

## Climate Action Plan - Community Advisory Committee BFO Pitch Session

March 30, 2018 – 9:30 – 11 am

Council Information Center (CIC Room) @ 300 Laporte

### Anticipated Meeting Results: CAC Members will...

- Review and provide feedback on a draft list of budget offers that are related to the Climate Action Plan
- Evaluate if this format is effective

### Attendees:

#### CAC Members:

- Ann Hutchinson, Fort Collins Area Chamber
- Hunter Buffington, Fort Collins Sustainability Group
- Lisa Leveillee, Wells Fargo
- Bob Gowing, Apex Engineering
- Trudy Trimbath, Poudre School District
- Bruno Sobral, One Health Institute, CSU
- Jim Beers, Former Communications Professional at CSU
- Steve Kuehneman, Care Housing
- Sheble McConnellogue, Northern Colorado Clean Cities
- Scott Denning, Colorado State University

#### CAC Members Not present:

- Fred Kirsch, Community for Sustainable Energy
- Jean Runyon, Front Range Community College
- Dawn Paepke, Kaiser Permanente
- Marissa Bell, Colorado State University
- Stacey Baumgarn, Colorado State University
- Dana Villeneuve, New Belgium Brewing
- Todd Parker, Brinkman Development
- Todd Dangerfield, Downtown Development Authority
- Evelyn Carpenter, Solas Energy Consulting
- Molly McLaughlin, Colorado State University

Staff Members: Lindsay Ex, Lucinda Smith, Emily Wilmsen, John Phelan, Carrie Frickman, Kraig Bader, Rhonda Gatzke, Katy McLaren, Stu Reeve, Victoria Shaw, Paul Sizemore, Honore Depew, Brian Tholl, Molly Saylor, Pete Iengo, Kirk Longstein

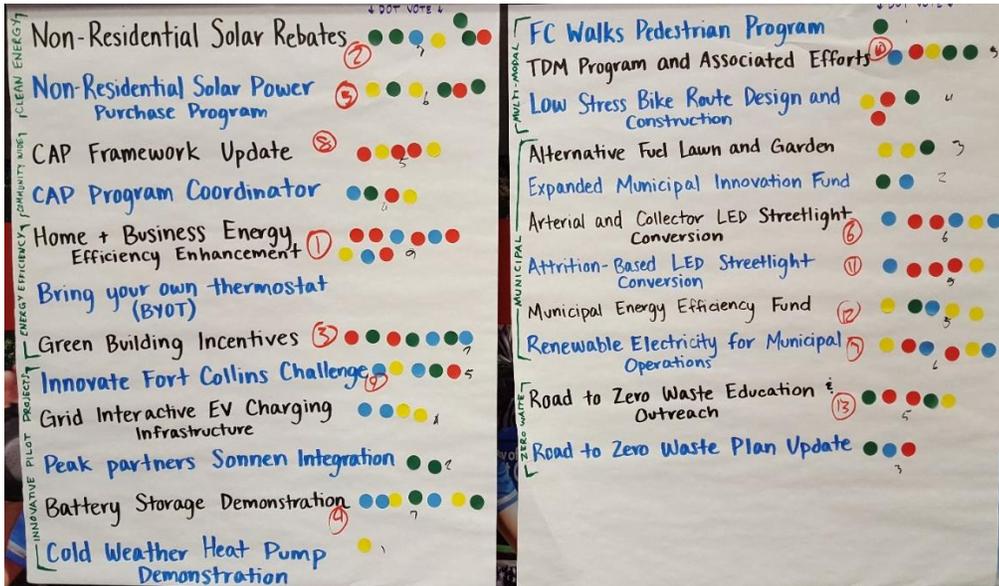
Facilitators: Chris Hutchison, Diana Hutchinson

Community members: Nick Francis – Community for Sustainable Energy, JD Murphy – Foothills Rotary, Alan Braslau, FCSG and Energy Board; Mark Houdashelt – Air Quality/Bicycle Advisory/Drive Electric, Rose Lew – FC Sustainability Group

**Agenda**

**9:30 – 9:40 Purpose, Expectations, and Agenda Review (Inform)**

- CAC members identified the order to discuss offers via an initial ranking



**9:40 – 10:50 Review of the CAP-related Budget offers (Involve)**

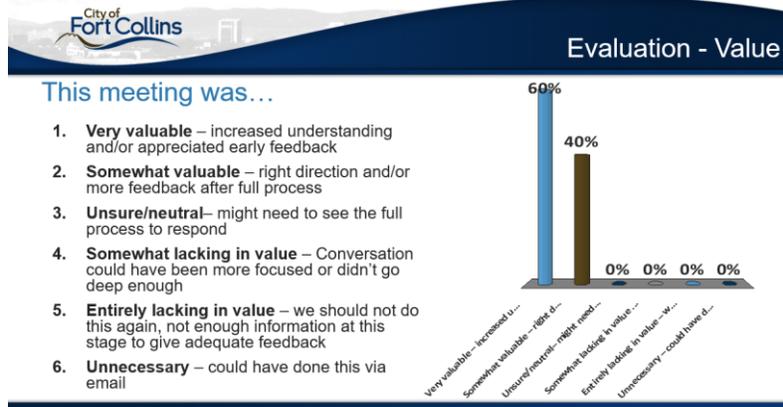
- Leveraging the initial priority ranking, top offers were presented by project managers, then CAC members asked questions or offered suggestions, concluding with clicker poll feedback on initial level of support.
- *Notes and poll feedback are embedded below with the offer descriptions*

**10:50 – 11:00 Meeting Evaluation and Next Steps**

- Meeting length – attendees rated just right or too short



- Meeting value – all rated as very or somewhat valuable



- Meeting recommendations - Start, Stop, Continue

- Liked/Continue:

- Laid foundation
- Value for staff to hear
- Paper backup was helpful
- Homework was clear
- Good structure with prioritizing topics, voting with clickers
- Responsiveness to request to put together this meeting
- Thanks to staff for being here and putting together
- Balance between early inputs and info that will be coming later

- Start

- Make sure everyone understood what dots were voting on (support vs. want to hear more)
- Wish there would have been something that was amazing to close the gap
- Look for funding outside of city budget (grants, DOEs, Bloomberg)

- Next steps: Q2 meeting preview – Budgeting for Outcomes (BFO) process



## How are CAP offers categorized?

CAP offers are categorized by their motivation and impact, see definitions below.

**Impact** is defined as either Direct (D) or Enabling (E)

- *CAP Direct* – the offer directly and quantifiably reduces greenhouse gas emissions; a 2017-2018 example would be Offer 3.7 Low Stress Bike Route Design and Construction which reduces VMTs (vehicle miles traveled).
- *CAP Enabling* – these offers do not necessarily reduce emissions, but they support programs and efforts that do; a 2017-2018 example would be Offer 23.6 Messaging and Engagement priorities, which focused on community engagement to increase program participation.

**Motivation** is defined as either Driven (D), Accelerated (A), or Beneficial (B). Staff’s plan for this BFO process is to only discuss the Driven and Accelerated offers with stakeholders:

- *CAP Driven*: These offers are new offers established because of the CAP goals, e.g., it is something we would not have done (or could not have done) without the goals. An example in the 2017-2018 budget is Offer 26.17 City Energy Project or Offer 26.8 Road to 2020 Pilot Projects and Innovation Fund (Innovate Fort Collins Challenge).
- *CAP Accelerated*: These offers scale up existing efforts to achieve the goals. A 2017-2018 example is Offer 6.76 – Energy Services Enhancement that scaled up energy efficiency programs.
- *CAP Beneficial*: These offers benefit the goals, but are business as usual for the City. A 2017-2018 example is Offer 5.6 Purchase Power which is the wholesale power purchase from Platte River, or Offer 15.9 Parks Fleet Replacement, both of which would have been done without the CAP goals, though they do benefit the goals.

## List of Potential BFO Offers

Year	Strategy	Impact	Motivation	FTE	Potential Offer Title	Amount/ year
2019/ 2020	Clean Energy	D	A		Non-Residential Solar Rebates	\$500,000
2020	Clean Energy	D	A		Non-Residential Solar Power Purchases	\$200,000
2019	Community Wide	E	D		CAP Framework Update (could shift to 2020; prefer \$ to be split)	TBD
2019/ 2020	Community Wide	E	D	1	CAP Program Coordinator	~\$50,000
2019/ 2020	Energy Efficiency	D	A		Home and Business Energy Efficiency Rebates	\$950,000
2019/ 2020	Energy Efficiency	E	A		Bring your own thermostat (BYOT)	\$160,000
2019/ 2020	Energy Efficiency	D	D	1	Green Building Incentives (CDNS + ESD)	~\$110,000
2019/ 2020	Innovative Pilot Projects	E	D		Innovate Fort Collins Challenge	\$210,000
2019/ 2020	Innovative Pilot Projects	E	A		Grid Interactive EV Charging Stations	\$150,000
2019/ 2020	Innovative Pilot Projects	E	A		Peak Partners Sonnen Integration	\$20,000
2019/ 2020	Innovative Pilot Projects	E	D		Battery Storage Demonstration	\$100,000
2019/ 2020	Innovative Pilot Projects	E	D		Cold Weather Heat Pump Demonstration	\$150,000

Year	Strategy	Impact	Motivation	FTE	Potential Offer Title	Amount/year
2019/2020	MMPD	D	A	1	FC Walks Pedestrian Program	\$200,000
2019/2020	MMPD	D	A		TDM Program and Associated Efforts	\$300,000
2019	MMPD	D	A		Low Stress Bike Route Design and Construction	\$300,000
2019/2020	Municipal	D	D		Alternative Fuel Lawn and Garden	\$50,000
2019/2020	Municipal	E	A		Expanded Municipal Innovation Fund	\$50,000
2019/2020	Municipal	D	A		Arterial and Collector Street LED Streetlight Conversion	\$1,102,000
2019/2020	Municipal	D	A		Arterial and Collector Street LED Streetlight Conversion	\$341,000
2019/2020	Municipal	D	D		Municipal Energy Efficiency Fund	\$150,000
2019/2020	Municipal	D	D		RE for Muni Operations	\$100,000
2019	RTZW	E	A		Road to Zero Waste Plan Update	\$50,000
2019/2020	RTZW	E	B		Road to Zero Waste Education Outreach	\$30,000

## Offer Descriptions

### Clean Energy Offers:

#### Offer: Non-Residential Solar Rebates

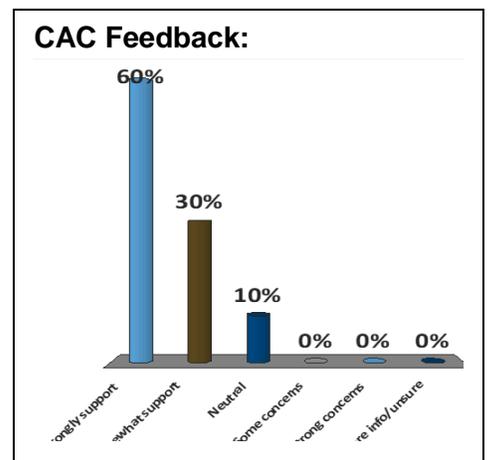
**Proposed Amount:** \$500,000/year

**Description:** This offer supports continuation of midsize non-residential solar projects through up front rebates with ongoing net metering. This funding level would add 1MW annually to the solar portfolio, in support of the Energy Policy local renewable energy goal.

**Project Manager:** John Phelan and staff

#### CAC Discussion & clarifications:

- Ground mount or rooftop? *Either.*
- What does Midsize mean? *Midsize may not be the right description. Not intending to limit on size.*
- Limitation on location? *Produced, distributed & used in FC.*
- Ongoing or one-time spending? *One-time \$.*
- Additional comments: *Would the City choose only one of these solar programs? Or potentially both? Will this program encourage companies who would not have considered solar otherwise? How do we reach those entities? Clarify how this piece fits into the goal of 20 MW by 2020*



**Offer: Non-Residential Solar Power Purchase Program**

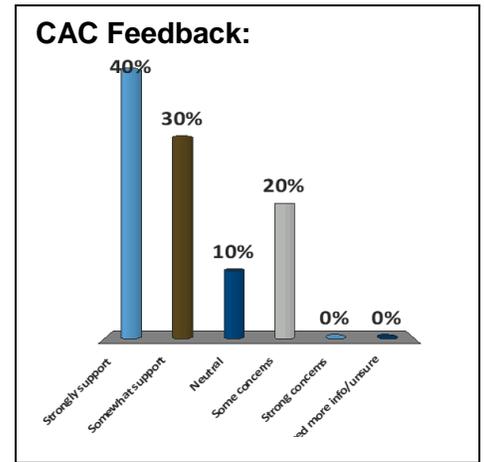
**Proposed Amount:** \$200,000 in 2020 and ongoing

**Description:** This offer supports the expansion of midsize non-residential solar projects through twenty-year power purchase agreements with a feed-in tariff. The offer is for \$200k in 2020 to add an additional 1.5 MW of solar (and ongoing within the purchased power offer), and supports the Energy Policy local renewable energy goal.

**Project Manager:** John Phelan and staff

**CAC Discussion & clarifications:**

- Annual payment for energy produced, to be resold to customers.
- Clarify how this piece fits into the goal of 20 MW by 2020
- Net metering vs PPA?



**Community Wide Offers:**

**Offer: CAP Framework Update**

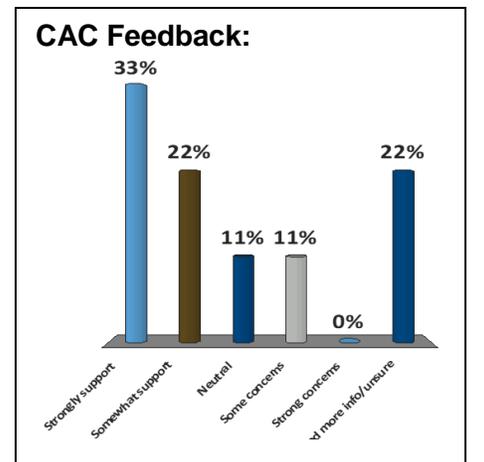
**Proposed Amount:** TBD

**Description:** The CAP Framework was developed in 2015 and focused on high-level strategies to achieve the City’s 2020, 2030, and 2050 climate action goals. The purpose of this offer is to update the Framework with a specific focus on how to achieve the 2030 goals, including the levers that can be pulled (strategies) and sequencing of those strategies. In addition, the offer proposes to include an increased focus on resiliency and adaptation within the context of the mitigation goals.

**Project Manager:** Lindsay Ex

**CAC Discussion & clarifications:**

- \$75k - \$225K range; bringing in outside support, one time \$.
- Resiliency to things like extreme heat, wildfire – what impact on energy use & water; ways to engage & mitigate community-wide.
- Additional comments: seems very important
- Include consultant cost is one time in the pitch



**Offer: CAP Program Coordinator**

**Proposed Amount:** ~\$50,000/year

**Description:** The purpose of this offer is to continue the contractual position within Environmental Services to provide program support to the City’s climate action efforts. The City is on a 32-year journey to achieve carbon neutrality, and this journey requires dedicated resources to assist in the coordination of the 11 Strategic Initiative Teams, the Executive Team, and the Community Advisory Committee – all of which include almost 70 City staff members and 45 Community members.

**Project Manager:** Lindsay Ex

**CAC Discussion & clarifications:** Not discussed (emailed in comment – this seems very important)

## Energy Efficiency Offers:

### Offer: Home + Business Energy Efficiency Enhancement

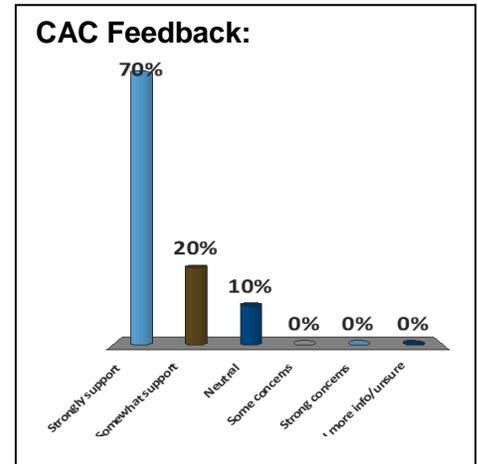
**Proposed Amount:** \$950,000/year

**Description:** This offer would fund energy efficiency at the same enhancement level as in 2017/18. The additional funds enable Utilities programs to reach the Energy Policy target level of savings (30 GWh in 2019, 37.5 GWh in 2020). Third party evaluation in 2017 verified realized savings results with a community benefit cost ratio of 1.8.

**Project Manager:** John Phelan and staff

#### CAC Discussion & clarifications:

- Is this a new program? *No, more funding for existing rebate program*
- Does it include outreach? *Yes, 10% for marketing or trade partners if rebates aren't fully used.*
- *Additional comments: This seems really important, although I recently heard that Fort Collins residents don't take advantage of this program as much as we could. Are we looking into why? What is the benefit cost ratio in other towns on the Front Range? With all of these things, how do we reach people who don't ever think about this stuff?*



### Offer: Bring your own thermostat (BYOT)

**Proposed Amount:** \$130,000 in 2019, \$30,000 ongoing in 2020

**Description:** This offer will fund integration and rebates to connect with 11 different thermostat models from Ecobee, Honeywell and Nest so they can become Peak Partners resources. Cost includes marketing and enrollment for approximately 400 thermostats. This offer also established an ongoing mechanism to recruit and add new thermostats with customer adoption over time.

**Project Manager:** John Phelan and staff

#### CAC Discussion & clarifications: *Not discussed*

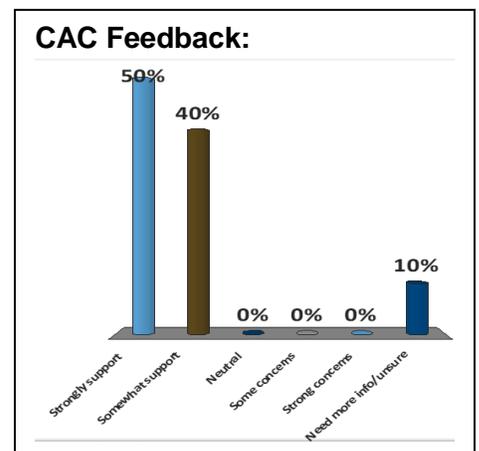
- *Additional emailed comments: This seems more expensive than I would expect. I would be curious to know the cost breakdown. Is there a way to give the 400 thermostats to lower-income or other people who might not be as likely to get involved? I think a lot of these could be taken by "the choir" who would also be willing to purchase a thermostat if needed.*

### Offer: Green Building Incentives

**Proposed Amount:** Approximately \$110,000

**Description:** The purpose of this offer is to incentivize increased green building in Fort Collins by offering accelerated permit review and processing. Accelerated permitting was selected based on cost effectiveness, benefit to the development community (reducing initial review time from 12 to 3 weeks or less), and nationwide best practice research. To implement accelerated permitting, a Plan Reviewer is required to dedicate resources to plan review; in the event there are periods with a limited number of accelerated permits, the reviewer would assist with other needs/project review in Building Services. The offer also includes \$5,000 for public outreach and marketing materials to building awareness and interest in the incentive program and related City services.

**Project Manager:** Russ Hovland, Tony Raeker



### CAC Discussion & clarifications:

- Commercial only or residential also?
- Would like additional assistance for answering questions by builders related to green building.
- Additional comments: Would this incentivize companies to build? Seems like a pretty good use of money, but isn't the highest on my list. Seeing results of the "best practice research" would help – maybe this would be more impactful than I realize. Also say up front how we know this is the most effective trigger we could pull.

### Innovative Pilot Projects:

#### *Offer: Innovate Fort Collins Challenge*

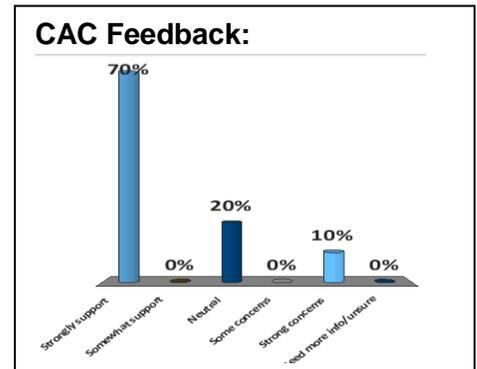
**Proposed Amount:** \$210,000/year

**Description:** This offer would provide funding for the Innovate Fort Collins Challenge, a competitive grant process for community based projects that support the Climate Action Plan goals. Applicants would be awarded funding for pilot projects that offer scalable solutions to reduce greenhouse gas emissions in energy, waste materials and transportation, as well as providing other community benefits.

**Project Manager:** Katy McLaren

### CAC Discussion & clarifications:

- Sounds like a good ROI, why not fund this more? *These are innovative pilot projects that could either scale or fail. Not guaranteed return*
- Emailed comment: *what benefits did we see from this program last year?*



#### *Offer: Grid Interactive EV Charging Infrastructure*

**Proposed Amount:** \$110,000 in 2019, \$50,000 in 2020

**Description:** This offer will fund adding a platform to dispatch and throttle-back charging sessions for Electric vehicles, ensuring minimum battery levels (set by participating customers) therefore turning EVs into a distributed energy resource. Cost include marketing, enrollment and installation of 25 electric vehicle charging stations.

**Project Manager:** John Phelan and staff

**CAC Discussion & clarifications:** *Not discussed (emailed comment: Seems like a great idea. Would there be an educational piece so that people know what's happening?)*

#### *Offer: Peak partners Sonnen Integration*

**Proposed Amount:** \$10,000/year

**Description:** This offer will fund adding software integration to the Peak partners platform to charge & discharge Sonnen Batteries, therefore turning batteries into a distributed energy resource. Cost includes up to 500 connections.

**Project Manager:** John Phelan and staff

**CAC Discussion & clarifications:** *Not discussed*

### Offer: Battery Storage Demonstration

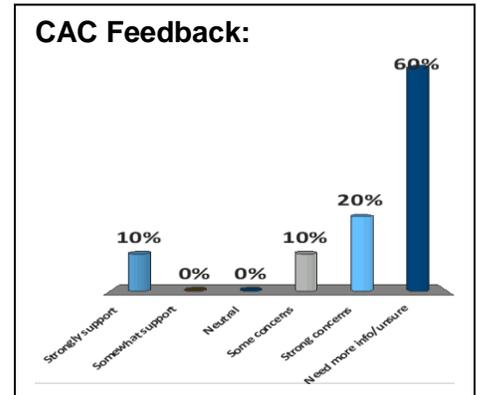
**Proposed Amount:** \$100,000/year

**Description:** This offer supports expansion of the 2018/2019 Battery Storage Pilot to understand and demonstrate how utilities infrastructure can interact with battery technologies, including financial and economic benefits to the utility and to residential and commercial customers. Utilities expect battery storage to be an essential component of long-term solutions for our clean energy goals. This pilot will focus on residential scale technologies, integration with the distribution system and program delivery to customers.

**Project Manager:** John Phelan and staff

#### CAC Discussion & clarifications:

- What energy would be stored in the batteries? *Storage of solar or off-peak energy*
- Is this to justify purchase of hardware or something more?
- Need more context about who this would help and outcomes for this project. Explain benefits – who is the demonstration for? What do you hope to learn? Context (time of day, demand management, volt/frequency?)
- Additional comment via email: Seems like a great idea. Would be cool to have an educational piece so that people in town know this is happening. Seems like a great first step before we install more battery power.



### Offer: Cold Weather Heat Pump Demonstration

**Proposed Amount:** \$150,000/year

**Description:** This offer will fund a pilot project focused on the use of cold weather heat pumps to improve heating efficiency and reduce costs for electric heat homes and demonstrate the conversion of natural gas heated homes to electric heat pumps in support of long term CAP goals. The pilot will focus these efforts in low to moderate income households.

**Project Manager:** John Phelan and staff

#### CAC Discussion & clarifications: *Not discussed*

- *Emailed comments: This sounds like a great idea, but of all of all the proposals in this category, maybe we could wait on this one? If we had to pick. Seems useful to only take a few of these approaches at a time so that people don't have as many different things to focus on.*

## Multi-modal Planning and Development:

### Offer: FC Walks Pedestrian Program

**Proposed Amount:** \$200,000/year

**Description:** This offer would create a pedestrian program based on the highly successful FC Bikes model, as well as other examples of pedestrian programs from around the country. FC Walks would be a visible presence in the community advocating for more walking, as well as an internal advocate for pedestrians in transportation planning and design.

**Project Manager:** Paul Sizemore

#### CAC Discussion & clarifications: *Not discussed*

- *Emailed comments: How realistic is this as compared to the biking program? Biking seems much more realistic than walking in Fort Collins from my perspective.*

**Offer:** *TDM Program and Associated Efforts*

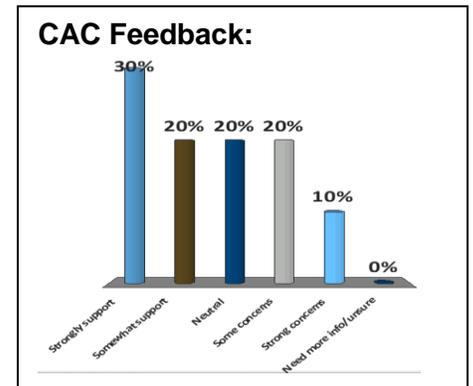
**Proposed Amount:** \$300,000/year

**Description:** Travel Demand Management is a proven tool for reducing roadway congestion and increasing use of nonmotorized modes of transportation. This offer would fund a program to launch travel demand management programming in the community, building on the business network already established by the Climate Wise program.

**Project Manager:** Paul Sizemore

**CAC Discussion & clarifications:**

- Main purpose? *Encouraging car trip reduction.*
- What resources? *Either contract out project or use city staff + outreach.*
- Would this include more data tracking, and what confidence would you have in the quality of the data? *Yes, more data collection would be part of this.*



**Offer:** *Low Stress Bike Route Design and Construction*

**Proposed Amount:** \$300,000/ year

**Description:** The City’s Bicycle Master Plan is built around the concept of the Low Stress Network: designing routes across the city that can be used by people of all ages and abilities. There is dedicated funding toward the Low Stress Network as a part of the CCIP infrastructure sales tax. This offer would supplement these funds to allow additional construction of low stress bicycle infrastructure and leverage CCIP dollars.

**Project Manager:** Paul Sizemore

**CAC Discussion & clarifications:** *Not discussed (emailed comment: clarify what else needs to be done)*

**Municipal Offers:**

**Offer:** *Alternative Fuel Lawn and Garden*

**Proposed Amount:** \$50,000/year

**Description:** The small engines used for commercial lawn and garden equipment have more limited emission controls than vehicles and can contribute to both greenhouse gas and ozone causing emissions. These funds would enable the City to further increase the rate of replacement of municipal gas and diesel equipment with electric equipment.

**Project Manager:** Cassie Archuleta, Jenna Channel

**CAC Discussion & clarifications:** *Not discussed (emailed comment: carbon impact? Seems like this needs to be done eventually)*

**Offer:** *Expanded Municipal Innovation Fund*

**Proposed Amount:** \$50,000/year

**Description:** Funding this offer will support innovative, sustainability focused improvements to the City's property, buildings and operational procedures and build upon past success. This funding continues the investments made by the City in the 2017-2018 budget at the same level. In 2018, 15 projects were funded that will improve efficiencies in Parks, Natural Areas, Utilities, and Streets and provide employee education around green historic preservation, biking, and equity and inclusion.

**Project Manager:** Michelle Finchum

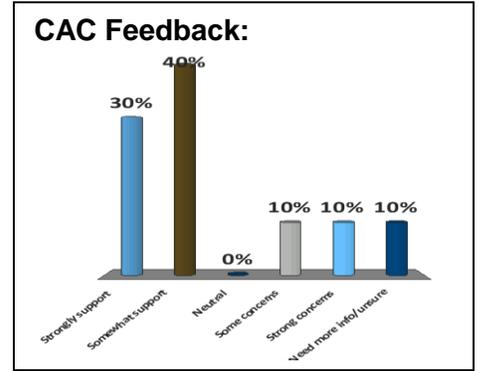
**CAC Discussion & clarifications:** *Not discussed*

**Offer: Arterial and Collector Street LED Streetlight Conversion**

**Proposed Amount:** \$1,102,000 in 2019; \$570,000 in 2020

**Description:** Funding this offer will provide labor and materials for the complete conversion of 150-watt, 250-watt, and 400-watt high pressure sodium (HPS) streetlights that are primarily located on arterial and collector streets in Fort Collins. Careful analysis of illuminance levels, lighting patterns, and lighting efficacy that accounted for the shift in the output spectrum of LED lighting from HPS lighting has resulted in the development of a replacement plan for a significant portion of Fort Collins' streetlights. This offer represents a scheduled and complete conversion of all 150W, 250W, and 400W HPS streetlights in Fort Collins to take effect in 2019 and 2020. It can be scaled to exclude any one of the three streetlight classifications, or another proposal, "Attrition-Based Streetlight Replacement" (see below) may be selected in lieu of this offer wherein these streetlight classifications can be converted only as they fail.

**Project Manager:** Kraig Bader



**CAC Discussion & clarifications:**

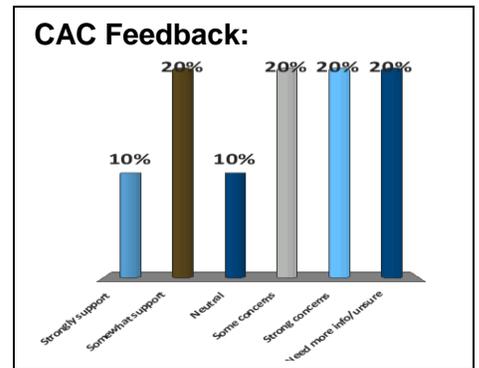
- How is labor efficiency and transportation impact included here vs. attrition method? *This method is much more efficient for labor and transit.*
- Is this the right time for technology? *Technology will continue to improve, but this is a good time based on technology improvements and the studies the department has done on lighting efficacy. Start gaining efficiency benefits right away.*
- What will be done with old fixtures? *Probably recycling vs auction of old fixtures to keep less efficient fixtures out of use.*
- Emailed comments: *Both of these streetlight programs sound great/would reduce energy and also set a good example. High on my list in terms of importance.*

**Offer: Attrition-Based LED Streetlight Conversion**

**Proposed Amount:** \$341,000 in 2019; \$352,000 in 2020

**Description:** Funding this offer will provide labor and materials for an attrition-based conversion of 150-watt, 250-watt, and 400-watt high pressure sodium (HPS) streetlights that are primarily located on arterial and collector streets in Fort Collins. An attrition-based program will only convert streetlights to LED as the existing HPS lights fail. Careful analysis of illuminance levels, lighting patterns, and lighting efficacy that accounted for the shift in the output spectrum of LED lighting from HPS lighting has resulted in the development of a replacement plan for a significant portion of Fort Collins' streetlights. (see offer above for full conversion)

**Project Manager:** Kraig Bader



**CAC Discussion & clarifications:**

- Labor efficiency and transportation impact? *Requires more support for identifying burned out lights and sending crews out to replace, as well as more miles traveled going out one by one.*
- *Cost and benefits spread out over 7 years*

**Offer: Municipal Energy Efficiency Fund**

**Proposed Amount:** \$150,000/year

**Description:** This offer supports energy and water efficiency upgrades in all service area facilities. Projects are prioritized based on the best ROI, timing of other remodel work that may be scheduled, and impact on meeting our 2020 and 2030 reduction goals.

**Project Manager:** Stu Reeve

**CAC Discussion & clarifications:** *Not discussed (emailed comment regarding importance of this)*

**Offer:** *Renewable Electricity for Municipal Operations*

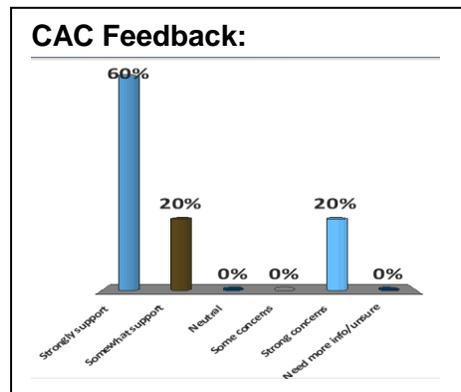
**Proposed Amount:** \$100,000/Year

**Description:** To meet our 2030 reduction goals, the need to ramp up the combination of energy efficiency and renewable energy is critical. This offer supports having a fund to add renewable energy systems such as photovoltaic solar panels to new facilities, additions, or remodels that we are designing for net-positive energy use.

**Project Manager:** Stu Reeve

**CAC Discussion & clarifications:**

- What is the scale of municipal use vs. overall energy use?
- What are interactions between various solar offers?
- Is this offer providing up front capital for installing solar? *Yes, these installations are expected to have a longer term operational financial ROI in addition to reducing green house gases.*
- *Emailed comment: high in terms of importance*



**Road to Zero Waste Offers:**

**Offer:** *Road to Zero Waste Education & Outreach*

**Proposed Amount:** \$30,000 (one-time)

**Description:** This offer proposes doubling the Waste Reduction & Recycling outreach budget for 2019 to help staff engage the community better during a critical year of change to increase landfill diversion and reduce emissions from waste. It will be a very important year for messaging and engagement due to constrictions in the global recycling market and the development of major new proposed policy in the Wasteshed, related to organics and other waste materials.

**Project Manager:** Caroline Mitchell

**CAC Discussion & clarifications:** *No questions due to limited time (emailed comment: this is a tiny amount of \$; hard to believe it is going to make much of a difference).*

**Offer:** *Road to Zero Waste Plan Update*

**Proposed Amount:** \$50,000 (one-time)

**Description:** Funding this offer will allow the Waste Reduction and Recycling program area to update the Road to Zero Waste (RTZW) plan in 2019. The plan was originally adopted by City Council in 2013 and has been a foundational, strategic document for the Environmental Services Department ever since. An update is needed to help staff and Council plan around changes that have occurred from the local level all the way to global recycling markets, and to improve alignment with Wasteshed planning and Climate Action strategies.

**Project Manager:** Susie Gordon

**CAC Discussion & clarifications:** *Not discussed*

