



**We Work
for Public
Transportation.**

AssetWORKS
A TRAPEZE GROUP COMPANY



Today's Best Transit Fleets Succeed with Information

Information is power: the power to be an effective manager who delivers optimal services, the power to control costs, the power to make your department shine.

Public transportation asset and maintenance managers using FleetFocus™ software from AssetWorks harness the power of information to optimize their organization's fleet equipment, parts inventory, and maintenance activities.

FleetFocus empowers managers by making it easy to track asset lifecycle costs and implement preventive maintenance (PM) schedules.

With FleetFocus, managers can make the right choice between repair and disposal, based upon the actual cost of an asset from requisition to retirement, instead of relying on purchase price or intuition.



Asset Management Made Simple

FleetFocus manages and tracks everything from maintenance and replacement costs to labor, even availability optimization and warranty tracking.

FleetFocus benchmarks your operational costs against similar transit fleets as well as offering benchmark comparisons of your organization's individual repair facilities.

Tracking information and data to make sound decisions is critical for fleet operations. Just ask Dave Richards, Director of Maintenance for Community Transit in Everett, Washington. "We're supported by taxpayer dollars," said the manager of 900 pieces of equipment, including 340 buses and 320 vanpool vehicles. "We have to be financially sharp and productive. Our success is reliant on the performance of our buses. If they're not safe and reliable, we'll lose riders. And that's a catch-22. The State of Washington was hit with reduced funding. Now we have to do more with less – that means finding ways to maintain the same quality of service with fewer resources. We've achieved that thanks to our ability to accurately know and track our costs. With FleetFocus we have information that allows us to properly manage our fleet."

FleetFocus is flexible yet straightforward to use. It allows you to tailor a custom asset and maintenance-tracking package to your unique operation. What's more, AssetWorks regularly releases upgrades and enhancements to FleetFocus based on our customers' feedback.

FleetFocus is browser-based, enabling maximum flexibility to roll it out across the enterprise. This design allows staff to enter vehicle maintenance data from anywhere they can connect, from shop floor touch screens or tablet PCs to handheld PDA

units. The familiar, browser-based user interface is designed to require a minimum amount of data entry while maintaining the most robust functionality on the market. As a result, FleetFocus is intuitive, easy-to-deploy, and is the most functional fleet management application on the market.

Since implementing FleetFocus, Denver's Regional Transit District (RTD) has gone paperless, with great results. Several hundred supervisors and technicians use FleetFocus on a daily basis for all their tasks, including recording their labor in real-time, processing work orders, and ordering parts. It is important that the system be easy enough for all these employees to use efficiently.

Dean Shaklee, RTD General Superintendent of Maintenance, reports that productivity has increased since moving to a paperless shop. "FleetFocus offers a happy balance between how much time a technician needs to spend at a kiosk entering information and his time performing work on the shop floor," says Shaklee. "It allows technicians to enter information and get information out of the system very efficiently in a short amount of time."



Best Technology Practices

FleetFocus can track any piece of equipment from cradle to grave, determining lifecycle costs in the process. Once equipment is put into the system with initial costs attached, work orders are entered into that same system to document equipment maintenance history.

All information is captured by FleetFocus in real-time and stored on a single database which makes it readily accessible for management. Over time, this information allows analysis of breakdowns and the ability to adjust PM schedules for each class of equipment. The result: Maximized uptime and reduced overall maintenance costs.

Leading transit operations, such as Metro St. Louis, have adopted AssetWorks FleetFocus to integrate all of their preventive maintenance scheduling, predictive maintenance forecasting, parts data, and other maintenance metrics that the organization needs to measure.

Metro St. Louis' longtime use of AssetWorks software has contributed to the agency's extraordinary operational success: the Federal Transit Administration has designated Metro St. Louis' fleet maintenance plan as a "best practice" for the U.S. transit industry.

The improved fleet condition, original equipment maintenance recommendations, and years of seamless operational effectiveness have enabled Metro St. Louis to implement predictable component replacement instead of "time of failure" replacement.

In addition to the service gains, the operational efficiencies from this practice have allowed Metro St. Louis to combine some positions and eliminate others in the maintenance department.

Better data, analysis, and control helped Metro St. Louis change inspection schedules to be more cost-effective and efficient. "Uptime increased by 300%, and our maintenance costs have remained flat since then," said Carl Thiessen, Chief Maintenance Officer at Metro St. Louis. "Mechanic productivity has also increased because the majority of our work is now planned."

Quality reporting and information have also led to immense cost savings for Metro St. Louis. Its predictive maintenance system has helped the transit authority to extend the life of its fleet and predict costs over the life of the vehicle, which translates into lower total cost of ownership, improved reliability, and increased utilization, as well as better visibility for budgeting manpower, parts, and capital replacement expenditures.

Metro St. Louis now performs a minimal amount of breakdown maintenance, which has improved vehicle reliability and maintenance productivity while reducing overall costs. Metro's maintenance team significantly reduced total department costs by approximately four million dollars in one year alone thanks to predictive maintenance and the ability to monitor and report data from the FleetFocus system.

LYNX, the Central Florida Regional Transportation Authority in Orlando, uses FleetFocus to extend the life of its fleet and to determine appropriate replacement scheduling. Most LYNX buses are expected to travel 500,000 miles over a life of twelve years. Although LYNX is in the process of replacing its fleet with new buses, many of the existing buses will reach 500,000 miles in seven years, and several have made it to 1 million miles in their 11th year.

Preventive maintenance for high mileage vehicles such as these is essential in keeping them safe and operational. FleetFocus tracks all maintenance information for each vehicle and provides automated reports that help LYNX keep on top of the PM schedules and service appointments.

The type of maintenance detail provided by FleetFocus allows LYNX to determine the operating costs of different buses. Through detailed reports generated by FleetFocus, Joe Cheney, Deputy Chief of Operations, has been able to track the long-term operating costs of the older buses and compare that to a possible capital expenditure for a new bus. Armed with reliable data, LYNX can make informed decisions about what buses will be retired and when.



We have to do more with less – that means finding ways to maintain the same quality of service with fewer resources. We’ve achieved that thanks to our ability to accurately know and track our costs. With FleetFocus, we have information that allows us to properly manage our fleet.”

**DAVE RICHARDS, MAINTENANCE SHOP MANAGER
COMMUNITY TRANSIT, EVERETT, WASHINGTON**

Accurate Data is the Key to Saving Money

Maximizing the benefits of a fleet maintenance system is dependent upon putting good information in the system from the start. Symptom codes, sometimes called complaint codes and task codes, dictate the subsequent action and solution for a particular issue.

The challenge that transits face with coding structures is that if they are too general, the reports that reference them don't provide enough detailed information to be useful. If, however, a transit fleet uses a coding structure that is too granular, it can be both confusing and time-consuming for the technician. The key is to strike the right balance that keeps both the shop floor running smoothly and gives management the data they need.

Denver RTD, which has been honored with the Outstanding Public Transportation System Achievement Award by the American Public Transit Association three times, leads the way in best practices with its use of smart coding. Prior to going live with FleetFocus, RTD's maintenance teams created an intuitive, logical and manageable list of codes that captured and described virtually anything that could go wrong with a vehicle, resulting in specific and precise data that forms a foundation for all of RTD's daily reports, long term trending analysis, and replacement planning activities.

Parts inventories represent another large area of expense for transit fleets. Potential cost-saving areas include inventory levels, the actual unit costs of parts, and warranty recovery.

FleetFocus gives you the tools to optimize your inventory by identifying and eliminating obsolete parts, maintaining "just-in-time" inventory levels, researching appropriate parts, and managing automated inventory replenishment. Initial reduction

in inventory capital investment is matched farther down the road by efficiencies with vendor performance analysis and improved purchasing decisions. Parts buy or rebuild decisions are made much more manageable using key FleetFocus data, saving fleet managers unnecessary costs.

FleetFocus has a superb warranty recovery functionality that tracks the warranties on vehicles, as well as specific parts and components. FleetFocus first alerts you to the warranty status of every repair you perform and then provides all the tools you need to easily track warranty claims through settlement.

The ability to have multiple agencies using one enterprise asset management system has enabled many organizations to successfully bring non-revenue fleet vehicles, buses, and even bus stops and building facilities all into FleetFocus.

Tracking Components with FleetFocus

Many components on today's buses, from the fareboxes and security cameras to some of the major mechanical items such as the engine itself, are interchangeable and require their own PM maintenance schedules. FleetFocus has extensive capability to manage these components, with robust rebuild functionality for properties that have their own back-shop operations. Fleet managers can use FleetFocus to keep track of the individual maintenance schedules of these parts and monitor on which vehicle each component is installed.

When a vehicle comes in for service and a component is to be swapped out, the technician uses a drop down list to select the component to be removed. FleetFocus then changes the status of that component from "installed" to "needs rebuild" and places it into the Production Planning queue, automatically creating a bar code label for the item. When the technician replaces the component with a

new one, FleetFocus tracks the component from "in stock" to "installed." In Rebuild Shop, FleetFocus continues tracking the work orders, labor and parts associated with component repairs. As soon as the work on the component has been finalized, FleetFocus changes its category to "in stock" so that it is ready to be installed when needed.

"It took a great amount of effort to set up all the components the way that we wanted, however it was worth the time. Now that the system is running full steam, the Serialized Components tool is extremely useful. I am constantly amazed by how powerful the system is," asserts Lou Cripps, Light Rail Maintenance Supervisor at RTD in Denver.

Tracking Labor: Your Highest Variable Cost

While FleetFocus lets you track hard costs for vehicle maintenance, it also delivers the solution for tracking the more variable side of the business: the productivity of your mechanics and technicians.

The simple act of measuring time can induce improved productivity and increase direct versus indirect time. With FleetFocus, managers can also compare the productivity of their technicians between shop locations, benchmark performance, and develop customized repair standards.

Metropolitan Atlanta Rapid Transit Authority (MARTA), the ninth largest transit system in the United States, relies on the integrated EAM system offered by AssetWorks to manage its bus, rail, track, non-revenue fleet, facilities and maintenance-of-way divisions. Labor can be captured via computers on the shop floor or with mobile PDA units which helps increase efficiency across the organization, allowing MARTA to account for 98% of the labor it pays out.

"The costs are now associated at the job task level instead of at the work order level, as we had

in the former CMMS,” says Tim Elsberry, Assistant Director of Track & Structures for MARTA. “This helps us measure productivity by task and make important decisions considering cost and time. We have automated reports through AssetWorks that are emailed to management staff daily informing us of every defect that was reported, as well as labor and maintenance operations information.”

Santa Barbara Metropolitan Transit District (MTD) has deployed FleetFocus on the shop floor with the AssetWorks integrated on-line parts catalog and mobile PDAs for the parts room. Jerry Estrada, Assistant General Manager of MTD, echoes Elsberry's sentiments about the benefits of FleetFocus. “AssetWorks software has provided MTD's maintenance personnel with real-time information in a very accessible and easy-to-understand way. MTD mechanics and shop employees have adjusted quickly to entering their information into the system. Overall, everything was implemented quickly and professionally which has resulted in employee satisfaction with the system.”

Managing Inspections with FleetFocus

Keeping a transit fleet running safely and smoothly for the ridership is extremely important for today's transit organizations. FleetFocus provides tools to help fleets deal with the large workload associated with all internal, State DOT and FTA inspections.

Whether the inspection is completed on paper and then input into the system or performed using a handheld device that connects automatically with the FleetFocus database, the information gathered can be used to automatically generate work orders and schedule tasks. FleetFocus can also be set to automatically email reports and notifications about work coming due.

Each day, RTD's Lou Cripps, refers to automatically generated reports that help him schedule work orders and maintenance activities for his staff. As required by the Public Utilities Commission (PUC) and Federal Transit Administration (FTA), both of which oversee the rail operation, inspections and defect reporting must have a paper trail. RTD performs their inspections in AssetWorks and on paper and then manually enter defects found into AssetWorks as work orders with specific tasks to address the inspection items. RTD has found this to be a quick and accurate process which has improved their audits from the PUC and FTA.

“Inspections and audits are an important part of our maintenance practices,” comments Lou Cripps. “An audit from the PUC or FTA may have taken several days prior to using the AssetWorks solution. Their integrated products now help us organize all the inspection and maintenance data. It's very easy to access when we need it.”



FuelFocus: Your Tool to Get Ahead of the Curve

Many Transit operations, including Metro St. Louis, Monterey Salinas Transit (MST) and King County Metro Transit have also implemented FuelFocus, the AssetWorks Automated Fuel Management System (AFS).

FuelFocus is the only AFS to be managed in real-time by a fleet maintenance management software application; one application on one database. Together, FleetFocus and FuelFocus enable customers to monitor, track, and control fuel and fluid commodity usage by individual, location, and specific vehicle, all in real-time.

Real-time and accurate information is critical to ensure adequate commodities are on-hand at all times. FuelFocus provides robust fuel reporting, analytics and reports for Federal Environmental Protection Agency and State regulatory requirements.

Within its first year of use, Metro St. Louis realized a cost savings of \$600,000 thanks to FuelFocus and the ability to redesign fueling procedures and develop a cost effective fuel and fluids plan.

Monterey Salinas Transit (MST) was looking for a proven solution for both fleet maintenance and fuel management. “MST selected AssetWorks because it offered an affordable, highly integrated fleet and fueling solution for our maintenance and materials management needs,” said Carl Sedoryk, General Manager/CEO at MST.

Similarly, Metro King County Transit in Seattle, Washington uses FuelFocus to gain more control over its fuel and fluid usage to prevent waste, theft, and the possibility of running out of fuel while en-route. The agency replaced an outdated manual system that was prone to data entry errors and not integrated with the fleet's maintenance system. It turned to FuelFocus' state-of-the-art automated system to accurately track fuel and fluids in real-time to look for anomalies and source problems before they cost the agency money. “It would have cost us too much money to build a

fuel management interface on our own,” said Colleen Duke, of King County Metro Transit. “FuelFocus was the right price and the right solution to fit with our goals and of course it integrated perfectly with our existing AssetWorks FleetFocus software.”

FuelFocus delivers:

- Integrated fleet and fueling database for validating vehicle identification, employees, meter readings and fuel tank capacity in real-time
- Single database for maintenance and fueling management
- Fuel/fluids inventory consumption management
- Accurate inventory and consumption management
- Tracking and reduction of overall fuel expenditures
- Support for gas, diesel, CNG, LNG, hydrogen, alternative fuels and fluids
- Support for smart cards, proximity cards/keys, magnetic stripe cards and radio frequency identification (RFID) option
- Precise reporting
- Lower PM and repair costs
- Flexibility and customization

“AssetWorks works for us and works really well,” continues Duke. “The people are responsive and the products have improved our operations. Our mission has always been to provide the best possible public transit services that get people on the bus and improve regional mobility and quality of life in King County. FleetFocus and FuelFocus help us do that.”

If efficiency and cost justification are what you are looking for, then the AssetWorks transit solutions for fleet and fuel management are right for your organization. Hundreds of companies rely on the system for real-time data and an understanding of their fleet costs to better manage their operations. Call us to learn more about our solutions and understand why AssetWorks is a market leader.

For more information, contact an AssetWorks representative today at 610.687.9202 or visit us online at www.assetworks.com



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“ We felt it was important to find a vendor that could be a ‘one-stop shop’ for asset management solutions. Given the business that the CTA is in, asset management is extremely important. Implementing the AssetWorks system will allow us to improve our bus and rail car availability thereby improving overall service to our customers.”

*John Flynn
CIO, Chicago Transit Authority
Chicago, IL*

“ RTD selected AssetWorks because FleetFocus provides a configurable, user-friendly solution to RTD’s maintenance management needs. Prior to making a final decision, RTD staff visited several AssetWorks customers who were pleased with AssetWorks’ support and responsiveness to their needs and concerns.”

*Phil Washington
Chief Operating Officer,
Regional Transit District (RTD) of Denver
Denver, CO*



ASSETWORKS IS A MARKET LEADING ENTERPRISE ASSET MANAGEMENT SOFTWARE SOLUTION FOR PUBLIC TRANSPORTATION

FleetFocus™

FuelFocus™

AssetWorks is an industry-leading provider of technology and consulting solutions for asset and infrastructure-intensive organizations in public transportation, government, education, utilities, telecommunications, and the commercial sector. Our suite of fleet Enterprise Asset Management (EAM) software solutions and professional consulting services enable organizations to improve maintenance practices, streamline operations, and improve accountability for mission-critical capital and infrastructure assets.

Leveraging the latest browser, business intelligence, and mobile computing technologies, our software and industry expertise help our customers maximize resource utilization, improve service delivery, and achieve substantial and measurable cost savings. Whether you are doing more with fewer resources, or managing additional assets with the same number of resources, AssetWorks provides a complete solution—software, services, and support—to get the job done.

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998 Old Eagle School Road, Suite 1215 | Wayne, Pennsylvania 19087

www.assetworks.com | 610.687.9202