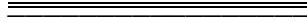
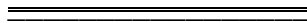


**The Bill Blackwood
Law Enforcement Management Institute of Texas**



Active Fleet Management in Law Enforcement Agencies



**A Leadership White Paper
Submitted in Partial Fulfillment
Required for Graduation from the
Leadership Command College**



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ABSTRACT

The need to have an active fleet management system is a major part of the management of law enforcement. Law enforcement is funded by public money; therefore, the budget is always under scrutiny. The budget is economy driven and changes each year. An active fleet management system is needed not only because of budget, but also for the safety of the officers who operate these vehicles under emergency conditions.

Every law enforcement agency should have an active fleet management system. This is required in order to save money, enhance officer safety, and utilize equipment to its fullest potential. This will be supported by a review of articles located on the internet, a government report, and a study of vehicle lifecycles. Repeatedly, the sources all agree that close management of the fleet is a must.

The final recommendation is that every law enforcement agency needs to have an active fleet management system. This program must be managed by a sworn officer who understands the needs of the street level patrol officer. This position also requires a hands-on approach. The time must be taken to gain control by utilizing ideas, such as benchmarking, and then maintaining that control.

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INTRODUCTION

Law enforcement agencies needing an active fleet management system is a statement that outlines the hazards of having a fleet that is not actively managed. This paper will look at the initial cost of a vehicle and the maintenance to maintain one as it relates to being actively managed. There will be discussion concerning replacement mileage and criteria, along with the pros and cons of cascading the vehicles. The pitfalls of improper management will be thoroughly explained along with a suggested management system. The main reason for taking the position of recommending an active fleet management system is to avoid the excessive expense and age of vehicles. A fleet that is not actively managed allows vehicles to remain in the fleet for an excessive amount of time, which can cause greater expense to maintain and a lower resale value.

Sergeant Kelly with the Dallas Police Department stated their cars are generally replaced solely based upon mileage, which occurs at 100,000 miles. They have spent between \$9,000 and \$17,000 for lifetime maintenance, when a car is driven daily until it reaches the required mileage limit, in as little as two and a half years. However, a car that is pushed to the back burner and is not required to be driven everyday can end up costing over \$70,000 for maintenance costs in the same 100,000 miles, which may take as long as 14 years (K. Kelly, personal communication, February 10, 2010).

All law enforcement agencies should have an active fleet management program. This will be proven by showing the cost of maintenance, value of resale, recycling of equipment installed, and discussing the cosmetic appearance of an agency's fleet. It will show that criteria should be established to allow for the removal of a vehicle from the

fleet regardless of mileage limits. Safety, reliability, and even availability should be considered when determining replacement criteria of vehicles. An active fleet management program will create a safer, more reliable fleet while promoting a more professional appearance to any department.

POSITION

Active fleet management is a must to save money, enhance officer safety, and utilize equipment to its fullest potential. This style of management requires a constant and detailed look at every vehicle in the fleet. In order to actively manage a fleet, every aspect of a vehicle must be monitored regularly. This is to ensure each vehicle is performing at its peak level and does not develop any reoccurring mechanical issues that may lead to excessive costs. The usage of each vehicle should be tracked to verify they are being utilized to their maximum potential. Fleet management software will save departments money by keeping track of expenses, mileage, and the history of usage. This data can also be used to provide historical documentation to protect against litigation. According to Strandberg (2001), with the current fleet management software that is on the market, departments can manage a fleet, which may extend the useful life of vehicles.

This type of software can also calculate vehicle cost per mile to operate. This information could recognize that a vehicle has increased in the rate per mile to operate to a point where it would be cheaper to sell it and buy a new vehicle that would cost less per mile to operate. This software could also be used to inventory all of the add-on equipment. This will give the fleet manger an accurate accounting and location of all specialized equipment. According to Bane (2007), there are problems in the lack of data

collection for tracking costs associated with each vehicle and the maintenance history. This leaves a department open to loss of money from auctioning the vehicles and possibly leaving unsafe vehicles on the road. He also emphasizes the need for establishing replacement criteria and written guidelines.

There is a constant need to study lifecycles and replacement criteria for vehicles in the fleet. Replacement criteria are a crucial part of fleet management, and it should be flexible enough to overcome any changes in vehicle or driving conditions. The financial cost of operating a police fleet is almost overwhelming to think about. There is the initial cost of the vehicle itself, plus the cost of up-fitting the vehicle with all of the police equipment. But one of the most important pieces of data that is often overlooked is the overall lifecycle costs for a vehicle. More times than not, the deciding factor is the low bid at the original time of purchase. Bane (2007) said, "Based on maintenance records, current fleet management programs and market reports from auction sales, a guide can be put in place for agencies to follow when considering vehicle replacement" (p. 12).

This means that every aspect of a vehicle should be considered when deciding on replacement criteria. It is not just how a vehicle is operating but what the value is if and when it is auctioned. Lifecycle costs must consider the purchase, add-ons, fuel, maintenance, and resale value of every vehicle. A recently published study listed the police vehicle with the lowest lifecycle costs as the Chevy Tahoe, even though it was the most expensive at the initial purchase (Vincentric, 2010). The study was based upon three years of ownership, with 25,000 miles driven per year. The report considered anticipated fuel usage, maintenance, insurance, repairs and, most importantly, how

much the vehicle depreciated over that three year period. The Tahoe depreciated 40% as compared to 79% for the highest of the other three vehicles it was compared to. This means that if this vehicle was operated under the guidelines set forth in the analysis, it could be operated for \$0.053 cents per miles whereas other vehicles were as high as \$0.0588 cents per mile.

Cascading is a term used to describe the practice of moving vehicles around to different users in order to regulate the amount of miles placed on each vehicle. This practice ensures they are driven the most while covered under warranty. It is imperative that mileage be monitored monthly to keep all vehicles of the same year model progressing towards the replacement mileage goal at the same rate. Keeping in mind that the resale value of vehicles lessens every year they are in service, the sensible way to manage this is to push a vehicle towards the mileage objective as quickly as possible. Cascading is not a popular concept since it requires the constant moving of vehicles. It also implies that the groups who drive the most number of miles will frequently be called upon to drive cars that are beginning to age with fewer miles on them to push them towards replacement.

Making sure vehicles are driven as quickly as possible toward the mileage goal is only one part of the equation. Operating software that tracks repairs and reliability should be utilized and must be a heavy factor in every replacement schedule. When comparing two vehicles, each with 100,000 miles on them, in the same condition, the newer car would almost always bring a higher price at auction, thus reducing the cost per mile to operate per vehicle. If maintenance is ignored and vehicles are not moved around to guarantee they are driven to their full potential, then vehicles will age at

different rates. Older cars develop mechanical problems, which costs money, just because of their age, not always because of the mileage. These older cars become costly to keep in the fleet resulting in their full value never being achieved. According to Miner (1983), vehicle mileage will vary in different areas of the department, and this should be monitored. By tracking this mileage, it creates a better way to schedule replacement and gets the most use from each vehicle.

A fleet manager should be someone who has knowledge of the demands of the user groups and the role each vehicle will play. In law enforcement, the fleet manager should be a sworn member of the department. Bellah (2004) said, "No one other than a patrol officer is better to understand the vital role of a police vehicle in today's law enforcement. The wrong vehicle can affect officer morale, reduce efficiency and increase a department's operation costs appreciably" (para. 1).

To properly manage a police fleet and understand the needs for the fleet, the manager must have direct knowledge of police needs. It is also very important for a police fleet manager to be placed in the department structure as close to the chief as possible in terms of who they report to. This will minimize the amount of time other members of the department attempt to overrule the decisions made by the fleet manager. The position of the fleet manager requires a very hands-on approach, starting with planning the budget for the next purchase and moving all the way to the best equipment needed to purchase for the vehicles. According to Molnar (2009), the demands of police vehicles have changed. Just think of the many changes to cars in the past 20 years. Computers, cages, patrol rifles, radars, in-car cameras, and many others have all been added to daily use. All of these things must be considered when deciding on a vehicle.

Direct and personal knowledge that can only be learned from working in a patrol car is a must.

It is also imperative that the fleet manager join fleet associations and attend training and conferences to keep up with changing trends. Acting Sergeant Richard Lee of the San Francisco Police Department was the fleet manager in 2009. Due to his knowledge and experience, he “is aware of the line officer’s vehicular needs. To keep abreast of current industry trends, he routinely attends both the annual Michigan State Police and Los Angeles County Sheriff’s Department vehicle tests, as well as various fleet seminars” (as cited in Bellah, 2009, para. 22).

Networking is an excellent way to gain new insight from peers. Vehicles and equipment should be looked at from every angle. If the only criterion is choosing the vendor because they were the low bidder, there may be issues down the road. If the vehicle changes every year due to picking the lowest bidder, it must be considered that the add-on equipment from the previous year models may not fit, thereby increasing the end cost. The cost of down time must always be considered. This down time can be increased by the frequent changing of vehicle types and by delaying the replacement of a vehicle caused by not cascading. It is frequently overlooked that the parts room has to keep parts in stock for the most common needed items. If the fleet has a different make of car every year, this increases the stress on the parts room to stock parts for multiple makes of vehicles. The same issue arises when vehicles are allowed to stay in the fleet for too many years. Even the decals may not fit different models due to body changes, which will increase the cost of the repair if the vehicle is in an accident. The decals

cannot be bought in bulk for discounts if the fleet vehicles have a broad range of year models.

Another issue to consider is the public image of the agency. Citizens pay taxes and expect their money to go to good use. Exley (2002) said, "How safe will citizens feel when they see a 10-year-old patrol car on the streets?" (p. 8). Vehicles that are capable of reaching the mileage goal in four years should do so and not stay in service for an additional six years and depreciate.

COUNTER POSITION

There are many issues when discussing an active, financially responsible, and even cost saving fleet management. It is widely acknowledged that police officers despise change, probably more so than almost any other work group. Police officers prefer things to stay the same all the time. Whether it is the stress of working long hours, lack of sleep, or the demand to make decisions for everyone else, they resist change and are very vocal about it.

Working in the public sector is considerably different than working in the private sector. Many challenges facing the public sector are related to budget, where the money comes from, being compelled to work with the lowest bidder, politics of the governing agency, and an ingrained work culture. LeSage (2005) described the unique challenges in regard to police fleets, budget, and demands that private groups may not deal with. He stated that, often, those in charge of police fleets "deal with problems and challenges that their counterparts in private industry generally don't have to face" (para. 1). Some of these challenges include: "tight budget constraints, vehicles constantly in motion or idling, specialty vehicles and equipment, and the requirement that fleet units

be on the road 24/7 with backup vehicles always running and available” (LeSage, 2005, para. 1).

Police fleets are also very diverse, and so is the staff that utilizes this fleet. In many departments, there are marked squad cars, unmarked administrative cars, light trucks, motorcycles, and other special use vehicles. The prioritizing of these vehicles for purchase, up-fitting, assignment, and repair is challenging. It is also necessary to examine how to best utilize each vehicle. It is difficult for a fleet manger to make everyone happy while working among the different user groups to meet their needs. According to LeSage (2005), a fleet manager must be able to work with the civilians and sworn officers within this culture to meet the specific needs of these groups.

The lack of a benchmark for a fleet manager can cause problems in performance, management, poor maintenance, and excessive costs. However, benchmarking is time consuming and difficult to perform. It is also commonly said that every fleet is different. This attitude is common and hard to work around. According to Deierlein (1995), it is imperative that fleet mangers develop a benchmark to access themselves and their fleet management program.

Cost of vehicles is also a major concern in every department. The cost of a vehicle can double by the time all of the specialized equipment in order to make it ready for use is added up. Because of the total cost, most departments try to squeeze every ounce of use from the vehicle. Exley (2002) said, “Transportation equipment costs rank second as the greatest expenditure that a law enforcement agency faces, just below personnel salaries and benefits” (p. 1). A decision to manage a fleet by any other means besides a mileage cap can cause an immediate need for cash outlay. In many

departments, marked police vehicles are required to be purchased with cash because of their already short life expectancy. Any decision to replace vehicles early may cause an unexpected need for cash.

There are also other issues that every agency must deal with. The previously mentioned resistance to change is only enhanced by the common feeling in fleet management of, "it has always been done this way and it works." It is very labor intensive to change a culture and the guidelines that it takes to manage a fleet actively. According to the United States General Accounting Office (USGAO) (1994), obstacles include things such as no specific written guidelines or policies regarding fleet costs, little or in adequate information on each specific vehicle, poor policy that prohibits getting private sector involved in the government fleet, and a budget process that changes all the time.

The easy way out is always the path of least resistance. With this philosophy, no change is good. But then the system will never improve; however, this approach is the one least likely to upset people and will produce the least number of complaints. People grow used to what they have and give up complaining, which creates a false sense of approval. In order to make positive change, decisions will have to be made that may cause some to become upset if they are not able to see the whole picture. According to Bearly (February 5, 2009), while attending a seminar on best fleets, he repeatedly heard phrases from fleet managers like "can't" or "that is not my responsibility" (para. 4). This "can't" attitude will not allow any fleet management program to improve; however, it is the path that requires the least amount of work.

Looking at all of the negatives against an active fleet management program, new ideas must be introduced in an agency that does not have an active fleet management program. Every fleet management system must keep up with the location, maintenance history, mileage and usage of each vehicle in the fleet. Strandberg (2001) examined “the success of the fleet program in Marion County, Florida, and talked with fleet manger Wyatt Earp who said “it’s almost impossible to operate a fleet without a software package” (p. 102). With a fleet management software program, it makes the complete data for every vehicle readily available. Today’s software offers the ability to not only track the maintenance, usage and fuel for each vehicle, but can also be customized to include the inventory of all added equipment to the vehicles. This gives the fleet manager the ability to monitor the availability of vehicles in different districts and move matching vehicles around as needed to meet the needs of each district or area. Michael Picardi, the Commissioner of the Department of Fleet Management for the City of Chicago stated, “With a police fleet, you’re only as good as the number of spares you have available” (as cited in LeSage, 2005, para. 9). In his management system, he moves cars around to make them available to be best utilized where needed.

The concept of benchmarking has been in practice for police departments for decades and should also be used in the area of fleet. Police departments frequently study best practices of agencies that are of the same relative size and city population as themselves. Most departments have a list of agencies to compare themselves to for matters of crime, policy, and personnel. These departments should be considered a starting place to conduct a benchmark study. It is well worth the effort to contact these

departments to study best practices and seek creative ideas to improve or at least measure the success of an agency's fleet management program.

Working with a broad range of groups, such as civilians, detectives, administrative personnel, and specialized groups, a study of equipment needs of each area is a good start. The amount of time each group needs vehicles should be studied to determine if some vehicles could be pooled in order to generate more use of some vehicles. Maximizing the use of vehicles by sharing them among various user groups allows the department to gain maximum usage of vehicles while they are covered under warranty and costs are low. If a vehicle is used infrequently while under warranty, the utilization is not maximized by placing as many miles on the vehicle as possible when the cost of repairs is not coming from the department budget. A lower mileage, older vehicle will need repairs that now must come from the budget. According to Exley (2002), a newer fleet will have lower operating cost but will cost more up front; however, this newer fleet will reduce the need for extra cars, since newer cars break down less often.

Policies must be written to cover the rules for the fleet. Having a set of rules and guidelines for usage sets boundaries to manage the way vehicles are driven and maintained. USGOA (1994) said, "Fleet managers in the public and private sector told us that uniform policies and procedures, sound information for making decisions and assessing performance, and predictable funding for vehicle replacement are essential elements for managing a cost-effective fleet" (p. 14). Written policy must be approved and backed by not only the department command staff but also should be supported by the governmental body that oversees the department. Complaints will likely be made to

this group as well as the department heads. A published policy should be given to employees that clearly states the goal and direction of the fleet program. Combining a written policy with a detailed vehicle management database will create a system of active management to track and govern each individual vehicle.

It is imperative that from the top down, an attitude is created for innovation in the ideas of managing a police fleet. In order to gain the support of the officers, the program must first have the support of the command staff. Change is hard in any law enforcement agency, and it takes time. Consistency is the key to this change. A positive attitude and a slow and consistent approach is a must.

RECOMMENDATION

Every law enforcement agency needs to have an active fleet management system. While the position of a fleet manger is not a popular one, it is very necessary in order to ensure that the fleet is properly maintained, provides the right tools for the job at the right time, and is financially responsible. After reading previously conducted research and many articles about fleet management one thing is clear: an active fleet management system is complex, time consuming, and absolutely essential. The agency crowned number one fleet in 2009 was The Hillsborough County Fleet Management Division, by Government Fleet Magazine. According to Bearly (February 5, 2009), he said the manager, Sharon Subadan, was actually a leader, and she lead by leadership, not by power or traditional management. He described her team as using words like "innovation" and "new." He said there were two types of management teams at the seminar, the ones that said "can't" and the one that said "we took a chance."

To break the mold of the phrase that every law enforcement officer has heard, “we have always done it that way,” a good fleet manager must be a leader and encourage out of the box thinking. Fleet managers must put together a team to look for new and better ways of doing things. Ideas from this team must be developed into structured plans. Equipment should be tested, not just blindly bought. Alternative vehicles need to be seriously considered whenever possible. According to Molnar (2009), Salt Lake City and New York City are both adding hybrid vehicles to their fleet. While these will not work in every situation, they should be looked at for any function in which the full power of a gasoline vehicle is not required. There are many federal grants to assist in the original purchase, plus there are added fuel reduction benefits for the long term.

In today’s economy, budgets are shrinking even though there is a constant and sometimes increasing demand on police fleets. The role of a fleet manager is ever expanding and more demands are being placed upon them to make sure the right vehicle is available for the job. However, every fleet manager should strive to remember that they must also be good stewards of the taxpayer dollars used to purchase and run the fleet. When talking about the San Francisco Police Department fleet, Bellah (2009) said, “When a vehicle is brought in to be fueled, mileage is recorded, and if the vehicle is due for a Preventative Maintenance service, it is taken out of service then and there. No exception!” (para 8). This is a proactive approach to making sure every effort is made to catch minor problems before they cause major and costly damage. Little problems can quickly lead to major problems with police fleets. The demand on a

vehicle that is in service 24/7 is huge. The importance of preventative maintenance and officers reporting problems to mechanics is crucial.

Best practices must be researched and studied to give managers the most data when making decisions. Even small details need to be addressed in order to create happy customers and not add stress to the job of a law enforcement officer. Something as simple as maintaining the same type of equipment in every car and having it set up in the same manner is critical for officer safety. Light controls change for every manufacturer, and since the invention of LED lights, they can be very complicated. Having different controls in vehicles become a liability and an officer safety issue. Bearly (February 16, 2009) said, "Whether it is a horrible accident or not having your fleet able to respond effectively to a disaster, the long-term results of poor fleet management can not be understated" (para. 5).

There is no viable alternative to having an active fleet management system. The results of a poorly managed fleet can be deadly and costly. A fleet is the second most expensive part of an agency's operating costs, even when managed properly. The fleet manager must find new ways to manage, equip, and replace vehicles in today's economy in order to provide the best service possible to both the users of the vehicles and to the taxpayers who pay for them. Exley (2002) said, "The safety of their officers and the public they serve, the image their agencies project, and the efficiency and effectiveness of their operations depend on their decisions regarding how they manage their vehicle fleets" (p. 10).

REFERENCES

- Bane, M. (2007). Fiscal Responsibility in Fleet Replacement for Law Enforcement. Huntsville, TX: The Bill Blackwood Law Enforcement Management Institute of Texas.
- Bearly, E. (2009a, February 5). My Fleet is Better Than Your Fleet. *Government Fleet*. Retrieved from <http://www.government-fleet.com/Blog/Questionable-Opinions/Story/2009/02/My-Fleet-is-Better-than-Your-Fleet.aspx>
- Bearly, E. (2009b, February 26). Poor Fleet Management Can Kill. *Government Fleet*. Retrieved from <http://www.government-fleet.com/Blog/Questionable-Opinions/Story/2009/02/Poor-Fleet-Management-Can-Kill.aspx>
- Bellah, J. (November 2009). Fleet Profile: San Francisco Police Department. *Police Fleet Manager Magazine*. Retrieved from <http://www.hendonpub.com/resources/articlearchive/details.aspx?ID=207633>
- Chevy Tahoe police vehicle rated best for life-cycle cost by analyst. (2010, February 4). *Police Magazine*. Retrieved from <http://www.policemag.com/Channel/Vehicles/News/2010/02/04/Chevy-Tahoe-Police-Vehicle-Rated-Best-for-Lifecycle-Cost-by-Industry-Analyst.aspx>
- Deierlein, B. (1995, May). Fleet management in the 90s requires more than maintenance. *World Wastes*, 38(5), 32-38.
- Exley, C. W. (2002, August). Fleet Management Vehicle Rotation Criteria. *FBI Law Enforcement Bulletin*, 71(8), 1-10.

- Hunt, W. (Ed.). (1994). Federal Motor Vehicles Private and State Practices Can Improve Fleet Management. *United States General Accounting Office: Report to Congressional Requesters*. Washington DC: Author.
- LeSage, J. (2005, April). Cutting Car Costs. *Police: The Law Enforcement Magazine*, 29(4), 42-44,46.
- Miner, Lt. G. (1983, June-July). Fleet Management. *The National Sheriff*, 35(3), 6-8,10.
- Molnar, JP (December 1, 2009). Where the patrol vehicle's been & where it's going. *Law Officer*, 5(12).
- Strandberg, K. (2001, October). Fleet Management Software. *Law Enforcement Technology*, 28(10), 102,104-106.
- Vincentric. (2010, February). *A look at lifecycle costs for law enforcement vehicles*. Retrieved from [http://vincentric.com/Portals/0/Market%20Analyses/Law%20Enforcement%20Life cycle%20Cost%20Analysis-%20Prepared%20Feb%202010.pdf](http://vincentric.com/Portals/0/Market%20Analyses/Law%20Enforcement%20Life%20cycle%20Cost%20Analysis-%20Prepared%20Feb%202010.pdf)