



Office of the Common Council - City Clerk
City Records Center

Jim Owczarski
City Clerk
jowcza@milwaukee.gov

Bradley Houston
City Records Officer
Bradley.Houston@milwaukee.gov

August 22, 2019

TO: Ald. Nik Kovac, Chair, City Information Management Committee
FROM: Brad Houston, Document Services Manager/City Records Officer
RE: Cost Implications of Surveillance Footage Storage

At the June 19, 2019 CIMC meeting, I submitted RDA #19-0065, at the request of ACA Peter Block, as a global schedule for Surveillance Recordings across the City of Milwaukee. This schedule was based on a similar RDA for Milwaukee Police Department Surveillance Footage (RDA #17-E036) and reflected the 120-day statute of limitations for bringing civil action against government entities, as described in Wis. Stat. § 893.80(1d)(a). Concerns were raised at that meeting about the cost of storage of 120 days of digital video, and the schedule was held pending investigation of the cost implications.

There are, to be sure, many variables to consider for storage costs, including number of cameras recording footage, video frame rate and resolution, and file format, and I cannot explore every hypothetical in this memo. However, a number of surveillance camera vendors have provided online storage space calculators for this very purpose, which allows for some variable experimentation.

Using one such calculator at maximum size, resolution (10 Megapixel), and frame rate (30 fps), storage required for 120 days of footage on one camera was as high as **1308 TB** (or 1.3 million GB of data total). This, at a low-end price of \$300 for an 8 TB networked hard drive, is clearly not an acceptable amount of data to retain. By contrast, a lower-end quality of surveillance (1 Megapixel, 10 fps, medium video quality) will produce merely **2.69 TB** of data over the 120-day period. That same \$300 8 TB hard drive will by itself have enough capacity for three cameras recording at this level. My supposition is that surveillance cameras in use by DPW, MPL, and others produce video data somewhere in the middle of this range.

As I noted at the June 19 meeting, since at least 2014 the Public Records Board has not approved ANY schedules for surveillance footage, even with no discernable incidents, for any period less than 120 days. In the absence of such a schedule, however, retention of this footage defaults to the period set by Wis. Stat. § 19.21(4)(b) of **seven years**, under which standard most City Departments are doubtlessly already out of compliance.

My recommendation is for CIMC to **approve RDA #19-0065 as written**, and to **direct City Records and ITMD to develop guidance for reducing the storage footprint of surveillance footage of no evidentiary value**, to be disseminated to DPW and other facilities/security managers to help them meet the 120-day retention requirement.

