STAFF REPORT

DATE: June 1, 2010

TO: City Council

FROM: Bill Emlen, City Manager
Ken Hiatt, Community Development and Sustainability Department Director
Mitch Sears, Sustainability Program Manager

SUBJECT: Adoption Davis Climate Action and Adaptation Plan

Recommendations

1. Receive final Davis Climate Action and Adaptation Plan.

2. Adopt the attached resolution approving the Davis Climate Action and Adaptation Plan and associated work plan.

3. Direct staff to process a General Plan amendment establishing local GHG reduction targets and the development and implementation of a local plan to achieve the targets and prepare the community for a transitioning climate.

Overview

The Davis Climate Action and Adaption Plan (D-CAAP), is designed to place the community on a path to achieve the greenhouse gas emission reduction targets adopted by the City Council in November 2008. The targets were based on a range that uses the State of California targets as a minimum goal and deeper reductions as the desired outcome. The City adopted this range in recognition that emission reductions are not precise and that many scientists believe that a reduction of 80 percent below 1990 levels by 2050 may not be adequate.

Table 1 - Davis GHG Reduction Targets: Community and City Operations

Year	Target Range*		Notes
	State	Davis**	
2010	2000 levels	1990 levels	Minimum: State target. Desired: Provides baseline for subsequent average annual reductions.
2012	1998 levels	7% below 1990 levels	Minimum: State does not establish target for this year; linear interpolation from 2010 target. Desired: Consistent with Kyoto – Mayors Climate Protection Agreement Pledge – City of Davis Reso. 2006.
2015	1995 levels	15% below 1990 levels	Minimum: State does not establish target for this year; linear interpolation from 2010 target. Desired: Consistent with initial ICLEI modeling conducted by the City.

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2015 to 2020	Average annual reduction	Ave of 2.6% reduction/yr to achieve 80% below 1990 levels by 2040	Minimum: State does not establish target for these years. Desired: Average reduction encourages monitoring of progress and some flexibility in implementation.
2020	1990 levels	28% below 1990 levels	Minimum: State target. Desired: Average reduction encourages monitoring of progress and some flexibility in implementation.
2020-2040	No formal target, but must reduce an ave. of 2.66%/yr to achieve 80% below 1990 levels by 2050	Average of 2.6% reduction/yr to achieve 80% below 1990 levels	Minimum: State does not establish target for these years. Desired: Reduction level adopted by the state based on climate stabilization levels of 3-5.5 degree increase in temp. Average reduction encourages monitoring of progress and some flexibility in implementation.
2050	80% below 1990 levels	Carbon neutral	Minimum: State target. Reduction level adopted by the state based on climate stabilization levels of 3-5.5 degree increase in temp. Average reduction encourages monitoring of progress and some flexibility in implementation. Desired: Combination of actions at the local, regional, national, and international levels **and** carbon offsets. Similar target set by the UC system, City of Berkeley, and Norway.

* It is anticipated that Davis will achieve reductions within the range of the state targets (minimum) and local targets (desired).
**Due to residency time of GHG gasses in the atmosphere, early GHG reduction is generally more beneficial for mitigation of the most severe impacts of climate change.

The plan responds to the challenge of these ambitious goals by setting out a framework for actions in the next five years Davis will take to reduce local GHG emissions and contribute to the effort to achieve a stable climate.

Plan preparation was guided by a community based public input process executed by the Davis Climate Action Team, the Natural Resources Commission, and staff. Based on community input, analysis of best practices adopted by other communities, and contributions from subject matter experts, the plan utilizes a systems based approach to address local GHG emissions. The plan identifies objectives and actions in the next five years that will reverse local GHG emission growth and establish a foundation for deeper, longer term reductions beyond 2015.

The plan includes objectives and actions in nine sectors:

1. Mobility
2. Energy
3. Land use and buildings
4. Consumption and waste

5. Food and agriculture
6. Community engagement
7. Government operations
8. Advocacy
9. Climate change preparation (adaptation)

Adaptive management principles are integrated into the plan to guide action assessment and plan updates.

A first year work plan to bolster existing GHG emission reduction efforts and initiate new activities is included as an appendix to the plan. In recognition that financial and staff resources are limited, many year one actions included in the work plan are designed to leverage private sector investment and community engagement to achieve GHG emission savings.

Council Goals

Adoption of the draft Davis Climate Action and Adaptation Plan (D-CAAP), addresses the Council goal of conserving natural resources and protecting the environment. Specifically, plan adoption implements the Council objective of addressing global warming and reducing the carbon footprint of Davis.

In addition, the D-CAAP implements a wide range of existing General Plan goals and policies, including but not limited to:

Select General Plan Visions

5. Natural Resource Protection and Restoration

• Promote a clean, safe, healthy, livable and ecologically sound environment for today and the future.

• Pursue sustainability.

• Minimize impacts on Davis' land, water, air and biological resources and seek to enhance and restore Davis' environment, through such projects as wetlands and multi-functional drainage ponds.

8. Neighborhood-Oriented Transportation System

• Encourage a clean, quiet, safe and attractive transportation system that harmonizes with the city's neighborhoods and enhances quality of life.

• Promote alternative transportation modes such as bicycling, walking, public transit and telecommuting.

Select General Plan Goals

- **GOAL Land Use 3.** Integrate land use, economic development, environmental, and transportation planning.

- **GOAL Mobility 3.** Increase walking and the use of non-polluting forms of transportation, including bicycles.

- **GOAL Energy 1.** Reduce per capita energy consumption in Davis.

The General Plan includes hundreds of goals, policies, and actions related to community sustainability. The D-CAAP serves to implement many of these community objectives.

Sustainability Impact

Environmental – The D-CAAP is consistent with the City's long-standing environmental protection policies and implements a range of activities that benefit the local environment. The plan is categorically exempt from the California Environmental Quality Act (CEQA), pursuant to Section 15803, actions by Regulatory Agencies for the Protection of the Environment, which states that actions taken to ensure the enhancement or protection of the environment have categorical exemption from CEQA review. Adoption of the plan is also considered implementation of many General Plan goals and policies and is therefore also addressed, in part, by the General Plan EIR (2001).

Fiscal – Plan development, as directed by the City Council, has included significant staff time to complete the community and City organization GHG inventory, research and develop GHG reduction targets, develop and execute the community input process, research best practices, and complete the draft plan. Plan implementation, as proposed, focuses on early actions that require relatively modest direct investment by the City. Primarily these early actions enhance existing programs and leverage private sector investment (e.g. AB 811 energy efficiency financing program). However, these early actions, and foreseeable mid-term actions, will require a reallocation of staff resources as well as the development of financing tools in the future to achieve plan objectives.

Staff anticipates that implementation of the plan will also provide direct and indirect local economic benefit. One example of anticipated direct benefits is employment of a full range of skilled labor to develop, market, install, and maintain building system improvements. This activity will be spurred by the City with the establishment of financing tools such as an AB 811 energy efficiency financing program. Local retailers and small businesses able to effectively support these types of activities will be positioned to benefit as well.

Potential indirect economic benefits are associated with the community's ability to position itself to take advantage of emerging technologies and approaches to solving global warming. Execution of the plan will reinforce the community's standing as a center for innovation and build the green infrastructure required to attract the companies that will play pivotal roles in shaping the emerging green economy. The plan is designed to position the community to successfully adapt to a transitioning climate and economy.

Social – Primarily through actions to directly engage and involve the community in the effort to reduce local GHG emissions, the plan has the potential to strengthen Davis' social support network. Common effort, shared accomplishment, and accountability to fellow community members are elements that are featured in plan actions designed to align households, neighborhoods, community organizations, businesses, and institutions to improve quality of life in Davis while becoming more carbon efficient and saving money. Specific elements within the

community engagement actions will be targeted to provide those with the fewest resources within the community the opportunity to achieve these benefits as well.

Background and Analysis

In April 2007, the City Council adopted the Davis Climate Protection/Community Sustainability Strategy Framework. This framework directed the City to continue to implement early GHG reduction actions while beginning the process of developing a comprehensive plan to reduce local GHG emissions. Key milestones in this process include:

- Spring 2007 – Initiation of an inventory of community and city government operations GHG emissions.
- Summer 2007 – City joins ICLEI – Local Governments for Sustainability and Cities for Climate Protection Campaign; City adopts ICLEI's five step process to reduce local GHG emissions. These five steps include (completion dates shown in parenthesis):

    1. Establish baseline (Inventory) (2007/08)
    2. Set reduction targets (2008)
    3. Identify actions to achieve the targets (and adaptation strategies) (2009/10)
    4. Take action (1958 +)
    5. Monitor to make sure actions are effective - reexamine targets and actions based on results (begin following adoption of plan).

- Winter 2007 – Establishment of the twenty-member Climate Action Team (CAT) to assist with the development of actions to include in the plan.
- Spring 2008 – CAT begins work; GHG inventory completed.
- June 2008 – First CAT public forum held, 200+ attendees.
- November 2008 – City Council adopts GHG emission targets.
- Winter/Spring 2008/09 – CAT finalizes recommendations; GHG inventory updated.
- May 2009 – CAT recommendations forwarded to Natural Resources Commission (NRC).
- Fall/Winter 2009/10 – NRC review of working draft plan.
- April 2010 – NRC recommendation to City Council on draft plan.

Natural Resources Commission Action – April 2010

As noted above, in May 2009 the Natural Resource Commission began its review of the components of the draft plan. This early review included consideration of the recommendations of the Climate Action Team (CAT) and multiple drafts of the plan. The review was delayed significantly due to a reallocation of staff resources to respond to grant opportunities that would potentially fund early GHG emission reduction actions. In total, the Commission considered the draft plan at six public meetings.

On April 26, 2010 the Commission considered the final draft of the plan. The Commission expressed support for the overall strategy and actions included in the draft plan, but agreed with staff that while additional analysis of potential GHG emission reduction and implementation cost estimates were desirable, the level of detail included in the plan was sufficient to move forward with adoption by the City.

The Commission also recommended that a commitment to analysis of long-term actions be specifically added to the draft plan. Staff concurred with the Commission's recommendation and has included language in the adaptive management section of the draft plan in response. The Commission voted unanimously to recommend adoption of the plan.

Plan Overview
The draft plan includes the following sections:

1. Executive Summary – Describes overall strategy and key elements of the plan.

2. Introduction – Describe challenge, society response to challenge, local response (historic and current), detail vision, opportunity for community progress/ improvement of quality of life.

3. Climate protection in Davis - sources of local emissions (community & city), framework for local climate protection, Davis' current planning process.

4. The Plan – Objectives and Actions. Plan Organization, Nine Sectors: (1) Mobility, (2) Energy, (3) Buildings & Land Use, (4) Consumption and Waste, (5) Food and Agriculture, (6) Community Engagement, (7) Local Government, (8) Advocacy, (9) Adaptation.

Plan Organization
The draft D-CAAP builds on the foundation of resource conservation and community infrastructure that Davis citizens have developed over the past several decades. Initially, the draft plan employs proven technologies and best practices to make reductions in local GHG emissions. These anticipated savings occur primarily in the energy sector. The draft plan also looks to the community for early GHG savings. A comprehensive community engagement strategy is a cornerstone of the draft plan. This engagement strategy will be designed to show how household cost savings, improving quality of life in Davis, and GHG emission reductions are possible, related and complementary. The strategy will go beyond an information campaign by providing the tools that Davis residents need to achieve these beneficial outcomes. The community engagement strategy is a cross sector design that is the link between the draft plan's comprehensive set of actions and strategies. Staff believes that the full value of the draft plan can only be achieved if the community buys in and develops a sense of ownership of the plan. Therefore, staff places great importance on a well designed, effectively executed community engagement program.

Objectives and actions
The objectives and actions included in the draft plan are designed to put Davis on the path to meet its 2050 GHG reduction goals. Specifically, the objectives are designed to reach Davis' minimum target for 2015 as established by the City Council in 2008. More aggressive action would be required to meet the desired targets. Estimates of potential GHG emission reduction totals for each objective is provided in the draft plan where sufficient information is available. Staff recommends that the City continue to work to update the plan with new information as it becomes available and resources allow, with a specific focus on updating GHG emission reduction and cost information. However, staff believes that the community is best served if the

City maintains a bias for action approach which emphasizes actual GHG emission reductions over continued study and plan refinement.

As noted above, the draft plan includes objectives and actions in nine areas:

1. Mobility
2. Energy
3. Land use and buildings
4. Consumption and waste
5. Food and agriculture
6. Community engagement
7. Government operations
8. Advocacy
9. Climate change preparation

Two classes of actions are included in each area:

1. Phase I actions are identified for short term implementation to achieve local GHG reduction goals over the next 5 years (through 2015). In general, these actions have proven effective in other communities and require relatively low investment of local financial and/or political capitol to initiate.

   For the purpose of order of implementation, Phase I actions are further broken down into the following three classes of priorities:

Table 2 – Phase I Action Priorities

	Priority I	**Priority II**	**Priority III**
Implementation Timing	Year 1 (2010)	Years 2-5	TBD
Level of Current Analysis	• Basic analysis complete • Year 1 workplan complete	Preliminary analysis complete	Actions require basic analysis
Metrics	Basic metrics complete	Preliminary metrics	Metrics TBD
Funding	Action implementation can be accommodated within current budget	Funding TBD	Funding TBD
Rationale	• Low/No cost beyond existing budgeted staff costs. • Basic analysis complete. • Existing Council direction to proceed and actions in progress; preliminary analysis/ planning complete. • Establish foundation for future actions.	• Funding not budgeted. • Preliminary action analysis complete. • Actions needed to meet 2015 GHG reduction goals. • Actions build on existing programs/projects.	• Funding not budgeted. • Preliminary analysis of actions not complete. • Actions needed to meet 2015 GHG reduction goals.

A Year 1 workplan is included as an appendix to the draft plan.

2. Phase II actions are identified for further analysis and are generally intended to help achieve the community's mid to long-term GHG reduction goals (beyond 2015). Phase II actions are also included as an appendix to the draft plan.

As with all current climate action plans researched by staff, there is insufficient information readily available to fully analyze or assess potential GHG emission reduction potential, implementation cost, or payback periods. Staff acknowledges these gaps but recommends that the City move forward with the best available information while attempting to document key assumptions. The draft plan is designed to adapt to the rapidly changing climate policy landscape. Consistent with the City's overall climate action strategy, the draft plan is intended to evolve as information from credible sources is identified.

If implemented and assumptions hold, the Phase I actions are expected to reduce local GHG emissions by approximately 20% over current levels (6.5 MT CO2 per person) by 2015. This will reverse local GHG emission growth and put Davis on a path to meet its long term goals. Consistent with the City's GHG emission reduction targets, the City will strive to reduce beyond the 20% that the actions in the draft plan are designed to achieve. As resources and opportunities permit, additional actions and strategies that build on, replace, or multiply the effect of the actions included in the draft plan will be added to achieve greater GHG emission reductions.

Short Term Objectives, Actions, and Priorities

The draft plan addresses nine major areas related to local GHG emissions and includes objectives and actions to be taken in the first five years following adoption (2010 – 2015). The objectives and actions are not intended to be an exhaustive list of all efforts that are either currently underway or that will be taken to reduce local GHG emissions. The actions identified in the plan form a foundation for making progress toward the City's long-term goals. It is important to note that while adjustments and revisions to the draft plan are anticipated, the actions included in the draft plan, or other equally or more effective actions, are needed to meet the City's goals. Moreover, while the City will have direct responsibility for carrying out many of the actions listed below, success will require deep involvement from all sectors of the community. Ultimately, staff believes that success will be measured by citizen engagement and individual action.

As outlined above, priority actions have been identified for 2010. The 2010 priorities are based on project readiness, funding, and their ability to function as foundation elements for future actions identified in the plan. A work plan for the year 1 priority actions has been developed and is included as an appendix to the draft plan. Following adoption of the D-CAAP, a five-year work plan will be developed to establish specific priorities, assignments, and measures of success for years 2-5.

Action Implementation Planning

As outlined above, general priorities for actions are identified in the individual action areas of the draft plan (e.g. Transportation, Energy, etc.). These initial priorities reflect actions that are currently underway or where existing funding/technology are available to implement the action within the first several years after plan adoption. A one year work plan has been developed that will guide actions in 2010 and a five year work plan will be developed following plan adoption

that incorporates all actions identified in the draft plan. The five year work plan will include responsibilities for implementation, anticipated funding sources, and basic metrics to assess results.

Adaptive Management. The following general reviews are proposed to allow the City to monitor progress toward GHG reduction targets and adjust actions as necessary.

Review	Timing	Notes
GHG inventory update (City operations)	Annual	As required under the Climate Registry protocol. This update provides an indication of effectiveness of City actions between the 5 yr community GHG inventory update.
Indicator actions – assess the cost and GHG reduction of selected key actions.	Every 2.5 years	These indicator actions provide an intermediate check on the effectiveness of the plan and allow for mid-term adjustments.
GHG inventory update (Community inventory)	Every 5 years	Interval allows GHG reduction actions time for implementation and results. This serves as a general assessment of the overall performance of the plan.
Analysis of long-term actions and incorporation of emerging technologies into plan.	Ongoing	Access to subject matter experts at UC Davis, state agencies, and in the community allow Davis to examine and test next generation approaches to GHG reduction.

The purpose of the adaptive management measures is to allow the City and community to assess the effectiveness of the plan and adjust as necessary to meet GHG reduction targets.

Staff also proposes in the draft plan that the City establish a technical advisory body made up of local subject matter experts and representatives of the City's Natural Resources Commission to advise the City on implementation and monitoring of the plan. This action is included in the first year work plan.

Attachments

1. Resolution adopting the Davis Climate Action and Adaptation Plan.
2. Draft Davis Climate Action and Adaptation Plan.

RESOLUTION NO. 10-XXX, SERIES 2010

RESOLUTION ADOPTING
THE DAVIS CLIMATE ACTION AND ADAPTATION PLAN

WHEREAS, adoption of the Davis Climate Action and Adaptation Plan serves to implement the visions, goals and policies of the Davis General Plan that guide the community toward a sustainable future; and

WHEREAS, the Intergovernmental Panel on Climate Change and the National Academy of Sciences have concluded that the continued buildup of anthropogenic greenhouse gases in the atmosphere threatens the stability of the global climate and that delay in reducing global GHG emissions will intensify impacts on human and natural systems; and

WHEREAS, there are significant long-term risks to the economy and the environment of the United States, California, and the City of Davis from the climatic disruptions that are projected to result from increased greenhouse gas concentrations; and

WHEREAS, local governments greatly influence the energy used in their communities by exercising key powers over land use, transportation, building construction, waste management, and in many cases energy supply and management; and

WHEREAS, local government actions taken to reduce greenhouse gas emissions and increase energy efficiency provide multiple local benefits by decreasing air pollution, creating jobs, reducing energy expenditures, improving public health, and saving money for City government, for its businesses, and for its citizens; and

WHEREAS, on September 29, 1999, the City of Davis adopted a resolution to participate in the Cities for Climate Protection Campaign; and

WHEREAS, on April 18, 2006, the City of Davis adopted a resolution endorsing the US Mayor's Climate Protection Agreement, thereby committing to strive to meet the Kyoto emission reduction targets of 7 percent below 1990 levels by 2012; and

WHEREAS, in June 2008 the City completed a GHG emissions inventory and on November 18, 2008, the City of Davis adopted local GHG emission reduction targets with a goal of becoming carbon neutral by 2050.

NOW, THEREFORE, BE IT RESOLVED, the City Council of the City of Davis does hereby adopt the Davis Climate Action and Adaptation Plan to meet its adopted GHG emission reduction targets.

PASSED AND ADOPTED by the City Council of the City of Davis on this 1st day of June, 2010 by the following vote:

AYES:

NOES:

Ruth Uy Asmundson, Ph.D.
Mayor

ATTEST:

Zoe S. Mirabile, CMC
City Clerk

City of Davis
Climate Action and Adaptation Plan

Final Draft – City Council Review

Plan Outline

1. Executive Summary – Describes overall strategy and key elements of the plan.

2. Introduction – Describe challenge, society response to challenge, local response (historic and current), detail vision, opportunity for community progress/ improvement of quality of life.

3. Climate protection in Davis and the Sacramento region - sources of local emissions (community & city), framework for local climate protection, Davis' current planning process.

4. The Plan – Objectives and Actions. Plan Organization, Sectors: Mobility, Energy, Buildings & Land Use, Consumption and Waste, Food and Agriculture, Community Engagement, Local Government, Adaptation.

Executive Summary

To be inserted.

Introduction

Scientific consensus has built around human influenced climate change because the models developed by professional climate scientists accurately explain and predict observed conditions in the field. With this information, perhaps as never before, human civilization is aware of its potential collective fate. As the causes and implications of global warming come into sharper focus, the global community is presented with simple, yet fundamental choices to act or accept the results of business as usual. As the world's climate scientists verify their consensus with growing confidence, policy makers are beginning to take the first steps in crafting a global strategy to minimize the damage to public health, economies, ecosystems and the food and water supplies of billions of people.

Because cities account for 75% of global GHG emissions, they take a central role in developing key elements of the global strategy to address this slow motion catastrophe. With its plan, Davis chooses a path of continuing innovation and accepts the responsibilities that accompany its leadership role. This is a role that the Davis community has chosen often since taking the seemingly simple step of painting lines on its streets more than 40 years ago to create the first bike lanes in the United States; a radical idea at the time that continues to transform the urban landscape across the country. Innovations in community design, energy conservation, renewable energy production, alternative transportation, affordable housing and farmland protection followed and continued the City on its current path toward sustainability. Davis, and

other aligned communities provide early examples of how cities can maintain or improve quality of life while:

- Developing cost effective policies that have real impacts on household and business GHG emissions
- Reducing government operation GHG emissions through informed choices and efficiencies within an organization
- Helping guide regional, state, and national efforts to address climate change.

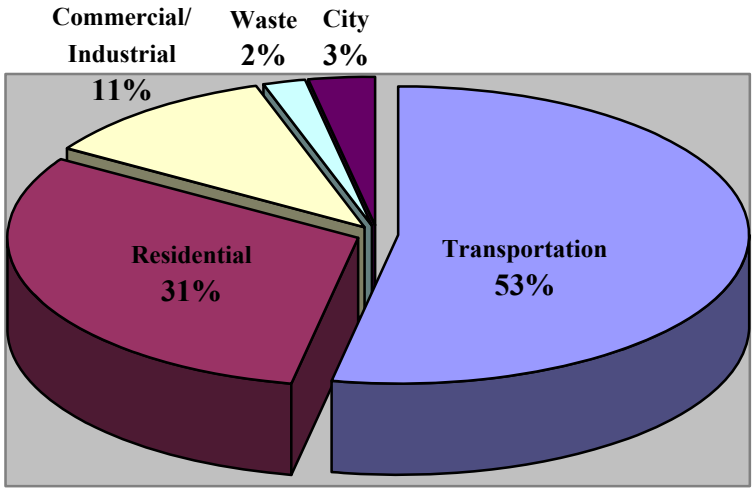
Despite its investments over time, Davis will be challenged to meet its aggressive GHG emission goals. The City recognizes that it will take a deep commitment on the part of the community to achieve these necessary goals. With this in mind, the Davis Climate Action and Adaptation Plan is not just a collection of actions, but is a plan aligned to bring about system level changes. The plan is built on a foundation that residents understand their role as active agents and not merely interested bystanders. Without an engaged community that is willing to take ownership of this critical issue, Davis is unlikely to meet its targets. It is the City's primary role to engage the community and provide tools that offer the best chance for its residents to succeed in this effort.

Cities also have a very important role to play in helping their communities prepare for the environmental and economic uncertainties associated with global and local climate change. To this end, the plan includes strategies to help Davis become a more climate resilient community.

Local GHG Emissions

The City utilized the Clean Air Climate Protection software developed by ICLEI to assess its organizational and community GHG emissions. In addition, the City worked with UC Davis Professor Deb Neimeier, Phd., to verify and adjust the results of the initial inventory. The results of these studies showed that most GHG emissions in Davis result from the movement of people and goods. The transportation sector accounts for more than half of local GHG emissions. Residential energy use accounts for approximately 31% of Davis GHG emissions, with commercial and industrial uses making up about 10%. Government operations account for 3% of local emissions.

City of Davis GHG Emissions - 2006



Additionally, the detailed inventory analysis allowed the City to develop a GHG emissions "budget" for each Davis resident (see Table 2 below). The analysis accounted for anticipated reductions due to State policies (e.g. fuel efficiency standards), as well as anticipated population growth in Davis. This level of analysis enables the City to understand and communicate the implications of local policy decisions with greater precision.

Local GHG Reduction Targets

In November 2008, the Davis City Council adopted GHG emission reduction targets. The targets were based on a range that uses the State of California targets as a minimum goal and deeper reductions as the desired outcome. The City adopted this range in recognition that emission reductions are not precise and that many scientists believe that a reduction of 80 percent below 1990 levels by 2050 may not be adequate.

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**Due to residency time of GHG gasses in the atmosphere, early GHG reduction is generally more beneficial for mitigation of the most severe impacts of climate change.

This plan responds to the challenge of these ambitious goals by setting out a framework for how Davis will contribute to the effort to achieve a stable climate.

Vision:

The need to reduce GHG emissions and the sustained effort necessary to meet the targets can be overwhelming. However, within these challenges are equally impressive opportunities to fashion a more prosperous, efficient, and resilient community. In the past four decades, Davis has shown it is possible to transform a community in ways that have positive effects on quality of life of local residents while conserving limited natural resources and improving the environment. This decades long investment by the community serves as a important example that the efforts to create a more sustainable community are both practical and beneficial. These efforts have also influenced state and national policy (e.g. alternative transportation, energy policy, land use policy, agricultural

protection, etc.). With the ambitious actions identified in this plan, Davis positions itself to again show how creative and practical action at the community scale can produce desirable results. Looking forward to when Davis has achieved its goals, some of these results at mid-century might include:

- The campus/community link grows even stronger with an increasing role for Davis as a test bed for emerging climate friendly technologies and policies developed at UC Davis;

- Alternative transportation becomes the "normal" way for Davis residents to travel and fossil fueled vehicles become collectors' items that are only seen in the annual "Sustainability Days" parade through the downtown. With all residents living within walking/biking distance of essential services that allow them to meet their daily needs, more than half their trips are by foot, bike, transit, or other low carbon mode. With all the walking and biking, Davis lays claim to the title: "Healthiest City in America";

- With a clear statement of intent and incentives to match, Davis thrives as a green business magnet, with green collar jobs dominating a thriving, diverse, and highly adaptable local economy;

- The City's "Climate Response Team" wins national recognition for its work in planning for and addressing a record summer of extreme heat days;

- The City is ringed with community based farms which provide for 25% of local food needs while educating school children during the annual "Week on the Farm" 6th grade field trip. UC Davis uses these incubator farms to train the next generation of farmers who feed the nation and transform national food policy;

- A 25% reduction in energy use by the community allows the 50 megawatt community solar array on the outskirts of the City to fully meet local electricity needs and export the leftovers to further green the grid;

- A savvy development company answers the community challenge and builds the first zero carbon project in the nation that sources all energy within a bike ride of the City. The elegant and affordable approach shows that it can be done;

- Members of the NCAA national champion UC Davis Bike Team train by peddling the 25 passenger bike trams operating between downtown and the center of campus. With 5 minute intervals between trams during busy lunch hours, the 100,000th passenger is honored at the annual US Bicycle Hall of Fame induction ceremony only 3 years after the tram service begins;

- The last household in Davis completes the Davis Low Carbon Diet Challenge, saving 3 metric tons of CO_2 and qualifying to participate in the City's local energy independence financing district. With funding provided by the financing district,

the homeowners make energy and water saving improvements and install rooftop solar to achieve their goal of creating a zero net energy home;

These and other desirable outcomes can only be achieved by coordination and deep collaboration across all sectors of the community. And while the early work by Davis and other communities is important, the latest science suggests that much more ambitious action by all levels of society is required to minimize the impacts of global warming. As it stands today, national and international efforts to slow and then reverse carbon output have been ineffective. It is becoming more clear (and imperative), that local action must lead before national leaders will respond in a meaningful way.

To this end, the Davis Climate Action and Adaptation Plan (D-CAAP) guides action at the community level for the next five years to minimize household, business, and government GHG emissions. The plan also begins a process for the City to prepare for the coming environmental and economic challenges related to global climate change. It is the stated intent of the City of Davis that the actions identified in this plan help create a thriving, resilient community.

Davis Climate Action Team

The majority of the actions identified in the plan were developed by the Davis Climate Action Team (CAT), a community based advisory group appointed by the City Council in early 2008. The CAT held dozens of public meetings and two community forums over a fourteen month period to identify and prioritize a set of recommended actions. Key criteria used by the CAT to identify actions included: potential GHG emission reductions, economic and community benefits, and the role and ability of local government to implement the actions in a timely manner. These recommendations form the foundation for the actions identified in the plan.

As part of its work, the CAT hosted several public forums to gather information and ideas from the community. In the summer of 2008, more than 200 residents attended a forum and provided their best thoughts and ideas for how Davis could reduce local GHG emissions. The CAT used these suggested strategies and actions, along with the best practices of other aligned communities to generate their set of recommended actions.

The full set of strategies and actions gathered at the community forum is included as Appendix 1.

In addition to the CAT, the City invited key members of the UC Davis campus community to assist with analysis of the actions being considered for inclusion in the plan. While the ability of the City to draw on this group's considerable knowledge was limited due to resource constraints, their influence helped shape and inform the plan. In addition, the City plans to engage further with members of this group and invite them to advise on plan implementation and provide input on how subject matter experts can best be used to advise on future plan updates and on plans that may be developed in other communities in the future.

Section 4 – Davis GHG Budget, Plan Organization, Objectives, Actions

Davis GHG Budget

The City has conducted local GHG emissions inventories to establish a community baseline and benchmarks for its reduction efforts. The table and graph provide an overview of local emissions and key target dates. This table converts the City's GHG emission reduction targets into carbon budgets for Davis residents.

Table 3: Davis Carbon Budget - Individuals

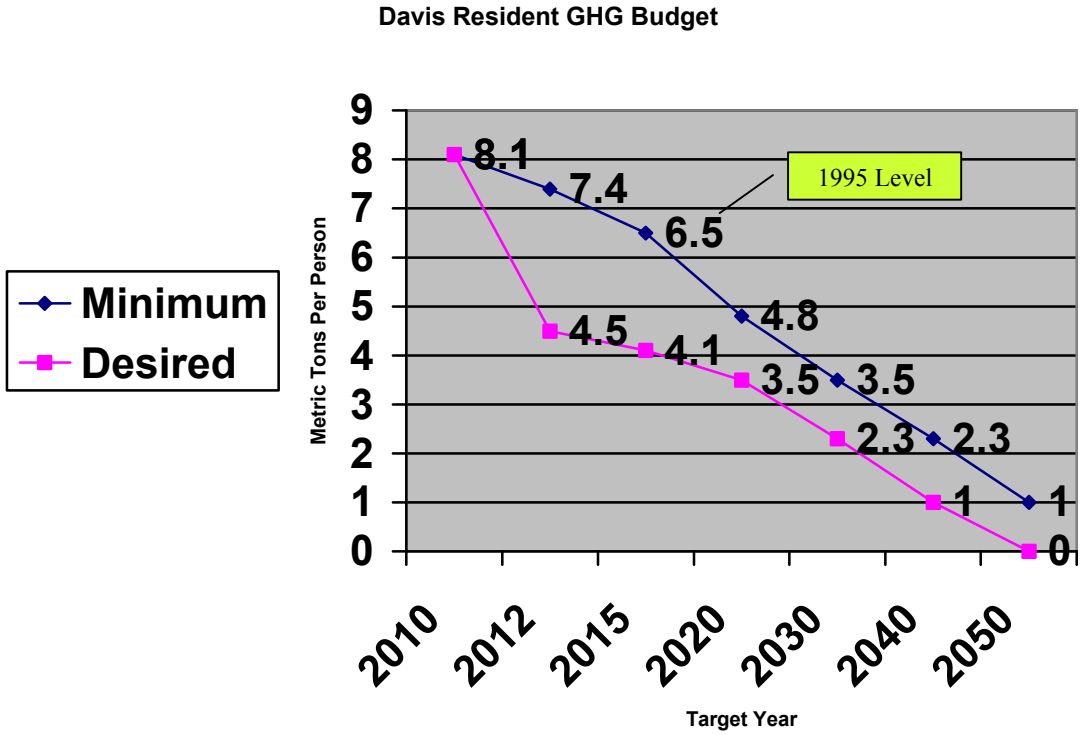
Target year Minimum/Desired	Target	Carbon allowance to meet GHG reduction targets* (annual metric tons per person)**	
		Allowance per person	% reduction over existing
Existing/Base year (2010)	N/A	8.1 per person	0% per person
2012 (Min.)	1998 level	7.4	9%
2012 (Desired)	7% below 1990	4.5	44%
2015 (Min.)	1995 level	6.5	20%
2015 (Desired)	14% below 1990	4.1	51%
2020 (Min.)	1990 level	4.8	41%
2020 (Desired)	28% below 1990	3.5	57%
2030 (Min)	28% below 1990	3.5	57%
2030 (Desired)	53% below 1990	2.3	72%
2040 (Min.)	53% below 1990	2.3	72%
2040 (Desired)	80% below 1990	1.0	88%
2050 (Min.)	80% below 1990	1.0	88%
2050 (Desired)	Carbon Neutral	Net 0	100%

Plan Year

* Source: Carbon Development Allowances, Final Report, September 2008.

** Assumes 2.5 persons/dwelling unit and an annual growth rate of 1%/yr (Source: City of Davis GHG Inventory and Forecast Report, May 2008).

The minimum and desired targets represent the range of GHG emission reductions the Davis City Council adopted in November 2008. The minimum targets are consistent with the State of California reduction targets while the desired targets reflect emerging climate research that suggests the need for more rapid and aggressive cuts in global GHG emissions. The plan is designed to set Davis on a path to achieve reductions within this range.



As the table and graph show, the Davis community will need to make sustained reductions over time to achieve the benefits associated with the GHG reduction targets. To give a sense of the changes necessary to achieve these goals, a typical Davis resident would use about 1/3rd the amount of electricity and fuel in their daily activities by mid-century. Additionally, the electricity and fuel used would need to be effectively carbon free.

Plan Organization

The D-CAAP builds on the foundation of resource conservation and community infrastructure that Davis citizens have developed over the past several decades. Initially, the plan employs proven technologies to make reductions in local GHG emissions. These anticipated savings occur primarily in the energy sector. The plan also looks to the community for early GHG savings. A comprehensive community engagement strategy is a cornerstone of the plan. This engagement strategy will be designed to show how household cost savings, improving quality of life in Davis, and GHG emission reductions are possible, related and complementary. The strategy will go beyond an information campaign by providing the tools that Davis residents need to achieve these beneficial outcomes. The community engagement strategy is a cross sector design that is the link between the plan's comprehensive set of actions and strategies. The full value of the plan can only be achieved if the community buys in and develops a sense of ownership of the plan. The City therefore places great importance on a well designed, effectively executed community engagement program.

The Plan includes objectives and actions in nine areas:

1. Mobility
2. Energy
3. Land use and buildings
4. Consumption and waste
5. Food and agriculture
6. Community engagement
7. Government operations
8. Advocacy
9. Climate change preparation

Two classes of actions are included in each area:

1. Phase I actions are identified for short term implementation to achieve local GHG reduction goals over the next 5 years (through 2015). In general, these actions have proven effective in other communities and require relatively low investment of local financial and/or political capitol to initiate.

   For the purpose of order of implementation, Phase I actions are further broken down into the following three classes of priorities:

Table 4 – Action Priorities

	Priority I	**Priority II**	**Priority III**
Implementation Timing	Year 1 (2010)	Years 2-5	TBD
Level of Current Analysis	• Basic analysis complete • Year 1 workplan complete	Preliminary analysis complete	Actions require basic analysis
Metrics	Basic metrics complete	Preliminary metrics	Metrics TBD
Funding	Action implementation can be accommodated within current budget	Funding TBD	Funding TBD
Rationale	• Low/No cost beyond existing budgeted staff costs. • Basic analysis complete. • Existing Council direction to proceed and actions in progress; preliminary analysis/ planning complete. • Establish foundation for future actions.	• Funding not budgeted. • Preliminary action analysis complete. • Actions needed to meet 2015 GHG reduction goals. • Actions build on existing programs/projects.	• Funding not budgeted. • Preliminary analysis of actions not complete. • Actions needed to meet 2015 GHG reduction goals.

The Year 1 workplan is included as Appendix 2.

2. Phase II actions are identified for further analysis and are generally intended to help achieve the community's mid to long-term GHG reduction goals (beyond 2015).

As with all current climate action plans, there is insufficient information readily available to fully analyze or assess potential GHG emission reduction potential, implementation cost, or payback periods. This plan acknowledges these gaps and moves forward with the best available information while attempting to document key assumptions. The plan is designed to adapt to the rapidly changing climate policy landscape. Consistent with the City's overall climate action strategy, the plan is intended to evolve as information from credible sources is identified.

If implemented and assumptions hold, the Phase I actions are expected to reduce local GHG emissions by approximately 20% over current levels (6.5 MT CO2 per person) by 2015. This will reverse local GHG emission growth and put Davis on a path to meet its long term goals. Consistent with the City's GHG emission reduction targets, the City will strive to reduce beyond the 20% that the actions in the plan are designed to achieve. As resources and opportunities permit, additional actions and strategies that build on, replace, or multiply the effect of the actions included in this plan will be added to achieve greater GHG emission reductions.

Short Term Objectives, Actions, and Priorities

The following tables detail the nine major areas and associated objectives and actions to be taken in the first five years (2010 – 2015). The objectives and actions are not intended to be an exhaustive list of all efforts that are either currently underway or that will be taken to reduce local GHG emissions. The actions identified in the plan form a foundation for making progress toward the City's long-term goals. It is important to note that while adjustments and revisions to the plan are anticipated, the actions included in this plan, or other equally or more effective actions, are needed to meet the City's goals. Moreover, while the City will have direct responsibility for carrying out many of the actions listed below, success will require deep involvement from all sectors of the community. Ultimately, success will be measured by citizen engagement and individual action.

As detailed above, priority actions have been identified for 2010. The 2010 priorities are based on project readiness, funding, and their ability to function as foundation elements for future actions identified in the plan. A work plan for the year 1 priority actions has been developed and is included as Appendix 2. Following adoption of the D-CAAP, a five-year work plan will be developed to establish specific priorities, assignments, and measures of success for years 2-5. Additional information is included in the Plan Implementation section below.

Objectives and actions

The following objectives and actions are designed to put Davis on the path to meet its 2050 goal. Specifically, the objectives are designed to reach Davis' minimum target for

2015. More aggressive action would be required to meet the desired targets. Estimates of potential GHG emission reduction totals for each objective is provided where sufficient information is available. The City will continue to work to update the plan with new information as it becomes available and resources allow, with a specific focus on updating GHG emission reduction and cost information. However, it is the clear and stated objective that the City will maintain a bias for action approach which emphasizes actual GHG emission reductions over continued study and plan refinement.

1. Mobility

Davis has prioritized transit, walking and biking as a strategy to slow traffic growth in neighborhoods and improve the environment. With a better understanding of the substantial effect personal transportation has on local GHG emissions, the City has begun to place an even stronger emphasis on creating and maintaining a greater range of transportation choices for residents. These enhanced transportation options are intended to multiply the positive effects of the City's long standing land use policies that bring housing closer to shops, services, schools, recreation and jobs, reducing the need for residents to travel long distances. Although the car will continue to play an important transportation role, its use will need to be deemphasized further to achieve a low carbon future.

To clearly articulate the City's mobility objectives, the City adopted the following basic priorities in April 2009 to guide future transportation investment by the City:

Minimize GHG emissions from local transportation by prioritizing:

1. Walking
2. Biking
3. Transit
4. Goods movement
5. Single-occupancy vehicles

For the purposes of this GHG reduction plan, the City has identified four basic areas within mobility that it can directly or indirectly influence at the local level:

- Travel Activity (Primary local influence: Direct) — Reducing the number of miles traveled by vehicles, or shifting those miles to more efficient modes of transportation.

- Vehicle and System Operations (Primary local influence: Direct)—Improving the efficiency of the transportation network so that a larger share of vehicle operations occur in favorable conditions, with respect to speed and smoothness of traffic flow, resulting in more fuel efficient vehicle operations.

- Vehicle Technology (Primary local influence: Indirect). Improving the energy efficiency of the vehicle fleet by implementing more advanced technologies. The City can support research in this area through partnerships and joint projects with

UC Davis transportation research groups (e.g. UC Davis Hybrid Research Center).

- Fuel Technology (Primary local influence: Indirect) — Reducing the carbon content of fuels through the use of alternative fuels (for instance, natural gas, biofuels, and hydrogen). The City can initiate and/or support the development of local infrastructure and production of alternative fuels.

The 2015 objectives for GHG reductions in mobility have a primary, though not exclusive focus on areas the City can directly influence: Travel Activity and Vehicle and System Operations.

2015 Objective 1:	Description/Discussion:
Reduce Davis per household daily vehicle miles traveled by 10% from 2010 levels **Potential GHG savings: 58,300 MT**	Currently, Davis residents drive 1.3 million miles per day. A 10% reduction equals a reduction of approximately 5.2 miles per day per household. Replacing one round trip from campus to outlying neighborhoods would do the trick! The actions described below address travel activity and vehicle and system operations. They are intended to make alternative transportation choices more convenient and make efficiency improvements in how the community mobility system operates.

2015 Actions – VMT Reduction

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Establish a Mobility Advisory Commission ("MAC")	N/A – Foundation action	Low cost to City	Existing City Budget	Recruitment of members	Mobility system planning; events (e.g. "Safe Transport. Day")
I	Establish Community Car Share Program	5,450 MT	Low cost to City	Private	Care share members	
I	Determine and publish safe bicycle routes to schools.	Undetermined	Low cost to City	Existing program	Bike trips to schools	Existing program
III	Hire "Safe Routes Coordinator"	Undetermined	Moderate cost to City	Undetermined	Bike trips to schools	Identification of funding required
	Participate in	Undetermined	Existing City	Existing	N/A	City currently

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	regional planning to reduce commuting and GHG emissions		staff time	program		participates in regional planning through SACOG. Additional involvement anticipated based on SB 375.
II	Develop transportation demand management program with local employers	7,753 MT	Undetermined (assume low overall cost) Marketing, incentives.	Undetermined	Participants	Addresses in commuting. Base program on based on carbon credit trading example
II	Develop Community carpool program	4,225 MT	Undetermined (assume low overall cost) Marketing, incentives.	Undetermined	Carpool participants.	Addresses out commuting
II	Develop additional bicycle parking downtown and other commercial areas	Undetermined	Additional staff time	Existing program	Use of bike racks	Expand existing program
III	Research changes in traffic rules to favor bicycles	N/A – Foundation	Undetermined	Undetermined	Increase in bike use	Changes resulting from research included in Stage II actions
III	Implement "Complete Streets"/ Greenstreets plan.	Undetermined	Undetermined	Undetermined	Increase walking and bike use	Greenstreets for existing streets included in current General Plan; apply to all new streets.
III	Develop shuttle service from the campus and high school to the downtown.	Undetermined	Undetermined	Undetermined	Passengers	U-Dash shuttle discontinued Feb. 2010

2015 Objective 2:	Description/Discussion:
Increase the overall efficiency of passenger vehicles operated by Davis residents by 5% (over new CAFÉ standards).	Assuming the national average MPG of passenger vehicles for Davis, a 5% increase in the local average would increase the 2015 local average from 35.5 mpg to 37 mpg. Based on a 10% reduction in VMT identified in Objective 1 above, this action would result in a savings of 1,648 gallons of gas per day. Over the course of a year, this action would save over 500,000 gallons of fuel and would keep approximately $1.6 million dollars in the local economy ($3/gallon).
Potential GHG savings: 4,787 MT	These actions address vehicle technology.

2015 Actions – Fuel Use Reduction

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Develop a plan to de-carbonize personal transportation in Davis	N/A - Foundation	Undetermined	Undetermined	Number of local PHEV and BEV	Plan to develop and deploy infrastructure to support emerging EV transportation system.
II	Develop medium speed NEV program (35 mph)	259 MT	Low cost. Advocate for new legislation.	Undetermined	Number of NEV's in Davis	Current NEV speeds limit utility
II	Create local incentives and financing opportunities for the purchase of high efficiency vehicles and the retirement of inefficient vehicles.	329 MT	$875,000	City	Number of local HEV, PHEV, BEV	Local cash for clunkers.
II	Provide increased parking for fuel efficient vehicles (e.g. permit system)	Undetermined	Staff time	Undetermined	Use of designated parking	
II	Work with local vehicle dealerships to promote local participation in	Undetermined	Undetermined	Undetermined	Number of vehicles purchased by Davis residents that	

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
	any State and/or Federal programs established to encourage the purchase of high efficiency vehicles and the retirement of inefficient vehicles.				exceed new CAFÉ standards.	
III	Implement traffic light synchronizatio n to favor GHG emission reductions	Undetermined	Undetermined	Undetermined	Idle times at key intersections	Additional study required
III	Research opportunities to increase the number of traffic circles in place of traffic lights; retrofit and new intersections	N/A – Foundation	Additional staff time	Undetermined	Idle times at key intersections	Changes resulting from research included in Stage II actions

2015 Objective 3:	Description/Discussion:
Replace 1% of fuels used in passenger vehicles operated by Davis residents with locally sourced biofuels **Potential GHG savings: TBD**	Assuming the Davis community will use approximately 10,540,000 gallons of conventional vehicle fuel per year in 2015 for personal transportation, these actions would result in the local production and use of approximately 105,400 gallons of bio fuels. Local production and use addresses many issues associated with the effectiveness of biofuel use at reducing GHG emissions such as agricultural land use conversion and transport of fuels to market. Locally sourced production could take advantage of the advanced research and development of the next generation of bio-fuels by UCD research teams and R&D firms located in Davis. In addition, abundant agricultural crop residues produced in Yolo and Solano Counties provide a ready source of materials. Potential co-benefits to the local agricultural industry include disposal of crop residues, an alternative fuel source for farm equipment, and improved air quality from agricultural irrigation wells/pumps. These actions address fuel technology.

2015 Actions – Local Fuel Production

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Incorporate the use of biofuels into local public agency fleets as appropriate	Undetermined	Low cost difference between conventional and biofuels.	City	Gallons of biofuels used in City fleet	
II	Develop plan for local bio fuel production, distribution and use.	Undetermined	Undetermined	Undetermined	Gallons of locally produced and used biofuels.	Work with local subject matter experts to prepare plan.
III	Work with local farmers, UCD, State, and Federal partners to establish a locally based biofuel production facility in the Davis area.	Undetermined	Undetermined	Undetermined	Gallons of locally produced and used biofuels.	Work with local subject matter experts to scope and plan project.

2. Energy

Davis has a long history of innovation in energy efficiency and renewable energy production. The California Energy Code (Title 24), utility scale solar power plants (PVUSA), and LED traffic signals are among the energy innovations that originated or were tested here in Davis. With this rich history and the abundant local natural (e.g. sunlight, biomass, etc) and technical resources (UCD Energy Efficiency Center, Davis Energy Group, etc.), energy savings and renewable energy production are a key feature in the early actions contemplated in this plan. The community is familiar with the issues surrounding energy and has shown a willingness to explore new ideas and technologies. Together, these factors allow for relatively quick advancement in local energy efficiency and production of renewable energy.

Because Davis is so well positioned, the plan is specifically structured to implement energy efficiency and renewable energy production actions in the early years of the plan. In effect, this "buys" time and allows strategies and actions in other sectors to mature and begin producing significant GHG emission reductions.

2015 Objective 1:	Description/Discussion:
Reduce total energy use in Davis by 5% from 2010 levels **Potential GHG savings: 24,750 MT**	Currently, Davis residents and businesses use approximately 268 million kilowatt hours of electricity (0.089 Rosenfelds) and 12.5 million therms of natural gas per year (2006). This represents about 45% of the total GHG emissions produced by the community. An aggressive conservation and retrofit effort in the next five years could yield a savings of about 1 metric ton of CO2 per household. This would be the equivalent of making 4,500 homes zero net energy.

2015 Actions – Energy Efficiency

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Establish a financing district for residential properties for energy efficiency (AB 811)	2,940MT	Undetermined (assume low overall cost) Marketing, incentives, use of AB 811 program funding by property owners	Program start up – EECBG and SEP	Number of Davis residential property owners participating	Participate in California-FIRST program pilot program.
I	Participate in Yolo Energy Watch program	Undetermined	Undetermined (assume low overall cost) marketing.	PG&E ratepayers	Number of Davis property owners participating	Assist in implementation of county program that currently exists in other counties. Typical program includes consumer education and outreach.
I	Participate in establishment of a local non-profit to assist with energy efficiency/climate action information center	N/A – Foundation	Low	Undetermined	Establishment of non-profit	Support the reformulation of the Valley Energy Efficiency Corporation into the Valley Climate Action Center.
II	Establish a financing district for	Undetermined	Undetermined (assume low overall cost)	Program start up – EECBG and SEP	Number of Davis commercial	Expand California-FIRST

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
	commercial properties for energy efficiency (AB 811)		Marketing, incentives, use of AB 811 program funding by property		property owners participating	program pilot program.
II	Improve energy efficiency of rental housing	4,060MT	Undetermined (assume low overall cost) Marketing, incentives, use of AB 811 program funding by property owners	Undetermined	Number of rental units retrofitted	Must resolve issue of "split incentives" (property owner not responsible for energy use; tenant responsible but no incentive to make EE improvements)
II	Strengthen energy efficiency requirements contained in the mandatory green building ordinance	Undetermined	Low to City	Undetermined	Energy efficiency measures adopted	Continue to improve energy saving measures contained in the ordinance.
III	Expand the existing time of sale inspection program to include energy retrofit measures	Undetermined	Low	Undetermined	Energy efficiency measures adopted	Expansion of the existing "resale" program.
III	Hire full time energy/climate specialist	Undetermined	Undetermined	Undetermined	Staff positions dedicated to implementation of City climate actions.	

2015 Objective 2:	Description/Discussion:
Produce 5% of the total electricity used in Davis from	Rooftop energy production and solar arrays in Davis are a locally proven strategy. To completely meet the community's current electricity demand, a total of approximately 52 megawatts of power is needed. Five percent of

renewable on-site and/or local sources **Potential GHG savings: 13,365 MT**	the total is 2.6 megawatts. One 2.6 megawatt "solar farm" or 1,733 households with rooftop solar or some combination of various approaches would satisfy this objective. In the effort to bring local renewable energy sources online in the next five years, solar energy production is the focus in the early years of the plan due to the City's experience with the technology and the abundant solar resources available. However, this should not preclude the City from pursuing other renewable energy opportunities as technologies mature. It is anticipated that the Davis community will ultimately receive electrical power from a mixture of local renewable sources. Electricity accounts for approximately 54% of energy GHG's Natural gas accounts for approximately 46% of energy GHG's

2015 Actions – Renewable Energy Production

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Establish a local financing district for solar energy production (AB 811)	1,848 MT	Undetermined (assume low overall cost) Marketing, incentives, use of AB 811 program funding by property owners	Program start up – EECBG and SEP	Number of Davis residential property owners participating	Participate in California-FIRST program pilot program.
I	Develop local solar farm(s) (10 Mw)	4,927 MT (This estimate may be low due to assumption of fixed angle collectors.)	High. Approx $6 million per megawatt. Possible cost reductions based on PPA and/or local community financing	Private financing (power purchase agreement)	Megawatts installed	Expand California-FIRST program pilot program.
II	Develop renewable energy production plan to meet community electricity needs	N/A - Foundation	Undetermined	Undetermined	Adopted plan	Work with local subject matter experts to develop plan.

3. Land use and buildings

The Davis community is designed with energy conservation in mind. A central downtown, neighborhood schools and shopping centers, solar orientation at the subdivision scale, neighborhoods interconnected with greenbelt corridors, a

neighborhood park system, natural stormwater filtration, and buffers for protection of adjacent farmland are a few of the many innovative measures that contribute to the high quality of life and embedded approach to resource conservation. These measures allow Davis residents to make fewer, shorter trips for daily needs and pay less to heat and cool their houses due to solar orientation. These community features are supported by newly adopted green building requirements and a long standing resale program that serves to maintain the quality of the existing housing stock. Combined, these community features and green building programs serve to reduce local GHG emissions and are a result of long-term vision and investment in urban design by the City and its residents. Residents enjoy the benefits of this investment and the City seeks to build on these resource conservation design features to achieve even greater energy savings and a higher quality of life. Davis has demonstrated that careful consideration of community design enables greater GHG emission savings. It is the City's intent to pursue further innovations in land use and building design that allow its residents to live a high quality, low carbon lifestyle.

2015 Objective 1:	Description/Discussion:
Achieve net zero energy use in all new buildings and homes. **Potential GHG savings: 0**	New buildings which achieve zero net energy serve to reduce local GHG emissions by not adding to current totals. If new buildings (or remodels) replace existing energy intensive uses, GHG savings would be realized. It is also recognized that new buildings in Davis can produce a GHG savings if they serve local needs and/or minimize carbon intensive activity (e.g. elimination of commuting to/from Davis).

2015 Actions – Energy Use in New Buildings (general)

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Adopt GHG thresholds and standards for new non-residential buildings in Davis that include credit for zero net energy	N/A - Foundation	Existing staff	Add non-residential standards to existing City program	Number of homes built to new GHG standards	City adopted policy for residential projects. Need companion standards for non-residential land uses.
III	Promote transit oriented development (TOD)	1,719 MT (savings over 5 years) Accounts for	Undetermined	Private financing	Number of homes/jobs created	Expand California-FIRST program pilot program.

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
		commute trips by transit				
III	Develop policy regarding zero carbon development projects	N/A - Foundation	Undetermined	Undetermined	Adopted policy	Develop process to evaluate and incentivize carbon neutral projects.

2015 Objective 2:	Description/Discussion:
Achieve 41% reduction in greenhouse gas emissions in all new buildings and homes. **Potential GHG savings: TBD**	New buildings which achieve 41% overall reduction in GHG emissions (energy and transportation), meet the 1990 standard established by the City Council in adopting GHG reduction guidelines for new residential projects in April 2009. The intent of the objective is to ensure that structures built today meet future standards since they will still be in place (and producing GHG emissions) through 2050.

2015 Actions – Energy Use in New Buildings (residential)

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Adjust standards for existing GHG thresholds and standards for new buildings in Davis.	N/A - Foundation	Existing staff	Continuation of existing City policies	Number of homes built to new GHG standards	City adopted policy. Need adjustment to GHG standards and potential mitigation measures

2015 Objective 3:	Description/Discussion:
Create vibrant neighborhoods where 100% of Davis residents	Convenient access to daily needs increases the likelihood that residents will make carbon friendly transportation choices. This objective continues the decade's long land use policies employed by the City.

can easily walk or bicycle to meet basic daily, non-work needs. **Potential GHG savings: captured in Mobility Objective 1**	

2015 Actions – Energy Efficient Neighborhood Design (transportation and energy use)

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Locate homes within walking/biking distance of essential services	960 MT (savings over 5 years) Accounts for walking/biking non-commute trips	Existing staff	Continuation of existing City policies	Number of homes located within certain distances of essential services	Continuation of existing policies.
II	Reevaluate neighborhood design standards to minimize GHG emissions from transportation	N/A - Foundation	Existing staff	Continuation of existing City policies	Number of homes within walking and biking distance of essential services	City adopted policy. Need an evaluation of effectiveness as it relates to personal transportation.
II	Reevaluate neighborhood design standards to maximize GHG reductions from urban design	N/A - Foundation	Existing staff	Continuation of existing City policies	Number of homes with north/south orientation.	City adopted policy. Need an evaluation of effectiveness as it relates to neighborhood scale energy use. Design street layout, building orientation, and landscaping to accommodate passive and

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
						active solar energy systems and to capture natural cooling and heating opportunities.
II	Provide incentives and facilities for car and bike sharing programs	Undetermined	Undetermined	Undetermined	Number of participants in car and bike share programs.	Programs facilitate lower ownership rates and use of personal automobiles and facilities can be incorporated into neighborhood design.

2015 Objective 4:	Description/Discussion:
Create vibrant, centrally located shopping and entertainment centers, with a particular focus on maintaining the downtown as the commercial and entertainment center of the City. **Potential GHG savings: captured in Mobility Objective 1**	Convenient access to shopping and entertainment increases the likelihood that residents will make carbon friendly transportation choices. This objective continues the decades long land use policies employed by the City.

2015 Actions – Energy Efficient Community Design (transportation and energy use)

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
II	Promote mixed use development (residential/commercial) in and outside the downtown to provide essential services to all residents, including providing incentives for commercial development.	Undetermined	Undetermined	Continuation of existing policy	Number of residential units build downtown.	High density mixed use projects in and around the downtown serve to minimize vehicles trips and create an even more vibrant downtown.
III	Develop and initiate a carbon neutral development design competition	Undetermined	Low cost to City	Private	Number of submittals for carbon neutral design competition.	Would serve to show what a carbon neutral design in the central valley would look like.

4. Consumption and Waste

Consumption and waste are important factors when considering local GHG emissions due to the energy embedded in products Davis residents purchase (upstream emissions), and the energy needed to process and repurpose solid waste (downstream emissions). While the ability of the community to directly influence product manufacturing is limited, consumer awareness of the upstream emissions can be addressed at the local level. In addition, the course the community chooses to take to address downstream emissions is directly influenced by the volume and type of solid waste that the community produces.

Davis was an early pioneer in the recycling effort. In the early 1970's a non-profit (Resource Awareness Committee of Davis) started a small locally based program which evolved to a formal program with the support of a City ordinance in 1974 requiring the separation of newspapers from garbage. In the decades since, Davis has continued to strive for creative approaches to minimize waste production (e.g. composting classes), and a greater rate of recycling materials (e.g. I-BIN recycling containers for apartment

residents). The City's current approach is summarized by the "4 R's" approach, listed in priority order:

1. Reduce waste in the first place; buy products in bulk and with less packaging.
2. Reuse old items; find a new use for the item or find a new user.
3. Recycle.
4. Rebuy items made from recycled materials to increase demand for recycling.

The objectives and actions in this section are intended to spur continued innovation in the reduction and processing of solid waste in Davis.

2015 Objective 1:	Description/Discussion:
Reduce total solid waste generated by 10% **Potential GHG savings: TBD**	Solid waste processing is energy intensive (collection and disposal), and the GHG emissions related to the breakdown of waste is significant (Methane, a high intensity GHG gas). In addition, reduction in solid waste reduces GHG emissions associated with the manufacture of products, packaging, storage, shipping, etc. These "upstream" GHG emissions are difficult to calculate, but are significant.

2015 Actions – Solid Waste Reduction (Pre consumer/Post consumer)

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Adopt Zero-waste goal for Davis and begin planning process.	N/A - Foundation	Undetermined	Undetermined	Adoption of plan.	Include consideration of "pay as you throw" pricing systems
II	Move to zero waste community (10% reduction)	2,450 MT	Undetermined (assume low overall cost) Marketing, incentives.	Undetermined	Solid waste collection	

2015 Objective 2:	Description/Discussion:
Recover 75% of all waste generated **Potential GHG savings: TBD**	This is an increase of 25% over current estimates of 50% diversion rate. Because Davis does not get credit for its early success in recycling, this additional 25% reduction is more difficult to reach. The GHG emissions related to the breakdown of waste is significant (Methane, a high intensity GHG gas). In addition, recovery and adaptive reuse of materials reduces GHG emissions associated with the manufacture of products, packaging, storage, shipping, etc. Elimination of these "upstream" GHG emissions is difficult to calculate, but are significant.

2015 Actions – Solid Waste Reduction (Recycling)

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
II	Increase recovery of waste by 25%.	1,843 MT	Undetermined (assume low overall cost) Marketing, incentives.	Private	Waste recovery rate	
III	Provide weekly curbside collection of food waste and other compostable materials in addition to recycling.	Undetermined	Undetermined	Private	Waste recovery rate	
III	Create a City salvage yard for the City to promote reuse of goods and reduce consumption, expanding on existing program with extended hours of operation and increased seasonal availability based on the UC Davis schedule.	Undetermined	Undetermined	Undetermined	Waste recovery rate	

2015 Objective 3:	Description/Discussion:
Maximize the efficiency of the waste collection system **Potential GHG savings: TBD**	Solid waste collections is energy intensive. Technological advances and reduction in solid waste disposal as described in objectives one and two above may present opportunities to make the waste collection system more energy efficient.

2015 Actions – Solid Waste Collection System (Energy)

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
II	Establish a kitchen greenwaste program and shift residential garbage collection to every other week.	Undetermined	Undetermined	Private	Increased waste diversion and reduced VMT for garbage collection	Recycling collection to remain weekly
III	Convert collection vehicles to alternative fuels	98 MT	High $250k incremental cost for hybrid (Source: NYC pilot program)	Private	MPG of waste collection vehicles	

2015 Objective 4:	Description/Discussion:
Reduce water use by 10% over 2010 levels **Potential GHG savings: TBD**	The production, shipping, and treatment of water are energy intensive. Reduction in water use also has may co-benefits, including the ability to adapt to future climate conditions that may reduce overall availability for municipal uses.

2015 Actions – Water Conservation

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Establish a local financing district for water conservation (AB 811)	Undetermined	Undetermined (assume low overall cost) Marketing, incentives, use of AB 811 program funding by property owners	Program start up – EECBG and SEP	Number of Davis residential property owners participating	Participate in California-FIRST program pilot program.

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Permit greywater use	Undetermined	Undetermined	Private	Number of systems installed	Small systems currently permitted under new state law.
I	Establish a baseline energy use for water production, use, and processing (kWh/gallon) and develop specific actions to move toward a zero energy use water system.	N/A - Foundation	Low	City	Establishment of baseline energy use	Allows for assessment of water use actions; Energy Task Force Report previously established baseline
III	Require subdivision level wastewater treatment and reuse for all new developments.	Undetermined	Undetermined	Private	Volume diverted from City WWTP	
III	Promote water production and storage policies to reduce the energy requirements and GHG emissions associated with these activities: including options such as time-of-use water monitoring and construction of low embedded energy and low energy use projects including new water towers instead of on-ground tanks.	Undetermined	Undetermined	Undetermined	Energy use in water production and storage	

5. Food and Agriculture

Davis straddles and is surrounded by some of the finest farmland on the planet. With the preeminent agricultural research institution, experienced and innovative growers, the top rated farmers market in the country, one of the finest food cooperatives anywhere, a locally based food market chain rated the 10th best company to work for in a national survey, the first municipal farmland protection program in the nation, and a health conscious citizenry, no other community in the nation is better positioned to address the relationship between food production/consumption and GHG emissions.

The objectives and actions in this section are intended to activate and align these resources and to drive innovation in the creation of a viable local food system that reduces local GH emissions.

2015 Objective 1:	Description/Discussion:
Increase consumption of local food by 10% **Potential GHG savings: TBD**	The shipping of food is energy intensive. Increased consumption of locally sourced food also has many co-benefits, including the support of the local farm economy, freshness of the product and the conservation of local farmland.

2015 Actions – Reduce Energy Intensity of Locally Consumed Foods

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Develop policies to encourage community based farms, including demonstration projects	N/A – Foundation	Undetermined	Measure O, USDA Grants (e.g. Know Your Farmer, Know Your Food)	Food produced that is sold/consumed locally	Council Direction on Community Farms provided March 2010
II	Develop a local food policy	N/A - Foundation	Undetermined	Undetermined	Establishment of baseline food consumption and sources for Davis (community food profile)	Allows for assessment of food system actions
II	Encourage consumption of local foods	1,406 MT	Undetermined (assume low overall cost) Marketing, incentives.	Private	Sales of local food at Farmer's Market, Food Coop, Nugget	"Food miles" only one factor in carbon intensity of

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
						food, but one that can be affected at the local level.

2015 Objective 2: Reduce consumption of carbon intensive food **Potential GHG savings: TBD**	Description/Discussion: The typical diet in the United States is energy intensive. Reduced consumption of carbon intensive food also has many co-benefits, including community health.

2015 Actions – Consumption of Local Foods (Energy)

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
II	Conduct a community education campaign on the carbon consequences of food choices, with special focus on protein sources such as meat, fish, grains and vegetables.	NA - Foundation	Undetermined (assume low overall cost) Public outreach	Undetermined	Number of residents contacted	Opportunity for public/private partnership (e.g. Farmer's Market, COOP, UCD, etc.)
II	Reduce local consumption of high carbon foods	3,970 MT	Undetermined (assume low overall cost) Marketing, incentives.	Private	Number of households committed to additional low carbon meals/week	

6. Community Engagement

Davis has a rich history of community engagement on energy and resource conservation issues. In response to the energy crisis of the early 1970's, the community rallied around the "Prime Time" program that showed Davis residents could significantly reduce energy use at the community scale (22% reduction of peak energy use in the summer of 1980).

Other examples include community involvement in local non-profits such as the Davis Farmer's Market, the Davis Coop, Davis AYSO, and Explorit! that grew from good ideas to community institutions due to the depth and sophistication of community involvement.

To achieve its GHG reduction goals, the Davis community must once again rally around an issue that will directly and indirectly affect its future. The notion that action at the household level is not only needed, but is fundamental to the success of the effort to reduce local GHG emissions is at the core of this plan. Without the community taking responsibility and being held accountable for the results, Davis will not have reached its potential and has little chance of reaching its goals.

2015 Objective 1:	Description/Discussion:
Motivate all Davis residents and businesses to change their behavior in ways that reduce carbon emissions. **Potential GHG savings: 18,750**	Action at the household and business level to reduce local GHG emissions is a cornerstone of this plan. Without engagement by residents and business owners in the GHG effects of their daily decisions, it is unlikely that Davis will achieve its GHG reduction targets. Note: The Davis Low Carbon Diet includes a full range of GHG saving actions for individual households, including actions in transportation, energy, and consumption and waste. It is assumed that 50% of the GHG savings associated with the program have been incorporated into the other actions in this plan. Therefore, household GHG savings associated with this program are assumed to be 1 MT/participating household.

2015 Actions – Community Engagement

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Develop and implement a multi-year plan to engage 75% of households to participate in a household based carbon reduction program	18,750 MT	Undetermined (assume low overall cost) Marketing, incentives.	Undetermined	Number of households participating	Build off of Davis Low Carbon Diet Pilot Program

7. Government Operations

The City of Davis has practiced energy conservation for over thirty years. These efforts have resulted in a relatively energy efficient organization. Several examples include continuous upgrades to interior lighting, early adoption of LED traffic signals, and installation of PV systems on City property. Despite these efforts, much more needs to

be done to meet the City's goals and provide an example to the community that the City is committed to a low carbon future.

2015 Objective 1:	Description/Discussion:
Reduce GHG emissions from City operations 41% below 2010 levels (this puts the City on tract to meet the minimum 2020 target 5 years early). **Potential GHG savings: 2,460 MT**	Implement a variety of actions across the organization to reduce GHG emissions and achieve long-term cost savings. Aggressive action by the City provides leadership in the community and an example for other organizations to follow. City operations account for less than 3% of total local GHG emissions.

2015 Actions – Government Operations

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Install a total of 1.5 Mw PV at City facilities (wastewater treatment plant, other City Facilities)	1,300 MT	Low due to financing through PPA's	Power purchase agreements	Number of Kw's installed	0.75 Mw system installed at WWTP Spring 2010.
I	Install efficient streetlights	694 MT	Low (quick payback period)	City and EECBG grants	Number of Kwh saved	5,000 lights
I	Energy efficient exterior lighting, parking lots, greenbelts, etc.:	195 MT	Low (quick payback period)	City and SEP III funds	Number of Kwh saved	1,500 lights
I	Continue to transition City fleet to higher efficiency vehicles	100 MT	Moderate (cost difference between standard and higher	City and EECBG	City fuel use	Includes transition to HEV, PHEV, EV, and non-motorized

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
			efficiency vehicles)			vehicles where vehicles can continue to serve core function.
I	Expand urban forest	7MT	Low	City and grants	Number of trees planted	
II	Install reflective hardscape when maintaining roads, greenbelts, city parking lots, etc. (high albedo)	580 MT	Low (material cost difference is low)	City	Number of miles	Addresses heat retention in hardscape; savings due to lower urban temperatures
II	Energy efficient building retrofits	44 MT	Low (relatively quick payback period)	City and EECBG	City energy use	
II	Misc. efficiency improvements	10 MT	Undetermined	City	Various	Efficiencies in office equipment, reduction in paper use, provide reusable utensils, dishes and water containers at City Facilities to enable zero waste events, etc.
II	Implement City policies that favor purchasing local, seasonal, sustainably grown and raised, organic, food products, and climate	Undetermined	Undetermined	City	Events featuring locally sourced food	

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
	friendly, rapidly renewable, and recycled content products, create a bulk and or co-operative purchasing system for business within the city to implement similar purchasing policies.					
II	Implement City policies that favor contracting with companies which adopt energy efficient, low carbon practices, and use non-toxic and fragrance free products. Encourage businesses to implement similar contracting policy via incentives and disincentives.	Undetermined	Undetermined	City	Events featuring locally sourced food	
II	Incorporate climate change goals, policies, and actions for greenhouse gas reduction and energy efficiency into the General Plan. Consider	N/A - Foundation	Undetermined	City		Policy issue

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
	including a "Climate Change Element" in the General Plan.					
II	Require that environmental documents specifically address climate change, energy efficiency, and greenhouse gas reduction.	N/A - Foundation	Undetermined	City		Policy issue
II	Determine an appropriate funding mechanism (or mechanisms) to support city programs to reduce greenhouse gas emissions, including analysis of a local carbon tax.	N/A - Foundation	Undetermined	City		Funding support for new city positions to assist the Sustainability program, increased funding for bicycle and pedestrian infrastructure, etc.
II	Require the implementation and construction of lowest possible carbon impact public works and infrastructure projects.	N/A - Foundation	Undetermined	City		This includes all areas of city public works and construction as well as local developer built infrastructure projects.

8. Advocacy

Many solutions to the climate crisis are beyond the ability of the Davis community to directly influence or control. In these instances, the City and broader community may

benefit from leading or joining efforts to affect climate policy in its formative stages or implementation of existing regulations that result in a reduction of GHG emissions at the regional, state, or national level. No attempt to quantify potential GHG emission savings from these efforts is offered in this plan. However, it is clear that leadership and advocacy are important considerations in developing a local climate strategy. A local example illustrates the long-term GHG reduction potential of focused, applied advocacy: the Davis Energy Ordinance adopted in the 1970's influenced the California Energy Code in the 1980's which today is considered the gold standard for state energy codes and is influencing the national discussion on energy efficiency.

2015 Objective 1:	Description/Discussion:
Identify five key legislative or regulatory climate issues that would assist the City in meeting its GHG reduction targets and devote adequate resources to positively influence outcomes **Potential GHG savings: TBD**	Davis has shown the ability and willingness to engage successfully at the state and national levels. With its location near the State Capitol, additional opportunities to exchange ideas directly with state lawmakers and participate in the public conversation on climate policy are present. The actions listed below serve as a beginning point for identification of important issues that may benefit from direct engagement by the Davis community. It is the intent that addressing these issues will either ease implementation of actions found elsewhere in this plan or lead to new opportunities for GHG emissions beyond the initial 5 year scope of this plan.

2015 Actions – Advocacy

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Seek legislation to allow Davis to pilot a renewable energy program allowing property owners to invest in and directly benefit from a local renewable energy project through a municipal financing district. Cross reference – Energy.	N/A - Foundation	Undetermined	City	Bills introduced and signed into law	
II	Seek legislation to allow Davis to pilot a medium-speed (35mph) NEV	N/A - Foundation	Undetermined	City	Bills introduced and signed	

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
	program as currently permitted in several other states. Cross reference - Mobility				into law	
II	Develop local carbon offset accounting mechanism that is recognized by the state for community participation in developing cap and trade markets.	N/A - Foundation	Undetermined	City	Bills introduced and signed into law	
II	Identify additional advocacy topics					
II	Analyze local carbon tax	N/A	Undetermined	City		

9. Climate Change Preparation

Even under the most conservative predictions, climate driven changes will affect resources critical to the health and prosperity of California and Davis. Strain on the State's water supply, increase in vector borne diseases, and more intense heat waves will put Davis residents and the prosperity of the community at risk.

The prudent course of action is to begin to prepare for these potential outcomes to create a more climate resilient community. The State has produced a guiding document that is the primary reference source for the actions outlined below.

2015 Objective 1:	Description/Discussion:
Adapt successfully to a changing climate **Potential GHG savings: N/A**	Some effects of climate change have begun and preparation for future, potentially more severe changes must begin to maintain a resilient community and a successful transition to future conditions.

2015 Actions – Climate Change Preparation

Priority	Action	Potential GHG Reduction	Estimated Cost	Funding Source	Key Metrics	Notes
I	Prepare an assessment of climate-related vulnerabilities of local food, water and energy supplies, infrastructure and the public health system.	N/A – Foundation	Undetermined	City	Assessment	Use the State Climate Adaptation Strategy to guide assessment and establishment of priorities
II	Analyze the costs and benefits of addressing major vulnerabilities identified in the assessment and prioritize preparation actions.	N/A - Foundation	Undetermined	City	Report	Use the State Climate Adaptation Strategy to guide assessment and establishment of priorities
II	Adopt a climate change preparation plan assigning responsibility to appropriate departments to address prioritized actions.	N/A - Foundation	Undetermined	City	Adoption of plan	Use the State Climate Adaptation Strategy to guide assessment and establishment of priorities

Action Implementation Planning

Action Implementation. General priorities for actions have been identified in the individual action areas (e.g. Transportation, Energy, etc.). These initial priorities reflect actions that are currently underway or where existing funding/technology are available to implement the action within the first several years after plan adoption. A one year work plan has been developed that will guide actions in 2010 (Appendix 2) and a five year work plan will be developed following plan adoption that incorporates all actions identified in the plan. The five year work plan will include responsibilities for implementation, anticipated funding sources, and basic metrics to assess results.

Adaptive Management. The following general reviews allow the City to monitor progress toward GHG reduction targets and adjust actions as necessary.

Review	Timing	Notes
GHG inventory update (City operations)	Annual	As required under the Climate Registry protocol. This update provides an indication of

		effectiveness of City actions between the 5 yr community GHG inventory update.
Indicator actions – assess the cost and GHG reduction of selected key actions.	Every 2.5 years	These indicator actions provide an intermediate check on the effectiveness of the plan and allow for mid-term adjustments.
GHG inventory update (Community inventory)	Every 5 years	Interval allows GHG reduction actions time for implementation and results. This serves as a general assessment of the overall performance of the plan.
Analysis of long-term actions and incorporation of emerging technologies into plan.	Ongoing	Access to subject matter experts at UC Davis, state agencies, and in the community allow Davis to examine and test next generation approaches to GHG reduction.

The purpose of the adaptive management measures is to allow the City and community to assess the effectiveness of the plan and adjust as necessary to meet GHG reduction targets.

The City will establish a technical advisory body made up of local subject matter experts and representatives of the City's Natural Resources Commission to advise the City on implementation and monitoring of the plan. This action is included in the first year work plan.

Appendices

1. Climate Community Forum
2. D-CAAP First Year Work Plan

H:\Davis - Sustainable Project\GHG Reduction Plan\Plan - 2009\NRC - CC Final Plan 2010\Davis Climate Action and Adaptation Plan - final draft - CC review.doc

Davis Climate Action and Adaptation Plan

Appendix 1 – Climate Community Forum

June 2008

City of Davis Climate Action Team
Community Forum
Thursday, June 26th, 2008
6:30 – 8:30 PM
Veteran's Memorial Center
203 East 14th Street

AGENDA

FORUM OBJECTIVES:

- ✓ Share information about the work of the Climate Action Team (CAT);
- ✓ Get feedback, input and ideas on potential actions to reduce greenhouse gases;
- ✓ Identify initial potential actions that the public would be willing to support; and
- ✓ Share information about how to continue to be involved in this process.

6:30 – 6:35 PM I. WELCOME & INTRODUCTIONS

6:35 – 6:55 PM II. CLIMATE ACTION TEAM: BACKGROUND

6:55 – 7:00 PM III. ORIENTATION TO THE OPEN HOUSE

7:00 – 8:30 PM IV. OPEN HOUSE/GROUP EXERCISE

5 staffed stations around the room:

- Orientation/General Information and Evaluation Criteria
- Energy Use and Production
- Transportation
- Consumption and Waste
- Land Use

8:30 PM V. ADJOURN

INSTRUCTIONS FOR OPEN HOUSE (at each station)

1. Ask questions/get more information from Climate Action Team members and City Staff (look for anyone wearing a clear plastic name tag).

2. Write down any ideas for additional actions on a post-it and place them on the wall posters.

3. Using up to 5 green dots, choose the 5 actions at each station that you would be most willing to support and place the dot in the Rating column on each poster.

4. Using up to 5 red dots, indicate any actions that you would not support by placing the dots in the Rating column on each poster and write why you would not support the action on a post-it note.

5. Write down any additional comments on a post-it or on your comment form and place in the comment form box near the entry/exit door.

If you have additional comments or ideas we encourage you to submit them via e-mail at: sustainability@cityofdavis.org.

Thank you.

H:\Davis - Sustainable Project\GHG Reduction Plan\Climate Action Team - Community\Public Forum Materials\Public Forum 1_6-27-08\CAT Community Forum Agenda 1 - 6-27-08.doc

City of Davis Climate Action Team
Community Forum
Thursday, June 26th, 2008

Background Information

This information sheet provdes a summary of current City activites related to planning for climate change. The City is committed to addressing the issue of climate change and preparing a plan for the community that reduces local greenhouse gas emissions and outlines strategies for adapting to changing climatic conditions here in the Central Valley.

Background

In 1999, Davis joined a small group of cities calling for local action and a national policy on climate change. In 2006, the City joined the US Conference of Mayors Climate Protection Agreement that called for local and national action to reduce greenhouse gas emissions (GHG). In a follow up action in spring 2007, the Davis City Council unanimously adopted a strategy to reduce the City's greenhouse gas emissions.

Based on this Council action, the City joined the Cities for Climate Protection (CCP) program along with hundreds of other communities across the globe to reduce greenhouse gas emissions at the local level. The program is designed to educate and empower local governments to take action on climate change. The CCP is a performance-oriented campaign that offers a framework for local governments to reduce greenhouse gas emissions and improve livability within their municipalities. The framework includes the following 5 steps:

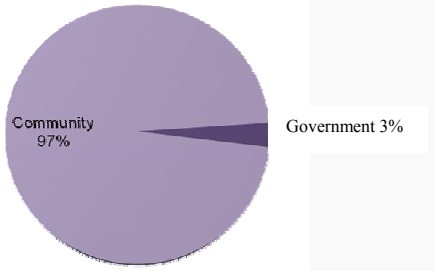
1. **Conduct a baseline emissions inventory and forecast.**
2. **Adopt an emissions reduction target for the forecast year.**
3. **Develop a Local Action Plan.**
4. **Implement policies and measures.**
5. **Monitor and verify results.**

City of Davis efforts to complete these steps

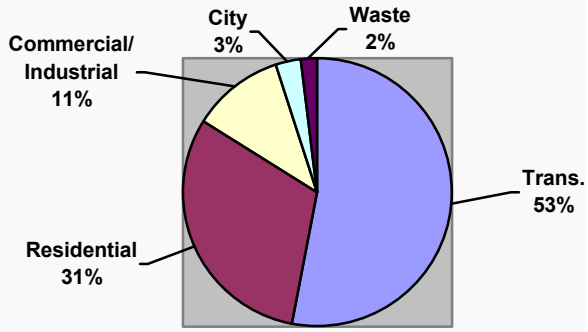
Step 1 – Conduct GHG Inventory/Forcast - Completed

The City has completed its baseline inventory and forecast of greenhouse gasses (step 1). The overall results of the inventory showed that approximately 3% of the total GHG emissions in Davis result from City operations, with the remaining 97% coming from the day to day activities of citizens and businesses. This information provides a baseline for the City to develop, implement, and evaluate actions to reduce local GHG emissions. The charts below provide summary data from the inventory. More information is available on the City's Climate Change web site at: http://www.cityofdavis.org/cmo/Sustainability/ClimateChng.cfm

Davis GHG Emissions



Davis GHG Emissions, by Sector



Source: City of Davis GHG Inventory, May 2008

Step 2 - Set Targets – Underway

The City is currently analyzing GHG reduction targets. As a guide, the City is considering reduction targets established by the State of California and international organizations. Establishment of reduction targets will allow the City to identify the actions necessary to meet those targets.

Step 3 – Adopt Action Plan - Underway

The Climate Action Team along with the Natural Resources Commission is identifying and beginning to analyze potential actions that could be included in the Davis Climate Action Plan. Actions in these four key sectors have been identified by the Climate Action Team:

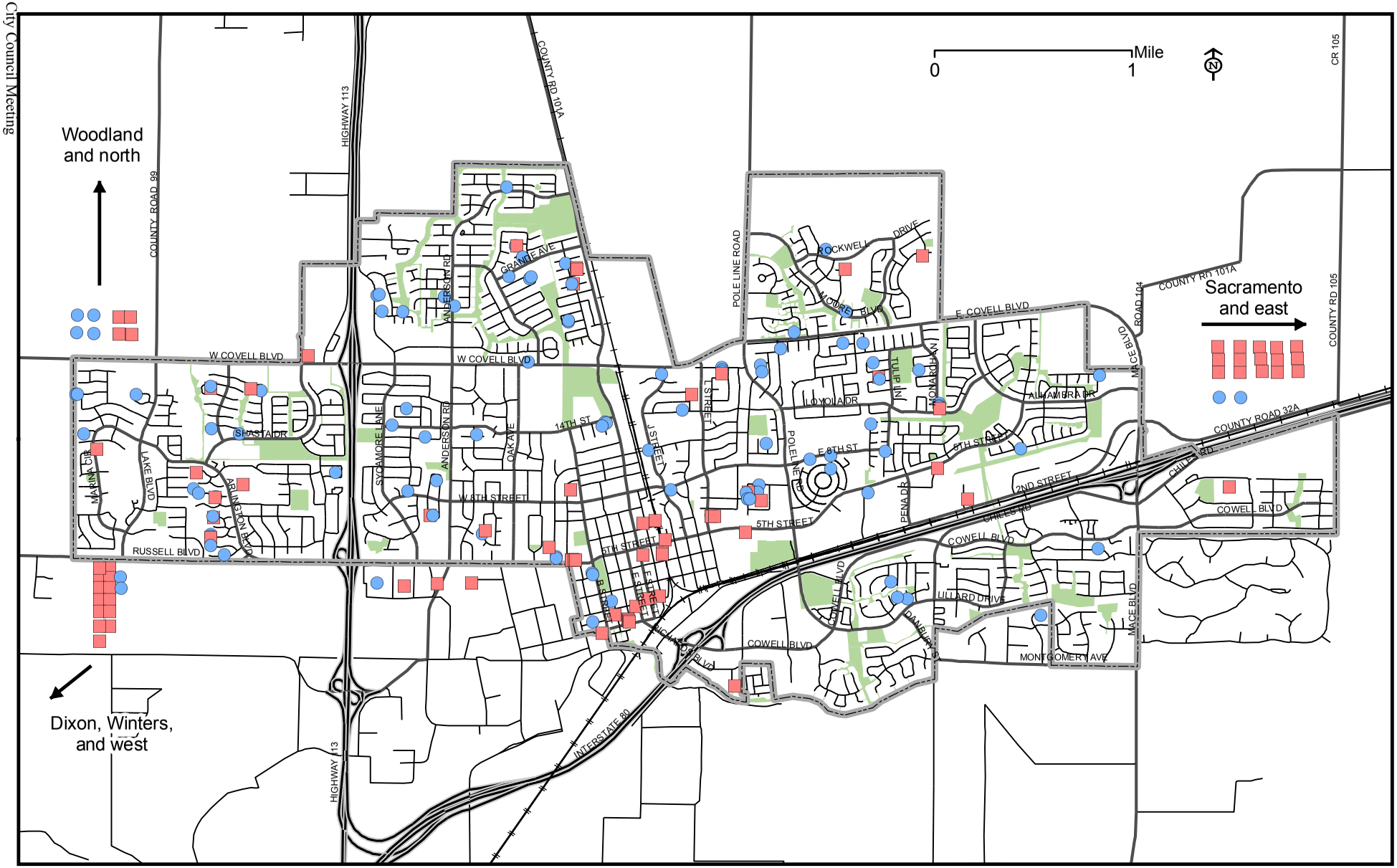
- Transportation
- Energy Efficiency/Production
- Land Use and Community Design
- Waste Reduction and Recycling

The Climate Action Team, Natural Resources Commission and City staff are working to present a draft cliamte action plan to the City Council by the end of 2008. The City will continue to identify and implement actions to reduce local GHG emissions even while the plan is being drafted. In combination with the extensitve list of existing actions taken by the Davis community over that past four decades, this will give us a head-start in reducing local GHG emissions.

Step 4 - Implement Policies and Measures - Future

Step 5 - Monitor and Verify Results - Future

For additional information and to track progress, please visit the City Climate Change web page at: http://www.cityofdavis.org/cmo/Sustainability/ClimateChng.cfm



Meeting Attendees

- Where they live
- Where they work

Climate Action Committee
June 2008 Public Meeting

Climate Action June 2008 Meeting.mxd

City of Davis Climate Action Team
Community Forum
Thursday, June 26th, 2008

EVALUATION FORM SUMMARY – (47)

1. Did this workshop provide you with more information about the City of Davis Climate Action Team and their work to develop a Greenhouse Gas Reduction Plan?

Yes: 38 No: 3 No Response/Maybe: 6

2. How would you rate tonight's workshop?

A. How well the workshop addressed issues that are important to me:

Excellent: 19 Good: 23 Fair: 2 Poor: 1 No Opinion: 2

B. Information presented and overall workshop content:

Excellent: 19 Good: 20 Fair: 5 Poor: 1 No Opinion: 2

C. My ability to participate & give input:

Excellent: 26 Good: 17 Fair: 1 Poor: 1 No Opinion: 2

3. Please share any comments on any of the above:

- Include fact sheets on each issue
- Didn't understand some of the options presented & the CAT staff wasn't sure either.
- Well organized, but some items needed translation for the 'non-expert'
- Keep going! Concise meeting very helpful
- Hope that the CAT will seek input from underrepresented groups to develop the action plan – not just us educated white folks
- Frustrated that this process is taking so long. Do one or two items right away – less talk more action
- I would like to know what the GHG emissions were at the start and how that was determined
- Thanks!
- I would have liked to hear more in the large setting about what is currently happening.
- Too much information to assimilate. I hope the future workshops focus on one of the four subject areas.
- Land use, access to public & bicycle transportation, mixed neighborhood and conservation are the most likely to make a dent in the 97%. Please consider LED streetlights and turning wastewater sludge into energy for reducing the 3%.
- Not a single speaker gave a sign of professional presentation training. The first speaker seems motivated by the idea that Davis is a "leader" rather than any concrete results.

- The prepared suggestions and presentations adhered to societal taboos – can't talk about wanting a bigger house or a bigger car or a bigger TV screen is the cause of the problem we seek to solve.
- Small but effective ideas tend to get lost & not voted on.
- We can reduce water consumption if we make the tenants pay the bill; reduce the number of stoplights if traffic safety record shows it is not needed; plant more evergreen trees; require all windows and sliders to be double-paned.
- Put 2 sheets together of choices. I didn't see a second sheet and used up all my green dots.
- I had a hard time assessing pros and cons of each suggestion. Some seemed over-simplified and redundant. There was a lot to take in and intelligently assess.
- It'll be clearer if each subgroup can give a short presentation (1-2 minutes) and add a paper about future action recommendations.
- Could have separate nights for Energy/Transportation/Land/Waste, but this was good.
- Costs should be posted so we are more realistic in what measures we should support.
- Thank you for all your hard work!
- I came in late (8:15 pm) yet still could read comments, assess large green dot-getters and add comments.
- Consider a facilitated discussion at each of the five topics at the next forum. For example, if I chose to be in the staffed group for Transportation, the interaction with others of like interests for 20-30 minutes could generate new ideas.

4. What was the most important thing you heard tonight?

- Understanding your process
- That serious consideration is being given to taking action.
- That the City is serious about reducing our carbon footprint and actually encouraging people to work towards that.
- The high percentage of GHG from Transportation is over 50%
- Individuals can make a difference. Thank you for inviting us to participate.
- Didn't realize that Davis had such an important influence in conservation.
- That we (in Davis) are working on this problem again!
- Something is being done - local awareness.
- Dialog between participants at stations.
- That you might entertain my suggestions.
- Team membership; Agenda/mission; Timeline – action/goals
- What the Climate Action Team is doing & how we can help
- That we are ready to go full speed ahead and take this issue.
- This is an on-going process
- The results will be put on the City website
- You are working towards sustainability
- Lots of people are interested
- There are lots of people active or willing to be on this issue
- The support by the City, the community to reduce the GHG is commendable.
- Go to the forum faster next time

- The many conversations among the many participants tonight! Glad to see people are aware and care enough to show up.
- People want a re-use center
- You wanted input from the public
- A good start has been made.
- That the City is making GHG reduction a priority.
- People understand the scope of the problem
- That a group is working on this issue. I was unaware of the Davis Climate Action Team.
- Community/residents are responsible for 97%! Places importance on individual actions.
- The key task will be to convince the skeptics of the importance of changing their lifestyle and/or business practices.

5. Do you have professional or academic expertise in this field?

- Lmerry@vervesolar.com – teaches solar industry seminars/solar technology
- John Johnston – Johnston@ecs.csus.edu
- Ken Kirsch – ken@makdesignbuild.com – certified green builder
- Lynne Nittler – lnittler@sbcglobal.net – 30 years living in Village Homes
- Bernadette Balics – bbalics@cal.net – Sustainable landscaping & agriculture
- Debrorah Whitman – deborahjwhitman@aol.com – Solar & trees
- Steve Goldstein – gold@omsoft.com – BA in Environmental Studies
- Sally Parker – sallystory@yahoo.com – Editor, The Flatlander
- Charles Persson – cpersson@davisenergy.com – Green building/renewable energy/ native drought resistant landscaping
- John Whitehead – jcw@dcn.org
- Rita Seiber – r6tan@sbcglobal.net – PhD in Chemistry – work for Dow Chemical
- Mike Siminituc – msimin@gmail.com – Zero Waste Events & recycling systems
- sorabaleh@aol.com – landscape design
- Scott King – sking@arb.ca.gov
- Steve Streeter – scisplanning@sbcglobal.net

6. Do you plan to participate in future events hosted by the City of Davis Climate Action Team?

Yes: 42 *No: 0* *Declined to Comment: 5*

City of Davis Climate Action Team
Community Forum
Thursday, June 26th, 2008

SUMMARY OF COMMENTS FROM COMMENT FORMS

Please share any additional actions for reducing greenhouse gases that you would like us to consider.

- Land Use – Design and modify the community to significantly reduce auto dependency by providing:
  - Convenient access to a dependable transit system
  - An easy and safe network of bike routes and trails with links to transit
  - Pedestrian friendly streets linking major destinations
  - A compact development pattern with a mix of homes/stores, schools and offices
  - Centrally located neighborhood serving retail and other services
  - A variety of apartments, condominiums and townhomes suitable for all family sizes and incomes
  - Squares and plazas, cultural centers, parks and playgrounds
- Prepare plans that promote compact, pedestrian friendly, mixed use development linked to transit which include specific land use and circulation components, design guidelines, standards and code amendments.
- I would suggest a good outreach program that explains the climate change science and how that interacts with plant and animal species, crop needs for special weather as opposed to our increased variability in annual weather.
- Plant large stands of bamboo, more neighborhood gardens, less paved streets, use pea gravel instead of cement in driveways, solar panels, ban swimming pools, more bike lanes off the street
- Restrictions on barbeques
- Encourage clothesline use. Get kids involved.
- Greening the City fleet
- Food scrap recycling at restaurants/event, mail 'Compost at Home' book to all residents, get post office to supply small e-waste recycling mailers
- Promoting 'car awareness' = driving less
- Partner with financiers to create options on low income housing that are sustainable to promote shorter commuters.
- Bring citywide uses to the downtown
- As a member of DANG, I strongly support neighborhood shopping centers and grocery stores.

- Community education so the majority who are physically capable of bicycling will actually begin to do so.
- Smaller homes & too many people driving their kids to school
- Building integrated solar cookers. Local community supported agriculture in town and community garden type areas
- City incentives to homeowners or renters for water efficient landscaping & gardening
- Promote a national carbon tax, carbon rationing and publicize the limit needed to prevent methane release by permafrost.
- Access expertise at UCD and State office to the fullest extent possible.
- Mark off a portion of downtown to all car traffic (similar to Santa Cruz).
- More sponsorship of classroom education
- Allow people to plant trees in the middle of cul-de-sacs.
- Obtain electricity from a utility like SMUD that pays you if you generate more than you use.
- CAT recommendations should be integrated into the City General Plan.
- Ban plastic bags and Styrofoam containers & require restaurants to use compostable take out containers
- Have the City test for sulfur hexafluoride (SF6) and aluminum and barium which could be killing our trees
- Encourage more biking among students
- Learn from Europe.
- Insulate existing homes or improving current insulation
- Plant evergreen trees along the freeway to improve air quality (Redwoods).
- Transportation is the key. We have to get people out of cars.
- Discourage sprawling, car-oriented development. Encourage infill, densification and development near transit (need more transit), retail, etc.
- Make RT more attractive to commuters. Point-to-point from Park-n-Ride lots to downtown. Add bike parking amenities at Park-n-Ride lots.
- Smart metering!
- Collect green kitchen waste for use in biofuel plants, pizza boxes, etc.
- Allow more granny flats & similar densification projects
- Volunteer EV charging stations
- Change all signaled intersections as round-abouts (reduced idling).
- Chemical trails – emissions of heavy metal particles in California's air space.
- Promote the idea of two or more families purchasing an electric hybrid or alternative fuel vehicle for local commutes. Increase funding to YoloBus & Solano Transit to increase bus service for commute times and weekdays.

Please identify any actions that we presented that you would like us to eliminate from consideration (and describe why).

- No PPA's on residential
- Eliminate new development of "senior housing" – encourage development of senior friendly infill projects currently proposed.

- City has not expertise and lots of potential to screw up power purchases. The money required to implement a PU strategy can be more productive if spent on conservation
- Zero net electrical use on new development is impossible at the present time.
- Don't make Davis an energy company. It is a consumer and policy setter: It's primary role is to sustain the community first, energy consumption by the City is secondary.
- Legislative ideas are likely to drive people away, i.e. requiring gardens.
- Actions that we can't do right now. Any 'emerging' technologies should be shelved until it is practically feasible.
- Moving parking from downtown. A healthy business community benefits a town.
- Take out the speed bumps & put in narrow strips of permeable material.
- Do not resort to relying on market forces – eliminate items that provide little benefit.
- Styrofoam recycling! Davis Waste & Recycling accepts #6 rigid plastic, but not Styrofoam. Eliminate Styrofoam use.

Please suggest any additional criteria that we might want to use to evaluate the potential actions.

- Immediacy of reduction. A reduction this year is much better than an equal reduction in year 2010.
- Physical/practical ease of implementation – regardless of the level of support.
- The categories of evaluations are excellent
- Include coordination with UC and Yolo County
- Cost vs. Return on Investment
- Waste related emissions may be underestimated – methane very potent GHG in short term
- Realistic achievement
- Transportation costs
- Resident costs
- Total effect on affordability
- National laws
- Whatever makes the most impact, not necessarily the most popular
- Group actions into cost categories
- Criteria that involves experimenting or testing new technologies
- Time to implementation
- Compare what other counties are doing & emulate their methods
- The normal/group process is confusing for many people who first participate. Could be better if people were given options to choose one or two out of the five stations to spend more time on a topic?

Do you have any other feedback on any of the proposed draft actions, or this process, that you would like to share?

- Concerns that City Council will ignore this work
- The GHG impact of waste seems underestimated.
- Make this fun for residents, use incentives, contests, prizes for participation, etc.

- Thank you for doing this! I look forward to riding my bike!
- Great job folks! Thanks!
- This was an excellent idea and people are enthusiastic.
- Set goals and measure progress: Zero waste, zero emissions, zero energy imports
- Individual incentives – individually owned shopping carts.
- Catagorize the evaluations, some can be implemented easily & immediately, others will be costly and unpopular
- Good effort!
- Implementation is a daunting task. Public education of the steps they can take will be important. Some focus should be on the school district. Provide green tips to the Davis Enterprise, as well as to the Sacramento Bee.

Transportation

Evaluation Criteria:
- Potential Green House Gas Reduction
- Cost to Implement Measure
- Ease of Implementation – Public Support
- Visibility of Measure – Raises Public Awareness
- Social Justice – Equity of Measure's Benefits

	Category	Action	Green Dots	Red Dots
A	Promote Comprehensive Transportation Planning	Promote regional cooperation to reduce commuting in single-passenger vehicles.	10	0
B		Require land use planning that minimizes motor vehicle transportation.	31	0
C		Market the plan to reduce carbon footprint aggressively; car-free days, bike everywhere days, etc.	21	0
D		Lobby for "green" state and federal incentives and regulations, e.g. improved CAFÉ standards, subsidies for mass transit, carbon tax.	12	0
E	Reduce Motor Vehicle Emissions	Install parking meters downtown to discourage auto use and reduce traffic congestion.	5	5
F		Eliminate on-street parking in downtown commercial zone and build peripheral parking structures to discourage auto use and reduce congestion.	4	8
G		Reduce speed limits throughout city to discourage auto use and to make biking and walking safer.	5	3
H		Establish a program to increase car pooling opportunities for commuters.	8	0
I		Promote car sharing by collaborating with UCD to attract a commercial car-sharing company to Davis.	22	0
J		Promote telecommuting; provide high speed internet access.	4	0
K		Install traffic circles in place of signals and stop signs to reduce motor vehicle idling time at intersections.	12	7
L		Reserve most parking spaces for compact and smaller vehicles and for alternative fueled and hybrid vehicles, to promote fuel efficiency.	7	3

	Category	Action	Green Dots	Red Dots
M		Create and improve infrastructure for alternative fueled vehicles, e.g. electric, hydrogen fuel cells	9	0
N	Promote Alternative Transportation Modes	Make bike lanes safer, e.g. double lines, restricted green waste collection.	12	0
O		Change traffic rules to favor bicycles.	10	3
P		Provide more bicycle pumps (compressed air) around town.	7	0
Q		Provide much more parking for bicycles, including covered secure parking, in commercial centers and at schools, libraries, and other major destinations.	19	0
R		Establish safe routes for bicycles and pedestrians to all schools and commercial centers.	17	0
S		Implement traffic calming measures on all streets to make biking safer.	13	1
T		Provide web information for bike travel: interactive maps, trip planning, etc.	3	0
U		Establish pedestrian retail zones downtown.	10	1
V		Make walkways (sidewalks, bike paths) more inviting e.g. more shade trees, benches, water fountains etc.	8	0
W		Revise UNITRANS schedules so that buses serve special events, e.g. football games, farmers market.	3	0
X		Locate UNITRANS and Yolobus routes and terminals so as to better serve downtown, outlying commercial centers, and schools.	10	0
Y		Provide lunch hour shuttles from UCD and high school to downtown.	4	0
Z		Investigate ways that buses can carry more bicycles, with assistance with loading them.	12	3
AA		Expand mass transit (bus, light rail) to nearby communities.	35	0
BB		Evaluate the feasibility of establishing an all-electric public tram system.	19	0

Comments:

- E – parking meters also encourage employees to park in garages, leaving premium on-street parking spaces open for customers and visitors.
- F – Instead of "eliminate" use "reduce" Peripheral park and ride w/frequent bus service at commute times. Promote a more ped. Friendly downtown.
- G – speed limits are already at legal minimums on most streets. Would prefer to see more off-street paths paralleling high-speed streets.
- K – traffic circles are a danger to bikes.
- L – preferential parking for electrics, propane, natural gas vehicles. No gasoline vehicles (including hybrids).
- M – natural gas (CNG).
- O – don't even think of allowing cyclists to yield at stop signs and/or stop and go on red signals.
- Traffic rules requires a lot of explanation – plus city of Davis doesn't have much impact on changing CVC.
- T – Please put commercial and entertainment destinations near the cities downtown transit hub.
- U, F – this doesn't work in the US as well as it does in Europe. Stores and restaurants need streets for deliveries.
- V – clean up abandoned bikes!
- W – also health sciences district at UCD – make easier to get around on campus.
- Z – I would rather see more bike parking at bus stops. Buses are only so big…
- AA – Amtrak/commuter rail more appropriate.
- AA – commuters hits a big target.
- BB – works for the old folks.
- Coordinate traffic signals so can drive across town without stopping at every signal (seemingly) with increased idling time and decreased gas efficiency.
- How about a rebate program for electric and natural gas vehicles like the one in Vacaville?
- Have the city help launch a human-powered courier service (like the Center for Appropriate Transport has in Eugene, OR).
- Light rail to Sac.
- Public transportation should be free.
- City-edge retail farms (no food transport).
- Eliminate or significantly reduce high-schoolers driving to school, except in cases of demonstrated need.
- Create more bike racks and storage in downtown at train station to encourage bike usage.
- Highly support a UCD/Downtown shuttle 10am-2pm every 5 minutes!
- Publicize good activities to make riding bikes, using public transportation, carpooling, hybrid and electric vehicles seem "cool". Example: Ask a Hollywood celebrity with his/her Prius to participate.
- Substantially expand/improve bike parking, including large spaces to accommodate cargo trailers, before moving any further with plans for any construction of more car parking.
- You can drive across the city of SF on Geary Blvd. @ 5mph below the speed limit and never stop. The same could be accomplished on Covell Blvd. When I drive across Davis on Covell I spend 55% of my trip sitting at stop lights waiting for traffic that is not there! Please see follow up email.
- Concentrate commercial and entertainment centers near transit hub downtown.
- Pedi cabs – lower DUI's, lower fuel, increase social contact. City promoted/financed. Student operated or homeless/jobless employment for tips. Weekends and Weekdays and lunch and night.
- Promote across the country ridesharing. Drivers and riders go to a city website, they give personal references and share rides across the country.
- Create public transit that is ongoing in downtown to minimize stopping and starting of autos (single uses) in downtown.
- Does telecommuting work in all instances? If you are the only one heating/cooling your house when at work you are heating/cooling for many.

- Cities with "civilized" traffic plans hardly needs stoplights. Its all traffic circles and turning lanes.
- Create public transit for campus use of downtown for lunches and dining in downtown for Mondavi and other campus users to minimize single auto use to maximize exchange.
- Work on getting kids to ride to school – charge high school kids for parking. (*comment on this comment: "Great idea!!!")
- Make downtown Davis a "no car" zone, accessible only via bike bus and shuttle.
- Require (offer?) small electric car/gas car exchange program (reduce gas cars over time for in city use).
- Need train at night.
- Multi-story, multi-use buildings within city limits to reduce commutes.
- I would like Covell Blvd. changed so the stop lights are synchronized. Now all autos stop at most lights. This small change would help reduce emissions in our air in Davis.
- Eliminate parking requirements for houses (goes against high-density co-housing, infill…).
- More aggressively promote bicycles and electric cars. Discourage ICE's.
- Recognize and provide (as necessary) utility efficiencies of downtown densification.
- Make the high school parking lot a pay-for-parking lot to encourage students to bike to school.
- Roundabouts are extremely dangerous. Do not promote them! Downtown parking for seniors and disabled must be multiplied.
- Close streets downtown to car traffic, encourage foot traffic!
- Kids almost naturally want to do the right thing for the environment—but we can't always get them motivated to ride their bikes to school, swimming, sports, camps… here's an idea my wife came up with to give them and incentive: driving our van around town cost approx. 30cents per mile and we'd much rather give that to the kids than to Chevron. She tracks the trips that each of them cheerfully take to destinations around town and we periodically pay them for their miles ridden. The $ goes to the kids, everyone is healthier and the earth is better off.
- Many Davis residents work at gov't facilities in the Arden/Fulton AV areas. Transportation that requires fewer transfers is needed – with better bike options in Sac.
- More velo-cabs (bike cabs) to transport people around town – good jobs for teens/young adults.
- Slower design speeds on streets! (people whiz down J St. at 45 mph despite the 25 mph limit).
- Put bikes downtown for "loan" like they do in Amsterdam.
- Traffic calming—as practiced on some Davis streets—does not make for a safer cycling environment—e.g. bulbouts that constrict bike lanes or create conflicts between cyclist and motorists—esp. at right turns.
- Make biking <u>safer</u> overall by widening bike lanes, enforcing traffic speeds more aggressively and re-paving cracked streets.
- Taking away downtown parking or making it more metered = bad for out of towners, bad for shop owners, bad for elderly or less-abled.
- For travel to Sacramento, having the capacity for only 2 bikes on a bus is extremely limiting. Ger more bikes on buses.
- Close off a portion of downtown to all car traffic (similar to Santa Cruz).
- Promote use of passenger trains, including more bike parking at Davis' train station, lobbying state and federal governments, etc.
- Lets make walking in Davis a delight – not just downtown, but in the "taste-free" spaces too! See walkablecommunities.com
- Put pressure on Caltrans to clean the Yolo causeway bike path as it often has glass which causes flat tires.
- Provide free bike helmets, bikes, lights, baskets, and water bottles.
- Publicize businesses or organizations which give bonuses to their employees who commute by public transportation, carpools, bike, or walking.
- Four words: FIFTH STREET ROAD DIET.
- Have big map (like UCD did) where bicyclists can come and write down notes about exactly where there are problems, e.g. bike path needs to be repaired, etc.

- If the climate action team and the city council are serious about changing the transportation mix, then any po0licy decision that affects automotive transport vs. alt. transport/ped/bicycling should always be biased toward the latter.
- Change the value system that says bicycles aren't worth spending real money on.
- Subsidize purchase of electric vehicles, cars, and scooters.
- Establish cleaning (clearing?) house (website, phone #) for single occupancy vehicular trips out of town.
- Do as Paris does with the electric bikes/scooters. People use cards to "rent" them to go to another location. Parking for scooters/bikes is where those scooters/bikes are picked up and dropped off.
- Fifth street road diet.
- Be sure to remember the link between UCD campus and downtown. Support idea of lunch time shuttle.
- In addition to providing a shuttle UCD to downtown, provide shuttle (van) on campus so people to have to drive their cars to get to meetings at various campus location. E.g. health sciences district to quad and back, etc.
- Traffic calming (i.e. roundabouts) often lead bikes into traffic in same lane as cars. Can this be worked on?
- Let the public ride Unitrans buses free of charge…these numerous mostly empty gross emitters are leaving a gigantic footprint—at the end of the line (sycamore, for ex) turn off the motors while they sit and party for 5-10 mins.
- Implement a city gasoline tax.
- Community bicycle education outreach to answer questions for the uninitiated and practical advice for bike purchase and bike transportation.
- Driving to schools—have a "green coordinator" at each elementary school help to set up bike pools for kids
- Charge students to park at the high school.
- Promote travel by train—efficient way of moving people and goods.
- Change the value system that says anyone's life can be improved by having a bigger motor vehicle.
- Close down the Go Cart Track which wastes petro and increases carbon. It is located where the city's new salvage yard should be.
- Bicycles/yolobus=2? 2 bikes per bus is upsurd. We used to be able to load 2 bikes per bus in the wheel chair spots when not in use—20 years ago we load 2 bikes at rear except in rush hour (ok against the direction of rush hour though). In 20 yrs, still 2 bikes/bus????
- Provide safe bike access to and from downtown. 5th street currently unsafe. Ditto G. St. between 4th and 5th. Access to 8th going west from G & H. It's difficult to shop on G St. with a bike trailer due to unsafe routes.
- Current buses are worthless unless going to UC or Sac/Woodland –develop buses shuttles, or trolleys to major destinations in town (stores, schools, parks, etc.).
- People (except for people who work there) should pay to park in school parking lots, i.e. high schools.
- Help people have great experiences on a bike. Use city funds to have a farmers market—bike evaluation help on fit, what need to do with bike. Checklist for comfort and safety.
- give free or reduced cost bike lights in safety program.
- would like to see Davis develop a "no drive day" (except for absolute necessity).
- will your favorite retired UCD professor or any of our elderly actually find public transport useable?
- Pedi-cabs (see other post-it).
- Encourage building bike paths off the street to promote families with young children to feel safer biking. The next generation will need to be raised as bikers.
- Improve bike racks to accommodate bikes w/trailers.
- Once a quarter, promote "free" bus days to encourage ridership.
- Advocate for a Secure Rail service. Metros and minibuses connecting to high speed rail. Connect our cities our state, and the whole country as other progressive counties have done. We are really backward in this area.

EXPLANATION FOR RED DOTS:

- B-E – too many people already head to Vacaville/woodland to shop because faster/more convenient.

- B-L – need to enforce big cars NOT using compact spots.
- E, F – we need to make the downtown accessible to encourage more people to shop downtown. Don't make it onerous to get there. Also, much of the reason to go downtown is to shop, and we need to carry purchases to our near by cars.
- F – a large part of the reason to drive to downtown (as opposed to biking) is the need to carry something purchased home. We do need to drive downtown. Also, taking the family our for a social evening downtown requires a car.
- F – my grandpa is old. How do we accommodate him? And how do we involve him? Maybe reserve downtown parking for older folks.
- G – I think the existing speed limits are reasonable and consistent.
- L – compact parking spaces do not encourage acquisition and use of smaller cars. They create frustration and door dings. (compact spaces in city garage at 1st and F are too small for even compact cars! Boo!)
- Z – too many bikes in Davis for bikes on Unitrans to be practical. More bikes on Yolobus would be good.
- Will harm merchants business and income.
- Link land use policies to transit priorities.
- Require mitigation of new traffic through transit funding.
- Locate new development where is will help, not hurt, transit/pedestrian mobility.
- Bike sensors (that work) at intersections.
- Make road/paths bikable w/out long-term spinal injuries. (fix cracks, ramps, huge holes, e.g. 2nd Street).
- Allow some large streets to have higher speed limits to get across town. This will encourage speedy drivers to stay off small streets.
- We do not want to prohibit all vehicle traffic in downtown. Perhaps on some streets – create a pedestrian "mall" but some of us do not get around well and cannot walk far. Need to consider that when making these rules. Also, some of us live downtown or close to it and we need parking and vehicle traffic for that. Also, it is good to encourage housing in the downtown, perhaps above retail, to keep it alive and busy.
- City could develop a buy-back program to discourage people (students) from abandoning their bike in racks.

Energy Use and Production

Evaluation Criteria:
- Potential Green House Gas Reduction
- Cost to Implement Measure
- Ease of Implementation – Public Support
- Visibility of Measure – Raises Public Awareness
- Social Justice – Equity of Measure's Benefits

	Category	Action	Green Dots	Red Dots
A	Energy Production	Produce 100% renewable electric power for Davis in or near city	28	1
B	Energy Production	Implement citywide PV project to displace city's PEAK DEMAND on PG&E	10	0
C	Energy Production	Identify solar potential on existing low income housing	1	0
D	Energy Production	Actively encourage homeowners to install solar PV and solar hot water	23	0
E	Energy Production	Require city to purchase 100% green power	5	3
F	Energy Financing	Pursue Power Purchase Agreements (PPA)	1	2
G	Energy Financing	Create a "Berkeley type" financing district to enable Davis residents and small businesses to finance solar and energy efficiency improvements.	25	0
H	Energy Financing	Create a Community Choice Aggregation (CCA) entity to provide Davis with 100% renewable energy and reduce cost of distributed systems through mass wholesale purchase	17	1
I	Energy Financing	Encourage bulk purchasing for energy efficiency and solar projects similar to "Go Solar Marin" and Northern California Power Authority.	13	0
J	Energy Financing	Actively advertise tax rebates and incentive programs	12	0
K	Energy Financing	Investigate grants for retrofitting low income housing	13	0
L	Energy Financing	Use proceeds from sale of carbon off-sets to finance carbon-free energy projects in Davis	1	3
M	Energy Financing	Provide financing strategies to school district to implement energy saving programs	6	1
N	Energy Efficiency	Expand city's green building requirements for new construction and retrofit	33	1
O	Energy Efficiency	Install solar PV for pool facilities	5	0

	Category	Action	Green Dots	Red Dots
P	Energy Efficiency	Add LED/energy efficient decorations to Davis Enterprise Christmas light competition	1	0
Q	Energy Efficiency	Require all new buildings in Davis to be net zero electricity users	21	3
R	Energy Efficiency	Require all existing buildings to meet an energy efficiency standard by time of sale	7	5
S	Energy Efficiency	Convert traffic signals, street lights and park lights to more efficient technologies as they become available	11	0
T	Energy Efficiency	Reduce heating and cooling by promoting light colored roofs/Cool Roof on re-roofing projects throughout the city	17	0
U	Energy Efficiency	Require tree or solar shading for parking lots.	13	0
V	Energy Education	Actively advertise tax rebates and incentive programs	8	0
W	Energy Education	Encourage elementary, junior high and high schools to emphasize energy efficiency in curriculum	18	0
X	Energy Education	Implement city wide and neighborhood based outreach programs to promote participation in energy efficiency projects	14	0
Y	Energy Education	Educate public about integrating trees and solar PV	7	0
Z	Energy Education	Create city 'thermometer' to show progress on GHG reduction	19	0
AA	Energy Administration	Hire full-time city energy manager to maximize city's use of rebates and grants	1	3

Comments:

- A – red, renewable energy projects are usually land intensive. I prefer surrounding land to remain agricultural use.
- B – have the city buy solar panels for roofs @ wholesale cost and hire full time installer to reduce overhead costs.
- D – "encourage" is good, but does nothing to advance. How about incentive, or COOP PV fields w/in or adjacent to the urban planning limit.
- R – for example: ceiling insulation.
- R – This is the only way the efficiency of existing stock can be addressed.
- S – start building traffic circles instead of stop signs and lights.
- U – existing, but needs real follow up and enforcement.

- U – this also promotes bicycle/ped use.
- Permit citizens to contribute on H2O bills to a greenhouse gas reduction fund for local projects—such as solar on schools, or insulating flat roads.
- Household size wind turbines—or on street lights.
- Feed in tariffs for excess energy.
- A major item for some of use is the cost of loans for installing photovoltaics – a city-supported loan or incentive program could be helpful.
- Didn't understand all the terminology, which could affect "voting."
- Aerial infrared dark night photo of Davis, so people can see their house and where energy is leaking.
- Offer incentives/green building credits to apartment complexes willing to retrofit their units w/solar panels, green roofs, energy star appliances, solar hot water, and allow composting.
- Build shade structures w/PV panels over city parking lots. Encourage schools, businesses, etc.. to do the same.
- (on above comment) Yes—great idea—build them, don't wait for schools or businesses to be able to afford this up front.
- Instead of requiring existing buildings to meet energy std at time of sale, require an energy audit at the time of sale – require disclosure but not retrofit .
- (on above comment) Good idea.
- Promote change out of wood burning fireplaces. Ordinances against burning wood fires—altogether or at least during poor air days!
- Solar panels on school buildings.
- City-edge retail farms (save oodles of energy, and produce it, too!) .
- Require chimney retrofit by sale of house.
- Turn down the air-conditioning. It doesn't need to be so cold. Maybe change summer dress codes to that we don't have to cool buildings to accommodate people in slacks and long-sleeved shirts.
- Highly support a UCD/downtown shuttle 10am-2pm every 5 minutes!
- (on above comment) Yes!!
- Extend horizon of retrofit paybacks for energy reduction upgrades.
- Provide homeowners and landlords to borrow $ from cit to insulate old homes and pay off costs over 5-15 years add line item to utility bill.
- Put a real estate sales tax on all sales and use funds to finance loans to home owners to retrofit their homes w/double pane windows, etc.
- Require blown in wall insulation in house upon resale.
- Require flat top roofs to be insulated when reroofed add to reroof permit.
- For those who cannot install solar roofing panels because of shade trees or house orientation, allow families to buy into a PV development (farm) outside the city. Once they have bought-in with an investment based upon their past energy use, then they would get their power from the PV farm instead of PG&E.
- Power all public schools from 100% renewable energy.
- Favor progressive new energy-saving building techniques over other project goals.
- Celebrate 4th of July, etc. sans fireworks. Donate burned money funds to save our schools and celebrate that!
- Ban leaf blowers/save gas!
- Use funds from new construction "zero" energy requirements to provide a loan program to retrofit/insulate old houses.
- Use a city revenue bond to finance and addition to Solano wind farms and use that win energy in a community aggration type plan.
- Install solar on all school roofs (large and flat) do not expect schools to pay for this up front. Assess all roofs for solar potential – I don't use much electricity, but my roof could be ideal for some solar panels—may not directly benefit me, but many roofs together could benefit all of us.
- Do a study on why all our trees (shade) are dying in Davis.
- Give solar reports to public.

- Stop allowing building height increases without first analyzing effect of adjacent passive solar (or neighbor windows) design. The no-review allowance of second stories undoes the earlier implemented passive solar design! Little things count.
- Solar ovens, clothes line (no dryer use) and compost in every household!
- If the Covell village site was used for solar thermal (i.e. parabolic through collector) it would generate enough electricity to power all of Davis at a similar rate to that charged now ($.1156/kwh). Let's do this! Alternatively, use land near the sewage plant.
- Community involvement will be much broader if we make this effort competitive, challenging- i.e. contests, challenge Woodland to a GHG reduction contest. Example: challenge residents to go carfree for a month – make the prize for the winner one of those GEM cars the city proposed to get rid of.
- Use low income weatherization pgm. Model to improve efficiency and health of all older homes.
- Involving all educational institution in energy efficiency and waste reduction is very important to continued success.
- Clothesline use in Davis – give incentives, educate public about using them, set up program to install them. –"solar powered" clothes dryer. Do certain communities have ordinances against clotheslines?
- (on above comment) Yes! More drying racks, fewer dryers. Also, phase out leaf-blowers in favor of NON-motorized tools (rakes?) 1-hr of those noisy machines uses the energy equivalent of driving 350 miles!
- Start to promote solar energy collectors on city parking lots. Double gain cover for cars and electricity.
- Investigate/develop financing strategies for high-insulation retrofitting.
- Promote use of solar ovens. Cheap way to cook, especially in a city with many sunny days.
- Strongly encourage "solar" drying – using outside clotheslines to dry clothes April-October. 1) offer free clothes line rope and pulley 2) offer low-cost umbrella clothesline pedestal. F/up with phone call to assess clothes line usage and promote media of this.
- Phase out gas-powered leaf blowers and wood-burning fireplaces.
- Make a big effort to educate people about the energy effects of air-conditioner use. Many people run their when it's cool in the evening.
- How about turning some of our water intensive green belt lawns into areas for PV panels for residential homes.
- Limit square footage of homes –no more 4,000sqft houses!
- Find ways to help people choose energy-efficient heating and cooling systems so that they can afford to spend more for a new system. Education, low-cost loans, rebates, etc.
- I head of 1 new housing place in town (park Santiago) with long CR & RIS (?) preventing people from hanging a clothesline in their yard. Please consider a city ordinance preventing such restrictions and encouraging energy resource conservation.
- Plant big shade trees.
- Require all new public buildings (incl. schools) to be energy autonomous.
- Use ESCO's for residential and homes building retrofits.
- Subsidize residential purchase of waterless water heaters.
- Favor energy saving building materials and techniques.
- Produce city google map of solar installations.
- Do solar and EE tours!

EXPLANATION FOR RED DOTS

- A – I didn't put a red dot here – but I do not support using land to do this – we should be making use of roofs – rather than taking up additional land and probably a net GHG benefit.
- E – the market should make this more affordable in the long run.
- E, F – this could cost a lot of money in the long run.
- H – There is a lot of waste getting power to places, like groceries there is a transportation cost: look at the whole picture of energy – may not be "green" and may be very expensive (better to reduce).

- L – just use carbon off-sets as extra cash—the City of Davis is not a VC for power and any power savings should be on their own merits.
- M – the school district should let the market decide whether this should be done.
- Q – incompatible with multi-story higher density development.
- R, Q – government really needs to let the market handle this. We don't need more regulations.
- R – could be too expensive for individual homeowners.
- R – too complicated and expensive to implement.
- AA – the city is already experiencing budget difficulties. Need we make it worse?
- In response to other red dots, we need to pick items that will be most effective or we will pay through increase in fires, weather instability, crop losses. Money won't matter so much then.
- The best megawatt is the one that is saved through frugality.
- Green building requirements should be encouraged, not required. Not everyone can afford to pay for the higher costs.
- The LED Christmas decoration idea is cute, but how about changing all street lights to LED? Ann Harbor Michigan is doing it, as well as Dusseldorf, Germany.

Land Use and Community Design

Evaluation Criteria:
- Potential Green House Gas Reduction
- Cost to Implement Measure
- Ease of Implementation – Public Support
- Visibility of Measure – Raises Public Awareness
- Social Justice – Equity of Measure's Benefits

	Category	Action	Green Dots	Red Dots
A	Land Use and Community Design	Revise land use standards to encourage higher density, create compactness, and minimize sprawl; link increased density to requirements to reduce greenhouse gas emissions	32	0
B		Adopt LEED neighborhood design standards	11	0
C		Locate new homes within walking/cycling distance of grocery and other stores	17	1
D		Locate new homes within walking/cycling distance of schools	10	3
E		Promote residential/commercial mixed use development	14	0
F		Provide incentives for projects that exceed current energy efficiency standards	8	0
G		Allow for flexibility in standards to facilitate green building construction	11	0
H		Design street layout, building orientation, and landscape to accommodate passive and active solar energy systems and to capture natural cooling and heating opportunities	38	0
I		Institute growth boundaries, ordinances and programs to limit sprawl	14	0
J		Create incentives to develop retail opportunities	1	1
K		Promote redevelopment and infill	16	0
L		Make bicycle routes primary or equal, but not secondary, to automobile routes	33	0
M		Increase parking lot shading requirements	3	0
N		Raise size limitations for granny flats and other Secondary units to allow broader use	5	0
O		Allow reduced street widths and clustering of on-street parking.	4	2
P		Require community or neighborhood gardens	9	3

	Category	Action	Green Dots	Red Dots
Q		Allow community forests for carbon sequestration	10	0
R		Encourage no-mow landscaping in all greenbelts	21	0
S		Promote "Transit Oriented Development" projects. (integrate mass transit, walking, bicycle)	19	0
T		Create mitigation mechanism to use funds from new development to upgrade energy efficiency of existing development	2	3
U		Amend the General Plan and the EIR process to address climate change	19	0
V		Establish specific goals to reduce "vehicle miles traveled"	7	0
W		Provide incentives for car and bike sharing programs	11	0
X		Plan for "senior housing" and other downsizing options to create move up opportunities	7	2
Y		Permit the option for new development to mitigate loss of farm land through farm easements or purchase	1	0
Z		Permit construction of "green roof" or reflective roof tops	12	0
AA		Create incentives for residential options that increase the potential for people to work and live in Davis	15	0
BB		Evaluate parking requirements to encourage increase use of non-auto transportation	18	0
CC		Encourage "green" businesses to locate in Davis	8	0

COMMENTS:

- C – Support general plan policy that put citywide uses in our geographical center.
- C – Please incentivize more dense residential near UC Davis and the transportation downtown.
- D – This will not be possible as schools close down due to declining enrollment. Would like to see transit emphasized in this case.
- G – Edible landscaping, no lawns, more urban gardens (to grow food).
- J, T, X – The market should decide this one.
- L – "automobile routes" are bike routes – don't think of streets and roadways and primarily for autos!!
- O – downtown is already a zoo to navigate at times without shrink street widths and complicating things .
- P – Long-term designation of community or neighborhood gardens or land exchange for alt. locations.
- R – I can support this if it weren't "all."

- T – funding program for retrofitting of existing development is a great idea; however new development should not be the funding source.
- X – Eliminate prop 13 and this problem solves itself .
- BB – get rid of minimum parking requirements! That is so behind the times. I assume it was parking requirements, or at least an auto-oriented mentality, that gave us that ghastly new parking lot at 2nd & C (NW corner). The new building is great, but the parking lot is like a missing tooth in a smile. Yuck!
- Have local schools reduce their lawns. Replace them with mulch and native, non-irrigated vegetation.
- Dramatically increase water costs if one has a lawn. Or reduce water costs if no lawns.
- Create an incentive program to remove lawns in town. Award for street w/most lawns removed in year.
- Allow housing downtown w/no parking requirements. Renters can't rent there and own a car but get cheaper rent.
- Encourage more attached second units instead of unattached second units.
- Put in more roundabouts and get rid of more stop lights. Pole Line Rd Covell Village idea.
- Get stop lights to be timed. Allow citizens to tell city when lights aren't timed.
- Support neighborhood shipping centers – including grocery stores – people west of HW 113 have to go across 113 to obtain groceries.
- Provide incentives for new residents moving into units near/in downtown, public transit who don't own cars, or own one per family. If the city requires minimum number of parking spaces per unit or issues parking permits for residents, reduce or eliminate the requirements for parking spaces. Give substantial financial incentive not to have parking permit (e.g. Make parking permit more expensive, something residents have to pay for, separate from cost of the unit where they live.)
- Passive heating YES, efficiency – use what we've got!
- Put citywide uses at our geographic center → Downtown.
- *See attached scanned letter "City-edge retail farms."
- Any redevelopment and/or infill should protect and maintain the historic neighborhoods of Davis and quality of all existing neighborhoods.
- Densify downtown residential – offer incentives 1) near UCD 2) Concentrated in center of City.
- Need incentives for land-lords owning single family homes to improve energy efficiencies in 1960's and older homes.
- Implement City repair projects (like Portland's) that encourage residents to work collaboratively on green-building/garden-building/community building projects.
- Encourage farmers to use cover crops rather than importing N fertilizers. Flour mill for processing local wheat. Encourage people to use their yards to grow food, lawns require too much water.
- Emphasize small farms growing for the local populations over large-scale commercial agriculture. In Walking the Flatlands, Mike Madison says "Supplying local needs would require less than 20% of the land in the district." We have the land resources to meet local food needs, lets change policies so we can do it.
- Make safe, well-lit, park! Ride and rideshare parking lots. Offer car share and van share services.
- Adopt Berkeley's solar financing program for energy efficiency upgrades. A low interest loan program implemented through city utility bills. Green the 1950's houses!
- Make GHG emissions reduction as a goal of general plan (mandatory policy).
- Concentrate infill on underused industrial sites near downtown – go way up on PG&E, for example, with international design competition. Preserve some of cottage-scale in historic downtown. It is how we densify that counts.
- Providing incentives can start the momentum. A few people take advantage and become the examples that others follow. It works – we Prius owners know it.
- Incentives for more compact residential near UCD (our largest employer) and our mass transit hubs. Downtown..
- Facilitate multiple uses in downtown for retail and services
- City should provide utility efficiencies to accommodate densification where appropriate, such as downtown.
- Reduce city council's 1% growth rate.
- Concentrate commercial and entertainment uses at the city's transit hub (downtown).

- Modify parking requirements to discourage large and multiple vehicles. Especially downtown.
- (better) interact with UC Davis for transportation and housing/land use planning.
- Please incorporate energy saving/green building techniques over other goals.
- Favor new cutting edge energy tech. over other project goals like subjective design guidelines.
- Promote/support co-housing.
- Do not allow CC&Rs w/in the city limits that discourage environmentally friendly practices (i.e. Pargue Santiago CC&Rs which forbid clothes lines).
- Offer incentives for development or redevelopment in the downtown for commercial purposes.
- No more Wildhorse or Evergreen, Shasta, Wright, & Moore are the antithesis of smart growth. They are pretty, walled-off streets. They're dead. I've walked on Wright and Moore at all hours and they are dead zones. Did the houses behind those walls really need to be protected from the low #'s of car that use the streets? Don't wall off streets. Insist on grid street systems—Covell Village was not a grid and it was not "smart growth". Grid streets, lowered speed limits, traffic lights timed for bikes, and peak oil will improve bicycling conditions.
- Use traffic circles instead of stop lights.
- Don't develop parks, playgrounds far from living areas (unless shuttles can be done well, economically, & environmentally).
- "Requiring" seems hard to do—creating more opportunity seems better.
- Replace lawns with native drought resistant plants, low water landscape and permeable surfaces. Grow as much food as possible on our own properties. (green dot)
- Yes! Permeable, tree-shaded parking lots and no free parking downtown. Also, give renters the option to opt-out of parking spaces (separate rental costs and parking costs like SF does). Bikers and car-free folks can save big on this.
- Parking lots should be permeable pavement.
- Implementing LEED-ND would include some of the other items as a subset.
- Instead of locating houses near schools, locate schools near houses. The former encourages edge construction.
- Community gardens – criteria #4, community education, especially the youth! export gardeners! This goes with high density development, it does not detract from it.
- Support general plan policies that put citywide uses in our geographical center (downtown).
- "Mitigating" the loss of farmlands or natural lands is STILL A NET LOSS! We are going to need all the farmland we have, I'll bet!
- Be proactive—peak oil will eliminate the need for parking requirements.
- Don't require community gardens but asses greenbelt use and where it is low – allow community gardens.
- More neighborhood cafes so people will have places to socialize and also can walk to.
- Incentivize more dense residential near UCD (Davis' largest employer) and the transportation hub downtown.
- Promote the establishment of city-edge small farms where residents could buy local products – thereby reducing food transportation costs.
- Everyone likes smart growth and infill until it comes to their neighborhood. Council generally gives in (with the exception of Cal-Aggie House). So what do we do about this?
- Build up, not out in locations as close as possible to UCD or downtown (or in downtown or at UCD) so people can walk or bike. No urban sprawl!
- Support general plan that puts citywide uses in downtown (center).
- Enforce the general plan policy requiring neighborhood grocery stores.
- Urban sprawl is neither green nor smart. No development on periphery of Davis and no change to measure J. Support existing General Plan.
- Explore ways to encourage improved insulation in existing homes (the option on the list –using funds for new construction is obviously not popular but there could be other ways to do this).

- Take care on deciding how many "green building REQUIREMENTS" versus Incentives or rebates. Suggestion: homeowner tax reduction x 2yrs for replacing roof with "white, solar reflective" or other energy-saving measure.
- Require thick, insulating walls for new construction so building will not require heating or air conditioning. Require designs to pass an "energy design" approval.
- City should not allow CCRs to require front yard lawns or make roles against vegetable/food gardens in front yards.

EXPLANATION FOR RED DOTS:

- C – need cars to carry goods. It isn't reasonable to carry a week's worth of groceries home on a bike.
- X – provide financial incentives for downsizing – greening has little to do with it.
- Red dot on senior housing – we do not need a large, isolated senior housing development. Seniors can move to any home in the city as they become available if they want to downsize. I am a senior and want to remain in my home till I am carried out. We can accommodate senior housing in many of the housing committee update recommended infill sites in the city. We already have policies for senior or disability housing such as accessibility and resistibility. Employ these in all new development.
- How about locating new schools near existing homes?

Consumption and Waste Reduction

Evaluation Criteria:
- Potential Green House Gas Reduction
- Cost to Implement Measure
- Ease of Implementation – Public Support
- Visibility of Measure – Raises Public Awareness
- Social Justice – Equity of Measure's Benefits

	Category	Action	Green Dots	Red Dots
A	Consumption and Waste	Institute a City of Davis green innovation award program.	6	0
B	Consumption and Waste	Train high school students to become "Waste Reduction Monitors" that judge the performance of local restaurants on waste practices.	5	1
C	Consumption and Waste	Encourage greywater collection and use.	34	0
D	Consumption and Waste	Encourage on-site wastewater processing for new developments.	3	4
E	Consumption and Waste	Expand and promote the Davis Freecycle web site.	9	0
F	Consumption and Waste	Develop a City wide rainwater collection and usage program.	31	0
G	Consumption and Waste	Encourage natural storm water drainage and retention in landscaping design.	32	1
H	Consumption and Waste	Reduce the water used for irrigation of the greenbelts by 50% and require no long term irrigation on new developments.	23	1
I	Consumption and Waste	Conduct a community education campaign on the environmental impact of meat consumption.	10	5
J	Consumption and Waste	Encourage citizens, organizations, and businesses to buy locally produced food.	19	0
K	Consumption and Waste	Expand curbside waste pickup to include more recycling and wet composting.	20	1
L	Consumption and Waste	Recycle Styrofoam citywide.	8	1
M	Consumption and Waste	Adopt Zero Waste Goal for our community.	22	0
N	Consumption and Waste	Promote a campaign to "Give the gift of an experience rather than an item".	3	0
O	Consumption and Waste	Develop a biogas energy facility.	8	1

	Category	Action	Green Dots	Red Dots
P	Consumption and Waste	Promote "time of use" water metering.	16	0
Q	Consumption and Waste	Eliminate heavy metal batteries within the City of Davis and beyond.	2	3
R	Consumption and Waste	Implement cradle to cradle (lifecycle) appliance recycling program.	6	0
S	Consumption and Waste	Encourage installation of Energystar appliances.	5	0
T	Consumption and Waste	Implement City policy that favors contracting with companies that are energy efficient and use non – toxic chemicals.	12	1
U	Consumption and Waste	Implement city policy favoring the purchase of local, climate friendly, and recycled content products.	13	0
V	Consumption and Waste	Mandatory construction waste recycling (in progress thanks to DWR).	5	0
W	Consumption and Waste	Create a city salvage yard to promote reuse of goods.	40	0
X	Consumption and Waste	Provide reusable utensils, dishes and water containers at City Facilities to enable zero waste events.	8	0

COMMENTS:

- B - Why just high school for "B"; should be K-12, youth is the key!
- H - Promote city and private planting of drought resistant indigenous plants.
- H – Our greenbelts could be vastly improved. I regularly ride through the north Davis ones and strongly feel that most of the grassy areas are underutilized. Lets grow food there. Lets plant drought-tolerant plants that are beneficial to good bugs. Finally, lets never, ever allow any more greenbelts that have houses backing up to them instead of facing them. They're not safe after dark and they're much less lively than they can and should be.
- H – Why is there not more up here about water? We should be most concerned about this, of all goods.
- K – add restaurant food recycling.
- X – you bet! Lets start w/4th celebration 08!
- City-edge retail farms (very local food) cuts waste dramatically. (green dot)
- Disposable shopping bag levy in supermarkets and other stores—use the monies to fund bag-making workshops! Added bonus: supermarkets can lower their prices by reducing bag-related expenses.
- Better monitoring of watering (I see apartment campuses and individual homes watering in the middle of the day – and have called up apartments to complain!) and broken irrigation systems.

- Require waste reduction measures on all new development (stormwater capture, toxic paints, energystar appliances).
- Sign up with USPS for e-waste mailers. Recycle batteries, phones, ipods.
- Encourage people to reduce waste and collect trash less often.
- Improve city water quality so people won't buy bottled water.
- Garbage production and collection. Use of garbage 1) have a program of shared containers for neighbors 2) find a way to give incentive to those who produce minimal garbage 3) more emphasis should be given to recycle items and material disposed by residents.
- Adopt a "pay as you throw" garbage collection rate structure to incentivize waste reduction. Many other cities in CA have this structure in place. (Right now residents w/small garbage cans in Davis pay the same collection fee as those w/large cans.) (green dot)
- I'm all for promoting local businesses and eating home-grown produce but I think a more thorough analysis of food miles is needed here. What is "local"? Is it better to distribute lost of food with a big vehicle than some food in a smaller truck?
- Make building materials from garbage, plastic bags, etc.
- I recycle and compost and have very little in my garbage yet I pay the same amount as those how fill their container. (green dot)
- Awareness that cement is one of top 5 sources of GHG – reduce use of cement city wide. This also has potential to reduce heat-island effect.
- Promote bulk purchases (no packaging).
- Ban gasoline powered leaf blowers. (green dot)
- City should sponsor educational workshops on energy use (residential) carbon footprint, water use, lifestyle impact, etc.
- Provide concrete help (city staff or trained volunteers) to install rainwater/greywater system in so many homes per year –same for solar panels, clothes lines – perhaps for folks under a certain income or over a certain usage level. Experiment with waterless toilet system – install these in a few volunteer homes to see how this works.
- Remove 50% of lawns in schools around perimeters of soccer and play fields. Replace w/mulch and native trees. (green dot)
- Change city ordinance to allow hoofed animals to eat lawn/shrub waste. Reduce green waster and eat local. (green dot)
- We have a change to make our wastewater treatment plant produce all the energy it needs as we upgrade it. (*see attached scanned article "Wastewater Sludge: A New Alternative Energy.")
- Waste is not a renewable resource. Waste=food.
- Do not outlaw heavy metal batteries – batteries are needed to store solar and wind energy. What has that to do with GHG's anyway?!!
- No more sales of bottled water in Davis. Public education campaign.
- Mandate greywater systems in all new construction.
- Expand current bulky items program to include a much larger salvage operation. Salvageable items should be hauled on top of load and dropped off before recyclables and trash. Easily accomplished/huge carbon reduction!
- Different size waste containers to promote waste reduction.
- Reduce lawns on greenbelts.
- Initiate a real "buy recycled campaign" in Davis.
- Allow composting toilets and nutrient recycling within the community.
- Ban sale on plastic bags, Styrofoam and non-recyclable products at Davis merchants.
- Could we put a tax or a ban on water bottles (single use 16-32oz)? we could have some sort of incentive for people to use Nalgene's/Kleen Kanteens/Sigg etc instead.
- Change the ordinance prohibiting the growing of food crops on lawns. Salons use TREMENDOUS amounts of water which could nourish vegetables and fruits within the same space! Food not lawns…
- Don't allow new buildings to have fireplaces.

- Don't allow restaurants to use Styrofoam.
- Minimize landscaping that needs hedging/pruning. See "River Friendly Guidelines on Landscaping" on the web.
- Promote small size of waste cans (for pickup) as standard (low cost6) – currently medium size is standard.
- Change the margin default on city and school computers. The word default margin uses only 57.8% of the page for printing. The rest of the paper is margin.
- Address the climate change impact of new drinking water supply project (Sacramento River).
- C &D is 10%-30% of waste stream. Very recyclable. Reduce virgin resource extraction.
- Reuse is highest form of recycle in energy savings and $. Value is in design.
- When recyclable products, notably paper, are used at an event, provide recycling trash cans, otherwise its pointless.
- I'd like to know more about the biogas facility.
- Encourage people to plant Mediterranean plants that use less water.
- Start a really really free market (like the one in SF).
- Policy of retail changing for giving out plastic bags.
- I think the City of Davis could be the premier supplier of canvas/nylon shopping bags. The city could have them made and sold at cost to the public. Ideally we could have a contest for the design... not to be facetious but I'd suggest Davis CACA (California climate action).
- Allow composting toilets to remove black water from existing sewer lines/creating primary greywater line
- Have city composting for people without land for composting.
- Encourage recycling at large apartment buildings.
- Biosolids recycling @WWTP good.
- We can cut down water usage greatly if the tenants pay for the use. As properly aware, we have no control on the wastefulness. The city should allow tenant to sign up for the service.
- Expand DWR curbside/on site effort to include all plastics that are currently recyclable, regardless of whether or not they make money for DWR. This creates a market for them by demonstrating availability to prospective investors.
- If water use is limited on greenbelts, plant native plants and trees to create urban forests. Trails should be made through it for walking.
- Require the use of energystar appliances instead of recommendation.
- I would love to get help w/examples of rainwater (roof water) collection structures. I have a flat roof, but don't find easy-to-use guidance. A volunteer "green squad" to assist, like Tree Davis might be good.
- Begin charging higher rates for larger garbage cans. Using the largest size as the "default" when containers were changed a few years ago was a big mistake.
- I think the Davis police could do more patrolling on foot/bike. They could park their vehicle and "walk the beat"; they could put bike racks on their vehicles then patrol an area on bike. Cell phones and video cameras would assist. A real benefit would be improved public relations (badly needed in my opinion).
- Create a low-water-low-green-waste locally sourced materials – friendly front yard landscaping competition (along the lines of Enterprise lights competition).
- Encourage use of laundry lines.
- Use of "permeable concrete" I putt out my garbage and recycling every other to every 3 weeks and have very little. I compost. The city could save energy by reducing pick-up to every other week & encourage residents to reduce packaging.
- With regularly/bi –monthly utility bills, add survey about: 1) what measures were taken to reduce energy (with choices to check) and 2) what measures do you expect to take in the next 6 months (w/choices).
- Support thrift and consignment stores. Have community wide "Freecycle" days.

EXPLANATION FOR RED DOTS:

- B, I – Government needs to keep their hands out of this.
- D, T – let the market decide this.

- D – I'm not sure how this reduces GHG – what is the trade-off between energy cost for pumping water versus building a bunch of facilities – water are the economics of scale?
- H – Most greenbelts yes—definitely xeriscape, but for fields and such—need water. The fake grass surfaces are HOT.
- I – Support local (sustainable) husbandry.
- K – Promote on-site compost or make collected waste available to return back to local landscape.
- L – eliminate Styrofoam use citywide.
- Ban plastic bags, ban Styrofoam (x2).
- Wastewater retention in landscaping: What do we do in summer for these plants?
- No more lawns! Edible landscaping, gardens … see Village Homes. It works great there.
- Eliminate plastic water bottles.

Davis Climate Action Plan – Climate Action Team
Project/Program Analysis Worksheet – Community GHG Reduction Measures

Project Name:	
Project Category:	
Primary Impact (Municipal/Community):	
Project Description:	
Implementation Timeframe	**Short term (less than 2 years)** **Mid term (2-5 years)** **Long term (more than 5 years)**
Overall Ranking: **1. Qualitative** **2. Score**	

Criteria	**Weight** (relative importance) **3 High** **2 Moderate** **1 Low**	**Rating Scale (1-6)** **6 Very Favorable** **5 Favorable** **4 Moderately Favorable** **3 Unfavorable** **2 Very Unfavorable** **1 Negative effect**	**Description**	**Score**
Potential GHG reduction	3	6. High 5. Moderate/High 4. Moderate 3. Moderate/Low 2. Low 1. None	Favors measures with high GHG reduction potential.	
Cost	2	6. Insignificant 5. Low 4. Moderate/Low 3. Moderate 2. Moderate/High 1. High	General assessment of implementation and on-going costs. Favors low cost projects. Price/Ton CO2 Equivalent reduction	
Ease of implementation	2	6. Strong public support w/involvement of community groups that support policy/program w/no organized opposition 5. Public support w/no organized opposition 4. Split public support and opposition 3. Public indifference 2. Public opposition w/o organized opposition 1. Public opposition w/organized opposition	Degree of expected public support/opposition to the measure.	

Criteria	Weight (relative importance) 3 High 2 Moderate 1 Low	Rating Scale (1-6) 6 Very Favorable 5 Favorable 4 Moderately Favorable 3 Unfavorable 2 Very Unfavorable 1 Negative effect	Description	Score
Visibility	1	6. High 5. Moderate/High 4. Moderate 3. Moderate/Low 2. Low 1. None	Degree measure supports public outreach efforts. Favors projects that increase public awareness/support of GHG reduction measures.	
Social Justice	2	6. Measure has direct and significant benefits for lower income/under represented residents and/or groups; with strong support/involvement of affected residents/groups. 5. Measure has direct and general benefits for lower income/under represented residents and/or groups; with general support/involvement of affected residents/groups. 4. Measure has indirect benefits for lower income/under represented residents and/or groups; with some support/involvement of affected residents/groups. 3. Measure has limited benefits for lower income/under represented residents and/or groups; with general support/involvement of affected residents/groups. 2. Measure has no benefits for lower income/under represented residents and/or groups; with no support/involvement of affected residents/groups. 1. Measure has negative impact on lower income/under represented residents and/or groups.	Degree measure benefits, is supported, and involves lower income/under represented residents and/or groups. Favors measures that have direct and significant benefits and involves these residents and/or groups in implementation.	

Narrative Evaluation

Information in this section should include assessment of social justice issues, positive and negative side effects, need for additional research, primary stakeholders, and adoption/implementation of similar measures by other jurisdictions.

Recommendation

COMMENTS:

- People aren't putting up enough red dots—it would be nice to "green-dot" everything, but can we afford it, how practical is it?
- Create audit form for person/home and professional climate impacts.
- (on above comment) I like this one too, create audit form.
- Ease of implementation could be better stated as public support.
- Suggest raising "cost" weight from 2 to 3. It is important. Suggest raising "visibility" weight from 1 to 2. Solving problem will take mass action by many individuals. They need to be encouraged and prodded, comforted by visible projects. Get the ideas into everyday thinking.
- Establish a speakers bureau for community, neighborhood groups, clubs, and schools.
- For developing a "portfolio", consider uncertainty or "probability of success" e.g. technical and social feasibility. Consider low-tech solutions as more sustainable, likely to succeed.
- Technical feasibility, e.g., current technologies vs. promising technologies
- Create a "model city" program to export our GHG reduction program to other local municipalities.
- The red dots are hard to decide upon—some of the ideas seem unlikely or not completely developed, and are also not objectionable.
- What community groups are available to implement. Which programs?
- Will the climate action committee do outreach/seek input from underrepresented groups during this phase of "developing and action" plan?
- Cost needs to be LCC, include energy savings and non-energy benefits.
- Include auxiliary/other benefits such as better indoor or outdoor air quality, less resource use (water, energy, minerals, etc) public health (not just certain SES groups).
- Omit weighting for the moment. Too arbitrary.
- Good program –lots of opportunity for public input and communication.
- Education on how to conserve our resources (in this case water and energy) is vital. Let people know how to conserve and conserve. Repeat it, and repeat it using all the media possible. Use the same strategy of the current administration but this time it is not a lag
- Implementation: political vs. technical.

Davis Climate Action and Adaptation Plan

Appendix 2 – Year One Work Plan

Davis Climate Action and Adaptation Plan – Appendix 2
Year One Work Plan – 2010
Priority I Actions

Category	Action	Est. GHG Reduction	Est. Cost	Funding Source	Timing (Completion)	Metrics	Primary Responsibilities	City Role	Community Role
1. Mobility	Establish a Mobility Advisory Commission ("MAC")	N/A – Foundation action	Low cost to City	Existing City Budget	Fall 2010	• Recruitment • Establishment of priorities	PW	Administer	Participation
	Assumptions and Data Sources		• Ability to recruit local subject matter experts						
2. Mobility	Establish Community Car Share Program	5,450 MT	Low cost to City	Private	Summer 2010	• Council Action • Membership/ use rates	CDD	Establish dedicated parking stalls; assist with marketing	Participation
	Assumptions and Data Sources		• 40% reduction in VMT by members (Source: Zipcar) • 66% of Davis population likely subscribers – between ages 20 & 60 (Source: Davis Gen Plan). 43,000 potential subscribers. • 10% subscribe – 4,300 • 52 miles/day ave household VMT or 30 miles/person of age 20-60 yrs old. • VMT reduction by members: 12 miles/day (40% reduction) • Assume members drive 20 mpg vehicle • Assume 240 days of driving/yr						
3. Mobility	Determine and publish safe bicycle routes to schools.	Undetermined	Low cost to City	Existing program	Existing	• Number of outreach materials distributed	PW	Administer	Awareness
	Assumptions and Data Sources		• N/A						
4. Mobility	Participate in regional planning to reduce commuting and	Undetermined	Existing City staff time	Existing program	Ongoing	• N/A	CDD	Attend SACOG meetings and report	Support

Category	Action	Est. GHG Reduction	Est. Cost	Funding Source	Timing (Completion)	Metrics	Primary Responsibilities	City Role	Community Role
	GHG emissions								
	Assumptions and Data Sources		• N/A						
5. Mobility	Develop a plan to de-carbonize personal transportation in Davis	N/A – Foundation action	Undetermined	Undetermined	Initiate Winter 2010	• Recruitment of subject matter experts to advise on plan development • Number of local PHEV and BEV	CDD	Administer and complete plan to develop and deploy infrastructure to support emerging EV transportation system.	Participation
	Assumptions and Data Sources		• N/A						
6. Mobility	Incorporate the use of biofuels into local public agency fleets as appropriate	Undetermined	Low cost difference between conventional and biofuels.	City	Fall 2010	• Gallons of biofuel used in City fleet	PW	Administer	Support
	Assumptions and Data Sources		• Locally sourced biofuels have a lower GHG well-to-wheel footprint than conventional fuels.						
7. Energy	Establish a financing district for residential properties for energy efficiency (AB 811)	2,940MT	Undetermined (assume low overall cost) Marketing, incentives, use of AB 811 program funding by property owners	Program start up – EECBG and SEP	Program launch Summer 2010; ongoing	• Number of Davis residential property owners participating	CDD	Local administration, assist with marketing	Participation
	Assumptions and Data Sources		• 42% of housing stock:10,500 single family • 20% efficiency improvements per unit • 20% units participate • Ave. Davis energy use in MT/unit: 1.4 • (2,100 units)(1.4MT/unit) = 2,940MT						

Category	Action	Est. GHG Reduction	Est. Cost	Funding Source	Timing (Completion)	Metrics	Primary Responsibilities	City Role	Community Role
8. Energy	Participate in Yolo Energy Watch program	Undetermined	Undetermined (assume low overall cost) marketing.	PG&E ratepayers	Program launch Summer 2010; ongoing	• Number of Davis property owners participating	CDD	Administer; Assist in implementation of county program that currently exists in other counties. Typical program includes consumer education and outreach.	Participation
	Assumptions and Data Sources		• N/A						
9. Energy	Participate in establishment of a local non-profit to assist with energy efficiency/climate action information center	N/A – Foundation action	Low	Undetermined	Spring 2010	• Establishment of non-profit	CMO	Support the reformulation of the Valley Energy Efficiency Corporation into the Valley Climate Action Center.	Establish and support
	Assumptions and Data Sources		• Ability to recruit local subject matter experts						
10. Energy	Establish a local financing district for solar energy production (AB 811)	1,848 MT	Undetermined (assume low overall cost) Marketing, incentives, use of AB	Program start up – EECBG and SEP	Fall 2010	• Recruitment • Establishment of priorities	PW	Administer	Participation

Category	Action	Est. GHG Reduction	Est. Cost	Funding Source	Timing (Completion)	Metrics	Primary Responsibilities	City Role	Community Role
			811 program funding by property owners						
	Assumptions and Data Sources		• **Ability to recruit local subject matter experts**						
11. Energy	Develop local solar farm(s) (10 Mw)	4,927 MT (This estimate may be low due to assumption of fixed angle collectors.)	High. Approx $6 million per megawatt. Possible cost reductions based on PPA and/or local community financing	Private financing (power purchase agreement)	Winter 2010	• Megawatts installed	CDD	Facilitate	Participation
	Assumptions and Data Sources		• Built on City property • Assume 10 megawatt solar farm installed • 1500 kWh per kw installed on a fixed tilt angle (1500kWh/kw)(10,000kw) = 15 million kwh produced (Source: PGE) • Emissions rate for California (electric): 0.724 lbs CO2/kWh • (15,000,000 kWh)(0.724 lbs CO2/(kWh) = 10,860,000 lbs CO2 • Portion of renewable energy credits allocated to City operations and community, the remainder applied to utility RPS requirements.						
12. Land Use and Buildings	Adopt GHG thresholds and standards for new non-residential buildings in Davis that include credit for zero net energy	N/A – Foundation action	Low cost to City	Existing City Budget	Winter 2010	• Adoption of Ordinance • Buildings built to GHG standards	CDD	Develop ordinance and administer	Provide guidance and support
	Assumptions and Data Sources		• Use existing residential GHG building standards as template • Small proportion of local GHG emissions originate from non-residential buildings						
13. Land Use and Buildings	Adjust standards for existing GHG thresholds and standards for new residential	N/A – Foundation action	Low cost to City	Existing City Budget	Summer 2010	• Adopt ordinance • Buildings built to GHG standards	CDD	Administer	Support

Category	Action	Est. GHG Reduction	Est. Cost	Funding Source	Timing (Completion)	Metrics	Primary Responsibilities	City Role	Community Role
	buildings in Davis.								
	Assumptions and Data Sources		• Action consistent with Council direction on adoption of standards						
14. Land Use and Buildings	Locate homes within walking/biking distance of essential services	960 MT (savings over 5 years) Accounts for walking/biking non-commute trips	Low cost to City	Existing City Budget	Fall 2010	• Distance of residential from retail, education, recreation land uses	CDD	Administer	Participation
	Assumptions and Data Sources		• 11 MT CO2/unit/yr due to transportation (Source: City of Davis Carbon Development Allowances Report, Sept 2008) • 10% reduction due to mode shift based on proximity to services (Source: personal comm. w/ SACOG staff and UCD Researchers). • 1.1 MT/yr reduction • Assume 250 units/yr built (Source: Davis City Council 1% growth policy). • 70% built to these standards = 193 units						
15. Consumption and Waste	Adopt Zero-waste goal for Davis and begin planning process.	N/A – Foundation action	Undetermined	Undetermined	Winter 2010	• Adoption of goal • Initiate planning process	PW	Research and adopt goal	Participation
	Assumptions and Data Sources		• Ability to recruit local subject matter experts						
16. Consumption and Waste	Establish a local financing district for water conservation (AB 811)	N/A – Foundation action	Undetermined (assume low overall cost) Marketing, incentives, use of AB 811 program funding by property owners	Program start up – EECBG and SEP	Winter 2010	• Participation	PW	Administer	Participation
	Assumptions and Data Sources		• Ability to recruit local subject matter experts						

Category	Action	Est. GHG Reduction	Est. Cost	Funding Source	Timing (Completion)	Metrics	Primary Responsibilities	City Role	Community Role
17. Consumption and Waste	Permit greywater use	N/A – Foundation action	Low cost to City	Existing City Budget	Spring 2010	• Greywater systems installed	CDD	Administer	Participation
	Assumptions and Data Sources		• Continuation of existing policy						
18. Consumption and Waste	Establish a baseline energy use for water production, use, and processing (kWh/gallon) and develop specific actions to move toward a zero energy use water system.	N/A – Foundation action	Low cost to City	Existing City Budget	Spring 2010	• Establishment of standard	PW	Administer	Support
	Assumptions and Data Sources		• Confirm Energy Task Force conclusions						
19. Food and Agriculture	Develop policies to encourage community based farms, including demonstration projects	N/A – Foundation action	Undetermined	Measure O, USDA Grants (e.g. Know Your Farmer, Know Your Food)	Winter 2010	• Adoption of policies • Lbs of food grown in demonstration farm(s)	CDD	Establish policies and demonstration farm	Support and participation
	Assumptions and Data Sources		• Ability to qualify for grant(s) • Suitable City property identified for demonstration farm • Recruitment of local subject matter experts						
20. Community Engagement	Develop and implement a multi-year plan to engage 75% of households to participate in a household based carbon reduction program	18,975MT CO2e	Unknown (assume low overall cost) Marketing, incentives.	Undetermined	Fall 2010 (first phase)	• Number of households participating • Average decline in energy use in participating houeholds	CDD	Administer	Participation
	Assumptions and Data Sources		• Ability to recruit local subject matter experts						

Category	Action	Est. GHG Reduction	Est. Cost	Funding Source	Timing (Completion)	Metrics	Primary Responsibilities	City Role	Community Role
			• 75% households participate in Davis Low Carbon Diet. • 5,000 lbs CO2e savings/household • 50% of GHG savings accounted for in other plan actions • 1.1 MT CO2e savings/household • (17,250 households)(1.1 MT) = 18,975 MT						
21. Government Operations	Install a total of 1.5 Mw PV at City facilities (wastewater treatment plant, other City Facilities)	1,300 MT	No cost to City	Power Purchase Agreement(s)	Winter 2010	• Kw installed	PW/CDD	Administer	Support
	Assumptions and Data Sources		• All calculations based on ICLEI CAPPA software						
22. Government Operations	Install efficient streetlights	694 MT	Low, due to relatively short pay-back periods and federal funding support	EECBG	Winter 2010	• Adoption of goal • Initiate planning process	PW	Administer	Support
	Assumptions and Data Sources		• All calculations based on ICLEI CAPPA software						
23. Government Operations	Energy efficient exterior lighting, parking lots, greenbelts, etc.:	21 MT	Low, due to relatively short pay-back periods	Undetermined	Winter 2010	• Adoption of goal • Initiate planning process	PW	Administer	Support
	Assumptions and Data Sources		• All calculations based on ICLEI CAPPA software • First phase of retrofits						
24. Government Operations	Continue to transition City fleet to higher efficiency vehicles	100 MT	Low, due to existing vehicle replacement funding	Undetermined	Winter 2010	• Adoption of goal • Initiate planning process	PW	Administer	Support

Category	Action	Est. GHG Reduction	Est. Cost	Funding Source	Timing (Completion)	Metrics	Primary Responsibilities	City Role	Community Role
	Assumptions and Data Sources		• All calculations based on ICLEI CAPPA software						
25. Government Operations	Expand urban forest	7MT	Low cost to City	Undetermined	Winter 2010	• Trees planted/ maintained	CS	Administer	Support
	Assumptions and Data Sources		• 31.6 lbs/tree/yr (Source: Center for Urban Forest Research, USDA) • Accounts for sequestration and energy savings • 100 trees planted/yr • 500 trees						
26. Advocacy	Seek legislation to allow Davis to pilot a renewable energy program allowing property owners to invest in and directly benefit from a local renewable energy project through a municipal financing district. Cross reference – Energy.	N/A – Foundation action	Undetermined	Undetermined	Winter 2010	• Introduction of legislation • Legislation signed into law	CMO	Research and development of legislation	Support
	Assumptions and Data Sources		• Support of local legislative representatives						
27. Climate Change Preparation	Prepare an assessment of climate-related vulnerabilities of local food, water and energy supplies, infrastructure and the public health system.	N/A – Foundation action	Undetermined	Undetermined	Winter 2010	• Completion of assessment	CMO	Research prepare assessment	Support
	Assumptions and Data Sources		• Ability to recruit local subject matter experts						

Category	Action	Est. GHG Reduction	Est. Cost	Funding Source	Timing (Completion)	Metrics	Primary Responsibilities	City Role	Community Role
28. Plan Admin.	Prepare a 5 year work plan to implement Phase II and III actions and perform plan review.	N/A – Foundation action	Undetermined	Undetermined	Winter 2010	• Completion of work plan • Development of indicators	CDD	Prepare work plan	Support
	Assumptions and Data Sources								
29. Plan Admin.	Form Plan Technical Advisory Committee to advise City on plan implementation and monitoring.	N/A – Foundation action	Undetermined	Undetermined	Winter 2010	• Formation of TAC	CMO	Form TAC	Participation
	Assumptions and Data Sources		• Ability to recruit local subject matter experts						

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