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# **AN EVALUATION OF COUNTY AND CITY ROAD WEIGHT ENFORCEMENT EFFORTS IN THE STATE OF WASHINGTON**

WA-RD 353.3

Final Technical Report  
July 1994



**Washington State  
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**AN EVALUATION OF COUNTY AND CITY  
ROAD WEIGHT ENFORCEMENT EFFORTS  
IN THE STATE OF WASHINGTON**

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## SUMMARY

The accelerated deterioration of Washington's roads and highways from overloaded trucks was the impetus for much of the states current permit fee and fine system. The system is a combination of both deterrent and compensation for the damage inflicted by overloaded trucks. The objective of this paper was to determine the degree of participation in truck weight enforcement programs for cities and counties in the state of Washington. The determination of participation levels throughout the state provides a measure of how effective current overweight truck legislation is implemented. This objective is accomplished through the use of a survey of counties and cities throughout the state.

The survey results indicate that only 6 cities were directly involved in weight control enforcement programs with Seattle and Tacoma having the most active programs. Also, larger cities tended to have greater involvement in weight enforcement programs possibly reflecting the larger tax base available to support enforcement programs.

Eleven of the 39 counties in the state of Washington were identified as having full weight enforcement programs while 5 were identified as having only partial enforcement programs. Twenty counties relied entirely on the Washington State Patrol for weight control enforcement. The counties also exhibited a similar trend as the cities regarding the relationship between urbanization and weight enforcement control. Counties having less than 50% of their area in farms were more likely to have weight enforcement programs in place.

# AN EVALUATION OF COUNTY AND CITY ROAD WEIGHT ENFORCEMENT EFFORTS IN THE STATE OF WASHINGTON

## PURPOSE

The purpose of this report is to determine the current levels at which cities and counties participate in truck weight control. Two surveys were conducted in September 1992; one was directed toward cities and the other toward counties. The Association of Washington Cities identified 13 cities involved in truck weight enforcement. Further information regarding city participation levels was obtained through telephone interviews with personnel in the following departments: Public Works, Transportation/Traffic Division, Road Compliance, Traffic Engineering, and City Police. All 39 counties in the state were contacted by telephone, initially through Sheriff's offices and then through Public Works or Public Services, as necessary.

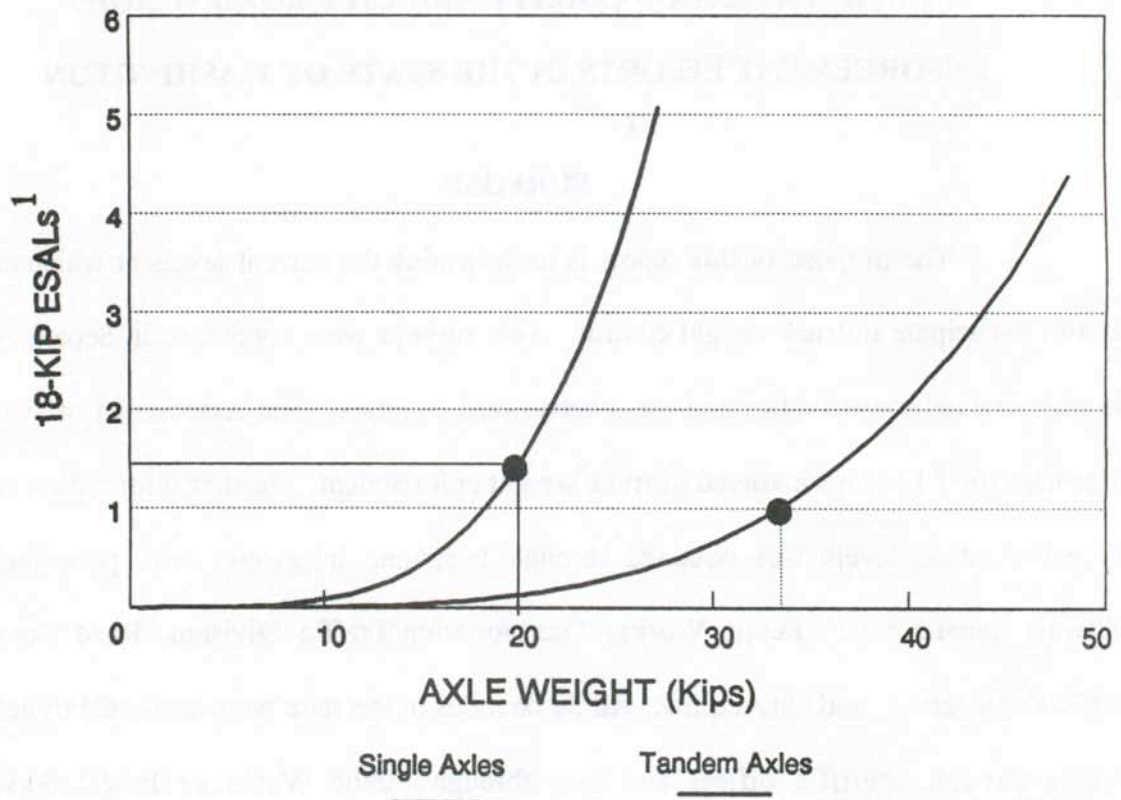
## BACKGROUND

In recent years it has become evident that the nation's roads and highways are deteriorating prematurely. One of the causes of the faster-than-normal wear is the overloaded truck. Studies by the American Association of State and Highway Transportation Officials (AASHTO) concluded that as truck axle weights increase, the damage they cause increases by roughly a fourth-power relationship. Therefore, it would take 1.5 crossings of an 18,000 pound axle to equal one crossing of a 20,000 pound axle  $((20,000/18,000)^4 = 1.5)$  (Figure 1)<sup>1</sup>.

Washington has had regulations on truck weights since 1913. These weight laws were enacted to protect and prolong the life of pavements, as well as for safety reasons.

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<sup>1</sup> One Kip equals 1,000 pounds; ESALs denotes Equivalent Single-Axle Load values.



**Figure 1.** Axle Load Effects on Flexible Pavements (AASHTO, 1986).

Accompanying these laws were permits and penalties which were designed to eliminate the economic incentive to overload, or to recover the road damage associated with the additional tonnage.

Transportation is a very important part of Washington's economy. The aim of trucking companies, like any other business, is to be profitable. Therefore, the weight regulation system should not be unduly restrictive. Its primary goal should be to encourage the trucking industry to work with Washington's additional tonnage or permit system. Through the collection of permit fees the state can capture the resultant financial damage caused by the extra tonnage.



However, an economic incentive to operate illegally overloaded trucks still exists. For this reason, enforcement is a major component of the overall weight regulatory system.

Enforcement of weight rules and regulations in Washington is a function of the Commercial Vehicle Enforcement Section (CVES) of the Washington State Patrol (WSP). Commercial Vehicle Enforcement Officers (CVEOs) are the individuals who perform weighings, either at permanent scale sites (scalehouses) or with portable and semi-portable scales. Washington's road system has three connecting subsystems: (1) state and interstate highways; (2) county roads; and (3) city connectors. Enforcement is generally conducted on state highways, but is also performed on county or city roads if there is a specific need (seasonal traffic, scale bypass route, etc.). Assistance is also provided to city and county agencies, if requested.

The state legislature authorizes the number of WSP CVEOs. The WSP Certification of Size and Weight Enforcement report dated January 1, 1993, reported that the number of CVEOs currently authorized by the legislature is 144. It also stated that local governments (cities and counties) also recruit size and weight enforcement officers to enforce the rules and regulations stipulated in the Revised Code of Washington (RCW) Title 46.

In Washington, cities and counties have the authority to legislate weight permit/fee systems. Cities do not have the power to administer or collect fines from those truckers guilty of violating weight regulations in their municipalities; such responsibilities are assigned to WSP and county CVEOs and District Courts. Although a city cannot collect fines, it can collect permit fees for overloaded trucks if the entire movement is confined to roads within its jurisdiction. When a combination of county and city roads is utilized, the permit fee is paid to

the county, provided the city approves the specific movement. Further information regarding special permits for overweight movements and to whom fees are paid can be found in RCW 46.44.096.

## **STUDY RESULTS**

### **City Road Enforcement**

Overall, cities in Washington do not seem to direct much attention to overloading on their streets and any such attention seems to be associated with safety information rather than road damage. Two municipalities have specific regulations for overweight vehicles operating on their streets, as do several other cities, although to a much lesser degree. However, because cities tend to charge flat fees, their programs may not be capturing the total physical, and therefore financial, damage caused by overweight trucks. For greater efficiency, a permit/fee system could be based on the weight-mile concept (fees are based on excess pounds carried per mile); the state of Washington's permit/fee system is based on such a concept. Moreover, because it is axle weight rather than gross weight that causes a majority of the damage, overload permit fees should be based on additional weight carried on axles and not just on additional gross weight. Systems based on weight-mile and axle weights do require more time and labor than current programs; therefore, accompanying expenses may mean weight control in some cities is just not feasible.

With the exception of Aberdeen (population of 16,600), the cities involved in weight enforcement had larger populations (over 45,000). A large number of residents is associated with a large tax base and thus more money for programs such as law enforcement. Smaller cities may not be able to afford weight control programs because of limited funds and the need for more critical programs. Moreover, the benefits gained from weight enforcement programs

may not be as large in smaller cities as in bigger cities and thus the feasibility of such a program is diminished. Benefit/cost analyses may be useful in assessing whether additional attention to the weight control system in a city's precinct is feasible. Benefit/cost analysis is discussed further in the Evaluative Methods section of this report.

Although the Association of Washington Cities reported there were 13 cities that had their own weight enforcement programs, information obtained through the telephone survey revealed there are only six cities actually directly involved in weight control. These cities are Seattle, Tacoma, Vancouver, Aberdeen, Everett and Bellevue.

Seattle and Tacoma were the most active participants in commercial vehicle weight control. Both cities had programs that required truckers who were utilizing city streets to have validated weight permits. Truckers using state or federal roads and highways are to have licenses issued by Washington State Department of Transportation (WSDOT) for the tonnage they are hauling. In addition, if they plan to operate on city streets, those licenses or permits must be validated by the city, but no additional charges are assessed. If movement is confined solely within city limits, annual or single-trip permits may be purchased from the city for a nominal fee, approximately \$15-\$30, depending on vehicle configuration and the product being hauled.

The city of Vancouver has a permit system for oversize (length and width) and overweight trucks. There is a \$25 flat fee (on single-trips) for all truckers who wish to operate their oversize or overweight vehicles on city streets. Aberdeen and Everett both issue permits for overweight vehicles operating on their roads, but they do not charge fees. Bellevue reported its involvement in weight control is limited to instituting a truck route ordinance that designates 13 streets and the state highway system in the area for truck use.

Bellingham, Longview, Mercer Island, Olympia, Renton, Spokane, and Yakima all reported that they were not directly involved in weight control on roads within their jurisdictions. Weight enforcement in these areas, if carried out, was generally executed by WSP and WSDOT. A complete listing of the 13 cities and the extent of their weight enforcement is presented in Appendix A.

### **County Road Enforcement**

A telephone survey was administered, following the city survey, to determine county participation in weight enforcement. All 39 counties in Washington were contacted, initially through sheriff's departments and then through Public Works, as necessary. The effort dedicated to weight enforcement varied greatly among counties in Washington (Table 1) (see Appendix B for more detail).

### **WSP Enforcement Only**

Twenty counties (51%) relied entirely on WSP to administer weight enforcement in their precincts. Two of the twenty counties (Island and Walla Walla) had no weight enforcement programs at the time of the survey, but anticipated the commencement of such programs by mid-1993. Follow-up phone calls in June 1993 revealed that both of these counties were still attempting to establish their own weight control programs. Walla Walla Sheriff's Department submitted a weight enforcement package in its 1993 budget proposal. The package included a vehicle and portable scales, but funds were not approved. Currently, Walla Walla relies on ordinances and posted regulations as well as the WSP for weight control. Island county has a limited truck inspection program, but no county weight control due to lack of manpower and

scales. Although WSP occasionally enforces limits in the county, overweight trucks basically run unimpeded.

### County Full Enforcement

Eleven counties in the state have full-scale weight enforcement programs: Benton, Clallam, Clark, Grays Harbor, King, Lewis, Pierce, San Juan, Snohomish, Thurston, and Whatcom. Each county owns portable scales and has officers specifically assigned to enforce weight regulations on county (and state) roads.

Most of the CVEOs in these counties are sheriffs' deputies. However, three counties' CVEOs are officers with the sheriff's department who are funded by Public Works, Public Services or the County Road Department, and not the sheriff's office. Four other counties have weight control officers employed and funded solely through Public Works.

Contact and coordination with WSP varies among these eleven counties. Three of these counties work closely with WSP (setting up weight enforcement areas, etc.) while two counties' contacts are limited to training and annual/semi-annual seminars that update rules and regulations pertaining to commercial vehicles. One CVEO works with the Forest Service, WSDOT, and Washington State Utilities and Transportation Commission on weight control in addition to enforcing weight regulations with the local WSP CVEO. One county mentioned a multi-agency force (sheriff's office, WSP, Washington State Utilities and Transportation Commission, and local police agencies) used to set up truck weight enforcement areas. However, that county currently has no contact with WSP regarding weight control.

Table 1. Levels of Weight Enforcement by County.

County	Rely Solely on Washington State Patrol	County Partial Enforcement	County Full Enforcement
Adams	X		
Asotin	X		
Benton			X
Chelan	X		
Clallam			X
Clark			X
Cowlitz	X		
Dayton	X		
Douglas		X	
Ferry	X		
Franklin		X	
Garfield	X		
Grant	X		
Grays Harbor			X
Island	X		
Jefferson	X		
King			X
Kitsap		X	
Kittitas		X	
Klickitat		X	
Lewis			X
Lincoln	X		
Mason		X	
Okanogan	X		
Pacific	X		
Pend Oreille	X		
Pierce			X
San Juan			X
Skagit	X		
Skamania		X	
Snohomish			X
Spokane	X		
Stevens	X		
Thurston			X
Wahkiakum	X		
Walla Walla	X		
Whatcom			X
Whitman	X		
Yakima		X	

### County Partial Enforcement

Douglas, Franklin, Klickitat, Mason and Skamania counties all own portable/semi-portable scales and have officers trained in commercial vehicle weight enforcement. However, their programs are not full-scale. CVEOs in these precincts have duties in addition to weight control, so many tend to weigh trucks only as time allows. Kitsap, Kittitas and Yakima counties do not utilize scales, but still participate somewhat in weight control. For example if officers in Kitsap county see a suspicious truck, they will stop it and ask for a permit. In Kittitas county, truckers are asked their vehicle's gross weight and issued permits, as necessary. However, Kittitas has no direct weight enforcement on roads and no actual weighing takes place. Yakima county's involvement in weight enforcement consists of officers periodically helping WSP at the Rimrock scalehouse. Eight counties (Douglas, Franklin, Kitsap, Kittitas, Klickitat, Mason, Skamania and Yakima) were partially involved in weight enforcement.

### **EVALUATIVE METHODS**

To determine whether certain policies are needed and which are most efficient, judges and legislators often require information regarding the costs and benefits of all possible alternatives. Benefit/cost (B/C) analysis is a technique which provides quantitative guidance to policy makers. Three main criteria are commonly used for decision making in B/C analysis: (1) Maximum Net Present Value Criterion (MNPV); (2) B/C Ratio Criterion (BCR); and (3) Net Present Value Criterion (NPV) (Tietenberg). The MNPV criterion implies that resources should be utilized when the present value of net benefits received is maximized. Of the three analyses, MNPV guarantees an efficient allocation of resources (Tietenberg). The BCR analysis suggests

that a project should be undertaken if the ratio of present value of benefits to costs is greater than one. The NPV suggests a project should be undertaken if the present value of net benefits is greater than zero.

This report suggests certain factors be taken into account when estimating the feasibility of weight control statewide. One factor is the concept of Marginal Benefit (MB) and Marginal Cost (MC). MB is the additional benefit gained from one additional unit of service (in this case, weight enforcement). MC is the cost of an additional unit of service (for manpower, equipment, etc). Maximum efficiency is obtained when the difference between total benefits and total costs is the greatest (Figure 2), or when total benefits exceed total costs by the largest possible amount. However, even the most efficient level of enforcement does not eliminate all overweight shipments.

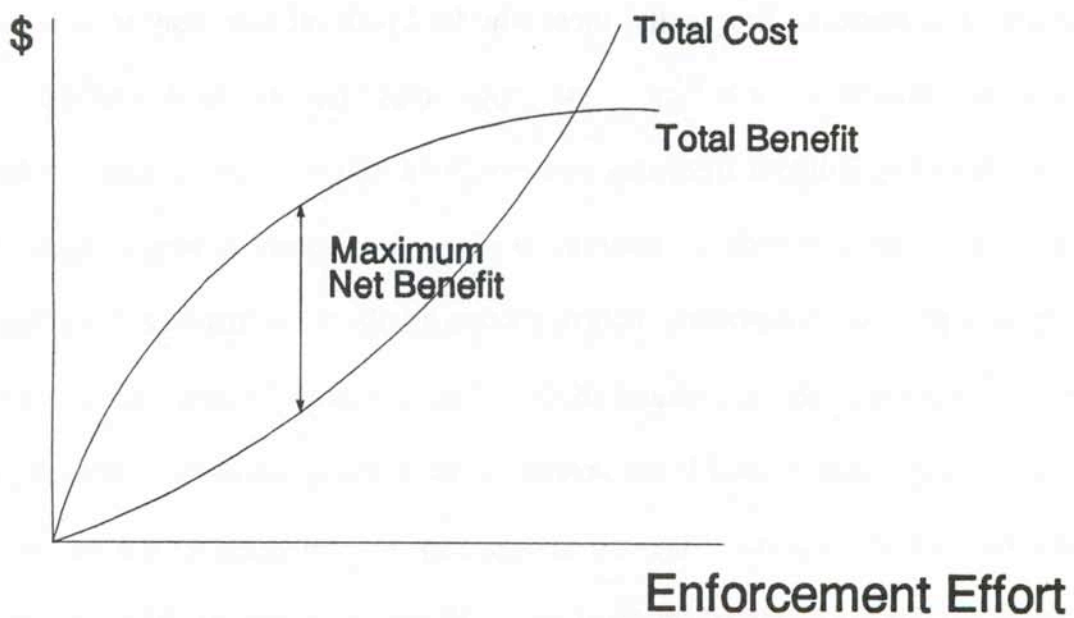
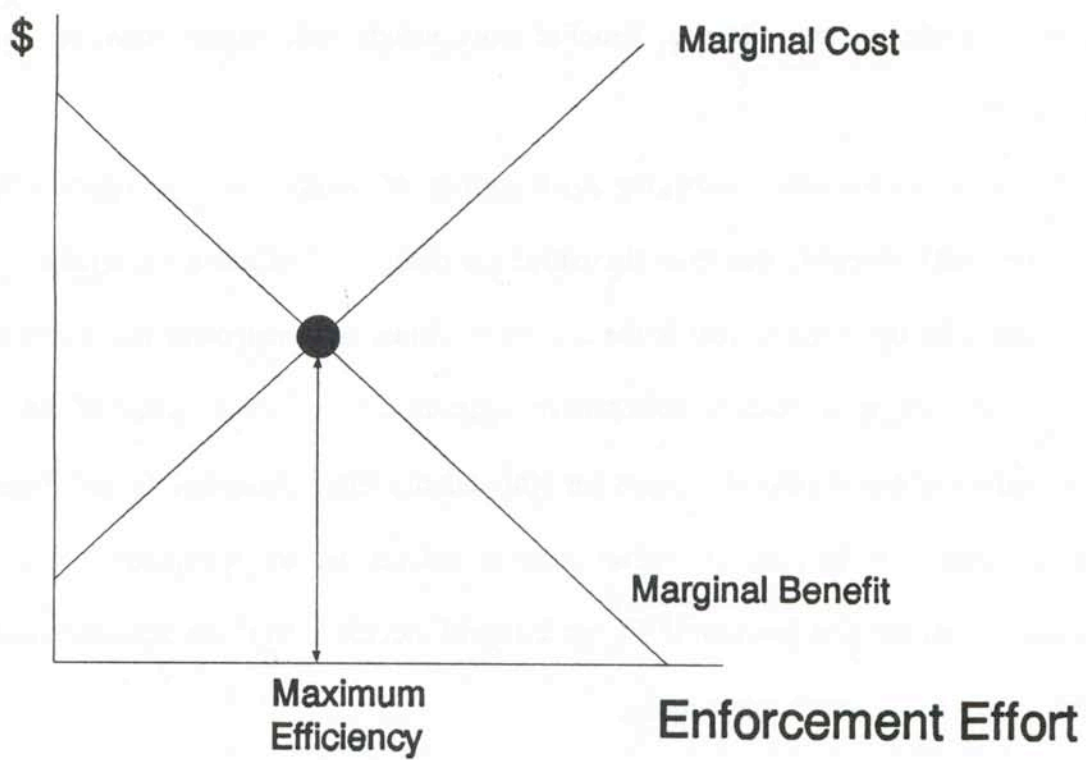
With regard to weight control programs, certain values can be associated with MB and MC. For example:

$$MB = R + F + P$$

where: R = Amount of road damage eliminated through increased enforcement which may discourage truckers to operate illegal overloads  
F = Amount of road (financial) damage captured through fines  
P = Amount of road (financial) damage captured through fees

where: MC = E + M + B + S  
E = Cost of equipment (scales, gasoline)  
M = Cost of manpower  
B = Cost of bookkeeping and miscellaneous cost  
S = Cost of lost sales (gasoline, motels, restaurants) due to traffic bypassing heavily enforced area





**Figure 2.** Enforcement Benefit/Cost Analysis and Efficiency

"R," the damage saved by discouraging truckers from overloading cannot be easily quantified in the market. Hence, benefits from weight enforcement may be significantly understated.

Another factor when estimating the feasibility of weight control is opportunity cost or "the return that is foregone due to an alternative use of an input" (Casavant and Infanger, p. 52). In this case, the opportunity cost is the amount of funds and manpower that could have been used to patrol neighborhoods or construct or upgrade facilities or a myriad of other services performed by law enforcement officers (or other county employees) that might be classified as necessary and feasible projects, rather than to enforce weight regulations on commercial vehicles. Thus, the cost function in Figure 2 should include an "O" for the opportunity cost or benefits foregone in other alternatives.

Another potential factor in testing the feasibility of weight control is an assessment of political base of support. Frequently, those who hold political seats may support laws which they and their constituents can benefit and oppose those they see as detrimental. Those in political office in agricultural areas may vote to reject a weight control program in their county because they, or many of their constituents, would have to adhere to weight regulations while trucking their products to elevators, mills or processing plants. Increased enforcement may not be favored by some in the agricultural sector. Trucking costs increase due to more frequent trips that must be made to haul lower volumes in each individual haul. Although pavements would deteriorate at lower rates, the cost savings may be insufficient for the individual farmer who has to pay for the increased transport costs. Hence, there may be difficulties establishing weight enforcement in rural or agricultural-based counties. Another appropriate element in

marginal cost might be the impact on economic activity in a local region caused by stringent weight enforcement.

To test this possibility, regression analyses were run using weight enforcement levels in counties (none versus partial versus full) as the dependent variable and county population and percent of total county area in farms as independent variables. The analysis used the squared Pearson correlation or  $R^2$ , which indicates the proportion of variance in the dependent variable accounted for by the independent variable. It measures the linear predictability and ranges from zero to one. Although one is optimal for linear relations, an  $R^2$  near zero does not imply there is no relationship between the variables; there may be a non-linear relationship. For simplicity, this report focuses only on linear relationships.

With county population and level of weight enforcement at the county level as variables, an  $R^2$  of 0.172 was generated. This is relatively low, suggesting other relevant variables affecting weight enforcement participation were not included, but when percentages of counties with populations above 50,000 are examined, 56% have full programs, 11% have partial programs and 33% have no weight control programs (Appendix C). Conversely, counties with under 50,000 residents are less likely to have their own weight enforcement programs. Only one county (5%) in this category was fully involved in weight control and only 28% had partial programs. Two-thirds of the less populated counties were not directly involved in weight enforcement, relying on WSP and WSDOT to perform such duties.

Regression analysis was also run using percent of total area of county in farms and level of county weight enforcement as variables. Again, a low  $R^2$  of 0.174 was calculated, indicating farmland as a percent of total area accounts for only 17.4% of the variation in weight control participation. Sixteen Washington counties have at least 50% of their land in farms (Appendix

C). Over two-thirds (69%) of the 16 counties reported having no direct participation in commercial vehicle weight enforcement. Four (25%) of them had partial programs and one (6%) had a full-scale program complete with scales and officers assigned to weight control. Those counties having less than 50% of their area in farms were more apt to have weight enforcement programs; 44% had full programs, 17% had partial programs while 39% were not involved in weight control.

In summary, participation in weight control tends to be more common in larger metropolitan counties and cities. The smaller agricultural communities are not as apt to be active in commercial vehicle weight enforcement. Although numerous reasons may account for that pattern, a prevailing argument would include lack of funding and low priority compared with other law enforcement activities. Counties and cities currently active in weight control may wish to examine their actions and compare the actual benefits gained versus costs incurred since the initiation of their programs. Those precincts not currently involved may wish to analyze possible benefits gained by initiating a weight enforcement program and compare them with projected costs. Adoptions of these programs may prove to be advantageous for selected counties and cities. In all cases, close contact and coordination with the weight enforcement efforts of the WSP appears to be appropriate.

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## APPENDIX A

### SUMMARY OF CITY FEE/PERMIT SYSTEMS

<b>Aberdeen</b>	Issue permits, but no fees are charged.
<b>Bellevue</b>	Have truck route ordinance that designates 13 streets and state highway system for truck use.
<b>Bellingham</b>	All done through WSDOT/State Patrol.
<b>Everett</b>	Have permit system, but no fees are charged.
<b>Longview</b>	Have no permit system.
<b>Mercer Island</b>	Have fee/permit system because of I-90. Have never issued citations or fines. State Patrol is responsible for I-90.
<b>Olympia</b>	All done through WSDOT/State Patrol.
<b>Renton</b>	Do not have any fee/permit system. Done by WSDOT/State Patrol.
<b>Seattle</b>	If truckers are coming off state roads, they are to have a state permit that needs to be validated by the city. If movement is solely within the city, there are single-trip (\$14) or annual permits. There are additional tonnage permits (for garbage trucks, etc.) and nonreducible load permits (for cranes, etc.).
<b>Spokane</b>	All done through the WSDOT/State Patrol.
<b>Tacoma</b>	If truckers are coming off/going to state roads, they will have state permits that must be validated by the city. Same thing applies with county roads and permits. If movement is within the city, there are annual permits which cost approximately \$25 per year and single-trip permits which may cost up to \$30, depending upon cargo type.
<b>Vancouver</b>	Have a permit system for oversize/overload with \$25 flat fee.
<b>Yakima</b>	No permit system within the city. If there is a problem, they contact State Patrol.

## APPENDIX B

### WEIGHT ENFORCEMENT AT THE COUNTY LEVEL

#### **Benton County (Prosser)**

One deputy has a set of portable scales and works weight enforcement on county roads. There is training on weight enforcement with WSP, but otherwise the sheriff's department does not have much contact with the State Patrol.

#### **Clallam County (Port Angeles)**

There is an officer assigned to weight enforcement on county roads. His position is funded through Public Works, but he is also a commissioned officer within the sheriff's department.

Weight enforcement is practiced during the work week. The officer may work with State Patrol or go out by himself and work county routes.

#### **Clark County (Vancouver)**

There are two officers (deputy sheriffs) who are contracted with the sheriff's office to do commercial vehicle enforcement. They work for and are paid through the Public Services department. Ninety percent of their time is to be dedicated to commercial vehicle enforcement.

The officers have a set of jump scales which allows them to weigh trucks on the spot. However, it is often difficult to use jump scales on logging roads or other uneven surfaces because, to be accurate, the scales must be located on an even surface. Truckers' communication through CBs is another obstacle for officers as truck drivers soon find out where officers have their scales.

There are four people in the Clark County Traffic Unit. All have been through the Level 2 inspection with the Oregon DOT. They are qualified to perform walk-around inspections. In October 1992, two officers gained Level 1 inspection status which qualified them to perform under-truck inspections.

#### **Douglas County (Waterville)**

There is a weight control officer with portable scales in the sheriff's department. The program is not a full-scale one, but the officer will go out and weight trucks at random, depending on time available.

#### **Franklin County (Pasco)**

The sheriff's office has a set of portable scales which are usually used by a traffic officer for weight enforcement. There is no traffic officer at the current time (September 1992), but there is an officer licensed to use the scales.

The officer will occasionally work weight enforcement on county roads, but he also has other duties. He only works four days a week, Tuesday through Friday. Weighings are random by officer discretion.

### **Grays Harbor County (Montesano)**

One officer has been assigned to the weight enforcement position for the past four years. He has a combination of duties: weight enforcement and vehicle patrol. He has a set of portable scales and works closely with WSP.

### **Island County (Coupeville)**

Weight enforcement is currently under WSP, but they seldom come out to the island. Although there was no weight enforcement program at the county level at the time of contact, the sheriff's department was planning to start a commercial vehicle enforcement program for equipment around October 1992.

The department is working to have a full-scale commercial vehicle enforcement program by mid-1993. Such a program almost went through this year, but there was no room in the budget to buy scales and the manpower required. The initiation of a weight enforcement program is a very political issue, especially in small counties such as Island County.

### **King County (Seattle)**

There used to be multi-agency forces that would go out and set up truck weight enforcement areas. The sheriff's department used to work with WSP, Washington State Utilities and Transportation Commission and local small police agencies. Now, there is little contact with WSP in weight enforcement, possibly because middle management does not seem to want to work with the county.

There is a weight enforcement program within the sheriff's department. Officers will set up truck enforcement areas two or three times a month. There may be anywhere from four to twelve officers present.

### **Kitsap County (Port Orchard)**

Little weight enforcement is done at the county level. If officers see a suspicious truck, they will stop it and ask for a permit. There is no equipment at the sheriff's office for weighing. There was a road-use investigator with the county, but that position has been eliminated.

### **Kittitas County (Ellensburg)**

No weight enforcement is performed by the sheriff's office. Public Works was thought (by the contact in the sheriff's office) to have a set of jump scales. However, that department reported it has little involvement in weight enforcement. With overlegal loads, truckers are asked their vehicle's total weight and issued permits, if necessary. No actual weighing occurs.

### **Klickitat County (Goldendale)**

There is very little involvement in weight enforcement at the county level. Traffic is not the sheriff department's main priority; they concentrate on crime. The department has a set of portable scales and there is an officer who enjoys weight enforcement so--if time allows--he will go out and weigh trucks.



### **Lewis County (Chehalis)**

There has been a weight enforcement program in Lewis County for the past 15 years. The current CVEO has had training at the state scalehouses. He has a set of portable scales and generally measures weight, height, and length of all commercial vehicles.

He works with the local State Patrol officer and with the Forest Service, WSDOT, WSP Commercial Vehicle Enforcement Section, and Washington State Utilities and Transportation Commission.

He has an interest in performing the Commercial Vehicle Safety Alliance Inspection, but has not received forms from the state. He is certified to perform such inspections (by Oregon DOT), but cannot conduct them without the necessary forms.

### **Mason County (Shelton)**

The sheriff's department has a set of portable scales. There is a road-use deputy who does weight enforcement in addition to other traffic duties. Weight enforcement is not a full-time job. They are mostly concerned about logging trucks on the county roads. The officer occasionally works with WSP.

### **Pacific County (South Bend)**

The sheriff feels weight enforcement is a commendable program which should be implemented in Pacific County, but funds in his district do not allow it. For the past several years the road-use crew has urged the sheriff's department to enforce weight limits, but the department's crew has been cut and they cannot afford the needed manpower; officer priority goes to criminal offenses such as burglary and domestic violence. Weight enforcement is not a priority because it is not a mandated service. It may be feasible if used in conjunction with the traffic unit, provided there were enough officers for backup crew (currently there is not).

WSP usually does not work county roads. If the sheriff requests WSP commercial vehicle enforcement, they will work the road for a day. The sheriff felt it is not worth it because the CVEOs work weekdays from 8:00 a.m. to 5:00 p.m. only, while the first vehicle runs start at 3:00 a.m. Also, scales are set up at one location and do not move; truckers soon take other routes.

Concern was expressed that the WSP's reliance on permanent scales, rather than jump scales, has resulted in a decrease in effectiveness of the overall weight enforcement program.

### **Pierce County (Tacoma)**

The county began its weight enforcement program four years ago. The sheriff's office has portable scales and officers work on state and county roads. Currently, there is a weight enforcement officer who works out of the Public Works Department.

### **San Juan County (Friday Harbor)**

Although there is no weight enforcement done by the sheriff's department (due to lack of equipment), there is a weight enforcement officer at Public Works. He is the weight enforcement officer for the four ferried islands, but has other duties in addition to weight

enforcement. The officer feels they have a quality weight enforcement program in San Juan County. There is a need for weight enforcement, otherwise there would be loads exceeding 100,000 pounds and the roads would deteriorate at an even faster rate than currently.

It is a unique situation in the islands. Off-island traffic is in jurisdiction of State Patrol, so there are usually no problems with those truckers. There are more problems with loggers and gravel trucks traveling within the islands (in-island traffic). However, they tend to discipline each other (in weight) because if not, they know the weight enforcement officer will go out and weigh trucks.

Contact with WSP is minimal. It includes a seminar in eastern Washington every six months that updates officers on new laws and regulations (laws continually change). Also, if the officer cannot apprehend an off-island trucker, he will call WSP and they will detain the truck as it comes off the ferry.

#### **Skamania County (Stevenson)**

There are people with weight enforcement training and portable scales in the sheriff's department. Weight enforcement is not a priority. If there are complaints, officers will go out and weigh trucks, but normally the sheriff's office relies on WSP to enforce weight regulations.

#### **Snohomish County (Everett)**

There is a weight control officer whose main responsibility is weight enforcement on county roads. His position is funded entirely through the County Road Department. He has a set of portable scales and weighs trucks randomly at various sites throughout the county.

#### **Thurston County (Olympia)**

There is a commercial vehicle enforcement officer in Public Works who is on personal contract to enforce weight limits within the county. He is also the president of Washington Association of Commercial Vehicle Enforcement Officers (WACVEO). In addition to weight enforcement responsibilities, the officer has risk management and road emergency duties. He has two sets of scales and weighs trucks at random. He works staggered shifts and may start at 4:00 a.m. or 12:00 p.m.

#### **Walla Walla County (Walla Walla)**

Prior to July 1992, all traffic enforcement on Walla Walla County roads was performed by the State Patrol. Since July, the sheriff's department has been responsible for enforcing rules and regulations on county roads. The sheriff included in his 1993 budget proposal (to be approved) a vehicle and portable scales for weight enforcement on county roads. He has also trained two deputies to work in weight enforcement.

#### **Whatcom County (Bellingham)**

The cities of Bellingham and Ferndale both have a set of scales. A sheriff's deputy also has a set of scales. He works on county and state roads and works with the State Patrol quite closely. Canadian trucks sometimes avoid the state scalehouses by taking back roads, so the officer periodically goes out at night and sets up a scale on those back roads.

**Yakima County (Yakima)**

There is no involvement in weight enforcement from the sheriff's department except periodically on White Pass at Scale 47 (Rimrock scalehouse). Officers may watch the scalehouse if the WSP officer is on vacation, etc. If there is any other weight enforcement, it would be added in with other responsibilities such as traffic accidents and stolen ski equipment.

**Washington counties not mentioned above reported they rely solely on WSP to administer commercial vehicle weight enforcement.**

## APPENDIX C

### COUNTY STATISTICS

Appendix Table C.1. County Population (1991), Percent of Total County Area in Farms, and County Weight Enforcement Levels.

County	Population (thousands)	Percent of Total Land Area in Farms	Weight Enforcement Programs <sup>a</sup>
Adams	13.8	94.8	N
Asotin	17.8	67.4	N
Benton	114.8	59.1	F
Chelan	53.2	61.8	N
Clallam	58.5	2.4	F
Clark	250.3	23.6	F
Cowlitz	4.0	57.8	N
Dayton	83.5	5.1	N
Douglas	27.5	84.8	P
Ferry	6.5	53.9	N
Franklin	38.6	83.1	P
Garfield	2.3	74.4	N
Grant	56.4	64.7	N
Grays Harbor	65.1	3.6	F
Island	62.7	14.0	N
Jefferson	21.6	1.0	N
King	1542.3	4.0	F
Kitsap	196.5	3.8	P
Kittitas	27.4	27.4	P
Klickitat	16.8	58.3	P
Lewis	60.5	7.9	F
Lincoln	8.9	99.9	N
Mason	39.9	1.9	P
Okanogan	34.0	39.7	N

Appendix Table C.1. Continued.

County	Population (thousands)	Percent of Total Land Area in Farms	Weight Enforcement Programs <sup>a</sup>
Pacific	19.2	5.6	N
Pend Oreille	9.2	6.9	N
Pierce	603.8	5.5	F
San Juan	10.7	15.7	F
Skagit	82.8	8.6	N
Skamania	8.5	0.6	P
Snohomish	484.0	6.1	F
Spokane	366.0	54.3	N
Stevens	31.5	33.1	N
Thurston	168.0	12.2	F
Wahkiakum	3.3	8.6	N
Walla Walla	49.3	83.1	N
Whatcom	132.2	9.2	F
Whitman	38.5	98.3	N
Yakima	190.5	58.6	P

Source: Washington State Department of Agriculture, Washington Agricultural Statistics Service. "Washington Agricultural County Data." Olympia, WA, March 1993.

<sup>a</sup>N = No weight enforcement at the county level; P = Partial weight enforcement program at the county level; F = Full weight enforcement at the county level.

## APPENDIX D

### INTERVIEW NOTES

\* Through conversations with county officials it was revealed that enforcing weight limits on county and state roads is not a simple task. Initiating programs in some counties, especially the smaller rural ones, was viewed as almost impossible. It was reported that in some counties, people holding local political offices often make it difficult to obtain funding in some counties because they perceive weight limits as threatening to their area's business/farming operations; hence, requests for funds for such programs are denied.

\* Many counties feel weight enforcement is imperative as roads and bridges are deteriorating at a rapid rate due to overloaded trucks. The road-use crew in one county has been attempting to persuade its sheriff to begin a weight enforcement program for the past several years. The sheriff feels weight control is needed, but his office currently cannot afford the manpower nor the equipment necessary for such a program. Since weight enforcement is not mandated, the service is not given priority. Occasionally the county requests WSP to patrol the area; state officers will generally work county roads for one day, but because they set up scales at one location and work weekdays, truckers soon learn to easily bypass the scales or reschedule/delay their hauls.

\* If there are bypass routes (around permanent scales), overweight truckers will be apt to use them, provided their schedules are not delayed excessively. Several counties' CVEOs reported they set up scales on bypass routes and periodically work staggered shifts to capture

overloaded trucks. However, communication through Citizen Band radios (CBs) is a continuing obstacle for CVEOs as truckers are quickly advised of the areas where CVEOs are present.

\* CVEOs in county offices do appear to be dedicated to weight enforcement. County personnel reported that although some officers have duties in addition to weight enforcement, most enjoy weighing trucks and will perform weight control whenever time allows. Some CVEOs have set up enforcement areas at 3:00 a.m. in order to apprehend truckers hauling illegal excess tonnage. One officer mentioned he has an interest in performing Commercial Vehicle Safety Alliance inspections and, although he is certified to perform the inspections, the required forms have not been made available as yet.

1. The first part of the document is a letter from the author to the editor, dated 10/10/1998. The letter discusses the author's interest in the journal and the possibility of publishing a paper.

2. The second part of the document is a letter from the editor to the author, dated 10/15/1998. The editor responds to the author's letter and discusses the journal's policies and the author's submission.

3. The third part of the document is a letter from the author to the editor, dated 10/20/1998. The author responds to the editor's letter and discusses the author's interest in the journal and the possibility of publishing a paper.