



Oniqua Helps West Coast Transit Authority Fuel Savings and Drive Performance by Tuning Up Inventory, Accelerating Response Times and Putting the Brakes on Waste

Challenge:	Reduce inventory stock levels while maintaining 95%+ fill rates
Solution:	Oniqua Analytics Solution
Benefits:	Greater visibility into operations; ability to segment/analyze stock items by groups; Quicker reaction time to fluctuating demand; rapid implementation with no disruption to operations; automatic feedback loop into asset management system
Results:	400% return on investment; 20% reduction in inventory; \$1M in savings; significant reduction in analysis time from days and weeks to hours; reduction in purchase orders cut and overall replenishment costs.

Maximizing Inventory Levels – An Uphill Climb

A West Coast Transit Authority (WCTA) is a multi-modal transportation agency that keeps multiple cities on the West coast moving with bus and transit service; commuter-rail service; a toll facility; freeway, street and road improvement projects; motorist aid services and the regulation of taxi operations.

Within its bus operations alone, WCTA operates a \$165 million fleet of 550 vehicles, and needs to efficiently manage \$5 million worth of inventory consisting of over 14,000 stock part numbers. Materials and parts range anywhere from complex engine components to lubricants, upholstery and safety supplies.

Unlike many other asset-intensive organizations, WCTA and most other transit authorities don't build assets, they operate them. Their main job is to maintain buses, repair them and keep them on the road. In addition, most transit authorities don't have master schedules, sales forecasts, standard bills of material or MRP systems. Instead, transit authorities like WCTA deal with the same parts each and every day, and their primary challenge comes in the form of anticipating and reacting effectively to unplanned fluctuations in demand.

"Some of our segments are somewhat predictable," stated the Materials Manager at WCTA, who has worked with the transit authority for over seven years. "We'll do preventative maintenance on our fleets before they fail, such as changing filters, starters and many other items that have a certain life expectancy in order to prevent road calls. But for the most part, we really don't know what we're going to need from a materials and asset standpoint. We have to anticipate that."

Where the Rubber Meets the Road – Optimizing Inventory, Minimizing Risks, Reducing Costs

WCTA steers its inventory group towards a goal of 95 percent or higher fill rates, which means that WCTA must have parts in stock and ready for use at least 95 percent of the time. But there is a delicate balance between keeping fill rates high and ensuring inventory and related costs are kept low – all without compromising operational efficiency.

Prior to July of 2009, WCTA based its stocking levels on relatively arbitrary sources such as human experience, informal communication with maintenance and recommendations from suppliers. Sometimes WCTA could leverage a bit more reliable data, taking usage and maintenance history from prior bus fleets and extrapolating that data out to identical parts in new bus fleets. But even that process hit bumps in the road when old diesel buses were replaced by vehicles that ran on compressed and liquefied natural gas.

“We had to get the common parts that the two types of buses had in common to determine potential failure rates, but that only got us so far,” stated WCTA’s Materials Manager. “For the most part, time, experience and manufacturer recommendations were our only true indicators.”

To further complicate matters, WCTA was spinning its wheels trying to segment its parts into usable groups. It either needed to run manual reports or write a special program for each situation. This made it very hard to react to changes on the floor. The demand for parts would fluctuate greatly, and WCTA was having a hard time keeping up. They needed something that would give them greater visibility into spikes in demand, an ability to segment different types of parts and materials at will, analyze stocking levels and parts usage, and then make fact-based, data-driven recommendations that would optimize WCTA’s overall inventory and asset performance.

Firing On All Cylinders with Oniqua

So in early 2008, driven in part by the economic downturn and the need to operate more efficiently, WCTA put its search for an analytics application into high gear. After a thorough review process, which included several other analytics applications, WCTA found the Oniqua Analytics Solution (OAS) to be the superior choice.

“Oniqua was the missing piece of the puzzle for us,” stated WCTA’s Materials Manager. “We use Mincom Ellipse as our asset management platform, but it doesn’t provide any of the analytics capabilities of the Oniqua Analytics Solution, which allows us to quickly analyze our inventory in a very short amount of time. What used to take us days and weeks can now be done in hours.”

Using Oniqua, WCTA can now fine tune its stock levels based on multiple criteria, including usage data, potential impact of stock outs, purchase frequencies, spikes in demand, trends analyses and other user-defined scenarios. OAS presents recommendations on how to optimize inventory levels and then, once accepted by the user, exports the information back into the Mincom system where it automatically changes stocking levels. This complete feedback loop is one of many key differentiating features that sets Oniqua apart from the competition.

WCTA has rolled out OAS across several of its bases, with implementation taking less than three months – compared to over a year with some of its other software applications such as Mincom Ellipse. After only two months of deployment, WCTA is already seeing tremendous benefits from the Oniqua Analytics Solution.

“The number of purchase orders we cut have been significantly reduced, as Oniqua helped us uncover many hidden inefficiencies,” stated WCTA’s Materials Manager. “But more importantly, we are trimming the excess out of our parts inventory, while meeting our fill rate objectives. Over the course of the coming year, we expect to reduce our inventory levels by 20 percent, which equates to a full \$1 million in savings. We estimate our total return on investment will exceed 400 percent. Now that’s payback.”

Right Around the Bend – Maintenance Rollout

Because of its overwhelming success in optimizing its inventory levels with Oniqua, WCTA plans to get even more mileage out of OAS by expanding it across its maintenance operations as well. To do so WCTA will partner with Oniqua’s support team, which proved to be an invaluable partner during the inventory rollout phase.

“The Oniqua support team was superb, extremely knowledgeable and worked very well with our team,” stated WCTA’s Materials Manager. “They helped us build a cost model on the front end, ensured it aligned with our business goals, and then designed the system around our specific needs. They asked all the right questions, reviewed our business and operational goals, analyzed our system and delivered exactly what we needed with no disruption or risk to our existing operations. The bottom line is that OAS has proven to be a huge asset for us, it’s a great analytical tool and the benefits it provides far outweigh the investment. I’d recommend it without reservation to other transit authorities.