# **C55 Predictive Analytics**





Assets are aging and budgets are tight, yet expectations are higher than ever. Where should you focus your limited resources: on upgrades, maintenance, replacement, or growth? Which projects merit funding? Which investments will deliver the greatest value, or mitigate the most serious risks?

Make faster, smarter, and more strategic decisions with innovative solutions from Copperleaf™. We leverage operational and financial data to empower organizations like yours to make the highest value investment decisions.

# Forecast sustainment needs & manage risk in your critical infrastructure

At the core of the ISO 55000 asset management standard is the concept that assets exist to generate value for the company and its stakeholders. To maximize business value, organizations must develop comprehensive plans to proactively manage risk and ensure the ongoing performance and reliability of critical infrastructure. Being able to manage this effectively for a diverse asset base calls for a robust toolset.

The Copperleaf C55™ Predictive Analytics module includes multiple strategies to forecast the long-term sustainment needs of your assets based on economics and risk. With C55, you can visualize future asset demands and develop investment strategies to smooth out funding and resource requirements—and maximize the value of your asset portfolio.

#### Predict the sustainment needs of diverse assets

Many asset-intensive organizations struggle to forecast long-term sustainment needs across diverse asset pools. **C55** provides a long-term view by determining the *optimal economic intervention* dates for assets based on age, condition, degradation, and risk profile. **C55** considers the total cost of operating, maintaining, refurbishing, and replacing the asset, as well as the risks associated with potential failures, throughout its entire lifecycle.



> Copperleaf C55 is a unique Decision Analytics solution that helps assetintensive organizations decide where and when to invest in their businesses to optimize performance and manage risk.

C55 is highly modular and configurable, and integrates seamlessly with existing EAM, ERP, GIS, and a variety of other systems—empowering organizations to turn data into decisions.

Organizations can evaluate the impact of financial constraints across any range of years and come up with the best solution for all assets under consideration—deferring the lowest priority interventions and providing visibility into future "walls of investment" that might result from sustained underinvestment in the asset base. C55 provides a holistic view of the risks, costs, and benefits associated with different investment strategies for more informed decision making.

## Determine optimal funding levels for populations of assets

Large populations of assets with relatively low individual cost, such as distribution poles or water mains, require special attention. Rather than addressing these assets individually, organizations design recurring programs to proactively replace assets within the population to manage risk across the asset pool. However, the business consequences of reducing or increasing the level of investment in these programs is not well understood or quantified.

C55 provides a complete understanding of the impact of these different investment strategies on the company and its customers. C55 identifies the optimal investment strategy for populations of assets by comparing the risk, benefits, and cost trade-offs of various levels of funding.

### Create risk-informed investment strategies for your entire asset base

C55 Predictive Analytics enables companies to understand their asset sustainment needs over the long term, and create an investment strategy that maximizes business value while proactively managing risk. Unlike other solutions, C55 considers funding, resource, and timing requirements, resulting in an "executable" plan that can be accomplished with the available resources. Insightful reports and visualizations make it easy to communicate and justify planned asset expenditures internally, and to your regulator, board, and other stakeholders.



> C55's dashboards allow organizations to easily identify the assets that pose the greatest risk so that proactive interventions can be planned to manage the business to an agreed risk profile.

With Copperleaf C55, we now have much better visibility into the sustainment needs of our asset base over the long term, and we can clearly demonstrate that our investment plans are aligned with our company priorities.

—Jim Pegg, Manager of Asset Planning Hydro Ottawa

