



A Guide for Local Government:

Public Works Fleet Management

Public Works Fleet Management: **A Guide for Local Governments**

Many tasks of managing a public works fleet haven't changed in decades, whether it involves changing tires or hiring drivers. But an unprecedented combination of digital technology and double-digit budget cuts has upped the ante for local officials to do much more with much less. The goal of this paper is to help local government organizations understand fleet management in the 21st Century—and the new options offered by technology—while learning the basics of how to effectively implement and integrate high-tech as part of a new fleet strategy.

What does the new era of local government Fleet Management look like?

Let's start with the backdrop. Today, citizens demand more financial transparency and smarter spending in capital budgets from their elected officials. That means fleets can no longer be managed by educated guesses, let alone gut decisions. Successful local governments now utilize digital tools that hone fleet tracking and support to an exact science. Armed with superior information, and more of it, supervisors and field workers cannot only preserve and extend the service life of assets, but also increase productivity, track ongoing tasks more thoroughly, and devise detailed action plans not possible before.

The 6 key principles that underpin Fleet Management:

- 1 Optimize the useful life of your vehicles.
- 2 Decide whether to repair or retire vehicles.
- 3 Reduce downtime and increase fleet availability.
- 4 Supervise your employees in the field.
- 5 Provide support to your field workers.
- 6 Track your fleet expenses accurately and efficiently.

If decades-old methods still work, is new technology necessary?

Absolutely. No degree of paper record keeping or standard mainframe computing can supply the level of granular detail and accurate information—updated to the very minute—that today’s mobile technology and software solutions can offer. What’s more, the old methods prove impractical when monitoring or tracking employee activity, for example, or delivering valuable information for real-time problem solving on construction sites or in the event of emerging needs such as snow removal. They also fail to gather data that can save a public works department time and expenses.

What makes technology-driven fleet management so effective?

- **Operates in the same real time as fleets do.**
Field assignments, maintenance, and financial tracking depart from a static environment and enter a dynamic one that’s continuously updated through the day.
- **Takes the guesswork out of major decisions.**
Vehicles that might otherwise be retired prematurely can stay in service longer; supply cost can be parsed to fractions of a dollar.
- **Saves money.**
By tracking fleet utilization over a period of months, for example, supervisors can eliminate the cost of maintaining rarely used backup vehicles.
- **Provides modern tools for creating benchmarks and measuring outcomes.**
Continuous operational improvement becomes easier to achieve due to the improved degree of monitored progress.

In local government, fleet management principles are applied to six major categories:



**Fleet Vehicle Aquisition: Garbage trucks, large and small snow removal and construction equipment, light-duty work vehicles, street sweepers, etc.*

Where should an organization begin?

There is no one-size-fits-all solution for every public works fleet, even in neighboring communities. Needs, demands, and available resources can vary widely between borders. What's more, one town may have distinctly urban characteristics, while the next may reflect a suburban or even rural density. The blighted city of Camden N.J. and suburban Cherry Hill Township, just a mile to the east, illustrate these striking contrasts.

So a public works department, while it can look to other municipalities for general guidance, needs to take stock across the board, and ask key questions, such as:

- 1** Where do our cost challenges exist?
- 2** In what general areas do we need additional focus and improvement?
- 3** Which systems and procedures are clearly out of date?
- 4** To what extent are we completing regular scheduled tasks, such as street sweeping and garbage pickup, in a timely and efficient manner?
- 5** What goals do our elected officials and citizens share for bringing the department into a state of peak performance?

Where should an organization begin? (continued)

When considered carefully, and followed in order, these nine best-practice steps result in a fleet management strategy tuned and tailored to your organization:

1

Collect and Enter Data

All the information and records you've previously tracked for your vehicles—from mileage to maintenance; years in service to fuel efficiency—will serve as the foundation for new technological solutions you implement.

2

Take Stock of Information Holes

Evaluate where your department lacks vital data and how that information, once collected and organized, will improve fleet performance. Certain real-time comparisons (vehicle replacement versus maintenance costs, for example) may have proved elusive to make in the past.

3

Set Fleet Goals – And Quantify Them

Goals will differ for every public works department. How much do you want to improve fuel efficiency? Improve information sharing between the field and the garage? Decrease response times? To the extent possible, attach numbers and/or percentages to goals as a way to measure success later.

4

Train Staff in the New Technology – But Keep It Simple and Quick

It's human nature for workers to resist change. Keep the learning curve shallow and the training environment free of pressure. This will help your employees adapt to the new technology, and reap its benefits, with far greater ease.

5

Integrate Complementary Technologies

Equip the entire fleet team with support technologies such as inexpensive smartphone apps to step up your game. With a few finger flicks, fleet drivers can map the best routes around traffic (Waze), or even look up sheet metal gauges and drill sizes (Mech Ref).

Where should an organization begin? (continued)

6

Have a Plan to Take Advantage of Time Efficiencies

Keep a running list of backlogged or neglected needs, and dedicate surplus staff time to these areas. This is time your new technology will buy you: whether your workers spend fewer hours in traffic or now schedule overlapping repairs more efficiently.

7

Recalibrate Supervision, Support of Field Workers

Use digital technology to monitor vehicles around the clock, drastically cutting the chances for unauthorized personal use. But also employ it to send information into the field the instant that it's requested or available (such as project status updates), thus reducing your crew's work stress and wasted time.

8

Follow Through

Smart fleet management is the byproduct of patience, planning, and execution. Regular, proactive monitoring is the key to working efficiently and the easiest way to ensure that the fleet performs to your satisfaction.

9

Reiterate as Part of an Evolving Tech-Based Strategy

As a function of regular monitoring of your progress—whether monthly or at whatever interval makes the most sense—fine-tune your strategy and implementation as fleet demands and data feedback change over time.

Do you know your users?

Technology doesn't guarantee that a retooled fleet management strategy will succeed. Before choosing a system or solution, it's absolutely crucial to consider the needs of the people who will use the system on a day-to-day basis. Ideally, the system you choose will meet the needs of people in different roles and at multiple levels of your organization.

Here's a guide to what users need to find success with Fleet Management Technology:

Mechanics and Maintenance Staff

- **Easy to learn and use.**
Straightforward, intuitive and friendly. No tech savvy required. Minimal training time.
- **Optimized for the field.**
Streamlined workflow enables users to complete work accurately and on time, or ahead of schedule.
- **Real-time tasks and data.**
Easy access to real time data no matter where the task is located.
- **Shared access.**
Workers benefit from data and maps shared among departments.

Supervisor

- **Quickly assign work.**
Create and assign tasks to field workers in real time.
- **Gauge progress.**
Immediately see the progress and status of tasks and work orders.
- **Plan ahead.**
Plan, group, and relate tasks to maximize efficiency.
- **Monitor vehicle use.**
See where vehicles are at all times, whether to make dispatching more efficient or pinpoint unauthorized usage.

Do you know your users? (continued)

Fleet Manager

- **Simple reporting.**
Easily gather and filter data and create detailed reports.
- **Advanced analytics.**
Understand exactly how time and money is being spent.
- **Better decisions.**
Accurate, timely data makes for well-informed decisions.
- **Improved compliance.**
Easy comparison of fleet data versus government compliance rules and regulations.
- **Focused fuel, maintenance, and task management.**
Timely data optimizes fuel mileage improvements and prioritization of maintenance.

What are the traits of superior fleet management technology?

First, it's important to tailor the technology to the specific needs of your department. Yet no matter the staff size or budget, local governments can take smart steps to avoid mistakes and overcome the challenges associated with researching, selecting, and implementing the right technology.

Here are some things to look for when choosing a fleet management technology solution that fits your organization:

User Experience

When choosing a system, consider the ease of use and intuitiveness of its design. A clean, simple interface enables workers—especially those busy in the garage or field—to concentrate on the task at hand, rather than trying to muddle their way through poorly designed software that makes tasks more difficult to manage and complete.

Mobility

Public works departments succeed or fail based on variables such as response time, on-the-job time efficiencies and the ready exchange of complex information between the field and home base. Look for a system that performs as well, or better, on a mobile device as it does in the office. That way, your mobile workforce has everything it needs to access and complete work accurately and on time.

Data Organization

Does the system make it easy to input, view, and find data? If not, look elsewhere. Quick, easy access to well-organized data, such as a particular vehicle's work and inspection history, empowers workers and supervisors to make well-informed decisions when performing their work.

Adaptability

Identify your technology needs today and consider how those needs might evolve in the future. Use that knowledge to choose technology that has the ability to expand and grow with needs of your fleet and the operations that service it.

Applicability

Once you have identified the critical goals of your department, is the technology you've chosen ready to start helping you achieve them? Take a particularly close look at how the system measures fuel management, maintenance scheduling, and vehicle replacement ratings—three metrics core to any public works operation.

Integration

The operating budget and ongoing needs of a public works department do not exist in a vacuum. The right technology solution will integrate easily with your municipality's network and will allow you to share requested data with local officials in minutes.

Now You Know

Now that you have a basic understanding of the what, why, and how of public works fleet management in the 21st Century, you can begin thinking about how your organization can integrate and apply it. With the insight, answers, and steps outlined in this paper, you'll position yourself to make better decisions about when and where to begin implementing fleet management strategies and technology into your day-to-day operations, even as you save money while doing so.

The Fleet Management Solution for Local Government

Cartegraph's user-centric, Esri-enabled Operations Management System (OMS) is designed especially for managing the work, assets, requests, and resources at the center of local government operations. Its rich toolset includes functionality for capturing and tracking vehicle and equipment inventory, creating preventative maintenance schedules, and managing the parts and labor being invested in your fleet. Cartegraph OMS also integrates seamlessly with most new and existing fuel management systems.

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About Cartegraph

Cartegraph technology is designed and built to help public sector organizations save time and money. With its emphasis on adoptability, user experience, and return on investment, Cartegraph helps organizations effectively manage the work, assets, resources, and requests at the center of their day-to-day operations.