

EMPLOYER TRIP REDUCTION PROGRAM

Houston-Galveston Area

**Texas Air Control Board
12124 Park 35 Circle
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EMPLOYER TRIP REDUCTION PROGRAM

1. GENERAL

The 1990 Federal Clean Air Act (FCAA) Amendments authorized the U.S. Environmental Protection Agency (EPA) to designate areas failing to meet the National Ambient Air Quality Standard (NAAQS) for ozone as nonattainment and to classify them according to degree of severity. The Houston-Galveston ozone nonattainment area was classified "Severe-17," triggering a set of control requirements designed to bring the area into attainment within 17 years of the FCAA enactment (2007). The ozone nonattainment area includes the following eight counties: Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller.

The control strategy for attainment of the ozone NAAQS focuses on reductions in emissions of volatile organic compounds (VOC) and nitrogen oxides (NO_x), which react together in the presence of sunlight to form ozone, the main component of photochemical smog. A large portion of these ozone precursors are contributed by mobile sources, particularly from automobile emissions during the early morning hours. The Houston-Galveston area must implement a stepwise reduction in both VOC and NO_x emissions over the next 17 years in order to demonstrate reasonable further progress and to achieve attainment of the ozone standard.

In response to the continued deterioration of air quality, particularly in major metropolitan areas, Congress enacted the 1990 FCAA with measures to reduce the number of vehicles on the road during the morning peak travel period in severe ozone nonattainment areas. Since the commuter work trip is more consistent than other trip purposes, the FCAA [Section 182(d)(1)(B)] requires states with severe or extreme nonattainment areas for ozone to submit a revision to the State Implementation Plan (SIP) no later than November 15, 1992.

This revision "requires employers in such areas to implement programs to reduce work-related vehicle trips and miles traveled by employees." At a minimum, the SIP must "require that each employer of 100 or more persons in such area increase average passenger occupancy (APO) per vehicle in commuting trips between home and the worksite during the peak travel period by not less than 25 percent above the average vehicle occupancy (AVO) for all such trips in the area at the time the SIP revision is submitted." Major employers which have fewer than 33 employees that report between 6:00 a.m. and 10:00 a.m. qualify for a de minimis exemption from this requirement.

The FCAA requires that the SIP revision must provide "that each employer subject to a vehicle occupancy requirement shall submit a compliance plan within two years after the date of the SIP revision (no later than November 15, 1994) which shall

convincingly demonstrate compliance with the FCAA requirements, no later than four years after the SIP revision is submitted (no later than November 15, 1996).

The FCAA also requires that the SIP revision be developed in accordance with EPA guidance pursuant to Section 108(f). While official federal guideline requirements on the employer trip reduction (ETR) program were not published prior to the submission of this SIP revision, additional guidance for Section 174 of the FCAA, concerning state and local government cooperation, was included in the 1991 Transportation Planning-Air Quality Planning Guidelines. This SIP revision is consistent with the definitions and requirements in the federal guidelines.

EPA guidelines require states with a severe or extreme nonattainment to establish:

- a. a process for compliance plan submission,
- b. a process for compliance plan approval,
- c. requirements for periodic reporting on target achievement, and
- d. requirements for periodic compliance plan revision as necessary to achieve the required target.

The EPA guidelines interpret the FCAA to require that each employer that demonstrates achievement of the target APO should also submit a maintenance plan and demonstrate compliance no less than every two years. EPA also requires that each employer that fails to meet the target APO after the initial two-year period revise its plan and demonstrate the status of its compliance annually until compliance is met.

To assure compliance of the APO target, EPA requires the employers to develop plans that will include programs designed to increase their APO. These programs would focus on the reduction of single occupancy vehicles (SOV) used during the commute to the worksite.

2. Definitions

EPA proposes to approve ETR SIP submissions which are consistent with the following definitions.

"Alternative means of commuting" - means travel between a person's place of residence and place of employment, other than in a motor vehicle occupied by one person. Alternative means of commuting include, but are not limited to, public transportation, carpools, vanpools, ferries, telecommuting, and walking which may be used in conjunction with such strategies as flextime, staggered work hours, compressed workweeks, and similar measures.

"Average passenger occupancy" - applies to the average number of employees per vehicle equivalent arriving at a specific employer's worksite during the morning peak travel period and equals the number of employees reporting to a worksite between 6:00 a.m and 10:00 a.m. divided by the number of vehicle equivalents in which employees report to work, minus the APO credit. APO determinations may include:

(1) initial APO based on employee commuting information obtained from the initial employee survey conducted during the preparation of the ETR plan submitted in accordance with subsection (j) of §114.21 of Texas Air Control Board (TACB) Regulation IV; and

(2) projected APO based on employee commuting information projected by the employer considering the effects of all anticipated ETR measures and incentives as of the target APO compliance deadlines established in subsection (j) of §114.21 of TACB Regulation IV.

"APO Credit" - means the number of vehicle equivalents less than that needed to achieve the target APO for an employer for the previous year. The APO credit equals the target number of vehicle equivalents used in calculating the target APO, minus the actual number of vehicle equivalents measured in the survey.

"Average vehicle occupancy" - means the baseline number of employees per vehicle equivalents throughout the nonattainment area or a zone within the nonattainment area which has been measured for the year of the SIP submission. The AVO applies to all commuting trips in the area between home and the worksite during the defined peak travel period of 6:00 a.m. to 10:00 a.m., Monday through Friday. Therefore, all commuters, including those who work for employers with less than 100 employees and who commute during the peak travel period, are included in this calculation.

"AVO zones" - means delineations of portions of the nonattainment area that have similar modes of transportation and land use patterns.

"Carpool" - means a group of two or more persons commuting on a regular basis to and from work by means of a vehicle with a seating capacity of nine passengers or less.

"De minimis exemption" - is allowed whereby employers with worksites at which fewer than 33 employees report between 6:00 a.m. and 10:00 a.m. are not subject to the requirements.

"Employee" - means any person, excluding volunteers, employed by a firm, person(s), business, educational institution,

nonprofit agency or corporation, government department or agency, or other entity. Employee includes:

(1) any person, whether paid directly by the employer or through contract with the employer, who regularly reports to work or is assigned to a specific worksite;

(2) any temporary employee assigned to a worksite for more than one month; and

(3) any part-time employee assigned to a worksite for more than 88 hours per month.

"Employer" - means any person(s), firm, business, educational institution, government department or agency, nonprofit agency or corporation, or other entity which employs, by direct payroll or through contract, 100 or more persons at a single worksite. Entities under a common regulating body are considered a single employer and will each require a single plan if they occupy a common worksite, unless the entity has 100 or more employees. Unassociated companies occupying a common worksite will require individual plans. Only worksites with 100 or more employees are subject to the reduction requirement for compliance in 1996. However, all employers of the area are encouraged to implement trip reduction plans to help increase the area AVO, reduce SOVs use, and decrease vehicle emissions. Specifications

for employers of less than 100 employees will be developed with guidance of the TACB and the Houston-Galveston Area Council (H-GAC).

"Guaranteed ride home" - offers employees who use a commute alternative a means to return home or to their car in the event of a personal emergency or unplanned overtime. Often referred to as an insurance policy for carpoolers, guaranteed ride home programs offer reliable back-up transportation at a minimal or no cost to employees.

"Peak travel period" - refers to the time between 6:00 a.m. and 10:00 a.m., Monday through Friday.

"Person trips" refers to each person who takes a trip. For example, there can be five person trips within one vehicle trip, or there can be person trips without a vehicle trip when the person walks.

"Public transportation" - means rail passenger service, motorbus regular route service, paratransit service, motorbus charter service, or other transportation service available to the traveling public whose purpose is to carry passengers between two or more points.

"Ridesharing" - means the cooperative effort of two or more people traveling together for the purpose of getting to work. Utilization of carpools, vanpools, buspools, taxipools, trains, buses, and rail transit are all examples of ridesharing.

"Rideshare and trip reduction incentives" - are defined as inducements offered to encourage ridesharing or trip reduction.

"Single occupancy vehicle" - is any motorized vehicle, including motorcycles, that is used for commuting by a single individual.

"Target APO" - the specified APO that each employer must achieve by the compliance deadlines established in subsection (j) of §114.21 of TACB Regulation IV. Target APOs have been designated in Section 3 for specified geographic subareas within the ozone nonattainment area, such that the weighted average of all target APOs will achieve an overall APO of at least 25 percent greater than the AVO for the entire ozone nonattainment area.

"Telecommuting" - refers to eliminating the need to commute to work by allowing employees to work at home or via electronic connection through a regional center.

"Vanpool" - means seven or more persons commuting on a regular basis to and from work by means of a vehicle seating arrangement designed to carry not more than 15 adult passengers.

"Vehicle equivalent (VE)" - the calculated fraction of a motor vehicle used by each employee for commuting during the peak travel period. For example: a single occupancy vehicle equals a 1.0 VE, a carpool with four employees equals a 0.25 VE, and an employee using transit service or a special vehicle for a disabled employee equals a zero VE. The VEs for other trip reduction strategies, such as compressed workweeks, alternative fuel vehicles, telecommuting, or other measure will be calculated in accordance with procedures and formulas provided by the TACB.

"Vehicle Trips" - refers to a trip taken by a vehicle. Reducing vehicle trips is the goal of the trip reduction program. There can be an increase of person trips without an increase in vehicle trips.

"Vehicle miles traveled (VMT)" - means the number of miles traveled by a vehicle. VMT information may be compiled for one vehicle, for all commuter vehicles, for all vehicles in the entire region, or for other specified purposes.

"Work-related trips" - mean commuting trips between home and the worksite, including any stops enroute to work, during the peak travel period.

"Worksite" - means a building or grouping of buildings which are in actual physical contact or separated only by a private or public roadway or other private or public right-of-way and which are owned or operated by the same employer or by employers under common control as described under the employer definition.

3. Determination of AVO and Zones

The key to achieving a target AVO 25 percent over a regional average is determining that average. Based on a telephone survey conducted during the spring of 1992, the H-GAC has determined that the regional AVO is 1.17. A 25 percent increase in regional AVO would be 1.46. The survey methodology and related information is attached as Appendix A.

EPA guidelines allow the nonattainment area to be divided into AVO zones, each with its own target AVO, to delineate portions of the nonattainment area that have similar modes of transportation and land use patterns. The H-GAC, as the metropolitan planning organization for the Houston-Galveston severe nonattainment area, has been assigned authority to describe the boundaries of AVO zones. As preparation for determining the boundaries of

potential AVO zones, the H-GAC conducted a survey of transportation characteristics of the employees in the nonattainment area. From the survey data, the H-GAC calculated AVOs for various activity centers and portions of the region. The H-GAC examined population data from the 1990 census data and employment data from the 1990 Metropolitan Planning Organization Abstract Tape acquired from Dun's Marketing Services to evaluate the concentration of affected employers and employees in each of the eight counties of the nonattainment area. The H-GAC also considered the availability of transit and other commute alternatives.

Survey Results

From the AVO survey data, only the Houston central business district (CBD), with an AVO of 1.34, was significantly differentiated from the rest of the nonattainment area. Since geocoding is incomplete, the survey data has not revealed any distinctions in AVO among the counties of the nonattainment region.

Employment and Population

The employment analysis identified Harris County as noticeably differentiated from the other seven counties in the region. Over 83.7 percent of regional employment is in Harris County, with the remaining 16.3 percent in the outer seven counties. No less than 85.4 percent of affected employees are in Harris County, with the

remainder outside. At the same time, 86.9 percent of affected employers are in Harris County and 13.1 percent in the outer seven. Harris County has approximately 1.06 affected employers per square mile, while the rest of the region has about 0.05. The Houston CBD comprises about 11.5 percent of affected employees and 7.2 percent of affected employers.

Harris County is the most populous county in the nonattainment region, with 75.5 percent of regional population. The 1990 census identified the major urbanized area in the region; it lies predominantly within Harris County. The remaining seven counties are significantly more rural than Harris. The absence of concentration of employment or population in the outer counties makes alternative commutes more difficult than in counties of similar size with those concentrations. The counties average about 900 square miles of land area, with a range from Galveston County with 398.6 to Harris County with 1,728 square miles. Harris County is the largest, the most populous, the most densely populated, and the county with the largest concentration of employment. The Houston CBD is the most concentrated portion of the most active county in the nonattainment area.

Commute Alternatives

The analysis of commute alternatives reveals that only two counties have any fixed route transit service: Harris and Galveston.

The Metropolitan Transportation Authority of Harris County (Houston METRO) serves an area of approximately 1,300 square miles, almost all of which are within Harris County. METRO operates about 130 routes, most of which converge on the Houston CBD. Island Transit is operated by the City of Galveston within the city limits. Residents of southern Montgomery County are served by The Woodlands Express park-and-ride service to the Houston CBD.

Determination of Zones

Based on the above technical analysis, the H-GAC did not create separate AVO zones in the Houston-Galveston nonattainment area. Instead, the H-GAC established one zone with a current AVO of 1.17 and a regional target 1.46. This zone has been divided into two areas with different target APOs:

Target APO Area I encompasses Harris County, plus adjacent urbanized areas of economic importance, such as The Woodlands, Sugarland, and South Shore Harbor and has a target APO of 1.47.

Target APO Area II encompasses all of Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties not contained in Target APO Area I and has a target APO of 1.41.

Target APO Area I is bounded by the county boundary of Harris County with extensions into Fort Bend, Galveston, Montgomery, and Waller Counties as described below:

Target APO Area I extends into Fort Bend County from the intersection of the Brazoria-Waller County line with Farm Road 1463 south to the intersection of Farm Road 1463 with Farm Road 1093, then east on Farm Road 1093 to Farm Road 1464, then south on Farm Road 1464 to U.S. 59, then east on U.S. 59 to State Highway 6, then east on State Highway 6 to Farm Road 1092, then north on Farm Road 1092 north to Farm Road 3343, then east on Farm Road 3343 to Farm Road 2234, then east on Farm Road 2234 to the Harris-Fort Bend County line.

Target APO Area I extends into Galveston County from the Harris-Galveston County line south along Interstate Highway 45 to Farm Road 518, then east along Farm Road 518 to State Highway 146, then north on State Highway 146 to the Harris-Galveston County line.

Target APO Area I extends into Montgomery County from the Harris-Montgomery County line approximately northeast along Kuykendahl and the planned extension of Kuykendahl, then east along Farm Road 1488 to the planned extension of Needham, then curves along planned and existing Needham south and east to Interstate Highway 45, then south along Interstate Highway 45 to Tamina, then east

along Tamina to the Missouri-Pacific Railroad tracks, then south along the tracks to the Harris-Montgomery County line. Target APO Area I also extends into Montgomery County from the Harris-Montgomery County line north along Sorter to North Park and then east along North Park to the Harris-Montgomery County line.

Target APO Area I extends into Waller County within the corporate boundaries of the City of Katy.

Target APO Area II encompasses the remainder of the eight-county nonattainment area.

The differential target APOs were created in response to technical and political input. The survey only justified creating one zone, the Houston CBD. The region does not want to target only the CBD; targeting that fine creates a significant burden on the CBD and on the outer counties. The CBD would be unique in the region and could experience socioeconomic fallout, while employers in the outer counties would have to raise their APO to a target that may lack the commute alternatives to achieve. The target APOs reflect a somewhat higher target in Target APO Area I with a somewhat lower target in the balance of outer counties. The target APOs are set relative to a weighted average of the APOs of the affected employers in Harris County and in the outer counties. The 1.47 Target APO will affect employers in Harris County which represents 85.4 percent of the area's employment

total. The 1.41 Target APO affects the remaining 14.6 percent of the employment in the outer counties. The weighted average of this distribution results in the required overall Target APO of 1.46. Although the data is not available to quantify, the specific impact of extending the target APO for Harris County into the urbanized areas of the other counties, the resulting overall APO will not decrease below that calculated.

The concentric target areas shown on Figure I direct the trip reduction to Harris County where it would cause the most mobility benefit. Reduction of trips in Harris County also targets emissions reductions to where existing vehicle emissions are greatest.

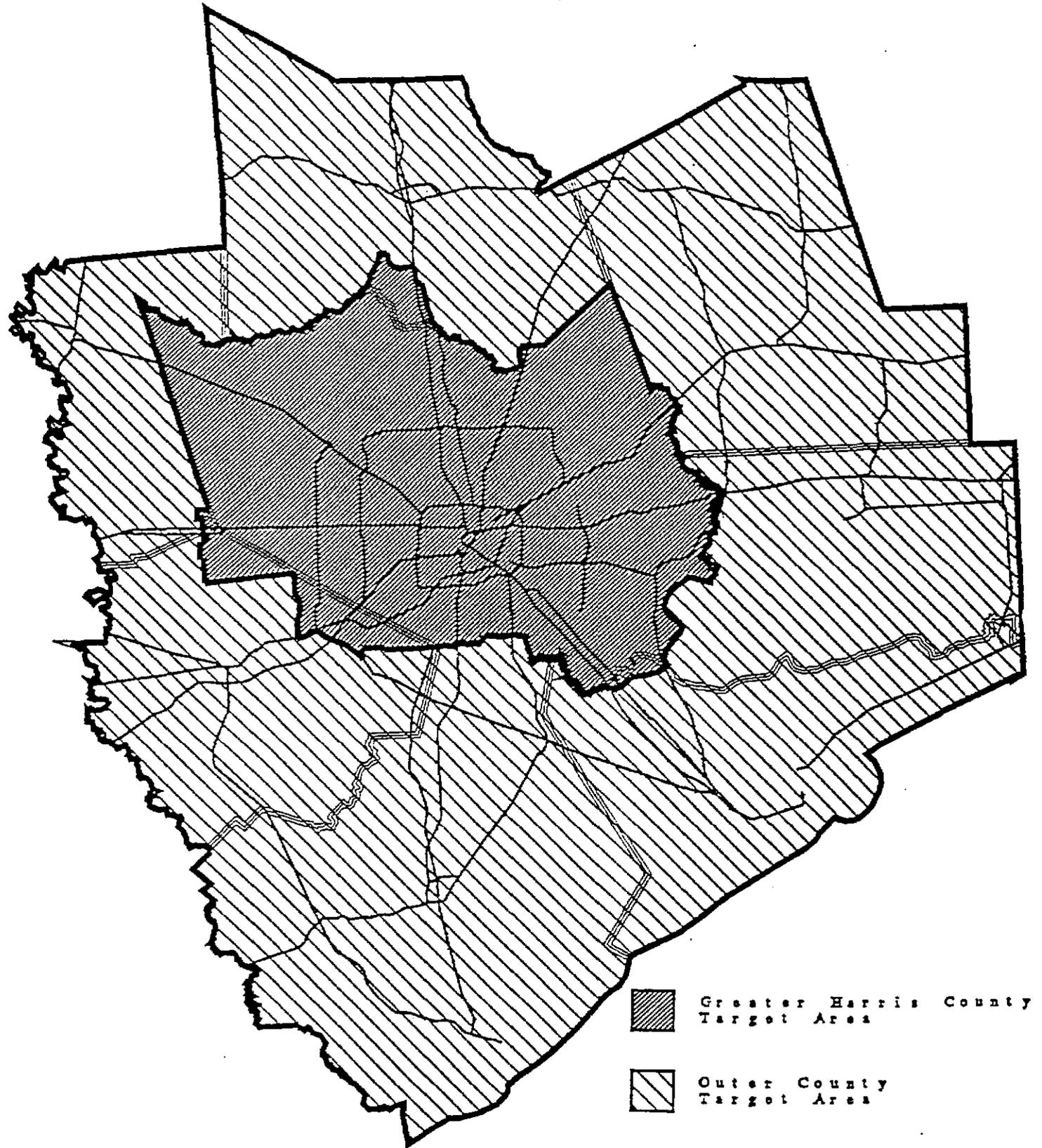
The H-GAC delineated only one zone to make certain that trading of AVO credits would be permitted within the entire nonattainment region when methods for banking and trading of AVO credits are developed in a future SIP revision. The H-GAC envisions a program in which employers surpassing their target AVO for a given year could bank the surplus credit for use in a future year or be available for future trading options.

H-GAC Public and Political Process

Because of the tight timing for the 1992 SIP revision, the above one-zone scheme passed through the H-GAC political and public

Proposed AVO Target Areas

Greater Harris County Illustration



HGAC

processes concurrently with the public comment period at the TACB.

The H-GAC public process included several levels of review leading to formal comments given to the TACB by the H-GAC Board of Directors as representatives of the region. The H-GAC Board established a Regional Air Quality Planning Committee (RAQPC) to advise it on air quality issues. The RAQPC established several subcommittees to respond to specific technical issues of the 1992 SIP revision; the AVO subcommittee is responsible for technical work pertaining to the ETR program. The committee includes representatives of government agencies, transportation providers, affected employers, and members of the public.

The target scheme has been reviewed by the AVO Subcommittee and was reviewed by the RAQPC. The AVO Subcommittee prepared recommendations and comments to be forwarded to the RAQPC. The RAQPC then reviewed the AVO recommendations and comments and drafted a resolution that was adopted formally by the H-GAC Board on June 23, 1992. The extensions of the Harris plus area into Fort Bend, Galveston, Montgomery, and Waller Counties were developed by consensus during the committee process. Areas adjacent to Harris County having similar development and commute patterns were included in the Harris plus area. The resolution was conveyed to the TACB at the public hearing in Houston on June 30, 1992.

4. ETR Plan Requirements

For each worksite, the TACB requires the employers in the nonattainment area to submit ETR plans that demonstrate compliance with the FCAA requirements and include, but are not limited to, the following information:

a. Employer Transportation Coordinator (ETC) Requirements

The employer must designate an ETC and show evidence of the ETC's training in a basic TACB-approved training, in accordance with the requirements of Section 9.a., to implement and monitor the ETR plan. The ETC is responsible for the preparation of the plan and the implementation, operation, and monitoring of the applicable ETR measures and incentives at each affected worksite.

b. Site Information

Information regarding the location of and type of business being conducted at each affected worksite, the associated target APO, and associated initial APO.

c. Employee Information

1) An employee survey on commuter behavior, with a response rate of 75 percent or higher, must be submitted to the TACB that describes what transportation modes employees actually used to travel each day over five consecutive workdays, Monday through Friday, to the worksite between 6:00 a.m. and 10:00 a.m.

2) current commuter behavior, including data such as VMT, number of coldstarts, portions of commuter trips traveled in SOVs, and other information necessary to estimate vehicle emissions.

d. Initial APO Determination

The initial APO must be based on results of a survey of the total number of employees arriving at the worksite during the Monday through Friday morning peak travel period. The survey must cover five consecutive days representing a typical week for the employer's business. No public holidays or special rideshare must occur during or bordering the weekend on either side of the selected week. The survey must have a response rate of at least 75 percent or higher and non-respondents must be counted as arriving to work each day in a SOV, unless a response rate of 90 percent or greater for which the surveyed ratio will be considered for all employees. A 100 percent employee participation in

the survey is encouraged. From the survey results, the employer must calculate the initial APO.

e. Tracking Methods

To assure the effectiveness of the ETR plan, the employer must provide a mechanism to ensure the proper evaluation and tracking of the effectiveness of selected trip reduction measures and incentives. At a minimum, the employer should perform periodic calculations of the employees' person trips, the reduction in VMT, and the vehicle trips resulting from the trip reduction plan and incentives. This information should be available so that the employer can monitor the effectiveness of the incentives and make adjustments when necessary.

f. Selection of Trip Reduction Measures

1) The plan must include a description of the trip reduction measures and incentives scheduled to be implemented at each worksite. While implementation of these specific measures and incentives is not required, the employer must implement, monitor, and periodically modify, if necessary, adequate measures to ensure the applicable target APO is achieved by the compliance date specified in Section 7.

2) Employers are not limited to specific measures or incentives and are encouraged to be innovative with measures that can be effective in reducing or eliminating vehicle trips for their employees. EPA's preliminary guidance documents present the following examples of measures and incentives which may be implemented to increase the APO.

(a) Provide direct financial incentives to promote rideshare and disincentives to SOVs,

(b) Sponsor and/or subsidize carpools and van-pools,

(c) Subsidize use of public transit,

(d) Institute compressed workweeks,

(e) Offer telecommuting and work-at-home options,

(f) Provide comprehensive rideshare matching services,

(g) Subsidize mid-day shuttles to local shopping areas and local activity centers,

(h) Provide company-owned fleet vehicles for
ridesharing,

(i) Charge those who drive alone for parking,

(j) Offer preferential or subsidized parking for
carpools and vanpools,

(k) Improve facilities to promote bicycle use,
or

(l) Promote establishment of on-site amenities.

g. Commitment Letter

The highest ranking official with direct management responsibility for the worksite must sign an enforceable certification which will:

1) attest to the completeness, accuracy, and
reliability of the plan contents,

2) verify that the measures and incentives to be
implemented have been evaluated and are designed to ensure
compliance with the appropriate APO target, and

3) commit to the full and timely implementation of all provisions of the plan, including the on-going evaluation and adjustment of the ETR measures and incentives as necessary to achieve the applicable APO target by the compliance deadlines, established in Section 5.

h. Combined ETR plans may be submitted by employers which have a single official with management responsibility for multiple worksites with more than 100 employees each. Combined plans must comply with the following conditions:

1) Compliance may be demonstrated either:

(a) for the specific target APO for each individual worksite or

(b) for the combined worksites by dividing the total number of employees arriving at all worksites during the peak travel period by the total number of associated VEs for all worksites. The target APO for the combined plan shall be determined at the highest target APO at any single worksite included in the plan.

(2) Information pertaining to site information, employee information, initial APO, and trip reduction measures must be submitted separately for each worksite.

(3) Information pertaining to ETC, tracking methods, and commitment letter may be aggregated and submitted for all worksites.

(4) The commitment letter must be applicable for all worksites included in the combined plan.

i. Employers which can demonstrate compliance with the target APO by the ETR plan submission deadlines established by Section 5. of this SIP must submit a complete ETR plan with the exception of information pertaining to the selection of trip reduction measures and need not commit to any additional measures or incentives.

5. Plan Submission Requirements

a. Counties Affected

Major employers in the Houston-Galveston ozone nonattainment area, including Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties are subject to the ETR requirements.

b. Phase-In of Plan Submittal

Employers will be encouraged to prepare plans and initiate trip reduction measures and incentives prior to the established deadlines because changing employee travel behavior will not occur immediately nor without a significant cooperative effort by the employer and employees.

Employers must submit approvable ETR plans according to the following schedule:

Employers of 400+ employees ----- no later than
May 15, 1994

Employers of 200-399 employees --- no later than
July 15, 1994

Employers of 150-199 employees --- no later than
September 15, 1994

Employers of 100-149 employees --- no later than
November 15, 1994

Employers which increase employment to 100 or more employees or which move into the nonattainment area or into an AVO zone with a higher APO target after the scheduled deadlines must submit an

ETR plan within one year and shall become subject to the applicable APO target in two years.

6. Plan Review Criteria

The goal of the plan review process is to encourage employers to submit plans that lead to the trip reduction goals and improve the air quality. The TACB will review ETR plans based on completeness and accuracy of information requested.

The plan review process is anticipated to be phased-in to match the plan submission schedule described in Section 5.b. It is a goal of the TACB to review all plans within 60 days of submittal and notify the employer whether the plan is approved or disapproved. Approval of a plan does not exempt the employer from the requirement to achieve the target APO.

7. Attainment of APO Target

ETR plans must "convincingly demonstrate" compliance with the targeted APO no later than two years after the plan submission deadline. Failure to attain the targeted APO, regardless of the approval of the plan, may subject an employer to penalties under TACB Regulation IV, Control of Air Pollution from Motor Vehicles.

8. Tracking and Auditing Requirements

The TACB will develop tracking and auditing procedures to provide for the quality assurance of the plans and reporting requirements.

a. Reporting Requirements

1) Each employer must review and evaluate each of the measures and incentives implemented and submit a report reflecting the status of each measure and an estimate of their progress toward achieving the applicable target APO no later than one year after the date of their plan submission deadline.

2) Each employer must demonstrate compliance with and achieve the target APO no later than two years after the date of their plan submission deadline.

(a) For employers that achieve the target APO goal by the compliance date, the TACB will require the employer to review; update, if necessary; resubmit the plan; and demonstrate continued compliance every two years by the anniversary of the original plan submission deadline. Milestone employee surveys must be performed annually and the results submitted to the TACB on forms provided by the TACB or in a format approved by

TACB to ensure that employers maintain compliance with the APO target.

(b) For employers that fail to reach the target APO by the compliance date, the TACB will require employers to revise and resubmit a plan to achieve compliance. The employer must continue to survey employees, review and report on the implementation of committed control measures and incentives, and submit revisions to the ETR plan annually until compliance of the APO target is demonstrated. Furthermore, the employer will be considered in violation of TACB Regulation IV and be subject to potential penalties until compliance is achieved.

b. Recordkeeping Requirements

The TACB will require employers to maintain records at the facility for at least two years and to make such records available to representatives of the TACB, EPA, or local air pollution control agency having jurisdiction in the area, upon request. These records include, but are not limited to, the following:

- 1) the contents and results of employee surveys, market analyses, transportation studies, or other information gathering efforts;

2) a full description of all measures and incentives offered to employees and the associated employee response;

3) an accounting of the budget allocations and expenditures for each measure and incentive offered to employees;

4) the statistics on the operation or coordination of employer-owned or contracted transportation services, such as vanpools or subscription buses;

5) all publications, newsletters, brochures, or other examples of marketing, promotional, or educational activities conducted to encourage employee participation; and

6) other information associated with the development, implementation, evaluation, or modification of the ETR program.

Falsifying or failing to maintain appropriate records may be considered a violation of TACB Regulation IV. Records must verify that all incentives included in the ETR plan were offered and must document the resulting employee participation. Plans from prior years must be kept for at least five years from the submission deadline date.

c. Quality Assurance Measures

The TACB will provide for the development and implementation of quality assurance measures and procedures to assure the integrity of the ETR program through the auditing of employee surveys, site visits for facility audits, and audits of employers' required records.

1) Audit surveys of employees may be conducted to verify the APO submitted by the employer in the ETR plan and periodic reports.

2) Announced and unannounced site visits may be conducted to verify the facility description and facility improvements, such as bicycle lockers or bus loading facilities, that are provided to support committed control measures and incentives.

3) Audits of required employer records may be performed as a part of the announced and unannounced site visits.

9. Training and Information Assistance

The TACB will provide for the certification of training programs and/or instructors to assist employers and their employees to comply with the requirements of the ETR program. In addition,

the TACB will assure the implementation of a public information program, in cooperation with the H-GAC and other local agencies, to increase awareness of the ETR program requirements and associated benefits.

a. ETC Training Requirements

Employers must designate an ETC who, by the plan submission date is trained to accomplish the implementation and monitoring of the ETR plan. Adequate ETC training shall include, but shall not be limited to, the following:

1) an initial comprehensive training course approved by the TACB and administered by a TACB training provider; and

2) on-going training activities, such as relevant workshops, conferences, symposia, or other events recognized by the TACB as necessary to maintain expertise in ETR plan administration and trip reduction measures.

b. ETR Training Program

The TACB will coordinate the development of this training program for the ETC with transportation providers, representatives of

employers, local government, and local training institutions.

The emphasis of the training will focus on the following topics:

1) how to access local transportation providers and rideshare programs to provide methods for meeting the requirements of the ETR plan,

2) transportation demand management and its importance as an element in solving our current traffic congestion and air quality problems,

3) marketing of the plan and associated incentives to company management and employees, and

4) methodologies of designing the ETR plan and complying with administrative requirements.

Yearly updates to the curriculum will provide information gained from "successful" plans either in Houston or another ozone nonattainment area.

c. Certification of ETC Training Providers

The TACB will establish a program of certification of training providers to ensure the quality and consistency of the required ETC training. An emphasis will focus on the use of local

providers and training institutions. The program will determine the duration of the certification, the educational/professional qualifications for certification of instructors, and requirements of the development of training materials.

d. Public Information Program

The TACB will assure implementation of a public information program to publicize the ETR program in the media, to employers, to employees, and to the public. The TACB will assure the implementation of the public information program in cooperation with those local agencies interested in participating in the public awareness program. This effort may include the preparation and distribution of brochures, news releases, public service announcements, and other public information materials explaining the ETR program, the need to increase vehicle occupancy for work trips, and the need to reduce the number of vehicle trips contributing to air pollution in the nonattainment area.

The main emphasis of this public information program will be to inform commuters of the "hidden cost" of subsidizing the automobile and its parking and the advantage of reducing vehicle trips and improving air quality. Information regarding the penalties that may result from noncompliance with the ETR requirements, as well as the need for employee involvement and cooperation, will be included. Information about the

availability of local programs for transit, rideshare matching services, and other transportation service providers will also be emphasized.

10. Banking APO Credits

To encourage area employers to begin early trip reduction incentives and to surpass target APO goals set in Section 3 of this document, the TACB will allow employers to "bank" APO credits to be used in the next year. Banking of credits would allow employers who achieve more effective implementation of the ETR program to offset a potential shortfall in the APO achieved during the following year.

Employers wishing to use this option will be required to establish a verifiable recordkeeping methodology to track APO credits and must submit that methodology to the TACB with the ETR plan. Banked APO credits can only be used by the employer and can not be traded between employers. Trading of APO credits will not be considered until an effective method of tracking and administering a trading program is developed.

11. Enforcement

a. Rules for the ETR Program

Rules governing the ETR program are contained in 31 TAC Chapter 114, Regulation IV, Control of Air Pollution from Motor Vehicles, §114.21, adopted in conjunction with this SIP revision. Failure to provide an approvable ETR plan by the scheduled deadline, failure to implement the ETR plan or plan incentives, and/or failure to attain the appropriate target APO may be considered violations of TACB Regulation IV.

b. Penalties

The Texas Health and Safety Code establishes both administrative and civil penalties for persons violating a rule or order that is adopted by the TACB. The TACB may consider the effort made by the employer toward achieving the APO target when determining compliance and/or in assessing the penalties.

1) Administrative Penalty

An administrative penalty of up to \$10,000 may be assessed by the TACB for each violation. Each day that a continuing violation occurs may be considered a separate violation.

2) Civil Penalty

A civil penalty of up to \$25,000 may be assessed by the courts through action by the Texas Attorney General's office.

12. Notification of Employers

The TACB, in cooperation with the H-GAC, will notify employers of the regulations and appropriate administrative requirements.

Notification may include the following activities:

a. Public announcements will be provided to media such as local newspapers, television, and radio.

b. A direct mailing of a notice will be made to all major employers that are identified by the H-GAC.

c. Notification will also be included in announcements of ETC training sessions and other related publications.

d. Failure to receive a specific notice does not exempt an employer from the requirement for plan submission or the requirement to attain the APO target.

13. Emission Reduction Estimates

Emission reductions resulting from the ETR program are expected to contribute towards a demonstration of attainment of the ozone standard. However, methodologies for estimating the emission reductions resulting from this fraction of the motor vehicle trips are not yet available. The specific emission reduction estimates from this program will be included in the 1993 and 1994 SIP revisions.