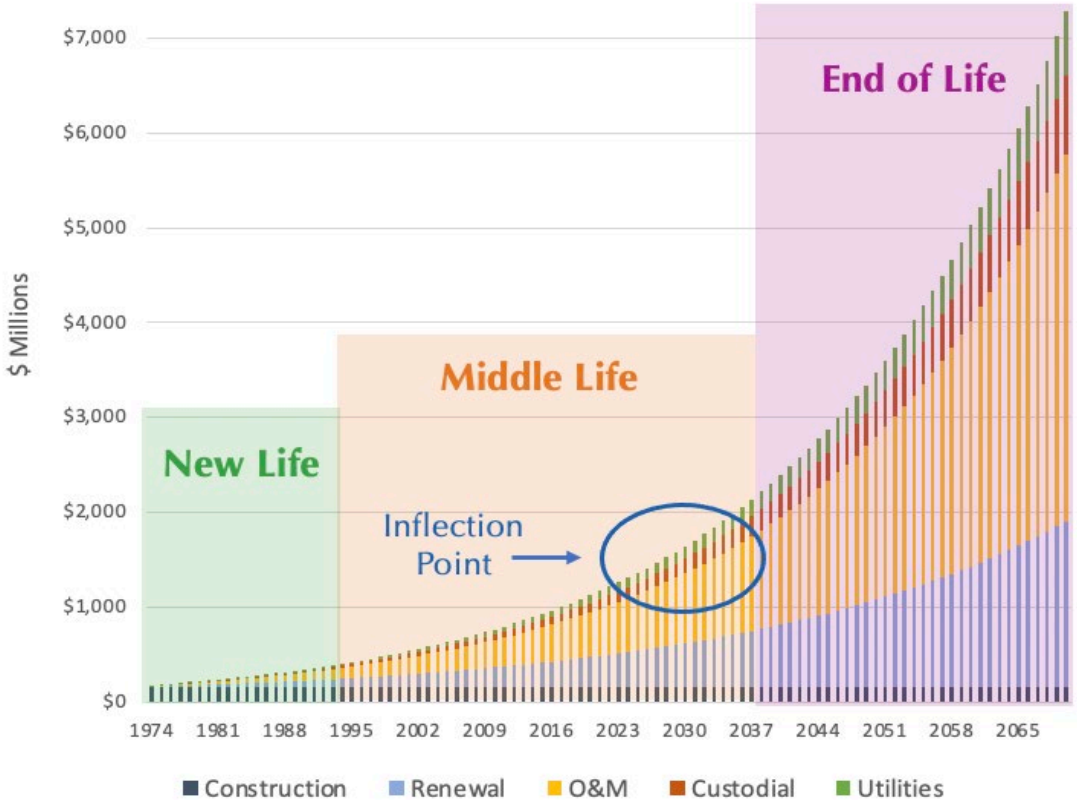
TOTAL COST OF OWNERSHIP OF CITY BUILDING PORTFOLIO



New Life *(Brenton Building, Boulder Reservoir Building)*

When a building is new, capital renewal needs are minimal to none, and the building performs predictably and linearly. Operations and maintenance (O&M) are proactive and preventative versus reactive, and utility costs are efficient.

Middle Life

Capital renewal on systems starts coming due and buildings perform more randomly and less predictably. O&M becomes increasingly reactive and utility costs are less efficient if the building is not routinely kept balanced. Buildings that are designed to last are high performing and, most importantly, are funded at appropriate levels. Well-built buildings will enter middle life 10-15 years later and costs can be kept under control for longer periods.

Inflection Point *(Municipal Building, Fleet Building)*

At 25-30 years in a typical building, or at 50-60 years for a well-designed, well-maintained, high-performing building, the cost of owning, operating, and maintaining aging infrastructure escalates significantly. Equally, the performance of the building and systems deteriorates. At this point, it is critical to determine whether continued investment in the current state of the building is worthwhile or, if either, a significant (deep) retrofit should be made, or the asset should be repurposed entirely.

End of Life

Without a deep retrofit and appropriate maintenance, as the buildings approach their life expectancy, capital renewal needs escalate, building performance deteriorates, and O&M becomes reactive and less efficient rapidly. At this point, the asset no longer performs and should be repurposed, disposed of, or deconstructed.