



**CITY OF BOULDER
CITY COUNCIL AGENDA ITEM**

MEETING DATE: Nov. 6, 2014

AGENDA TITLE: Consideration of a motion to accept the Sept. 23, 2014 study session summary on the Facilities and Asset Management Master Plan Update.

PRESENTERS

Jane S. Brautigam, City Manager
Maureen Rait, Executive Director of Public Works
Joe Castro, Facilities and Fleet Manager

EXECUTIVE SUMMARY

This agenda item presents a summary of the [Sept. 23, 2014 study session](#) on the Facilities and Asset Management (FAM) Master Plan Update as **Attachment A**.

STAFF RECOMMENDATION

Suggested Motion Language:

Staff requests council consideration of this matter and action in the form of the following motion:

Motion to accept the Sept. 23, 2014 study session summary on the FAM Master Plan Update.

ANALYSIS

The Institute of Climate and Civil Systems (iCliCS) has confirmed that the projected temperature increase for 2050 ranges from approximately 1 to 5 degrees Celsius (2 to 9 degrees Fahrenheit). The projected increase of 20 degrees Fahrenheit was for 2100, not 2050 as was reported during the Sept. 23 study session. The full iCliCS report provides the correct temperature ranges. In **Attachment B**, iCliCS has provided a scatter diagram and whisker diagram of temperature ranges for 25 to 75 percent from the median of the Intergovernmental Panel on Climate Change's 54 General Circulation Models (GCMs).

Staff met to discuss City Council feedback and has found that many communities are currently grappling with the challenge of localizing climate change projections. Working with the city's new Chief Resiliency Officer (CRO), staff will be convening a workshop with climate scientists from the National Center for Atmospheric Research (NCAR) and National Oceanic and Atmospheric Administration (NOAA) to establish a formal, vetted, and documented set of standards that the community will use to identify future climate changes. The CRO will also be participating in NCAR's "Engineering for Climate Extremes" workshop from Nov. 19 to 21.

Staff also participated in the EcoDistricts International Summit from Oct. 24 to 26 and learned that some local and regional governments have developed climate change plans, including [Boston](#), [Washington, D.C.](#), [Portland](#), and the State of [California](#). Staff will continue to examine how the FAM Master Plan Update should reflect the impacts of climate change.

NEXT STEPS:

Staff will address the City Council questions raised during the Sept. 23 study session about Police Department space needs as part of the space needs assessment, which is expected to be completed in the first quarter of 2015. FAM staff has begun the Fire-Rescue Department space needs assessment for Fire Station #3 and Fire Administration, and will address these needs as part of the next FAM Master Plan Update to council in the second quarter of 2015.

Staff will be meeting with Boulder County land use staff to discuss the proposed annexation of the Valmont Butte property and expects to convene a community open house during the fourth quarter of 2014. Future uses at Valmont Butte will also inform the Municipal Service Center (Yards) Master Plan Update.

ATTACHMENTS

Attachment A: Sept. 23, 2014 FAM Master Plan Update Study Session Summary

Attachment B: Institute of Climate and Civil Systems' Scatter and Whisker Diagrams

City Council Study Session Summary
Sept. 23, 2014
Facilities and Asset Management (FAM) Master Plan Update

PRESENT

City Council: Macon Cowles, Suzanne Jones, George Karakehian, Lisa Morzel, Tim Plass, Andrew Shoemaker, Sam Weaver, Mary Young

Staff Members: Maureen Rait, Executive Director of Public Works; Joe Castro, Facilities and Fleet Manager; Glenn Magee, Facilities Design and Construction Manager; Mark Simon, Facilities Maintenance and Operations Supervisor; Mitch Meier, Financial Analyst/Fund Manager, Shelley Janke, Administrative Specialist

PURPOSE

The purpose of the Sept. 23 study session was to provide an update about the Facilities and Asset Management (FAM) Master Plan and get council feedback about a few issues to guide the 2015 FAM Master Plan Update.

OVERVIEW OF PRESENTATION

Maureen Rait's Presentation

- Provided an overview of the purpose and background of the FAM workgroup and 2015 FAM Master Plan Update.
- Introduced questions about the issues that require City Council feedback, including:
 - Energy management;
 - Projected climate change impacts to city facilities;
 - Operations and office space studies; and
 - Environmental remediation.

Joe Castro's Presentation

- *History of the FAM Master Plan*
- *Energy Management*
 - Gave a summary of the Energy Performance Contract (EPC), including the financials of the contract – the money spent and invested, as well as the resulting energy cost savings. For example, FAM was able to reduce greenhouse gas emissions by 24 percent.
 - Provided an overview of the PeoplePowerPlanet campaign and powerED program to help facilitate city employee behavior change to support the EPC investments. The City of Boulder is the first municipality in the country to implement these efficiency programs in the public sector.
- Shared an update about the electric vehicle program.
- *Climate Change Impacts to Facilities*
 - The Institute of Climate and Civil Systems (iCliCS) was hired to identify potential climate change impacts to city facilities.

- The Infrastructure Planning Support System (IPSS) created by Resilient Analytics, an iCliCS firm, produced climate change scenarios for the City of Boulder through the year 2100 using data from the Intergovernmental Panel on Climate Change's 54 General Circulation Models (GCMs). Each scenario includes an analysis of the risks and costs of adaptation versus not adapting.
 - The iCliCS model divided the City of Boulder into two climate zones from north to south. One city facility in each climate zone was selected for the study – the East Boulder Community Center (EBCC) in the south zone and the new Wildland Fire Station in the north zone.
 - These projected temperature increases will cause energy costs to increase by a range of 3 to 18 percent for the EBCC and 2 to 16 percent for the Wildland Fire Station by 2050.
 - The next steps for staff will be to determine other city facilities to study and model increased energy costs, and then to identify risk-banked changes to the current funding model to account for the higher energy costs and earlier replacement and upgrades of heating, ventilation, and air conditioning (HVAC) and other building systems.
 - Information about the impacts of higher energy costs will be presented to council in 2015 as part of the FAM Master Plan Update.
 - The current goal for funding is 2.5 percent of the current replacement value (CRV) for operations and maintenance (O&M) and 2 percent of the CRV for replacement and renovation (R&R)
- *City Operations and Office Space*
 - There is a deficiency between what the city has available for office space, what the International Facility Managers Association (IFMA) nationwide average is, and what other local area government provide.
 - FAM commissioned three major studies of city operations and office space in the:
 - Downtown area;
 - Police Department and Fire-Rescue Department; and
 - Municipal Service Center.
 - The studies identified shortfalls of 30,000 square feet for city services in the downtown area and recommended that 35,000 square feet of city facilities and 377 parking spots be removed from the high-hazard flood zone.
 - The total space deficiency at the Public Safety Building is 25,000 square feet and 50 parking spots. The best operational and most cost-effective option is to construct an addition to the Public Safety Building with a new parking structure.
 - The Fire-Rescue Master Plan calls for an evaluation of space needs for current fire stations. Moving Fire Station #3 out of the 100-year floodplain has been identified as a top priority. A space needs study has been initiated for Fire Station #3 and Fire Administration.
 - The city is temporarily leasing office space at Center Green Drive. Moving Information Resources, Information Technology and Human Resources to the leased space will increase the available space for city services in the downtown area. Moving Fire Administration out of the Public Safety Building will provide the Police Department with 3,000 square feet to expand into.

- *Environmental Remediation*
 - Valmont Butte Voluntary Clean-Up Program (VCUP)
 - FAM has been working with the previous property owners to remediate the hazardous materials left onsite, at a cost of \$6.4 million.
 - The VCUP is complete and received a No Action Determination approval from the Colorado Department of Public Health and Environment (CDPHE).
 - The CDPHE revision of the existing covenants to assure that future land use is protective of the remedy was signed on May 12, 2014.
 - The city is examining annexation of the property and a redesignation of the land use from “commercial/light industrial” to “public.”
 - Staff’s intent is to continue the historical designation of the mill buildings, preserve the 16 acres of undisturbed historic areas, keep the 27 acres of open space “as-is,” and use the remaining areas for future, low-impact city use.
 - 13th Street Voluntary Clean-Up Program (VCUP)
 - Remediation activities were initiated on Jan. 28, 2014 and continued through the backfilling efforts on April 17, 2014.
 - Staff is continuing work to determine the effectiveness of in-situ remediation and is seeking reimbursement from other responsible parties

NEXT STEPS

Climate Commitment discussions with City Council in November 2014 will also guide the 2015 FAM Master Plan Update.

2015 FAM Master Plan Update Anticipated Schedule

- *Fourth Quarter 2014* –Parks and Recreation Advisory Board, Library Commission, Arts Commission, and Environmental Advisory Board.
- *Second Quarter 2015* – Planning Board consideration and City Council consideration.

COUNCIL DISCUSSION

Individual council members provided specific feedback in response to the questions from staff.

1. *Does council have any questions regarding the projected climate change impacts to city facilities?*
 - Council members were not comfortable with the way the climate change scenarios were presented. They would have liked to see the information shown in a scatter chart and would like to have all of the 54 GCMs shown together to see where they fall in relation to each other. Council determined that the information needs to be refined further.
 - Council would like to have more information about the projections and methodology, especially why Boulder was separated into two different climate zones.
 - Council would like to make sure that staff is planning properly for these types of climate scenarios. They asked if the city should use the International Council for Local Environmental Initiatives (ICLEI) climate change projections for modeling of impacts, in the future.

- Council commended staff for the energy efficiency work that has been done. The city needs to keep looking at future climate change impacts to facilities, the cost of doing nothing, and what the city will need to plan for.
 - Council wanted to know if municipalization was accounted for in these climate change scenarios. Dr. Paul Chinowsky from ICliCS stated that municipalization was not accounted for in these models.
2. *Does council have any questions about the operations and office space studies, or the capital projects being planned and evaluated?*
- Council wanted to know if the space requirements were based on projections for the proposed increase to the number of employees presented in the 2015 budget/capital investment plan presentation. Joe Castro stated that they are, with the planning factor of 360 square feet per person being used. The more detailed space analysis evaluates how much growth should be provided for.
 - Council wanted to know how much head room FAM should build in for the future. Joe Castro stated that FAM tries to budget for a 20-year major renovation of each building. Council requested that staff look at what the city can actually afford and determine if a 20-year renovation cycle is the right interval, or if the city needs to plan for longer cycles due to budget limitations.
 - Council wanted to know if the IFMA numbers for square footage per employee were for public and private facilities. Joe Castro stated that the numbers were only for city and county government buildings nationwide, which FAM staff considered to be high in comparison to other local governments.
 - Council was supportive of moving Fire Station #3 out of the floodplain.
 - Council needs more information in order to support the Fire-Rescue Department needing more space; for example, council wants to know the results of the small vehicle pilot program. Joe Castro stated that this will all be part of the upcoming space study for the Fire-Rescue Department facilities.
 - Council would like more information about the Public Safety Building and the parking situation. What is the culture? What is expected? Who is the additional parking for - visitors and/or employees?
3. *Does council support staff scheduling for council consideration the proposed annexation of the Valmont Butte property, with the intent to landmark the historic mill buildings, preserve previously undisturbed areas in their natural state. and make the remaining areas of the property available for low-impact municipal uses such as material stockpiling storage and renewable energy generation?*
- Council is supportive of moving forward, as long as the conversation and communication continues with the Native Americans and all other interested parties. Staff should proceed in a slow and deliberate manner.
 - Joe Castro stated that the Native American representatives are pleased with the work that has been done so far and would like a continued presence in the area to help protect and preserve it.
4. *Does council have any other questions involving the management of the city's facilities?*

- Council stated that they have not heard any discussion about the Municipal Service Center (Yards) and asked what the long-range plans for that area are. Joe Castro stated that the Sept. 23 study session packet provided an update about the Municipal Service Center Master Plan, including what staff has planned up to January 2015, when the storage area (next to where Eco-Cycle was) will be vacated. FAM is starting to work on a second planning phase to determine the next steps and will provide council with an update in 2015.

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Attachment B: Institute of Climate and Civil Systems' Scatter and Whisker Diagrams

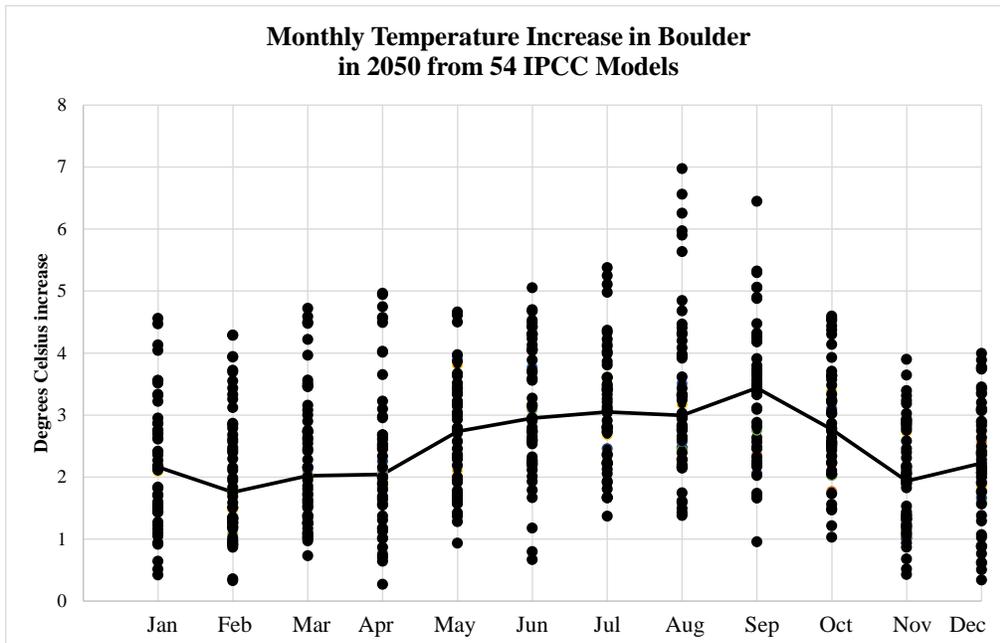


Figure 1: Monthly temperature increase for all 54 General Circulation Models.
 The temperature is calculated as an average of the monthly temperatures projected during a ten-year period (2040 to 2050). The median monthly values are shown along the dark line. Temperature is shown in Celsius.

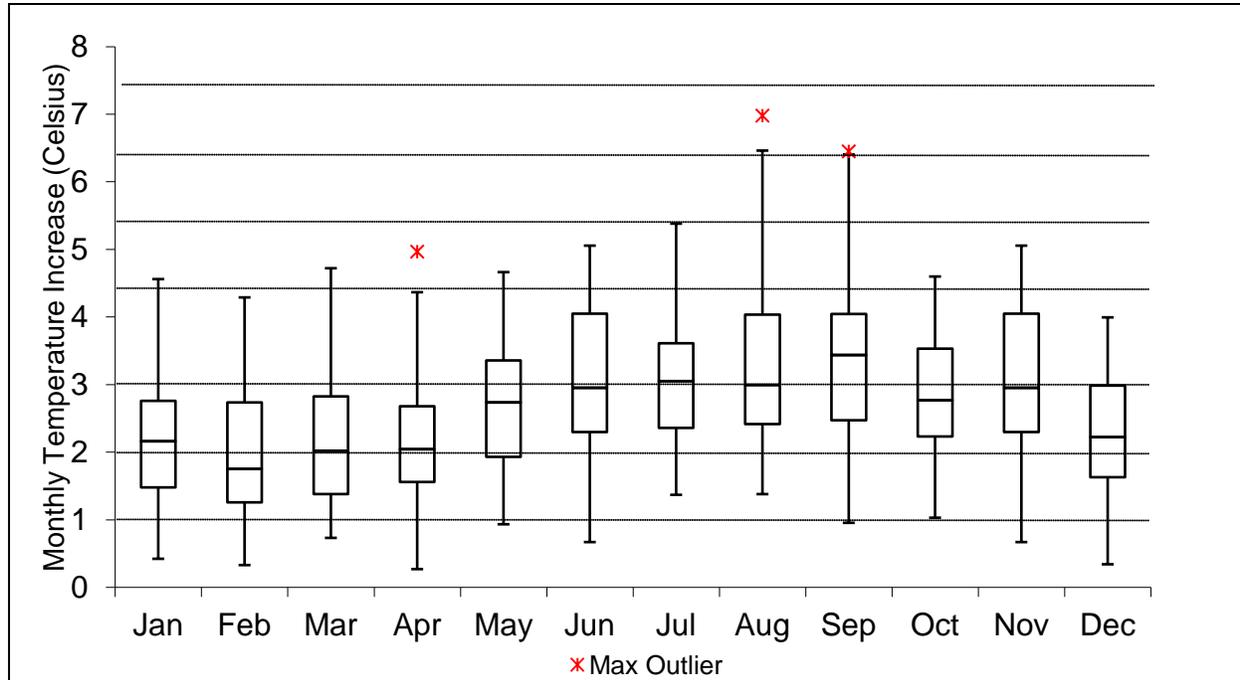


Figure 2: Monthly temperature increase for all 54 General Circulation Models.
 The temperature is calculated as an average of monthly temperatures projected during a ten-year period (2040 to 2050). The box plots illustrate the 25th to 75th percentiles with the median line. The whiskers extend to the minimum and maximum temperatures. Temperature is shown in Celsius.

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