



Asset Sustainability

A 'Capital Creation Strategy' Roadmap

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The Challenge Today

There are many infrastructure challenges that we face today including an aging stock of assets, a lack of capital to sustain them and a lack of reserves to maintain them for the long term. Funding appropriation strategies are going to be challenged as this infrastructure continues to age.



Economic uncertainty along with a declining tax base is causing governments to rethink their fiscal policies and funding appropriation strategies. Some of the recent short-term strategies have resulted in funding cutbacks for capital renewal and operations to balance budgets. This impact has increased the number of unfunded capital repair and replacement projects resulting in an ever-increasing deferred maintenance backlog. When life cycles of major building systems and components are studied it becomes clear that the future unfunded needs are growing at a faster rate than available dollars. This growing unfunded liability should concern all portfolio owners – this situation begins to talk to an aging infrastructure that is approaching a state of unsustainability if status quo funding strategies continue to be applied. The assets that serve the community (that were once icons of a prosperous and healthy community) could become liabilities and need to be managed now before the situation worsens.

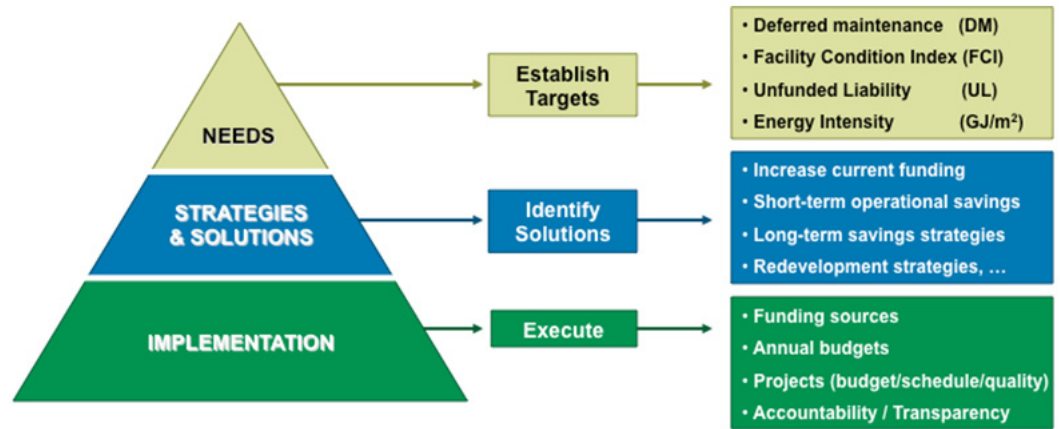
Within the confines of an effective asset sustainment model reside a few key pillars that need to be measured and monitored to create healthy communities. These include, in part, economic and fiscal health, physical asset health, and environmental and social responsibilities.

Defining and Arresting the Challenge

There are a few key steps required to arrest this challenge. Establishment of good data and criteria to measure success is vital and communicating and presenting effective and meaningful business plans that are understood by senior executives and key stakeholders.

A few key steps that have helped define and build a framework around this challenge include 'next practices' and processes including:

1. Defining asset needs - confidence with various forms of needs data
2. Exploring strategic opportunities - capital creation and leveraging strategies
3. Managing implementation strategies - measuring and communicating successes



Step One: Defining Asset Needs

Asset Needs come in many forms – it is important to assemble information that is measurable and objective including a short term picture of prioritized needs along with a long term picture that helps guide decisions around funding appropriation strategies. Metrics of key ‘needs based’ data should include the following elements:

- Life cycle cost profiles for all major systems and components
- Portfolio wide view that will allow holistic decision making
- Understanding of functional needs related to the purpose of the asset
- Current and longer-term view of asset utilization - demographics
- Environmental data including energy conservation initiatives
- Real estate valuation including development potential (density, zoning, etc.)

Step Two: Exploring Strategic Opportunities

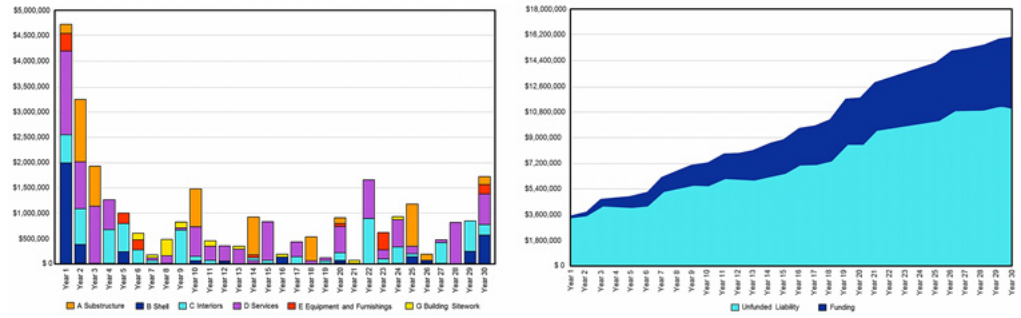
To maintain and sustain our infrastructure and assets, we need to create strategies that balance capital renewal needs against various funding sources and look for proactive ways to leverage this funding. Multiple funding strategies need to be explored and positioned in the form of an effective business plan including:

- Strategy 1) Creating Awareness
- Strategy 2) Creating Capital Through Leveraging
- Strategy 3) Community Partnerships

Strategy One: Creating Awareness

Funding appropriation policies can often be restrictive and tend to be based on historical spending rather than future projected needs. Preparing a good business plan that maps out current and future (25 to 30 year forecasts) of capital needs offer decision makers and boards a clear roadmap. Presently the industry uses ‘deferral strategies’ to balance need with budget (i.e. perform a repair to buy time for a needed replacement of an aging building system). Effective prioritization planning and mapping is the key to managing deferral strategies (refer to paper on ‘Effective Prioritization Planning’).

Tabular and graphical presentations help decision makers grasp the situation as it pertains to asset sustainability, as evidenced in the following samples. The 30 need profile is captured identifying a large deferred backlog in the first year and forecasting future life cycle needs representing all major building systems subject to capital depreciation. The second graphic shows a growing ‘unfunded liability’ in light blue that clearly illustrates that the funding formula will not sustain this aging infrastructure.



Based on the output from the Needs Analysis, Ameresco works with clients to develop financial strategies created through leveraging facility-related savings opportunities, identifying requirements for funding injection, and providing recommendations for any adjustments needed in the base funding level.

Equally important is an effective communication plan that needs to be established to ensure all stakeholders are fully informed and aware of the options and strategies – the goal is to achieve stakeholder buy-in.

Strategy Two: Creating Capital Through Leveraging

Capital Creation Strategies represent a series of options that when bundled together can produce significant financial leverage for the organization. There are multiple avenues that should be explored, but the more common ones include:

1. Energy savings through demand reduction or generation
2. IT/Communication savings
3. Operations and maintenance savings through life extension
4. Utilization savings through rightsizing and/or consolidation of property
5. Real estate leveraging (lease vs. own, property disposition/acquisition, etc.)
6. Life cycle reduction offsets through portfolio restructuring or right-sizing

Below is a simplified graphic that illustrates some of the more common ‘Capital Creation Strategies’:



Strategy Three: Community Partnerships

Quality assets in a community are highly regarded and offer many benefits. Too often assets are planned and built for a specific purpose only to find out that a number of years later the asset does not meet the current functional need or demographic shift has taken place in the community leaving the asset underutilized. Today we live in a world of ‘silos’ where each department, agency or organization builds assets to meet their specific needs. As dollars become more and more hard to come by and as long range tax bases are leaning towards a decline (except in areas where population growth is experienced), we are challenged to think beyond our current asset and infrastructure models – we need to look deeper to develop community partnerships and explore shared asset models.

Step Three: Managing Implementation Strategies

The key to an effective implementation plan is to develop and utilize performance metrics that effectively manage all capital investments. Outcomes of such a plan should measure and point to the gains achieved to support long term ‘asset sustainability’ of the portfolio.

Elements of an effective ‘Implementation Plan’ include:

- Selection of construction measures based on sound criteria (risk and impact based)
- Implementation strategies with measurable results that tie back to business plan objectives
- Use of criteria that measures impact of sustainability through Reduced Unfunded Liability and improved Facility Condition Indices
- Effective monitoring of implementation and outcome results
- Proactive project and construction management processes
- Continuous updating of the capital plan to reflect completed project information
- Communication strategies that reach out to community stakeholders on a regularly scheduled basis

For further information regarding ‘Asset Sustainability’ strategies, please contact Tim Dettlaff at tdettlaff@ameresco.com or call (toll free) at (855) 788-6068.



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