Report No. 2005-18

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State Agency Use of Metered Equipment

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Secretary of State Audit Report

Summary

PURPOSE

The purpose of our audit was to determine if state agencies are meeting their metered equipment needs in the most cost-effective manner. Examples of metered equipment reviewed include tractors, loaders, rollers and graders.

RESULTS IN BRIEF

We found that, when viewed as an enterprise, the state has opportunities to improve cost effectiveness through interagency sharing of lightly used equipment. Our analysis also pointed towards some potential opportunities for agencies to develop usage data and usage standards to help identify sharing or rental opportunities within their own metered equipment fleets, further improving their cost effectiveness.

A limiting factor for our analysis was the lack of available and accurate equipment usage data. Three of the six agencies we reviewed did not have usage data that was complete and accurately reflected equipment in their possession. Lack of this information would limit, if not prohibit, systemic identification of those interagency sharing opportunities that may exist.

We developed a minimum-use standard in order to identify a pool of lightly used equipment for our review. Our standard focused on an economic breakeven point where a particular piece of equipment, based exclusively on usage, may be cheaper to rent than to own. We noted through this analysis many of the agencies had not developed a similar minimum-use standard that would point towards equipment that may more suitably be rented than owned. Nor had they developed a process to identify those lightly used pieces of equipment where low use would be acceptable due to other factors, such as safety or availability, thereby excepting them from rental or sharing consideration.

We identified 268 pieces of metered equipment that should be reviewed to determine whether need for the equipment could be more cost-effectively met through sharing or rentals, or should be excluded from consideration due to other considerations. These pieces of equipment, as well as metered equipment fleets in general, should be closely monitored and evaluated because of the high costs to retain, maintain, and eventually replace equipment, approximately $18.3 million for the 268 pieces of low-use equipment identified.

We also noted interagency sharing is not a function commonly coordinated by fleet managers and that those instances we did find were generally a result of arrangements made by the local work teams or area managers.

RECOMMENDATIONS

We recommend agency fleet managers consider development of information and utilization standards that would facilitate an enterprise-wide approach to metered equipment utilization. This could include:

- Development of a centralized information system including standards for equipment descriptions, cost data, and utilization records;
- Development of minimum use and exception documentation standards, as well as a process to identify those pieces with additional considerations (such as safety or availability concerns);
- Develop the interagency relationships, agreements, and oversight such that metered equipment can be viewed and managed as a statewide asset.

We further recommend all agency fleet managers who have yet to do so develop policy, procedures, and a systematic methodology to accumulate relevant data and perform the analysis needed to determine the most cost-effective buy, lease, or borrow options for their individual metered equipment needs.

AGENCY'S RESPONSE

The Oregon University System generally agrees with the recommendations.

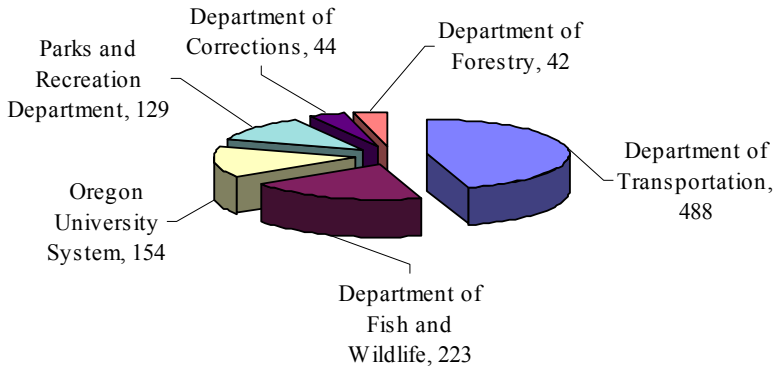
The Department of Administrative Services and the other non-OUS agencies included in this audit generally agree with the recommendations but disagree with the findings. Agencies' complete responses can be found at the end of this report.

Introduction

Metered equipment usage is tracked in hourly increments any time the engine is switched on. Hourly measures are more appropriate for metered equipment than miles driven because hours of use better measures this type of equipment's useful life. Common types of metered equipment include tractors, loaders, rollers, and graders.

To assess metered equipment use, we selected six agencies that own the majority of the state's metered equipment fleet: the Department of Transportation (ODOT), Department of Fish and Wildlife (ODFW), Oregon University System (OUS), Parks and Recreation Department (OPRD), Department of Corrections (DOC), and Department of Forestry (DOF). We reviewed available information for 1,080 pieces of equipment at these agencies. See Figure 1 for a summary of the metered equipment at each agency we reviewed.

Figure 1
Summary of Agency Metered Equipment Totals



Audit Results

We found that, when viewed as an enterprise, the state has opportunities to improve cost effectiveness through interagency sharing of lightly used equipment. Our analysis also pointed toward some potential opportunities for agencies to develop usage data and usage standards to help identify sharing or rental opportunities within their own metered equipment fleets, further improving their cost effectiveness.

A Significant Percentage of the State's Metered Equipment is Lightly Used

Because of the high cost of ownership, agencies need to have in place a system to identify lightly used equipment and a process to identify exceptions.

A necessary first step in determining whether to borrow, loan, rent or own metered equipment is to determine the point at which one method becomes more cost effective than the other. To determine this point, we calculated the minimum number of hours a piece of equipment should be used each year to justify owning it. In developing this minimum-use standard, we considered ownership costs (e.g. depreciation, maintenance, insurance, and administrative overhead) and the cost of rental alternatives.

We found usage data was available for only 880 of the 1080 pieces of metered equipment we included in our review. By applying the minimum-use standard we developed, we determined 288 of the 880 pieces of equipment fell below the breakeven point in both 2002 and 2003. Of this total, 20 pieces were geographically isolated from rental providers or a similar piece of equipment owned by the state. The

Figure 2

Agency Lightly Used Equipment Totals

Agency	Metered Equipment Total A	Equipment Analyzed[1] B	Lightly Used Equipment C	% Analyzed Lightly Used (C / B)
Department of Fish and Wildlife	223	181[2]	108	60%
Department of Corrections	44	21[2]	9	43%
Oregon University System	154	25[2]	9	36%
Department of Forestry	42	39	12	31%
Parks and Recreation Department	129	129	37	29%
Department of Transportation	488	485	93	19%
Total	**1080**	**880**	**268**	**30%**

[1] Some equipment was excluded because usage information was unavailable
[2] Usage information provided did not have supporting documentation

remaining 268, or 30 percent of the equipment with usage data, represent equipment below the hourly breakeven standard that could potentially be relocated or replaced through sharing or rentals. See Figure 2 for a summary of agency lightly used equipment.

Our testing identified a number of pieces of equipment that were lightly used. For example, we noted one agency had 23 pieces that were each used less than 20 days in the two years we reviewed. Of the 23, nine were used less than 10 days. In another agency, we found 24 pieces of equipment that averaged less than 40 hours per year of use for the two years reviewed.

We also found a significant number of lightly used pieces of equipment and they were assigned near each other. Further, when we reviewed usage information looking for overlapping usage for like equipment, we noted situations where limited overlapping usage existed.

Metered Equipment Ownership Expense

We estimate it will cost the state approximately $18.3 million to retain, maintain, and eventually replace the 268 pieces of equipment identified through our economic breakeven analysis. Some portion of these costs could be avoided through better fleet management practices.

State Agencies Should Seek the Most Cost-Effective Options to Meet Equipment Needs

For those pieces of equipment identified as lightly used, and where ownership has been determined as one of the more expensive options, we sought justification for the ownership decision. In discussions with fleet managers, we were told that valid reasons exist to support agency ownership and these are often considered in fleet management decisions. However, we felt these decisions often center on each agency's operations without knowledge of activities or needs of other agencies utilizing similar equipment.

We also found a lack of usage information readily available about this equipment and the lack of interagency sharing arrangements. Our interviews with field managers and fleet managers confirmed our conclusion that no one in the state is looking for these enterprise-wide opportunities that appear to exist.

Fleet Management Practices Could Improve

Our audit noted the following management practices we concluded were limiting factors in maximizing the effectiveness and efficiency of the state's metered equipment fleet.

- Agencies do not have adequate usage information to manage the state's metered equipment;
- Agencies have not developed a metered equipment minimum-use standard or standards and process for identifying exemptions; and
- A general lack of interagency coordination exists in meeting heavy equipment needs.

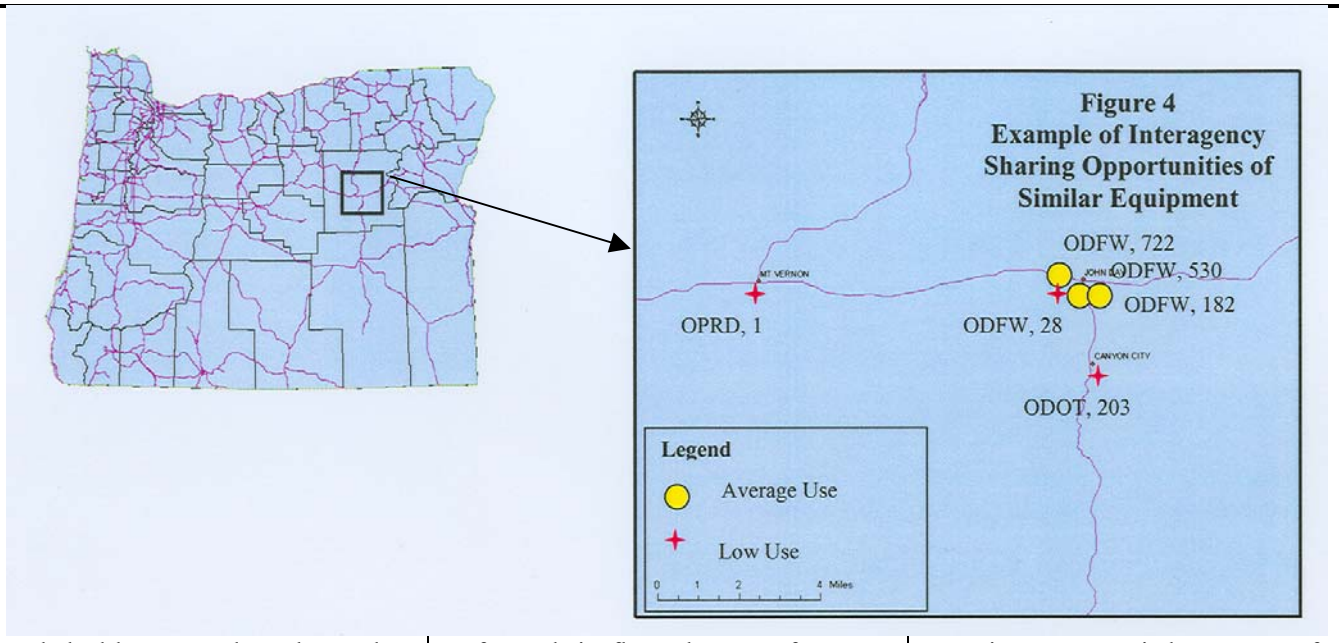
Inadequate Usage Information

We found available information was not adequate to manage the state's metered equipment. First, agencies have incomplete information about their own metered equipment. Specifically, three agencies lacked usage information for a significant portion of their metered equipment. Moreover, the usage information these three agencies did provide was commonly based on estimates rather than actual usage records. By maintaining and periodically reviewing complete cost and usage information, agency managers can identify lightly used equipment and adopt cost-saving options when possible. (See Figure 3 for pieces of equipment, summarized by agency, for which there was no usage data.) For example, one analysis we performed demonstrated an agency could have saved $327,000 during the two years of our review if equipment

Figure 3

Agency Equipment Without Usage Information

Agency	Metered Equipment Total	Equipment with Usage Data	% Without Usage Data
Oregon University System	154	25	84%
Department of Corrections	44	21	52%
Department of Fish and Wildlife	223	181	19%
Department of Forestry	42	39	7%
Department of Transportation	488	485	2%
Parks and Recreation Department	129	129	0%
Total	**1080**	**880**	**19%**



needs had been met through rental options. Savings would have been even greater if sharing opportunities were utilized for some or all of this equipment.

Another information need relates to metered equipment owned by other agencies. In order to identify potential sharing opportunities, agency managers need to know the types, locations, and availability of other agencies' metered equipment. Without this information, agency managers are not able to identify potential sharing opportunities or avoid rental costs when a nearby agency already owns the piece of equipment needed.

Lack of Usage Standards in Policies

We also found some agencies had not developed minimum-use standards for their metered equipment fleets. Such standards help managers to determine when to add, replace or remove equipment from a fleet. As our audit results demonstrated, without minimum usage standards agencies may not see potential opportunities to resize and redeploy equipment fleets.

It is clear, even in the best case, agencies will not be able to eliminate all low-use equipment from their fleets because factors such as safety, critical backup equipment, specialized uses, and availability of equipment to rent or borrow must be considered. Accordingly, agencies may not have the flexibility to replace or increase utilization of all lightly used equipment through rental or sharing options.

Lack of Interagency Coordination

While agencies owning metered equipment are fairly autonomous and have different equipment needs, in many situations they own similar equipment that could be shared. (See Figure 4.) One barrier to increased equipment sharing is the lack of coordination between agencies.

In looking at coordination, we also noticed a general absence of interagency arrangements that would allow managers to share equipment and still recover equipment costs. Reimbursement agreements would promote agency collaboration and sharing of resources. For example, the Department of Fish and Wildlife has provided equipment to the Department of Forestry during firefighting operations. The two agencies have established ongoing agreements specifying usage and maintenance reimbursement for loaned equipment. The Department of Transportation's District 13 in La Grande has similar agreements for sharing equipment with the City of La Grande and Union County. However, these examples appear to be the exception. The agencies included in our review did not typically have interagency agreements for sharing of metered equipment.

Identifying Intra-Agency Redeployment Opportunities Could Further Reduce Costs

Through our analysis, we noted the potential of additional opportunities for efficiency based on agencies redeploying equipment assigned near one another. For example, in the La Grande area, the Department of Transportation had four rollers, each of which had fewer than 100 average hours of use for 2002-2003. Of the four rollers, department records showed two eight-to-ten-ton and two two-to-four-ton rollers. We reviewed the two sets of rollers by actual days of use and found their use overlapped for only one day in the two-year period reviewed. Given the assigned location and use history of these rollers, it appears Transportation crews could

coordinate their work and use fewer rollers in this area. Surplus rollers could be sold, used to replace older pieces in other areas, or reassigned to an area where an additional roller is needed.

We also analyzed Transportation's lightly used equipment by its proximity to similar equipment. We identified two situations that applied to 61 pieces of equipment. We found 31 pieces of equipment had a similar average use piece(s) located at the same base location. The remaining 30 pieces of equipment represented 15 instances where two similar lightly used pieces were at the same base location. These instances of similar equipment located in close proximity suggest the opportunity for borrowing, interagency rentals, or consolidation.

Conclusions

Opportunities Exist to Reduce Costs

Our analysis suggests Oregon could reduce its costs for metered equipment by making changes in the way fleets develop and use fleet utilization information, and in the way they share information and equipment. Currently, state agencies individually manage their inventories of heavy and metered equipment with little knowledge or interaction with other agencies. Some agencies have established data collection systems to allow fleet managers to monitor equipment usage and costs, while other agencies have not. Some agencies have taken steps to establish economically justified minimum-use standards, and others have not. Some officials with whom we spoke were concerned the administrative costs to collect fleet data would offset potential savings. While we agree there would be additional costs, done properly, we believe the savings potential should more than outweigh these costs. Our audit suggests long-term costs could be reduced if metered equipment was managed as a statewide asset, rather than as an individual agency resource.

We recommend the Department of Administrative Services establish a working group of agency fleet managers to develop:

- A centralized information system including standards for equipment descriptions, cost data and utilization records;
- Minimum use and exception documentation standards, as well as a process to identify those pieces with additional considerations (such as safety or availability concerns); and
- Interagency relationships, agreements, and oversight such that metered equipment can be viewed and managed as a statewide asset.

Objectives, Scope and Methodology

The objective of our audit was to determine if state agencies meet their metered equipment needs in the most cost-effective manner. To accomplish this we:

- Surveyed state agencies to determine the number and types of metered equipment they owned,
- Interviewed agency staff and managers to gain an understanding of the agencies' operations and activities related to their use and management of metered equipment,
- Obtained financial data such as depreciation, insurance, and overhead costs,
- Obtained usage information, when available, for each piece of metered equipment, and
- Used Geographic Information Systems (GIS) software to plot the location of metered equipment throughout the state.

We also developed a minimum-use standard for metered equipment using calendar year 2002 and 2003 cost information from the Oregon Department of Transportation and Oregon Department of Forestry. Specifically, we calculated ownership costs and compared those to rental rates we gathered from equipment rental providers. This allowed us to determine the economic breakeven point for each category of metered equipment. Ownership costs included depreciation, maintenance, insurance and administrative overhead. We then compared agencies' reported usage levels for 2002 and 2003 with our minimum-use standards. We identified equipment falling below the minimum-use standard as lightly used.

We determined equipment cost data from the Oregon Department of Transportation, Oregon Department of Forestry, and Oregon Parks and Recreation Department were sufficiently reliable for our purposes. We based this conclusion on a preliminary assessment of the data and our site testing, which included tracing documentation provided by the agency to source documentation.

In contrast, we determined that cost data from the Oregon Department of Fish and Wildlife, Oregon University System, and Oregon Department of Corrections was not sufficiently reliable for our purposes. Specifically, these agencies lacked documentation necessary for determining usage and maintenance costs of equipment. In addition, agency staff used estimates instead of actual usage data when calculating equipment costs. These agencies were included in our analysis, and were supplemented with equipment and financial information from agencies having reliable equipment

data. We conducted our fieldwork from February 2004 to July 2004. We conducted our audit in accordance with generally accepted government auditing standards.

Oregon University System's Response

The Oregon University System (OUS) appreciates the opportunity to respond to the Secretary of State Audits Division audit recommendations related to the use of metered equipment.

In response to the recommendations, OUS will conduct an evaluation to determine if there are cost effective ways the agency can develop more effective usage records to ensure optimal use. OUS will further ensure the rational for maintaining equipment is adequately documented to show that a cost benefit analysis was completed. The reason for maintaining low usage equipment will include the mitigation of potential public safety concerns, experimental usage for agricultural research, as well as lack of available alternatives due to geographic location.

The Oregon University System also looks forward to evaluating any suggested recommendations on creating synergy among state agencies put forth by the Department of Administrative Services.

Department of Administrative Services and Agencies' Response

The Department of Administrative Services *and agencies whose heavy equipment fleets are subject to this audit report thank the Audits Division for its efforts. We understand the difficulties involved in undertaking an audit of this scope. We appreciate the opportunity to respond to this latest report draft. Please note that this response does not address any findings with respect to the* Oregon University System.

We agree with your recommendations but respectfully disagree with your findings. In reviewing your report with the agencies that manage metered equipment, we are concerned that there are no authoritative best practices discussed[1]*. There is no risk or cost benefit analysis that address the trade-offs between savings achieved by sale of equipment versus the costs of increased public safety risks, business interruption or consumer inconvenience.*[2] *Unlike light fleets where demand can be more readily forecast, heavy fleet needs are influenced by factors not always within the control of the agency like weather conditions, and safety concerns. Heavy equipment availability can have immense immediate impact on public safety and the state's economy.*

We believe there may be some merit in studying the possibility of creating a heavy equipment shared fleet. We recommend that the workgroup you propose be expanded to include program managers that rely upon heavy equipment, highway engineers as well as agency budget officers and business managers. This workgroup would look at data collection issues, statutory changes that may be necessary as well as revenue and fund type problems that will most certainly be presented during this discussion. The Department of Transportation *has broad experience in managing heavy equipment. We recommend that they lead this effort. The* Department of Administrative Services *has no expertise in managing heavy equipment and remains focused on light fleet issues. What follows are some of the concerns raised by the agencies to your audit report.*

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1 In our discussions with the various agency fleet managers during the course of this audit we, too, were concerned with the overall lack of authoritative guidance in this area and, more important, with Oregon's lack of an overall structured/enterprise approach to managing such an expensive fleet of metered equipment. To determine whether a need to change our fleet practices existed, we first needed to identify whether there were enough pieces of equipment needing to be more critically evaluated. We applied a breakeven analysis, a standard economic modeling tool, to determine the point at which ownership becomes more economical than loaning or renting. Any equipment not meeting this threshold should have some overriding reason to justify ownership, such as safety or availability concerns. Prior to conducting this analysis, we met on a number of occasions with one of Oregon's recognized experts in heavy equipment fleet management, the Oregon Department of Transportation, and shared with staff our audit methodology and our planned breakeven analysis. At that time, they agreed with our approach and helped us to identify those situations where exceptions could be warranted.

2 When we began this review, we expected to find that heavy equipment fleet managers would have conducted risk and cost benefit analysis themselves to weigh the tradeoffs between the potential savings from consolidating their fleets with the costs of increased public safety risks, business interruption, or consumer inconvenience. One of the significant management weaknesses we found during the course of our audit was a lack of this kind of analysis. This is why we recommended the development of a minimum-use policy with a process to evaluate exceptions.

Minimum use analysis is incomplete[3]

Generally, the minimum use criteria do not address seasonality, emergency needs, or transportation costs associated with remote storage locations. The findings rely heavily upon the same economic breakeven analysis found in the 1997 audit entitled "Opportunities to Reduce State Employee Travel Costs." That report opined about the cost effectiveness of using state motor pool cars vs. employee owned vehicles for travel while on state business. Unlike light vehicles, heavy equipment cannot be relocated as easily, nor can its use always be forecast correctly. In addition, there are valid reasons for minimal use of some of the state's older heavy equipment assets. For example, the Department of Transportation *uses older pieces of equipment for fewer hours than new pieces to keep maintenance costs down. They manage this equipment by strategically locating them around the state for seasonal or backup use. Examples include equipment used for side hill mowing, loaders located at sands sheds and rollers used predominantly in eastern Oregon for chip seal highway maintenance.*

The report does not cite industry and government sector best practice examples and does not provide any expert authority regarding heavy equipment management.[4] *Rather than identify a statewide standard for heavy equipment use, agencies have developed minimum use criteria related to their unique and different missions.*[5] *The* Department of Forestry *uses its Heavy Equipment Replacement Request and Evaluation Process to monitor minimum use. Its motor pool operations are self-supporting and financed solely through a system of user charges for the acquisition, operation, storage, maintenance and replacement of equipment. The* Department of Transportation *sets usage standards for all equipment to monitor, track usage, and maintain fleet size. It is continually updating these criteria recognizing that the single metric "annual use" does not serve the state well in times of emergency. Unfortunately, the report does not consider the following factors when classifying* Transportation's *equipment as "underutilized" or "lightly used*:[6]

- ***Critical equipment backup****: Several pieces of equipment with low hour meter readings are used as backup for critical emergency equipment that the State cannot do without. Weather conditions dictate the use of some of this equipment. Much of this equipment is stationed around the state in remote strategic locations for use during snow removal or storm cleanup. Some of this fleet is thirty to forty years old.*
- ***Environmental requirements****: Backhoe loaders and excavators are used for ditch clean-outs, as noted in the report. Clean-outs can only be accomplished during dry weather to prevent bank and ditch erosion and stream contamination. In the past, this task was completed regardless of the weather. This is no longer an option.*
- ***Specialty equipment and safety concerns****:* Transportation *has a few specialized pieces of equipment that can only be used for certain functions. For example, guiding, repairing and replacing concrete barrier rails can only be lifted and maneuvered by the larger loaders (weight issues). Certain mowers are configured for steep side hills such as on some of the state's freeway onramps (tipping-safety issues). Snow equipment like blowers, sanders and plows are only used in winter but must be available when needed.*

Some of the loaders listed in the report as lightly used are in fact critical items that are required to keep major highways open. The equipment is strategically located around the state for quick access and response to urgent situations. Transportation *estimates that road closure costs can exceed $650,000.00 per hour on major highways, excluding fuel costs. Some recent examples where loaders were used to keep highways open include:*

- *A tree that fell across Hwy 20 between Santiam junction and Sisters was cleared because such a loader was readily available in less than one hour. Safety as well as highway closure costs are important considerations. The longer a closure event lasts the more likely an accident or other catastrophic event will occur.*
- *An accident near Wilsonville on I-5 was cleared in less than one hour for the same reason.*

In both of these instances, equipment availability saved millions of dollars and insured the safety of the traveling public.

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3 We disagree with the statement that the minimum-use analysis is incomplete. The analysis in this report starts with a breakeven analysis, which identifies the point at which one method of meeting an equipment need becomes more economical than another. Any equipment not meeting this usage standard should be further evaluated to determine whether there exists any programmatic reasons to own this equipment, rather than borrow, loan, or rent. The initial breakeven analysis is a critical first step in effective equipment fleet management.

4 See footnote No. 1.

5 At the time of our audit work, most of the agencies we reviewed had not developed minimum use criteria at all, let alone criteria related to their unique and different missions. If this development has occurred since the conduct of our audit work, then we applaud this effort.

6 The report does consider these factors and notes that they are important to consider when making equipment management decisions (for example, see page 4, column 2). However, this does not impact whether or not a piece of equipment should be labeled "lightly used." It is very possible to have a lightly used piece of equipment that is necessary to keep because it is determined to be critical for safety reasons. Again, this is why exception criteria need to be developed.

While certain equipment is used during specific times or certain weather conditions, effective transportation system management practices require optimum equipment availability. Unfortunately, the report assumes that the equipment is based at the mailing address of the Department's district offices.[7] *This is not the case since equipment is not stored at that location throughout the year. In Eastern Oregon for example, equipment may be used hundreds of miles away from the mailing address of the District Office. During peak equipment use (either summer for mowing or winter for snow removal), equipment is stationed at remote locations for optimum use. For example, landscape crews locate mowers at rest areas or freeway medians to reduce equipment transport, and loaders are strategically located at sand sheds near sanding areas or maintenance stations. These strategically placed sand sheds with loaders are placed to keep the sanders filled and to limit the time spent running for sand. Without these sand sheds and loaders* Transportation *would need additional staff and trucks to provide the same level of service.*

The four rollers referred to in the audit report are not interchangeable. They are located at four different crew locations within Districts twelve and thirteen. The two districts cover Umatilla, Morrow, Union, Baker and Wallowa counties. The rollers are not the same size and have different configurations. The 2-4 ton rollers are used for small patch or chip seal jobs and have pneumatic tires. The 8-10 ton rollers are used for larger paving jobs and have steel rollers. Transportation *crews share rollers with other crews when possible.*[8] *Unfortunately, highway crews pave or patch during the same time making it very difficult to share paving equipment on a consistent basis. Each of the crews that have rollers are responsible for about 250 highway maintenance miles requiring that rollers be stationed in remote locations.*

The Department of Fish and Wildlife *has been cautious in investing time and scarce resources in managing its heavy equipment fleet. The average age of their equipment is 35 years old. The majority of that equipment came from state or federal surplus. Some of their equipment is not metered due to its age.*

The 2003 Legislature approved a policy package allowing the Parks and Recreation Department *to improve management of its heavy fleet to more appropriately and safely meet park maintenance needs. Several pieces of equipment identified in the audit as underutilized had already been identified as a result of management action with disposal occurring during this or early next biennium.*

Agencies identify rental or other opportunities to reduce their costs of managing their heavy equipment fleet when appropriate

The Department of Forestry *uses rented or leased heavy equipment for fire suppression work. These rentals are seasonal and done in accordance with its Directives and Administrative Manuals. Forestry has found in most cases that it is cheaper to own rather than rent or lease heavy equipment. The* Department of Transportation *performs cost-benefit analyses of buying versus leasing equipment as part of its regular fleet management practice. It surveyed several of the larger equipment rental companies around the state to determine rental cost, equipment availability, and accessibility of repair maintenance contracts for the equipment specifically addressed in this audit. This survey, as well as past surveys, indicates highway funds are best spent on equipment purchases rather than leases for the following reasons:*

- *Rental equipment has low availability (no availability in most cases during busy seasons).*
- *Some vendors limit equipment usage (if users exceed limits, charges are greater).*
- *Vendors do not provide maintenance contracts or they are not cost-effective.*
- *In most cases ownership costs are lower than rental or lease rates.*

The audit report's suggested savings of $327,000 is also overstated. Those savings assume that Transportation *would remove all 93 pieces of "underused" equipment identified in the report from service, that rental equipment would be available and that there would be no associated equipment repair costs. These assumptions are not reasonable and as pointed out above, not wise in emergency situations.*[9]

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7 We agree with the statement that the equipment was not always located at the mailing address of the district offices. This information was simply not available at the time of our audit and is what led us to the section in the report outlining the inadequate information with which to properly manage the state's metered equipment (see page 3, column 3). Having good and up-to-date information on the physical location of the equipment is another component of an effective fleet management system. It is not possible for agency managers to identify potential equipment sharing opportunities without such information.

8 On the last paragraph of page 4 and the top of page 5, we note that during the two-year period of our analysis there was only one day of overlapping use. Typically, rollers are used for planned, scheduled work; therefore, we believe, sharing opportunities such as this one should be explored further. We do recognize the difference in the size of the four rollers and we looked at them separately as a part of this analysis.

9 Again, we do acknowledge in the report that, even in the best case, agencies will not be able to eliminate all low-use equipment. However, the purpose of the analysis was to show the cost difference between owing and renting the equipment so that conscious decisions can be made as to how to best meet the equipment needs. Because of the large cost difference, it is important to analyze whether the downside of renting, leasing, or sharing equipment outweighs the additional costs.

While the report recommends borrowing and renting equipment, it does not address the likelihood of successfully accomplishing these tasks.[10] *It does not recognize the related costs or fleet management realities including:*

- *The extent to which borrowed/rented equipment would be available, especially seasonal equipment;*
- *Costs of training staff;*
- *Staff and logistical costs of transporting equipment;*
- *Cost differentials between long-term versus short-term rentals. Most equipment rental vendors are not willing or able to provide specialized equipment on a short-term basis. Consequently, vendors would require longer equipment rental contracts to cover the cost of obtaining specialized equipment; and*
- *Availability of rental equipment with required safety options.*

The report also does not acknowledge the difficulty in finding equipment configured to appropriate specifications.[11]

The majority of the Department of Corrections' *heavy fleet consists of mowers and tractors. They are used primarily during the warmer months of the year. The availability of rental equipment during this period is not always reliable and rental and maintenance costs are high during these peak demand periods.*

Fleet management practices have improved

The report does not acknowledge the work that agencies are engaged in to improve their heavy fleet management practices. The Department of Forestry *uses the "Fleet Anywhere" software program, an industry standard, to manage and track its fleet.* Forestry *locates many of its bulldozers throughout the state to address a variety of fire suppression activities. The equipment is shared with the U.S. Forest Service in return for use of its helicopter and other logistical fire suppression support. Forestry also participates in the statewide fleet managers group and the heavy-duty specification subcommittee.*

The Department of Transportation *uses a combination of accounting, equipment tracking, and fleet management software. It is a key participant in the statewide fleet managers group and the heavy-duty specification subcommittee. It has a number of agreements in place to share equipment resources with city, county, and other state agencies. The* Parks and Recreation Department *actively manages its heavy equipment fleet and participates in the statewide fleet managers group. It also has a long history of sharing equipment and management information with* Transportation. *The* Department of Corrections *has decentralized its fleet management to meet the specific requirements of each of its correctional institutions. The* Department of Fish and Wildlife *manages its aging and limited use heavy fleet through its field offices to best meet the needs of the public. It does not have a central fleet management position. However, equipment is shared among multiple facilities and locations within the department.*

Few pieces of metered equipment lack documentation

It is important to put this audit finding in perspective. Without the University System*, the report identified 926 pieces of heavy equipment used by the* Departments of Forestry, Transportation, Parks, Corrections and Fish and Wildlife. *Only 71 pieces of equipment or eight percent did not have usage data. The majority of the equipment without usage data is over thirty years old. Some of the equipment is so old that there are no hourly use meters.*

Agency management uses heavy fleet equipment standards

The report does not address the difficult issues of effective heavy fleet management. Each agency must be able to meet their needs efficiently but be prepared for emergencies to protect the public. Each of the agencies reviewed utilize methods and practices designed to consider specialized equipment needs, emergency response, training and operational support requirements, cost-benefit, geographic location, maintenance, useful life, legal requirements, and safety factors. None of the agencies reviewed however, rely solely upon "annual use." Agencies use their limited heavy fleet resources to effectively accomplish their legislative purpose. There is presently an active statewide fleet managers group, which convenes on a bi-monthly basis. A subcommittee of the fleet manager's group meets annually to review the needs and specifications of metered equipment identified for replacement.

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10 This statement mischaracterizes our recommendations. What we do recommend is the development of information and utilization standards that would facilitate an enterprise-wide approach to metered equipment utilization. We also recommend that agency fleet managers develop policies and procedures, and a systematic methodology to accumulate relevant data and perform the analysis needed to determine the most cost-effective buy, lease, or borrow options for their individual metered equipment needs.

11 We acknowledge that these are some of the challenges that fleet managers are facing. However, with better central information about the equipment and its location and usage, we believe that states' professional fleet managers could identify and address these barriers.

Conclusion

Agencies manage their heavy equipment fleets to best meet the state's needs on an ongoing and emergency basis. We believe the best course of action is to have the Department of Transportation *lead a multifunctional workgroup of fleet managers, program managers, field maintenance personnel, budget officers and business managers to explore the possibility of creating a state shared heavy equipment fleet. We welcome your suggestions and any information you have on industry best practices. The current levels of service and emergency preparedness provided by these agencies and their heavy equipment fleets are high. The goal of the workgroup should be to increase that preparedness and efficiency without impacting public safety and the business environment in our state.*

Secretary of State
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The courtesies and cooperation extended by the officials and staffs of the departments were commendable and much appreciated.

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