

# Using Data to Make Better Decisions to Repair or Replace

With each major component failure, fleet managers are confronted with the dilemma to once again repair a vehicle or start anew. The decision requires determining what money has already been spent on a vehicle and what residual book value remains.

The risk of making an expensive mistake is compounded when managers must make such judgements on a fleet of many different makes and models. Decision-makers aren't well-positioned to decide whether to buy a new vehicle when they lack the data they need to fully analyze the asset they still have.



# A One Size Approach Doesn't Fit All

Successful fleet operators don't make decisions in a vacuum. Most have developed a set of criteria to determine when to replace an aging vehicle. That criterion usually includes the vehicle's age, mileage and condition. **But a one-size-fits-all approach doesn't work if it fails to calculate differences in utilization.** A well-maintained truck that runs 5,000 miles a week over long-hauls could last 1.2 million miles without an engine replacement. But a truck that makes deliveries in a large city is likely to wear out its major components by 400,000 miles.

Most companies don't have readily available maintenance records for each truck within the fleet that are easily analyzed. Some OEM dealerships offer data programs, but many in-house shops lack a maintenance database that facilitates easy reporting. Without specific data on vehicles, fleet managers are left to go with assumptions of age of the vehicle or driver complaint.

Some shops estimate a lifecycle projection of seven years per truck. But that approach can result in a manager junking a unit that might still have value to the company. Other managers may spend more money keeping aging vehicles on the road than making the decision to buy a new vehicle at the optimum time.



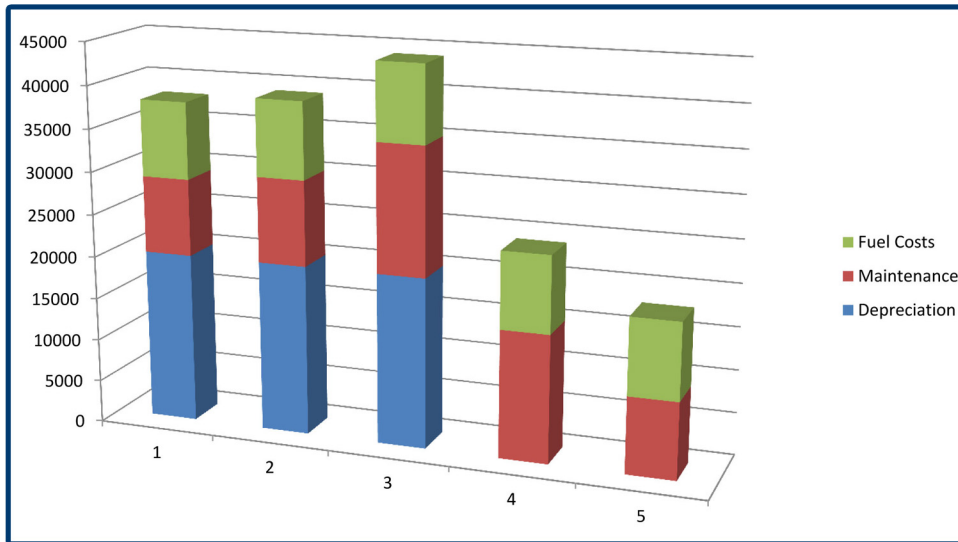
## Data-Driven Savings

When a new vehicle is acquired, purchase costs are high but maintenance costs are low. As the vehicle ages, maintenance and repair costs tend to rise and depreciation cost is no longer a factor. The question then becomes, "Is it cheaper to continue maintenance on the vehicle or replace the vehicle?" This is called the "Asset Trade Threshold".

### Asset Trade Threshold

*The point at which you begin comparing the cost of repairs vs. the value of the asset to make decisions to repair or replace.*

The chart below can help explain the Asset Trade Threshold. This chart depicts a 3 year trade cycle. If the maintenance and fuel costs in the 4th year don't exceed the total cost of year 3, it is better to keep the asset instead of trading.



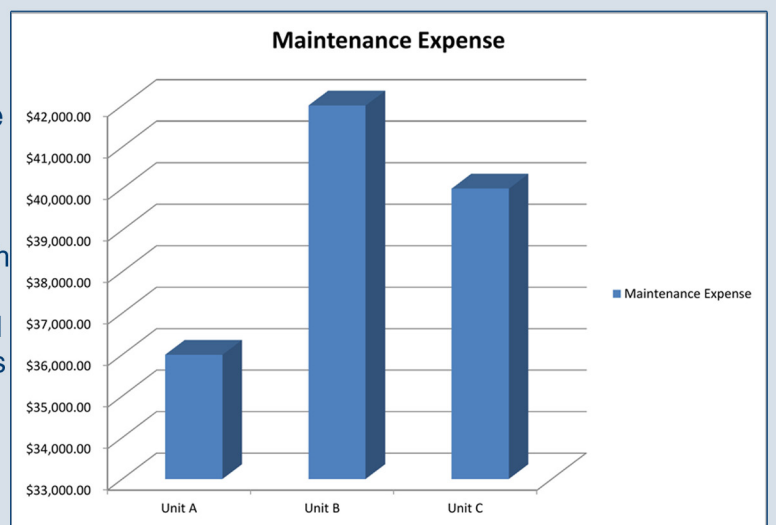
Many fleet managers use the Asset Trade Threshold or some other combination of vehicle age, miles driven and condition to determine when a vehicle should be replaced. But having a specific history of that vehicle, including what components have been repaired and when, provides a clearer picture of the remaining life of the vehicle.

The key to creating a robust fleet database is called the Vehicle Maintenance Reporting Standard, or VMRS. This is a unique identifier of the system, assembly, and component involved in a maintenance problem. Every maintenance event logged by FleetNet America is coded using VMRS. Over time, the log of maintenance events creates a database unique to each customer's fleet. Across a fleet of vehicles, that data can reveal patterns about what functions most often fail and provide benchmarking for fleet performance from year to year.

## What Would You Do?

The chart to the right shows 3 units the same age with roughly the same maintenance expense. Based on this info, which unit which would you replace?

Most people would say all three. However, with additional data you may likely make different decisions. Unit B recently had the engine and transmission replaced/repared. These repairs extend the life of the unit 3-5 years. With this new information, would your answer change?





# FleetNet Provides Data for Buy Vs. Replace Decisions

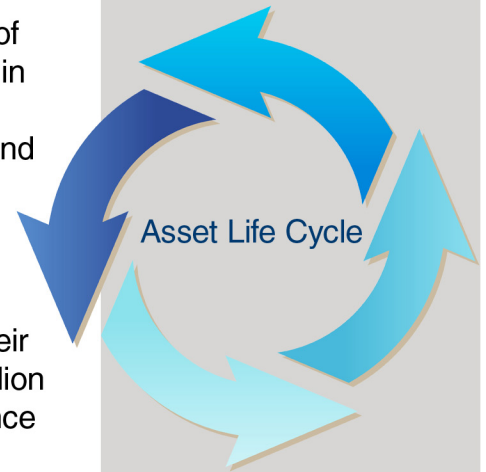
One FleetNet America client operated its fleet on a 10-year life cycle. Using data collected through TMcare's ongoing maintenance program, FleetNet was able to show the customer a comparison of how much money was spent on the vehicle after its seventh year in service. The large capital outlay helped the customer understand that their conservative approach wasn't so conservative after all and shortening the life cycle of their fleet would actually save them money.

Another customer without a maintenance program faced the ominous task of replacing 732 trucks that were nearing or past their life cycle. To do so all at once would have cost the carrier \$94 million – an untenable one-time cost. Using FleetNet America maintenance records for those trucks, the company and FleetNet developed a plan that determined which trucks would be replaced immediately and which could continue on the road through the transition.

For another client, TMcare® data helped the company conduct research on which leased vehicles were the best candidates to be purchased at the end of the lease. Data available from FleetNet America revealed which vehicles were relatively free of unexpected repairs and which ones presented maintenance problems. The client purchased the reliable vehicles. When that client was ready to sell its used vehicles, the fleet manager could present comprehensive maintenance records to the buyer, adding value to the sale.

## Conclusion

Managers often have to make decisions without all of the information they'd like to have. But that doesn't have to be the case when making decision regarding your fleet maintenance. Using VMRS, FleetNet gives you access to detailed information about your fleet and the ability to make informed, cost-saving decisions. Fleets can't afford to ignore the fact that more and better information leads to lower costs. In fleet maintenance, it is possible to have all of the information necessary to make a decision about the most cost-effective approach to repairing or replacing a vehicle. Through FleetNet America's TMcare® program, fleet managers can receive insights on their fleet based on accumulated data. Knowing the life-cycle costs of any one truck can help reduce costs within fleet maintenance and take the guess work out of fleet management.



**“You can easily leave some of your company’s money on the table if you don’t have good data to make well informed decisions.”**

Stephen Crane  
VP of TMcare®,  
FleetNet America