A Tale of Two Systems

How significant savings can be realized by developing a comprehensive system to better manage a department's fleet inventory

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The City of Baltimore Department of Public Works (DPW) is, among other things, responsible for providing safe drinking water to approximately 1.8 million people daily, the collection of mixed refuse and recycling from 210,000 households, and keeping the city's alleys, waterways and roadways clean and clear of debris. None of which can be done efficiently if the Department's fleet is not well maintained.

"The residents in our region depend on DPW to respond when there is a water main break or a street needs to be plowed during a snowstorm," said DPW's Director, Rudolph S. Chow, P.E. "We don't have the luxury of not showing up because our car is in the shop."

Currently, the Department of General Services (DGS) is responsible for monitoring and servicing almost all City agency vehicles, but the day-to-day management and monitoring of a vehicle's location, preventive maintenance, emissions testing, and taking it in for repairs is the responsibility of the individual agencies and their coordinators; noting the data maintained by both should match.

However, in early 2015 Director Chow determined that he was unable to quickly ascertain the overall health of his Department's fleet and was unsure if the over thirty coordinators, who monitored the approximately 1,900 vehicles and motorized equipment assigned to the Department, had the necessary tools to manage their portion—potentially leading to the loss of time and money.

City of Baltimore Department of Public Works fleet vehicle responding during a snow emergency (photo credit: Mark Dennis)

To correct this, DPW began the process of evaluating how to provide the Director and others with better access to fleet information and the ability to ensure that vehicles and equipment are maintained according to schedule.

Step 1: Determining the Need

Before a new system could be created, the current business practice had to be dissected. Several meetings were held with the coordinators to discuss items such as what they believed their role as a coordinator was, how they were currently monitoring their assigned vehicles, and what features a new system should have that would best assist them and the Department.

It was determined that most of the coordinators had a good understanding of their duties, but often fell behind in their monitoring because they were using spreadsheets or paper filing—not the most efficient way to track items over time. The use of spreadsheets also made it difficult to track the various information associated with a vehicle in one view. Coordinators had to often switch between several programs and pieces of paper to get the complete history and status of a vehicle.

Coordinators also expressed frustration in the time it took to reconcile their maintenance records with the City's

fleet system. Because data on their vehicles were in various formats and locations, they often had to review several bits of information just for one record; and if there were discrepancies, spent even more time identifying the source.

Based on the information collected, it was determined that the establishment of a main fleet coordinator position and the development/acquirement of a centralized database would provide the Department with the best results.

Step 2: Implementation

The first step in implementation of a new DPW fleet system was to assign a person with the full-time task of monitoring DPW's overall fleet. This person would serve as the single point of contact for all DPW coordinators as well as DGS. Now instead of each coordinator reaching out to DGS individually for assistance on a discrepancy, which sometimes took a lot of time to resolve, the coordinators could now contact the main fleet coordinator who would get the discrepancy resolved on their behalf. This process has already proven beneficial in saving time and money as each of the coordinators is taking on fleet coordinator responsibilities in addition to their other duties within DPW. So the less time they spend on correcting discrepancies, the more time they can spend on other duties. The overall fleet coordinator is also responsible for monitoring DPW's fleet to ensure vehicles are serviced according to schedule, are in the shop immediately when behind schedule, and working with DGS if vehicles have been in their shop for an usually long period of time.

The second part in implementing the new fleet system was the installment of a centralized database. Although there are several fleet management programs on the market, DPW opted to first internally create a database; although the possibility of purchasing a system still remains an option for the future. The database DPW created not only provides a centralized system for all of the coordinators to enter maintenance and repair information but it also has the ability to generate Department-wide and individual coordinator reports.

These reports help the Department and coordinators quickly cross-check for discrepancies in the City's systems as well as show information such as what vehicles are due for maintenance and testing within the next 30, 60 and 90 days, when vehicles are past due, and the complete repair history of a vehicle. The new reporting system also lets the Director and the coordinators know at any given moment how many vehicles in the entire fleet are nearing the end of their life cycle, are down for repairs, and are having similar maintenance issues. This information is invaluable in helping with financial and usage planning.

Conclusion

Although there are still improvements that can be made, and the fact that we will never be able to move away from having to maintain two separate systems, the establishment of a main fleet coordinator and the creation of centralized database have certainly made fleet management within the Department more reliable and efficient.

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