City of Davis Climate Action and Adaption Plan Update Funding & Financing Tools

I. Introduction

The City of Davis' Climate Action and Adaptation Plan (CAAP) includes 28 priority actions for reducing the City's GHG emissions and adapting to climate change. These actions range from capital intensive projects like the electrification of municipal buildings and vehicle fleet, to ongoing policies and programs like subsidized public transit and water conservation incentives. Capital intensive projects will require large sums of upfront funding and agency resources, while policies and programs will require ongoing, annual funding and resources including staffing and consultant support. This memo summarizes key considerations for developing funding strategies for climate actions, funding and financing tools that are currently available to fund both capital intensive climate action projects and ongoing policies and programs, and existing state and federal incentive programs for consumers.

II. Key Considerations for Developing Funding & Financing Strategies

This section discusses key considerations for developing funding and financing strategies, including criteria for evaluating strategies and identification of funding needs and opportunities for each priority action.

Evaluation Criteria

When developing funding and financing strategies for its priority climate actions, the City of Davis should evaluate these strategies based on the following criteria:

- **Efficiency:** Environmental economists generally agree that the "polluter pays" principle is the most efficient means of curbing pollution at minimal cost to society. To the extent possible, financing mechanisms should place the burden of paying for decarbonization on emitting industries.
- Appropriateness of funding strategy for its use: Ongoing climate action programs, such as household
 incentives or transit access programs, should be funded by ongoing revenue sources such as taxes or fees.
 Ideally, they these revenue sources should be new and support climate action goals (see "economic
 efficiency") so that spending on climate action does not come at the expense of other vital City priorities. On
 the other hand, large, capital-intensive projects may be better suited for grants and financing tools such as
 bonds that allow the City to issue debt (e.g., borrow money) to pay for investments upfront and repay over
 time.
- Equity: The burden of paying for climate solutions should not disproportionately fall on low-income households. A funding strategy that creates regressive fees or taxes for low-income residents would not achieve the CAAP's long-term goals of promoting community and social equity. Instead, wherever possible, policies should reduce costs and impacts, generate wealth, and create other economic opportunities for lower-income, Black, Brown, Indigenous, and Asian communities. In addition, financing solutions should balance the "polluter pays" criterion with ensuring that the transition to a carbon neutral economy is equitable.

• Ease of administration: Financing tools should be relatively easy for the City and/or its partners to administer. Funding and financing mechanisms should reflect the capabilities of the City and should enable the agency to achieve its level of service goals for its programs.

Action-Specific Issues & Opportunities

Table 1 summarizes the key considerations for identifying the issues and opportunities associated with each of the City's climate actions. Actions that require large upfront capital investment are likely to have a different funding strategy than actions that require ongoing funding and resources, such as staff and consultant time. Actions that generate revenue could fund themselves and, potentially, other actions. Meanwhile, funding and financing opportunities include bundling of similar projects, which could be based on timing, geographic region, or co-benefits.

As shown in the table, the key considerations for developing funding and financing strategies for specific actions include:

- Action type: Some actions are policies or program while others are capital investments. Understanding the
 type of action is critical for determining what type of funding it may need.
- **Upfront capital investment vs. ongoing funding stream:** Fundamental to developing funding and financing strategies for the City's climate actions is first identifying the type of funding that is needed (e.g., large amount of upfront funding or ongoing annual funding).
- Potential to generate revenue: Another key consideration is whether the action can pay for itself via a built-in revenue stream, such as a tax or fee.
- Quick wins / fast starts: These actions could be pursued in the near-term. For efficiency purposes, a funding strategy could be designed to support multiple of these actions.
- **Potential for regional collaboration**: Actions that cross jurisdictional boundaries or may benefit multiple jurisdictions are prime for regional collaboration. Regional collaboration can enable resource sharing and broaden the impact of the intended climate action.
- **Benefits low-income or vulnerable populations:** Actions that provide benefits to low-income or vulnerable populations should be prioritized in order to facilitate equitable climate action.
- **Co-benefits:** Actions that provide similar co-benefits may be bundled to take advantage of specific funding strategies. For example, a stormwater fee may support funding for a water conservation incentive and tree planting.



Table 1. Action-Specific Funding Issues & Opportunities

Action	Action Type	Requires Upfront Capital Investment?	Requires Ongoing Funding Stream?	Generates Revenue?	Quick Wins / Fast Start	Facilitates Regional Collaboration	Benefits Low- income or vulnerable populations	Co-Benefits
A.1 Adopt requirements for electrification of all building systems that require permits at end of useful life and/or at time of remodel, including space and water heating/cooling equipment, swimming pool equipment, indoor/outdoor fireplaces and major appliances. Include specific provisions for low-income and vulnerable populations. Address financing/incentivize options. Preferred approach is to start immediately with voluntary implementation supported by education and outreach; transition to mandatory requirements by 2025.	Policy	No	Potentially, depending on the provisions for low-income households	Depends on whether there will be fines	N/A	N/A	Yes	Air qualityJob creationCost of living reductionEnergy resilience
A.2 Research and develop an ordinance requiring building energy-efficiency upgrades and electric (or other non-fossil fuel) equipment replacement at time of sale for residential and commercial properties with a defined implementation schedule for ordinance requirements. Develop Home Energy Score (HES) program. Include specific provisions for low-income and vulnerable populations. Address financing/incentive options. Preferred approach is to start immediately with voluntary implementation supported by education and outreach; transition to mandatory requirements by 2025.	Policy	No	Potentially, depending on the provisions for low-income households	Depends on whether there will be fines	N/A	N/A	Yes	 Air quality Job creation Cost of living reduction Energy resilience
A.3 Develop financing and/or incentivize options for rental property owners to make energy efficiency and cooling/ventilation upgrades. Develop policies, and/or modify the rental license program, to require minimum energy efficiency and cooling/ventilation requirements, with a priority on residential rental properties.	Policy & Program	No	Potentially, depending on the provisions for low-income households	Depends on whether there will be fines	N/A	N/A	Yes	 Air quality Job creation Cost of living reduction

Action	Action Type	Requires Upfront Capital Investment?	Requires Ongoing Funding Stream?	Generates Revenue?	Quick Wins / Fast Start	Facilitates Regional Collaboration	Benefits Low- income or vulnerable populations	Co-Benefits
A.4 Continue to update the City's residential and non-residential reach codes to require allelectric new construction and increase electric vehicle charging infrastructure requirements; adopt a requirement that all new municipal building construction must be all-electric.	Policy	No	No	Depends on whether there will be fines	N/A	N/A	N/A	Air qualityJob creationCost of living reductionEnergy resilience
A.5 Partner with Valley Clean Energy (VCE) to increase capacity in support of citywide building and transportation electrification, investments in community solar energy, and provide solar battery storage. Encourage all subscribers to enroll in the UltraGreen option. Develop financing/incentive options to support building and transportation energy electrification and energy efficiency improvements.	Policy & Program	Potentially	Yes, if incentives are provided	No	N/A	Yes	N/A	Air qualityJob creationEnergy resilience
A.6 Establish a carbon mitigation fund to collect voluntary and/or mandatory payments to mitigate local emissions activities, with collected funds used to support a range of local, climate-change-related projects.	Program	No	Yes	Potentially	N/A	Yes	N/A	Job creation
A.7 Switch from fossil gas to electricity, renewable hydrogen, or other non-fossil renewables in all existing City facilities, and include a provision that the City shall upgrade to UltraGreen (100% renewable energy) with Valley Clean Energy for all municipal accounts.	Investment	Yes	No	No	N/A	N/A	N/A	 Air quality Job creation Energy resilience
A.8 Address and incentivize the creation of community microgrids, community battery "coops", and the networking of local energy sources. Create and/or support resiliency hubs that remain in operation during a power grid outage.	Program	No	Yes, if incentives are provided	No	N/A	N/A	N/A	Job creation Energy resilience
B.1 Update and implement the Davis Electric Vehicle Charging Plan (2017) to determine public and private charging infrastructure needs, time frame, and implementation approach to enable all vehicles to go electric. Identify and implement the first five-year plan including specific locations and feasibility, costs, potential grant funding and partners, electric vehicle adoption needs and	Investment	Yes	Potentially	Potentially	N/A	Yes	N/A	Air qualityJob creationCost of living reduction

Action	Action Type	Requires Upfront Capital Investment?	Requires Ongoing Funding Stream?	Generates Revenue?	Quick Wins / Fast Start	Facilitates Regional Collaboration	Benefits Low- income or vulnerable populations	Co-Benefits
opportunities. Include provisions for low-income and vulnerable community members.								
B.2 Develop an aggressive plan to transition the municipal vehicle fleet to alternative fuels (e.g., electric, battery electric vehicle, hydrogen).	Investment	Yes	No	No	N/A	N/A	Yes	Air quality Job creation
B.3 Address 'first mile/last mile' and short-trip transportation needs by continuing to prioritize, fund, and implement on-going programs/partnerships and develop new programs/partnerships to provide alternative transportation options within Davis. Include specific provisions for low-income or vulnerable populations. Include specific action recommendations, pilot programs, or other ways to implement actions.	Investment	Yes	Yes	No	Yes	N/A	Yes	Air quality
B.4 Develop financing/incentives for purchasing, using, and maintaining electric micromobility vehicles for personal use (such as bicycles, scooters, trailers). Include specific provisions for low-income and vulnerable populations.	Program	Potentially	Yes, if incentives are provided	No	N/A	N/A	Yes	Air quality Job creation
B.5 Encourage active transportation with infrastructure improvements. Implement roadway and bikeway infrastructure improvements in existing right-of-way, such as "road diets," narrower pedestrian crossing distances, green stormwater infrastructure, etc., to meet Green Streets standards and increase safety for pedestrians and bicycles.	Investment	Yes	No	No	N/A	N/A	N/A	Air qualityEnvironmental stewardshipPublic safety
B.6 Subsidize public transit so it is free for all to use. Promote expansion of public transit routes and increased operation frequency within Davis to support day-to-day travel needs.	Program	No	Yes	No	N/A	Yes	Yes	Air quality Cost of living reduction
B.7 Coordinate with regional transit agencies and cities to promote cohesive transit interconnections, including express buses to Woodland, West Sacramento, Sacramento, etc.	To be determined	No	To be determined	To be determined	N/A	Yes	Yes	Air quality Job creation

Action	Action Type	Requires Upfront Capital Investment?	Requires Ongoing Funding Stream?	Generates Revenue?	Quick Wins / Fast Start	Facilitates Regional Collaboration	Benefits Low- income or vulnerable populations	Co-Benefits
B8 Revisit most recent parking pricing study (Downtown Paid Parking, City Council March 5, 2019) and implement pilot projects to test their effectiveness. Reduce or eliminate minimum parking standards in new developments.	Program and investment	Yes	Yes	Yes	N/A	N/A	No	Air quality
B.9 Address recommendations for developing, funding, and staffing a coordinated Transportation Demand Management (TDM) program to encourage and/or require 'all people, all trips' to implement TDM strategies, such as remote work opportunities, community education and outreach, micromobility, vanpool, rideshare, subsidized transit, employee parking cash-out, etc.	Program	No	Yes	No	Yes	N/A	N/A	Air quality
B.10 Research, develop, and establish a low- emissions vehicle program that disincentivizes travel by internal combustion engine (ICE) vehicles.	Program	No	Potentially	Potentially	N/A	N/A	No	Air quality Public safety
B.11 Increase housing opportunities to support the jobs/housing balance and decrease vehicle miles traveled. Develop incentive options to increase housing construction in the city, including high-density, mixed-use (especially office space and food service), transit-oriented, and affordable options.	Policy & Program	No	Yes	No	N/A	N/A	Yes	Job creationCost of living reduction
C.1 Develop financing/incentive options with specific provisions for low-income and vulnerable populations that promote climate-ready private landscapes, such as installing drought tolerant, native, climate-ready plants and/or xeriscaping; programs that support turf removal; installing rainwater capture and harvesting equipment; and the use of green stormwater measures to enhance natural water infiltration.	Program	No	Yes	No	N/A	N/A	Yes	 Environmental stewardship Biodiversity Water conservation Cost of living reduction
D.1 Develop an ordinance to require the use of cool surfaces, reflective materials, and coatings to reduce the heat island effect.	Policy	No	No	Depends on whether there will be fines	N/A	N/A	N/A	Air quality

Action	Action Type	Requires Upfront Capital Investment?	Requires Ongoing Funding Stream?	Generates Revenue?	Quick Wins / Fast Start	Facilitates Regional Collaboration	Benefits Low- income or vulnerable populations	Co-Benefits
D.2 Expand urban forest in parks, greenbelts, and open space with climate-ready species that provide shade and develop a tree-replacement plan for street trees for all neighborhoods.	Investment	Yes	Yes	No	N/A	N/A	N/A	Air qualityEnvironmental stewardshipBiodiversityWater conservation
D.3 Develop policies to increase the use of green stormwater infrastructure and enhance natural water infiltration in public infrastructure.	Policy	Potentially	Potentially	No	N/A	N/A	N/A	Environmental stewardship Water conservation
D.4 Relocate/elevate critical public infrastructure out of projected flood areas.	Investment	Yes	Potentially	No	N/A	N/A	N/A	Energy resilience Public safety
D.5 Allocate funding and staff resources to aggressively implement important existing climate-related programs, policies and management, such as City utility infrastructure (water, wastewater and stormwater) and assets (trees, streets, etc.) Continue to conduct assessments at regular intervals to ensure efficient and effective operations that are at pace with industry improvements, and changing needs due to climate change impacts, and implement recommendations in the assessments as technologically and financially feasible.	Policy, Program, and/or	Potentially	Potentially	Potentially	N/A	N/A	Yes	 Environmental stewardship Biodiversity Job creation Water conservation Waste reduction Cost of living reduction
D.6 Develop policies to expand existing public services and resources provided by the City and community-based organizations during extreme weather events, such as high wind, air quality (smoke), cooling, and weather relief centers.	Policy & Program	No	Yes	No	N/A	N/A	Yes	Air quality Public safety
D.7 Develop policies to implement carbon sequestration and removal opportunities the City can pursue to balance remaining emissions by 2030/2040.	Policy, Program, or Investment	Potentially	Yes	No	N/A	N/A	N/A	
D.8 Develop carbon farm plans for City-owned agricultural land and seek grant funding to implement recommended strategies for maximum carbon sequestration.	Investment	Yes	Yes	No	N/A	N/A	N/A	Environmental stewardship Food access

III. Funding & Financing Tools

Common funding and financing sources for climate action projects and programs can be broadly categorized as (1) grants from local, state, and federal agencies, (2) revenue-generating tools, (3) fiscal policies, and (4) private market financing strategies (e.g., debt instruments). This section summarizes key funding and financing sources that are currently available to support implementation of the City of Davis' priority climate actions.

Grants

In response to the COVID-19 pandemic and the increasing impacts of climate change, an unprecedented amount of federal and state funding is being made available to local governments, which creates a once-ingeneration opportunity to implement projects and programs that mitigate and adapt to climate change (Office of Governor Gavin Newsom 2022). At the same time, local agencies across the country are largely underfunded, which creates substantial competition for grant funding. Competition has been exacerbated by the COVID-19 pandemic, which reduced revenues from sales taxes, user fees, and other public revenue streams. Likewise, the increasing frequency and intensity of extreme weather events have increased local agency demand for grant dollars to mitigate climate change, prepare for future events, and support recovery from these events.

The grants summarized in this memo are those that are intended to specifically fund Davis' priority climate actions, like those related to transportation and mobility, electric vehicle (EV) infrastructure, home weatherization programs, and water conservation initiatives. Overall, grants are well-suited for one-time capital improvement or pilot infrastructure projects, as opposed to ongoing programs (unless there is an explicit plan for funding the program once the grant sunsets).

Successful implementation of Davis' climate action priorities will require a strategy for securing grants that considers staff capacity, the competitive landscape (i.e., other entities from the region that may be pursuing the same grants), opportunities to collaborate across jurisdictions and bundle projects, annual funding priorities of each grant program, and Davis' ability to secure a local match if required.

Specific state, regional, and federal grants are described below.

State and Regional Grants

The State of California and the Sacramento Area Council of Governments (SACOG) offer an array of mitigation and resilience-related grants for which Davis' priority climate actions may be well-suited. In May 2022, Governor Newsom announced a record-breaking \$32 billion in state funding over the next four years to address climate change, including emissions reduction, drought resilience and response, extreme heat, natural carbon sequestration, renewable energy, and energy resilience (Office of Governor Gavin Newsom 2022). State grant programs that are earmarked to receive increased funding allocations because of this increased budget allocation are indicated with an asterisk**Error! Reference source not found.**

Table 2. State and Regional Grants Most Applicable to Davis Priority Climate Actions

Administering Organization	Program/Grant Name	Description	Match Requirement	Funding Uses	Funding Range per Grantee
Caltrans, funds distributed by SACOG	Active Transportation Program (ATP)*	This grant funds bicycle and pedestrian infrastructure and non-infrastructure projects. These projects are intended to encourage the use of active modes of transportation that increase safety and mobility, enhance public health, and reduce greenhouse gas emissions.	No	Planning & Implementation	\$50K - \$250K

Administering Organization	Program/Grant Name	Description	Match Requirement	Funding Uses	Funding Range per Grantee
California Energy Commission (CEC)	Clean Transportation Program	This program is intended to promote the development and deployment of advanced transportation and fuel technologies, including the development of fueling and charging infrastructure for low- and zero-emission vehicles, the adoption of alternative fuel and advanced technology vehicles, and the production of alternative low-carbon renewable fuel from low-carbon pathways.		Implementation	N/A
California Energy Commission (CEC)	Energy Partnership Program	This Program offers services to help identify the most cost-effective, energy-saving opportunities for buildings and new construction. These funds may be used to conduct energy audits, prepare feasibility studies, and develop equipment performance specifications, among other construction related plans.		Planning & Implementation	Up to \$20K
California Department of Food and Agriculture	Healthy Soils Program (HSP)*	This Program provides financial assistance for implementation of conservation management that improve soil health, sequester carbon and reduce greenhouse gas emissions. While local jurisdictions have not been awarded funds to date, UC Davis has been awarded several rounds of funds over the past few cycles.	Yes	Planning & Implementation	\$80K - \$250K
SACOG	Regional Program	The Regional Program funds cost-effective transportation projects that realize the performance benefits of the Metropolitan Transportation Plan and Sustainable Communities Strategy.	No	Planning	Up to \$5M
California Transportation Commission (CTC)	SB1 State Local Partnership Program (LPP)	The LPP appropriates \$200M annually from the Road Maintenance and Rehabilitation Account to local and regional transportation agencies that have sought and received voter approval of taxes or that have imposed fees, which taxes or fees are dedicated solely for transportation improvements.	Yes	Planning & Implementation	\$2K - \$25K
Caltrans	Sustainable Communities Grant	This grant program is intended to encourage local and regional planning that furthers state goals, including, but not limited to, the goals and best practices cited in the Regional Transportation Plan Guidelines adopted by the California Transportation Commission.	Yes	Planning & Implementation	\$100K - \$700K
California Strategic Growth Council (SGC)	Transformative Climate Communities Program	The Transformative Climate Communities (TCC) Program funds community-led development and infrastructure projects that achieve major environmental, health, and economic benefits in California's disadvantaged communities.	Yes	Planning & Implementation	Up to \$28M (Implementat ion); \$200K (Planning)
California Natural Resources Agency	Urban Greening Program	The Urban Greening Program supports the development of green infrastructure projects that reduce GHG emissions and provide multiple benefits, including direct investments toward disadvantaged communities.	Yes	Planning & Implementation	\$100K - \$2M

Administering Organization	Program/Grant Name	Description	Match Requirement	Funding Uses	Funding Range per Grantee
Sacramento Area Council of Governments (SACOG)	Transportation Demand Management (TDM) Program	This Program provides funding for projects, programs, and events that are effective in changing travel behavior. Eligible projects encourage residents to drive alone less often through the development and implementation of TDM programs, policies, and services that promote bicycling, walking, riding transit, carpooling, or teleworking.	Yes	Planning & Implementation	\$20K - \$100K

^{*}These grants have been allocated additional funding per Governor Newsom's 2022-2023 Budget Act.

Federal Grants

Federal grants tend to offer larger dollar amounts per grantee than state and local grants but tend to have more requirements and lengthier application processes, which can be resource-intensive for the receiving entity. Given this, federal grants are generally better suited for higher price tag projects, including regional projects, for which the grant can cover a significant portion. A list of the federal grants that are most relevant to Davis' climate action priorities are summarized in Table 3. The landscape of federal grants is poised to expand with the implementation of President Biden's \$1 trillion infrastructure bill, so close attention should be paid to agencies that are slated to receive grant monies.

Table 3. Federal Grants Most Applicable to Davis Priority Climate Actions

Administering Organization	Program/Grant Name	Description	Match Requirement	Funding Uses	Funding Range per Grantee
Department of Energy (DoE)	Building Codes Implementation for Efficiency and Resilience	Building Codes Implementation for Efficiency and Resilience is a competitive grant program intended to enable sustained, cost-effective implementation of updated building energy codes to save customers money on their energy bills. This program is available to states and state partnerships, which in turn may apportion monies to local governments. The applications for funding are expected to be open by the end of 2022.	TBD	Implementation	TBD
Federal Highway Administration (FHWA)	Charging and Fueling Infrastructure Grant Program	The Charging and Fueling Infrastructure Grant Program is intended to improve public accessibility to electrical vehicle charging and hydrogen, propane and natural gas fueling stations. The development of this grant is forthcoming.	TBD	Planning	TBD
Department of Energy (DoE)	Energy Efficiency and Conservation Block Grant Program	The Energy Efficiency and Conservation Block Grant Program is intended to fund the development and implementation of programs for buildings and facilities within local jurisdictions, including design and operations of programs, public education, and measurement and verification protocols. The application is expected to open during Q4 2022.	TBD	Planning & Implementation	TBD

¹ The City of Davis received \$20 million in American Rescue Plan (ARP) funding, which the City had already allocated to various uses at the time of this publication. Any remaining funding, however, could be used as match funding for climate action grants.

Federal Transit Administration (FTA)	Grants for Buses and Bus Facilities Program	The Grants for Buses and Bus Facilities Competitive Program is intended to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities. This includes technological changes that modify low or no emission vehicles or facilities.	Yes	Implementation	\$50K - \$15M
Federal Transit Administration (FTA)	Low or No Emission Vehicle Program – 5339(c)	This Program provides funding to state and local government authorities for the purchase of lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supported facilities.	Yes	Implementation	\$200K - \$7M
Federal Highway Administration (FHWA)	National Electric Vehicle Infrastructure Formula (NEVI) Program	The National Vehicle Infrastructure Formula Program (NEVI) is intended to provide funds to states to strategically deploy electric vehicle charging infrastructure and to establish an interconnected network to facilitate data collection, access, and reliability. Funds are apportioned to state governments and are in turn distributed to local government agencies.	Yes	Planning	TBD
US Department of Transportation (DOT)	Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grant Program	These Grants can be used to fund a wide variety of large-scale transportation infrastructure projects, including bicycle and pedestrian infrastructure, and micro-mobility projects.	Yes	Planning & Implementation	\$500K - \$25M

Revenue-Generating Tools

Local funding sources are essential for paying for ongoing programming and staffing needs, issuing debt, and securing grants that require a local match. The City of Davis and Yolo County can use a variety of revenue-generating tools to provide funding for their priority climate actions, ranging from revenue bonds to assessment districts to user fees. These strategies are summarized in Table 4.

Each tool, however, has its own set of opportunities and drawbacks that may or may not make it a good fit for the priority actions proposed in the CAAP. These factors relate to timing, revenue-generating potential, political feasibility, administrative complexity, and equity. For example, a new sales tax has the potential to generate substantial funding that can be dedicated to multiple programs and projects (including those beyond the CAAP), but sales taxes can have a long road to approval and tend to be regressive. Assessment districts, on the other hand, may have require less coordination and a smaller population for voter approval, but may not generate substantial cash flow, particularly if the area is undeveloped, and restricts revenue use to a specific area (Resources Legacy Fund and AECOM 2018).

Table 4. Revenue-Generating Mechanisms

Tools	Description		Considerations
Citywide Taxes			
Ad Valorem Property Tax	Revenue from property taxes primarily used to fund local government services and education. Proposition 13 limits property taxes to one percent of the assessed value and restricts the rate of increase on assessed values to no greater than 2 percent each year (except in the case of new construction or sales), which limits revenue generation for municipalities. ² Both the City of Davis and Yolo County use property taxes as a revenue source.	•	Few limitations on uses. Requires 2/3 majority vote for a GO bond to be issued based on Property Tax receipts

² Municipalities may increase property taxes to pay for a GO bond with voter approval.

Tools	Description	Considerations
Cannabis Revenues	Since the 2016 passage of Proposition 64, several California cities began acquiring receipts from cannabis-related revenue. The revenue generated from cannabis typically goes into the general fund. Both Davis and Yolo County collect sales tax from cannabis sales.	
New Sales Taxes	Municipalities may levy a fixed increase in the sales tax rate for a defined term. Excise taxes, in addition to those levied by the SB1 Gas Tax, may be placed on gasoline purchases in local jurisdictions. General sales taxes require only a simple majority for approval, while sales taxes with a specific purpose require a two-thirds supermajority vote for approval. The City of Davis and Yolo County have both have sales taxes.	 Few limitations on uses High revenue generator Can be regional in scale Can be regressive
Parcel Tax	Parcel taxes are assessed at a rate based on the characteristics of a parcel rather than a based on the assessed value of the property and may be collected by municipalities. In 2018, City of Davis voters voted on Measure I, which intended to enact a 10-year parcel tax of \$99 per residential unit to fund the maintenance of streets and bike paths. ³ Both the City of Davis and Yolo County use parcel taxes as a revenue source.	 Flat rates are regressive Requires 2/3 majority vote Can be regional in scale Flexible use
Transient Occupancy Taxes	Also known as hotel taxes, transient occupancy taxes are imposed on the rental of accommodations for stays of less than 30 days. These taxes are typically collected by hotel operators and short-term rental hosts/sites and are remitted to respective cities. Both the City of Davis and Yolo County currently collect transient occupancy taxes.	Revenue could be allocated to mitigate impacts from visitors.
Transit Development Act (TDA) Revenues	The Transit Development Act (TDA) allows counties to establish a quarter-cent sales tax to finance a wide variety of transportation projects, including transit operations, bus and rail projects, special transit services for disabled riders, pedestrian and bicycle facilities, and transportation planning. Both the City of Davis and Yolo County collect revenues from the TDA.	TDA revenue could prioritize actions identified in the CAAP
Property-based Taxes		
Assessment Districts, including Business Improvement Districts	A charge imposed on property owners in a specified geographic area or district to fund specific projects or services that provide direct benefits to properties in that district. The City of Davis has a business improvement district in operation.	Requires approval of most property owners within the district Funds must be spent on benefits for the district
Community Facility District (CFD) Special Taxes	A taxing district where a special tax is imposed on taxable property, on top of the citywide ad valoreum property tax, within the district. The special tax can fund the planning, design, construction, or improvement of public infrastructure and some public services. This is also known as a Mello-Roos Community Facility District. The City of Davis currently has the Mello-Roos Mace Ranch CFD Fund in operation.	 Requires 2/3 approval of the districts registered votes Funds must be allocated to specifically support a district facility
Development Impact Fees, including Transit Impact Development Fees	A fee and imposed by local governments on new development to pay for infrastructure and public services needed to support new development. The City of Davis currently collects development impact fees.	Revenue must be used to mitigate the impacts of that development on public services
Tax Increment Financing, including Infrastructure and Enhanced Infrastructure Finance Districts (IFD/EIFD)	A city or other governing jurisdiction can allocate tax increment revenues for up to 45 years to fund the planning, design, improvement, construction, or rehabilitation of assets with an estimated life of 15 years or longer. These properties include but are not limited to highways, transit, water systems, sewer projects, flood control, and parks.	A bond requires 55% voter approval Future tax revenue must specifically support investments in the area
Utility Fees, Including Stormwater Fees	Revenue generated from residential and commercial water, wastewater, and power bills may be used to fund municipal programs. Specifically, stormwater fees, or charges imposed on property owners for pollution in stormwater drainage, may be used to fund policy and program development. Both the City of Davis and Yolo County have utility fees.	Funds raised must directly support operation of the utility

³ Measure I did not pass.

Tools	Description	Considerations	
Other Sources			
User Fees	Public agencies may collect fees from users of specific public goods, such as parking spaces, facility rentals, and public transit.	•	Fees may be regressive without subsidies for low-income populations
Naming Rights Agreements	Corporations or other entities may purchase the right to name a facility or event, typically for a defined period of time. Naming rights are frequently utilized for properties like multi-purpose arenas, performing arts arenas, and sports fields, but have also been approved for energy infrastructure projects.	Limited or one-off revenue generation	

Fiscal Policies

Another key strategy for funding and financing the City's climate actions is to develop fiscal policies that support and reinforce its climate goals. Climate change creates a long-term financial obligation, both in terms of mitigating, adapting, and responding to a climate crisis, and, as such, requires long-term fiscal planning. The City of Davis may consider developing a Climate Action Fund that allocates a portion of its General Fund to specifically fund climate mitigation and adaptation efforts. The City of Davis already has a similar policy in place that could serve as a template for the Climate Action Fund: since FY2016, the City has been contributing a minimum of \$3 million annually to capital projects, with a focus on street and bike path resurfacing (City of Davis 2021).

The City may also identify climate action and adaptation as a priority criterion when determining how to allocate funding and prioritize programs and projects across all funds. For example, the City of Los Angeles' Financial Policies identifies "resilience and sustainability" as a primary criterion for allocating funding and prioritizing capital projects (City Administrative Officer of Los Angeles 2020). If the City of Davis were to develop a similar criteria policy, it may have the effect of facilitating implementation of fund-specific, or department-specific, climate actions, such as replacing the municipal fleet with electric vehicles, which would be funded by the Fleet Replacement Fund.

Financing Tools

Financing strategies, or debt issuance, are generally suitable for capital-intensive projects and, as such, may only be applicable to a subset of Davis' priority climate actions. Table 5 summarizes current loan opportunities that are relevant to Davis' CAAP. Notably, the California Infrastructure and Economic Development Bank's Infrastructure State Revolving Fund (ISRF) can be used as a source of matching funds for grants or other financing needs. Table 6 summarizes the types of bonds that may be suitable for funding Davis' climate actions.

Table 5. Relevant Loan Programs Offered by the California Infrastructure and Economic Development Bank

Program	Description
CLEEN (Green Loan) Program	The CLEEN Program provides public financing to help meet state goals of greenhouse gas reduction, water conservation, and environmental preservation. This program consists of two subprograms: (1) the Statewide Energy Efficiency Program (SWEEP), which helps local governments and nonprofit organizations make small, medium, and large-scale energy-efficiency upgrades and projects, and (2) the Light Emitting Diode Street Lighting Program, which finances the installation of LED streetlights for local governments.
Climate Catalyst Program	The Climate Catalyst Revolving Loan Fund is intended to provide flexible, low-cost credit to local jurisdictions to help bridge the financing gap toward achieving advanced technologies. Relevant projects include sustainable vegetation management, forestry practices, and timber harvesting products.

⁴ This criterion is secondary to criteria related health, safety, and well-being, as well as legal and regulatory requirements.

Program	Description
Infrastructure State Revolving Fund (ISRF)	The Infrastructure State Revolving Fund (ISRF) Program (through IBank) is authorized to directly provide low-cost public financing to state and local government entities, including Municipalities, Universities, Schools and Hospitals (MUSH borrowers) and to nonprofit organizations sponsored by public agencies for a wide variety of public infrastructure and economic expansion projects. In the past, the City of Davis has received state revolving fund loans for the development of bike path and pedestrian path lights and investments in drinking water sources.

Table 6. Bonds Relevant to Davis Priority Climate Actions

Strategy	Description
Environmental Impact Bond (EIB)	An Environmental Impact Bond (EIB) is an innovative financing tool that uses a Pay for Success approach to provide up-front capital from private investors for environmental projects, either to pilot a new approach whose performance is viewed as uncertain or to scale up a solution that has been tested in a pilot program.
Revenue or General Obligation Bonds	Revenue Bonds are used to pay for projects such as major improvements to an airport, water system, garage or other large facilities which generate revenue that is then used to repay the debt. General obligation (GO) bonds are issued to pay for projects that may not have a revenue stream. Debt is repaid through an increase in the ad valorem property tax.
Green or Climate Bonds	Green or climate bonds specifically finance climate change adaptation or mitigation projects. Eligible projects include those related to renewable energy and energy efficiency, sustainable waste management projects, sustainable land use and biodiversity conservation, clean transportation, and clean drinking water.
Utility Revenue Bonds	A utility revenue bond is a type of municipal bond issued to finance a public utility project that repays investors directly from project revenues. Utility revenue bonds are used to fund capital projects in areas considered essential to public services including hospitals, fire services, water and waste treatment facilities, and improvements to the electrical grid.

Meanwhile, projects that generate their own revenue or cost savings create private investment opportunities. Public-private partnership (P3) agreements are cooperative agreements between one or more public and private sectors that can take different forms, such as private entity financing or management of a project in return for a promised stream of payments from a government agency. In the context of limited public funding opportunities, P3 agreements may provide capital that allows a project to be delivered faster since private operators may have more immediate access to capital and debt financing and fewer competing resource demands. Table 7 summarizes P3 opportunities to implement energy projects.

Table 7. Public Private Partnership Opportunities

Strategy	Description
Certificates of Participation (COP)	Certificates of Participation (COPs) are lease-financing agreements used by local governments to acquire real property by making regular payments over the annually renewable contract for the acquisition and use of the property. These agreements often afford local governments the opportunity to finance capital improvements from existing revenue sources, though this strategy relies on an investors' purchase of a share of the lease revenues of a program rather than the bond being secured by those revenues. The City of Davis retired its last COP during the 2012-2013 fiscal year.
Energy Savings Performance Contracting (ESPC)	Budget-neutral approach to building improvements that reduce energy and water use and increase operational efficiency. By partnering with an energy service company (ESC), a facility owner can use an ESPC to pay for today's facility upgrades with tomorrow's energy savings without tapping into capital budgets.
	State and local governments can implement ESPC projects in their own facilities as well as promote and support ESPC projects through ESPC programs. Ideal candidates for ESPC projects include any large building or group of buildings such as city, county, and state buildings; schools; hospitals; commercial office buildings; and multi-family buildings.
Leasing Arrangements	Tax-exempt lease-purchase agreements provide state and local governments with the opportunity to finance upgrades and use energy savings to pay for financing costs. While leasing arrangements have higher rates compared to bond financing, they are often faster and more flexible revenue-generating mechanisms.

Power Purchase Agreement (PPA)	A Power Purchase Agreement (PPA), a type of P3, is a financial agreement in which a developer arranges for the design, permitting, financing, and installation of an energy system on a customer's property at little to no cost. The developer sells the power generated to the host customer at a fixed rate that is typically lower than the local utility's retail rate. The lower electricity price serves to offset the customer's purchase of electricity from the grid while the developer receives the income from the sales of electricity as well as any tax credits and other incentives generated from the system. These may take the form of corporate PPAs, which involve corporate or industrial buyers purchasing renewable energy directly or virtually from developers. PPAs typically last 10 to 25 years, and the developer is responsible for the operation and maintenance of the system for the duration of the agreement. The Morris Model of a PPA is when a public entity issues a government bond at a low interest rate and transfers low-cost capital to a developer in exchange for a lower PPA price.
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IV. Consumer Incentive Programs

Some of the priority climate actions are intended to facilitate household- or business-level adoption or participation. While the City of Davis may develop its own programs to incentivize climate action, there are also state and federal programs that the City could promote to increase uptake among local residents and businesses. Table 8 summarizes programs that are relevant to Davis' priority climate actions.

Table 8. Existing State and Local Consumer Incentive Programs

Administering Organization	Program Name	Description
California Energy Commission (CEC)	Building Initiative for Low- Emissions Development (BUILD) Program	The Building Initiative for Low-Emissions Development (BUILD) Program is a residential building decarbonization program that provides incentives and technical assistance to support the adoption of advanced building design and all-electric technologies in new, low-income all-electric homes.
California Air Resources Board (CARB)	Clean Vehicle Assistance Program	The Clean Vehicle Assistance Program provides grants and affordable financing to help income-qualified Californians purchase or lease a new or used hybrid or electric vehicle. The program is funded by California Climate Investments.
California Air Resources Board (CARB)	Clean Vehicle Rebate Project (CVRP)	The Clean Vehicle Rebate Project (CVRP) provides a rebate of up to \$7,000 to purchase or lease a new plug-in hybrid electric vehicle (PHEV), battery electric vehicle (BEV), or a fuel cell electric vehicle (FCEV).
Yolo County	Property Assessed Clean Energy Programs	The Property Assessed Clean Energy (PACE) model is an innovative mechanism for financing energy efficiency and renewable energy improvements on private properties. PACE programs allow a property owner to finance the up-front cost of energy or other eligible improvements on a property and then pay back over time through a voluntary assessment, usually on an annual property tax bill.
California Department of Water Resources (DWR)	Turf Replacement Program	The Turf Replacement Program is intended to encourage homeowners to remove existing grass and replace it with organic, drought tolerant landscaping. The rebate may provide up to \$2 per square foot of grass lawn that is removed and replaced and is limited to a maximum of \$2,000 per eligible household.
Yolo County	Water Conservation Rebate Program	The Water Conservation Rebate Program offers turf or lawn replacement of \$1.25 per square foot of grass converted in up to 400 square feet. The program is only available to homeowners in the Wild Wings County Service Area (CSA) within Yolo County.
US Department of Energy	Weatherization Assistance Program (WAP)	The Weatherization Assistance Program (WAP) reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.

V. Next Steps

The Davis Climate Action and Adaptation Plan includes 28 priority actions for mitigating GHG emissions and adapting to drought, extreme heat, and other climate changes. Implementation will be most effective and efficient if multiple actions are pursued in tandem, which may include using funding and financing sources to support multiple, or bundled, projects. Near-term next steps (within one to two years) for beginning implementation of priority actions may include:

- Prioritize actions that will offer savings or other benefits to low-income or vulnerable
 households. Successful climate action must facilitate equitable outcomes for Davis residents, which will
 require prioritizing actions that provide immediate and direct benefits to low-income or vulnerable
 households. These actions include subsidized public transit (action B.5) and energy efficiency upgrades
 (action A.3).
- Identify partnership opportunities to plan, fund, and implement climate actions. Other public local and regional public agencies, such as Yolo County and SACOG, that have similar GHG emission reductions goals or face similar climate stressors are ideal candidates for partnerships. Partnerships between public agencies can also increase the competitive edge of grant applications. Other civic institutions, notably UC Davis, may also offer partnership opportunities.
- Determine which strategies will require environmental review, technical analysis, and/or complex partnerships and permitting. Some of the priority actions will have longer implementation timelines due to environmental review requirements or financing coordination (e.g., new sales tax, bond issuance). To meet its 2030 and 2040 goals, the City will need to start the first phase of work on these longer-term projects.
- Being preparing application materials for the state grants that have been allocated additional funding in the Governor's 2022-2023 budget. Some funding for these grants may already be or will soon be available and will have short application deadlines. An early start on application materials will give Davis more time to match actions to grant opportunities, define strong proposal narratives, and identify potential partnerships.