

ROBERT STREET MOTOR POOL

PROGRAM EVALUATION AND AUDIT



March 2013

INTRODUCTION

Background

The Robert Street motor pool is a fleet of six cars that can be used by Robert Street staff for business purposes. The motor pool is a small part of the Environmental Services (ES) fleet and is administered and maintained by ES fleet maintenance. According to Council policy, the motor pool is “to be maintained as a ready and reliable source of transportation services.”

The Robert Street motor pool was reviewed as part of prior audits of travel expense and vehicle usage. Procedures were established to record and review vehicle use as a result of a 2004 audit. A 2008 audit included a recommendation that supervisors from each department review logs on a monthly basis.

At the time of the audit, ES fleet maintenance staff has been working with a consultant to optimize their overall fleet management practices. The purpose of the consultant’s work is to help develop a system where all of Environmental Service’s fleet is centrally managed instead of being distributed among many sites. The scope of the consultant’s work includes an evaluation of preventative maintenance, fleet utilization, fleet replacement, cost control, and monitoring and overall fleet optimization practices. Motor pool administration was not specifically included in the scope of the consultant’s work.

This audit is part of the 2012 audit plan as a result of the Council-wide risk assessment. Management asked the audit department to review motor pool operations as this is a unique subset of the ES fleet and would not be addressed by the consultant fleet assessment.

Purpose

The purpose of the audit was to review the implementation and adequacy of motor pool procedures.

Scope

Vehicles in the Robert Street motor pool were reviewed. Vehicles used for operational purposes, such as the maintenance fleets of Environmental Services, were not included in this audit.

Methodology

- Review of motor pool policies and procedures
- Interview motor pool administrative and maintenance staff
- Review/sample vehicle logs, monthly manager reports and vehicle maintenance records
- Flowchart reporting process
- Cost analysis

Assurances

This audit was conducted in accordance with the Institute of Internal Auditors’ *International Standards for the Professional Practice of Internal Auditing* and the U. S. Government Accountability Office’s *Government Auditing Standards*.

OBSERVATIONS

Procedures

Motor pool procedures are not up-to-date.

Motor pool procedures were last updated in December, 2009 and no longer accurately describe operations in several areas. The approval process is not current. According to what is written, employees only need to present their driver's license to the receptionist as they are checking out a vehicle. In practice, employees must send a copy of their license to the manager of central services who enters it into the DMV system to ensure it is valid—a process that takes at least three days. Check-out procedures are also incorrect. The procedure incorrectly states that a handout to describe check-out procedures is available. Vehicles are now located in a different parking ramp than what is indicated in the procedures.

Use of the requisition forms is not defined.

The procedure to fill out requisition forms at check-out is not adequately defined and has led to significant delays later in the process. Requisition forms are used to track and charge vehicle use of RA employees (ES employees do not use requisition forms.) Driver's signature is sometimes missing on the forms, so the front desk receptionist must gather them at the end of the month before sending them to ES. More frequently, the manager's signature field on the form is left blank. 81% of requisition forms had no manager's signature in November. When the unsigned forms reach accounts payable, they are sent to each supervisor for signatures before journal entries are completed, leading to significant delays. The manager's signature field is an implied preventative control, and serves little purpose after the vehicle has already been used. The forms are also not numbered, so there is no way to ensure that all the forms are received back when they are sent from department to department. Finally, the receptionist fills out the account string on the requisition form for some employees based on what has been entered before, but the account string is never independently verified to be correct. This procedure could be fine if controls were in place, but it may be better to develop a consistent process where employees are responsible for entering the account string themselves.

The accounts payable process has not been well-defined and is no longer ensuring that the proper departments are charged for vehicle use.

At the end of each month, requisition forms are sent from the front desk to the ES maintenance facility at Metro Plant. Mileage rates are recorded on the forms before they are sent to RA finance. Delays are common before the mileage rates are recorded and sent back to RA. Also, a backlog of several months has recently occurred where vehicle use was not charged. As of January 28, 2013, motor pool vehicle use from May-December 2012 has not been charged. The requisition forms were lost and carbon copies needed to be retrieved. ES does not monitor that vehicle use is charged each month. Additionally, vehicle use by ES is tracked in paper logs but not charged by department, leading to a loss of information about how the vehicles are used within ES.

The accounts payable process had not been well-defined between ES and AP. The process was originally developed to centralize the reporting of all fleet vehicles in ES, but the operation of the Robert Street motor pool is unique enough to call for a more efficient process. Long staff absences have also occurred in each department which led to a lack of coordination.

Resources and training in motor pool procedures are not consistently provided for back-up reception staff.

The front desk receptionist plays a critical role in the operation of the motor pool. The receptionist performs a variety of duties that are not explicitly defined. She ensures that scheduling is accurate and timely, new drivers are approved, forms are properly filled out and filed, maintenance issues or incidents are attended to and also manages issues with parking garage when they arise. Informal training has occurred for other front desk staff, but many of the duties the primary receptionist performs would be compromised if she were to be absent for an extended period. Adequate resources and training for all staff who work at the front desk are necessary to ensure the motor pool remains “ready and reliable source of transportation services.”

Prius instructions do not describe how to start the keyless model.

The Priuses operate differently from other vehicles. Operating instructions for the Priuses are made available to employees on the Met Council intranet, but the instructions are not adequate to help a new user start each model year Prius. The instructions describe how to start the Prius model that requires a key to be inserted into the steering column, but do not describe the model that requires no key at all. Lack of starting instructions could lead to confusion for those who have never used a Prius before.

Maintenance

Electronic maintenance records do not give reliable measures of downtime.

Maintenance records are kept electronically in the WAM system. It was difficult to determine when maintenance work was actually performed by looking at the work orders. The “vehicle in” date on the work order is when the work order was created, not necessarily when the vehicle entered the shop. The “vehicle out” date on the work order is when it is manually coded as “finished” by the mechanic. Mechanics often do not code the work order as finished right after the work is complete. This is partially the result of habits the mechanics developed from a system before WAM. Unlike WAM, the prior system did not allow time to be charged to the ticket once it was coded as “finished.” Mechanics would wait to close the ticket in case more time needed to be charged.

Table 1: Downtime records for dead batteries, 2012

Vehicle	In	Out	Downtime (days)
764	12/12/2012	12/26/2012	14
743	11/28/2012	12/10/2012	12
743	8/28/2012	10/16/2012	49
744	9/26/2012	10/16/2012	20
744	7/19/2012	7/23/2012	4
679	5/8/2012	5/22/2012	14
744	2/3/2012	5/22/2012	109
744	4/12/2012	5/22/2012	40
764	2/3/2012	2/9/2012	6
679	12/28/2011	1/16/2012	19
744	12/28/2011	1/16/2012	19
743	12/28/2011	1/12/2012	15

Dead batteries were the most common maintenance issue on record, occurring twelve times in 2012.

Dead batteries have occurred enough times to hinder the main objective of the motor pool, which is to ensure a “ready and reliable source of transportation services.” Management believes the most likely causes for dead batteries are employees leaving the dome light on or generally being unfamiliar with how a Prius operates. Mechanics do not keep reliable records when work is done to specifically fix

dead batteries. When these records were investigated, downtime ranges from 4 days to 109 days. (Table 1) 109 days seems excessive, but actual downtime is difficult, if not impossible, to determine from current maintenance records.

Preventative maintenance is not consistently completed on-time or adequately monitored.

Preventative maintenance (PM) records were reviewed for each motor pool car from 2009-2012. Each vehicle is on a maintenance schedule according to date. PM inspections were considered on-time if they occurred within 10% of the manufacturer’s recommended interval and were not penalized for being performed early. The “transaction date” on the work order was used as a better measure of when work was actually performed. Reliability of the records is questionable, but the results demonstrate what conclusions can be drawn from current records.

Table 2: On-time Preventative Maintenance, 2009-2012

Vehicle	Schedule 1	Schedule 2	Schedule 3	On-time rate
679	43% (3 of 7)	50% (2 of 4)	0% (0 of 1)	42% (5 of 12)
742	50% (3 of 6)	75% (3 of 4)	0% (0 of 1)	55% (6 of 11)
743	50% (3 of 6)	100% (2 of 2)	100% (1 of 1)	67% (6 of 9)
744	50% (3 of 6)	67% (2 of 3)	100% (1 of 1)	60% (6 of 10)
763	0% (0 of 4)*	0% (0 of 1)*	NA	0% (0 of 5)
764	0% (0 of 2)	0% (0 of 1)*	NA	0% (0 of 3)
On-time rate	39% (12 of 31)	60% (9 of 15)	50% (2 of 4)	46% (23 of 50)
<i>Note: “On-time” preventative maintenance defined as work completed within 10% of manufacturer's recommended maintenance interval</i>				
<i>*No PM's performed according to the respective schedule on this vehicle</i>				

Overall, 46% (23 of 50) of PM inspections were on-time. (Table 2) 18% of PM inspections (9 of 50) occurred at more than twice the recommended interval. The on-time rate varies by the PM schedule and vehicle. Two vehicles did not have a preventative maintenance schedule set up in WAM since the date of purchase—preventative maintenance did not occur on these schedules as result. Consistently late PM inspections risk voiding the warranty and increasing the risk of mechanical problems, both of which could lead to increased maintenance costs. Inconsistent maintenance of vehicles is also a safety issue since tires, brakes inspections, fluids etc. are part of the preventative maintenance schedule recommended by the manufacturer.

Lack of monitoring contributed to the number of late PM inspections, but unreliable maintenance records have made monitoring a challenge. Controls were not in place to ensure each vehicle was set up in the system before being used.

Vehicle Use and Cost

Fleet size is not adequately monitored.

A system is not currently in place to monitor motor pool fleet size based on vehicle usage, but management has taken steps to develop a system by working with an external consultant. Council policy states, "Fleet manager will...monitor vehicle utilization to ensure proper fleet size and ensure vehicle replacement frequency based on mileage accumulation and/or age of vehicle." Yearly mileage is currently low on the vehicles, one indicator of low use, yet the receptionist reports greater demand for pool cars than can be met by the current fleet. Monitoring fleet size is important to make sure the motor pool meets the management purpose of maintaining a "ready and reliable source transportation services."

A complete mileage log for each motor pool vehicle is lacking.

Vehicle mileage is currently recorded in two separate places; individual requisition forms for RA employees and a running mileage log for ES employees. Use of separate forms for different employees has led to gaps in mileage that are not recorded or charged. Vehicles 0679, 0743 and 0764 each have gaps in mileage totaling 161 miles in November that cannot be accounted for in vehicle or maintenance logs.

Motor pool procedures state, "A formal mileage log for each vehicle's usage must be completed and will include mileage, date, employee number, shift, driver's signature, destination and reason for using the vehicle. Each mileage log will be forwarded to designated personnel and will be maintained in a database."

No one is assigned responsibility for accounting for motor pool vehicle use.

Management review of vehicle usage was a recommendation from a previous audit. According to the audit report in 2008, "While MCES has made significant strides in accounting for fleet usage it is important that supervisors be required to review the vehicle usage logs for all vehicles assigned to their areas." The reporting system that was in place to meet this recommendation has become obsolete and too costly to replace. A new system was not developed to take its place. As a result, no one ensures vehicle use is accounted for.

Mileage rates have not changed since 1998 and do not reflect the cost of the service.

The current rate charged for using a motor pool vehicle is \$0.11 per mile with an additional flat fee of \$11.50 per day (or \$5.75 if the vehicle is only needed for a half day.) The rate structure was set up to cover the costs of operation and was originally benchmarked to what the State of Minnesota charged for their motor pool. The rate has not been updated in 15 years. The State, which operates a much larger fleet of vehicles, currently charges a rate based on the estimated use of each leased vehicle and is updated frequently, as often as quarterly, with a computer program. Metro Transit does not charge for employee use of their pool vehicles, but requires that they be driven at least 7,500 miles a year to be assigned for departmental use.

Cost recovery was calculated since this was a concern expressed during the audit. A cost estimate for 2012 suggests an effective rate of \$0.67 per mile would be required to cover motor pool costs.(Appendix A) When the rate of \$0.67 per mile is applied to the estimated vehicle use by RA employees (Appendix B), \$9,530 would need to be charged to cover costs. In 2012, a total of \$7,747 was charged. This means ES has essentially subsidized RA for the difference of \$1,783 over the course of the year. The difference is not in itself very large, but shows that the actual cost of the motor pool has gradually outpaced the rate charged and will continue unless the rate is updated and monitored.

The current cost of the motor pool is higher than the IRS reimbursement rate for personal vehicle use.

The estimated motor pool cost of \$0.67 per mile is higher than the 2013 IRS reimbursement rate of \$0.565 per mile. Reimbursing at the IRS rate would save of \$4,335 per year compared to current costs. Costs are not the only consideration. The benefits of maintaining a “ready and reliable source of transportation services” for Council employees may justify higher costs, but it is important for management to at least be aware of the costs so alternatives can be adequately assessed.

The high cost per mile reflects low annual mileage, approximately 6,000 miles per vehicle per year, and the cost of parking, which represents 45% of the total cost. (Appendix C) A yearly average of 7,500 miles per vehicle is roughly the breakeven point for current motor pool costs to equal the IRS reimbursement rate. (Appendix A)

CONCLUSIONS

1. *Administration of the motor pool is the responsibility of ES Fleet Maintenance, located at the Metro Plant, but many of the associated motor pool processes are carried out at the Robert Street location. The processes centralized at the Robert Street location were generally found to be lacking definition, coordination and control from ES Fleet Maintenance.*
2. *Preventative maintenance has not been consistently performed on-time and maintenance records are not adequate to monitor the maintenance program*

RECOMMENDATIONS

Program Evaluation and Audit recommendations are categorized according to the level of risk they pose for the Council. The categories are:

- **Essential** – Steps must be taken to avoid the emergence of critical risks to the Council or to add great value to the Council and its programs. Essential recommendations are tracked through the Audit Database and status is reported twice annually to the Council's Audit Committee.
- **Significant** – Adds value to programs or initiatives of the Council, but is not necessary to avoid major control risks or other critical risk exposures. Significant recommendations are also tracked with status reports to the Council's Audit Committee.
- **Considerations** – Recommendation would be beneficial, but may be subject to being set aside in favor of higher priority activities for the Council, or may require collaboration with another program area or division. Considerations are not tracked or reported. Their implementation is solely at the hands of management.
- **Verbal Recommendation** – An issue was found that bears mentioning, but is not sufficient to constitute a control risk or other repercussions to warrant inclusion in the written report. Verbal recommendations are documented in the file, but are not tracked or reported regularly.

1. (Essential) Update motor pool procedures.

Procedures do not reflect current practices. Procedures should be updated, communicated to relevant employees and reviewed at regular intervals to ensure they remain up-to-date. There are several areas where procedures should be updated or developed:

- The approval process should be updated to reflect current practice.
- The check-out process should be updated, including how to fill out required forms.
- The front desk receptionist plays a critical role in the operation of the motor pool. Duties the receptionist performs for motor pool should be written down and made available to all staff who work at the front desk.
- Procedures for the accounts payable process for motor pool should be defined by ES and accounts payable staff and written down.
- Consideration should be given to including more detailed instructions for starting and using the Priuses.

Management Response: *Management will ensure that all motor pool procedures are updated to reflect current practices or improved practices, and will be communicated to affected employees by June 30, 2013. In addition, fleet management, Robert Street facility management, and finance staff will clarify the process for processing payment in accounts payable by July 30, 2013. New procedures will be documented and communicated.*

Fleet management met with Robert Street building staff who administer the day to day operation of the Robert Street Motor Pool on March 13, 2013. They reviewed the process and clarified roles and responsibilities of staff who administer the program.

Updated instructions for both the 2009 and 2010 Prius model cars have been posted on MetNet and are in the glove box of each car.

In addition, fleet management will continue to implement the GPS technology (AVL) in the motor pool vehicles. As part of this implementation, management will work with the vendor to find a way to utilize ID card access to the system, with the goal of eliminating paper mileage logs. The anticipated completion date is August 30, 2013.

Staff Responsible: *Tim Keegan, Manager Facilities and Fleet*

Timetable:

- *Procedures and process updates – publishing and communication by September 30, 2013.*
- *Accounts payable process review and documentation by July 30, 2013.*
- *Prius operational instructions - Starting instructions are completed and posted. Other operational instructions will be completed and posted by May 30, 2013.*

2. (Essential) Develop a system to monitor maintenance of motor pool vehicles.

Management should monitor preventative maintenance to ensure the warranty remains active and the vehicles safe. A definition of “on-time” preventative maintenance should be developed and controls put in place to ensure the proper PM schedule is entered at the time of purchase. The frequency of dead batteries and resulting downtime should also be monitored. Management should take steps to ensure maintenance records are reliable and adequate to monitor necessary aspects of the maintenance program.

Management Response: *Fleet management will immediately begin to more actively monitor the Robert Street motor pool to ensure that maintenance is performed on-time. A review of the current preventative maintenance (PM) intervals in WAM (Utilities Work and Asset Management system) will be reviewed and, if needed, updated. Management will work with employees to improve maintenance records for accuracy and timeliness. To help ensure timeliness, fleet management will utilize a State of Minnesota contract for oil and filter changes.*

In addition, fleet management will utilize either the GPS technology (AVL) or the Fuel Management system to schedule maintenance by interfacing with the WAM system. As part of this implementation, more timely maintenance work orders will be generated and proper documentation will be retained.

Staff Responsible: *Tim Keegan, Manager Facilities and Fleet*

Timetable:

- *The increased monitoring and implementation of maintenance activities is currently being implemented and will be fully incorporated by August 15, 2013.*
- *An integrated maintenance schedule systems utilizing either AVL or the Fuel Management system will take some time, with expected completion date by December 31, 2014.*

3. (Essential) Develop a system to monitor proper fleet size and vehicle replacement according to management goals for the motor pool.

Management has not been monitoring fleet size or vehicle replacement, but has taken steps in this direction by working with a consultant. Management should continue this work and develop criteria for determining proper fleet size and when vehicles should be replaced.

Management Response: *MCES has implemented several comprehensive initiatives to better manage our fleet. As part of this effort MCES contracted with Chatham Consulting, Inc. to conduct a fleet optimization study of the entire MCES fleet and to make recommendations to management. The draft review was delivered to MCES in December of 2012. MCES management will analyze the results and recommendations over the next few months. Another step was to hire a Fleet and Facilities manager, Tim Keegan, who began work in 2011.*

In addition, fleet management has started collecting the following data from the Robert Street motor pool: vehicle miles, number of trips, and number of decline requests. This information will be analyzed after the first six months, one year, and annually thereafter. The information will be used to determine appropriate fleet size and timing for replacements, based on industry standards and the Fleet Optimization Study recommendations.

Staff Responsible:

- *Tim Keegan, Manager Facilities and Fleet*
- *MCES senior management team (ESMT)*

Timetable:

- *Robert Street motor pool data collection started in March of 2013 and will be analyzed October 1, 2013, April 1, 2014, and annually thereafter.*
- *Criteria for motor pool fleet size and vehicle replacement will be completed by September 30, 2013.*

4. (Significant) Strengthen controls to account for vehicle use and to prevent personal use of motor pool vehicles.

A complete vehicle log is necessary to make sure mileage is accounted for. The current system of using a requisition form for RA and a separate vehicle log for ES is not adequate to account for mileage. Management should develop methods to account for mileage and develop reasonable controls to make sure the process continues to work adequately. To address personal use of vehicles, consider either strengthening the existing preventative control requiring management signature prior to vehicle use, or developing a reasonable detective control after vehicle use.

Management Response: *In the short term, steps have already taken place to address this recommendation. The Robert Street building receptionist will verify a manager's signature prior to vehicle use and verify that both the RA form and the vehicle logs are completed. In cases when an employee was unable to obtain a manager's prior approval (short notice for offsite meeting, eg.) the receptionist will follow-up with a phone call to the manager and make a note on the RA log.*

The entire process will be reviewed and revised, to ensure efficiency and consistency. This will be done as a component of the procedure, process and documentation review sited in the management response in recommendation #1.

Staff Responsible: *Tim Keegan, Manager Facilities and Fleet*

Timetable:

- *Procedures and process updates – publishing and communication by September 30, 2013.*

5. (Significant) Develop a system to monitor motor pool costs and adjust the mileage rate at regular intervals.

The current rate for use of the motor pool has not been updated in fifteen years. The rate charged should closely reflect *the costs of the program and be updated at regular intervals.*

Management Response: *Fleet management will establish a new rate based on a cost of owning and operating the fleet and current federal mileage rates and will propose a new charge rate to RA finance. Reviews and updates will be done annually thereafter.*

Staff Responsible:

- *Tim Keegan, Manager Facilities and Fleet*
- *Finance*

Timetable:

- *A new rate will be proposed by September 30, 2013, with an adoption date to be determined by Finance.*

6. (Consideration) Track and charge vehicle use by ES employees as well as RA employees.

Vehicle use is not currently tracked by department in ES, leading to a loss of information about how they are used. Consider developing a system where vehicle use is charged to ES departments so use can be tracked in departmental budgets.

Management Response: *The MCES senior management team will take this recommendation under advisement for the 2015 budget cycle.*

APPENDICES

Appendix A: Motor Pool Cost Estimation, 2012

1. Personnel Costs

*Assumed to be negligible since motor pool is a small part of the total ES fleet

2. Operating Costs

Maintenance	\$	1,769
Fuel	\$	2,840
Parking	\$	10,800
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Total	\$	15,409

3. Capital Cost

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6 Vehicles	\$	8,823

*Straight line depreciation for each vehicle, 10-year useful life. Salvage value assumption: \$2,000 for the 2002 Ford Taurus, \$5,000 for the five Toyota Priuses.

4. Total Cost

Total Operating Cost	\$	15,409
Total Capital Cost	\$	8,823
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Total Cost	\$	24,232

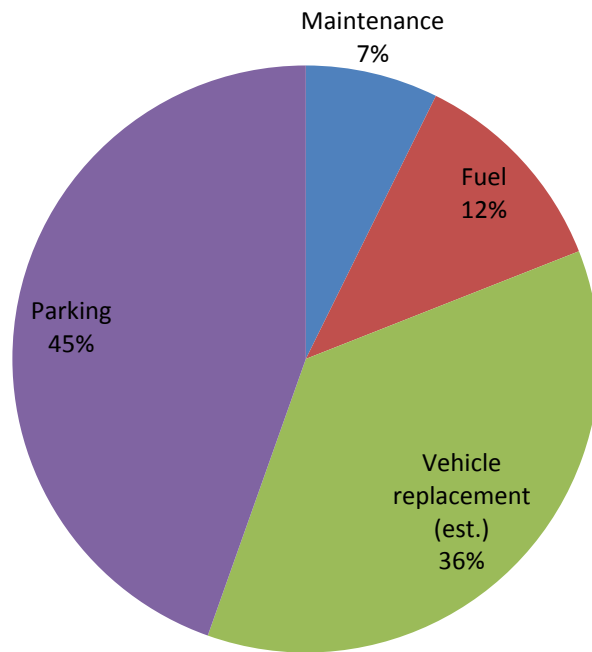
5. Estimated cost per mile

Total miles per year	Rate per mile
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36,000 (actual, 6,000 per car)	\$ 0.67
45,000 (7,500 per car)	\$ 0.54
60,000 (10,000 per car)	\$ 0.40
75,000 (12,500 per car)	\$ 0.32

Appendix B: Estimated 2012 Motor Pool Mileage

	Miles	Percent
ES Employees	20,992	60%
RA Employees	14,224	40%
Total	35,216	100%

Appendix C: Motor Pool Costs, 2012





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