



Fleet Utilization & Motor Pool:

A Comprehensive Guide

eBook

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Introduction

If you are overwhelmed at the thought of launching a fleet management information system (FMIS), don't be. Launching a new FMIS is easier than ever due to the nature of the web-based technology and the refined implementation processes offered by fleet technology vendors. But it's important to understand the basics of good fleet management. And that often starts with the topic of vehicle utilization.

We get asked this question all the time: What is a good vehicle utilization rate? Most organizations have differing concepts of what vehicle utilization means and why it is so important. Why is there such interest in fleet utilization? The answer is simple. When you understand utilization, you understand how to right-size your fleet, maximize the efficiency of your fleet, and reduce costs. When you understand utilization, you can confidently modify the composition of your fleet. In doing so, it is almost certain you will save money. Organizations typically ask us exactly what we mean by fleet utilization, how is it measured, and why it is important.

Common questions include:

1. What is a good fleet utilization rate?
2. What is right sizing?
3. How does right-sizing relate to not only the quantity of vehicles but also having the right type of vehicles at the right location at the time when they are needed?
4. What is a motor pool?
5. How does a motor pool differ from consumer car sharing?
6. Is running a motor pool a good thing or something to be avoided?
7. What is a fleet management information system (FMIS)?
8. How does a fleet management information system differ from fleet tracking, fleet software, fleet key management, an enterprise fleet management system, and other similar technologies?
9. How do I get started with fleet metrics?

This guide will help you have a greater understanding of these terms, what they mean, how they may apply to your fleet.



Chapter 1. What is Fleet Utilization and Fleet Right-sizing?

Fleet utilization, or fleet usage, is typically a **ratio** of demand (how many people want/ need vehicles) to capacity (how many vehicles are available to them). If you have achieved optimum fleet utilization, your fleet is considered right sized.

Having a right-sized fleet is the key to fulfilling the mission of your organization. Whether you are a community college with 15 vehicles or a large local or **federal government, utility**, or commercial enterprise with tens of thousands of vehicles, understanding and managing fleet utilization should be a top-of-mind priority at the core of right-sizing initiatives. Utilization metrics tell you about the size of your fleet relative to your needs. The size of your fleet directly impacts the ability to complete your mission, and, it has a significant impact on your organization's financial bottom-line.

If you have too few vehicles, you can't get work done. With too many vehicles, you're burning money needlessly. The key is to have the "right" utilization when it comes to your fleet, making the work of collecting data to understand your fleet utilization rate crucial to building your optimal utilization formula.

What is a right-sized fleet? Ed Smith, President of fleet solutions provider Agile Fleet, has been involved with fleet right-sizing initiatives for more than twenty years and has worked with all types and sizes of fleets. While he acknowledges that every fleet has some unique characteristics, he stresses that the quantity and use of vehicles is not the only variable to consider. Smith believes there are four key components of a right-sized fleet, namely:

1. The right quantity – Do you have the right quantity of vehicles, i.e., not too many and not too few?
2. The right location – Are the vehicles available where they are needed? If you have vehicles that are not affordably accessible at the location where the work or the drivers are located, then vehicles are effectively not available. Alternatively, if a seldom-used class of vehicle is accessible just a short distance away, perhaps that class of vehicle is not needed at each fleet location. This is also where we take "asset criticality" into account. Some pieces of equipment are so critical to supporting an organization that they are needed at several locations, regardless of use (think of a firetruck or other emergency response equipment).
3. Right type/class – Do we have the right type or class of vehicle? If I have ten box trucks available yet have a need for more small passenger vehicles, I haven't fulfilled the need for small passenger vehicles.
4. The right time – Do drivers have access to vehicles when they are needed? Are vehicles available after hours or on weekends? If access to vehicles requires access to a motor pool office or an outside rental office that is closed, needs go unfulfilled. Your drivers need access to vehicles at the time the job needs to be done.



NAFA Fleet Management Association agrees that not only the overall fleet but also every vehicle in it needs to be right sized for their primary mission. When procuring a new asset, you should ask such questions as: Is the engine large enough to perform the recurring tasks but not oversized? Can the task be accomplished with a two-wheel drive vehicle instead of a 4-wheel drive vehicle? Can we use the treadplate platform on the liftgate instead of the extruded aluminum? An essential part of rightsizing is choosing the right class of vehicles and upfitting enough vehicles to do the job, without having too many.

But what about the number of miles driven, hours operated, trips taken, hours billed, and other benchmarks that often are required to reach each month as part of a fleet utilization program? These are important. At the end of the day, these metrics are tools for helping to understand the right quantity, location, class, and accessibility of vehicles. Therefore, utilization is a way of thinking about whether a vehicle is maximizing its utility and achieving productivity, rather than remaining idle or racking up costs with maintenance, insurance and registration, and ultimately replacement. Assessing utilization involves looking at a multi-departmental organization and determining which of these requires more vehicles and which has more than suits their requirements.

Achieving optimal utilization depends on having the right metrics to make fleet count and composition changes.

Fleet utilization is a measurement of fleet asset performance or use. It's all about the numbers, i.e., the measurements. When we understand the metrics behind the use of fleet vehicles, we have the information needed to affect positive change. Fleet utilization experts will tell you that they've heard the sentiments below hundreds, or thousands, of times:

“My gut tells me we have too many vehicles.”

“We really need more vehicles to do our job.”

One reason that fleet utilization is such an important aspect of fleet management is that our “gut feel” and the fact that we “really need more vehicles to do our job” aren't good enough to make decisions that may have an impact concerning hundreds of thousands or millions of dollars to a fleet. We need real measurements of vehicle use that we can use to manage our fleets and justify fleet acquisition or down-sizing.

A fleet management information system (FMIS) will record the data reflecting your fleet's supply and demand. Manually tracking these can be complicated and time-consuming. Ultimately, a fleet employee could spend the better part of the working day manually processing reservations and reconciling returns, often on spreadsheets, even though the technology is available to streamline such processes. Valuable information gets missed via human error, making accurate utilization assessments difficult.



But where does GPS fit in? Implementing GPS technology can be a great start to a vehicle right-sizing initiative. GPS technology, when used in conjunction with vehicle sharing, is a great resource for understanding utilization. GPS tracking systems can tell when vehicles are in use and when they are away from their home location and, therefore, not available for [use by other departments](#). This type of data is key to understanding utilization.

While GPS data reveals that vehicles are underutilized, you simply can't remove assigned vehicles, for example, from the fleet without providing an alternative for easy access to vehicles. The use of vehicle sharing or motor pool technologies is often paired with GPS technology to achieve an even more accurate assessment of utilization. Alter fleet size and composition based on GPS data and fulfill the need for access to vehicles via motor pools.

Chapter 2. What is a Motor Pool?

The definition of a [motor pool](#) is a group or fleet of motor vehicles whose use is shared on a short-term basis by the personnel of an organization. Ideally, having an efficiently run, self-service motor pool comprising well-utilized vehicles assures the organization can achieve its mission in the most cost-effective and efficient way.

Unfortunately, many organizations attempt to manage motor pools manually, using spreadsheets, email, and by handing out keys in person. This method results in time-consuming inefficient motor pool processes, excessive staff time needed to manage vehicles, lack of understanding of the types and numbers of vehicles needed, and expensive carrying costs with no metrics for fleet composition decision making.

Thankfully, motor pool technology has evolved significantly over the past twenty years. Prior to the year 2000, if you mentioned motor pool technology or vehicle sharing technology, most likely you'd have to explain the subject. Today, due to the success of motor pool technology across nearly every segment of fleet and even in the consumer space, motor pools are considered an essential tool in the fleet management toolbox.

While there are many different types of technologies and services that ultimately enable motor pool and the sharing of vehicles, the core functions of any vehicle sharing initiative are basically the same. They consist of:

- 1) Scheduling or coordinating the use of motor pool vehicles
- 2) Dispatching motor pool vehicles out and in (i.e., gaining access to vehicles)
- 3) Generating the requisite billing or reports related to a motor pool.

With motor pool software, the significant amount of administrative time spent manually managing vehicles, communicating with drivers, keeping records on spreadsheets, generating reports, and analyzing fleet use can be streamlined to include a virtually self-service operation that runs 24 hours a day, seven days a week. Motor pool management efficiencies, combined with the metrics collection for fleet composition decision-making, are key to achieving an efficient right-sized fleet.

In contrast to an efficiently run automated motor pool, some organizations prefer to allow employees to use their own personal vehicles for official business. These organizations can spend upwards of hundreds of thousands of dollars annually on [personal vehicle use reimbursement](#). Likewise, [assigned](#) fleet vehicles, or vehicles that are assigned 1:1 to an individual are less efficient and usually cost much more than a shared vehicle.

Fleet costs can spiral out of control quickly when considering that fleets spend \$3 to \$6K per vehicle per year to keep a single vehicle in the fleet. These include depreciation costs, maintenance expenses, parking spaces, insurance, tags, staff time to manage vehicles, and myriad other related fleet carrying costs.

Chapter 3. Motor Pool Management: Understanding the Costs and Getting Buy-in for Technology

[Managing a motor pool](#) requires an individual or a team to schedule and coordinate vehicle use, dispatch vehicles, and handle reporting and billing. They must also stay on top of creating, communicating, and enforcing [policy](#) for vehicle users, tracking [preventive maintenance](#) schedules, and factor in how that downtime might affect the overall motor pool schedule.

Many organizations rely upon paper request forms, email chains, spreadsheets, and other manual tools to track vehicle sharing, but these are cumbersome, extremely time-consuming, and costly.

To illustrate this potential waste of productivity and money, take for example a 50-vehicle motor pool. If one has 20 workdays per month, that factors to 1.5 trips per vehicle, per day, equaling 1,500 reservations per month. If each reservation consumes 15 minutes of staff time to handle reservations, dispatching, and billing, that's 375 hours every month, or 4,500 hours per year, more than two full-time employees. As a motor pool scales up, so too will the responsibilities that are attached to a manual system, making the integration of fleet technology a wise choice.

Installing a motor pool or fleet management solution can be a straightforward effort. Many times, it is the buy-in process – the conversations with employees and stakeholders surrounding new procedures and operations - where change management gets complicated.

The key is communicating the benefits of sharing vehicles in a motor pool, like access to more types and newer vehicles, easy online reservations, no more vehicle prep and preventive maintenance (PM) management, around-the-clock access to vehicles, and more.

To gain stakeholder confidence for the new system, go after 'low-hanging fruit' that will bring about savings and efficiencies quickly. Continue collecting data to learn what your fleet utilization rates are. Do you have too many vehicles or not enough? Do you have the right types of vehicles? Which vehicles can be earmarked for disposal?

Initiate monthly odometer collection and reporting and look at any permanently assigned vehicles in your fleet. Are they being used to their fullest potential, or can they be reassigned to the shared fleet and be shared by others?

Going after the soft targets will help show successes, tackle waste, and reveal savings that support the [R.O.I. proposition](#) of the motor pool system.

With these metrics, you can show upper management the potential of the motor pool system and can begin more complex efforts to reshape your transportation goals. You can create your 5-year plan for vehicle replacement, identify policies that are working, and others that may be needed. If you need to implement other technology such as GPS, it is a good time to introduce something new.

Having shown benefits from the first motor pool as a proof-of-concept, your organization might want to go further in launching more motor pool sites or mini-pools.

To start a motor pool effectively, a fleet manager should consider the following tips:

- [Understand where you can reduce costs and improve efficiencies.](#)
- [Find a champion within your organization and get buy-in from upper management and stakeholders.](#)
- [Communicate organizational changes positively with drivers and stakeholders.](#)
- [Draft policies and make sure you have a way to communicate and enforce them.](#)
- [Prove the concept first.](#)
- [Learn from the successes of others.](#)

Chapter 4. Motor Pool Management Software

Motor pool management software can automate vehicle reservations and returns, record the data derived from each vehicle's use, organize that data in a way that is comprehensive and easily retrievable, and can assist in communicating and enforcing your fleet's policies.

Modern tools offered to fleet managers can overcome objections regarding automated motor pool ease-of-use. Functions that can be automated are motor pool reservations, managing reservations, dispatching, distributing keys, and billing and reporting. A good motor pool system will automate the reservation process so that reservations can be made online from a web browser. Keys can be distributed via a secure key box around the clock, with pickup via a kiosk much as one would pick up a boarding pass in an airport. And, since utilization and trip data are all collected by the system, reports can be created and run in a fraction of the time normally spent. The substantial staff time savings can be reallocated to other important duties.

Having, communicating, and enforcing policies on vehicle use reduces the cost of doing business with respect to liability, safety, and vehicle use. However, unless people know the policies, they will not be effective. With an automated motor pool system, users are prompted to acknowledge that they have read policies as they interact with the system, and policies are communicated during each stage of the reservation process.

Because this process is done automatically and consistently, policies are enforced every time. It's a pain-free way to consistently ensure your drivers are made aware every time a policy changes.

Chapter 5. Expert's Checklist for Getting Started & Fleet Cost-Cutting Metrics

1. Put the right technology tools in place to collect the metrics you need – at Agile Fleet, we want you to evaluate alternatives. In fact, we'll even help you develop checklists or evaluation criteria so your comparisons can be apples-to-apples. When you are ready to evaluate FleetCommander, we'll provide you with a comprehensive online demonstration. We'll even let you use a fully functional FleetCommander site for 30 days, with all your fleet data -- free of charge. Many FleetCommander customers can achieve measurable successes during their trial period.

2. Set Goals – Capture baseline data such as total expenses, budget constraints, and management directives and set goals for reducing costs. Document these goals and communicate them clearly to everyone in the organization.

3. Define metrics – Identify the metrics that you will measure. For example, fleet size, total maintenance costs, number of turned-down vehicle requests, etc.

4. Define benchmarks – Establish benchmarks. Use a snapshot of your fleet's performance or use industry benchmarks obtained through organizations such as NAFA or Government Fleet.

5. Measure progress against stated goals & benchmarks – Using FleetCommander, capture new metrics for stated periods and compare against stated goals and benchmarks.

6. Report your successes – Report your findings far and wide. We often get requests for quantifiable cost reductions and increases in customer service. We'd love to have your input to share with others (names can be held in confidence).

7. Refine your goals – Change your plan as necessary. "Raise the bar" if things are going well. Adjust expectations or revise your strategy for reducing costs if objectives are not being met. The bottom line is you should always have metrics to confirm you are headed in the right direction.

If your goal is to reduce costs, the following metrics will help guide your initiative.

Cost-Cutting Initiative	Metric/Benchmark Needed for Decision-Making	Estimated Savings <i>*Per vehicle</i>
<ul style="list-style-type: none"> Reduce fleet size by allocating vehicles to motor pool 	<ul style="list-style-type: none"> Ratio of "Assigned" vehicles to pool vehicles. Total number of assigned vehicles Total number of pooled / shared vehicles Utilization rates of assigned vehicles (by time and miles) 	<p>\$20k capital cost & \$3-5k annual expense*</p>
<ul style="list-style-type: none"> Reduce fleet size by optimizing use of existing pool cars 	<ul style="list-style-type: none"> Vehicle Usage as a percentage of available usage time by vehicle (used vs. available) Average motor pool utilization by class of vehicle Average trips per day Duration of required "buffer" between pool car uses (for same car) Percentage of abuse (late pick-ups, late returns, no-shows) 	<p>\$20k capital cost* \$3-5k annual expense*</p>
<ul style="list-style-type: none"> Reduce fleet size by consolidating trips 	<ul style="list-style-type: none"> Number of trips eliminated through consolidation of trips. Number of carpool trips taken per year 	<p>\$20k capital cost* \$5k annual expense*</p>
<ul style="list-style-type: none"> Reduce fleet size by maintaining a fleet inventory that matches demand by type of vehicle 	<ul style="list-style-type: none"> Average passengers per trip Total vehicles upgraded to alternate vehicle type to fulfill requests Average utilization by vehicle class 	<p>\$20k capital cost* \$3-5k annual expense* Reduce or eliminate outside rentals or POV mileage reimbursement</p>
<ul style="list-style-type: none"> Use staff more efficiently and consolidate jobs 	<ul style="list-style-type: none"> Number of staff required to perform fleet dispatch functions (using FleetCommander) Number of staff required to perform fleet prep (cleaning, fuel, inspection) 	<p>Annual salary, e.g.: \$30k per person</p>
<ul style="list-style-type: none"> Reduce abuse of vehicles through enforcement of policies & procedures 	<ul style="list-style-type: none"> Number of "abuse charges" per month Count of policy breaches (e.g., using high-octane fuel in lieu of regular) 	<p>Varies - Abuses may result in procurement of additional vehicles, higher fuel costs, more staff time</p>

Chapter 6. Expert Advice on Choosing Your Motor Pool System

Whether you have 25 vehicles or thousands, Agile Fleet can help you share vehicles, understand your utilization, reduce idle vehicles, and right-size your fleet.

But choosing fleet technology or creating a motor pool technology RFP can be an intimidating task, but it doesn't have to be. We've talked to hundreds of fleet managers who have successfully made their way through the process, here are some recommendations they've shared with us.

1. Have a clear understanding of why you want to implement a motor pool. If you set your goals at the outset of the process, you have a much higher likelihood of selecting the right technology for your organization. It's easy to get "wowed" by new technology without understanding whether it will meet your particular needs or not.
2. Document what you think you need, not HOW you think it is to be delivered. Once you have articulated your goals, document your goals and objectives in writing. If you have been audited and have been given clear directives on what problems sharing vehicles will solve, include those directives in your stated goals. At this stage, it's important to articulate your needs -- without stating how those needs will be met.
3. Learn from organizations like yours. There is no need to reinvent the wheel. There are plenty of organizations like yours that have "been there, done that." Get references from vendors, peruse their press releases, and read case studies.
4. Borrow RFPs from organizations like yours or skip the RFP altogether. Other organizations are usually more than willing to share their RFP language with you. You can also find them online or ask vendors. Or you can circumvent the RFP process altogether by purchasing directly from an existing contract or through cooperative purchasing contracts such as GSA schedule or Sourcewell.
5. Address all areas of fleet and motor pool management. Vendor requirements should always address the three key components of a motor pool:

- 1) Scheduling and coordinating use
- 2) Dispatching
- 3) Reporting and billing

If they don't address these three areas, they may not be able to adequately meet all your needs. Break the problem down into manageable parts.

Chapter 7. Getting Started with Motor Pool

If you are considering launching a new motor pool or automating your existing one, Agile Fleet has the technology and industry experience to help you make it a success.

[Set up a custom motor pool technology demo call with us.](#) We've helped many fleets launch very successful automated motor pools, and we're confident we can help you too.

On the call, we will discuss your fleet challenges as well as common challenges in your industry and how we can overcome them with our fleet management information system. We will address specifically, how to:

- Get your fleet user and vehicle data organized and online
- Share vehicles in a self-service motor pool
- Set up automated maintenance plans and reminders
- Automatically communicate and enforce policy consistently
- Right-size your fleet, reduce costs, and better serve the users of your fleet
- Incorporate GPS and telematics

After our brief discovery call, we will set up a live web session to directly address your fleet challenges at a time that is convenient for you and your team.

Want our help? Set up a free demo today!

We will tailor the demo based on the needs of your fleet and share what we know about fleets in your industry. Want to talk? Please set up a time that is convenient for you on our [client success manager's calendar here](#). We look forward to helping you achieve your motor pool goals. [Learn more about Agile Fleet Inc. as a company, our core values, and our people.](#)

“A top priority of initiating fleet automation tools is to slash POV mileage reimbursement, which we estimate now costs the county upwards of \$350,000. Going to an all-online vehicle reservation process will require drivers to check for the availability of a fleet vehicle first. If there is not a vehicle available, drivers will be allowed to use their own vehicle. This will enable the county to cut way back on POV mileage reimbursement. We could buy FleetCommander and a whole fleet of vehicles for what we are spending on POV mileage reimbursement.”

— Scott County, MN

“The savings started on day one and we haven't looked back.” — [Greater Toronto Airports Authority](#)

“We have more than surpassed our goals by reducing POV by 50%. That alone has been a huge success for us.”
— [Forsyth County, NC](#)

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