

Insourcing Versus Outsourcing: An Idea for Better Law Enforcement Fleet Vehicle Maintenance

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Abstract

One of the most important tools law enforcement officers nationwide have in their arsenal is their police vehicle. As with any tool you must maintain it and ensure it is in proper working order for overall safety and a good service life. Law enforcement vehicles are maintained in several ways depending on the agency. A look into whether or not outsourcing actually saves money was concluded on the practices of several other agencies and the Florida Highway Patrol. It was concluded that it is important to ensure first, your practices fit your agency and second to know there are ways save additional money depending on your level of vehicle maintenance your department wants to get involved with.

Introduction

There are thousands of police vehicles in service across America today. They range from Ford Crown Victoria's, Chevrolet Tahoe's, to Dodge Chargers. They all have several things in common but, mainly they are here for officer use to help ensure public safety. They are also here for officer safety. Some other common factors they share are vehicle maintenance issues related to upkeep and regular service.

Outsourcing of vehicle maintenance issues is standard practice on the Florida Highway Patrol and several other police agencies. The question is whether or not the outsourcing of vehicle maintenance services can be done cheaper than conducting these services in house. Even if the decision is made to outsource, can you still save money by doing some of the less invasive issues in house? This decision is not made lightly due to issues that insourcing requires, such as dedicated personnel, but we must consider long term cost. For instance: "Transportation equipment costs rank second as the greatest expenditure that a law enforcement agency faces, just below personnel salaries and benefits. Considering cost and frequency of fleet vehicle replacement, law enforcement agencies must consider improved strategies for developing budget estimates and priorities". (Exley 2002)

Literature Review

As budgets shrink within governmental agencies, we as agency leaders are forced to find alternative ways to continue to get the same job done with less expense to the tax payer. One of the most commonly used trends today is the outsourcing of needed items and services. For years insourcing has been considered too costly. According to Owen "Outsourcing and privatization are national business trends that are becoming increasingly relevant to public-sector equipment managers. The premise that

many of the publicly provided services are better performed by the private sector has been embraced by many members of state legislatures, county commissions, and city councils.” (Owen, 2000)

Privatization of public-provided services continues to be a hotly debated issue. Many members of state legislatures, county commissions, and city councils have embraced the premise that the private sector can deliver most public services better, faster, and more cheaply than can public employees. Moreover, many businesses and public agencies have concluded that most support services are not “core” and, therefore, are candidates for outsourcing. A recent study in the journal *Public Works* (1) reported that 32 percent of public sector managers feel that the trend toward privatization of equipment maintenance services will increase in the future. Only 2 percent believe that the trend will decrease. There were similar results for other public works functions, so the consensus is that our customers will also face the privatization issue with increasing frequency. (Owen, 2000)

Core and Critical Business Functions hackneyed cliché is too often lumped together business functions that are core and critical, urging us to treat them similarly. The reverse is true. Core business functions, those that differentiate your company from competitors, and critical business functions, those without which your company cannot function, warrant completely different treatment. (Williams, 2001)

Currently, the popular trend in Florida State Government is outsourcing, but there is not enough information to determine if it actually saves money. According to Owen “Outsourcing is another trend that bears watching. Groups that provide services to internal customers, such as information technology or equipment management organizations, are especially vulnerable to this trend. This is the case not only because these services are seen by many as not being core services, but also because many internal services providers have fallen well short of meeting their customers’ expectations.” (Owen, 2000).

According to Tom Peter author of, *“Do what you do best and outsource the rest”*. He cited; it is a common practice to outsource logistics and supply chain activities. One would be surprised to know that some organizations strongly believe in insourcing logistics activities. He later wrote: the recent study by CAPGEMINI, (A global leader in consulting, technology, outsourcing, and local professional services, 2010) revealed a few interesting facts on insourcing.

1. On an average of 24% of outsourcing companies indicated that they would be returning to insourcing some of their logistics activities, and 36% of 3PL (Logistics Provider) respondents observe that some of their customers are insourcing certain logistics activities.
2. “Transportation is most outsourced”.
3. The percentages of 3PL users outsourcing individual logistics activities (versus overall outsourcing) tend to be higher in Europe and Asia Pacific than in North America or Latin America.
4. The gap between expectation and satisfaction with regard to 3PL IT capability is widening (54%).

Further, the same report revealed that 52% of the respondents indicated that the length of the contract reduced. The outsourcing community is aggressive and they do not mince words in sending out a strong message to 3PLs, “don’t sell me what YOU want, show me what I NEED”. In 2009 UK’s largest retailer, Tesco, has decided to take some of its distribution operations in-house. The move follows a company review of supply chain strategy. (Sangam, 2010)

An emerging trend in today’s business is sharing the cost of technical depth, focus and experience. This is the very same reasons that you don’t perform your own surgery, it is likely that you should consider outsourcing business functions that are, like surgery; critical, complex and costly. The sharing of technical specialists, especially those, like a surgeon, not required constantly, is the fundamental economy of scale that underlies application management outsourcing. A service provider can justify an entire hierarchy of specialization, distributing the cost of the most specialized over many customers. This is in contrast to individual customers, most of who cannot begin to justify the cost of the expertise they need--especially the expertise they need only occasionally. Consider, as a concrete example, the role of database administrator. As specialized as this role is, there is a skill-cost spectrum within the role. That is, day-to-day management of the database can be performed by less skilled and less costly people than those qualified to fight unusual fires or to chase down and fix an intermittent error. Cost savings, reduced downtime, and predictable investments sharing the cost of the skill hierarchy among multiple businesses is such a powerful concept that application management outsourcing almost always reduces costs. The savings was predicted early on by Cherry Tree Associates (financial advisory firm offering investment banking, investment management and wealth management services) to be between 30% and 50%. Fortunately, there has now been sufficient experience with this form of outsourcing to produce empirical data. A recent study of 54 application service providers (ASP) customers by IDC (global market intelligence firm) found an average return on investment (ROI) of over 400% and a payback time of less than six months for almost half the companies studied. IDC found that the average five-year ROI for enterprise resource applications to be over 1300%. Even such large estimates do not capture what are arguably the most attractive financial aspects of application management outsourcing:

- 1) Reduced downtime,
- 2) Predictable costs and
- 3) Elimination of irregular investments.

The financial value of downtime is difficult to quantify, but this difficulty should not obscure its importance. Cost predictability is one of the benefits most appreciated by customers of application management service providers. The benefit to the customer is clear, and is derived from the experience of the service provider, who has, in most cases, delivered similar services to other customers. That is, the service provider is experienced both with the services delivered and with the associated costs. The elimination of irregular investments is another benefit that is popular among customers of application management service providers. Large investments distort

budgetary planning. Conversely, the elimination of those associated with expensive information technology is strongly appreciated. (Williams, 2001)

"If one common denominator exists that links law enforcement agencies across America, it is the ever-present patrol vehicle. From small-town police departments to large state agencies, the need for economical, high-performance, and comfortable patrol vehicles remains absolute. While the demand for police vehicles is universal, each agency has its own specific needs. Those needs should focus on agency objectives, financial and operating capabilities, replacement specification, and overall efficiency. With each specific category in mind, the requirement for improved fleet management should become clear." (Exley, 2002)

Considering the cost and frequency of vehicle rotation or replacement, law enforcement agencies must find better strategies for developing life--cycle estimates, including vehicle replacement, operation, and maintenance. The development of strategies can improve vehicle operating efficiency, reduce unnecessary equipment costs, and improve overall agency efficiency. Because the needs, objectives, and financial and operating capabilities of agencies differ, each agency must analyze the advantages and disadvantages of its methods of maintaining equipment to determine which method will best contribute to the overall objectives of the agency in a cost-effective manner. "Most of all, economic life is of critical importance to equipment managers. It relates to the total stream of costs associated with the specific unit over a period of time. Therefore, it has impact upon both capital and operating budgets. The economic life of a unit refers to the length of time the average total vehicle cost is at a minimum. Total unit expense encompasses all costs associated with the ownership of the vehicle." (Exley, 2002).

Engineers agree that two factors determine the life expectancy of a vehicle: environment and maintenance. Maintenance is seldom a problem for police agencies; common sense dictates that they take care of their equipment. As long as agencies follow the manufacturer's recommended maintenance schedules during the life-cycling process, their cars should hold up reasonably well. (Exley, 2002).

Today, it is commonplace for all governmental entities to follow the requests of the public and stretch existing tax dollars. City councils, police commissions, and state legislatures continue to ask law enforcement agencies of all sizes to reduce their budgets. This results in agencies buying less, stretching supplies, and making things last longer, including patrol vehicles. (Exley, 2002).

The Florida Highway Patrol maintained a fleet of well over 1700 police vehicles that are always in need of service or routine maintenance. These vehicles included a combination of Ford Crown Victoria's, Chevrolet Impalas and Tahoes, Dodge Chargers, and various other seized vehicles. The question that needs to be answered is whether or not outsourcing is actually cheaper.

Methods

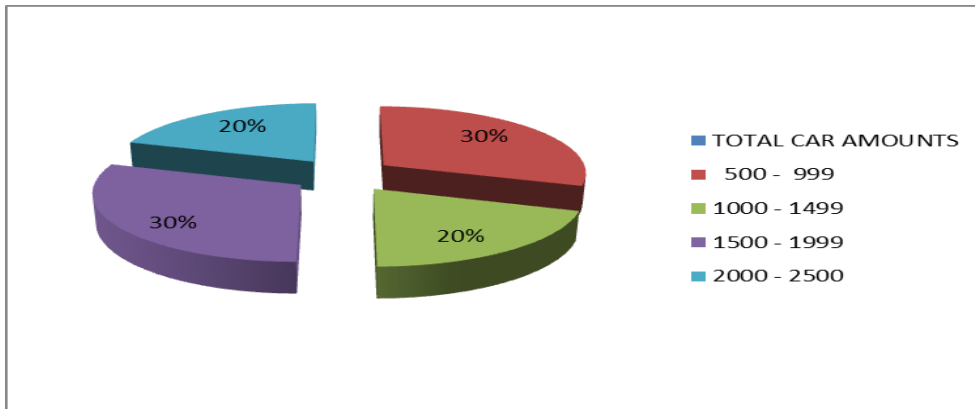
The purpose of this research is to determine how effective the outsourcing of basic vehicle maintenance services is on the Florida Highway Patrol. A survey was developed and several different law enforcement agencies were contacted via phone interviews. These departments were chosen because of the size of their fleet and the possibility of alternative ways of conducting business, as their leaders are faced with the very same issue as the Florida Highway Patrol. Most of the departments were over 500 sworn members with corresponding police vehicles. During the research the question of; "Can doing moderate insourcing save money and is it cost effective?" The question of what are other departments doing in this area will also be explored. The premise is to determine if by incorporating what other agencies do plus re-examining what we do as it relates to outsourcing; can we gain additional cost savings? Data was gathered through surveys completed through call-ins to other law enforcement agencies. Additional information was gathered as to the "vehicle use" allowed by other departments along with restrictions on what kind of maintenance is allowed to be completed by the officers themselves. This information was gathered so a conclusion could be made if allowing simple services such as changing a department issued air filter could save additional money or the possibility of having an in house mechanic that only conducts routine maintenance. Can the cost of his benefit package and other required items offset the cost of just outsourcing all services?

The survey will also determine if an agency switched from outsourcing to insourcing or vice versa and the reasons why. This information will be gathered to alert for potential problems, and educate us about the pitfalls from either insourcing or outsourcing.

The survey focused on whether the departments insourced or outsourced and if so what kind of cost savings if any have they experienced. The question was also asked if officers were restricted as to where they can have services completed. These questions were asked to determine what other departments are doing and to see if insourcing is a viable option in today's police service environment.

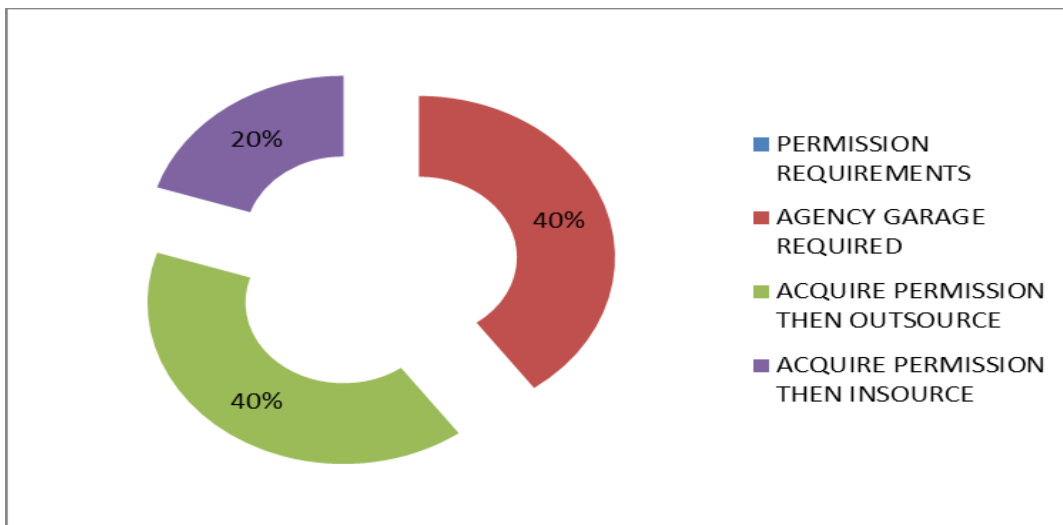
Results

A total of ten law enforcement agencies were surveyed, they consisted of other State Police/Highway Patrol agencies, Sheriff's Offices and City Police Departments. The survey revealed that all agencies were well over 500 vehicles, the smallest agency with 775 vehicles and the largest with 2370. 30% of the vehicle agencies surveyed had less than 1000 cars. 20% had between 1000 and 1500 vehicles. 30 percent had between 1500 and 2000 vehicles and 20% had over 2000 vehicles. The vehicles range from take home cars, to pool cars, to non-sworn cars but all had the common factor of required vehicle maintenance. It must be noted that 90% of the agencies surveyed had a state or county owned garage they could take their vehicles too. See Graph below:



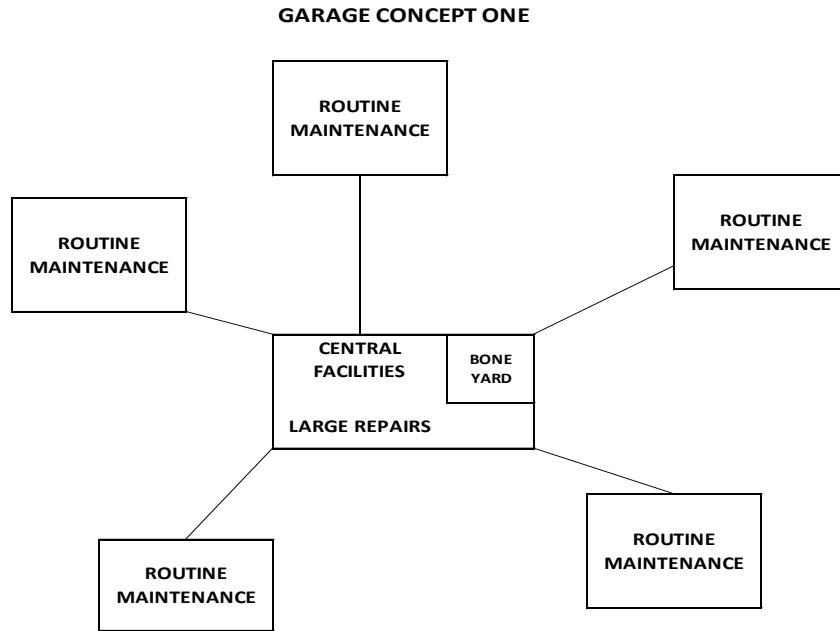
The survey revealed that the individuals responsible for fleet maintenance of their agency ranged from sworn and non-sworn positions. The titles ranged from Equipment Superintendent, Fleet Manager, Supervisor Mechanic II, and Sergeant to Lieutenant basically a range of people in essence completing the same job. Of the agencies surveyed 20% of them offered some of their civilian employees a take home vehicle and all of them had some version of pool car program.

During the survey the following question was posed "Are there restrictions placed on your officers for working on their assigned cars? 100% of the agencies responded yes, all with permission requirements. No agency allowed their officers themselves to do any kind of maintenance on their assigned vehicle. 40% require their officers to go to an agency garage. 40% require their officers to get permission to have work completed on their vehicles at local outsourced garages. 20% require their officers to first get permission then go to an agency garage. The results are below:



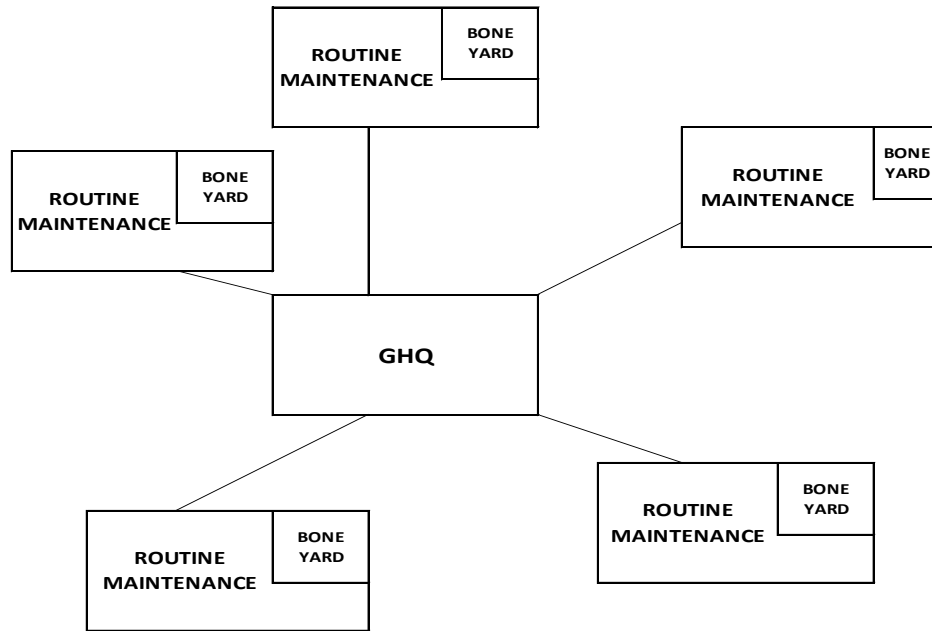
Among the difference in agencies and garages there were two main themes when it comes to garages around the different counties and states. Both of the garages encompassed using used parts to repair their vehicles. The main difference was under concept two, where parts would be shared among the garages as compared to acquiring the used parts from one central facility. They were explained like this:

Garage Concept One: One central facility with several smaller facilities located throughout the area. The central facility does all large repairs and maintains a bone yard of crashed patrol cars that are repurchased from the insurance companies. The bone yard is used for any parts that may be needed. The small garages handle all routine maintenance. See diagram below:

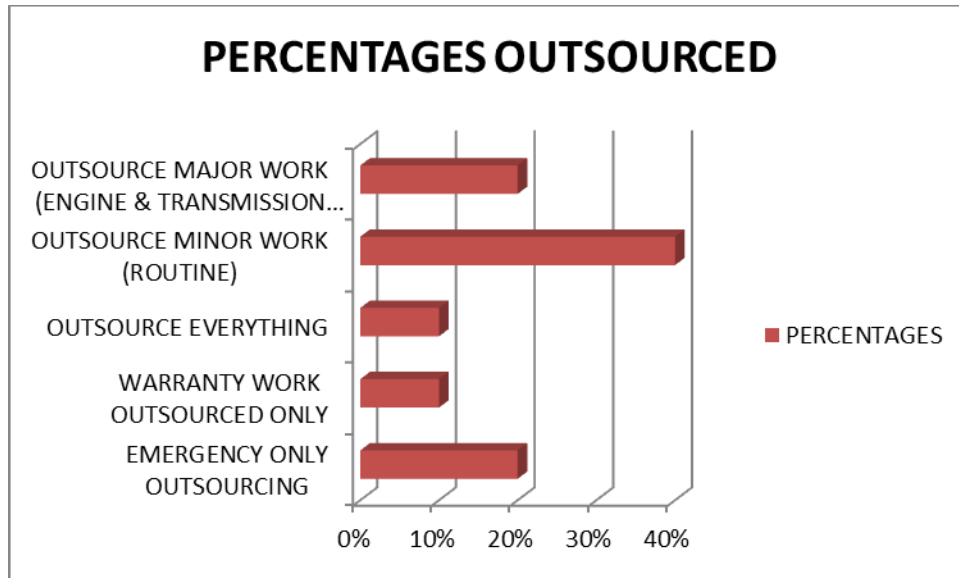


Garage Concept Two: Several small garages located through-out an area. These garages are responsible for all vehicle maintenance depending on the capabilities of the garage. All repair work that cannot be completed locally is outsourced locally to locations decided upon by the local commanders or competitive bid process, thus maximizing effective use of governmental funds. See diagram below:

GARAGE CONCEPT TWO



Questions 6, 7, 8, and 9 of the survey were about whether or not the agencies surveyed insourced or outsourced and cost savings from either. The questions explored the different types of outsourcing or insourcing that are currently used in the law enforcement field and the restrictions placed on the officers. As stated earlier, 90% of the agencies surveyed had an insourced garage system that their officers were required to utilize in some way. 50% of the agencies were required to use their departmental garages and were encouraged to do so but due to mileage constraints they were authorized to outsource only very minor services such as brakes, oil changes, windshield wipers and headlights. 20% of the agencies surveyed were only allowed to outsource larger repairs such as engine overhauls and transmission repair work. 20% were only allowed to outsource any service in an emergency situation. 10% outsourced all their vehicle maintenance. This trend tells us that insourcing is used significantly more than outsourcing in the field of law enforcement. The differences seen among agencies are listed below:



The final questions on the survey dealt with whether or not any agencies feel they had seen significant cost savings from outsourcing, ideas for additional cost savings and ideas that they might share for improvement on their current system. 40% of the agencies felt the only reason they got cost savings from outsourcing was due to the distance the individual officers would have to travel to get maintenance work completed. At no other time did they feel outsourcing was a viable option and 100% of those surveyed felt their way of conducting business was as good as it could be as far as cost are concerned. Some of the ideas shared from other agencies included the following:

- 6000 mile oil changes
- The expanded use of synthetic fluids
- Upgrades to high performance rotors
- The possibility of expanding into body work
- The possibility of selling used cars to local agencies instead of at public auctions.

Discussion

This writer found it interesting that there were so many variations in the way vehicle maintenance is performed among different agencies. One common factor stood out was that over 90% of other agencies insourced some type of vehicle maintenance. Among the different agencies there were levels of what they would insource versus what they would outsource. The majority of the agencies would only outsource larger repairs such as transmission work or major engine repair. The Florida Highway Patrol currently outsources all vehicle maintenance work. This is a quite an expense for the

agency. The chart below shows the amounts spent from just vehicle maintenance for a three year period.

	08/09	09/10	10/11
Total R & M	\$4,482,272.92	\$4,886,590.30	\$5,119,625.12

These numbers do not include the towing of vehicles to the facility for repair or tire use. If you break out just oil changes alone and account for 1700 vehicles getting one oil change a month at the cost of thirty dollars that is over \$500,000 a year. The oil change can be completed for twelve dollars if it is insourced. That is an eighteen dollar savings, for a total of a \$350,000 yearly just in oil changes. It is clear we must strongly think about insourcing some of the routine vehicle maintenance work.

If the Florida Highway Patrol did decide to go with insourcing there would be issues to get the program started: See below:

- Location selection at 5 different locations statewide
- The employment of 5 Chief Mechanics at each facility
- The establishment of inmate labor at the facilities
- Initial start-up cost for the facility and equipment needed

Another interesting trend this writer noticed was the concept of a bone yard for spare parts. When cars are crashed generally one side will not have damage depending on the impact site and the type of vehicle crash. This leaves the availability to undamaged parts that can be put back into service. This works extremely well due to the parts will most likely be painted the same color already and should just bolt on. The average fender is two to four hundred dollars and although that is not a lot of money at one time it certainly adds up on a yearly basis. If there was a bone yard established at all the vehicle maintenance facilities, crashed vehicles could be stored there and parts could be shared throughout the state thus saving thousands of dollars.

Getting more for the public's dollar is a concept that will always be in government. It is our responsibility as managers to look for ways to save money. This paper shows we can do this by insourcing some of the services we currently outsource. In the future the program can be expanded to include other agencies the opportunity to get their routine service done at our facilities at a significantly lower cost.

Recommendations

In reviewing the information gathered in the literature reviews and the information obtained by the surveys, some recommendations can be made regarding the implementation of an insource vehicle maintenance system by the Florida Highway Patrol. Such as:

- A committee be established to ascertain if insourcing is a viable possibility and to conduct further research into logistics of making this concept a reality.
- A proposal be written to the legislature for future funding.

- Meetings be established with other agency heads about the possibility of combined facilities.
- The Fleet property section being assigned oversight.

This concept would allow the Florida Highway Patrol to lead the way in cost savings to the citizens of the state of Florida.

Captain Robert Ifft is a 15-year veteran of the Florida Highway Patrol. He has served in several areas to include the Training Academy, Accreditation and Policy, The Bureau of Investigations and Field Operations. As of September, 2011 he is assigned as the Tampa District Commander in Hillsborough County. Robert has an AA Degree from Pensacola Junior College and a Bachelor of Arts Degree in Criminal Justice from the University of West Florida.

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Appendix A

Survey

1. What is your agency name?
2. What is your name and official title?
3. What is the size of your fleet? (All Vehicles? Patrol, Jail etc.)
4. Are the vehicles in your fleet take home cars or pool cars? How many of each?
5. Are there restrictions placed on your officers for working on their assigned cars? (Mechanic work?)
6. Do you outsource your vehicle maintenance? If so, to whom?
7. Do you insource any vehicle maintenance? If so, what type?
8. Have you ever gone from outsourcing to insourcing or vice versa? Is so, why?
9. Do you limit your members on where they can have services completed at? If so, what are the limitations?
10. Has your agency seen any cost savings from outsourcing?
11. What are some ideas you may have for additional cost savings for your department in the area of vehicle maintenance?
12. Is there anything that I have failed to ask you that you feel is important and would assist me with this survey?