

Attachment 2

MEMORANDUM

November 9, 1998

TO: Pat Dutton, Assistant Director, Operations

FROM: Gene Eckhardt, Assistant Director, Water and Transportation
Tom MacLean, Commission Staff Economist

SUBJ: The Economics of Banded Rates

After discussions with the Washington Mover's Conference and the Association of Independent Movers, and analyzing transportation agreements between regulated movers and the Department of General Administration, the Commission staff believes that the appropriate variations to the current tariff rates and charges should be 15 percent above and 35 percent below the current rates. These variations would remain in place until such time as the staff reviews the new market and cost structure. Following is an example of rates using a \$1,000 move and the current \$85.05 hourly rate for a truck and two men:

LOWER LIMIT (MINUS 35%)	BASE	UPPER LIMIT (PLUS 15%)
\$650 Move	\$1,000 Move	\$1,150 Move
\$55.28 Rate (Truck +2 Men)	\$85.05 Rate (Truck +2 Men)	\$97.81 Rate (Truck +2 Men)

Summary:

The proposed rule changes for household goods movers would, among other proposals, directly increase consumer choice, relax the rules for new entry, and allow upper and lower bands around the current tariff rates.

Under the proposed rule changes staff expects that the industry will grow, and that services will become niched appropriately to meet the differentiated needs of the customers. Some potential customers may want a more economical service, while others may want more choices in service intensity or time of service. We cannot state precisely who the new entrants will be and how they will affect the market, but staff

expects a wider variety of services and prices to be offered to the public.

Allowing bands around the current tariff rates will benefit the industry in a number of ways. It will allow full-service movers to raise their rates to cover increased expenses or to improve services. The band would also allow a mover to charge lower rates, passing cost savings achieved to the customer, or to reflect lesser service levels, if they decide that is appropriate for their firm.

Background

The Commission has historically regulated household goods carriers as it regulated all motor carriers, controlling entry, rates, routes, services and safety. While the Commission has not granted the incumbent household good carriers a monopoly, as a practical matter, the Commission's interpretation and application of the "public convenience and necessity" entry standard has created a closed system. New applicants find the standard very difficult and costly to prove to gain entry into the market.

Incumbent carriers provide the same types of services, charge the same rates (based on averaged fully allocated costs), and operate under similar cost structures that have developed under a long period of regulation. Carriers do not compete on price, as they all charge the same rate for the same service. Carriers maintain they compete on service, however consumers may be misled into believing that price is the reason for getting three estimates. The real competition takes place between the sales staff of companies who provide estimates to prospective customers. Since price is not an object of competition under the current rules, regulated companies can sometimes become comfortable with the status quo and become less innovative, creative, and efficient.

The Commission set the current rates for the household goods industry by averaging the fully allocated costs of a group of test carriers. For each service, the Commission set a single rate to apply to all carriers. By definition, some carriers in the test group had costs which were higher than the average and some carriers had costs which were lower than the average. The Commission set the current rates in 1994, using 1993 data. Costs have changed since then.

Goals

One of the primary goals of this rulemaking proceeding is to create choice, for both service providers and consumers. Under the proposed rules, incumbent and new

carriers will have the flexibility to provide different services and charge different prices. Consumers can choose from a broader range of service and price options, while service providers will have the opportunity to expand into new areas and services.

Rate Design

In this rule making, staff considered how to encourage incumbent and new carriers to provide a broader range of service and price options to increase consumer choice. A customer usually purchases a service when the value to the customer equals or exceeds the price the customer must pay. The service a carrier provides generally defines its costs: a move that requires packing and storage services will cost more than a move that does not.

Just as the service a carrier provides defines its costs, conversely, a single, fixed price for a particular service category defines the service options each carrier can provide. Some customers may demand a more costly service which carriers could not provide because they cannot recover their costs. Similarly, some customers may be willing to pay less for a lesser service option, but carriers cannot meet that need. Single price rate designs create a "one size fits all" environment -- it's not surprising the incumbent carriers offer such similar service. Flexibility in providing service options is directly controlled by price, which is set by the rate design. The current rate design, a single rate for all carriers, allows little flexibility for the service provider or the consumer. Staff concludes this type of rate design will not be appropriate under the proposed rules because it will not encourage incumbent and new carriers to provide a broader range of service and price options to consumers. Other options include:

(1) **Individual rates:** Set individual rates for each carrier, cost justified by each carrier. Each carrier would have an opportunity to recover reasonable expenses and earn a reasonable return. This option would require significant effort by all carriers to develop the appropriate cost information and significant effort by the Commission staff to review and audit that information. Carriers would have little flexibility in adjusting service options to meet customer demand and carriers would have no flexibility to adjust their prices to meet changes in market demand. Consumers would have some choice of service and prices.

(2) **Individual Rates and Bands:** Set individual base rates for each carrier and establish a rate band, based on each individual carriers cost structure, which allows the carrier to charge rates a specified amount above or below its base rate. The band suggested would allow market forces to affect the rate-setting decisions of individual firms. This option would give carriers some flexibility to adjust both service and price options. Customers would have more choice under

this option. This option would require more effort than the Individual Rate option. Carriers would need to develop the appropriate fully allocated costs and variable cost information. The Commission would also require more resources to analyze the filings. The public, and perhaps the carriers and staff, may find such a rate structure confusing to understand, apply, and enforce.

(3) **Industry Base Rate and Industry Rate Band:** Use the existing rates as the "industry base rate" and establish an "industry rate band" which allows each carrier to charge rates within a specified amount above or below the established "industry base" rate. The band suggested would also allow market forces to affect the rate-setting decisions of individual firms. This scenario would give each carrier the greatest flexibility in providing service and price options. It should also provide the consumer with the greatest choice in both service options and price. This option requires the least amount of resources, both from the carriers and the Commission.

Carrier operating costs can vary greatly. The operating expense categories include: wages, warehouse and office space, trucks, insurance, fuel, repairs, supplies, advertising and fees, and taxes. While most firms will incur costs in all of these categories, there will be a spread in the actual level of costs among the firms. The band will allow a variety of prices to reflect these variations in costs and services.

Staff concludes the **Industry Rate and Industry Band** option provides the greatest incentive for incumbent and new carriers to provide a broader range of service and price options: it provides consumers with the greatest choice of service and rate options; it will increase the efficiency of the market by eliminating regulatory lag in changing service and price options to respond to changes in the market; it best matches the level of entry regulation to the level of rate regulation; and, it results in the best use of both carrier and Commission resources.

Predatory Pricing

Although a band will allow some flexibility in pricing, it would not allow total marketplace freedom. One concern is that of "predatory pricing," where a firm could drop its price below costs in order to drive out competitors. Once the competitors are eliminated, then the firm raises its prices significantly, and the consumers are worse off in the long run. Classic examples from earlier this century include the methods employed by John Rockefeller to gain a monopoly on the oil refinery business, and the advent of the food supermarket which displaced many stores in small towns throughout the U.S.

Predatory pricing requires that the firm incur losses which need to be recouped somehow. There are three methods for recovering those losses: spatial, geographical and temporal. Spatial predation means that a firm's losses in one product will be made up by profits in other products where there is less competition. Geographical predation means that the losses in one location will be made up in another location. Temporal predation implies that losses at one time will be recovered at another time.

Theoretically, predatory pricing could occur in the household goods moving industry in Washington under certain circumstances. For example, an incumbent moving company could enter the niches of the smaller operators. It could use its profits from its storage, interstate or large operations to subsidize the losses in its small operations until the competition went away. If the large mover is part of a national firm, it could lose money in Washington but recover that money in a more profitable market somewhere else. Temporal predatory pricing would require a firm to have low costs or deep pockets so that it could offer low rates for a period of time long enough to convince the competition to leave.

One reason why predatory pricing is unlikely to be attempted in Washington is the presence of the price floor [see page 12]. The incumbent firms will be able to drop their prices only 35 percent which is not enough to force out all of their competitors over any length of time. The 35% band was selected as a conservative level and there is evidence that some firms have costs that are lower, allowing those firms to match the floor price while staying profitable. For example, one regulated firm offered discounts of 40 percent to the state. If the predatory pricing scheme comes from a new entrant it still will not be successful in the long run. It may be able to drive out an inefficient competitor, but there will be other firms that are able to match the price floor. Additionally, in order to successfully practice predatory pricing, the predator must be able to convince the other firms that it is willing and able to keep its price low indefinitely. Unfortunately, one consequence of using the price floor to prevent predation is that it results in a welfare loss to both consumers and some producers: firms with costs below the floor will not be able to pass those benefits on to the consumers and hence that part of the market will not get developed. If firms were free to reduce their rates as they wished, then the lower cost markets could develop; however, at an increased risk of predatory pricing.

Another reason that predatory pricing is unlikely is that most firms today expect all of their divisions to be profitable. It is unrealistic to expect a firm to allow continued losses in one location, even though profits in another location are greater than those losses. Of course, all businesses have products or services that lose money at some time and they continue to operate them in hopes of recovery; however, that does not necessarily indicate predatory pricing. A firm will evaluate the future profitability of the money losing

division and either fix it or sell it, but they won't carry it forever.

The most important reason why predatory pricing is unlikely is that it works only if the industry has high sunk costs or noneconomic barriers to entry, which prevent competing firms from easily entering and exiting the market. The moving industry will be just the opposite since the proposed rules are intended to reduce regulatory barriers to entry and carrier operating costs are primarily variable. One mover may drop its price below cost in hopes of driving out the competition, but when it raises its price to recover losses, there will be incentive for new entrants in the market. In fact, if eased entry is successful, there may be some new firms willing and able to compete at the lower price.

In conclusion, predatory pricing is bad because in the long run it can result in very little or no choice for consumers, along with very high prices and a general welfare loss for society. In reality it would be irrational for a firm to engage in predatory pricing as it will hurt their short term profitability without improving their long term profitability. The proposed rules, which allow the 35 percent discount in prices, are conservative enough to prevent predatory pricing while allowing the consumer to benefit from lower prices and greater choice. The solution to predatory pricing is competition, and more service options for both consumers and producers. In the event that predatory pricing does occur, or allegations of predatory pricing are made, the Commission is charged with, and able to, investigate and intervene under RCW 81.04.110.

Destructive Competition

Staff is aware of claims that opening up the moving industry to new entrants and allowing lower rates will lead to destructive competition. Destructive competition is said to occur when the industry, or at least a majority of the firms, operate at a loss for an extended period of time. This can occur when capacity grows, but demand for it grows less quickly or not at all. Taken together, these two economic influences will drive down prices, possibly below long run costs.

Is destructive competition likely to occur in the moving industry in Washington? No, because of the economic characteristics of the industry. Most importantly, the industry does not have the relatively high sunk cost and low variable cost structure that is necessary for long run pricing below average cost. For example, the trucking industry is generally characterized by only ten percent of total cost being fixed, while 90 percent of total cost is variable. Trucks pay only for the roads as they use them in fuel, fuel taxes, depreciation of capital, and labor. In contrast, a railroad has to purchase its right-of-way, construct and maintain the road bed, and build and operate expensive terminal facilities. Overall, the fixed costs are over 70 percent of the total costs of railroad

operation, and destructive competition has occurred in this industry during normal economic times.¹

There exist two more economic reasons to expect little or no destructive competition in the moving industry. First, the capital assets of the industry are highly mobile, and, second, the incremental investments are relatively small and occur frequently. When there is excess capacity in railroads it is virtually impossible to move the railroad to where it is needed more. Whereas movers have the great flexibility to listen to the economic signal of profitability and go wherever consumers need them most. The fact that motor vehicles are relatively short-lived assets, means that operators regularly decide what level of capital equipment is optimal for their business. Hence, there will not be an extended period of excess capacity which can lead to destructive competition.

Impact on Incumbent Carriers

Some parties believe that allowing price flexibility will force incumbent movers to lower their prices. This may be true if new entrants compete directly against the incumbents, and the new entrants can operate more efficiently. However, if the incumbents are already operating efficiently in their market, then new entrants will focus on niches that are presently not being served. Recent economic history and theory suggests that price flexibility will have both positive and negative impacts on the moving industry. Overall, the industry should fare well because of numerous advantages discussed below; however, there may be some individual firms that are not able to compete with either other incumbent firms or with new entrants.

The first advantage the incumbents have is the good will they have built up over many years of service. We all know the familiar names of the moving companies and they will nearly always be contacted by consumers at the outset. There are tens of thousands of moves made in the state and the incumbent movers will receive the opportunity to bid on virtually all of them.

The second advantage to the incumbents is the business structure and experience that the firms presently have in place. They will not have to expend time, energy and money on the arduous tasks that new entrants face such as developing a business plan, acquiring financing, setting up operations, and hiring qualified labor.

¹This section is adapted from: Kahn, A. The Economics of Regulation, MIT Press, 1995.

The incumbent firms will have the advantage of making incremental changes to their current business practices. They will be able to increase, reduce, or move company resources in a way that optimizes their productivity. The incumbents' changes will be a small part of their total company and therefore they face much lower business risk vis a vis a new entrant.

A fourth advantage for the incumbent movers is their ability to diversify into the new market niches. In addition to their current services, they will be free to offer different services at different times and in different locations. The management of each incumbent firm will have to measure their advantages and disadvantages for the changes they may consider. Presumably their many years of experience will lead them to make the best decisions.

In spite of their numerous advantages, staff recognizes that some incumbent firms may go out of business under the proposed rules. In general, firms go out of business because they do not provide the goods and services customers want. The management of some firms may make poor strategic business decisions, while others may simply be inefficient at their work. It is important to note that even when a company goes out of business the resulting situation is not all bad. Typically, the useful assets (e.g. trucks) and the employees will get rehired by the successful firms. Lastly, there is no reason to believe that the employees will be worse off. Relaxed entry will increase the opportunities for many people, and the well-managed firms will provide competitive wages to attract and retain the people necessary to operate a successful company.

Impact on the Customer

Although as a group, consumers will be better off with additional service and price options, not all customers will be "winners." Carriers that are free to adjust service and price options to meet consumer demand are also free to adjust service and price options to reflect market conditions. Carriers can and will differentiate price between customers to consider such things as:

Is this a move on a "busy day"

Is this a move in the "busy season"

Is this a move in the "busy time of the month"

Is this a move that is easily accomplished or will there be complications

Is this a move that will bring me additional moves

Is this for a large account

Is this a person that I've served before

Is this person a good negotiator
Where is the move going -- am I likely to find a return load

Cost Study

Staff considered whether or not to do a cost study before recommending the Commission adjust rates as part of this rule making. In evaluating how to adjust rates, staff had to balance the traditional methods of rule making for this industry with the goals of the rule making, e.g., promoting competition where it can protect the public interest as least as well as regulation, and increasing consumer choice. The purpose of relaxing entry is to encourage new carriers to enter the market and allow incumbent and new carriers flexibility to more effectively compete with one another and provide greater options to consumers. Staff believes that the proposed rules will create a new market and industry structure. Staff considered the following options to collect data:

- (1) Cost data from the incumbent regulated carriers. Companies behave differently in different environments and the industry structure affects cost by influencing or even dictating the way companies conduct business. Staff concludes that the fully allocated costs of the incumbent carriers developed under the existing industry structure have minimal use in setting rates for the new environment since they reflect the old environment.
- (2) Cost data of regulated carriers operating in other states suffer from same fundamental problem: the data reflects a regulated industry structure, which the Commission seeks to change under the proposed rules.
- (3) Cost data from illegal carriers would provide potentially valuable information, although, it also reflects a market structure different from what the Commission is trying to implement. Because the carriers are operating illegally, the Commission has no information available for an audit. To obtain any useful data, the Commission would need to review a representative sample, with relatively "clean" books, and have access to a company's complete operations, books and records. Staff concludes, that under the circumstances, a meaningful review is not likely.
- (4) A state that has a regulated industry with relatively open entry could provide some insightful information. A state with some regulation will presumably have some cost information on the regulated industry. The value of the information is that it can provide a view of the relative costs and their spread, but won't

represent the absolute costs that Washington haulers face. Additionally, access to the financial books of companies outside Washington is problematic.

Staff concludes a cost study will only be valuable when the environment has changed. The price bands are based on observations that costs and prices can and do differ from the current tariff rates which are based on fully allocated costs. It would be problematic to perform any sort of cost analysis on the moving industry at this time since its cost structure is based on the current regime characterized by closed entry and limited competition.

Staff recommends that the Commission perform a cost study and market analysis in eighteen to twenty-four months. The purpose in waiting for a period of time is to give the industry the time required to evolve and stabilize. It will take some months for the new entrants to fully enter the market as there are still business impediments to be overcome, including: learning the new rules; business plan development; capital and resource accumulation; and marketing one's services. For example, it could take almost a year just for something as simple as getting an advertisement in the yellow pages.

Once the economy has a number of competitive firms in the market, there still exists the learning curve or start-up cost problem. Staff does not anticipate excessive over-investment into the industry, and incremental investment by experienced firms is less risky and hence more likely. In fairness, staff wants to investigate the costs of relatively stable firms which have costs that should be representative of their near future as well as their recent past. The investigated firms will need to have been in full operation for at least a year, which includes the high volume summer period.

Currently, the Commission performs fully allocated cost studies for its regulated industries. A fully allocated cost study would not be appropriate for the moving industry under the proposed rules, since the industry does not have a natural monopoly cost structure, and will no longer have a high regulatory barrier to entry, necessary to justify its use. The purpose of the cost study is to evaluate the rate bands, which will be implemented to give service providers the opportunity to set prices that reflect their individual costs, and not the single industry cost.

At the time the cost study is performed the Commission will also investigate the structure of the moving industry. Staff believes that studying the industry structure, in conjunction with the cost study, will shed light on the appropriateness of the rate bands. The Commission currently utilizes a few tools for measuring industry structure. The first is the concentration ratio which is the percentage of the total industry output the

firms of the industry have. The most commonly used concentration ratio is the four-firm concentration ratio. For example, a ratio of 60 percent means that the four largest firms in the industry produce 60 percent of the industry's output. Historically, a concentration ratio greater than 60 percent indicates a monopolistic industry, while a concentration ratio below 40 percent indicates a competitive industry.

The concentration ratio is inadequate when used alone. The other tool is the Herfindahl index, which is calculated by summing the squared value of the market shares of all of the firms in the industry. The advantages of the Herfindahl index is that it takes into account all of the firms and it gives extra weight to the very large firms. In addition to the Commission, the Herfindahl index is also used by the federal Justice Department as a measure of competitiveness for merger guidelines. Currently, if the index is less than 1000 then the Justice Department assumes the industry is sufficiently competitive. Staff recommends that the Commission use both the concentration ratio and the Herfindahl index to measure the structure of the industry.

Another issue that the study will consider is the geographical distribution of the industry. It may be that some areas have fewer choices than others, and it would be imprudent to assume that all communities in the state have benefited equally from the rule changes.

When the Commission performs a cost study, it should provide information to set rates that will support stated goals. As discussed earlier, staff concludes the current rate setting methodology, uniform rates using fully allocated costs, does not support the goals of the present rule making and, therefore, is not an appropriate methodology to consider. Staff will consider variable costs, marginal costs, average costs, etc. Staff has not yet determined the appropriate methodology, but commits to considering carrier input as staff works toward developing and recommending a methodology to the Commission. Staff expects to complete that process by October 1999.

Rate Bands

So, how does the Commission set rates without a cost study? Overall, staff expects the economic "pie" to grow significantly under the proposed rules. New entrants may bring efficiencies to the current market, and presently under served markets may grow as the new entrants become established and consumers like their services.

As more companies provide service, we expect both incumbent and new companies will choose to offer different services (choice of smaller vehicles, broader choices for service at times other than standard business hours (after hours and weekends, etc.)). We know incumbent carriers have different cost structures and we expect new

companies will also have different cost structures. Costs, such as fuel, supplies, taxes, and regulatory fees, vehicles (lease v. purchase, new v. used), vehicle maintenance, warehouse and office space, insurance, advertising, wages, salaries, and benefits could vary substantially, or vary little.

The last rate increase, for hourly rates, used 1993 carrier data. Since then, the Implicit Price Deflator for the Gross Domestic Product has increased about 10 percent, from 102.64 to 112.4. On October 14, 1998, the Washington Mover's Conference filed a letter stating: "A cursory sampling of today's costs from the same household goods carriers used in the 1993 Tariff 15 rate study shows ..." average total costs (including profit) of \$87.00 per hour, or just 2.3% more than the current \$85.05 rate. Staff believes that it is important to note that the cost indicated is an average cost and that the Movers Conference would not provide the underlying cost data. Staff believes an additional five percent in the band (for the total 15% recommended) would give movers some additional flexibility in pricing and service options, while still protecting consumers from unfair pricing in areas where new firms may be slow to enter. As new movers enter the market to ensure consumer choice in service options and price levels, the Commission may consider raising the upper band.

To better understand movers' pricing decisions, staff analyzed "Transportation Agreements" between regulated movers and the Department of General Administration which are summarized below:

Commodity: Household Goods -- Domestic Door to Door Motor Van Service
Scope: Shipments moving in intrastate traffic in Washington State
Period: Generally one year
Discount: So-called "Bottom line Discount" off the rates in the tariff

<u>Percentage Discount</u>	<u>No. Of Haulers</u>
10%	1
15%	2
20%	8
25%	29
30%	23
40%	1

The average = 25%

Carriers should have the opportunity to offer, and customers should have the same opportunity to choose, these same price and service options. New entrants may

provide lower service levels and have lower cost functions. From the Department of General Administration's numbers we determined that 25% is the average bid discount offered by participating incumbent firms. Staff has seen some cost estimates which indicate variations of 20% - 40% for specific costs (e.g., labor and equipment). The Association of Independent Mover's stated its members used rates that were profitable at 20% - 30% discount, while complying with all requirements for taxes and state law. Oregon sets household goods rates on a regional basis, which have a 32% spread from the average (\$69.35 to \$96.00). Taking both the variations and size of cost factors into account, staff suggests a lower band of 35% (25% average discount of incumbent movers plus 10% to provide new entrants with lower cost structures the opportunity to provide different service options).

Therefore, during the interim period between adoption of the proposed rules and staff's review of the costs and charges, staff recommends the Commission approve a rule change that will:

- (1) leave the current rates and charges in place,
- (2) establish an upper band of 15 percent above the current tariff rates and charges, and
- (3) establish a lower band of 35 percent below current tariff rates and charges.

Conclusion:

Staff has corresponded at length, both with stakeholders and decision makers, to consider the variety of economic benefits and costs of the proposed rule changes. We believe that the proposed rules better reflect the needs and attitudes of current society while balancing the interests of both the industry and the public.

Staff believes that the banded rate proposal is the most appropriate course of action at this time, based on the information available. The banded rates allow full-service carriers to raise rates to cover increased expenses or improve services. The band would also allow a carrier to charge lower rates to reflect different service levels, pass on cost savings to the customer, or to reflect market conditions. Staff finds the lower

MEMORANDUM
November 9, 1998
Page 14

band of 35% to be conservative: it will benefit consumers with some lower rates, yet should not allow predatory pricing. Relaxed entry, combined with flexibility to provide service and price options to increase consumer choice will increase consumer welfare.