**Supporting rationale for 2% Reserve**

In 1990, the Building Research Board (BRB) of the National Research Council (NRC), within the National Academy of Sciences, produced a body of work titled *Committing to the Cost of Ownership: Maintenance and Repair of Public Buildings* focused on the subject of maintenance and repair of public buildings. The material therein is still referenced today by the Association for Physical Plant Administration (APPA). Based on a review of APPA’s material, it is noted that one-time funding to eliminate a backlog of deferred capital needs falls short of responsible stewardship, as it does not address future funding requirements to help avoid recurring “backlogs”. A dedicated reserve for replacement/renewal of facilities addresses this issue. APPA suggests an appropriate annual allocation (to a reserve) for routine maintenance and capital renewal in the range of 2%-4% of current replacement value (CRV) of facilities, excluding major utility infrastructure (e.g., distribution lines, central utility plants, etc.)1. This suggested allocation has two components; *maintenance* and *capital renewal*, the former representing routine/minor maintenance and not relevant to the matter of projected capital renewal needs; see below.

Maintenance (minor, routine): 0.5% - 1.5% of CRV

**Capital Renewal (long term): 1.5% - 2.5% of CRV**

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Total: 2.0% - 4.0%

**Based on the above, an annual reserve requirement of 2.0% (the median) is recommended.** It should be noted, however, that this does not address any pre-existing backlog of deferred capital needs, and it excludes functional improvement (e.g. increased capacity) to facilities.

1. APPA, <https://www.appa.org/bok/capital-renewal-and-deferred-maintenance/> , “Capital Renewal and Deferred Maintenance”, Harvey Kaiser