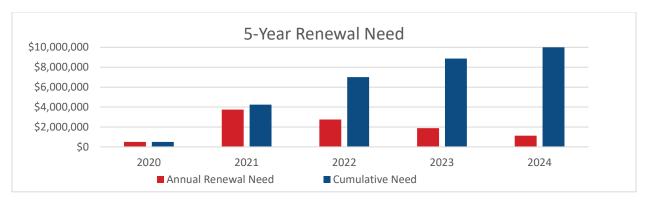
By William (Bill) Roth, Roth IAMS Ltd., FCAPX and SLAM Technologies Ltd.

The beginning of a new year and a new decade is the perfect time to consider tackling an important issue for all Asset and Facility Managers. Do you find it challenging to set realistic expectations for the results of your capital renewal program? If you do, you are not alone.

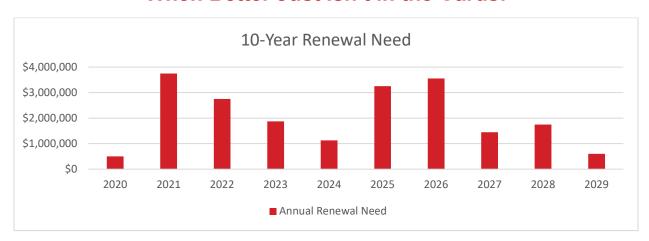
We collaborate with our clients to develop Integrated Asset Management (IAM) Plans and Programs, where our client's goal is to develop scenarios that will show improvement of their Deferred Capital Renewal and Maintenance (DCRM) backlog over the next three to five years. The problem is that the DCRM crisis has been two generations or more in the making. Unfortunately, even the most efficient and effective capital plan will be hard-pressed to overcome 40 to 50 years of neglect (in the absence of unlimited resources (time, money, staff, etc.)) within such a short timeframe.

To demonstrate this point, the graph below shows a portfolio with a 5-Year Facility Condition Index (FCI) of 10% based on \$10 M in renewal need and a replacement value of \$100 M. We have seen many clients make the case that if you give me \$5M in additional renewal funding over 5-Years, we can reduce our FCI from 10% to 5%.



At first glance, this assertion might make sense. However, as each year passes, a new list of needs (with their respective costs) enters into the FCI timeframe. Asset Managers cannot and should not fall into the myopic trap of just looking at the situation as it is today when making longer-term business cases. The second graph below provides a longer-term view of the renewal need for the portfolio that provides a more complete picture from an Asset Management perspective.

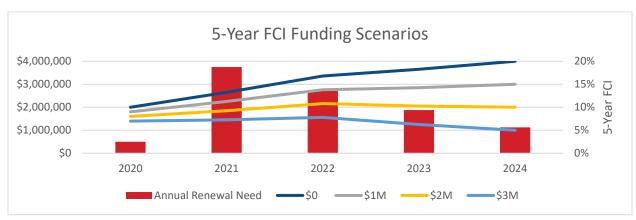




With a longer-term view, we see the relatively large spike in need in 2025 and 2026. The spikes are the result of deferring elements that are at or near their Expected Useful Life but have not been observed or reported as issues or deficiencies.

In a constrained funding situation, the idea is that these elements shouldn't be replaced simply because they are old. However, from a risk management perspective, we do not want to advance the replacement too far into the future as deterioration tends to accelerate at the end of an element's life. Additionally, it is prudent to make sure that these "old" elements are front-and-centre during the next round of Building Condition Assessments (BCAs). In some instances, during the next round of BCAs, some of these elements may once again be "pushed out" beyond the 5-Year FCI horizon if they continue to exhibit no deficiencies and do have any reported problems.

Now that we have a more complete picture of the renewal need over time, let's examine the actual impact of the \$5M in funding that is invested in the portfolio.



With the agreement to fund \$5M of capital renewal funding over 5 years (\$1M annually), the new FCI at the end of Year 5 would actually be 15%, up from 10% that was promised in our original client scenario. In fact, it would have taken \$10M in funding over the 5-Year planning horizon to just maintain the FCI at the level it started at, and \$15M to lower it to the original promised target of 5%.



To avoid falling into the present-day scenario trap, we recommend that clients use a 10-Year Projection of 3-Year or 5-Year FCI to make their business cases for increased capital renewal funding. In this way, longer term trends are considered, and more realistic expectations are set.

With the historic and on-going under-investment in capital renewal for our buildings and other assets, there is rarely an organization in the public or private sector that has sufficient capital to reduce the FCI for its portfolio over the near term. In our earlier case study, an FCI of 15% may look like failure compared to the stated goal of reducing it to 5%. However, when you compare it to the FCI of 20% that would have been, had the \$5M funding not been invested, 15% is an improvement.

Most organizations, in the near-term at least, will have to settle for making business cases where the goal is to be "LESS WORSE". With a sustained effort over time, and a commitment to increased capital investment and implementation of Preventative Maintenance Programs, we can start to "bend the curve" and get ourselves into a position where we can realistically develop plans to improve the condition of our assets over time.

To expect that we can do a 180 degree turn and undo decades worth of neglect may seem possible with a superficial glance. However, making these "bold" statements risk fracturing trust and causing us to slip back into underfunding scenarios.

Engaging stakeholders from across an organization to better understand the logic and discipline that goes into a capital planning process, as well as being realistic about what can be achieved in the near term, will set organizations on the path to solving their DM backlog problem.

We welcome your feedback on this and all whitepapers that we publish. Please send your comments to info@rothiams.com or email the author directly at bill.roth@rothiams.com. If you are interested in co-authoring one of our whitepapers by exploring specific challenges that face facility and asset managers, please contact us as well.



For more information on how we are helping clients just like you develop integrated asset management strategies, please do not hesitate to contact us!



William (Bill) Roth 289-295-1065 x101 bill.roth@rothiams.com

Bill Roth is the founder and President of Roth IAMS and FCAPX, as well as the Co-Founder of SLAM Technologies. Together the three organizations are focused on solving the world's deferred capital renewal and maintenance crisis.

