

MEMORANDUM

JOINT
BUDGET
COMMITTEE

TO Members of the JBC
 FROM Steve Allen, JBC Staff (303-866-4961)
 DATE March 1, 2018
 SUBJECT Recommended JBC Bill for Judicial Center Controlled Maintenance

JBC staff recommends that the Committee carry a bill to create a dedicated controlled maintenance cash fund to pay for controlled maintenance expenses of the Ralph L. Carr Judicial Center over the life of the building. The fund would be named the "Carr Center Controlled Maintenance Cash Fund." The bill would transfer \$3,000,000 from the Justice Center Cash Fund into the new cash fund on July 1, 2018. The fund would be subject to annual appropriation by the General Assembly to pay the Carr Center's controlled maintenance expenses and other designated expenses that recur periodically. The list of covered expenses could potentially change over time. Annual appropriations into the fund would be made in the Long Bill from the Justice Center Cash Fund, which receives revenues from docket fees and lease payments made by building tenants. The first annual appropriation into the fund would be in FY 2019-20. The annual appropriations would be level but could periodically be increased to reflect the higher cost of controlled maintenance due to inflation. The Judicial Department's annual budget requests would identify controlled maintenance expenses for the upcoming fiscal year and the JBC would include a corresponding appropriation from the new cash fund in the Long Bill.

The Judicial Department requested this bill when it submitted its budget last November and proposed the initial \$3 million transfer. At briefing, the JBC asked the Department to estimate the Carr Center's future controlled maintenance needs and submit them to the Committee. The Department's architect, its property management company, and the Carr Center's building engineer jointly developed the list of controlled maintenance needs at the end of this memo. The list was also based on consultation with vendors concerning asset costs and projected lives.

Commenting on this list, the state architect noted some omissions and the inclusion of at least two items (x-ray machines and metal detectors) that are not normally considered controlled maintenance because they are movable and are not part of the building. The omitted items were:

- Costs of maintaining the windows and caulking around windows.
- Interior paint and sealing.
- Pipes and plumbing. Some parts of the sprinkler system have standing water in them at all times and will eventually need replacement.
- Fire alarms, fire control, cameras, security devices, controlled access doors.

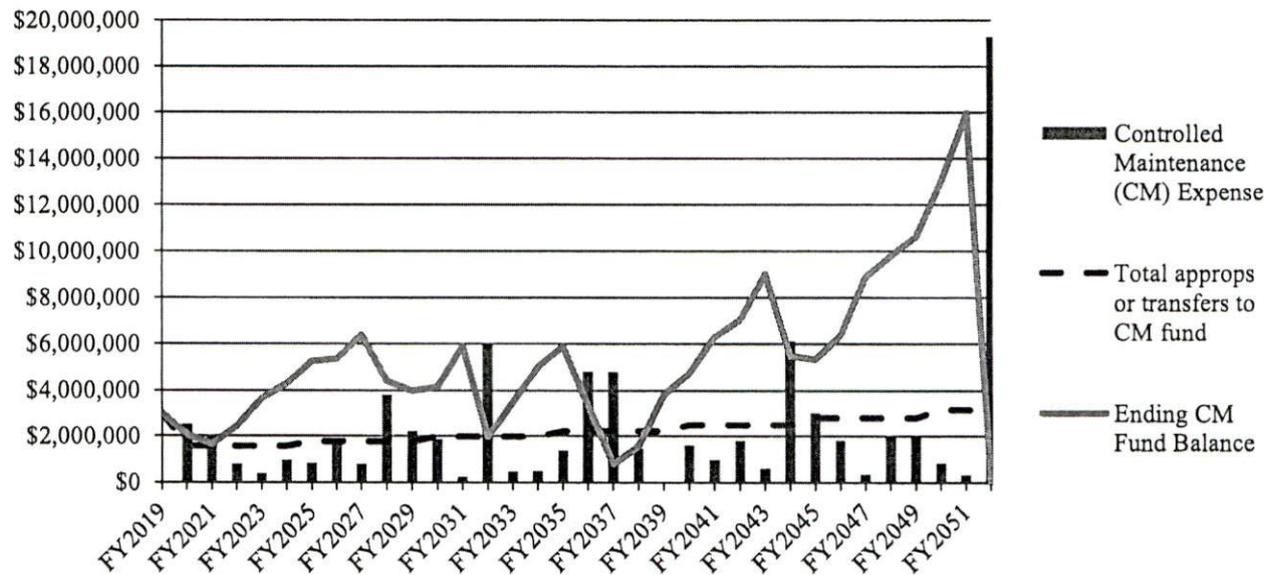
The Department is now looking at adding these items to the list. While x-ray equipment and metal detectors should technically be excluded, staff sees no harm in leaving them on the list. Any substantial periodic expense could be included in the funding plan as long as the Department and the JBC clearly understand what is included. If the Department uses the fund to pay expenses that are not on the list, the fund will be unable to pay all the anticipated costs that are on the list.

The Carr Center opened in 2013 so building assets with the shortest lives (7 years) are due for replacement in FY 2019-20. The two longest-lived assets (at the bottom of the table) last 40 years and together are the most expensive items on this list. Thus in 2052, 40 years after the building opened, all of the controlled maintenance assets in the Carr Center will have been replaced at least once. The next complete replacement cycle will conclude 40 years later in 2092.

Based on this list, the Department proposed a funding plan that staff refined. The staff plan, which is designed to pay controlled maintenance needs through 2052, is based on the following assumptions:

- Contributions to the fund will pay all controlled maintenance costs through 2052.
- The interest rate the Colorado Treasury pays to the fund will average 1%
- Inflation rates will average 2.35% annually, which approximates recent inflation. Controlled maintenance costs will rise at this rate.
- The annual appropriation into the cash fund will be adjusted upward once every 5 years to catch up with inflation.

Based on these assumptions staff determined that the first annual appropriation into the fund (in the year after the initial \$3 million contribution) should equal \$1,566,773, rising to \$1,759,727 in 2025 and to \$1,976,445 in 2030. The following chart shows the controlled maintenance expenses, the slowly rising annual contributions to the fund, and a fund balance that returns to 0 in 2052. **The Department finds these appropriations acceptable.**



The plan is flexible by design because needs will evolve. If in five years, the inflation forecast proves too low, or the cost on an item on the list differs significantly from the forecast, the plan can be recalculated and appropriations into the fund can be adjusted.

While experimenting with the spreadsheet that generated this chart, staff realized that inflation is a very important consideration. If the inflation rate is 2.35 percent, then prices will double every 28 years, so in 2046 replacement assets will cost twice as much as they do now. It will be important to increase appropriations periodically by that amount, which can only be done if Judicial revenue sources rise in step with inflation. Periodically the JBC may want to take the lead and sponsor bills that adjusts some judicial Department fees in step with inflation.

Ralph L. Carr Judicial Center Controlled Maintenance Needs Through FY 2030-31																
Project Title	Project Description	Life	Current Cost	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031
Network Switches	Replace Network Switches.	7	314,600	0	0	329,560	0	0	0	0	0	0	387,748	0	0	0
Lighting Control	Upgrade Lighting Control Upgrade	7	31,460	0	0	32,956	0	0	0	0	0	0	38,775	0	0	0
WAP Replacement	Replace Wireless Access Point (WAPs)	8	943,800	0	0	988,680	0	0	0	0	0	0	0	1,190,580	0	0
Court's Exterior Lighting	Replace existing lighting.	7	180,895	0	0	189,497	0	0	0	0	0	0	222,955	0	0	0
X-Ray Replacement	Replace existing x-ray machines in lobbies	7	78,650	0	0	82,390	0	0	0	0	0	0	96,937	0	0	0
Core Switches	Replace and upgrade the Carr network switches	8	300,443	0	307,503	0	0	0	0	0	0	0	370,299	0	0	0
DAS	Replacement of Distribution Antenna System for cell phone	8	1,730,300	0	1,770,962	0	0	0	0	0	0	0	2,132,613	0	0	0
UPS Battery Replacement	Battery Replacement throughout Carr	4	94,380	0	96,598	0	0	0	106,003	0	0	0	116,324	0	0	0
AV Replacement	AV Replacement for Carr Public Areas	8	354,974	0	363,316	0	0	0	0	0	0	0	437,509	0	0	0
AV Replacement	AV Replacement for Carr Public Areas	8	354,974	0	0	371,853	0	0	0	0	0	0	0	447,790	0	0
AV Replacement	AV Replacement for Carr Public Areas	8	354,974	0	0	0	380,592	0	0	0	0	0	0	0	458,313	0
Tower Carpet Replacement	Replace Carpet in Office Tower (20% of floors)	10	346,060	0	0	0	371,035	0	0	0	0	0	0	0	0	0
Tower Carpet Replacement	Replace Carpet in Office Tower (20% of floors)	10	346,060	0	0	0	0	379,754	0	0	0	0	0	0	0	0
Tower Carpet Replacement	Replace Carpet in Office Tower (20% of floors)	10	346,060	0	0	0	0	0	388,679	0	0	0	0	0	0	0
Tower Carpet Replacement	Replace Carpet in Office Tower (20% of floors)	10	346,060	0	0	0	0	0	0	397,813	0	0	0	0	0	0
Tower Carpet Replacement	Replace Carpet in Office Tower (20% of floors)	10	346,060	0	0	0	0	0	0	0	407,161	0	0	0	0	0
Test Davits	Test of roof Davits	10	39,325	0	0	0	42,163	0	0	0	0	0	0	0	0	0
Courts Carpet Replacement	Replace carpet in the Courts portion of Carr (1/3)	12	222,842	0	0	0	0	0	250,285	0	0	0	0	0	0	0
Courts Carpet Replacement	Replace carpet in the Courts portion of Carr (1/3)	12	222,842	0	0	0	0	0	0	256,167	0	0	0	0	0	0
Courts Carpet Replacement	Replace carpet in the Courts portion of Carr (1/3)	12	222,842	0	0	0	0	0	0	0	262,187	0	0	0	0	0
Heat Trace	Partial replacement of existing Heat Trace System	12	196,625	0	0	0	0	0	220,840	0	0	0	0	0	0	0
Network Servers	Replace Building Network Servers	13	157,300	0	0	0	0	0	0	180,824	0	0	0	0	0	0
UPS / 300KVA	Replace existing units.	14	589,875	0	0	0	0	0	0	0	0	710,334	0	0	0	0
UPS / 300KVA	Replace existing units.	14	589,875	0	0	0	0	0	0	0	0	0	0	0	761,599	0
UPS / 160KVA	Replace existing unit.	14	487,630	0	0	0	0	0	0	0	573,727	0	0	0	0	0
CRAC Unit Replacement	Replace existing CRAC Units in Data Center	14	401,115	0	0	0	0	0	0	0	471,937	0	0	0	0	0
Courts Garage Door	Replace existing overhead door	15	66,066	0	0	0	0	0	0	0	0	79,557	0	0	0	0
Fire Alarm System	Retrofit Fire Detection System	17	267,410	0	0	0	0	0	0	0	0	0	0	337,331	0	0
Replace Boilers	Replace existing Boilers (Quantity 3)	18	188,760	0	0	0	0	0	0	0	0	0	0	238,116	0	0
Replace Boilers	Replace existing Boilers (Quantity 3)	18	188,760	0	0	0	0	0	0	0	0	0	0	0	243,712	0
Replace Boilers	Replace existing Boilers (Quantity 3)	18	188,760	0	0	0	0	0	0	0	0	0	0	0	0	249,439
Replace Boilers	Replace existing Boilers (Quantity 3)	18	188,760	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Handler - AHU chilled water coil	Replace AHU chilled water coil	18	75,504	0	0	0	0	0	0	0	0	0	0	0	97,485	0
Air Handler - AHU hot water coil	Replace AHU hot water coil	18	75,504	0	0	0	0	0	0	0	0	0	0	0	97,485	0
Replace Snow Melt Equipment	Replace Snow Melt mechanical equipment.	18	157,300	0	0	0	0	0	0	0	0	0	0	0	203,093	0
Replace Emergency Generators	Replace Emergency Generators for Carr Complex (Quantity 2)	20	1,559,283	0	0	0	0	0	0	0	0	0	0	0	0	0
Replace Cooling Tower	Replace Cooling Tower (4 Cells)	20	385,385	0	0	0	0	0	0	0	0	0	0	0	0	0
Replace Chillers	Replace Chillers (530 Ton - Quantity 2)	20	943,800	0	0	0	0	0	0	0	0	0	0	0	0	0
Replace Chillers	Replace Chillers (220 Ton - Quantity 2)	20	786,500	0	0	0	0	0	0	0	0	0	0	0	0	0
BAS Jaces	Replace existing Jaces	20	81,796	0	0	0	0	0	0	0	0	0	0	0	0	0
Automatic Transfer Switch	Replace existing transfer switch.	25	283,140	0	0	0	0	0	0	0	0	0	0	0	0	0
Gerator Paralleling Switchgear (GPS)	Replace existing GPS	25	201,344	0	0	0	0	0	0	0	0	0	0	0	0	0
AHU - Motor Banks	Replace motor banks in existing Air Handler Unit	25	418,418	0	0	0	0	0	0	0	0	0	0	0	0	0
Pumps - HVAC	Replace existing HVAC Pumps	25	153,368	0	0	0	0	0	0	0	0	0	0	0	0	0
Replace Roof	Replace existing roofing.	25	786,500	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary Electrical Switch Gear	Replace Primary Switch Gear for Carr	40	528,528	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-Station Switch Gear	Replace existing Sub-Station Switch Gear (Quantity 6)	40	1,812,096	0	0	0	0	0	0	0	0	0	0	0	0	0

This table assumes that the cost of controlled maintenance item rises 2.35 percent per year, which approximates recent inflation. Because of space constraints the table stops in FY 2030-31, before the last 12 assets on this list are replaced.