



## MEMORANDUM

**TO:** Mayor and Council Members

**THROUGH:** Susana Carbajal, Chief of Staff *SC*

**FROM:** Zach Baumer, Chief Sustainability Officer *Zach Baumer*

**DATE:** May 21, 2024

**SUBJECT:** **Response to Environmental Investment Plan (Resolution No. 20240215-025)**

---

On February 15, 2024, the Austin City Council passed [Resolution No. 20240215-025](#), directing the City Manager to “solicit community input and prepare options and associated costs of capital improvements or programs that would reduce carbon emissions, decrease water usage, improve water quality and water detention, advance the sustainability of City operations, and improve community resilience.” The resolution also called for a public hearing of the Joint Sustainability Committee to gather public input and recommendations.

Over the past three months, staff from the Office of Sustainability convened numerous City departments and facilitated meetings and discussions across the organization on this response. Staff began by analyzing 13 existing City of Austin plans across multiple departments to catalog all the goals and strategies within each plan. Department representatives reviewed their plans and goals to identify gaps and potential new projects. The Office of Sustainability then convened the departments to discuss their findings and facilitated workshops to consolidate and refine all department proposals.

### **Summary**

Attachment A includes the full list of potential new projects and investments and is summarized below. The list is a result of cross-departmental collaboration, deepening connections and alignment across City-wide work areas, and offers a snapshot of major initiatives that would fill gaps and advance areas in climate sustainability and community resilience. A comprehensive cost-benefit analysis of these potential environmental investments in comparison with other City priorities has not yet been completed and is necessary. Staff has also not yet evaluated the long-term approach to addressing funding gaps and implementation. The potential new projects have been categorized into 4 topic areas

summarized below. Items marked “JSC” indicate alignment with Joint Sustainability Committee recommendations.

**Carbon Emissions**

*Potential projects would reduce emissions from energy and transportation and reduce waste.*

**Total summarized needs: \$455 million**

	<b>Project</b>	<b>Department</b>	<b>Cost Estimates</b>	
CE12 CE13	ARR Transfer Station + EV Charging Network	ARR	\$100M+	JSC
CE14	Recycling and Reuse Drop Off Facility (could be combined with Transfer Station)	ARR	\$100M	
CE6 CE10	Weatherization and EV Charging Programs for Low and Moderate-income Customers	AE	\$55M	JSC
CE15 CE16 CE17	Facilities to Process Compost, Reuse Materials, and Recycle Construction Debris	ARR	\$45M	JSC
CE7	Matching Funds for Federal Clean Energy/Resiliency Grants	AE	\$40M	
CE1 - CE5	Transportation Demand Management and Safety Programming	TPW, Fleet, AE	\$23M	
CE8	Solar at ARR FM 812 Landfill	AE, ARR	\$16.9M	JSC
CE11	Commercial Building Energy Audits	AE	\$5M	
CE9	Pilot "Virtual Power Plant" Project	AE	\$1.3M	JSC

**Water Quality, Quantity, and Land**

*Potential projects would acquire and manage lands for public benefits and increase community resilience.*

**Total summarized needs: \$1.1 billion**

	<b>Project</b>	<b>Department</b>	<b>Cost Estimates</b>	
WL3	Land Acquisition of 20,000 acres	AW, OOS, PARD, WPD	\$1B	JSC
WL6	Food Hub	OOS	\$50M	JSC
WL7	Farm Incubator	OOS	\$20M	
WL1	Tree Assessment, Inventory, and Management	ARR, AW, AFD, DSD, PARD, WPD	\$10M	JSC
WL5	Austin Civilian Conservation Corps	EDD, PARD	\$5M/year	JSC
WL4	Citywide Green Infrastructure Plan / Natural Resource Management	ARR, AW, AFD, DSD, OOS, PARD, WPD	\$5M	
WL2	Climate Change & Natural Systems Analysis	ARR, AW, AFD, DSD, Housing, OOS, PARD, Planning, WPD	\$5M	

**Community Resilience**

*Potential projects would increase resilience for the community and for City assets.*

**Total summarized needs: \$233 million**

	<b>Project</b>	<b>Department</b>	<b>Cost Estimates</b>	
CR7	Enhance City-owned Community Facilities	AE, PARD, APL, APH	\$100M	JSC
CR6	Community Resilience Programs for Residential & Commercial that support fire resilience, water use reduction, battery storage, and more	AW, AFD, HD, WPD	\$100M	
CR4	Fallwell Lane Improvements	AE	\$18.2M	
CR3	Decker Dam Improvements	AE	\$14M	
CR5	Decker River Water Pump Upgrade	AE	\$500K	
CR2	Climate and Health Investments	APH	\$500K	
CR1	Climate Health Assessment	APH	\$250K	

**City Operations**

*Potential projects would allow the City to lead by example and build community resilience.*

**Total summarized needs: \$90 million**

	<b>Project</b>	<b>Department</b>	<b>Cost Estimates</b>	
CO1 CO2 CO3	Unified COA Facilities Operation, Maintenance, and Improvement Plan, including resilience, electrification, energy and water use reduction, and more	PARD, APH, APL, BSD, AE, all facility owners	\$60M+	JSC
CO4 CO5 CO6	Advance Decarbonization of City Fleet and Community-wide EV Infrastructure	Fleet	\$28M + \$800K/year	JSC

**Joint Sustainability Committee Recommendations**

The Joint Sustainability Committee held a public forum on March 27, shared initial feedback with staff on April 24, and approved its final recommendations on April 30. Thirty-three recommendations were adopted, encompassing cross-sector needs, energy and water conservation, consumption and waste reduction, natural systems, and transportation and land use. The Joint Sustainability Committee’s complete list of recommendations is included as Attachment B.

**Next Steps**

Staff will continue developing these project proposals by specifying scopes of work, analyzing costs, and quantifying environmental benefits. Additionally, further analysis is necessary to identify the impact on taxes, rates, and fees for Austin residents. Staff will continue to work with the City Manager’s Office and during the budget process to identify potential funding sources for these projects, including the exploration of a “Climate Fee” that would create annual dedicated funding for climate and environment projects.

cc: T.C. Broadnax, City Manager  
CMO Executive Team  
Department Directors  
Assistant Directors

**Attachments:**

Attachment A: Staff Recommendations List

Attachment B: Joint Sustainability Committee Recommendations

**Attachment A: Carbon Emissions**

	Project	Cost + Savings	Funding Source(s)	Department(s)	Plan / Goal / Strategy	Timeline (fiscal year)	Notes
CE1	<p><b>Vision Zero Safety Program:</b> Implement safety policies and programs, including:</p> <ul style="list-style-type: none"> <li>- Safety Education Campaigns</li> <li>- Seasonal Campaigns, such as Distracted Driving Awareness Month in April, and Darker Evening Commutes in the fall</li> <li>- Community Engagement</li> <li>- Safety policies</li> </ul>	\$200,000	General Fund	TPW	ASMP Goal - Safety: The goal of the Vision Zero Safety Program is to create safe mobility options to allow our city to make a cultural shift towards sustainable modes and therefore reduce carbon emissions.	Short to Long	
CE2	<p><b>Land Use Regulations:</b> These programs are responsible for Land Development Code Amendments and other regulatory requirements. Including:</p> <ul style="list-style-type: none"> <li>- LDC Amendments</li> <li>- Criteria Manual Updates</li> <li>- Process and Procedures improvements</li> </ul>	TBD	General Fund	TPW, PD, HD, EDD, WPD	ASMP Goal - Land Use and Regulations: Realizing the Imagine Austin Growth Concept, providing more housing in proximity to transit, and allowing a mix of uses within our neighborhoods will unlock the city's ability to be less auto dependent. Over time, providing more housing and housing options will facilitate this cultural shift allowing people to live and work where it's convenient without a car.	Short to Long	Additional staffing will be required
CE3	<p><b>Transportation Demand Management:</b> Scale behavior change programming across a variety of modes by offering incentives for commuters and other travelers, expanding low-income discounts, conducting outreach including on-the-ground LIDAC engagement, and building accessible public-facing resources. The project will serve as a bridge, priming residents to become users of the transit system improvements currently under construction that will come online in the next decade. The budget is reasonable to offer 700 low income transportation subsidies and 70,000 commuter incentives annually, conduct both a comprehensive LIDAC outreach campaign and a complete regional communications campaign, and implement a coordinated regional mobility platform.</p>	\$23 million	General Fund	TPW	ASMP Goal - Transportation Demand Management: Changing travel behavior through TDM programming is paramount to actualizing the benefits of changing infrastructure to be more safe and less auto dependent. This cultural shift has to be encouraged and incentivized.	Short (2024 - 2025)	<p>The TDM program has both capacity limitations due to its small staff and resource limitations for providing robust behavior change incentives to community members.</p> <p>The TDM program is made up of four FTEs and has an annual budget of \$1.4M derived from the Transportation User Fee (TUF) to deliver TDM programming for both the City of Austin workforce and the community. The current program budget comprises 1/3 staff salaries and 2/3 in contracts to educate and incentivize people to take non-drive-alone trips in the city.</p> <p>TDM funding is being pursued through a Climate Pollution Reduction Grant (CPRG) for \$48M to fund behavior change and incentive programming. Should this grant be awarded in July, the City would have a TDM funding source for five years, but would be unfunded beyond that.</p> <p>Transit Service (\$17,500,000)                      Mobility Infrastructure (\$7,140,668)                      Behavior Change (\$22,625,000)</p>

**Attachment A: Carbon Emissions**

CE4	<p><b>Environmental Strategies:</b> Implement strategies intended to address the negative externalities of transportation, as a means to mitigate their impacts, and the systemic barriers to implementing projects and programs with the greatest benefit. This includes the transition to Electric Vehicles and fleet replacement to reduce the use of fossil fuel as well as city administrative barriers such process improvements and aligning budgets around improvements that will have the greatest environmental impact.</p>	TBD	Bond, General Fund	TPW, Fleet, AE	ASMP Goal - Environmental Strategies: The goal is to address the negative externalities of transportation, as a means to mitigate their impacts, and the systemic barriers to implementing projects and programs in an Environmental Investment Plan.	Short to Long	
CE5	<p><b>Connecting People to Services</b> that already exist and developing new services yet to be implemented. Including:          - Special transit service          - Guaranteed Basic Mobility Program          - Transportation Subsidy programs          - other mobility services</p>	TBD	General Fund	TPW	ASMP Goal - Connecting People to Services: The goal is to create "Complete Communities" by providing services and connecting people to those services. Complete communities are less auto dependent.	Short to Long	<p>Additional staffing to implement action items          Additional funding for programs that engage with the community          Additional funding for the community</p> <p>Short Term (0-2 years):          Mid Term (2-5 years):          Long Term (6-10 years):          Full Build (10+ years):</p>
CE6	<p><b>Expand Weatherization Assistance Program:</b> Austin Energy's Weatherization Assistance Program is a cost-effective program for reducing electricity demand and improving affordability of electricity service for low-income customers. Weatherization includes energy efficiency improvements to a home such as weather stripping, caulking, air sealing, attic insulation, solar screens, duct repair/replacement, health and safety upgrades, HVAC tune up, and a smart thermostat. This leads to lower GHG emissions from coal and natural gas-fired power plants with reduction of AE's total load from lower A/C usage. Other benefits include cost savings from lower "4CP" peak demand events in summer that keep overall electricity rates lower and significant utility bill savings and quality of life improvements for customers.</p>	<p>\$40 million over 5 years (cost)           \$51.7 million in savings over 10 years, 8.2 year simple payback</p>	Utility Rates	AE	Climate Equity Plan, Sustainable Buildings G1S1: Ensure benefits flow to low income and communities of color; AE Gen Resource Plan: 25% of CES program participation is limited income	Short (2024 - 2025)	
CE7	<p><b>COA Grant Match for Federal Clean Energy/Resilience Grants:</b> AE is currently in the process of applying for various Federal grants. A Matching Fund for Grants would provide matching funds for those potential projects. The Matching Fund for Grants would include, but not be limited to proposed projects listed below, but any Federal grant effort that would help address resilience of our energy systems and needs matching funds pool to reference in an application.          - Resilience Hubs: 6-7 commercial-scale battery storage systems at community facilities (Up to 1MW/4MWh) integrated with a device-agnostic distributed energy resource management system (DERMS)          - Smart Grid Enhancements: End-to-end feeder rehabilitation and automation effort that will harden and enhance the resilience of Austin Energy's distribution system.</p>	<p>\$40 million           Savings depend on which projects are chosen.          Match unlocks significant grant funding.</p>	Utility Rates	AE	AE Gen Resource Plan: Local Battery Storage; Climate Resilience Action Plan: Harden Critical Infrastructure	Short (2024 - 2025)	

JSC

JSC

**Attachment A: Carbon Emissions**

CE8	<p><b>Solar at ARR FM 812 Landfill:</b> Austin Energy is working with Austin Resource Recovery to potentially build a new solar PV system on top of the closed FM 812. 10MW of solar panels will be installed with a ballasted racking system to avoid any penetration or disturbance of the landfill cap. The electricity from this project will be earmarked for the AE Community Solar program and AE will contract with an "Engineering, Procurement and Construction (EPC)" firm to deliver the project. AE will own it, taking advantage of new Direct Pay provisions in the Inflation Reduction Act to offset 30% or more of the capital cost. The project will include an educational kiosk for student groups and visitors to see how a utility scale solar installation works</p>	\$16.9 million (cost)	Utility Rates	AE, ARR	AE Gen Resource Plan: Supports both local solar and carbon-neutral goals; 25% of CES program participation is limited income	Short (2024 - 2025)	
CE9	<p><b>Pilot 'Virtual Power Plant' Project:</b> A Virtual Power Plant (VPP) is a group of distributed energy resources (DERs) that can be controlled as a single entity to provide services to a utility or to the grid. This pilot project would deploy 1MWh of battery energy storage systems behind the meter at AE/COA facilities and/or participating customers aggregated as a VPP. The batteries would be controlled by AE to reduce total electricity load on the grid during potential "4CP" peak demand events. Batteries would be charged during off-peak/lower cost/lower GHG hours and discharged during on-peak/higher cost/higher GHG hours. Customers receive lower overall electricity bills and improved resilience, AE reduces its costs, and overall GHG emissions are reduced. AE will use the pilot to test telemetry protocols between DERMS and devices and evaluate the safety, technical and economic performance of the VPP to inform a longer term strategy on how to optimize deployment of VPPs in the AE service territory.</p>	<p>\$1.28 million cost (after 30% Investment Tax Credit) for 2 years \$650,000 in savings over 10 years</p>	Utility Rates	AE	AE Gen Resource Plan: 225 MW Economic Demand Response by 2030	Short (2024 - 2025)	
CE10	<p><b>EV Charging Infrastructure for LMI Customers:</b> Low and Moderate Income customers may not have the option or funds to install dedicated charging infrastructure; this project will leverage public-private partnerships and federal incentives to fund the most cost-effective solutions currently available for providing EV charging services to LMI customers. Main environmental benefit is reduction in GHG emissions through replacement of gas-powered vehicles with electric vehicles for segment of population currently underrepresented in EV ownership.</p>	\$15 million over 5 years	Utility Rates	AE	Climate Equity PlanTransportation Electrification G2: By 2030, Austin has a compelling and equitably distributed mix of level 1, 2 and DC fast charging infrastructure to accommodate 40% of total vehicle miles traveled in the city	Mid (2025- 2027)	
CE11	<p><b>Commercial Building Energy Audits:</b> Funding for energy audits and technical assessments for local commercial and multifamily properties. Work to ensure all city/government, non-profit, and small/medium businesses have received an energy audit or EE upgrades every 10 years. Austin Energy will administer an audit program (in-person or virtual) and link audit results to energy efficiency funding for target buildings.</p>	\$5 million	Utility Rates	AE	AE Gen Resource Plan:Building Efficiency	Short (2024 - 2025)	
CE12	<p><b>Austin Transfer Station:</b> Facility where trash, recycling, and compost are temporarily held to hauler to landfills or processing facilities. This also enables fleet electrification.</p>	\$100 million (estimate, could be colocated with Recycling and Reuse Facility)	Utility Rates	ARR	2023 ARR Comprehensive PlanChapter 8	Long (2027 and beyond)	

JSC

JSC

JSC

JSC

**Attachment A: Carbon Emissions**

CE13	<b>EV charging network:</b> Conduct study in partnership with Austin Energy (and other departments with electric fleet) to map existing heavy vehicle charging stations at City properties and identify future expansion options to support electrification of fleet	TBD	Utility Rates	ARR	2023 ARR Comprehensive PlanChapter 8	Long (2027 and beyond)		JSC
CE14	<b>Austin Recycling and Reuse Drop Off Facility:</b> Provide residents with convenient household waste and hard-to-recycle drop-off opportunity similar to existing south RRDOC.	\$100 million (estimate, could be colocated with Transfer station)	Utility Rates	ARR	2023 ARR Comprehensive PlanChapter 8	Long (2027 and beyond)		
CE15	<b>City Collected Compost Processing Facility</b> to process organic material.	\$15 million (estimated cost if existing City land utilized at closed landfill)	Utility Rates	ARR	Climate Equity Plan Food and Product Consumption Goal 3; Urban Forest Plan S-2 Wood Utilization	Long (2027 and beyond)		JSC
CE16	<b>Deconstruction Reuse Warehouse</b> to hold reusable material salvaged from deconstructed buildings until reuse opportunities can be found.	\$15 million (estimate)	Utility Rates	ARR	2023 ARR Comprehensive PlanChapter 13	Long (2027 and beyond)		JSC
CE17	<b>Construction Debris Recycling Facility</b> (Open to 3rd Party Haulers). City owned or public-private partnership.	\$15 million (estimated cost if existing City land utilized at closed landfill)	Utility Rates	ARR	2023 ARR Comprehensive PlanChapter 13	Long (2027 and beyond)		



**Attachment A: Water Quality, Quantity, and Land**

	Project	Cost + Savings	Funding Source(s)	Department(s)	Plan / Goal / Strategy	Timeline (fiscal year)	Notes
WL1	<p><b>Tree Assessment, Inventory, and Management</b>                      Tree inventory: Conduct a comprehensive geospatial inventory of all trees including street trees and wildfire risk                      Comprehensive Urban Forest Planting and Maintenance Plan:                      Proactive tree planting and care: implement the Comprehensive Urban Forest Planting and Maintenance Plan, including reforest the floodplains, wildfire mitigation and wood reuse strategies</p>	\$10 million	General Fund	ARR, AW, AFD, DSD, PARD, WPD,	CEP NS Goal 3: Achieve at least 50% citywide tree canopy cover by 2050, focusing on increasing canopy cover equitably.	Short (2024 - 2025)	
WL2	<p><b>Climate Change &amp; Natural Systems Analysis</b>                      Include data analytics for predictive modeling, gray infrastructure impacts such as comprehensive parking (Lot) assessment, etc.                      Develop a framework for land acquisition                      Assess land to acquire and bank for future community needs (parks, stormwater management, affordable housing, agriculture, health centers, libraries, etc. )</p>	\$5 million	General Fund	ARR, AW, AFD, DSD, HD, OoS, PARD, PD, WPD	CEP NS Goal 1: By 2030, legally protect an additional 20,000 acres of carbon pools on natural lands and manage all new and existing natural areas (approximately 70,000 acres total), focusing on resilience.	Short (2024 - 2025)	
WL3	<p><b>Land Acquisition</b>                      Acquire and bank land for future community needs through fee simple, lease agreements and other means                      Preserve and restore open space ecosystem services and food production in the East Austin/blackland prairie land conservation and restoration area                      Preserve and restore the Lower Colorado River Basin drinking water watershed land conservation</p>	\$1 billion	Bond	AW, OoS, PARD, WPD	CEP NS Goal 1: By 2030, legally protect an additional 20,000 acres of carbon pools on natural lands and manage all new and existing natural areas (approximately 70,000 acres total), focusing on resilience.  CEP NS Goal 2: By 2030, protect 500,000 acres of farmland from development in the five county region* through legal protections or regenerative agriculture programs.  Food system plan - Preserving Farmland Strategy 1.1	Long (2027 and beyond)	
WL4	<p><b>Citywide Green Infrastructure Plan / Natural Resource Management</b>                      Increase resources for land management to address climate resilience, fire management, and flooding on existing public lands                      Include Stormwater Resilience                      Include food production: Community Gardens, Food Forests, Farm Incubator Program, etc.</p>	\$5 million	General Fund	ARR, AW, AFD, DSD, OoS, PARD, WPD	CEP NS Goal 4: By 2030, include all City-owned lands under a management plan that results in neutral or negative carbon emissions and maximizes community co-benefits.	Mid (2025-2027)	
WL5	<p><b>Austin Civilian Conservation Corps</b>                      Expand engagement including Ambassadors/Green Workforce Development</p>	\$5 million	General Fund	EDD, ARR, AW, AFD, DSD, OoS, PARD, WPD		Mid (2025-2027)	
WL6	<p><b>Food Hub</b>                      Develop a central aggregation, processing, and distribution facility (Food Hub) to supply institutional purchasers with local agricultural goods.                      Support a regional food system network to facilitate and coordinate large-scale pro-health, pro-climate food purchasing and distribution from regenerative agricultural producers.</p>	\$50 million	Bond	OoS	Food System Plan -Food Hub - Strategy 5.1: Develop a central aggregation, processing, and distribution facility (Food Hub) to supply regional institutional purchasers with local agricultural goods.	Long (2027 and beyond)	

JSC

JSC

JSC

JSC

**Attachment A: Water Quality, Quantity, and Land**

WL7	<p><b>Farm Incubator</b>                  Create a local farm incubator program to support farmers who practice regenerative agriculture through the first 3-5 years of business with a focus on reducing barriers for underrepresented farm owners and workers, including offering beginning farmer training.</p>	\$20 million	General Fund	OoS	Food System Plan -Farm Incubator Program - Strategy 2.3: Create a local farm incubator program.	Mid (2025-2027)	
-----	--	--------------	--------------	-----	---	-----------------	--

**Attachment A: Community Resilience**

	Project	Cost + Savings	Funding Source(s)	Department(s)	Plan / Goal / Strategy	Timeline (fiscal year)	Notes
CR1	<p><b>Climate Health Assessment</b>                      In-depth climate change vulnerability health study, gap analysis, and modeling                      Relationship between climate change impacts and social determinants of health                      Current and projected vectors borne disease.                      Number and locations of energy-burdened households: lack air conditioning, using ventilators, etc.                      Recommendations for equitable programs that support and strengthen community resilience.</p>	\$250,000	General Fund	APH	<p><b>Austin Public Health 2020-2025 STRATEGIC PLAN</b>                      Goal 3. Minimize the public’s exposure to environmental hazards, infectious diseases, and foodborne illness KPI 3.1 Percent of retail and food service fixed establishments that are substantially compliant in their routine inspections Target: 90%</p>	Short (2024 - 2025)	
CR2	<p><b>Climate + Health Investments</b>                      Health resource for acute and chronic climate impacts                      Broader communication, portable/potable water, charging stations, etc. \$250k Short term                      Funding for a public health Climate Program \$250k/yr long term</p>	\$500,000	General Fund	APH	<p><b>Austin Public Health 2020-2025 STRATEGIC PLAN</b>                      Goal 6. Promote health equity, eliminate disparities, and assist people in achieving wellness, stability, and self-sufficiency KPI 6.1 Percent of households receiving homeless services that move into housing TARGET: 82%                      Goal 7. Use science, data, and a prevention-focused approach to guide and support health and racial equity KPI 7.1 One epidemiologist per 100,000 population employed by Austin Public Health TARGET: 1 per 100,000 Population</p>	Short (2024 - 2025)	
CR3	<p><b>Decker Dam Improvements:</b> Replace key infrastructure at the Decker Dam to bring the dam into compliance with current standards, improving resiliency of City infrastructure against extreme weather and flood risk</p>	\$14 million	Utility rates	AE	Climate Resilience Action Plan: Harden Critical Infrastructure	Mid (2025-2027)	
CR4	<p><b>Fallwell Lane Improvements Ph A &amp; B:</b> Citywide project to improve the embankment along Fallwell Lane for flood resilience improvement at Sand Hill Energy Center</p>	\$18.2 million	Utility rates	AE	Climate Resilience Action Plan: Harden Critical Infrastructure	Mid (2025-2027)	
CR5	<p><b>Decker River Water Pump Upgrade:</b> modernized traveling water screens, new pump discharge check valve. A new pump gland sealing system and improvements to the river inlet cistern</p>	\$500,000	Utility rates	AE	Climate Resilience Action Plan: Harden Critical Infrastructure	Short (2024 - 2025)	
CR6	<p><b>Community Resilience Projects for Residential &amp; Commercial</b>                      Increase community resilience by combining initiative and increasing incentives for Firewise, stormwater capture, landscape transformation, greywater reuse (\$500k for 25 or more homes), battery back up and other resilience upgrades                      Support home repairs for LMI households to ready homes for participation in weatherization, energy efficiency, solar programs</p>	\$100 million	General funds, utility rates	AW, AFD, HD, WPD		Mid (2025-2027)	
CR7	<p><b>Enhance City Owned Community Facilities</b>                      As part of the Resilience Hub Network program, design and implement improvements at Recreation Centers, Health Centers and Library Facilities including solar, site updates, signage and other hardening updates.                      Capital improvement project for resilience updates to city facilities include solar/battery backup, supportive infrastructure, and other resilience upgrades. Estimate based on 20 facilities @ \$5 million each.</p>	\$100 million	Bonds	AE, PARD, APL, APH,	<p>Climate Resilience Action Plan: Strengthen Emergency Response, Optimize Coordination of Disaster Response Resources, Design for Resilience</p> <p>PARD Long Range Plan SEG6: Pursue sustainability and resilience goals at all PARD parkland and facilities</p>	Short (2024 - 2025)	Related to upgrades in the Unified City of Austin Facilities Operations, Maintenance, and Improvement Plan, but focused on Resilience Hubs in particular.

**Attachment A: City Operations**

	Project	Cost + Savings	Funding Source(s)	Department(s)	Plan / Goal / Strategy	Timeline (fiscal year)	Notes	
CO1	<b>Unified City of Austin Facilities Operations, Maintenance, and Improvement Plan:</b> Real-time facility energy and water-use monitoring, poor performance alerts	\$300,000 + utility bill savings TBD	General funds	PARD, APH, APL, BSD, AE, all facility owners	Climate Equity Plan Sustainable Buildings Goals 1 and 4	Short (2024 - 2025)	Would improve efficiency of everyday operations, decrease utility bills, and identify malfunctioning equipment rapidly	JSC
CO2	<b>Unified City of Austin Facilities Operations, Maintenance, and Improvement Plan:</b> Regular facility assessments at all buildings every 5 years	\$60 million over 5 years	General funds	PARD, APH, APL, BSD, AE, all facility owners	Climate Equity Plan Sustainable Buildings Goals 1, 2, and 4	Mid (2025-2027)	To identify priority maintenance and upgrades to support carbon emission reductions, water conservation, and community resilience	
CO3	<b>Unified City of Austin Facilities Operations, Maintenance, and Improvement Plan:</b> Dedicated funds for maintenance and upgrades identified through assessments	TBD	General funds, bonds, utility rates	PARD, APH, APL, BSD, AE, all facility owners	Climate Equity Plan Sustainable Buildings Goals 1, 2, and 4	Long (2027 and beyond)	Maintenance and upgrades to include resilience hardening, electrification, energy efficiency, water conservation and reclamation, refrigerant management, more. Includes an estimated \$1.5 million for conversion of three cooling towers from potable to reclaimed water.	JSC
CO4	<b>Advance Decarbonization of City Fleet and Community-wide EV Infrastructure:</b> Transition to R99 renewable diesel	\$800,000 annually	General funds	Fleet Services	Climate Equity Plan Transportation Electrification	Mid (2025-2027)	R99 renewable diesel is an existing zero-carbon drop-in replacement for traditional vehicles and is a good solution for fleet applications that are difficult to electrify	
CO5	<b>Advance Decarbonization of City Fleet and Community-wide EV Infrastructure:</b> Procure an additional 2,200 Evs by 2040	\$13 million	General funds	Fleet Services	Climate Equity Plan Transportation Electrification Goal 1	Mid (2025-2027)	While the upfront investment in transitioning to BEVs is significant, our analysis suggests that over time, the operational and maintenance cost savings will offset this initial expense.	
CO6	<b>Advance Decarbonization of City Fleet and Community-wide EV Infrastructure:</b> Fleet and public (when feasible) charging infrastructure	\$15 million	Bonds	Fleet Services	Climate Equity Plan Transportation Electrification Goal 2	Mid (2025-2027)	While the upfront investment in transitioning to BEVs is significant, our analysis suggests that over time, the operational and maintenance cost savings will offset this initial expense.	JSC

Attachment A: Other

	Project	Cost + Savings	Funding Source(s)	Department(s)	Plan / Goal / Strategy	Timeline (fiscal year)	Notes
O1	<p><b>Sidewalks:</b> Build new sidewalks and rehabilitate existing sidewalks at high-priority locations throughout the city. This work will complement transportation investments that increase accessibility to, and comfort using, the sidewalk system.</p>	\$810 million	Bond	TPW	<p>ASMP Goal - Active Transportation Infrastructure: The goal of the Sidewalks program is to fund 810 miles of new sidewalks at absent locations throughout the city.</p>	Short-Long	<p>Unless a significant new source of funding is identified by the end of 2024 construction will start slowing down in mid-2025 and will come to a near halt (relative to current levels) by mid 2026. The Sidewalk program of projects faces staffing and workforce capacity constraints that limit the ability to deliver projects on an annual basis. Additional funding toward workforce development and staffing would accelerate the program's ability to meet annual targets. Additional funding is needed for consultant support and additional staffing and funding is needed for operations and maintenance.</p> <p>Short Term (0-2 years): \$124,000,000            Mid Term (2-5 years): \$248,000,000            Long Term (6-10 years): \$682,000,000            Full Build (10+ years): \$810,000,000</p>
O2	<p><b>Shared Streets:</b> Build shared streets as a potential alternative for improving pedestrian access in existing neighborhoods that were developed without sidewalks; and shared streets may be a preferred alternative for aesthetic, social, or environmental reasons, or where construction of sidewalks would be particularly difficult.</p>	\$93 million	Bond	TPW	<p>ASMP Goal - Active Transportation Infrastructure: The goal of the Shared Streets program will be to fund 740 miles of shared streets at absent locations throughout the city.</p>	Short-Long	<p>The Shared Streets program is a new program with staffing and workforce capacity constraints that limit the ability to deliver projects on an annual basis. Additional funding toward workforce development and staffing would accelerate the program's ability to meet annual targets. Additional funding is needed for consultant support and additional staffing and funding is needed for operations and maintenance.</p> <p>Short Term (0-2 years): \$5,000,000            Mid Term (2-5 years): \$13,000,000            Long Term (6-10 years): \$25,000,000            Full Build (10+ years): \$93,000,000</p>
O3	<p><b>Bicycle Network:</b> Install bicycle facilities that create an all ages and abilities (AAA) bicycle network in high priority areas throughout the city. This network will require proactive capital investments to engineer and construct:</p> <ul style="list-style-type: none"> <li>- Physically protected bicycle lanes</li> <li>- Off-street bikeways</li> <li>- Shared use paths</li> <li>- Bridges or tunnels</li> <li>- Signals</li> <li>- Traffic calming infrastructure</li> <li>- Utility relocation</li> </ul>	\$1.15 billion	Bond	TPW	<p>ASMP Goal - Active Transportation Infrastructure: The goal of the Bikeways program will be to fund 800 miles of the entire remaining AAA bicycle network as defined in the 2023 Bike Plan and upgrade Bikeways to medium and full build quality.</p>	Short-Long	<p>The Bicycle program of projects faces staffing and workforce capacity constraints that limit the ability to deliver projects on an annual basis. Additional funding toward workforce development and staffing would accelerate the program's ability to meet annual targets. Additional funding is needed for consultant support and additional staffing and funding is needed for operations and maintenance.</p> <p>Short Term (0-2 years): \$15,000,000            Mid Term (2-5 years): \$50,000,000            Long Term (6-10 years): \$140,000,000            Full Build (10+ years): \$1,150,000,000</p>

Attachment A: Other

O4	<p><b>Vision Zero Safety Improvements:</b> This project will include various engineering countermeasures on the High-Injury Network and visibility improvements (lighting, markings, vegetation removal, etc.).</p>	\$70 million	Bond	TPW	<p>ASMP Goal - Safety: The goal of the Vision Zero Safety Improvement program of projects is to create safe mobility options to allow our city to make a cultural shift towards sustainable modes and therefore reduce carbon emissions.</p>	Short to Long	<p>Short Term estimates reflect spending at a peak projected spend rate (~\$24 million per year) for two additional years beyond current projections.</p> <p>The Vision Zero program of projects faces staffing and workforce capacity constraints that limit the ability to deliver projects on an annual basis. Additional funding toward workforce development and staffing would accelerate the program's ability to meet annual targets.</p> <p>Short Term (0-2 years): none Mid Term (2-5 years): \$34,000,000 Long Term (6-10 years): \$70,000,000 Full Build (10+ years): unknown</p>
O5	<p><b>Local Transit Enhancements:</b> Design and construct transit infrastructure improvements at high-priority locations throughout the city. These include: - <i>Transit access improvements</i>, such as adding pedestrian crossings (crossing islands, PHBs, etc.) at new and existing bus stops, filling first/last mile gaps (missing sidewalks, SUPs, etc.) near transit, and building multimodal bus stops. - <i>Transit operations improvements</i>, such as transit priority lanes, intersection and signal modifications, and bus queue jump signals. - <i>Safety improvements for transit</i>, such as access management, turn modifications, and curb management near transit facilities. - <i>Transit only lane feasibility studies</i>.</p>	\$51 million	Bond	TPW	<p>ASMP Goal - Transit: The goal of the Transit Enhancement program's Long-term project is to fund design and construction for all projects identified in the 2023 Transit Enhancement Infrastructure Report. The Transit Enhancement program will improve mobility and access to opportunity for Austin residents and visitors by fostering collaborative relationships with public transit providers, working directly with communities to understand needs and opportunities, and systematically enhancing areas of the built environment to support transit.</p>	Short to Long	<p>The Transit Enhancement program of projects faces staffing and workforce capacity constraints that limit the ability to deliver projects on an annual basis. Additional funding toward workforce development and staffing would accelerate the program's ability to meet annual targets.</p> <p>Short Term (0-2 years): \$5,000,000 Mid Term (2-5 years): \$32,000,000 Long Term (6-10 years): \$51,000,000 Full Build (10+ years): Unknown</p>
O6	<p><b>Project Connect System Plan:</b> Implement the Project Connect Long Term Vision Plan</p>	TBD		TPW, CDS, ATP, CapMetro	<p>ASMP Goal - Transit Partner with Capital Metro to plan for and implement the Project Connect Long Term Vision Plan.</p>	Long (2027 and beyond)	<p>2020 Proposition A only funded an initial investment.</p>

Attachment A: Other

<p>O7</p>	<p><b>Pedestrian Crossings:</b> Design and construct the following transportation infrastructure at high-priority, non-signalized crossing locations throughout the city:</p> <ul style="list-style-type: none"> <li>- Signals</li> <li>- Crosswalks</li> <li>- Bulb outs</li> <li>- Crossing islands</li> </ul>	<p>\$502 million</p>	<p>Bond</p>	<p>TPW</p>	<p>ASMP Goal - Active Transportation Infrastructure: The goal of the Pedestrian Crossing program is to design and construct Very High and High priority crossings ready for implementation in the next ten years. Crossings are located along the Pedestrian High Injury Network (HIN), and/or within 1/4 mile of all identified schools, public transit stops and stations, and parks. They shall be provided frequently to ensure safe pedestrian crossings, avoid crossing delay, discourage unsafe and illegal crossings, and promote walking as a chosen mode of transportation.</p>	<p>Short to Medium</p>	<p>The identified need is \$502M to address high and very high priority gaps - nearly 2,000 priority crossing locations identified from Sidewalks, Crossings, and Shared Streets plan (adopted November 2023). To meet these goals, pedestrian crossings would be delivered using multiple funding sources, including large CIP, Corridor Program, and the Vision Zero/Safety Program. However, the core program would be responsible for the majority of crossings and thus requires additional funding.</p> <p>Other constraints include in-house ability to build and maintain infrastructure. For example, Signs and Markings Division and Arterial Management Division both need additional capacity and tools/resources. Additional funding is needed for consultant support and additional staffing and funding is needed for operations and maintenance.</p> <p>Short Term (0-2 years): \$10,000,000          Mid Term (2-5 years): \$25,000,000          Long Term (6-10 years): \$50,000,000          Full Build (10+ years): \$502,000,000</p>
<p>O8</p>	<p><b>Mobility Hubs &amp; Placemaking:</b> Planning and implementation of transit Mobility Hubs. This work will expand access to transit opportunities and increase community engagement at select locations. Mobility Hubs include additional amenities and uses such as concentration of employment, housing, shopping, and/or recreation.</p>	<p>\$21.3 million</p>	<p>Bond</p>	<p>TPW</p>	<p>ASMP Goal - Transportation Demand Management: The goal of the Mobility Hubs project will be to plan and implement priority locations in the next five years. This project will create family-friendly multimodal mobility hubs, including park-and-rides, adjacent to transit stops to offer a variety of first- and last-mile mobility options and a complete trip experience. Incorporate community-knowledge sharing, maintenance programming, and integrate civic space where strategic. The locations will include underutilized and disadvantaged communities as outlined by the Equity Analysis Zones GIS Map, which may qualify the associated projects for various federal grants.</p>	<p>Short to Long</p>	<p>This project is utilizing existing staff time. The scope of work has not been developed as the project is in the research portion of the planning phase.</p> <p>Possible constraints: potential sites are unavailable; conflicting timelines for CapMetro updating transportation network vs COA updating of network via Project Connect and other upcoming priorities; Project Connect, I-35 expansion and other large initiatives may affect potential locations and extend timeline; community outreach and stakeholder involvement will take time; hiring consultants to help with particular elements of planning and community outreach.</p> <p>Additional funding is needed for consultant support and additional staffing and funding is needed for operations and maintenance.</p> <p>Short Term (0-2 years): \$4,100,000          Mid Term (2-5 years): \$10,500,000          Long Term (6-10 years): \$21,300,000          Full Build (10+ years): unknown</p>

**Attachment A: Other**

O9	<p><b>Green Infrastructure:</b> Plan, procure, and install trees and construct associated infrastructure at select locations throughout the city. These locations will be based on ongoing transportation projects that lack trees and related infrastructure as part of their engineering and/or construction. The engineering and construction will include excavation, irrigation, site preparation, drainage, and installation. Such factors will be based on the Corridor Program Office Tree Reference Manual, which updates tree installation specifications to modern day standards and ensures optimal health of the tree in context of the urban environment.</p>	\$10 million	Bond	TPW	CEP Natural Systems Goal 4 Strategy 2: Reclaim public space and prioritize green infrastructure	<p>Refer to recent Council Resolution No. 20240321-039 on Green Infrastructure/Trees</p> <p>Short Term (0-2 years): \$5,000,000 Mid Term (2-5 years): \$10,000,000</p>
O10	<p><b>Urban Trails:</b> Fund engineering and construction of Tier I urban trails and connections to existing transportation infrastructure. It also includes designing and constructing trail connections that overcome barriers of the city's active transportation network.</p>	\$860 million	Bond	TPW	<p>ASMP Goal - Active Transportation Infrastructure: The goal of the Urban Trails Full Build project would design and construct all Tier 1 trails identified in the Urban Trails Network after existing bonds are spent down in the next five years.</p>	<p>The Urban Trails program is funded with 2016, 2018, and 2020 Mobility Bonds. The program is estimated to spend remaining bonds in FY2028-2029. Urban Trail project delivery is constrained by conflicts with existing projects from other city departments. In addition, these projects are located in environmentally sensitive areas and require protracted design and environmental clearance. These constraints slow down the pace at which projects reach full design and implementation. Additional funding is needed for consultant support and additional staffing and funding is needed for operations and maintenance.</p> <p>Long Term (6-10 years): \$76,000,000 Full Build (10+ years): \$860,000,000</p>
O11	<p><b>Climate Change Integration:</b> Integrate climate change considerations into decision making for capital investments. Including:</p> <ul style="list-style-type: none"> <li>• Design for resilience to address climate change and other stressors using strategies such as enhancing designs where there is a higher risk of damage</li> <li>• Designing roadways and sidewalks for weak soils and expansive clays</li> <li>• Armoring bridges and roadways in flood prone areas</li> <li>• Making trails along creeks durable for the long term</li> </ul>	TBD	Bond	TPW	<p>ASMP Goal - Environmental Strategies: This program of projects would be responsible for integrating climate change considerations into decision making for capital investments. Including: Design for resilience to address climate change and other stressors using strategies such as enhancing designs where there is a higher risk of damage; Designing roadways and sidewalks for weak soils and expansive clays; Armoring bridges and roadways in flood prone areas; Making trails along creeks durable for the long term.</p>	<p>Additional staffing to implement action items Additional capital funding Additional funding is needed for consultant support Additional staffing and funding is needed for operations and maintenance.</p> <p>Short Term (0-2 years): Mid Term (2-5 years): Long Term (6-10 years): Full Build (10+ years):</p>

JSC

JSC



**Attachment A: Other**

O12	<p><b>Major Capital Improvements</b> will address unfunded needs for large scale capital improvement projects in the following programs:</p> <ul style="list-style-type: none"> <li>•Corridor Construction Program</li> <li>•Roadway Capacity (SIF)</li> <li>•Substandard Streets</li> <li>•Roadway Infrastructure</li> <li>•Bridge Management</li> <li>•Signalls</li> </ul>	\$3.8 billion	Bonds	TPW, CDS	<p>Goal - Congestion Management: The goal of the Major Capital Improvement program will be to address unmet engineering and construction needs of large scale capital projects.</p>	Short to Long	<p>Major capital improvements require a lot of time and a lot of money to create an outcome that accomplishes all of our goals. If left underfunded, elements like trees and drainage improvements are removed to keep costs low undermining the desired outcome. If left unfunded, they take decades to realize if ever at all. The Street Impact Fee provides a small revenue source for eligible vehicle capacity projects, but it has to be leveraged with other funds to make any progress. This is a direct reflection of the 2016 Mobility Bond Corridor Construction Program.</p>
O13	<p><b>Stormwater Resilience CIP</b> High priority CIP projects to reduce impacts of flooding, erosion, and water pollution and improve drainage infrastructure.</p>	\$400 million	Bonds	WPD	WPD Strategic Plan	Mid (2025-2027)	
O14	<p><b>Stormwater Resilience Projects and Programs</b> Projects and programs to enhance community resilience, reduce impacts of flooding and erosion, improve water quality and environmental health. Funding estimate based on existing Strategic Plan needs assessment currently under revision via Rain to River (anticipated 2026) to update community priorities and strategies.</p>	\$1.5 billion +	Bonds, other	WPD	WPD Strategic Plan, Climate Equity Plan	Long (2027 and beyond)	



## BOARD/COMMISSION RECOMMENDATION

### **Joint Sustainability Committee Recommendation 20240430-002: Environmental Investment Plan Funding Needs**

#### **List of Funding Needs**

Cross-Sector Funding Needs .....	2
1. Outreach and Engagement for Sustainability Incentives .....	2
2. Austin Civilian Conservation Corps.....	3
Energy and Water Conservation Funding Needs .....	4
3. Expand Austin Energy’s energy efficiency programs.....	4
4. Expand Austin Energy’s demand response programs .....	5
5. Invest in battery energy storage.....	5
6. Utility-owned or contracted rooftop solar .....	6
7. Shut down/retire AE’s portion of Fayette coal plant .....	7
8. Air sealing task force and training program .....	8
9. Passive House incentive program.....	8
10. Decarbonizing municipal buildings.....	9
11. Water leak detection programs.....	9
12. Improve rebates for residential and commercial landscape conversions.....	10
Consumption & Waste Reduction Funding Needs.....	11
13. Circular economy & waste reduction programs.....	11
14. Low-carbon concrete fund .....	12
15. Pro-climate, pro-health foods .....	12
16. Sustainable purchasing and carbon accounting .....	13
17. City-owned composting facility .....	13

Natural Systems Funding Needs .....	14
18. Preservation of existing agricultural land.....	14
19. Revolving loan fund for Working Farms Fund pilot.....	15
20. Energy and water dashboard for city facilities .....	15
21. Comprehensive public tree inventory for the city of Austin .....	16
Transportation and Land Use Funding Needs.....	17
22. Austin Resource Recovery Fleet Electrification .....	17
23. Austin Resource Recovery Transfer Station .....	17
24. Expand All Ages and Abilities Bicycle Network, Urban Trails, Sidewalks, and Shared Mobility	18
25. Extend Pickup Service Zones .....	20
26. Downtown High-Frequency Circulator .....	21
27. Neighborhood E-Circulators .....	22
28. Heat Resilience Infrastructure .....	23
29. CityLeap ATX Plan: convert travel lanes on arterial roads to protected bike or bus lanes .....	24
30. Establish a city-owned all-electric carshare service .....	25
31. Low-cost, accessible charging stations at City of Austin owned facilities .....	26
32. Install charging stations at multi-family homes with priority in low and moderate income communities .....	27
33. E-mobility solutions pilot program .....	28

## Cross-Sector Funding Needs

### 1. Outreach and Engagement for Sustainability Incentives

**Details:** The City of Austin has numerous sustainability incentive programs aligned with the goals of the Climate Equity Plan. However, many of these programs are underutilized, especially among low-income households. A part of the challenge is awareness. The city should host a user-friendly website that consolidates information on all sustainability incentives offered by the City of Austin (i.e., home weatherization and repair, water conservation, rainwater collection, landscape and green infrastructure programs), as well as state and federal incentives that align with the goals of the Austin Climate Equity Plan and other city sustainability plans.

Additional community outreach by the city and trusted organizations can increase the effectiveness of these programs. A new Community Engagement Specialist FTE in the Office of Sustainability is needed to coordinate community outreach and partnership activities

associated with promoting sustainability incentives, with a focus on building relationships with low-income communities, communities of color, and related organizations and service providers. This employee would manage grants, contracts and stipends for community leaders and community-based organizations to do direct outreach to promote sustainability incentive programs in targeted Austin communities, in partnership with the Office of Sustainability.

**Benefits:** GHG reduction, water conservation, more equitable participation in programs

**Cost:** \$500,000/year to the Office of Sustainability for:

- one additional Community Engagement Specialist FTE
- outreach grants, contracts, and stipends
- website construction and maintenance

**Plan Alignment:** Austin Climate Equity Plan; Water Forward Plan; Austin Energy Resource, Generation and Climate Protection Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **2. Austin Civilian Conservation Corps**

**Details:** Funding should be allocated to support the continuation and expansion of the Austin Civilian Conservation Corp (ACCC) program. The following tracks should be fully funded:

- Natural Systems (protecting critical ecosystems on preserves and parkland)
- Environmental Education
- Zero Waste (should be expanded beyond computer refurbishment)
- Clean Energy (solar, energy efficiency, demand response, batteries)
- Digital Media

Providing permanent funding to support and expand these programs is important in order to train people to provide needed environmental services in Austin. The ACCC should connect program participants with relevant programs at Austin Community College whenever possible for continuing education. This includes the solar technology program and sustainable agriculture program.

**Benefits:** The Austin Civilian Conservation Corp invests in people and projects that have a direct impact on climate justice and builds more equitable pathways to employment, organizational leadership, entrepreneurship and strengthens networks of support for those most impacted by a changing climate

**Cost:** \$3.93 million/year: \$570,000/year for 6 FTE Program Specialists; \$160,000 to support temporary staff and \$3,200,000/year to support the programming and training and partnerships with external organizations. \$80,000 one time for access to a truck.

**Plan Alignment:** Climate Equity Plan; Austin Resource Recovery Comprehensive Plan; Parks and Recreation Department Land Management Plan: Austin Energy Resource, Generation and Climate Protection Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## Energy and Water Conservation Funding Needs

Additional investments in energy efficiency, demand response, local solar, batteries and coal retirement are needed to meet the carbon-free by 2035 goal in the Austin Energy Resource Generation and Climate Protection Plan and the greenhouse gas emissions reduction goals in the Austin Climate Equity Plan. These are the resources that are locally available and cost effective for decarbonizing the energy sector. Decarbonizing the energy sector is doubly important because it is the lynchpin for decarbonizing transportation, buildings and other activities. Decarbonizing city buildings and improving water conservation will also yield greenhouse gas (GHG) reductions and other co-benefits and aligns with the Water Forward plan.

### 3. Expand Austin Energy's energy efficiency programs

**Details:** More investment is needed to improve building envelopes and air sealing and install efficient heat pumps for heating and cooling and hot water production, as well as LED lighting and other energy efficiency appliances. Additional community outreach is needed to inform the community about available local, state and federal incentives. Building performance should be measured and ranked to enable focused attention on buildings with the highest need.

**Benefits:** GHG reduction, air pollution reduction (and health benefits), affordability/bills reduction (for program participants and non-participants), improved health and safety of buildings and their occupants, increased building life (reduced embedded GHG emissions), greater equity in energy bills and home comfort, improved grid resilience

**Cost:** AE budget is \$13.6 million/year for existing programs. This amount should be doubled to \$27.2 million/year (\$13.6 million/year increase). An additional 14-20 FTEs should be allocated to run energy efficiency programs, costing \$1.68-2.4 million/year. These costs will be offset by reduced AE energy purchases, ancillary services purchases, and transmission costs.

**Plan Alignment:** Austin Energy Resource, Generation and Climate Protection Plan; Austin Climate Equity Plan Sustainable Buildings Goal 1, Strategies 1 and 3

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

#### **4. Expand Austin Energy's demand response programs**

**Details:** Expanded price-based demand response programs, including to the residential, commercial, industrial, and transportation sectors is needed. "Demand response ready" should be well defined and enforced. Demand response should be automated as much as possible. Electric hot water tank programs, thermostats, home energy managements systems, commercial and residential battery storage, electric vehicle smart chargers, smart meters

**Benefits:** GHG reduction, affordability/reduced bills (reduce peak demand costs for AE), improve grid resilience

**Cost:** AE budget is \$3.6 million/year for existing programs. This amount should be quadrupled to \$14.4 million/year (\$10.8/year increase). An additional 11-16 FTEs should be allocated to run demand response programs, costing \$1.32-1.92 million/year. These costs will be offset by reduced AE energy purchases when ERCOT prices are high.

**Plan Alignment:** Austin Energy Resource, Generation and Climate Protection Plan; Austin Climate Equity Plan Sustainable Buildings Goal 1, Strategies 1 and 3

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

#### **5. Invest in battery energy storage**

**Details:** Battery storage is an important part of a decarbonized grid. Austin Energy must invest in utility scale and distributed battery storage to enable the retirement of its fossil fuel power plants and flatten the demand curve and avoid local electric grid price spikes that increase bills. Decentralized batteries on resilience hub buildings, school and supportive housing can be used as a virtual power plant (VPP) to help with load shifting during normal use and provide critical resiliency backup energy during outage events. Longer term heat batteries can decarbonize

industrial facilities throughout Austin by soaking up excess solar and wind during curtailment and putting energy into those industrial uses, or even storing it to later export to the grid, which allows much higher penetration of renewables.

**Benefits:** GHG reduction, air pollution reduction (and health benefits), affordability/bills reduction (for program participants and non-participants), improved grid resilience

**Cost:** For utility scale batteries: Using the average cost of 4-hr duration batteries provided by AE (\$1,168/kW), 200 MW would cost \$233.7 million. Using the average cost of 8-hr duration batteries provided by AE (\$1,992/kW), 400 MW would cost \$797 million. Using the average cost of 100-hr duration batteries provided by AE (\$2,150/kW), 100 MW would cost \$215 million. The combined 700 MW battery investment would cost \$1,245.7 million. These costs would be recovered by earnings in the ERCOT energy and ancillary services markets. Heat battery pilots could be funded as public/private partnership with local industrial facilities and piggyback on federal funding currently flowing to these companies.

**Plan Alignment:** Austin Energy Resource, Generation and Climate Protection Plan; Austin Climate Equity Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **6. Utility-owned or contracted rooftop solar**

**Details:** Austin Energy needs a considerable expansion of local solar to meet energy needs and keep bills affordable (by avoiding price separation from remote resources). Land is expensive, so rooftop solar is the best locally available clean renewable energy source. New programs are needed to allow the utility to invest directly in this local rooftop solar (different from current programs that require customer investment). Under this structure, AE would pay for installation of residential rooftop solar. The utility or a third part would own the installations for the first 15 years (est.) and the customer would pay a tariff that is less than the Value of Solar credits they earn on their bill. After 15 years, ownership would flip to the customer.

**Benefits:** GHG reduction, air pollution reduction (and health benefits), affordability/bills reduction (for program participants and non-participants), more equitable access to solar, reduced land use for energy production

**Cost:** Assuming \$3/watt current solar cost and \$2.70/watt solar cost starting in 2024 and getting the solar ITC and domestic content incentives and recovering cost over 15 years via tariff, \$74.46 million could establish a revolving fund that could support 5 MW installation per year. \$223.38 million could establish a revolving fund that could support 15 MW installation per

year. The 5 MW program would also need approximately 3 FTEs, costing approximately \$360,000/year, and the 15 MW program would need 6 FTEs, costing approximately \$720,000/year. These costs will be offset by reduced AE energy purchases, ancillary services purchases, and transmission costs.

**Plan Alignment:** Austin Climate Equity Plan Sustainable Buildings Goal 1, Strategies 1 & 3; Austin Energy Resource, Generation and Climate Protection Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **7. Shut down/retire AE's portion of Fayette coal plant**

**Details:** Austin Energy and LCRA co-own two coal-burning units at Fayette. Austin Energy's portion accounts for about 25% of the entire Austin Energy's scope 1 and 2 emissions (current GHG inventory). It is impossible to reach near, medium or long-term GHG reduction goals without closing Austin Energy's portion of Fayette. LCRA has demanded payment from Austin Energy for changing the contract so AE fully owns one unit and can shut it down. We don't know the exact amount, but it was rumored to be in the 100's of millions.

**Benefits:** GHG reduction, air pollution reduction (and health benefits), water pollution reduction (and health benefits and liability), long-term affordability improvement

**Cost:** \$100-300 million. Because of the large amount of GHG emissions from Fayette, this cost is still much less than the social cost of carbon (cost of contribution to climate change) from AE's portion. Based on AE's share of Fayette emissions in 2022 (2,710,000 metric tons) and the EPA social cost of carbon with a 2% discount rate<sup>1</sup>, the cost of AE's Fayette GHG emissions will be \$563.68 million in 2024, \$574.52 million in 2025, \$582.65 million in 2026, and \$593.49 million in 2027, and \$604.33 million in 2028. Thus, the cost over the coming three years (2024-2026) is approximately \$1.72 billion and the cost over the coming five years (2024-2028) is approximately \$2.92 billion.

**Plan Alignment:** Austin Energy Resource, Generation and Climate Protection Plan; Austin Climate Equity Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

---

<sup>1</sup> Pg. 154, [https://www.epa.gov/system/files/documents/2023-12/epa\\_scghg\\_2023\\_report\\_final.pdf](https://www.epa.gov/system/files/documents/2023-12/epa_scghg_2023_report_final.pdf)



**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **8. Air sealing task force and training program**

**Details:** According to RMI and DOE air sealing is the lowest cost path to lowering operational carbon. Air sealing is a sequencing and trade knowledge problem, not a technical or product problem, so training up our trade base is the best way to ensure higher quality, more air sealed buildings. Under this new program, Austin Energy would publish air sealing results of all new buildings and retrofits and host trainings for trades on how to execute tight building envelopes. Research grants and federal funds for trainings and air sealing knowledge and skills

**Benefits:** GHG reduction, air pollution reduction (and health benefits), affordability/bills reduction (for program participants and non-participants), improved indoor air quality, improved grid resilience

**Cost:** \$2 million There is a lot of federal money for this type of training.

**Plan Alignment:** Austin Climate Equity Plan Sustainable Buildings Goal 1, Strategies 2 & 3; Austin Energy Resource, Generation and Climate Protection Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **9. Passive House incentive program**

**Details:** As [directed by City Council on April, 18, 2024](#), create a program that offers cash incentives to affordable housing projects in Austin that certify as Passive House buildings. Use the Massachusetts Passive House Challenge Program as a model for this program. This program will reduce energy use costs for affordable housing providers while also creating a market shift - helping local design and construction teams learn how to build much more energy efficient buildings. As these projects are completed the added cost comes down through a learning curve that has been seen in other markets using this strategy, eventually allowing for smaller incentives and code mandates of more efficient buildings. Passive House buildings can play a critical role in the energy transition as well due to their low load and ability to load shift to help with peak demand curve reduction and resilience.

**Benefits:** GHG reduction, air pollution reduction (and health benefits), affordability/bills reduction (for program participants and non-participants), improved health and safety of buildings and their occupants, increased building life (reduced embedded GHG emissions), greater equity in energy bills and home comfort, improved grid resilience

**Cost:** \$8 Million would fund 2,000 units of housing at \$4,000/unit. This also piggybacks on IRA funding as any project doing this would also be eligible for \$5k/unit of 45L tax credits.

**Plan Alignment:** Austin Climate Equity Plan Sustainable Buildings Goal 1, Strategies 1, 2 & 3; Austin Energy Resource, Generation and Climate Protection Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **10. Decarbonizing municipal buildings**

**Details:** Retrofitting existing municipal buildings to reduce energy use, decarbonize them and make them more resilient will benefit the City budget and the services offered to the community. In addition to energy efficiency upgrades to meet suggested 2030 EUI reduction, all buildings should have solar installed (where appropriate), be equipped to participate in demand response programs, utilize 100% electric appliances, include rainwater harvesting and utilization for landscaping irrigation, which should be minimal, and should utilize sustainable and low-embodied carbon materials. Energy modeling and life cycle assessments should be done for all retrofits and new construction for municipal buildings.

**Benefits:** GHG reduction, long-term benefit for city budget; more resilient community; serve as a reference for sustainable buildings in the commercial sector - laying the ground to replicate high-performance, low embodied carbon, all-electric buildings in the commercial sector

**Cost:** For 10 buildings: \$45 million

**Plan Alignment:** Austin Climate Equity Plan Sustainable Buildings Goal 1, Strategy 3; Austin Energy Resource, Generation and Climate Protection Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **11. Water leak detection programs**

**Details:** In 2023, Austin Water loss 8,678,000,000 gallons of water which equates to a 21.68 gallons per capita per day of water loss. While this loss is within the acceptable loss for water

utilities as set by the American Water Works Association (AWWA), there is a lot of room to make significant improvements.

**Benefits:** water conservation; GHG reduction (Reducing water loss in the water will preserve this water for productive use and will reduce energy use for pumping and treatment.)

**Cost:** Austin Water should, at a minimum, triple its current leak detection budget from \$1.14 million/year to \$3.42 million/year (\$2.28 million/year increase).

**Plan Alignment:** Water Forward Plan; Austin Climate Equity Plan Sustainable Buildings Goal 4, Strategy 1

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **12. Improve rebates for residential and commercial landscape conversions**

**Details:** During summer months, the use of water dramatically increases, mainly due to the watering of landscapes. Turf areas in particular require the most water per square foot in any landscape. While ordinances for new construction can help reduce the amount of turf areas, existing properties don't have requirements to adapt their landscapes to conserve water. Reducing the amount of turf grass that requires a lot of water to survive will help conserve water.

Austin Water should offer more substantial and accessible rebates for landscape conversions. Currently, Austin Water offers a landscape conversion rebate of \$100 per 100 square feet, up to a maximum rebate of \$3000. Most conversions will be smaller areas and thus, the currently offered rebate amounts don't incentivize many customers to implement landscape conversions. In 2023, only 19 rebate applications were submitted to Austin Water. Austin Water should implement a tiered rebate structure that offers more rebate money for smaller areas of landscape conversion and should substantially increase the maximum rebate offered. As suggested by the [Get Fertilizer Wiser campaign](#), there should also be incentives that are more easily accessible to individuals who may not need to fully remove turf grass in order to reduce or eliminate watering.

**Benefits:** water conservation; GHG reduction (Reducing water use for landscaping irrigation will preserve this water for productive use and will reduce energy use for pumping and treatment.)

**Cost:** \$400,000/year

**Plan Alignment:** Water Forward Plan; Austin Climate Equity Plan Sustainable Buildings Goal 4, Strategy 1

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## Consumption & Waste Reduction Funding Needs

### 13. Circular economy & waste reduction programs

**Details:** A recent greenhouse gas inventory conducted by the Office of Sustainability indicates that Scope 3 emissions (emissions that result from the production and transportation of the products and services we use) are larger than the Scope 1 and 2 emissions that have traditionally been part of the GHG inventory. The Austin Resource Recovery has several programs to address this issue by encouraging reducing and reuse and use of more sustainable materials, but these programs are funded at such a low level they are essentially pilot projects. Considerable additional investment is needed to address this outsized source of emissions from the Austin community.

- Zero Waste Business Incentives and Rebates: This program provides incentives to businesses to reduce waste, including switching from plastic or Styrofoam containers to reusable or compostable. The current program provides a one time incentive up to \$3,000 and is only providing about \$5,000/year. The incentive should be restructured to help businesses address ongoing costs (multi-year incentive) and funding should be allocated for additional staff to do outreach to businesses (including all restaurants) (\$1 million/year).
- ARR zero waste education: Expand to reach the full Austin community, not just ARR customers, including with a paid canvassing team. (increase from \$410,000/year to \$4 million/year)
- Furniture collection for Reuse Warehouse: Current plan is for drop-off only. Funds are needed to enable pick-up to increase diversion from landfill. (\$400,000)
- Deconstruction Warehouse: To divert salvaged construction materials from the landfill. (\$10-15 million)
- Fix-it Clinics: Expand and host more (\$500,000/year)
- Circular Austin Accelerator and Circular Austin Showcase competition: Expand outreach and an increased number and value of awards for competition winners would increase effectiveness in building a circular economy in Austin. (increase award from a total of \$12,000 to \$100,000/year)
- MoveOutATX: Increase the number of events from 1 to 4 per year. (\$50,000/year)

**Benefits:** GHG reduction, plastic pollution reduction, reduce need for new landfill, local economic development, save on ARR tipping fees

**Cost:** \$10.4-\$15.4 million one time and \$5.35 million/year

**Plan Alignment:** Austin Resource Recovery Comprehensive Plan; Austin Climate Equity Plan Food and Product Consumption Goal 2, Strategy 4 and Goal 3, Strategies 1 & 5

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

#### **14. Low-carbon concrete fund**

**Details:** Concrete represents the largest of Austin’s purchasing emissions, with potential surcharges for truly carbon neutral cement ranging as high as an additional \$18/cubic yard, but with costs falling as new technology scales up. This fund would pay for additional testing, program fees, and surcharges to cover both city and non-city owned buildings of 1.1 M cubic yards of concrete.

**Benefits:** GHG reduction: 200,000 MT of CO2/year

**Cost:** \$2 million/year

**Plan Alignment:** Austin Climate Equity Plan Sustainable Buildings Goals 1, 2 & 3 (and overarching goal of ACEP); City Council Resolution No. 20230420-024

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

#### **15. Pro-climate, pro-health foods**

**Details:** Replacing animal products with plant-based foods is one of the most cost effective ways to reduce GHG emissions. Funds would be used to provide education and incentives to the Austin community to enable better choices, including 2 FTEs to help implement programming.

**Benefits:** GHG reduction, air and water pollution reduction, water use reduction, improved public health

**Cost:** \$1 million/year

**Plan Alignment:** Austin Climate Equity Plan Food and Product Consumption Goal 1, Strategies 1, 2 & 3; Austin/Travis County Food Plan Goal 8

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 12-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Recuse:** Charlotte Davis

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **16. Sustainable purchasing and carbon accounting**

**Details:** Austin can't get to net-zero without measuring our progress. Today, staff make tradeoffs between doing the work and accounting for that work. Additional staff, consultant, and software money can add capacity and speed up this critical work.

**Benefits:** Unlocks GHG reduction

**Cost:** \$1 million

**Plan Alignment:** Austin Climate Equity Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **17. City-owned composting facility**

**Details:** Emissions from Austin's waste like methane and nitrous oxide decay quickly in the atmosphere, but have a large short-term impact. Looking at waste using 20-year global warming potential puts landfill waste as our 3rd largest source of emissions (right behind energy & transport), or well over 1 million metric tons of CO<sub>2</sub>e. Purchasing and operating a municipal composting facility will help avoid the landfilling of organic waste and save money.

**Benefits:** GHG reduction, air pollution reduction, reduced costs: 66,130 MT CO<sub>2</sub>E (1.3 metric tons CO<sub>2</sub>E/ton of feedstock)

**Cost:** \$1.5M for startup costs with savings of \$1,222,980 / year for 51,000 tons of waste

**Plan Alignment:** Austin Climate Equity Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## Natural Systems Funding Needs

### 18. Preservation of existing agricultural land

**Details:** Funding is needed to preserve existing agricultural land and increase the amount of farmland using practices that improve soil health through land trusts, land banks, conservation easements and/or other legal or financing mechanisms. Develop an inventory of available farmland in Austin/Travis County, conduct appraisals, fund conservation easements for farmers adopting regenerative agricultural practices (TBD but may include cover cropping, crop rotation, no/low-till, mulching, compost application, elimination/ reduction of synthetic pesticide and fertilizer use, etc.)

**Benefits:** Slows the loss of local farmland; improves the quality of locally produced food and protects soil carbon pools. Soils with healthy levels of organic material increase water retention, improve water quality, protect biodiversity, sequester carbon and mitigate greenhouse gas emissions.

**Cost estimate:** \$200,000 for inventory and appraisals (one time); and \$25.25 million/year: \$25,000,000/year to fund easements (assuming 5,000 acres protected per year at \$5,000 per acre); \$250,000 for operating expenses (annual). Leverage federal funding where available such as the Agricultural Conservation Easement Program of the USDA.

**Plan Alignment:** Food Plan Goal 1; Austin Climate Equity Plan Natural Systems Goal 2

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **19. Revolving loan fund for Working Farms Fund pilot**

**Details:** Establish a revolving loan fund to preserve agricultural land in Austin/Travis County through a pilot program that provides a path to ownership for a new generation of farmers and increases the amount of farmland acting as carbon pools.

A collaboration with the Conservation Funds Working Farms Fund and local agricultural nonprofits will acquire and permanently protect small to mid-sized farms, and provide a pathway for underrepresented farmers to own their own farms

**Benefits:** Slows the loss of local farmland, improves the quality of locally produced food, protects carbon pools, and serves as a template for program replication.

**Cost estimate:** \$5.5 million/year: \$5.25 million/year to establish a revolving loan fund; \$250,000/year for operational expenses

**Plan Alignment:** Food Plan Goal 1; Austin Climate Equity Plan Natural Systems Goal 2

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **20. Energy and water dashboard for city facilities**

**Details:** Create a consolidated energy and water dashboard to automate data collection and track real-time. Consolidate disparate data sources throughout the City's operations to reduce complexity, streamline management and conservation

**Benefits:** Advances the sustainability of City operations by enabling near real-time response to leaks, solar panel outages etc. and improving management of water and electricity usage in City parks, pools and buildings.

**Cost:** \$350,000 one time/ and \$15,000/year for operational expenses (maintenance, licensing etc.)

**Plan Alignment:** Austin Climate Equity Plan Natural Systems Goal 4

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel



**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **21. Comprehensive public tree inventory for the city of Austin**

**Details:** Ensure full funding for City Council resolution [20240418-051](#) to support a comprehensive public tree inventory for the city of Austin on all city-owned property. Collect data on Austin’s urban forest, which will allow the city to commit to coordinated and comprehensive urban forest management across city departments in support of ongoing implementation of the Urban Forest Master Plan. Collecting this data will allow the city’s Urban Forester to complete a comprehensive urban forest management plan, including a robust tree planting and tree replacement plan. Data collection methods should follow nationally recognized best management practices in acquiring vegetation information for the purposes of maintenance, planning, canopy goal establishment, and other comprehensive urban forest management efforts, and should be done in collaboration with federal, state, regional, and local governmental jurisdictions, community nonprofits, and the private sector where appropriate. Data should be stored in formats that can be easily shared across departments and stakeholders.

**Benefits:** Urban forests serve as carbon sinks that promote climate mitigation efforts, but at present the city does not have a comprehensive tree inventory that would allow for effective urban forest planning and maintenance. Developing and maintaining a robust data catalog of existing trees is a necessary first step to ensuring that the city can maintain the health of the overall tree ecosystem, as outlined in the Urban Forest Master Plan, and also supports the increase of our overall tree canopy footprint to the 50% goal proposed in the Climate Equity Plan.

**Cost:** \$6.25 million one time: \$6 million for the initial tree inventory; \$250,000 for the development of a comprehensive tree planting and tree replacement plan based on inventory data

**Plan Alignment:** Urban Forest Master Plan and the Climate Equity Plan Natural Systems goal 3 (50% citywide tree canopy)

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

# Transportation and Land Use Funding Needs

## 22. Austin Resource Recovery Fleet Electrification

**Details:** Replace all 300 heavy duty Austin Resource Recovery vehicles (flatbed trucks and refuse trucks) with electric vehicles. Install appropriate heavy-duty charging infrastructure to charge these vehicles.

**Benefits:** Nearly 1 million (968,400) tons CO2 emissions avoided; air pollution reduction (health benefits); reduced maintenance; lower heat exposure for ARR workers (better AC during hot weather)

**Cost:** \$204.5 million for trucks and \$60 million for chargers to be phased in over 8 years. Funding is available from TCEQ now, and prices are likely to decrease over time, but the city needs to apply for TCEQ grant funding now to get started before funds are depleted. May be biannual (every other year) opportunity in the future.

**Plan Alignment:** Austin Resource Recovery Master Plan; Austin Climate Equity Plan  
Transportation Electrification

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## 23. Austin Resource Recovery Transfer Station

**Details:** A transfer station is needed to reduce truck rout lengths and host electric truck chargers is necessary to enable full ARR fleet electrification

**Benefits:** Unlocks GHG and air pollution reduction from transportation electrification

**Cost:** \$100 million

**Plan Alignment:** Austin Resource Recovery Comprehensive Plan, Austin Climate Equity Plan

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **24. Expand All Ages and Abilities Bicycle Network, Urban Trails, Sidewalks, and Shared Mobility**

**Details:** Expand the number of Metro Bike stations and to build out the All Ages and Abilities (AAA) Bicycle Priority Network, the Tier One Urban Trails network, and sidewalks and shared streets as recommended in the Urban Transportation Commission's "Climate Equity Investment" Recommendation 20240305-006.

- \$48,960,000 to build out an additional 148 miles of the AAA Bicycle Priority Network and meet the 2023 Bicycle Plan Goal of 380 miles built out by 2026. Projects should be selected using the project prioritization model in the 2023 Bicycle Plan, which scores projects based on equity, destinations & travel demand, connectivity & safety, and cost. Relevant plan sections: Austin Strategic Mobility (ASMP) Bicycle Policy 2, Austin Climate Equity Plan (ACEP) Transportation and Land Use (TLU) Goal 3, and 2023 Bicycle Plan Item 4.7.1a.
- \$22,600,000 to build out an additional 200 Metro Bike Stations to reach the 2023 Bicycle Plan goal of 300 stations by 2025. The investment should prioritize new stations in low-income areas with high mobility needs and connections to CapMetro's existing high-frequency bus and Metro Rail network. Relevant plan sections: ASMP Shared Mobility Policy 1, ACEP TLU Goal 3, and 2023 Bicycle Plan Item 4.7.2.
- \$75,826,000 to build out 15.6 miles of Tier One Urban Trails by 2028 and put COA on track to reach the 2023 Urban Trails goal of building all 94 miles of Tier 1 trails by 2043. City Manager should also consider investments to ensure "the Urban Trails Plan is deliver[ing] projects on an accelerated timeline" as the Urban Trails Plan notes doing so is "dependent on increasing internal City of Austin capacity across supporting departments concerning staffing, systems, and the processes for permitting" Urban Trails Plan Section 3.5). Relevant plan sections: See ASMP Urban Trails Policy 2 & 3, ACEP TLU Goal 3, and 2023 Urban Trails Plan Section 3.5.
- \$64,000,000 to build out 136 miles of new sidewalks and 80 miles of shared streets per year through 2028, putting Austin on track to address all "Very High" and "High" priority sidewalks and shared streets within 10 years. Projects in the highest Equity Analysis Zones should be prioritized for funding, per the Sidewalks, Crossings, and Shared Streets Plan. Relevant plans: ASMP Pedestrian Network Policy 1 & 2, ACEP TLU Goal 3, and 2023 Sidewalks, Crossings, and Shared Streets Plan Section 2.3.4)

**Benefits:** Carbon dioxide (CO<sub>2</sub>) emissions reduction from reducing Vehicle Miles Traveled (VMT) in single-occupancy vehicles (SOVs). The estimated reduction for #1, added bikeways, is 1000-2000 metric tons of CO<sub>2</sub>-equivalent per year, and for #2, added MetroBike stations, is 84 to 336 metric tons of CO<sub>2</sub>-equivalent per year. (We lack data to calculate #3 and #4.) More trips within

Austin will use modes split between public transit, bicycles, walking/wheelchair, carpooling, or shared mobility, or will be avoided altogether. Public health benefits include improving air quality by reducing vehicle CO<sub>2</sub> emissions along with co-pollutants such as nitrous oxide (NO<sub>x</sub>) and fine particulate matter (PM<sub>2.5</sub>) as well as encourage more active transportation for overall wellbeing. Equity benefits include increasing the variety and accessibility of modes of transportation besides SOVs which are significantly more expensive. Building out this infrastructure in under resourced zones will increase these benefits for low-income and communities of color. Community benefits of greater cohesion from using public spaces and infrastructure and being better connected to the city. Greater land availability for uses other than car and parking infrastructure, which can aid with heat mitigation if drought-tolerant tree plantings are prioritized along bikeways and sidewalks per Council [Resolution 20240321-039](#). Jobs creation.

**Cost:** \$211.39 million:

- \$48,960,000. 2023 Bicycle Plan estimates the average protected bike lane costs \$600k/mile. The total cost to reach the 2026 goal is \$88,800,000. The 2016 and 2020 Mobility Bonds have a total of \$39,840,000 in unspent bikeways funds (as of December 5th, 2023)
- \$22,600,000. MetroBike received \$11.3 million from the Texas Department of Transportation's Transportation Alternative Set-Aside grant program. Those funds will build 100 new stations, including replacing 83 existing stations, and 800 new electric bicycles. An additional \$22.6M is required to achieve the goal of 300 stations total.
- The Urban Trails Plan uses the assumption of \$10 million per mile. To build out all Tier 1 trails by 2043, Austin needs to average \$52 million in Urban Trails spending per year. The 2016, 2018, and 2020 Mobility Bonds contain a total of \$80,174,000 in unspent funds for Urban Trails (as of December 5th, 2023)
- \$64,000,000. The Sidewalks, Crossings, and Shared Streets Plan notes the city currently has "less than half the estimated funding required to meet plan goals through 2028". Those goals are spending \$32 million for 34 miles of new sidewalks and 20 miles of shared streets annually. Over four years that amounts to \$128,000,000.

**Plan Alignment:** ACEP TLU Goal 3; ASMP Bicycle Policy 2, Shared Mobility Policy 1, Urban Trails Policies 2 & 3, Pedestrian Network Policies 1 & 2; 2023 Urban Trails Plan Section 3.5; 2023 Bicycle Plan Strategies 4.7.1a & 4.7.2; 2023 Sidewalks, Crossings, and Shared Streets Plan Section 2.3.4

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **25. Extend Pickup Service Zones**

**Details:** CapMetro (CM) should invest to extend the service area for the CM Pickup ride hailing and ridesharing service. Pickup launched in 2017 and serves [11 zones](#) in Austin and the surrounding areas. Ridership is [projected](#) to increase 26.8% in FY2024 compared to FY2023; this follows a 200% increase over FY2022. On April 1, 2024, it passed the 1 millionth passenger mark. This milestone and the projected increase in riders attest that Pickup fulfills an unmet need in under resourced transit areas. It expanded to Dove Springs in January 2024 and plans to extend to Decker Lake. We recommend CM pursue the Decker Lake zone and also study user data and rider surveys through an equity lens to identify where it's needed most and expand into 1-2 additional zones by May 2025. Possible zones include Del Valle and Montopolis. We also endorse CM's [planned initiative](#) to pilot an electric Pickup fleet by the end of 2024.

**Benefits:** Contributes to ACEP's overarching goal of "equitably reaching net-zero community-wide greenhouse gas emissions by 2040" and specifically Transportation and Land Use (TLU) Goal 3, "By 2030, 50% of trips in Austin are made using public transit, biking, walking, carpooling, or avoided altogether by working from home." Pickup reduces VMTs by connecting riders to services and amenities in their zone, including school, work, shopping, recreation, and medical clinics and hospitals. It also solves the "first/last mile" problem in transit accessibility and utilization by connecting riders to transit stops that may be prohibitively far away and therefore especially improves transit access for the disabled, elderly, and riders with children who may not be able to use e-bikes, scooters, and other solutions for short trips and the "last mile." Given Austin's extreme temperatures and paucity of shade corridors, eliminating the first/last mile is essential to encouraging transit ridership. Provides community cohesion by connecting people to the services and amenities they need.

**Cost:** up to \$5 million/year: Based on CapMetro's FY2024 Operating Budget, we estimate the annual cost of adding 1-2 new zones will be \$3-5 million per year.

**Plan Alignment:** CM's [FY2024 budget](#) lists extending Pickup service areas as one of its priorities (p. 91); ACEP TLU Goal 3, Strategies 1, 3; if fleet is electrified, ACEP TE Goal 1, Strategy 5; ASMP Shared Mobility Policies 1-3, 5, 6; Public Transportation Policies 1 & 6; Air & Climate Policy 1

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **26. Downtown High-Frequency Circulator**

**Details:** CoA and CapMetro (CM) invest up to \$7 million per year to resurrect a high-frequency, free or low-fare downtown circulator along the routes proposed by the Downtown Austin Alliance in [a June 2020 report](#). We also propose the addition of the Long Center and Barton Springs/Zilker Park to address 2023 Urban Trails Plan Policy 3, "Pursue opportunities to connect to and expand the Urban Trails System." This service should be free or <\$1/ride, thereby addressing ACEP TLU Goal 3, Strategy 2 to "promote free transportation options," as well as Strategy 1 ("Expand and improve public transportation"). The circulator should also run frequently, i.e., with stops serviced every 15 minutes or less, which is one of the highest predictors of public transit usage [according to a 2016 study](#). We also recommend the circulators be electric vehicles to reduce CO<sub>2</sub> emissions and co-pollutants in the downtown area, thereby addressing ACEP Transportation Electrification (TE) Goal 1, Strategy 5. Reviewing and updating the DAA analysis for present conditions and drawing best practices from the models examined there will facilitate design and implementation.

**Benefits:** Contributes to ACEP's overarching goal of "equitably reaching net-zero community-wide greenhouse gas emissions by 2040" and specifically Goal 3, "By 2030, 50% of trips in Austin are made using public transit, biking, walking, carpooling, or avoided altogether by working from home." Circulators reduce VMTs and the associated environmental and public health damages of SOV travel. They also reduce reliance on expensive and dangerous ride-hailing services filling high-congestion downtown zones. Ride-hailing cars idle and block bike, bus, and car lanes, creating dangerous conditions for everyone on the roads. Reduce congestion and therefore emissions and co-pollutants.

Though the Circulator routes do not serve low-income or under resourced neighborhoods, additional free transportation options can reduce the transportation cost burden for low-income residents traveling within the downtown core for work, services, and leisure.

**Cost:** \$7 million/year

**Motion:** Charlotte Davis

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **27. Neighborhood E-Circulators**

**Details:** CoA and CapMetro should implement high-frequency, free or low-fare electric circulators serving neighborhoods across Austin, especially those neighborhoods facing significant mobility barriers (e.g., neighborhoods with a high percentage of low-income households, households with children, elderly residents, residents facing disabilities, etc.). We propose starting with three (3) neighborhoods, with a focus on neighborhoods underserved by transit. This service should be free or <\$1/ride, thereby addressing ACEP TLU Goal 3, Strategy 2 to "promote free transportation options," as well as Strategy 1 ("Expand and improve public transportation"). The circulator should also run frequently and connect neighborhood residents with essential community services, including health clinics, grocery stores, cultural and recreation centers, parks and trails, libraries, and other community centers and amenities. We also recommend the circulators be electric vehicles to reduce CO<sub>2</sub> emissions and co-pollutants threatening public health in these neighborhoods, thereby addressing ACEP Transportation Electrification (TE) Goal 1, Strategy 5.

**Benefits:** Contributes to ACEP's overarching goal of "equitably reaching net-zero community-wide greenhouse gas emissions by 2040" and specifically Goal 3, "By 2030, 50% of trips in Austin are made using public transit, biking, walking, carpooling, or avoided altogether by working from home." Circulators reduce VMTs and the associated environmental and public health damages of SOV travel. They also reduce reliance on expensive and dangerous ride-hailing services. Ride-hailing cars idle and block bike, bus, and car lanes, creating dangerous conditions for everyone on the roads. Reduce congestion and therefore emissions and co-pollutants. These Circulator routes should provide an equity benefit by providing free transportation options in low-income and under resourced neighborhoods.

**Cost:** \$10 million per year

**Plan Alignment:** ACEP TLU Goal 3, Strategies 1, 2; if fleet is electrified, ACEP TE Goal 1, Strategy 5; ASMP Shared Mobility Policies 1, 3, 5, 6; Public Transportation Policies 1 & 6; Air & Climate Policy 1; 2023 Urban Trails Plan Policy 3

**Motion:** Charlotte Davis

**Second:** Amy Noel

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **28. Heat Resilience Infrastructure**

**Details:** Building off JSC Recommendation 20240228-014, we further recommend that CoA invest \$30 million in building shade and cooling interventions, green infrastructure, and other resilient infrastructure projects. These measures mitigate the effects of extreme heat, increase water conservation, increase carbon sequestration, encourage transit usage and active transportation, and improve flood control through water retention. Council's approved resolution 20240228-014 directs the City Manager to improve and build out green infrastructure - including drought-tolerant trees, plantings, rain gardens, and bioswales - along new roadways, transit lines, in the right-of-way, and around utilities. We endorse these directives and further request the following allocations for green infrastructure development:

- \$25 million to design, build, and maintain curb extensions and neighborhood roundabouts along new bikeways as a traffic calming measure and a space for green infrastructure. The projects should use the equitable prioritization methods of the ASMP and related plans to equitably distribute these projects in neighborhoods throughout the city.
- \$5 million in recurring annual funding for shading and cool corridors to address urban heat island effects and the needs of key neighborhood sites. Identify priority mobility corridors to serve as “cool corridors” with natural and engineered shade and cooling solutions to provide safe, climate-resilient connectivity on core pedestrian and transit routes. These corridors should (1) prioritize benefits in low-income neighborhoods facing high heat vulnerability, (2) address gaps based on the City’s existing heat vulnerability analyses, and (3) be developed in consultation with community-based organizations. Initial locations to prioritize for cool corridors should include the Rundberg area and the St. Johns, Montopolis, Franklin Park, and Dove Springs neighborhoods, due to high heat vulnerability as measured by various socioeconomic and heat exposure indicators. Priority project include research, design, installation, and maintenance of heat resilient infrastructure at new and existing transit stops, including shade structures (with solar panels, where feasible) and fan misters at high-traffic stops; research, design, installation, and maintenance of shade structures and shaded drinking fountains in parks, recreation centers, trails, and other community spaces/facilities adjacent to cool corridors.

**Benefits:** Summer 2023 was [Austin's](#) and the [planet's](#) hottest summer on record, and future summers are expected to bring more extreme heat. Mitigating heat through increased shade provision and urban cooling strategies reduces the negative health effects of heat, especially for children, the elderly, low-income populations, communities of color, and outdoor workers. As



ACEP emphasizes, "Low-income communities and communities of color are the most impacted by extreme weather and pollution despite having contributed least to the drivers of climate change and pollution." Reduce VMTs in SOVs by making public transit, trails, sidewalks, and bikeways more comfortable and safer in the face of extreme heat. Jobs creation. Traffic calming promotes safer streets for all forms of mobility, serving ASMP Bike System Policy 1 (Make streets safe for bicycling).

In addition to local cooling and carbon reduction benefits, green spaces have aesthetic benefits that can increase neighborhood satisfaction and make the public transit and active transportation experience more comfortable for all users, serving ASMP priorities.

Providing shade and cooling in public spaces serves several other ASMP Policies (e.g., Public Transportation System Policy 5, Improve the public transportation experience) and ACEP TLU Goal 3, Strategies 1 (Expand and improve public transportation), 3 (Enhance transit stations and stops), 4 (Prioritize bicycle networks), and 6 (Improve sidewalks, urban trails, and crossings) and Natural Systems Goal 3, Strategy 3 (Increase community tree planting) and Goal 4, Strategy 2 (Reclaim public space and prioritize green infrastructure).

**Cost:** \$30 million

**Plan Alignment:** ACEP TLU Goal 3, Strategies 1, 3, 4, 6; ACEP Natural Systems Goal 4, Strategy 3; ASMP Pedestrian Network Policy 2; Public Transportation System Policy 5; Bicycle System Policy 1; Land Use Policy 5; Land and Ecology Policy 2; 2023 Urban Trails Plan Goals 4-7; 2023 Bicycle Plan Chapter 2, Shade & Green Infrastructure; 2023 Sidewalks, Crossings, and Shared Streets Plan Strategies 1-3

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

## **29. CityLeap ATX Plan: convert travel lanes on arterial roads to protected bike or bus lanes**

**Details:** JSC recommends the Smart Streets Austin CityLeap ATX Plan. On all City-owned arterial roads of 4 or more lanes (approx. 100 miles), one or more travel lanes should be converted to either dedicated bus lanes or two-way protected bicycle lanes and protected intersections as appropriate. This should occur within 5 years of EIP approval using "quickbuild" materials. Examples of arterial roads include Burnet, William Cannon, W. 45th, Menchaca, and Oltorf, among others. This proposal serves ACEP TLU Goal 3 (50% of trips in Austin are made using

public transit, biking, walking, carpooling, or avoided altogether by working from home) and ASMP's overall goal of achieving a 50/50 mode share (50% drive-alone, 50% taking transit, riding a bicycle, walking, carpooling, or teleworking) by 2039.

**Benefits:** Equity benefits of expanding the public transit system to be affordable, reliable, accessible, safe, and comfortable and expanding the bicycle network on major arteries throughout the city, making bikeways accessible to public transit and other services and amenities. Climate benefits of carbon dioxide (CO<sub>2</sub>) emissions reduction from reducing VMT in SOVs as more trips within Austin will use modes split between public transit and bicycles. Public health benefits include improving air quality by reducing vehicle CO<sub>2</sub> emissions along with co-pollutants such as nitrous oxide (NOx) and fine particulate matter (PM<sub>2.5</sub>) as well as encourage more active transportation for overall wellbeing. Significant transportation modeshift in the shortest time by converting Austin's most direct routes to bike and bus lanes. Dedicating more lanes to space-efficient transportation will also move more people faster and reduce commuter delay, which reduces emissions and co-pollutants and improves public health and urban liveability. Safer streets for all forms of mobility. Jobs creation.

**Cost:** \$38.5 million. Assumes half (55 miles) of lane conversions will be bus lanes (\$100K/mile) and half will be protected bike lanes (\$600K/mile). Estimate does not include protected intersections or other measures.

**Plan Alignment:** ACEP TLU Goal 3, Strategies 1 & 4; ASMP Overall Goal; Air & Climate Policy 1; Bike System Policy 1 & 2; Shared Mobility Policy 1; Public Transportation Policy 1; 2023 Bicycle System Plan Strategy 2

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

### **30. Establish a city-owned all-electric carshare service**

**Details:** Establish a City of Austin-owned all-electric carshare service with at least 200 vehicles within the City of Austin by December 2025. This program has already been proven to be successful in St. Paul, Minnesota, where the city launched the largest publicly owned, renewably powered, electric car-sharing program in the nation called Evie Carshare. Therefore, the Evie Carshare should be used as an example for best management practice to establish a successful program. Service areas should be prioritized in low-income and marginalized

communities and lower fees to use the vehicles should be considered to COA's Customer Assistance Programs (CAP) customers.

**Benefits:** Based on Evie Carshare program, each carshare vehicle put into service reduces 71,540 Vehicle Miles Traveled (VMT) in Single Occupancy Vehicles (SOVs) annually, or 196 VMT per day. For 200 cars that would be 14,308,000 VMT. If we assume the average passenger vehicle emits about 400 grams of CO<sub>2</sub> per mile, that would be equivalent to displacing 5,723 metric tons of CO<sub>2e</sub> annually from internal combustion engines. In addition, by reducing VMT in Single Occupancy Vehicles (SOV) and replacing Internal Combustion Engine (ICE) vehicle trips with Electric Vehicle (EV), the project will significantly reduce harmful criteria pollutants, including Carbon Monoxide (CO), Nitrous Oxides (NO<sub>x</sub>), and Volatile Organic Compounds (VOC). Benefits also include residents being able to drive an electric vehicle without the cost of having to purchase one.

**Cost:** \$10 million: Assuming each car costs approximately \$30,000, total cost for 200 all-electric vehicles would be \$6 Million. At least \$4 Million toward application development and support, customer interface development, management of fleet and service.

**Plan Alignment:** Austin Climate Equity Plan Transportation Electrification Goal 1, Strategy 4

**Motion:** Christopher Campbell

**Second:** Lane Becker

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

### **31. Low-cost, accessible charging stations at City of Austin owned facilities**

**Details:** City of Austin (COA) will be conducting an assessment to identify city facilities where charging stations can be installed. This assessment is focused on COA properties to support fleet, workplace, and public charging needs. Funding is needed for the installations of the charging stations once they are identified in COA's assessment. Service areas should be prioritized in low-income and marginalized communities. In addition, the funding should prioritize city buildings near local small businesses to increase their revenue potential to benefit Austin's small business local community economy. Installations of charging stations should be completed no later than July 2026.

**Benefits:** Assuming at \$10k per installed port (level 2 - 7.2kW) that would be 1,000 ports so roughly 7.2MW of installed load for EV charging. That would be equivalent to approximately

3,154 MWh/year of potential load to EV vehicles. Assuming a 0.321 kWh/mile EV fuel economy and an Average Port Utilization Rate of 20%, that would be equivalent to displacing approximately 39,500,000 miles of internal combustion vehicles. Assuming, an average passenger vehicle emits approximately 400 grams/mile of CO<sub>2</sub>, the CO<sub>2</sub> reduction would be as follows: CO<sub>2</sub>e reduction = 39,500,000 miles/year x 400 grams CO<sub>2</sub>/mile x 1,000,000 grams/metric ton = 15,800 metric tons of CO<sub>2</sub> per year. In addition, by reducing VMT in Single Occupancy Vehicles (SOV) and replacing Internal Combustion Engine (ICE) vehicle trips with Electric Vehicle (EV), the project will significantly reduce harmful criteria pollutants, including Carbon Monoxide (CO), Nitrous Oxides (NO<sub>x</sub>), and Volatile Organic Compounds (VOC), improving local air pollution.

**Cost:** \$10 Million for the installation of the charging stations, prioritizing areas of low-income and marginalized communities and local small businesses.

**Plan Alignment:** Austin Climate Equity Plan Transportation Electrification Goal 2, Strategy 1

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

### **32. Install charging stations at multi-family homes with priority in low and moderate income communities**

**Details:** Charging BEVs at home is the most affordable way to charge your vehicle. However, a significant portion of the population in Austin lives in multi-family homes where in most cases charging stations are not available. Therefore, the JSC recommends \$10 million be provided to supplement existing EV rebates for multifamily properties in low- and moderate-income communities for the installation of electric vehicle charging stations by December 2024.

**Benefits:** Assuming at \$10k per installed port (level 2 - 7.2kW) that would be 1,000 ports so roughly 7.2MW of installed load for EV charging. That would be equivalent to approximately 3,154 MWh/year of potential load to EV vehicles. Assuming a 0.321 kWh/mile EV fuel economy and an Average Port Utilization Rate of 20%, that would be equivalent to displacing approximately 39,500,000 miles of internal combustion vehicles. Assuming, an average passenger vehicles emits approximately 400 grams/mile of CO<sub>2</sub>, the CO<sub>2</sub> reduction would be as follows: CO<sub>2</sub>e reduction = 39,500,000 miles/year x 400 grams CO<sub>2</sub>/mile x 1,000,000 grams/metric ton = 15,800 metric tons of CO<sub>2</sub> per year. In addition, by reducing VMT in Single

Occupancy Vehicles (SOV) and replacing Internal Combustion Engine (ICE) vehicle trips with Electric Vehicle (EV), the project will significantly reduce harmful criteria pollutants, including Carbon Monoxide (CO), Nitrous Oxides (NOx), and Volatile Organic Compounds (VOC), improving local air pollution.

**Cost:** \$10 Million for the installations of the charging stations, prioritizing areas of low-income and marginalized communities

**Plan Alignment:** Austin Climate Equity Plan Transportation Electrification Goal 2, Strategy 1

**Motion:** Anna Scott

**Second:** Haris Qureshi

**Vote:** 13-0

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Kaiba White, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Charlotte Davis, Lane Becker, Heather Houser, Rodrigo Leal, Chris Campbell, Amy Noel

**Off Dais:** Yure Suarez

**Absent:** Bertha Delgado, Alice Woods, Larry Franklin

### **33. E-mobility solutions pilot program**

**Details:** The City of Austin should develop an E-mobility Solutions Program to address transportation barriers faced by residents, social service providers, non-profit and community-based organizations, and businesses in underserved communities. The Pilot Program should fund community-driven e-mobility solutions, including the establishment of all-electric carshare programs, electric vans or shuttles for social service providers (e.g., elderly care services, after-school youth programs, childcare services, food access programs, healthcare services, etc.), local mini-bus services or on-demand rideshare services for underserved populations, e-mobility solutions for local small businesses, mobile health clinics or food pantries, or similar programs. Service areas should be prioritized in low-income and marginalized communities.

**Benefits:** Contributes to ACEP's overarching goal of "equitably reaching net-zero community-wide greenhouse gas emissions by 2040". E-mobility will replace internal combustion vehicles and therefore reduce GHG emissions. In addition, by reducing replacing Internal Combustion Engine (ICE) vehicle trips with Electric Vehicle (EV), the project will significantly reduce harmful criteria pollutants, including Carbon Monoxide (CO), Nitrous Oxides (NOx), and Volatile Organic Compounds (VOC).

**Cost:** \$10 Million

**Motion:** Rodrigo Leal

**Second:** Haris Qureshi

**Vote:** 10-2

**Yes:** Chris Maxwell-Gaines, Haris Qureshi, Anna Scott, Diana Wheeler, Jon Salinas, Melissa Rothrock, Lane Becker, Rodrigo Leal, Chris Campbell, Amy Noel

**No:** Charlotte Davis, Heather Houser                   **Abstain:** Kaiba White

**Off Dais:** Yure Suarez                                   **Absent:** Bertha Delgado, Alice Woods, Larry Franklin

**Attest:**



Rohan Lilauwala, Staff Liaison