



**HOW UTILITIES CAN MINIMIZE
RISK AND MAXIMIZE ASSET
AVAILABILITY TO IMPROVE
OPERATIONAL EFFICIENCY
AND CASH FLOW**







PowerPlan's Long-Range Planning Solution Improves Operational Efficiency and Cash Flow

When uptime is critical, and you need to get the most out of existing assets, how do you allocate limited funding among all the project managers vying for those dollars?

Rock, paper, scissors is a classic approach to conflict resolution. Drawing straws is another timeless solution. You can flip a coin, take a vote, wrestle or go with whoever whines the loudest. However, the board of directors might have some questions about those approaches.

The reality is that companies often make important strategic decisions based on siloed requirements or internal pressure. Long-range capital asset planning frequently revolves around discussions between directors about whose project is more important.

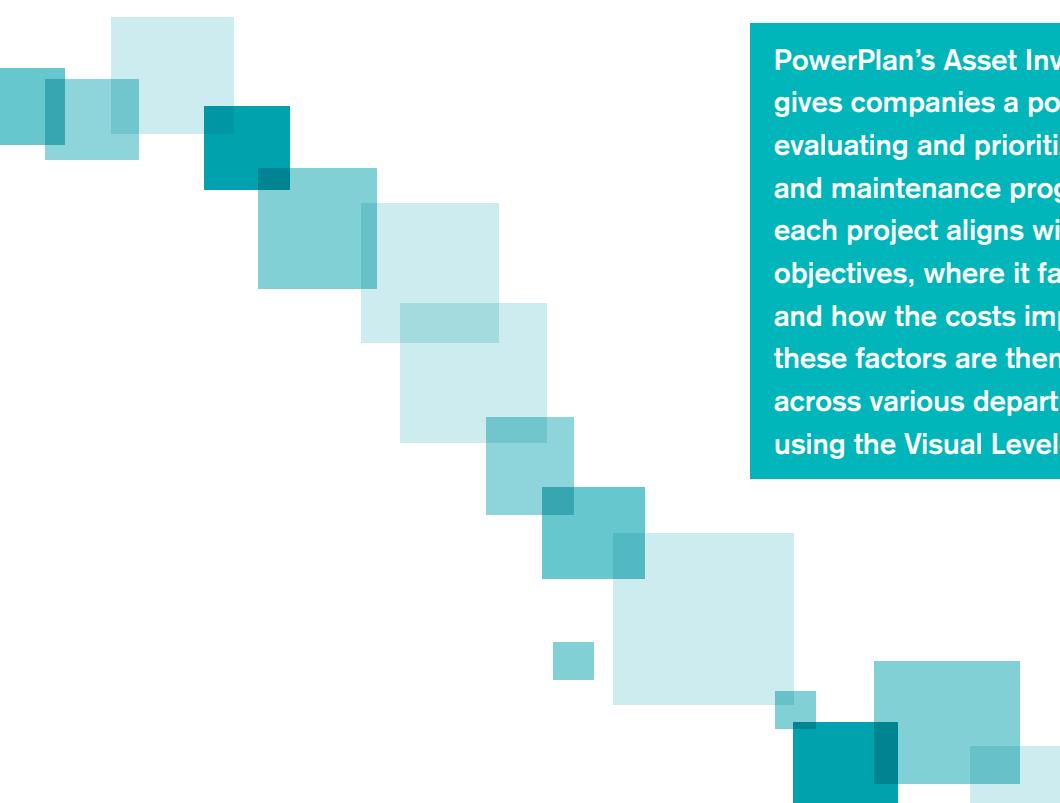
There is a better way.

The Visual Leveler, a module within PowerPlan's Asset Investment Planning (AIP) solution, allows utilities companies to optimize an investment portfolio of projects to determine which projects should be done and when to meet overall objectives. This portfolio optimization engine was purpose-built with a dynamic algorithm to help organizations best apply their available resources over time to achieve organizational objectives such as coming in on budget and minimizing total system risk. The algorithm also helps you identify and model the impact of different scenarios, all within the constraints of the organization. Consequently, the system provides unbiased decisions based on a framework that aligns projects to the corporate strategy and helps drive overall performance and cash flow. This form of investment decision making breaks down the silos between departments and enables an objective way to determine the right investments for the organization at the right time.

Challenging Traditional Methods

We already ruled out wrestling and coin flipping as practical methods for ranking infrastructure investments. If those aren't "workplace appropriate", then what options do companies currently use – and what challenges do they bring?

- **Spreadsheets:** Excel is a fantastic tool for crunching numbers. However, spreadsheets get unwieldy and complex when you start introducing formulas and macros to create maintenance schedules. And they add a level of risk that auditors just don't like.
- **Politics:** A project manager's title or years of service shouldn't be the only influence on complex logistical, financial and operational planning. You need to look at all the projects across department lines and decide what's best for the company and whether it aligns with the overall corporate objectives.
- **Equal portions:** Objectivity goes out the window with this method. Every project is treated equally, but it may not be the best decision for the company.



PowerPlan's Asset Investment Planning software gives companies a powerful solution for evaluating and prioritizing their capital projects and maintenance programs by assessing how each project aligns with strategic corporate objectives, where it falls within the risk register and how the costs impact the overall plan. All these factors are then used to prioritize projects, across various departments within the portfolio using the Visual Leveler.

At a time when you must balance variable commodity prices with the need to stretch every dollar, the Visual Leveler replaces bias and guesswork with neutrality that looks at your corporate objectives to develop the optimal plan on an objective basis.

Imagine what this means if you are responsible for maintenance and growth planning related to installing new lines, replacing meters, electric system upgrades, plant relocation or extensions and other improvements. An impartial assessment by the Visual Leveler determines what the critical needs are and when to make the investment. Despite internal lobbying by the person who manages “Project A”, the tool might tell you that “Project B” is the more essential investment right now based on risk and

regulatory requirements. In another scenario, the Visual Leveler might identify a project as the higher priority due to its alignment with the company’s strategic objectives or risk mitigation plan.

The software looks at all variables across the portfolio and provides the optimal plan that points you in the right direction. Although the module performs the analysis, the output is based on evaluation criteria you select. Factual decisions are dynamically weighted across the organization and can be changed and evaluated in real time in response to market conditions or regulatory requirements. Scenarios can be compared to see how the change of a constraint can change the outcome of the portfolio.





Forecasting, Planning, and Execution – It's Tetris on Steroids for Projects

The Visual Leveler is a flexible optimization software module that allows finance and capital planning professionals to weigh investment options against each other and then review them under variable constraints. The output is a multi-year portfolio with optimal project ranking and scheduling that can be updated in real time as needed.

Working inside the Visual Leveler is intuitive. The interface shows all your organization's projects in a pane on the left side of the window. Projects are ranked based on criteria you determine, along with the relative condition of every asset. On the right side, you can click and drag color blocks representing the project to find the ideal scenario for each upcoming year. David Clark, the director of capital planning for the District of Columbia, called that feature "Tetris on steroids" when he used the Visual Leveler to plan for a six-year capital improvement project.

"You can click on a project and slide it over, move it around, and you can save different scenarios," Clark said. "Then when you give up, you click a button that solves the problem for you. At that point, the system takes your highest priority projects and ranks them

in order based on the budget you have available in any year. And it moves anything below that to the out years."

The optimization engine runs through every scenario to determine which projects you should pursue and when they should take place. If it's more advantageous to refurbish an asset or delay building new infrastructure for three years, then the Visual Leveler will tell you. It even tells you when to abandon a project and pull it off the list. And this all happens within the parameters you set. You can see the ideal plan in a matter of seconds.

As you continually review the data, some critical requirements may indicate that a different project merits higher priority. In that situation, you can shuffle the plan and rework the details. You also can slice the information by multiple conditions, including region, general manager, or company.

Your strategy might be to achieve more revenue, maximize your field force or maybe the top priority is to reduce network risk. Or perhaps you need an equitable examination of which plants require inspection, which ones will require an overhaul in three years, and which sections are good for 20 years.

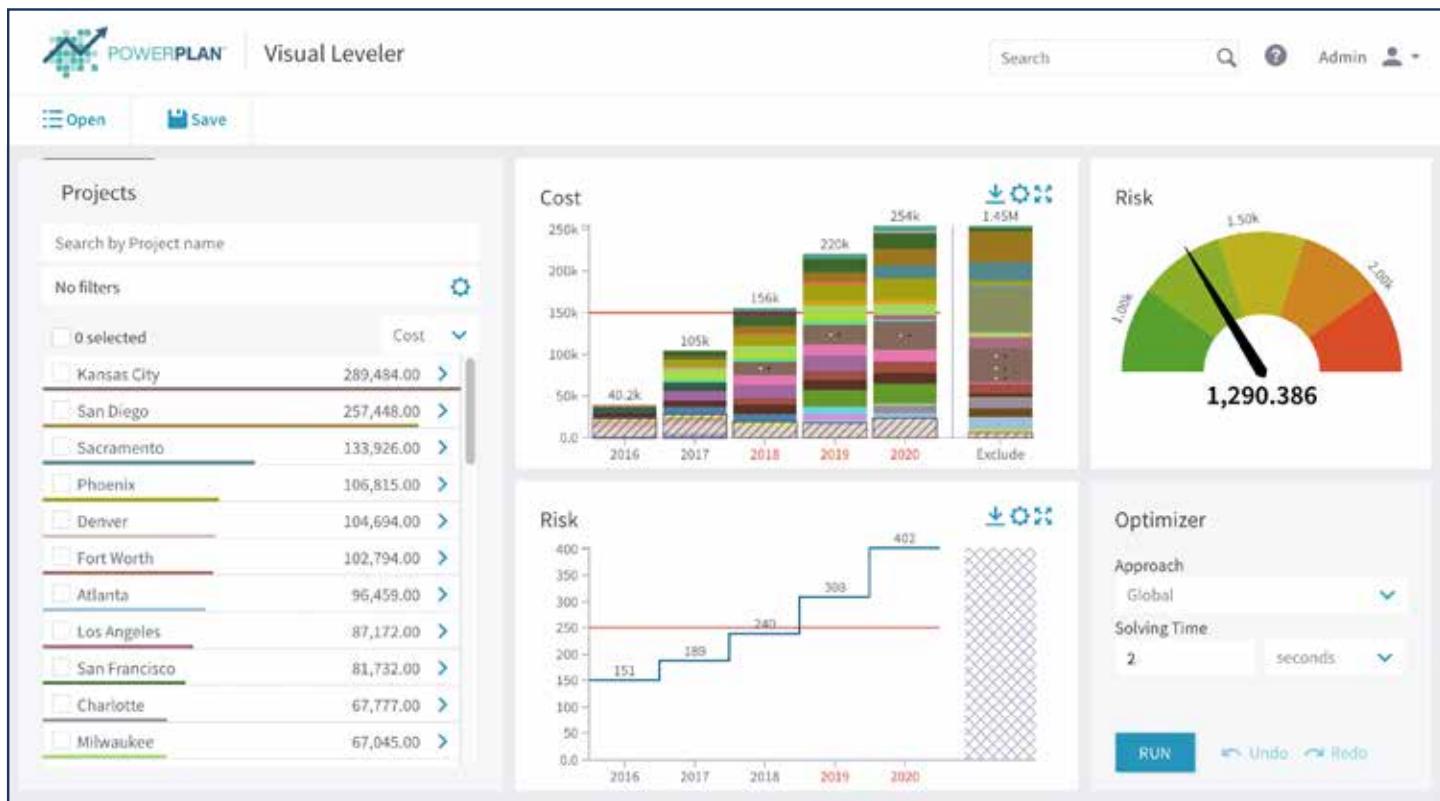
Set those constraints in the tool and let it do the analysis. You immediately see your optimal scenario and identify funding gaps. Of course, planning is only half the battle. Execution is the game.

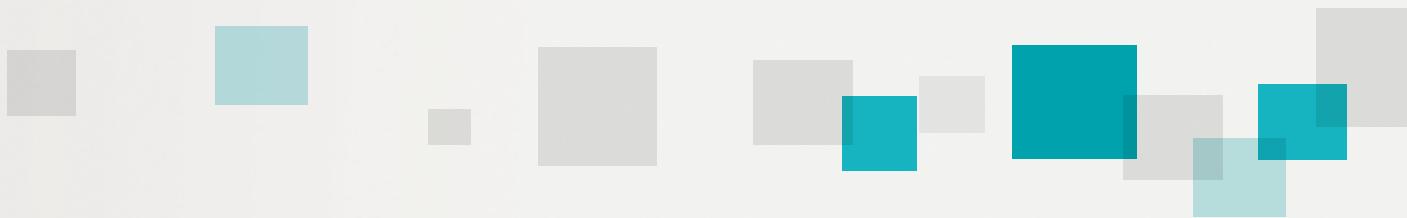
Once the projects are prioritized and in process, you need real-time visibility into the progress of all projects to make sure they are on track. The Visual Leveler solves that challenge with a native forecast-to-plan feature. It shows how things are trending early in the year so you can adjust portfolio investments. If you're under budget, you can see what's teed up next. If you're trending over, then at least you know early enough to plan for a course correction based on the guidelines you establish.

When you develop long-term strategies for asset optimization with PowerPlan's Visual Leveler, the results are pragmatic, defendable, and void of emotion. Those attributes are music to the ears of a CFO who needs to consider condition assessment and integrity management when planning budgets.

Other products offer individual solutions for planning, project execution, and forecasting. But only the Visual Leveler closes the loop to provide the utility industry with an integrated asset optimization tool.

We challenge you to see the Visual Leveler in action and learn more about how it will bring clarity to your asset investment plans: please visit <https://powerplan.com/schedule-a-demo> to request a demo.





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