



City of Denton
MINUTES
COMMITTEE ON THE ENVIRONMENT

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

Monday, November 6, 2017

9:00am

City Council Work Session Room

After determining that a quorum of the Committee on the Environment of the Denton City Council was present, the Committee on the Environment thereafter convened into an Open Meeting on Monday, November 6, 2017 at 9:04 a.m. in the Council Work Session Room at City Hall, 215 E. McKinney Street, Denton, Texas

Council Members: Chair Council Member Keely Briggs, Council Member Dalton Gregory, Council Member John Ryan

Also Attending: Mario Canizares ACM; Kenneth Banks, General Manager Water Utilities; Katherine Barnett, Sustainability and Customer Initiatives Manager; Sarah Luxton, Sustainability Coordinator; Jonathan Gregory, Conservation Program Coordinator; Ethan Cox, Director Solid Waste; Wendy Chance, SW & Recycling Business Acct Coord; Stuart Birdseye, Marketing & Outreach Coord; Erin Clark, Administration Manager; Kim Mankin, Administrative Supervisor

REGULAR MEETING

- A. COE17-039** Consider approval of the Committee on the Environment of the Denton City Council Meeting minutes of September 11, 2017.

Approved as circulated

- B. COE17-041** Receive a report, hold a discussion, and give staff direction regarding National Renewable Energy Laboratory reports.

Jonathan Gregory talked about this item with a PowerPoint Presentation. The background was given on this item including how this program came about with the introduction from Council Member Briggs. There are several cities throughout the country that are part of this program called Cities LEAP (Leading through Energy Analysis and Planning). The intent is to support the widespread implementation of data driven energy policies programs and projects that have the potential to drive change. This is being led by an organization called NREL (National Renewable Energy Laboratories). There are several cities across the country that use this technology.

In February Sustainable Denton made contact with NREL. Staff was provided a list of focus areas and staff settled on energy efficiency analysis for low income households.

NREL offered to provide data analysis additional topic addressing air quality issues through community vehicles miles traveled. The goal was to better understand the makeup of the local transportation sector so we could identify vehicle emission sources and reduce associated air quality impacts more effectively.

J Gregory added that staff is having a hard time accessing information on electric vehicles from the State. They used to have a little more flexibility in this area. D Gregory questioned why we could no longer get that information. J Gregory stated he is not sure, he has found another method to access the information. D Gregory added that we should talk to our legislative body to make sure we can have that information. J Gregory said that is valuable information.

Briggs asked why 2013 data was used for this report. J Gregory answered it is the last data that was available, there is an update in the works at the regional level that NCTCOG is putting out this fall.

J Gregory stated that the final report was titled, 'Denton, Texas: Using data to achieve low-income household energy savings and evaluate city-level transportation trends'. It was completed and delivered mid-October.

Key Findings – Energy – Approximately 52.3 percent of housing units are renter occupied in Denton. Renters in Denton are more likely to fall into lower income brackets than their homeowner counterparts. Of low-income renter-occupied households, about 82 percent live in duplexes or multifamily buildings. About 37 percent of owned-occupied units are electrically heated, compared to about 76 percent of renter-occupied units.

Recommendations for Energy include:

Energy Burden is a ratio of energy expenditures to household income. There are a lot of ways to define eligibility for an energy efficiency program, but energy burden is increasingly common.

Briggs added that Council is talking about a low income deposits, this is good information for that discussion

Expanded access to renewable energy resources for Low-and Moderate income populations. Developing renter-owner split incentive programs.

D Gregory asked about the rebate program and landlords, the mechanics. J Gregory stated they are mailed a check instead of applying to the utility bill.

Ryan added that information is no longer available about how much the history of utility bills for landlords. J Gregory stated there is problems getting that history due to security issues. Ryan added that information is very important being a landlord. J Gregory answered they are working on this issue, it is being explored legally.

Rental weatherization programs at time of property transfer. Briggs asked about the definition of weatherization. J Gregory stated it can be defined many ways, his opinion is weather stripping, caulking, air sealing and potentially insulation. Staff is not recommending these to Council at this point.

Landlord disclosure policies of energy aspect of property. Renters guide to energy efficiency. J Gregory stated the number of landlords that are registered in the rebate program is low, staff is working to improve those numbers.

Briggs asked if the renters guide is given to apt complexes. J Gregory stated there is a 'tips' flyer of how to save energy and water, it is given out at the universities but not apartments at this time. It is available on the website.

Key Findings for Transportation: Denton estimated gasoline use is 88 percent higher and diesel use is 205 percent higher than the average for similarly sized cities in US. This is due to highways in the City and also a heavily driven city. The public transportation use is fairly low as well. Regionally Denton has a slightly lower per capita VMT and fuel consumption than Dallas and Fort Worth, but double McKinney.

There was discussion regarding Denton fuel usage.

J Gregory added it is estimated that 87 percent of petroleum consumption reduction efforts are through the use of alternative fuel vehicles. Denton has a higher-than-average number of registered hybrid electric

vehicles, ranking in the top 14 percent nation-wide. Denton has more than double the national average of public EV (electric vehicle) stations for every 1,000 registered EV's.

Briggs asked what the city vehicle count is for hybrid vehicles. Staff will bring back that information.

Recommendations for transportation include:

With flex fuel as our largest share of AFVs we need to increase the accessibility to E85 fuel stations (only 3 locations in Denton). Briggs asked if Buc-ee's or Loves will have those types of fuel. J Gregory not sure, will find out. Ryan asked the fuel efficiency of E-85. J Gregory will get that information. D Gregory asked if only three locations for E85 is correct. J Gregory stated they did not verify that number.

Another recommendation: AFV bulk purchasing program that offer opportunities to collaborate across the region to increase AFV adoption. Streamline the permitting and inspection of AFV charging installations to reduce costs and development time.

There was discussion regarding charging stations, not all chargers are the same.

Briggs asked about the Denton Code, and if Denton could require charging stations at developments. J Gregory stated that is next on the list, to require EV charging station installation in commercial building code, as well as development and parking regulations.

Provide incentives such as density bonuses and reduced parking requirements for installing EV charging infrastructure in new development. Adopt zoning ordinance amendments to enable the installation of EV charging stations and encourage their appropriate placement.

Direction: with the sustainability plan updates underway staff will utilize the analysis and recommendations in these reports to inform our stakeholders and come to best conclusions on how to proceed. Staff incorporated the analysis on the low income energy efficiency report. Transportation data will be integrated into our GHG Inventory to better quantify the vehicle miles traveled sector of those reports.

D Gregory stated he saw data that regionally the emissions are going down while the population is going up. Staff will bring back a data analysis on this.

Presentation to be added to back up.

C. COE17-042 Receive a report, hold a discussion, and give staff direction regarding the City of Denton Municipal and Community Greenhouse Gas Inventories.

J Gregory gave this presentation starting with the background. This is a directive of US Mayor's Climate Protection Agreement (2005). This is a program that is scaled at Municipal Operations level and Community Wide level. Annual collection wide level, previously every five years.

Objective: Air quality and greenhouse gas management is a key focus area of Denton's sustainability plan. By tracking and working to reduce GHG emissions, the city can save energy and money, strengthen the local economy, improve air quality and preserve the quality of life in our community.

A graph was shown with the municipal emissions by year. Trending down but a slight increase in 2016. D Gregory asked if this was regional or city operations. J Gregory stated it was city operations. He then showed the GHG distribution by source graph that shows the methane from decomposition, electric power production (T&D losses), Electricity emissions, transportation emission and natural gas emissions.

Briggs asked how owning our own natural gas generation will fit into our municipal distribution by source impact. J Gregory will look into this and get an answer.

Barnett stated it will be a new category that hasn't been measured before because it will be production that we own, up to this point it has been purchased power only. It will be much like the landfill where we have to account for in our inventory. Staff will work with the EPA to get it set up.

D Gregory asked about the methane from decomposition. J Gregory stated that is because we own the landfill. Barnett added some cities have changed how they track those GHG and are not following protocol so the numbers look lower. Ethan Cox added that our landfill is designed to increase the methane production. A bioreactor is run to inject the liquids back into the waste to manage it. We are pulling the methane off and not just allowing it to become an emission.

J Gregory showed the percent change over year and base year using a graph.

Summary of Data (municipal): Decreased total GHG emissions by 25 percent since 2006. Decreased total GHG emissions per capita by 52 percent since 2006. DME T&D Loses were reduced by ~25 percent compared to 2015 due to efficiency improvements. The addition of 94 new fleet vehicles and the incorporation of compressed natural gas consumption into our inventory data, transportation emissions increased 11% over 2015. Efforts to educate staff on efficient driving behaviors and fuel economy priority purchasing policies have led to the decrease of emissions per vehicle by nearly 80 percent since 2006. The amount of solid waste landfilled in Denton increased by seven percent over 2015 due to a combination of population growth and higher rates of dumping from sources outside City limits. We also observed a 19 percent increase in landfill gas (LFG) volume over 2015. The combination of these additional sources resulted in a total emissions increase of 27 percent over 2015. Briggs asked if more engines were an option for the methane at the landfill to use it more efficiently. Cox answered that he believes the flare is a little cleaner regarding the environmental impact than the electric engine. The contractor that is currently working on the methane at the landfill doesn't provide an opportunity to put in more generation at this time.

J Gregory showed on a graph that the community emission by year (2006-2016) are continuing to decrease. There was more discussion regarding the graphs shown.

Summary of Data (community): Decreased total GHG emissions by nearly 20 percent since 2006. Decreased total GHG emissions per capita by 46 percent. Decreased Natural Gas emissions by nearly 16 percent over 2015. Decreased Electricity emissions is major driver at 50 percent over Base.

Ryan asked on the natural gas side can we put in the average winter temp so we will know if the weather had to do with the emissions. J Gregory yes we can moving forward.

Direction: Investigate quantitative methods of how total amount of solid waste collection breaks down over time and releases emissions. Research alternative reporting software that has been developed since we began using ClearPath in 2011. Continue to improve communication methods between departments for more efficient data sharing and goal setting. Develop an online dashboard for data sharing

D. COE17-043 Receive a report, hold a discussion, regarding City of Denton STAR Communities 3-Star Certification.

Katherine Barnett gave the PowerPoint presentation beginning with the background.

Nation's leading comprehensive framework and certification program for evaluating local sustainability. Designed to help communities identify, validate, and support implementation of best practices to improve

sustainable community conditions. We began pursuing STAR Certification in 2016. Currently there are under 70 certified communities across the country, including our neighbors in Plano, Austin, San Antonio, and Houston.

Objective: The table of STAR goals and objectives include the headings: Built environment, climate & energy, economy & jobs, education arts and community, equity and empowerment, health and safety and natural systems. This replaced the previous sustainability plan. Under each heading include outcomes and actions to improve the community and get points to improve the STAR rating.

Barnett stated the next step is to talk about what else we can do to help the community. It will be interesting as we have community meetings. The certification levels were shown, as Denton is in the 3-STAR community level. She believes we can get more points through documentation and get a higher rating. There was discussion regarding the ratings.

Key points: Water Conservation, Parks and Recreation, Air quality and Energy and Economy and Affordability.

Direction: Apply every 4 years. Incorporate aligned parts of framework and metrics into Sustainability Plan updates. Work with City departments and local organizations to collect data and make improvements where it makes sense. Learn from other certified communities on best practices. Aim for increasing our points to achieve a 4-STAR rating in 2021.

E. **COE17-044** – Receive a report, hold a discussion and give staff direction regarding City of Denton Sustainability Plan update.

Sarah Luxton gave the presentation beginning with the background.

Background: Our *Simply Sustainable* Plan was first published in 2012. It was intended to be a 5-Year plan, so updates are necessary to continue moving forward. Out of 100 actions 82 are either complete or in progress.

Objectives: Organize a series of internal and community stakeholder meetings to get feedback and generate new ideas. Make appropriate updates/changes to Simply Sustainable Plan and set direction for next 5 years. Incorporate aspects of STAR Communities framework that will enable us to get a better score and improve livability of Denton.

Key points: included an update to the sustainable timeline. This would include having a plan that is ready to be approved in the August timeframe.

Briggs stated that she and Council Member Ryan have upcoming community meetings, will staff come and speak. Luxton agreed it would be good, staff will attend.

Direction: A community stakeholder committee was formed to help with the development of the 2012 Sustainability plan. For the update and to also align with the STAR Communities framework, staff is seeking to create a new stakeholder committee. The Committee would maintain its involvement in the Sustainability Plan after the updates are complete as an advisory committee.

With COE direction, staff would like to develop this Committee over the coming month(s).

D Gregory stated that it might be good for this Committee to approve a 14 member list to and then visit the on-going citizen review panel to meet four times a year. Briggs stated it would be good there are many committees that help throughout the city. Barnett added it was in the original plan to establish an advisory committee going forward.

F. COE17-045 - Receive a presentation and hold a discussion regarding multifamily recycling and waste diversion strategies

Ethan Cox gave this presentation stating this has been a group effort up to this point. He gave accolades to Katherine Barnett, Wendy Chance, and Erin Clark.

The background included previous discussions at the last meeting that this committee wanted staff to focus on.

- Improving multi-family tenant access to recycling
- Increase multi-family & commercial recycling participation
- Increase material diversion

The key terms are accessibility, participation and diversion. Key players for accessibility include property management and solid waste or outside haulers. For participation, property management and tenants. For diversion, all parties are key players.

Outcomes are for the environment and sustainability.

Environmental impacts include:

- Soil/Groundwater
- Air
- Reduced Vegetation
- Vehicle Emissions

Sustainability Factors include:

- Land Use/Airspace
- Resources
- Changing Waste Stream

Erin Clark, Administration Manager talked about – Multi-family recycling – benchmark
Clark stated that Wendy Chance contacted about 15 different cities with responses from 11. All cities that were contacted have multi-family as commercial. Questions included accessibility of recycling and the diversion rate. Clark showed a graph showing the accessibility and diversion rates for those cities.

Gregory stated that many of the decals on the recycle carts are not readable, so that citizens know what to put in the cart. Cox added that they can be accessed from solid waste. Clark added that there are also magnets that state the same, to put on your refrigerator.

Multifamily accessibility and current efforts

- Multifamily outreach program began in late 2016
- 468 total Multi-Family complexes
- 194 voluntarily participating
- 64 of these are new in FY17, compared to average of three new per year in prior years
- 41.5% participation rate

Ryan asked if any multi-families use carts instead of the large containers. Chance answered that there are 23 complexes that are on carts, they are smaller complexes. Cox stated this is an example that the needs for multifamily vary. Clark added that providing carts to complexes that do not have the space for a large container may be successful. Ryan said that one problem is if a citizen places large items in the containers it becomes the complexes problem to take care of. Cox added there are similar challenges downtown currently.

- Focus on strategic effort beginning FY18 and beyond emphasizing
- Collecting data

--Targeted approach

--Partner with Sustainability

We do not have data on outside haulers, but are planning to implement a data collection requirement to their business registration agreement

Cox then continued talking about improving accessibility including the policy mandate, outreach education programs and operations.

Staff recommendations regarding accessibility includes a focus group to seek multifamily input. Staff is going through a needs assessment. There was discussion regarding the challenges, needs and required support, and mandate implications.

Gregory inquired about staffing in these areas. Cox believes there are fewer employees towards these efforts at this time. Gregory is pleased that we are having more multi-family come on line. Would like to know how this happened and what we are doing right. Compared to five years ago if we are having less participation because the education is dropping off we need to advocate for more staff. Efficiency at the cost of effectiveness is not good. Cox stated over the last few years there has been a dispersed, but is being built back up. We are still working on strategies as they come into focus.

Barnett gave the information on Targeted Education for multifamily tenants and student population.

G. COE17-040 ACM Update:

1. Community idling reduction resolution Jackson Hole Wyoming
2. Vehicle idling vs. turn off which is greener
3. Bloomberg proposal/Weatherization
4. Stream Clean
5. Matrix

Katherine Barnett talked about these items before item C due to technical difficulties.

CONCLUDING ITEMS

Under Section 551.042 of the Texas Open Meetings Act, respond to inquiries from the Public Utilities Board or the public with specific factual information or recitation of policy, or accept a proposal to place the matter on the agenda for an upcoming meeting AND Under Section 551.0415 of the Texas Open Meetings Act, provide reports about items of community interest regarding which no action will be taken, to include: expressions of thanks, congratulations, or condolence; information regarding holiday schedules; an honorary or salutary recognition of a public official, public employee, or other citizen; a reminder about an upcoming event organized or sponsored by the governing body; information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the municipality; or an announcement involving an imminent threat to the public health and safety of people in the municipality that has arisen after the posting of the agenda

Briggs – Update on integrated plan

Process for EV charger

Update on LED lighting program

Gregory student marketing and education

Adjournment: 11:40

Approved on 1/8/18