Commute Trip Reduction in Washington:

Base Year Worksite
Characteristics and Programs

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February 1995
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ERRATUM

On Page 18, the formula for potential trips should be

$$POTENTIAL_TRIPS = 5.0 - DAYS_NOT_WORKED - INVALID_RESPONSES$$

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Introduction

Employers in Washington's eight most populous counties are engaged in an effort to reduce their employees' use of single occupant automobiles for commuting. This report documents the status of those employers at the beginning of the Commute Trip Reduction (CTR) program as a basis for evaluating the impacts of the program.

The first section provides a brief exploration of the Washington CTR Law and a history of the first steps in its implementation. The second section presents a summary of the characteristics of the worksites affected by the law. The CTR Law calls for reductions in single occupant vehicle (SOV) commuting and in vehicle miles traveled (VMT). The third section of this report presents baseline measurements of SOV and VMT and goals for reducing them. The fourth section provides summary information on the first year of programs employers planned to implement. The final section very briefly outlines actions the Commute Trip Reduction law calls for between 1995 and 1999.

The Commute Trip Reduction Law

The Washington CTR Law¹ was passed by the legislature in 1991 as part of the Washington Clean Air Act. The law had three purposes - to reduce air pollution, to reduce highway congestion, and to reduce reliance on imported oil. The legislature intended to accomplish these purposes by reducing the number of commute trips made in SOVs.

The CTR law affects only large employers in the state's eight largest counties. It requires each county with population of at least 150,000 to adopt a CTR plan as a county ordinance and to implement its plan. In each of the eight affected counties, the law requires every employer with at least 100 full time employees at a single worksite who arrive at work between 6:00 a.m. and 9:00 a.m. to develop and implement a CTR plan for these employees. The CTR law exempts higher education institutions, seasonal employers, and construction worksites where construction will last less than two years. The law requires every city and town in the eight affected counties that has at least one affected worksite within its boundaries to adopt a CTR plan as a city or town ordinance. The law also requires the Department of General Administration to develop a uniform CTR program for state agency worksites that are affected by the law.

The county, city, and town CTR plans must set goals for reducing the fraction of commute trips that affected employees make in SOVs and their average vehicle miles traveled (VMT) in commuting. The law requires goals for reductions in SOV rates and VMT of at least:

- 15 percent by 1995,
- 25 percent by 1997, and
- 35 percent by 1999.

The CTR law gives counties, cities and towns, and employers considerable leeway in designing CTR programs. To assist them in developing programs, and in revising programs that do not produce the targeted reductions, the CTR law created a support and evaluation structure consisting of a CTR Task Force and a state Technical Assistance Team.

¹ RCW 70.94.521-551, RCW 43.01.220-235, and RCW 43.42.140.

The CTR law specifies two broad areas of responsibility for the CTR Task Force. It is to establish guidelines for implementation of the law by counties, local jurisdictions, and employers. The Task Force is also to evaluate the CTR law and its results and report back to the legislature. The law specifies four areas for the Task Force to evaluate. They are:

- Options for employers not covered by the CTR law, including whether the law should be extended to cover employers with 50 full time employees;
- Progress toward meeting the SOV and VMT reduction goals;
- Benefits and costs of the CTR program, where benefits include costs that would be incurred if there were no program; and
- The need to continue, modify, or terminate the program.

The CTR Task Force is to report and make recommendations to the legislature on December 1, 1995 and December 1, 1999. The Task Force sunsets on July 1, 2000.

The CTR law specifies that the Task Force is to have 23 members consisting of:

- Five state agency heads or their designees, with the Washington State Energy Office (WSEO) director as chair;
- Three transit agency representatives;
- Three county representatives;
- Three city and town representatives;
- Six employer representatives; and
- Three citizens.

The Technical Assistance Team (TAT) is to provide technical assistance to counties, cities and towns, state agencies, and other employers in complying with the CTR law. The TAT also serves as staff to the Task Force. The law specifies that the TAT will be under the direction of WSEO and will include representatives from the Department of Transportation and the Department of Ecology.

The CTR law directs that funds appropriated to implement the CTR law shall go to support the Task Force and the TAT, and to counties, cities, and towns in proportion to the number of affected worksites in each jurisdiction.

Task Force Actions So Far

The CTR Task Force held its first meeting October 4, 1991. The Task Force divided itself into three subcommittees to begin developing guidelines for implementing the CTR law. One subcommittee developed a model CTR ordinance. Another developed model programs and addressed parking issues and the training of Employee Transportation Coordinators (ETCs) for each worksite. The third subcommittee defined methods for measuring SOV and VMT rates and developed workplans for evaluating the CTR process. The Task Force and subcommittees developed draft implementation guidelines which the Task Force approved on February 28, 1992.

The Task Force presented the draft guidelines at a series of workshops for employers, local jurisdictions, and the general public around the state in March 1992. In April and May of 1992, the Task Force held comment and testimony sessions and accepted 117 written comments. The Task Force revised the draft guidelines in response to the public comments and adopted the final implementation guidelines on June 5, 1992.

Following adoption of the guidelines, the Task Force continued to meet quarterly, and the subcommittees met frequently to discuss issues including training, evaluation, survey development, program reporting forms, consistency across jurisdictions, and legislative issues. During this period, several original Task Force members left the group, and the Governor appointed replacements as specified in the CTR law.

At its October 1993 meeting, the Task Force turned its attention to the task of evaluating the CTR law for the legislature. The Task Force instructed the staff to develop a new committee structure, and in April 1994, the Task Force restructured itself into three subcommittees: the Impact Subcommittee, the Process Subcommittee, and the Policy Subcommittee.

Each new subcommittee is responsible for implementing one or more of the evaluation workplans. The Impact Subcommittee is responsible for evaluating SOV and VMT goal attainment and attainment of the policy goals of reduced energy consumption, reduced air pollution, and reduced congestion. The Process Subcommittee is evaluating participation, compliance, consistency across jurisdictions, technical assistance, training, and promotion. The Policy Subcommittee is evaluating potential modifications to the CTR law and alternative means of achieving the law's policy goals.

The subcommittees plan to complete their workplans and present preliminary reports to the Task Force as a whole by July 1995. The Task Force will make a comprehensive report to the legislature in December 1995.

State, County, and Local Support to Employers

After examining the experiences of other states, the Task Force concluded that a comprehensive training program would be vital to successful implementation of the CTR law. In the Spring of 1992, WSEO contracted with a consultant to develop five standard training courses. These courses had different target audiences and covered different aspects of the CTR program. An orientation course for local governments and employers was developed to familiarize them with the law and gain their commitment to the CTR program. A Basic CTR Training course introduced the CTR law, the Guidelines developed by the Task Force, and procedures for implementing the law at the local level. The Task Force requires this course as part of the certification process for local officials who will train others or review employers' CTR programs. Persons wanting to be certified by the Task Force to train others must complete an Instructor Training Course. Another course prepares program reviewers to review employer programs and annual progress reports. The Task Force requires program reviewers to pass a certification exam. ETC training provides worksite ETCs with the skills to develop, manage, and evaluate an effective CTR program.

All of these courses were conducted early in 1993 to produce a core group of trained CTR instructors. The trained local jurisdiction representatives conducted locally customized ETC training sessions throughout the remainder of 1993. The TAT coordinated the program reviewer and instructor training courses.

The eight counties affected by the CTR law formed an eight-County Coordinating Group in September 1992. This group has met regularly to share information and discuss issues relating to the implementation of the CTR law. In its first year, the eight-County Group discussed the mechanics of the employee survey, the role of the counties in CTR and their relationships with local jurisdictions, the adoption of local CTR ordinances and plans, and outreach to employers.

The eight-County Coordinating Group also provides a forum for the county coordinators to provide information to the TAT.

This Report in Context

This report has three functions:

- It shows the pre-CTR situation, particularly SOV rates and VMT, as a basis for evaluating the impacts of the program.
- It provides a catalog of program elements that employers planned to implement in the first year of the CTR program.
- It provides information on differences in pre-CTR commuting behavior that may be useful in designing and implementing CTR programs.

During an eighteen month period in 1993 and 1994, affected employers developed CTR programs. Employers provided two types of information to their local jurisdictions, the counties and the state. The first was an initial program description. In most cases, employers provided their program description on a form developed by the TAT and evaluation staff or on one of several forms designed by counties. Some employers only provided narrative descriptions. The initial program descriptions provided varying levels of detail about the worksite and the employer. The second type of information was on employee commuting behavior. In most cases, employers administered a survey developed under the guidance of the Task Force. A few employers provided equivalent information collected in another way.

Local jurisdictions set goals for SOV and VMT reductions based either on the initial survey results or on modeled estimates of initial SOV and VMT. A second employee survey is being administered during late 1994 and early 1995. This second survey will be used to determine whether the goals for 1995 have been met. The survey process will be repeated to track progress toward the 1997 and 1999 goals.

This report is based on the first year of employer program descriptions and employee surveys. It does not present any information on the results of the CTR program. The first year's results will be presented in the Task Force's report to the legislature in December 1995. The report to the legislature will document whether goals for 1995 were met. An interim report, planned for the Spring of 1995, will analyze the impact of worksite and employee characteristics on employee commute mode choices. That report will provide a foundation for the analysis of the impacts of CTR programs to be presented in the report to the legislature.

Employer and Worksite Descriptions

Eight counties in Washington currently have populations above the threshold of 150,000 in the CTR law. The eight affected counties are shown in Figure 1.

The information in this report is drawn from two sources: employers' initial program descriptions and employee surveys. Employer program descriptions provided information about the worksite and the employer's CTR program. Employee surveys asked about commuting behavior. These two data sources cover slightly different sets of employers and employees. In addition, the employer program descriptions followed at least six different shared formats, and some were idiosyncratic. Because of this, information that was collected about some worksites was not collected about others. Throughout this report, employers' responses to questions will be accompanied by the number asked to provide the information.

Table 1 shows the number of affected employers in each county, the number of employer reports in WSEO's database, and the number of employers represented in the employee survey database. The numbers differ for several reasons. Some worksites completed program description forms even though they fell under the 100 full time employee cutoff or had been granted an exemption by their local jurisdiction. Some program descriptions have not yet been recorded in WSEO's database. Not all affected worksites surveyed their employees, and some worksites surveyed their employees but were not required to file a program description.

Table 1
Affected Worksites, Program Descriptions, and Employee Surveys in Eight Counties

County	Affected, Non-Exempted Worksites	Program Descriptions in WSEO Database	Worksites That Surveyed	Surveys Returned
Clark	41	41	42	12,440
King	477	487	340	77,918
Kitsap	23	18	32	18,401
Pierce	82	71	85	23,927
Snohomish	50	44	51	16,017
Spokane	64	65	77	20,434
Thurston	59	66	104	18,294
Yakima	23	15	25	4,009
Total	819	807	756	191,440

SOV and VMT reduction goals are set for zones with similar characteristics, such as population and employment density. The eight counties are divided into twenty-six zones. These zones are shown in Figures 2 and 3.

Figure 1

Figure 2

Figure 3

Key For Figures 2 And 3

County.	Zone Name	Map Key
Clark	Clark County Zone 1 (Urban)	Z1
Clark	Clark County Zone 2 (Non-Urban)	Z2
King	North King County	Z1
King	North Seattle	Z2
King	North Central Seattle	Z3
King	Central Seattle	Z4
King	Seattle Central Business District	Z5
King	South Seattle (Split Zone)	Z6
King	Duwamish	Z7
King	East King County	Z8
King	Bellevue Central Business District	Z9
King	South King County	Z10
King	Rural King County	Z11
Kitsap	Kitsap County Zone	Z1
Pierce	Central Pierce County Zone (Tacoma-Fife Zone)	Z1
Pierce	Rural Pierce County Zone (Outer County)	Z2
Snohomish	Rural Snohomish County	Z1
Snohomish	Southwest Snohomish County Zone	Z2
Snohomish	Central Snohomish County Zone	Z3
Spokane	Spokane County Zone 1	Z1
Spokane	Spokane County Zone 2	Z2
Spokane	Spokane County Zone 3	Z3
Thurston	Thurston County Zone 1	Z1
Thurston	Thurston County Zone 2	Z2
Yakima	Yakima County Zone 1 (within Yakima city limits)	Z1
Yakima	Yakima County Zone 2 (outside Yakima city limits)	Z2

Table 2 shows the same information as Table 1 broken out by CTR zones.

Table 2
Affected Worksites, Program Descriptions, and Employee Surveys in CTR ZONES

Zone Name	Affected, Non-Exempted Worksites	Program Descriptions in WSEO Database	Worksites That Surveyed	Surveys Returned
Clark County Zone 1 (Urban)	31	32	33	9,794
Clark County Zone 2 (Non-Urban)	10	9	9	2,646
North King County	6	6	6	1,415
North Seattle	22	24	14	3,271
North Central Seattle	32	35	29	6,182
Central Seattle	31	32	22	5,408
Seattle Central Business District	105	105	74	22,509
South Seattle (Split Zone)	15	13	7	2,150
Duwamish	32	33	24	4,008
East King County	94	97	67	12,374
Bellevue Central Business District	12	13	7	1,619
South King County	113	118	82	17,924
Rural King County	11	11	8	1,058
Kitsap County Zone	23	18	32	18,401
Central Pierce County Zone (Tacoma-Fife Zone)	55	53	57	14,594
Rural Pierce County Zone (Outer County)	27	18	28	9,333
Rural Snohomish County	7	5	6	1,187
Southwest Snohomish County Zone	19	14	16	5,269
Central Snohomish County Zone	28	25	29	9,561
Spokane County Zone 1	28	29	33	9,380
Spokane County Zone 2	26	24	29	6,409
Spokane County Zone 3	10	12	15	4,645
Thurston County Zone 1	27	37	35	7,682
Thurston County Zone 2	32	29	46	8,701
Yakima County Zone 1 (within Yakima city limits)	12	9	13	2,516
Yakima County Zone 2 (outside Yakima city limits)	11	33	12	1,493
Unknown			23	1,911

Table 3 shows the number of worksites with different numbers of affected employees in each of the eight counties. Most affected employers are relatively small. Eighty-five percent of affected worksites have 500 or fewer employees. Fifty-four percent have 200 or fewer affected employees.

Table 3
Size Distribution of Employers

County	<500	501-1000	1001-1500	1501-2000	2001-2500	2501-3000	3001-3500	3501-4000	4001-4500	4501-5000	>5000	# Reporting Affected Employees
Clark	34	5	1	0	0	0	0	0	0	0	0	40
King	287	31	6	3	2	3	1	1	0	0	4	338
Kitsap	14	4	0	0	0	0	0	0	0	0	0	18
Pierce	60	8	1	0	0	0	0	1	0	0	1	71
Snohomish	33	6	2	0	0	0	0	0	0	0	1	42
Spokane	51	8	0	2	0	0	0	0	0	0	0	61
Thurston	59	2	2	1	0	0	0	0	0	0	0	64
Yakima	11	1	0	0	0	0	0	0	0	0	0	12
Total	549	65	12	6	2	3	1	2	0	0	6	646

Table 4 shows the number of employees reported by different size employers in each county. The 85 percent of worksites with 500 or fewer affected employees account for only 39 percent of affected employees. The eight largest worksites are one percent of the worksites but account for 28 percent of affected employees.

Table 4
Distribution of Number of Employers by Size of Employer

County	<500	501-1000	1001-1500	1501-2000	2001-2500	2501-3000	3001-3500	3501-4000	4001-4500	4501-5000	>5000	Number Reporting Affected Employees
Clark	6,519	3,598	1,209	0	0	0	0	0	0	0	0	11,501
King	53,751	21,428	8,029	5,599	4,144	8,544	3,150	3,852	0	0	28,303	134,693
Kitsap	2,627	2,286	0	0	0	0	0	0	0	0	0	4,929
Pierce	12,302	5,932	1,114	0	0	0	0	3,825	0	0	16,000	39,865
Snohomish	7,482	4,288	2,488	0	0	0	0	0	0	0	23,982	38,230
Spokane	10,548	5,773	0	3,644	0	0	0	0	0	0	0	21,025
Thurston	11,387	1,670	2,498	1,750	0	0	0	0	0	0	0	17,107
Yakima	2,344	770	0	0	0	0	0	0	0	0	0	2,864
Total	106,960	45,745	15,338	10,993	4,144	8,544	3,150	7,677	0	0	68,285	270,214

Table 5 shows the CTR program descriptions filed in each county by different types of firms. The largest category of employers is government agencies. There are two reasons for this: one is that government employees tend to be concentrated in large worksites, particularly in Thurston County. The other is that every city and town with an affected employer within its boundaries is automatically an affected employer, even if it would not otherwise meet the requirements of the CTR law. Manufacturing is the second most common category of worksite, while construction is the least common, with only one affected employer. There may be other construction worksites with more than 100 employees, but the CTR law exempts them unless construction will last more than two years.

Table 5
Distribution of Worksites by Industry

	Clark	King	Kitsap	Pierce	Snohomish	Spokane	Thurston	Yakima	Total
Agriculture & food processing	1	13	0	2	0	0	3	3	22
Non-metallic minerals & their products	0	2	0	1	1	2	0	0	6
Construction	0	0	1	0	0	0	0	0	1
Textiles & clothing	2	4	0	2	1	0	0	0	9
Wood products, paper & printing	10	12	1	7	3	1	0	0	34
Chemicals	0	9	0	2	0	2	0	0	13
Primary metals	1	1	0	2	0	3	0	0	7
Manufacturing	9	70	2	4	10	13	1	2	111
Transportation & communication	5	49	0	12	7	4	4	1	82
Wholesale trade	0	8	0	1	0	1	0	0	10
Retail trade	0	26	0	0	1	1	0	0	28
Finance, insurance & real estate	1	49	0	4	3	7	2	0	66
Health care	3	35	3	12	3	12	2	2	72
Education	1	18	1	6	1	7	1	1	36
Other services	0	56	3	2	3	3	0	1	68
Government	8	73	7	14	11	9	53	5	180
Unknown	0	62	0	0	0	0	0	0	62

Research has shown that drive-alone commuting is more prevalent at worksites with free or low cost parking and a high ratio of employee parking spots to employees. Table 6 shows the fraction of worksites reporting that they provided employee parking. Most employers provide parking at the worksite. A smaller number provide parking in a lot or garage away from the worksite. Clark County worksites were not asked to supply this information, but five worksites reported it without prompting.

Table 6
Worksites Reporting Employee Parking

County	Employer Provided Parking		Onsite Employee Parking		Offsite Employee Parking	
	Sites	Percent	Sites	Percent	Sites	Percent
Clark	5	12.2	5	12.2	0	0
King	380	78.0	371	76.2	90	18.5
Kitsap	16	88.9	15	83.3	2	11.1
Pierce	67	94.4	66	93.0	13	18.3
Snohomish	40	90.9	40	90.9	7	15.9
Spokane	62	95.4	62	95.4	9	13.8
Thurston	52	78.8	50	75.8	12	18.2
Yakima	10	66.7	10	66.7	3	20.0
Total	632	78.3	619	76.7	135	16.7

Table 7 shows the average number of employer provided parking spaces per employee reported in each of the counties. Clark County is not shown because of the unreported data.

Table 7
Parking Spaces per Employee

County	Parking Spaces Per Affected Employee	Number of Worksites
King	0.90	340
Kitsap	0.73	18
Pierce	0.67	71
Snohomish	1.08	42
Spokane	1.32	60
Thurston	1.14	64
Yakima	0.69	12

Table 8 shows the range of employer provided parking spaces per employee. Again, most of the zeros for Clark County are probably sites that did not report parking they have rather than sites with no parking. Except in King County, employers that provide parking for their employees tend to provide at least three stalls for every four employees. Not all employees are at a worksite during the same time every day. Some are on vacation, out sick, or on business trips, and some may work shifts other than eight-to-five. Employers generally can provide a parking space for every employee at work on any day with 75 to 80 percent as many stalls as employees. Most employers outside King County appear to be providing parking for all employees. Only in King County do many employers appear to provide parking for only a fraction of their employees.

Table 8
Employer Provided Parking Spaces Per Employee

County	Zero	0 to 1/4	1/4 to 1/2	1/2 to 3/4	3/4 to 1	1 to 1&1/2	>1&1/2
Clark	35	0	0	1	0	1	3
King	76	34	45	52	38	53	42
Kitsap	2	3	1	0	5	5	2
Pierce	4	2	4	4	17	25	15
Snohomish	3	1	1	2	7	18	10
Spokane	2	1	4	5	17	15	16
Thurston	13	5	2	10	10	15	9
Yakima	2	5	0	1	0	1	3

Table 9 shows the availability of public parking for employees. This includes parking on the street and in lots and garages not operated by the employer. King County is the only one where more worksites report nearby pay public parking than nearby free public parking. The lower fraction of sites in Yakima and Snohomish counties reporting nearby public parking may indicate that affected sites in these counties are less likely to be located near city centers. Again, Clark County is not shown because employers there were not asked to provide this information.

Table 9
Public Parking Near Affected Worksites

County	Sites With Public Parking	Percent of Sites With Public Parking	Sites With Free Public Parking	Percent of Sites With Free Public Parking	Sites With Pay Public Parking	Percent of Sites With Pay Public Parking
King	334	68.6	120	24.6	217	44.6
Kitsap	12	66.7	11	61.1	3	16.7
Pierce	38	53.5	37	52.1	14	19.7
Snohomish	17	38.6	16	36.4	4	9.1
Spokane	42	64.6	38	58.5	17	26.2
Thurston	52	78.8	46	69.7	23	34.8
Yakima	2	13.3	1	6.7	1	6.7
State	497	61.6	269	33.3	279	34.6

The employer reporting forms generally asked about worksite features that can encourage commuters not to drive alone. These include transit service, sidewalks or bike trails, bicycle parking, clothes lockers and showers, and services such as restaurants and shopping within walking distance. Table 10 shows the fraction of worksites that reported a bus stop or ferry terminal within 1/4 mile. Only a fraction of Pierce County and Yakima County worksites reported this information. With less than half of the worksites reporting, the Yakima percentage is suspect, but Yakima County does have a number of affected worksites outside the urban area. Thurston County is at the other extreme, with few affected worksites outside the Olympia-Lacey-Tumwater urban area.

Table 10
Transit Service to Affected Worksites

County	Bus or Ferry in 1/4 Mile	Worksites Reporting	Percent Bus or Ferry in 1/4 Mile
Clark	28	31	90.3
King	379	442	85.7
Kitsap	14	17	82.4
Pierce	8	11	72.7
Snohomish	34	42	81.0
Spokane	57	61	93.4
Thurston	60	62	96.7
Yakima	5	12	41.7
State	585	678	86.3

Table 11 shows accessibility by sidewalk, and Table 12 shows proximity to a bicycle trail or streets with marked bicycle lanes. The low number of worksites reporting this information makes the Yakima County and Pierce County percentages suspect. In the other counties, the fraction of worksites with sidewalks is probably a rough indicator of the split between urban and rural worksites.

Table 11
Worksites Reporting Sidewalk Access

County	Sites With Sidewalk in 1/4 Mile	Worksites Reporting	Percent of Sites With Sidewalk in 1/4 Mile
Clark	21	27	77.8
King	405	487	83.2
Kitsap	17	18	94.4
Pierce	6	11	54.5
Snohomish	33	42	78.6
Spokane	49	64	76.6
Thurston	59	65	90.8
Yakima	5	5	100.0
State	591	719	82.2

Less than 1/4 of the worksites reported whether there were bike lanes or bike trails nearby. No sites reported this information in King County. Only eight reported it in Pierce County, and only two in Yakima County. Clark County employers were given the opportunity to provide this information but may not have been prompted for it. Even if the figures for the other counties are reliable, there is little basis for cross county comparisons. The main lesson from this table is that a much lower fraction of worksites is served by dedicated bicycle lanes than by transit or sidewalks.

Table 12
Worksites Reporting Nearby Bike Lanes

County	Sites With Bike Trail in 1/4 Mile	Worksites Reporting	Percent of Sites With Bike Trail in 1/4 Mile
Clark	2	13	15.4
Kitsap	7	17	41.2
Pierce	3	8	37.5
Snohomish	10	41	24.4
Spokane	6	13	46.2
Thurston	29	62	46.8
Yakima	2	2	100.0
State	59	156	37.8

Table 13 shows the fraction of sites reporting bicycle parking. It appears that about 40 percent of affected worksites do not provide even minimal bicycle parking. Clark County employers did not report this information.

Table 13
Worksites Reporting Bicycle Parking

County	Sites With Bike Parking	Total Sites	Percent of Sites With Bike Parking
King	297	487	61.0
Kitsap	10	18	55.6
Pierce	42	63	66.7
Snohomish	19	42	45.2
Spokane	55	65	84.6
Thurston	40	65	61.5
Yakima	12	14	85.7
State	475	754	63.0

Table 14 shows the fraction of sites reporting that they have clothes lockers; and Table 15 shows the fraction of sites reporting that they have showers. No more than half of worksites provide shower and changing facilities that can be used by employees who bicycle or walk to work.

Table 14
Worksites Reporting Employee Lockers

County	Sites With Lockers	Total Sites	Percent of Sites With Lockers
King	220	487	45.2
Kitsap	5	18	27.8
Pierce	24	71	33.8
Snohomish	18	44	40.9
Spokane	43	65	66.2
Thurston	30	66	45.5
Yakima	7	15	46.7
State	348	766	45.3

Table 15
Worksites Reporting Employee Showers

County	Sites With Showers	Total Sites	Percent of Sites With Showers
King	261	487	53.6
Kitsap	8	18	44.4
Pierce	30	71	42.3
Snohomish	20	44	45.5
Spokane	45	65	69.2
Thurston	33	66	50.0
Yakima	6	15	40.0
State	403	766	52.6

Employees who must drive to run errands, to go shopping, or to go out for lunch, are more likely to commute in SOVs. Tables 16 and 17 show the fractions of worksites that reported having restaurants or shopping within 1/4 mile. Both fractions are lowest in Yakima, Clark, and Snohomish Counties. More worksites have restaurants nearby than have shopping nearby.

Table 16
Worksites Reporting Restaurants Nearby

county	Sites With Restaurant in 1/4 Mile	Total Sites	Percent of Sites With Restaurant in 1/4 Mile
Clark	22	41	53.7
King	354	487	72.7
Kitsap	13	18	72.2
Pierce	51	71	71.8
Snohomish	26	44	59.1
Spokane	40	65	61.5
Thurston	52	66	78.8
Yakima	5	15	33.3
State	563	807	69.8

Table 17
Worksites Reporting Shopping Nearby

County	Sites With Shopping in 1/4 Mile	Total Sites	Percent of Sites With Shopping in 1/4 Mile
Clark	16	41	39.0
King	264	487	54.2
Kitsap	11	18	61.1
Pierce	36	71	50.7
Snohomish	21	44	47.7
Spokane	37	65	56.9
Thurston	35	66	53.0
Yakima	4	15	30.8
State	424	807	52.5

When worksites are clustered together, employees have a larger pool of potential ride-sharing partners. Denser areas also can justify better transit service. Table 18 shows the fraction of worksites that report having other employers located within 1/4 mile. Worksites in King County and Yakima County did not report this information. The Clark County data may be under-reported. Most affected worksites in the other counties do have other employers nearby.

Table 18
Worksites Near Other Employers

County	Sites With Other Employers in 1/4 Mile	Number of Sites Reporting	Percent of Sites With Other Employers in 1/4 Mile
Clark	17	40	42.5
Kitsap	15	18	83.3
Pierce	58	65	89.2
Snohomish	35	43	81.4
Spokane	33	50	66.0
Thurston	58	66	87.9
State	216	282	76.6

Employees who do not work the day shift, who may have to work at more than one worksite, who are required to use their personal car for work related travel, or who are on call may find it difficult to commute other than by SOV. Table 19 Shows the fraction of worksites reporting that they have multiple shifts.

Table 19
Worksites with Multiple Shifts

County	Sites With Multiple Shifts	Number of Sites Reporting	Percent of Sites With Multiple Shifts
Kitsap	13	18	72.2
Pierce	56	70	80.0
Snohomish	31	43	72.1
Spokane	45	63	71.4
Thurston	37	66	56.1
State	182	260	70.0

Table 20 Shows the fraction of worksites reporting that some employees were required to work at more than one worksite.

Table 20

Sites Where Some Employees also Work at Other Sites

County	Sites Where Employees Work at Multiple Sites	Number of Sites Reporting	Percent Work at Multiple Sites
Kitsap	9	18	50
Pierce	24	70	34.3
Snohomish	22	43	51.2
Spokane	23	63	36.5
Thurston	30	66	45.5
Yakima	3	5	60.0
State	111	265	41.9

Table 21 shows the fraction of worksites reporting that some employees were required to use their own vehicles for work trips.

Table 21

Sites Where Employees Need Own Car

County	Sites Where Employees Need Personal Vehicles for Work Trips	Number of Sites Reporting	Percent of Sites Where Employees Need Own Car
Kitsap	10	18	55.5
Snohomish	30	43	69.0
Spokane	37	62	59.7
Thurston	49	65	75.4
Yakima	2	3	66.7
State	109	147	74.2

Table 22 shows the fraction of worksites reporting that some employees are on call.

Table 22

Worksites With Employees On Call

County	Sites With Employees on Call	Number of Sites Reporting	Percent of Worksites With Employees on Call
Clark	0	40	0
King	0	5	0
Kitsap	16	18	88.9
Pierce	1	60	1.7
Snohomish	29	42	69.0
Spokane	49	62	79.0
Thurston	43	65	66.2
Yakima	1	2	50.0
State	139	294	47.3

Employers were not asked how many affected employees worked at other sites, need their own car for work or are on-call. At most sites, they will make up only a fraction of the workforce.

SOV and VMT Rates

The CTR law specifies that the substantive goals of the CTR program are to be reductions in SOV and VMT rates. The law also provides direction on how SOV and VMT rates are to be calculated, including credits for trips avoided and non-motorized trips.

Definitions and Calculation Methods

Initial SOV and VMT rates for the CTR zones were calculated from employee survey results or from modeled travel behavior based on information from the U.S. Census of Population. SOV and VMT rates for 1995, 1997, and 1999 will be calculated from survey results or from equivalent data submitted by employers. The Task Force developed formulas for calculating SOV and VMT from the employee surveys.

SOV

The Task Force developed two formulas for calculating SOV, one to be used for worksites with survey response rates of at least 70 percent, and the other to be used for worksites with lower response rates. Both formulas are based on survey responses to trips to work on Monday through Friday of the week preceding the survey. The first formula is:

$$SOV1 = \frac{SOV_TRIPS - CREDITS}{POTENTIAL_TRIPS}$$

where

$$CREDITS = .20 * (DAYS_TELECOMMUTED + DAYS_BICYCLED + DAYS_WALKED + COMPRESSED_WORK_WEEK_DAYS_OFF)$$

and

$$POTENTIAL_TRIPS = 5.0 - COMPRESSED_WORK_WEEK_DAYS_OFF$$

This formula is the fraction of commute trips made in SOVs less the 20 percent credit for trips avoided and non-motorized trips.

For worksites that do not have a 70 percent response rate on the employee survey, SOV is to be calculated as:

$$SOV2 = SOV1 * (RESPONSE_RATE + .30) + 1.0 * (.70 - RESPONSE_RATE)$$

This combination of formulas assigns the measured worksite average SOV to non-respondents as long as they are 30 percent of the workforce or less. If more than 30 percent of employees at a worksite did not return surveys, the excess over 30 percent are assigned an SOV rate of 1.0.

VMT

The task force also developed two formulas for calculating VMT. VMT is based on trip distance multiplied by number of trips for which the commuter is responsible. One formula uses commute trip distances reported on the employee surveys. The other uses the zone average commute trip distance. The formulas are:

$$VMT1 = ((SOV_TRIPS + (CARPOOL_TRIPS / OCCUPANCY) - CREDITS) / POTENTIAL_TRIPS) * (HOME_TO_WORKSITE_MILES / SURVEY_RESPONSES)$$

Miles commuted in a carpool are divided up among the occupants, and miles commuted in a vanpool or bus are not counted. The formula includes a 20 percent credit for trips avoided or taken with a non motorized mode. The second formula is:

$$VMT2 = ((SOV_TRIPS + (CARPOOL_TRIPS / OCCUPANCY) - CREDITS) / POTENTIAL_TRIPS) * ZONE_AVERAGE_COMMUTE_TRIP_MILES$$

Pre-CTR SOV and VMT

SOV and VMT can be calculated for each worksite that surveyed employees based on the commute trip modes and trip lengths reported in the surveys. Table 23 shows the resulting weighted average SOV rate for each zone, where each worksite's rate is weighted by the number of employees. This calculation of SOV includes the credits for telecommuting, compressed work weeks, and non-motorized commuting.

Table 23
Average SOV Rates

Zone Name	Weighted Average of SOV1	Min of SOV1	Max of SOV1	Worksites
Seattle Central Business District	0.331	0.102	0.703	74
Central Seattle	0.501	0.149	0.737	22
Kitsap County Zone	0.585	0.203	0.971	32
Bellevue Central Business District	0.590	0.408	0.77	7
North Central Seattle	0.601	0.156	0.898	29
Duwamish	0.669	0.294	0.918	24
North Seattle	0.718	0.631	0.861	14
South Seattle (Split Zone)	0.741	0.649	0.887	7
North King County	0.755	0.611	0.908	6
Thurston County Zone 1	0.765	0.65	0.933	35
Spokane County Zone 3	0.772	0.447	0.992	15
Spokane County Zone 1	0.776	0.521	0.899	33
Yakima County Zone 2 (outside Yakima city limits)	0.778	0.558	1.00	12
South King County	0.803	0.00	0.948	82
East King County	0.804	0.527	0.948	67
Thurston County Zone 2	0.811	0.69	0.961	46
Clark County Zone 1 (Urban)	0.812	0.643	0.936	33
Central Snohomish County Zone	0.818	0.655	0.964	29
Central Pierce County Zone (Tacoma-Fife Zone)	0.828	0.512	0.987	57
Clark County Zone 2 (Non-Urban)	0.836	0.709	0.922	9
Rural Pierce County Zone (Outer County)	0.840	0.597	0.963	28
Yakima County Zone 1 (within Yakima city limits)	0.849	0.756	0.948	13
Southwest Snohomish County Zone	0.862	0.744	0.92	16
Rural King County	0.868	0.749	0.969	8
Spokane County Zone 2	0.881	0.634	0.951	29
Rural Snohomish County	0.889	0.813	0.939	6

Table 24 shows the distribution of worksite SOV rates within each zone. Zones are listed in order of increasing average SOV rate.

Table 24
Worksite SOV Rates

Zone Name	0 to .10	.10 to .20	.20 to .30	.30 to .40	.40 to .50	.50 to .60	.60 to .70	.70 to .80	.80 to .90	.90 to 1.00
Seattle Central Business District		10	24	17	12	7	3	1		
Central Seattle		1	1	6	4	2	3	5		
Kitsap County Zone			2	2			2	8	12	6
Bellevue Central Business District					1		1	5		
North Central Seattle		1		1	1	8	10	4	4	
Duwamish			1	1	1	2	5	10	3	1
North Seattle							3	7	4	
South Seattle (Split Zone)							1	4	2	
North King County							1	2	1	2
Thurston County Zone 1							3	20	11	1
Spokane County Zone 3					1		3	6	4	1
Spokane County Zone 1						2	6	9	16	
Yakima County Zone 2 (outside Yakima city limits)						1	1	2	4	4
South King County	1			2		2	7	21	36	13
East King County						2	2	22	32	9
Thurston County Zone 2							1	19	20	6
Clark County Zone 1 (Urban)							2	7	17	7
Central Snohomish County Zone							4	4	16	5
Central Pierce County Zone (Tacoma-Fife Zone)						1	3	11	27	15
Clark County Zone 2 (Non-Urban)								3	3	3
Rural Pierce County Zone (Outer County)						1	1	3	16	7
Yakima County Zone 1 (within Yakima city limits)								1	9	3
Southwest Snohomish County Zone								2	11	3
Rural King County								2	3	3
Spokane County Zone 2							1	2	13	13
Rural Snohomish County									4	2

Table 25 shows weighted average daily VMT per employee, and Table 26 shows the distribution of worksite average VMT within each zone. This calculation includes the credit for telecommuting, compressed work weeks, and non-motorized commuting and excludes trips in buses and vanpools. Both tables are ordered by average VMT.

Table 25
Average VMT

Zone Name	Weighted Average of VMT1	Min of VMT1	Max of VMT1	Worksites
Seattle Central Business District	6.0	2.527	12.625	74
Yakima County Zone 1 (within Yakima city limits)	7.3	5.411	9.533	13
Central Seattle	7.8	1.914	12.542	22
Spokane County Zone 1	8.1	4.276	11.423	33
Yakima County Zone 2 (outside Yakima city limits)	9.2	4.441	11.953	12
Clark County Zone 1 (Urban)	9.5	6.094	15.11	33
North Central Seattle	9.6	1.367	17.254	29
Kitsap County Zone	9.6	5.869	15.25	32
North Seattle	10.1	5.89	20.049	14
Bellevue Central Business District	10.2	8.191	12.365	7
Spokane County Zone 2	11.0	6.4	12.94	29
Clark County Zone 2 (Non-Urban)	11.1	3.107	15.787	9
Thurston County Zone 2	11.3	7.81	14.842	46
Thurston County Zone 1	11.5	8.126	16.345	35
Rural Pierce County Zone (Outer County)	11.6	7.596	19.894	28
Southwest Snohomish County Zone	11.7	8.888	14.225	16
Central Pierce County Zone (Tacoma-Fife Zone)	11.8	5.091	21.193	57
North King County	12.1	8.248	13.942	6
Duwamish	12.9	5.48	19.469	24
East King County	12.9	7.512	18.984	67
Spokane County Zone 3	13.0	3.175	18.34	15
Central Snohomish County Zone	13.4	9.615	20.382	29
South King County	13.9	0	20.627	82
South Seattle (Split Zone)	14.1	10.265	17.508	7
Rural King County	15.2	6.563	19.678	8
Rural Snohomish County	16.3	8.876	19.057	6

Table 26
Worksite VMT

Zone Name	VMT1 2 to 4	VMT1 4 to 6	VMT1 6 to 8	VMT1 8 to 10	VMT1 10 to 12	VMT1 12 to 14	VMT1 14 to 16	VMT1 16 to 18	VMT1 18 to 20
Seattle Central Business District	13	26	22	6	6	1			
Yakima County Zone 1 (within Yakima city limits)		3	6	4					
Central Seattle	1	6	4	5	3	2			
Spokane County Zone 1		2	15	11	5				
Yakima County Zone 2 (outside Yakima city limits)		2	3	3	4				
Clark County Zone 1 (Urban)			5	13	12	2	1		
North Central Seattle		1	4	11	3	6	2	1	
Kitsap County Zone		1	5	5	11	8	2		
North Seattle		1	3	1	3	4	1		
Bellevue Central Business District				2	3	2			
Spokane County Zone 2			1	8	15	5			
Clark County Zone 2 (Non-Urban)	1		1	1	3	2	1		
Thurston County Zone 2			2	12	18	12	2		
Thurston County Zone 1				5	14	15		1	
Rural Pierce County Zone (Outer County)			2	5	6	7	5	2	1
Southwest Snohomish County Zone				3	7	5	1		
Central Pierce County Zone (Tacoma-Fife Zone)		1	1	8	18	18	6	4	
North King County				1	2	3			
Duwamish		2			6	6	3	4	3
East King County			2	5	15	22	17	5	1
Spokane County Zone 3	1	2		1	5	1	4		1
Central Snohomish County Zone				1	7	12	6	1	1
South King County		1	3	4	13	22	27	7	3
South Seattle (Split Zone)					3	2		2	
Rural King County			1	1			2	2	2
Rural Snohomish County				1			2		3

Tables 27 and 28 show the effect of the 20 percent credit for trips avoided and non-motorized trips on the calculation of SOV and VMT rates. Table 27 shows SOV rates for each zone with and without the credit.

Table 27
SOV Rates with and without 20% Credit

Zone Name	SOV Without Credit	Weighted Average SOV1	Difference
Seattle Central Business District	0.347	0.331	0.017
Central Seattle	0.518	0.501	0.017
Kitsap County Zone	0.598	0.585	0.014
Bellevue Central Business District	0.602	0.590	0.012
North Central Seattle	0.616	0.601	0.016
Duwamish	0.671	0.669	0.003
North Seattle	0.740	0.718	0.022
South Seattle (Split Zone)	0.751	0.741	0.010
North King County	0.768	0.755	0.013
THURSTON COUNTY ZONE 1	0.776	0.765	0.012
Spokane County Zone 3	0.778	0.772	0.005
Spokane County Zone 1	0.788	0.776	0.012
Yakima County Zone 2 (outside Yakima city limits)	0.784	0.778	0.006
UNDEFINED ZONE	0.810	0.799	0.011
South King County	0.812	0.803	0.009
East King County	0.814	0.804	0.009
THURSTON COUNTY ZONE 2	0.822	0.811	0.012
Clark County Zone 1 (Urban)	0.824	0.812	0.012
Central Snohomish County Zone	0.825	0.818	0.006
Central Pierce County Zone (Tacoma-Fife Zone)	0.836	0.828	0.008
Clark County Zone 2 (Non-Urban)	0.847	0.836	0.012
Rural Pierce County Zone (Outer County)	0.850	0.840	0.011
Yakima County Zone 1 (within Yakima city limits)	0.858	0.849	0.009
Southwest Snohomish County Zone	0.868	0.862	0.006
Rural King County	0.878	0.868	0.010
Spokane County Zone 2	0.884	0.881	0.003
Rural Snohomish County	0.891	0.889	0.002

Table 28 shows VMT rates for the zones with and without the 20 percent credit.

Table 28
VMT with and without 20% Credit

Zone Name	VMT Without Credit	Weighted Average VMT1	Difference
Bellevue Central Business District	10.42	10.18	0.24
Central Pierce County Zone (Tacoma-Fife Zone)	11.88	11.81	0.07
Central Seattle	7.86	7.84	0.02
Central Snohomish County Zone	13.54	13.42	0.12
Clark County Zone 1 (Urban)	9.65	9.52	0.13
Clark County Zone 2 (Non-Urban)	11.40	11.13	0.27
Duwamish	12.80	12.87	-0.08
East King County	13.00	12.89	0.11
Kitsap County Zone	9.88	9.65	0.23
North Central Seattle	9.61	9.56	0.05
North King County	12.71	12.10	0.61
North Seattle	10.30	10.09	0.20
Rural King County	15.45	15.21	0.24
Rural Pierce County Zone (Outer County)	11.71	11.57	0.14
Rural Snohomish County	16.27	16.27	-0.01
Seattle Central Business District	6.30	6.04	0.26
South King County	14.00	13.87	0.13
South Seattle (Split Zone)	14.21	14.13	0.08
Southwest Snohomish County Zone	11.81	11.72	0.10
Spokane County Zone 1	8.21	8.13	0.08
Spokane County Zone 2	11.06	11.03	0.03
Spokane County Zone 3	13.07	12.99	0.08
THURSTON COUNTY ZONE 1	11.67	11.48	0.19
THURSTON COUNTY ZONE 2	11.44	11.26	0.17
UNDEFINED ZONE	12.03	11.87	0.17
Yakima County Zone 1 (within Yakima city limits)	7.33	7.27	0.06
Yakima County Zone 2 (outside Yakima city limits)	9.24	9.18	0.06

The 20 percent credit does not have a significant effect on the calculated base year SOV and VMT because only a small fraction of affected employees use the modes that get the credit. This can be seen in Table 31 below.

SOV and VMT Reduction Goals

Tables 29 and 30 show the SOV and VMT reduction goals for each zone. Goals for zones marked with an asterisk (*) were based on modeled estimates of zone average SOV and VMT. The other Zones' goals are based on the employee survey results.

Table 29
SOV Goals

Zone	Base Year Value	1995 Goal	1997 Goal	1999 Goal
Clark County Zone 1 (Urban)	.888	0.755	0.660	0.577
Clark County Zone 2 (Non-Urban)	.900	0.765	0.675	0.585
North King County*	.85	0.72	0.64	0.55
North Seattle*	.85	0.72	0.64	0.55
North Central Seattle*	.74	0.63	0.56	0.48
Central Seattle*	.59	0.50	0.44	0.38
Seattle Central Business District*	.43	0.37	0.32	0.28
South Seattle (Split Zone)*	.83	0.71	0.62	0.54
Duwamish*	.88	0.75	0.66	0.57
East King County*	.85	0.72	0.64	0.55
Bellevue Central Business District*	.81	0.69	0.61	0.53
South King County*	.85	0.72	0.64	0.55
Rural King County*	.90	0.77	0.68	0.59
Kitsap County Zone*	.85	0.72	0.64	0.55
Central Pierce County Zone (Tacoma-Fife Zone)*	.85	0.72	0.64	0.55
Rural Pierce County Zone (Outer County)*	.90	0.77	0.68	0.59
Rural Snohomish County*	.82	0.70	0.62	0.53
Southwest Snohomish County Zone*	.82	0.70	0.62	0.53
Central Snohomish County Zone*	.80	0.68	0.60	0.52
Spokane County Zone 1	.7826	0.6652	0.5869	0.5087
Spokane County Zone 2	.8752	0.7439	0.6564	0.5689
Spokane County Zone 3	.7625	0.6481	0.5719	0.4956
Thurston County Zone 1	.763	0.65	0.57	0.50
Thurston County Zone 2	.811	0.69	0.61	0.53
Yakima County Zone 1 (within Yakima city limits)	.859	0.73	0.64	0.56
Yakima County Zone 2 (outside Yakima city limits)	.7502	0.6377	0.5627	0.4876

Table 30
VMT Goals

Zone	Base Year Value	1995 Goal	1997 Goal	1999 Goal
Clark County Zone 1 (Urban)	6.3	5.4	4.7	4.1
Clark County Zone 2 (Non-Urban)	6.9	5.9	5.2	4.5
North King County*	7.9	6.7	5.9	5.1
North Seattle*	8.2	7.0	6.2	5.3
North Central Seattle*	7.8	6.6	5.9	5.1
Central Seattle*	9.2	7.8	6.9	6.0
Seattle Central Business District*	6.8	5.8	5.1	4.4
South Seattle (Split Zone)*	9.6	8.2	7.2	6.2
Duwamish*	10.3	8.8	7.7	6.7
East King County*	9.3	7.9	7.0	6.0
Bellevue Central Business District*	9.2	7.8	6.9	6.0
South King County*	9.3	7.9	7.0	6.0
Rural King County*	9.0	7.7	6.8	5.9
Kitsap County Zone*	7.5	6.4	5.6	4.9
Central Pierce County Zone (Tacoma-Fife Zone)*	7.2	6.1	5.4	4.7
Rural Pierce County Zone (Outer County)*	7.7	6.5	5.8	5.0
Rural Snohomish County*	7.7	6.5	5.8	5.0
Southwest Snohomish County Zone*	7.3	6.2	5.5	4.7
Central Snohomish County Zone*	8.5	7.2	6.4	5.5
Spokane County Zone 1	8.21	6.98	6.16	5.34
Spokane County Zone 2	10.70	9.10	8.03	6.96
Spokane County Zone 3	12.13	10.31	9.10	7.88
Thurston County Zone 1	11.47	9.7	8.6	7.5
Thurston County Zone 2	11.29	9.6	8.5	7.3
Yakima County Zone 1 (within Yakima city limits)	7.26	6.2	5.4	4.7
Yakima County Zone 2 (outside Yakima city limits)	9.79	8.320	7.340	6.360

Mode Splits and Commute Trip Lengths

The employee surveys asked respondents to tell how they made their trip to work each day in the previous week. Table 31 shows the fraction of employees in each county who reported they used each commuting mode and the total number of commute trips survey respondents reported. All but two of the counties have SOV shares between 80 percent and 90 percent. Kitsap County has the lowest SOV rate, but this is due to the presence of a single large employer with limited parking. If that employer is excluded, Kitsap County does not stand out. King County's SOV share is lower than other counties, it has the highest transit share, and the second highest carpool share after Kitsap. Yakima County has the third highest carpool share combined with the lowest transit share. Carpooling is the second most frequently used mode except in King County, where transit is.

Table 31
Employee Commute Modes Percentages

County	SOV	Bike	Transit	Carpool	Other	Telecommute	Vanpool	Walk	Commute Trips
Clark	86.4	0.5	0.9	10.1	0.9	0.0	0.3	1.0	55437
King	63.8	0.9	16.0	15.1	1.1	0.2	0.7	2.1	354144
Kitsap	60.2	0.9	8.2	21.9	1.6	0.0	3.5	3.7	86903
Pierce	86.0	0.5	1.7	9.9	0.6	0.1	0.1	1.1	109630
Snohomish	84.9	0.2	1.2	11.2	1.1	0.1	0.6	0.7	75152
Spokane	82.5	0.6	2.9	11.4	0.7	0.0	0.6	1.3	94646
Thurston	81.5	1.0	2.3	11.2	1.2	0.1	0.9	1.7	84802
Yakima	84.2	0.4	0.5	12.7	0.7	0.0	0.0	1.5	18835
Total	73.6	0.7	8.2	13.7	1.0	0.1	0.9	1.8	879549

The employee survey also asked respondents to tell the distance between their home and their worksite. Table 32 shows the average distance in each county.

Table 32
Average Commute Distances

County	Average Home to Work Distance in Miles
Clark	11.5
King	15.1
Kitsap	14.2
Pierce	13.3
Snohomish	14.7
Spokane	11.7
Thurston	13.6
Yakima	9.1
Total	13.9

Tables 33 and 34 show the same information for each zone.

Table 33
Employee Commute Modes by Zone Percentages

ZONE	SOV	BIKE	TRANSIT	CARPOOL	OTHER	TELE COMMUTE	VAN POOL	WALK	COMMUTE TRIPS
Seattle Central Business District	35.3	1.0	40.4	16.9	1.5	0.2	0.5	4.1	102,721
Central Seattle	52.6	1.4	24.2	16.8	1.3	0.2	0.2	3.4	24,890
Kitsap County Zone	60.1	0.9	8.2	21.9	1.6	0.0	3.5	3.7	86,903
Bellevue Central Business District	60.7	0.5	11.9	23.1	0.9	1.1	0.8	1.0	7,583
North Central Seattle	61.8	2.2	12.2	16.6	0.8	0.1	2.6	3.6	29,054
Duwamish	67.6	0.8	9.5	19.5	0.8	0.0	1.4	0.5	18,293
North Seattle	78.1	2.1	3.7	12.4	1.2	0.0	0.0	2.4	14,074
South Seattle (Split Zone)	76.5	0.7	5.1	15.4	0.9	0.0	0.7	0.8	9,483
North King County	79.6	0.8	1.8	14.2	0.5	0.0	1.2	1.8	6,371
Thurston County Zone 1	78.4	1.1	3.3	12.2	1.3	0.2	1.3	2.3	35,849
Spokane County Zone 3	77.7	0.2	2.5	15.6	0.5	0.0	2.1	1.4	21,377
Spokane County Zone 1	80.7	1.0	4.7	10.6	0.9	0.0	0.2	1.9	42,880
Yakima County Zone-2 (outside Yakima city limits)	78.8	0.1	0.0	18.8	0.7	0.0	0.0	1.6	7,076
South King County	83.4	0.4	1.3	12.6	1.0	0.1	0.7	0.5	79,848
East King County	82.9	0.6	1.6	12.8	0.9	0.2	0.4	0.7	57,069
Thurston County Zone 2	84.2	1.1	1.4	10.6	1.0	0.1	0.5	1.1	40,036
Clark County Zone 1 (Urban)	86.6	0.3	1.2	9.8	0.9	0.0	0.3	0.8	43,174
Central Snohomish County Zone	82.9	0.3	1.6	12.1	1.4	0.1	0.8	0.8	44,641
Central Pierce County Zone (Tacoma-Fife Zone)	85.2	0.3	2.3	10.2	0.7	0.1	0.2	1.0	67,065
Clark County Zone 2 (Non-Urban)	85.5	1.1	0.1	10.9	0.7	0.0	0.0	1.7	12,263
Rural Pierce County Zone (Outer County)	87.4	0.7	0.6	9.5	0.5	0.1	0.0	1.2	42,565
Yakima County Zone 1 (within Yakima city limits)	87.4	0.5	0.8	9.0	0.8	0.0	0.0	1.5	11,759
Southwest Snohomish County Zone	87.5	0.2	0.5	10.1	0.8	0.0	0.1	0.7	24,947
Rural King County	89.4	0.8	0.3	8.5	0.4	0.0	0.0	0.7	4,758
Spokane County Zone 2	88.3	0.4	0.6	9.7	0.6	0.0	0.0	0.3	30,389
Rural Snohomish County	88.7	0.1	0.1	9.5	0.3	0.1	0.7	0.4	5,564

Table 34
Average Commute Distances by Zone

ZONE	Average Home to Work Distance
Seattle Central Business District	14.9
Central Seattle	13.2
Kitsap County Zone	14.2
Bellevue Central Business District	14.9
North Central Seattle	13.9
Duwamish	16.9
North Seattle	13.0
South Seattle (Split Zone)	17.4
North King County	15.4
Thurston County Zone 1	14.0
Spokane County Zone 3	15.4
Spokane County Zone 1	9.8
Yakima County Zone 2 (outside Yakima city limits)	10.6
South King County	16.2
East King County	14.9
Thurston County Zone 2	13.1
Clark County Zone 1 (Urban)	11.1
Central Snohomish County Zone	15.4
Central Pierce County Zone (Tacoma-Fife Zone)	13.5
Clark County Zone 2 (Non-Urban)	12.7
Rural Pierce County Zone (Outer County)	13.1
Yakima County Zone 1 (within Yakima city limits)	8.1
Southwest Snohomish County Zone	12.9
Rural King County	16.9
Spokane County Zone 2	11.9
Rural Snohomish County	17.4

King County has the highest average commute distance. The Seattle Central Business District has the lowest VMT but has a relatively high average commute distance. The ranking of counties and zones by commute distance and by VMT differ because VMT excludes transit trips, is weighted by occupancy for carpool trips, and includes credits for trips not taken.

First Year Program Descriptions

Affected employers are required to file descriptions of their CTR programs with their local jurisdictions. This section describes the programs employers reported that they planned to implement in the first year of the program. The 1995 employer program reports will describe the programs employers actually implemented in 1994 and changes they plan to make for 1995.

Coverage

Affected employers are required to offer CTR programs to their affected employees. Most offer CTR to all employees or all full time employees. Of the 709 sites reporting which employees were eligible for their CTR program:

- 653 offered CTR to all employees,
- 22 offered CTR to some non-affected employees, and
- 34 offered CTR only to affected employees.

This is not surprising. Most employers would incur greater costs and problems in separating out those employees not eligible for a CTR program than they would in offering the program to all employees.

Employee Transportation Coordinators

All employers are required to appoint an Employee Transportation Coordinator (ETC). By the time they filed their initial program descriptions, 627 (78 percent) had appointed an ETC. The state Technical Assistance Team and the County Coordinators provided standardized training for ETCs. Only a fraction of the employer reports indicated whether ETCs had been trained. At those worksites that reported information on ETC training:

- 193 of 234 (82.5 percent) had taken the State training, and
- 101 of 185 (54.6 percent) had taken other training.

Information and Promotion

Employers are required to post the ETC's name and phone number in a prominent place at each worksite. 518 of 627 (82.6 percent) reported having done so.

Employers have many options for disseminating information about their CTR programs to employees. Table 35 shows the fraction of employers reporting various methods of disseminating information about their CTR programs. The number of employers reporting differs across items because of differences in reporting forms.

Table 35
Worksite CTR Information Dissemination

Method	Employers Planning to Use	Employers Reporting	Percent Planning to Use
Distribute handouts	472	807	58.5
Post on bulletin boards	473	642	73.7
Transportation events	273	587	46.5
Presentations at meetings	313	626	50.0
Newsletter articles	366	807	43.4
New employee orientations	440	807	54.5
Commuter Information Center	74	188	39.4
E-Mail	142	807	17.6
Other	68	495	13.7

Carpooling and Vanpooling

Employers have several methods they can use to encourage employees to carpool or participate in vanpools. They can provide preferential parking and subsidies for employee carpools, they can provide company vehicles, and they can operate or participate in a ridematching service. Table 36 shows programs employers plan to use to encourage ride sharing.

Table 36
Worksites with Ridesharing Programs

Program	Employers Planning to Use	Employers Reporting	Percent Planning to Use
Preferential parking for carpools	352	790	44.6
Preferential parking for vanpools	206	757	27.2
Carpool subsidies	57	807	7.1
Vanpool subsidies	201	807	24.9
Fleet vehicles for carpools	32	807	4.0
Fleet vehicles for vanpools	14	807	1.7
In-house ride-matching service	145	807	18.0
Public agency ride-matching service	43	275	15.6
Other ride-matching service	5	160	3.1

Work Scheduling and Telecommuting

Employees can eliminate work trips by working compressed work weeks or telecommuting. Employers that allow flexible schedules make it easier for employees to use transit or avoid peak traffic congestion. Table 37 shows the number of employers planning to allow alternative work schedules and telecommuting as part of their CTR programs.

Table 37
Worksites using Employee Scheduling in CTR

Program	Employers Planning to Use	Employers Reporting	Percent Planning to Use
Compressed work week	323	807	30.0
Allow flextime	376	807	46.6
Allow telecommuting	177	807	21.9

Use of Company Vehicles

Company fleet vehicles can be used to support CTR in several ways. Employers can use company vehicles for a guaranteed ride home program (GRH). Employers that provide fleet vehicles for work trips or for non-work trips during the work day make it easier for employees not to use their own vehicles for commuting. Employers can also provide company vehicles for carpools or vanpools. Table 38 shows the number of worksites planning to use fleet vehicles to support CTR.

Table 38
Worksites Using Company Vehicles for CTR

Program	Employers Planning to Use	Employers Reporting	Percent Planning to Use
Fleet vehicles for GRH	35	588	6.0
Fleet vehicles for work trips	149	807	18.5
Fleet vehicles for carpools or vanpools	40	807	5.0
Fleet vehicles for non-work trips	2	252	0.8

Parking Management

Employers that provide parking for their employees can discourage SOV commuting and encourage use of other modes through the management of their parking facilities. They can reduce parking spaces and increase charges for SOVs and provide reserved parking with reduced charges for HOVs. Table 39 shows the number of worksites with parking management as part of their CTR programs.

Table 39
Worksite Parking Management

Program	Employers Planning to Use	Employers Reporting	Percent Planning to Use
Fees for employee parking	88	506	17.4
Reserved parking for carpools	352	790	44.6
Reserved parking for vanpools	206	757	27.2
Lower parking fees for HOVs.	18	653	2.8
Fewer parking spaces for SOVs	92	617	14.9

Facilities to Support Non-SOV Commuting

Employers can encourage use of commute modes other than SOVs by providing facilities to make using those modes easier or more convenient. Employers can provide covered parking for bicycles, showers and locker facilities for bicycle commuters and walkers, and loading areas for carpools and vanpools. Table 40 shows the number of worksites planning to provide facilities for non-SOV commuters.

Table 40
Worksite Non-SOV Facilities

Program	Employers Planning to Use	Employers Reporting	Percent Planning to Use
Bicycle parking	478	807	59.2
Lockers or showers	441	807	54.6
Loading areas	134	807	16.6

Subsidies and Incentives

Table 41 shows the number of employers reporting that they will offer subsidies for non-SOV commuters as part of their CTR programs. Transit and vanpools are the modes that employers plan to subsidize most often. Only one worksite reported planning to offer a transportation allowance that could be used for any commuting mode.

Table 41
Worksites Offering Non-SOV Subsidies

Program	Employers Planning to Use	Employers Reporting	Percent Planning to Use
Bus subsidy	239	807	29.6
Ferry subsidy	93	603	15.4
Carpool subsidy	57	807	7.1
Vanpool subsidy	201	807	24.9
Bicycling subsidy	58	765	7.6
Walking subsidy	35	765	4.6
Transportation allowance	1	170	0.6

Table 42 shows the average subsidy amounts offered by employers who reported amounts.

Table 42
Average Non-SOV Subsidies

Program	Employers Reporting Amount	Average Amount per Month
Bus subsidy	159	\$20.90
Ferry subsidy	81	\$31.10
Carpool subsidy	25	\$21.38
Vanpool subsidy	122	\$27.54
Bicycling subsidy	30	\$21.82
Walking subsidy	12	\$26.79

TMA Membership

Eighty-six worksites reported that they belonged to a Transportation Management Association.

Next Steps

This report covers commuting behavior before employers implemented CTR programs and the programs employers planned to implement. During the first half of 1995, employers will be filing new annual reports and conducting new employee surveys or collecting equivalent information on their employees commuting behavior. The results of the 1995 surveys will be used to determine whether the SOV and VMT reduction targets have been met and to estimate the impacts of the CTR program.

The CTR Task Force will report to the legislature in December 1995. That report will present the first year program results, and the program changes employers plan as they work to reach the 1997 and 1999 goals. That report also will contain the Task Force's evaluation of the CTR program and any recommendations the Task Force may have for changes in the law.

Employers will continue to file annual reports with their local jurisdictions, and they will survey employees or collect equivalent data in 1997 and 1999. This information will be used to determine whether the 1997 and 1999 goals have been met. Employers who wish to may survey their employees in 1996 and 1998 to gauge their progress toward meeting the goals and estimate the effectiveness of particular program elements.

The Task Force will make its second report to the legislature in December 1999. At that time, the Task Force will report on whether the 1997 and 1999 goals were met. The Task Force also will recommend whether the CTR program should be extended or allowed to sunset, or whether it should be replaced with some other type of program.