



Motor Pool

May 9, 2022

**A Report to the
Jackson County
Board of Commissioners**

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To: Board of Commissioners
Re: Audit of the Jackson County Motor Pool
Date: May 9, 2022

The enclosed report presents the results of an audit over the Jackson County Motor Pool.

The objectives of the audit focused on the financial aspects of how the Motor Pool charges user departments. Overall, we found the financial practices to be sound and equitable.

Please feel free to contact me at your convenience if you have any questions or would like additional information not contained in the report.

C: Steve Lambert, Roads and Parks Director
Jackson County Budget Committee
Audit Committee
Moss Adams, LLP

IN A NUTSHELL

Audit Objectives

The objectives of the audit focused on the financial aspects of how the Motor Pool charges user departments. Specifically, the objectives were designed to answer 5 questions which are relevant to the departments participating in the Pool and to Motor Pool management. The 5 questions are listed on page 4.

What We Found

Overall, we found the financial practices to be sound and equitable. Motor Pool recently changed one financial practice. This change (discussed in chapter 2) has the potential to reduce annual rate swings and influence when departments replace vehicles (discussed in chapter 3). To increase operational efficiency, Motor Pool also recently combined the Fleet and Motor Pool programs.

What We Recommend

Roads/Motor Pool has effectively balanced the challenge of needing to maintain adequate reserves with the interest of keeping rates down. Despite the effective performance, we do recommend development of a formalized policy that establishes parameters for the management of reserve balances. We make this recommendation for the benefit of future staff who may be tasked with this responsibility and also ensure there is appropriate oversight.

Introduction and Background

**Motor Pool
Background**

The Motor Pool (MP) is an internal service fund tasked with responsibilities relating to the acquisition, maintenance, and disposal of County vehicles.

The MP operates as a pool and charges the user departments on a monthly basis using a three-tier rate structure as described in Table 1 below to recover capital, fixed, and variable program costs. There are two general reasons pooling occurs:

- Pooling of costs for services provided to benefiting departments in order to calculate a reasonable and consistent billing/allocation process to recover costs. This is also referred to as central services, such as internal organization-wide accounting functions.
- Pooling of risk so that large, unpredictable individual financial risks become more predictable and are distributed among all members of the pool. Therefore, the higher costs of riskier departments/vehicles are offset by the lower costs of other departments/vehicles. Risk pooling is commonly used in the health insurance industry.

TABLE 1 – Motor Pool Rate Structure

Rate Structure Component	Description
Overhead Rate	This rate is a flat rate charged monthly per vehicle, and covers the cost of administration of the program and expenses that are not directly attributable to a vehicle (e.g., utilities). The monthly rate for FY21-22 is \$83 per vehicle.
Mileage Rate: Fuel & Maintenance	There are two subcomponents to the Mileage Rate, and both these subcomponent rates are charged based on actual miles driven each month. One component covers the cost of fuel, and the second component covers the cost of preventative maintenance and vehicle repairs needed due to normal wear-and-tear. The fuel rate is based on cost of fuel and the vehicle gas mileage. For FY21-22 the fuel rate ranged from 10 cents to 31 cents per mile driven. The maintenance rate is a flat rate for all vehicles and for FY21-22 the rate is 16 cents a mile.

Replacement Rate	This rate is an amortized pre-payment intended to ensure that funds are available to replace an active vehicle that was purchased by the department with a 'like' vehicle at the end of the active vehicle's life. The pre-payment is to help departments better budget for vehicle replacement costs by spreading the cost of the vehicle over a period of time instead of requiring the department to pay for a new vehicle when needed. The monthly rate is calculated based on the potential future cost of the replacement vehicle, expected return on sale of vehicles and reserve balances. At the beginning of FY21-22, the rates for active vehicles ranged between \$170 to \$1,615 per month.
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The FY2021-22 MP budget was established at about \$3.7 million as detailed in Table 2 that follows. The budgeted FTE for the program sits at about 1.77. This FTE count reflects the allocation of management staff and not the direct staff (mechanics). This is because in FY20-21 the Motor Pool operations was moved from downtown Medford to the Road's Fleet Shop in White City. Therefore, the MP pays for the Fleet mechanics time only when that mechanic works on an MP vehicle.

TABLE 2 – Fiscal Year 2021-22 Motor Pool Adopted Budget

Category	Amount
Personnel Services	\$235,614
Materials & Services	\$1,198,468
Capital Outlay	\$1,270,000
Contingency	\$289,304
Ending Balance & Reserves	\$715,949
TOTAL	3,709,335
Full-Time Equivalent	1.77

Source: Jackson County FY21-22 Adopted Budget

The Motor Pool oversees a fleet of 360 vehicles. Below in Table 3 is a break-down of active vehicles by department, and also the miscellaneous items such as trailers, motorcycles, etc., that make-up the remaining four percent (16) of assets that MP oversees.

TABLE 3 – Vehicles by Department

Department	Vehicles	Miscellaneous Items	Total	% of Fleet
Sheriff	148	5	153	41%
Community Justice	41	5	46	12%
Health and Human Services	42	1	43	11%
Roads	34	0	34	9%
Parks	32	0	32	9%
Development Services	15	0	15	4%
Facility Maintenance	12	3	15	4%
Assessor	12	0	12	3%
Motor Pool (Trippers)	11	0	11	3%
Airport	5	0	5	1%
Expo	2	2	4	1%
Surveyor	3	0	3	1%
Watermaster	2	0	2	1%
Mail Courier	1	0	1	0%
TOTAL	360	16	376	100%

Source: Auditor Analysis of Fleet Focus Data

The Sheriff’s Office, Community Justice, and Health and Humans Services are the primary Motor Pool departments. Together they account for 64% percent of vehicles and miscellaneous items. The 11 vehicles assigned to the Motor Pool program include ‘tripper vehicles,’ which is the term used for vehicles that can be rented from MP for a daily or short-term use.

The last detail audit of the Motor Pool program was done in FY2012-13. Naturally, there has been some changes to the MP program since the finalization of that audit. These changes included the physical location of the Motor Pool, as mentioned above, is now located in White City at the Road’s Fleet shop instead of downtown Medford; there was a change to the replacement rate calculation by removing the vehicle class factor from the rate schedule and basing the rates on future purchase price, useful life and miles projected to be driven; and lastly a new Program Manager was hired in 2017 with the retirement of the prior Program Manager.

Audit Authority

We conducted our audit in accordance with Codified Ordinance 218 pertaining to the County Auditor. This audit was included in our fiscal year 2021-22 Internal Audit Plan.

Compliance with Government Auditing Standards

We conducted this performance audit in accordance with generally accepted government auditing standards. These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Additionally, the standards address the importance that auditors be independent of management. The Internal Audit program operates in compliance with the generally accepted government auditing independence standard for internal audit shops.

Confidential or Sensitive Information

We did not withhold information that would be considered sensitive or confidential.

Audit Conclusion

We found that Motor Pool’s financial practices are sound and equitable, and no changes are needed over these practices. While the review of internal control was not relevant to the audit, we did identify one area where practices should be formalized into a policy. We do not believe that the lack of a formal policy is a significant deficiency in internal control, however, we make this recommendation to create a formal policy for the benefit of future staff who may be tasked with this responsibility of maintaining reserves for future purchases and also ensure there is appropriate oversight.

Audit Objectives, Scope & Methodology

Our audit objectives focused on answering the following 5 questions:

1. Should the overhead rate and mileage rate be trued-up each year based on actual expenses?
2. Are replacement rates covering the actual cost of replacing a vehicle?
3. Should the current practice of putting the proceeds from the sale of a vehicle into the pool’s funds be changed to the practice of giving the

proceeds to the department in order to disincentive the departments from hanging on to cars?

4. Are reserves sufficient?
5. Is the mileage rate (maintenance subcomponent) equitable across vehicle types?

Our audit procedures included:

- Reviewing Motor Pool Adopted Budgets
- Reviewing Motor Pool financial information
- Reviewing Motor Pool rate calculations for last six years
- Reviewing vehicle history information in Fleet Focus
- Reviewing vehicle sale/purchase information for FY19-20 through beginning of FY21-22

Chapter 1 – Should the Overhead and Mileage Rates be Trued-up Each Year Based on Actual Expenses?

We found that over a four-year period there was a minimal difference between the combined revenue collected from the overhead and mileage rates as compared to the actual expenses intended to be offset by the overhead and mileage revenue. Therefore, we do not believe changing the current system to a true-up system is warranted.

There are two methods that can be used to recoup costs for internal service funds. One method is to allocate budgeted costs on a reasonable basis to the user departments and then perform a true-up based on actual expenses at year-end. The other method is to calculate a billing rate that is then charged to the user departments. With this method, instead of the year-end true-up, the under/over recoupment of expenses is applied to the next year's billing rate.

The current method used by Motor Pool is similar to the billing method referenced above. The current method used by MP for calculating the rates takes into consideration the fluctuation of costs and revenue needs and therefore the rates are adjusted, as necessary, from year-to-year to recoup more or to lessen the burden on user departments in the upcoming year.

We calculated the difference between actual revenue collected and actual expenses for the overhead rate and mileage rate over a four-year period from FY17-18 to FY20-21. We performed this calculation because a significant difference for an extended period of time between actual revenue received and actual expenses can be an indication that the calculation method isn't working or that a different method may be warranted.

We found that MP does a good job estimating and, as necessary, adjusting the rates from year-to-year so not to charge the departments too much or too little. For example, in FY19-20 the overhead rate charged resulted in revenue exceeding expenses by about \$66,000. This additional revenue received in FY19-20 was offset in FY20-21 when the monthly overhead rate from was reduced from \$71 to \$66, which resulted in \$75,000 more in expenses than revenue for the year.

There had been lower variances in FY17-18 and FY18-19 then in the FY19-20 and FY20-21 variances discussed above. The increase in variance is explainable by various changes and events that occurred during these years. In FY20-21, the Motor Pool was moved to a different location. Also, the Road and Park's Director acted as the County's Emergency Operations Director during the COVID pandemic and in response to the September 2020 fires. Therefore, the budgeted costs for his oversight of the MP was reflected in the overhead rate calculation, however, his actual labor hours were allocated to the COVID and fire emergency response. As a result, the actual expenses were lower than anticipated.

Chapter 2 – Are Replacement Rates Covering the Actual Cost of Replacing a Vehicle?

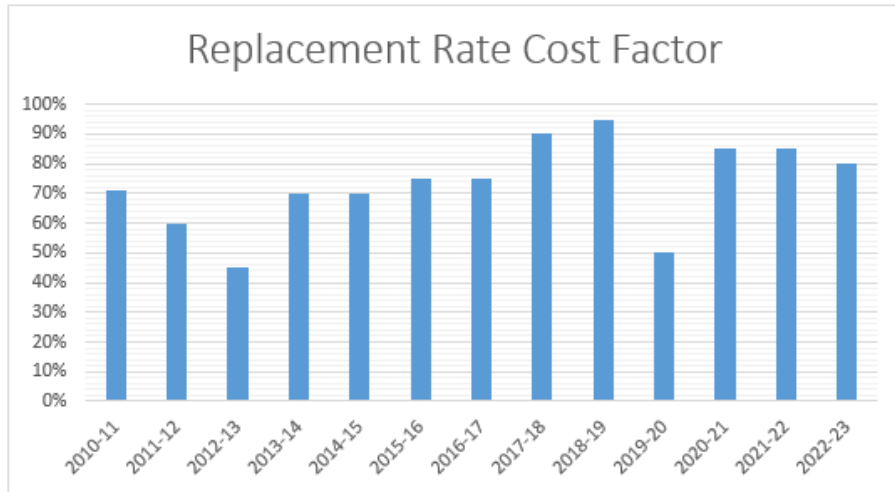
As discussed in the introduction, Motor Pool (MP) imposes a monthly replacement charge to replace a department's active fleet vehicle. Departments initially purchase a vehicle with the department's own funds, but then begin pre-paying for the future cost that will be incurred to replace the vehicle. The revenue from the replacement charge is then placed in a reserve fund which is used to purchase the next replacement vehicle (i.e., to replace the replacement vehicle). This practice spreads the department's cost of replacing an existing vehicle over several years and serves as an alternative to a department having to plan for the impact to its annual budget of the total cost of purchasing a replacement vehicle. To reiterate – If a department with 10 vehicles were to decide it needs 11 vehicles, then it would need to initially pay the full cost of adding the 11th vehicle. Replacement charges are only used to replace vehicles and not increase the fleet size.

In establishing the monthly replacement rate, MP must estimate what a new vehicle will cost several years into the future and it also must estimate the amount of revenue it will receive when the vehicle being replaced is sold at auction. If MP were to set the rates too low, it would create the risk of not recouping the cost of the replacement vehicle. However, if it were to set rates too high it would cause departments to overpay for their replacement vehicles which would result in there being an unnecessarily high reserve balance.

Historically, MP's practice has been to adjust replacement rates as the reserve balance gets too high or too low. This practice was effective in keeping the reserve balance at an appropriate level but an unintended consequence was that it created large swings in replacement rates, as shown below in Chart 1 which displays the replacement rate as a percentage of the estimated replacement cost of a vehicle to be recouped through the monthly charge. For example, in FY2010-11 the rate was intended to replace 71% of the replacement cost through the monthly charge. It was intended that the remaining 29% would be derived from a combination of the revenue from the sale of the disposed vehicle being replaced, current revenues and the fund's reserve balance.

MP lowered the 71% to 60% in FY2011-12. MP lowered it again in FY2012-13 to further reduce the reserve before returning to the 70% rate in FY2013-14.

CHART 1 – Replacement Cost Factor



At the beginning of the audit, Motor Pool explained that it is replacing this practice of adjusting rates. Instead, it's new practice will be to give a one-time "kicker" rebate to user departments when reserves reach levels that are considered above sufficient. This "kicker" will be used instead of lowering the replacement rate. This will remove the large swings in the replacement rate and hopefully any confusion that user departments experienced when their replacement rates change significantly year-from-year.

Chapter 3 – Should the proceeds from the sale of a vehicle be given to the user department to help disincentive departments from hanging on to cars?

This question was asked by the prior Roads and Parks Director due to concerns that departments were holding on to cars past the cars expected life. The practice of holding on to cars past their expected life may benefit the department but it may do so at the detriment of the Motor Pool (MP).

As you may recall from Chapter 2, MP anticipates receiving revenue from the sale of vehicles and plans on this revenue partially offsetting the cost of the replacement vehicles. This anticipated revenue is therefore factored into the equation when MP establishes monthly replacement charges. However, the longer a department holds on to a car past its expected life, the less revenue MP is likely to earn when the vehicle is eventually sold at auction.

Over the last five fiscal years from FY2016-17 through FY2020-21, revenue from the sale of vehicles helped offset about 9% of the cost of purchasing replacement vehicles.

We cannot accurately estimate the financial impact of delaying the sale of a used vehicle for one or two additional years. Additionally, the impact of supply chain issues on the market for both new and used automobiles makes it hard to analyze trends over time.

Despite these challenges, we did review MP's used vehicles sales for FY2019-20 through FY2021-22. We reviewed nineteen (19) of these sales that had sales information readily available during this period. The majority of these sales were Sheriff vehicles which accounted for about 63% of the vehicles.

Although Sheriff's vehicles account for 63% of the vehicles sold, the revenue from these vehicles only accounted for 53% of the total revenue earned from the sale of the 19 vehicles. However, because the type and condition of each of the 19 vehicles will affect the auction sale price, we cannot definitely say it supports the hypothesis that holding on to vehicles past their expected life may benefit the individual department but in a way that is not equitable to the other departments participating in the motor pool.

Accordingly, the question “whether the proceeds from the sale of a vehicle should be given to the user department to help disincentive departments from hanging on to cars?” needs to be considered within the context of the larger question as to whether there should be a pooled approach to vehicle purchase costs or whether departments should be responsible for the actual cost of their purchases (e.g., perform a true-up when a replacement vehicle is purchased).

Table 4 below shows the details of the 19 vehicle sales reviewed that occurred from FY2019-20 through FY2021-22.

TABLE 4 – Vehicle Sales Information by Department

Department	Number of Vehicles Sold	Total Sales Proceeds
Mail Courier	1	\$4,800
Facility Maintenance	1	\$9,900
Parks	2	\$14,201
Community Justice	3	\$20,350
Sheriff	12	\$56,603
TOTAL	19	\$105,854

Source: Auditor Analysis of Sales Information

Chapter 4 – Are Reserves Sufficient?

As discussed earlier, departments pay a monthly replacement charge that is, in essence, a pre-payment for the purchase of a future (replacement) vehicle. The pre-payments are placed in the Motor Pool (MP) fund and the fund is used when MP purchases vehicles.

As of June 30, 2021, the fund had a balance of about \$1.3 million. MP projected spending about \$2 million for vehicle purchases in FY21-22. Monthly replacement charge revenue budgeted at \$1.2 million for FY21-22 is intended to offset the \$.7M deficit between the beginning fund balance and the anticipated expenditures.

The question “are reserves sufficient?” addresses the scenario of what would happen if departments all stopped using vehicles and they all asked for their replacement pre-payments to be refunded. As of October 2021, the replacement value (pre-payments) made by user departments for all active vehicles (non-traded vehicles) is about \$5 million.

This scenario is obviously hypothetical as it is extremely unlikely that all departments would suddenly all stop using all vehicles. However, the COVID pandemic illustrates that the question may not be as far-fetched as it seems. The pandemic illustrates that a major shift in practices could occur and that the shift could result in departments reducing their need for vehicles.

The Government Finance Officers Association (GFOA) capital asset best practice recommends that governments adopt a written policy addressing capital asset reserve for renewal and replacement. The best practice doesn’t provide for an actual dollar amount or percentage that the reserve balance should be, but it does state that the amount or percentage should be set based on the particular entity’s capital needs and financial capabilities.

Maintaining an adequate but not too large reserve while also reducing the monthly rates charged to departments has required a delicate balancing act involving many variables. It has been achieved without a formal policy by the Roads Department’s experienced staff.

However, for purposes of oversight and governance, the County should consider adopting a formal policy that establishes parameters to guide staff in its management of the fund.

Chapter 5 – Is the mileage rate (maintenance subcomponent) equitable?

Mileage rates appear equitable, meaning that the maintenance rate charged for one type of vehicle is not subsidizing the cost of providing maintenance service to another type of vehicle. Because Sheriff vehicles account for such a large portion of the Motor Pool (MP) fleet and because they are driven in a manner that is different than how other vehicles are driven, we wanted to verify that maintenance rate was fair to all users.

Mileage rates are established to account for the expense of normal wear and tear and replacement parts (“maintenance subcomponent”) plus the cost of fuel. The model for charging a flat per mile maintenance rate is based on the assumption that there is a direct and consistent relationship between mileage driven and the amount of work that a vehicle will need. The cost of damage caused by accidents and other reasons not considered normal wear and tear are billed directly to the departments and not included in the model.

We found that there was not a significant difference in maintenance costs between the Sheriff’s Office vehicles and the rest of the pool. We also found this to be true during our FY2012-13 audit as well. However, in FY2012-13 the cost of outsourced work had not been consistently tracked and entered into the Fleet Focus system. As a result, in FY2012-13 we were unable to be as precise in determining the actual costs associated with each individual vehicle as we were in this audit.

We analyzed the data for 38 active vehicles that have been driven at least 90,000 miles to determine the relationship between mileage driven and actual expense of preventative maintenance and normal wear-and-tear repairs. For half of the 38 vehicles (19) the actual costs based on billable rates incurred divided by the actual number of miles driven resulted in a range of 12 to 17 cents per mile. For the other 19 vehicles, the lowest per mile cost was 7 cents and the highest was 30 cents.

Using the per mile model, MP charged 16 cents on average for the 38 vehicles reviewed, which equates to \$14,400 for 90,000 miles.¹ In general based on review of the 38 vehicles, the maintenance cost over

¹ 90,000 miles multiplied by 16 cents

the course of a vehicle's life was within plus or minus \$4,500 of the average cost of \$14,400.

The maintenance rate per mile system provides the benefits of predictability and stability for the user departments when budgeting. It also reduces the complexity and therefore time that is needed to prepare monthly billings for the user departments. Given that the data suggests the model is equitable and no subsidization is occurring, we see no reason to deviate from the current practice.

Summary of Recommendations

1. Our one recommendation is that a policy be formalized to govern management of the size of Motor Pool Fund's reserve balance.

Management Response



**JACKSON
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**Roads and Parks
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Steve Lambert
Director

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To: Eric Spivak
From: Steve Lambert
Subject: Motor Pool Audit
Date: May 6, 2022

This memo is in response to the Motor Pool Audit completed last month which reviewed the financial aspects of how the Motor Pool program charges user departments.

We are pleased that the audit found the financial practices to be sound and equitable. The audit did however recommend that the department consider working with county leadership to evaluate a formalized policy to establish parameters for the management of reserve balances. We agree with this recommendation and will explore options on how to implement it.

The Roads and Parks Department requested this audit and we are grateful to the Audit Division for your thorough review and assistance in helping the Motor Pool to provide quality and cost-effective service to the county.

C: J Domis
Chad Helvey

Jackson County

Internal Audit Program

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