

ORDINANCE NO. 93-14

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY
ESTABLISHING TRIP REDUCTION REQUIREMENTS
APPLICABLE TO EMPLOYERS OF 100 EMPLOYEES
OR MORE ON A SINGLE WORK SITE

Section 1. Purpose

The purpose of this ordinance is to establish Transportation System Management (TSM) requirements for employers located in the City of American Canyon. These requirements will promote alternative commute modes and reduce the total number of vehicle trips as part of a program to achieve the following objectives:

Reduce peak period traffic and congestion by decreasing the number of single occupant vehicle trips associated with commuting;

Reduce or delay the need for major transportation facility improvements by making more efficient use of existing facilities;

Reduce present and future motor vehicle emissions as a contribution towards complying with federal and state ambient air quality standards;

Establish TSM goals for employers so that a significant number of their employees are encouraged to arrive at the worksite by means other than single occupant vehicles.

Section 2. Authority

Government Code Section 65089.3 requires cities and counties to adopt and implement a trip reduction and travel demand ordinance. The California Clean Air Act requires the Bay Area Air Quality Management District to use all feasible means to meet the State air quality standards.

Section 2. Findings

The City Council of the City of American Canyon hereby finds and declares that:

- a. The City of American Canyon is projected by both the State and the Bay Area Association of Governments to experience growth in population which will result in increases in traffic volume;
- b. The geographical and meteorological conditions in the City of American Canyon are conducive to the formation of air pollution attributed largely to motor vehicle emissions according to both State and Regional Air Pollution Control Agencies;

c. Transportation Systems Management techniques including, but not limited to, ridesharing, transit, compressed work weeks and bicycle use among employees are effective means of reducing work related trips. A reduction in the number of trips will reduce congestion and vehicle emissions.

Section 3. Definitions

a. Average Vehicle Ridership (AVR): AVR is the number of employees who start work at a work site during the peak period divided by the number of vehicles those employees use to arrive at the work site, averaged over the survey week as calculated pursuant to Section 4(k). (BAAQMD Section 13-1-202)

b. Bus Pool: A privately operated or chartered bus which provides commute transportation on a subscription basis. This term is also known as a club bus.

c. Car Pool: A vehicle occupied by two (2) to six (6) people traveling together between their residence and their work site or destination for the majority of the total trip distance. Employees who work for different employers, as well as non-employed people, are included within this definition as long as they are in the vehicle for the majority of the total trip distance.

d. Commute Trip: The trip made by an employee from home to the work site. The commute trip may include stops between home and the work site.

e. Compressed Work Week: A regular full-time work schedule which eliminates at least one round-trip commute trip (both home-to-work and work-to-home) at least once every two (2) weeks. Examples include, but are not limited to, working three twelve-hour days (3/36) or four ten-hour days (4/40) within a one week period; or eight one-hour days and one eight-hour day (9/80) within a two week period.

f. Disabled Employee: For purposes of the performance objective calculation pursuant to Section 14-1-601, an employee with a physical impairment which prevents the employee from traveling to the work site by means other than a vehicle and the employee has been issued a disabled person placard or plate from the Department of Motor Vehicles.

g. Employee: Any person conducting work activity for an employer 20 or more hours per week on a regular full-time or part-time basis. The term includes independent contractors. The term excludes field construction workers, field personnel, seasonal/temporary employees, and volunteers. (BAAQMD Section 13-1-209)

- h. **Employer:** Any person(s), trust, firm, business, joint stock company, corporation, partnership, association, non-profit agency or corporation, educational institution, school district, hospital or other health care facility, or Federal, State, City or County government department, agency, or district, or any other special purpose public agency or district. A City, County, or City and County is a single employer for purposes of this ordinance, not individual departments or agencies of the City, County, or City and County. Individual departments or agencies of the State of California and the Federal Government are separate employers for purposes of this ordinance. The term includes; for-profit, not-for-profit, and non-profit enterprises. Several subsidiaries or units that occupy the same work site and report to on common governing board or governing entity or that function as one corporate unit are consider to be one employer. The term shall not include employers with on permanent work site within the City of American Canyon. (BAAQMD Section 13-1-212)
- i. **Employee Transportation Coordinator (ETC):** An employee, other individual, or entity appointed by an employer to develop, market, administer, and monitor the Employer Trip Reduction Program or Employer Trip Reduction Plan on full or part-time basis.
- k. **Employer Program Manager:** An employee with policy and budget authority who is responsible for the implementation of the Employer Trip Reduction Program or Employer Trip Reduction Plan and for fulfilling the requirements of this ordinance.
- l. **Employer Trip Reduction Plan:** A document describing in detail the Employer Trip Reduction Program, including an implementation schedule, budget, and all the elements listed in Subsection 4(H)(1) which is submitted to the City of American Canyon for review and approval pursuant to Section 4(H).
- m. **Employer Trip Reduction Program:** A group of measures developed and implemented by an employer that are designed to provide transportation information, assistance, and incentives to employees. The purpose of such measures is to reduce the number of motor vehicles driven to the work site by increasing AVR or decreasing VER, and to achieve and maintain the performance objectives listed in Section 4(D).
- n. **Field Construction Worker:** An employee who reports for work to a temporary field construction site.
- o. **Field Personnel:** Employees who spend 20% or less of their work time at the work site and who do not report to the work site during the peak period for pick-up and dispatch of an employer provided vehicle.

- p. **Independent Contractor:** An individual who enters into a direct written contract or agreement with an employer to perform certain services. The period of the contract or agreement is at least ninety (90) continuous days or is open ended.
- q. **Peak Period:** The time from 6:00 a.m. through 10:00 a.m. Monday through Friday inclusive. (BAAQMD Section '13-1-221)
- r. **Seasonal/Temporary Employee:** An employee who works for the employer for less than 90 continuous days (three months) within a calendar year.
- s. **Single Occupant Vehicle:** A vehicle occupied by one employee.
- t. **Survey Week:** A regular five (5) day, Monday through Friday, (inclusive) work week. The survey week for work sites within Saturday and Sunday work schedules will include only those work days Monday through Friday. The survey week cannot contain a Federal, State or local holiday, regardless of whether the holiday is observed by the employer. A survey week that meets the above criteria is to be selected by the employer during January through May, or September through November for the employee transportation surveys required by Section 4(G). The survey week cannot be Rideshare Week or contain any other rideshare or transit promotional event, e.g. "Beat the Back-Up". (BAAQMD Section 13-1-224)
- u. **Telecommuting:** A system of working at home or at an off-site, non-home telecommute facility for the full work day on a regular basis of at least one day per week
- v. **Van Pool:** A vehicle occupied by seven (7) to fifteen (15) employees including the driver who commutes together to work for the majority or their individual commute trip distance. Employees who work for different employers are included within this definition as long as they are in the vehicle for the majority of their individual trip distance.
- w. **Vehicle:** A device by which any person or property may be propelled, moved, or drawn upon a highway, except the following: 1) a device moved exclusively by human power, 2) a device used exclusively upon stationary rails or tracks, 3) buses used for public or private transit. Examples of vehicles include, but are not limited to, passenger cars, motorcycles, vans, and pickup trucks.
- x. **Vehicle Employee Ratio (VER):** VER is the number of vehicles used by employees who start work at a work site during the peak period, divided by the number of those employees averaged over the survey week as calculated pursuant to Section 4(K). VER is the reciprocal of AVR. (BAAQMD) Section 13-1-229).

y. **Volunteer:** An individual who does not receive any wages, salary, or other form of financial reimbursement from the employer for services provided.

z. **Work Activity:** Any activity for which an employee receives remuneration from an employer. Telecommuting is a work activity.

aa. **Work Site:** Any property, real or personal, which is being operated, utilized, maintained, or owned by an employer as part of an identifiable enterprise. All property on contiguous, adjacent, or proximate sites separated only by a private or public roadway or other private or public right-of-way, served by a common circulation or access system, and not separated by an impassable barrier to bicycle or pedestrian travel such as a freeway or flood control channel is included as part of the work site. If two or more employers each have 100 or more employees at a single work site, then that work site is considered a separate work site for each employer. (BAAQMD Section 12-1-232)

ab. **Zone:** A geographical area within the District where the performance objectives contained in Section 4(D) apply to employers with work sites located within that zone. Zone 4 - Napa County (BAAQMD Section 13-1-233)

Section 4. Requirements

A. **Applicability:** This ordinance applies to all public and private employers with 100 or more employees at a work site. This ordinance applies only to work sites with 100 or more employees. If an employer has 100 or more employees but no single work site with 100 or more employees this ordinance does not apply to that employer. For purposes of determining the applicability of this ordinance, the number of employees at a work site is determined as the maximum number of employees reporting to that work site on any single week day Monday through Friday during the current calendar or fiscal year. (BAAQMD Section 13-1-102)

B. **Exemptions:**

1. **Employee Minimum Level:** A work site of 100 or more employees where less than 50 of these employees normally start work during the peak period is exempt from all requirements of this ordinance.

2. **Exemption - Performance Objectives Achieved:** Employer may qualify for an exemption from the requirements of this ordinance as specified in this section.

a. Work sites that achieve the 1999 performance objectives specified in Section 4(D) as demonstrated pursuant to Section 4(G) are exempt from all other requirements of this ordinance except for this section.

b. Work sites that meet the requirements of subsection 4(B)(2)(A) must submit to the City of American Canyon, in a format approved by the City of American Canyon, a listing of the measures or reasons for achieving the 1999 performance objectives.

c. Work sites that meet the requirements of Subsection 4(B)(2)(A) must demonstrate continued achievement of the 1999 performance objectives by conducting an employee transportation survey pursuant to Subsection 4(G) once every three years.

d. Work sites that do not continue to demonstrate achievement of the 1999 performance objectives pursuant to Subsection 4(B)(2)(C) no longer qualify for the exemption provided by this section and become subject to the requirements of this ordinance at that time.

3. Exemption - Construction Site: Construction sites are exempt from the requirements of this ordinance. For purposes of this section:
1) construction means the on-site fabrication, erection, or installation of a physical structure such as a building, roadway, bridge, etc., and
2) site has the same meaning as work site.

C. Effective Dates: Employers become subject to this ordinance {three to six months after final adoption - but be aware of the Air District deadlines: Begin enforcing rule in area with no TRO-July 1, 1993; Employer registration deadline- September 30, 1993; over 400 employees survey due November 30, 1993; etc. Note that the required survey dates are contained in Section 4(g)(7) along with an assumption of when employers become subject to the rule. NOTE THAT G(7) IS A REQUIRED SECTION - THE DATES THEREIN ARE NOT ALTERABLE IF ONE WISHES TO MAINTAIN CONFORMANCE WITH THE BOARD.}

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D. Performance Objectives: Performance objectives are expressed in terms of AVR and VER. Employers have the option of reporting performance in terms of either AVR or VER or both. The performance objectives for (jurisdiction), by year, by type, follow: (BAAQMD Section 13-1-301)

	1993	1994	1995	1996	1997	1998	1999
AVR	1.05	1.10	1.15	1.20	1.25	1.30	1.30
	1993	1994	1995	1996	1997	1998	1999
VER	0.93	0.90	0.87	0.83	0.80	0.77	0.77

E. Employee Transportation Coordinator (ETC): Employers must have an ETC(s) as specified within this section. (BAAQMD Section 13-1-403)

1. Employers shall appoint an ETC for each affected work site. Employers with multiple affected work sites within the City of American Canyon may appoint one ETC for more than one work site, even when these work sites are located in different zones.
2. ETC's must complete a training curriculum certified by the Bay Area Air Pollution Control District Air Pollution Control Officer within nine (9) months of the effective dates of this ordinance as specified in Section 4(C), or within six (6) months of appointment when appointed after the initial nine (9) month time frame.
3. The employer may apply to the City of American Canyon for a waiver from the training requirement of Subsection 4(eE(2)) when at ETC has one or more years of experience in trip reduction of equivalent skills.
4. An ETC may also serve as the Employer Program Manager provided that the individual meets the criteria specified in Section 3(I).

F. Employer Program Manager: Employers must have an Employer Program Manager as specified in this section.

1. Employers shall appoint an Employer Program Manager. Employers with multiple affected work sites within the City of American Canyon may appoint an Employer Program Manager for more than one work site, even when these work sites are located in different zones.

G. Employee Transportation Surveys: Employers must conduct employee transportation surveys as specified in this section to establish whether the performance objectives listed in Section 4(D) have been achieved.
(BAAQMD Section 13-1-406)

1. An employer shall conduct an employee transportation survey consistent with the procedure contained in Section 4(K) and submit the survey responses to the City of American Canyon in accordance with the schedule contained in Subsection 4(G)(7).
2. An employer has the option of processing the employee transportation surveys on-site or having the surveys processed by an outside entity. Survey processing must be consistent with the procedures contained in Section 4(K), verifiable records must be maintained, and the survey results are to be submitted to the City of American Canyon in accordance with the schedule contained in Subsection 4(G)(7).
3. An employer may use a Random Sample Employee Survey Method consistent with Section 4(L) for work sites where 400 or more employees start work during the peak period.
4. The City of American Canyon will notify employers of the due date for subsequent year surveys.
5. Employee transportation surveys are to be conducted annually unless a work site demonstrates that a further year performance objective is achieved. These work sites are required to survey every other year as long as future year performance objectives continue to be achieved.
6. An employer shall not offer any special incentives or disincentives in addition to its regular Employer Trip Reduction Program during the survey week. This limitation does not apply to activities undertaken by an employer in response to a Bay Area Air Quality Management District forecast exceedance day, e.g. the 'Spare the Air' Campaign.
7. Employee transportation surveys are to be conducted as follows:
 - a. Employers subject to this ordinance July 1, 1993, with work sites of 500 or more employees must conduct an employee transportation survey at those work sites by November 30,

1993. (Note that the entire section is required (including the dates) if one wishes to maintain conformance with the BAAQMD. Also, it ties back into non-required Section 4(C.)

b. Employers subject to this ordinance July 1, 1993, with work sites of 100 to 499 employees must conduct an employee transportation survey at those work sites by May 31, 1994.

c. Employers subject to this ordinance July 1, 1994, with work sites of 500 or more employees must conduct an employee transportation survey at those work sites by November 30, 1994.

d. Employers subject to this ordinance July 1, 1994, with work sites of 100 to 499 employees must conduct an employee transportation survey of those work sites by May 31, 1995.

e. Employee transportation survey results are to be submitted to the City of American Canyon within 90 days of the survey week.

f. Subject to City of American Canyon approval, an employee transportation survey conducted prior to the effective dates of this ordinance may be submitted to fulfill the requirements of this subsection provided that 1) the survey was conducted within six (6) months of this submittal date and 2) it provides sufficient data to calculate the performance objective pursuant to Section 4(K).

8. Employers who become subject to this ordinance subsequent to the schedule above, due to an increase in employees or the establishment of a new or expanded work site shall conduct an employee transportation survey within (6) months after meeting the requirements of Section 4(A). The dates in Subsection 4(gG(7)(E) apply regarding submittal to the City of American Canyon.

H. Requirement to Submit Employer Trip Reduction Plan: Employers that do not achieve the performance objectives established in Section 4(D) for the applicable year at any work site subject to this ordinance shall prepare and submit an Employer Trip Reduction Plan for that work site to the City of American Canyon within 120 days of a determination that the performance objective was not achieved. An employer may submit a consolidated plan that covers multiple work sites. The City of American Canyon will issue a determination that the performance objective has not been achieved based upon information received pursuant to Section 4(G).

1. The Employer Trip Reduction Plan shall contain the following:
 - a. A detailed description and inventory of trip reduction measures including a list of specific trip reduction measures already implemented.
 - b. A description, schedule, and commitment to implement additional or enhanced measures which includes all reasonable, feasible, and cost effective trip reduction measures that can be expected to bring about significant progress toward achievement of the performance objectives. The plan should include appropriate measures designed to address unique characteristics of the work site.
 - c. Summary and discussion of the results of an attitudinal survey of employees or an employer/employee work group designed to ascertain employee attitudes toward various incentive and disincentive measures.
 - d. A discussion of the progress achieved to date and an analysis of why the worksite(s) did not achieve the performance objective including special issues, circumstances, or conditions at the work site.
 - e. A budget indicating all current and projected expenditures for the trip reduction measures.
2. The plan shall be submitted by the highest ranking responsible official of the employer at the work site or each work site when a consolidated plan is submitted that covers multiple work sites.
3. At the option of an employer, the Employer Trip Reduction Plan may include an alternative emission reduction program that demonstrates that the measures included in such program will achieve emission reductions equal to or greater than those that would have been realized if the performance objectives were achieved, and that these alternative measures are not required by any other federal, state, or local control measure or regulatory requirement. Such an alternative emission reduction program shall include an update or progress monitoring report to be submitted at least every two years to fulfill the requirements of Subsection 4(H)(7).
4. The City of American Canyon shall approve and the employer shall implement an Employer Trip Reduction Plan that includes all reasonable, feasible, and cost effective trip reduction measures that can be expected to bring about significant progress toward achievement of the performance

objectives given the constraints of the work site, the nature of the work activity, and the geographical distribution of employees relative to the work site; or the City of American Canyon shall approve an alternative demonstration pursuant to Subsection 4(H)(3). The City of American Canyon shall disapprove any plan that does not meet the above specified approval criteria.

5. An employer shall revise and resubmit to the City of American Canyon any disapproved plan within 90 days of the disapproval. If the revised plan is disapproved, the employer has one additional 90-day opportunity to revise and resubmit a plan before final disapproval. Final disapproval is a violation of the ordinance subject to penalty.

6. An employer may appeal any City of American Canyon disapproval of its Employer Trip Reduction Plan pursuant to Section 4(I).

7. An employer subject to this section shall update its Employer Trip Reduction Plan once every two years after plan approval until such time as the performance objective is achieved. Such plan updates are to be submitted every two years to the City of American Canyon on or before the anniversary date of plan approval.

8. An employer subject to this section shall continue to meet the requirements of Section 4(G).

9. An employer shall revise and resubmit its Employer Trip Reduction Plan within 90 days of a final determination that an element of an approved Employer Trip Reduction Plan violates any provision of law is issued by an agency or court with jurisdiction to make such determination.

I. Appeal of Plan Disapproval: An employer may appeal a plan disapproval made pursuant to Section 4(H) to the City of American Canyon through the procedure listed below:

1. The employer submits a written Notice of Appeal to the City of American Canyon within thirty (30) days of Plan disapproval.
2. The City Council of the City of American Canyon will convene to hear the appeal.
3. The City Council of the City of American Canyon shall issue its decision on the appeal within thirty (30) days after the close of the hearing.
4. The due date for revised Employer Trip Reduction Plans pursuant to Subsection 4(H)(5) will be suspended during the appeal process authorized by this section.

J. Confidentiality: The City of American Canyon will treat the information and data specified in this section as confidential.

1. The City of American Canyon shall treat individual employee transportation survey responses, records, and results submitted pursuant to Section 4(G) in a confidential manner and shall not release any information about individual employees to the public. Both aggregate and work site performance objective results for an employer shall be within the public domain.

2. The City of American Canyon shall treat employer budget information submitted pursuant to Subsection 4(H) (1) (e) in a confidential manner and shall not release any budget information about individual employers to the public. Aggregate and generic budget information for trip reduction programs and measures shall be within the public domain.

K. Performance Objective Calculation: AVR or VER for each affected work site is to be computed in a manner consistent with the following method.

1. The employer conducts an employee transportation survey during a survey week.

2. AVR is calculated only for those employees who start work or are assigned to the work site during the peak period.

3. If less than 60% of the survey forms are returned for processing from those employees who start work during the peak period, all survey forms not returned from those employees who start work during the peak period shall be counted as single occupant vehicles for purposes of calculating AVR or VER.

4. If 60% or more of the survey forms are returned for processing from those employees who start work during the peak period, one-half of those survey forms not returned from those employees who start work during the peak period shall be assumed to have the same AVR or VER as that calculated from the responses to the surveys returned, and on-half shall be counted as single occupant vehicles for purposes of calculating AVR or VER.

5. AVR for the work site shall be calculated by dividing the total "employee-days" for the survey week by the total "vehicle trip-days" for the survey week.

6. VER for the work site shall be calculated by dividing the total "vehicle trip-days" for the survey week by the total "employee-days" for the survey week.

(a) Employee-Days shall be determined as follows: The total number of employees who start work or are assigned to a work site during the peak period each work day Monday through Friday of the survey week. Each day of the survey week that an employee starts work during the peak period counts as one employee-day. For example, an employee who starts work each day Monday through Friday of the survey week between 6 a.m. and 10 a.m. counts as five (5) employee-days. The following procedures are used in totalling employee-days:

1. Employees telecommuting or are off due to a compressed work week schedule are counted as reporting to the work site in calculating the total employee-days.

2. The following employees are not included in the employee-days total:

a. Employees not working because of vacation, sickness, or other time-off.

b. Employees who report to a different work site or an off-site work related activity.

c. Disabled employees.

(b) Vehicle Trip-Days shall be determined as follows: the total number of vehicles used by employees who start work or are assigned to the work site each work day Monday through Friday of the survey week. A vehicle trip-day is based on the means of transportation used for the greatest distance of an employee's home to work commute trip. An employee who starts work during the peak period and arrives at the work site each day of the survey week Monday through Friday in a single occupant vehicle counts as five (5) vehicle trip-days. The following numerical values are used in calculating the total vehicle trip-days:

1. Single occupant vehicle (drive alone) equals one (1).

2. Carpool equals one (1) divided by the number of people in the carpool.

3. Vanpool equals one (1) divided by the number of employees in the vanpool.

4. Motorcycle, moped, motorized scooter, or motor bike equal one (1).

5. Clean-fueled vehicles are counted as follows:

- a. Electric vehicle equals zero (0).
 - b. Compressed natural gas vehicle equals one-fourth (0.25).
 - c. Propane vehicle equals one-half (0.50).
 - d. Dual or flexible fueled vehicle equals three-fourths (0.75).
6. The following all equal zero (0) vehicle trip-days:
- a. Public transit (bus, light rail, ferry, Caltrain, BART)
 - b. Private buspool or club bus
 - c. Bicycle
 - d. Walking and other non-motorized transportation modes
 - e. Employees telecommuting (only on the days those employees are telecommuting for the entire day)
 - f. Employees who work a compressed work week schedule (only on their compressed day(s) off)
 - g. Disabled employee vehicles at all times
7. Employers with multiple work sites within the City of American Canyon have the option to average individual work site AVR or VER to demonstrate that the performance objectives are achieved on an aggregate basis for those work sites when the City of American Canyon is implementing the ordinance. If the employer demonstrates that the performance objectives (Section 4 (D)) are achieved using the averaging methodology, then those work sites included in the averaging are not subject to the requirements of Section 4(H).
- a. The weighted AVR average for the multiple work sites is calculated by 1) adding together the "employee-days" for each work site, 2) adding together the "vehicle trip-days" for each work site, then 3) dividing the aggregate "employee-days" by the aggregate "vehicle trip-days" to obtain the weighted AVR average.
 - b. The weighted VER average for the multiple work sites is calculated by dividing the aggregate "vehicle trip-days" by the aggregate "employee-days."

c. The weighted VER average for multiple work sites can also be calculated as the number of peak period employees multiplied by VER (Site 1) plus the number of peak period employees multiplied by VER (Site 2) divided by the total peak period employees (Sites 1 and 2).

L. Random Sample Method: The method described in this section must be followed when an employer chooses to use a random sample to meet the requirements of Section 4(K).

1. Summary:

a. Subsection 4(G) (3) provides an option for larger work sites to calculate AVR or VER based upon a random sample of the employee population. The random sample option is available only for work sites where 400 or more employees start work during the peak period (6:00 a.m. through 10:00 a.m.).

b. The size of the random sample depends upon the number of employees who start work during the peak period at the work site. The means to determine the minimum size of the random sample is described in Subsection 4(L) (2) (b).

c. The sample must be selected as described in Subsection 4 (L) (2) (d). Once the sample group has been selected, the employer is not permitted to send additional survey forms to employees beyond the original sample group. This will invalidate the results of the survey and void the employer's option to utilize the random sample method.

d. A high response rate is critical to ensure that the random sample produces an accurate AVR or VER for the work site. The employer should make a concerted effort to obtain a completed survey from each employee in the sample. All non-respondents in the sample will be treated as drive along commuters (i.e. commuting in a single occupant vehicle) for purposes of calculating the work site AVR or VER.

2. Basic Random Sample Selection Methodology:

a. The employer shall compile a complete list of employees at the work site, in alphabetical order, and assign a consecutive number to each employee. The employer shall exclude from the list employees who are known to regularly start work outside the 6:00 a.m. through 10:00 a.m. peak period.

b. The employer shall determine the number of employees to be included in the random sample using the following formula, where n is the sample size and N is the number of employees who start work between 6:00 a.m. and 10:00 a.m.

$$n = \frac{N}{1 + .0026(N-1)}$$

A sample of size "n" based on this formula should produce an AVR or VER with a sampling error of at most plus or minus 0.05, with 95% probability. The sample size based on this formula is displayed in the table below:

Number of Peak Period Employees @ Work Site	Sample Size
400 to 420	200
421 to 440	205
441 to 460	210
461 to 480	214
481 to 500	218
501 to 550	225
551 to 600	235
601 to 650	240
651 to 700	248
701 to 750	255
751 to 800	260
801 to 850	265
851 to 900	270
901 to 950	274
951 to 1000	278
1001 to 1500	300
1501 to 2000	320
2001 to 3000	340
3001 to 4000	350
4001 to 6000	360
6001 to 10,000	370
>10,000	380

c. In no case can the random sample size be less than indicated in the above table. The employer may choose to include a larger number of employees in the survey. A larger sample group should more accurately represent the entire employee population, provided that the employer obtains a high response rate.

d. After the sample size has been determined, the employer has two options for selecting the sample.

1. Use a computer program to select distinct random number from the employee list (e.g. 278 distinct random numbers between 1 and 1000, where 1000 employees start work during the peak period).

2. Select employees from the list based upon a sampling interval and random starting number

To determine the sampling interval, the employer shall divide the total population of employees who start work during the 6:00 a.m. through 10:00 a.m. peak period by the sample size and round the result down to the nearest integer.

Example: If a work site has 1000 employees who start work during the peak period and the sample size is 278, then the sampling interval equals $1000 \div 278 = 3.6$. The 3.6 rounded down to 3 to produce the sampling interval.

Therefore, every third name on the list shall be selected beginning at a random starting number X where X is between 1 and 3. If X equals 3, then the sample would include numbers 3, 6, 9, 12, 15, etc., until the required 278 numbers have been selected.

e. The methodology described in Subsection 4(L) (2) (D) will eliminate potential bias that could result from choosing survey participants on the basis of department, rank, income level, home code, or other demographic factors, or from excluding certain segments of the employee population.

3. Selection Process for Subsequent Surveys:

a. In subsequent surveys, the employer may select the random sample using the method described in Subsection 4(L) (2) or the employer may choose to survey the same employees that were included in the previous random sample. Employees in the previous random sample group who have left the organization shall be replaced in the new sample by employees selected per Subsection 4(L) (2). The latter approach may enable the employer to more accurately track changes in commute mode from one survey to the next.

b. If the number of employees who start work between 6:00 a.m. and 10:00 a.m. has increased or decreased by more than 20% since the

last survey, the employer shall select a completely new random sample group using the methodology describe in Subsection 4(L)(2).

4. Performance Objective Calculation, Reporting and Recordkeeping:

a. AVR or VER must be calculated according to the methodology describe in Section 4(K). Notwithstanding, the provision of Subsection 4(K)(4), any employee in the random sample group who fails to submit a completed survey form shall be included in the performance objective calculation as a drive long commuter (single occupant vehicle).

b. The employer shall submit to the City of American Canyon: 1) the completed survey forms for processing or the results of the survey, according to the Subsection 4(G)(7) or 4(G)(8); 2) a description of the methodology used to select the random sample; and 3) a tally showing the number of surveys distributed, the number completed, and the number of non-respondents.

c. The employer shall retain records needed to document adherence to this protocol for a period of at least three years, including the master list used to generate the random sample and the names and numbers selected from that list. Such records, files, and documentation shall be made available to the City of American Canyon during any on-site audit conducted by the City of American Canyon.

The foregoing ordinance was introduced, approved and adopted at a meeting of the City Council held on December 2, 1993, by the following vote:

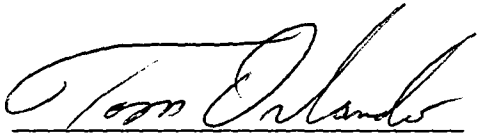
Ayes: Councilmembers Anderson, Bennett, Winters, Mayor Pro Tem Mahanay, and Mayor Orlando

Noes: None

Abstain: None

Absent: None

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Tom Orlando
MAYOR

ATTEST:


Paul H. Kiedrowski
CITY CLERK

APPROVED AS TO FORM:


William D. [unclear]
CITY ATTORNEY

APPROVED AS TO CONTENT


Paul H. Kiedrowski
CITY MANAGER