

City of Alexandria, Virginia

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3-11-08

MEMORANDUM

DATE: MARCH 6, 2008

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: JAMES K. HARTMANN, CITY MANAGER 

SUBJECT: IMPLEMENTATION OF THE EFFICIENCY AND BEST PRACTICES
STUDY OF FLEET MANAGEMENT

ISSUE: Implementation of the efficiency and best practices study of fleet management.

RECOMMENDATION: That City Council receive the Fleet Management Study and this implementation plan and schedule the reports for discussion at a future Council work session.

The City Manager's Advisory Group has reviewed the report, and their comments are included below. We will discuss the operating cost savings and operating costs that affect the FY 2009 budget at an upcoming budget work session.

DISCUSSION: This is the third efficiency and best practices study we have completed in response to Council's request to review City departments. Previous reports were completed for elements of the Transportation & Environmental Services (T&ES) and the Fire Departments. A fourth study of Recreation, Parks & Cultural Activities (RPCA) is expected to be completed this spring. The efficiency and best practices of the Personnel Services Department by the Corbin Company is underway. Watson Wyatt is studying employee classification and compensation and pay for performance. Virtual I.T. is reviewing the City's building permit process and Robert Kimball & Associates is studying public safety communications. The last four studies will take several months to complete, and we expect to discuss the results with Council in the fall.

The fleet efficiency and best practices study was conducted by the Matrix Consulting Group. The study was overseen by the City Manager's Fleet Management Improvement Team (FMIT), an interdepartmental team composed of staff from General Services, Police, Fire, Sheriff, T&ES, Recreation, Parks, and Cultural Activities, and the Office of Management and Budget (OMB). The purpose of the study was to:

1. Evaluate fleet management and operations against industry best practices;
2. Evaluate the level of staffing and work practices;
3. Evaluate opportunities to privatize or outsource selected fleet services;

4. Analyze the charge-back system for equipment costs;
5. Evaluate the effectiveness of fleet management software;
6. Evaluate opportunities to reduce the fleet, the extent of take-home vehicles, and the extent of four-wheel-drive vehicles;
7. Evaluate the fleet replacement program; and
8. Evaluate the plan of organization for delivery of fleet services

The City has fleet operations in the General Services, Fire and Recreation, Parks and Cultural Activities Departments. The largest operation is the Fleet Services Division in General Services. We have a total City fleet of 1,124 vehicles which is about the same number of vehicles found in comparator jurisdictions (page 190 of the Matrix Report).

Implementation Plan

The consultant made 74 recommendations. The FMIT has recommended acceptance and implementation of 64 of the recommendations immediately for a net savings of approximately \$210,000. These savings may take time to implement and may not be realized in FY 2009.

The major recommendations the City has begun implementing or will implement are:

1. **Charges to Departments (Recommendation #3 & 4)** – Currently, vehicle fuel and maintenance costs for most departments are budgeted and expended in General Services. The study recommends charging the cost of vehicle maintenance and operations to the user departments in order to minimize vehicle size and fuel consumption and reflect the true cost of services in the City's activity-based budget. The FMIT concurs with the recommendation, however, the mileage, fuel, and cost data and accounting systems necessary for accurately assigning charges to departments will take time to develop.
2. **New Management Analyst (Recommendation #7)** – The study recommends authorizing a new management analyst position in General Services at a cost of \$76,000 to assist Fleet Services in implementing a number of the other recommendations in the study, especially improving and maintaining data and accounting systems for charging operations and maintenance expenditures to user departments and consolidating citywide vehicle maintenance. The FMIT agrees, but this added staff will have to be considered in the context of the budget deliberations.
3. **Fleet Maintenance Consolidation (Recommendation #17 & 18)** – Fleet and equipment maintenance is currently performed in Fire, RPCA, and General Services. The study recommends consolidating all City vehicle maintenance, excluding Fire apparatus maintenance, within General Services for a savings of \$81,000. The FMIT concurs in principle with consolidation for improved efficiency, but needs to study further how the proposed model will allow for adequate resources to provide immediate attention to emergency apparatus for unscheduled repairs in Fire and how

uptime for RPCA mowers and other equipment will be maintained during critical peak periods.

4. **Maintenance Swing Shift (Recommendation #24)** – The study recommends assigning four General Services automotive mechanics to a swing shift. General Services agrees to study the proposal further, but estimates it would cost \$152,000 for two positions in additional staffing as opposed to the \$24,800 identified by the consultant. If fleet maintenance consolidation occurs, the need for two additional mechanics would be re-evaluated.
5. **Staff Reassignment (Recommendation #29)** – The study determined that the ratio of support staff to shop floor staff could be reduced and recommends reallocating existing support staff to shop floor positions in order to improve customer service to departments. The recommendation would require reclassification of two Technicians and one Auto Service Advisor to Lead Auto Mechanics at a cost of \$12,400 per employee. The FMIT concurs, and General Services agrees to study its organizational structure to move forward with this recommendation.
6. **Additional Staff Training (Recommendation #50)** – The study recommends increasing the Fleet Services training budget by \$22,622 for a total of \$25,000 annually in order to obtain Automotive Service Excellence (ASE) certification for all mechanics. The FMIT endorses this recommendation.
7. **Fleet Size Management Policy (Recommendation #60)** – The study recommends adopting a citywide policy regarding the size of vehicles in order to improve fuel efficiency, lower emissions, and minimize fleet costs. The FMIT concurs. City staff has developed five year fleet replacement plans which are reviewed annually to determine if vehicles could be extended or downsized. The Sheriff's Office has already begun replacing full-sized 8-cylinder Crown Victoria cruiser/sedans with mid-sized 6-cylinder Chevrolet Impalas where feasible. The Police Department has begun to replace full-sized Crown Victoria cruisers with 6-cylinder Charger Cruiser/Sedans. The Police Department is also downsizing its unmarked Police-package fleet to Impala sedans. The General Services motor pool fleet has been converted from gasoline to hybrid-powered vehicles. Several other departments have converted mid-sized sedans to more fuel efficient or hybrid vehicles.
8. **Sport Utility Vehicles (Recommendation #65)** – The study recommends downsizing sport-utility vehicles (SUVs), excluding eight assigned to the Police, four assigned to Fire, and two assigned to the Sheriff's Office, to pick-up trucks and sedans for an annual cost savings of \$116,800. The excluded vehicles have specific purposes for which a larger vehicle is justified. The FMIT concurs and will work with departments to identify SUVs to be replaced with pick-up trucks and sedans at the end of their useful lives. The Fire Department, Code Enforcement Bureau and the Police Department have begun this process. Staff analysis suggests that the annual cost savings would be no more than \$107,250, depending on the size and number of

vehicles downsized.

9. **Fleet Reduction (Recommendation #66)** – The study recommends reducing the size of the fleet by eliminating underutilized vehicles for a savings of \$159,500. The FMIT concurs and will work with departments to identify vehicles to be phased out of the fleet. The Police Department has already eliminated two vans in its fleet.
10. **Take-home Vehicles Policy (Recommendation #67)** – The study recommends revising the administrative regulation regarding the use and assignment of take-home vehicles. The FMIT submitted a revised take-home regulation for the City Manager's Office that addresses public safety vehicle needs since the 911 attacks in 2001. It should be noted that none of the comparator cities in the report (p.138) experienced the impact of the 911 attacks like the Washington DC area did. The consultant did not take this into account in his report. The new regulation will be issued early this spring.
11. **Fire storage building (Recommendation #69)** – The study recommends constructing a storage facility for fire apparatus at a cost of \$510,000. The FMIT believes that some of the immediate need for Fire vehicle storage will be met at the new Potomac Yard fire station. Future Fire Department storage needs will be addressed by the addition of a station in the Eisenhower Valley.
12. **Five-year Replacement Policy (Recommendation #71)** – The study recommends developing five-year vehicle replacement plans for operating departments in order to determine if the equipment replacement fund balance for the future vehicle replacement could be reduced. The FMIT concurs. City staff has developed five year fleet replacement plans which are reviewed annually to determine if vehicles could be extended or downsized.
13. **Vehicle Replacement Criteria (Recommendation #72)** - The study found that much of the City's replacement criteria are comparable to practices in other local governments, but that the useful life of vehicles included in the criteria could be extended for some classes of vehicles, such as dump trucks, trailers, street sweepers, and refuse collection trucks. It recommends evaluating the replacement criteria for these classes of vehicles and fire apparatus and adjusting them for an annual savings of \$400,000. The FMIT agrees with the recommendation; however the Fire department does not feel it can extend the life of its apparatus (large vehicles). The department's fleet replacement policy is consistent with a national average replacement cycle of 12 years. The savings likely to be realized by extending the useful life of vehicles other than fire apparatus is \$93,765. Life cycles for other City vehicles have already been extended.
14. **Alternative Fuel Policy (Recommendation #73)** – The study noted that the City fleet contains a number of alternative fuel vehicles already, but recommends that General Services develop a policy for expanding the use of alternative fuel vehicles.

General Services has hired an Energy Manager who will analyze alternative fuel opportunities.

Of the additional ten recommendations not discussed above, some were determined by the FMIT to require further study before implementation. Several other recommendations either have a low priority or were found by FMIT to be unwarranted at this time.

In addition to the study recommendations, the FMIT and departments have previously identified the following improvements independent of the consultant report.

15. Adoption of a uniform color and markings policy for vehicles
16. Establishment of a career ladder to allow qualified mechanics to be promoted upon completion of required certifications
17. Development of fleet service performance measures through the Managing For Results Initiative
18. More active rotation of Sheriff and Police vehicles in order to distribute mileage more evenly
19. Changes to the General Services auto parts, auto body repair, and car wash contracts in the FY 2009 Proposed Budget for a savings of \$96,000.

The City Manager's Advisory Committee reviewed the consultant report in January. The Committee discussed with staff the challenges the City faces including the potential consolidation of multiple shops maintaining different classes of equipment, which is a long-term issue. The Committee also discussed what items in the study could be implemented more readily. Staff indicated that vehicle downsizing (in quantity and physical size) and vehicle useful life extension could be implemented. The Committee asked that the recommendations be prioritized by staff since most recommendations are listed as "high priority." We are focusing now on what can be implemented now, and what can be deferred temporarily. We will discuss this further with Council work session on the study.

FISCAL IMPACT: The study recommendations after review by staff are expected to generate a net City savings of approximately \$210,000. Annual operating savings are expected to be approximately \$360,000. These savings may take time to implement and may not be available in FY 2009. Annual operating cost increases associated with the recommendations total approximately \$138,000. One-time costs total \$12,000. Additional revenues raised through increased charges to DASH, sanitary sewer maintenance, and residential refuse collection total \$72,500. The fiscal impacts of the study recommendations (#1-14 above) have not been included in the FY 2009 Proposed budget. The savings previously achieved by the FMIT and departments (#15-19) have already been included in the budget.

A table summarizing the cost impacts is provided as Attachment 1. A summary of all recommendations with comments from the FMIT is provided as Attachment 2. The consultant report itself is provided as Attachment 3.

ATTACHMENTS:

Attachment 1: Fiscal Impact Table

Attachment 2: Recommendations Summary with FMIT Comments

Attachment 3: Study Report

STAFF:

Amy Flenniken, FMIT Co-Chair, Police

Ed Mandley, FMIT Co-Chair, General Services

John Buckler, FMIT member, RPCA

Tony Davis, FMIT member, Sheriff's Office

Warren Leach, FMIT member, General Services

Doug McCobb, FMIT member, T&ES

John North, FMIT member, Fire

Morgan Routt, FMIT member, OMB

Fleet Efficiency/Best Practices Study Implementation Recommendations

Annual Operating Savings		Consultant Report	Staff Recommendation
17	Eliminate the Fire Fleet Services Supervisor through attrition	100,500	TBD
31	Eliminate two Assistant Mechanic positions in RPCA through attrition	119,500	TBD
65	Downsize SUVs	116,800	107,250
66	Eliminate vehicles from the fleet	159,500	159,500
69	Construct a Fire storage building	5,000	0
72	Revise vehicle replacement criteria	400,000	93,765
Total Annual Operating Savings		901,300	360,515

Annual Operating Costs		Consultant Report	Staff Recommendation
6	Reclassify the Fleet Service Division Chief to a Fleet Manager	TBD	TBD
7	Authorize a Management Analyst II for Fleet Services	76,000	76,000
12	Reclassify one Fleet Services Technician II as a Lead Automotive Mechanic	12,400	12,400
13	Reclassify one Fleet Services Technician II as a Lead Automotive Mechanic	12,400	12,400
16	Reclassify one Auto Service Advisor as a Lead Automotive Mechanic	12,400	12,400
18	Reassign RPCA maintenance to General Services	12,400	TBD
19	Provide CCG/FASTER access to operating departments	2,400	2,400
24	Implement a swing shift	24,800	TBD
35	Purchase CCG/FASTER licenses for Fire and RPCA	1,200	TBD
50	Increase General Services' annual training budget	22,622	22,622
Total Annual Operating Costs		176,622	138,222

One-Time Costs		Consultant Report	Staff Recommendation
19	Provide CCG/FASTER access to operating departments	12,000	12,000
35	Purchase CCG/FASTER licenses for Fire and RPCA	6,000	TBD
69	Construct a Fire storage building	505,000	0
Total One-Time Costs		523,000	12,000

Annual Revenue Increase		Consultant Report	Staff Recommendation
3	Adjust chargeback fees for DASH and Sanitation Authority	72,500	72,500
Total Annual Revenue Increase		72,500	72,500

Savings Previously Achieved by the FMIT and Departments (already included in the FY 2009 Proposed budget and/or previous years' budgets)		Amount
	Extended Police vehicle life cycles	167,000
	Extended Sheriff vehicle life cycles	24,500
	Downsized Police sedans	25,000
	Downsized Sheriff sedans	65,773
	General Services auto parts, auto repair, and car wash contract savings	96,000
	Equipment replacement fund savings of extending Police vehicle life cycles	260,000
	Equipment replacement fund savings of downsizing Police sedans	64,500
	Equipment replacement fund savings of eliminating Police radio van	50,000
	Equipment replacement fund savings of eliminating Police vice vehicle	130,000
Total Previously Achieved Savings		882,773

FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS

Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
Chapter 2 – Fleet Financial Management							
1. The Fleet Services Division should provide point of sale receipts for each transaction. The point of sale receipts should be summarized in monthly reports provided to each department.	Fleet Services Division Chief	High	TBD				Concurs as long as data is accurate, but more discussion in relation to the level of detail required for the receipts and method of generation needs to be held to determine true potential costs
2. The Fleet Services Division Chief should meet monthly with each department to review the monthly reports and discuss the basis and nature of the costs.	Fleet Services Division Chief	High					Recommends quarterly meetings with major departments and by demand for other departments
3. The City should immediately adjust the chargeback fees of the Fleet Services Division for the enterprise funds for labor, parts, commercial repairs, fueling, and fleet management and for DASH Transit and the Sanitation Authority for fuel only.	General Services Director	High			\$72,500		Concurs (reference to Sanitation Authority was intended to mean the fee-supported Residential Refuse Collection)
4. The City should develop and implement an internal service fund for the delivery of services provided by the Fleet Services Division / General Services Department when the Division begins charging general fund departments for the services that it provides.	General Services Director	Medium					Supports in principle if provided adequate time and resources to establish data and accounting systems
5. The City should initiate the use of lease financing solely for acquisition of heavy equipment such as fire apparatus when it faces significant capital outlay surges for replacement of this equipment in a particular fiscal year.	Management and Budget Director	Low					Recommends for heavy equipment but not regular vehicles; lease-to-own options should be considered; decisions should be considered on a case-by-case basis
Chapter 3 – Plan of Organization							
6. The classification description for the Fleet Services Division Chief should be revised to expand the responsibilities to that of a fleet manager. The class title should be revised to Fleet Manager. The roles and responsibilities of the Fleet Services Division Chief should be expanded to include working with operating departments to manage equipment utilization, control vehicle assignments, provide a City-wide driver training program, direct an equipment replacement program, submit City-wide replacement recommendations for management approval, control the size of equipment within the fleet, etc. The expanded role of the Fleet Services Division Chief should include regular and routine consultation with operating departments whose equipment is maintained / repaired by the Division.	General Services Director	High	TBD				Concurs, but only after customer service recommendations and data improvements have been implemented as stated in recommendation #8 The annual cost increase of \$116,800 is to be reduced by the consultant to reflect the incremental cost of reclassifying the Fleet Services Division Chief to a Fleet Manager.
7. Authorize a Management Analyst II for the Fleet Services Division / General Services Department to assist the Fleet Services Division Chief in implementing the opportunities for improvement identified in this analysis of fleet services.	City Manager	High	\$76,000				Concurs, however there is currently no Management Analyst II classification. The annual cost of hiring one Management Analyst I at the midpoint would be \$76,000.

FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS

Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
8. The roles and responsibilities of the Fleet Services Division Chief should be not be expanded until the customer service recommendations presented in chapter 4 have been resolved.	General Services Director	High					Concurs
9. The Fleet Services Division / General Services Department should be charged with providing and maintaining equipment in the City's fleet analogous to a full-service leasing company.	General Services Director	High					Concurs
10. The role of the Supervisor Equipment Maintenance within the Fleet Services Division / General Services Department should be modified to enhance the effective use of this position.	Fleet Services Division Chief	High					Concurs
11. Establish a new classification of Lead Automotive Mechanic	General Services Director	High					Concurs
12. The Fleet Services Technician II functioning as the parts room supervisor should be reclassified as Lead Automotive Mechanic and assigned to lead and participate in the maintenance and repair of fleet equipment.	General Services Director	High	\$12,400				Concurs, although the incumbent may not qualify for a lead mechanic
13. The Fleet Services Technician II that provides backup to the Automotive Mechanics should be reclassified as Lead Automotive Mechanic and assigned to lead and participate in the maintenance and repair of fleet equipment.	General Services Director	High	\$12,400				Concurs, although the incumbent may not qualify for a lead mechanic
14. The Auto Service Advisor responsible for responsible for planning and scheduling preventive maintenance and repair services for the Shop should report to the Supervisor Equipment Maintenance responsible for supervision of the Automotive Mechanics and Automotive Service Worker.	General Services Director	High					General Services agrees to review its organizational structure
15. The Supervisor Equipment Maintenance responsible for the supervision of the day-to-day operations of the Service Unit should be assigned responsibility for supervision of the Parts Room.	General Services Director	High					General Services agrees to review its organizational structure, and it could affect the balance between the maintenance operation's goal of putting vehicles back in service quickly and the parts room's goal of streamlining inventory
16. Reclassify the second Auto Service Advisor as a Lead Automotive Mechanic and assign the incumbent to lead and participate in the maintenance and repair of fleet equipment.	General Services Director	High	\$12,400				Concurs, although the incumbent may not qualify for a lead mechanic

FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS

Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
17. The responsibility for the maintenance and repair of Fire Department sport utility vehicles, sedans, vans, and pickup trucks should be reallocated to the Fleet Svcs Div/ General Services Dept in the short-term. An Automotive Mechanic position in the Fleet Svcs Section / Fire Dept should be transferred from the Fire Dept to the Fleet Svc Division / General Services Dept upon the reallocation of this responsibility. The Fleet Svcs Supervisor position in the Fire Dept should be eliminated through attrition. One of the two remaining Automotive Mechanics within the Fire Department should be reclassified to Lead Automotive Mechanic upon the elimination of the Fleet Supervisor position to lead and participate in the maintenance and repair of fire apparatus. When the Fleet Services Supervisor position in the Fire Department is vacated through attrition, responsibility for the maintenance and repair of fire apparatus should be reallocated to the Fleet Services Division / General Services Department along with the remaining Automotive Mechanic / Lead Automotive Mechanic positions.	City Manager	High				\$100,500	Generally supports consolidation, but details regarding staffing and service levels need to be worked out: Fire does not recommend transferring any vehicle or equipment maintenance to General Services.
18. The responsibility for the maintenance and repair of the mowers, snow blowers, weed-eaters, and other two-cycle motors in the Recreation, Parks and Cultural Activities Department should be consolidated with the Fleet Services Division / General Services Department. The location at which the maintenance and repair of light equipment assigned to the Recreation, Parks and Cultural Activities Department occurs should be reassigned to the Fleet Services Division / General Services Department. The Auto Mechanic position assigned to the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should be reallocated to the Fleet Services Division / General Services Department. The pickup truck assigned to the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department - #7537 - should be reassigned to the Fleet Services Division / General Services Department. The parts budget for this light equipment should be transferred from the Recreation, Parks and Cultural Activities Department to the Fleet Services Division / General Services Department.	City Manager	High	\$12,400				Generally supports consolidation, but details regarding staffing and service levels need to be worked out: RPCA supports the current approach of small engine maintenance being handled internal to the department If consolidation goes forth, RPCA strongly recommends establishing service level agreements with General Services to ensure equipment availability during peak season The annual cost decrease of \$100,500 included in previous versions of the report has been deleted as it was duplicative of recommendation #31
Chapter 4 – Customer Service							
19. Provide each liaison to the Fleet Services Division / General Services Department in major operating departments with access to CCG / FASTER.	Fleet Services Division Chief	Medium	\$2,400	\$12,000			Concurs as long as training is provided

FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS							
Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
20. CCG / FASTER should be utilized to e-mail operating departments the preventive maintenance schedule, when their vehicles are ready to be picked up after preventive maintenance or a repair has been completed.	Fleet Services Division Chief	High					Concurs as long as training is provided
21. The Fleet Services Division / General Services Department should develop and adopt service level agreements with its major operating departments that it serves.	Fleet Services Division Chief	High					Strongly concurs; level of service agreements will be essential if consolidation occurs
22. The Fleet Services Division / General Services Department, the Fleet Services Section / Fire Department, and the Fleet Services Section / Recreation, Parks And Cultural Activities Department should develop performance measures and report on a quarterly basis their accomplishment to their customers.	City Manager	High					Concurs; the department(s) responsible for maintenance depending on consolidation decisions will measure and report their performance
23. The Fleet Services Division / General Services Department, the Fleet Services Section / Fire Department, and the Fleet Services Section / Recreation, Parks and Cultural Activities Department should provide information to their customers on a routine, ongoing basis regarding the costs for equipment maintenance, repair, and replacement as well as utilization.	City Manager	High					Concurs; the department(s) responsible for maintenance depending on consolidation decisions will provide the suggested information to their customers
Chapter 5 -- Fleet Maintenance							
24. The Fleet Services Division / General Services Department should implement a swing shift. Four (4) Automotive Mechanics should be assigned to the swing shift. One of these Automotive Mechanics should be classified as a Lead Auto Mechanic.	Fleet Services Division Chief	High	\$24,800				Concurs, but General Services would require two additional mechanics at a cost of \$152,000
25. A new classification of Lead Automotive Mechanic should be established to lead and participate in the work of Auto Mechanics	General Services Director	High					Disagree - the classification already exists
26. One of the staff assigned to parts in the Fleet Services Division / General Services Department should be allocated to the swing shift.	Fleet Services Division Chief	High					Concurs
27. The Fleet Services Division / General Services Department should improve the level of service that it provides by increasing the number of work orders completed within one day and within three days to meet benchmarks and enhance customer satisfaction.	Fleet Services Division Chief	High					Concurs; but would need to monitor work orders to adjust benchmarks if necessary
28. The Fleet Services Division / General Services Department should outsource repairs when unable to meet the work order guidelines presented above (80% of work orders completed within one work day and 90% within three work days).	Fleet Services Division Chief	Medium					Concurs; but specific criteria for outsourcing is needed, particularly if costs are to be transferred to operating departments

FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS

Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
29. Increase the number of technicians assigned to the shop floor for the Fleet Services Division / General Services Department by three (3) positions. The proposed adjustments to staffing in the Division presented in proposed plan of organization for the Division should address this need.	Fleet Services Division Chief	High					Concurs
30. Do not adjust the Mechanic staffing assigned to the Fleet Maintenance Section / Fire Department.	Fire Chief	Medium					Recommendation is unclear; appears to contradict #17
31. Two Assistant Mechanic positions authorized for the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should be eliminated through attrition.	Recreation, Parks, and Cultural Activities Director	High				\$119,500	Disagree - the positions will be needed in either General Services or RPCA depending on how consolidation goes forth
32. The Fleet Services Division / General Services Department should provide parts procurement, pickup, delivery and invoice processing support the Fleet Services Section / Fire Department.	Fleet Services Division Chief	High					Concurs
33. The Fleet Services Division / General Services Department should set an objective of an average of 125 working hours charged to work orders per month per technician (this excludes leave).	Fleet Services Division Chief	High					General Services to review the 125 hour target
34. The Supervisor Equipment Maintenance should review the monthly direct-billed hours report to ensure accountability for all employees, and report actual adherence to this objective to the Division Chief on a monthly basis.	Fleet Services Division Chief	High					Concurs
35. The Fire Department and the Recreation, Parks and Cultural Activities Department should purchase licenses for CCG / FASTER. Two licenses should be acquired for the Fire Department and one license for the Recreation, Parks and Cultural Activities Department.	Fire Chief, Recreation, Parks, and Cultural Activities Director	Medium	\$1,200	\$6,000			Concurs; whichever department(s) are responsible for maintenance depending on consolidation decisions will utilize CCG/FASTER
36. The Fleet Services Division / General Services Department should work with the departments to develop a weekly preventive maintenance schedule that schedules preventive maintenance evenly across the month and assigns each vehicle to a particular week of the month.	Fleet Services Division Chief	Medium					Concurs as a long-term goal; depends on accurate, automated data
37. Specify the weekly schedule for each piece of equipment within CCG / FASTER within the table codes.	Fleet Services Division Chief	Medium					Concurs as a long-term goal; depends on accurate, automated data
38. Use the E-mail capacity of CCG / FASTER to notify customers that their equipment is due for preventive maintenance.	Fleet Services Division Chief	High					Concurs
39. Use CCG / FASTER to develop time guidelines for completing repair and maintenance of equipment.	Fleet Services Division Chief	Medium					Concurs

FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS

Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
40. Fleet Services Division / General Services Department, Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should develop formal written priorities for repair and maintenance of equipment and adopt these priorities in a formal policy.	Fleet Services Division Chief / General Services Department, Fleet Maintenance Supervisor, Fire Department, Recreation, \ Parks, and Cultural Activities Department Director	Medium					Concurs; whichever department(s) are responsible for maintenance depending on consolidation decisions will adopt formal policies
41. The Fleet Services Division / General Services Department, Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should develop and install a more formal work planning and scheduling system using CCG / FASTER.	Fleet Services Division Chief / General Services Department, Fleet Maintenance Supervisor, Fire Department, Recreation, \ Parks, and Cultural Activities Department Director	High					Concurs; whichever department(s) are responsible for maintenance depending on consolidation decisions will develop a more formal work planning and scheduling system using CCG/FASTER
42. The Supervisor Equipment Maintenance in the Fleet Services Division / General Services Department should be held accountable for implementation and supervision of the preventive maintenance scheduling system.	Fleet Services Division Chief / General Services Department	High					General Services currently utilizes preventive maintenance scheduling
43. The Parts Room in the Fleet Services Division / General Services Department should be provided with a copy of the CCG / FASTER preventive maintenance due report (FSR0103) on a weekly basis.	Fleet Services Division Chief / General Services Department	High					Concurs

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FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS							
Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
44. The Fleet Services Division Chief should direct that the Fleet Services Technician II formally document the results of each quality test.	Fleet Services Division Chief / General Services Department	High					Concurs
45. The results of the quality control tests should be integrated into the performance evaluations of Auto Mechanics.	Fleet Services Division Chief / General Services Department	High					Concurs
46. The Supervisor Equipment Maintenance responsible for the supervision of maintenance and repair should also randomly test drive completed repairs, although not 30%, to ascertain the quality of work.	Fleet Services Division Chief / General Services Department	Medium					Concurs
47. The Fleet Services Section / Fire Department should evaluate the quality assurance policy developed by the Fleet Services Division / General Services Department, modify it as necessary in consultation with their customers in the Department, and implement this policy.	Fleet Maintenance Supervisor, Fire Department	Medium					Strongly concurs; level of service agreements will be essential if consolidation occurs
48. The Fleet Services Division / General Services Department and the Fleet Services Section / Fire Department should establish a warranty recovery program using FASTER to identify repairs eligible for warranty recovery, and perform those warranty repairs in-house	Fleet Services Division Chief / General Services Department, Fleet Maintenance Supervisor, Fire Department	Medium					Disagree - General Services rarely performs warranty work in-house; the majority of vehicles under warranty are returned to the dealer for repair; bringing warranty work in-house would require certification and increased workload; Fire already performs some warranty work Recommendation may be done on a limited basis as practical
49. The Fleet Services Division / General Services Department should develop a training plan for each of its technicians.	Fleet Services Division Chief / General Services Department	High					Concurs
50. The Fleet Services Division / General Services Department should increase its annual training budget to \$25,000 per year or a net increase of \$22,622 annually.	Fleet Services Division Chief / General Services Department	High	\$22,622				Concurs

FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS

Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
51. The Fleet Services Section / Fire Department and the Fleet Services Division / General Services Department should initiate measures to increase the number of technicians with EVT and ASE certification.	Fleet Maintenance Supervisor, Fire Department, Fleet Services	High					Concurs; General Services has tried in the past to provide compensation adjustments as incentive for additional certifications but was denied; will consider adding certifications as qualifications for new hires; may result in a cost impact
52. The proposed classification of Lead Mechanic should require ASE certification (or obtaining the certification within two years of appointment). The Lead mechanic for the Fire Department should require EVT certification (or obtaining the certification within two years of appointment). The supervisory positions within the Fleet Services Division should require ASE certification (or obtaining the certification within two years of appointment).	Fleet Maintenance Supervisor, Fire Department, Fleet Services Division Chief / General Services Department	High					Concurs; General Services has tried in the past to provide compensation adjustments as incentive for additional certifications but was denied; will consider adding certifications as qualifications for new hires; may result in a cost impact
53. The City should consider providing financial incentives for EVT and ASE certification.	General Services Director	High					Concurs; General Services has tried in the past to provide compensation adjustments as incentive for additional certifications but was denied; will consider adding certifications as qualifications for new hires; may result in a cost impact
54. The extent of sub-let repairs performed by the Fleet Services Division / General Services Department meets benchmarks, and should not be changed.	Fleet Services Division Chief / General Services Department	Low					Concurs
55. An Auto Mechanic authorized in the Fleet Services Division / General Services Department should be assigned five days a week for not less than one shift each day to the new police building. This Auto Mechanic position should be dedicated to completing minor repairs of police vehicles.	General Services Director	High					Concurs
Chapter 6 – Fleet Safety							
56. Risk Management / City Attorney's Office should develop a City-wide fleet safety policy as part of the Citywide Personnel Safety Manual.	Risk Manager	Medium					Concurs, but public safety would like to have a role in developing the policy. Police has some internal policies that might assist in developing the citywide policy. <i>Risk Management is reviewing this recommendation.</i>
57. Risk Management / City Attorney's Office should analyze and report annually the accident rate per million miles driven for each department.	Risk Manager	Medium					Concurs, but verify that the rate per million miles is an appropriate benchmark (as opposed to 100,000 miles). <i>Risk Management is reviewing this recommendation.</i>

FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS							
Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
58. Risk Management / City Attorney's Office should check motor vehicle records on an annual basis for all City employees that are driving City vehicles or driving their own vehicles on city business.	Risk Manager	High					Concurs with verifying current licenses annually, but guidelines are required regarding what information would be reviewed and what it would be used for. <i>Risk Management is reviewing this recommendation.</i>
59. Risk Management / City Attorney's Office should audit all accident reviews in coordination with all departmental safety committees.	Risk Manager	High					<i>Risk Management is reviewing this recommendation.</i>
Chapter 7 – Fleet Utilization							
60. The City of Alexandria should adopt a fleet size management policy.	City Manager	High					Concurs
61. The Fleet Services Division Chief should develop a fleet size policy and procedure for the consideration of the Fleet Management Improvement Team, the City Manager's Office, and the Mayor and City Council.	Fleet Services Division Chief / General Services Department	High					Concurs
62. Fleet reduction in Alexandria should be a collective effort of fleet users, the Office of Management and Budget, fleet managers and the Fleet Management Improvement Team.	City Manager	High					Concurs
63. The parameters within the automated fuel dispensing software should be "tightened" to reduce the extent of incorrect entry of odometer readings.	Fleet Services Division Chief / General Services Department	High					Concurs; would require software improvements and have a fiscal impact
64. The Fleet Services Divisions should report those employees that enter incorrect odometer readings to the employees' department head and immediate supervisor.	Fleet Services Division Chief / General Services Department	High					Concurs if integrity of fuel system is improved
65. The City should review and consider the recommendations made by the Matrix Consulting Group to downsize sport utility vehicles. The Matrix Consulting Group recommends that all sport utility vehicles, except for eight assigned to the Police Department and four assigned to the Fire Department be downsized to midsize sedans and extended cab compact pickup trucks.	City Manager	High				\$116,800	Concurs in principle, but details need to be worked out; Police is developing updated plans for deployment and replacement of its grant-funded rapid-response SUVs; Sheriff opposes downsizing its two SUVs; departments should have input; T&ES would need properly equipped pick-up trucks in Maintenance for snow plowing and medium sized, stretch-cab 4x4 pickups for Construction & Inspections; Fire disagrees with recommendation to retain only 4 SUVs. Fire has coordinated with Code Enforcement to downsize their SUV fleet with small pickups during replacement cycles. There will be a total of 26 SUVs remaining in the fleet for suppression, EMS, fire marshals, and deputy personnel.

FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS

Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
66. The City should review and consider the recommendations developed by the Matrix Consulting Group for elimination of vehicles within the City's fleet. The Matrix Consulting Group recommends that the City proceed on a department-by-department basis beginning with non-public safety departments, that Fleet Services Division / General Services Department analyze the recommendations developed by the Matrix Consulting Group discuss these recommendations with the affected departments, and develop recommendations for elimination of the equipment for the consideration of the Office of Management and Budget and the City Manager's Office. The Matrix Consulting Group recommends that the City should initially set an objective of eliminating sixty-six (66) vehicles from its fleet (initially excluding the Police and the Fire Departments). This reduction would require an increase in the "pool" fleet at City Hall, operated by the Fleet Services Division / General Services Department, and an increase in mileage reimbursement for the use of personal vehicles on City business.	City Manager	High				\$159,500	Concurs, but departments should have input and Sheriff should be exempt; T&ES reports all regular vehicles meet the minimum mileage requirement. Some large trucks do not, however, their elimination would require greater use of contract vehicles for snow removal and responding to other storm events
67. The City should revise Administrative Regulation 7-3 should be revised as it pertains to take-home vehicles.	Fleet Services Division Chief / General Services Department	Medium					FMIT has revised; pending department head review & approval
68. The number of take-home vehicle assignments should be evaluated by the Office of Management and Budget, and reduced based upon that assessment and in the context of the revised Administrative Regulation 7-3.	Management and Budget Director	Medium					Concurs in principle; Police supports current policy of requesting take-homes from City Manager instead of the consultant's recommendation for OMB to evaluate take-home assignments
Chapter 8 – Vehicle Storage Requirements							
69: The City should construct a Butler-type building at the City's corporation yard to store reserve fire apparatus.	General Services Director	High		\$505,000		\$5,000	Disagree - Fire storage needs should be re-evaluated to look for a less expensive short-term solution
Chapter 9 – Fleet Replacement							
70. The Fleet Services Division / General Services Department should develop analytically-based short-term criteria to determine when specific vehicles should be replaced and which vehicles are a higher priority to replace than others.	Fleet Services Division Chief / General Services Department	High					Replacement criteria already exist; recommend reviewing and improving if necessary

FLEET MANAGEMENT EFFICIENCY/BEST PRACTICES STUDY RECOMMENDATIONS							
Consultant Recommendation	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	FMIT Recommendation
71. The Fleet Services Division / General Services Department should prepare a five year replacement plan for the review of the operating departments and the Management and Budget Department. Based upon the five-year replacement plan, the City should determine whether the equipment replacement fund balance could be reduced.	Fleet Services Division Chief / General Services Department	High					Concurs, but departments should have input for special circumstances; T&ES recommends installation of hour meters in large equipment as engine hours are a more accurate indicator of useful life than age or mileage for large trucks, backhoes, loaders, etc.
72. The Fleet Services Division Chief, General Services Department should evaluate the City's replacement criteria, including those for fire apparatus, and develop proposals for consideration of the operating departments, the Management and Budget Department, and the City Manager's Office.	Fleet Services Division Chief / General Services Department	Medium				\$400,000	Concurs as long as operating departments are included in developing the plan; see recommendation #71 regarding engine hours vs. age/mileage
Chapter 10 – Environmental Stewardship							
73. The Fleet Services Division / General Services Department should develop an alternative fuel policy for consideration of the City Council.	Fleet Services Division Chief	High					Concurs as long as the plan as developed in conjunction with major users
74. The Fleet Services Division / General Services Department should become a member of Virginia Department of Environmental Quality – Virginia Environmental Excellence Program.	Fleet Services Division Chief	High					Concurs
TOTAL CONSULTANT RECOMMENDATIONS			\$176,622	\$523,000	\$72,500	\$901,300	
FLEET IMPROVEMENT RECOMMENDATIONS DEVELOPED BY CITY STAFF							
Additional Staff-developed Improvements	Management Responsibility	Priority	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease	Comments
Auto Parts Contract	General Services	NA				\$60,000	Proposed in the FY 2009 budget
Auto Body Contract	General Services	NA				\$24,000	Proposed in the FY 2009 budget
Car Wash Contract	General Services	NA				\$12,000	Proposed in the FY 2009 budget
TOTAL STAFF-DEVELOPED IMPROVEMENTS						\$96,000	
TOTAL ALL IMPROVEMENTS			\$176,622	\$523,000	\$72,500	\$997,300	

Analysis of Fleet Services
CITY OF ALEXANDRIA, VIRGINIA

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1. INTRODUCTION AND EXECUTIVE SUMMARY

1. INTRODUCTION AND EXECUTIVE SUMMARY

The City of Alexandria retained the Matrix Consulting Group to conduct an analysis of its fleet maintenance and management. The objectives in conducting this study were as follows:

- To analyze service levels, workload, output and staffing for fleet operations.
- To evaluate all fleet operations programs and services offered in terms of necessity, efficiency, staffing and funding as well as responsiveness to customer/resident needs.
- To examine allocated personnel, equipment and other resources to assess proper workload distribution in support of fleet operations.
- To examine equipment needs and evaluate the replacement/depreciation schedules for fleet operations.
- To examine service standards and performance measurements for fleet operations.
- To identify and compare other local governments as benchmarks for service delivery, policies and programs for fleet operations.
- To analyze optimal organizational structure for fleet operations to include span of control, lines of authority and fiscal accountability.
- To develop projections of possible immediate and long-term savings for fleet operations in capital and/or operating costs resulting from implementing performance audit and efficiency study recommendations or returns on investment (ROI).
- To develop recommendations, including timelines and identification of responsible parties, to be incorporated into the next budget cycle.

The study also included a number of specific issues that needed to be addressed. These issues are presented below.

- Fleet Size
 - Determine vehicles of low use and low necessity.
 - Determine opportunities for the sharing of low use equipment/vehicles

- between departments.
 - Determine the feasibility and cost benefit of rental of low use equipment on an as-needed basis.
 - Determine the necessity of a spare equipment philosophy.
- Mechanic to Vehicle Ratio
 - Determine the number of specific vehicle types within the City fleet.
 - Determine the desired mechanic to vehicle ratio by vehicle type.
 - Determine an overall mechanic to vehicle ratio based on the aggregate composition of the fleet.
- Take-Home Vehicles
 - Determine the number of take-home vehicles.
 - Provide recommendations on the need for take-home vehicles, criteria, and the procedure for the issuance and monitoring.
- Four Wheel Drive Vehicle Criteria
 - Determine the number of four-wheel drive vehicle assignments currently in the fleet.
 - Provide recommendations on four-wheel drive vehicle need, criteria, and the procedure for the issuance and monitoring.
- Out-Sourcing
 - Analyze and recommend functions or activities for outsourcing.
 - Recommend whether the emphasis for outsourcing should be placed on preventive maintenance and minor repairs, or on major repairs.
 - Develop and provide projections on immediate and long-term savings to be realized if recommendations are implemented.
 - Ascertain and present a time frame for any outsourcing process that might be recommended.
- Labor Rate Standards for Vehicles / Equipment
 - Determine the labor rate standards for specific vehicle types within the fleet.
 - Determine the standard labor rate for common preventive maintenance, minor repair and major repair for all vehicles/equipment.
- Fleet Operation Consolidation
 - Review and analyze overall fleet operations to include General Services, Fire, and Recreation, Parks, and Cultural Activities.

- Determine and recommend the efficient and effective operational structure for fleet operations.
- Present the pros and cons of consolidation recommendations. Subjects shall include, but are not necessarily limited to:
 - Fleet Services Allocation of functions and assignments
 - Handling of Specialized Fleets
 - Handling of Vehicle Inventories
 - Use and maintenance of physical facilities to include major renovation and Capital repair recommendations and corresponding cost estimates
 - Service Provided
 - Costs (Projected vs. Realized)
 - Savings (Projected vs. Realized)
 - Efficiencies
 - Staffing
 - Management Structure
 - Reporting and Responsibilities
 - Administration
 - Budget Development and Application

8. Storage Requirements

- Prepare a detailed summary of current storage requirements for Public Safety fleet related equipment and suggest cost-effective alternatives.

A brief description of the methodology used in reviewing the Fleet Services practices and performance is presented below.

- Management and supervisory staff of the Fleet Services were interviewed.
- Descriptive and quantitative information was collected and analyzed.
- A comparative survey was conducted of other fleets serving a population comparable to Alexandria.

The information assembled through these methods was used to evaluate the performance of the Fleet Services and the fleet management and operations in three ways.

- Quantitative measures were developed of those attributes of activity (e.g., vehicle utilization) and performance (e.g., the average turnaround time for completing

repairs and maintenance of vehicles) that lend themselves to such measurement and comparing the resulting performance statistics against benchmarks.

- Fleet management, maintenance and repair, and replacement processes were compared to best practices we have observed in public sector fleet operations.
- The appropriateness of certain aspects of fleet management performance were assessed through direct analysis of current fleet conditions and costs.

The project team utilized a fact-based approach to the development of its findings, conclusions, and recommendations.

1. POSITIVE FEATURES

By its very nature, a study like this tends to focus on improvement opportunities. Before addressing those opportunities, it is important to note that the study identified a number of significant positive features about the fleet service units in the General Services Department, the Fire Department, and the Recreation, Parks, and Cultural Activities Department. Examples of these observations are presented below.

- The City will reimburse employees for ASE certification as well as for community college;
- The City has established a replacement fund for the replacement of fleet assets within the City of Alexandria;
- The General Services Department Fleet Services Division charges enterprise funds including Solid Waste, Recycling and the Housing Authority for vehicle maintenance and fuel, and also charges overtime expenses directly to the user departments;
- City employees are required to take a City driving education course not less than once every three years;
- The Fleet Services Division / General Services Department e-mails all customers the prior month regarding the date that their scheduled preventive maintenance is due, and also sends notices of overdue preventive maintenance services to customers notifying them or their supervisors that the preventive maintenance is past due.;

- The Fleet Services Division / General Services Department provides such services as tire repairs, battery replacement, lights replacement, etc. to customers on a walk-in basis;
- The total maintenance and repair cost per vehicle equivalency unit for the Fleet Services Division / General Services Department is \$1,094 per vehicle equivalency unit, which falls within the range of the benchmark utilized by the project team for total maintenance and repair costs (labor, parts, sublet) - \$900 to \$1,200 per VEU;
- The sublet or commercial repair costs per vehicle equivalency unit for the Fleet Services Division / General Services Department is much lower than the benchmark, indicating that the Division minimizes the extent of work outsourced;
- The parts costs per vehicle equivalent for the Fleet Services Division / General Services Department is much lower than the benchmark, indicating that the Division is minimizing the use of parts to resolve problems with vehicles;
- General Services Department Fleet Services Division utilizes a state-of-the-art fleet maintenance information system known as CCG / FASTER;
- In a twelve month period, the Parts Section of the Fleet Services Division / General Services Department "filled" 94% of work orders immediately by supplying parts; and
- The Fire Fleet Maintenance Section workload amounts to 96 vehicle equivalency units per technician, which closely approximates the benchmark.

There are clearly a number of positive aspects to the staffing, operations, and management of the fleet service units in the General Services Department, the Fire Department, and the Recreation, Parks, and Cultural Activities Department.

2. SUMMARY OF AUDIT FINDINGS

The City faces a number of challenges to cost effective fleet management.

Overall, the City has a sufficient number of authorized staff to effectively maintain its fleet. The City has an effective replacement program to assure that equipment does not become cost intensive to maintain and repair overall.

The City faces a number of challenges to cost effective fleet management. A summary of these challenges is presented in the paragraphs that follow.

- The Fleet Services Division / General Services Department is not charging all of its customers for the services it provides. The Division only charges the enterprise funds. In addition, the chargeback rates utilized by the Division have not been updated for several years. The general fund, as a consequence, is subsidizing the enterprise funds for the provision of these services.
- The Fleet Services Division / General Services Department has a greater proportion of support staff than other comparable fleets in other cities and than warranted.
- The Division Chief for the Fleet Services Division / General Services Department is not functioning as a fleet manager with responsibility for managing the fleet assets in a manner analogous to a full-service leasing company (such as managing the size of vehicles and the number of vehicles in the City's fleet).
- The plan of organization for the Fleet Services Division / General Services Department hinders its ability to provide effective supervision on the shop floor using a team-based approach to organization. The Division has too many administrative and support staff and too few Automotive Technicians.
- The customer service tools utilized by the Fleet Services Division / General Services Department are limited, and do not include such tools as providing customers with access to CCG / FASTER, the use of service level agreements, and the use of a swing shift to provide expanded hours for customers.
- The costs of fleet maintenance and repair services provided by the fleet service units in the Fire Department and the Recreation, Parks, and Cultural Activities Department are not competitive, and do not meet benchmarks. The total maintenance and repair cost for the Fleet Services Section / Fire Department is \$1,907 per vehicle equivalency unit. The total maintenance and repair cost for the Fleet Services Section / Recreation, Parks and Cultural Activities Division is \$2,535 per vehicle equivalency unit (this does not include parts, and sub-let repairs since that data was not readily available). The total maintenance and repair costs (labor, parts, sublet) should range from \$900 to \$1,200 per VEU.
- The extent of training and funding for training in the Fleet Services Division / General Services Department should be increased by \$22,622 annually, and that Division and the Fire Department should work with their staff to increase the extent of certification (Automotive Service Excellence or ASE certification and Emergency Vehicle Technician or EVT certification).
- A significant proportion of the City's fleet is underutilized, and the Fleet Services

Division / General Services Department lacks the authority to work with operating departments to reduce the City's fleet in terms of the size of vehicles and the number of vehicles.

- There is some duplication and overlap in the management of the City's fleet between the General Services Department and the Fire Department.

The next section of this executive summary presents a summary of the recommendations developed by the Matrix Consulting Group to address these audit findings.

3. SIX-POINT AGENDA FOR CHANGE.

The assessment of the fleet services for the City of Alexandria identified over 70 recommendations for improvement that the Matrix Consulting Group believes should provide the basis for change in the coming years. These recommendations fall into five major improvement areas including:

- Customer service;
- Organization structure;
- Fleet maintenance management;
- Fleet utilization;
- Fleet financial management; and
- Environmental stewardship.

These major points in the improvement agenda are briefly summarized below.

(1) Customer Service

High performers in the delivery of customer service in local governments base the value they create on two criteria: the outcomes they deliver and the effectiveness of the service delivered. They look at value from the perspective of the customer. By focusing also on effectiveness, high-performance local governments strive not only to

do the right things, but also to do them in the right way. High-performers share some common characteristics as identified below.

- They generate maximum value for their customer.
- They are relentlessly customer-centered and outcome-focused.
- Their capabilities and operational activities all support the delivery of outcomes, and they measure their performance based on those outcomes.
- High-performers are committed to effectiveness. They hold themselves accountable and they make their operations and results transparent their customer.
- They are innovative and flexible, continually striving to improve value delivery, and are able to respond creatively to new challenges and opportunities.
- They work in open and collaborative ways with their customers.

In evaluating fleet services in Alexandria against these characteristics, a number of opportunities for improvement are apparent. These opportunities are summarized below.

- Provide the liaisons to the Fleet Services Division / General Services Department in the major operating departments with access to CCG / FASTER;
- CCG / FASTER should be utilized to e-mail operating departments the preventive maintenance schedule, when their vehicles are ready to be picked up after preventive maintenance or a repair has been completed;
- The Fleet Services Division / General Services Department should develop and adopt service level agreements with its major customers;
- The Fleet Services Division / General Services Department, Fleet Services Section / Fire Department, And The Fleet Services Section / Recreation, Parks And Cultural Activities Department should develop performance measures and report on a quarterly basis their accomplishment to their customers;
- The Fleet Services Division / General Services Department, the Fleet Services Section / Fire Department, and the Fleet Services Section / Recreation, Parks and Cultural Activities Department should provide information to their customers on a routine, ongoing basis regarding the costs for equipment maintenance, repair, and replacement as well as utilization;

- The Fleet Services Division / General Services Department should implement a swing shift with four (4) Auto Mechanics assigned to the swing shift, and one of these technicians classified as a Lead Auto Mechanic;
- The Fleet Services Division / General Services Department should increase the number of work orders completed within one day and within three days to meet benchmarks and enhance customer satisfaction;
- Upon completion of the new Police Department building and the associated garage, an Automotive Mechanic should be assigned to this facility five days a week for the entire shift for the completion of minor repairs and preventive maintenance of police vehicles.
- The Fleet Services Technician II in the Fleet Services Division / General Services Department should formally document the results of each quality test after repairs and maintenance of equipment have been completed, and the results of these quality control tests should be integrated into the performance evaluations of Auto Mechanics; and
- The Fleet Services Section / Fire Department should evaluate the quality assurance policy developed by the Fleet Services Division / General Services Department, modify it as necessary in consultation with their customers in the Department, and implement this policy.

The customer service practices utilized by fleet services in Alexandria can be enhanced.

(2) Organization Structure

Organizational structures tend to evolve over time, and are the result of incrementalism.

While not uncommon, incremental changes without an overall strategy can be detrimental to the organization's overall performance. Lack of planning and flexibility often negatively affect the organization's ability to effectively respond to changing economic and societal conditions. Periodically reviewing an organization's structure and planning for changes provides an opportunity to improve effectiveness.

Opportunities for enhancing the City's approach to organizing for fleet

management are summarized below.

- The classification description for the Fleet Services Division Chief should be revised to expand the responsibilities to that of a fleet manager, and the class title of the position should be revised to Fleet Manager.
- The roles and responsibilities of the Fleet Services Division Chief should be expanded to include managing equipment utilization (in consultation with operating departments), vehicle assignments (in consultation with operating departments), a City-wide driver training program (in consultation with operating departments), an equipment replacement program (in consultation with operating departments), City-wide replacement recommendations for management approval (in consultation with operating departments), the size of equipment within the fleet (in consultation with operating departments),, etc.
- To enable the Fleet Services Division Chief to effectively fulfill these responsibilities, a Management Analyst I position should be authorized for the Fleet Services Division / General Services Department.
- The Fleet Services Division / General Services Department should be charged with providing and maintaining equipment in the City's fleet analogous to a full-service leasing company.
- Establish a new classification of Lead Automotive Mechanic to serve as a lead worker for a team of employees in the Fleet Services Division / General Services Department, and reclassify four positions to this new classification including:
 - The Fleet Services Technician II functioning as the parts room supervisor;
 - The two Auto Service Advisor positions; and
 - The Fleet Services Technician II that provides backup to the Automotive Mechanics.

Each of these Lead Automotive Mechanics should be assigned to the “shop floor” to lead and participate in the maintenance and repair of vehicles.

- The Supervisor Equipment Maintenance responsible for the supervision of the day-to-day operations of the Service Unit should be assigned responsibility for supervision of the Parts Room.
- The responsibility for the maintenance and repair of Fire Department sport utility vehicles, sedans, vans, and pickup trucks should be immediately reassigned to the Fleet Services Division / General Services Department. An Automotive Mechanic position in the Fleet Services Section / Fire Department should be transferred from the Fire Department to the Fleet Services Division / General

Services Department upon the reallocation of this responsibility. The Fleet Services Supervisor position in the Fire Department should be eliminated through attrition. One of the two remaining Automotive Mechanics within the Fire Department should be reclassified as a Lead Automotive Mechanic upon the elimination of this position through attrition. Upon the elimination of the Fleet Services Supervisor position through attrition, the responsibility for maintenance and repair of fire apparatus should be reassigned to the Fleet Services Division / General Services Department. This reassignment is facilitated by the location of the Fleet Services Section / Fire Department in the same facility as the Fleet Services Division / General Services Department

- The responsibility for the maintenance and repair of the light equipment assigned to the Recreation, Parks and Cultural Activities Department should be immediately reassigned to the Fleet Services Division / General Services Department. An Automotive Mechanic position in the Recreation, Parks and Cultural Activities Department should be transferred from the Fire Department to the Fleet Services Division / General Services Department upon the reallocation of this responsibility. As noted later, the remaining two Assistant Mechanic positions in the Recreation, Parks and Cultural Activities Department should be eliminated. The location at which the maintenance and repair of the light equipment assigned to the Recreation, Parks and Cultural Activities Department should be reassigned to the facility used by the Fleet Services Division / General Services Department. However, the Auto Mechanic should continue to provide mobile repair services.

Fleet services in the City should be consolidated to strengthen the ability of the Fleet Services Division / General Services Department to manage these assets, and to enhance the cost-effectiveness of City service delivery.

(3) Fleet Maintenance Management

All vehicles and other motorized equipment require maintenance and repair during their life. Since a fleet management organization's primary mission is to maximize the availability of vehicles so that its customers can productively do their jobs, the focus of fleet maintenance management needs to be in developing practices that minimize unscheduled incidents of repair and that return vehicles requiring repair to service in as little time as possible.

Opportunities for enhancing the City's approach to fleet maintenance

management are summarized below.

- Increase the number of Auto Mechanics assigned to the shop floor for the Fleet Services Division / General Services Department by three (3) positions. The proposed adjustments to the plan of organization presented previously should address this need. Do not adjust the Mechanic staffing assigned to the Fleet Maintenance Section / Fire Department. The two Assistant Mechanic positions authorized for the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should be eliminated through attrition.
- The Fleet Services Division / General Services Department should provide parts procurement, pickup, delivery and invoice processing support the Fleet Services Section / Fire Department.
- The Fleet Services Division / General Services Department should set an objective of an average of 125 hours charged to work orders per month per technician. The Division does not meet this benchmark at present.
- The Fire Department and the Recreation, Parks and Cultural Activities Department should purchase licenses for CCG / FASTER. Two licenses should be acquired for the Fire Department and one license for the Recreation, Parks and Cultural Activities Department.
- The Fleet Services Division / General Services Department should work with the departments to develop a weekly preventive maintenance schedule that schedules preventive maintenance evenly across the month and assigns each vehicle to a particular week of the month. The weekly schedule for each piece of equipment should be specified within CCG / FASTER within the table codes. The e-mail capacity of CCG / FASTER should be utilized to notify customers that their equipment is due for preventive maintenance. The Supervisor Equipment Maintenance in the Fleet Services Division / General Services Department should be held accountable for implementation and supervision of the preventive maintenance scheduling system.
- The Fleet Services Division / General Services Department, the Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should utilize the capabilities of CCG / FASTER to plan and schedule the work of its technicians for the entire shift.
- The Fleet Services Division / General Services Department, the Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should use CCG / FASTER to develop time guidelines for completing repair and maintenance of equipment by the Automotive Technicians.

- The Fleet Services Division / General Services Department and the Fleet Services Section / Fire Department should establish a warranty recovery program using CCG / FASTER to identify repairs eligible for warranty recovery, and perform those warranty repairs in-house.
- The Fleet Services Division / General Services Department should develop a training plan for each of its technicians. The Division / should increase its annual training budget to \$25,000 per year or a net increase of \$22,622. The Division should be proactive in providing training to its technicians to obtain ASE certification. The Fleet Services Section / Fire Department should initiate measures to increase the number of technicians with EVT certification. The City should consider providing financial incentives for EVT and ASE certification.

Fleet maintenance and repair is one of the most costly aspects of owning and operating a fleet of vehicles. The cost effectiveness of a City's fleet is driven in large measure by the effectiveness of its maintenance management practices.

(4) Fleet Asset Management

The primary factors driving fleet related costs for any organization are the size and composition of the fleet. The more vehicles an organization owns, the higher the annual cost to that organization, because for each fleet asset there are costs associated with ownership and operation. The National Association of Fleet Administrators reports that the costs of depreciation in a typical local government fleet amounts to 53% of the total cost of ownership, with the second highest cost being fuel. Overall, the original cost of purchasing the vehicles in the City 's fleet approximates \$41.7 million.

In a nine-year period (1997 to 2005), the number of vehicles maintained by the Fleet Services Division / General Services Department increased by 28%.

Opportunities for enhancing the City's approach to managing fleet utilization are summarized below.

- The City of Alexandria should adopt a fleet size management policy.
- Fleet reduction in Alexandria should be a collective effort of fleet users, the Office

of Management and Budget, fleet managers and the Fleet Management Improvement Team.

- The parameters within the automated fuel dispensing software should be “tightened” to reduce the extent of incorrect entry of odometer readings.
- The Fleet Services Division / General Services Department and the Fleet Services Section / Fire Department should publish a quarterly report that identifies those vehicles that fall short of average utilization levels by class of vehicle.
- The City should review and consider the recommendations developed by the Matrix Consulting Group for downsizing of sport utility vehicles. The Matrix Consulting Group recommends that all of the sport utility vehicles assigned to operating departments, with the exception of the Police Department, be downsized to midsize sedans or extended cab pickup trucks (possibly with four-wheel drive in selected instances). This would represent a
- The City should review and consider the recommendations developed by the Matrix Consulting Group for elimination of vehicles within the City’s fleet. There are a total of 125 low utilization vehicles in the City’s fleet. Vehicles were defined as low utilization if the annual mileage was 25% or less for the same class of vehicles. These vehicles utilization ranged from a low of 399 miles annually to a high of 6,790 miles annually. The Matrix Consulting Group recommends that the City proceed on a department-by-department basis beginning with non-public safety departments, that Fleet Services Division / General Services Department analyze the recommendations developed by the Matrix Consulting Group discuss these recommendations with the affected departments, and develop recommendations for elimination of the equipment for the consideration of the Office of Management and Budget and the City Manager’s Office. The Matrix Consulting Group recommends that the City should initially set an objective of eliminating sixty-six (66) vehicles from its fleet (initially excluding the Police and the Fire Departments). This would represent a 7% reduction in the City’s total fleet. This reduction would require an increase in the “pool” fleet at City Hall, operated by the Fleet Services Division / General Services Department, and an increase in mileage reimbursement for the use of personal vehicles on City business.
- The Fleet Services Division / General Services Department should prepare a five-year replacement plan for the City’s fleet in consultation with operating departments and the Office of management and Budget. Based upon the five-year replacement plan, the City should determine whether the equipment replacement fund balance could be reduced.
- The City’s take home vehicle policy should be revised. The number of take-home vehicle assignments should be evaluated by the Office of Management and

Budget, and reduced based upon that assessment and in the context of the revised Administrative Regulation 7-3.

- The City should revise its replacement criteria for the City's fleet. For some classes of equipment, the criteria result in premature replacement of the City's assets.
- The City should construct a storage facility for reserve fire apparatus at the location of the maintenance and repair facility of the Fleet Services Section / Fire Department on Quaker Lane. These apparatus are stored or parked in the open at the present time.

This City has a significant investment of taxpayer dollars in its fleet. Every dollar invested in the City's fleet is a dollar that can't be used elsewhere to provide services to the public. It is important that the need for vehicles within the City's fleet meet usage guidelines and that no other alternatives exist to provide transportation for City employees in those situations where usage falls below those guidelines.

(5) Fleet Financial Management.

There are basically two ways that operating funds can be provided to a fleet management organization to support the management, maintenance, and fueling of a fleet: through direct appropriations to the organization or through the use of a charge-back system which recovers the organization's costs through charges to other organizations for the goods and services it provides them.

There are two reasons why the use of a cost charge-back system is preferable.

- One is that properly designed charge-back systems improve the consumption and provision of fleet resources by (1) illustrating linkages between the behavior of vehicle users and the costs of the vehicles and related services they consume; and (2) encouraging fleet users to hold fleet management organizations accountable for the quality and costs of the goods and services the latter provide.
- The second reason for implementing a charge-back system is to promote equitable treatment of fleet users. Since users pay only for the resources they consume, there is no cross-subsidization of fleet costs under a properly designed and implemented charge-back system.

The effectiveness of fleet funding and financial management practices directly impact the effectiveness of the acquisition, management, operation, and maintenance of the City's fleet.

Opportunities for enhancing the City's approach to fleet financial management are summarized below.

- The Fleet Services Division / General Services Department should eliminate its subsidy by the general fund of the enterprise funds for the services it provides by updating its shop labor rate, and adopt markups for parts, fuel, commercial repair of sub-let repair, fueling, and fleet management.
- The City should establish a cost charge-back system for all of the services the Fleet Services Division / General Services Department provides to its customers, not just enterprise fund departments.
- The City should utilize lease purchase financing, but solely for heavy equipment with long replacement cycles or with high costs per unit such as fire apparatus and street sweepers.

(6) Environmental Stewardship

The Fleet Services Division / General Services Department is a key element in the development and the implementation of an environmental sustainability policy by the City of Alexandria. The Division should initiate a number of practices to enhance its environmental stewardship. These practices are presented below.

- The Fleet Services Division / General Services Department should develop an alternative fuel policy for consideration of the City Council.
- The Fleet Services Division / General Services Department should become a member of Virginia Department of Environmental Quality – Virginia Environmental Excellence Program.

* * * * *

The table following this page presents the recommendations contained in the report by chapter.

Recommendation	Management Responsibility	Priority
Chapter 2 – Fleet Financial Management		
1. The Fleet Services Division should provide point of sale receipts for each transaction. The point of sale receipts should be summarized in monthly reports provided to each department.	Fleet Services Division Chief	High
2. The Fleet Services Division Chief should meet monthly with each department to review the monthly reports and discuss the basis and nature of the costs.	Fleet Services Division Chief	High
3. The City should immediately adjust the chargeback fees of the Fleet Services Division for the enterprise funds for labor, parts, commercial repairs, fueling, and fleet management and for DASH Transit and the Sanitation Authority for fuel only.	General Services Director	High
4. The City should develop and implement an internal service fund for the delivery of services provided by the Fleet Services Division / General Services Department when the Division begins charging general fund departments for the services that it provides.	General Services Director	Medium
5. The City should initiate the use of lease financing solely for acquisition of heavy equipment such as fire apparatus when it faces significant capital outlay surges for replacement of this equipment in a particular fiscal year.	Management and Budget Director	Low
Chapter 3 – Plan of Organization		
6. The classification description for the Fleet Services Division Chief should be revised to expand the responsibilities to that of a fleet manager. The class title should be revised to Fleet Manager. The roles and responsibilities of the Fleet Services Division Chief should be expanded to include working with operating departments to manage equipment utilization, control vehicle assignments, provide a City-wide driver training program, direct an equipment replacement program, submit City-wide replacement recommendations for management approval, control the size of equipment within the fleet, etc. The expanded role of the Fleet Services Division Chief should include regular and routine consultation with operating departments whose equipment is maintained / repaired by the Division.	General Services Director	High
7. Authorize a Management Analyst I position for the Fleet Services Division / General Services Department to assist the Fleet Services Division Chief in implementing the opportunities for improvement identified in this analysis of fleet services.	City Manager	High
8. The roles and responsibilities of the Fleet Services Division Chief should be not be expanded until the customer service recommendations presented in chapter 4 have been resolved.	General Services Director	High
9. The Fleet Services Division / General Services Department should be charged with providing and maintaining equipment in the City's fleet analogous to a full-service leasing company.	General Services Director	High
10. The role of the Supervisor Equipment Maintenance within the Fleet Services Division / General Services Department should be modified to enhance the effective use of this position.	Fleet Services Division Chief	High
11. Establish a new classification of Lead Automotive Mechanic	General Services Director	High

CITY OF ALEXANDRIA, VIRGINIA
Analysis of Fleet Services

Recommendation	Management Responsibility	Priority
12. The Fleet Services Technician II functioning as the parts room supervisor should be reclassified as Lead Automotive Mechanic and assigned to lead and participate in the maintenance and repair of fleet equipment.	General Services Director	High
13. The Fleet Services Technician II that provides backup to the Automotive Mechanics should be reclassified as Lead Automotive Mechanic and assigned to lead and participate in the maintenance and repair of fleet equipment.	General Services Director	High
14. The Auto Service Advisor responsible for responsible for planning and scheduling preventive maintenance and repair services for the Shop should report to the Supervisor Equipment Maintenance responsible for supervision of the Automotive Mechanics and Automotive Service Worker.	General Services Director	High
15. The Supervisor Equipment Maintenance responsible for the supervision of the day-to-day operations of the Service Unit should be assigned responsibility for supervision of the Parts Room.	General Services Director	High
16. Reclassify the second Auto Service Advisor as a Lead Automotive Mechanic and assign the incumbent to lead and participate in the maintenance and repair of fleet equipment.	General Services Director	High
17. The responsibility for the maintenance and repair of Fire Department sport utility vehicles, sedans, vans, and pickup trucks should be reallocated to the Fleet Services Division / General Services Department in the short-term. An Automotive Mechanic position in the Fleet Services Section / Fire Department should be transferred from the Fire Department to the Fleet Services Division / General Services Department upon the reallocation of this responsibility. The Fleet Services Supervisor position in the Fire Department should be eliminated through attrition. One of the two remaining Automotive Mechanics within the Fire Department should be reclassified to Lead Automotive Mechanic upon the elimination of the Fleet Supervisor position to lead and participate in the maintenance and repair of fire apparatus. When the Fleet Services Supervisor position in the Fire Department is vacated through attrition, responsibility for the maintenance and repair of fire apparatus should be reallocated to the Fleet Services Division / General Services Department along with the remaining Automotive Mechanic / Lead Automotive Mechanic positions.	City Manager	High

Recommendation	Management Responsibility	Priority
18. The responsibility for the maintenance and repair of the mowers, snow blowers, weed-eaters, and other two-cycle motors in the Recreation, Parks and Cultural Activities Department should be consolidated with the Fleet Services Division / General Services Department. The location at which the maintenance and repair of light equipment assigned to the Recreation, Parks and Cultural Activities Department occurs should be reassigned to the Fleet Services Division / General Services Department. The Auto Mechanic position assigned to the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should be reallocated to the Fleet Services Division / General Services Department. The pickup truck assigned to the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department - #7537 - should be reassigned to the Fleet Services Division / General Services Department. The parts budget for this light equipment should be transferred from the Recreation, Parks and Cultural Activities Department to the Fleet Services Division / General Services Department.	City Manager	High
Chapter 4 – Customer Service		
19. Provide each liaison to the Fleet Services Division / General Services Department in major operating departments with access to CCG / FASTER.	Fleet Services Division Chief	Medium
20. CCG / FASTER should be utilized to e-mail operating departments the preventive maintenance schedule, when their vehicles are ready to be picked up after preventive maintenance or a repair has been completed.	Fleet Services Division Chief	High
21. The Fleet Services Division / General Services Department should develop and adopt service level agreements with its major operating departments that it serves.	Fleet Services Division Chief	High
22. The Fleet Services Division / General Services Department, the Fleet Services Section / Fire Department, and the Fleet Services Section / Recreation, Parks And Cultural Activities Department should develop performance measures and report on a quarterly basis their accomplishment to their customers.	City Manager	High
23. The Fleet Services Division / General Services Department, the Fleet Services Section / Fire Department, and the Fleet Services Section / Recreation, Parks and Cultural Activities Department should provide information to their customers on a routine, ongoing basis regarding the costs for equipment maintenance, repair, and replacement as well as utilization.	City Manager	High
Chapter 5 – Fleet Maintenance		
24. The Fleet Services Division / General Services Department should implement a swing shift. Four (4) Automotive Mechanics should be assigned to the swing shift. One of these Automotive Mechanics should be classified as a Lead Auto Mechanic.	Fleet Services Division Chief	High
25. A new classification of Lead Automotive Mechanic should be established to lead and participate in the work of Auto Mechanics	General Services Director	High
26. One of the staff assigned to parts in the Fleet Services Division / General Services Department should be allocated to the swing shift.	Fleet Services Division Chief	High

CITY OF ALEXANDRIA, VIRGINIA
Analysis of Fleet Services

Recommendation	Management Responsibility	Priority
27. The Fleet Services Division / General Services Department should improve the level of service that it provides by increasing the number of work orders completed within one day and within three days to meet benchmarks and enhance customer satisfaction.	Fleet Services Division Chief	High
28. The Fleet Services Division / General Services Department should outsource repairs when unable to meet the work order guidelines presented above (80% of work orders completed within one work day and 90% within three work days).	Fleet Services Division Chief	Medium
29. Increase the number of technicians assigned to the shop floor for the Fleet Services Division / General Services Department by three (3) positions. The proposed adjustments to staffing in the Division presented in proposed plan of organization for the Division should address this need.	Fleet Services Division Chief	High
30. Do not adjust the Mechanic staffing assigned to the Fleet Maintenance Section / Fire Department.	Fire Chief	Medium
31. Two Assistant Mechanic positions authorized for the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should be eliminated through attrition.	Recreation, Parks, and Cultural Activities Director	High
32. The Fleet Services Division / General Services Department should provide parts procurement, pickup, delivery and invoice processing support the Fleet Services Section / Fire Department.	Fleet Services Division Chief	High
33. The Fleet Services Division / General Services Department should set an objective of an average of 125 working hours charged to work orders per month per technician (this excludes leave).	Fleet Services Division Chief	High
34. The Supervisor Equipment Maintenance should review the monthly direct-billed hours report to ensure accountability for all employees, and report actual adherence to this objective to the Division Chief on a monthly basis.	Fleet Services Division Chief	High
35. The Fire Department and the Recreation, Parks and Cultural Activities Department should purchase licenses for CCG / FASTER. Two licenses should be acquired for the Fire Department and one license for the Recreation, Parks and Cultural Activities Department.	Fire Chief, Recreation, Parks, and Cultural Activities Director	Medium
36. The Fleet Services Division / General Services Department should work with the departments to develop a weekly preventive maintenance schedule that schedules preventive maintenance evenly across the month and assigns each vehicle to a particular week of the month.	Fleet Services Division Chief	Medium
37. Specify the weekly schedule for each piece of equipment within CCG / FASTER within the table codes.	Fleet Services Division Chief	Medium
38. Use the E-mail capacity of CCG / FASTER to notify customers that their equipment is due for preventive maintenance.	Fleet Services Division Chief	High
39. Use CCG / FASTER to develop time guidelines for completing repair and maintenance of equipment.	Fleet Services Division Chief	Medium

CITY OF ALEXANDRIA, VIRGINIA
Analysis of Fleet Services

Recommendation	Management Responsibility	Priority
40. Fleet Services Division / General Services Department, Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should develop formal written priorities for repair and maintenance of equipment and adopt these priorities in a formal policy.	Fleet Services Division Chief / General Services Department, Fleet Maintenance Supervisor, Fire Department, Recreation, \ Parks, and Cultural Activities Department Director	Medium
41. The Fleet Services Division / General Services Department, Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should develop and install a more formal work planning and scheduling system using CCG / FASTER.	Fleet Services Division Chief / General Services Department, Fleet Maintenance Supervisor, Fire Department, Recreation, \ Parks, and Cultural Activities Department Director	High
42. The Supervisor Equipment Maintenance in the Fleet Services Division / General Services Department should be held accountable for implementation and supervision of the preventive maintenance scheduling system.	Fleet Services Division Chief / General Services Department	High
43. The Parts Room in the Fleet Services Division / General Services Department should be provided with a copy of the CCG / FASTER preventive maintenance due report (FSR0103) on a weekly basis.	Fleet Services Division Chief / General Services Department	High
44. The Fleet Services Division Chief should direct that the Fleet Services Technician II formally document the results of each quality test.	Fleet Services Division Chief / General Services Department	High
45. The results of the quality control tests should be integrated into the performance evaluations of Auto Mechanics.	Fleet Services Division Chief / General Services Department	High
46. The Supervisor Equipment Maintenance responsible for the supervision of maintenance and repair should also randomly test drive completed repairs, although not 30%, to ascertain the quality of work.	Fleet Services Division Chief / General Services Department	Medium
47. The Fleet Services Section / Fire Department should evaluate the quality assurance policy developed by the Fleet Services Division / General Services Department, modify it as necessary in consultation with their customers in the Department, and implement this policy.	Fleet Maintenance Supervisor, Fire Department	Medium
48. The Fleet Services Division / General Services Department and the Fleet Services Section / Fire Department should establish a warranty recovery program using FASTER to identify repairs eligible for warranty recovery, and perform those warranty repairs in-house	Fleet Services Division Chief / General Services Department, Fleet Maintenance Supervisor, Fire Department	Medium
49. The Fleet Services Division / General Services Department should develop a training plan for each of its technicians.	Fleet Services Division Chief / General Services Department	High

CITY OF ALEXANDRIA, VIRGINIA
Analysis of Fleet Services

Recommendation	Management Responsibility	Priority
50. The Fleet Services Division / General Services Department should increase its annual training budget to \$25,000 per year or a net increase of \$22,622 annually.	Fleet Services Division Chief / General Services Department	High
51. The Fleet Services Section / Fire Department and the Fleet Services Division / General Services Department should initiate measures to increase the number of technicians with EVT and ASE certification.	Fleet Maintenance Supervisor, Fire Department, Fleet Services Division Chief / General Services Department	High
52. The proposed classification of Lead Mechanic should require ASE certification (or obtaining the certification within two years of appointment). The Lead mechanic for the Fire Department should require EVT certification (or obtaining the certification within two years of appointment). The supervisory positions within the Fleet Services Division should require ASE certification (or obtaining the certification within two years of appointment).	Fleet Maintenance Supervisor, Fire Department, Fleet Services Division Chief / General Services Department	High
53. The City should consider providing financial incentives for EVT and ASE certification.	General Services Director	High
54. The extent of sub-let repairs performed by the Fleet Services Division / General Services Department meets benchmarks, and should not be changed.	Fleet Services Division Chief / General Services Department	Low
55. An Auto Mechanic authorized in the Fleet Services Division / General Services Department should be assigned five days a week for not less than one shift each day to the new police building. This Auto Mechanic position should be dedicated to completing minor repairs of police vehicles.	General Services Director	High
Chapter 6 – Fleet Safety		
56. Risk Management / City Attorney's Office should develop a City-wide fleet safety policy as part of the Citywide Personnel Safety Manual.	Risk Manager	Medium
57. Risk Management / City Attorney's Office should analyze and report annually the accident rate per million miles driven for each department.	Risk Manager	Medium
58. Risk Management / City Attorney's Office should check motor vehicle records on an annual basis for all City employees that are driving City vehicles or driving their own vehicles on city business.	Risk Manager	High
59. Risk Management / City Attorney's Office should audit all accident reviews in coordination with all departmental safety committees.	Risk Manager	High
Chapter 7 – Fleet Utilization		
60. The City of Alexandria should adopt a fleet size management policy.	City Manager	High
61. The Fleet Services Division Chief should develop a fleet size policy and procedure for the consideration of the Fleet Management Improvement Team, the City Manager's Office, and the Mayor and City Council.	Fleet Services Division Chief / General Services Department	High
62. Fleet reduction in Alexandria should be a collective effort of fleet users, the Office of Management and Budget, fleet managers and the Fleet Management Improvement Team.	City Manager	High

CITY OF ALEXANDRIA, VIRGINIA
Analysis of Fleet Services

Recommendation	Management Responsibility	Priority
63. The parameters within the automated fuel dispensing software should be "tightened" to reduce the extent of incorrect entry of odometer readings.	Fleet Services Division Chief / General Services Department	High
64. The Fleet Services Divisions should report those employees that enter incorrect odometer readings to the employees' department head and immediate supervisor.	Fleet Services Division Chief / General Services Department	High
65. The City should review and consider the recommendations made by the Matrix Consulting Group to downsize sport utility vehicles. The Matrix Consulting Group recommends that all sport utility vehicles, except for eight assigned to the Police Department and four assigned to the Fire Department be downsized to midsize sedans and extended cab compact pickup trucks.	City Manager	High
66. The City should review and consider the recommendations developed by the Matrix Consulting Group for elimination of vehicles within the City's fleet. The Matrix Consulting Group recommends that the City proceed on a department-by-department basis beginning with non-public safety departments, that Fleet Services Division / General Services Department analyze the recommendations developed by the Matrix Consulting Group discuss these recommendations with the affected departments, and develop recommendations for elimination of the equipment for the consideration of the Office of Management and Budget and the City Manager's Office. The Matrix Consulting Group recommends that the City should initially set an objective of eliminating sixty-six (66) vehicles from its fleet (initially excluding the Police and the Fire Departments). This reduction would require an increase in the "pool" fleet at City Hall, operated by the Fleet Services Division / General Services Department, and an increase in mileage reimbursement for the use of personal vehicles on City business.	City Manager	High
67. The City should revise Administrative Regulation 7-3 should be revised as it pertains to take-home vehicles.	Fleet Services Division Chief / General Services Department	Medium
68. The number of take-home vehicle assignments should be evaluated by the Office of Management and Budget, and reduced based upon that assessment and in the context of the revised Administrative Regulation 7-3.	Management and Budget Director	Medium
Chapter 8 – Vehicle Storage Requirements		
69: The City should construct a Butler-type building at the City's corporation yard to store reserve fire apparatus.	General Services Director	High
Chapter 9 – Fleet Replacement		
70. The Fleet Services Division / General Services Department should develop analytically-based short-term criteria to determine when specific vehicles should be replaced and which vehicles are a higher priority to replace than others.	Fleet Services Division Chief / General Services Department	High
71. The Fleet Services Division / General Services Department should prepare a five year replacement plan for the review of the operating departments and the Management and Budget Department. Based upon the five-year replacement plan, the City should determine whether the equipment replacement fund balance could be reduced.	Fleet Services Division Chief / General Services Department	High

CITY OF ALEXANDRIA, VIRGINIA
Analysis of Fleet Services

Recommendation	Management Responsibility	Priority
72. The Fleet Services Division Chief, General Services Department should evaluate the City's replacement criteria, including those for fire apparatus, and develop proposals for consideration of the operating departments, the Management and Budget Department, and the City Manager's Office.	Fleet Services Division Chief / General Services Department	Medium
Chapter 10 – Environmental Stewardship		
73. The Fleet Services Division / General Services Department should develop an alternative fuel policy for consideration of the City Council.	Fleet Services Division Chief	High
74. The Fleet Services Division / General Services Department should become a member of Virginia Department of Environmental Quality – Virginia Environmental Excellence Program.	Fleet Services Division Chief	High

The estimated costs, savings, and cost avoidance associated with these recommendations, where the project team could identify these impacts, are presented in the appendix.

2. FLEET FINANCIAL MANAGEMENT

2. FLEET FINANCIAL MANAGEMENT

This chapter presents an analysis of the fleet funding methodology utilized by the City for fleet services provided by the Fleet Services Division / General Services Department, and the methodology used for funding the replacement of heavy equipment.

1. THE FLEET SERVICES DIVISION ONLY CHARGES ENTERPRISE FUNDS FOR THE COSTS OF LABOR, PARTS, AND COMMERCIAL REPAIR, AND THESE RATES HAVE NOT BEEN UPDATED FOR SEVERAL YEARS.

The Fleet Services Division / General Services Department is responsible for providing fleet services to all City departments excluding the Fire Department and light equipment for the Recreation, Parks, and Cultural Activities Department. The services provided include:

- Vehicle maintenance and repair;
- Commercial repair contracting;
- Fuel distribution from various fueling stations; and
- The specification and disposal of vehicles.

The Division also upfits new police cars. The Division receives direct appropriations to cover its labor and administrative costs.

The current approach used by the Division to charge for its services is as follows:

- Labor charges are billed at \$56 per hour;
- Vehicle acquisition, disposal, and fleet administrative charges are not billed;
- Parts are charged back at actual cost with no markup;
- Commercial repair charges are charged back at actual cost with no markup;
- Fuel charges are charged back at actual cost with no markup.

However, the Fleet Services Division only charges enterprise fund departments such as Solid Waste, Recycling and the Housing Authority. (It also charges all departments for overtime expenses incurred on behalf of these departments). These charges have not been updated for several years. A clear consequence of the existing chargeback systems is that the general fund is subsidizing the provision of fleet operating and maintenance services to the enterprise funds. The actual costs for the provision of services by the Division to these enterprise funds exceeds the charges, as will be demonstrated in the following section.

The Division does not operate as an internal service fund (ISF).

2. THE CHARGEBACK RATES USED BY THE FLEET SERVICES DIVISION DO NOT FULLY RECOVER THEIR COSTS.

There are two reasons to charge all departments – general fund, special revenue fund, and enterprise funds for the services provided by the Fleet Services Division.

- When you get something for nothing, you often treat it like nothing. A department that consumes the services provided by the Fleet Services Division that does not incur costs for the provision of those services is less likely to pay attention to – and more importantly, manage – these costs.
- * The same principle applies to the Fleet Services Division. Since the Division does not have to account to its customers for the costs of providing services to them, it faces less pressure to manage these costs well than is the case when the cost of every good and service they produce is subject to customer scrutiny and acceptance before it can be recouped.

For these reasons, the Matrix Consulting Group recommends that all customers of the Fleet Services Division be charged for the services that it provides.

Charge-back rates are developed in several steps, with analyses of total costs joining information gathered on operations to create a rate structure that provides insight on the total costs of specific activities. The steps used in the creation of the

proposed chargeback rates or the Fleet Services Division / General Services

Department rates are:

- Identify the costs to be recovered such as budgeted personnel costs, operating costs and supplies costs;
- Define the services provided by the Division;
- Allocate costs to cost pools that correspond to the services provided;
- Define the rate structure;
- Determine billable units of service; and
- Calculate rates.

(1) Identify Costs To Be Recovered

The goal of a well-defined charge-back structure is the recovery of the total costs of providing goods and services. To this end, the rate-base – the costs identified for recovery – should reflect the total cost of operations. In order to develop charge-back rates for implementation in FY 2007-2008, the project team used twelve months (July 2005-June 2006) actual expenditures as the point of departure.

The project team reviewed each line item with Division staff to make any necessary adjustments.

(2) Define The Services Provided

Through interviews with the Fleet Services Division / General Services Department, the project team identified the various services the Division provides. For example, the Division provides labor for the maintenance of vehicles and equipment for its customers. The identification of all fleet functions provides the structure for the full allocation of costs. As with any business function, there are costs associated with the provision of each service (e.g. salaries, overhead, supplies, etc.). Through the use of

cost allocation principles the total costs identified for recovery are allocated to each function or cost center as described below:

- **Fleet Management** - The activities associated with the elements of the acquisition process, specification, inventory and disposal of fleet vehicles. Other activities include budget preparation, personnel management, planning, and fleet analysis. The total costs allocated to this cost pool include: direct and indirect salaries and fringe benefit costs of all personnel involved in the fleet management functions and associated operating expenses.
- **Vehicle Maintenance and Repair**: The provision of funds for maintenance and repair activities by the Division for vehicles in the City's fleet. The total costs allocated to this cost pool include all direct and indirect salary and fringe benefit costs of technicians and appropriate maintenance, management and administration personnel; direct and indirect operating expenses, and other, indirect costs.
- **Parts Procurement and Supply**: The procurement and supply of parts purchases for the City's vehicles. The total costs allocated to this cost pool include all direct and indirect salary costs associated with contracting with parts vendors, procuring parts, managing the parts space, maintaining parts inventories, paying vendors, charges associated with the storage space for inventory, and all other direct and indirect costs of parts procurement and supply.
- **Commercial Repair Management**: Commercial repairs are defined as vehicle repair and maintenance services that are performed by vendors other than the Division. The total costs allocated to this cost pool include the full costs of contracting with vendors, administering repairs, transporting vehicles, processing vendor invoices, billing users, and managing accounts receivable.
- **Fuel Procurement and Supply**: The procurement, inventory, and dispensing of fuel from the City's fueling facilities. The total costs allocated to this cost pool include the direct and indirect costs of dispensing fuel on-site, operating and maintaining fueling facilities and all other direct and indirect costs associated with fuel purchasing and supply.

(3) Allocate Costs

The specific sources of allocation statistics used in our analysis included: (1) a salary and wage analysis of staff; (2) the total expenditures by functional area, used for overhead allocations; and (3) direct allocations based on function. These statistics provided the criteria with which to assign all of the costs to appropriate cost pools.

Through interviews with Division's management, a salary and wage analysis was performed which allocated each specific employee's time to one or more of the internal support and/or customer service functions performed. Once the correct proportion of time spent on each activity was determined, the total salaries for each employee could then be allocated to the various services provided.

The salary and wage analysis provides more than just a mechanism to allocate salaries and fringe benefits, however. It also was used to develop statistics for allocating general and administrative costs, such as the costs of office supplies, to specific activities. For example, the proportion of Division's salary and fringe benefit costs attributable to vehicle maintenance and repair served as the basis for the allocation of the general and administrative costs to the vehicle maintenance and repair function.

To properly allocate the \$2.1 million in projected expenditures (not including capital expenditures for new and replacement vehicles) to each of Division's services, the allocation statistics and the actual expenditures for FY 2005-2006 were entered into a rate calculation spreadsheet created in Microsoft Excel. Individual line item amounts were transferred to one of the cost centers if the charge was directly related to proving the service, or a number of the cost centers if the charge was a general and administrative cost as described above.

(4) Rate Design

Converting the total costs attributable to each service-delivery activity into a billing rate enables the development of charge-back rates. This rate will recover the full cost of the activity when multiplied by the number of units of service projected to be provided in a year.

The project team's proposed structure creates rates for each specific service the Division provides. For the labor associated with the maintenance and repair of a vehicle, a shop labor rate based on the number of hours billed to a work order was developed. For parts procurement and supply and commercial repair activities, a mark-up rate applied to the cost of goods sold was developed to recover the costs of procurement and supply. By isolating the costs of each repair through rates based on time and materials, the Division's customers can understand the impact of their behavior on maintenance and repair costs.

The design and management of Internal Service Funds and charge-back systems should comply with the guidelines of the Federal Office of Management and Budget (OMB) Circular A-87. OMB A-87 establishes principles and standards for determining costs for federal grants, contracts, and other agreements with state and local governments. The purpose of OMB A-87 is to provide a uniform approach for determining allowable costs incurred by local governments-

Fuel procurement and supply costs will be recovered through a mark-up applied to the per gallon cost of fuel. The mark-up will recover the cost of the fueling facilities and personnel that the Fleet Maintenance Division incurs while providing the service.

(5) Determine Billable Units of Service

As noted above, charge-back rates are developed by dividing the total costs of specific services accumulated in cost pools, by the annual number of billable units of service projected to be provided, resulting in a per-unit cost or charge-back rate which recovers full costs. The billable units of service for each cost center are outlined in the table below.

Proposed Rate Structure	Billable Units of Service
Vehicle Maintenance and Repair	Hours of labor charged to work orders
Parts Procurement and Supply	Cost of Parts Sold
Commercial Repair Management	Cost of Repair Services Purchased
Fuel Procurement and Supply	Number of Gallons Sold
Fleet Management	Fixed Monthly Fee per vehicle

(6) Importance of Future Projections

It is important to realize that variations in billable units of service can lead to the over or under recovery of costs. For example, the costs of labor are recovered through a shop labor rate. The project team estimates that the Division will charge 15,860 labor hours. Should the Division actually charge less than those hours, it will not recover the costs associated with the provision of vehicle maintenance and repair, and thus will be unable to recover its full costs. The Division should monitor its chargeback revenues and costs on a monthly basis to assure that they are in line. Adjustments to labor rates or parts markups may be necessary throughout the year to insure that rates produce the revenue required to cover actual costs.

(7) Calculate Rates

The results of the rate calculation are shown in the following table. A more detailed breakdown of the costs of providing each service is provided in the three exhibits following this chapter.

Labor Costs	\$1,006,581
Labor Hours-Projected	15,860
Labor Rate	\$63.47
Parts Procurement Costs	\$273,854
Parts Sales-Projected	\$403,859
Parts Markup	67.81%
Commercial Repair Procurement Costs	\$39,198
Commercial Sales-Projected	\$169,016
Commercial Repair Markup	23.19%

CITY OF ALEXANDRIA, VIRGINIA
Management Study of Fleet Services

Fuel Procurement and Disbursement Costs	\$63,885
Fuel Gallons Issued-Projected	788,601
Fuel Markup Per Gallon	\$0.08
 Fleet Management Costs	 \$209,655
Number of Vehicles	1,348
Fleet Management Charge Per Year	\$156

Each of these rates is higher than the rates currently charged by the Fleet Services Division. The shop labor rate is competitive with other Virginia jurisdictions included in the comparative survey as indicated in the table below.

Rate Factor	Alexandria (Proposed)	Arlington	Richmond	Portsmouth	Hampton
Labor Rate	\$63.47	\$79	\$42.50	\$44	\$65
Parts Markup	67.81%	None	35%	20%	33%
Fuel Markup	\$0.08	None	\$0.07	\$0.10	\$1.84
Commercial Markup	23.19%	None	13%	20%	15%
Fleet Management Markup	\$156 / year	None	\$125.64 / year	\$15,000 / department / year	\$70 / year

As the table indicates, the proposed shop labor rate for Alexandria is higher than Richmond and Portsmouth, but lower than Arlington and Hampton. The proposed parts markup for Alexandria is higher than any of the other jurisdictions, and reflects the higher operating costs for the Fleet Services Division. Recommendations are presented later in this report to mitigate these operating costs. The proposed fuel markup for Alexandria is less than Hampton and Portsmouth, but higher than Richmond. Arlington does not charge a fuel markup. The proposed commercial markup for Alexandria is higher than Richmond, Portsmouth, and Hampton and reflects the higher operating costs for the Fleet Services Division. Recommendations are presented later in this report to mitigate these operating costs. The fleet management markup is higher than the Richmond, Portsmouth, and Hampton and reflects the higher operating costs for the

Fleet Services Division. Recommendations are presented later in this report to mitigate these operating costs.

3. THE FLEET SERVICES DIVISION SHOULD PROVIDE COST OF SERVICE STATEMENTS TO DEPARTMENTS FOR TWO FISCAL YEARS.

Accurate, timely, and detailed data from the CCG / Faster System is critical to the issuance of customer bills. Accurate, timely, and detailed data are important not only for recovering all fleet costs from customers, but also for recovering them properly. Billing customers only for the costs of the goods and services they actually consume is important not just from the standpoint of treating them fairly and equitably, but for complying with generally accepted accounting principles (GAAP).

Customer charges that are based on inaccurate data can send the message to customers that:

- The fleet organization is not concerned about the accuracy of its bills;
- Raise questions in customers' minds as to why a charge-back system is used in the first place; and
- Suggest that the fleet organization's systems and procedures for capturing and ensuring the quality of data are lax, implying that the organization's work is slipshod in general.

Customer billing is a key point of contact between service provider and customer. If these contacts are tainted by bad information, customer relations are not going to be good. Indeed, in many cases, customer disaffection with the in-house organization that manages and maintains its vehicles stems from either a lack of understanding as to how charge-back rates and billing amounts are derived, or downright suspicion that rates and charges are intentionally manipulated by the fleet organization to hide inefficiencies and stave off calls to outsource certain activities.

The Fleet Services Division should demonstrate its ability to provide accurate, timely, and detailed cost information based upon the data contained in CCG / FASTER to its customers for the services that it provides. This demonstration should take the avenues presented below.

- The Division should provide each of its customers – general fund, special revenue fund, or enterprise fund – with point of sale receipts.
- These point of sale receipts should provide detailed information regarding each transaction, the data of the transaction, the nature of the transaction, the labor hours, commercial charges, parts, etc. involved in the transaction, and the costs of those transactions.
- The point of sale receipts should be summarized in monthly reports provided to each department. The information should be provided in electronic form, preferably in an Excel spreadsheet, so that the department can analyze the information.
- The Fleet Services Division Chief should meet monthly with each department to review the monthly reports and discuss the basis and nature of the costs.

The primary purpose of a charge-back system is not to shuffle money from one fund or account to another, but to promote the cost-effective provision and use of fleet assets and services.

Recommendation #1: The Fleet Services Division should provide point of sale receipts for each transaction. The point of sale receipts should be summarized in monthly reports provided to each department.

Recommendation #2: The Fleet Services Division Chief should meet monthly with each department to review the monthly reports and discuss the basis and nature of the costs.

4. THE CHARGEBACK RATES FOR ENTERPRISE FUNDS AND SPECIAL REVENUE FUNDS SHOULD BE IMMEDIATELY INCREASED TO REIMBURSE THE FLEET SERVICES DIVISION AND THE GENERAL FUND FOR THE ACTUAL COSTS OF PROVIDING SERVICES.

Enterprise funds account for City operations financed and operated in a manner similar to a private business enterprise. The intent of the City is that the cost of

providing goods and services be financed primarily through user charges, and that these funds should not be subsidized through the general fund.

The Fleet Services Division is not charging the full costs of its services to enterprise and special revenue funds.

- Labor is being charged at \$56 per hour. The actual cost amounts to \$63.47
- The Division does not charge a vehicle acquisition, disposal, or administrative charges at all.
- The Division charges the actual costs for parts without a markup. The markup should be 67.8%
- The Division charges commercial repairs at actual costs without a markup. The markup should be 23.19%.
- The Division charges fuel at actual costs. The markup for fuel should 3.8%.

The general fund is subsidizing the provision of services by the Fleet Services Division to the enterprise funds and the special revenue funds. The chargeback rates utilized by the Division should immediately be increased to reflect actual cost of service delivery. The chargeback rates, suggested previously in this chapter, should be utilized as the rates for these funds. The estimated additional annual revenue that would be generated for the general fund is presented in the table below.

Revenue Increase	
Immediately adjust the chargeback fees charged by the Fleet Services Division to the enterprise funds for labor, parts, commercial repairs, fueling, and fleet management and for DASH Transit and the Sanitation Authority for fuel only.	\$72,500
Total Revenue Increase	\$72,500

Recommendation #3: The City should immediately adjust the chargeback fees of the Fleet Services Division for the enterprise funds for labor, parts, commercial repairs, fueling, and fleet management and for DASH Transit and the Sanitation Authority for fuel only. These chargeback fees should be recalculated annually by the Fleet Services Division to reflect adjustments in the costs of its business.

5. THE FLEET SERVICES DIVISION SHOULD BE ESTABLISHED AS AN INTERNAL SERVICE FUND WHEN THE DIVISION BEGINS CHARGING GENERAL FUND DEPARTMENTS FOR THE SERVICES THAT IT PROVIDES.

Internal service funds are used to account for the financing of goods or services provided by one department or agency to other departments or agencies of the City and to other government units on a cost reimbursement basis. Costs in the internal service funds are allocated to the benefiting funds in the form of fees and charges.

The experiences of the project team are uncommonly uniform in suggesting that the use of an Internal Service Fund, as opposed to a conventional budgeting process, is appropriate and beneficial. This was also a finding from the comparative survey. Each of the local governments that responded to the comparative survey recovered the costs of fleet management from the departments. More specifically

- Arlington uses an Auto Fund – an internal services fund. The County allocates all of its fleet operating and maintenance costs through projected charges for each class of vehicle to operating departments. Arlington also charges for accident repairs.
- Richmond recovers fleet operating and maintenance costs by charging operating departments and non-city agencies that includes labor, parts, commercial repairs, and fuel including mark-ups.
- Portsmouth charges all of the general fund departments for fleet operating and maintenance costs for fleet management based upon a rental fee that is billed quarterly. All other funds are charged for services rendered.
- Hampton charges all operating departments for fleet operating and maintenance costs including labor, parts, fuel, commercial repairs, etc.
- Winston-Salem charges all of its customers a shop labor rate and actual costs and a markup for fuel, parts, and commercial repairs.

It is clearly a prevailing practice to charge customers for fleet operating and maintenance costs incurred in the maintenance and repair of their equipment.

Use of an internal service fund also enhances the accountability for the delivery

of cost effective fleet services by the Division. Accountability will be enhanced because the ISF will provide departments with a clearer picture of what they are buying, enabling them in turn to make certain that the Division is providing all that they are paying for.

Recommendation #4: The City should develop and implement an internal service fund for the delivery of services provided by the Fleet Services Division / General Services Department when the Division begins charging general fund departments for the services that it provides.

6. THE CITY SHOULD INITIATE THE USE OF LEASE PURCHASE FINANCING FOR THE REPLACEMENT OF HEAVY EQUIPMENT.

The Matrix Consulting Group recommends that the City initiate the utilization of lease purchase financing for financing the replacement of equipment, but solely for heavy equipment with long replacement cycles or with high costs per unit such as fire apparatus and street sweepers.

In considering leasing, the City should consider the following factors as the basis for evaluating leasing versus outright purchase of vehicles:

- Financial Considerations
 - Paying cash is inherently the least expensive way to acquire assets (including vehicles) as long as all other funding sources require the payment of interest with the principal repayment.
 - Next to cash, using funds that have the lowest associated interest rate will be the most economical way to make purchases.
 - Government entities (like Alexandria) have the potential to secure lower cost capital funds than private sector firms due to their ability to offer tax-exempt income to investors.
 - Governmental entities must balance the low interests rates associated with public debt against the entity's borrowing capacity and competing asset needs.
 - Consistent with basic economic principles of risk-versus-return, the more flexible the financing source (risky), the higher the associated interest rate.

- Tax-exempt leasing provides a way to secure funds at low interest rates without issuing public debt.
- Administrative Considerations
 - Leasing provides a flexible way to meet vehicles needs.
 - Leasing providers/fleet management firms are able to leverage investments in technology, communications infrastructure, linked vendor networks, streamlined business processes and functional expertise over multiple firms.
 - Leasing providers/fleet management firms allow rapid adoption and/or expansion of technology and/or enhanced fleet management programs without lessee investments in equipment or personnel.
 - Leasing providers/fleet management firms can bundle / unbundle services to quickly provide the lessee a variety of fleet management support options. When combining multiple programs, the lessor can spread administrative costs more broadly, often resulting in lower combined pricing than if programs are sourced separately.
- Operational Considerations
 - The use of leasing providers/fleet management firms provides a means to quickly monitor and manage fleet operations in a decentralized environment.
 - Operational considerations (ability to replace a higher proportion of the fleet) may justify higher-cost vehicle sourcing alternatives as a means of achieving overall fleet goals.
- Political Considerations
 - Government vehicles and fleet funding are popular areas for City Council and budget scrutiny during difficult financial periods.

There are three basic types of leases enjoying significant usage in local governments:

- Tax-exempt Leases (a form of conditional sale.
- Open-End Leases (also referred to as “TRAC”, “capital,” or “finance” leases; and
- Closed-End Leases (also referred to as “operating,” “net,” or “walk-away” leases).

Analysis completed of alternatives for financing the replacement of vehicles using the financial model developed for the National Association of Fleet Administrators (NAFA) Foundation by the consulting firm, Deloitte & Touche LLP, has led to the following conclusions:

- Tax-Exempt leasing had nearly the same NPV as paying cash.
- Open-End leasing was more expensive than Tax-Exempt leasing or paying cash due to the slightly higher applicable interest rate and the management fee.
- The Closed-End lease calculation reflects the same interest rates and management fees as Open-End leasing but also reflects the need to constantly make principle and interest lease payments that are based on a more frequent replacement cycle, and the use of a short lease term to ensure that the lessor has marketable vehicles for resale.

Based on both Total Cost and Net Present Value, the analysis completed of alternatives for financing the replacement of vehicles resulted in the ranking from least-to-most expensive as follows:

- Current (pay cash);
- Tax-exempt Lease;
- Open-End Lease; and
- Closed-End Lease.

The City should utilize lease purchase financing when it faces significant surges in a fiscal year for capital outlay for replacement of heavy equipment. The type of equipment that could be eligible could include:

- Fire pumper trucks with an estimated replacement cost of \$550,000 to \$600,000; and
- Fire aerial trucks with an estimated replacement cost of \$800,000 to \$950,000 depending on the working height of the aerial truck.

A number of local governments have utilized lease purchase financing such as Chesterfield County, Virginia, York County, Virginia, Decatur, Georgia, Phoenix, Arizona, Chapel Hill, North Carolina, and San Antonio, Texas.

Recommendation #5: The City should initiate the use of lease financing solely for acquisition of heavy equipment when it faces significant capital outlay surges for replacement of this equipment in a particular fiscal year.

Exhibit 1

Fleet Services Division Rate Calculations

Cost Category	FY 2006 Expenses	Admin. Expenses	Fleet Mgmt.	Auto. Repair	Sublet	Parts Expenses	Fuel	Non- Chargeable	Total
Salaries & Fringe Benefits									
Full-Time Employees	\$1,108,330	\$241,938	\$114,014	\$547,395	\$21,316	\$148,926	\$34,742	\$-	\$1,108,330
Seasonal Employees	\$21,331	\$4,656	\$2,194	\$10,535	\$410	\$2,866	\$669		\$21,331
Overtime	\$49,990	\$10,912	\$5,142	\$24,690	\$961	\$6,717	\$1,567		\$49,990
Outstanding Performance Awards	\$450	\$98	\$46	\$222	\$9	\$60	\$14		\$450
Social Security Retirement	\$105,222	\$22,969	\$10,824	\$51,968	\$2,024	\$14,139	\$3,298		\$105,222
Contributions	\$127,694	\$27,874	\$13,136	\$63,067	\$2,456	\$17,158	\$4,003		\$127,694
Group Life Insurance	\$6,783	\$1,481	\$698	\$3,350	\$130	\$911	\$213		\$6,783
Hospitalization Medical	\$135,407	\$29,558	\$13,929	\$66,876	\$2,604	\$18,195	\$4,244		\$135,407
Long Term Disability	\$4,348	\$949	\$447	\$2,147	\$84	\$584	\$136		\$4,348
Salaries & Fringe Benefits	\$1,559,555	\$340,436	\$160,431	\$770,251	\$29,995	\$209,557	\$48,886	\$-	\$1,559,555
Operating Expenses									
Fees for Services	\$2,162	\$472	\$222	\$1,068	\$42	\$291	\$68		\$2,162
Professional Health Services	\$2,372	\$518	\$244	\$1,172	\$46	\$319	\$74		\$2,372
Other Equipment Maintenance	\$36,489	\$7,965	\$3,754	\$18,022	\$702	\$4,903	\$1,144		\$36,489
Building & Improvement Maint	\$99	\$22	\$10	\$49	\$2	\$13	\$3		\$99
Vehicular Maintenance	\$104,475							\$104,475	\$104,475
Laundry & Dry Cleaning	\$5,356	\$1,169	\$551	\$2,645	\$103	\$720	\$168		\$5,356
Towing & Impounding	\$4,778							\$4,778	\$4,778
DMV Service Charges	\$65	\$14	\$7	\$32	\$1	\$9	\$2		\$65
Photocopying	\$325	\$71	\$33	\$161	\$6	\$44	\$10		\$325
Printing Internal	\$352	\$77	\$36	\$174	\$7	\$47	\$11		\$352
Accident Reserves	\$59,763							\$59,763	\$59,763
Office Supplies	\$989	\$216	\$102	\$488	\$19	\$133	\$31		\$989
Food Supplies	\$500	\$109	\$51	\$247	\$10	\$67	\$16		\$500

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Cost Category	FY 2006 Expenses	Admin. Expenses	Fleet Mgmt.	Auto. Repair	Sublet	Parts Expenses	Fuel	Non- Chargeable	Total
Housekeeping and Janitorial	\$800	\$175	\$82	\$395	\$15	\$107	\$25		\$800
Vehicle Parts & Equipment	\$403,859							\$403,859	\$403,859
Fuel and Lubricants	\$1,653,943							\$1,653,943	\$1,653,943
Operating Supplies & Materials	\$48,612	\$10,612	\$5,001	\$24,009	\$935	\$6,532	\$1,524		\$48,612
Hand Tools and Shop Supplies	\$8,836	\$1,929	\$909	\$4,364	\$170	\$1,187	\$277		\$8,836
New Uniforms & Wearing Apparel	\$3,878	\$847	\$399	\$1,915	\$75	\$521	\$122		\$3,878
Medical & Lab Supplies	\$703	\$153	\$72	\$347	\$14	\$94	\$22		\$703
Controlled Operational Equipment	\$7,027	\$1,534	\$723	\$3,471	\$135	\$944	\$220		\$7,027
Controlled Data Process Equipment	\$131	\$29	\$13	\$65	\$3	\$18	\$4		\$131
Utilities Electric	\$29,038	\$6,339	\$2,987	\$14,342	\$558	\$3,902	\$910		\$29,038
Utilities Gas	\$33,509	\$7,315	\$3,447	\$16,550	\$644	\$4,503	\$1,050		\$33,509
Utilities Water	\$1,899	\$415	\$195	\$938	\$37	\$255	\$60		\$1,899
Postal & Messenger Services	\$165	\$36	\$17	\$81	\$3	\$22	\$5		\$165
Telecommunications	\$13,007	\$2,839	\$1,338	\$6,424	\$250	\$1,748	\$408		\$13,007
Memberships/Subscriptions	\$1,483	\$324	\$153	\$732	\$29	\$199	\$46		\$1,483
Insurance	\$1,624	\$355	\$167	\$802	\$31	\$218	\$51		\$1,624
Microsoft									
Products/Licenses	\$295	\$64	\$30	\$146	\$6	\$40	\$9		\$295
Awards & Honors	\$1,715	\$374	\$176	\$847	\$33	\$230	\$54		\$1,715
Education & Training	\$766	\$167	\$79	\$378	\$15	\$103	\$24		\$766
Conferences & Registrations	\$1,580	\$345	\$163	\$780	\$30	\$212	\$50		\$1,580
Regional Travel	\$32	\$7	\$3	\$16	\$1	\$4	\$1		\$32
Recovered Costs	\$(1,134,312)							\$(1,134,312)	\$(1,134,312)
Operating Total	\$1,296,315	\$44,490	\$20,966	\$100,660	\$3,920	\$27,386	\$6,389	\$1,092,506	\$1,296,315
Total FY 2006 Expenditures	\$2,855,870	\$384,925	\$181,397	\$870,911	\$33,915	\$236,943	\$55,274	\$1,092,506	\$2,855,870
Administration Allocation			28,258	135,671	5,283	36,911	8,611	170,191	384,925
Total Expenditures			209,655	1,006,581	39,198	273,854	63,885	1,262,697	2,855,870

Exhibit 2

**Fleet Services Division Salary
Allocation By Cost Center**

Position	Annual Salary	Administration		Fleet Management		Shop Labor		Sublet		Parts		Fuel	
		%		%		%		%		%		%	
Auto Mechanic I	39,762		\$-		\$-	100%	\$39,762		\$-		\$-		\$-
Auto Mechanic I	54,668		\$-		\$-	100%	\$54,668		\$-		\$-		\$-
Supervisory /Advisor	67,976	50%	\$33,988	50%	\$33,988		\$-		\$-		\$-		\$-
Auto Mechanic I	62,660		\$-		\$-	100%	\$62,660		\$-		\$-		\$-
Auto Mechanic I	51,033		\$-		\$-	100%	\$51,033		\$-		\$-		\$-
Accounts Clerk II	45,273	75%	\$33,955		\$-		\$-		\$-	15%	\$6,791	10%	\$4,527
Diagnostician	69,079	25%	\$17,270		\$-	40%	\$27,632	10%	\$6,908		\$-	25%	\$17,270
Parts Room Clerk	45,273		\$-		\$-		\$-		\$-	100%	\$45,273		\$-
Diagnostician	69,079	25%	\$17,270	10%	\$6,908		\$-		\$-	50%	\$34,539	15%	\$10,362
Supervisory/Tech.	72,775	10%	\$7,277	40%	\$29,110	50%	\$36,387		\$-		\$-		\$-
Auto Mechanic I	62,657		\$-		\$-	100%	\$62,657		\$-		\$-		\$-
Auto Mechanic I	52,820		\$-		\$-	100%	\$52,820		\$-		\$-		\$-
Admin Assistant I	49,663	100%	\$49,663		\$-		\$-		\$-		\$-		\$-
Division Chief	74,957	50%	\$37,478	50%	\$37,478		\$-		\$-		\$-		\$-
Lube Technician	30,165		\$-		\$-	100%	\$30,165		\$-		\$-		\$-
Auto Mechanic I	62,660		\$-		\$-	100%	\$62,660		\$-		\$-		\$-
Service Advisor	50,772	80%	\$40,617		\$-		\$-	20%	\$10,154		\$-		\$-
Auto Mechanic I	39,762		\$-		\$-	100%	\$39,762		\$-		\$-		\$-
Auto Mechanic I	46,029		\$-		\$-	100%	\$46,029		\$-		\$-		\$-
Parts Room Clerk	39,499		\$-		\$-		\$-		\$-	100%	\$39,499		\$-
Auto Mechanic I	49,308		\$-		\$-	100%	\$49,308		\$-		\$-		\$-
Parts Room Driver	41,364		\$-		\$-		\$-		\$-	100%	\$41,364		\$-
Service Advisor	69,079	50%	\$34,539	30%	\$20,724		\$-	10%	\$6,908		\$-	10%	\$6,908
TOTAL	1,246,308		\$272,057		\$128,208		\$615,541		\$23,970		\$167,466		\$39,067
			21.83%		10.29%		49.39%		1.92%		13.44%		3.13%

Exhibit 3

**Fleet Service Internal Service
Charge Rates**

Expenditure Allocation	Shop Labor Rates	Parts Rates	Fuel Rates	Sublet Rates	Fleet Mgmt
Salaries and Benefits	\$770,251	\$209,557	\$48,886	\$29,995	\$160,431
Operating Expenditures	\$100,660	\$27,386	\$6,389	\$3,920	\$20,966
Fleet Overhead	\$135,671	\$36,911	\$8,611	\$5,283	\$28,258
Total Automotive	\$1,006,581	\$273,854	\$63,885	\$39,198	\$209,655
Labor Shop Rate					
Automotive Expenses	\$1,006,581				
Billable Hours	15,860				
Shop Labor Rate	\$63.47				
Parts Overhead Rate					
Parts Overhead		\$273,854			
Parts Expenses 2006		\$403,859			
Parts Markup Rate		67.81%			
Fuel Overhead Rate					
Fuel Overhead			\$63,885		
FY2006 Gallons Used			788,601		
Total Fuel Markup per Gallon			\$0.08		
FY2006 Fuel Expense			\$1,681,779		
Average Price Per Gallon			\$2.13		
Fuel Markup Rate %			3.80%		

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Expenditure Allocation	Automotive Rates	Parts Rates	Fuel Rates	Sublet Rates	Fleet Mgmt
Sublet Overhead Rate					
Sublet Overhead				\$39,198	
Sublet Expenses 2006				\$169,016	
Sublet Markup Rate				23.19%	
Fleet Mgmt Overhead Rate					
Fleet Mgmt Overhead					\$209,655
Fleet Units					1,348
Fleet Management Rate					\$156

3. PLAN OF ORGANIZATION

3. PLAN OF ORGANIZATION

This chapter presents our findings, conclusions, and recommendations regarding the plan of organization of for delivery of fleet services by the City of Alexandria including:

- The role of the Fleet Services Division Chief in managing the fleet (with the exception of the Fire Department and the light equipment utilized by the Recreation, Parks and Cultural Activities Department);
- The role of the first-line supervisors in managing the work performed in the Fleet Services Division / General Services Department;
- The plan of organization for the Fleet Services Division / General Services Department; and
- Opportunities to consolidate fleet services in the City of Alexandria.

The major focus of the analysis is an evaluation of the need to clarifying the roles of the Fleet Services Division Chief and the first - line supervisors in the Fleet Services Division / General Services Department.

1. THE ROLE OF THE FLEET SERVICES DIVISION CHIEF IS LIMITED TO THAT OF A FLEET MAINTENANCE AND REPAIR MANAGER.

The role of the Fleet Services Division Chief in the General Services Department is largely limited to management of the maintenance and repair of the City's fleet (excluding the Fire Department and the light equipment assigned to the Recreation, Parks, and Cultural Activities Department). The operating departments are responsible for preparing the replacement budget and scheduling replacement for the fleet assigned to that department, preparing the depreciation budget, assigning and rotating vehicles within their department, and preparing purchasing documents for replacement of equipment. The Police Department fulfills these tasks and also resolves discrepancies

in odometer readings, downsizing equipment (the department just downsized ten full size sedans to mid size sedans), seeks quotes for vehicle damage and accident repairs, and has developed their own database to, among other things, track and schedule preventive maintenance, and issue repair orders to staff for preventive maintenance by the Fleet Services Division. The Police Department allocates staff whose responsibility, in part, is management of the department's large fleet. The Police Department has assigned this responsibility to existing staff as an other related duty. Other departments are unable to provide their fleet with this level of attention given the limitations in the number of staff and the size of their fleet.

The City of Alexandria does not have a centralized fleet manager. The Fleet Services Division Chief in the general Services Department does not function as a fleet manager. Responsibility for fleet management has been decentralized to the operating departments. This approach has several drawbacks including:

- The potential to have control and realize savings over a significant proportion of the cost of the fleet is difficult to achieve because of duplication and decentralization. Potential cost control avenues could include pooling, reducing the size of the fleet, sharing equipment and facilities, etc.
- Decisions made at the City Manager and City Council levels are made on a departmental basis, rather than with reference to the needs of the entire fleet.
- The City's sizeable investment in equipment and services is a shared responsibility by many managers in many departments. On the other hand, similar major investments in people, materials, and services (i. e., buildings, finance, purchasing, personnel, etc.) are more centrally managed.
- Equipment operating and capital costs have been and will continue to be not only major costs, but also growing costs to the City.

The impact of this decentralized responsibility is demonstrated by the growth in the City's fleet. The City's fleet that is maintained by the Fleet Services Division has

grown by 190 vehicles in the past ten years since 1998 or 29%. Over the same period of time, the population of Alexandria has grown by approximately 8%. The fleet has grown more quickly than the population of the City. This is not an expected result.

While almost half of the growth in the fleet maintained by the Fleet Services Division has occurred in the Police Department (47.4% of the growth in the fleet), the fleet in other departments has also grown including Transportation and Environmental Services (10.5% of the growth in the fleet) and Recreation, Parks and Cultural Services (12.1% of the growth in the fleet). Other decisions have been made that impacted the cost of the fleet such as extent of sport utility vehicles in the City's fleet.

The role of a Fleet Manager should be to work with the operating departments and the Office of Management and Budget to, among other roles, develop alternatives that would control the growth in the number of vehicles in the fleet and the size of the fleet.

This does not imply or suggest that the Fleet Manager has total control over departmental fleets. This should continue to be a shared responsibility. However, the Fleet Services Division Chief should have a larger role in planning for the replacement of the fleet, pool management to provide a fleet of pool vehicles that are available for use by a multiple of departments (versus assigned vehicles), and analysis of fleet utilization and the size of equipment assigned to departments and the development of alternatives and recommendations to reduce the capital costs for the fleet. Operating departments would still share responsibility for the management of the fleet including decisions regarding internal assignment of vehicles within their department, participating in the decisions regarding fleet utilization and the size of equipment, etc.

2. OVER THE NEXT TWO TO THREE YEARS, THE ROLES AND RESPONSIBILITIES OF THE DIVISION CHIEF POSITION WITHIN THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD BE EXPANDED TO THAT OF A FLEET MANAGER

The limitations of the authority of the Fleet Services Division Chief noted previously in this chapter lead to the conclusion that the Fleet Services Division Chief is underutilized. Enhancing role of the Fleet Services Division Chief as a fleet manager responsible for managing the City's fleet is essential in improving the cost-effectiveness of the City's fleet operations, maintenance, and replacement.

This would focus all responsibility for managing the City's fleet. The expanded responsibilities of the position would include the following:

- Managing equipment utilization, in consultation with operating departments, with a view toward reduction of the size of the fleet, expansion of the City pool, and sharing of equipment among departments. Submits recommendations for reduction of the fleet for management approval.
- Developing equipment utilization guidelines, capturing equipment utilization data, assuring the accuracy of that data, evaluating equipment utilization abnormalities, and managing equipment re-assignment or disposal. This would be accomplished in consultation with operating departments that are assigned this equipment.
- Controlling vehicle assignments, in consultation with operating departments, to assure vehicles are assigned only when warranted, balancing utilization levels with departmental need, evaluating alternatives to the assignment of vehicles including management of privately owned vehicle use reimbursement and take-home vehicle management.
- Providing a City-wide driver training program and makes recommendations to management of operating departments regarding control of abuse of equipment. This includes operator certification and record keeping, operator training, pre-trip inspection and record keeping, equipment misuse / abuse management, and accident reporting, investigation and management.
- Directing an equipment replacement program, in consultation with operating departments, and submitting citywide replacement recommendations for management approval. This includes preparing equipment replacement guidelines and submitting these guidelines for management approval.

- Controlling the size of equipment within the fleet, downsizing" equipment wherever appropriate and possible, in consultation with operating departments.

A revised classification description for the position should be developed. Equally as well, however, specific performance-based expectations need to be clearly defined for this position to reflect this larger role.

To assist the Fleet Services Division Chief in the execution of these responsibilities, a Management Analyst I position should be authorized for the Fleet Services Division / General Services Department. This position would have a number of responsibilities including those presented below.

- Analyzing, developing and improving policies, practices, methods and procedures in the Fleet Services Division / General Services Department.
- Duties include the maintenance and installation of CCG / FASTER fleet maintenance Information system equipment, software, applications and procedures relating to the economical and efficient management of a large diverse vehicle maintenance operation.
- Performing productivity studies and reviews, monitoring and evaluating equipment utilization and performance, tracking measurable indicators of facility operations, as well as providing professional and technical advice in establishing operational efficiencies.
- Conducts in-house systems studies to include areas such as staffing, equipment, processes, procedures and products.
- Conducts research for development of recommendations as required by Fleet Services Division Chief.
- Acts as user contact point for reporting computer system problems, analyzes and makes preliminary determinations regarding network related problems, applications or software problems, and guides users through corrective action steps.
- Designs and develops instructional manuals for the CCG / FASTER fleet maintenance Information system;
- Provides support to Division automation efforts incurred within Fleet Services

Division / General Services Department.

- Advises management on applications to assist Fleet Services Division / General Services Department operations.
- Prepares written procedures for users of the CCG / FASTER maintenance Information system.
- Performs data processing related duties including using available statistical or packaged software programs, data entry and retrieval and routine computer terminal operations or programming/reprogramming
- Research and develop guidelines for vehicle use.
- Develop a vehicle orientation program for new employees.
- Prepares the Fleet Services Division / General Services Department operating and city-wide replacement budget and provides periodic reports on expenditures.

The consolidation of responsibility of the management of the City's fleet in the Fleet Services Division / General Services Department, proposed later in this chapter, requires a higher level of management analysis and support for the Fleet Services Division Chief. The table below presents the annual operating costs for this position, at top step, in salary and fringe benefits.

Annual Cost Increase	
A Management Analyst I position should be authorized for the Fleet Services Division / General Services Department to assist the Fleet Services Division Chief in implementing the opportunities for improvement identified this analysis of fleet services.	\$76,000
Annual Cost Increase	\$76,000

Recommendation #6: The classification description for the Fleet Services Division Chief should be revised to expand the responsibilities to that of a fleet manager. The class title should be revised to Fleet Manager. The roles and responsibilities of the Fleet Services Division Chief should be expanded to include working with operating departments to manage equipment utilization, control vehicle assignments, provide a City-wide driver training program, direct an equipment replacement program, submit City-wide replacement recommendations for management approval, control the size of equipment within the fleet, etc. The expanded role of the Fleet Services Division Chief should include regular and routine consultation with operating departments whose equipment is maintained / repaired by the Division.

Recommendation #7: A Management Analyst I position should be authorized for the Fleet Services Division / General Services Department to assist the Fleet Services Division Chief in implementing the opportunities for improvement identified this analysis of fleet services.

Recommendation #8: The roles and responsibilities of the Fleet Services Division Chief should be not be expanded until the customer service recommendations presented in chapter 4 of this report have been resolved.

(3) The Fleet Services Division / General Services Department Should Be Charged With Providing and Maintaining Equipment In The City's Fleet Analogous To A Full-Service Leasing Company.

To maximize its return on the sizable investment made in equipment and to pinpoint responsibility for managing the fleet, the City should hold the Fleet Services Division / General Services Department accountable for all of the functions associated with providing and maintaining equipment (excluding the other issue of management of the fleet assigned to the Fire Department and the light equipment utilized by the Recreation, Parks and Cultural Activities Department). This includes the following charges:

- The equipment would be centrally owned by the City rather than each department, with the Fleet Maintenance Division acting as the City's caretaker for the equipment. However, this does not suggest that each department would be absolved of responsibility for managing their assigned fleet. In fact, that responsibility would continue. Rather, this is meant to suggest that the Fleet Services Division Chief should fulfill a citywide responsibility for managing the fleet, consulting with operating departments, but ultimately making recommendations regarding the City's fleet to the Office of Management and Budget that may differ from that of the operating department.
- The proper type and amount of equipment to meet the requirements of the operating departments would be established by the Division in consultation with the operating departments.
- Equipment would be "rented" by the operating departments to reimburse the Division for the costs of maintenance and operation.
- Maintenance of the fleet would be provided by the staff of the Division.

- The Division would submit recommendations to the City Manager for replacement of equipment as part of the budgetary process in consultation with operating departments. Operating departments would no longer be responsible for submitting recommendations to the City Manager, but rather would submit such recommendations to the Fleet Manager.
- The Division would be responsible for preparation of specifications for the replacement of the equipment, working with the Purchasing Division.

In essence, the operating departments would be "leasing" their equipment from the Fleet Services Division / General Services Department (excluding the other issue of management of the fleet assigned to the Fire Department and the light equipment utilized by the Recreation, Parks and Cultural Activities Department).

Recommendation #9: The Fleet Services Division / General Services Department should be charged with providing and maintaining equipment in the City's fleet analogous to a full-service leasing company.

3. THE ROLE OF THE SUPERVISOR EQUIPMENT MAINTENANCE WITHIN THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD BE MODIFIED.

The Supervisor Equipment Maintenance within the Fleet Services Division / General Services Department assigned to the supervision of the technicians is not being effectively utilized. A more effective use of the time of this supervisory position would be in the performance of the following tasks:

- **Quality controlling the work.** This need not be a 100% sample, but the Supervisor Equipment Maintenance responsible for supervising the maintenance and repair of fleet equipment should set an objective for road testing of equipment as 5% to 10% of all repair orders. The repair order should be revised to include a box for the Supervisor Equipment Maintenance to check if the equipment was road tested. These road tests could consume up to one hour a day of the supervisors' time.
- **Planning and Scheduling the work.** This task will be described more completely in the next chapter. The Supervisor Equipment Maintenance should develop a longer-range timeframe for planning and scheduling work including:

- Establishing "to do" lists of needed equipment repairs that were identified as a result of preventive maintenance inspections, but not performed since they did not represent safety problems. These repairs can be scheduled for times when shop workload would otherwise be low.
- Maintaining a backlog of work for each Auto Mechanic or Auto Service Worker.
- Prioritizing the work to be performed, and writing the priority onto the work order.

The task of "loading the shop with scheduled repairs is one of the most important responsibilities of the Supervisor Equipment Maintenance.

The scheduling process for the Supervisor Equipment Maintenance should proceed as follows each day:

- Review and quality control repair orders written by Auto Service Advisors including preventive maintenance.
- Prioritize repairs.
- Determine which staff are at work that particular day.
- Make certain that the equipment is available for repair or maintenance.
- Make certain that the usual needed parts are available.
- Assign the work to an Auto Mechanic or the Auto Service Worker.

Once the work has been assigned, the Supervisor Equipment Maintenance should check the progress of each Auto Mechanic or the Auto Service Worker to determine progress and when the repair will be completed.

- **Getting onto the shop floor on a regular basis and supervising the work of an Auto Mechanic or the Auto Service Worker.** A contributory factor to productivity of staff is the visibility of the supervisors on the shop floor. The Supervisor Equipment Maintenance should allocate more time on the floor, assisting staff in resolving problems, assuring work is being completed at a productive work pace, and that backlogs are not developing.
- **Monitoring and controlling repeat repairs.** Repeat or comeback repairs are repairs that are made more than once because the underlying cause of failure was not diagnosed accurately when the equipment originally came into the shop. The role of the Supervisor Equipment Maintenance should be to review the history of the equipment when it comes into the shop for repair or maintenance to

identify the previous type of repair. If, in fact, the equipment has returned as a repeat repair, the Supervisor Equipment Maintenance should take steps to assure the Auto Mechanic responsible conducts a more complete and comprehensive diagnosis of the problem, sets up training for the Auto Mechanic to resolve any knowledge or skill deficiencies, and raise the issue, if the problem reoccurs during the Auto Mechanic's performance evaluation.

- **Manage the workload of the Auto Mechanics and the Auto Service Worker.** There are a variety of tasks the supervisors need to perform to fulfill this responsibility:
 - Set an objective for how much of the Auto Mechanics and the Auto Service Worker time will actually devoted to working on equipment as "wrench turning" time (direct labor), and compare the actual direct labor time to this objective and follow up on discrepancies. The objective should be an average of 125 hours per month per Auto Mechanic and Auto Service Worker.
 - Pull equipment out of service for maintenance only when all necessary parts are available.
 - Write in flat rate time standards on repair orders prior to assigning a job to an Auto Mechanic and Auto Service Worker. Any significant variations between these standard estimated repair times and the actual time should be analyzed.
 - Provide Auto Mechanics and the Auto Service Worker with in-shop and vendor training to assure these staff have the necessary skills and knowledge.
 - Assure that Auto Mechanics and the Auto Service Worker have the necessary tools and diagnostic equipment to perform their tasks
 - Review vehicle histories regularly to uncover patterns of repeat repairs.
 - Run cost analysis of in-house versus vendor costs of repairs to assess the competitiveness of staff with the private sector.
- **Controlling backlogs.** Control of backlogs is essential to prevent the work overflows that cripple a shop's operation. This can lead to deferral of maintenance and a subsequent increase in unscheduled breakdowns. Backlogs often result from conditions that a shop can control including poor work scheduling, old or outdated equipment, or poorly trained staff. The Supervisor Equipment Maintenance should manage the backlog, as measured by turnaround time, to assure the level of service delivered to the customer remains satisfactory. Yet, they also need to assure work is not "farmed out" carte blanche

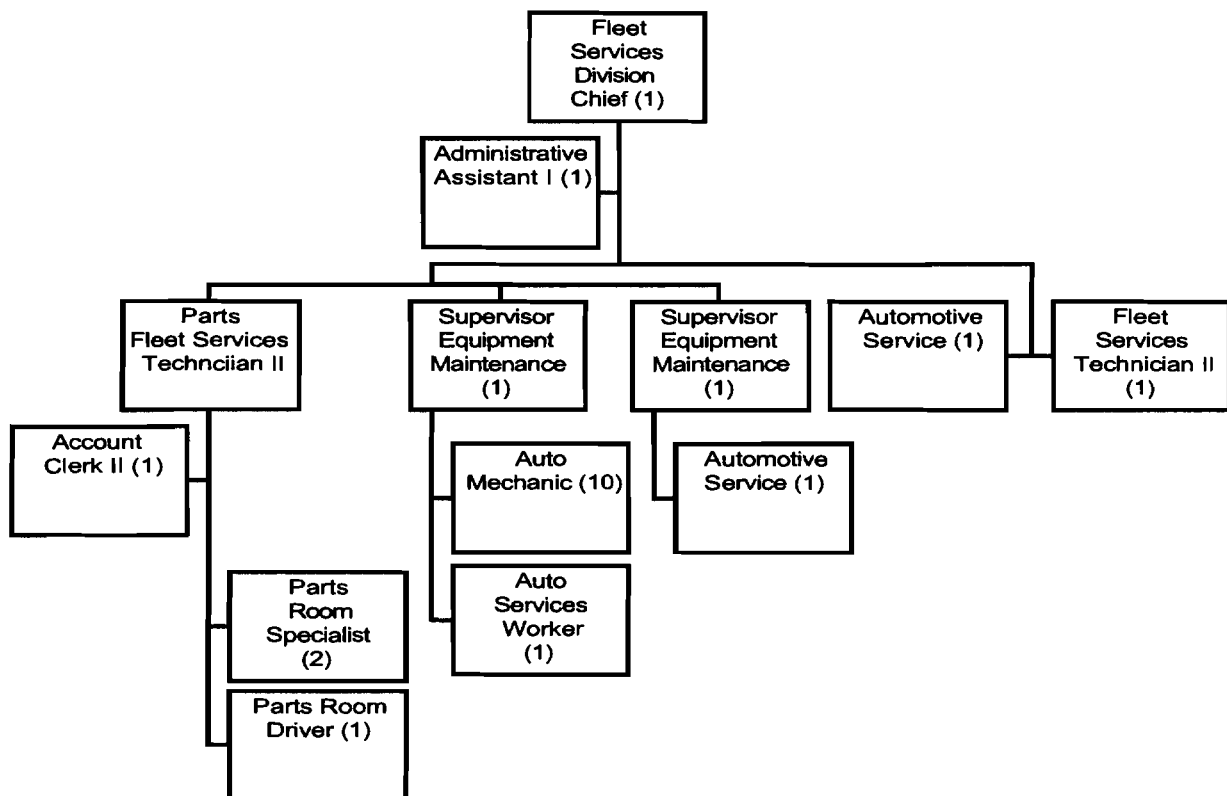
resulting in a lack of work for staff in the afternoon.

The Fleet Services Division Chief should transform these tasks into a set of specific written performance expectations for the supervisors.

Recommendation #10: The role of the Supervisor Equipment Maintenance within the Fleet Services Division / General Services Department should be modified to enhance the effective use of this position.

4. THE EXTENT OF SUPPORT STAFF WITHIN THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD BE REDUCED AND SUPPORT STAFF REALLOCATED TO THE SHOP FLOOR.

The Fleet Services Division / General Services Department is authorized twenty-three (23) positions. The plan of organization is presented below.



Important points to note regarding the plan of organization and the allocation of staff are presented below.

- There are a total of eleven (11) Auto Mechanic / Lube Technician positions engaged in the maintenance and repair of fleet equipment in the Fleet Services Division / General Services Department.
- There are a total of twelve (12) positions engaged in administrative support for these eleven (11) Auto Mechanics / Lube Technicians as portrayed below.
 - The Division Chief is the manager of the Division.
 - There are two (2) Supervisory Equipment Maintenance positions. One of these supervisory positions is responsible for the supervision of the (11) Auto Mechanics / Lube Technicians and the Administrative Assistant I and the other is responsible for the supervision of the Service Section that plans and schedules the work of the shop in terms of unscheduled work, scheduled work, preventive maintenance, etc.
 - There are two (2) Service Advisor positions. One of these positions reports to the Division Chief and is responsible for a number of duties including the following:
 - Generates monthly bills from FASTER to limited operating departments, including the Transportation and Environmental Services Solid Waste Division, the Alexandria Redevelopment and Housing Authority, Fire Department, School Department, DASH, and Sanitation;
 - Responsible for the billing of overtime to departments for use of Fleet Services Division personnel on special projects;
 - Processes monthly motor pool, rental car and fuel card billing.
 - Responsible for new vehicle tags and registration;
 - Manage the calibration certification for Police Department patrol cars (e.g., speed enforcement devices);
 - Handles the Division's time and attendance reporting in Kronos;
 - Receives and process deadline vehicles for auction; and
 - Maintains vehicle files, including spare keys, title, etc.
- The other Service Advisor position is responsible for planning and scheduling preventive maintenance and repair services, notifying customers (through designated fleet manager) of service needs (via email, phone and / or interdepartmental mail), coordinating unscheduled repairs, and coordinating outsourced work for body work / accident repairs, including distribution of purchase orders to customer.
- There are two (2) Fleet Services Technician II positions. One of these positions is filling the as a supervisory position for the Parts Room. The other position provides backup to the Maintenance Shop, as needed including working on complex problems, as well as handling peaks in

workload, troubleshooting and diagnosing problems and repair needs, and providing preventive and routine maintenance and performs minor repairs on the City's fueling sites.

- The Administrative Assistant I position has a number of duties as presented below.
 - .. This position has been reassigned from the Division Chief's Office to the Service Unit.
 - .. Reports to the Supervisory / Advisor positions.
 - .. Fulfills the duties and responsibilities of the Service Advisor.
 - .. Provides customer support, answer phones, schedules service, assigns work tickets, etc.
 - .. Manages the loaner car program (e.g., provides loaner cars to City staff whose assigned vehicles are receiving service).
 - .. Manages the rental car program, including receipt of requests, tracking of rental cars, maintaining documentation for billing purposes, etc.
 - .. Maintains and disburses fuel cards, as needed.
 - .. Maintains auction database for the Division, including date, inventory of vehicles sold and prices.
 - .. Responsible for processing payment vouchers, as assigned by the Division Chief.
- An Account Clerk II position reports to the Supervisory / Advisor for the Parts Room. This position has a number of responsibilities as enumerated below.
 - .. Receives and processes invoices for the Parts Room.
 - .. Manages and monitors the Division's procurement card program.
 - .. Generates weekly reports on vendor payments.
 - .. Provides backup to Parts Room Clerks, as needed.
- There are three (3) positions assigned to the Parts Room besides the Fleet Services Technician II. These include two (2) Parts Room Clerks and a Parts Room Driver. The two (2) Parts Room Clerks are responsible for the following duties:
 - .. Staff the parts room;
 - .. Check in deliveries and stock shelves;
 - .. Receive parts orders from Fleet Services staff;
 - .. Dispense parts per orders;
 - .. Locate and order parts not kept in stock;
 - .. Maintain data in CCG / FASTER with respect to parts.
 - .. Direct the daily activity of the Parts Room Driver.

The Parts Room Driver is responsible for the following duties:

- Pick up and deliver parts as needed;
- Stock inventory in the Parts Room; and
- Provide assistance and back up to Parts Room Clerks.

The project team utilized a number of approaches to “test” the reasonableness of the level of support staff within the Division. Each of these approaches suggests that the number of support staff should be reduced.

(1) The Number of Support Staff Versus Shop Floor Staff Is High In Comparison To A Number of the Division’s Peers.

In the Fleet Services Division / General Services Department, a total of twelve (12) positions currently support the work of eleven (11) Auto Mechanic / Lube Technician positions. These twelve (12) support positions comprise 52% of the total authorized positions in the Division. This is a higher proportion of support than most of the other cities that were included in the comparative survey. Examples are provided in the paragraphs below.

- Winston-Salem, North Carolina. Fleet Services in this city is authorized thirty-three positions. Twenty-five of these positions, or 76% of the total positions, are allocated to the maintenance and repair of equipment. This include team leaders or lead workers, master technicians, senior technicians, associate technicians, and attendants. The remaining eight (8) positions are allocated to support and consist of the five (5) parts staff, a fleet services supervisor, a clerical support position, the fleet manager, and an equipment operator-medium.
- Richmond, Virginia. Fleet Services is authorized fifty-six (56) positions. Forty-(40) of these positions, or 71%, are allocated to the maintenance and repair of equipment. This includes auto attendants, auto mechanics, body / fender repair specialists, fire equipment mechanics, and a welder. The remaining sixteen (16) positions are allocated to support and consist of an account specialist, administrative project analysts and project management analysts (4), auto mechanic supervisors (4), a clerical support position, a facilities maintenance manager position, three (3) fleet support positions, and two (2) managerial positions.

- Arlington, Virginia. The Equipment Bureau is authorized sixty-one (61) positions. Forty-two (42) positions, or 69%, are allocated to the maintenance and repair of equipment. This includes auto mechanics, heavy auto mechanics, welders, and trades workers. The remaining nineteen (19) positions are allocated to support and consist of seven (7) equipment stores staff, four (4) support services staff, and eight (8) managers and supervisors.
- Hampton, Virginia. Fleet Services is authorized twenty (20) positions. Eleven (11) positions, or 55%, are allocated to the maintenance and repair of equipment. This includes team leaders (or lead workers), Auto Mechanics, an auto welder, and a service associate assigned to preventive maintenance (oil and lubrication). Nine (9) positions are allocated to support including three (3) parts staff, three (3) service technicians / advisors, a vehicle / safety coordinator, an information systems specialist, and a fleet manager.

For three of the four local governments included in the comparative survey, the extent of support staff is substantially less than that of the Fleet Services Division / General Services Department.

(2) The Labor Cost Per VEU for the Fleet Services Division / General Services Department Is Higher Than Benchmarks.

The following table presents the results of the project team's analysis of the Division's repair costs.

Cost Factor	Benchmark	Fleet Services Division
Labor cost per VEU	\$400 to \$600	\$896
Parts Cost per VEU	\$300 to \$400	\$231
Sublet costs per VEU	\$100 to \$200	\$60
Total M & R cost per VEU	\$800 to \$1,200	\$1,187

The reason that the project team uses a range of costs in these benchmark assessments is to account for varying conditions that are difficult to quantify in a VEU analysis. These conditions include a fleet's operating environment, utilization levels, the age of the fleet, and the local market for labor, parts, and vendor services. With a generally favorable operating environment, somewhat lower than average fleet age,

relatively low priced vendor and parts services, and a higher priced labor market in the Alexandria area as opposed to other parts of the country, the project team believes that the middle of the range in terms of total maintenance and repair cost per VEU is an appropriate competitive cost benchmark for Fleet Services. As can be seen, Fleet Services' cost per VEU exceeds our benchmark by is at the upper end of the range overall. However, the parts cost and the sublet costs per VEU are below the range. This suggests that the fleet is relatively lower than average fleet age. The sublet costs are also are somewhat below the range, suggesting that Fleet Services accomplishes more repair work in-house than the average fleet.

However, the labor cost per VEU is almost 50% higher than the top end of the range. A number of factors are impacting Fleet Services' cost competitiveness in labor. Some of these factors are institutional and beyond the control of the organization including high salary and benefit costs. However, we do see a number of areas of opportunity for the Division to reduce fleet maintenance and repair costs and expect that implementation of the recommendations included in this report will enable the Division to deliver labor services at a cost that falls within the competitive benchmark. Specifically, the project team believes that reducing the extent of support staff and focusing on and measuring productivity (i.e. mechanic billable hours) and efficiency (i.e. mechanic performance against established time standards) can reduce labor costs per VEU.

* * * * *

Fleet Services faces two challenges. First, it has an insufficient number of mechanics based upon the application of vehicle equivalency units to the fleet

maintained by the Division. The second challenge is that labor costs for Fleet Services is high relative to benchmarks and reflects a high number of support staff. This assessment is based upon the comparative survey conducted as part of this study and on benchmarks used by the Matrix Consulting Group. Fleet Services should address these two challenges by reducing the number of support staff and shifting these staff resources to the shop floor to improve the level of service provided to its customers.

The number of support positions should be reduced by three positions and the three positions should be reassigned to the shop floor. The proposed reallocation and reclassification of these positions are presented in the paragraphs below.

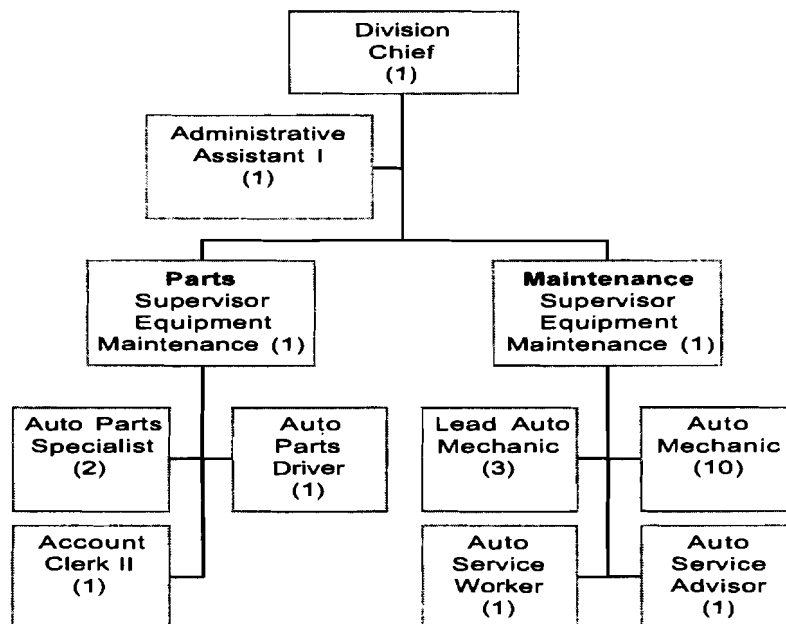
- **The Fleet Services Technician II that is functioning as the parts room supervisor should be reclassified as Lead Automotive Technician.** This position should be reassigned to the shop floor with responsibility for the maintenance and repair of equipment, and functioning as a lead worker for a team of Auto Mechanics. This would be a new classification. The proposed role for this position and its typical duties are presented in the exhibit at the end of this chapter. This position should be billable to work orders for approximately 65% of the available work hours, with the remaining 35% allocated to leading the work of a team of Automotive Technicians. The Lead Automotive Technician should be required to have ASE certification as a Master Mechanic.
- **The Fleet Services Technician II that provides backup to the Automotive Mechanics should be reclassified as Lead Automotive Mechanic.** This position should be reassigned to the shop floor with responsibility for the maintenance and repair of equipment, and functioning as a lead worker for a team of Auto Mechanics. This position should be billable to work orders for approximately 65% of the available work hours, with the remaining 35% allocated to leading the work of a team of Automotive Mechanics.
- **The Auto Service Advisor responsible for responsible for planning and scheduling preventive maintenance and repair services for the Shop should report to the Supervisor Equipment Maintenance responsible for supervision of the Automotive Mechanics and Automotive Service Worker.** This position plans and schedules the work performed by the Mechanics and Automotive Service Worker, runs monthly reports of vehicles due for service, notifies customers of service needs (via email, phone and / or interdepartmental mail), schedules service, coordinates unscheduled repairs, generates work orders and distributes work orders to the Mechanics and Automotive Service

Worker, etc., should report to the Supervisor Equipment Maintenance responsible for supervising the automotive mechanics and the automotive service worker. This supervisor is responsible for supervising the work performed on the shop floor. The supervisor should be able to supervise the planning and scheduling of the work performed by his staff.

- **The Supervisor Equipment Maintenance responsible for the supervision of the day-to-day operations of the Service Unit should be assigned responsibility for supervision of the Parts Room.** One position, the Auto Service Advisor, should be capable of fulfilling the responsibility of planning and scheduling preventive maintenance and repair services for the shop. There is a need for supervision of the Parts Room. There is not a need for three first-line supervisors in Fleet Services given spans of control.
- **Reclassify the second Auto Service Advisor as a Lead Automotive Mechanic.** This position should be reassigned to the shop floor with responsibility for the maintenance and repair of equipment, and functioning as a lead worker for a team of Auto Mechanics. This position should be billable to work orders for approximately 65% of the available work hours, with the remaining 35% allocated to leading the work of a team of Automotive Mechanics. The responsibility for the duties fulfilled by this position should be reassigned to other positions within the position. The proposed reassignment is proposed below.
 - The Account Clerk II should be responsible for generating monthly bills from FASTER to limited operating departments, including the Transportation and Environmental Services Solid Waste Division, the Alexandria Redevelopment and Housing Authority, Fire Department, School Department, DASH, and Sanitation, billing of overtime to departments for use of Fleet Services Division personnel on special projects, processing monthly motor pool, and rental car and fuel card billing.
 - The Administrative Assistant I position should be responsible for new vehicle tags and registration processing the calibration certification for Police Department patrol cars (e.g., speed enforcement devices), handling the Division's time and attendance reporting in Kronos, receiving and processing deadline vehicles for auction and maintaining vehicle files, including spare keys, title, etc.

The proposed plan of organization for the Fleet Services Division / General Services Department is presented below. This plan would provide a span of control of two for the Division Chief: two Supervisors – Equipment Maintenance. One of these supervisors

would be responsible for the supervision of the parts room and the other for the supervision of maintenance and repair of the fleet. The proposed plan would include three Lead Mechanics. This would provide a ratio of one Lead Mechanic to every three to four Mechanics / Auto Service Workers. This ratio should provide a workable size for three teams - each headed by a Lead Mechanic. One of these three Leads would be responsible for supervision of the team assigned to the proposed swing shift.



Recommendation #11: Establish a new classification of Lead Automotive Mechanic.

Recommendation #12: The Fleet Services Technician II functioning as the parts room supervisor should be reclassified as Lead Automotive Mechanic and assigned to maintenance and repair of fleet equipment.

Recommendation #13: The Fleet Services Technician II that provides backup to the Automotive Mechanics should be reclassified as Lead Automotive Mechanic and assigned to maintenance and repair of fleet equipment.

Recommendation #14: The Auto Service Advisor responsible for responsible for planning and scheduling preventive maintenance and repair services for the Shop should report to the Supervisor Equipment Maintenance responsible for supervision of the Automotive Mechanics and Automotive Service Worker.

Recommendation #15: The Supervisor Equipment Maintenance responsible for the supervision of the day-to-day operations of the Service Unit should be assigned responsibility for supervision of the Parts Room.

Recommendation #16: Reclassify the second Auto Service Advisor as a Lead Automotive Mechanic and assign the incumbent to maintenance and repair of fleet equipment.

5. FLEET MANAGEMENT SERVICES IN THE FIRE DEPARTMENT SHOULD BE CONSOLIDATED IN THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT, BUT NOT THE RECREATION, PARKS AND CULTURAL ACTIVITIES DEPARTMENT.

There are a number of different factors that should be evaluated in considering the consolidation of the maintenance and repair of the City's fleet. These factors are presented below.

- **Cost Savings.** Perhaps the most widely anticipated benefit of consolidation is the realization of cost savings as a result of eliminating redundant fleet maintenance resources and activities. For example, the fact that the Fleet Services Division / General Services Department, Fleet Services Section / Fire Department both occupy the same maintenance facility suggests that there is duplication of fleet maintenance capabilities and activities, and that cost savings therefore could be achieved by consolidating the maintenance operations of these two departments. Eliminating redundant Auto Mechanics (to the extent that there are any) is irrelevant to consolidation because staffing levels can always be streamlined without consolidating operations. The costs that can be reduced through consolidation are primarily those indirect costs associated with support and supervisory staff. The theory is that consolidation lowers the cost of providing fleet services by enabling these fixed costs to be spread over larger numbers of billable units of service produced – labor hours, parts costs, sublet activity, etc. That is, consolidation improves the utilization of indirect maintenance resources.
- **Management Improvements.** Fleet management is not the primary mission of any department within the City with the exception of the General Services Department. Many of these other departments find it difficult to invest in the development of sound maintenance management systems and controls. It is impractical to assign a professional, full-time fleet manager to a small fleet of a dozen or so vehicles or a relatively small number of equipment.
- **Service Improvements.** Consolidating the maintenance and repair activities of a fleet under a single department often leads to improvements in service delivery to

the end user. Consolidation has the potential to significantly improve the management of maintenance activities by providing other departments with access to maintenance management capabilities which they otherwise would be unable to afford such as a fleet management information system, costly equipment, professional management, proactive parts management, etc.

One of the principal causes of resistance to fleet maintenance consolidation is the belief that the attenuation of lines of communication between fleet users and fleet maintenance providers impairs service effectiveness by making it more difficult for the former to convey their wishes and desires to the latter and to hold the latter accountable for their responsiveness to these demands. It is entirely understandable for fleet users to want to exert direct control over the care and upkeep of their vehicles and equipment. Indeed, this desire usually is a sign of the seriousness with which an agency views its service delivery responsibilities and its appreciation of the importance of controlling the resources on which effective service delivery depends.

However, effective service level agreements and performance monitoring and reporting can go a long way in satisfying customer concerns and managing expectations. Service level agreements can establish repair priority levels, repair turnaround targets, hours of operation, etc.

- (1) The Fleet Services Division / General Services Department Should Immediately Assume Responsibility For The Maintenance And Repair Of The Light And Medium Equipment Assigned To The Fire Department, and Assume Responsibility For the Maintenance and Repair of Fire Apparatus When the Fleet Maintenance Supervisor Position in the Fire Department is Vacated Through Attrition.**

At present, the Fleet Services Section / Fire Department is authorized four staff for the maintenance and repair of its fleet. The four (4) staff includes a Fleet Maintenance Supervisor and three (3) Automotive Mechanics. The staff is responsible for maintaining a fleet of light and medium equipment as well as fire apparatus.

The Fleet Services Section currently has three (3) Mechanics to maintain 255.5 VEU's or one (1) mechanic for every 85 VEU's.

The project team recommends that the Fire Department continue to maintain and repair fire apparatus in the short-term, but that the responsibility for the maintenance and repair of sport utility vehicles, sedans, vans, and pickup trucks be reallocated to the Fleet Services Division / General Services Department immediately (along with an Automotive Mechanic). Once the Fleet Maintenance Supervisor position in the Fire Department is vacated through attrition, the responsibility for the maintenance and repair of fire apparatus should be transferred to the Fleet Services Division / General Services Department. The Fleet Services Supervisor position should be eliminated at that time.

There are a number of benefits resulting from this consolidation.

- **Cost savings.** The consolidation of the responsibility for the maintenance and repair of sport utility vehicles, sedans, vans, and pickup trucks to the Fleet Services Division / General Services Department would also require the transfer of an Automotive Mechanic. Two Automotive Mechanics are more than sufficient for the maintenance and repair of engine pumpers, aerial trucks, and medic units. With the transfer of the Automotive Mechanic to Fleet Services Division / General Services Department, a full-time Fleet Maintenance Supervisor for the Fire Department's Fleet Services Section would be unnecessary. The span of control, even at the present time, is narrow. However, one of the two remaining Automotive Mechanic's should be reclassified as a Lead Automotive Mechanic.
- **Enhanced fleet management.** Fleet management is not the primary mission of the Fire Department. The Fleet Services Section / Fire Department cannot afford the level of support provided to customers by the Fleet Services Division / General Services Department such as service writers, secretarial and accounting clerical support, a full-time Division Chief, etc. The move toward centralization can be traced to the increasing complexity and cost of fleet management endeavors over the last 20 years or so. During this period, developments in such areas as information technology, human resources management and professional development, risk management, regulation of environmental protection and occupational safety and health, and automotive technology have essentially changed the definition of "effective" fleet management, making it

prohibitively expensive for many small, independent fleet management organizations to keep up. In short, the complexity of fleet management today produces significant economies of scale that often can be captured only through collective effort. The benefits associated with centralized ownership of vehicles/equipment are often not as easy to recognize for most fleet customers. Department managers do not like to give up "ownership" of their fleet of vehicles and equipment for fear of decreased flexibility and increased bureaucracy. This, however, is not the case. Responsibility for arranging preventive maintenance inspections, performing repairs, planning replacement, maintaining a right-sized fleet, monitoring utilization, and standardizing the fleet are all management issues that can best be attended to when the fleet is centrally managed.

- **Service Improvements.** With the reallocation of responsibility for the maintenance and repair of sport utility vehicles, sedans, vans, and pickup trucks to the Fleet Services Division / General Services Department, the remaining Automotive Mechanics in the Fire Department can concentrate their attention on engine pumpers, aerial trucks, and medic units.

It is entirely understandable for the Fire Department to want to exert direct control over the care and upkeep of their vehicles and equipment. Indeed, this desire usually is a sign of the seriousness with which the Department views its service delivery responsibilities and its appreciation of the importance of controlling the resources on which effective service delivery depends.

Effective service level agreements and performance monitoring and reporting can go a long way in satisfying these concerns and managing expectations.

Annual Cost Decrease	Amount
Eliminate the Fleet Services Supervisor position in the Fire Department through attrition.	\$100,500

Recommendation #17: The responsibility for the maintenance and repair of Fire Department sport utility vehicles, sedans, vans, and pickup trucks should be reallocated to the Fleet Services Division / General Services Department in the short-term. An Automotive Mechanic position in the Fleet Services Section / Fire Department should be transferred from the Fire Department to the Fleet Services Division / General Services Department upon the reallocation of this responsibility. The Fleet Services Supervisor position in the Fire Department should be eliminated through attrition. One of the two remaining Automotive Mechanics within the Fire Department should be reclassified to Lead Automotive Mechanic upon the elimination of the Fleet Services Supervisor position. When the Fleet Services Supervisor position is vacated through attrition, responsibility

for the maintenance and repair of fire apparatus should be reallocated to the Fleet Services Division / General Services Department along with the remaining Automotive Mechanic / Lead Automotive Mechanic positions.

(2) The Fleet Services Division / General Services Department Should Be Responsible For The Maintenance And Repair Of Light Equipment.

There are 200 pieces of light equipment maintained by the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department. This includes mowers, snow blowers, weed-eaters, and other two-cycle motors. This section is currently staffed with three (3) Technicians or two more than required for meeting service requirements. The number of VEU's represented by this fleet amounts to 78. This would indicate the need for one (1) Technician. The project team recommended the elimination of two Assistant Mechanic positions through attrition.

The problems with providing one Auto Mechanic in an independent shop are vacancies in the position, leave, peaks in workload that exceed capacity of the one position, etc. The responsibility for maintenance and repair of the light equipment assigned to the Recreation, Parks, and Cultural Activities Department should be transferred to the Fleet Services Division / General Services Department.

Recommendation #18: The responsibility for the maintenance and repair of the mowers, snow blowers, weed-eaters, and other two-cycle motors in the Recreation, Parks and Cultural Activities Department should be consolidated with the Fleet Services Division / General Services Department. The location at which the maintenance and repair of light equipment assigned to the Recreation, Parks and Cultural Activities Department occurs should be reassigned to the Fleet Services Division / General Services Department. The Auto Mechanic position assigned to the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should be reallocated to the Fleet Services Division / General Services Department. The pickup truck assigned to the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department - #7537 - should be reassigned to the Fleet Services Division / General Services Department. The parts budget for this light equipment should be transferred from the Recreation, Parks and Cultural Activities Department to the Fleet Services Division / General Services Department.

Exhibit 4 (1)

**Proposed Classification Description for
Lead Automotive Mechanic**

Definition:

Leads, oversees, reviews and participates in the more complex and difficult work of staff responsible for performing a variety of skilled duties involved in performing minor and major repairs to and maintaining automobiles, trucks, tractors, motor sweepers, and other heavy and light equipment; ensures work quality and adherence to established policies and procedures; oversees and participates in inspecting, diagnosing, overhauling, repairing, and adjusting engines, transmissions, and related vehicle systems and components; oversees and participates in servicing and performing preventive maintenance duties on a variety of vehicles and equipment; and maintains a variety of records including City vehicle repair and inventory documents.

This is the advanced journey level class in the Automotive Mechanic series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed and the complexity of duties assigned. Employees perform the most difficult and responsible types of duties assigned to classes within this series including providing lead supervision to assigned staff. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility.

Typical Duties:

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Leads, plans, trains, and reviews the work of staff responsible for the mechanical repairs of automobiles, trucks, buses, tractors, motor sweepers, and other heavy and light equipment; schedules work assignments and inspects completed work; participates in performing the most complex work of the unit including engine overhauls and complex mechanical repairs of emergency vehicles and equipment, as well as major mechanical defects; ensures compliance with applicable rules, policies and procedures.
2. Participates in the selection and training of mechanic shop personnel; assumes responsibility for motivating and evaluating assigned personnel; provides necessary training; initiates discipline procedures as appropriate.
3. Supervises the use, care and operation of a variety of mechanical repair equipment including machine lathe, grinders, sanders, and welding equipment.

Exhibit 4 (2)

4. Verifies the work of assigned employees for accuracy, proper work methods, techniques and compliance with applicable standards and specifications; ensures adherence to safe work practices and procedures; enforces all safety regulations in the shop.
5. Oversees and participates in performing preventive maintenance inspections including tune-ups, frame and chassis lubes, oil and filter changes, inspections of vehicle or equipment drive trains, tires, body, engines, chassis components, and hydraulic systems.
6. Oversees and participates in overhauling engines, transmissions, clutch assemblies, differentials, carburetors, fuel injection systems, hydraulic valves and pumps, transfer pump assemblies and generators.
7. Oversees and participates in removing, repairing and reinstalling external engine components such as belts, alternators, water pumps, power steering pumps, radiators, injection pumps, vacuum pumps and miscellaneous filters.
8. Oversees and participates in performing diagnosis, repair and installation of vehicle electrical systems to include batteries, charging systems, aftermarket components, lighting systems, computer system components and switches such as relays, remote switching systems and solenoids; troubleshoots and repairs complex electrical circuits as necessary.
9. Oversees and participates in installing emergency equipment in new city vehicles including light bars, alarms, computer mounts, spotlights, etc.
10. Oversees and participates in removing, repairing and installing chassis or frame components to include shocks, struts, spindles, bushings, brake assemblies such as drums, rotors, wheel and master cylinders, fuel tanks and steering components.
11. Oversees and participates in performing diagnosis, repair and installation of vehicles hydraulic systems to include pumps, valves, hoses, cylinders, tanks and filter systems.
12. Oversees and participates performing fabrication and gas welding duties from free hand to pattern type components.
13. Authorizes mechanics for emergency repair work in the field; participates in the field as necessary.
14. Coordinates contract repairs with vendors as necessary; reviews estimates; approves work to be done.
15. Establishes, maintains and monitors a regular preventive maintenance program for all equipment and vehicles.
16. Develops schedules and methods for performing assigned duties; maintains appropriate work records and documents, which may include time sheets and work orders; inputs work orders into computer; prepares statistical and/or analytical reports on operations as necessary.

Exhibit 4 (3)

17. Estimates time, materials and equipment required for jobs assigned; requisitions materials as required; distributes parts as necessary.
18. Responds to inquiries in a courteous manner; provides information within the area of assignment including explaining mechanical procedures; resolves complaints in an efficient and timely manner.

4. CUSTOMER SERVICES

4. CUSTOMER SERVICES

This chapter presents opportunities to improve the customer services of the City's fleet focusing on the following areas:

- The use of service agreements between the divisions or sections that provide maintenance and repair services and their customers – the operating departments.
- The current satisfaction of the customers of the divisions or sections with its services.
- The definition of goals and objectives for the division regarding the provision of customer service including the use of customer guarantees.
- The tools the divisions or sections utilize to make it easy for its customers to do business with the division.
- The extent of information the division provides to its customers regarding the costs of the services provided by the division.

There are a number of measures that can be taken to better serve customers.

These measures are identified within the sections below.

1. RESPONDENTS TO A CUSTOMER SATISFACTION SURVEY FOR THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT EXPRESSED SATISFACTION WITH MANY SERVICES, BUT IDENTIFIED A NUMBER OF CONCERNS.

A customer satisfaction survey was conducted of managers and supervisors in the larger City departments including the Police Department, Recreation, Parks and Cultural Activities Department, and the Transportation and Environmental Services Department. A total of twenty-four responses were received. With two of these three departments, managers summarized the responses from their immediate subordinates in one questionnaire.

The following sections summarize the responses.

(1) Respondents Cited a Number of Positive Aspects As Well As a Number of Opportunities of Improvement.

In reviewing the responses to the quantitative responses to the first section of the customer satisfaction questionnaire, it is important to look at the pattern of responses for the entire group versus individual responses.

The chart below summarizes the overall distribution of responses to statements to which customers were asked to select a response. It should be noted that the chart does not include responses were the customers selected “no opinion” or did not make a selection.



The response pattern for all statements in the first section of the customer survey indicates customers overall had positive opinions. A total of 64% of the respondents agreed with the statements (either “agree” or “strongly agree”), and 36% disagreed with the statements (either “disagree” or “strongly disagree”).

(2) Respondents Strongly Agreed With Five Statements.

A review of the responses to the statements provided in the first section of the customer survey shows that there were five statements to which customers clearly agreed with. At least 60% of respondents selected “agree” or “strongly agree” in response to the statement presented below.

- Question #1 – 90% of respondents agreed that the level and frequency of preventive maintenance of their vehicles was adequate to keep them operating safely and effectively.
- Questions #2 – 77% of respondents agreed that Fleet Services does a good job of diagnosing and fixing the problems with their vehicles when they are brought in for repair, 19% disagreed.
- Question #7 - 84% of respondents feel that the Fleet Services staff is courteous and helpful in responding to requests for scheduling and repairs.
- Question # 9 – 87% of respondents felt that the Fleet Services hours of operation were convenient. – the hours Fleet Services were open for business - were convenient to us.
- Question #13 - 61% of respondents said that the services provided by Fleet Services met their expectations.

(3) Respondents Had Mixed Opinions Regarding Nine Statements.

There were nine statements to which respondents had mixed opinions. These statements are presented below.

- Question # 3 – 55% of respondents said they were satisfied with the services provided by Fleet Services for the maintenance, repair, and replacement of equipment, while 42% were not satisfied.
- Question #4 – 58% of respondents felt that Fleet Services was effective at understanding and completing requests for repairs without having to bring vehicles back for a second time, 35% were not satisfied.
- Question #5 – 54% of respondents felt that Fleet Services was extremely helpful in working with them to resolve problems with their vehicles, while 45% were unsatisfied.

- Question #6 - 54% of respondents agreed that they receive timely notice when the repair or preventive maintenance of their vehicles is completed, while 45% disagreed.
- Question #8 – 46% of respondents felt that Fleet Services had a timely response to emergency road calls, while 48% had no opinion.
- Question #10 - 49% of respondents agreed that Fleet Services consistently complete the repair and preventive maintenance in accordance with their promised completion time, while 41% disagreed.
- Question #11 - 55% of respondents were satisfied with the turnaround time for completion of repairs and preventative maintenance, while 45% were not satisfied.
- Question #12 – 34% of the respondents agreed with the statement that Fleet Services consults with them in preparing specifications for replacement vehicles for their division / department. 13% disagreed with the statement and 54% had no opinion.
- Question #13 – 50% of the respondents agreed with the statement that services provided by Fleet Services met their expectations. 41% disagreed with the statement.

2. RESPONDENTS TO A CUSTOMER SATISFACTION SURVEY FOR THE FLEET SERVICES SECTION / FIRE DEPARTMENT EXPRESSED SATISFACTION WITH ALL OF THE SERVICES.

A customer satisfaction survey was conducted of managers and supervisors in Fire Department. A total of seven responses were received.

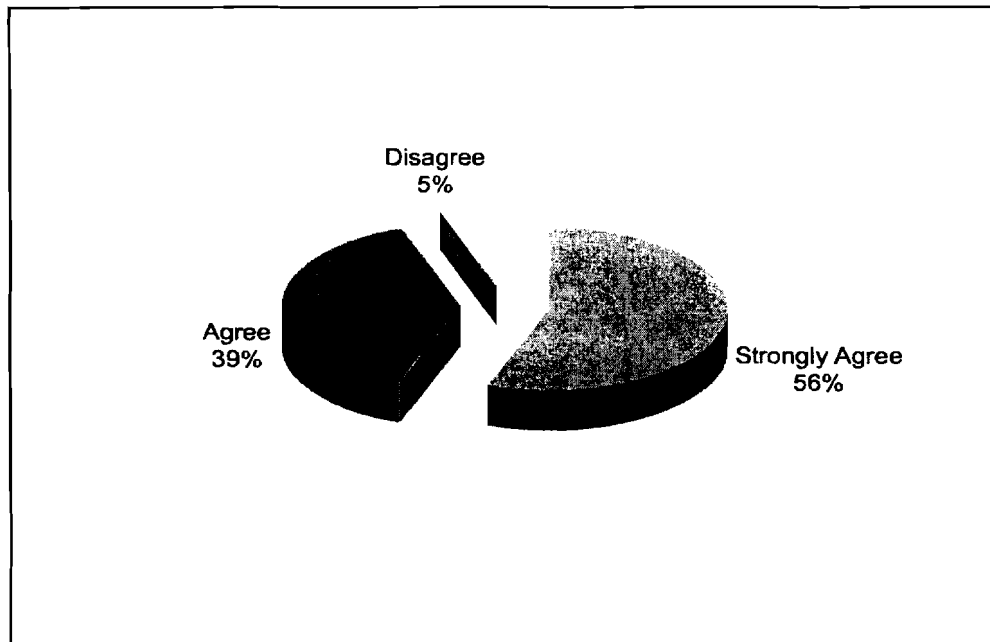
The following sections summarize the responses.

(1) The Majority of Respondents Cited Only Positive Aspects

In reviewing the responses to the quantitative responses to the first section of the customer questionnaire, it is important to look at the pattern of responses for the entire group versus individual responses.

The chart below summarizes the overall distribution of responses to statements to which customers were asked to select a response. It should be noted that the chart

does not include responses were the customers selected “no opinion” or did not make a selection.



The response pattern for all statements in the first section of the customer survey indicates customers overall had positive opinions. Respondents agreed with 95% of the statements (either “agree” or “strongly agree”), and 5% disagreed with the statements (either “disagree”).

Not one of the questions received more than one respondent of the seven respondents disagreeing. In the fourteen questions, there were only five responses that disagreed with the statement.

3. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD UTILIZE CCG / FASTER TO ENHANCE CUSTOMER SERVICE.

CCG / FASTER boasts two unique features that constitute it as a very powerful customer service tool.

- It can automatically generate an e-mail to notify a customer when his/her equipment is ready; and

- Customers can access their fleet equipment and repair information on the Internet, any time.

CCG / FASTER has a module known as the FASTER Service Center (FSC) and Work Order E-Request (WOER). FSC allows the Division to provide information electronically to the Division's customers. WOER allows the customer to electronically pass information to the Division.

The FSC should be established as a web page on the Division's web site. FSC allows non-FASTER users to view FASTER information from any personal computer with access to the web site. The customer is able to view equipment one piece of equipment at a time. This capacity is customizable, and is available to customers at no additional cost from CCG / FASTER. The customer can inquire by equipment number of license number, review equipment information, check meter readings, review open work orders, the last preventive maintenance performed, and the preventive maintenance schedule.

The WOER allows the customer to communicate directly with the Division. Any non-FASTER user can send a service request, allows Auto Service Advisors to manage and schedule requests, and is also and is available to customers at no additional cost from CCG / FASTER. Using WOER allows customers to make a request through the WERequest web page, which generates a new service request in the Shop Floor Manager module of CCG / FASTER. The Division can then process this request.

The Fleet Services Division / General Services Department should utilize these aspects of CCG / FASTER to enhance customer service.

- **The liaison to the Fleet Services Division / General Services Department in each major department should be provided on-line access to CCG /**

FASTER. CCG / FASTER contains a number of on-line modules and reports that could be utilized to answer questions from their own departmental managers and supervisors regarding the services provided by the Fleet Services Division / General Services Department.

- **CCG / FASTER should be utilized to e-mail operating departments the preventive maintenance schedule and enable managers and supervisors to monitor preventive maintenance and identify equipment overdue for preventive maintenance.** CCG / FASTER has the capacity to e-mail operating departments when their vehicles are due for scheduled preventive maintenance. This e-mail capacity should be utilized to notify customers when their vehicles are scheduled for preventive maintenance.

Recommendation #19: Provide each liaison to the Fleet Services Division / General Services Department in major operating departments with access to CCG / FASTER.

Recommendation #20: CCG / FASTER should be utilized to e-mail operating departments the preventive maintenance schedule, when their vehicles are ready to be picked up after preventive maintenance or a repair has been completed.

4. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD DEVELOP AND ADOPT SERVICE LEVEL AGREEMENTS WITH ITS MAJOR CUSTOMERS.

Good customer service management stems from an acute sensitivity to the needs and concerns of fleet users, and manifests itself in a set of communication, decision-making, reporting, and feedback processes which encourage fleet users to actively participate in the management, and not simply the use, of vehicles and equipment.

A clear understanding of the needs and concerns of customers is also critical to effectively running a fleet management organization. The understanding by the Fleet Services Division / General Services Department of its customers' needs should not be based solely on informal communication. The lack of a formal customer communication infrastructure can limit its ability to quickly revise its service practices to keep pace with changes in its customers' service needs. Relevant information may be lost or misinterpreted if communicated only through informal channels. In addition, the lack of

a formal communication process can prevent the Fleet Services Division / General Services Department from gathering consistent information with which to evaluate customer satisfaction with its services.

One way to improve customer communication and relations is through the development of detailed service agreements. These agreements should include a description of service procedures, prices and billing procedures, repair priorities, repair authorization limits, performance standards, contact persons, and customer responsibilities. The agreements provide customers with a better understanding of the range of services offered by the fleet services organization and how to access these services. They also establish a clear understanding of how the fleet organization's performance should be judged.

A sample service level agreement is presented in the appendix.

Recommendation #21: The Fleet Services Division / General Services Department should develop and adopt service level agreements with its major operating departments that it serves.

5. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT, FLEET SERVICES SECTION / FIRE DEPARTMENT, AND THE FLEET SERVICES SECTION / RECREATION, PARKS AND CULTURAL ACTIVITIES DEPARTMENT SHOULD DEVELOP PERFORMANCE MEASURES AND REPORT ON THEIR ACCOMPLISHMENT TO THEIR CUSTOMERS.

Performance measures enable a fleet management organization to answer the question, "How do we know whether we are doing a good job?" Many organizations simply focus on budgetary performance. Performance measures can:

- Emphasize fleet management strengths (prove fleet management is doing a good job);
- Identify areas where fleet management needs to improve;
- Help fleet management achieve future performance improvement; and

- Help fleet management make an objective case for more (or *fewer*) resources.

If a fleet organization can't communicate its performance to top management, there is a significant danger that management will not understand the overall value of the services being provided.

Performance measures and reports are not just for upper management. They are also important tools to communicate with fleet "customers" as well to improve communication with its customers and to demonstrate the value of the services that it provides.

Fleets can usually use the following categories to begin defining specific performance measures and reports:

- Cost;
- Quality of Service;
- Timeliness of Service;
- Customer Satisfaction;
- Safety;
- Regulatory Compliance;
- Fleet Utilization; and
- Fleet Appearance.

Top management typically needs high-level information which can impact overall organizational performance. Customers will probably care more about the timeliness and quality of service they receive ("I want my vehicle fixed quickly and correctly"). Employees of the Fleet Services Division need to know what people think of their work (quality, timeliness, customer satisfaction).

The City has initiated a Managing for Results Initiative. This includes the development and refinement of performance measures, the reporting of results versus these measures, etc. However, a review of the measures developed by the Fleet Services Division / General Services Department indicates that, in large measure, these measures are output or workload, and efficiency. The Division needs to expand the extent of measures for service quality such as the comeback rate or the preventive maintenance compliance rate.

A description of proposed additional performance measures for the Fleet Services Division is presented in the appendix.

Recommendation #22: The Fleet Services Division / General Services Department, the Fleet Services Section / Fire Department, and the Fleet Services Section / Recreation, Parks And Cultural Activities Department should develop performance measures and report on a quarterly basis their accomplishment to their customers.

6. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT, FLEET SERVICES SECTION / FIRE DEPARTMENT, AND THE FLEET SERVICES SECTION / RECREATION, PARKS AND CULTURAL ACTIVITIES DEPARTMENT SHOULD PROVIDE INFORMATION TO THEIR CUSTOMERS ON A REGULAR ONGOING BASIS.

All fleet services organizations capture a vast amount of equipment data in their fleet management information systems.

Routine monthly information should be provided to middle managers within the City by the Fleet Services Division / General Services Department, Fleet Services Section / Fire Department, and the Fleet Services Section / Recreation, Parks and Cultural Activities Department regarding the costs for equipment maintenance, repair, and replacement as well as utilization. One of the goals of this reporting should be to heighten customer awareness of the cost and utilization of equipment so that they are

willing to evaluate alternatives. Without timely and useful information regarding the costs for equipment maintenance, repair, and replacement as well as utilization, such a process will not occur.

Standard reports provide some access to this data; however, ad hoc reports are often required to customize data retrieval to a particular issue that is being researched. Many fleet management organizations now use a standard ad hoc report writing program such as *Crystal Reports* to publish Intranet-based reports for their customers to access. This allows the users of vehicles to manage their equipment more effectively.

The Fleet Services Division / General Services Department, Fleet Services Section / Fire Department, and the Fleet Services Section / Recreation, Parks and Cultural Activities Department should make the generation, analysis, and distribution of management information regarding fleet operations one of their core fleet management services.

Recommendation #23: The Fleet Services Division / General Services Department, the Fleet Services Section / Fire Department, and the Fleet Services Section / Recreation, Parks and Cultural Activities Department should provide information to their customers on a monthly basis regarding the costs for equipment maintenance, repair, and replacement as well as utilization.

5. FLEET MAINTENANCE

5. FLEET MAINTENANCE

Fleet maintenance and repair are the most costly and labor intensive aspects of owning and operating a fleet of vehicles. Maintenance and repair processes have a significant impact on vehicle availability, reliability, safety, economy, and environmental integrity.

In evaluating fleet maintenance, a number of functional areas within maintenance management were reviewed. These functional areas are identified in the paragraphs below.

- Preventive maintenance or the planned inspection, testing and adjustment, and/or replacement of selected vehicle components, systems, and fluids at pre-defined time or usage intervals.
- Defect reporting and service writing or the process of defining problems that have been experienced with a vehicle when it is brought into the shop and the corrective and preventive maintenance services that need to be performed.
- Warranty management or the identification of repairs to vehicles and parts that are covered by manufacturer, re-manufacturer, or vendor warranty and recovering the costs associated with performing warranty repairs.
- Work order assignment, control, and quality assurance or the processes of determining how many labor hours need to be allocated to completing a work order, assigning the work order to an Equipment Mechanic or Equipment Service Worker based on priority and workload, keeping track of the status of open work orders, and inspecting finished services and associated records for completeness before returning the vehicle to the user.
- Sub-let maintenance and repair services or the farming out of work to vendors and the procedures used to control the quality and costs of these services.
- Employee training or the provision of in-house training and participation in third party training programs.
- Professional certification or the encouragement and rewarding of employees to secure formal recognition for specific technical proficiencies from recognized industry organizations such as the National Institute for Automotive Service Excellence.

- Use of maintenance management information or the capturing of relevant data on maintenance activities and costs and using such data to develop an understanding of maintenance performance that cannot be obtained through first-hand observation and second-hand information.
 - The level of staffing within the fleet services for the three departments or the adequacy of staffing within the Division to maintain and repair the fleet and the efficiency with which that staff is utilized.
- 1. THE FLEET SERVICES DIVISION /GENERAL SERVICES DEPARTMENT UTILIZES A NUMBER OF THE BEST PRACTICES FOR FLEET MAINTENANCE.**

There are a number of strengths within the fleet service practices in the three departments. The strengths of fleet services include the following:

- “Loaner” sedans are available to customers of Fleet Services / General Services Department when they bring their sedans in for preventive maintenance.
- Fleet Services in the General Services Department and the Fire Department has established a formal preventive maintenance schedule that includes multiple echelons or progressive preventive maintenance. These echelons include preventive maintenance and safety inspection, preventive maintenance and annual safety inspection, and preventive maintenance and smog inspection.
- Preventive maintenance intervals are based upon both time and/or mileage in the three departments.
- Work or repair orders are utilized to record all maintenance activities in the three department.

At the same time, there are also opportunities for improvement. These opportunities include the following:

- Based upon a sample of 4,946 work orders in the Fleet Services Division / General Services Department, 69.8% of the work orders are completed within one workday, and 75.5% within two workdays. This is somewhat a lower level than the project team would expect to find.
- Shop business hours have not been set for customer convenience.
- Warranty recoveries are not actively pursued for both repairs and parts.

- Two-thirds of the Auto Mechanics in the Fleet Services Division / General Services Department have not yet received ASE certification. The Fire Department has not pursued Emergency Vehicle Technician certification for its three technicians, and only their supervisor has ASE certification.
- While the industry standard indicates that each fleet technician should bill 125 hours per month, the Fleet Service technicians bill approximately 99.42 hours per month on average. Four of the eleven technicians billed above 110 hours per month. Four of the eleven Auto Mechanics billed 90 hours or less during fiscal year 2006. The lowest average per technician was 60 hours per month.

The strengths of the City's fleet services practices provide a sound foundation for improvements.

2. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD EXPAND ITS WORK SCHEDULE TO INCLUDE A SWING SHIFT.

The comparative survey presented previously included an analysis of operating hours for other cities. These other cities, with the exception of Portsmouth, utilized swing shifts. The results of the comparative survey are presented in the table below.

City	Hours/Days of Operations
Arlington, VA	6:00 am-11:30 pm Monday to Friday and 7:00 am-5:00 pm on Saturday
Hampton, VA	7:00 am-11:00 pm Monday to Friday
Richmond, VA	Shop 1, 7:00 am-9:00 pm Monday to Friday. Shop 2, 7:00 am-3:30 pm Monday to Friday. On call service 24/7.
Portsmouth, VA	Shop 1, 7:30 am-4:00 pm. Shop 2, 7:00 am-6:00 pm.
Winston-Salem, NC	6:30 am to 11:30 pm

The data presented in the table are discussed in the paragraphs below.

- Arlington, Virginia operates its shop from 6:00 a.m. to 11:30 p.m. Monday to Friday and from 7:00 a.m. to 5:00 p.m. on Saturday.
- Hampton, Virginia operates its shop from 7:00 a.m. to 11:00 p.m. Monday thru Friday
- Richmond, Virginia operates two shops with a day shift and a swing shift that begin at 7:00 a.m. and end as late as 9:00 p.m.
- Portsmouth, Virginia operates two shops with largely a day shift with hours that begin at 7:30 a.m. and end at 6:00 p.m.

- Winston-Salem, North Carolina stays open until 11:30 p.m. Monday thru Friday.

There are a total of eleven (11) Auto Mechanics and one Lube Technician authorized for the Fleet Services Division / General Services Department. Four of these staff should be assigned to a swing shift. This swing shift should operate from 2:30 p.m. until 11:00 p.m. Monday through Friday. One of these four (4) technicians should be classified as a Lead Auto Mechanic. This new classification should be utilized to lead and participate in the work performed by the staff assigned to this shift.

To support these technicians, one of the staff assigned to parts in the Fleet Services Division / General Services Department should also be allocated to the swing shift.

Recommendation #24: The Fleet Services Division / General Services Department should implement a swing shift. Four (4) Automotive Mechanics should be assigned to the swing shift. One of these technicians should be classified as a Lead Auto Mechanic.

Recommendation #25: A new classification of Lead Automotive Mechanic should be established to lead and participate in the work of Auto Mechanics.

Recommendation #26: One of the staff assigned to parts in the Fleet Services Division / General Services Department should be allocated to the swing shift.

3. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD IMPROVE THE TURNAROUND TIME FOR REPAIR ORDERS.

Turnaround time represents the amount of time it takes the Fleet Services Division / General Services Department to restore a vehicle to service after it is brought into the shop for repair and / or maintenance. Turnaround time is a critical element in fleet evaluations as:

- The longer the turnaround time for repairs and maintenance, the larger the fleet and the greater the associated costs, as additional vehicles will be required to provide the necessary back-up for equipment out of service.

- The longer the turnaround time, the greater the likelihood mechanical staffing is inadequate, as vehicles will be idle longer periods as mechanics are busy elsewhere.
- The longer the turnaround time, the greater the level of customer dissatisfaction with the level of service provided by the Division.

To evaluate turnaround time, the consulting team examined approximately 4,946 work orders to determine elapsed time from when vehicle was brought in to when the repair and / or maintenance was completed. The table below presents the turnaround time associated with the work order sample.

Number of Days Required To Complete Work Order	Number of Work Orders	% of Total Work Orders
1 day or less	3,450	69.8%
2 days	283	5.7%
3 days	167	3.4%
4 days	165	3.3%
5 days or more	881	17.8%

Important points to note concerning the data contained in the table are presented below.

- 69.8% of the work orders were completed within one workday. The best management practice and an appropriate objective is 80% of all work orders being completed within one workday.
- 78.9% of the work orders were completed within three workdays. The best management practice and an appropriate objective is 90% of all work orders being completed within three workdays.

Implementation of the recommend expansion of work hours by the Fleet Services Division / General Services Department and the shifting of staffing from the shop office to the shop floor should enable the Fleet Services Division / General Services Department to address the gap between the existing level of service and the benchmark.

In addition, the Division should outsource repairs when unable to meet the work order guidelines presented above (80% of work orders completed within one workday

and 90% within three workdays). The analysis by the project team indicates that the level of expenditures for sub-let repairs per vehicle equivalency unit is \$60 per vehicle equivalency unit. The benchmark is \$100 to \$200 per vehicle equivalency unit. This reflects a fleet that is young relative to other fleets, but also reflects underutilization of vendors for repairs. This is to be encourages as long as the level of service provided by the Division meets objectives. At this point in time, however, the Division does not meet those targets. The Division should increase the level of use of vendors when it is unable to meet these objectives - 80% of work orders completed within one workday and 90% within three workdays.

CCG / FASTER provides a report that enables the Fleet Services Division to readily monitor this level of service: FSR0307 or FOR0307 – Fleet Work Order Activity

Recommendation #27: The Fleet Services Division / General Services Department should improve the level of service that it provides by increasing the number of work orders completed within one day and within three days to meet benchmarks and enhance customer satisfaction.

Recommendation #28: The Fleet Services Division / General Services Department should outsource repairs when unable to meet the work order guidelines presented above (80% of work orders completed within one workday and 90% within three workdays).

4. TECHNICIAN STAFFING SHOULD BE ADJUSTED IN TWO OF THE THREE FLEET SERVICE UNITS.

In order to make some high-level judgments regarding the amount of maintenance effort required to keep a fleet in good condition, the project team utilized an approach called Vehicle Equivalents (VE's). Each piece of equipment is compared to the average amount of maintenance effort that is required to keep an average sedan in a fleet in good repair. The amount of this maintenance effort is expressed as one Vehicle Equivalent (1 VE). Each general class of vehicles is then assigned a vehicle

equivalency that expresses the service effort required to maintain that vehicle as a multiple of fleet sedans. For example, the typical police patrol car (used 2 to 3 shifts per day) equates to 2.5 vehicle equivalents meaning that it takes about two and one-half times as much maintenance effort per year to maintain the average police patrol car as it does to maintain the average fleet sedan.

Thus, if one sedan is assumed to require 15 hours of direct maintenance and labor hours annually, and a patrol car require 2.5 times that effort (since it is 2.5 VE's), it would typically consume 37.5 hours of direct maintenance and repair effort annually. As with any standardized benchmarking tool, the information must be used judiciously. The benefit of using vehicle equivalents is its relative simplicity, and the fact that diverse types of vehicles and equipment can be compared using a common standard. The project team periodically "tests" these VE's based upon actual data from clients that have well-managed fleets, effective fleet management information systems, and effective equipment replacement programs. For example, in the recent analysis of the fleet of the City of Beverly Hills, California, the project team documented the amount of labor hours required annually to maintain fire apparatus. The results are presented below.

- Fire pumper – 26,001 to 33,000 GVW: 59.39 annual equipment mechanic labor hours for each pumper or the equivalent of 5 VE's;
- Fire pumper - >33,000 GVW: 71.43 annual equipment mechanic labor hours for each pumper or the equivalent of 6 VE's;
- Fire truck or aerial ladder - >33,000 GVW: 34.82 annual equipment mechanic labor hours for each pumper or the equivalent of 3 VE's.

These results either match or are slightly more or less than the VE's that the project team utilized for the fire apparatus in Alexandria.

The Insurance Services Office has rated the City of Beverly Hills, California a Class 1 fire department. The City has seven (7) fire pumpers and two (2) fire trucks or aerial ladders, and is authorized 91 full-time positions. The City's fire pumpers are young in age, averaging 2 years, but its fire trucks or aerial ladders average 14 years in age.

Vehicle equivalencies are a high level diagnostic tool to evaluate the relative level of maintenance effort for large groups of vehicles. They are not meant to apply separate values to individual vehicles.

This technique allows us to compare fleets of dissimilar size and composition. The vehicle equivalents have been derived, in part, from research originally conducted by the U.S. Air Force and other organizations, such as Stone and Webster and Utility Fleet Magazine. The National Association of Fleet Administrators has also published vehicle equivalents in suggesting an approach to evaluating of staffing for fleets.

(1) The Fleet Services Division / General Services Department Should Be Authorized An Additional Three (3) Auto Mechanics.

The Fleet Services Division / General Services Department is responsible for 1,745.35 VEU's. The project team's experience is that one VEU is equal to 12 to 15 labor hours per year and that mechanics generally can be expected to produce 1,456 hours of wrench-turning time each year (70% of 2,080 payroll hours). However, our analysis indicates that the average available time for the Divisions technicians is only 1,193 hours (labor hours actually charged to work orders). This is another issue discussed later in this chapter that must be addressed.

Given the age, composition, operating environment, and utilization of the City's fleet, the project team believes that the low-point of a benchmark range (12 hours per VE and 121 VEU's per technician) are appropriate benchmarks for the Division.

Applying this benchmark, the ratio of equipment to maintenance staff in the Division's shops is less than the benchmark, indicating that technician-staffing levels are below what is necessary to meet service requirements. Currently, the Division is authorized ten (10) full-time Auto Mechanics and one (1) Lube Technician. Based upon the application of the VEU's, the Division requires a little more than fourteen (14) Auto Mechanics / Lube Technicians to meet service requirements.

Recommendation #29: Increase the number of Auto Mechanics assigned to the shop floor for the Fleet Services Division / General Services Department by three (3) positions. The proposed adjustments to staffing in the Division presented in proposed plan of organization for the Division should address this need.

(2) The Level of Technician Staffing For the Fleet Maintenance Section / Fire Department Is Sufficient To Meet Service Requirements.

The table below presents a summary of the number of Vehicle Equivalent Units maintained by the Fleet Maintenance Section / Fire Department sorted by class. As the table indicates, the Fleet Maintenance Section / Fire Department is responsible for 255.5 VEU's with equipment ranging from compact SUV's to Aerial Fire Apparatus.

The Fire Fleet Division currently has three (3) Mechanics to maintain 255.5 VEU's or one (1) mechanic for every 85 VEU's. This would indicate that the Fleet Maintenance Section / Fire Department would need 2.1 Mechanics to meet service requirements.

Recommendation #30: Do not adjust the Auto Mechanic staffing assigned to the Fleet Maintenance Section / Fire Department.

(3) The Number of Technicians Authorized For The Recreation, Parks and Cultural Activities Department Should Be Reduced By Two (2) Positions Through Attrition.

The Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department is currently is authorized one (1) Mechanic and two (2) Assistant

Mechanics. These staff are responsible for the maintenance and repair of 200 pieces of light equipment such as weed eaters, chain saws, push mowers, weed trimmers, etc. and some medium equipment such as riding mowers. This inventory is presented in the table below.

Description	Count
Aerator	2
Air Compressor	3
Ball Field Machine	1
Boat Motor	1
Chain Saw	6
Combo	1
Edger	2
Edger Attachment	1
Field Line	6
Field Markers Ball Field	4
Heater Oil Fired	1
Heftee Lift	1
Leaf Blower	22
Lesco Seeder	1
Mower	10
Paint Striker	1
Plows	12
Power Washer	3
Riding Mower	20
Salt Boxes	10
Shop Back Blower	2
Shop Chain Blowers	12
Shop Generators	2
Small Boat Motor	2
Small Field Seeder	10
Snow Blower	15
Sod Cutters	2
Split Seeder Drum And Disc	1
Stick Edger	3
Top Dresser	1
Trash Pump	1
Trimmer Attachment	1
Vacuum	2
Weed Eater	36
Welder	2
Total Pieces of Equipment	200

There are 200 pieces of light equipment maintained by the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department. The number of VEU's represented by this fleet amounts to 78. This would indicate the need for one (1) Technician. This section is currently staffed with three (3) Technicians or two more than required for meeting service requirements.

Annual Cost Decrease	Amount
Two Assistant Mechanic positions authorized for the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should be eliminated through attrition.	\$119,500

Recommendation #31: Two Assistant Mechanic positions authorized for the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should be eliminated through attrition.

5. THE PARTS ROOM FOR THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD PROVIDE PARTS SERVICES AND STORAGE FOR THE FIRE DEPARTMENT.

The Fleet Services Division / General Services Department is authorized two (2) Parts Room Clerk positions, a Parts Room Driver position, an Account Clerk III position, and a Supervisory / Advisor position. The roles and responsibilities of these positions is presented in the table below.

Position	Auth.	Act.	Responsibilities
Supervisor Equipment Maintenance	1.0	1.0	• Reports to the Division Chief. • Responsible for managing the day-to-day activities of parts personnel. • Set thresholds in FASTER for automatic re-orders/ • Runs inventory reports to determine supply needs. • Orders parts. • Conducts periodic audits of the inventory. • Negotiates discounts and prices with vendors. • Provides assistance to the Maintenance Shop with respect to maintenance and repair work.
Account Clerk II	1.0	1.0	• Reports to the Supervisor Equipment Maintenance. • Primary responsibility for receipt and processing of the Parts Section's invoices. • Manages and monitors the Division's procurement card program. • Generates weekly reports on vendor payments. • Provides backup to Part Room Clerk's, as needed.
Parts Room Specialist	2.0	2.0	• Reports to the Supervisor Equipment Maintenance. • Responsible for staffing the parts room. • Checks in deliveries and stock shelves. • Receives parts orders from Fleet Services staff. • Dispenses parts per orders. • Locate and orders parts not kept in stock. • Maintain data in Faster with respect to parts. • Directs the daily activity of the Parts Driver.
Parts Room Driver	1.0	1.0	• Reports to the Supervisor Equipment Maintenance. • Responsible for pick up and delivery of parts as needed. • Stocks inventory in the parts supply room. • Provides assistance and back up to parts counter personnel.

If the Fleet Services Division / General Services Department was authorized the recommended fourteen (14) Auto Mechanics / Lube Technicians, the Division would have a ratio of approximately three and one-half (3.5) Auto Mechanic / Lube Technician positions for each parts technician position (excluding the Account Clerk II position).

The comparative survey obtained information regarding the ratio of Auto Mechanics / Lube Technicians to parts technician for fleets in other cities. The results from the comparative survey are presented in the table below.

CITY OF ALEXANDRIA, VIRGINIA
Management Study of Fleet Services

City	Auto / Lube Technicians	Parts Technicians	Ratio
Alexandria	14	4	3.5 to 1
Arlington	40	7	5.7 to 1
*Richmond	41	N / A	N / A
Portsmouth	21	3	7.0 to 1
Hampton	10	3	3.3 to 1
Winston-Salem	27	5	5.4 to 1
* Contract with NAPA			

Important points to note regarding the table includes the following:

- The average number of Auto Mechanic / Lube Technician positions to parts technician positions in the four other cities was 5.4. This ratio is 54% higher than that of the Fleet Services Division / General Services Department.
- Arlington has forty (40) Auto Mechanic / Lube Technician positions and seven (7) Parts Technician positions or a ratio of 5.7 Auto Mechanics / Lube Technicians to 1 Parts Technician.
- Portsmouth has twenty-one (21) Auto Mechanic / Lube Technician positions and three (3) Parts Technician positions or a ratio of 7 Auto Mechanics / Lube Technicians to 1 Parts Technician.
- Hampton has ten (10) Auto Mechanic / Lube Technician positions and three (3) Parts Technician positions or a ratio of 3.3 Auto Mechanics / Lube Technicians to 1 Parts Technician.
- Winston-Salem has twenty-seven (27) Auto Mechanic / Lube Technician positions and five (5) Parts Technician positions or a ratio of 5.4 Auto Mechanics / Lube Technicians to 1 Parts Technician.
- The Fleet Services Division / General Services Department, if the recommended increase in positions was authorized, would have fourteen (14) Auto Mechanic / Lube Technician positions and four (4) Parts Technician positions or a ratio of 3.5 Auto Mechanics / Lube Technicians to 1 Parts Technician.

For Fleet Services Division / General Services Department to meet the median, it would require one less parts technician. However, rather than reduce the number of parts technicians in the Fleet Services Division / General Services Department, the project team recommends that these staff also support the Fleet Services Section / Fire Department. These staff are located in the same facility as the Fleet Services Division /

General Services Department, in close proximity to the Parts Room. This support should include the procurement of parts based upon repair orders submitted by the Fleet Services Section / Fire Department, the pickup and delivery of parts from parts houses, and the processing of invoices.

With the support of the three Mechanics assigned to the Fleet Services Section / Fire Department, the ratio would approximate a ratio of 4.3 Auto Mechanics / Lube Technicians to 1 Parts Technician. While still lower than the median, this represents a more effective use of these staff.

One other factor militating against the reduction of parts technicians is the implementation of a swing shift by the Fleet Services Division / General Services Department. This will require the allocation of a parts technician to this shift.

Recommendation #32: The Fleet Services Division / General Services Department should provide parts procurement, pickup, delivery and invoice processing support the Fleet Services Section / Fire Department.

6. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD SET OBJECTIVES FOR CHARGEABLE HOURS BY ITS TECHNICIANS AND HOLD THEM ACCOUNTABLE FOR MEETING THOSE OBJECTIVES.

As noted earlier, benchmarks for chargeable hours per technician amount to 125 hours a month or 72% of their available work hours.

However, a review of actual hours charged to work orders in 2006 indicated that four of the eleven technicians charged an average less than 90 hours per month with one technician charging an average of 60 hours per month. Conversely, four technicians billed more than 110 hours, and one of these technicians billed over 138 hours per month. The table below presents a summary of the data.

Technician	Annual Labor Hours	Monthly Hours
Technician # 1	1,335.20	111.27
Technician #2	893.06	74.42
Technician #3	1,018.21	84.85
Technician #4	1,148.63	95.72
Technician #5	1,665.13	138.76
Technician #6	1,441.41	120.12
Technician #7	1,317.33	109.78
Technician #8	1,326.18	110.52
Technician #9	1,244.92	103.74
Technician #10	1,008.78	84.06
Technician #11	724.23	60.35
Total	13,123.07	99.42

Overall, an average of 99 hours was charged to work orders per technician per month or 79% of the benchmark.

The Fleet Services Division / General Services Department needs to establish a policy regarding labor reconciliation that requires the Supervisor Equipment Maintenance to review the monthly direct-billed hours report to ensure accountability for all technicians. This same policy should also require the Supervisor Equipment Maintenance to monitor adherence to these goals and report monthly to the Division Chief.

CCG / FASTER includes a report designed specifically to address this issue. This report - FSR0301 or FOR0301 - a Technician's Accountability report will provide the number of direct hours versus indirect hours per technician for any time frame selected.

Recommendation #33: The Fleet Services Division / General Services Department should set an objective of an average of 125 working hours charged to work orders per month per technician (this excludes leave).

Recommendation #34: The Supervisor Equipment Maintenance should review the monthly direct-billed hours report to ensure accountability for all employees, and report actual adherence to this objective to the Division Chief on a monthly basis.

7. THE CITY SHOULD EXPAND THE USE OF THE CCG / FASTER FLEET MANAGEMENT SOFTWARE TO INCLUDE THE FIRE DEPARTMENT AND THE RECREATION, PARKS AND CULTURE ACTIVITIES DEPARTMENT.

Currently, the Fleet Services Division / General Services Department utilizes a fleet maintenance management system known as CCG / FASTER. FASTER has a good reputation for being an effective analytical tool in the analysis of fleet management data. Effective summary reports and analysis is easy to acquire from a system such as this.

Recreation, Parks and Cultural Activities uses an in-house system known as MainTrak. While work order data such as labor and parts are being entered into the system, data and reports are difficult to retrieve from this system. Summary reports such as lifetime maintenance expenditures of equipment and mechanic utilization are not available through the use of this system. Reports, such as the ones noted above, are effective management tools, which should be being used on an on-going basis.

The Fire Fleet Maintenance Division uses a maintenance management system known as Q-Quest. The project team found it hard to determine the effectiveness of this particular maintenance management system because the Fire Department is currently not using the system in the manner for which it was intended. PM scheduling and work order data is not being entered into the system. In fact, work order data such as labor, parts, and sublet costs, have not been entered into the system in over a year and a half. This makes it virtually impossible to evaluate things such as mechanic utilization or equipment maintenance issues.

The one-time cost is \$2,000 per license with an ongoing \$400 per year for technical support per license.

Recommendation #35: The Fire Department and the Recreation, Parks and Cultural Activities Department should purchase licenses for CCG / FASTER. Two licenses should be acquired for the Fire Department and one license for the Recreation, Parks and Cultural Activities Department.

8. A MORE FORMAL WORK PLANNING AND SCHEDULING SYSTEM SHOULD BE INSTALLED FOR ALL THE FLEET SERVICES UNITS.

The Fleet Services Division / General Services Department, the Fleet Maintenance Section / Fire Department, and the Fleet Services Section / Recreation, Parks and Cultural Activities Department have or can have available a number of tools to plan and schedule the work of its technicians. This includes the planning and scheduling tools within CCG / FASTER, the fleet maintenance management system.

However, a number of steps need to be taken to enhance the planning and scheduling system in these three units.

(1) The Preventive Maintenance Schedule In Fleet Services Division / General Services Department Should Be Completed On A Weekly Basis.

Currently, preventive maintenance notifications are sent to departments by the Fleet Services Division / General Services Department notifying them that their equipment is due for preventive maintenance sometime in the following month. This creates a problem because departments may wait until the end of the month to bring their vehicles in for service. There is no way to predict the workflow for the Fleet Services Division / General Services Department when this occurs.

The Fleet Services Division / General Services Department should not just schedule a vehicle for preventive maintenance for a particular month; the vehicle should be scheduled for a particular week.

This would help the Division to more effectively manage its workload and equitably distribute this workload throughout the month. The accountability of

departments for working with the Fleet Services Division / General Services Department in bringing in their equipment during the week scheduled for preventive maintenance should be clarified in the service level agreements.

CCG / FASTER has the capacity to set up table codes that specify the preventive maintenance schedule. This capacity should be utilized to specify the specific week that equipment is scheduled for preventive maintenance. CCG / FASTER also has the capacity to E-mail customers that their equipment is due for preventive maintenance. The Fleet Services Division / General Services Department should utilize this capacity to E-mail customers the schedule for preventive maintenance of their equipment.

Recommendation #36: The Fleet Services Division / General Services Department should work with the departments to develop a weekly preventive maintenance schedule that schedules preventive maintenance evenly across the month and assigns each vehicle to a particular week of the month.

Recommendation #37: Specify the weekly schedule for each piece of equipment within CCG / FASTER within the table codes.

Recommendation #38: Use the E-mail capacity of CCG / FASTER to notify customers that their equipment is due for preventive maintenance.

(2) The Fleet Services Division / General Services Department, the Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department Should Utilize the Capabilities of CCG / FASTER to Plan and Schedule the Work of Its Technicians.

There are a number of issues pertaining to the effectiveness of supervision of technicians in the Fleet Services Division / General Services Department, the Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department. These issues can be summarized as follows:

- The supervisors do not directly measure the workload and productivity of the

staff.

- The Division and Sections do not have formalized system of priorities for the scheduling of repairs.

These issues directly impact staff workload and productivity. To resolve these problems, the Fleet Services Division / General Services Department, the Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should establish a formal scheduling system. More specifically:

- The priorities of its equipment repairs should be clearly established to ease the loading of work within the shops. These priorities should be written into the repair order itself. These priorities should be distributed to key managers in operating departments as well.
- Time guidelines should be established for the work to be accomplished. These guidelines could be based on manufacturer allowed shop time (for example, as shown in the annual Parts and Time Guide) and should cover the majority of work performed by staff. These time guidelines should be written on the repair order itself, as a method for management and supervisors within the Division to communicate their performance expectations. Auto Mechanics and the Auto Service Worker should be held accountable for meeting or closely approximating these guidelines on a consistent basis. CCG / FASTER readily supports the development of these estimates as well. Reports FSR0321 or FOR0321 document the average hours and dollars for repairs. These reports will help establish labor standards for the repairs by providing the average amount of time to complete the repair. These are sorted by class code.
- The Auto Services Advisor in the Fleet Services Division / General Services Department should maintain a "to do" list of repairs on equipment which can be scheduled for periods of low workloads. CCG / FASTER has a report - FSR0304 or FOR0304 (Deferred Repairs) that the Auto Services Advisor should run every week to keep track of all the deferred repairs and establish this "to do" list for the Supervisor Equipment Maintenance. Once a week, the Auto Services Advisor would meet with the Supervisor Equipment Maintenance for maintenance and repair and the Supervisor Equipment Maintenance for the Parts Room to go over the list and make sure they are aware of the "to do" list. The Auto Services Advisor should be responsible for the maintenance of this list of deferred repairs through the Shop Floor Manager Applet in CCG / FASTER. Since the Auto Services Advisor creates the work orders and receives calls from customers, this should be a good fit.

- The Auto Services Advisor should track workload and backlog for use by the Supervisor Equipment Maintenance to assure each Auto Mechanic and the Auto Service Worker has sufficient work, important repair priorities are addressed in their proper time frame, and to assign work as it arrives.

The Auto Mechanics and the Auto Service Worker should have backlogs of scheduled work. CCG / FASTER should be utilized to develop a formal work schedule for each Auto Mechanic and the Auto Service Worker. When an Auto Mechanic or the Auto Service Worker completed one job, they could access CCG / FASTER to determine their next job, even in the absence of the Supervisor Equipment Maintenance. The Supervisor Equipment Maintenance should monitor the actual time that the Auto Mechanics and the Auto Service Worker take to accomplish repairs versus the time guidelines established using CCG / FASTER.

In essence, the consulting team is proposing a scheduling system known as "shop loading", in which each staff is assigned work with clear expectations as to the time required to perform the work. The Auto Services Advisor would continue to act as a "service writer", pulling up the history of the equipment on CCG / FASTER; completing the repair order by identifying the tasks to be performed along with estimated repair times; assigning a priority to repair order; and reviewing the shop workload and recommending the assignment of the repair order to a specific Auto Mechanic or the Auto Service Worker. The Supervisor Equipment Maintenance should assign the work and review the work completed to assure quality including a road test, if appropriate, and comparing actual repair times with the estimated repair time and determining the reasons for variances.

Recommendation #39: Use CCG / FASTER to develop time guidelines for completing repair and maintenance of equipment.

Recommendation #40: Fleet Services Division / General Services Department, Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should develop formal written priorities for repair and maintenance of equipment and adopt these priorities in a formal policy.

Recommendation #41: The Fleet Services Division / General Services Department, Fleet Maintenance Section / Fire Department, and the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should develop and install a more formal work planning and scheduling system using CCG / FASTER.

(3) The Supervisor Equipment Maintenance in the Fleet Services Division / General Services Department Should Be Held Accountable For Implementation and Supervision of the Preventive Maintenance Scheduling System.

From the time period from October 19, 2005 until October 19, 2006, the Fleet Services Division / General Services Department had a preventive maintenance compliance rate of 46%. This is a problem of vehicles being late for preventive maintenance by a median of two weeks.

The Supervisor Equipment Maintenance responsible for maintenance and repair in the Fleet Services Division / General Services Department should be clearly assigned responsibility for managing the preventive maintenance program for the Division. The Supervisor Equipment Maintenance should direct the Auto Services Advisor, recommended to report to the Supervisor Equipment Maintenance, to complete the tasks presented below to improve the scheduling of the preventive maintenance program.

- Based on CCG / FASTER, develop a weekly preventive maintenance schedule to assure all vehicles requiring preventive maintenance in a particular week are brought in on a timely basis.
- Send out weekly e-mail notices to customers using CCG / FASTER notifying them that preventive maintenance is needed on their vehicle with a date the vehicle should be brought in.

- Monitor the weekly schedule to make sure vehicles get in for preventive maintenance. If vehicles are not brought in as scheduled, send overdue notices to the appropriate division head. If a response is not received, follow-up with the appropriate department head.
- Assign a preventive maintenance work order and preventive maintenance checklist to the appropriate Mechanic or Mechanic Assistant. Note any special instructions based on the vehicle's maintenance history.
- Periodically conduct quality control checks on work performed by Auto Mechanics and the Auto Service Worker to make sure preventive maintenance is completed properly.
- Review the completed preventive maintenance work order and preventive maintenance checklist.
- Close-out the preventive maintenance work order.
- Notify the division that the vehicle is ready for pick-up using E-mail.

The Supervisor Equipment Maintenance in the Fleet Services Division / General Services Department should to be held accountable for playing an active, involved role in supervising the preventive maintenance program of the fleet.

Recommendation #42: The Supervisor Equipment Maintenance in the Fleet Services Division / General Services Department should be held accountable for implementation and supervision of the preventive maintenance scheduling system.

(4) Provide the Parts Room With A Copy of the Preventive Maintenance Schedule.

A copy of the CCG / FASTER preventive maintenance schedule – report FSR0103 or FOR0103 - should be provided to the Parts Room so that these staff know what's scheduled and can have the parts ready for your Technicians. This report provides a list of equipment that is due for preventive maintenance within the parameters selected by the Division.

Recommendation #43: The Parts Room in the Fleet Services Division / General Services Department should be provided with a copy of the CCG / FASTER preventive maintenance due report (FSR0103) on a weekly basis.

9. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT AND THE FLEET SERVICES SECTION / FIRE DEPARTMENT SHOULD IMPLEMENT FORMAL QUALITY CONTROL POLICIES.

As noted earlier, the Fleet Services Division / General Services Department has developed quality control processes. In fact, the Division has developed a policy regarding quality assurance specifying that a Fleet Services Technician II will take at random a vehicle that has been reported as complete and road test the vehicle. The Fleet Services Division has established a target that approximately 30% of the vehicles worked on by the division shall be road tested.

The problem with the policy is that the Fleet Services Technician II does not complete a Quality Assurance Report and the results are not reviewed with the Auto Mechanic. E-mail is sent to the Division Chief that identifies the vehicles that have been quality tested. The Division does not document the results of the quality assurance test as a means to evaluate Auto Mechanics as part of their performance evaluations. The Division should direct that the Fleet Services Technician II immediately implement this policy. In addition the Supervisor Equipment Maintenance responsible for the supervision of maintenance and repair should also randomly test drive completed repairs, although not 30%, to ascertain the quality of work.

In addition, the Fleet Services Section / Fire Department should evaluate the quality assurance policy developed by the Fleet Services Division / General Services Department, modify it as necessary in consultation with their customers in the Department, and implement this policy.

Recommendation #44: The Fleet Services Division Chief should direct that the Fleet Services Technician II formally document the results of each quality test.

Recommendation #45: The results of the quality control tests should be integrated into the performance evaluations of Auto Mechanics.

Recommendation #46: The Supervisor Equipment Maintenance responsible for the supervision of maintenance and repair should also randomly test drive completed repairs, although not 30%, to ascertain the quality of work.

Recommendation #47: The Fleet Services Section / Fire Department should evaluate the quality assurance policy developed by the Fleet Services Division / General Services Department, modify it as necessary in consultation with their customers in the Department, and implement this policy.

10. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT AND THE FLEET SERVICES SECTION / FIRE DEPARTMENT SHOULD IMPROVE WARRANTY REPAIR AND VENDOR "COMEBACK" MANAGEMENT.

A warranty management program identifies repairs to vehicles that are covered by warranty and recovers the costs associated with performing them. Warranty recovery revenue for the Division should be comparable to other fleets (e.g., \$100 over the first three years for a light duty vehicle).

For example, the City of Everett has generated significant warranty dollar savings. The City was reimbursed more than \$641,000 over a three-year period (2003-2005) on warranty repairs. As another example, the State of Alaska established a new vehicle warranty recovery policy. That policy states that "the purpose of this procedure is to provide a uniform way of processing warranty repairs on State Equipment Fleet (SEF) vehicles and equipment. It is SEF's policy to avail itself of maximum warrant coverage for eligible repairs."

CCG / FASTER includes a report that verifies credits issued to work orders and facilitates warranty claims (which includes equipment, parts, accidents and involvement

with the City's legal department) on an ongoing basis. This would enable Fleet Services Division / General Services Department and the Fleet Services Section / Fire Department to work effectively with vendors.

Warranty management involves determining the level of warranty coverage that should be secured from suppliers of vehicles, parts, and related services, assuring that this warranty recovery data is entered into CCG / FASTER, identifying repair needs that are covered by warranty, and ensuring that the costs of such repairs are borne by the original equipment manufacturer (OEM) rather than the City.

The Fleet Services Division / General Services Department and the Fleet Services Section / Fire Department specify warranty terms in all contracts and purchase orders for vehicles. Procedures should be in place by the Fleet Services Division / General Services Department and the Fleet Services Section / Fire Department, using CCG / FASTER, to flag all service requests that might be covered by a warranty and to properly document and secure reimbursement or purchase credits for all warranty-covered costs that are incurred in house. Where the volume of warranty-covered repairs justifies it, warranty work should be performed in-house under an OEM certification in order to minimize repair turn-around time.

The project team believes that with the proposed adjustment in staffing for the Fleet Services Division / General Services Department, that there is capacity to absorb much of this warranty repair work.

The Fleet Services Division / General Services Department should initially obtain OEM certification for the repair of light and medium vehicles.

Recommendation #48: The Fleet Services Division / General Services Department and the Fleet Services Section / Fire Department should establish a warranty

recovery program using FASTER to identify repairs eligible for warranty recovery, and perform those warranty repairs in-house.

11. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD DEVELOP A FORMAL TRAINING PLAN FOR ITS AUTO MECHANICS AND ADDITIONAL FUNDING MADE AVAILABLE.

Only three of the ten Auto Mechanics in the Fleet Services Division / General Services Department have received some form of ASE certification such as brakes, air conditioning, steering and suspension, etc. This has occurred despite a provision that the City will reimburse all technicians who received such a certification.

The Division should be proactive in providing training to its technicians to obtain such ASE certification.

In FY 2006, the Fleet Services Division / General Services Department funded \$2,378 for education and travel costs for the division. This is 0.2% of the total salaries for the division, which are approximately \$1,108,330.

The American Society of Training and Development, in its 2006 State of the Industry Report of Trends in Workplace Learning and Performance, reported that the average annual expenditure for training per employee amounted to \$1,424, and that percentage of payroll amounted to 2.2%. This would suggest that the Division should be expending approximately \$25,000 to \$30,000 annually.

As a first step in enhancing the training of its staff, the Division should develop a training plan for its technicians. In developing a training plan, the Division is linking the skill development of its technicians to its own assessment of their strengths and weaknesses. The Division should strive to achieve the best practices presented below in developing this training plan.

The Division provides a comprehensive staff development program to achieve and maintain high levels of productivity and employee performance.
The Division maintains training records for each technician.
The Division has mentoring programs, as appropriate, for new employees.
The Division plans training programs for its technicians based on a needs assessment that includes input from employees and their supervisors at least every other year.
The Division establishes and implements formal development plans to provide on-going training for technicians. Technicians are provided with at least forty (40) hours of training annually.
The Division has procedures to evaluate individual in-service training activities, including employee feedback, and to evaluate the extent to which annual training efforts have met identified long-term training objectives.

The training process involves the identification of the need for training, and the selection of and attendance at appropriate courses. Due to continual and accelerating changes in automotive technology, a rigorous, proactive training program is essential for maintaining the viability of in-house fleet maintenance programs. Training investments yield dividends in mechanic effectiveness and efficiency, which translate into better, and cheaper maintenance and repair services.

The Fleet Services Division / General Services Department should develop a training plan for each technician, and increase the budget for training to \$25,000 per year.

Recommendation #49: The Fleet Services Division / General Services Department should develop a training plan for each of its technicians.

Recommendation #50: The Fleet Services Division / General Services Department should increase its annual training budget to \$25,000 per year or a net annual increase of \$22,622.

12. THE CITY SHOULD INITIATE MEASURES TO INCREASE THE NUMBER OF TECHNICIANS WITH EVT AND ASE CERTIFICATION.

Over the next several years, the City should work towards assisting its Auto Mechanics acquiring Emergency Vehicle Technician certification or ASE certification.

NFPA has promulgated a standard – NFPA 1071 – regarding Emergency Vehicle Technician Professional Qualifications. This standards establishes minimum job

performance requirements for a person qualified as an emergency vehicle technician who is engaged in the inspection, diagnosis, maintenance, repair, and testing of an fire emergency response vehicle.

NFPA has a long history of promulgating standards for firefighters and fire officers. A great deal of emphasis is placed on maintaining the condition of the apparatus and equipment used by these personnel. NFPA has now promulgated standards for the level of training for the Auto Mechanics that must keep a sophisticated piece of machinery in proper operating order.

At present, none of the Auto Mechanics in the Fire Department have obtained EVT certification.

A number of local governments in Virginia have Fleet Services Divisions that have obtained the ASE Blue Seal of Excellence. This requires that not less than 75% of the technicians performing diagnosis and repairs must be ASE certified and that at least one technician must be ASE certified in each area of service offered. Those local governments that have obtained the ASE Blue Seal of Excellence includes, but is not limited to, the following:

- The City of Fairfax;
- The City of Richmond (Fleet Management, General Services);
- Chesterfield County;
- The City of Hampton; and
- The City of Lynchburg.

Some of the Fleet Services Division / General Services Department technical and supervisory staff have obtained Automotive Seal of Excellence certification. These include the following staff:

- An Auto Mechanic is ASE certified on brakes, air conditioning, steering, and suspension;
- A Diagnostician possesses all 16 ASE certifications;
- A Supervisor possesses ASE engine performance and brake certification; and
- An Auto Mechanic has obtained ASE certification as a master mechanic.

Two other staff in the Division have also obtained ASE certification. However, this represents only six technicians out of an authorized sixteen technician positions or 38%.

The City of Richmond developed an ongoing training program to aggressively increase the level of ASE certifications. In May 2000, approximately 13% of technicians and supervisors had at least one level of ASE certification. During FY 2001, 35% of technicians and supervisors had obtained at least one level of ASE certification, with 23% having dual certification. The level of certification has now risen to a level (not less than 75%) that Richmond has obtained the ASE Blue Seal of Excellence. This clearly demonstrates that with proper emphasis and incentives.

Chesterfield County adopted a certification incentive pay plan and has seen its rank of ASE-trained technicians grow. At Chesterfield County, eligible employees take one or more of the ASE examinations and the EPA Section 605 air conditioning certification. The County's incentive program allows successful technicians to earn an additional 15% professional incentive pay increase in their annual salary. However, those employees can earn only one professional incentive increase within a two-year period.

There is not a standard for ASE certification incentive pay; it is negotiated as part of a labor agreement. However, ASE certification incentive pay can be structured in a variety of ways. One example is the payment of 40 cents to 45 cents per hour for passing four ASE tests in either the automotive or the medium / heavy truck series and the addition of 10 cents to 15 cents per hour for each additional test passed. If a mechanic completes all eight exams, many fleets will add an additional 20 cents per hour to their salary, bringing the total incentive from \$1 to \$2 per hour for a master mechanic certificate.

ASE credentials must be recertified every five years. Typically, technicians must renew prior to the expiration date to maintain the incentive pay. Some fleet operations, but not all, reimburse mechanics for the expense of ASE certification.

The City should initiate measures to increase the number of EVT-certified technicians in the Fire Department and the ASE-certified technicians in the Fleet Services Division / General Services Department. These measures should include the following:

- The City should be proactive in providing training to its technicians to obtain such certification. The management and supervisory staff should develop a formal training plan for the Auto Mechanics to assure the necessary training in light of continued technological advances in vehicles, equipment, and diagnostic equipment.
- In developing a training plan, the management and supervisory staff should link the skill development of the technicians to an assessment of their strengths and weaknesses.
- The proposed classification of Lead Mechanic should require ASE certification (or obtaining the certification within two years of appointment). The Lead mechanic for the Fire Department should require EVT certification (or obtaining the certification within two years of appointment). The supervisory positions within the Fleet Services Division should require ASE certification (or obtaining the certification within two years of appointment).

- The City should consider providing financial incentives for EVT and ASE certification. It is unlikely that significant increases in certification can be obtained without some form of financial incentive.

The training process involves the identification of the need for training, and the selection of and attendance at appropriate courses. Due to continual and accelerating changes in automotive technology, a rigorous, proactive training program is essential for maintaining the viability of in-house fleet maintenance programs and the credibility of these programs with their customers.

Recommendation #51: The Fleet Services Section / Fire Department and the Fleet Services Division / General Services Department should initiate training and training plans to increase the number of technicians with EVT and ASE certification.

Recommendation #52: The proposed classification of Lead Mechanic should require ASE certification (or obtaining the certification within two years of appointment). The Lead mechanic for the Fire Department should require EVT certification (or obtaining the certification within two years of appointment). The supervisory positions within the Fleet Services Division should require ASE certification (or obtaining the certification within two years of appointment).

Recommendation #53: The City should consider providing financial incentives for EVT and ASE certification.

13. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD NOT EXPAND THE EXTENT OF SUB-LET REPAIRS.

The Fleet Services Division does not expend a significant amount of funds on sub-let or commercial repairs. The actual expenditures or budgets for the past several years for sub-let repairs are presented in the table below.

Fiscal Year	Amount Expended or Budgeted
2003 Actual	\$102,537
2004 Actual	\$121,091
2005 Actual	\$121,946
2006 Actual	\$104,475
2007 Budgeted	\$122,150
2008 Budgeted	\$125,000

As the table indicates, the amount expended or budgeted has ranged from a low of \$102,000 in FY 2003 to a high \$125,999 in 2008. The amount of expenditures on sub-let repairs have been insignificant ranging from 3.6% to 4.9% of total expenditures or budget during this six year period.

The Matrix Consulting Group uses a number of measures to assess the adequacy of sub-let expenditures. These measures are presented below.

- **Does the Division outsource the right types of repairs?** These should typically be the types of repairs that the Division does not perform frequently enough to maintain its in-house skill levels. In this case, the Division outsources the typical repairs including rebuilding engines, transmissions auto body repairs, suspension repairs, etc.
- **Does the extent of overtime exceed benchmarks?** Over the past six years, the Division has reduced the extent of overtime expenditures. In FY 2003, overtime expenditures amounted to 10.8% of regular salaries for full-time employees. By FY 2006, overtime expenditures had been reduced in real terms and to 4.5% as a percentage of regular salaries for full-time employees. The budget for FY 2007 and 2008 budgeted 4.1% for overtime as a percentage of regular salaries for full-time employees. The level of expenditures for overtime falls within benchmarks as a percentage of regular salaries for full-time employees.
- **What is the turnaround time for the completion of repairs?** A key measure for the adequacy of the level of service is the percentage of repair orders completed within one workday of receipt. While the level of service provided by the Division can be improved, it should be characterized as a good level of service (see the table below).

Number of Days Required To Complete Work	Number of Work Orders	% of Total Work Orders
1 day or less	3,450	69.8%
2 days	283	5.7%
3 days	167	3.4%
4 days	165	3.3%
5 days or more	881	17.8%

Overall, almost 70% of the repair orders are being completed within one workday.

In addition to these measures, the Matrix Consulting Group has previously recommended the reallocation of the staff of the Division to reduce the number of staff available on the shop floor for repairs and reduce the number of administrative staff. This would further serve to increase the capacity of the Division for providing timely service without increasing the extent of sub-let repair.

Recommendation #54: The extent of sub-let repairs performed by the Fleet Services Division / General Services Department meets benchmarks, and should not be changed.

14. UPON COMPLETION OF CONSTRUCTION OF THE NEW POLICE BUILDING, THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD ASSIGN AN AUTO MECHANIC TO THE BUILDING TO PERFORM LIGHT MAINTENANCE AND REPAIR.

The City is building a new police building whose construction will be completed in 2012. This building will include two garage bays for minor automotive repairs, radio maintenance. Each bay will be a standard size for one car with doors open, and one bay would have a floor lift.

Based upon previous experience in the analysis of the repair order cycle time for police department vehicles, the project team would expect that approximately 40% of repair orders for these vehicles to be completed and closed within one hour or less and another 5% to 10% of the repair orders to be completed and closed within one to two hours.

These minor repairs can be more effectively accomplished at the new police building, reducing equipment downtime and out-of-service time by police patrol staff. An Auto Mechanic should be assigned five days a week for not less than one shift each day. This Auto Mechanic position should be dedicated to completing minor repairs of police vehicles.

Recommendation #55: An Auto Mechanic authorized in the Fleet Services Division / General Services Department should be assigned five days a week for not less than one shift each day to the new police building. This Auto Mechanic position should be dedicated to completing minor repairs of police vehicles.

6. FLEET SAFETY

6. FLEET SAFETY

Alexandria has employees who drive on City business. Alexandria is assured of having motor vehicle crashes. And, statistically, the cards are stacked against Alexandria - the leading cause of death and injury on the job is motor vehicle crashes. So, motor vehicle crashes involving employees are going to happen to Alexandria. Over 90% of all motor vehicle accidents are caused by human error.

Motor vehicle crashes have become a serious problem across the country. The National Highway Traffic Safety Administration estimates the annual cost – including productivity losses, property damage, medical cost, rehabilitation costs, travel delay, legal and court costs, emergency service costs, insurance administration costs, premature funeral costs, and costs to employers at a staggering \$230.6 billion a year, about \$820 per person.

1. THE CITY UTILIZES A NUMBER OF THE BEST PRACTICES FOR ACCIDENT PREVENTION.

There are a number of strengths within the City related to best management practices for accident prevention as well as opportunities for improvement. The strengths of the City include the following:

- Risk Management / City Attorney's Office fills the role and responsibilities of a fleet safety coordinator;
- Risk Management / City Attorney's Office requires departments to validate the driver's license and the vehicle insurance of their employees once a year;
- Motor vehicle records are being checked by Risk Management / City Attorney's Office for employees on an ongoing basis for such issues as failure to appear, moving citations, cancelled insurance, physical examinations, accidents, etc. for those employees with commercial drivers licenses;

- Risk Management / City Attorney's Office requires driver training education for all employees with a City driver's license to be renewed at least once a year;
- City employees, whose job description calls for a Commercial Driver's License, are subject to random drug tests;
- City employees, involved in an accident on City time, are required to take an immediate and mandatory drug test; and
- The Fleet Services Division / General Services Department maintains records regarding vehicle maintenance and inspection within CCG / FASTER, its fleet management information system.

On the other hand, there are a number of opportunities for improvement. These opportunities include the following:

- The City does not have an adopted and documented citywide fleet safety policy (although the Police Department has developed two policies regarding departmental fleet safety);
- Fleet safety program guidelines have not been established city-wide (such as basic criteria concerning driver qualifications, required and prohibited driving practices, accident reporting and review procedures, etc.);
- The City has not defined standards for safe driving performance;
- Motor vehicle records are not being checked for employees without CDL that are driving City vehicles or driving their own vehicles on City business; and
- Penalties have not been defined in a citywide policy for at-fault accidents.

The strengths of the City's existing safety policies and practices provide a sound foundation for addressing the opportunities for improvement cited above.

2. THE CITY SHOULD ADOPT A CITYWIDE FLEET SAFETY POLICY.

The City of Alexandria maintains individual and departmental fleet safety policies for many of its larger departments. Each department is responsible for establishing their own policies and procedures regarding fleet safety. Risk Management / City Attorney's

Office is responsible for the coordination and collection of the individual fleet safety policies established by each department.

The City of Alexandria should develop an overall, citywide fleet safety policy to provide overall guidance and direction for each department. This fleet safety policy should contain the elements presented in the following sections.

- The responsibilities for department heads, managers, supervisors and employees regarding the implementation of the fleet safety policy should be identified within the policy.
- The responsibility of the Alexandria Police Department regarding investigation of accidents involving city employees and reporting these accidents to the Risk Management Division should be specified.
- The responsibility of Risk Management / City Attorney's Office should be identified as:
 - Training appropriate employees in the City's Fleet Safety Policy;
 - Auditing each department's compliance with this policy on an annual basis;
 - Tracking and documenting all reported vehicle accidents; and
 - Assisting with the identification of preventable and non-preventable vehicle accidents, as requested.
- The policy should require that the Risk Management / City Attorney's Office annually check all full-time and part-time employees of the City of Alexandria who operate a City owned or leased vehicle or utilize their personal vehicle in conducting City business.
- Driving standards should be identified within the fleet safety policy.
- Fleet safety rules should be specified, as well as insurance requirements, responsibility for the vehicle maintenance safety inspection program, insurance requirements, and accident reporting policies and procedures, and employee retraining in defensive driver techniques in the event of preventable accidents.

Risk Management / City Attorney's Office, in the development of a Citywide Health and Safety Manual, should develop a fleet safety policy. The development of this

fleet safety policy should be accomplished in consultation with the City's Safety Committee and the operating departments.

Recommendation #56: Risk Management / City Attorney's Office should develop a City-wide fleet safety policy as part of the Citywide Personnel Safety Manual.

3. THE CITY SHOULD ADOPT ADDITIONAL MEASURES TO ENHANCE ITS ACCIDENT PREVENTION PROGRAM.

Implementation of this policy would involve additional measures to prevent accidents or to mitigate employee behavior that resulted in accidents. These additional measures are presented in the paragraphs below.

(1) Risk Management / City Attorney's Office Should Analyze and Report Annually the Accident Rate Per Million Miles Driven For Each Department.

This tool should be utilized to identify problem areas within the City's organization. In addition, the National Association of Fleet Administrators publishes accident rate data annually. The City should compare its accident rates per million miles driven to this annual survey and internally on a department-by-department basis. The

Recommendation #57: Risk Management / City Attorney's Office should analyze and report annually the accident rate per million miles driven for each department.

(2) Risk Management / City Attorney's Office Should Check Motor Vehicle Records for all City Employees that Are Driving City Vehicles or Driving Their Own Vehicles on City Business.

Regardless of the size and type of vehicle being utilized, employees using unsafe driving practices present risks to the City. Risk Management / City Attorney's Office should check the motor vehicle records of all City employees, not just those with CDL. It could check the motor vehicle records of those employees without CDL less frequently than those with CDL (such as once every three years), but all employee-driving records should be checked periodically.

Recommendation #58: Risk Management / City Attorney's Office should check motor vehicle records on an annual basis for all City employees that are driving City vehicles or driving their own vehicles on city business.

(3) Risk Management / City Attorney's Office Should Audit All Accident Reviews In Coordination With All Departmental Safety Committees.

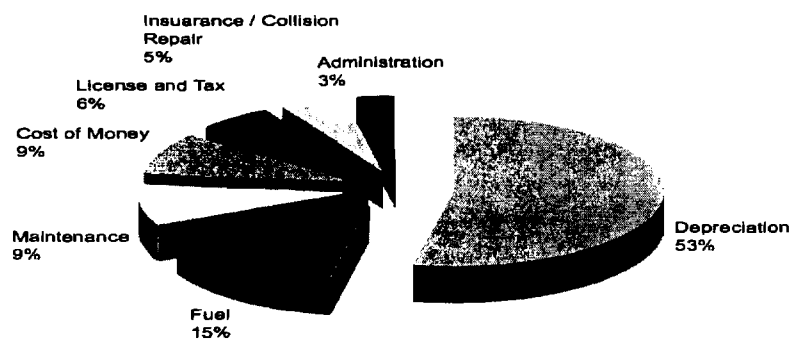
Risk Management receives Police Department accident reports and departmental accident reports once an accident has occurred, primarily for insurance purposes. There is not a citywide policy that requires departments to formally review accident reports with the at-fault City employee (although the Police Department already does this for its own employees). Citywide guidelines have not been developed regarding the consequences stemming from an employee at-fault accident such as license suspension, termination, or at a minimum requiring additional driver's education courses.

Recommendation #59: Risk Management / City Attorney's Office should audit all accident reviews in coordination with all departmental safety committees.

7. FLEET UTILIZATION

7. FLEET ASSET MANAGEMENT

The primary factors driving fleet related costs for any organization are the size and composition of the fleet. The more vehicles an organization owns, the higher the annual cost to that organization, because for each fleet asset there are costs associated with ownership and operation. As indicated in the following chart, depreciation is the top fleet related expense representing over half of annual costs for the typical organization.



Source: National Association of Fleet Administrators

Even under-utilized vehicles consume fuel and maintenance resources each

year. More importantly, these units also depreciate and lose value each and every day even if they are older and are fully amortized (i.e. paid for). Time and effort are also required to maintain appropriate licenses, tags, fleet inventory records, insurance, fuel cards, etc. The units may also take up valuable space at maintenance yards, parking lots and garages. As indicated in the following chart, depreciation is the top fleet related expense representing over half of annual costs for the typical organization. Therefore, any serious effort to lower total fleet costs needs to start with an analysis of opportunities to reduce the size of the fleet.

Despite the obvious benefits, most organizations do not actively manage the size and composition of their fleets. The reasons for this are varied and are discussed in more detail later in this memorandum. A common problem in the industry is a phenomenon known as "fleet creep", which describes a situation where both the overall size of the fleet - and the size/expense of the units within the fleet - slowly but surely grows over time.

Arbitrary utilization thresholds are not effective because they fail to take into consideration the significant differences that exist in vehicle missions and the usage patterns that result from these differences. This approach also inappropriately applies the same mileage thresholds to all departments within an organization. It is obviously invalid to expect a vehicle assigned to an organization that operates within a closely defined area (such as a Alexandria) to meet the same level of use as a vehicle that travels state-wide.

There are two basic limitations of this arbitrary approach to managing fleet utilization. One is that it forces fleet managers into the role of "car czar" requiring them

to approve vehicle purchases and demand return of units that fail to meet annual use thresholds. This approach inappropriately vests decision-making authority in fleet managers who usually lack the intimate knowledge of user agencies' operations and work methods needed to make sound vehicle acquisition and usage decisions. The other limitation is that this approach creates, due to this lack of operational knowledge, adversarial relationships between fleet managers and fleet users.

Fortunately, there are many strategies that organizations can employ to effectively improve fleet utilization. One of the keys to their success, however, is close collaboration between fleet users– who are best equipped to define how vehicles and equipment enable them to fulfill their missions – and fleet managers – who have technical expertise and access to jurisdiction-wide fleet data that individual user agencies lack. The other is using economic incentives to motivate fleet users to make sound vehicle acquisition and utilization decisions out of enlightened self interest.

A cost effective fleet size management plan usually consists of a combination of all of these methods.

- A policy that clearly sets forth the organization's fleet size management principles;
- An organizational approach that fosters cooperation among fleet program stakeholders;
- Financial practices for fleet operations that raise awareness among fleet users of the fixed and variable costs associated with fleet ownership such as monthly depreciation charges;
- An effective fleet replacement program;
- The use of CCG / FASTER to provide for the efficient collection, analysis, and distribution of fleet utilization data;
- A baseline authorized allocation of vehicles for each organizational unit

established through a detailed study of fleet size requirements that considers mission activities, staffing, vehicle use, and the feasibility of employing other transportation alternatives;

- A procedure for demonstrating the need for acquiring new vehicles (whether they are replacement units or additions to the fleet).

Each of these elements is discussed below.

1. THE CITY SHOULD ADOPT A FLEET SIZE POLICY AND PROCEDURE THAT INCLUDES A POLICY FOR SPORT UTILITY VEHICLES.

Securing upper management and fleet user support for a fleet size management policy is a crucial element of success for a fleet size management program. The policy should clearly communicate the need to use taxpayer funds wisely, acknowledge the essential role that vehicles and equipment play in achieving the organization's mission, and outline management expectations for employees.

The concern regarding the size of vehicles in a fleet originates from a number of perspectives. One of these perspectives is cost. In a recent study released by the National Association of Fleet Administrators, sport utility vehicles were found to cost an average of \$0.056 per mile more than a typical sedan.

Sport utility vehicles comprise a significant proportion of the City's fleet. A total of 67 of 124 pieces of equipment in the Fire Department consist of sport utility vehicles. A total of 51 of 835 vehicles in the fleet maintained by the General Services Department consist of sport utility vehicles.

There are a number of features that should be included in the fleet size policy and procedure. These features are presented below.

- A policy that clearly sets forth the City's fleet size management principles;
- An approach that recognizes fleet asset management is a shared responsibility between the Fleet Services Division Chief and operating departments;

- Financial practices for fleet operations that raise awareness among fleet users of the fixed and variable costs associated with fleet ownership;
- An information management approach that provides for the efficient collection, analysis, and distribution of fleet utilization data;
- A procedure for demonstrating the need for acquiring new vehicles (whether they are replacement units or additions to the fleet).

This policy should include criteria for the purchase and assignment of sport utility vehicles. The criteria that address this policy are presented below.

- The sport utility vehicle must transport three or more passengers, in addition to the driver, a minimum of three times a week.
- If cargo or equipment is transported, the length must exceed 70 inches to warrant a sport utility vehicle comparable to the Ford Explorer or 60 inches to warrant a sport utility vehicle comparable to the Ford Escape and otherwise be incompatible with transport in a van pickup truck, or automobile. The equipment must be transported at least two days per week.
- The need for a sport utility vehicle rather than a sedan, van or truck, to fulfill as vehicle's mission must be sufficiently specific and quantifiable.
- If a four wheel drive option is requested, the request must include the percentage that four wheel drive use is expected and why this use could not be satisfied with a four wheel drive pickup truck.
- If more than one sport utility vehicle size meets the above criteria, then the smallest, least expensive sport utility vehicle must be selected.
- Current sport utility vehicles in the City's fleet are not exempt from this requirement.
- All sport utility vehicle requests should be reviewed by a committee consisting of the Fleet Services Division Chief, the Director of the Office of Management and Budget, and the Director of General Services. If the request is denied, the committee should recommend an alternate vehicle.

In addition, the fleet size policy and procedure should include other aspects that encourage the use of fuel-efficient vehicles. The criteria that address this policy and procedure are presented below.

- All vehicles purchased by the City for its fleet will be consistent with the City's policy to standardize vehicles, the most fuel efficient and lowest emissions within the vehicle class, commercially available, practical, and reasonably cost-competitive for the class of vehicles needed for specific assignments.
- The most fuel efficient vehicles are those with a fuel economy rating (combined average of city and highway mileage) determined by the U.S. Environmental Protection Agency that is within 10% of the highest rated vehicle in that class meeting the criteria above.
- It shall be the policy of the City to encourage the selection of vehicles of a smaller class size whenever possible to achieve increased miles per gallon. Requests for new or replacement vehicle purchases must be accompanied with written justification addressing the need for a specific model and type. The Fleet Services Division Chief shall work with operating departments to determine whether a proposed vehicle could be downsized and still complete its required function within the department.

The City should adopt a policy that will increase fuel efficiency, lower emissions, and control fleet costs. The policy should provide vehicle replacement criteria that limit the use of sport utility vehicles to work assignments where they are essential, and to encourage the purchase of fuel-efficient vehicles.

Recommendation #60: The City of Alexandria should adopt a fleet size management policy.

Recommendation #61: The Fleet Services Division Chief should develop a fleet size policy and procedure for the consideration of the Fleet Management Improvement Team, the City Manager's Office, and the Mayor and City Council.

2. FLEET REDUCTION SHOULD BE A COLLECTIVE EFFORT OF DEPARTMENTS, THE OFFICE OF MANAGEMENT AND BUDGET, AND FLEET MANAGEMENT.

Evaluating fleet size and usage patterns of a group of fleet assets should always be done in the context of an organization's mission, the types of functions performed, and the levels of service required. Vehicles and equipment are necessary tools used to accomplish these goals. It is Alexandria's fiduciary responsibility to provide these tools in the most efficient and economical manner possible.

Traditionally, fleet managers (rather than departments) were held to account for fleet size decisions. However, it is difficult to regulate department's behavior and have them want to continue to do business with you if this responsibility is assigned to fleet managers. Charge-back systems have forced fleet managers to become much more customer service oriented for the simple reason that fleet users are more protective of their vehicle usage prerogatives and their treatment by fleet management organizations when they are footing the bill for the vehicles they use and the services they consume.

This does not mean that fleet management organizations should be relieved of any responsibility for managing fleet size, composition, and utilization. On the contrary, these organizations usually are the only central repositories of data on the jurisdiction-wide deployment and use of vehicles and equipment. Fleet management organizations are uniquely positioned and qualified to observe and collect information on how (and how much) fleet assets are used and to determine the suitability of the size and composition of the fleet to such usage habits.

It is safe to say, therefore, that managing fleet size, composition, and utilization is a shared responsibility between:

- Fleet users;
- Budget analysts; and
- Fleet managers.

The most appropriate role for fleet management organizations is to provide information and guidance to their customers and to management aimed at helping fleet user organizations optimize their vehicle acquisition and assignment decisions and utilization practices.

To the fullest extent possible, fleet managers should not be utilized to decide whether specific assets should be retained or removed from the fleet. As convenient and tempting as it might be for management to be able to hold the fleet manager accountable for the size and composition of the fleet, such expectations are unfair to both fleet managers and their customers. Making the fleet manager responsible for controlling fleet size is analogous to holding the personnel director accountable for the size of the government payroll.

Effective implementation of an enterprise-wide process improvement initiative also is dependent on the existence of an organizational structure that supports development of centralized policies and programs. A management culture that promotes implementation of cross-functional/cross-organizational management improvement programs, based on collaboration and a strategic perspective such as FMIT – is essential to success in implementing a fleet size management program.

Recommendation #62: Fleet reduction in Alexandria should be a collective effort of fleet users, the Office of Management and Budget, fleet managers and the Fleet Management Improvement Team.

3. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD ADDRESS THE PROBLEMS WITH INVALID DATA ENTRY OF ODOMETER READINGS IN THE GASBOY FUEL MANAGEMENT SYSTEM.

One of the most effective strategies for getting fleet users to pay attention to fleet utilization is to quantify and publicize how much they use their vehicles and equipment. Producing a monthly exception report for each user agency that identifies those vehicles that fall short of average utilization levels by class of vehicle is a good place to start. Even more effective in promoting efficient fleet utilization is publishing a report that summarizes such statistics by user agency and for the fleet as a whole. Peer pressure,

insights gained from seeing how much other agencies utilize their vehicles, and the knowledge that upper management and internal auditors may be scrutinizing such reports, all tend to have a salutary effect on department' attentiveness to this aspect of their performance.

The accuracy of fleet utilization data is essential to these reports, however. It is clear from a review of fuel records that City employees are frequently entering incorrect odometer readings when fueling their vehicles. Accurate odometer readings are important for a number of reasons including scheduling of preventive maintenance, assessing the utilization of a vehicle to determine whether it warrants continued assignment, replacement planning, etc.

These problems result from setting the parameters in the automated fuel dispensing software too broadly or eliminating the parameters altogether.

Recommendation #63: The parameters within the automated fuel dispensing software should be "tightened" to reduce the extent of incorrect entry of odometer readings.

Recommendation #64: The Fleet Services Divisions should report those employees that enter incorrect odometer readings to the employees' department head and immediate supervisor.

4. THE CITY SHOULD REDUCE THE NUMBER AND THE SIZE OF VEHICLES IN ITS FLEET.

As a first step in the analysis of utilization, the Matrix Consulting Group mapped the distribution of vehicles and equipment five different types of classes of equipment: law enforcement patrol sedans, general purpose or unmarked sedans, pickup trucks, sport utility vehicles and sedans. The number of equipment in these five classes of vehicles represent 53% of the fleet maintained by the Fleet Services Division / General Services Department and the Fleet Services Section / Fire Department. This information

helped the project team map the fleet and evaluate the basis for future activities such as creating effective motor pools. The data indicate that there are many units in the fleet that have low levels of utilization.

The Matrix Consulting Group compared average annual utilization data among similar units – such as general-purpose sedans. The project team documented the utilization of equipment within a class in terms of age and life-to-date mileage. The Matrix Consulting Group analyzed equipment in five classes of equipment including vans, sport utility vehicles, general-purpose (or unmarked) sedans, pickup trucks, and law enforcement patrol sedans.

Data regarding the utilization of the vehicles in these five classes of vehicles is presented below.

- **Law Enforcement Patrol Sedans.** There were 143 law enforcement patrol sedans included in the analysis of annual mileage. These sedans were assigned to the Police Department and the Sheriff's Office. This excludes all of the 2006 sedans as well as sedans that the Police Department indicated were no longer in service (e.g. totaled in an accident). Specific annual utilization for this class is presented below:
 - Median annual mileage – 9,447
 - 25th percentile – 6,863
 - 75th percentile – 13,000 miles.
- **General Purpose or Unmarked Sedans.** There were 139 general purpose sedans included in the analysis of annual mileage. This excludes all of the 2006 and 2007 sedans as well as sedans that the Police Department indicated were no longer in service (e.g. totaled in an accident). The analysis includes vehicles assigned to such departments as the Juvenile Court, Office of the Sheriff, Fire Department, Police Department, Fire Department, Human Services, Mental Health, Mental Retardation and Substance Abuse Department, etc. Specific annual utilization for this class is presented below:
 - Median annual mileage – 8,051

- 25th percentile – 3,759
- 75th percentile – 11,930 miles.
- **Pickup Trucks.** There were 61 pickup trucks included in the analysis of annual mileage. The 2006 and 2007 model years were excluded. The analysis includes vehicles from General Services, Transportation and Environmental Services, Health, Recreation, Parks, and Cultural Activities, Refuse Collection, Redevelopment and Housing Authority, and Fire. Specific annual utilization for this class is presented below:
 - Median annual mileage – 6,223
 - 25th percentile – 4,337
 - 75th percentile – 7,993 miles.
- **Sport Utility Vehicles.** There were 92 sport utility vehicles included in the analysis of annual mileage. The 2006 and 2007 model years were excluded. The analysis includes vehicles from the Office of the Sheriff, Information Technology Services, Planning, General Services, Transportation and Environmental Services, Police, Human Services, Recreation, Parks and Cultural Activities, Redevelopment and Housing Authority, and Fire. Specific annual utilization for this class is presented below:
 - Median annual mileage – 5,306
 - 25th percentile – 4,900
 - 75th percentile – 7,603 miles.
- **Vans.** There were 74 vans included in the analysis of annual mileage. The 2006 model years were excluded. The 2006 and 2007 model years were excluded. The analysis includes vehicles from Juvenile Court, Office of the Sheriff, General Services, Mental Health, Mental Retardation and Substance Abuse Department, Health, Human Services, Historic Alexandria, Recreation, Parks and Cultural Activities, Library, Transportation and Environmental Services, Redevelopment and Housing Authority, and Fire. Specific annual utilization for this class is presented below:
 - Median annual mileage – 3,928
 - 25th percentile – 1,810
 - 75th percentile – 6,211 miles.

There is clearly a significant amount of what would appear to be underutilized equipment (equipment at or below the 25th percentile in terms of annual mileage for the same class of equipment) in the fleet maintained by the Fleet Services Division and the Fire Department.

A list of vehicles of low use and low necessity are presented in the first exhibit at the end of this chapter (see exhibit 5). These are vehicles whose annual mileage or utilization is at the median or less than the median for their class. There are a total of 125 low utilization vehicles or 13% of the fleet maintained by the Fleet Services Division / General Services Department and the Fleet Services Section / Fire Department. A questionnaire was circulated to operating departments soliciting information regarding the need and necessity for these vehicles. The responses were compiled and provided separately to the Office of Management and Budget including recommendations regarding the elimination of these underutilized vehicles. The Matrix Consulting Group recommends that the City proceed on a department-by-department basis beginning with non-public safety departments, that Fleet Services Division / General Services Department analyze the recommendations developed by the Matrix Consulting Group discuss these recommendations with the affected departments, and develop recommendations for elimination of the equipment for the consideration of the Office of Management and Budget and the City Manager's Office.

The Matrix Consulting Group recommends that the City should initially set an objective of eliminating sixty-six (66) vehicles from its fleet (initially excluding the Police and the Fire Departments). This would represent a 7% reduction in the City's total fleet. This reduction would require an increase in the "pool" fleet at City Hall, operated by the

Fleet Services Division / General Services Department, and an increase in mileage reimbursement for the use of personal vehicles on City business. The estimated annual operating and capital cost savings resulting from the reduction of the fleet sixty-six (66) vehicles from its fleet (initially excluding the Police and the Fire Departments) is presented in the table below. The net cost impact reflects the annual operating and capital cost savings, offset by the increase in mileage reimbursement for the use of personal vehicles on City business or the cost of increasing the number of "pool" cars at City Hall.

In addition, the list of sport utility vehicles currently in use in the City is presented in the second exhibit at the end of this chapter (see exhibit 6). A questionnaire was circulated to operating departments soliciting information regarding the need and necessity for these vehicles. The responses were compiled and provided separately to the Office of Management and Budget. Based upon the 97 responses received to the questionnaire (an 86% response rate) and a review of all of the other assignments within the City's fleet, the Matrix Consulting Group recommends that all sport utility vehicles be downsized to midsize sedans or extended compact pickup trucks with the exception of eight (8) sport utility vehicles remain assigned to the Police Department and four sport utility vehicles assigned to the Fire Department. The estimated annual capital cost savings resulting from the downsizing of these sport utility vehicles is presented in the table below.

Recommendation	Annual Cost Savings
Eliminate sixty-(60) underutilized vehicles in the City fleet.	\$159,500
Downsize twenty-five (25) sport utility vehicles to midsize sedans	\$27,500
Downsize seventy-six (76) sport utility vehicles to extended cab compact pickup trucks.	\$89,300

Recommendation #65: The City should review and consider the recommendations made by the Matrix Consulting Group to eliminate vehicles and downsize sport utility vehicles. The Matrix Consulting Group recommends that all sport utility vehicles, except for eight assigned to the Police Department and four assigned to the Fire Department be downsized to midsize sedans and extended cab compact pickup trucks.

Recommendation #66: The City should review and consider the recommendations developed by the Matrix Consulting Group for elimination of vehicles within the City's fleet. The Matrix Consulting Group recommends that the City proceed on a department-by-department basis beginning with non-public safety departments, that Fleet Services Division / General Services Department analyze the recommendations developed by the Matrix Consulting Group discuss these recommendations with the affected departments, and develop recommendations for elimination of the equipment for the consideration of the Office of Management and Budget and the City Manager's Office. The Matrix Consulting Group recommends that the City should initially set an objective of eliminating sixty-six (66) vehicles from its fleet (initially excluding the Police and the Fire Departments). This reduction would require an increase in the "pool" fleet at City Hall, operated by the Fleet Services Division / General Services Department, and an increase in mileage reimbursement for the use of personal vehicles on City business.

5. THE CITY'S TAKE HOME POLICY SHOULD BE REVISED AND THE NUMBER OF TAKE HOME VEHICLES SHOULD BE EVALUATED AND THE EXTENT OF TAKE-HOME VEHICLES SHOULD BE REDUCED.

The City of Alexandria has a take home policy. That policy is contained in Administrative Regulation 7-3, adopted on June 9, 1983 and apparently updated on August 15, 1991. Section III-D indicates that regular take-home use (pool or assigned vehicle) is extended to only the 58 positions presented in the table below.

City Manager	All K-9 Officers, Police (5 vehicles)
Commonwealth's Attorney	Marked cruiser take-home program, Police (16 vehicles)
Director T & ES	Vice Narcotics unmarked vehicles, Police (12 vehicles)
Deputy Director, T & ES	Fire Chief
Chief of C & I, T & ES	Deputy Fire Chief
Transportation Division Chief, T & ES	Fire Marshal
C & T Inspector (snow season only) T & ES	Arson Investigator, Fire Department
On-call Building Technician, General Services	Sheriff
Police Chief	Undersheriff
Deputy Police Chief for Operations	Chief Deputy Sheriff
Chief, Criminal Investigations, Police	Sheriff Department Captains (4 vehicles)
Chief, Special Operations, Police	Human Services, Child Abuse standby person
Public Information Officer, Police	

The administrative policy Contains a number if provisions concerning the use of take home vehicle as presented below.

- If any of the personnel listed above reside outside of the City, then the take-home use will not be authorized without prior written approval of the City Manager or Deputy City Manager. In no event, will police officers in the marked take-home program be authorized to take their vehicles to residences outside the City.
- Operators of take-home vehicles which have been approved to be taken to residences outside of the City on a regular basis must reimburse the City at a rate of \$0.15 per mile for miles traveled outside of the City during commuting. It should be noted that this part of the Administrative Regulation was and has not been implemented, although the City does report the fringe benefit aspect of personal use for inclusion on the employees' W-2 tax forms for non-public safety employees.
- Department Heads who have take-home vehicles within their organization are responsible for reporting the names, addresses, and vehicles numbers of persons operating these vehicles to the Director of Finance, with a copy to the Director of General Services. The reports shall be submitted by January 1 of each year and updated during the year as necessary. The Director of Finance shall make a determination regarding the taxable earnings, exemptions, amounts to be taxed, etc. All employees with take-home vehicles shall be listed regardless of their tax status. Regular passengers of take-home vehicles must also be included in the report.

There are currently 188 authorized take-home vehicles or more than three times that authorized by Administrative Regulation 7-3. This includes 152 take-home vehicles

in the Police Department, 16 in the Fire Department, 10 within the Sheriff's Office, 7 within the Transportation and Environmental Services Department, 1 within the Recreation, Parks and Cultural Activities Department, 1 within the Planning and Zoning Department, and 1 within the Commonwealth's Attorney's Office. Of the 152 take-home vehicles in the Police Department:

- 35 are police patrol sedans that are part of the in-city take home program to increase police presence;
- An additional 35 police patrol sedans are assigned to police officers with specialized assignments such as the K-9 unit, School Resource Officers, the Motorcycle Unit, Special Operations, and the on-call Crime Scene Investigation officers.

Almost one-half of the fleet assigned to the Police Department is being taken home (148 vehicles out of 313 vehicles assigned to the Department or 49% of the total). The vehicles being taken home by the Police Department represent 81% of the City's vehicles being taken home. This is a high proportion relative to other Police Departments as noted below.

City	Total Fleet	Take Home Vehicles	Take Home As A % of Fleet	Marked Take Home Vehicles	Marked % of Take Home Vehicles
Jacksonville	1,640	1,420	86.6%	1,150	81.0%
Oklahoma City	886	533	60.2%	437	82.0%
Kansas City	804	374	46.5%	67	17.9%
St. Louis	640	188	29.4%	63	33.5%
Denver	934	162	17.3%	11	6.8%
Memphis	1,564	237	15.2%	191	80.6%
San Jose	658	73	11.1%	50	68.5%
Minneapolis	410	29	7.1%	20	69.0%

As the data in the table indicates, the proportion of take home vehicles in the Police Department is at the higher end of the range for these other Police Departments – higher than six of the eight departments.

Administrative Regulation 7-3 should be revised. The recommended revisions to

this policy are presented below.

- **All references to the number of take-home vehicles that should be removed from the regulation.** This number will inevitably change as operating conditions change. This should not require the revision of Administrative Regulation 7-3 as these changes occur.
- **The approval of a take-home vehicle should require the completion of formal, written take-home vehicle authorization request form each year and for any changes that occur in take-home vehicle assignments at the time of the change.** This form should be submitted to the Office of Management and Budget for evaluation each year, even if circumstances of its use do not change. One form should be completed for each take-home vehicle. This form should also be submitted at any time a change occurs; this could include adds, deletes, etc. This form should include the following information:
 - Employee name;
 - Position title;
 - Department, division, section;
 - Number of the vehicle to be taken home;
 - Current odometer reading;
 - Primary work assignment / location;
 - City of residence;
 - Daily commute miles;
 - Daily business miles;
 - Number of after hour emergency call-outs in the previous fiscal year;
 - Whether the use of the vehicle meet criteria as follows:
 - **Police patrol sedan in-city take home vehicle program.** The employee resides within the City of Alexandria, and is assigned to Police Patrol.
 - **Emergency Response:** The employee has primary responsibility for responding to emergency situations which require immediate response to protect life or property and the employee is called out at least 12 times which require immediate response to protect life or

property and the employee is called out at least 12 times per quarter. A "call-out" is defined as a directive to an employee to report to a work site during off duty time. Documentation listing the number and nature of call-outs for the six-month period from the prior year should be maintained. There must be an explanation of why alternate transportation cannot be used and why a City vehicle cannot be picked up from a designated County parking area.

- **Economic Benefit:** There is an economic benefit to the City. This means the cost of travel reimbursement would exceed the costs associated with a take home vehicle. A calculation of this benefit must be submitted with the Take Home Vehicle Request. The cost of lost productivity cannot be a part of the calculation.
- **Special Equipment:** The employee has primary responsibility for responding to emergency situations which require immediate response to protect life or property and the employee needs a special vehicle and/or carries specialized equipment other than communications equipment in order to perform their work outside of normal working hours. A description of this equipment must be submitted with the Take Home Vehicle Request.

The Office of Management and Budget should be responsible for the analysis of these take-home vehicle requests each year. This responsibility should include:

- Evaluate and authorize or deny take-home vehicle assignment requests from all departments;
- Notify appropriate department directors, and the Finance Department, central payroll, in writing, each time a new take-home vehicle assignment is authorized;
- Submit the summary of authorized take-home vehicle assignments to the City Manager, to the department directors and to the Finance Department, Payroll Section on a semi-annual basis;
- Maintain records of all take-home vehicle assignments including:
 - Take-home authorization by department, division, employee name, position title and vehicle number.
 - Mileage data, including breakdowns of daily commute mileage and business mileage based on daily vehicle trip logs.
 - Vehicle trip log data detailing the number and nature of emergency calls, if the take-home vehicle is based on an emergency response justification.

- A calculation of economic benefit to the City, if the take-home vehicle assignment is based on an economic justification.

In evaluating take-home vehicle assignments in the Police Department, as an example, it is clear that there are opportunities to reduce the extent of take-home vehicles. For example:

- Seven (7) School Resource Officers are taking vehicles home;
- The four (4) Patrol captains and four (4) Patrol Lieutenants are taking vehicles home; and
- It appears that the thirty-nine (39) investigators assigned to Criminal Investigations Division take their vehicles home.

Opportunities exist to reduce the extent of take home vehicle assignments.

Recommendation #67: The City should revise Administrative Regulation 7-3 should be revised as it pertains to take-home vehicles.

Recommendation #68: The number of take-home vehicle assignments should be evaluated by the Office of Management and Budget, and reduced based upon that assessment and in the context of the revised Administrative Regulation 7-3.

Exhibit 5 (1)

Low Utilization Vehicles

Class	Equip. #	Department	Year / Make Model	Year	Age	Annual Mileage
Law Enforcement Sedan	1708	Police Depart.	2000 Ford Crown Vic	2000	7	5,023
	8610	Office of Sheriff	2001 Ford Crown Vic	2001	6	3,946
	8647	Office of Sheriff	2003 Chevrolet Impala	2003	4	3,646
	8654	Office of Sheriff	2003 Chevrolet Impala	2003	4	4,211
	166	Police Depart.	2000 Ford Crown Vic	2000	7	6,343
	1922	Police Depart.	2001 Ford Crown Vic	2001	6	5,412
	1922	Police Depart.	2001 Ford Crown Vic	2001	6	5,412
	2363	Police Depart.	2003 Ford Crown Vic	2003	4	6,790
	2419	Police Depart.	2004 Ford Crown Vic	2004	3	5,233
	2420	Police Depart.	2004 Ford Crown Vic	2004	3	5,286
	2424	Police Depart.	2004 Ford Crown Vic	2004	3	5,799
	2441	Police Depart.	2004 Chevy Tahoe	2004	3	4,860
	2506	Police Depart.	2005 Ford Crown Vic	2005	2	5,813
	1738	Police Depart.	1998 Ford Crown Vic	1998	9	4,654
	1743	Police Depart.	1998 Ford Crown Vic	1998	9	4,138
	1825	Police Depart.	1999 Ford Crown Vic	1999	8	6,109
	1935	Police Depart.	2001 Ford Crown Vic	2001	6	5,748
	2307	Police Depart.	2003 Ford Crown Vic	2003	4	2,775
	2316	Police Depart.	2003 Ford Crown Vic	2003	4	4,127
	2318	Police Depart.	2003 Ford Crown Vic	2003	4	4,895
	2403	Police Depart.	2004 Ford Crown Vic	2004	3	5,996
Number of Law Enforcement Sedans						
					21	
General Purpose Sedan	0323	Human Services	2002 Chevrolet Cavalier	2002	5	3,634
	0332	Human Services	1999 Saturn SW	1999	8	3,747
	0335	Human Services	2004 Dodge Neon	2004	3	3,449
	0337	Human Services	2005 Ford Taurus	2005	2	2,772
	0343	Human Services	1997 Chevrolet Cavalier	1997	10	2,284
	0348	Human Services	2001 Chevrolet Lumina	2001	6	3,452
	0163	Juvenile Court	2001 Chevrolet Lumina	2001	6	1,808
	0165	Juvenile Court	2001 Chevrolet Lumina	2001	6	3,221

Exhibit 5 (2)

Class	Equip. #	Department	Year / Make Model	Year	Age	Annual Mileage
General Purpose Sedan	0166	Juvenile Court	2001 Ford Taurus	2001	6	2,319
	0713	MH/MR/SA	2002 Chevrolet Cavalier	2002	5	3,843
	0715	MH/MR/SA	1999 Chevrolet Cavalier	1999	8	2,743
	0723	MH/MR/SA	2000 Chevrolet Cavalier	2000	7	1,293
	0733	MH/MR/SA	2005 Toyota Prius	2005	2	2,012
	0824	MH/MR/SA	1998 Chevrolet Cavalier	1998	9	2,431
	0825	MH/MR/SA	2002 Chevrolet Cavalier	2002	5	1,485
	8601	Office of the Sheriff	2005 Ford Crown Vic	2006	1	1,973
	8605	Office of the Sheriff	2000 Ford Crown Vic	2000	7	3,955
	7501	Parks and Recreation	1999 Chevrolet Cavalier	1999	8	1,538
	7505	Parks and Recreation	2002 Chevrolet Cavalier	2002	5	1,283
	2329	Police Depart.	2003 Chevy Malibu	2003	4	4,322
	2446	Police Depart.	2004 Chevrolet Malibu	2004	3	3,968
	1795	Police Depart.	1999 Dodge Stratus	1999	8	3,078
	2337	Police Depart.	2003 Ford Crown Vic	2003	4	2,886
	2444	Police Depart.	2004 Chevrolet Malibu	2004	3	2,451
	4038	T&ES	1995 Oldsmobile Cutlas Ciera	1995	12	1,008
	4400	T&ES	1999 Dodge Stratus	1999	8	3,105
	4405	T&ES	1999 Dodge Stratus	1999	8	1,645
	5004	Fire	2003 Chevy Malibu	2003	4	2,300
	5062	Fire	1998 Chevrolet Cavalier	1998	9	1,200
	5964	Fire	1998 Chevrolet Cavalier	1998	9	3,500
	5988	Fire	1998 Chevrolet Cavalier	1998	9	2,700
	5990	Fire	1998 Chevrolet Cavalier	1998	9	1,500
	5013	Fire	2001 Ford Crown Victoria	2001	6	3,100
Number of General Purpose Sedans						
Pickup Trucks	0601	Redevelopment and Housing Authority	1994 Ford Stakebody	1994	13	1,186
	0623	Redevelopment and Housing Authority	1996 Ford Ranger	1996	11	1,190
	3395	General Services	2004 Dodge Dakota	2004	3	441
	3301	General Services	2004 Dodge Dakota	2004	3	1,113

Exhibit 5 (3)

Class	Equip. #	Department	Year / Make Model	Year	Age	Annual Mileage
Pickup Trucks	3302	General Services	1991 Chevrolet S10 Pickup	1991	16	3,816
	0431	Health Department	2005 Ford F150	2005	2	1,309
	7291	Parks and Recreation	2006 Ford F350	2006	1	1,525
	7536	Parks and Recreation	2005 GMC Sierra C2500	2005	2	2,987
	7157	Parks and Recreation	1999 Ford F450	1999	8	3,460
	7577	Parks and Recreation	2003 Ford F150	2003	4	3,579
	7572	Parks and Recreation	1994 GMC Sierra	1994	13	3,840
	4119	T&ES	2003 Ford F450	2003	4	1,745
	4118	T&ES	2003 Ford F450	2003	4	2,084
	4104	T&ES	2006 Ford F150	2006	1	3,460
	4317	T&ES	2005 Ford F450	2005	2	3,775
	5093	Fire	2003 Ford F150	2003	4	4,500
	5092	Fire	2003 Ford F150	2003	4	3,500
	5910	Fire	1997 GMC 1/2 Ton	1997	10	4,200
	5031	Fire	2004 Chevy Colorado	2004	3	4,300
	5928	Fire	1997 GMC Utility	1997	10	2,500
Number of Pickup Trucks					22	
Sport Utility Vehicle	0605	Redevelopment and Housing Authority	1995 Jeep Cherokee	1995	12	2,758
	3350	General Services	2004 Ford Escape	2004	3	1,377
	3305	General Services	2005 Ford Escape Hybrid	2005	2	2,417
	0121	ITS - Telecommunications	1994 Suzuki Sidekick	1994	13	2,190
	7506	Parks and Recreation	2005 Ford Explorer	2005	2	1,954
	7597	Parks and Recreation	2005 Ford Escape	2005	2	3,445
	7502	Parks and Recreation	2005 Chevrolet Tahoe	2005	2	4,333
	0501	Planning / Comm. Dev	1997 Ford Expedition	1997	10	3,303
	1956	Police Depart.	2001 Chevy Suburban	2001	6	3,943
	2355	Police Depart.	2003 Chevy Suburban	2003	4	3,564
	2357	Police Depart.	2003 Chevy Suburban	2003	4	4,132
	4029	T&ES	1999 Jeep Cherokee	1999	8	744
	4200	T&ES	2001 Jeep Cherokee	2001	6	3,000

Exhibit 5 (4)

Class	Equip. #	Department	Year / Make Model	Year	Age	Annual Mileage
Sport Utility Vehicle	4411	T&ES	1999 Jeep Cherokee	1999	8	4,583
	4310	T&ES	2001 Jeep Cherokee	2001	6	4,640
	5014	Fire	2005 Ford Escape	2005	2	4,400
	5060	Fire	2005 Ford Escape	2005	2	4,900
	5063	Fire	2002 Jeep Liberty	2002	5	2,500
	5068	Fire	2000 Jeep Cherokee	2000	7	4,100
	5073	Fire	2000 Jeep Cherokee	2000	7	3,600
	5075	Fire	2005 Ford Escape	2005	2	4,500
	5076	Fire	2000 Jeep Cherokee	2000	7	4,200
	5078	Fire	2000 Jeep Cherokee	2000	7	4,300
	5909	Fire	1998 Chevy Suburban	1998	9	2,600
Number of Sport Utility Vehicles					26	
Van	0630	Redevelopment / Housing Authority	2001 GMC Van Cargo	2001	6	1,041
	0612	Redevelopment and Housing Authority	1998 Ford E250	1998	9	1,126
	0624	Redevelopment and Housing Authority	1999 Ford Cargo Van	1999	8	1,239
	0616	Redevelopment and Housing Authority	1993 Chevrolet C10 Cargo Van	1993	14	1,517
	0632	Redevelopment and Housing Authority	2002 GMC Cargo Van	2002	5	1,770
	3359	General Services	2004 Chevrolet Express Van	2004	3	514
	3102	General Services	2005 Chevrolet Astro Van	2005	2	1,131
	3312	General Services	2000 Chevrolet Astro Van	2000	7	1,138
	0403	Health Department	2003 Dodge Ram	2003	4	1,419
	0430	Health Department	2004 GMC Savana	2004	3	1,599
	0099	Historic Alexandria	1989 Ford Aerostar	1989	18	2,107
	0321	Human Services	2005 Dodge Caravan	2005	2	1,970
	0841	MH/MR/SA	2006 Ford E350	2006	1	774
	0721	MH/MR/SA	2000 GMC Safari	2000	7	1,168

Exhibit 5 (4)

Class	Equip. #	Department	Year / Make Model	Year	Age	Annual Mileage
Van	0811	MH/MR/SA	1998 GMC Safari	1998	9	1,710
	8631	Office of Sheriff	2001 Ford E350	2001	6	1,119
	8634	Office of Sheriff	2001 GMC Safari	2001	6	1,343
	8611	Office of Sheriff	2005 GMC Savana	2005	2	1,931
	7500	Parks and Recreation	2003 Chevrolet Van	2003	4	614
	7212	Parks and Recreation	1997 Ford Aerostar	1997	10	1,397
	1791	Police Depart.	2000 Dodge Van	2000	7	771
	1223	Police Depart.	1988 Ford Van	1988	19	604
	1799	Police Depart.	1998 Ford Van	1998	9	399
	5012	Fire	2003 Dodge Passenger Van	2003	4	2,100
	5912	Fire	1995 Ford Passenger Van	1995	12	2,600
Number of Vans					27	

Exhibit 6 (1)

Sport Utility Vehicle Assignments

Equip #	Dept #	Year / Make Model	Year
0605	Alexandria Redevelopment and Housing Authority	1995 Jeep Cherokee	1995
0628	Alexandria Redevelopment and Housing Authority	2001 Jeep Cherokee	2001
0631	Alexandria Redevelopment and Housing Authority	2002 Jeep Cherokee	2002
5903	Fire	1997 GMC Suburban	1997
5909	Fire	1998 Chevy Suburban	1998
5066	Fire	2000 Jeep Cherokee	2000
5068	Fire	2000 Jeep Cherokee	2000
5070	Fire	2000 Jeep Cherokee	2000
5072	Fire	2000 Jeep Cherokee	2000
5073	Fire	2000 Jeep Cherokee	2000
5076	Fire	2000 Jeep Cherokee	2000
5077	Fire	2000 Jeep Cherokee	2000
5078	Fire	2000 Jeep Cherokee	2000
5067	Fire	2001 Jeep Cherokee	2001
5074	Fire	2001 Jeep Cherokee	2001
5007	Fire	2002 Ford Explorer	2002
5015	Fire	2002 Ford Explorer	2002
5920	Fire	2002 Ford Explorer	2002
5005	Fire	2002 Jeep Liberty	2002
5030	Fire	2002 Jeep Liberty	2002
5063	Fire	2002 Jeep Liberty	2002
5065	Fire	2002 Jeep Liberty	2002
5069	Fire	2002 Jeep Liberty	2002
5003	Fire	2003 Chevrolet Suburban	2003
5009	Fire	2003 Chevrolet Suburban	2003
5050	Fire	2003 Chevy Tahoe	2003
5022	Fire	2003 Ford Explorer	2003
5026	Fire	2004 Ford Explorer	2004
5079	Fire	2004 Ford Explorer	2004
5080	Fire	2004 Ford Explorer	2004
5081	Fire	2004 Ford Explorer	2004

Exhibit 6 (2)

Equip #	Dept #	Year / Make Model	Year
5082	Fire	2004 Ford Explorer	2004
5006	Fire	2005 Ford Escape	2005
5014	Fire	2005 Ford Escape	2005
5060	Fire	2005 Ford Escape	2005
5061	Fire	2005 Ford Escape	2005
5071	Fire	2005 Ford Escape	2005
5075	Fire	2005 Ford Escape	2005
5086	Fire	2005 Ford Escape	2005
5087	Fire	2005 Ford Escape	2005
5091	Fire	2005 Ford Escape	2005
5001	Fire	2005 Ford Explorer	2005
5008	Fire	2005 Ford Explorer	2005
5002	Fire	2006 Chevy Tahoe	2006
5020	Fire	2006 Chevy Tahoe	2006
5051	Fire	2006 Chevy Tahoe	2006
5024	Fire	2006 Ford Escape	2006
5064	Fire	2006 Ford Escape	2006
5088	Fire	2006 Ford Escape	2006
5089	Fire	2006 Ford Escape	2006
5090	Fire	2006 Ford Escape	2006
5094	Fire	2006 Ford Escape	2006
5095	Fire	2006 Ford Escape	2006
5096	Fire	2006 Ford Escape	2006
5097	Fire	2006 Ford Escape	2006
5098	Fire	2006 Ford Escape	2006
5023	Fire	2006 Jeep Liberty	2006
5027	Fire	2007 Ford Escape	2007
5029	Fire	2007 Ford Escape	2007
5032	Fire	2007 Ford Escape	2007
5033	Fire	2007 Ford Escape	2007
5034	Fire	2007 Ford Escape	2007
5035	Fire	2007 Ford Escape	2007
5039	Fire	2007 Ford Explorer	2007
3201	General Services	2003 Chevrolet Suburban	2003

Exhibit 6 (3)

Equip #	Dept #	Year / Make Model	Year
3350	General Services	2004 Ford Escape	2004
3305	General Services	2005 Ford Escape Hybrid	2005
0319	Human Services	2001 Jeep Cherokee	2001
0350	Human Services	2001 Jeep Cherokee	2001
0121	ITS - Telecommunications	1994 Suzuki Sidekick	1994
7563	Parks and Recreation	2002 Ford Expedition	2002
7502	Parks and Recreation	2005 Chevrolet Tahoe	2005
7597	Parks and Recreation	2005 Ford Escape	2005
7506	Parks and Recreation	2005 Ford Explorer	2005
0501	Planning / Comm. Dev	1997 Ford Expedition	1997
0502	Planning / Comm. Dev	1997 Ford Expedition	1997
1704	Police Depart.	1996 Chevrolet Suburban	1996
1875	Police Depart.	1998 Jeep Cherokee	1998
2351	Police Depart.	2003 Chevrolet Suburban	2003
2354	Police Depart.	2003 Chevrolet Suburban	2003
2353	Police Depart.	2003 Chevrolet Suburban	2003
2352	Police Depart.	2003 Chevrolet Suburban	2003
2357	Police Depart.	2003 Chevrolet Suburban	2003
2355	Police Depart.	2003 Chevrolet Suburban	2003
2356	Police Depart.	2003 Chevrolet Suburban	2003
2447	Police Depart.	2004 Chevrolet Suburban	2004
8652	Sheriff	2004 Ford Explorer	2004
8651	Sheriff	2003 Chevrolet Suburban	2003
4103	T&ES	2003 Chevrolet Suburban	2003
4029	T&ES	1998 Ford Expedition	1998
4411	T&ES	1999 Jeep Cherokee	1999
4026	T&ES	1999 Jeep Cherokee	1999
4022	T&ES	1999 Jeep Cherokee	1999
4410	T&ES	1999 Jeep Cherokee	1999
4017	T&ES	2000 Ford Excursion	2000
4015	T&ES	2000 Ford Excursion	2000
4200	T&ES	2001 Jeep Cherokee	2001

Exhibit 6 (4)

Equip #	Dept #	Year / Make Model	Year
4310	T&ES	2001 Jeep Cherokee	2001
4110	T&ES	2001 Jeep Cherokee	2001
4106	T&ES	2003 Ford Explorer	2003
4100	T&ES	2003 Ford Explorer	2003
4025	T&ES	2005 Ford Escape	2005
4021	T&ES	2005 Ford Escape	2005
4018	T&ES	2005 Ford Escape	2005
4023	T&ES	2005 Ford Escape	2005
4020	T&ES	2005 Ford Escape	2005
4401	T&ES	2005 Ford Escape	2005
4027	T&ES	2005 Ford Escape	2005
4028	T&ES	2005 Ford Escape	2005
4102	T&ES	2005 Ford Escape	2005
4019	T&ES	2005 Ford Escape	2005
4024	T&ES	2005 Ford Escape	2005
4039	T&ES	2005 Ford Escape Hybrid	2005

8. VEHICLE STORAGE REQUIREMENTS

8. VEHICLE STORAGE REQUIREMENTS

This section presents an analysis of the vehicle storage requirements for the new police building and for reserve fire apparatus.

1. THE CITY IS BUILDING A NEW POLICE BUILDING WHOSE CONSTRUCTION WILL BE COMPLETED IN 2012.

This project provides for the design and construction of a new multi-level police headquarters facility. The new facility will include a multi-level structure of at least 110,000 square feet, a multi-level parking structure, and significant site, security, and infrastructure improvements. In addition, there are significant site improvements to be accomplished as part of this project, including the relocation of the Transportation and Environmental Services / Parks and Recreation maintenance facility from South Quaker Lane to Roth Street; demolition of the South Quaker facility; relocation of the salt domes from the current approved Police facility site; environmental cleanup; and reconfiguration and new construction of impacted access and existing parking areas.

A design contract was awarded in FY 2006 for the new police facility. During the design process, the City will be reviewing the overall facility and parking programs to address potential shared public / police facility opportunities, and will update potential program areas as required due to program growth, changes in technology and related costs, and other areas that might have impact on the overall final construction costs. The final construction estimate will rely significantly on this programming update.

Upon successful completion of the design process in 2009, engineering specifications will be drafted for competitive bids by construction firms. Construction is expected to begin in May 2009, with completion scheduled for September 2012.

2. THE NEW POLICE BUILDING GARAGE HAS BEEN CONFIGURED FOR STORAGE OF POLICE VEHICLES.

The new police building includes a multi-level parking structure. This structure has been planned to include storage of a variety of vehicles, including vehicles that are not utilized routinely. The plan for storage of these vehicles is presented in the table below.

Component	Comments	Net Square Feet
Fleet	2 offices shared by 4 staff, located in the garage	320
Fleet Storage Room	secure space to be utilized for racks,. Holds vehicle parts, radios, siren boxes, light bars, etc.	500
Fleet Locker Area	Toilets, showers, lockers	160
Mud room		60
Bike squad	Includes storage, maintenance and lockers	1,000
Civil Disturbance Storage	Riot gear, uniforms, repair. Sink with drain boards and storage area to accommodate drying racks for 180 protective suits / helmets, 100 riot shields	200
Motors storage	Tools, motor parts, compressed air, drying room, cleaning and maintenance supplies	200
Tactical Computers Installation Bay	Installation bay and tool storage. Provide 2 garage bays for minor repairs, radio maintenance. Each bay standard size for 1 car with doors open. 1 bay should have a floor lift	620
Tactical computers and radio garage bay storage	Shared for tool cart storage	50
Evidence: Vehicle Processing	4 bays with lifts, compressed air, blacklighting capabilities, cabinet storage	1,240
Evidence: Vehicle Processing Workstations	For paperwork. Computer workstations	160
Crash Reconstruction Storage		120
Child Safety Storage		120
SOT Vehicle	Special Operations Transport	480
HNT	Hostage Bus	576
Command Bus	Incident Command System	576
Robot Trailer	Space for 2 future medium-sized vehicles	195
Armored Vehicle		480
Sniper Truck		480
SOT Vehicle	Special Operations Transport	480
Medium Sized Vehicles	Future	390
ATV		390
Parking Enforcement	3-wheeler	780
Traffic Trailer		460
Bike Trailer		230
WMD Trailer		230
Civil Disturbance Trailer		230

Component	Comments	Net Square Feet
Motorcycles		1,400
Fleet and Employee		
Parking		100,620
Car Wash		390
TOTAL		113,137

The General Services Department and the Police Department have developed a well-thought out plan based upon numerous meetings and discussions with each other. This plan should be sufficient to address the storage requirements for the Police Department for its 34-specialty vehicles.

2. THE CITY SHOULD CONSTRUCT A BUTLER-TYPE BUILDING FOR STORAGE OF FIRE DEPARTMENT RESERVE APPARATUS ADJACENT TO THE

The Fire Department has two reserve aerial ladders or trucks and three reserve pumpers. Typically, these reserve apparatus are housed in bays at fire stations. This enables this equipment to be monitored on a daily basis to assure their operational status and readiness.

The City of Alexandria lacks this capability. Its fire stations have two bays - one for a pumper and one for a truck or medic unit. The stations do not have sufficient space to store reserve apparatus. There are a total of two reserve trucks and three reserve pumpers.

As a consequence, these apparatus are stored in the open at the City's corporation yard. This presents a number of challenges in terms of security for this equipment and the equipment stored on the apparatus, and protection of this apparatus from weather.

The City should construct a Butler-type building for the storage of this reserve apparatus that includes electrical and drainage systems. The building would require

approximately 3,200 square feet to store the two trucks (20 feet by 80 feet) and another 2,400 square feet to store the three pumpers. Total square footage would approximate 5,600 square feet with an estimated construction cost of \$340,000 to \$505,000.

Recommendation	One-Time Additional Cost
Construct a Butler-type building for the storage of this reserve apparatus that includes electrical and drainage systems. The building would require approximately 3,200 square feet to store the two trucks (20 feet by 80 feet) and another 2,400 square feet to store the three pumpers.	\$340,000 to \$505,000

Recommendation #69: The City should construct a Butler-type building at the City's corporation yard to store reserve fire apparatus.

9. FLEET REPLACEMENT

9. FLEET REPLACEMENT

Eventually, all vehicles wear out. As they wear out, they become more expensive to operate and maintain and less safe and reliable to use. They become more expensive, in part, because major components and systems, which are costly to fix or replace, cease to function properly or at all. They also become more expensive because component failures tend to be unpredictable, and unplanned for repair requirements are more likely to disrupt the use of the vehicle, impose uneven demands on maintenance resources, and exacerbate parts acquisition difficulties.

The fact that a particular vehicle has reached an age and/or usage threshold beyond which it is a candidate for replacement does not mean that it should automatically be scheduled for replacement. Some vehicles do not wear out as quickly as others due to a variety of factors such as their usage is lower than that of other vehicles in the same class or because their operator takes better care of the vehicle. By the same token, some vehicles need to be replaced sooner than others because they experience above-average wear and tear.

In addition to having guidelines that trigger an assessment of the need to replace a particular vehicle, a good fleet management organization have analytically-based short-term decision-making processes that are used to determine when specific vehicles should be replaced and which vehicles are a higher priority to replace than others.

1. THE CITY SHOULD DEVELOP FORMAL WRITTEN CRITERIA FOR EVALUATING VEHICLE REPLACEMENT NEEDS.

The City has developed replacement criteria for replacement of vehicles within the City's fleet. This is presented in the first exhibit at the end of this chapter.

These replacement criteria are solely based on the age of a vehicle. No other criteria are presented.

It is not financially possible to replace all vehicles within the City's fleet that exceed their age-based replacement criterion, nor is it economically necessary.

Instead, the City should utilize decision-making process that is based upon these replacement criteria, but then should conclude with an analysis of each vehicle eligible for replacement and whether its historical and most recent 12-month maintenance and repair costs in comparison to the same class of vehicles (i.e., general purpose sedans, pickup trucks, vans, etc.) warrant its replacement. The candidate vehicles that could be replaced should be scrutinized using a series of criteria that is not limited to age and life-to-date mileage or hours of use, but also consider factors unique to the vehicle such as its recent repair history, pending repair / refurbishment costs, perceived reliability, suitability and safety, and ease of replacement. These criteria should be used to finalize each year's fleet replacement budget.

The Fleet Services Division Chief should be assigned responsibility for evaluating the vehicles that are eligible for replacement based upon their age, and determining whether the vehicles should be replaced or retained for an additional fiscal year. This recommendation should be provided to the operating department that is assigned the office and the Management and Budget Department. Independently, the operating departments could provide their own recommendations to the Management and Budget

Department. The Management and Budget Department should utilize this information to develop recommendations for the operating budget regarding those vehicles that should be replaced, and those vehicles that should be retained for an additional fiscal year.

Possible criteria are presented in the exhibit following this chapter.

Recommendation #70: The Fleet Services Division / General Services Department should develop analytically-based short-term criteria to determine when specific vehicles should be replaced and which vehicles are a higher priority to replace than others.

2. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD DEVELOP A FIVE-YEAR REPLACEMENT PLAN.

Planning for the replacement of the City's fleet is a matter of prudent financial management. In its more basic form, the development of a five-year replacement plan is no more than a schedule listing the specific equipment proposed for replacement in order of priority, together with cost estimates and the proposed method to finance them (i.e., guaranteed buyback, purchase, etc.).

The five-year replacement plan would not be static. It would be updated each fiscal year to reflect changing priorities, changing maintenance and repair costs, unexpected component failures, etc.

The five-year replacement plan should identify the specific equipment to be replaced, the year in which it would be replaced, the amount proposed to be expended each year, and the proposed method of financing the replacement of the equipment. The City does not have the fiscal ability to raise replacement rates and replace every piece of equipment solely based on the age of a vehicle. Rather, the City will have to balance priorities for replacement within the financial resources available. The five-year replacement plan is an important tool to evaluate whether the balancing of these

priorities against the limited financial resources will result in an aging, expensive-to-maintain fleet and replacement rates need to be increased.

Overall, the City had a total of \$8,842,662 in reserve in the fleet replacement fund at the end of fiscal year 2006-07. A benchmark utilized by the Matrix Consulting Group is that a city should have 15% to 20% of the replacement value of its equipment in reserve. The replacement value of the City's fleet approximates \$41,703,700. The benchmark would suggest that the City of Alexandria should have \$6,255,500 to \$8,340,700 in reserve at the present time. This is \$501,000 to \$2,587,100 less than the City presently has in reserve. The Matrix Consulting Group is not recommending that the City immediately reduce fund balance for the fleet reserve, but rather that it utilize the five-year replacement plan as a guide to determine whether fund balance can be reduced.

The Fleet Services Division / General Services Department should prepare this five-year replacement plan for the review of the operating departments and the Management and Budget Department.

Recommendation #71: The Fleet Services Division / General Services Department should prepare this five year replacement plan for the review of the operating departments and the Management and Budget Department. Based upon the five-year replacement plan, the City should determine whether the equipment replacement fund balance could be reduced.

3. SOME OF THE CITY'S REPLACEMENT CRITERIA SHOULD BE REVISED.

Much of the City's replacement criteria are comparable to practices in other local governments. For example:

- The replacement criteria for general purpose sedans are eight (8) years;
- The replacement criteria for sport utility vehicles is eight (8) years;

- The replacement criteria for vans is eight (8) years; and
- The replacement criteria for pickup trucks is eight (8) years.

However, other aspects of the fleet replacement criteria would appear to result in premature replacement of some classes of equipment. For example:

- Dump trucks have replacement criteria of eight (8) years, when other local governments typically utilize ten (10) to twelve (12) years;
- Trailers have replacement criteria of ten (10) years, when other local governments typically utilize fifteen (15) to twenty (20) years;
- Broom street sweepers have replacement criteria of three (3) years, when other local governments typically utilize five (5) to seven (7) years;
- Vacuum street sweepers have replacement criteria of five (5) years, when other local governments typically utilize seven (7) years; and
- Rear loader refuse collection trucks have replacement criteria of six (6) years, when other local governments typically utilize eight (8) to ten (10) years.

The adjustment of these replacement criteria would have significant financial cost savings. This is amply demonstrated in the third exhibit presented at the end of this chapter.

As the third exhibit indicates, by lengthening the replacement criteria for three classes and thirty (30) pieces of equipment – refuse collection vehicles, street sweepers, and dump trucks – to replacement cycles that are typically utilized by other cities would reduce the depreciation charges by \$225,631 annually.

The Fleet Services Division Chief, General Services Department should evaluate these replacement criteria, including those for fire apparatus, and develop proposals for consideration of the operating departments, the Management and Budget Department, and the City Manager's Office. The Matrix Consulting Group recommends that the replacement criteria for several classes of heavy equipment can be lengthened. The

estimated financial impacts of lengthening replacement criteria for those classes of equipment whose criteria are less than that typically used by other cities are presented in the table below.

Recommendation	Annual Cost Savings
Lengthen replacement criteria for those classes of equipment whose criteria are less than that typically used by other cities	\$400,000

Recommendation #72: The Fleet Services Division Chief, General Services Department should evaluate the City's replacement criteria, including those for fire apparatus, and develop proposals for consideration of the operating departments, the Management and Budget Department, and the City Manager's Office.

Exhibit 6

Existing Vehicle Replacement Criteria

VEHICLE CLASS	REPLACEMENT CRITERIA
Police/Sheriff Vehicles	
Small Sedans (PEO & Admin)	8 Years/72,000 Miles
Mid-Size Sedans (CID)	7 Years/72,000 Miles
Mid-Size Sedans (PEO & Admin)	8 Years/72,000 Miles
Large Sedans (Admin & CID)	7 Years/72,000 Miles
Large Marked Cruisers	5 Years/60,000 Miles
Sport Utility Vehicles (SUV)	8 Years/72,000 Miles
Cargo / Passenger Vans	8 Years/72,000 Miles
Go-4's / Parking Enforcement	8 Years/72,000 Miles
Motorcycles	8 Years/72,000 Miles
Command Bus	12 Years/100,000 Miles
Other City Agency Vehicles/Pool Cars	
Sedans	8 Years/72,000 Miles
Vans/Light Trucks / SUV's	8 Years/72,000 Miles
Large Trucks/Construction Equipment	
Dump Trucks, Leafers, Bucket Trucks, Etc.	8 Years/72,000 Miles
Refuse Trucks	6 Years/50,000 Miles
Street Sweepers	3 Years
Street Vacuums	5 Years
Trailers / Snow Blowers	10 Years
Riding Mowers / Tractors	6 Years
Message Boards	8 Years
Other Construction Equipment	8 – 10 Years (Depending On Usage)
Fire Department Vehicles/Apparatus	
All Sedans (Fire)	8 Years/70,000 Miles
Fire / EMS Response SUV's s	6 Years/60,000 Miles
Sedans / Pickups / SUV's (Code Enforcement)	8 Years/50,000 Miles
All Other Light Duty Vehicles (Pickups / Vans, Etc)	10 Years/60,000 Miles
Trailers	10-12 Years
Ambulances	6 Years
Fire Engines/Pumpers	10 Years
Fire Aerial Ladder Trucks	12 Years
Specialty Units Med Support; Hazmat; Rescue; Air/Light)	12 Years

Exhibit 7

Sample Replacement Criteria

1. The Fleet Services Division / General Services Department shall recommend for City Manager approval the establishment of replacement criteria to meet department requirements to support the replacement of economically obsolete or inoperable vehicles as necessary to maintain a safe, efficient and reliable fleet. Replacement criteria serve as guidelines for evaluating each vehicle against several economic and operational considerations: original capital outlay; estimated replacement cost; cost of continued operation; cost of repair, downtime, and maintenance; and suitability for intended use. It is in the best interest of the City to dispose of a vehicle that is not cost-effective regardless of age or mileage.
2. Vehicles meeting the eligibility requirements for replacement will not necessarily be selected for replacement during a given budget year.
3. A vehicle, or related equipment item, may be considered for replacement regardless of the established minimum replacement interval, if the Fleet Manager determines that the vehicle has been wrecked or damaged (including wear caused by normal operating conditions) to the extent that it is in an unsafe or inoperable condition beyond economical repair. Any replacements are subject to budgetary and purchasing policies as appropriate. Vehicle repairs (one-time or cumulative over a period of one year) exceeding 30% of the vehicle's wholesale value may be justification to discontinue vehicle use and schedule replacement.
4. Vehicles shall meet or exceed at least two of the following criteria to be eligible for replacement:
 - a. The Fleet Services Division / General Services Department determines that it is no longer cost effective to retain.
 - b. The accumulated repair costs reach or exceed 80% of the original purchase price.
 - c. Replacement parts or components are no longer available.
 - d. Miles/hours and age are reached or exceeded.

Exhibit 8

Cost Impact of Modified Replacement Criteria

Vehicle Number	Model Year	Type of Equipment	Purchase Price	Existing Replacement (Years)	Annual Depreciation	Revised Replacement (Years)	Revised Annual Depreciation
4240	2002	Refuse Side Loader	\$151,667	6	\$25,278	7	\$21,667
4241	2000	Refuse Rear Loader	\$127,519	6	\$21,253	10	\$12,752
4242	2005	Refuse Rear Loader	\$14,880	6	\$2,480	10	\$1,488
4243	2005	Refuse Rear Loader	\$141,800	6	\$23,633	10	\$14,180
4245	2005	Refuse Side Loader	\$148,880	6	\$24,813	10	\$14,888
4246	2002	Refuse Rear Loader	\$162,775	6	\$27,129	10	\$16,278
4247	2005	Refuse Rear Loader	\$141,800	6	\$23,633	10	\$14,180
4248	2002	Refuse Rear Loader	\$138,343	6	\$23,057	10	\$13,834
4249	2005	Refuse Rear Loader	\$141,800	6	\$23,633	10	\$14,180
4250	2002	Refuse Rear Loader	\$138,343	6	\$23,057	10	\$13,834
4253	2005	Refuse Side Loader	\$141,800	6	\$23,633	10	\$14,180
4254	2002	Refuse Side Loader	\$138,567	6	\$23,095	7	\$19,795
4256	2000	Refuse Rear Loader	\$127,519	6	\$21,253	7	\$18,217
4259	2000	Refuse Rear Loader	\$105,300	6	\$17,550	10	\$10,530
Sub-Total					\$303,499		\$200,003
4212	2006	Street Sweeper, Large 3-Wheel	\$132,495	3	\$44,165	7	\$18,928
4213	2005	Street Sweeper, Large 3-Wheel	\$126,418	3	\$42,139	7	\$18,060
4216	1998	Heavy Truck, Sweeper	\$124,014	3	\$41,338	7	\$17,716
4227	2004	Street Cleaning	\$122,464	3	\$40,821	7	\$17,495
Sub-Total					\$168,464		\$72,199
4121	1994	Heavy Truck, 2-Axle Dump	\$71,799	8	\$8,975	10	\$7,180
4123	2001	Heavy Truck, 2-Axle Dump	\$97,965	8	\$12,246	10	\$9,797
4124	2004	Heavy Truck, 2-Axle Dump	\$85,945	8	\$10,743	10	\$8,595
4125	1999	Heavy Truck, 2-Axle Dump	\$80,640	8	\$10,080	10	\$8,064
4126	2001	Heavy Truck, 2-Axle Dump	\$97,965	8	\$12,246	10	\$9,797
4127	2004	Heavy Truck, Dump	\$86,695	8	\$10,837	10	\$8,670
4128	1999	Heavy Truck, 1-Axle Dump	\$80,460	8	\$10,058	10	\$8,046
4129	2001	Heavy Truck, 1-Axle Dump	\$98,077	8	\$12,260	10	\$9,808

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Vehicle Number	Model Year	Type of Equipment	Purchase Price	Existing Replacement (Years)	Annual Depreciation	Revised Replacement (Years)	Revised Annual Depreciation
4130	2001	Heavy Truck, 1-Axle Dump	\$97,965	8	\$12,246	10	\$9,797
4131	2000	Heavy Truck, 2-Axle Dump	\$73,589	8	\$9,199	10	\$7,359
4132	1990	Heavy Truck, 2-Axle Dump	\$77,000	8	\$9,625	10	\$7,700
4321	2004	Heavy Truck, Dump	\$86,695	8	\$10,837	10	\$8,670
Sub-Total					\$129,349		\$103,480
TOTAL					\$601,312		\$375,681

10. ENVIRONMENTAL STEWARDSHIP

10. ENVIRONMENTAL STEWARDSHIP

The City of Alexandria promotes environmental stewardship and conservation by following green practices and policies in the course of its procurement, recycling, pesticide use, energy conservation, and facilities and fleet, among other City business operations. The Fleet Services Division is key player in implementing a set of processes and practices that enable the City to reduce its environmental impacts and increase its operating efficiency. The recommendations in this analysis – to consolidate the responsibility for management of the City's fleet – are also designed to enhance the effectiveness of the City in working to advance air quality, public health, reduced energy consumption and economic development goals for the area by promoting the implementation of policies and practices that contribute to the reduction of petroleum consumption in its vehicles. Strategies have been adopted to facilitate the introduction of alternative fuels and hybrid-electric vehicles, leading to increased fuel efficiency.

1. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD DEVELOP AN ALTERNATIVE FUEL POLICY AND PROCEDURE FOR CONSIDERATION OF THE CITY COUNCIL

The Fleet Services Division / General Services Department already has a number of alternative fuel vehicles in the City's fleet. However, the Division should develop a policy and procedure for the expansion of alternative fuel vehicles in applications that will not result in impairment of service delivery. For example, a law enforcement patrol sedan would not be a recommended application for a hybrid electric vehicle, but could be an appropriate application for compressed natural gas. There are a number of alternative fuels that the City should consider including hybrid electric vehicles, compressed natural gas, ethanol, propane, and biodiesel.

A number of local governments have significantly expanded the proportion of their fleet that utilizes alternative fuels. Examples are presented below.

- With a population of around 65,000, Hoover, Alabama, is the sixth largest city in the state. The City of Hoover currently operates 179 flex-fuel vehicles as well as 21 other light-duty vehicles, 60 medium- and heavy-duty trucks, two buses, two shuttles, and 96 off-road vehicles on B20, a blend of 20% biodiesel and 80% petroleum diesel. The city currently boasts that 80% of the fuel used by its fleet is alternative fuel.

Hoover's police force operates 130 of the flex-fuel vehicles, which are fueled 100% of the time on E85. The city's administrative personnel use the remaining 49 flex-fuel vehicles. Hoover has also started a test program to use B20 in its fire trucks and plans to forward the results to the National Fire Protection Association.

Hoover may also be the first municipal government in the U.S. to manufacture its own B100 using waste vegetable oil collected from local restaurants. The city also plans to start home collection of waste vegetable oil by providing gallon jugs to homeowners who want to participate.

- The Clark County School District in Las Vegas, Nevada, is the fifth largest in the nation. It spans more than 8,000 square miles and provides transportation to approximately 138,000 students. The district currently has 1,450 school buses that use biodiesel and plans to add 100 buses every year for the next five years. The fleet travels more than 18 million miles and consumes more than 3 million gallons of biodiesel (B20 blend) each year. That adds up to 600,000 gallons of petroleum displaced annually.

The school district initially tried using biodiesel made from recycled cooking oil, but found that the vehicles performed better with 100% soybean oil. The district was also able to take advantage of the one dollar per gallon tax incentive for using soy oil. The school district currently has 10 biodiesel fueling stations throughout the Las Vegas area. In addition to the school bus fleet, the district operates more than 500 other vehicles including food service trucks, construction equipment, water trucks, backhoes and mowing machines on B20.

- Valley Metro Transit, the regional transit system for metropolitan Phoenix, serves 50 million passengers per year and operates one of the nation's largest fleets of natural gas transit buses. The transit service operates a fleet of 70% liquefied natural gas (LNG) buses and 30% ultra-low-sulfur diesel (ULSD) buses. Valley Metro uses 8.5 million gallons of liquefied natural gas (LNG) and 900,000 gallons of compressed natural gas (CNG) annually. The buses are owned by the cities of Phoenix, Tempe, Mesa, and Scottsdale and the Regional Public Transportation Authority (RPTA). The procurement manager for the City of Phoenix indicated that the City has learned that alternative fuel vehicles are more costly to purchase, operate, and maintain, but the benefits include reducing carbon-based pollutants in the air and having more than one fuel source available. The City

also indicated that the City had observed an improvement in the public's perception of mass transit and an improvement in ridership.

The State of Maryland adopted a policy that, consistent with the goals of the Chesapeake 2000 Agreement (also adopted by the Commonwealth of Virginia), the State shall offer more flexibility in purchasing, where practical, low-emission and alternative fuel vehicles for its fleet. The State shall ensure that, for fleet units operating bi-fuel or flex-fuel vehicles (vehicles that operate on either motor gasoline or an alternative fuel, as defined by the Federal Energy Policy Act), an average of 50 percent of the fuel used by those vehicles shall be alternative fuel. This reflects a leadership in alternative fuels exercised by a number of states and local governments.

The Fleet Services Division / General Services Department should develop a policy and procedure for continued introduction of alternative fuel vehicles into the City's fleet.

Recommendation #73: The Fleet Services Division / General Services Department should develop an alternative fuel policy for consideration of the City Council.

2. THE FLEET SERVICES DIVISION / GENERAL SERVICES DEPARTMENT SHOULD BECOME A MEMBER OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY – VIRGINIA ENVIRONMENTAL EXCELLENCE PROGRAM.

A number of local government fleets in Virginia have become members of the Virginia Environmental Excellence program, sponsored by the Virginia Department of Environmental Quality. This includes Fairfax County, Manassas, Chesapeake, etc.

The initial stage is considered Environmental Enterprise (or E2) is a facility in the early stages of implementing an environmental management system emphasizing pollution prevention. Facilities achieving Environmental Enterprise status are eligible for a number of benefits, including technical assistance for the development and

implementation of an environmental management system and pollution prevention program. Other incentives include positive public recognition, possible reductions in annual permit fees, and a single point of contact within DEQ. To achieve this Environmental Enterprise status, the Fleet Services Division / General Services Department would need to submit an application with the following information::

- A copy of the facility's policy statement outlining its commitment to improving environmental quality, stressing compliance with environmental requirements, pollution prevention, training, communication and continuous improvement.
- An evaluation of the actual or potential environmental impacts and aspects from current or future activities at the facility, including a comprehensive list of impacts and aspects, an explanation of the process used by the facility to determine its significant impacts and aspects, a summary of the most recent impact and aspect review process, and the facility's schedule for reviewing and reevaluating its impacts.
- Objectives and targets for addressing significant environmental impacts, including the facility's goals (or objectives) for addressing its significant impacts and aspects and the projects or tasks that are planned to address each of the significant impacts and aspects (with an implementation schedule).
- Description of the facility's pollution prevention program, including a comprehensive list of pollution prevention projects and accomplishments, not limited to those which address its significant impacts and aspects and any environmental results and costs savings achieved from past projects if available.
- Commitment to environmental measure reporting: E2 facilities are required to commit to report on at least one of the VEEP environmental measures in their annual reports, which are due by April 1st each year for the previous calendar year. Facilities can report on a specific project that falls within one of the categories (i.e., switching to a non-hazardous parts washer to reduce hazardous waste generation) or their results for reducing the entire waste stream (i.e., energy use for the entire facility). These measures should be tied to goals and targets of the facility's EMS and pollution prevention plans. VEEP measures are: air emissions, energy use, water discharges, water use, waste, materials use, land use, product performance and other.

Recommendation #74: The Fleet Services Division / General Services Department should become a member of Virginia Department of Environmental Quality – Virginia Environmental Excellence Program, initially as an Environmental Enterprise (or E2).

APPENDICES

APPENDIX 1 - PROFILE

This chapter presents a profile of current organization and operations for fleet services in the General Services Department, Fire Department, and the Recreation, Parks and Cultural Activities Department. This includes information regarding the following:

- Introduction
- Organizational charts showing authorized staff positions and reporting relationships
- Key personnel roles and responsibilities
- Summary of key services

1. FLEET SERVICES DIVISION, GENERAL SERVICES DEPARTMENT

This section provides a review of the Fleet Services Division of the General Services Department. The table, which follows, presents the Fleet Services Division's general fund expenditures and authorized staffing.

	Actual FY 2005	Approved FY 2006	Approved FY 2007
General Fund Expenditures	\$2,677,054	\$2,542,299	\$3,376,964
Full-Time Staffing	23	23	23

It should be noted that fiscal year 2007 approved budget includes a mandatory adjustment of \$671,939 to reflect a projected increase in the cost of fuel for City vehicles. The table, below, presents Fleet Services performance indicators and measures as presented in the City's annual budget.

Indicator	Actual FY 2003	Actual FY 2004	Actual FY 2005	Estimated FY 2006	Projected FY 2007
Number of motorized equipment units	764	772	805	820	835
Number of maintenance and repair	7,930	8,246	8,440	8,720	8,825

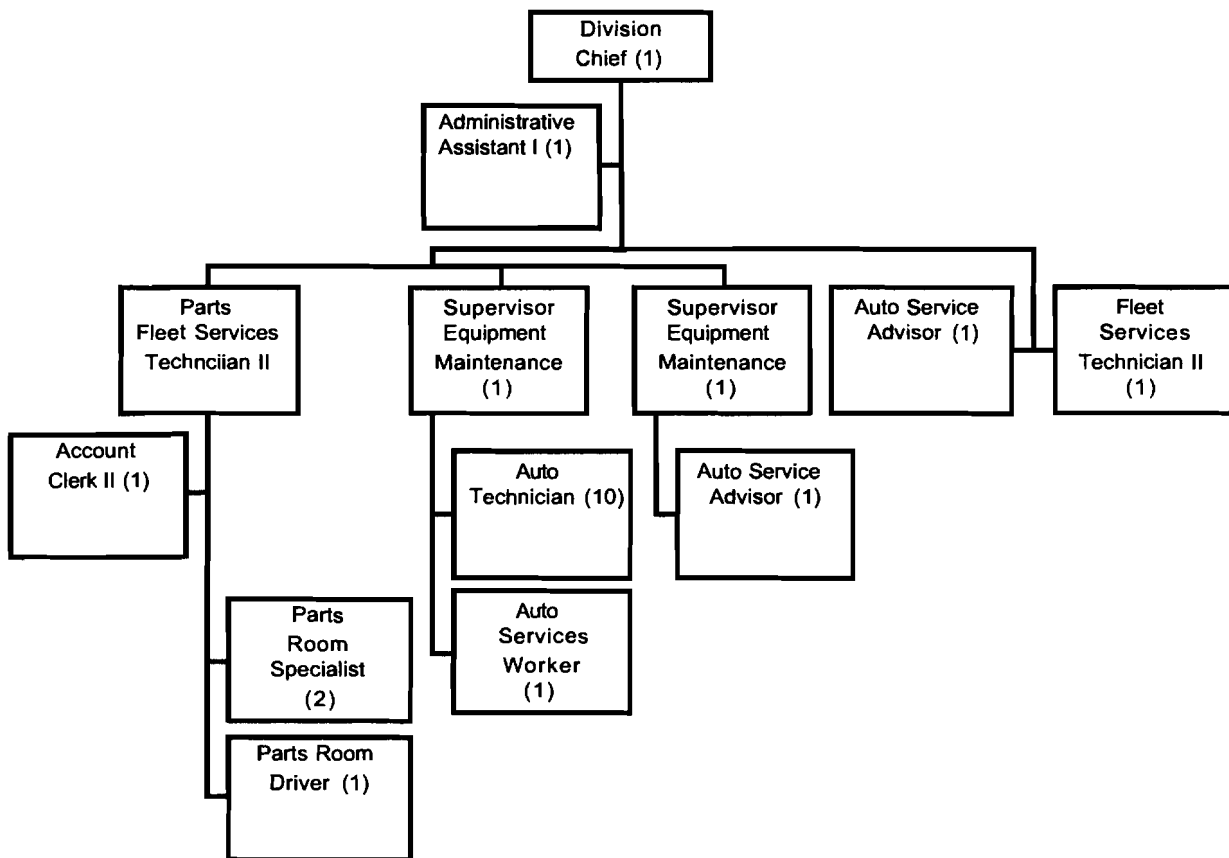
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Indicator	Actual FY 2003	Actual FY 2004	Actual FY 2005	Estimated FY 2006	Projected FY 2007
Average number of direct labor hours per repair	2.2	2.1	1.9	2.0	2.0
Number of direct labor hours	17,252	17,463	16,172	17,600	18,000
Average maintenance / repair tasks per vehicle	10.4	10.7	10.5	10.6	10.6
Average maintenance / repair hours per vehicle	22.6	22.6	20.1	21.5	21.6

The section, which follows, provides the plan of organization for the Fleet Services Division.

(1) Organization

This section presents the table of organization for the Fleet Services Division.



The Division is authorized a total of twenty-three positions.

(2) Staff Roles and Responsibilities

The table, which follows, presents the roles and responsibilities for the staff assigned to the Fleet Services Division.

Function	Position	Auth.	Act.	Responsibilities
Administration	Division Chief	1.0	1.0	• Responsible for the management and direction of the Fleet Services Division. • Develops and monitors the Division's annual operating budget. • Develops annual budget memo with respect to fleet standards. • Reviews and approves new fleet purchases requested by operating departments. • Troubleshoot issues and problems. • Writes specifications for fleet acquisitions. • Receives and approves all purchase orders and invoices.
	Administrative Assistant I	1.0	1.0	• Reports to the Division Chief. • Provides customer support, answer phones, schedules service, assigns work tickets, etc. • Manages the loaner car program (e.g., provides loaner cars to City staff whose assigned vehicles are receiving service). • Manages the rental car program, including receipt of requests, tracking of rental cars, maintaining documentation for billing purposes, etc. • Maintains and disburses fuel cards, as needed. • Maintains auction database for the Division, including date, inventory of vehicles sold and prices. • Responsible for processing payment vouchers, as assigned by the Division Chief.

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Function	Position	Auth.	Act.	Responsibilities
Administration (Continued)	Automotive Services Advisor	1.0	1.0	- Position was originally assigned to the Service Shop. - Reports to the Division Chief. - Generates monthly bills from FASTER to limited operating departments, including TES Recycling and Refuse Divisions, Alexandria Redevelopment and Housing Authority, Fire Department, School Department, DASH, and Sanitation. - Responsible for overtime billing of operating department for use of Fleet Services personnel on special projects on an overtime basis. - Processes monthly motor pool, rental car and fuel card billing. - Responsible for new vehicle tags and registration. - Manages the calibration certification for Police Department patrol cars (e.g., speed enforcement devices). - Handles Division's time and attendance reporting in Kronos. - Receives and process deadline vehicles for auction. - Maintains vehicle files, including spare keys, title, etc. - Troubleshoots problems as necessary.
	Fleet Services Technician II	1.0	1.0	- Reports to the Division Chief. - Provides backup to the Maintenance Shop, as needed. This includes working on complex problems, as well as handling peaks in workload. - Troubleshoots and diagnoses problems and repair needs. - Provide preventive and routine maintenance and performs minor repairs on the City's fueling sites.
Parts	Fleet Services Technician II	1.0	1.0	- Reports to the Division Chief. - Acting as the parts room supervisor - Responsible for managing the day-to-day activities of parts staff. - Set thresholds in CCG / FASTER for automatic re-orders/ - Runs inventory reports to determine supply needs. - Orders parts. - Conducts periodic audits of the inventory. - Negotiates discounts and prices with vendors. - Provides assistance to the Maintenance Shop with respect to maintenance and repair work.

Function	Position	Auth.	Act.	Responsibilities
Parts (Cont'd)	Account Clerk II	1.0	1.0	• Reports to the Fleet Services Technician. • Primary responsibility for receipt and processing of the Parts Section's invoices. • Manages and monitors the Division's procurement card program. • Generates weekly reports on vendor payments. • Provides backup to Part Specialist, as needed.
	Automotive Parts Specialist	2.0	2.0	• Reports to the Diagnostician. • Responsible for staffing the parts room. • Checks in deliveries and stock shelves. • Receives parts orders from Fleet Services staff. • Dispenses parts per orders. • Locate and orders parts not kept in stock. • Maintain data in Faster with respect to parts. • Directs the daily activity of the Parts Driver.
	Automotive Parts Driver	1.0	1.0	• Reports to the Diagnostician. • Responsible for pick up and delivery of parts as needed. • Stocks inventory in the parts supply room. • Provides assistance and back up to parts counter personnel.
Maintenance	Supervisor Equipment Maintenance	1.0	1.0	• Reports to the Division Chief. • Responsible for the day-to-day management and direction of the Maintenance Shop, which provides preventive maintenance and repair services to the bulk of the City's Fleet. • Receive work orders from the Services Unit. • Works on complex and / or high priority equipment, such as refuse trucks. • Organizes special projects, such as servicing snow plows, street sweeper, leave equipment, etc. • Troubleshoots problems. • Reviews and assists staff work, as necessary. • Along with Division Chief determines work repair work to be outsourced, etc. • Responds to requests for service in the field as needed. • Handles administrative and supervisory needs for Unit, including performance evaluations of staff, time and attendance reporting, etc.

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Analysis of Fleet Services

Function	Position	Auth.	Act.	Responsibilities
Maintenance (Cont'd)	Automotive Mechanic	10.0	10.0	• Reports to the Maintenance Supervisor. • Responsible for the preventive maintenance and repair of the City's fleet. • With the exception of three Technicians, staff work 4-10s from 6:00 AM to 4:30 PM with either Monday or Friday off. Three technicians work 8:00 AM to 4:30 PM, Mondays through Friday. • Receive daily work tickets and assignments from the Service Unit. • Typically four Fleet Technicians are assigned to heavy equipment and seven Fleet Technicians are assigned to light equipment.
	Automotive Services Worker	1.0	1.0	• Reports to the Maintenance Supervisor. • Staffs the lube bay. • Responsible for lube and oil changes, as well as light preventive maintenance (e.g., PM As and Bs). • Customers can schedule appointments for service with the Lube Technician. • Provides support to the Fleet Technicians, as needed.
Service	Supervisor Equipment Maintenance	1.0	1.0	• Reports to the Division Chief. • Responsible for managing the day-to-day operations of the Service Unit. • Receives request for service from Fleet customers. • Monitors and schedules preventive maintenance, including initial establishment of thresholds. • Supervisor runs monthly report of vehicle due for service.
	Automotive Services Advisor	1.0	1.0	• Reports to the Supervisory - Advisor. • Responsible for planning and scheduling preventive maintenance and repair services for the Maintenance Shop. • Notifies customers (through designated fleet manager) of service needs (via email, phone and / or interdepartmental mail). • Schedules service. • Coordinates unscheduled repairs. • Generates work orders and distributes work orders to the Auto Mechanics and Lube Technician. • Notifies customer when vehicle is ready for pickup. • Coordinates outsourced work for body repair work / accident repairs, including distribution of purchase orders to customer.

(3) Summary of Operations

The table below provides a summary of the services provided by each section.

Function	Description of Services
Administration	• Management of the Division's budget. • Processing of invoices. • Management of rental and loaner cards. • Issues monthly billing reports.
Parts	• Orders, stocks and dispense supplies. • Tracks purchase orders and invoices relating to parts. • Conducts audits of inventory.
Maintenance	• Performs maintenance and repair on the bulk of the City's Fleet. • Completes work tickets, as assigned by the Service Unit.
Service	• Plans and schedules preventive maintenance and repair work for City vehicles and equipment. • Provides customer support.

The table, which follows, provides a summary of the vehicles maintained by the Fleet Services Division in 2007.

DEPARTMENT	NUMBER OF VEHICLES IN THE FLEET
AHRA	25
City Manager	-
Commonwealth Attorney	1
General Services	89
Health	5
Historic Alexandria	3
Human Services	35
ITS	2
Juvenile Court	5
Library	3
MH / MR / SA	39
Planning and Zoning	3
Police (Including Asset Forfeiture Vehicles)	313
Parks and Recreation	112
Sheriff	35
T & ES	154
TOTAL	824

As shown in the above table, the size of the fleet maintained by the Fleet Services Division is an estimated 824 vehicles and pieces of equipment (as of 2007).

It should be noted that the Fleet Services Division does not maintain Fire Department vehicles and apparatus or the small equipment for the Recreation, Parks and Cultural Activities Department. These vehicles are not reflected in the table above.

The Matrix Consulting Group extracted parts inventory data from the CCG / FASTER System reviewed databases developed in Microsoft Excel, and utilized by staff. The table, below, presents a summary of the inventory on October 19, 2006.

Total Parts Line Items	2,114
Total Pieces	22,910
Total Inventory Costs	\$226,205

In addition, the project team reviewed parts turnover data. The table, which follows, presents the distribution of turnover for parts.

Number of Turns	Number of Parts with Turns	% of Parts
1	1,577	77%
2	243	12%
3	80	4%
4	161	8%
Total	2,061	100%

As shown in the above table, 77% of parts turned over less than once in a twelve- month period. The table, below, presents the fill rate for the Parts Unit, which is 94% of work orders' parts needs are filled immediately.

Work Orders Completed	5,086
Work Orders Immediately Filled	4,760
Work Orders Delayed (Waiting on Parts)	326
Fill Rate	94%

The Parts Unit is assigned an Account Clerk II responsible for managing the procurement process for parts. This includes issuing purchase orders, tracking invoices

and vendor payments, and monitoring the procurement card program. The table, which follows, provides a summary of the total purchases made in fiscal year 2005 – 2006 for the Parts Unit.

	Purchase Orders		Procurement Cards		Total
	No.	% of Total	No.	% of Total	
Number of Purchases	935	31%	2,041	69%	2,976
Average Dollar Amount per Vendor Purchase	\$2,294	96%	\$96	4%	2,390
Total Dollar Amount by Purchase Type	\$2,144,465	92%	\$195,989	8%	\$2,340,454

The Parts Unit was responsible for nearly 3,000 transactions in fiscal year 2005 – 2006 of which nearly 70% were made utilizing the procurement cards. Over 90% of purchases were completed using purchase orders and 8% utilizing the procurement cards. The table, below, presents a summary of the purchases made for the Parts Unit.

	Amount per Purchase / Transaction	Purchase Orders		Procurement Cards	
		Number Per Vendor	Amount Per Vendor	Number Per Vendor	Amount Per Vendor
Average	\$827.02	7	\$16,246	28	\$2,649
Minimum	\$0.26	1	\$21	1	\$16
Maximum	\$29,161	51	\$916,209	565	\$36,316
Percentile					
25 th	\$38.36	1	\$724	1	\$202
50 th	\$120.65	3	\$2,132	5	\$610
75 th	\$327.32	8	\$6,122	18	\$2,099
100 th	\$29,161	51	\$916,209	565	\$36,316

The points, which follow, provide a discussion of the information presented in the above table.

- On average, staff spend \$827 per purchase (both purchase orders and procurement card purchases). Approximately half of purchases were under \$121.
- On average, there were seven purchase orders issued per vendor and nearly thirty transactions per vendor for procurement card purchases.
- With respect to purchase orders, the maximum number presents 51 purchase orders for an annual amount of \$916.209 to one vendor for fuel.

The table, which follows, presents data with respect to work orders for the Fleet Services Division. The data were extracted from the CCG / FASTER System and reflect work activities for a twelve-month period (October 18, 2005 to October 17, 2006).

Employee	Total Number of Work Orders Completed	Total Cost of Work Orders
1	61	\$29,678
2	171	\$74,133
3	109	\$19,556
4	30	\$10,258
5	4	\$3,925
6	1,401	\$486,585
7	2,786	\$803,054
8	5	\$567
9	28	\$9,286
10	52	\$31,765
11	6	\$2,336
12	348	\$107,698
Total	5,001	\$1,578,841

2. FLEET MAINTENANCE SECTION, FIRE DEPARTMENT

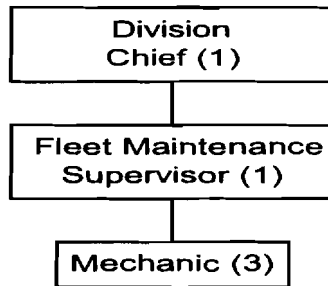
The Alexandria Fire Department provides fire and rescue services to the City of Alexandria. The Fire Department currently operates from eight fire stations located throughout the City. The Fleet Maintenance Section for the Fire Department is adjacent to the Fleet Services Division. The table, which follows, presents the Fleet Maintenance Section's general fund expenditures.

	Actual FY 2005	Approved FY 2006	Approved FY 2007
General Fund Expenditures	\$739,703	\$742,761	\$784,034
Full-Time Staffing	4	4	4

General fund expenditures for the Fleet Maintenance Section has increased by approximately 6% from FY 2005 actual expenditures to FY 2007 approved budget. The section, which follows, provides the plan of organization for the Fire Department's Fleet Maintenance Section.

(1) Organization

Presented below is the table of organization for the Fleet Maintenance Section in the Alexandria Fire Department.



(2) Staff Roles and Responsibilities

The table, which follows, presents a summary of the staff roles and responsibilities for staff assigned to the Fleet Maintenance Section of the Alexandria Fire Department.

Function	Position	Auth.	Act.	Responsibilities
Fleet Maintenance	Supervisor	1.0	1.0	• Reports to the Division Chief over Administrative Services. • Responsible for the day-to-day operations and management of the Fire Department's Fleet Maintenance Section. • Develops and monitors the Section's budget. • Plans, schedules and assigns work for the Section. • Enters and tracks data in the Section's automated information system (i.e., Management Pro). • Responsible for all Fleet related procurement, including goods and services. • Develops specifications for new equipment and conducts inspections in field. • Maintains records on warranties for Department's fleet. • Responds to road calls as needed. • Trains equipment operators on new equipment as needed. • Repairs and maintains equipment as necessary.

Function	Position	Auth.	Act.	Responsibilities
Fleet Maintenance	Mechanic	3.0	2.0	• Reports to the Supervisor of the Fleet Maintenance Section. • Work four-tens, from 0600 to 1430 hours Monday through Fridays. • Performs preventive maintenance and repairs on all Fire Department equipment, apparatus and vehicles. • Maintain commercial drivers licenses, as well as State inspection / emissions certifications. • Respond to road calls, as needed.

(3) Summary of Operations

The table below provides a summary of the Fleet Maintenance Section's operations and key workload.

Function	Description of Services and Key Workloads
Administration	• Management of the Section's budget. • Plan and schedule work. • Annual expenditures for FY 2006 were \$742,761 and included \$29,257 in overtime expenditures.
Parts	• Orders, stocks and dispense supplies. • Tracks and processes invoices for parts. • Annual parts expenditures of approximately \$103,000.
Training and Certification	• Training of Fleet Maintenance Section personnel on fire apparatus repair. • Training and certification of personnel for State Inspector / State Emissions, CDL, etc.
Maintenance and Repair	• Maintain and repair all fire vehicles and equipment. • Respond to callbacks for repair needs.

The table, which follows, provides a summary of the training and certifications of personnel in the Fleet Maintenance Section.

Employee	Training Certifications / Qualifications
1	• Associates degree in Automotive Technology • ASE Master Medium / Heavy Tuck Certification in Diesel Engines, Drive Train, Brakes, Suspension and Steering, Electrical / Electronic Systems, HVAC, and Preventive Maintenance. • Additional certifications and training in the following: Maintenance Management, Pump Certified, Pierce Electrical Course, CDL Qualified and State Inspector Certified.
2	• Certifications in Pump maintenance, State Inspector, and Emissions Inspector. • Formal courses for maintenance and repair in AMPS Generator, Aerial Ladder, Pierce Electrical and Air Brakes.
3	• Certifications in Pump maintenance, State Inspector, and Emissions Inspector. • Formal courses for maintenance and repair of Aerial Ladders, Pierce electrical and Freightliner.
4	• Data were unavailable.

The table, below, presents a summary of the workload data as presented in the Section's annual budget.

Indicator	Actual FY 2003	Actual FY 2004	Actual FY 2005	Estimated FY 2006	Projected FY 2007
Repair orders completed	828	804	780	760	760
Repairs completed per mechanic	276	268	260	253	250
Repair orders completed same day	715	692	676	690	700
Percentage of repairs completed same day	86%	86%	87%	90%	93%

The table, which follows, presents the number of calls backs for the Fleet Maintenance Section Calls backs are instances in which Fleet Maintenance Unit personnel are 'called back' to repair apparatus and / or other equipment during non-working hours.

Year	Number of Call Backs
FY 2003	26
FY 2004	21
FY 2005	24
FY 2006	25

As shown in the above table, callbacks have remained stable over the last four years, ranging from 21 to 26 per year.

The table, below, presents a summary of the Fire Department's fleet.

Class	Quantity
Compact SUV	38
Small SUV	20
Mid-Size SUV	5
Large SUV	4
Compact Sedan	1
Mid-Size Sedan	2
Full-Size Sedan	7
Small Pickup	2
Standard Pickup	3
Van	4
Service Body	3
Specialty	8
Water Craft	3
Engine / Pumper	11
Aerial Truck	5
Medic Unit	8
TOTAL	124

The Fleet Maintenance Section is responsible for the maintenance and repair of 124 pieces of equipment, including all fire suppression apparatus, specialty equipment and regular passenger vehicles.

3. RECREATION, PARKS AND CULTURAL ACTIVITIES DEPARTMENT

The Parks Administration Division of the Recreation, Parks and Culture Activities Department is responsible for management of the other park operational sections and providing support for budget coordination of daily operations.

Staff assigned to this Division is responsible for ensuring all preventive maintenance and equipment maintenance work is completed on time, extending the life of each piece of equipment. The Division maintains and repairs approximately 200 pieces of equipment, such as mowers, snow blowers, weed-eaters, and other two-cycle motors. Additionally, the Division is responsible for coordinating the repair and

maintenance of the Department's rolling stock (e.g., vehicles, heavy equipment, etc.) with the Fleet Services Division.

(1) Organization

The Department of Recreation, Parks and Cultural Activities has three fulltime equivalents assigned to the maintenance of equipment: a Mechanic and two Assistant Mechanics.

(2) Staff Roles and Responsibilities

The table, which follows, presents the roles and responsibilities of staff assigned to the Equipment Maintenance Section in the Department of Recreation, Parks and Cultural Activities.

Function	Position	Auth.	Responsibilities
Equipment Maintenance	Mechanic	1.0	• Responsible for the management and direction of daily activities of the Equipment Maintenance Division. • Utilizes MainTrack to plan and schedule work. • Provides direct supervision of Assistant Mechanics. • Distributes and assigns work. • Serves as the liaison with the Fleet Services Division. • Maintain inventory of parts.
	Assistant Mechanic	2.0	• Performs preventive maintenance and repair on equipment for the Department of Recreation, Parks and Cultural Activities'. • Receives and completes requests for work as assigned by the Mechanic. • Responds to calls in the field, as needed. • Transports vehicles to and from Fleet Services, as necessary. • Responsible for the preparation of seasonal equipment (e.g., leaf / snow removal, etc.)

(3) Summary of Operations

The table below provides a summary of the Equipment Maintenance Section's operations and key workload.

Function	Description of Services and Key Workloads
Equipment Maintenance and Repair	• Maintains and repairs equipment for the Department of Recreation, Parks and Cultural Activities. • Staff work 7:00 AM to 3:30 PM, Mondays through Fridays. • Maintains approximately 140 pieces of equipment. • Coordinates the maintenance and repair of the Department's more than 100 vehicles and heavy equipment with the Fleet Services Division.

The fleet maintained by the Section is presented in the table below.

Description	Count
Aerator	2
Air Compressor	3
Ball Field Machine	1
Boat Motor	1
Chain Saw	6
Combo	1
Edger	2
Edger Attachment	1
Field Line	6
Field Markers Ball Field	4
Heater Oil Fired	1
Heftee Lift	1
Leaf Blower	22
Lesco Seeder	1
Mower	10
Paint Striker	1
Plows	12
Power Washer	3
Riding Mower	20
Salt Boxes	10
Shop Back Blower	2
Shop Chain Blowers	12
Shop Generators	2
Small Boat Motor	2
Small Field Seeder	10
Snow Blower	15
Sod Cutters	2
Split Seeder Drum And Disc	1
Stick Edger	3
Top Dresser	1

CITY OF ALEXANDRIA, VIRGINIA
Analysis of Fleet Services

Description	Count
Trash Pump	1
Trimmer Attachment	1
Vacuum	2
Weed Eater	36
Welder	2
TOTAL	200

The Section is responsible for the maintenance and repair of 200 pieces of equipment. Almost one-half of this equipment consists of weed eaters, leaf blowers, riding mowers, and snow blowers.

COMPARATIVE SURVEY

APPENDIX 2 - COMPARATIVE SURVEY

As part of the management study of fleet management, the project team conducted a comparative survey of other local governments. The survey focused on a number of issues including roles and responsibilities, the level of staffing, fleet size, hours of operation, the use of an internal service fund and cost recovery, technical certification of staff, preventive maintenance, take home vehicle and replacement criteria.

1. BACKGROUND INFORMATION.

The project team developed a survey instrument that was distributed to eleven different local governments including Hampton (VA), Newport News (VA), Richmond (VA), Portsmouth (VA), Arlington (VA), Winston-Salem (NC), Charleston (SC), Ft. Lauderdale (FL), Tallahassee (FL), Fayetteville (NC), and Wilmington (DE).

The project team received responses from six of these eleven local governments including Arlington (VA), Richmond (VA), Portsmouth (VA), Hampton (VA), and Winston-Salem (VA). A sixth response was received from Ft. Lauderdale (FL), but fleet services in that city are outsourced.

The table below shows the population of the responding cities and for Alexandria.

City	2005 Population
Portsmouth, VA	100,169
Hampton, VA	145,579
Winston-Salem, NC	193,755
Richmond, VA	193,777
Arlington, VA	195,965
Alexandria, VA	135,337

As the table indicates, the population of the four responding local governments ranged from a low of 100,169 for Portsmouth to a high of a 195,965 for Arlington. The City of Alexandria has a population of 135,337.

2. FLEET RESPONSIBILITIES

The project team requested data regarding the roles and responsibilities for fleet management in each of the local governments. The exhibit on the following page provides the responses for each of the local governments that responded and for the City of Alexandria.

Important points to note concerning the responses by these local governments are presented below:

- All of the responding local governments except for the cities of Hampton and report that Fleet Services is responsible for the maintenance and repair of the city's fleet including fire, police, refuse collection, utilities, etc. In the City of Hampton, the Solid Waste Division and the Fire Department maintain their own equipment with their own staff. In Winston-Salem, the Fire Department maintains fire apparatus, while Fleet Management maintains the Fire Departments light and medium equipment. The responsibility for fleet management in Alexandria is fragmented among the Fire Department and the Parks, Recreation, and Cultural Activities Department, and Fleet Services / general Services Department.
- There is no uniform approach for the maintenance of small motors / equipment among local governments. In Arlington, Winston-Salem, Hampton, and Richmond, responsibility is decentralized. This is much the same pattern in Alexandria, except it is less decentralized than these other cities. In Portsmouth, responsibility is centralized with Fleet Management.
- The acquisition of equipment, specification development, receipt and titling of new equipment are listed among the responsibilities of all of the local governments. Fleet Services / General Services Department is responsible for this same range of responsibilities except for the Fire Department.

Among the local governments there are several similarities when it comes to fleet responsibilities. Fleet Management is responsible for the maintenance and repair of the citywide fleet with the exception of light equipment.

Exhibit 9

**Roles and Responsibilities
of Fleet Management**

Question	Alexandria	Arlington	Richmond	Portsmouth	Hampton	Winston Salem
Is Fleet Services responsible for the maintenance and repair of all the citywide fleet including fire, police, refuse collection, utilities, etc?	No The Fire Department maintains its own equipment, and Parks, Recreation, and Cultural Activities maintains its own light equipment	Yes	Yes	Yes	Not at this time. The Fire Department and the Solid Waste Division have their own staff that maintains their own equipment.	Yes except that the Fire Department maintains its own fire apparatus (Fleet maintains the light and medium equipment for the Fire Department)
Who is responsible for the maintenance of small motors / equipment (e.g., push mowers, chain saws, etc.)?	General Services / Fleet Services, and Parks, Recreation, and Cultural Activities	Currently it is divided up between: Parks; Water, Sewer; Streets; and Equipment Bureau.	Public Works, Environmental Services.	Fleet Management	The equipment is maintained by the user or is sublet out to vendors.	Fleet Management and Parks and Recreation (small engine shop)
Acquisition of Equipment	Yes	Yes	Yes	Yes	Yes	Yes except for heavy equip.
Specification Development	Yes	Yes.	Yes	Yes	Yes	Yes
Equipment Disposal	Yes	Yes.	Yes	Yes	Yes	Yes
Receipt and titling of new equipment	Yes	Yes	Yes	Yes	Yes	No. This is done by the Finance Department

3. STAFFING

The project team requested data regarding the staffing levels of the local governments. The table below provides details for the communities that have responded.

Question	Alexandria	Arlington	Richmond	Portsmouth	Hampton	Winston-Salem
How many authorized staff within Fleet Services?	30	61	48	41	29	38
Number of Administrative Staff (clerical, fiscal, supervisors, managers, etc.)	9	12	7	6	6	4
Number of Mechanics	17	40	41	21	20	32
Number of Parts Room Staff	4	7	In-house contract with NAPA.	3	3	5
Other?	N/A	2 Welders	N/A	N/A	N / A	N/A

Important points to note concerning the data contained in the table are presented below.

- The data for the City of Alexandria includes the staff allocated to fleet management by the Fire Department and by the Recreation, Parks, and Cultural Activities Department.
- The number of authorized staff within the Fleet Services ranges from a low of 21 in Hampton to a high of 61 in Arlington. The staffing for Winston-Salem includes the staff assigned separately for maintenance and repair of fire apparatus and for the small engine shop in the Parks and Recreation Department. The staffing for Hampton includes the staff assigned separately for maintenance and repair of the equipment assigned to the Fire Department and the staff assigned separately for the maintenance and repair of equipment assigned to the Solid Waste Division.
- The number of administrative staff ranges from a low of 4 in Winston-Salem to a high of 12 in Arlington. Alexandria has 9 administrative staff including the Division Chief, the Account Clerk, the Administrative Assistant, the two Automotive Service Advisors, a Fleet Services Technician, the two Supervisors – Equipment

Maintenance, and the Fleet Maintenance Supervisor assigned to the Fire Department.

- The number of Mechanics ranges from a low of 10 in Hampton in to a high of 40 in Arlington and 41 in Richmond. Alexandria has 17 mechanics including eleven in the General Services Department, three in the Fire Department and three in the Recreation, Parks, and Cultural Activities Department.
- The number of staff assigned to the parts room varied. Arlington has 7 staff, while Portsmouth and Hampton have 3 staff assigned to the parts room. Winston-Salem has 5 staff assigned to the parts room. Richmond contracts with NAPA for operation of their parts room. Alexandria Fleet Services / General Services Department has 4 staff assigned to the parts room excluding the Account Clerk.

Due to different size of fleets in these local governments, the number of authorized staff varied significantly. The City of Arlington had the highest number of authorized staff.

4. FLEET SIZE

The project team requested data regarding the total fleet size of the local governments. The table below provides the response for these local governments.

City	Total Number of Vehicles
Arlington	1,200
Hampton, VA	1,100
Richmond, VA	2,150
Portsmouth, VA	1,238
Winston-Salem, NC	1,700
Alexandria, VA	1,124

The total number of vehicles being maintained by the Fleet Services ranges from a low of 1,100 in Hampton to a high of 2,150 in Richmond. The size of the fleet maintained by Alexandria includes the General Services Department, Fire Department, and the Recreation, Parks and Cultural Activities Department.

5. HOURS OF OPERATION

The project team requested data regarding the hours of operation of the fleets in the local governments. The table below provides the response.

City	Number of Repair Shops	Hours / Days of Operations
Arlington, VA	1	6:00 am-11:30 pm Monday to Friday and 7:00 am -5:00 pm on Saturday
Hampton, VA	1	7:00 am -11:00 pm Monday to Friday
Richmond, VA	2	Shop 1, 7:00 am - 9:00 pm Monday to Friday. Shop 2, 7:00 am - 3:30 pm Monday to Friday. On call service 24/7.
Portsmouth, VA	2	Shop 1, 7:30 am - 4:00 pm. Shop 2, 7:00 am - 6:00 pm.
Winston-Salem, NC	1	6:30 am to 11:30 pm
Alexandria, VA (General Services Department)	1	6:00 am to 4:30 pm

Important points to note concerning the data contained in the table are presented below:

- The City of Portsmouth and Richmond both operate two repair shops that are open five days a week, Monday to Friday.
- The City of Arlington operates one shop that is open six days a week and Hampton operates one shop that is open five days a week.
- With the exception of Portsmouth, all of these local governments have more expansive hours than provided by the Alexandria Fleet Services / General Services Department.

The hours of operations differ among responding fleet agencies.

6. INTERNAL SERVICE FUND / COST RECOVERY

The project team collected data regarding internal service fund and cost recovery among the local governments. The following sections present the response.

(1) Cost Recovery Among Local Governments.

The project team requested data regarding the approach used for cost recovery for fleets for these local governments. The table on the following page provides the response. Important points to note concerning the table are presented below.

- All of the local governments recover full operating and maintenance costs for fleet services. In the City of Arlington and Portsmouth, the operating and maintenance cost of the equipment are recovered through an equipment rental charge. Richmond and Winston-Salem use a shop labor rate and mark-up to recover the actual costs. The City of Hampton works with departments to find the best alternative for cost recovery, but fully recovers its costs. Alexandria Fleet Services / General Services Department only charges enterprise funds for services, and it uses a shop labor rate and markups that have not been updated for a number of years.
- All of these cities recover their fleet services costs from all of their customers. Alexandria Fleet Services / General Services Department only charges enterprise funds for services.
- All of the local governments, with the exception of Winston-Salem, amortize the replacement costs of their light, medium, and heavy equipment. Winston-Salem, with the use of a state-wide leasing corporation, treats the leasing costs of light and medium equipment as an operating expenses. The replacement of heavy equipment is accomplished through the annual operating budget. Alexandria does not have a replacement fund for its vehicles. Replacements are made through the annual operating budget. Alexandria has a replacement fund, although it mixes replacement funds for information technology equipment and vehicles in the same fund.

Important points to note concerning the data contained in the table are presented below.

- All of the local governments recover operating and maintenance costs for fleet services. Alexandria Fleet Services / General Services Department only charges enterprise funds for services, and it uses a shop labor rate and markups that have not been updated for years.
- All of the local governments recover their fleet services costs from all of their customers. Alexandria Fleet Services / General Services Department only charges enterprise funds for services.

Internal Service Fund / Cost Recovery

Question	Alexandria	Arlington	Richmond	Portsmouth	Hampton	Winston-Salem
Are the full operating and maintenance costs for Fleet Services recovered? How are the costs of the operating and maintenance of equipment recovered (i.e. flat monthly fee per class, direct billing of costs based upon actual costs, cost per mile, etc.)? What's included in the charge (labor, parts, commercial repairs, fuel, etc.)?	No	Yes, through an equipment rental, prepared at the beginning of the prior budget year with projected chargers established for each class of vehicle in each using agency. All chargers averaged over 3 years including accident repairs.	Yes, labor, parts, commercial repairs and fuel are recovered with mark-up to cover actual cost. We also charge administrative fees and insurance.	Yes, General fund vehicles are charged a rental fee billed quarterly. All others are billed for services rendered.	All listed. We tailor to fit the needs of the departments.	Yes. All customers are charged a shop labor rate and a markup for parts, sublet, and fuel
Are Fleet Services costs recovered from all departments or from only enterprise or fee supported operations?	Only from enterprise funds	The Auto Fund is an internal Service Fund. Funding is allocated annually based on the Rental Book.	Costs are recovered from agencies and non-city agencies through billing.	All departments.	Fleet Services recovers our cost from all departments that use our services.	All departments that receive service from Fleet Management
How are the replacement charges recovered (e.g. purchase price less salvage value plus inflation)?	Replacement charges are recovered	Through the Rental Book replacement rate for each class. Purchase price less salvage value plus inflation divided by the expected service in years.	Cost plus 3%	Amortized in the rental rate.	Through the vehicle replacement fund. We depreciate new vehicles monthly, apply a gap fee to cover increases for inflation that is placed in the replacement fund.	There is no replacement fund. The state has a municipal leasing corp. for light and medium equipment. Heavy equipment is purchased directly by the departments.

- All of the local governments, with the exception of Winston-Salem, amortize the replacement costs of their light, medium, and heavy equipment. Alexandria does not have a replacement fund for its vehicles. Replacements are made through the annual operating budget. Alexandria has a replacement fund. This fund, however, mixes information technology equipment and vehicles in the same fund.

(2) The Charges Utilized by Fleet Services to Recover Costs.

The project team requested data regarding charges that Fleet Services are using to recover costs. The table below provides details for the local governments that responded.

Question	Alexandria	Arlington	Richmond	Portsmouth	Hampton	Winston-Salem
Shop labor rate (Yes, No, Amount)	Yes, \$56	Yes, \$79.	Yes, \$42.50.	Yes, \$44.	Yes, \$65.	Yes, \$50
Parts markup (Yes, No, Amount)	None	None	Yes, 35%.	Yes, 20%.	Yes, 33%.	Yes, 26%
Fuel markup (Yes, No, Amount)	None	None	Yes, \$0.07.	Yes, .10 cents per gallon.	Yes, 1.84 cents per gallon.	Yes, 15%
Commercial repair markup (Yes, No, Amount)	None	None	Yes, 13%.	Yes, 20%.	Yes, 15%.	Yes, 13%
Administrative Charge (Yes, No, Amount)	None	Yes, \$1,336 per vehicle.	Yes, \$10.47.	Yes, all departments \$15,000 per Yr.	Yes, \$70 per unit	No

Important points to note concerning the data contained in the table are presented below.

- All of the local governments utilize shop labor rate to recover costs. The shop labor rate ranges from a low of \$42.50 in Richmond to a high of a \$79 in Arlington. The shop labor rate for the Fleet Services Division / General Services Department in Alexandria is \$56.
- The cities of Richmond, Portsmouth, Winston-Salem, and Hampton all utilize markups for parts, fuel, and commercial repair as a way to recover costs. The Fleet Services Division / General Services Department does not utilize markups for parts, fuel, and commercial repair.

- All of the local governments with the exception of Winston-Salem utilize an administrative charge. The Fleet Services Division / General Services Department does not utilize an administrative charge.

The local governments utilize a shop labor rate and markups as a way to recover costs.

7. ANNUAL VEHICLES UTILIZATION GUIDELINES

None of the local governments, with the exception of Winston-Salem, had developed annual vehicle utilization guidelines. Winston-Salem has developed a guideline of 4,000 miles annually for light and medium equipment.

8. TECHNICIAN CERTIFICATION

The project team requested data regarding the certification or training required for mechanics employed by these local governments. The table below provides the responses.

City	Certification/Training Required for Mechanics
Arlington, VA	VA State Safety & Emissions for Auto Tech's and VA Safety & CDL for Heavy Truck and Equipment/Tech's.
Hampton, VA	Min. 2 ASE.
Richmond, VA	Yes, ASE.
Portsmouth, VA	VA State Safety & Emissions for Auto Tech's and VA Safety & CDL for Heavy Truck and Equipment/Tech's.
Winston-Salem, NC	Provides financial incentives for ASE certification. Its Master Technicians and Senior Technicians are ASE certified.
Alexandria, VA	Fleet Technicians are required to have a CDL, and (1) Virginia State Automotive Safety Inspector; (2) Virginia State Emissions Inspector; and (3) Virginia State Emissions Mechanic; and (4) ASE Refrigerant Recovery and Recycling Certification

Important points to note concerning the data contained in the table are presented below:

- Two local governments in Virginia, Arlington and Portsmouth, require fleet technicians to have VA State Safety & Emissions certifications and heavy truck

and equipment technicians to have VA Safety & CDL. This is much the same pattern as Alexandria Fleet Services / General Services Department.

- In Richmond and Hampton, mechanics are required to have ASE certification.
- In Winston-Salem, technicians are required to obtain ASE certification. Their Senior Fleet Service Technician, for example, is required to obtain an ASE or manufacturer's certificates in brake systems and engine performance/diesel engines within two years of employment,

All of the local governments have established some requirement when it comes to certification required for mechanics. Hampton, Richmond, and Winston-Salem have established ASE requirement for their mechanics.

9. PREVENTIVE MAINTENANCE

The project team requested data regarding preventive maintenance and scheduling. The table below provides details for the local governments that responded.

Question	Alexandria	Arlington	Richmond	Portsmouth	Hampton	Winston-Salem
What is the percentage of preventive maintenance completed according to schedule?	46% for Alexandria Fleet Services / General Services Department.	79% same day and 7.9% next day.	87%	80%	100%	44%
What percentage of services is scheduled repairs versus unscheduled repairs?	Unknown	N/A	None	60% scheduled and 40% unscheduled.	45%	Unknown

Important points to note concerning the data contained in the table are presented below:

- The percentage of preventive maintenance completed according to schedule ranges from a low of 44% in Winston-Salem to a high of a 100% in Hampton. Alexandria Fleet Services / General Services Department achieves a 46% preventive maintenance compliance rate.

- In the City of the Portsmouth, 60% of all repairs are scheduled, whereas in Hampton 45% of the repairs are scheduled. The other local governments do not document the proportion of scheduled to unscheduled repairs.

Obtaining a high proportion of compliance with preventive maintenance schedules is one of the more significant challenges facing fleet management.

10. TAKE HOME VEHICLE CRITERIA

The project team requested data regarding take-home vehicle criteria. The table below provides details for the local governments that responded.

Question	Alexandria	Arlington	Richmond	Portsmouth	Hampton	Winston-Salem
What is your municipalities policy regarding take home vehicles? Does this differ for emergency responders and non-emergency responders?	The City has an adopted, formal take-home policy	Different criteria for Public Safety. All other agencies based on emergency callback requirements.	No response	Assigned by City Manager approval for Police, Fire, and Sheriff.	There is a take home policy. The departments administer it. There are more units that are take-home in the Police than all other departments.	Winston-Salem has a adopted a city-wide policy on take-home vehicles.

Important points to note concerning the data contained in the table are presented below:

- In the City of Arlington, all departments except Public Safety have a take home policy that is based upon emergency callback requirements.
- In Portsmouth, take home vehicles are being assigned by City Manager while in Hampton take home policies are being administered by the departments.
- Winston-Salem has adopted a take-home policy. That policy states that the City Manager authorizes permanent overnight custody of take-home vehicles. The department/division head may grant occasional overnight use. The department/division head also enforces the take-home policy. It further states that A take-home vehicle may travel up to 20 miles from the employee's primary work site. If an employee must travel more than 20 miles to and from home, he/she reimburses the city for the extra miles at the city's current mileage rate. The Police and Fire Departments have developed their own take-home policies.

- Alexandria has adopted a formal policy regarding take-home vehicles. This policy – Administrative Regulation 7.3 – was adopted in June 1983, but was apparently updated in 1991. The policy covers the use of City owned and leased motor vehicles. The policy extends take-home use (pool or assigned vehicle) to 58 positions in the City ranging from the City Manager to the Human Services Child Abuse standby position, although the actual number of take-home vehicles far exceeds this number.

Take home policies vary widely among local governments.

11. REPLACEMENT CRITERIA

The project team requested data regarding replacement cycle. The table below provides details for the local governments.

City	Replacement Criteria (Vehicle Type, Years, Miles/Hours)
Arlington, VA	The vehicles meeting the estimated service life and having odometer reading of a minimum of 50,000 miles by April of the current Fiscal Year are reviewed for replacement during the next Fiscal Year.
Hampton, VA	Cost ratio along with years, miles/hours and vehicle type are used for replacement.
Richmond, VA	Auto & light. Vehicles, 5 years, 80,000 miles. Heavy equipment, 10 years, 90,000 miles. Fire suppression, 10 years, 3,000 miles.
Portsmouth, VA	Police Marked, 8 years, 150,000 miles. Police Unmarked, 10 years, N/A. Administration, 10 years, N/A. Garbage Trucks, 7 years, N/A. Fire Trucks, 20 years, N/A. Ambulances, 5 years, N/A.
Winston-Salem, NC	Sedan, 8 years Police patrol sedan, 6 years Pickup truck, SUV, 8 years Van, 10 years Medium and heavy trucks, 10 years Solid waste packers –rear loader, 10 years Construction equipment, 10 years

City	Replacement Criteria (Vehicle Type, Years, Miles/Hours)
Alexandria, VA	Sedan, 8 years Police patrol sedan, 5 years Pickup truck, 8 years SUV, 8 years Van, 8 years Medium and heavy trucks, 8 years Solid waste packers –rear loader, 6 years Construction equipment, 8 years Fire trucks, 12 years

Important points to note concerning the data contained in the table are presented below:

- The City of Arlington reports that vehicles meeting the estimated service life and having an odometer reading of a minimum of 50,000 miles by April of the current Fiscal Year are reviewed for replacement during the next Fiscal Year.
- In Richmond autos and light vehicles are being replaced every five years or 80,000 miles, heavy equipment is being replaced every ten years or 90,000 miles and fire suppression is being replaced every ten years or 3,000 miles.
- On the other hand Portsmouth has five classes when it comes to replacement criteria: police patrol sedans are being replaced every eight years or 150,000 miles, police unmarked and administration vehicles have a cycle of ten years, solid waste collection trucks are replaced every seven years, fire trucks every twenty years and ambulances every five years.
- The City of Hampton did not provide specific replacement criteria, but indicated that they use cost data along with years, miles/hours and vehicle type to assess replacement needs.
- Winston-Salem utilizes a more typical approach for replacement. Sedans are replaced at 8 years, police patrol vehicles at 6 years, pickups and SUV's at 8 years, etc.
- Alexandria has adopted formal replacement guidelines and depreciates its vehicles in accordance with these guidelines. In some cases, these guidelines match those of these other local governments such as the replacement guidelines for replacement of general-purpose sedans. In other instances, however, the guidelines result in replacement of equipment much earlier than these other local governments such as solid waste rear loaders, medium and heavy trucks, etc.

ESTIMATED COST IMPACT OF RECOMMENDATIONS

APPENDIX 3 - ESTIMATED COST IMPACT OF RECOMMENDATIONS

Recommendation	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease
4. The City should immediately adjust the chargeback fees of the Fleet Services Division for the enterprise funds for labor, parts, commercial repairs, fueling, and fleet management and for DASH Transit and the Sanitation Authority for fuel only.	\$-	\$-	\$72,500	\$-
6. The classification description for the Fleet Services Division Chief should be revised to expand the responsibilities to that of a fleet manager. The class title should be revised to Fleet Manager. The roles and responsibilities of the Fleet Services Division Chief should be expanded to include working with operating departments to manage equipment utilization, control vehicle assignments, provide a City-wide driver training program, direct an equipment replacement program, submit City-wide replacement recommendations for management approval, control the size of equipment within the fleet, etc. The expanded role of the Fleet Services Division Chief should include regular and routine consultation with operating departments whose equipment is maintained / repaired by the Division.	TBD	\$-	\$-	\$-
7. Authorize a Management Analyst I for the Fleet Services Division / General Services Department to assist the Fleet Services Division Chief in implementing opportunities for improvement identified in the analysis of fleet services	\$76,000			
12. The Fleet Services Technician II functioning as the parts room supervisor should be reclassified as Lead Automotive Mechanic and assigned to maintenance and repair of fleet equipment.	\$12,400	\$-	\$-	\$-
13. The Fleet Services Technician II that provides backup to the Automotive Mechanics should be reclassified as Lead Automotive Mechanic and assigned to maintenance and repair of fleet equipment.	\$12,400	\$-	\$-	\$-
16. Reclassify the second Auto Service Advisor as a Lead Automotive Mechanic and assign the incumbent to maintenance and repair of fleet equipment.	\$12,400	\$-	\$-	\$-

CITY OF ALEXANDRIA, VIRGINIA
Management Study of Fleet Services

Recommendation	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease
17. The responsibility for the maintenance and repair of Fire Department sport utility vehicles, sedans, vans, and pickup trucks should be reallocated to the Fleet Services Division / General Services Department in the short-term. An Automotive Mechanic position in the Fleet Services Section / Fire Department should be transferred from the Fire Department to the Fleet Services Division / General Services Department upon the reallocation of this responsibility. The Fleet Services Supervisor position in the Fire Department should be eliminated through attrition. One of the two remaining Automotive Mechanics within the Fire Department should be reclassified to Lead Automotive Mechanic upon the elimination of the Fleet Services Supervisor position. When the Fleet Services Supervisor position is vacated through attrition, responsibility for the maintenance and repair of fire apparatus should be reallocated to the Fleet Services Division / General Services Department along with the remaining Automotive Mechanic / Lead Automotive Mechanic positions.	\$-	\$-	\$-	\$100,500
18. The responsibility for the maintenance and repair of the mowers, snow blowers, weed-eaters, and other two-cycle motors in the Recreation, Parks and Cultural Activities Department should be consolidated with the Fleet Services Division / General Services Department. The location at which the maintenance and repair of light equipment assigned to the Recreation, Parks and Cultural Activities Department occurs should be reassigned to the Fleet Services Division / General Services Department. The Auto Mechanic position assigned to the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should be reallocated to the Fleet Services Division / General Services Department. The pickup truck assigned to the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department - #7537 - should be reassigned to the Fleet Services Division / General Services Department. The parts budget for this light equipment should be transferred from the Recreation, Parks and Cultural Activities Department to the Fleet Services Division / General Services Department.	\$12,400	\$-	\$-	\$-

CITY OF ALEXANDRIA, VIRGINIA
Management Study of Fleet Services

Recommendation	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease
19. Provide each liaison to the Fleet Services Division / General Services Department in major operating departments with access to CCG / FASTER.	\$2,400	\$12,000	\$-	\$-
24. The Fleet Services Division / General Services Department should implement a swing shift. Four (4) Automotive Mechanics should be assigned to the swing shift. One of these Automotive Mechanics should be classified as a Lead Auto Mechanic.	\$24,800	\$-	\$-	\$-
31. Two Assistant Mechanic positions authorized for the Fleet Maintenance Section / Recreation, Parks and Cultural Activities Department should be eliminated	\$-	\$-	\$-	\$119,500
35. The Fire Department and the Recreation, Parks and Cultural Activities Department should purchase licenses for CCG / FASTER. Two licenses should be acquired for the Fire Department and one license for the Recreation, Parks and Cultural Activities Department.	\$1,200	\$6,000	\$-	\$-
50. The Fleet Services Division / General Services Department should increase its annual training budget to \$25,000 per year	\$22,622	\$-	\$-	\$-
65. The City should review and consider the recommendations made by the Matrix Consulting Group to downsize sport utility vehicles. The Matrix Consulting Group recommends that all sport utility vehicles, except for eight assigned to the Police Department and four assigned to the Fire Department be downsized to midsize sedans and extended cab compact pickup trucks.	\$-	\$-	\$-	\$116,800

CITY OF ALEXANDRIA, VIRGINIA
Management Study of Fleet Services

Recommendation	Annual Cost Increase	One Time Cost	Annual Revenue Increase	Annual Cost Decrease
66. The City should review and consider the recommendations developed by the Matrix Consulting Group for elimination of vehicles within the City's fleet. The Matrix Consulting Group recommends that the City proceed on a department-by-department basis beginning with non-public safety departments, that Fleet Services Division / General Services Department analyze the recommendations developed by the Matrix Consulting Group discuss these recommendations with the affected departments, and develop recommendations for elimination of the equipment for the consideration of the Office of Management and Budget and the City Manager's Office. The Matrix Consulting Group recommends that the City should initially set an objective of eliminating sixty-six (66) vehicles from its fleet (initially excluding the Police and the Fire Departments). This reduction would require an increase in the "pool" fleet at City Hall, operated by the Fleet Services Division / General Services Department, and an increase in mileage reimbursement for the use of personal vehicles on City business.	\$-	\$-	\$-	\$159,500
68. Construct a Butler-type building for the storage of this reserve apparatus that includes electrical and drainage systems. The building would require approximately 3,200 square feet to store the two trucks (20 feet by 80 feet) and another 2,400 square feet to store the three pumps.	\$-	\$505,000	\$-	\$5,000
71. Lengthen replacement criteria for those classes of equipment whose criteria are less than that typically used by other cities	\$-	\$-	\$-	\$400,000
TOTAL	\$176,622	\$523,000	\$72,500	\$901,300

APPENDIX 4 - POSSIBLE SERVICE LEVEL AGREEMENT

APPENDIX 4 - POSSIBLE SERVICE LEVEL AGREEMENT

The Fleet Services Division (Division) is dedicated to providing its customers with high quality, timely and cost-effective fleet services. We recognize that our customers deliver essential services to the citizens of Long Beach and must receive a high level of fleet services in order to accomplish their missions. Simply stated, when vehicles are out of service, our customers cannot do their jobs. Therefore, while we are committed to providing services at the lowest price possible, our primary focus will be on activities that lead to maximizing vehicle availability and minimizing the operational impact of repair services. We are also committed to the following principles:

- We will focus on asset management activities that conserve the value of equipment investments and will provide our customers with value added services that result in lower fleet ownership costs.
- We will be the low cost provider of the services that we offer.
- All services that we provide will be of the highest quality available in the equipment industry
- We will understand our customers' needs and will meet these needs effectively, responsively and courteously.

The Division is required to provide a stated level of service to all its customers under an overall operating agreement with the Police Department. This agreement provides some customization of the services offered to the Police Department by the Division while staying within the overall agreement. Included are procedures for accessing services, service prices and billing procedures, and a description of the Division's and Police Department's responsibilities under this agreement.

SERVICES PROVIDED BY FLEET SERVICES

FSB provides a full range of transportation related services as described below:

- Fleet policy development
- Equipment replacement planning
- Equipment specification preparation
- Equipment selection and purchase coordination
- Fuel program development
- Equipment utilization review
- Preventive maintenance program development
- Comprehensive equipment maintenance and repair services
- Vendor repair coordination
- Vehicle towing services
- Roadside tire repair services
- Collision damage repair services
- Loaner vehicle rentals
- Driver and operator training
- Surplus equipment disposal

SCOPE OF SERVICES TO BE PROVIDED TO POLICE DEPARTMENT

Division will provide the Police Department with high quality, timely and cost-effective vehicle and equipment services as described below:

1. Preventive maintenance (PM) program.

PM Focus. A comprehensive PM program is the cornerstone of effective fleet maintenance. The objective of a PM program is to minimize equipment failure by maintaining a constant awareness of the condition of equipment and correcting defects before they become serious problems. A PM program minimizes unscheduled repairs by causing most maintenance and repair activities to occur through scheduled inspections. An effective PM program pays dividends not only in improved equipment safety and reliability, but also financially by extending the life of equipment, minimizing the high cost of breakdowns, and reducing lost employee productivity resulting from equipment downtime. The Division will focus efforts on behalf of Police on PM activities as described below:

PM Service Types. Three types of PM services will be provided. 1.) PM-A or Lube Oil Inspection service will consist of an oil & filter change, and a comprehensive safety inspection. 2.) PM-B or a General Inspection service will consist of a oil & filter change, a brake system inspection, engine performance check, transmission service, electrical, cooling, exhaust system check, overall vehicle check including mounted bodies and accessories. 3.) NC Inspection service will consist of the mandated California State Inspection.

PM Schedule. Police pursuit vehicles will be scheduled for PM every 3,000 miles or 3 months whichever occurs first. All other vehicles will be scheduled every 6 months or 6,000 miles or according to the manufacturers' recommended service schedule.

Repair Authorization. Police will be contacted for authorization before any remedial repairs found during a PM inspection which are estimated to cost in excess of \$1,000. Police agrees to provide a decision on repair approval as soon as possible upon being contacted by The Division. Police also agrees to provide designated staff to make repair authorizations after normal business hours so that second shift operations are not adversely impacted by the repair authorization process. Downtime and repair turnaround time calculations shall not include time waiting for repair authorization.

Scheduling PMs. The Division will track maintenance of Police vehicles in our CCG / FASTER system and will call, FAX or E-mail a PM schedule to the appropriate supervisor monthly. The Division will coordinate scheduling of services with the appropriate supervisor for a date and time that is convenient to Police and at a time where workload requirements are such that the above turn around times can be met.

After Hours or While You Wait Service. The Division will provide Police vehicles with the highest priority possible. All PM services will be scheduled at Police's convenience. Police may choose to wait for sedans or light trucks receiving a lube & oil service. These services will be completed in one hour or less, unless needed repairs are discovered during the component inspection of the service. Police may also choose to have PM services completed after hours. Vehicles must be dropped off at the appropriate shop no later than 4:00 pm and will be available for pickup no later than 7:00 am the next morning. Police agrees that units scheduled for PM will be brought to the Shop rather than parked in the Police lot.

PM Compliance Goal. The Division will achieve a PM compliance rate of 95% for Police's vehicles. That is, 95% of scheduled services will be completed before they are overdue. As services will be scheduled on the basis of miles and/or elapsed time, upon request, Police will provide The Division with an annual odometer reading report for all vehicles.

Rescheduling PM Services. Police agrees to cooperate in scheduling PM services by responding promptly to PM scheduling requests and by honoring PM appointments. If operational priorities require rescheduling of a PM appointment, then Police agrees to do so at least 24 hours in advance of the original appointment by calling or e-mailing the appropriate Shop Manager. Missed appointments with no call will not count against The Division 's achievement of the PM compliance goal.

2. Vehicle repair services

Overtime Service. Upon request, the Division will provide service on holidays weekends or during emergency situations. Hours of service will mirror those worked by Police.

Normally, technicians will be assigned depending upon the need. The Division reserves the right to compensate mechanics at time and one half. The Division will focus on Police vehicles on these days. If no Police vehicles are available to work on, the Division will work on other customers' vehicles with their time billed to those vehicles. However, if no other vehicles are available to work on, then Police agrees that the Division will charge mechanic hours to the Police account.

Road Call Service. The Division will provide roadside services for vehicles that are broken down. The decision to dispatch a field mechanic will be based on Division's estimate of the severity of the repair problem and the level of effort required to get the vehicle back in service. In general, the Division will provide roadside service when repairs can be clearly diagnosed over the phone or radio and can be handled in less than one hour. More complex and time consuming repair problems are more cost-effectively handled by towing the vehicle.

Vendor Services. In addition to regular repair services, the Division also will coordinate contract repair services for Police. The decision to use an outside vendor will be based on shop workload and services that require special tools, equipment or expertise. Roadside tire services and towing services are also available through contracts managed by FSB. If necessary, Police drivers will transport vehicles to vendors for warranty repairs and other services in order to expedite the repair process. The Division must first authorize taking any vehicles to an outside vendor other than those vendors with contracts already in place (i.e., radios, MDTs, lights, striping, etc).

Time Promised. The Division will provide Police (usually the operator) with a turnaround time estimate for all repairs. If conditions change during the repair process, then the Division will provide the operator with updated turnaround time as required. The Division will complete repairs on Police vehicles as quickly as possible. Our goal will be to complete repairs on 70% of Police vehicles in one day or less and 90% in one to three days. Only 10% of repair incidents involving Police vehicles should take more than three days to complete. Repair turnaround times will be calculated after problem diagnosis has occurred and Police has given Division repair authorization. This turnaround time standard will not apply to vehicles requiring repair due to accidents, vandalism, driver responsible incidents, defects covered by manufacturer warranty, or acts of God.

Fleet Availability and Vehicle Downtime. Every effort will be made to limit vehicle downtime. Vehicles are considered out of service when they are not available during their normal work schedule. Vehicles requiring repair due to accidents, vandalism, driver responsible incidents, defects covered by manufacturer warranty, or acts of God shall not be included in downtime calculations. However, each vehicle will still get priority attention for reducing downtime. The following benchmarks will apply to Police's fleet:

Police vehicles will have a 95% availability rate.

Repair Authorization. The same conditions for repair authorizations as described above under the PM program section of this agreement will also apply to general vehicle repairs.

Repair Warranties. The Division will provide the following repair warranties:

General repair work will be warranted for 90 days or 4,000 miles for defective parts or workmanship.

- Parts that have warranty coverage for longer periods will be recouped for Police.
 - Vendor repairs that fail within their warranty period will be recouped for Police.
 - Manufacturer warranties will be recouped for Police.
3. Equipment repair services

The Division has extensive experience in the maintenance and repair of a wide variety of construction equipment and specialized equipment such as chain saws, weed trimmers, mowers trailers, aerial devices, blowers, generators and cement mixers. Police will be provided a full range of equipment maintenance and repair services. Billing for services of equipment outside the contract "with purchase value of less than \$500" will be on a time and material basis for equipment, at the rates detailed in the "Service Prices and Billing Procedures" section of this agreement.

4. Equipment Modification

The Division will work with the department liaison to pre-approve all equipment modifications prior to their installation. Police will submit in writing the type of modification and it's purpose. This will become a part of the equipment's permanent folder. The Division will be responsible for making sure the modifications are completed. The modifications are considered non-target work and requesting department will be charged accordingly.

4. Accident Repair Services

The Division assigns a local body shop to pickup, repair and return damaged vehicles. The Division will directly bill these charges in our monthly billings to Police. The Division will send all vehicles to vendors for repair of accident damage. The Division will not begin the repair process for vehicles that have been involved in an accident until knowledge of the accident is confirmed by Risk Management. Police is responsible for promptly notifying Risk Management of accident incidents and completing an Accident Report.

5. CCG / FASTER (EMIS)

The Division has a computer system (CCG / FASTER) to manage vehicle maintenance operations. This system will provide equipment life cycle cost information, shop productivity data, preventive maintenance scheduling, warranty tracking, and other operational information. The Division will use this system to manage maintenance operations for Police. A variety of reports are available from the system to help Police analyze vehicle costs. The Division will provide the following standard reports on a monthly basis:

- Consolidated billing report by cost center
- Ranking of vehicles by monthly cost

The Division shall provide the Police Department access to CCG FASTER for real-time query capabilities to access the current maintenance/repair status of their vehicles.

6. Equipment Replacement

The Division is responsible for preparing replacement recommendations for most vehicles in the City's fleet including vehicles assigned to Police. Replacement recommendations are prioritized according to a formula that considers vehicle age, life usage, life costs and a condition review. Recommendations are made to Budget and Evaluation who, along with the City Manager's office, determines a final funding level bases on the availability of capital funds. Police will be consulted before recommendations for replacement vehicles are forwarded to the OMB. The Division will work with the Police liaison to prepare specifications for new and replacement vehicles and Purchasing to coordinate acquisitions from equipment vendors. The Division and Police will have final review of all specifications. The Division will strive to purchase vehicles with all necessary equipment already installed in order to expedite delivery to customers.

7. Radios, Safety Devices and Light Bars

Installation of radios is performed by a vendor partnering with the Police Department and the Division. The Police Department will be responsible for arranging equipment installation in new vehicles or removal from surplus vehicles. Police will make arrangements when ordering radios for existing vehicles.

8. Loaner Cars

The Division maintains an inventory of vehicles that are available for short term loan to replace vehicles under repair, and for out of town trips. Police is responsible for any accident or other damage to loaner vehicles while they are in their possession. Police Department staff wishing to reserve loaner cars should contact the Division not less than one work day in advance..

9. Directed Work / Special Projects

The Division is available to provide special project work at the direction of Police. Special projects may include new equipment installation design, custom reports, driver training, and other projects. Billing for these projects will be at our standard hourly rate in effect at the time that services are rendered. If priorities for special projects are such that normal activities will be impacted and production goals effected (e.g. downtime, turnaround time, PM compliance), then Police agrees to waive production goal attainment for the duration of the special project.

POLICE'S DRIVER/OPERATOR RESPONSIBILITIES

- Drivers of these units are an important part of the maintenance process and a first line of defense against vehicle breakdowns. Police department drivers will have the following daily responsibilities:
- Drivers will perform a daily pre-trip inspection of their vehicle before operation. This inspection will include a general check of the vehicle appearance and condition. Vehicles with safety related defects (e.g. brakes, lights, mirrors, etc) must not be operated.
- Police employees will report problems discovered during daily operations promptly at the end of shift so that remedial repairs can be scheduled and not impact daily police operations. If the problem is safety related, immediate attention is required.
- If necessary, Police drivers will transport vehicles to vendors for warranty repairs and other services in order to expedite the repair process. The Division must first authorize taking any vehicles to an outside vendor.
- Whenever possible, Police drivers will clean their vehicle before bringing it to the shop for service.

ACCESSING DIVISION'S SERVICES

The overall coordinator of this agreement and the main point of contact between the Division and Police will be ----- . The Supervisor Equipment Maintenance in charge of the Division's repair facilities will manage Day to day activities. The Fleet Services Division Chief is ultimately accountable for Police's satisfaction and will be responsible for problem resolution, agreement amendments and quality control.

Appointments are strongly recommended in order to minimize vehicle downtime.

SERVICE PRICES AND BILLING PROCEDURES

Most repair services will be on a time and material basis. For the Fiscal Year ending on June 30, 2007, Division's labor rate for all customers was \$—00 per hour. This rate will be adjusted on July 1, 2007 to meet the requirements of the agreement. Parts will be billed on the basis of Division's agreement in order to cover inventory carrying costs and the professional services of our parts staff. Vendor services will be billed according to the agreement in order to cover contract administration, invoicing and coordination costs. Prices will be updated on an annual basis and Police will be notified of price changes during the budget preparation process. Price changes will be effective July 1 of each fiscal year.

Time standards are established for common repair procedures based on industry references such as Chiltons labor guide and manufacturer labor times. Any procedures that take more time than the "standard" time will be judged on an individual basis and charged appropriately. Infrequent or unusual repair procedures will not be subject to time standards. FSB will absorb any additional time required by mechanics to complete "standard" repair procedures. Loaner cars are available for a set price per mile. There will normally be a five day limit on loaner vehicles.

Invoicing will be on a monthly basis with consolidated statements summarizing activity for all Police vehicles. Individual work orders will be available on request.

DIVISION'S AND POLICE'S RESPONSIBILITIES

Division will have the following responsibilities under this agreement:

1. To recognize that Police is our customer and so has certain rights including:
 - The right to complain
 - The right to question cost
 - The right to demand fast service
 - The right to demand quality service
 - The right to shop around
 - The right to expect courtesy and consideration
2. To comply with all provisions of this agreement.
3. To have Police's best interests in mind.
4. To assist Police in reducing their transportation costs.

Police will have the following responsibilities under this agreement:

- To designate a fleet liaison.

- Upon request, to submit an annual vehicle mileage list.
- To report vehicle malfunctions promptly.
- To honor appointments for preventive maintenance services. If rescheduling is necessary, to do so at least 24 hours in advance.
- To provide repair authorizations as soon as possible after being contacted.
- To provide repair authorizations after normal business hours.
- To insure that Police employees make daily inspections of their vehicles before use and check fluids and tire pressure at each fueling.
- To review billing reports within five business days of receipt and to promptly notify the Division of any problems.

Failure to keep scheduled preventive maintenance appointments will result in the following:

1. The Police liaison will be notified after the first missed appointment. The department will be responsible for contacting Fleet Services to reschedule the maintenance.
2. The department liaison will be notified after the second missed appointment. The department will be charged for one (1) hour of labor.
3. The department head will be notified after the third missed appointment. The department will be charged for an additional hour of labor and the gas key will be cut off.

ADMINISTRATION

This writing is intended both as the final expression of the agreement between the parties hereto with respect to the included terms, and as a complete and conclusive statement of the terms of the agreement. No modification of this agreement shall be effective unless such modification is evidenced by a writing signed by both parties.

The process for modifying this agreement will be for the party requesting the modification to initiate a change order letter detailing the requested change, the reason for the requested change and it's financial impact.

Neither party shall assign or transfer any interest in or duty under this agreement without the written consent of the other, and no assignment shall be of any force or effect whatsoever unless and until the other party shall have so consented in writing.

Either party may cancel this agreement for any reason with 30 days written notice to the other party.

This agreement shall be effective on the date both parties have signed the agreement and shall extend until June 30, 2008. This agreement shall automatically renew for

each subsequent fiscal year unless terminated or changed by the parties pursuant to the provisions of this agreement.

**Approved: Police Department
Services Bureau**

Approved: Fleet

By: _____

By: _____

Police Chief

Fleet Services Division Chief

Dated: _____

Dated: _____

APPENDIX 5 - SUGGESTED PERFORMANCE MEASURES

APPENDIX 5 - SUGGESTED PERFORMANCE MEASURES

Performance Measure	Description
Average Fleet Age	The age and accumulated use of a fleet has a great impact on the cost and performance of fleet operations. As such, relative fleet age should be tracked over time in parallel to key performance measures in order to track trends and to document the impact of lower or higher capital spending levels.
Fleet Operating Rates including: Hourly Labor Rate Parts Markup Fuel Markup Per Gallon Sublet Markup	Properly constructed operating rates provide a strong indication of cost competitiveness, and an ongoing mechanism of comparison with alternate and peer service providers.
Number of Vehicle Equivalents Per Technician	A measure of staffing reasonableness and adequacy. In a fleet of reasonable age and condition, each FTE technician should be able to support a benchmark number of vehicle equivalents.
Technician Utilization (Billable Labor Hours)	A measure of maintenance program productivity, this measures the average annual number of hours billed to work orders by each FTE technician. Low utilization indicates possible over-staffing and/or inefficient work processes.
Overtime Rate	A measure of staffing efficiency and effectiveness. A benchmark level of utilization coupled with reasonable overtime levels indicates an optimally staffed operation. Low productivity and high overtime indicates serious staffing imbalances. High productivity and high overtime indicates probable staffing shortages
PM Program Compliance Rate	This measures the number of PM's performed within schedule. A low compliance rate indicates that PM's are not being performed regularly. A high PM compliance rate is a basic building block for an effective maintenance and repair program.
Scheduled Repair Rate	Measures the portion of all repairs identified and conducted in a controlled, planned manner. The combined purpose of the PM program, operator inspections, and service writing is to identify and take care of problems in a planned, scheduled manner so vehicles do not suffer unscheduled and costly breakdowns.

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Performance Measure	Description
Road Call Rate	This measures the percentage of all repairs conducted on vehicles that breakdown in the field and cannot be driven to the shop. In combination with the scheduled service rate, it provides an indication of PM and overall maintenance program effectiveness.
Comeback Rate	This measures the percentage of time a customer returns a vehicle or piece of equipment to the shop for the same problem within a specified period of time. It is a measure of service quality that reflects the accuracy of service writing and diagnostic activities as well as repair quality.
Fleet Availability Rates	This is one of the key measures of success in a fleet management program; the degree to which the fleet service provider is able to ensure the regular availability of fleet units to their user departments. Availability rates should be highest for mission critical vehicles and should be calculated to reflect the work schedule of each vehicle.
Repair Turnaround Time	Services completed in one work day – 80% of all repair orders Services completed in three days – 90% of all repair orders