic pavilions or playscapes. This reduction of receptacle locations has led to increased efficiency of grounds maintenance service routes which has helped as maintenance staff receives new service locations from newly developed parks.

In April 2024, PARD completed the final Recycling Implementation Report which is available on the PARD website, and the recycling program switched from the Implementation Phase to an ongoing Maintenance Phase, where site operators and PARD staff work closely in partnership with Operations and Maintenance staff to identify additional receptacles or changes needed. PARD is working to launch a compost program at select facilities and is working with staff to reduce single use plastic purchases throughout the system.

Austin's Resilience Hub Pilot and the Launch of the Austin Resilience Network

Austin's climate risks include extreme heat, wildfire, drought, flood, and winter storms. PARD takes a multifaceted approach to prioritize allocation of resources on the most promising strategies targeted at communities experiencing climate change first and worst. The City of Austin and PARD's programs are grounded in the belief that intersectional sustainability and resilience initiatives are collaborative and interdisciplinary.

The Resilience Hub Pilot Program was initiated April 8, 2021, with Austin City Council Resolution No 20210408-028. The Austin Parks and Recreation Department worked closely with the Office of Climate Action and Resilience (OCAR, formerly known as The Office of Resilience) to co-champion the facility enhancements. The pilot was a collaboration between multiple City Departments, including the Building Services Department (BSD), Fleet Mobility Services (FMS), Development Services Department (DSD), Austin Energy (AE), Homeland Security and Emergency Management (HSEM), and the Homeless Strategy Office (HSO), educational entities, and non-governmental organizations (NGO's) working for food security, accessible housing, disaster preparedness, religion, health, and social justice.

When disaster strikes, people across Austin need trusted community spaces to meet basic needs. When paired with ongoing emergency planning, disaster response, and sheltering plans, a Resilience Hub Network can help provide relief during extreme weather events and other emergencies.

The six pilot locations are at Recreation Centers primarily located in Austin's eastern crescent:

- The Northwest Recreation Center (LEED Gold green building standard);
- Gus Garcia Recreation Center (LEED Gold green building standard);
- The Turner Roberts Multipurpose Room (LEED Silver green building standard);
- Parque Zaragoza Recreation Center (Austin Energy Green Building Commercial Pilot Participant);
- Montopolis Recreation Center (LEED Gold); and
- George Morales Dove Springs Recreation Center (2021 Renovation and Expansion LEED Silver).

Two of the parks have community gardens, four host solar arrays, and three feature electric vehicle charging capacity. All the facilities demonstrate reasonable levels of energy efficiency. Montopolis Recreation Center was particularly well suited for the job, as it is collocated with an Austin Public Health site that serves the community as a food pantry. These sites were selected through an extensive community engagement process. The Resilience Hub Pilot recognized that the community is the expert in their needs and the Office of Climate Action and Resilience engaged this on multiple levels. The pilot acknowledged systems of inequity, centered community voices, empowered marginalized communities, and fostered accountability.

Through the Resilience Hub Pilot effort and utilizing American Rescue Plan Act (ARPA) funds, improvements were performed at the sites to better serve Austin residents before, during and after emergencies. Upgrades for backup power, emergency supplies (including diapers, water, protein bars) and sleeping bags were added, enabling community-trusted recreation centers to provide education on emergency preparedness, communication during events, and shelter during extreme weather, even during prolonged power outages. All six locations were equipped with flexible redundant power docking stations and automatic transfer switches that switch the building to back up power within seconds if an electrical outage occurs. The Building Services Department purchased six temporary generators that can each power a whole recreation center. The generators are flexible; they can be connected in a series circuit, and used to power larger buildings such as City Hall. The docking stations are also future proofed to accommodate other power sources such as solar arrays and batteries. The plan is for these sites to become Austin Energy Community Solar sites and/or host utility scale batteries too.

The Resilience Hub Pilot sites have been used as community shelters and warming centers several times since their inception. One of the most profound, and humbling, lessons learned by the Resilience Hub pilot is that cities alone cannot provide enough capacity to meet the demands for sheltering, food and other resources during emergencies. With community engagement and support, focus shifted and Homeland Security and Emergency Management determined that going forward, the strategy will be to build an Austin Resilience Network (ARN) that supports physical hub locations in addition to strengthening a robust network of relationships. The City will focus its efforts on broader community partnerships that will better connect needs with resources and information sharing during events. Partner agencies now coordinate year-round with HSEM.