William & Mary Environmental Law and Policy Review

Volume 18 (1993-1994) Issue 1 William and Máry Journal of Environmental Law

Article 5

October 1993

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Leanne Cusumano, Analysis of the 1990 Clean Air Act's Employee Commute Options Program -A Trip Down the Right Road, 18 Wm. & Mary Envtl L. & Pol'y Rev. 175 (1993), https://scholarship.law.wm.edu/wmelpr/vol18/iss1/5

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ANALYSIS OF THE 1990 CLEAN AIR ACT'S EMPLOYEE COMMUTE OPTIONS PROGRAM: A TRIP DOWN THE RIGHT ROAD

Leanne Cusumano

Congress, through the 1990 Clean Air Act Amendments, has mandated the implementation of new requirements and programs designed to effectively reduce air pollution and reach and maintain defined clean air goals. The Employee Commute Option ("ECO") program, as promulgated by the Environmental Protection Agency ("EPA"), exemplifies the extent to which Congress has regulated activities that cause air pollution in its attempt to save the nation's air.

The ECO program is described in the Clean Air Act ("CAA") section 182(d)(1)(B).² The ECO requires states and employers to work together to reduce the number of vehicle miles travelled by commuters³ by creating and implementing commuter programs.⁴ EPA generated thirty pages of guidance⁵ from the single paragraph describing ECO in the CAA. This Article details the requirements of the employee commute option program as outlined in the Guidance issued by EPA in December 1992.⁶ The Article also examines whether employee commute option programs constitute a rational part of a pollution reduction program, and if so, whether the gains from such a program justify individual sacrifices that must be made to ensure that commuting programs will work.

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^{1.} The new amendments bring the Clean Air Act to three times the length of the prior act. JOHN-MARK STENSVAAG, CLEAN AIR ACT 1990 AMENDMENTS: LAW AND PRACTICE § 1.2, at 1-3 (1991).

^{2.} CAA § 182(d)(1)(B), 42 U.S.C. § 7511a(d)(1)(B) (1990).

^{3.} Id.

^{4.} Telephone Interview with Constance H. Ruth, Division of Mobile Sources, EPA (Oct. 16, 1992). These programs were originally referred to as Employer Trip Reduction ("ETR") programs. *Id*.

^{5.} OFFICE OF AIR AND RADIATION, U.S. ENVTL. PROTECTION AGENCY, Pub. No. ANR-443, EMPLOYEE COMMUTE OPTIONS GUIDANCE (December 1992) [hereinafter GUIDANCE].

^{6.} The December 1992 GUIDANCE is the final version of the EPA regulations on Employee Commute Options. 58 Fed. Reg. 13,596 (1993) (publishing notice of availability as of March 12, 1993).

Part I of this Article discusses the requirements of the federal ECO program. Part II analyzes the requirements of similar state programs and compares the state requirements to the federal requirements. Part III surveys the challenges to the programs that have come before the courts. Part IV examines the privacy and individual liberty considerations implicated by implementation of a program that "require[s] widespread lifestyle changes and limit[s] use of the personal car."7 Part V balances the government interest in a clean environment against individual liberty interests by examining how, where, and why ECO programs developed; whether this provision will actually reduce harmful emissions and air pollution; and whether the provision is the best method to create clean air. This Article also considers the legislative history of the ECO amendment and discusses whether Congress understood exactly what it was requiring when it adopted the ECO mandate. Part VI attempts to evaluate how effective the ECO program will be in light of possible challenges, and what the role of the courts will be in implementing ECO.

I. EPA GUIDANCE FOR IMPLEMENTATION OF THE EMPLOYEE COMMUTE OPTION PROGRAM

EPA had one paragraph in the CAA from which to develop the requirements of the ECO program.⁸ In interpreting that one paragraph,

^{7.} Jeremy A. Gibson, Employer Trip Reduction = Lifestyle Regulation Enlargement,

²³ Env't. Rep. (BNA) 1329 (1992).

^{8.} Section 182(d)(1)(B) states:

⁽B) Within 2 years after November 15, 1990, the State shall submit a revision requiring employers in such area [severe ozone nonattainment areas] to implement programs to reduce work-related vehicle trips and miles travelled by employees. Such revision shall be developed in accordance with guidance issued by the Administrator pursuant to section 7408(f) of this title and shall, at a minimum, require that each employer of 100 or more persons in such area increase average passenger occupancy per vehicle in commuting trips between home and the workplace during peak travel periods by not less than 25 percent above the average vehicle occupance for all such trips in the area at the time the revision is submitted. The guidance of the Administrator may specify average vehicle occupancy rates which vary for locations within a nonattainment area (suburban, center city, business district) or among nonattainment areas reflecting

EPA has constructed a complex set of requirements. This Section examines these requirements in order to fully explore the impact of ECO on individuals and the likelihood that pollution will be decreased by ECO programs.

A. Who Must Comply With the Program

The ECO program applies to employers located in severe and extreme ozone nonattainment areas⁹ and to employers located in serious carbon monoxide areas.¹⁰ Although the areas constitute a limited number of sites, a large percentage of the U.S. population lives within these areas.¹¹ For this reason, the ECO requirement will have a tremendous effect on a great number of individuals.

existing occupancy rates and the availability of high occupancy modes. The revisions shall provide that each employer subject to a vehicle occupancy requirement shall submit a compliance plan within 2 years after the date the revision is submitted which shall convincingly demonstrate compliance with the requirements of this paragraph not later than 4 years after such date.

CAA § 182(d)(1)(B), 42 U.S.C. § 7511a(d)(1)(B) (1990).

- 9. CAA § 182(d)(1)(B), 42 U.S.C. § 7511a(d)(1)(B) (1992). Only one area exists in the entire United States which is classified as an extreme ozone nonattainment area. That area is Los Angeles, California, which includes Anaheim and Riverside California. The areas that are severe ozone nonattainment areas are Baltimore, Maryland; Chicago-Gary-Lake County, Illinois-Indiana-Wisconsin; Houston-Galveston-Brazoria, Texas; Milwaukee-Racine, Wisconsin; Muskegon, Michigan; New York-North New Jersey-Long Island, New York-New Jersey-Connecticut; San Diego, California; Philadelphia-Wilmington-Trenton, Pennsylvania-New Jersey-Delaware-Maryland. S. REP. No. 228, 101st Cong., 2nd Sess. 35 (1990), reprinted in 1990 U.S.C.C.A.N. 3385, 3421.
- 10. CAA § 187(b)(2), 42 U.S.C. § 7512a(b)(2) (1992). The areas that are designated serious carbon monoxide areas are all in California. They are the Los Angeles South Coast Air Basin Area, Orange County, Riverside County, and San Bernadino. 40 C.F.R. § 81.305 (1992).
- 11. As of 1990 the United States population was 249,900,000 people. U.S. BUREAU OF THE CENSUS, U.S. DEP'T OF COMMERCE, STATISTICAL ABSTRACT OF THE UNITED STATES: 1993, at 8 (1993). As of 1990 the aggregate population for those areas included in severe and extreme ozone nonattainment areas was 58,001,000 people. *Id.* at 37-39. This means that the ECO program will apply to an area of the United States that includes roughly 23% of the country's population.

ECO requires employers¹² with one hundred or more employees at a single worksite to develop an ECO program.¹³ The employer calculates the number of employees who will be subject to ECO requirements; this number is based on the total payroll and is not limited only to those employees reporting to the worksite during peak hours.¹⁴

B. How the Formula for Compliance is Determined

EPA has attempted to clarify the requirements of the ECO program by providing numerous definitions in the ECO GUIDANCE. However, the large number of definitions make determining a formula for compliance difficult. In an attempt to simplify the determinations, the process is broken down into five basic steps.

- STEP 1 Determine the area Average Vehicle Occupancy ("AVO"). 15
- STEP 2 Determine the target Average Passenger Occupancy ("APO") ≥ 1.25(AVO). 16

^{12.} A state must use the definitions, such as the definition of "employer," used in the GUIDANCE unless a State can show "that alternative definitions are more appropriate." GUIDANCE, *supra* note 5, at 6. This means states are bound to the ECO requirements unless they can make a showing that their definitions are more appropriate, which may well be interpreted as requiring stricter standards.

^{13.} Id. at 8. "The number of employees an employer has is determined as the number of employees on the payroll" Id. at 9.

^{14.} Id. at 9.

^{15.} AVO equals the number of employees who report to work divided by the number of vehicles in which those employees arrive. *Id.* at 10. A state may divide a nonattainment area into multiple zones with different AVOs. *Id.* at 11-12. The AVO number for an area is determined by survey or census data collected with the assistance of employers in the nonattainment areas. *Id.* at 10-11. AVO includes "all commuters including those who work for employers with less than 100 employees and who commute during the peak travel periods...." *Id.* at 11.

^{16.} The baseline goal set for increasing the number of commuters per vehicle is determined by a ratio between the AVO and the APO. *Id.* at 12. Employer progress will be measured against this goal. *Id.*

Determine the measured APO = (# Employees reporting to worksite during peak hours)¹⁷ / (# Vehicles in which employees report)¹⁸

17. Id. at 12. Peak hours are 6:00 a.m. to 10:00 a.m., Monday through Friday, or any time between 5:00 a.m. and 11:00 a.m. that the state determines captures 85% of commuters. Id. at 6. Because the normal business day runs 9:00 a.m. to 5:00 p.m., the number of employees included areawide in this definition will be very extensive. The only employees that this definition will exclude are those employees that do shift work during off hours.

18. The final GUIDANCE does not provide a definition for vehicle. The original DRAFT GUIDANCE considered defining what would count as a vehicle. The number of vehicles in which employees arrive may seem a simple calculation, but can be more complex due to certain exceptions and provisions EPA may allow. In the DRAFT GUIDANCE, employees who used only public transportation to arrive at work were counted as arriving in zero vehicles. U.S. E.P.A., THE DRAFT EMPLOYER TRIP REDUCTION GUIDANCE OF THE CLEAN AIR AMENDMENTS OF 1990 AS INCLUDED IN THE GENERAL PREAMBLE: IMPLEMENTATION OF TITLE I: CLEAN AIR ACT AMENDMENTS OF 1990 (STAFF WORKING DRAFT) 135 (October 11, 1991) [hereinafter DRAFT GUIDANCE]. For commuters who drove to public transportation, "[v]ehicles left at transit terminals, bus stops, or carpool formation points more than 2 miles from the worksite ... need not be counted." Id. at 136. The average commuting time in the United States is twenty-two minutes one way. The New Look of Commuting in America, 14 CURRENT MUN. PROBS 299. 304 (1988) (summarizing the findings of the report Commuting in America, published by the Eno Foundation) [hereinafter New Look]. Allowing cars left within two miles of a worksite to be excluded from the vehicle count seems insufficient to reduce vehicle use. Some exceptions permitted by the DRAFT GUIDANCE were slightly more complicated. For example, "[c]hildren ... dropped off at a daycare facility at, or within one half mile of, the worksite [we]re to be counted as occupants in the vehicle." DRAFT GUIDANCE, supra, at 135. A parent dropping off two children would be counted as one person arriving in one-third of a vehicle. Id.

Another exception detailed how to account for employees on an abbreviated work schedule. "Full-time employees on a compressed work week schedule are to be included in the employee count for their compressed weekdays off and assigned a zero vehicle count on those days." *Id.* at 136. This exception would allow employers an easy way to increase AVO. If an employee works ten hours a day, four days a week instead of eight hours a day, five days a week, an automatic zero would be added for the fifth day. If the employer spreads out the work schedule of his employees this measure alone should bring down significantly the AVO. An employer with one hundred employees working five days a week can change the schedule to four day work weeks with ten hour shifts so that he only has eighty people working on any given day by rotating the weekday that individual employees would have off. This change would result in 20 automatic zeros being added to the measured AVO. In the original calculation, the employer would theoretically have 100 employees / 100 vehicles = 1 for the measured AVO. Under the shift change, the employer would still have 100 employees but this number would be divided by 80 vehicles, for a measured AVO of

STEP 4 Calculate Vehicle Mile Credits 19

1.25. This change alone would enable the employer to meet the requirements of the ECO program if the area AVO were equal to 1; the environmental ramifications of this change are that four trips would still be required, instead of five.

The final GUIDANCE has eliminated references to what will constitute a vehicle, making it uncertain whether an employer could use the above examples to argue compliance or whether a vehicle means one motorized means of transportation, regardless of the number of people arriving in it. Perhaps the states will provide definitions of "vehicle" within their ECO programs.

19. Vehicle Mile Credits represent the amount by which a worksite meets, exceeds, or fails to reach the target APO. If a worksite meets the target APO, Vehicle Mile Credits equal zero. If a worksite exceeds the target APO, Vehicle Mile Credit is a positive number. If the worksite fails to reach the target APO, Vehicle Mile Credit is a negative number. GUIDANCE, *supra* note 5, at 17-19 (Vehicle Mile Credits take amount of miles commuted into account as well).

For example, if Company A reaches the end of a year with an APO credit of ten (use of ten fewer vehicles than permitted by the ECO program) and an average employee commute of ten miles, it will have available 100 Vehicle Mile Credits to trade. If Company B ends a year with an APO Excess Vehicle Count of five (use of five more vehicles than permitted by the ECO program) and has an average employee commute of twenty miles, it will need to acquire 100 Vehicle Mile Credits in order to avoid being out of compliance. *Id.* at 18.

A state may allow an employer to bank his extra credits or trade them to other employers. Trading may be done in the same nonattainment area. *Id.* at 18. Trading also may also be done across zone lines so long as the zones are within the same nonattainment area and the average number of vehicle miles travelled is considered. *Id.* at 16-17.

If a state does not allow banking or trading, it still may allow an employer with multiple worksites "to average compliance over all such worksites so long as individual compliance plans are submitted for each worksite." *Id.* Averaging may be done within the same nonattainment area. *Id.*

An employer may be on either a one or two year review cycle. *Id.* at 13; *see also* DRAFT GUIDANCE, *supra* note 18, at 137-38. If an employer chooses to demonstrate compliance every two years instead of every year and he is out of compliance at the two year mark he will be penalized as if he were out of compliance for both years, even though no measurements were made for the interim year. The yearly increment used to determine excessive vehicle count will be two. *Id.* at 139 (Example 2, Employer D, *cf.* Employer E who elects to attempt to demonstrate compliance every year). If the employer more than meets the compliance standards at the two year mark, the state will give him only credit for one year. The yearly increment used to determine surplus vehicle count will be one. *Id.* at 139 (Example 2, Employer C).

STEP 5

Adjust the *measured APO* by any credits such that (APO) = (# Employees reporting to worksite during peak hours) / (# Vehicles in which employees report +/- Vehicle Mile Credits).²⁰

For example, if an area's AVO were found to be 1.2, the target APO would be 1.25(1.2) = 1.5 persons per vehicle. The GUIDANCE would require an employer to have an average of 1.5 people reporting to work in each vehicle which arrived at the worksite. This average would constitute the employer's measured APO. An employer with 100 employees would be permitted to have 66.67 vehicles used to reach the worksite. An employer with Vehicle Mile Credits would be able to have more cars arrive at the worksite; an employer with excessive Vehicle Mile Credits would have to reduce the number of vehicles arriving at the worksite.

This five step formula allows for flexibility by planning for differences in commuting habits between localities while maintaining a constant percentage increase in vehicle occupancy. This flexibility ensures that even though the absolute numbers of commuters may differ for each employer, the vehicle occupancy rate will be the same, and will be greater than what is currently required.

C. Specific Requirements With Which States and Employers Must Comply

The EPA is very specific about how it will determine ECO program compliance. ²² EPA permits the states, however, to determine how compliance will be reached. In fact, states may choose to leave specific implementation methods to affected employers. ²³

Although EPA requires neither states nor employers to use any

^{20.} GUIDANCE, supra note 5, at 15-16.

^{21.} Step 3 of the formula produces this number. 100 employees divided by a measured APO of 1.5 would equal 66.67 vehicles. This computation assumes that the employer's APO credit is equal to zero.

^{22.} See supra section I.B.

^{23.} EPA suggests a variety of measures for implementing ECO programs. GUIDANCE, supra note 5, at 22-26. The GUIDANCE specifically states, however, that the "list is not all-inclusive and the measures are not required per se." Id. at 23. EPA has avoided the possibility of any challenge to its methodology by leaving the specific steps of a program to state discretion.

specific measures in developing plans to increase their APO,24 some actions toward ECO goals are mandatory.25 The states, for example, must demonstrate compliance through their State Implementation Plans ("SIPs").26 The CAA withholds all highway construction funds from a state if the state fails to submit a SIP that EPA may approve; a viable ECO program is a required part of the SIP.27 The CAA gives states four options whereby an ECO program will be considered to demonstrate convincingly that compliance will be attained.²⁸ States may provide funding for a plan-by-plan review of each employer; create a minimum plan with which employers must comply; create a plan to be used in the event of employer failure to meet the target APO; or provide for fines "large enough to result in a significant prospective incentive for the employer to" comply.²⁹ A state may implement these options separately or in combination.³⁰ Additionally, states must provide penalties for an employer's failure to develop or implement a compliance plan.31 The penalties must be at least equal to the cost of compliance.32

The CAA also requires states to submit a revised SIP, including ECO programs, within two years of enactment of the 1990

^{24.} In developing an ECO program, an employer will have to consider several new legal issues. For example, if an employer adopts a ride share program, the employer will have to make some determination of how far workmen's compensation will extend for participants. See Ellen Hershkowitz, Note, Transportation Controls: Time to Clear the Air, 10 FORDHAM L. REV. 725, 743-47 (1982) (discussing the practical considerations of instituting a car or van pool operation).

Another consideration will center around whether the vehicles used in a ride share program will be private passenger vehicles for insurance purposes. One solution may be to have the government provide low cost insurance programs for such programs. Id. at 745 n. 24.

^{25.} GUIDANCE, supra note 5, at 15-16.

^{26.} Id. at 23-24. A SIP is a plan "which provides for implementation, maintenance, and enforcement of [National Ambient Air Quality Standards ("NAAQSs")] in each air quality control region (or portion thereof) within such state." CAA § 110(a)(1), 42 U.S.C. § 7410(a)(1) (1988).

^{27.} CAA § 176, 42 U.S.C. § 7506 (1988).

^{28.} The CAA requires the states to "convincingly demonstrate compliance with the requirements" of the ECO provision. CAA § 182(d)(1)(B), 42 U.S.C. § 7511a(d)(1)(B) (1990). EPA echoes this language in the Guidance. GUIDANCE, supra note 5, at 13.

^{29.} GUIDANCE, supra note 5, at 13-14.

^{30.} Id. at 13.

^{31.} Id. at 14-15.

^{32.} Id.

amendments.³³ Employers then are required to submit a compliance plan within two years of submission of the revised SIP, and compliance must be reached four years after an employer submits an ECO plan.³⁴ On this schedule, ECO would be fully implemented by 1998.³⁵

II. SIMILAR PROGRAMS IN EXISTENCE AT THE STATE LEVEL

Programs similar in nature to ECO have existed for the last eight years. The first such program was adopted in 1984 by the town of Pleasonton, California. The ordinance basically said that within four years, all new and current employers in the community with 50 or more employees must have 45 percent of their work force coming to work some other way than by driving to work alone in rush hour." States which currently have programs aimed at reducing vehicle miles travelled include California, Arizona, and Washington. Comparison of the state programs to the federal ECO program reveals that many requirements mandated by Congress and detailed by EPA were copied from existing state programs; this shows that Congress was aware of exactly what it was requiring when it passed ECO.

A. California

The State of California has some general requirements for the reduction of vehicle miles travelled. California requires that a congestion management plan "be developed, adopted, and annually updated for every county that includes an urbanized area,³⁹ and ... include every city and the county."⁴⁰ A mandatory part of this plan is a "trip reduction and travel demand element that promotes alternative transportation methods, such as carpools, vanpools, transit, bicycles, and park-and-ride lots; ... and other strategies, including flexible work hours and parking

^{33.} CAA § 182(d)(1)(B), 42 U.S.C. § 7511a(d)(1)(B) (1990).

^{34.} Id.

^{35.} *Id*.

^{36.} Richard L. Oram, Reducing Traffic: Getting Businesses on Board, 15 CURRENT MUN. PROBS. 54, 56 (1988).

^{37.} Id.

^{38.} See infra section II.D.

^{39.} Urbanized areas are those areas having a population of more than 50,000 people. CAL. GOV'T CODE § 65088.1(g) (West Supp. 1993).

^{40.} Id. § 65089(a).

management programs."⁴¹ Highway funds originally designated for the nonconforming city or county are withheld as the penalty for noncompliance.⁴²

Although California does not demand specifically the implementation of programs like ECO, certain areas of the state have adopted independently programs similar in nature to ECO. The most widely known of these programs is the program, known as Regulation XV, implemented by the South Coast Air Quality Management District ("SCAQMD").⁴³ Regulation XV covers "Los Angeles, Orange and Riverside Counties and the non-desert portions of San Bernadino County."⁴⁴ The program is currently in effect for all employers with one hundred or more employees at any given work site.⁴⁵

An approvable plan has four major characteristics: 1) the objective of the plan is clearly specified and supported by accurate survey data; 2) the opportunities and constraints of the work site are clearly identified and documented; 3) the plan contains a detailed explanation that logically associates incentives with the target AVR; and 4) the plan describes how the proposed incentives will be implemented and marketed among employees.⁴⁶

Regulation XV differs from the federal ECO requirements in several ways. The SCAQMD program requires annual approval and updating of a trip management plan.⁴⁷ The trip management plan "consists of an updated employee survey, a discussion of the effectiveness of the previous plan and new methodologies to achieve a

^{41.} Id. § 65089(b)(3).

^{42.} Id. § 65089.4(b). See supra note 27 and accompanying text.

^{43.} Regulation XV was enacted on December 11, 1987, a full three years before the most recent CAA Amendments. See David M. Lester & Sandra Elkin Lester, Encouraging Commuter Car Pools: How to Comply with the SCAQMD's Ride-Sharing Regulations, Los Angeles Lawyer, Sept. 1991, at 23.

^{44.} Id.

^{45.} Id. (citations omitted).

^{46.} Id. at 24 (citing to W. LOPEZ-AQUERES, STAFF REPORT ON THE IMPLEMENTATION OF REGULATION XV - TRIP REDUCTION / INDIRECT SOURCE STATUS AND PROCESS 00003-00004, at 00023 (Feb. 22, 1991)).

^{47.} Id. at 23.

specific ride-sharing goal."⁴⁸ The federal guidelines allow an ECO program to be reviewed on either an annual or bi-annual basis, at the discretion of the employer.⁴⁹ The laxer federal requirements could lead to a slower progress rate if the majority of employers opt to review on a bi-annual basis. Bi-annual review could mean that the average vehicle occupancy rate used would allow for fewer than the actual number of people per vehicle. In such cases, the target APO would not increase as rapidly as it would if review were conducted on an annual basis, and therefore vehicle miles travelled would not decrease as rapidly. Additional vehicle miles travelled result in increased vehicle pollution; therefore an increased likelihood exists that an area will fail to meet National Ambient Air Quality Standards ("NAAOS").

The SCAQMD program requires that a transportation coordinator be appointed,⁵⁰ whereas CAA recommends only that one be appointed.⁵¹ As the history of transportation management programs shows,⁵² a responsible individual is often the driving force sustaining a program and ensuring its success. States without a transportation coordinator responsible for keeping the program on track may well find that their ECO programs are ineffective.

SCAQMD is partially self-supporting because SCAQMD charges employers a fee for review of transportation plans;⁵³ no one in Congress proposed making the ECO program even partially self-supporting. Individual states may still choose, however, to implement a fee schedule for review of employer programs as part of the specific requirements of an individual state program.

The SCAQMD program is similar in several respects to the CAA program. Regulation XV requires calculation of an Average Vehicle Ridership,⁵⁴ comparable to the measured AVO of the ECO program.

^{48.} Id.

^{49.} GUIDANCE, supra note 5, at 13.

^{50.} Lester, supra note 43, at 23.

^{51.} GUIDANCE, supra note 5, at 22.

^{52.} See infra part III.A.1. (discussing history of TCM programs).

^{53.} The fee ranges from \$375 to \$775 and is based on the number of employees an employer has at a given work site. The fee only covers the initial review of the plan and one rejection. Any subsequent rejections are reviewed at a fee of \$75 per hour. Lester, supra note 43, at 25.

^{54.} *Id.* at 23 n.11. Average Vehicle Ridership ("AVR") = (# of people reporting to work between 6:00 a.m. and 10:00 a.m., Monday through Friday) / number of vehicles in which they report. *Id.*

Like the ECO program, SCAQMD does not require that employers implement specific measures, but only requires that employers put a transportation plan in place. As to penalties, under SCAQMD, "potential penalties for failing to have an approved ride-share plan can be as much as \$25,000 per day. Other penalties which may be incurred are "up to one year in jail for each day Regulation XV is violated. CAA also uses monetary penalties to ensure compliance. Although the CAA does not dictate jail time as a penalty, it does not prohibit states from using jail time as an enforcement mechanism.

Perhaps the most important difference between the SCAQMD program and the ECO program is that SCAQMD "is considering expanding its ride-share program to include employers with 50 or more employees and university students." ⁵⁸ Although Congress has not built into the CAA a schedule which would progressively include more employers, future amendments to the CAA that may demand more comprehensive participation in ECO programs are foreseeable. If states still cannot meet NAAQ standards after implementation of ECO, Congress almost certainly will expand the ECO program to include smaller employers. Many NAAQSs have been in place for more than twenty years and have not been met. ⁵⁹ As Congress and EPA work to achieve NAAQSs, more and more people will be affected by ECO.

B. Arizona

Arizona requires all counties that are designated nonattainment areas⁶⁰ and that have a population of 1.2 million or more to create a

^{55.} Id. at 23.

^{56.} Id.

^{57.} Id. at 25 (citation omitted) (emphasis added).

^{58.} Id. at 26.

^{59.} See infra part V.B. (discussing the legislative history of § 182(d)(1)(B) and Trip Management Programs in the 1990 Clean Air Act Amendments).

^{60.} Arizona requires all ozone and carbon monoxide nonattainment areas in the state to comply with the trip reduction programs, not just severe and extreme areas. "A nonattainment area means [an] area which has been designated by the administrator of the environmental protection agency, acting pursuant to § 107 of the CAA, 42 United States Code § 7401 et seq., as exceeding national primary or secondary ambient air standards for the pollutant of carbon monoxide or ozone and designated as such in the state implementation plan submitted to the environmental protection agency" ARIZ. REV. STAT. ANN. § 49-541(15) (Supp. 1993).

system whereby major employers⁶¹ develop and implement travel reduction programs.⁶² Although the federal program calls for employers to have a twenty-five percent increase in occupancy rates over the area baseline, the Arizona program calls for a "[f]ive per cent reduction in the proportion of employees commuting by single occupancy vehicles ... in the first year" and an additional five per cent reduction in the second year.⁶³ Although the program contains provisions for variances and exemptions, in reality no "out" for employers exists.⁶⁴ The program does not establish criteria for determining when a variance will be granted.⁶⁵ Exemptions are granted only temporarily; employers must comply with the guidelines of the Act when the exemption expires.⁶⁶

The Arizona program contains some features that the federal program does not. The Arizona program requires that all "high school, community college or university [major employers] ... include full-time students in determining the requirements of" the Act.⁶⁷ Attempting to coordinate the commuting habits of tens of thousands of students seems an overwhelming task, which may be why neither Congress nor EPA has chosen to include such a requirement in the ECO. Despite the lack of a federal mandate, individual states may still impose such a requirement on employers. The Arizona program provides assistance to voluntary participants of a travel reduction program.⁶⁸ Similarly, EPA encourages participation by parties not required statutorily to participate in ECO programs by allowing credit from non-mandatory participation to be

^{61.} A "major employer" is defined as one "with one hundred or more employees working at or reporting to a single work site during any twenty-four hour period for at least three days per week during at least six months of the year." *Id.* § 49-581(10). 62. *Id.* § 49-582 (cross-reference § 49-581(19) which includes only nonattainment areas in its definition of regional programs). Arizona adopted this mandate in 1988 and made it effective in 1989, at least one full year before it was looked at as a part of the federal CAA.

A "travel reduction program" is "a program that implements a travel reduction plan by an employer and is designed to achieve a predetermined level of travel reduction through various incentives and disincentives." *Id.* § 49-581(27).

^{63.} Id. § 49-588(D)(1) to (2).

^{64.} The federal ECO requirements have no exemption provisions. See CAA § 182(d)(1)(B), 42 U.S.C. § 7511a(d)(1)(B) (1990).

^{65.} ARIZ. REV. STAT. ANN. § 49-589.

^{66.} Id. § 49-591.

^{67.} Id. § 49-590.

^{68.} Id. § 49-587.

applied toward state emission reductions.⁶⁹ Non-mandatory participation may be encouraged at the state level as part of the SIP.

In order to ensure the compliance of those employers who are required to participate in the travel reduction programs, the Arizona statute provides for civil penalties. Penalties are "not to exceed one hundred dollars for a first violation, two hundred dollars for a second violation within one year and three hundred dollars for each additional violation within one year. Violations of this article which continue for more than one day constitute separate violations on each day."⁷⁰ EPA requires fines to be large enough to ensure compliance and to be at least equal to the cost of compliance. 71 EPA may find that the Arizona fines satisfy the requirement that fines be substantial enough to induce Considering that for every day an employer is not in compliance, a new violation occurs, fines accrue rapidly. Large fines affect a company's bottom line and create tremendous incentives to comply. Unfortunately, however, under the Arizona plan, an employer who violates plan requirements six times within one year would only be required to pay \$1500.72 Although the actual cost of implementation is not discernible until programs are in place, EPA estimates that a firm of 200 people will have an annual administrative cost of approximately \$3500 to implement ECO.73 EPA's estimate seems low, in light of the fact that the salary of even a part-time employee hired only to coordinate commute programs could easily be several thousand dollars. Arizona likely will have to increase its fines in order to meet EPA standards. One possible solution for Arizona would be to set the minimum penalty at the cost of compliance, and then establish a sliding scale of fees for violations which go beyond the minimum.

Arizona, like EPA, did not develop detailed plan requirements. Rather, the employer has the discretion to choose specific implementation

^{69.} GUIDANCE, *supra* note 5, at 5. "Reductions in emissions from the ECO program ... may receive SIP credit toward required emission reduction demonstrations, provided that certain criteria relating to quantification, permanence, and enforceability of credits are satisfied. Emission reduction estimation techniques will be addressed in a separate guidance." *Id*.

^{70.} ARIZ. REV. STAT. ANN. § 49-593(D) (1990).

^{71.} GUIDANCE, supra note 5, at 14-15.

^{72.} \$1500 = \$100 (violation 1) + \$200 (violation 2) + (\$300 x 4) (violations 3, 4, 5,

^{6).}

^{73.} GUIDANCE, supra note 5, at Appendix A at 4.

methods.⁷⁴ Even upon failure to demonstrate compliance, an employer need only choose a specific number of measures from a list included in the statute, rather than have specific measures dictated to them.⁷⁵

In general, the Arizona program complies with the EPA guidelines for implementation of the ECO program. States, like Arizona, that have already implemented a trip reduction program have questioned whether they will be at a severe disadvantage in the determination of the area APO. This disadvantage would result because the state, having implemented the program in 1989, already will have greatly reduced its AVO. EPA's response to this concern is that the state should submit a revised SIP as soon as possible so that it will not be at too great a disadvantage.

C. Seattle, Washington

Seattle, Washington, has adopted a program which differs significantly from any other transportation management program. The Seattle program ties new construction of office buildings to transportation management requirements. The program can be characterized as trip prevention rather than trip reduction. Seattle "require[s] each new downtown development to meet its parking demand on-site through a substantial commitment to ridesharing."

Washington State adopted a state-wide management plan which states that "[d]evelopment may proceed [only] if transportation improvements or trip reduction strategies are available concurrent with the development." Robert H. Freilich & S. Mark White, Transportation Congestion and Growth Management: Comprehensive Approaches to Resolving America's Major Quality of Life Crisis, 24 LOY. L.A. L. REV. 915, 977 (1991) (citing to Act approved Apr. 24, 1990, ch. 17, § 7(6), 1990 Wash. Legis. Serv. at 1380).

^{74.} ARIZ. REV. STAT. ANN. § 49-588(A)(3)(c).

^{75.} Id. § 49-588(B)(4).

^{76.} DRAFT GUIDANCE, supra note 18, at 125.

^{77.} Id. Arizona has submitted two SIP revisions, both for Maricopa County, which is a moderate nonattainment area for both ozone and carbon monoxide. See 40 C.F.R. § 52.120 (1992).

^{78.} Melody McCutcheon & Jeffrey Hamm, Land Use Regulations to Promote Ridesharing: An Evaluation of the Seattle Approach, 11 CURRENT MUN. PROBS. 143, 143 (1984). The Seattle City Council enacted these policies through a series of downtown parking policies enacted pursuant to the Washington State Environmental Policy Act. Id. at 144, 145.

Seattle first began planning for substantial growth in 1975, when it adopted a downtown transportation management program designed to reduce use of the single occupancy vehicle ("SOV"). "The requirement for a ride-sharing program was meant to further three goals: (1) to reduce the supply of parking for single occupant vehicles in order to encourage a shift away from SOV travel, (2) to ensure that a project met its parking demand on-site in order to mitigate adverse environmental impacts, and (3) to foster developer responsibility over the long-term for reducing the number of SOVs coming downtown." 80

Seattle's program has not worked well. Developers and building owners view the program's requirements as a threat to office space marketability and as a cause of reduced parking income.⁸¹ Although Seattle may withhold the Certificate of Occupancy only for a new building until an intention to comply with program requirements has been demonstrated, in actuality compliance can be determined only after The policy of withdrawing Certificates of occupancy has begun. Occupancy for "compelling reasons of public health or safety" has made enforcement of travel management requirements difficult.82 At least two analysts have concluded that Seattle's program is not effective because of enforcement problems.⁸³ Although the city has a legal right to demand that developers meet trip prevention demands, 84 Seattle's failure to institute monetary penalties has left the program without teeth. The CAA ECO program should avoid enforcement problems. The ECO program requires that EPA assess monetary penalties against employers who fail to comply and withhold highway funds from states which fail to comply.85

The failure of the Seattle program demonstrates that, above and beyond considerations of environmental desirability, a workable

^{79.} McCutcheon & Hamm, supra note 78, at 144. Another objective of the transportation management program was "to control the supply of parking spaces downtown." Id.

^{80.} Id. at 149.

^{81.} Id. at 152.

^{82.} Id. at 153.

^{83.} Id. at 154-55; Freilich, supra note 78, at 964.

^{84.} Freilich, supra note 78 at 935. "[C]ourts have consistently approved the use of zoning to alleviate traffic congestion. Zoning techniques typically include use districting, density and lot regulations, and parking requirements." Id.

^{85.} See supra note 27 and accompanying text (discussing the effectiveness of a penalty which withholds highway funding from the states).

commuter program must examine market and economic factors. In recognition of this need, EPA has prepared a brief analysis of the cost of implementing the ECO program. The analysis finds that "[t]he total social cost[s] of ... ECO ... are ... estimated to fall in the range of the \$1.2 - \$1.4 billion per year." EPA incorporates administrative and individual costs in its estimate. EPA estimates that the social costs will be offset partially by the value of reduced commuting times, calculated to be between \$447 - \$551 million dollars annually. EPA does not attempt to place a monetary value on the reductions in pollution which will result from the ECO program. 90

D. Summary Comparison of State and Federal Commuter Programs

Generally, the states and EPA have followed the same pattern by mandating performance of a specific, defined level while leaving to individual employers the method of implementation. In terms of efficiency, this approach makes the most sense because it allows for accommodation of different conditions at different workplaces.

ECO is most similar in current scope, outlook, and requirements to California and Arizona's programs. The federal ECO program would benefit from California and Arizona's experience by incorporating a few of the better features of these programs. From the SCAQMD program, ECO should incorporate annual review of trip management programs, appointment of transportation coordinators and the progressive inclusion of employers with fewer employees. A particularly attractive aspect of the SCAQMD program, and one which the ECO should try to adopt, is the ability of the program to be partially self-supporting. From the Arizona program, ECO should consider including students in the number of employees at an educational facility.

The states who have programs currently in effect can also benefit from an examination of the federal program. Arizona could increase

^{86.} GUIDANCE, supra note 5, at Appendix A: Methodology for Rough Estimation of ECO Social Costs.

^{87.} Id. at Appendix A at 4 (footnote omitted).

^{88.} Id. at Appendix A at 1. Individual costs include the "time, inconvenience and expense that workers who drive to work would incur if they had to commute by other means." Id.

^{89.} Id. at 21. EPA asserts that commuting times and vehicle miles travelled will absolutely be lower under the ECO program than they would be otherwise. Id. at 22. 90. Id. at 22.

dramatically its average vehicle occupancy required percentage increases. Arizona currently has a ten percent required increase. The federal program, which will operate on a much larger scale, seeks to have a twenty-five percent increase. Arizona will have to meet this percentage to meet federal standards. Arizona can give its program more force by raising its percentage increase to twenty-five percent now. Seattle also needs to reexamine its enforcement mechanisms and institute monetary penalties sufficient to ensure compliance. Although the idea of tying development to transportation management programs sounds like a good one, the effectiveness of such a program with effective penalties is unclear. Until Seattle increases its penalties, its program will be considered ineffective.

Existing state programs have been valuable in the development of the federal ECO program because they have provided experimental models which demonstrate effective and ineffective methods of reducing vehicle miles travelled. As the federal program is instituted, states will be able to learn from each other's programs and thereby institute the most effective ECO program.

III. CHALLENGES TO STATE PROGRAMS

Challenges to state programs may point to possible future challenges to the federal program. Few cases exist in which a person subject to the CAA has challenged specific measures of the Act. Some cases have developed as claimants have asserted exemption from the requirements of the statute or failure to fall under the umbrella of the statute. In a number of cases, plaintiffs have demanded specific

^{91.} See, e.g., Natural Resources Defense Council v. Reilly, 983 F.2d 259 (D.C. Cir. 1993). EPA refused to promulgate regulations for implementation of onboard refueling vapor recovery ("ORVR") systems, arguing that Congress had left to EPA's discretion the right to implement an ORVR requirement if it found the canisters used for the ORVR system to be too dangerous. Id. at 266. The court overruled the EPA's argument and stated that the statutory language unambiguously required promulgation of ORVR standards. Id. (quoting CAA § 202(a)(6), 42 U.S.C. § 7521(a)(6) (Supp. 1990), " 'the Administrator shall ... promulgate standards under this section...' " Id.). 92. See, e.g., Sims v. Florida, 832 F.2d 1558 (11th Cir. 1987) (requesting exemption from CAA requirements for gray market vehicle); Montana Power Co. v. EPA, 608 F.2d 334 (9th Cir. 1979) (claiming that construction had begun on power project prior to implementation of new CAA standards and therefore the project was exempt from CAA PSD review).

enforcement of certain provisions or implementation of tougher standards than the Act requires. Plaintiffs, in seeking tougher standards, have often challenged the validity of State Implementation Plans. Now that the ECO program is a mandatory part of State Implementation Plans, cases challenging SIP validity will have particular applicability.

A. Challenges to Enforcement of State Implementation Plans

1. Citizens for a Better Environment v. Deukmejian⁹³

In Citizens for a Better Environment v. Deukmeijan, 94 Citizens for a Better Environment ("CBE") wished to enforce the transportation contingency measures provided for in a state SIP. The SIP required more stringent measures to be implemented in the event that the state did not make reasonable further progress towards reaching the NAAOSs. 95 The district court stated that it could not enforce general policy goals, but recognized its authority to require the state to adhere to specific strategies.96 The court refused to accept the state's claim of good faith attempts to make reasonable further progress and stated unequivocally: "States have an unwavering obligation to carry out federally mandated SIPs: thus, where a SIP is violated, liability attaches, regardless of the reasons for the violation."97 The burden then shifts to the state to prove that the SIP provision was unreasonable. In evaluating whether the provisions of the SIP should be implemented, the court stated that it would not "require impracticable measures or measures that cause a substantially disproportionate hardship for the air quality benefits accrued The court also stated that "infeasibility means more than inconvenience, unpopularity, or moderate burdens."99 The court found that, although "TCMs contribute relatively little to ozone reduction," 100 the state still was required to comply with the SIP.

This evaluation, as applied to ECO programs that burden

^{93. 731} F. Supp. 1448 (N.D. Cal. 1990).

^{94.} Id.

^{95.} Id. at 1453.

^{96.} Id. at 1454.

^{97.} Id. at 1458.

^{98.} Citizens for a Better Environment v. Wilson, 775 F. Supp. 1291, 1307-08 (N.D.

Cal. 1991) (follow up case to CBE v. Deukmegian).

^{99.} Id. at 1307-08.

^{100.} Id. at 1300.

businesses by requiring development of transportation programs and individuals by indirectly requiring participation, favors finding ECO guidelines valid. EPA estimates that ECO will cost individual workers \$6.17 per day. 101 At this minimal cost, ECO cannot be considered anything more than an "inconvenience, unpopularity, or moderate burden[]." 102 Thus, a state will feel strong pressure to meet its SIP obligations and will no doubt pass this pressure on to businesses who are required to assist in meeting the SIP requirements. Under this scenario, the state"s best interest is to ensure that employers comply with and, if possible, exceed ECO requirements. Complying with or surpassing ECO requirements will enable states to either meet NAAQ standards faster or permit states to have laxer standards in other areas so as to stay on schedule to meet NAAQSs.

2. Coalition Against Columbus Center v. City of New York¹⁰³

In Coalition Against Columbus Center v. City of New York, ¹⁰⁴ citizens challenged the construction of a building that, according to the Environmental Impact Statement prepared in anticipation of its construction, would contribute to carbon monoxide levels and thereby cause New York City to violate the NAAQS for carbon monoxide. ¹⁰⁵ The court stated that "[i]n order for citizens properly to allege a CAA violation, they must allege that the City has specifically 'repudiated' or 'failed to fulfill' any part of its SIP commitment." ¹⁰⁶ The court would balance a repudiation or failure against whether the city had made a reasonable attempt to reach the NAAQS as soon as possible. ¹⁰⁷ The court held that the city's plan to construct the project was a violation of its obligations under the SIP. ¹⁰⁸ The court refused to issue an

^{101.} GUIDANCE, supra note 5, at 20. This estimate "is representative of the cash incentive employees who forego the use of their single occupancy vehicle would have to receive in order for employers to achieve a 20% reduction in automobile use." *Id.* 102. Wilson, 775 F. Supp. at 1307-08.

^{103. 769} F. Supp. 478 (S.D.N.Y. 1991), aff'd in part and rev'd in part, 967 F.2d 764 (2nd Cir. 1992) (affirming the right to bring a citizen suit for failure to meet CAA deadlines but holding that no deadline had passed in the instant case).

^{104.} *Id*.

^{105.} Id. at 484.

^{106.} Id. at 483.

^{107.} Id. at 486.

^{108.} Id. at 489.

injunction to halt the project. Instead, the court required the City to complete a study on the effects of carbon monoxide by the November 15, 1992, deadline imposed upon the city by the 1990 CAA Amendments and declared that it would fine the city \$15,000,000 plus supplemental fines for continued failure to comply.¹⁰⁹

A court may require action by the state when the state fails to meet NAAQSs and fails to implement the requirements of the CAA. The ECO program falls directly within this realm because Congress intended the ECO to enable states to meet NAAQSs. Failure to implement ECO in non-attainment areas will allow courts to mandate state action, an occurrence to which states are generally not amenable. This result provides further incentive to the states to create viable ECO programs and require the supportive participation of employers.

Compliance actions leave little room for the states to escape the new requirements of the CAA. States have turned to the constitutional division of power between the federal and state governments in an effort to challenge the requirements of federal programs.

B. The Federal/State Relationship

1. Congress' Power to Compel State Participation in Federal Programs

In New York v. United States, 110 the Supreme Court examined the extent of the federal government's power to compel individual states to participate in federal programs. Although the Court recognized that the balance of power in the federal system lies in favor of the federal government, 111 the Court pointed out that the federal government cannot compel a state to legislate in a particular manner. 112 Rather, Congress must act "directly upon the citizens" or, where it chooses to enact a federal program, give the states the option of adopting the

^{109.} Id. at 490.

^{110. 112} S. Ct. 2408 (1992) (challenging Congress' power to refuse to allow states to export any low-level radioactive waste generated by the state).

^{111.} Id. at 2419.

^{112.} Id. at 2420-21.

^{113.} Id. at 2421 (emphasis omitted) (citation omitted).

program.¹¹⁴ Upon state refusal to enact the program, Congress must guarantee that the federal government will enact the program within that state.¹¹⁵ Whether the state accedes to denial of choice is not relevant, because consent of the state does not make a constitutional deprivation legal.¹¹⁶

In the context of the CAA, Congress' solution to this requirement is enactment of a Federal Implementation Plan ("FIP") in the event a SIP fails to meet the requirements of the CAA. If a state fails to submit a SIP or EPA refuses to approve the submitted SIP then EPA must draft a FIP for the state. This requirement increases the pressure on EPA, the states, and employers to meet compliance requirements.

In New York, the Court declared that a state need not expend funds unless it decided that the expenditures were part of the state's priorities. Although this decision would not allow private parties to escape from the requirements of ECO programs, it might allow state employers to challenge the applicability of a federal ECO program to state worksites if the federal program required the expenditure of state funds in order to meet compliance standards. The decision might require

The director by rule shall require adjusted work hours for at least eighty-five per cent of state employees with offices located in a nonattainment area as defined in § 49-541 each year beginning October 1 and ending April 1 in order to reduce the level of carbon monoxide concentrations caused by vehicular travel.

^{114.} Id. at 2424. "[W]here Congress has the authority to regulate private activity under the Commerce Clause, we have recognized Congress' power to offer States the choice of regulating the activity according to federal standards or having state law preempted by federal regulation." Id. (citations omitted).

^{115.} *Id.* at 2427. "The State need not expend any funds, or participate in any federal program, if local residents do not view such expenditures or participation as worthwhile." *Id.* (citation omitted).

^{116.} Id at 2431. "The Constitution's division of power among the three Branches is violated where one Branch invades the territory of another, whether or not the encroached-upon Branch approves the encroachment." Id.

^{117.} Coalition for Clean Air v. Southern Cal. Edison, 971 F.2d 219, 223 (9th Cir. 1992) (citing to CAA § 110(c)(1)). EPA may be forced to develop a FIP under the citizen suit provision of the CAA. *Id.* at 222-23.

^{118.} New York, 112 S. Ct. at 2427.

^{119.} Arizona specifically requires state employers to participate in the state ECO program.

the federal government to either provide the funding necessary to meet ECO goals at state worksites or exempt state employers from ECO requirements. A state's refusal to have state agencies participate in an ECO program, however, would be self-defeating; the state would still have to meet NAAQSs, either by imposing restrictions in other areas or by imposing stricter requirements on participating employers.

2. Congress' Power to Regulate the Environment

New York v. United States¹²⁰ exemplifies the extent of Congress' power to regulate the environment. New York challenged Congress' power to regulate low level radioactive waste.¹²¹ The Court held that Congress had the power to regulate the market in low level radioactive waste and preempt all other regulation under the Commerce Clause.¹²² The CAA constitutes complete preemption of regulations in the field of air pollution. Under the Commerce Clause courts must defer to Congressional legislation if any rational basis for the regulation exists.¹²³ The Court has interpreted the Commerce Clause expansively in the past.

In Hodel v. Virginia Surface Mining & Reclamation Ass'n¹²⁴ a mining association challenged Congress' right to regulate surface coal mining.¹²⁵ The Court affirmed the findings of multiple lower courts that the Commerce Clause gives Congress the power to regulate "activities causing air or water pollution, or other environmental hazards that may have effects in more than one state." The Court continued

^{120. 112} S.Ct. 2408 (1992).

^{121.} Id. at 2415.

^{122.} Id. at 2419-20. See supra notes 110-19 and accompanying text (discussing impact of New York v. United States on the federal-state relationship).

^{123.} Hodel v. Virginia Surface Mining & Reclamation Ass'n, 452 U.S. 264, 276 (1981) (stating "The court must defer to a congressional finding that a regulated activity affects interstate commerce, if there is any rational basis for such a finding." (citation omitted)).

^{124.} Id.

^{125.} Id. at 275-76.

^{126.} Id. at 282 (footnote omitted). The Court gave two other reasons for supporting the validity of the mining regulations. First, "Congress may regulate the conditions under which goods shipped in interstate commerce are produced where the 'local' activity of producing these goods itself affects interstate commerce." Id. at 281 (citations omitted). Second, uniform federal regulations prevent individual states from unfairly undercutting competing states. Id. at 281-82 (citing United States v. Darby,

by stating that, although the Commerce Clause gives Congress the power to regulate activities affecting interstate commerce, regulations must not conflict with other provisions of the Constitution. ¹²⁷ In *Hodel*, the focus of the Court turned to land use and takings analyses, but in another case could turn to the implications of Commerce Clause regulation on individual rights.

New York and Hodel continue the reasoning the Supreme Court has consistently used in defining the federal-state relationship. Congress has a tremendous amount of power to legislate under its Commerce Clause powers, and the Court permits Congress to exercise the full extent of that power. This fact makes it unlikely that the courts would strike down any aspect of the ECO program as beyond the scope of Congressional power to enact under Commerce Clause powers.

IV. ECO PROGRAMS AND INDIVIDUAL RIGHTS

ECO will impact not just states, but individuals. The challenges to ECO requirements may be on the grounds that they infringe on individual rights, including the right to privacy, freedom of association, and the right to travel. Congress and EPA have neutralized, at least temporarily, many potential problems by not commanding implementation of specific measures. Nothing in the EPA GUIDANCE nor in the existing state programs requires *individuals* to participate in ECO programs. Mandatory requirements are used only at the state and employer level. Penalties for noncompliance can be severe, however, and programs that do not meet goals because of a lack of voluntary participation may soon require mandatory participation. The rights of the

³¹² U.S. 100 (1941) (allowing imposition of a minimum wage and maximum work week on manufacturer of goods shipped in interstate commerce)).

^{127.} Id. at 286; see infra part IV. (discussing the right to travel, right to privacy, and freedom of association).

^{128.} See, e.g., Martin v. Hunter's Lessee, 14 U.S. (1 Wheat.) 304 (1816) (holding that the Supreme Court has final authority regarding all cases dealing with the Constitution, laws, and treaties of the United States. This authority includes appellate jurisdiction over state court cases regarding these matters); Katzenbach v. McClung, 379 U.S. 294 (1964) (holding that Congress had the right to enforce Title II of the Civil Rights Act in restaurants at the state level because of its Commerce Clause power); Garcia v. San Antonio Metro. Transp. Auth., 469 U.S. 528 (1985) (holding that Congress has the power, under the Commerce Clause, to impose federal minimum wage and overtime standards on a state).

individual must be weighed against the government interest in promulgating a regulation which protects the environment.

A. The Individual's Right to Privacy

No specific provision of the Constitution guarantees a right to privacy. The Supreme Court has upheld a right to privacy, however, as necessary to the preservation of enumerated rights. 129 The right to privacy is deeply ingrained in the character of Americans. The right to be left alone is a right the Constitution was designed to protect.¹³⁰ Employers who attempt intrusive regulation of employee activities unrelated to work are usually prohibited from doing so. 131 example. California forbids disclosure of facts about employees compiled to create a ride-share program. 132 "Some states have ... prohibit[ed] employers from regulating employees' use of any 'lawful product' or participation in any 'lawful activity' during nonwork hours." 133 A car is a lawful product and driving is a lawful activity. In states with laws prohibiting employers from regulating lawful activities, employees could challenge restrictions on commuting habits. Such challenges may be countered with the argument that, although driving may be a lawful activity, in order to meet the legal requirements of a state SIP as mandated by the federal CAA, employees must participate in trip reduction programs. Additionally, in many states driving has been found to be a privilege and not a right. Driving is subject to regulation by the state in many forms, including drunk driving laws, fines, and insurance requirements.

Courts have allowed restrictions on an individual's right to privacy in cases in which the state has shown a substantial relationship between

^{129.} Griswold v. Connecticut, 381 U.S. 479 (1965). "[S]pecific guarantees in the Bill of Rights have penumbras, formed by emanations from those guarantees that help give them life and substance Various guarantees create zones of privacy." *Id.* at 484. 130. *Id.* at 484-85 (citing Boyd v. United States, 116 U.S. 616 (1886) and Mapp v. Ohio, 367 U.S. 643 (1961)).

^{131.} Andrew M. Kramer & Laurie F. Calder, The Emergence of Employee's Privacy Rights: Smoking and the Workplace, 8 LAB. LAW. 313, 317 (1992).

^{132.} Lester, supra note 43, at 40 (citing CAL. PEN. CODE § 637.6 (West Supp. 1991)).

^{133.} Kramer, *supra* note 131, at 324 (citing as examples COLO. REV. STAT. § 24-34-402.5 (1991); NEV. REV. STAT. ANN. § 613.333 (Michie 1991); and N.D. CENT. CODE § 14.02.4-09 (1991)).

the restriction imposed and a compelling state interest. ¹³⁴ A substantial question exists as to whether commuting habits are related to work habits. Common sense says that this is not the case. So long as an employee is on the job, regardless of how he arrived, he is capable of performing his work. If an employer can demonstrate a correlation between the two issues, however, he may be able to regulate employee commuting. ¹³⁵ Courts have allowed public or government employers to regulate employee activity where a demonstrated correlation between the regulated activity and job performance exists. The courts have not allowed an exemption for private employers.

The courts have found for employers in the majority of cases relating to employee privacy in the context of public employers asserting a compelling government interest as a justification for imposing restrictions on employees. 136 Courts have not allowed the interests of a private enterprise to carry the same weight as a government interest. Courts have found that private interests do not outweigh individual privacy interests. If private employers were considered agents of the government in the specific context of employee commuter programs, the employers might be able to regulate employee activities.¹³⁷ In fact, a private employer may be required to take certain actions so as to ensure Constitutional treatment of all individuals. ¹³⁸ Government regulation of private action, however, also infringes on the freedom of the Lugar v. Edmondson Oil Co., Inc. 139 addresses this concern, permitting the assertion of a 42 U.S.C. § 1983¹⁴⁰ cause of action against a private party when "[j]oint action with a state official ... accomplish[es] a prejudgment deprivation of a constitutionally

^{134.} See, e.g., Roe v. Wade, 410 U.S. 113, 154-55 (1973).

^{135.} Oram, *supra* note 36, at 55 (citing studies that found that employees who participated in commuter programs were more punctual and more likely to remain longer in their jobs).

^{136.} See, e.g., National Treasury Employees Union v. Von Raab, 489 U.S. 656 (1989) (holding that generally, an employee's privacy interests must be balanced against the need for probable cause to conduct drug tests).

^{137.} See, e.g., Skinner v. Railway Labor Executives' Assoc., 489 U.S. 602 (1989) (holding that the Railway acted as an agent of the government in conducting government required drug testing and as such was subject to the same standard).

^{138.} Compare Civil Rights Act, 42 U.S.C. §§ 1981-2000h-6 (1982 & Supp. III 1988); prohibition, U.S. CONST. amend. XVIII (repealed by U.S. CONST. amend. XXI) with Poll Tax Amendment, U.S. CONST. amend. XXIV.

^{139. 457} U.S. 922 (1982).

^{140. 42} U.S.C. § 1983 (1988).

protected property interest." Action is considered fairly attributable to the state if it meets both parts of a two part analysis. First, the deprivation must be caused ... by a rule of conduct imposed by the state Second, the party charged with the deprivation must be a person who may fairly be said to be a state actor. ECO meets the first prong, by requiring action fairly attributable to the state, because the state would be responsible for the imposition of some type of employee commuter option program through the state SIP. ECO does not meet the second prong as easily, because meeting it would require classifying each private employer who implements an employee commuter option program as a state actor. Action by a private party pursuant to [a] statute, without something more, [i]s not sufficient to justify a characterization of that party as a state actor. Individuals may have difficulty, therefore, in asserting a Section 1983 action against private employers.

Individual states will have the responsibility of guarding individual privacy interests, because no grounds for a challenge exist under federal law. Restrictions on the use of the automobile affect the individual right to privacy by directing the activities of the individual to conform to state mandated action. The state exists at the pleasure of the conglomerate of individuals which comprise its citizens, not the reverse. The saving grace is that ECO programs take only the first step down the road of restriction on individual freedom of action. Vigilance is the price which must be paid to ensure that the road is not taken to its end.

^{141.} Lugar, 457 U.S. at 927 n.6 (citing to Adickes v. S.H. Kress & Co., 398 U.S. 144 (1970) and Flagg Brothers, Inc. v. Brooks, 436 U.S. 149 (1978)). "Title 42 U.S.C. § 1983 provides a remedy for deprivations of rights secured by the Constitution and laws of the United States when that deprivation takes place 'under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory'" Id. at 924 (citation omitted).

^{142.} Id. at 937.

^{143.} Id.

^{144.} See id. at 939.

^{145.} Id. (discussing Flagg Brothers, Inc. v. Brooks, 436 U.S. 149 (1978)).

B. Freedom of Association

The Supreme Court has found not only a right to associate but also a protected right to *not* associate against one's will. 146 Commuters required to take part in a carpool comprised of individuals with whom they may not wish to associate would be able to challenge ECO programs as violative of the right of freedom of association.

The majority of cases dealing with freedom of association and employee rights focus on whether unions can require mandatory The reasoning in this extremely narrow line of cases membership. applies only where Congress has specifically mandated that all employees must contribute to a union because all employees benefit from the activities of the union.147 Unions were created originally under Congressional authorization based on the constitutional power to settle all disputes of agencies that conduct interstate transportation. ¹⁴⁸ Courts have never found a constitutional right to a clean environment, a right which would counteract a constitutional freedom of association right. Congress would not be able to claim it was acting pursuant to a constitutional power to provide clean air in requiring ECO. Congress acted pursuant to its Commerce Clause powers in enacting the CAA.¹⁴⁹ Courts may accept that Congress' expansive Commerce Clause powers permit Congress to require mandatory participation in ECO.

Another theory under which relief may be available is that state action and actors are impermissibly infringing upon an individual's

^{146.} Abood v. Detroit Bd. of Educ., 431 U.S. 209 (1977); Elrod v. Burns, 427 U.S. 347 (1976); see also Minnesota Bd. for Community Colleges v. Knight, 465 U.S. 271, 288 (1984). Theoretically, brought to an extreme, employee commuter programs and, more generally, controls on commuting options, could foster development of "company" towns where employees of the same company live in the same community to ensure the most efficient commuting. Of course, such programs could engender more work at home programs and expanded use of technology, such as modem connections and networking, thereby obviating the need to commute by changing the workplace from a central location to wherever the employee is located.

^{147.} Railway Employees' Depart. v. Hanson, 351 U.S. 225, 238 (1956). But see International Assoc. of Machinists v. Street, 367 U.S. 740 (1961) (holding that a union member's dues could not be used to support political activity to which he was opposed).

^{148.} Railway Employees' Dept. v. Hanson, 351 U.S. at 233.

^{149.} See U.S. CONST. Art. I, § 8, cl. 3.

constitutional right.¹⁵⁰ Forcing an individual to associate with people for whom s/he feels no affinity and to participate in an organization whose very goals may be antithetical to the individual's beliefs violates an individual's right to freedom of association. The question is whether a court would be willing to strengthen this currently weak right. To do so a court must find that the individual's right to freedom of association outweighs the government and societal interest in regulating the environment. This is unlikely.

C. The Right to Travel

The Supreme Court has found a penumbral right to interstate travel. 151 The Court also has stated that the right to intrastate travel is as basic as the right to interstate travel. 152 Congress has the right to impose the restrictions of the CAA pursuant to its Commerce Clause power, however. 153 Additionally, the ECO program dictates a specific method of travel rather than prohibiting travel altogether. 154 determining whether ECO met constitutional scrutiny, a court would look to whether the state has a compelling state interest which outweighs the burden on the right to travel. 155 The burden falls on activity conducted during and for the purpose of work rather than for a personal purpose. The counter to this argument is that an individual's work time and activities are as much a part of constitutionally protected rights as private time. A court may look to the actual impact of an ECO program on the individual. If a court finds that people generally drive to and from work without running errands or making stops along the way, few practical restrictions would result from an ECO program. Employees using public transportation, bicycling, or walking to work instead of carpooling

^{150.} See supra notes 138-45 and accompanying text. The same problems that exist under the analysis of the individual's right to privacy exist with the individual's right to associate freely. A plaintiff would have difficulty characterizing a private employer as a state actor. Assuming the plaintiff can leap this hurdle, s/he may have a viable argument, as discussed in the text which follows.

^{151.} Edwards v. California, 314 U.S. 160 (1941).

^{152.} Bell v. State of Maryland, 378 U.S. 226, 255 (1964) (holding that in the context of discrimination based on race, the right to accommodations and service was as basic as the right to travel).

^{153.} See U.S. CONST. art. I, § 8, cl. 3.

^{154.} See CAA § 182(d)(1)(B), 42 U.S.C. § 7511a(d)(1)(B) (1990).

^{155.} Shapiro v. Thompson, 394 U.S. 618 (1969).

choose to employ a method of transportation other than the single occupancy vehicle. One need not exercise one's right, however, in order to be entitled to it or to preserve it.

Congress has expansive power to enact legislation under the Commerce Clause. 156 Although an individual's rights to privacy, to freely associate, and to travel, have been found to be constitutionally protected rights, these rights have not been the strongest rights under the Constitution. A court would be likely to find that Congress had a sufficiently compelling interest in enacting ECO that any resulting infringement on individual rights was not overly burdensome. The history behind ECO provides fertile grounds for harvesting arguments in favor of ECO implementation.

V. BALANCING CONSTITUTIONAL RIGHTS AGAINST THE GOVERNMENT INTEREST IN THE ENVIRONMENT

Courts have stated that if any reasonable rationale exists for Congressional regulation of any activity that affects interstate commerce, the court will defer to the judgment of the Congress. In developing the 1990 CAA Amendments, Congress provided a plethora of reasons to validate ECO legislation.

A. Non-Legislative History

Ordinances requiring businesses to participate in transportation management programs developed from voluntary associations of businesses looking to reduce traffic congestion. The voluntary organizations were often driven by one individual, and therefore often died out when the individual was no longer part of the organization. In order to ensure the continued success of transportation management programs, municipalities codified the program requirements. Transportation management programs have since been adopted on the

^{156.} See U.S. CONST. art. I, § 8, cl. 3.

^{157.} Oram, supra note 36, at 55. These associations, known as transportation management associations, developed successfully in Hartford, Connecticut; Syracuse, New York; Princeton, New Jersey; Santa Clara and El Segundo, California, among other places. *Id.* at 55.

^{158.} Id. at 55-56.

^{159.} Id. at 56.

state and federal level, 160 often modelling themselves on programs developed at the local level.

B. Legislative History of Section 182(d)(1)(B) and Trip Management Programs in the 1990 CAA Amendments

Congress had good reason to enact stricter standards in order to control ozone. "Though the attainment of the other NAAQSs has been difficult, perhaps none has been quite so elusive as the NAAQS for ozone." The CAA Amendments of 1970 set 1975 as the attainment date for the primary NAAQS for ozone. The states did not meet the standards by 1975. In the 1977 CAA Amendments, Congress changed the deadline for meeting the ozone requirements to 1982 and allowed severe areas to request extensions until 1987. 163

A large part of the reason nonattainment areas did not meet the NAAQS was opposition to restrictions on the use of the personal car. "Transportation control measures such as gas rationing, restricted parking, and restricted freeway lanes generally met with strong resistance; and in 1974 Congress enacted legislation that prohibited EPA from requiring many types of transportation control measures." ¹⁶⁴ Even so, in 1975 Congress attempted to institute transportation planning measures through the Federal Aid Highway Act Amendments of 1975. ¹⁶⁵ "The process was to culminate in a comprehensive transportation plan, with a transportation system management ("TSM") element, as well as a long-range planning element." ¹⁶⁶ The plans were never developed, however, largely because the measures could not gain political acceptance. ¹⁶⁷ In 1978, Congress found that there was still

^{160.} See supra notes 39-90 and accompanying text (discussing the requirements of the federal ECO and transportation management programs in California, Arizona, and Seattle, Washington).

^{161.} Warren H. Husband, New Approaches and New Polluters: The Practical Impact of the Clean Air Act Amendments of 1990, 19 FLA. St. U. L. Rev. 861, 867 (1992). 162. OFFICE OF TECHNOLOGY ASSESSMENT, U.S. CONGRESS, OTA-0-412, OFFICE OF TECHNOLOGY ASSESSMENT, CATCHING OUR BREATH: NEXT STEPS FOR REDUCING URBAN OZONE 29 (July 1989) [hereinafter CATCHING OUR BREATH].

^{163.} Id. at 30.

^{164.} Id.

^{165.} Freilich, supra note 78, at 923-24 (citations omitted).

^{166.} Id. at 924 (citation omitted).

^{167.} Id. at 924.

"widespread failure" to meet the NAAQS standards. This failure was "attributed to the fact that mobile source emissions reductions ... were not fully realized." 168

In the mid and late 1980s, when Congress was considering how to amend the CAA, over 100 geographic areas were still non-attainment areas for ozone. 169 Congress recognized the need for sacrifices in order to cut ozone levels in certain areas. In a report prepared at Congress' direction, the Office of Technology Assessment ("OTA") found that reductions in the worst areas were not achievable with current technology and that meeting acceptable standards would "require both new technologies and lifestyle changes in the most affected communities, including changes in transportation, work, and housing patterns." 170 This conclusion indicates why only the severe and extreme nonattainment areas adopted the most severe transportation management plans, including ECOs, and counters the argument that other areas did not adopt these measures because they were too politically costly.¹⁷¹ Rather, Congress felt these measures were needed for attainment only in the most severe areas because other measures were available to reach Even so, OTA reported to Congress attainment in less severe areas. that trip reduction programs were a method to make unpalatable driving restrictions more attractive to the average public. 172 Much of the language in OTA's report appears identical to that used by Congress in issuing its report on why it has adopted transportation control measures. 173 Specifically, the report cites both the Los Angeles and Pleasonton, California programs as successful examples of trip reduction programs and uses the same examples 174 as those used in the

^{168.} CATCHING OUR BREATH, supra note 162, at 30.

^{169.} Id. at 32. "Of the six 'criteria' pollutants for which standards have been established, we have been least successful in our efforts to attain the standard for ozone." Id. at 29.

^{170.} Id. at 5.

^{171.} STENSVAAG, supra note 1, at § 4.13 ("The House Committee Report does not explain these alterations, but the most likely explanation is that the transportation control plan features of SIPs have been so controversial that Congress elected to require them only in nonattainment areas having sufficiently poor air quality to justify the political heat." (citations omitted)).

^{172.} CATCHING OUR BREATH, *supra* note 162, at 182. One study indicated that "[c]ontrol strategies may include measures to encourage people to cut back on driving." *Id.* at 32.

^{173.} Id. at 182-83.

^{174.} Id. at 183.

Congressional hearing. The report looked at the Los Angeles plan and found that a thirty percent reduction in emissions would come over a twenty-two year period from the reduction in the number of vehicles on the road that would result from implementation of the transportation management plan.¹⁷⁵ The report called for ECO programs to be viewed in a fifteen to twenty year time frame, and stated that such programs are most effective when used as long-range strategies.¹⁷⁶ TCMs were recommended as a method currently available ¹⁷⁷ to reduce emissions.¹⁷⁸

One concern that Congress had with a required reduction in vehicle miles travelled was the effect that such a reduction would have on the allocation of highway transportation funds. "Highway Trust Fund dollars are allocated largely on Vehicle Miles Travelled. The ... CAA requires Vehicle Miles Travelled to be significantly reduced in nonattainment areas resulting in fewer federal dollars for those areas that fully comply with the Clean Air Requirements." The response to this concern was that the CAA did not actually require reduction in trip miles; a state could choose its own mix of options, such as reducing trip miles, to meet emission reduction requirements. Congress also considered a solution through which the formula for highway funding as related to Vehicle Miles Travelled would "be based on 'people' miles traveled rather than Vehicle Miles Travelled" because the goal of the Transportation Department is to "move people," not vehicles. 181

Congress heard strong objections to restrictions on the use of the single occupancy vehicle. One witness stated: "A basic element of the American lifestyle is our virtually unrestricted ability to get from one place to another. ... Even though highway transportation contributes in

^{175.} Id. at 230.

^{176.} Id.

^{177. &}quot;Currently" referring to the year 1989. Id. at 16.

^{178.} Id.

^{179.} The Impact of Air Quality Regulation on Federal Highway and Transit Programs, and on Fuel Tax Collections: Hearing before the House Subcomm. on Investigations and Oversight of the Comm. on Public Works and Transportation, 101st Cong., 1st Sess. 34 (1989) (question by The Honorable Glenn Anderson (Ca.)) [hereinafter Impact of Air Quality Regulation].

^{180.} Id. at 16-37, 35 (testimony of Joseph Canny, Director of the Office of the Assistant Secretary for Policy and International Affairs, Department of Transportation; and Richard D. Wilson, Director, Office of Mobile Resources, EPA).

^{181.} Id. at 38-60, 51 (comments by William Reilly, Assistant Health Commissioner, Philadelphia Air Management Services).

some degree to the nation's air quality problems in some nonattainment areas, it also supports our nation's entire economic and social structure." 182

Opponents of the bill were "strongly opposed to efforts to mandate reductions in individual mobility." Opponents argued that any control on freedom of movement is inherently un-American and, as such, should be opposed. They did "support efforts to induce voluntary traffic reduction programs such as car or vanpooling." Objections based on reductions in individual mobility are minimized by the use of programs such as the guaranteed ride home and by increased usage of public transportation. The advantages of carpooling must be balanced against the perceived convenience of being able to make sidetrips on the way to and from work. The ECO program may well preserve the freedom that comes from the personal car by allowing its unlimited use during personal time by placing restrictions on its use during "company" time. Opponents did not offer alternative pollution control methods during the hearings but simply opposed the solutions offered to reduce air pollution. 186

In the face of such opposition, Congress took several years to agree on a passable bill. In 1987, when the House first devised amendments for the CAA, the amendments did not include an employer trip reduction program. The only provision was for the use of transportation management control programs as an alternative to

^{182.} Id. at 60-71, 63 (testimony of Neil Gray, Director of Government Relations, Highway Users Federation).

^{183.} Id. at 65.

^{184.} The American traditions of independence and individuality and the long history of exploration are all tied into the belief that freedom to travel should not be restricted in any way.

^{185.} Impact of Air Quality Regulation, supra note 179, at 65 (testimony of Neil Gray); see also id. (testimony by John Archer, Managing Director, Government Affairs, American Automobile Association).

^{186.} One must also consider economic costs when looking at alternatives. Government has left progress on pollution reduction to the private sector for many years. The failure of the capitalist market to incorporate externalities has meant, however, that companies who are not required to pay for the pollution of a common resource, here air, do not progress toward pollution reduction. If companies had to pay for externalities, they might well find it more economically attractive to spend research and development money on making solar power and alternative fuels more efficient.

mandatory emission inspections.¹⁸⁷ Section 182(C)(4) of the presidential proposal of legislation for the CAA Amendments required that serious nonattainment areas¹⁸⁸ implement transportation controls when these areas did not make reasonable further progress. This section required the reduction of vehicle miles and congestion levels.¹⁸⁹ No indication exists in the legislative history as to why the requirement was enacted only for severe and extreme nonattainment areas.

The Senate bill originally differed from the House bill in that it allowed an escape route for employers who failed to meet the reduction requirements. This exception stated that "[i]f the employer spends an amount equal to the cost of providing each employee a parking space at the workplace and does not achieve the required increase in ridership but shows that such an increase is not feasible, the requirement of the bill will be considered to have been met." The refusal of Congress to include this provision in the final bill is yet another indication that Congress was serious about the ECO program requirements and knew what it was doing when it passed the bill.

The legislative history justifying the ECO program is further strengthened by the social and technological reasons for implementing controls on air pollution.¹⁹¹

C. Effect on Urban Areas

At least one court has strongly endorsed the use of public transportation as a means to revitalize urban areas. 192

"A public transportation system ... will provide increased

^{187.} H.R. 3054, § 183(d)(2), reprinted in Clean Air Act Amendments (Part 1): Hearing before the House Subcomm. on Health and Environment of the Comm. on Energy and Commerce, 100th Cong., 1st Sess. 51 (1987).

^{188.} Serious nonattainment areas are the third most critical category in the nonattainment area ratings, directly beneath severe nonattainment ares.

^{189.} Proposed Legislation - "Clean Air Act Amendments of 1989," Message from the President of the United States, 74 (1989).

^{190.} S. REP. No. 101-228, 101st Cong., 2nd Sess. 32 (1989), reprinted in 1989 U.S.C.C.A.N. 3385, 3418.

^{191.} See infra pp.

^{192.} Grais v. City of Chicago, No. 72842, 1992 III. LEXIS 130 (October 1, 1992) (holding that a tax on businesses within a special service area to pay for the construction of new public transportation was legal).

ability of persons to reach workplaces, offices, public buildings, services, and shops in the Area; will facilitate commerce and services in the Area; and will reduce air pollution. ... [It] will [also] stimulate economic development, the maintenance and creation of jobs, the creations [sic] of additional tax revenues, and the general economic health of the Area;

[It will also] encourage people to make longer trips by unifying the area into a coherent whole, allowing access to jobs that were not convenient to them and encouraging shoppers and diners to venture further"193

The court also found that "the vast majority of the circulator's [the new public transportation system's] riders will be employees and customers of businesses in the central area." One of the reasons the court allowed taxation of businesses and not residences was its finding that businesses would be the largest beneficiaries of the service. ECO programs will undoubtedly add to public transportation use and may well bring about many of the benefits enumerated by this court.

The possibility of increased use of public transportation must be considered in light of the fact that the United States is becoming a country of suburban rather than urban centers. Hereica today is predominantly metropolitan with more than 75% of its population in such centers in 1980. More accurately, America is predominantly a suburban country with 44% of its population living in areas surrounding the central cities of large metropolitan regions. Trends since 1980 have continued this pattern. Has dramatic as metropolitan job growth patterns were

^{193.} Id. at *8-9 (citing findings made by the city council in the Establishment Ordinance). The court also made the following statements: "[D]evelopment of Chicago's central area can continue only if the transportation system is improved"; "[I]mproved transportation is essential for the expansion of central area business activity"; and "[G]rowing traffic makes the downtown area more expensive and less desirable as a business location" Id. at *3, *20.

^{194.} Id. at *20.

^{195.} Id. at *24.

^{196. &}quot;The dominant flow pattern in commuting is now the suburb-to-suburb pattern at twice the size of the 'traditional' pattern of suburb-to-central city travel." New Look, supra note 18, at 302.

^{197.} Id. at 301.

compared to population growth trends in large metropolitan areas, suburban worker growth trends were even greater." In developing a transportation policy for the nation Congress must consider whether the growing unattractiveness of cities has caused increased suburbanization, or whether increased suburbanization should be taken as an indication that transportation planning should look not to the needs of cities but those of suburbia. Even if the shift is due to a perception that cities are unattractive places to live and work, this perception could be changed by an improvement in transportation systems and a reduction in congestion in metropolitan areas. Cities cannot be written off. The fact still remains that "[g]rowth in the 'traditional' suburb-to-center city travel remains substantial."

D. Public Perception of a Transportation Crisis

Congress was willing to include the ECO program in the CAA Amendments because of a growing public perception of a transportation crisis.200 "Commuters around the country, frustrated by growing traffic problems, are encouraging the passage of advisory measures asking officials to consider mass transit. Transportation planners listen because they know that not enough space exists to add more urban Previously, transportation policy was based on the highways."201 assumption that transportation should revolve around the private car and that it was possible to construct enough roadways to accommodate the free flow of every one of those vehicles. 202 Policy makers "now accept that it is impossible to build enough roads to meet demand, and that the emphasis must now be on reducing the demand"203 commentator projected that the number of vehicle miles travelled will increase ninety percent by the year 2010 because of continued reliance on the car.²⁰⁴ Preventing dependence on the single occupancy vehicle not only reduces pollution but reduces the number of roadways

^{198.} Id. at 302.

^{199.} *Id*.

^{200.} See Stephen Joseph, Traffic Growth: The Problem and the Solutions, 18 J.L. & SOC'Y 126, 126 (1991).

^{201.} Melanie Baker Daly, America - On the Road to Mass Transit, 19 TRANSP. L.J.

^{357, 363 (1991) (}citations omitted).

^{202.} Joseph, supra note 200, at 126-27.

^{203.} Id. at 130.

^{204.} Daly, supra note 201, at 362 (citation omitted).

constructed, thereby decreasing the adverse environmental impacts such roads have on the environment. 205 This prevention of dependence also reduces suburbanization, which has already caused the death of many cities²⁰⁶ and which in itself has severe environmental impacts.²⁰⁷ Congress has made several attempts to encourage mass transportation in urban areas, but the average American's love affair with the car has prevented these policies from functioning well.208 "Many of the country's mayors believe that a light-rail system combined with laws requiring employers at new commercial developments to reduce their workers' travel are the best transportation strategies for reducing pollution."209 Congress has taken this a step further and required all large employers, not just new ones, to reduce the vehicle miles travelled by their employees.

Congress was willing to pass legislation in favor of mass transit because it found that " 'the welfare and vitality of urban areas, [and] the satisfactory movement of people and goods within such areas ... are being jeopardized by the deterioration or inadequate provision of urban transportation facilities[,] ... the intensification of traffic congestion, and the lack of coordinated transportation[,] ... on a comprehensive and continuing basis.' "210 The same rationale applies to passing ECO legislation. Although Congress, pressed by the public, has recognized the need for controls on use of the single occupancy vehicle, such controls have still not gained broad acceptance. Even in the face of resistance, in a country where "[v]ehicles available now exceed the number of licensed drivers,"211 use of the private automobile must clearly be regulated in some form in order to ensure that the nation can move.

^{205.} Id.

^{206.} Suburbanization leads to flight from inner cities in the ephemeral search for a "better life." The public perception that life in suburbia means lower crime rates, better schools, and generally better quality of life means that people abandon cities in favor of white picket fences. This abandonment causes businesses to depart from the inner city. Eventually only the very rich and the very poor remain. The rich live in the best parts of the city while the poor are left the evacuated areas. Cities have no place left for the middle class.

^{207.} Joseph, supra note 200, at 126-29.

^{208.} For a brief history of the legislation related to urban mass transportation, see Daly, supra note 201.

^{209.} Id. at 362 (citation omitted).

^{210.} Id. at 364 (citing to 49 U.S.C. § 1601(a)(2)).

^{211.} New Look, supra note 18, at 302.

D. The Effect of ECO Programs on Vehicle Emissions

Automobiles are the chief cause of four of the six CAA criteria pollutants - carbon monoxide, hydrocarbons, nitrogen oxides, and photochemical oxides, or ozone.²¹² Congress knew from previous studies that a direct correlation exists between emissions reductions and a reduction in emission of volatile organic compounds ("VOCs"). "EPA estimates that nationwide, emissions of VOCs have decreased by about 10 percent over the last decade. The decline in VOC emissions is due primarily to a 30-percent decline in mobile source emissions, which has occurred because of significant reductions in vehicle emissions rates. despite a 25-percent increase in vehicle-miles travelled."213 However. when technology stays at about the same level, an increased number of vehicles on the road means an increased amount of emissions. The additional congestion that an increased number of vehicles creates adds to vehicle emissions because cars operate less efficiently when not moving at a consistent speed.²¹⁴ Ride-sharing can reduce emissions. At a thirty percent or higher employee participation rate, "van pools and car pools possess substantial potential for emissions' reductions compared to other transportation control measures "215

[I]ncreased ride sharing is necessarily one of the methods of addressing congestion issues. If we increase the average number of people per vehicle during the rush hour from the current 1.1 to 1.5 ... we would reduce Vehicle Miles Travelled by 25 percent.

Thereby, that one action alone [would] offset[] the projected growth in traveling population; reduce the number of vehicle trips by nearly 34 million a day; reduce emissions of reactive organic gases by about 24 tons a day, nitrogen oxides by up to 34 tons per day, and carbon

^{212.} Daly, supra note 201, at 377 (citation omitted).

^{213.} CATCHING OUR BREATH, *supra* note 162, at 31 (citing to a 1985 EPA report on trends in emission controls).

^{214. &}quot;Today's commuting patterns result in an average of only 1.1 people per vehicle. Emissions go up when cars sit idling or when they operate at low speeds." *Impact of Air Quality Regulation*, *supra* note 179, 38-60, 52-53 (comments by Norton Younglove, Chairman of the Board, South Coast Air Quality Management District).

^{215.} Hershkowitz, supra note 24, at 736 n.54.

monoxide up to 216 tons per day.216

Congress, once it made a commitment to a reduction in emissions, would be hard pressed to exclude transportation management programs after hearing testimony that extolled the virtues of such programs. Although Congress has not specifically looked to reduce emissions as an end in itself, it has made a commitment to the attainment of the NAAQSs for ozone and carbon dioxide, and believes that emission reductions are an effective means of reaching attainment.

Congress examined several other spin-offs that would result from trip reduction programs. First, "studies have found that transit-using employees are more punctual and have lower turnover rates than those who drive to work."217 Second, "employer ridership programs appear to make economic as well as environmental sense."218 One program "resulted in estimated annual savings of \$1.77 million to the company's 1,475 employees, assuming a savings of approximately \$2,000 per employee per year; the annual cost ... of implementing the program is \$640,404"²¹⁹ This savings is a net savings of over one million dollars.²²⁰ Reduced emissions also will cause a reduction in the harm that results from air pollution. "Although it is difficult to attach an accurate dollar figure to the air pollution harm, the Council on Environmental Quality estimated that air pollution was costing the country \$21.4 billion per year. From 1972 to 1979, a total of \$65.2 billion was spent on air pollution abatement."221 These figures indicate that the nation spent approximately \$8.15 billion a year on abatement during this time, or approximately one-third of what air pollution cost the United States during the same period. The only way to know whether

^{216.} Impact of Air Quality Regulation, supra note 179, 38-60, 52-53 (comments by Norton Younglove, Chairman of the Board, South Coast Air Quality Management District).

^{217.} Oram, supra note 36, at 55.

^{218.} STENSVAAG, supra note 1, §5.43 (citation omitted).

^{219.} Id. (referring to the program at ARCO's facility in Los Angeles).

^{220.} EPA has made a commitment to using economic incentives as a means of optimal protection for the environment in several programs. One specific program which will generate much interest over the coming years will be the futures market in sulfur dioxide, for which a nationwide cap has been set by EPA. For further information regarding the use of economic incentives for environmental regulation, see generally ECONOMIC INCENTIVES TASK FORCE, U.S. EPA, PM-220, ECONOMIC INCENTIVES: OPTIONS FOR ENVIRONMENTAL PROTECTION (1991).

^{221.} STENSVAAG, supra note 36, at 55.

this figure is a reasonable expenditure is to determine what kind of progress has been made on the road towards air pollution and how much worse off the country would be if it had not spent that money.

Compelling technological and economic reasons²²² exist for implementing transportation management programs. Whether these reasons outweigh the burden that will be placed on individuals who are required to comply with the programs implicates several constitutional considerations.

E. Balancing the Interests

The question of which policies are important and why centers around choices between unlimited, unregulated use of the single occupancy vehicle and restrictions which will result in reductions in air ECO policies will reduce the number of vehicle miles travelled and therefore the amount of emissions from mobile sources. That reduction will lead to a reduction in the amount of pollution. This beneficial reduction must be weighed against the freedom to travel anytime to any place, in any manner desired. ECO programs actually may preserve freedom of travel because they will allow the individual to use his or her private vehicle as desired during leisure time. freedom of use will be possible in the long term only if emissions are reduced overall. If no overall reduction occurs, governments may have to take drastic steps, such as allowing certain cars to drive only on certain days, much like the rationing system for water in drought areas.²²³ This balancing will be a tough struggle for Americans. Some would argue that most people do not see their time at work as their own in any case, and that any method which gets them there faster and then home faster is a good alternative.

The road Congress has chosen is controversial on theoretical grounds. Congress is working towards a market based system, forcing users to pay for what they use. Some would argue that having never paid for air, they should not be required to do so now. This contention ignores the long term reality of living in a closed environmental system.

^{222.} Other reasons to decrease reliance on the car and increase reliance on mass transit are to decrease reliance on foreign oil, alleviate gridlock, stimulate economic growth, and allow for better land use. Daly, *supra* note 201, at 377-80.

^{223.} For example, in such areas, odd numbered houses may water their lawns only on odd numbered days, and vice-versa.

Privacy, freedom of association, and travel issues will come into focus only if employers choose to make trip reduction programs mandatory. Employers will be under a legal obligation to increase vehicle occupancy rates, and yet will have difficulty creating legally enforceable requirements which they may place on their employees in order to ensure that trip reduction goals are met. Employers will be forced to deal with this reality in the face of legitimate action by Congress and the states in requiring the employers to develop trip reduction programs.

VI. RECOMMENDATIONS

The government is using a novel approach in its attempt to implement viable strategies for the cleansing of the nation's severely polluted air. The ECO program could be challenged in two ways. First, employers could challenge required participation in the program. Second, employees could challenge either the methods chosen to implement the program or any mandatory requirements placed on them to ensure that trip reduction goals are met. A court would need to balance the state interest in clean air against the traditional free market ability of an employer to run a business in the manner s/he chooses and the individual's liberty interests, specifically the right to privacy, the right of association, and the right to travel. An employer would need to demonstrate that the ECO requirements operated to his or her detriment; an individual would need to demonstrate that the requirements of the ECO program were violative of individual rights. Both the employer and the individual would need to show harm sufficient to outweigh the state interest and the tremendous Commerce Clause power exercised by the Congress.

An employer may attempt to show that s/he is being required to carry a greater burden than any benefit received, especially because the employer views the benefits as an abstract result in clean air rather than a method to ensure that the costs of externalities are included in the employer's planning and production costs. When an employer hires an employee, s/he must now take into account not only the salary and benefits of that employee but must also calculate into the cost of hiring the cost of transporting that person to and from the worksite. EPA is implementing these restriction through a legislative mandate. The courts have traditionally shown great deference both to legislative findings and to agency expertise. Conversely, courts have also recognized that free

enterprise is the foundation of the country. Which priority will prevail is still unsure.

The United States has chosen to make a priority of reaching and maintaining clean air goals. ECO programs are one effective method for ensuring that such goals are met. The courts should generally defer to the ECO program, while prohibiting encroachment on constitutional rights. EPA has left a great deal of leeway in the program for individual state development. The states themselves may allow for accommodation of different needs according to the type of worksites involved. Because of this, enough flexibility in the development and use of the ECO programs should exist to allow states to meet the goals of the CAA without taking away individual liberties.

The judiciary acts as a check on the power of the legislature. If no abuse of power occurs, the judiciary should not act. Congress has decided that one of the best methods for controlling emissions and decreasing air pollution is to limit the use of the single occupancy vehicle; this choice is supported by research that shows, at a minimum, that the choice is not irrational. This decision should be respected by the courts. The real question will be whether the courts simply respect the decision or act as advocates of the policy. The attitude the courts take will determine the effectiveness of the program and the extent to which the program infringes on individual rights.

VII. CONCLUSION

This Article has examined the requirement of the new Employee Commute Option program. The program requirements are sufficiently flexible to allow for wide variations in implementation while maintaining goals that will assure the effectiveness of the program. This Article also has looked at programs in existence at the state level and found that the local programs similar in content to the federal program have been successful in reducing air pollution.

Finally, this Article has considered the possible bases for challenges to the ECO program and found that possible challenges may be brought on the basis of the federal-state relationship, Congress' power under the Commerce Clause, and infringement on individual liberties, such as the right to privacy, freedom of association, and the right to travel. These interests must be weighed against the state interest in the environment. If courts continue to give great deference to the Commerce Clause power of Congress and to legislative judgments in general, the

government interest will sufficiently outweigh any opposing interests and enable the ECO program to withstand challenge. This conclusion is based on an examination of the legislative history of the ECO program, the growing transportation crisis in the United States, the public recognition of this crisis, and the actual reductions that are predicted to result from implementation of the ECO program.

One of the limitations of this Article is that it considers the employee commute option program in isolation and without benefit of the rest of the requirements of the CAA. One must remember many alternatives exist for emission reductions and attainment of ozone standards. However, Congress also clearly believes that reducing the number of vehicle miles traveled is essential to having clean air.

Whether in the next CAA Amendments Congress further limits the use of the single occupancy vehicle is of interest for the future. Congress could limit use through reducing the minimum number of employees an employer has to have to be required to participate in the ECO program. Congress also could attempt to put controls on leisure time use of the private car. However, these controls may impermissibly implicate the constitutional right to travel.

As the United States continues to work toward an environmentally sound future, without a renewable energy source such as fusion, Congress and the nation will be forced to continue to struggle with tough decisions which attempt to maintain individual freedom while preserving the environment. Programs such as ECO attempt to strike a fair balance between individual freedom and environmental preservation.