



Equipment Rental & Revolving Fund

What is it and how does one operate?

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Inside Cover

This document is adapted from a report done for a county struggling with typical user issues. Thank you to that county and to CRAB staff who provided the impetus to develop this overview document.

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Background

Why This Document

Equipment Rental and Revolving Fund costs have been an ongoing issue for counties across the state since the inception of the requirement in 1977. This is particularly true for those who operate ER&R with vehicles and equipment other than the Public Works or Road Department.

There is a continuing debate about the purpose and operation of ER&R funds, often centered around the equity of the rental rates to recapture the proper costs of operations and replacements.

One county was heavily engaged in an ER&R operations debate, and requested a review of their program. As ER&R is a critical function of county road operations, and more and more, all county vehicles, this project became an opportunity to not only assist that county in understanding ER&R but in providing a document that could be useful to others as well.

Supporting Documents

The legal requirement for ER&R is found in the Revised Code of Washington, Title 36.33A (Attachment A). Also important to understanding some of the issues is the 18th Amendment to the Constitution of the State of Washington. In addition, a guidance document from the State Auditor's Office (Attachment B), RCW 43.09.210 (separation of accounts and funds) (Attachment C), and excerpts from the Budgeting Accounting and Reporting System Manual (Attachment D), are included.

Each of these supporting documents should be reviewed in order to understand the legal foundation for and premises of this document.

Historical Overview

The ER&R law, RCW 36.33A, was passed in 1977. I was the County Engineer of Okanogan County at that time, and recall many of the reasons, debates, and issues raised during the discussions leading up to passage of the legislation.

Fleet operations are a fact for County Road operations, and have been virtually since their inception. Millions of dollars were, and are, invested annually in those fleets, yet counties historically consistently faced a lack of funding for equipment replacement. That was the driving force for the ER&R law. At the same time, it was common to have minimal supporting documentation of the real costs of operating that equipment. As an example of the problems faced, in 1977 Okanogan County was operating a motor grader manufactured in 1949. Parts

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were often no longer available, and manufactured at the county shop or commercially, at very high unit cost. It was clearly obsolete and not cost effective, yet the shop cobbled it together regularly and soldiered on *"because we don't have the money to replace it"*.

Exacerbating the issue was the all too common practice of using Road Fund equipment, paid for with fuel tax dollars protected 'for highway use only' under the 18th Amendment to the Constitution of the State of Washington, for all kinds of non-road purposes. In addition, RCW 43.09.210, which essentially states that one fund may not benefit from another, was often violated.

As a result, criticism from citizens and legislators alike was all too common, and auditors were finding it very difficult to review and assure that agencies were in fact meeting both constitutional and statutory requirements. To address those issues, the Legislature looked to private and public models across the country.

Fleet operations typically look at both individual and collections of similar vehicles to decide reasonable average operating costs. They recognize that vehicles and equipment will wear and will reach a point where the cost of parts and maintenance outweigh the amortized cost of simple replacement. As manufacturing processes have changed and warranties increased in both time and scope, becoming standard in the industry, this curve has actually shortened.

Those operations further recognize variables will affect their fleet costs. For example, even with the best of manufacturing processes and quality control, some items will fail prematurely, the 'lemons'. At the same time, some will outlive all expectations, the 'peaches'. Both are unpredictable individually. In addition, operators can have a decided impact on the life. Those who care for equipment, keep it clean and make sure that little things get fixed before they become big problems, as opposed to those occasional operators who 'leave the driving to us', will assure a longer life and a better return on the investment.

Similarly, inclusion of pits & quarries materials in ER&R was logical in that those materials, representing millions more in tangible assets, were easy to mismanage through lack of tracking, and subject to theft. Some materials may be purchased directly for, immediately used on, and charged directly to a project. Much of the manufactured materials must be placed in stock for later use. That occurs for a variety of reasons, from somewhat unpredictable repair items that need to be available on very short notice, to maximizing contracting values. Those materials become the property of the county and must be managed for the noted reasons.

Those elements provided a foundation for methods to assure that costs were captured, managed, and the crossing point of the operations & maintenance cost curve on the replacement cost became known. Further, it can provide a means to justify and adjust fleets and materials needs, and just as important, operations of the equipment, to assure that this huge taxpayer investment is best managed.

The ER&R law as written, and virtually unchanged in the nearly thirty years since, provides accountability and a management mechanism that has proven its worth. Within that structure, it also provides an equitable distribution mechanism for costs among the various users and cost centers, an invaluable tool in the context of the 18th Amendment and RCW 43.09.210. This primary issue is commonly misunderstood. It is often characterized as, *"After all, it's all the taxpayers' money!"* The fact is our system of law dictates more separation of funds and their management than we commonly might think.

At the same time, as the value of ER&R is recognized, most counties have taken advantage of its allowance for equipment and materials other than traditional roads items. With that change, the reason for the requirement that the County Engineer set the ER&R has often been lost. As a reminder, in the typical ER&R fund fleet Road Fund operations is still the predominate user. Recognizing that the Road Fund is one of the few constitutionally and statutorily protected funds, separating costs and assuring rates reflect the unique nature of heavy and specialized equipment as differing from autos and other light vehicles remains a critical management requirement. The County Engineer is uniquely trained and qualified in this area. While management of the fund may be done elsewhere, I foresee no quick change in this requirement.

Further, with tightening budgets, the issue of equitable cost distribution continues to be a greater and greater perceived impact to the various user Department Heads and fund and program managers.

The Issues

Key Elements

Two key issues are often the foundation of nearly all of the common misunderstandings and questions. The first is lack of understanding of the legal and management foundation and requirements of the ER&R Fund. The second is lack of understanding of how rates are set, and how that may or may not result in equity among the various users. Along with that is a feeling of disengagement by the users. Typical in any multilevel organization is the difficulty of assuring effective communications. We all like to believe we are good at it, but the reality is, and likely always will be, it is perhaps our biggest management challenge.

A common first reaction to that premise by ER&R staff is surprise. *"We meet with these folks regularly!"* When reminded that they work with the program, the inputs, the rate setting and general management on a daily basis, while the users often simply pay the monthly bill and meet with them relatively infrequently compared to their own day-to-day business activities, the surprise turns quickly to *"How do we solve that problem?"* Staff is normally very

interested in meeting the goals of the ER&R fund in such a way that users felt that they are meaningfully engaged in the process.

One of the biggest challenges the ER&R manager faces is balancing appropriate communications with the daily challenges of other obligations, including the necessary day-to-day ER&R management decisions.

The Foundation

The introduction discusses the legal and management foundation of an ER&R fund. If further discussion of those issues is necessary, this should provide a good starting point. It should leave little question about the legal responsibilities within the county, however the management is an issue for which the Board and Manager will need continuing conversation.

— Communications

Communications is an area requiring continual focus. The reader should again bear in mind this is one of the most common issues in any ER&R fund program serving multiple users with differing perceptions and needs.

There are three basic options for communications: formal written communications, formal regular meetings, and informal one-on-one meetings. Each should be part of any manager's tools, but perhaps the most effective is the one-on-one.

Publication, distribution and regular updating of an ER&R Manual is one way to provide a solid foundation for understanding as well as management of the fund. Such a publication is particularly helpful where there are multiple users outside the roads operations. Any changes being considered for ER&R should be discussed in both formal meetings and one-on-ones. The result of those discussions should be regularly and formally communicated, preferably well in advance of their implementation.

It is appropriate to hold regular formal meetings with Department Heads to assure that their concerns about any uniqueness of how their equipment is used (*as opposed to uniqueness of their programs, which is generally not an issue for ER&R management or rates*), are heard and appropriately addressed. These are also great opportunities to discuss broader issues and provide information on rates, rate setting processes, budgetary impacts, and general equipment operations procedures.

In addition, if a Department Head feels a need for more information about a particular aspect of the ER&R operations, they should be comfortable in asking for a bit more of the ER&R managers time. This is the 'over a cup of coffee' meeting, a half hour to catch up on the issues for both. You will often see

solutions in an informal setting that might resolve issues before they become a topic for the Board.

Fleet Composition

One of the core issues that set the stage for setting equipment rates is the fleet composition. While this is not the general responsibility of the ER&R manager (except those fleet elements for which that person may have operational responsibility), rate setting discussions would be incomplete and more difficult to understand without a clear expectation and understanding of how we determine the extent and purpose of the managed fleet.

— Responsibilities

Department Heads and the Board must make decisions about equipment needs appropriate for each department to carry out its missions, and in some cases, its mandates. That said, there might be times when the resources are limited to the point that the Board may determine that the cost exceeds the capability of the county, and the risk of not doing so is less costly.

Once the fleet makeup is determined, the ER&R manager is then responsible to assure that the equipment is maintained to obtain maximum realistic life and value from it. As a part of maximizing value, it must be replaced when its condition is such that the cost of continuing repairs, parts and labor, begins to be greater than the amortized cost of replacement.

We all want the best equipment available for all our needs as we see them. The reality is funds are seldom available to that desired end. Decisions on what is truly necessary and cost effective, and good management of the various needs are often drive the cost of public agency fleets. All should recognize that government often carries out tasks that are not cost effective for individuals and businesses to do on their own, as well as mandated services necessary for government to operate. That reality may well cause some high rates.

While that may seem to fly in the face of the logic that if it can be achieved cheaper with privatization of fleets or at least some fleet elements, there are many elements that drive the appropriate fleet makeup for government agencies. Private enterprise may best supply some equipment items, and decision makers should keep that option in mind. At the same time, the public fleet may best serve safety issues and necessary service levels.

— Fleet Determinations

Equipment is “needed” in a number of ways. Departments most often need equipment to carry out daily basic functions. Nearly everyone needs some kind of passenger vehicle to get to the various field areas they serve. Road Superintendents need pickups to check the roads in their area, and to ferry

various and sundry pieces to the work site, sometimes along with personnel. Road crews need trucks and graders to accomplish their daily work.

□ ***Regular Use Equipment***

Day-to-day use equipment items are easiest to deal with. Department Heads should be able to lay out their needs and the service levels those equipment items provide with little difficulty.

One element to consider, too often glossed over, is the need to determine the right equipment for the task. Too big or too small of a dump truck costs more than right sized. Using a D-8 crawler tractor, when a D-6 will perform the task physically and economically, will increase the project cost. Using a D-4 for that same task will also increase cost due to the extra burden it will carry but not for which it is designed. Carrying 5 passengers in a 15 passenger bus costs more than using a 9 passenger van. Of course, part of the consideration is the occasional need that may be critical. If getting there is critical to life and property and road conditions unpredictable, then the added cost of a 4 passenger four-wheel drive SUV may be appropriate over the sedan that will carry the same number of people.

While a formal method to determine regular equipment needs might in some cases be desirable, an occasional documented review and discussion with the Board is likely adequate to make decisions on daily operations. The exception as noted is the life and property decisions, and Department Heads should expect to provide reasonable justification for that added cost. Otherwise, ongoing discussions with the Board are certainly part of Department Heads accountability.

□ ***Limited or Special Use Equipment***

More difficult to reconcile is need for part time or sporadic use equipment. It can be justified by a response need, a life safety issue, or by unique characteristics of the equipment not easily met other than owning it. Also, limited use equipment is typically justified on efficiency of the overall operation, basic irregular service needs, or special infrequent and less predictable operations.

Compared to daily use equipment, rental rates for such equipment tend to be relatively high. For example, insurance costs for any vehicle in the fleet are often independent of their daily use. When considering limited use equipment, it may be even more important place it in ER&R to assure appropriate consideration is given not only to its acquisition costs, but also to its life cycle cost. Removing them from the fleet gives a false cost for inclusion and replacement considerations. At the same time, recognize that government mandates are not necessarily predicated on cost efficiency, and recognition of need and priority will dictate that some equipment is essential to the fleet even though its cost is relatively high.

Limited use equipment is an area of concern among Department Heads and discussed in more detail. Department Heads and the Board must carefully consider and justify use of such equipment as it can have a disproportionate impact to budgets.

A good example of such equipment is the snowplow. First, when winter snow is here, plowing is usually necessary to use the roads. The 2004-05 winter might suggest that snowplows could easily be reduced or maybe even eliminated in nearly all of Washington. Historically however, such a decision would lead to certain and significant life safety issues for the many folks living in the higher ground of the Cascade Mountains and the colder eastern parts of the state. Most years, snowfall occurs through much of the winter, and at depths that most, and sometimes nearly all, vehicles cannot traverse. Without snowplows, there would be many times in most winters when residents could not get out, and necessary services, groceries to emergency medical, couldn't get in.

As a result, nearly every ER&R fleet in Washington State has enough snowplows to assure such a circumstance is relatively short and a rare event. In many counties, snow plowing is one of the largest annual expenses.

Similarly, vehicles commonly considered emergency use, such as some Sheriff's vehicles, may have limited or sporadic use, or may be considered appropriate in that even with lower daily use, availability is critical.

□ ***Justification for Limited Use Equipment***

All Department Heads stated that they deal with the Board and explain their needs as they consider any given vehicle for purchase or replacement. Sometimes that discussion takes place during consideration of the ER&R rates. There may not be a specific methodology or manner of documenting those discussions and decisions.

— Limited Use Equipment Justification Process

When a county uses ER&R broadly across multiple department, the potential fleet impacts of limited use equipment, limited use vehicles nearly always draw controversy, mostly between Department Heads. I recommend the Board develop and adopt a basic request and documentation of need process specifically for these items. This process should lead from basic assumptions and general guidance. The Board, in cooperation with the ER&R manager and Department Heads should develop guidance for Department Heads to bring requests back to the Board, for keeping, replacement, and acquisition of limited use equipment.

Assumptions that would support limited use equipment might include:

- *An essential government service – the equipment clearly supports and preferably enhances essential public services.*

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- *Worker efficiency – overall cost of multiple vehicles outweighs the cost of time lost to move workers between multiple job sites.*
- *Response availability – response time is critical for life safety issues.*
- *Unique characteristics – the piece of equipment is so unique that acquiring it from the private sector is either not possible in a reasonable response time, or not generally used or cost effective from the private sector.*
- *Other key factors identified during the guidance development process.*

The guidance should address how the documentation comes to the Board. Basic formatting and guidance is likely desirable for brevity and simplicity, clarity, comparability and usability. Content is critical. The guidance should require a clear citation and statement of any specifically and directly affected legal mandates. It should provide basic agreed upon cost evaluations that attempt to measure real direct cost impacts. It is far too easy to suggest costs based on intangibles. While experts assign values in court for a human life for example, no one will ever agree that theirs is really that value. The guidance should express ways to identify and support unique characteristics.

To support these assumptions, requestors should:

- *Cite specific legal mandates and clearly link how the equipment will affect such mandates, both negatively and positively;*
- *Cite specific circumstances to support the item characteristics and arguments;*
- *Include a direct cost evaluation;*
- *Provide specific clear examples of how unique characteristics either will save money, or are critical to the task or mission.*

I suggest that requests initially not include intangible values, for two reasons. First, gifted writers or presenters can too easily portray those in a way that may outweigh their value in the Board's deliberations over equal or perhaps even more significant requests, presented by those less gifted. Second, the Board faces such issues on a regular ongoing basis as core policy issues are considered, and they should be reserved to the Board. The Board may at times request such intangibles. Only then should they be presented, backed with expert recognized values.

The Board might also wish to include some relative guidance on priorities this process may help establish. I suggest the Board base priority for limited use equipment first on life safety issues. Keeping roads open and safe for use is inarguably one such priority. Road related crashes account for over 40,000 deaths annual across the country, and two lane rural roads have the highest rate of all. Having a high level of law enforcement and emergency vehicle availability is another such issue. No one would argue against such a need when his or her, their family's or neighbor's life or property is at stake. Moreover, these are both essential government services.

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Finally, the Board should be clear that these guidelines are primarily for its use to support requests for limited use equipment in budget deliberations and decisions. While it should adopt such a policy by formal Board Resolution, it likely neither wants to tie itself to a policy that is so stringent it significantly limits its own flexibility, nor does it want a policy that leaves no debate for the inevitable differing viewpoints, among either its own members, or others with an interest.

I also suggest this guidance or process be as short and simple as possible. A smaller county process should reflect its relative need to have basic supportable decision-making processes. A large county process on the other hand is likely to be significantly different based on its organizations size and complexity.

While this approach will take effort and time to develop, it should provide at least two very desirable results.

- 1. The Board will have a clear rationale, with supporting documentation, to use in its inevitable budget discussions and negotiations.*
- 2. It can significantly mitigate concerns among the departments, and provide much clearer response to public questions or criticisms of fleet decisions.*

□ **Equipment Outside ER&R**

There is sometimes a temptation to 'make the most' of vehicles that are considered too tired for general use, and place them in some limited use rather than surplus and dispose of them. Part of the 'solution' is to bill for these vehicles only for direct parts and labor costs.

This practice creates at least a couple of questions.

- *Has the equipment really reached its economic life?*

This question commonly comes up with the explanation 'if it were mine, I could keep it running for less money'. That viewpoint typically discounts or ignores labor costs, which are significant.

If in fact the equipment has reached the point where you can replace it cheaper than the cost of paying labor and buying parts, then it should be removed from the fleet entirely. Otherwise, it is an economic sham, the county is paying a hidden premium to keep it operating, and shop rates will incrementally reflect that cost.

If on the other hand, the equipment still has remaining economic life, then it should remain a viable part of the fleet, and continue to accrue replacement costs.

That is not to say that vehicles with limited life remaining should not be operated to the end of that life, and perhaps placed in less stressful uses. That would be good management of the resource. Finding that balance is

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sometimes difficult, but to do otherwise begins to defeat the purpose of fleets and their management.

- *Do the vehicle charges cover the true overhead costs of maintaining the fleet and that vehicle?*

Since equitable distribution of overhead costs is most easily covered by a percentage rate on billings (discussion of ER&R overhead following), by removing replacement rates from these vehicles, and the overhead percentage that part of the rental rate would otherwise generate, the balance of the fleet is effectively subsidizing the vehicles.

- *Are any inflationary costs covered if they are replaced?*

If these vehicles are replaced directly from ER&R replacement funds, then that would not be the case, and again, others would effectively subsidize that replacement and the receiving fund.

If however, the receiving department pays any difference from that amount that was left in reserve for those vehicles after they have reached their replacement life, there is no subsidy and inflationary costs are properly covered.

In considering this practice, it is apparent there are built-in inequities. A couple of changes will address those issues and assure sound management of the county fleet needs.

- *Eliminate the class.*

There may be occasional situations where vehicles simply do not belong in ER&R, but there are other ways to address them. Any vehicle that continues to operate within the county fleet should do so in ER&R. That assures equity throughout, maximum benefit for all users, and appropriate consideration of the true economic viability of vehicles, as well as the overall fleet operation itself, for continued operation.

If 'hand-me-down' vehicle use is appropriate, that should be done while they are still economically viable. That can be accomplished across the fleet by direction of the Board, or within a department by the Department Head.

- *Place Limited Use Vehicles on a Monthly or Annual Rate*

This solves the problem of trying to bill hourly or by mileage when those measures are impractical, yet allows responsible fiscal management of the asset, and a realistic assessment of its economic viability, or special use as appropriate. It also effectively recognizes replacement need for equipment that the Board has agreed is necessary to meet the county's responsibilities.

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- *Place any vehicles operating under grant restrictions that disallow replacement costs from the grant funds under a rate tailored to specific grant requirements as necessary.*

Federal restrictions are common, and typically paid by the grant receiving agency. Case in point is the similar restriction on federal Emergency Relief funds often received by Road Departments for emergency repairs following a disaster. In that case, the department simply absorbs that rental cost difference, appropriately paying it from County Road funds.

Split the rates to reflect the federal prohibition, with the balance paid with county funds. For example, if the operating grant is \$50,000, with a 50% local match requirement, the county must contribute \$25,000. This is commonly done with state grant funds or local revenues. If the replacement cost over the life of the grant is \$5,000 (10% of the total grant), giving a total rental cost of \$55,000, the county would budget \$5,000 from county funds. The rental rate would reflect that calculation so it is clear that portion of the rental rate is paid with local dollars separate from the federal grant.

Then, to cover the overhead difference between that applied to only the operating costs and that applied to the total rental that includes the replacement, apply an equity adjusted overhead rate¹ to the base allowable rate. Then, require any vehicles in this class at end of their economic life be declared surplus and removed from service. Finally, full replacement costs must be born by the receiving agency as they are now.

As an alternative for all such vehicles, to assure equity to the greatest extent possible for the rest of the ER&R fleet users, they should be treated as a minimum as external vehicles and all charges should reflect full shop rates with an equity overhead rate applied. That however removes the potential benefit of full management, recognition of their actual costs and value, and the potential policy and decision-making benefits of tracking them under an ER&R accounting system.

Rate Setting

ER&R rates setting is without doubt the most contentious issue among users in that budgets are virtually always tighter than they would desire, and the cost of equipment seems like an easy way to reduce their budget impacts. Part of the responsibility of both the ER&R manager and the Department Heads is to assure that equipment costs are not only the lowest possible, but also assure that the equipment is operating efficiently at lowest life cycle costing.

¹ Calculate an equity adjustment rate by applying the standard overhead rate against a full rental rate, including a replacement amount. Compare that to the standard rate applied to the allowed rate. Compute the average percentage difference. Add that back to cover the amount of overhead lost by not charging against the full rental rate.

A number of general items must be considered as a part of the fleet rate setting process.

— **General Fleet Rates**

Once an item is determined to be appropriate to the fleet, and rates set for the expected use of that item, the ER&R manager's responsibility is to assure that each user pays their fair and appropriate share, and that one fund does not benefit from another. In addition, he or she must manage the fleet to replace it in the most cost effective manner, and provide Department Heads information needed to assure optimum operations. That information is primarily the repair and maintenance costs and any unusual maintenance issues on an ongoing basis, perhaps quarterly, to determine that equipment under their oversight is operated and maintained properly.

Under the fleet management concept, it is critical for management and users alike to understand the rates and associated costs. While equity between funds is important, one of the most significant elements of a fleet operation is that similar equipment items, operated in similar circumstances, will almost never require exactly the same maintenance or have exactly the same life. However in the interest of assuring reasonable equity for the recipient of the 'lemon' as well as the 'peach', all normal costs for maintenance, operations and replacement are distributed equally within that similar group of items, thus standard rates are set within specific equipment classes, regardless of 'ownership'.

□ ***Life Cycle Costing***

Life Cycle Costing (LCC) is one of the most important elements of ER&R, and an understanding of it critical to acceptance of assigned rates. LCC is the ER&R manager's implementation tool to assure that fleet use returns best value.

LCC is a simple concept, but one that takes a fair amount of information to have confidence in. Once equipment use is determined, then the challenge is to determine all of the costs of purchasing and operating the equipment. All costs include obviously the initial purchase price converted to replacement cost, fuel and lubricants, parts and labor for ongoing repairs, and necessary overhead for management and administration. Those costs must be captured over the life of the item.

Those costs are broken into two areas to determine the LCC. The purchase price must be considered, and amortized over the estimated life of the item. This assures that an appropriate replacement reserve is available at the end of its life. Equipment life typically is estimated based on how such equipment has performed in the past. It is then tracked and refined over time as the fleet ages. Operation, maintenance and overhead are relatively simple to accumulate costs on over time.

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Once these costs are captured, it becomes apparent that at some point in time, as the equipment ages and wears, fuel consumption goes up, parts become more expensive and maybe even difficult to obtain, and the labor to make repairs goes up at an increasing rate. The curve that is created from tracking these costs can then be compared with the curve for amortized costs of replacement over time. Replacement must also normally be inflated to account for the changing (virtually always increasing) cost of money. When the operation and maintenance curve goes higher than the replacement cost curve, it is then more economical to replace it rather than keep it operating.

Fleet operations help define and refine those curves by averaging anomalies that always occur with any given piece of equipment. LCC then provides the information to determine the most cost effective replacement time.

Finally, it is important to note that practical life of equipment in a fleet operation does not necessarily mean that the equipment cannot be kept operating. It simply means it is no longer economically efficient to do so. Like many folks, when I was growing up on the ranch, spit and bailing wire were cheaper than buying new equipment. The difference was that my labor was essentially considered free (and even that was a false economic assumption!)

— Fund Reserves

The ER&R fund is an internal service fund for accounting purposes, and set up as required to be self-sustaining. Management's goal is to assure that rates continue that practice, but at the lowest reasonable costs allowed. Rates then must allow for fluctuations of any number of elements in a given year.

For the fund is to be self-sustaining, part of the manager's responsibility is to assure that it also has adequate cash on hand to deal with potential catastrophic failures that could cause premature replacements, as well as normal annual equipment replacement needs. This is a broad subject and I will not try to provide significant detail, only a general opinion and direction.

The State Auditor's Office publishes no guidance for setting ER&R reserves. When the ER&R law went into effect in 1977, a reserve was a topic of considerable discussion and concern. Some argued that it should be set at 100% of the current replacement value. It was generally settled that a minimum reasonable amount would assure that average annual replacement needs could be covered through the reserve.

While the discussion could continue in any number of directions and levels of detail, I recommend the reserve be set to assure annual replacement, with a possible added amount to cover a general risk assessment of how much equipment might need replacement in the event of a catastrophic event. If the annual replacement amount is considered sufficient following that assessment, then that would be the reserve amount to manage. In my opinion, it is highly

unlikely, and inappropriate for a number of reasons, to carry a reserve as high as recommended by the field auditor.

The good news is that an ER&R reserve is not only a fiscally sound management practice, once it is set in place, it has little impact on rates other than helping to mitigate economic fluctuations.

— Equipment Classes

With the fleet concept, equipment is divided and assigned to a particular "class". The purpose of classification is to place vehicles of similar use and design together for setting of rates. Equipment assigned to and managed within ER&R is divided into a variety of classes.

Clear understanding of equipment use is essential to classification and rate setting. That use can be broken into multiple sub elements, but ER&R rates are generally set at the first and second levels of use. A general division occurs typically between light and heavy equipment.

Autos, pickups, vans and similar vehicles are all considered light duty vehicles. Dump trucks, road graders, crawler tractors and similar vehicles are considered heavy-duty vehicles. Heavy-duty equipment has far greater demands placed on its function and ability to withstand heavy loads than light duty equipment. This division is usually easy to make. Further subdivisions are appropriate, provided the fleet concept is kept in mind.

For example, passenger automobiles all have quite similar functional design and virtually all are used for the central and almost exclusive purpose of transporting persons. However, similar use becomes more judgmental.

Among passenger automobiles, few would argue that police vehicles are operated in any similar fashion to those outside that area. Police vehicles often operate with long periods of idling. They are sometimes subjected to hard acceleration and deceleration, much beyond that seen in normal driving conditions. They are at times even used as barriers or shields, subjecting them to damage that would never occur purposely in normal driving conditions. With these operational use differences, it is common to have them separated into a class separate from the rest of the fleet passenger autos.

The ER&R manager must look at these subdivisions carefully to assure that the breakout is appropriate, and that the uses are in fact similar. Further breakouts should be discouraged unless the use is so dissimilar as to create a truly different class. The ultimate test is if the cost of operation and maintenance for the same type of vehicles is significantly different due to their use.

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○ *Classification Subdivisions*

Some would argue that further subdivisions are necessary, usually to assure equity between departments. As an example, some four wheel drive pickups may be used exclusively for moving crews around, while others are predominately used for snow plowing. Wear and tear on the latter may be higher than the former.

This subdivision is a judgment call. If in fact the wear and tear due to use is significantly different in this example, then the cost of repairs and operation will be higher in the four wheel drive pickups used for plowing, and further subdivision is appropriate. I suggest these breakouts should occur only if cost data shows such a difference. Even though the types of use might suggest otherwise, if the costs are similar, then the vehicles are appropriately placed in only one class.

One specific breakout sometimes used that is questionable is that between departments. As an example, a light duty vehicle used for essentially the same purpose in two different departments should have the same operational costs. The only difference should be operator differences or manufacturing defects, neither of which is under the purview of the ER&R manager. In fact, fleet operations and class comparisons help determine those things. That gives department managers an ability to deal with them.

Proper consideration of the classifications will assure equity among departments and no further subdivision should be necessary.

○ *Classification Exclusions*

In discussion of equipment classes, one occasionally expressed concern is if one office's vehicles were excluded from the fleet, other ER&R rates would increase. For example, let's use the Sheriff's vehicles as they are often included in the fleet, and typically the second largest group of vehicles used in the Departments. As once stated, "The County Sheriff is paying for the **richest fund** in the county through excessive rates."

First, let's dispense with the terminology of "richest fund". Yes, ER&R is typically one of the largest funds in any county, but such terminology is neither accurate nor productive. It is inaccurate in that a properly functioning ER&R fund makes no profit and is responsive only to the needs of the county.

Then, Sheriff's vehicles are a particularly good example of why proper classification resolves equity issues. Higher cost to operate police vehicles are normally in a separate class. As a result they pay a higher rate on sedans than one used in the Assessor's office. That is not a subsidy issue in that the purpose is to assure that different class rates cover the costs within that class.

The only change that might be expected within ER&R is a slightly higher potential overhead rate *if* there were no relative reduction in personnel or facilities. That would appear to be an unlikely event. However, if total fleet requirements still dictate that level of support, a total fleet fixed costs issue becomes a matter of judgment. Therefore, while one might argue that such a result could occur, ultimately it would be independent of that decision. By the same argument, it is intuitive that the larger the fleet, regardless of makeup, the better potential there is for economies of scale.

Bottom line is that inclusion or exclusion of any class of equipment is not an equity issue, only a larger fleet management issue.

— Rate Calculations

Rates are calculated based on several items, most of which have been discussed above. This is a brief overview of a standard rate calculation process. Some areas are discussed in more detail than others are as they typically generate more questions.

Basic items in the rate calculations include:

- Operational Costs
- Replacement Costs
- Overhead Costs

□ ***Operational Costs***

Operational costs include all the direct cost items attributable to day-to-day use of a piece of equipment. They include fuel and lubricants consumed, parts used for repairs, and direct labor for repairs and maintenance performed.

○ *Fuel & Lubricants*

Fuel and lubricants typically generate a significant cost, particularly as the price of crude increases. Fuel usage, coupled with the mileage, is also key to knowing the operator habits and mechanical status of the equipment. Tracking typically occurs at the pump, which can be a problem as mileage is normally a manual input.

I suggest two ways to help resolve that dilemma. First, Department Heads need to advise employees so they understand that it is key information that affects their use and budgets. Ongoing emphasis and communication is often needed in this type of manual data collection effort. Second, monthly billings could be based on average use, and adjusted less often, perhaps quarterly. Waiting until the end of the year is not a desirable solution in that it is often too late for budget adjustments to cover any surprises.

- *Parts*

Parts costs normally reflect the type of equipment. Heavy equipment and/or specialized equipment parts are often significantly more expensive than for ordinary light vehicles. In addition, they are also an indicator of use and wear. A higher than average replacement rate on a particular vehicle may suggest that there is an operator issue, or that the vehicle is beginning to reach its economic life span. Certainly there may be other conclusions, however having that information for both the particular item as well as the fleet is important to setting appropriate rates and life expectancies.

If rates are set properly according to equipment class, when labor and parts for high cost repairs are removed from the overhead calculation, the proportion of overhead attributable to them goes down, and all others pay a larger share. In other words, with proper rates, overhead is shared directly proportional to the impact of the use of any given equipment item, thus equitably. If that distribution does not occur, then light equipment ends up subsidizing the operation of heavy equipment, subverting the rate setting process.

- *Labor*

Labor costs should be billed to the greatest extent possible, directly to the equipment item receiving work. There is an unavoidable added labor cost sometimes forgotten, the real cost of benefits. Benefits include lost time due to leave, medical and labor insurance, and other items that are directly attributable to each employee. Labor rates must include these 'hidden' but very real costs.

Any time an ER&R person is working on a specific equipment item for more than a few minutes, their labor must be charged to the item. By doing so, both direct costs associated with keeping and operating that equipment and the relative overhead costs are properly attributed. Obviously, there are some realistic limits. For example if a light bulb is changed in three minutes, it isn't cost effective to charge that time out. That "lost time" becomes part of the non-productive time covered in overhead.

- ***Replacement Costs***

Replacement costs are more than simply an equipment item purchase price. Not only is there the cost of money or inflation over time, different equipment types may inflate at different rates. Historic inflation rates, adjusted annually for actual experience (both internal to the fund as well as consideration of outside information sources) become part of the rate in order to assure there is adequate replacement reserves.

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Again, with appropriate replacement costs considered within equipment rates, when overhead is applied to the rates, a direct proportion of the fixed and non-attributable cost is applied to the relative value and impact of that fleet item.

Similar to equipment, materials replacement costs are more than the initial acquisition costs. Handling of any materials will result in some degree of loss, and rock materials are subject to a measurable loss. The most common is the "floor loss", the material that is mixed into the ground it is stored on, becoming unusable. In addition, unless every load is weighed or carefully calculated, not always economically feasible, use rates will reflect some inaccuracy and "loss".

Theft is unfortunately a common loss issue for materials, particularly materials stored at remote locations. While tracking and security such as fencing and gates (an added cost) will minimize these losses, they must be considered. Typically, these added costs are captured in overhead rates, as they are seldom directly attributable to one particular material or use.

Virtually all other costs associated with materials, such as the labor of handling them again, should be charged out to the project or activity they are used on.

It should be noted that additions to ER&R, and upgrades or similar changes to planned replacements determined during the annual review process with Department Heads and approved by the Board, must be paid for independent from ER&R reserves. After placement in ER&R, they will then accumulate reserves for their ultimate replacement.

Replacement costs should be amortized over the life of the class of equipment, at a rate that provides assurance that an adequate reserve is in place at the end of its economic life. The last element to include is a reasonable salvage or disposal sale value.

□ ***Overhead Costs***

One of the primary criticisms typically leveled at ER&R fund managers is that overhead rates are excessive. This area certainly deserves scrutiny, and an understanding of what and why the rates are what they are is critical to responding to critics.

While it is always an area to watch, there are overhead costs in any organization. Not only is there coordination and paperwork to do, in an asset heavy organization such as ER&R there are all kinds of fixed and small costs that are not particularly assignable to an individual work order. From the shop building itself to small tools, whether there is one vehicle regularly maintained or one hundred, those costs are unavoidable but necessary. Managements challenge is to scale those costs to the extent possible to the fleet needs. Fortunately, when properly accounted, these fixed and non-attributable costs directly reflect again a relative and equitable value of the equipment or material to the entire operation.

Equipment Rental & Revolving Fund Operations

The simple and least expensive (helps keep overhead down) way to distribute those costs is on a percentage onto billable items. Regardless of the equipment origin or 'ownership', all bills should carry that rate to assure that any who benefit from using ER&R for their equipment needs share equitably in those fixed costs.

○ *Overhead Elements*

Elements of an appropriate overhead rate include all items that not practically or efficiently billed through directly attributable expenditures. It will help clarity for users to characterize the shop rates by breaking out average mechanics wages, add benefits, and then add the overhead costs so that users can easily see not only how they are derived but also the percentage.

◆ Administrative Costs

Typically there will be a number of people who do parts of the day to day administration. Those costs are normally proportioned between personnel involved in some aspect of management of the fund. For example, there may be 5 or 6 different people doing some aspect, but when their time is proportioned between the work they do for ER&R and other areas, the cost will be the equivalent to maybe one person full time. That would be a very reasonable administrative cost for accomplishing the day-to-day oversight, accounting, and general management of the ER&R fund with a budget exceeding \$1 million.

Also included in administrative costs are such items as insurance, office supplies, and any external administrative services. These are all typically accounted for and added into the overhead total.

◆ Shop Supplies & Small Tools

Shop supplies and small tools are included in a proportional amount as a part of the ER&R overhead rate. This is also an appropriate methodology to account for these necessary costs. Often these are not directly related to a specific item of work, or are of such a minor nature as to not be economically practical to account individually, but are necessary to the operation of an equipment shop. Examples include disposal of hazardous materials such as used antifreeze or motor oil, and shop rags and specialty tools.

◆ Buildings and Facilities

Some may argue that facilities should not be included in overhead. However, when the primary purpose of a facility is to support ER&R, and is considered necessary to the operation, it becomes one of those fixed and unavoidable costs. Charging for its operation and maintenance through the overhead rates is the most equitable way to cover those costs.

Again, there may be multiple buildings where some ER&R work is carried out. In most operations however, there is a central shop where the major work is done,

Equipment Rental & Revolving Fund Operations

and outlying crew facilities where some minor maintenance is performed. However, since the predominate use of the outlying shops is for road crews or some other purpose, with only a percentage of the use for minor maintenance of equipment, those shops should be proportioned between ER&R and any other benefiting funds (typically primarily to Roads), rather than charged fully.

Any other facilities that directly support, and are principally for, ER&R operations should be included and calculated in a similar fashion.

Within that discussion, the Board and ER&R manager may wish to consider inclusion of the various county shops in the ER&R fund. We make no specific recommendation in this regard, however some counties use this method as a way to manage the repairs, replacement, M&O, and apportionment of the cost of these necessary facilities.

□ **Calculations**

Once each of the above items is determined, the calculation of a specific standard class rate is straightforward.

Example Motor Grader - 12 Year Life		
Direct Annual Operational Cost	\$27,652/yr x 12	331,824
Purchase Price		160,518
Projected Inflation	3% Straight Line	57,786
Projected Salvage Sale Price	Auction	10,000
Subtotal	(Less Salvage)	540,128
Projected Hourly @ 750 Hours Per Year Use	Sub ÷ 750 ÷ 12	60.01
Fleet Overhead Rate ²	+ 9.4%	65.65
Adjusted Hourly Rental Rate		\$66.00

(Note: these entries are purely fictional, for example calculation purposes only.)

Each class of equipment will have a similar calculation. These calculations are typically done in a spreadsheet format to ease the large number of calculations.

○ *Rates for Limited Use Equipment*

Rates for limited use equipment are often set differently in that hourly or mileage measures fail to capture their use. All calculations up to that point are similar. Rather than break them out by direct usage since it may vary so greatly, they are typically calculated only on a monthly or annual rate. This provides a simplified method of assuring that this type of equipment is properly accounted for its own use and replacement, and the variability within rates resolved.

² The overhead in this calculation is applied on the rental rate rather than only the shop rate as sometimes practiced. This distributes the overhead across all costs, rather than only within the direct operational costs. By doing so, the relative cost and value of all aspects of the fleet operation are equitably distributed among classes and users in a clear manner, and avoid the 'lemon' and 'peach' phenomenon..

Setting rates periodically also assumes that it is limited use, appropriately justified on a rational documented basis.

□ ***User Input to Rates***

ER&R managers generally recognize that without user input some rates may fail to reflect real world practices. For example, absent an understanding of how the equipment is being used, an engine replacement might be treated as ordinary parts. If that engine change provided additional life to the vehicle, the life and rates should be adjusted to re-amortize the replacement.

Again, this points out the continuing need for direct user input to assure that operational considerations are given to rates, particularly for such elements as major repairs and life cycles. Department Heads must recognize however, that the ER&R manager, even with full understanding of the concerns, may face a choice that does not always meet their desire.

— **Accounting & Billing**

Accounting and billing practices are key to both good management and an ability to explain equipment costs and rental rates to users.

○ *Historical Costs*

Historically derived numbers provide the foundation for rate setting. A three to five year history tends to average out anomalies for individual equipment items so that class rates are appropriately balanced. Those historical averages must be updated annually to reflect any changes in equipment and use, as well as determining trends.

○ *Single ER&R Billing*

One question occasionally asked, why not simplify the billing process with a single bill for all ER&R usage for the Board to approve? Individual department billing addresses two issues.

The first is the legal issue of assuring that each fund stands on its own, without benefit to or from another. This is in direct response to the 18th Amendment and RCW 43.09.210, and is critical to Legislative requirements for how government operates.

The second is that individual billings provide important information for Department Heads management of their particular fleet elements. If a particular vehicle under their management is used inefficiently, or abused in some manner, Department Heads, particularly elected ones, rather than the Board are responsible for correction of the problem.

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Simplification is always desirable to the extent that it meets the letter and intent of law, and represents good management. The separate billings are an excellent example of how they may not be the most efficient means, but preserve the very high level of accountability expected from using your neighbor's funds.

○ *ER&R vs. Private Vehicle Reimbursement*

One issue for the Board to consider in policy is the perception or reality that reimbursement for use of employees privately owned vehicles may be less costly to a department than using ER&R vehicles. There are a number of issues within that question. Most of those issues are outside the purview of the ER&R manager, but are certainly within that of the Board. Those issues include employee expectations, whether or not the reimbursement rate provides them fair compensation for the use of their vehicles; and whether it is advantageous for the fleet operations or if it detracts from the economy of scale.

I leave that discussion to the Board and Department Heads. I also suggest it is an important conversation and should include the ER&R manager.

○ *Accounting & Billing System*

Various manual accounting and billing systems are used to track equipment use and costs. Consistency in carrying data forward has sometimes been a problem. If background data is suspect because its validity cannot be verified, a survey of similar counties by the ER&R manager can give an indication that rates are within normal bounds.

Implementation of newer accounting systems such as WinCams, one of several that has modules specifically designed for fleet management, is bringing data management into a sound basis. In one year, it should provide significantly improved ability to measure equipment use and costs. Within two to three years, it should provide a high confidence level on equipment costs and appropriate rental rates. At least five years of rolling and annually adjusted cost data would be most desirable for that purpose.

Radio Systems

Radios and radio systems, if included in ER&R, are normally considered within the context of the overall ER&R system. However, it has been an area of concern in that it will often again include a variety of users external to roads, and the infrastructure needs are sometimes, and usage almost always, more difficult to quantify.

— Radio Operation

With multiple users that may include junior taxing districts such as EMS, these systems can operate across a broader range of users than other equipment. The ER&R manager must evaluate appropriate maintenance and replacement

options, and must work with the various users to coordinate and provide the Board the information they need for budgetary and system needs decisions.

Separate repeater facilities with multiple frequencies in use are common. As an example, the frequencies might include the Sheriff's Office, used exclusively for law enforcement; EMS, for both fire and ambulance; and County Road, who might have multiple additional users. Due to the typically remote location of repeaters and attendant difficulty and costs for power and other infrastructure, there may even be an arrangement to allow some private repeaters to use the installed infrastructure.

Maintenance is often contracted out. One methodology to provide reasonable rate setting follows. The systems are separated into "infrastructure", to include the Emergency Operations Center (EOC) setup, the mountain top buildings, antennas, repeaters, and utilities; and "mobile and fixed radios", to include all of the various radios in vehicles and offices scattered around the county among the various users. ER&R is responsible for the maintenance and operation of the infrastructure and those radios purchased by county departments. External users, the junior taxing districts, radios are owned, operated, maintained and replaced by the various districts themselves.

— Radio Rates Equity

Again, RCW 43.09.210 comes into play. Each fund must pay its proportional share to assure that one fund does not benefit another.

A private user of public facilities brings into play the additional constitutional restriction of benefit to private individuals. It is therefore imperative, from both an equity and legal perspective, that any private user pays a full and fair share of any related costs. The question then is how to do that?

— Radio Rates Recommendations

Generally, a multiple user system relies on some measure of relative use. Power use for example will vary directly with the number of transmissions that occur. More radios have resulted in added frequencies and repeater radios over time. Radio systems today can be operated with equipment that can measure actual airtime use, but current systems would likely require significant upgrades to accomplish that, and it is questionable whether that cost is necessary.

Average rates applied to different radios, while simple and convenient, fails to recognize that different brands and different ages of equipment generate different maintenance costs. Maintenance contracts normally show that difference, and it should be applied to multiple classes of radios. I recommend using the differences in the maintenance contract as the best way to make those differentiations and apply a proportionate rate to each radio.

Equipment Rental & Revolving Fund Operations

The infrastructure rates are more of a problem. Lacking a way to measure use directly, a proxy to reflect the capability of use seems appropriate. All users certainly have an inventory, even though radios they use may not be owned by ER&R. The number of radios owned and operated by each user would provide a direct ratio of the user potential. While one may argue that some users require 24 hour 7 day use, others only 8 hour 5 day or maybe less, I suggest that is an overly complex solution. I recommend using the number of owned and operated radios of each user group to calculate a proportional rate for each user group.

Due to the significantly different operation than the ER&R fleet, it may be appropriate to calculate a separate overhead percentage for radios and apply that to the combined radio maintenance and infrastructure rates. The calculation methodology is essentially the same.

ER&R Fund Resolution

Most, if not all, counties implemented their ER&R program with a Commissioner's Resolution in 1977 and a reference to Chapter 67 (Engrossed SB 2024) of the Forty-Fifth Legislature, Regular Session (codified in RCW 36.33A.) That resolution commonly transfers funds and equipment to ER&R.

With the many changes over the last 28 years, if it has not been done from time to time, it is likely time to update the implementing resolution to reflect current operations; the various departments, funds, and others who utilize the fund; the intent to assure that charges are equitable and in accordance with RCW 43.09.210; to clarify statutory responsibilities; and name the appointed ER&R manager by position.

Attachment A

Chapter 36.33A RCW EQUIPMENT RENTAL AND REVOLVING FUND

RCW SECTIONS

36.33A.010 Equipment rental and revolving fund -- Establishment -- Purposes.

36.33A.020 Use of fund by other offices, departments or agencies.

36.33A.030 Administration of fund.

36.33A.040 Rates for equipment rental.

36.33A.050 Deposits in fund.

36.33A.060 Accumulated moneys.

RCW 36.33A.010

Equipment rental and revolving fund -- Establishment -- Purposes.

Every county shall establish, by resolution, an "equipment rental and revolving fund", hereinafter referred to as "the fund", in the county treasury to be used as a revolving fund for the purchase, maintenance, and repair of county road department equipment; for the purchase of equipment, materials, supplies, and services required in the administration and operation of the fund; and for the purchase or manufacture of materials and supplies needed by the county road department.

[1977 c 67 § 1.]

RCW 36.33A.020

Use of fund by other offices, departments or agencies.

The legislative body of any county may authorize, by resolution, the use of the fund by any other office or department of the county government or any other governmental agency for similar purposes.

[1977 c 67 § 2.]

RCW 36.33A.030

Administration of fund.

With the approval of the county legislative body, the county engineer, or other appointee of the county legislative body, shall administer the fund and shall be responsible for establishing the terms and charges for the sale of any material or supplies which have been purchased, maintained, or manufactured with moneys from the fund. The terms and charges shall be set to cover all costs of

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purchasing, storing, and distributing the material or supplies, and may be amended as considered necessary.

[1977 c 67 § 3.]

RCW 36.33A.040 Rates for equipment rental.

Rates for the rental of equipment owned by the fund shall be set to cover all costs of maintenance and repair, material and supplies consumed in operating or maintaining the equipment, and the future replacement thereof. The rates shall be determined by the county engineer and shall be subject to annual review by the legislative body.

[1977 c 67 § 4.]

RCW 36.33A.050 Deposits in fund.

The legislative authority of the county may, from time to time, place moneys in the fund from any source lawfully available to it and may transfer equipment, materials, and supplies of any office or department to the equipment rental and revolving fund with or without charge consistent with RCW 43.09.210. Charges for the rental of equipment and for providing materials, supplies, and services to any county office or department shall be paid monthly into the fund. Proceeds received from other governmental agencies for similar charges and from the sale of equipment or other personal property owned by the equipment rental and revolving fund, which is no longer of any value to or needed by the county, shall be placed in the fund as received.

[1977 c 67 § 5.]

RCW 36.33A.060 Accumulated moneys.

Moneys accumulated in the equipment rental and revolving fund shall be retained therein from year to year; shall be used only for the purposes stated in this chapter; and shall be subject to the budgetary regulations in chapter 36.40 RCW.

[1977 c 67 § 6.]

Attachment B

Equipment Rental & Revolving Fund Guidance

A reference document prepared by

Washington State Auditor's Office
Local Government Support Team

with assistance from State and Local Agencies.

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Introduction:

This guide is designed to provide information on the formation and basic operations of Equipment and Rental & Revolving (ER&R) funds. The guide contains answers to common questions and discusses issues that have been encountered during audits of ER&R funds. Areas covered are:

- Overview
- Who's required to have an ER&R fund and how are they formed?
- Operation of the fund:
 - Rate setting
 - Revenue assets
 - Investments
- Accounting requirements - financial reporting
- Common questions
- Common audit issues

Overview:

Equipment Rental and Revolving funds, also known as ER&R funds, are established to provide equipment rental services within a local government. They increase government efficiency by giving the entity a way to allow expensive equipment and supplies to, in essence, be rented to the entity's other departments. These departments are internal service funds and should operate at zero profit. Their rental equipment ranges from computers to police and fire vehicles to heavy road equipment to specialized high voltage trucks.

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Who's required to have an ER&R fund and how are they formed?

All counties and cities with populations over 8,000 are legally required to have an ER&R fund for operating county road and street departments. ER&R funds may be expanded to provide services to other departments including public works, utilities, fire and police. Legal references: RCW 35.21.088, cities and RCW 36.33A.010, counties.

ER&R funds are created by city councils or county commissions. Counties pass a resolution and cities an ordinance defining the origin of the resources, purpose, and specific duties of the fund. Start-up resources usually come from an interfund transfer of cash and/or equipment. The transfer may be as a loan or a permanent transfer. Further discussion of interfund transactions and ER&R funds can be found in the Budgeting, Accounting and Reporting System Manual volume 1, part 3, chapter 4, sections A&B.

Operation of the fund

The management of the ER&R fund is responsible for assuring that the fund's operation complies with what is set out in the ordinance or resolution. These goals include rates that cover the costs of operation and equipment replacement; charges to departments are equitably allocated; tracking of equipment; and investment of excess funds. Management has the further responsibility to ensure that all revenues and expenses are properly coded, summarized and reported in the formats prescribed both internally and externally.

Rate setting

ER&R rate structures need to cover all costs associated with the operation of the fund. In counties, the rate structures are determined by the county engineer and reviewed by the legislative body, RCW 36.33A.040. Rental rates are typically composed of four components:

1. Expenses due to maintenance and operation (employee wages, building rental, equipment repair, supplies, etc.)
2. Depreciation of equipment.
3. A surcharge for equipment replacement.
4. Corrections for prior year charges.

It is extremely important to have a system in place that separates charges for replacing equipment from the other components. Most federal grants allow only actual costs to be submitted for reimbursement. Surcharges for equipment replacement are an estimate and not allowable under A-87 cost principals. Inclusion of surcharges of equipment replacement in federal reimbursement requests could lead to questioned costs.

Deficiencies in revenues should be made up from transfers from the general fund or funds of other departments using the services. Excess revenue should be allocated back to departments that are over charged. Under the prescription of RCW 43.09.210 "it is not legal for one fund to benefit from another".

Rates can be developed for individual assets or similar groups of assets. They can also be billed as a single rate or separately. Composite rates (single rates that apply to dissimilar assets), should be avoided. They tend to lead to overcharges or undercharges.

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Revenue Assets (rental equipment)

Records must be maintained that identify revenues, costs, and depreciation associated with rental equipment (revenue assets). Rental equipment needs to be monitored by a tracking system and physically inventoried. Tracking is essential to ensure the items are not lost or misappropriated and are properly depreciated. Equipment should be valued at purchase price or the fair market value when it is transferred to the fund. In addition to internal policies, criteria for asset accounting and monitoring are prescribed by external sources. They are:

- Category 1 Counties and Cities: RCW 36.32.210 (counties only); 2002 BARS Manual, volume 1, part 3, chapter 7.
- Category 2 Counties and Cities: RCW 36.32.210 (counties only); 2002 BARS Manual, volume 1, part 3, chapter 1, section B.
- Entities purchasing assets with Federal grants: Common Rule, Section 32(d)(2).

Information that should be maintained for assets includes:

1. Historical cost, type of asset and a cross-reference to the capital asset record (finance record), identification of the primary user or whether it is a pool asset.
2. A periodic summary (at least annually) of all operating expenses, including any special operator costs.
3. A periodic summary of depreciation expense and indirect expenses.
4. A periodic summary of rental income, service charges, or user fees.
5. Periodic calculation of net income or loss.
6. Annual summary of 2-5 above.
7. Cumulative net income or loss.

While separate records are recommended, group asset records are acceptable.

Investments

Revenue collected for replacement equipment is the property of the ER&R fund and is not to be transferred to other funds. They should be invested only in allowable investments. These funds should also be reviewed during budgetary review. Investment levels in the ER&R fund should reflect the projected amount needed to replace equipment. Rental rates and or fees should be adjusted if investment levels are above or below the targeted amount.

Accounting Requirements – Financial Reporting

Accounting and financial reporting are prescribed by the Washington State Auditor's Office. Reporting requirements are based upon the size of the municipal corporation. Category 1 and those category 2 choosing to prepare GAAP financial statements should refer to the Category 1 Budgeting Accounting and Reporting System (BARS) manual, volume 1, part 3, chapter 7, section G. In pre GASB 34 reporting the ER&R fund is reported as a proprietary fund using full accrual accounting. The required basic financial statements are a balance sheet, operating statement and statement of cash flows.

Category 2 entities should review the Category 2 Budgetary Accounting and Reporting System (BARS) manual, volume 1, part 4, chapter 4. Category 2 entities are required to complete 04 and 05 schedules for internal service funds.

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Common Questions

Q: How big should the fund balance of the ER&R fund be?

A: One of the primary goals of an internal service fund is to break even. Therefore, the fund balance should reflect a level that is anticipated to assure continued operation of the fund. It should not contain an excess or deficit to that projected amount. When the fund balance is not in line with the project amount, rates need to be adjusted to bring the fund balance to that level.

Q: What should be included in the cost of equipment purchases/leases?

A: All actual costs associated with the operation of the ER&R fund should be included when determining the rate structure for equipment. Allocation of the costs should be made on an equitable basis such as asset life. Costs should be allocated for salaries and benefits, general cost of operations, attorney fees, insurance, etc. The four components of rate-setting are further discussed in the rate setting section above.

Q: How is replacement cost defined?

A: Replacement cost is that amount that is anticipated to replace the existing asset above the cost being recovered through depreciation. This portion of a rental charge should be tracked separately. Replacement costs are estimates and are not allowable for federal reimbursement.

Q: How do we handle assets that are depleting, such as quarry sites or pit areas?

A: These assets should be handled as other assets. Their use charge should be based on operation costs, historical cost depreciation/depletion rate, and replacement inflation factor. The goal is continued break-even operation of the ER&R fund, which includes future replacement of the depletable asset.

Q: How do we decide on an appropriate inflation factor for equipment that has a 10-year lifetime?

Rates for assets should be re-evaluated on a yearly basis. This would include review of the inflation factor as well as operational costs. If the amount invested for purchase of a replacement vehicle is not on target, an adjustment should be made. Care must be made when signing contracts with other departments so that rates are not locked in for an entire 10-year period.

Common Audit Issues

1. Failure to maintain a current list of assets and lack of the performance of physical inventories. (This was the most common condition observed).
2. Failure to retain adequate records for support of expenditures.
3. Failure of the ER&R fund to bill departments for use of equipment and supplies.
4. Submitting replacement cost estimates for reimbursement with grant money.

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REFERENCES

- RCW 35.21.088 Equipment Rental Fund
- RCW 36.32.210 Inventory of county capitalized assets -- County commission inventory statement -- Contents
- RCW 36.33A.010 Equipment Rental and Revolving Fund – Establishment – Purpose
- RCW 36.33A.020 Use of fund by other offices, departments or agencies.
- RCW 36.33A.030 Administration of fund
- RCW 36.33A.040 Rates for equipment rental
- RCW 36.33A.050 Deposits in fund
- RCW 36.33A.060 Accumulated moneys
- RCW 43.09.210 Local government accounting -- Separate accounts for each fund or activity

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Attachment C

RCW 43.09.210

Local government accounting -- Separate accounts for each fund or activity -- Exemption for agency surplus personal property.

Separate accounts shall be kept for every appropriation or fund of a taxing or legislative body showing date and manner of each payment made therefrom, the name, address, and vocation of each person, organization, corporation, or association to whom paid, and for what purpose paid.

Separate accounts shall be kept for each department, public improvement, undertaking, institution, and public service industry under the jurisdiction of every taxing body.

All service rendered by, or property transferred from, one department, public improvement, undertaking, institution, or public service industry to another, shall be paid for at its true and full value by the department, public improvement, undertaking, institution, or public service industry receiving the same, and no department, public improvement, undertaking, institution, or public service industry shall benefit in any financial manner whatever by an appropriation or fund made for the support of another.

All unexpended balances of appropriations shall be transferred to the fund from which appropriated, whenever the account with an appropriation is closed.

This section does not apply to agency surplus personal property handled under RCW 43.19.1919(5).

[2000 c 183 § 2; 1965 c 8 § 43.09.210. Prior: 1909 c 76 § 3; RRS § 9953.]

Attachment C

Attachment D

BARS Manual 2005

Chapter 4. Interfund Transactions

Section A. Interfund Loans

This section does not attempt to determine which money of a municipality may or may not be available for interfund lending, since the special character of some money involves commitments and restrictions which would require individual consideration. As a rule of thumb, however, it may be considered permissible to make interfund loans of those municipal money which are clearly inactive or in excess of current needs **and** legally available for investment.

The minimum acceptable procedures for making and accounting for interfund loans are as follows:

1. The legislative body of a municipality must, by ordinance or resolution, approve all interfund loans, and provide in the authorization a planned schedule of repayment of the loan principal as well as setting a reasonable rate of interest (based on the external rate available to the municipality) to be paid to the lending fund.
2. Interest should be charged in all cases, unless:
 - a. The borrowing fund has no other source of revenue other than the lending fund; or
 - b. The borrowing fund is normally funded by the lending fund.
3. The borrowing fund must anticipate sufficient revenues to be in a position over the period of the loan to make the specified principal and interest payments as required in the authorizing ordinance or resolution.
4. The term of the loan may continue over a period of more than one year, but must be “temporary” in the sense that no permanent diversion of the lending fund results from the failure to repay by the borrowing fund. A loan that continues longer than three years will be scrutinized for a “permanent diversion” of moneys. (Note: these restrictions and limitations do not apply to those funds which are legally permitted to support one another through appropriations, transfers, advances, etc.)
5. Appropriate accounting records should be maintained to reflect the balances of loans in every fund affected by such transactions.

Attachment D

Chapter 4. Interfund Transactions

Section B. Transfers Of Property Between Funds

RCW 43.09.210 requires that, when property is transferred between funds of the same municipality, it should be paid for at its full value by the fund which receives it. The following rules are intended to clarify the application of this statute:

1. When a municipality wishes to acquire capital assets for an internal service fund, such as the Equipment Rental and Revolving Fund, the budgets of the contributing funds should specifically identify the item(s) of equipment to be purchased. The item(s) can be purchased from the contributing fund or the internal service fund. In either case, documentation of the equipment purchase must be adequate to show that the funds originally budgeted for a specific piece of equipment were actually used for the purchase of that item.

The transfer of capital asset to an internal service fund must be approved by the entity's legislative body.

2. The transfer of capital assets between two governmental funds of the same entity should be accounted for merely as a change in location and/or custodian because the assets are not owned by the particular funds. Such transfers are not subject to budgetary control, but the assets should be declared surplus to the needs of the relinquishing fund and the transfer approved by the entity's legislative body.
3. The transfer of capital asset to an enterprise fund should be budgeted and accounted for as a sale and purchase of property. Proceeds of such sale should be deposited to the fund which originally paid for the item or to the general (current expense) fund at the discretion of the legislative body unless a particular statute requires another treatment.