

**Policies and Procedures
for
Review of New Parking Facilities in
New Jersey Central Business Districts**

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Prepared by
TRW Environmental Services and DeLeuw, Cather & Company

POLICIES AND PROCEDURES
FOR REVIEW OF NEW PARKING FACILITIES
IN NEW JERSEY CENTRAL BUSINESS DISTRICTS

PREPARED FOR:

U.S. Environmental Protection Agency, Region II
26 Federal Plaza
New York, New York 10007

PREPARED BY:

Environmental Services of TRW, Inc.
800 Follin Lane, SE
Vienna, Virginia 22180

and

DeLeuw, Cather & Company
1201 Connecticut Avenue, NW
Washington, D.C. 20036

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1.0 INTRODUCTION*

1.1 PURPOSE OF THE STUDY

1.1.1 Background

The Clean Air Act Amendments of 1970 directed the Environmental Protection Agency (EPA) to set National Air Quality Standards which would protect the public health and welfare from the known effects of the major air pollutants. In 1971, such Air Quality Standards were established for six pollutants, including the four primarily associated with motor vehicles, i.e. Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), Photochemical Oxidant (Ox), and Hydrocarbons (HC). The standards for the first three of these species are given in Table 1-1. The ambient standard for hydrocarbons was intended only as a means for control of Ox, and it is not included in the table.**

On May 31, 1973, under section 110 of the Clean Air Act and 40 CFR Part 51, the Administrator of EPA approved, with specific exceptions, State plans for implementation of the National Ambient Air Quality Standards. The plan submitted by the State of New Jersey for attainment and maintenance of standards for photochemical oxidants and carbon monoxide was approved with a 2-year extension of the attainment data because transportation controls were deemed necessary.

On January 31, 1973, the U. S. Court of Appeals for the District of Columbia Circuit decided the case of Natural Resources Defense Council et. al. versus Environmental Protection Agency (hereafter referred to as NRDC v. EPA). The Court ordered the Administrator to formally rescind the extensions of time granted for achieving the standards and to require that all affected states formally resubmit their transportation control plans by April 15, 1973. The Administrator did so on

* Reference numbers in this report refer to the list of references at the end of each section.

** In other words, if an area meets the oxidant standard, it is assumed to meet the hydrocarbon standard.

TABLE 1-1
AIR QUALITY STANDARDS FOR TRANSPORTATION-
RELATED POLLUTANTS

Pollutant	Air Quality Standard*
Carbon Monoxide milligrams/meter ³ max. 8-hour conc.** max. 1-hour conc.**	10 (9 ppm.) 40 (35 ppm.)
Photochemical Oxidants micrograms/meter ³ max. 1-hour conc.**	160 (.08 ppm.)
Nitrogen Oxides micrograms/meter ³ annual arithmetic average	100 (.05 ppm.)

*Primary and secondary standards are the same for these species.

**Not to be exceeded more than once a year.

March 20, 1973. When the State of New Jersey failed to meet this deadline, EPA published a notice of disapproval for the affected areas in New Jersey on June 22, 1973 and published proposed rules and regulations in the Federal Register of July 3, 1973 (36 FR 17782).

Public hearings concerning the proposed transportation controls were held at various locations in New Jersey on July 16, 17, and 18, 1973. After the required comment period, the revised transportation plan was promulgated in the Federal Register on November 13, 1973 (38 FR 31388). Corrections and proposed changes to the plan have been made as noted below:

December 7, 1973	(38 FR 33775)
January 15, 1974	(39 FR 1848)
February 8, 1974	(39 FR 4880)
April 3, 1974	(39 FR 12101)
June 4, 1974	(39 FR 19779)
August 22, 1974	(39 FR 30440)
August 27, 1974	(39 FR 30942)
October 15, 1974	(39 FR 36870)
November 15, 1974	(39 FR 40286)

An essential part of the New Jersey Transportation Plan as it applies to the central business districts (CBD) of Camden, Newark, and Trenton is a set of regulations for management of parking supply. These regulations are part of a comprehensive transportation control program designed to minimize motor vehicle emissions in areas where these emissions now cause serious violations of National Ambient Air Quality Standards. In these areas, it has been determined that the Air Quality Standards for carbon monoxide and photochemical oxidants (smog) cannot be achieved in compliance with the provisions of the Clean Air Act through the use of only stationary source and new automobile emission controls. In order to achieve the applicable standards, it is also necessary to develop and implement transportation controls, which both reduce emissions from in-use vehicles on the road and reduce the vehicle miles traveled by the vehicles in the affected areas. The controls set forth in the transportation plans

to accomplish this task include parking management regulations, mass transit improvements, inspection and maintenance programs, carpool matching programs, exclusive bus and carpool lanes, employer incentive programs for the use of mass transit and the retrofit of older automobiles with emission control devices.

As part of the overall transportation control programs, the purpose of the parking management regulations, which manage the development of new parking facilities, is twofold: (1) To reduce the area wide growth in VMT so as to contribute to the achievement of photochemical oxidant and/or carbon monoxide standards; and (2) to assure that congestion associated with the operation of a new parking facility does not cause or exacerbate a violation of carbon monoxide standards.

1.1.2 Scope and Intended Use of this Report

This report, together with its companion volumes, provides the following information:

- Data and methodologies which, when combined with other basic data from parking facility permit applications, can be used to estimate the impacts of the proposed facility on air quality, traffic congestion, parking supply, and transit usage.
- A socioeconomic analysis which makes some preliminary judgements of the effects of the parking regulations on the Newark CBD.

It should be noted that the study is not a detailed analysis or interpretation of the EPA regulations, although these are summarized in Section 1.2 and printed in full as Appendix A; nor is the report intended as an instruction book for completion of parking facility permit applications. The latter may be obtained from EPA regional offices.

1.2 SUMMARY OF NEW JERSEY PARKING MANAGEMENT REGULATION

1.2.1 The Need for the Regulation

This regulation is designed to control the growth of parking

facilities in the New Jersey portions of the Metropolitan Philadelphia Interstate and New Jersey-New York-Connecticut Interstate Air Quality Control Regions. Parking management regulations came about indirectly as a result of provisions contained in the Clean Air Act of 1970. The Act presents a master plan for national air pollution control. One important aspect of the Act is that it gave responsibility for this control to the States, requiring that each State submit an Implementation Plan outlining how standards would be attained, and, after attainment, how they would be maintained.

Within the context of the State Implementation Plan, there are specific measures which deal with control of emissions from motor vehicle activities. These measures constitute the Transportation Control Plan. Transportation Control Plans are designed to change the emission characteristics of motor vehicles and the way they are used to a sufficient degree to assure certain defined reductions in the emission of specific pollutants. Thus, the measures within the plan affect the actual design of vehicles, as well as the manner in which they are used. Use controls relate to time of travel, location of destination, route used, and operating conditions assumed during travel. In New Jersey, it was found that, assuming all required modifications in automobile engines to reduce their emissions by 90% were made, it would still be necessary to reduce the absolute distance traveled by the overall State population by approximately 25%. This means that, regardless of the success of all other control measures, it will be necessary to place some constraints on the use of the automobile for work-related trips and other trips made frequently by automobile. This requirement is the primary and overriding transportation control measure for the State, and all future planning and development must seek such a reduction as a principal consequence of the activity.

There are only two ways in which mobility can be limited as regards private transportation. Either the capacity of the road system to carry

vehicles can be reduced, or, the number of potential trip-ends can be reduced. The term trip-ends can be loosely interpreted here as parking spaces. One important method of reducing VMT in New Jersey is to reduce the number of parking spaces available to the driving public. In this way, unnecessary auto trips and auto trips which could have been made using public transportation will be eliminated, as only persons for whom it is absolutely necessary to drive will find the intense competition for limited parking space to be worthwhile. The parking management regulation is one method by which it is hoped to carefully and sensitively reduce the number of parking spaces to be provided the drivers of New Jersey in the specified region.

Parking management regulations are dual purpose: (1) they seek either to reduce, or to minimize the growth of vehicle miles of travel (VMT) in accordance with the State Implementation Plan; and (2) they require that new facilities, or modification of old facilities which provide increased parking capacity, do not cause, or exacerbate already existing violations of an air quality standard.

Two basic approaches for achieving the goals of parking management are: (1) facility-by-facility review and; (2) a comprehensive parking management plan. The former may be conducted by the Federal Government or by the local jurisdictional agency, if it submits an approvable plan to EPA outlining how it will pursue the review process. The development of a comprehensive plan, however, can only be performed by the local planning agency, as this process must integrate all facets of local planning with the parking management control strategy, and this is beyond the scope of EPA's work.

1.2.2 Facility-by-Facility Review

The parking management ruling outlines three basic methods for conducting facility-by-facility review. The first method of satisfying the

regulation is to indicate that the facility has a special purpose directly related to VMT minimization. An example of this would be in the case of a facility where a substantial portion of its usage will be as a park-and-ride lot for commuters. The VMT reduction is proven if it can be shown that users who originally drove to jobs will now use the facility to take advantage of public transportation, and that the facility will not serve some other purpose which would negate this savings and yield a net increase in VMT. If these two criteria can be met, the facility will be granted approval in most cases.

The second method, assuming sufficient traffic information is available, involves making accurate projections of VMT changes which will result from the operation of the proposed facility. If it can be shown that there will be no increase in VMT above what would have occurred without the facility, approval is likely.

The third and final method of showing compliance with VMT control strategies is to be applied where neither of the first two are proper, and will probably be used in most evaluations. It assumes, first, that there will be some increase in VMT resulting from operation of the facility. It requires then, that the owner/operator show the need for the facility in spite of this compliance deficiency. At the same time, a program to minimize the impact of the facility must be provided including good-faith intentions to initiate and maintain the program after approval has been granted. A listing of measures by which this can be accomplished is included in Appendix A. Such measures include incentives for the use of mass transit and carpooling, rate schedules to discourage problem parking, and dial-a-bus or chartered bus service to areas not served by regularly scheduled transit. Also, any item that the owner feels is of merit will be considered, assuming it is apparent that other methods may not be reasonably available in a particular situation. The overall procedure will, therefore, include three phases:

1. explanation of the need for the proposed facility;
2. development of a plan to employ all reasonable measures to minimize VMT; and,
3. projection of the new reduced parking space demand resulting from effective implementation of measures comprising the second step.

The use of the appropriate method will be sufficient to allow accurate review of a proposed facility with respect to VMT control.

The requirement that there be no violation of air standards is dealt with separately in the review process. The regulations are structured to provide guidance in the use of dispersion modeling techniques to clarify carbon monoxide problem areas around the proposed facility. They also indicate the necessary information to be provided for accurate analysis, and remove ambiguities which were present in the original rules.

1.2.3 Comprehensive Parking Management Plans

The final item covered in the revised proposal is the provision for a local agency not to utilize the facility-by-facility review, but, instead, to proceed with the development of a usable comprehensive parking management strategy. Upon approval of such a plan by EPA, it is assumed that the parking management control strategy has been integrated wholly into the local planning process, and that Federal supervision is no longer needed. This situation represents the final goal of the proposed regulations, whereby environmental considerations, primarily their relation to air quality, are a functional part of land-use and transportation planning throughout the areas of concern. It is this goal toward which EPA is striving by means of this parking management regulation.

The complete regulation was published in the August 22, 1974 Federal Register, Title 1, Part 52, and some minor corrections were published on August 27, 1974. An amendment, published in the October 15, 1974 Federal Register, postponed the effective date of the regulation from January

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1, 1975 to June 30, 1975. The regulation, after that date, will apply to all proposed facilities of the required size which have not signed construction contracts for continuous construction on or before this later date.

1.3 PARKING MANAGEMENT REGULATIONS AND INDIRECT SOURCE REGULATIONS

In addition to parking management regulations, EPA also has indirect source regulations (40 CFR 52.22 (b), 39 FR 25292 et. seq., July 9, 1974) governing proposed future parking facilities. In order to avoid confusion concerning the overlap between these two regulations, a brief discussion is necessary.

The indirect source regulations, except as they relate to highways and airports, are designed to review proposed construction of new parking facilities anywhere in the nation to prevent violation or exacerbation of an existing violation of carbon monoxide standards and were applicable to facilities for which construction commenced after January 1, 1975. The size cutoff for indirect source review varies depending upon the location of the proposed facility. Inside a Standard Metropolitan Statistical Area (SMSA), the regulations apply to new facilities of 1,000 spaces or more and modifications (additions) of 500 spaces or more. Outside an SMSA, the regulations apply to new facilities of 2,000 spaces or more and modifications of 1,000 spaces or more.

Parking management regulations are limited to specific areas found to have serious violations of auto-related air quality standards and requiring transportation control plans. The regulations include both a review for localized carbon monoxide impact, similar to that required under indirect source regulations, and a review of the impact of the proposed facility on area-wide oxidant and area-wide carbon monoxide levels resulting from motor vehicle use. The size cutoff for parking management regulations

is 250 spaces or more for the construction of new facilities or the modification of existing facilities after June 30, 1975.

Indirect source regulations do not apply to facilities which are subject to review under EPA-promulgated parking management regulations. No single facility will be subject to more than one of these requirements. Highways and airports in parking management areas will continue to be reviewed under the indirect source regulations. However, as originally formulated, indirect source regulations would have applied to parking facilities in parking management areas between January 1, 1975 and June 30, 1975*, but the implementation date has been suspended until July 1, 1975 the same as that for the parking management regulations (40 CFR 52.22 (b), 39 FR 45014-5, Dec. 30, 1974).

1.4 OVERVIEW OF REPORT

The remaining sections of this volume of the study cover the following material:

- Section 2.0 - Technical Basis for Report

This is a detailed account of the methodology used for developing the data in the CBD databooks, and instructions for use of the data. The areas covered are: (1) analysis of parking supply and demand; (2) traffic analysis; (3) public transportation analysis; and (4) air quality analysis.

- Section 3.0 - Summary of the CBD Handbooks

This section is a summary description of data taken from the databooks for the Camden, Newark and Trenton CBD's.

- Section 4.0 - The Socio-economic Impact of Parking Management Strategies

This section attempts to identify the potential socio-economic impacts of parking management strategies based on the analysis of two attitude surveys taken in the Newark CBD:

- (1) a survey of the major employers in the CBD, and
- (2) a survey of the employees at two major CBD employers.

* Information obtained at EPA Briefing for Developers on "Indirect Source" Review, Washington, D.C., November 22, 1974.

- Section 5.0 - Transportation Alternatives

The major emphasis in this section is on the operation of carpooling systems, but short-term transit improvements are also discussed.

In addition, there are parking management handbooks for each CBD which provide data and techniques for estimating; (1) Parking supply and demand; (2) traffic characteristics; and (3) air quality effects. Mass transit availability is also discussed.

2.0 TECHNICAL BASIS FOR THE CBD HANDBOOKS

2.1 GENERAL APPROACH

Time and resource constraints of this study forced a reliance on existing secondary information sources for the most part. In only one case - the socio-economic analysis of the Newark CBD in Section 6.0 - were field studies made for the development of primary data. Most of the data used for the analysis of parking supply and demand, traffic, public transportation, and air quality were obtained from local agencies. In some instances, such as the hourly distribution of traffic, it was necessary to use more general data, which were typical of urban areas.

Treatment of the collected data was based principally on existing methodologies. At times, it was necessary to make some "adjustments" in analytical techniques to fit the data pool, but these were held to a minimum. The use of standard methods in most cases should give the overall technical approach, but not the specific results, some degree of general applicability to other urban areas.

The remainder of this section presents the technical basis, both data and methodologies, for each of the critical areas of parking facility review, namely:

- Parking supply and demand;
- Traffic;
- Public transportation; and
- Air quality impacts.

2.2 PARKING SUPPLY AND DEMAND

The first area of interest in the review of a proposed parking facility is the analysis of parking supply and demand. This step is designed to identify the need for the new facility, in light of the existing supply and the new or existing factors that might warrant the construction of additional parking spaces.

The supply of on-street and off-street parking spaces can be best determined by a field inventory. However, the time and resource limitations of this study prevented the development of such a field inventory. Existing data on licensed parking lots, and on-street parking regulations were obtained from different secondary sources, and in one case - Camden - a parking inventory of off-street facilities was done by the city's Traffic Engineering Division. The "Parking Management Handbook" for each CBD discusses in detail this information, and accordingly, presents the location of the parking facilities.

The parking demand for the CBD of a city is affected by many factors, some of the most important are:

- Population characteristics: population of the metropolitan area, age distribution, income, car ownership.
- Total number of people coming downtown during the daytime, to work, shop or visit.
- Cost: higher parking fees reduce demand if everything else remains constant.
- Local administration: zoning, parking regulations and a strict enforcement of the regulations can greatly affect the parking demand.
- The economic growth and market share of the CBD.
- Traffic congestion in the CBD itself and the roadways leading to it.

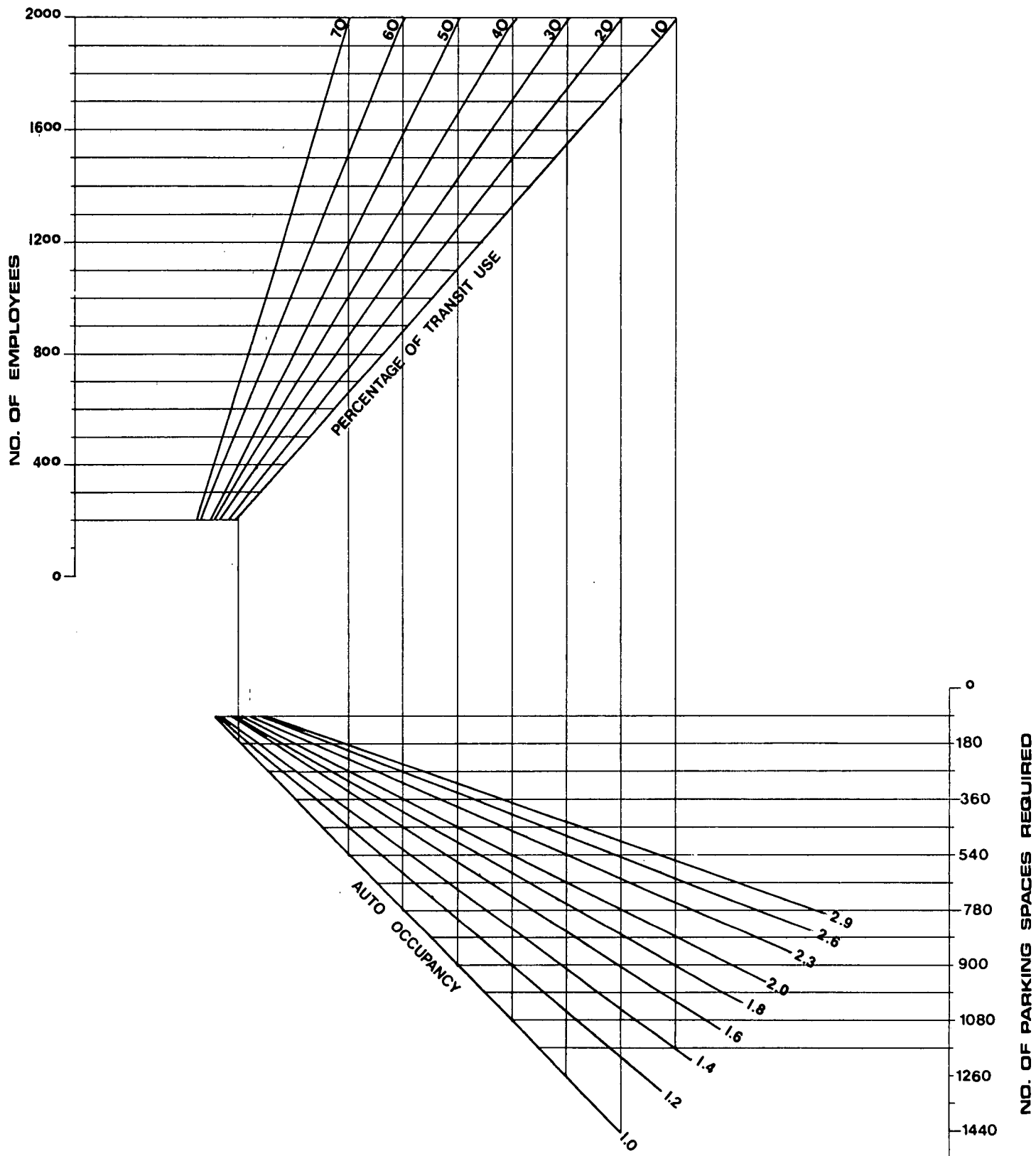
Of the three cities being considered, only Newark had the necessary information to make a rough estimation of the parking demand for the CBD as a whole. It must be emphasized, however, that only a comprehensive parking study can give an accurate picture of the demand for parking and of parkers' characteristics.

Although the parking demand for a new facility is also affected to some degree by the factors mentioned above, there are other factors that play a key role. These factors are:

- Land and building use: ranges in demand for different land uses are available.
- Location in relation to existing parking facilities and final destination of motorists.
- Number of employees: especially relevant in cases of company-owned parking lots.
- Transit availability within a reasonable walking distance to both origin and destination.

The "Parking Management Handbooks" give the reviewing agency simple methods to make first cut estimates for the parking demand of a new facility, and provide general guidelines as to whether or not a new facility should be built at the proposed location and for the proposed number of spaces.

The nomograph shown in Figure 2-1 was developed for use by the reviewing agency during the review period of a proposed parking facility. Input variables for its use are the number of employees, their mode of access and auto occupancy. The number of spaces required is the output. The nomograph can also be used to determine levels of auto occupancy and automobile use assumed by applicants. To facilitate its use, examples are presented in each handbook.



**FIGURE 2-1
PARKING NOMOGRAPH**

In the analysis of parking supply and demand, it must be always remembered that, from the viewpoint of the motorists, the parking areas (off-street and on-street) should be as close as possible to their final destinations. This is usually possible in areas of low intensity land use, but becomes increasingly difficult and expensive in areas of higher intensity land usage such as in the Central Business District of cities.

Parking inadequacies in downtown areas might create circulation problems, since the searching motorist will drive around until he finds a space. On the other hand, an excess of parking spaces available will induce many motorists to take automobiles to their final destinations, adding vehicles to the already crowded streets. In either case, the associated levels of traffic emissions will be higher than necessary. An equilibrium between demand and supply of parking spaces is, therefore, desirable.

2.3 TRAFFIC ANALYSIS

The existing traffic pattern in the vicinity of a proposed parking facility is very important in the determination of the air quality impact. It has become apparent that "hot spots" in the vicinity of parking facilities are usually found in the exit/entrance lanes of the facility and at intersections of nearby access roads. A congested intersection is characterized by the heavy volumes that try to use it at a given time, the low speed of the traffic flow and the frequent stop-and-go conditions that it imposes on traffic.

"Level of Service" is a broad term that denotes a wide range in the operating conditions of an intersection. The level of service of a given intersection depends on the "load factor" of the approaches. An approach is said to be loaded when the following two conditions apply to the green phase of the signal controlling the intersections:

- (1) There are vehicles ready to enter the intersection in all lanes when the signal turns green; and
- (2) they continue to be available to enter in all lanes during the entire phase with no unused time or excessively long gaps.

The "load factor" is defined as the ratio of the number of phases that are loaded, to the total number of green phases available for that approach during the same period. Table 2-1 presents the level of service definitions according to the value of the load factor. Level of Service C is the level typically associated with urban design practice. Stable operation is characteristic under this condition, but, occasionally, drivers may have to wait through more than one red signal indication and traffic back-ups might be observed.

The capacity (C) of an intersection is usually associated with a given level of service. If the volume (V) carried by the intersection during peak periods is known, then the volume to capacity ratio (V/C) measures the level of congestion. When the V/C ratio is near 1.0 the intersection is said to be working at capacity.

Parking facilities are large generators of travel, and uncongested intersections in the access roads can become overloaded due to the increased demand brought about by new or expanded parking facilities.

The volume to capacity (V/C) ratios for major signalized intersections in the study areas were obtained and presented in the handbooks for Newark and Trenton. No information was available for the Central Business District of Camden.

Applicants for new parking facilities are required by EPA to present the access roads to proposed facilities. By determining the affected intersections, and checking the existing levels of congestion on them, a preliminary judgement can be made as to what effect the new demand will have.

Table 2-1
LEVEL OF SERVICE DEFINITIONS

<u>Level of Service</u>	<u>Traffic Flow Description</u>	<u>Load Factor</u>
A	Free Flow	0.0
B	Stable Flow	≤ 0.1
C	Stable Flow	≤ 0.3 (a)
D	Near Unstable Flow	≤ 0.7
E	Unstable Flow	≤ 1.0
F	Forced Flow	(b)

Notes: (a) Design Capacity
(b) Not Applicable

Source: Highway Capacity Manual
Highway Research Board
Special Report 87, 1965

One-way street systems were also considered in the handbooks. Parking facilities with entrances on such streets present easier left turns, reduced time to exit the facilities and, consequently a reduced level of emissions. If entrances are available on more than one street, access can be worked out as to cause the minimum interference with other traffic and pedestrian movements.

Finally, the daily traffic volumes on major streets within the study area of each of the three cities were presented. These indicate the actual levels of street usage.

2.4 PUBLIC TRANSPORTATION

A major factor that is considered in the review of a new parking facility is public transportation. Present and future availability of some form of public mass transportation is of great interest when determining the parking needs in any Central Business District.

In many areas of the country, transit systems are the major source of person trips to downtown areas. Their importance is further increased in low income areas, such as the three cities considered in this study, because public mass transit is the only means of transportation for a significant part of the population. The increased use of transit generally results in auto trip reductions and, therefore, in reductions of parking demand. Relief of traffic congestion and levels of pollutants in central areas, are associated with increased transit availability and usage.

Several factors contribute to the use of transit systems, as opposed to the private automobile. The frequency of service is perhaps the single most important factor. Door-to-door travel time, reliability of schedules, cost, and comfort of the ride are also variables considered in

modal choice decisions. The relative importance of these factors varies not only from individual to individual, but also with whether the users are captive or choice riders, trip purposes and metropolitan area characteristics.

The "Parking Management Handbooks" for Camden, Newark and Trenton analyze the existing transit systems in each area. The areal coverage of service, fare and transfer policies, schedules, and some other relevant information on transit routes within the study areas are also shown.

The handbooks also discuss several of the existing plans to improve transit service in the three cities and the effect that these improvements might have on the demand for parking spaces. Implementation of these plans and some new ones will certainly be affected by the approval of the "Urban Mass Transportation Assistance Act of 1974", which should encourage the continuation and improvement of transit service in urban areas. Some of the main factors covered by this Act are:

- Funding level:
 - \$7.825 billion obligational authority to the Secretary of Transportation, for the capital program from 1975 to 1980 inclusive.
 - \$500 million capital program for rural public transportation
 - \$3.975 billion for grant programs
- Federal matching share: 80% for capital programs
50% for operating programs
- Formula Distributions: (for the formula grant program only)
 - $\frac{1}{2}$ based on the urbanized area population
 - $\frac{1}{2}$ on population weighted by a factor for density
- Special provisions:
 - Up to one half of the financial assistance can be used exclusively for the payment of operating expenses, upon approval of the Secretary.
 - Uniform system of accounts and records shall be developed by January 10, 1977.

- \$20 million is provided in each of the fiscal years ending June 30 of 1975 and 1976, for the research, development and demonstration projects to determine the feasibility of fare-free mass transportation systems, as well as reduced fares. The effect of this on the level of reduction of traffic congestion and, or air and noise pollution will be closely observed.

The November 29, 1974 edition of Passenger Transport gives a breakdown of the \$3.9 billion available from the Act for grant programs over the next six years. According to that information, the State of New Jersey is the eighth largest recipient of funds from this grant, with \$176,975,000. Improvements in transit services are to be expected throughout the state, and in the three subject cities of this analysis.

The transit system in New Jersey should also be favored by the Environmental Protection Agency regulations that call for identification of corridors with preferential bus/carpool lanes, and the establishment by the State of an additional 50 miles of bus/carpool lanes by May 31, 1977. The accompanying reduction in travel time for transit users and carpoolers should reduce the reliance on the private automobile with low occupancy as a commuting travel mode.

2.5 AIR QUALITY ANALYSIS

2.5.1 Basic Approach

In assessing the air quality impact of a proposed new parking facility, it is necessary to take the following steps:

- Determine the existing air quality at or near the proposed site in the year(s) of interest.
- Estimate the incremental change in air quality expected to result from operation of the new facility.
- By comparison with the relevant air quality standard(s), ascertain whether the facility will cause or aggravate a violation of the standard(s).

Although these same general steps are applicable to both O_x and CO analysis, the implementation of the steps is quite different in most cases. However, the study of either pollutant requires an estimate of the vehicular emission rate - in grams per mile - of the pollutant directly for CO, or of the principal precursor (HC) for O_x . Accordingly, the following paragraph, 2.5.2, discusses emission factor calculations per se. The next two paragraphs comment upon the application of the three-step analytical process to O_x and CO, in turn.

2.5.2 Emission Factors

The calculations of emission factors for gasoline-powered and diesel-powered vehicles differ significantly and are treated separately below:

2.5.2.1 Gasoline-Powered Vehicles

The procedures detailed in EPA document AP-42¹ were followed in computing emission factors for this vehicle class. Both heavy-duty and light-duty gasoline-powered vehicle exhaust emission factors were computed by the use of the equation below:

$$e_{np} = \sum_{i=n-12}^{n+1} c_{ip} d_i m_i s_i \quad (1)$$

where

e_{np} = emission factor in grams per vehicle mile for calendar year n and pollutant p,

c_i = the 1975 Federal test procedure emission rate for pollutant p (grams/mile) for the i^{th} model year, at low mileage,

d_i^* = the control vehicle pollutant p emission deterioration factor for the i^{th} model year at calendar year n,

m_i = the weighted annual travel of the i^{th} model year during calendar year n (The determination of this variable involves the use of the vehicle model year distribution.), and

s_i = the weighted speed adjustment factor for the i^{th} model year vehicles.

* This factor accounts for the decreasing effectiveness of the emission controls caused by wear and tear.

The c_i and d_i values are taken directly from AP-42. The weighted annual mileage, m_i , for vehicles of model year i is determined as follows:

$$m_i = \frac{V_i \times D_i}{\sum V_i \times D_i} \quad (2)$$

V_i = fraction of model year i vehicles in use on December 31 of year

D_i = average miles driven by model year i vehicles

The vehicle age distribution data, the V_i , can be obtained from registration data on a county basis. For the present study, data compiled by the R.L. Polk Co. were used for Camden, Essex, and Mercer Counties, where the cities of Camden, Newark, and Trenton, respectively, are located. Unless data to the contrary are available, it is normally assumed that the weighted annual mileage remains the same in later years. This was done for the current investigation.

With regard to s_i , it should be noted that data defining the relation of vehicle age to average speed are not generally available and New Jersey was no exception. As a result, an average speed for the entire vehicle fleet is normally used. The appropriate value of s_i may be taken from AP-42 data. Because the APRAC-1a Urban Diffusion Model for CO has an internal speed adjustment, a CO factor uncorrected for speed must be used. Paragraph 2.5.4 presents the details.

The preceding calculations account for the exhaust or tailpipe emissions. Emission factors for hydrocarbon evaporation and crankcase losses are calculated from another equation for which no speed adjustment is necessary:

$$f_n = \sum_{i=n-12}^{n+1} h_i m_i$$

in which,

f_n = the combined evaporative and crankcase hydrocarbon emission factor for calendar year n ,

h_i = the combined evaporative and crankcase emission rate for the i^{th} model year, from AP-42, and

m_i = the weighted annual travel for the i^{th} model year.

Once f_n has been computed, it is added to the speed-corrected exhaust hydrocarbon emission factor to determine the total emission factor.

Hardware or vehicle emission reduction control measures are incorporated by one of two procedures:

1. If the control measure reduces the per-vehicle emissions of all age classes equally, the controlled emissions are simply:
Controlled Emission = $(1-f) \times$ Uncontrolled Emission
where f is the fractional degree of control.
2. If the control measure affects different age classes by different amounts, one must recompute the emission factor, applying the correct degree of control to each component of every age class. The proper speed adjustment factor should be applied as the final step.

In computing hydrocarbon emission factors for evaluating control measures, one should remember that most such measures affect only exhaust hydrocarbons and not the evaporative/crankcase component. The correct procedure is to apply the control measure to the exhaust factor and then add the evaporative/crankcase factor to it.

2.5.2.2 Diesel Powered Vehicles

Emission factors for this vehicle class were taken directly from AP-42. No speed corrections are needed for these values.

2.5.2.3 Overall Vehicle Fleet Emission Factors

For some purposes, such as CO diffusion modeling, it is necessary

to have a single factor for carbon monoxide. This is easily obtained by multiplying each vehicle class emission factor by its fractional contribution to total VMT and summing the products. These fractional contributions can be obtained from most highway departments on a county-wide basis.

2.5.3 O_x Impact Analysis

The determination of the impact of a single emission source - point source, area source, or indirect source - on ambient oxidant levels is a very tenuous undertaking because:

- Photochemical oxidants form via a complex interaction involving HC, NO_x, and sunlight and the associated air quality effects are area-wide rather than localized in nature.
- Generally applicable diffusion models for O_x do not exist.*
- Such factors as hydrocarbon reactivities and the effects of meteorology reduce the utility of the simple proportional model.

Because of the underlying lack of a procedure for quantifying the relationship between O_x air quality and hydrocarbon emissions, the use of an equation of the following type seems as appropriate as more elaborate methods:

$$ER = \frac{\Delta E + Ee}{Ea}$$

where: ER = the emission ratio as explained below,
ΔE = the hydrocarbon emission contribution of the proposed parking facility,
Ee = the AQCR total hydrocarbon emissions expected in the first year of operation of the proposed facility, and
Ea = the maximum allowable hydrocarbon emission level that will prevent exceeding the ambient O_x standard.

* Models have been developed for the Los Angeles airshed, but they are highly involved systems specific to that area alone.

Both E_e and E_a can be taken from the New Jersey Transportation Control Plan. ΔE must be estimated from data given on the permit application, such as :

- Number of vehicle trips created,
- Average trip length.

From these data, one can compute vehicle miles of travel, which, when multiplied by the emission factor, yields hydrocarbon emissions.

The meaning of the emission ratio is as follows: (1) if ER is greater than one, the total HC emissions are greater than those allowed by the control plan; (2) if ER equals one, the O_x standard might just be equalled; and (3) an ER less than one means the oxidant air quality should be less than the standard. Situation (1) means the construction request should be denied, unless suitable modifications are made. Situation (2) indicates a more thorough analysis is in order, and situation (3) implies an acceptable facility, if all other criteria are met.

2.5.4 CO Impact Analysis

The impact assessment for carbon monoxide is much more straightforward and objective than that of O_x for the following reasons:

- During the normal measurement periods - 1-hr and 8-hr - CO is highly unreactive.
- Ambient concentrations of carbon monoxide are highly localized with respect to the proximity of receptors to emission sources.
- There are numerous urban air quality models for CO including simple and modified rollback models; the Hanna-Gifford models; the APRAC-1a model; and the Transportation and Air Shed Simulation Model (TASSIM).
- Most of the models, particularly APRAC-1a, make use of data which are normally collected in urban areas.
- Air quality data are frequently available for carbon monoxide over a period of several years.

- Motor vehicles are by far the major sources of CO so that stationary sources normally may be ignored. This is frequently not true for hydrocarbons.

For determining the CO air quality effects of vehicular activity, the usual choice of a technique is between rollback - the proportional model - and one of the diffusion models. The following paragraphs compare these options.

2.5.4.1 Rollback Versus Diffusion Modeling

In choosing a model or other procedure for determining the effects on carbon monoxide levels of changes in transportation activity, several factors are important:

- The amount of detail required in determining the spatial features of CO concentration;
- The nature of the actual or postulated transportation changes;
- The quantity and type of transportation, meteorological, air quality, and other data available; and
- The resources - manpower and computers - available.

Making a point-by-point comparison of every available CO model would be far too unwieldy an undertaking for the present purposes. Instead, a frequently-used diffusion model developed by Stanford Research Institute, APRAC-1a, will be considered as representative of the class.

Rollback Modeling

The basic assumption of the rollback equation is that the air quality at some "representative" receptor point in an area is proportional to the emissions in that area. For CO, this is a very poor assumption because nearby emission sources in an area are observed to have much greater impacts on a monitor than more distant sources. The problem of choosing a "representative" site within the area is quite complex involving itself in social, philosophical, as well as technical issues.

Because of the use of area-wide emissions in the proportional model, no spatial resolution is possible. Hence, a transportation control measure, which might relieve congestion in a small area and greatly reduce local CO levels, could be observed as only a small proportional change in CO concentration at the "representative" monitor.

Although the data inputs required by the rollback model - total emissions and a "representative" CO level - appear to be non-demanding, closer inspection reveals that they are not. It is quite unlikely that a truly representative CO monitoring site can ever be selected in an urban area because of the highly site-specific nature of the pollutant. In addition, the total emissions are dependent on total vehicular activity in an area. In emission computations from motor vehicles, the commonly used activity term is vehicle miles of travel (VMT). In most cases, VMT is calculated as the product of average annual daily* traffic (AADT) on a traffic link and the length of the link. However, AADT by link - a common way of expressing traffic data - is the direct input to APRAC-1a.

The resources required by rollback modeling are minimal. Only simple mathematical calculations are needed, although they can be voluminous in some cases.

APRAC-1a CO Model

This model calculates pollutant contributions from diffusion on various scales, including:

- Extraurban diffusion, mainly from sources in upwind cities,
- Intraurban diffusion from freeway, arterial, and feeder street sources,
- Local diffusion of emissions within a street canyon.

The computer program can be used to make calculations of the following types:

* Other time periods may be used, as well.

- Synoptic model: hourly concentrations as a function of time, for comparison and verification with observed concentrations and for operational applications;
- Climatological model: the frequency distribution of concentrations, for statistical prediction of the frequency of occurrence of specified high concentrations in connection with planning activities; and
- Grid-point model: concentrations at various locations in a geographical grid, providing detailed horizontal concentration patterns for operational or planning purposes.

As the preceding description indicates, APRAC-1a has good spatial resolution for carbon monoxide and so it can detect the local impacts brought about by parking changes, local traffic improvements or modal shifts on a particular traffic link. Data requirements include:

- Vehicle fleet emission factors;
- AADT and hourly distribution of AADT;
- Meteorological data, such as surface observations and upper air soundings;
- Area source emissions, if these are significant.

Although these data require some effort to collect and code for the computer, they are generally available for most metropolitan areas.

The APRAC-1a model requires both professional personnel and a digital computer for its use. The manhours expended in preparing the data inputs are generally not large, since many of the data are normally collected in the needed form. Only simple transfer operations are needed in most cases. Likewise, the computer time needed is quite modest, amounting to only a few minutes on a CDC-6500 for a typical urban area. The detailed operating procedures for the model are given in the APRAC user's manual.²

2.5.4.2f Methodology Used for Present Study

Because CO levels are highly localized and the locations of new parking facilities cannot be known in advance, it seemed essential to determine the spatial characteristics of this pollutant in and around the three CBD's of interest. To do this, the APRAC model was run in the grid-point mode. The CO concentrations predicted by this option are roughly comparable to rooftop levels, and provide a useful look at the carbon monoxide background across the analysis area. Figure 2-2 shows the peak one-hour values for the Newark CBD in 1972. The combination of meteorological data and traffic data was chosen to represent the worst air quality conditions occurring in that year. More details are given in the CBD Handbooks.

As was mentioned previously, APRAC makes an internal speed correction to the CO emission factors based on the street type classifications. Because the speed correction equation differs from that used by EPA, it is necessary to adjust the emission factor computed from AP-42 by a factor which makes the speed-corrected factors equal at some chosen speed, 20 miles-per-hour in this case. The factor turns out to be 9.46. The emission factors for the three CBD's are shown in Table 2-2 for two different years. The EPA and SRI factors become equivalent when the appropriate speed corrections are applied.

TABLE 2-2
CARBON MONOXIDE EMISSION FACTORS*

CBD	1972		1975**	
	EPA	SRI	EPA	SRI
Camden	74.0	700.0	44.5	421.0
Newark	74.0	700.0	39.3	371.5
Trenton	74.0	700.0	28.6	270.2

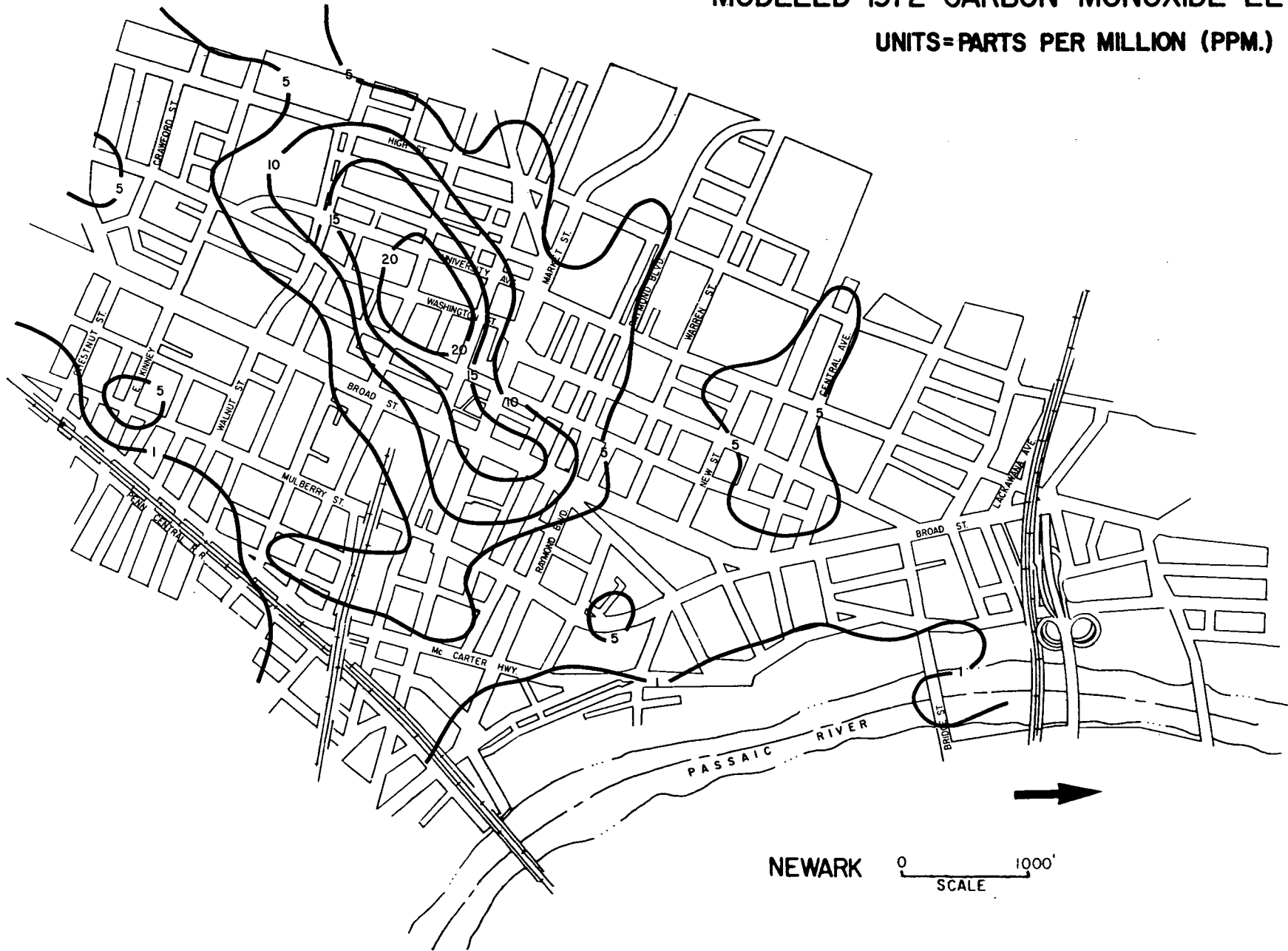
* Uncorrected for speed.

** These factors incorporate both the federal motor vehicle control program and the New Jersey Transportation Control Plan.

FIGURE 2-2

MODELED 1972 CARBON MONOXIDE LEVELS

UNITS=PARTS PER MILLION (PPM.)



Results such as those in Figure 2-2 give an approximate idea of the air quality in the vicinity of any proposed parking facility in the analysis area. It is best to have actual air quality data for the proposed site, but this will normally not be the case. Failing this, one of the following approaches can be taken:

- APRAC-1a can be run in the street canyon mode on the most congested street adjacent to the site. This option predicts street level CO concentrations and can show whether or not an air quality standard might be exceeded. Exercising the model both with and without consideration of the traffic impacts of the facility will enable the reviewer to distinguish the CO impacts of the proposed installation.
- The parking facility can be modeled using conventional complex source techniques.³ When these procedures are used, the APRAC grid point results can be added in as background concentrations.

The preceding methods work quite well for assessing possible violations of the one-hr. CO standards. However, the standard models cannot be used directly for comparison with 8-hr. measurements. A technique that can be used is to run the one-hr. model for eight consecutive hours* and then average the results. Because of the extra resources involved, this procedure should be used only at critical locations for borderline cases.

2.6 REFERENCES

1. Compilation of Air Pollutant Emission Factors, Document AP-42, U.S. Environmental Protection Agency, April 1973. Also, supplements No. 1, July 1973; No. 2, September 1973; No. 3, July 1974; and No. 4, January 1975.
2. Users Manual for the APRAC-1a Urban Diffusion Model Computer Program, R.L. Mancuso, et al., Stanford Research Institute, Sept. 1972.
3. Guidelines for Air Quality Maintenance Planning and Analysis Volume 9: Evaluating Indirect Sources, Publication No. EPA-450/4-75-001, U.S. Environmental Protection Agency, January 1975.

* These hours should be chosen as the period when the worst 8-hr. CO concentrations normally occur in the CBD of interest.

3.0 SUMMARY OF THE CBD HANDBOOKS

The Central Business District Parking Management Handbooks for Camden, Newark and Trenton contain background data and general methodologies for estimating the demand for a proposed parking facility and the impacts of such a facility on local traffic and air quality. The handbooks are intended as a framework for utilizing data usually available to local planners and policy makers. Each handbook presents the following:

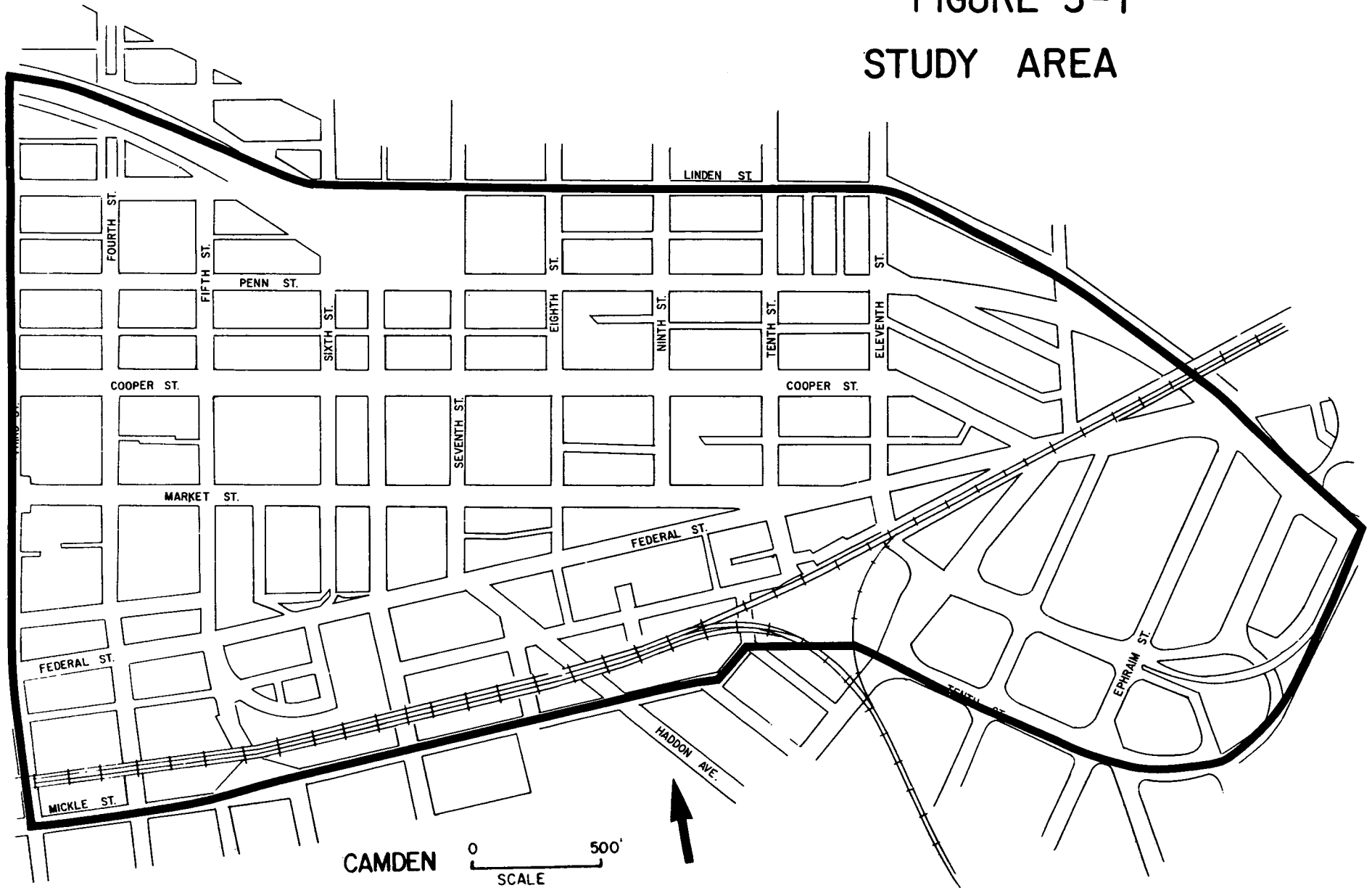
1. Data on existing levels of parking supply and demand, and procedures for estimating the demand for parking spaces at a particular facility.
2. Traffic characteristics of each CBD, data on existing levels of congestion shown as volume to capacity ratios, and procedures for estimating the impact of a new facility on the traffic of the surrounding streets.
3. Existing CBD air quality levels, the predicted 1975 air quality levels and procedures for estimating the impact of a new facility on air quality.
4. The status of existing public transit serving the CBD.

The three subsections below summarize the data contained in the handbooks for Camden, Newark and Trenton, respectively.

3.1 THE CAMDEN CBD

The Camden CBD study area is shown in Figure 3-1. Briefly, the data contained in the Camden Central Business District Parking Management Handbook indicate that the CBD has a supply of approximately 2600 parking spaces though no accurate estimate of the demand for parking could be made. Analysis of the traffic characteristics indicates that about 40,000 of the 60,000 vehicles, which cross the Benjamin Franklin Bridge daily, use Linden and Penn streets to continue traveling on U.S. Route 30, the most heavily used route in Camden. In addition, heavy daily traffic volumes occur on Broadway, Haddon Avenue and Seventh Street in a North-South direction; and on Market Street and on Federal Street in an East-West direction. Estimated 1975 daily traffic volumes for the major streets within the CBD and volume to capacity ratios (indicator of congestion) for key intersections are illustrated in the Handbook.

FIGURE 3-1
STUDY AREA



Based on an eight-hour CO measurement of 16.1 parts per million (ppm)- the standard is 9.0 ppm. - Camden needed a forty-four percent reduction in CO emissions to meet the national standard. However, Camden representatives felt that the high reading was based on a highly atypical monitoring site. The adverse air quality was considered to be a localized phenomenon caused by the following:

- Poor location of carbon monoxide monitors;
- Local traffic congestion; and
- Construction activity.

It was believed that the needed improvement in air quality would be obtained by:

- Relocating the monitors to more representative sites;
- The opening of the Betsy Ross Bridge and completion of Interstate 76;
- Improvements in traffic flow from the TOPICS program; and
- Completion of the construction activity around the present monitoring sites.

Carbon monoxide diffusion analyses using the SRI APRAC-1a model confirmed the localized nature of the CO problem. Furthermore, even one-hour peak CO concentration estimates were nowhere near the eight-hour concentration upon which the required reduction was based. The local traffic improvements are considered to have a good chance of success, but the air quality should be monitored closely to ensure conformance with the air quality standards.

Public transportation access to the Camden CBD is provided by Transport of New Jersey and the Port Authority Transit Corporation which provide bus and rapid rail service, respectively. Transport of New Jersey provides local bus service in Camden and between Camden and neighboring towns in southern New Jersey, with some routes continuing to Philadelphia. The bus routes are few in number, however, and the frequency of service is poor. On the other hand, the Lindenwold Line provides modern rapid rail service between Camden and Philadelphia 24 hours daily. The system carries about 40,000 round trips on an average weekday with 8,000 or 20 percent being generated or ending at the two stations within Camden's CBD.

3.2 THE NEWARK CBD

The Newark CBD study area is illustrated in Figure 3-2. Generally, the data contained in the Newark Central Business District Parking Management Handbook indicate that no large inadequacies presently exist in the supply of parking in the Newark CBD as defined in this study. The present demand for parking is estimated to be between 17,500 to 21,500 spaces, most of which are required by long-term parkers. Analysis of the traffic characteristics indicates that the heaviest traffic volumes occur in the North-South direction on McCarter Highway and Broad Street, each of which carries over 30,000 vehicles per day. Peak hour flows of over 2,000 vehicles per hour occur on sections of McCarter Highway, Broad Street and Raymond Boulevard. Estimated 1975 daily traffic volumes for the major streets within the CBD and volume to capacity ratios (indicators of congestion) for key intersections are illustrated in the Handbook.

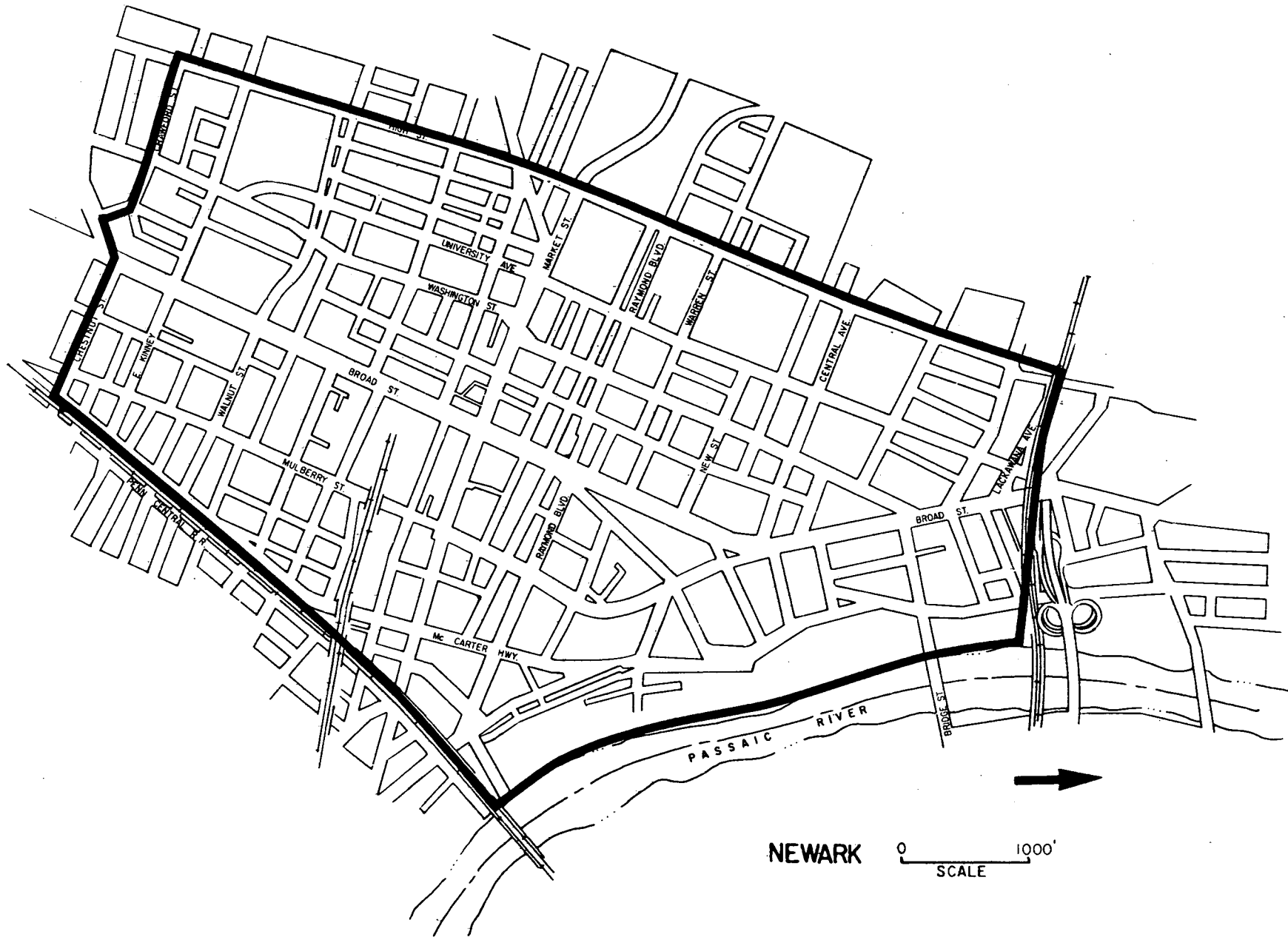
The control strategy for O_x in the New Jersey portion of the N.J. - N.Y. - Conn. air quality control region (AQCR) is based on a 1972 level of 0.210 parts per million (ppm.) measured on Welfare Island in the East River of New York City. Even though the highest O_x level measured in the New Jersey portion of the AQCR was only 0.135 ppm., the regional nature of this pollutant dictated the use of the higher value throughout the region. Reducing this O_x concentration to the standard of 0.08 ppm. requires an estimated reduction of 67% in total hydrocarbon emissions in the entire AQCR.

The control strategy for CO in Newark is based on a second high eight-hour average of 17 ppm., measured in 1972. Lowering this level to the 9 ppm. standard requires a CO reduction of 47 percent. To obtain some perspective concerning variations in carbon monoxide concentrations around the CBD the APRAC-1a diffusion model was exercised for the years 1972 and 1975.* The results indicated the following:

- Maximum estimated 1975 CO levels are only about 50 percent of the 1972 levels.

* The 1975 calculations assumed that the transportation control strategy was in effect.

FIGURE 3-2
STUDY AREA



- The area around the intersection of Washington and William Streets has by far the highest CO levels in the Newark CBD for both 1972 and 1975.
- In 1972, additional pockets of relatively high CO concentrations occur around the intersections of University & Bleeker Streets, Mulberry Street & Park Place, Mulberry & E. Kinney Streets, and Washington and Spruce Streets.
- In 1975, except for the area around the Washington Street-William Street intersection, the CO levels appear to drop to negligible levels.

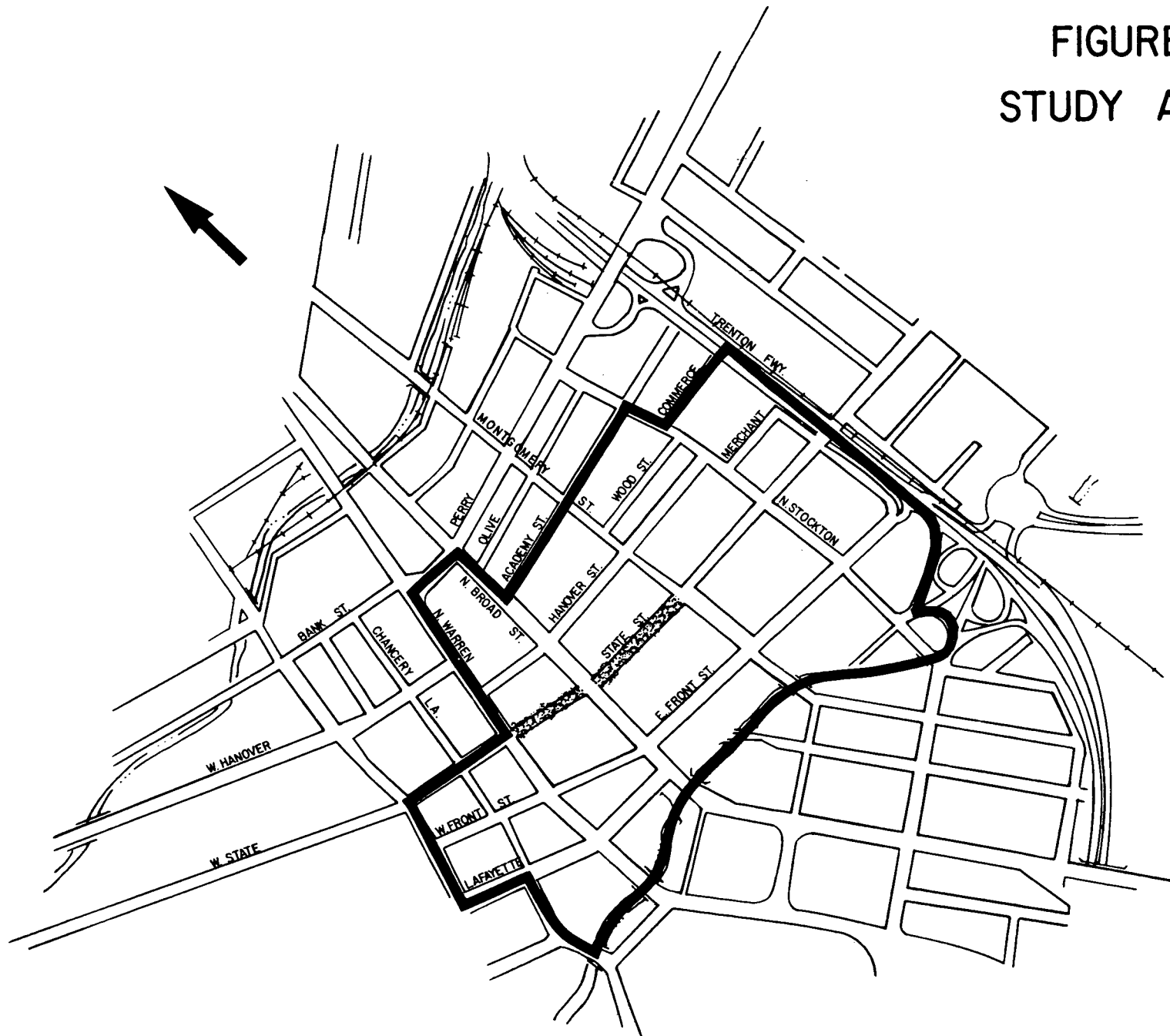
These results indicate that the Newark CO control strategy, when implemented, has a good chance of success.

The Newark CBD exhibits a viable public transportation system comprised of bus, local subway and commuter rail systems. Extensive local bus service is provided by Transport of New Jersey and 14 additional independent bus companies. In 1970, it was estimated that approximately 41 percent of the CBD work trips were completed by bus. The limited city subway serving the Central Business District extends out to a medium density residential/industrial area in Belleville. The CBD is also served by the PATH system, the Erie-Lackawanna, the Penn-Central, the Central New Jersey and the Reading railroads which connect it with the surrounding communities in New Jersey and downtown Manhattan.

3.3 THE TRENTON CBD

The Trenton CBD study area is depicted in Figure 3-3. The data presented in the Trenton Central Business District Parking Management Handbook indicate that there are approximately 6434 parking spaces within the study area and that short run demand will exceed supply by about 900 parking spaces. The highest daily traffic volumes are carried on State Street in an east-west direction, 18,000 vehicles. The main through streets in the study area running in a north-south direction are Broad Street and Warren Street which carry average daily volumes of 11,000 and 12,000 vehicles, respectively. Volume to capacity ratios for key intersections are also illustrated in the handbook.

FIGURE 3-3
STUDY AREA



TRENTON

0 1000'
SCALE

The control strategy for O_x in the New Jersey portion of the Metropolitan Philadelphia air quality control region (AQCR) is based on a 1970 level of 0.145 parts per million (ppm.). Reducing this O_x concentration to the standard of 0.08 ppm. requires an estimated reduction of 47% in total hydrocarbon emissions in the entire AQCR.

The CO control strategy for Trenton is based on 1972 air quality, which requires an emission reduction of 70 percent. At the time this requirement was established, it was understood that the major problem in the CBD was due to highly localized traffic congestion in the vicinity of the State St.-N. Broad St. intersection. Control of this "hot spot" was to be accomplished by establishment of the Commons Mall along State Street and the implementation of a network of one-way streets to disperse the traffic.

The APRAC-1a air quality model was used to provide an estimation of the CO levels around the CBD for both 1972 and 1975. Because there were no good traffic data for the Trenton CBD in 1972, it was necessary to use the 1975 traffic projections from the Traffic and Circulation Plan for the Trenton Commons Mall³ as a primary data source. Consequently, the 1972 air quality projections reflect the effects of the new mall and the one-way street system. The modeling results confirm the localized nature of the CO problem. However, even the one-hour peak CO concentration estimates are nowhere near the eight-hour concentration upon which the required reduction was based. Other salient features of modeling are as follows:

- The highest predicted CO concentration appears to be centered around the Commons Mall area in both 1972 and 1975.
- The modeled concentrations are far below the national standards of 35 ppm. (maximum one-hour average) or 9 ppm. (maximum eight-hour average).

The failure of the model to reproduce the high 1972 measured CO concentration is largely due to including the mall traffic circulation improvements in the modeling inputs. According to local representatives, CO levels around the mall have decreased drastically.

Buses are the only means of public mass transportation in the Trenton area. Three companies provide local bus service, but the bulk of the patronage,

17,200 average weekday riders, is carried on the quasi-public Mercer Metro System. The system operates twelve different routes: eleven link different areas of Trenton through the Central Business District and the other is a cross-town connector operating north of the CBD.

4.0 THE SOCIO-ECONOMIC IMPACT OF PARKING MANAGEMENT STRATEGIES

4.1 INTRODUCTION

Transportation control plans adopted for many urban areas throughout the United States have significant implications for future regional land use and transportation planning. Transportation control strategies and, more specifically, the parking management strategies with which we are concerned here, will have numerous socio-economic impacts associated with them. The socio-economic benefits and costs will occur first at a local level where older central cities may be the most severely impacted.

This chapter attempts to examine the potential socio-economic impacts associated with the implementation of parking management strategies for the Central Business District of Newark, New Jersey. Briefly, as part of the N. J. transportation control plan, parking management strategies will require owners or operators of off-street parking facilities to submit for EPA approval any plans for construction or modification of facilities over a certain size. Also, the strategies provide for the curtailment of on-street parking along certain streets in the Central Business District where carbon monoxide levels have been determined to exceed the ambient air quality standards. For the most part, estimation of impacts is qualitative since socio-economic impacts are qualitative in nature and not readily quantifiable. An attempt is made to identify the potential impacts and the characteristics of those who may be impacted. The sensitivities of the young, the elderly and the poor, which have sometimes been neglected by transportation planners, are of special interest.

Such an approach is designed to make the decision-maker aware of the potential trade-offs inherent in public policy decisions. Hopefully in this manner, public policies can be implemented with minimal socio-economic disruption.

The rest of this chapter will be organized to present a semblance of the following information: first, the general socio-economic impacts of

parking management strategies; second, the general historical background and socio-economic characteristics of Newark; third, a more detailed socio-economic profile of the Newark CBD employee, including a profile of the Newark CBD parker; and fourth, a detailed profile of the Newark CBD employer.

4.2 GENERAL SOCIO-ECONOMIC IMPACTS OF PARKING MANAGEMENT STRATEGIES

The socio-economic impacts of parking management strategies will be primarily a function of local or regional characteristics such as the availability of alternative transportation, the existing supply and demand of parking, and the ratio of long to short term parkers. The strategies may affect an individual's future personal mobility, modal choice decisions and future access to the CBD. The major socio-economic costs may be actual monetary costs, time costs, opportunity costs and convenience costs.¹

The social impacts of parking management strategies may be viewed in relation to the impacts of other transportation control measures in Table 4-1. The table indicates that parking management strategies are not as socially disruptive as a number of other transportation control strategies and have no very unfavorable impacts. Parking management strategies may negatively affect the average American, his mobility, modal choice decisions in favor of the automobile and accessibility. However, when complemented with improvements in public transit, the minor impacts on the young, the elderly, the poor and minorities become favorable impacts. The unfavorable impacts on the average American and modal choice decisions in favor of the automobile may be matters of adjustment in life style.

Table 4-1 Summary of Overall Social Impacts

	Impact on Various Socio-Economic Groups						Impact on Mode Choice Decision	
	● Young/Elderly	● Poor	● Minorities	● Average American	Impact on Mobility	Impact on Accessibility	● Private Auto	● Public Transit
● Vehicle Oriented								
I/M	-	--	-	0	0	0	-	0
Retrofit	--	--	--	-	0	0	--	0
● Traffic Flow								
TOPICS	0	0	0	+	+	0	+	+
On-Street Parking	0	0	0	-	-	-	-	0
Staggered Work Hours	0	0	0	0	0	0	+	0
Highway Construction	0	0	0	+	+	+	+	-
Ramp Metering	0	0	0	-	-	0	-	+
● VMT Reduction								
Transit Improvements	+	+	+	0	+	+	0	++
Car Pooling	0	0	0	-	0	0	-	+
Parking Control	0	0	0	-	-	-	-	+
Pricing Schemes	--	--	--	-	-	0	-	+
Auto Free Zone	0	0	0	0	0	--	--	+
Gasoline Rationing	--	--	--	-	--	0	--	0

LEGEND (relative impacts)

- ++ Very Favorable
- + Favorable
- 0 Very Minor or None
- Unfavorable
- Very Unfavorable

SOURCE: Reference 8.

Among the potential benefits and costs of parking management strategies are those listed below in Table 4-2.

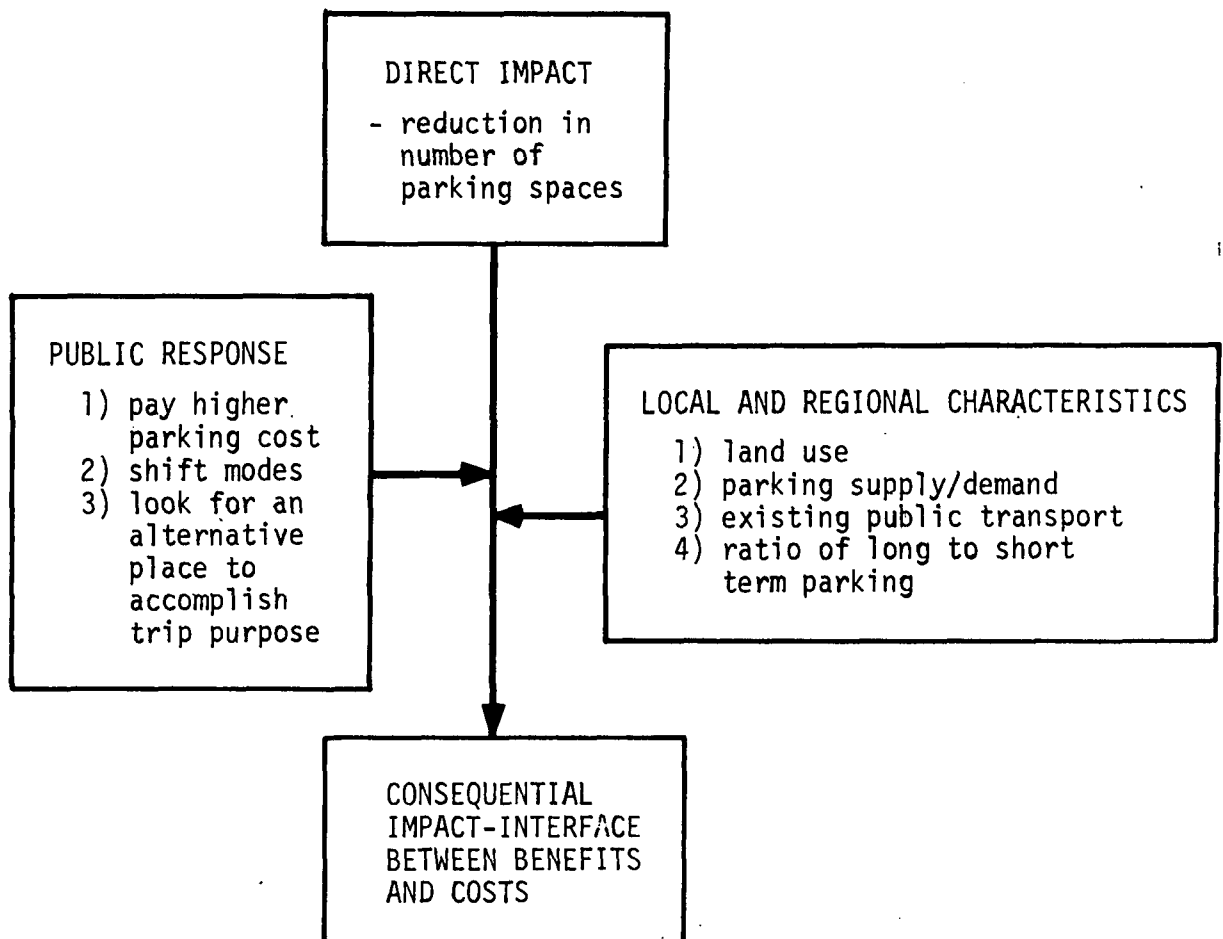
Table 4-2 Potential Benefits and Costs of Parking Management Strategies

<u>Benefits</u>	<u>Costs</u>
<ul style="list-style-type: none"> ● reduction in VMT and in air pollution, protection of public health ● alleviation of traffic congestion ● possible improvements in public transportation for commuters and captive riders ● possible increases in the supply of the latent demand for public transportation ● possible increase in carpool usage ● possible increase in viability of CBD, increase land values, increase in retail sales 	<ul style="list-style-type: none"> ● possible increase in parking costs ● possible increase in time or convenience costs ● possible increase in mobility costs ● possible rise in consumer prices ● possible decrease in the attractiveness of the CBD, loss of retail or commercial business and decrease in land values

The socio-economic impacts may be divided into direct and consequential impacts. The direct impact of parking management strategies will be the possible restriction on additional downtown parking spaces. The interface between benefits and costs, which will be called the consequential socio-economic impacts of parking management strategies, will be a function of public response to this direct impact and the quality of services offered, as previously mentioned. To avoid confusion between terms, their interaction is depicted in Figure 4-1. The list of socio-economic benefits and costs may be summarized in three areas of consequential socio-economic impact:

1. the Impact on the CBD Parker
2. the Impact on the CBD Resident
3. the Impact on the Future Viability of the CBD.

Figure 4-1
THE SOCIO-ECONOMIC IMPACTS OF
PARKING MANAGEMENT STRATEGIES



The impact on the CBD parker may be in the form of higher parking, time, convenience, or accessibility costs. In the absence of price controls, the limitation of the future number of public or private parking spaces will cause the price of available parking to increase. This condition may elicit the following responses in the CBD parker: he may pay the higher parking cost; he may park in a peripheral lot, which will probably be affected in price as well, and walk; he may choose another mode of transportation; or he may find an alternate place to accomplish the desired trip purpose. The first response has serious equity implications for low income auto owners since lower income groups are hardest hit by price increases. Any increase in parking costs will be socially regressive. The second and third responses have implications for higher income groups which place greater value on time and convenience. The fourth response has implications for the future viability of the CBD which will be discussed below. Optimally, the consequential impact would be a shifting of the CBD parker's mode of travel to either public transportation or carpooling. The status of the existing public transportation system, improvements in the levels of service offered and carpool programs would provide incentives for making such shifts.

Improvements in the levels of service of public transportation would minimize the disruptive socio-economic impacts, and may also simultaneously supply the demand of "captive riders," as well as, beginning to supply the "latent demand" of the young and the elderly for public transportation. Service improvements would improve the mobility and accessibility of these groups characteristic of older CBD's and central cities.

Besides the individual costs mentioned above, the viability of the CBD may also be impacted by opportunity costs or loss of potential retail sales or commercial business. A probable impact of parking limitations will be a shifting of the remaining spaces to long term use. The present parking price structure is designed to favor regular, long term parking uses. Since commuters generally arrive in the CBD first, more spaces

will shift to long term use leaving fewer short term parking spaces for shopping or business. In addition, the inelasticity of the home to work trip may cause a shift to a lower ratio of non-commute/commute CBD trip purposes. This may result in a loss of profits for the commercial and retail establishments which are competing with their suburban counterparts. Since the intent of parking management is to induce more travel by non-private auto uses, especially during peak commute periods, limitations of parking supply have to be formulated carefully. If not, the reduced supply will be largely used up by commuters at the expense of other potential users of the facilities. This could be avoided, for example, by requiring facilities to remain closed until after the time commuters would typically use them. Again, the socially disruptive impact here could be minimized by improvements in public transportation.

Here the optimal consequential impact would be the shifting of commuters to alternative modes of transportation and the enhancement of the competitive position of the CBD by increasing public transport accessibility and not impinging upon short term parking.

4.3 GENERAL SOCIO-ECONOMIC PROFILE OF NEWARK

With the proliferation of suburbanization, Newark, like many traditional urban centers, has experienced a decline in population, manufacturing jobs and work force. Economic growth has been and will continue to be in the suburbs while urban centers probably will continue to decline. Between 1960 and 1970, the number of Newark SMSA workers employed in Newark declined from 170,205 to 137,209, while the total number of SMSA workers increased from 666,051 to 744,421, mostly in Morris County.²

The post World War II process of decentralization was a result of a number of interrelated factors, among which the freedom and mobility provided by the automobile stand out most formidably. Combined with other technological and economic changes, transportation changes brought about by the automobile have aided the dispersion of jobs, residences and services throughout the outer rings of metropolitan areas at the expense of central cities.³

Technological changes in production, transportation and communication have made outlying areas more attractive to manufacturing and even white collar industries, while the central city has remained attractive to the central office functions requiring face-to-face communication. In Newark, manufacturing employment declined from 97,000 in 1952 to 55,000 in 1972. These declines have been partially offset by increases in employment in government (from 17,000 in 1952 to 31,000 in 1972), services (from 24,000 in 1952 to 40,000 in 1972), and transportation, communications and utilities (from 21,000 in 1952 to 27,000 in 1972). Finance, Insurance and Real Estate had relatively little change in employment remaining at between 23,000 and 25,000 employees since 1952.⁴ However, the decline in the city's traditional industrial base means that the city's jobs are increasingly less suited to the city's labor force.

Since, in general, people follow jobs, residential location has also become dispersed. Population in central cities has declined as shown for Newark and the Newark CBD in Table 4-3. Higher income and car ownership have given many Americans the ability to choose a decentralized residential location. Indications are that these trends will continue because in addition to the movement of jobs, there exists fear of crime, dissatisfaction with schools and services, pollution and a generally negative image of the central city. In fact, a whole generation has been raised on suburbia with no need for the central city.

Table 4-3
Population and Population Growth
1960 - 1970

	Population		Population	% Annual
	1960	1970	Change	Rate
Newark CBD	12,914	7,749	- 5,165	-3.9
Newark	405,220	382,417	-22,303	-0.6
Newark SMSA	1,689,420	1,356,556	167,136	1.0

Source: Reference 5.

Finally, as basic sector jobs and residential locations change, the location of the retailing and service industries which serve them will follow. The move of retailing to suburban locations was also aided by technological changes in warehousing and shipping, not accommodated in central cities. Newark CBD retailing has been experiencing a slight absolute decline in retail sales over the previous decade and a substantial decline relative to total SMSA retail business.²

Despite the effects of decentralization, Newark still possesses a viable central business district. As of 1970, the city supported 195,000 jobs. The CBD, which is the largest focus of office employment in New Jersey, the second

largest in the region, and about the fourteenth largest in the nation, supports 85,000 of these jobs. Approximately 50,000 office workers were employed in the CBD in 1972 mostly in insurance and financial activity. Other office uses include communications, utilities, services and government. It is estimated that during an average workday, downtown Newark is utilized by over 100,000 people: 85,000 workers plus students, shoppers and visitors. In effect, this doubles Newark's daytime population and accounts for one of the highest commuting rates in the country.

The future economic viability of the CBD will be a function of Newark's ability to, conservatively, retain existing jobs, and optimistically, attract new jobs in the CBD. The CBD is one of the main targets of potential growth to achieve Newark's overall future goals of increased employment and income generated by the city. According to the Newark Economic Development Committee, by 1980 the CBD could lose about 20,000 jobs unless the city of Newark takes some positive actions. If such actions are taken about 20,000 jobs could be saved and another 20,000 added by 1980. The NEDC offers the following list of CBD assests and liabilities and the areas which the committee feels need immediate attention.⁴

	ASSET (+) LIABILITY (-)	NEEDS IMMEDIATE ATTENTION
Access to labor	+	
Access to population	+	
Vehicle entry to downtown	+	
Parking	+	
Bus Service	+	
Rail access	+	
Airline access	+	
Land availability	-	X
Site preparations	-	X
Property taxes	-	X
Utilities	+	
Housing opportunities	-	X
Shopping opportunities	+	
Educational facilities	+	
Public safety	-	X
Environmental and aesthetic quality	-	X

Ultimately, the future of the city and the CBD will be dependent upon the alleviation of its fiscal burdens, poor housing, crime, high unemployment and other problems.

4.3.1 Profile of Newark Residents

The population of Newark has declined from 439,000 in 1950 to 405,000 in 1960 and to 382,000 in 1970 while the population of the rest of the Newark SMSA has continued to increase. Between 1950 and 1970 the white population declined by approximately 54 percent from 363,000 to 168,000 and the non-white population increased by approximately 182 percent from 76,000 to 214,000. The white population constituted approximately 83 percent of Newark's population in 1950 and 44 percent in 1970. The age - sex distribution in 1970 was characterized by a younger population and fewer males in relation to females. The median years of school completed in 1970 was 10.0. In 1970, there were 146,681 workers 16 years old and over in the city's civilian labor force of which 137,134 were employed and 9,547 were not. The percent of Newark's population in the labor force was 59.4 percent. The unemployment rate for Newark residents was about 6.7 percent, 5.6 percent for men and 7.8 percent for women. Of Newark's 137,134 workers 49 percent or 66,673 worked within the city itself and about 12 percent or 16,283 worked within the CBD. The city of Newark has been identified by the U. S. Census as a low income area; the median income in 1970 was \$7,735 and about 18.4 percent of all households had incomes below the poverty level. This is substantially lower than the U. S. median income in 1970 which was \$9,867.⁵ Half of Newark's households do not have access to an automobile so they must choose work places accessible by public transportation. Thirty-seven percent of all residents take some form of public transportation to work. Besides work trips, a large number of young and old "captive riders" exist who utilize public transportation.²

4.3.2 Profile of Newark Central Business District Residents

The population of the Newark Central Business District declined from 12,914 in 1960 to 7,749 in 1970.* The decline in population effected

* The census definition of the CBD (tracts 80, 81, 85) is larger than the definition of the CBD study area used in this study.

all age groups, especially 35-64 age group. In 1970, the population distribution was characterized by a younger population with a larger share being held by the under 19 age group and by the 20-34 age group.⁶

Table 4-4
1970 CBD Residents

	Male	Female
Total all ages	4,492	3,257
under 19	27.3%	33.3%
20 - 34	24.4%	30.1%
35 - 64	35.5%	29.8%
over 65	12.7%	6.9%

The median years of school completion ranged from 8.8 years in Tract 80 to 12.1 years in Tract 31. The median family income was particularly low in the CBD, ranging from \$5,258 in Tract 80 to \$7,907 in Tract 81. The proportion of families receiving incomes below the poverty level was generally higher than the city average, ranging from 15.4 % in Tract 81 to 24.1% in Tract 85. For Tract 80, nearly one out of four families received public assistance or welfare in 1969. The percent of families earning incomes in excess of \$15,000 was 9.1% compared to 12.1% city-wide and 33% in the SMSA.

In 1970, there were 3,664 workers 16 years old and over in the civilian labor force of which 3,371 were employed. The percent of the CBD population in the labor force was 62.2%, higher than either the city or the SMSA average, largely because of the greater proportion of women residents in the civilian labor force. The unemployment rate of CBD residents was 8.0% in April of 1970, again, higher than either the city or SMSA level. Unemployment rates for women were particularly high, averaging 9.5% for the

CBD, although in Census Tract 80, the rate reached 11.7%. Over half of the CBD residents, 14 and over, are employed in the manufacturing, trade and services industries. Another fifth were classified as "not reported" in the 1970 Census, and the remaining were employed in finance, public administration, construction and the transportation and communication-public utilities group. Approximately one-third of employed CBD residents are involved in "white collar" occupations i.e. professional, managerial, clerical and sales; about 27% were employed in blue collar trades, and 20% in the service and laborer categories.

Only 23% of the 3,140 CBD residents employed worked within the CBD. Another 27% worked in the rest of the city and the remaining 50% worked outside of the city. Of the total number of residents at work, over 35% listed bus or streetcar as the primary mode of transportation. Almost 30% walked to work and 28% travelled to work by automobile. Only 3.6% indicated regular use of subway or railroad. The place of work and mode of travel to work for CBD resident employees are shown below in Table 4-5.

Table 4-5
1970 Journey-to-Work Patterns - CBD Residents⁶
(16 Years and Over)

<u>Place of Work</u>		<u>Means of Transportation</u>	
All Workers	3,140	All Workers	3,140
to:		by:	
CBD	23.1%	Auto	28.1%
Rest of City	27.7%	Bus/Streetcar	35.6%
Rest of SMSA	16.5%	Subway or Railroad	3.6%
Outside SMSA	12.2%	Walked	29.4%
Not reported	20.5%	Worked at home or other	3.3%

Nine out of ten CBD residents rent their living quarters and pay an average of \$101 per month. However, 19% of the units lack some plumbing facilities, 14% lack adequate kitchen facilities and 28% live in quarters with more than one person per room. These conditions combined with declining in-migration rates help explain the high 11% vacancy rate in the CBD.

4.4 THE NEWARK CBD EMPLOYEE

Since the majority of Newark CBD employees are not Newark residents, a questionnaire was designed in order to gain a profile of all CBD employees. A questionnaire survey was administered to the employees of two large CBD employers. The questionnaires were designed to identify important socio-economic characteristics of CBD employees such as income distributions, age, sex, place of residence, mode of travel, travel time, car ownership and attitudes toward both private and public transportation.*

The questionnaires were distributed to a random sample of employees at two large CBD employers. Information was requested on the employee's trip to work on an average work day. Completed questionnaires numbered 625, which represented a return rate of about 70 percent. The survey was analyzed using BIOMED statistical programs. The inherent limitations of the survey as representative of an employee population of 85,000 people must be realized, therefore, no immutable conclusions are drawn from it. However, it does provide some indicators of the characters of the Newark CBD employee.

4.4.1 Major Findings of Newark CBD Employee Survey

- (1) Public transportation was indicated as the principal mode of travel to work by 58 percent of the respondents. The most frequently cited reasons for using public transportation were that it was cheaper than auto, caused no parking problems and no driving strain.
- (2) The automobile was indicated as the principal mode of travel to work by 41 percent of the respondents. Of these, 50 percent traveled alone and 50 percent traveled with one or more passengers. The most frequently cited reasons for utilizing the automobile were that it was faster, more dependable than public transit, and that buses or trains ran too infrequently.

* A copy of the Newark CBD employee questionnaire is contained in Appendix B.

- (3) The respondents ranked the following incentives for encouraging the use of buses or trains as most effective in order of effectiveness: first, more frequent service; second, faster travel; third, cleaner and newer vehicles; and fourth, lower fares.
- (4) When asked about their attitudes toward certain parking proposals the respondents indicated "time limits on all on-street parking" and "reducing on-street parking" to be the most acceptable. They indicated "restricting or reducing off-street parking," "increasing cost of all day parking," and "restricting downtown parking to car-pools only," to be the most unacceptable in order of declining acceptability.
- (5) Approximately 54 percent of auto travelers indicated they would use bus or train if parking became more than they are willing to pay.
- (6) Essex County was indicated as place of residence by 39 percent of the respondents, 19 percent in the City of Newark itself and 20 percent in the rest of Essex County.

4.4.2 Detailed Findings of Newark CBD Survey

Modal Split

About 58 percent of the respondents indicated that they used some form of public transportation as their principal means of travel to work; about 41 percent indicated they used the automobile and about one percent walked.

<u>Mode</u>	<u>% of Respondents</u>
Public Transportation	58
Automobile	41
Walk	1
Total Number of Respondents = 624	

Travel Time

About 46 percent of the respondents indicated that it took them 30 minutes or less to get to work, 38 percent spent between 30 minutes and one hour and 15 percent spent more than one hour traveling to work.

<div><div>% of Respondents by Mode</div><div>Travel Time</div></div>	Public Transit	Auto	Walk	All Respondents
0-15	3	5	<1	8
16-30	18	19	<1	38
31-45	14	10	0	23
46-60	10	5	0	15
61-90	11	1	0	12
90+	3	1	0	4
	59	40	1	100

Total Number of Respondents = 585

When the results are broken down by mode, 36 percent of those who use public transportation spent 30 minutes or less traveling compared to 60 percent of auto travelers. 59 percent of those who use public transportation spent 45 minutes or less compared to 85 percent of auto travelers. In general, auto trips were shorter than public transit trips with 97 percent of auto trips taking one hour or less compared to 76 percent of public transit trips. No substantial differences were found in travel times of solo car drivers and carpoolers.

Daily Cost of Public Transit Trip

Of the respondents who traveled to work by bus or train, about 53 percent paid one dollar or less for a daily round trip, 37 percent paid between one and two dollars, 6 percent paid between two and three dollars and 4 percent paid more than three dollars.

<u>Daily Cost of Public Transit Trip (dollars)</u>	<u>% of Respondents</u>
\leq \$.50	2
.75	25
1.00	26
1.25	9
1.50	9
1.75	6
2.00	13
2.25	4
2.50	2
\geq 3.00	4

Total Number of Respondents = 318

Reason for Utilizing Public Transportation

The most frequently cited reasons for using either bus or train to accomplish the work trip were: public transportation is cheaper than auto, no parking problems, and no driving strain, each of which was cited by 50 percent or more of the respondents.* Only 15 percent indicated they did not have driver's licenses. The respondents were asked to choose among the list of reasons shown below.

<u>Reason</u>	<u>% of Respondents</u>
Cheaper than Auto	53
No Parking Problems	53
No Driving Strain	51
Safer than Auto	28
Faster	20
No Driver's License	15
No Available Car at Home	15
No Car at Home	12
Other	12

Total Number of Respondents = 365

* Sum of percentages greater than 100
because of multiple answers.

Public Transit Convenience

About 92 percent of the respondents who traveled to work by bus or train indicated that they found a seat.

<u>Response</u>	<u>% of Respondents</u>
Yes	92
No	8

Total Number of Respondents = 357

Attitudes Toward Bus or Train Service

About 77 percent of the respondents who took public transportation indicated that they had some dislikes about it. Specific responses are not listed because of their variety and the difficulty inherent in categorizing them. However, these dislikes are reflected below under transit incentives.

Transit Incentives

Respondents were asked to rank incentives for inducing modal shifts towards public transit in order of effectiveness. A weighted average measure of effectiveness was calculated from the responses and indicated the following to be the most effective: first, more frequent service; second, faster travel; third, cleaner and newer vehicles; and fourth, lower fares.

<u>Incentives</u>	<u>Weighted Average</u>	<u>Rank</u>
More frequent service	7.84	1
Faster Travel	7.07	2
Cleaner and Newer Vehicles	6.80	3
Lower Fares	6.79	4
Better security to assure personal safety	5.40	5
Air-conditioned vehicles	5.39	6
Parking lots at stops and stations	5.19	7
Shelters against bad weather	4.95	8
Better located stops and stations	4.51	9
Other	4.06	10

Total Number of Respondents = 461

Attitudes Toward Parking Proposals

The respondents were presented with five alternative parking proposals. The proposals are ranked* below in order of declining acceptability:

- (1) time limits on all on-street parking
- (2) reduction or elimination of on-street parking
- (3) restriction or reduction of off-street parking
- (4) increasing the cost of all-day parking
- (5) restriction of CBD parking to carpools only

A majority of the respondents indicated the first two proposals [(1), (2)] to be acceptable and the last three [(3), (4), (5)] to be unacceptable. The distribution of responses by proposal is given below. When the responses are broken down by mode, the attitudes toward the parking proposals remained the same. However, the percentages of acceptable responses were generally lower and the percentages of unacceptable responses were generally higher for auto travelers when compared to public transit users. The ranking of the proposals also changed slightly as exhibited below:

- (1) time limits on all on-street parking
- (2) reduction or elimination of on-street parking
- (3) restriction or reduction of off-street parking
- (4) restriction of CBD parking to carpools only
- (5) increasing the cost of all-day parking

CBD auto travelers indicated that "increasing the cost of all-day parking" was the most unacceptable proposal while the attitudes of CBD transit users corresponded to those of the employees in general.

* The actual questionnaire responses were either "very acceptable, somewhat acceptable, neither, somewhat unacceptable or very unacceptable" (see questionnaire question 6 in Appendix). These responses were weighted 2, 1, 0, -1, -2 respectively to compute the above ranking.

% of Respondents by Mode by Parking Proposal Responses	PARKING PROPOSALS														
	Time Limits on all on-street parking			On-street parking reduced or eliminated			Off-street parking restricted or reduced			Increase cost of all-day parking			Downtown parking for carpools only		
	P.T.*	Auto	Total	P.T.	Auto	Total	P.T.	Auto	Total	P.T.	Auto	Total	P.T.	Auto	Total
Very Acceptable	19	11	30	15	10	25	7	3	10	5	<1	5	4	3	7
Somewhat Acceptable	13	8	21	15	7	22	11	4	15	6	2	8	7	5	12
Neither	13	10	23	10	9	19	11	7	18	7	3	9	6	4	10
Somewhat Unacceptable	5	5	11	8	6	14	11	9	20	11	5	16	11	5	16
Very Unacceptable	5	10	15	9	11	20	17	19	37	28	33	62	29	27	56

Total No.
of Respondents

(563)

(550)

(537)

(541)

(542)

* P.T. = Public Transit

Place of Residence

The distribution of where the respondents live, the origins of their work trip, are given below. Essex County was indicated as place of residence by the greatest number of respondents. Of the 39 percent who lived in Essex County, 19 percent lived in the city of Newark itself and 20 percent lived in the rest of Essex County.

<u>Residence</u>	<u>% of Respondents</u>
New Jersey	
Essex	39
Union	13
Morris	10
Hudson	10
Monmouth	8
Bergen	6
Middlesex	5
Passaic	4
Ocean	1
Mercer	1
Somerset	1
Sussex	< 1
Burlington	< 1
Hunterdon	< 1
Warren	< 1
New York	< 1
Pennsylvania	< 1

Total Number of Respondents = 568

Accessibility to Bus or Train

Responses were divided almost equally among those who indicated that they lived within three blocks of a bus or train stop and those who indicated they did not. Interestingly, 49 percent of those who traveled into the CBD by auto indicated that they lived within three blocks of a bus or train stop.

Responses	% of Respondents		
	Public Transit	Auto	Total
Yes	29	20	49
No	29	21	50
Don't Know	0	< 1	< 1

Total Number of Respondents = 615

Length of Residence

About 54 percent of the respondents indicated that they have lived at their present address for five years or more.

<u>Residence</u>	<u>% of Respondents</u>
< 6 months	7
6mon - 1 year	8
1 - 5 years	31
> 5 years	54

Total Number of Respondents = 625

Plans to Relocate

About 63 percent of the respondents indicated that they did not plan to move from the county in which they presently reside within the next three years, while 11 percent indicated that they did plan to move and 26 percent did not know.

<u>Response</u>	<u>% of Respondents</u>
Yes	11
No	63
Don't Know	26

Total Number of Respondents = 625

Car Ownership

Only about 7 percent of all the respondents did not own cars; 40 percent owned one car, 43 percent owned two cars and 10 percent owned three or more cars. Of those respondents who indicated public transportation as their principal mode of travel to work, about 88 percent owned at least one car.

Car Ownership	% of Respondents		
	Public Transit	Auto	Total
0	6	1	7
1	25	14	40
2	22	20	43
3+	4	6	10

Total Number of Respondents = 610

The distribution of model years are listed below:

<u>Model Year (1st car)</u>	<u>% of Respondents</u>
1975	< 1
1974	13
1973	16
1972	14
1971	12
1970	12
1969	9
1968	7
1967	5
1966	4
1965	4
1964	2
< 1963	1

Total Number of Respondents = 572

Driver's License

Approximately 87 percent of the respondents indicated that they had drivers' licenses and 13 percent indicated they did not. Of those respondents who indicated public transit as their principal mode of travel to work, 81 percent had drivers' licenses

<u>Responses</u>	<u>% of Respondents</u>		
	<u>Public Transit</u>	<u>Auto</u>	<u>Total</u>
Yes	47	40	87
No	11	2	13

Total Number of Respondents = 609

The age distributions seem pretty evenly matched when looking at the percentages of total respondents. However, when examining the percentages of respondents who used either public transit or automobile, the age distribution changes. As can be seen in listing below, a higher percentage of auto travelers are younger than public transit users.

Age	% of Public Transit Users	% of Auto Users
15-19	3	3
20-24	12	16
25-34	24	30
35-44	18	17
45-54	29	23
55-59	8	6
60 +	7	4
	<u>100</u>	<u>100</u>

Marital Status

About 69 percent of the respondents were married and 31 percent were single. These percentages remained approximately the same when broken down by mode.

Marital Status	% of Respondents		Total
	Public Transit	Auto	
Married	39	29	69
Single	18	13	31

Total Number of Respondents = 603

Sex

The percentage of respondents who indicated their sex to be male was slightly lower than those who indicated their sex to be female; 53 percent were female and 47 percent were male. These percentages remained about the same when broken down by mode.

Sex	% of Respondents		
	Public Transit	Auto	Total
Female	31	22	53
Male	28	19	47
Total Number of Respondents = 614			

Age Distribution

The highest percentages of respondents fell into the following age groups. 27 percent in the 25 to 34 years category and 26 percent in the 45 to 54 years category.

Age (years)	% of Respondents		
	Public Transit	Auto	Total
15-19	1	1	3
20-24	7	7	14
25-34	14	13	27
35-44	10	7	17
45-54	17	9	26
55-59	4	3	7
60+	4	2	6
	58	42	100

Total Number of Respondents = 613

Income

The majority of the respondents, 63 percent, had annual incomes of \$15,000 and greater. When broken down by mode, this remains true. However, the distribution of incomes under \$15,000 changes with incomes of auto users being higher.

Income (dollars)	% of Respondents		Total
	Public Transit	Auto	
0-4,999	1	1	1
5,000-6,999	4	1	5
7,000-8,999	6	4	10
9,000-10,999	4	5	9
11,000-12,999	4	2	6
13,000-14,999	3	3	6
15,000 +	37	20	63

Total Number of Respondents = 573

The percentage of transit users with annual family incomes under \$7,000 was 8 percent compared to 2 percent of auto travelers as shown below.

Income	% of Users	
	Transit Users	Auto Users
0-4,999	1	1
4,000-6,999	7	1
7,000-8,999	10	9
9,000-10,999	7	11
11,000-12,999	6	6
13,000-14,999	5	8
15,000 +	63	63

Total Number of Respondents = 573

4.4.3 The Newark CBD Parker - Detailed Findings

As indicated in the previous section, 41 percent of the CBD employees surveyed arrived in the CBD by automobile. About 50 percent of those were members of carpools. The following findings of the Newark CBD Employee Survey are those relating specifically to those respondents commuting by automobile.

Reason for Using the Automobile

The most frequently cited reasons for utilizing the automobile were: car is faster, more dependable, and bus or train run too infrequently, cited by 65, 47 and 29 percent of the respondents, respectively.*

<u>Reason</u>	<u>% of Respondents</u>
Car is faster	65
Car is more dependable	47
Bus or Train run infrequently	29
Transit stop too far from home	26
Car or carpool available	26
Car is cheaper	26
Other	26
Need car after work	24
Free parking at work	18
Car is safer	15
Need car for work	15
Hate fixed schedules	12
Can always park on-street	6
Transit schedules too confusing	6
Low cost parking at work	2

Total Number of Respondents = 272

* Sum of percentages greater than 100 because of multiple answers.

Car Occupancy

Of the respondents who traveled to work by car, 50 percent indicated they drove alone, 26 percent with one passenger, 12 percent with two passengers, 9 percent with three passengers and less than 4 percent with four or more passengers.

<u>Car Occupancy (persons)</u>	<u>% of Respondents</u>
1	50
2	26
3	12
4	9
5	3
≥ 6	< 1

Total Number of Respondents = 273

Where Car Was Parked

About 59 percent of auto travelers indicated that they parked at independent off-street lots or garages, 23 percent indicated they parked at a company owned lot and 8 percent parked on the street.

<u>Responses</u>	<u>% of Respondents</u>
On Street	8
Company Owned Lot	23
Independent Lot or Garage	59
Other	10

Total Number of Respondents = 272

Parking Cost

The average total parking cost per car incurred by CBD auto travelers was \$1.60 per day and ranged from \$.25 to \$2.27 per day. Personal parking costs for solo auto drivers averaged \$1.49 per day. Personal parking costs for carpool members averaged \$.74 per day. The average parking rates for the Newark CBD in general are given below in Table 6-6.

Table 4-6
Parking Rates Newark CBD

	Range (dollars)	Average
1/2 hour	.45 - .65	.62
1	.60 - 1.30	.86
2	.90 - 2.10	1.37
3	1.20 - 2.30	1.76
4	1.50 - 3.90	2.08
5	1.50 - 4.80	2.19
Max	1.50 - 7.00	2.46
Monthly	25.00 -44.35	33.19*

* 33.19/22 working days = 1.50 per day

Source: Newark Parking Authority

Tolerance to Parking Cost Increase

The greatest amounts parkers were willing to pay before they would switch to an alternative mode of transportation ranged from \$.45 to \$9.99 and averaged \$1.92 per day. Of those auto travelers who drove alone, 10 percent presently pay nothing for parking and indicate they will pay nothing for parking; 24 percent who presently pay are not willing to pay more; and 21 percent who presently park free indicated a willingness

to pay between \$.45 and \$2.00 per day or an average of \$1.18 per day for parking. The remaining 45 percent who presently pay for parking indicated a willingness to pay an average of about 90 percent more for parking.

Of those auto travelers who were members of carpools, 10 percent presently pay nothing for parking and indicate they will pay nothing for parking; 29 percent who presently pay are not willing to pay more; and 25 percent who presently park free indicated a willingness to pay between \$.50 and \$3.50 per day or an average of \$1.78 per day for parking. The remaining 36 percent who presently pay for parking indicated a willingness to pay an average of about 114 percent more for parking.

These results are to be expected since the average carpooler pays about half as much (\$.74) for parking as the average solo driver (\$1.49). Since CBD parkers pay different base prices for parking it was not possible to estimate the elasticity of demand for parking. However, assuming CBD parkers act the way they say they will and the average cost of parking goes up to \$1.75 per day, then approximately 39 percent of the respondents who drove alone and indicated tolerances for price increase would switch modes. If the average price of parking went up to \$2.00 per day about 49 percent of this group would switch modes and if it went up to \$3.00 per day about 84 percent would switch. These hypotheses must be viewed with caution, however, since the demand for parking for work trips has been shown in other studies to be inelastic.

Changes Induced by Increased Parking Costs

If presented with a situation where parking became more than one is willing to pay, about 54 percent of the respondents indicated that they would take a bus or train, 17 percent indicated they would join a carpool and 8 percent indicated they would look for a job where parking was cheaper.

<u>Responses</u>	<u>% of Respondents</u>
Join a Carpool	17
Take Bus or Train	54
Look for a Job with Cheaper Parking	8
Other	21
Total Number of Respondents = 216	

4.5 THE NEWARK CBD EMPLOYER

An attempt to identify the potential impact of parking management strategies on the economic future of the CBD was carried out via a second questionnaire. This questionnaire was distributed to the major CBD employers and was designed to identify characteristics such as: employer's attitudes toward parking, parking management strategies, and the effects they may have on their business, if any.*

The CBD employer questionnaire was distributed to 22 major CBD employers as identified by the Greater Newark Chamber of Commerce. Major employers were those employing 200 persons or more and ranged from 200 to 3800 persons. Sixteen responses were received, a return rate of approximately 73 percent. The responding employers employed a total of about 18,000 employees.

The responses were distributed among the following employment categories:

banking, finance, insurance	7
general office	1
engineering	1
utility	2
education	2
post office	1
retailing	2
	<u>16</u>

4.5.1 Major Findings of Newark CBD Employer Survey

- (1) In general, Newark CBD employers consider their parking supply to be important. They linked parking to their employment, student enrollment, and business opportunities.

* A copy of the Newark CBD employer questionnaire is contained in Appendix B.

- (2) Almost all of the employers responding, 94 percent, indicated that they do not intend to move out of the Newark CBD within the next five years.
- (3) The majority of employers, 87 percent, felt favorably about carpools.
- (4) The majority of the employers, 80 percent, indicated that reduced traffic congestion would have a positive effect on their businesses. Most noteworthy were the CBD retailers who indicated that reduced traffic congestion would help their competitive position with suburban centers.

4.5.2 Detailed Findings of the Newark CBD Employer Survey

Employee Parking Provided by Employer

Of the employers responding, 19 percent indicated that they provide parking for all of their employees, 31 percent provided parking for some of their employees and 50 percent provided no parking.

<u>Response</u>	<u>% of Respondents</u>
Provide parking for <u>all</u> employees	19
Provide parking for <u>some</u> employees	31
Do not provide parking	50

Total Number of Respondents = 16

Of the employers who provide some form of parking for their employees, 50 percent provide parking at a company lot or garage, 25 percent provide parking at a contracted lot or garage and 25 percent provide parking at both. Of these employers, 50 percent provide free parking, and 50 percent charged costs ranging from \$.45 to \$2.00 per day or an average of \$1.03 per day. Of the employers who provide limited parking or do not provide parking for their employees, 31 percent indicated that their employees who can't use company spaces park on the street or at a commercial lot or garage, and 69 percent indicated that these employees parked at commercial lots or garages only.

numbers of existing commuting drivers were given for "yes" answers. Reasons given for "no" answers were that the city has other major problems besides parking and that the city has an excellent public transit system (Total Number of Respondents = 16). About 56 percent of the employers considered their parking supply to be very important, 31 percent important, 6 percent not at all important.

Employers' Attitudes Toward Traffic Congestion

Of the 15 employers responding, 80 percent indicated that reduced traffic congestion would affect their business in a positive way and 20 percent indicated it would not. The reasons cited for a "yes" answer could be summarized as convenience for auto commuters and existing or potential customers.

Employers' Future Plans

Of all the employers responding (Total Number of Respondents = 16), 94 percent indicated that they would not move out of downtown Newark within the next five years, while 6 percent were uncertain. The majority of employers, 75 percent, have been located in downtown Newark for ten years or more. About 57 of the employers responding (14) indicated that their employment will in the future expand, 7 percent indicated it will decline and 36 percent indicated it will remain the same.

Employers Attitudes Toward Parking Proposals

The attitudes of the CBD employers surveyed toward five different parking proposals are given below. Basically all but on-street parking time limits received a negative response. In summary, 20 percent of the employers indicated that a time limit on all on-street parking in the CBD would negatively affect their business while 73 percent indicated that it would not; 73 percent indicated that a reduction or elimination of on-street parking would negatively affect their business while 27 percent

indicated it would not; 71 percent indicated that restrictions on the number and size of off-street parking lots would negatively affect their business while 14 percent indicated it would not; 73 percent indicated that cost increases for all-day parking would negatively affect their business while 7 percent indicated it would not; and 3 percent indicated that allowing persons in carpools only to park downtown would negatively affect their business while 7 percent indicated it would not.

Parking Proposal	% of Respondents by Response			Total Number of Respondents
	Yes	No	Don't Know	
Time limit on all on-street parking in CBD	20	73	7	(15)
On-street parking reduced or eliminated in CBD	73	27	0	(15)
Number or size of off-street parking lots restricted to present size or reduced	71	14	14	(14)
An increase in the cost of all day parking for off-street facilities and on-street parking	73	7	20	(15)
Persons in carpools are the only ones allowed to park in CBD	93	7	0	(15)

Employee Income Breakdown

The employers responding (11) indicated that their employee income breakdown was as follows: approximately 19 percent made less than \$8,000 per year, 52 percent made between \$8,000 and \$14,999 per year and 29 percent made \$15,000 or more per year. (Note that this breakdown is not directly comparable to the family income breakdown obtained from the employee questionnaire.)

Employers' Attitudes Toward Carpooling

Of all the employers responding, 87 percent felt favorably about carpools and 13 percent felt unfavorably (Total Number of Responses = 15). 31 percent of the employers indicated that they do have a carpooling policy and 69 percent indicated that they do not (Total Number of Responses = 16). Interestingly, only 38 percent of the employers who felt that carpooling was a good idea did have carpooling policies. The type of services provided by the employers who indicated they have carpooling programs are listed below:

<u>Response</u>	<u>% of Respondents</u>
Priority in parking space assignment	20
Advertisement and Promotion of Carpools	80
Matching System	40
Share costs	20
Total Number of Respondents = 5	

Visitor Parking Provided by Employer

Parking was provided for visitors or customers by 38 percent of the employers responding. (Total Number of Respondents = 16). Of the 62 percent who do not provide parking for visitors or customers, 50 percent indicated that their customers park either on the street or at commercial lots or garages, 40 percent indicated that they parked at commercial lots or garages only and 10 percent on the street only.

Employers' Attitudes Toward Parking Supply

About 81 percent of the employers indicated that changes in available parking would affect their business and 19 percent indicated it would not. Reasons of employment, student enrollment, customer convenience and the

4.6 SUMMARY OF THE SOCIO-ECONOMIC IMPACTS OF PARKING MANAGEMENT STRATEGIES ON THE NEWARK CBD

The ultimate objective of parking management strategies is to reduce vehicle miles of travel (VMT) in the central business district and thereby alleviate air quality problems, particularly that of carbon monoxide. Parking management strategies are part of an overall transportation control plan, and as such, should not be viewed in isolation. As is the case with other vehicle restraint strategies, parking management strategies must be complemented by public transit improvements if actual VMT reductions are to be achieved. The improvement of public transportation which is probably the most efficient strategy for the long run alleviation of air quality problems, is also consistent with the goals of the N.J. Master Plan for Transportation¹⁰ and long run national energy concerns. Should the effects of the predicted "energy crisis" be realized, the freedom of movement of the automobile may be severely curtailed in the future. This may represent the greatest incentive for modal choice decisions away from the private automobile in favor of public transportation. Parking management strategies are also complemented by EPA's carpooling strategies for the Newark CBD which require employers providing 400 parking spaces or more to develop mass transit incentive programs.¹¹

The benefits of parking management strategies will accrue to those living and working in the CBD. Viewed in isolation, parking management strategies would result in parking price increases and trip disincentives. However, viewed in light of the existing and potentially improved public transit system in Newark, EPA's carpooling strategies and long term energy concerns, the consequential socio-economic impacts of parking management strategies are expected to be minimal. Though the consequential impacts cannot be exactly quantified or predicted in a complex social, economic and political environment, three areas of potential impact are summarized below.

The socio-economic impact of parking management strategies on the Newark CBD parker may be in the form of higher time, convenience or monetary costs. The Newark CBD Employee Survey results indicate that about 42 percent of the respondents travel to work by car and about half of these drive alone. The

results indicate that the time cost of shifting from private automobile to public transit may be between 25 and 33 percent additional average travel time. Though the survey showed no significant differences between travel times of solo drivers and carpoolers, it will probably take the CBD employee who shifts from solo driving to carpooling slightly longer to get to work as well. Convenience costs may be incurred in getting to a bus or train stop instead of an automobile. However, 49 percent of the respondents who traveled to work via auto indicated that they lived within three blocks of a bus or train stop. Time and convenience costs will have a more severe impact on higher income travelers who place more value on their time. The survey results indicate that a majority of auto travelers (and CBD employees in general) have family incomes of \$15,000 per year and over.

Should the future supply of parking be limited in some way, the price of parking will probably rise. Though one cannot be sure of the magnitude of a price increase, the survey results indicate that the majority of CBD auto travelers had family incomes of \$15,000 per year or greater. Increased parking costs will have a less severe impact on this income group than on lower income groups. However, 23 percent of CBD auto travelers had family incomes of under \$12,000 per year. Using a hypothetical increase in average daily parking cost from \$1.45 to \$1.75, the tolerance levels of CBD parkers indicated that about 39 percent of solo auto drivers may be willing to switch to either carpooling or public transit. About 54 percent of the CBD parkers surveyed indicated that they would take a bus or train if parking became more than they were willing to pay while only 8 percent indicated they would seek employment elsewhere. Improvements in the levels of service offered by public transportation will help alleviate the time and convenience costs. However, it should be noted that these costs may in the future become incorporated into a changing lifestyle in light of the predicted energy problem.

The socio-economic impact on CBD residents and employees may be in the form of air quality, accessibility and mobility benefits. The benefits of reduced traffic congestion and improved air quality will accrue to those living and working in the Newark CBD. These two groups, as well as the city of Newark in general, stand to benefit from transit improvements. The

Newark CBD Employee survey indicated that about 58 percent of the respondents take some form of public transportation to work. The general socio-economic profiles of Newark and the Newark CBD show that these are low-income areas with high propensities of transit usage. In the city of Newark, about 37 percent of the residents use some form of public transportation to get to work. Improvements in public transportation would increase the mobility and accessibility of low income captive riders as well as that of the young and the elderly. It is doubtful that the central city population alone would generate the demand for such service improvements. The fact that improvements are needed is brought out in the survey results which indicated that 77 percent of the public transit users noted dislikes about the public transit system and the infrequency of service was marked as one of the reasons why people drive into the CBD. The results indicated the following incentives as the most effective in encouraging the use of buses and trains: more frequent service, faster travel, cleaner and newer vehicles and lower fares.

The socio-economic impacts of parking management strategies on the future viability of the CBD may be in the form of opportunity costs. Lost retail sales or business opportunities may result from the displacement of the CBD off-peak visitor by higher parking costs or by commuters preempting visitors in the utilization of parking facilities. However, the potential opportunity cost in lost retail sales is alleviated somewhat by the following three local conditions in Newark. First, the supply of parking at the present time appears adequate for the CBD. Second, the CBD is adequately served by public transportation. Third, the peak shopping hours are between 11:30 A.M. and 2:00 P.M. Monday through Friday,⁹ which exhibits the fact that CBD employees are the major supporters of the retail establishments. Parking rates in the Newark CBD favor the long term parker and the majority of the parking clientele are commuters. Estimates of the percentage of total parking spaces used by commuters range as high as 75 percent.

However, the relative and absolute decline of retail sales is one of the Newark CBD's many problems and it may be argued that CBD retailing needs no negative impacts no matter how slight in order to compete with suburban shopping centers. Visitor parking can be protected, at least to a certain degree,

for example, by keeping garages closed until after peak commute hours, by reserving space for visitor parking, or by allowing special rates for shoppers with proof of a shopping trip.

The future of Newark CBD retailing and the economic viability of the CBD in general will be a function of the city's ability to retain its existing employment and increase its future employment. The Newark CBD Employee Survey results indicated that less than two percent of the employees surveyed would look for a job elsewhere if parking became too expensive. Although the Newark CBD Employer Survey indicated that, in general, CBD employers considered their parking to be important, it does not appear to be a very significant factor in the future of the CBD. This is evidenced by the fact that in the face of an adequate parking supply, CBD employers still offer their employees additional incentives for working downtown such as higher salaries, free lunches and travel stipends. About 94 percent of the employers responding indicated that they did not intend to move out of the CBD within the next five years.

CBD retailers responding to the Employer Survey indicated that reduced congestion and air pollution would have positive impacts on their business and would increase their attractiveness, sales and competitive position with suburban centers in general. Parking management strategies also contribute to creating a better environment and a more positive image for the city.

As exhibited by these three areas of impact, parking management strategies will impact different segments of the CBD population unevenly. The severity of the socio-economic impacts in each area will depend upon how the strategies are implemented. The availability of alternative modes of transportation and the nature of the parking supply are future conditions of major import. It is believed that the flexibility contained within the scope of the regulations will allow local planners aided by public participation to minimize the disruptive socio-economic impacts as well as provide for the parking needs of the city.

4.7 REFERENCES

1. For a general discussion of the socio-economic impacts of transportation control strategies see: TRW, Transportation and Environmental Operations. Socio-Economic Impacts of the Proposed State Transportation Control Plans: An Overview (November 1973).
2. Newark Division of City Planning, Newark Transportation & Growth (October, 1973).
3. It is not the purpose of this chapter to discuss in depth the process and forces affecting suburbanization. For a good discussion of the process, it's relationship to transportation and the viewpoints of noted urbanologists on the future of the central city, see:

Hughes, James W.,(ed). Suburbanization Dynamics and the Future of the City, New Brunswick, New Jersey: Center for Urban Policy Research, Rutgers University, 1974.

Also see:
Meyer, Kain, Wohl. The Urban Transportation Problem. Cambridge, Massachusetts: Harvard University Press, 1965.

Armstrong, Regina Belz. The Office Industry: Patterns of Growth and Location - A Report of the Regional Plan Association. Cambridge, Mass: The MIT Press, 1972.
4. Centaur Management Consultants, Inc. Economic Development Framework for the City of Newark, New Jersey. Washington, D.C. (June 1973).
5. U. S. Department of Commerce. 1960 Census of Population and Housing - Newark, New Jersey. Washington, D. C. : U. S. Government Printing Office, 1972.
6. Port Authority of N. Y. & N. J. An Economic Audit of the Central Business and Ironbound Districts of Newark, New Jersey. Planning and Development Department (July 1973).
7. Survey recently conducted by the Greater Newark Chamber of Commerce on staggered working hours in the CBD (1974).
8. TRW, Transportation and Environmental Operations. Photochemical Oxidant Control Strategy Development for Southeast Texas Air Quality Control Region (September, 1973).

9. Information obtained from the Greater Newark Chamber of Commerce.
10. N. J. Department of Transportation. A Master Plan for Transportation, 1972.
11. Federal Register, Vol. 39, p. 19779 (June 4, 1974).
12. Tri-State Regional Planning Commission. Regional Transit 1990 (April 1972).
13. Tri-State Transportation Commission. The Region's Unique Rapid Transit System - In Newark, Technical Bulletin Volume IV, Number 2 March 1968.

5.0 ALTERNATIVE MODES OF TRANSPORTATION

This section of the report briefly describes methods that are being used to reduce the vehicle miles traveled (VMT) in different sections of the country. Some of these methods are direct responses to EPA's promulgated Transportation Control Plans, and some others are methods that had been previously used in an effort to increase the efficiency of traffic flow and the carrying person-capacity of existing facilities.

Although interrelations exist in the methods, three separate sections will be considered:

- Improvement in transit service operations;
- Preferential treatment for buses and high occupancy vehicles; and
- Car pool and van pool programs.

5.1 IMPROVEMENTS IN TRANSIT OPERATIONS

This section deals with operations of the transit system without changes in the operation of freeways and streets being used by the system.

Frequency of service is the variable most frequently reported to be the most important factor considered by transit users. By increasing the frequency of service, the headways between vehicles are reduced as are the waiting times at bus stops. The effect will be an increase in transit use. However, no exact relationship exists, making it extremely difficult to predict the effect of a given improvement. In most cases, improved service requires an increase in rolling stock, which, in turn, calls for capital disbursements in nearly bankrupt systems. The Urban Mass Transportation Assistance Act of 1974 (UMTAA) addresses this problem and provides funds for this type of program.

Travel time is another variable highly important to transit users. Auto drivers will change modes much more readily, if their door to door travel time is reduced. Express buses and buses with limited stops are

the means most widely used to cut down the travel time by bus. Other methods, which involve changes of regulations in the street network operation, are considered in Section 5.2.

Fare reductions and fare-free transit are methods that have been tried in different areas of the country in an effort to reduce the number of auto trips to downtown areas. Atlanta, San Diego and Cincinnati, among others, have tried reducing fares with different levels of success, but a net increase in ridership has resulted, in each instance.

Fare-free transit has been tried in Boston, Massachusetts. The results showed that a 14% reduction in auto work trips would result, but little diversion to transit from auto would occur for shopping trips. The effect on parking was very significant, since each space left open by an auto driver to work left an average of 3.4 spaces open for other trip purposes, which have higher turnovers per space. Estimates were made of 4.5 and 3.0 percent reductions in auto emissions for the morning and evening rush periods, respectively.

UMTAA provides 20 million dollars in each of the fiscal years ending June 30 of 1975 and 1976, for demonstration projects in fare reduction and fare-free transit. The modal shifts, reduction in auto trips and level of vehicle emissions will be closely observed. A better understanding of the effects of these methods might result.

Many other improvements have been proposed for transit systems: bus stop shelters; more attractive and comfortable buses; cross town routes; etc. Although these improvements are important and might affect the ridership level of transit systems, no major shift from auto to transit is to be expected from these changes alone.

5.2 PREFERENTIAL TREATMENT FOR BUSES AND HIGH OCCUPANCY VEHICLES

Preferential treatment for buses and car pools on freeways, ramps and city street networks has been implemented either on an experimental

or permanent basis in different sections of the country. The main objective of these techniques is to reduce the travel time of vehicles that meet certain qualifications. Research has shown that, to some extent, buses and car pools are competitive. Preferential bus treatment may, as a side effect, reduce the number of car pool users and visa versa. Some preferential treatment techniques are briefly discussed below.

- Separation of high-occupancy vehicles has been ensured by constructing separate roadbeds for these vehicles. The San Bernardino and Shirley busways, leading to Los Angeles and Washington, D.C., respectively, are examples of this technique. The high cost involved in the construction of a separate facility might be a deterrent to a generalized use.
- Contra-flow lanes for buses have been also used. In this technique, one lane of traffic is reserved for bus use in the off-peak direction. Safety considerations have led to the use of this technique for buses only. The method has been used in Marin County, California, on the Southeast Expressway in Boston, by the City of New York on the Long Island Expressway, and on the New Jersey approach to the Lincoln Tunnel.
- Preferential entry at metered on-ramps has been also used. The metering allows only a fixed volume of vehicles to enter the freeway upstream of bottleneck locations and this flow is controlled by a traffic signal. Buses are allowed to bypass the traffic waiting at the signal and enter the freeway without delay. Carpools have also been allowed to do the same thing, but the number of violations of the signals has increased in some cases.
- The reduction of delays has also been accomplished through the use of exclusive lanes upstream of bottleneck locations. This method permits buses to use exclusive lanes when approaching an established bottleneck, by-passing the existing long queues and delays. Use of freeway shoulders as peak period bus lanes has been suggested. The method could be used in corridors with relatively low bus volumes.
- Exclusive use of city street lanes by buses in congested areas is another method used to avoid delays. San Juan and Washington, D.C. are examples of cities using this method.

5.3 CAR AND VAN POOLING PROGRAM

Sections 5.1 and 5.2 discussed methods that have been used to reduce the demand for auto trips and parking, and of the effect on vehicle emissions. Application of these techniques, however, is in most cases out of reach of applicants for new parking facilities and even the reviewing agencies. This section deals with methods that are more viable for implementation by the applicant or the reviewing agency.

Car and van pooling activities have been encouraged recently by the increasing concern on air quality, the gasoline shortage and gas price levels. Carpooling has been looked upon as a short-term relief to the daily commuting problem, by providing available seating space otherwise not used.

It has been established that a 30 percent increase in auto occupancy could bring a 22 percent reduction in VMT with the associated effect on traffic congestion, travel speeds, fuel consumption, and CO and hydrocarbon emissions.

Successful programs have been reported by the U.S. Department of Transportation and National Aeronautics and Space Administration in Washington, D.C., with auto occupancies of 2.5 and 3.85 respectively. Private employers have also undertaken successful programs. Texas Instruments, in Dallas, has increased the auto occupancy of its employees from 1.20 in October of 1973 to 1.64 in April 1974; and Hallmark Cards in Kansas City, Missouri, saw its three-man carpool increase in number from 132 to 258 after a pooling program was initiated in early 1973.

Three phases compose a comprehensive pooling program:

a) Carpool Matching: This phase requires name of applicants, addresses, work time, destination and other data that can be of importance to the users. The Federal Highway Administration has a computer program that provides locator services. Use of this, or similar programs, is recommended for groups exceeding 200 persons.

b) Public Information: A proper promotion of the carpool program is very useful. Considerations such as time, cost, convenience, environment and energy, should be stressed in this phase of the process. Announcements on local news media and by interested employees are also very helpful.

c) Incentives: Combined with the public information, special incentives could be provided if at all possible. Special parking privileges have been the most successfully used incentive. It has been done in two ways:

- a) Assigning parking space only to the largest carpools, where spaces are limited; and
- b) Assigning priority parking areas to carpools, where spaces are in abundance.

Once a carpool program is started, a continuing updating process should begin too. This way the existing vacancies might be filled out, or prospective carpools will know when vacancies occur in convenient pools. Master files and periodic listings in convenient locations can be used for this purpose.

The Federal Highway Administration makes readily available its computer matching program with explanatory information about it. A similar program is offered by the New Jersey Department of Transportation to both businesses and municipalities.

Applicants covered by the EPA review process should be made aware of the possible decrease in parking spaces by implementing a car pool program. This program is of special interest to applicants for private garages, since the coordination of employees can be easier.

EPA has recognized the benefits involved in improved transit usage and carpooling. In the New Jersey Transportation Control Plan, Section 52.1590, paragraph (c) as amended on June 4, 1974, the Environmental Protection Agency mandates that:

"(c) Each employer in the Regions who maintains 400 employee parking spaces at any of his facilities shall submit to the Administrator, on or before July 1, 1974, an adequate transit incentive program for that facility designed to encourage the use of mass transit and carpooling by his employees. The employer's program should contain the mix of incentive or disincentive provisions most likely to obtain maximum use of carpooling and mass transit so as to reduce vehicle miles travelled (VMT). Some incentive examples are: Subsidies to employees using mass transit, preferential parking or other benefits for those who travel in carpools, provision of special charter or employer buses to and from mass transit stops and formal information systems so that employees can select optimum carpool arrangements. Some examples of disincentive provisions are: Reduction in employee parking spaces, surcharges on use of parking spaces for single passenger drivers and non-preferential parking for single passenger drivers."

The same section provides that the employers report on a semi-annual basis the number of employees commuting to and from work by single passenger automobile, carpool and mass transit. The Administrator can, at any time, revoke the approval of an employer's plan; and if after two months of the revocation the employer has not provided an acceptable plan, the Administrator will prescribe the transit incentive program for the affected employer.

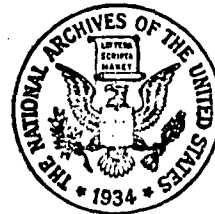
APPENDIX A
PARKING MANAGEMENT REGULATIONS

Environmental
Protection
Agency
Federal Register

THURSDAY, AUGUST 22, 1974

WASHINGTON, D.C.

Volume 39 ■ Number 164



PART III

ENVIRONMENTAL PROTECTION AGENCY

■

PARKING MANAGEMENT REGULATIONS

Proposed Rules

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 52]

[FRL 252-5]

APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Proposed Amendments to Parking Management Regulations

Between November 6 and December 12, 1973, the Environmental Protection Agency, acting under court order, promulgated or approved transportation control plans for 30 major urban areas as part of the State Implementation Plans. These transportation plans are designed to help provide the necessary control of photochemical oxidants (smog) and carbon monoxide required under the Clean Air Act for attainment of National Ambient Air Quality Standards established to protect the public health and welfare. Many of these transportation control plans include a management of parking supply regulation which requires explicit consideration of air quality impacts before construction of certain specified new parking facilities can proceed. Today, the Administrator is proposing amendments to these regulations which provide clarifications and slight modifications necessary for their successful implementation.

The areas having management of parking supply regulations covered by these amendments include:

Alaska:
Fairbanks Area

Arizona:
Phoenix Area
Tucson Area

California:
Fresno and San Joaquin Valley Area
Los Angeles Area
Sacramento Valley Area
San Diego Area
San Francisco Area

District of Columbia Interstate Area:
Washington, D.C.
Maryland Suburbs
Virginia Suburbs

Maryland:
Baltimore Area
(Suburbs of D.C. listed under D.C. Interstate)

Massachusetts:
Boston Area

New Jersey:
Suburbs of New York City
New Jersey Suburbs of Philadelphia (Camden, Trenton)

Pennsylvania:
Philadelphia Area
Pittsburgh Area

Texas:
Houston

Virginia:
(Suburbs of D.C. listed under D.C. Interstate)

Four additional areas which have parking management regulations set forth either by the State or EPA are not covered by the amendments being proposed today. These include: Denver, Colorado; Portland, Oregon; and Seattle and Spokane, Washington. Parking management regulations for Denver and Portland are already included in approved State Implementation Plans. The

proposed regulatory modifications do not apply to Seattle and Spokane because the State is actively developing its own procedures which, if approved, would remove the need for any EPA involvement (Section 39 FR 26, 167 (July 17, 1972)).

The original transportation control plans called for the management of parking supply regulations to become effective no later than January 1974. However, in December of 1973 the Emergency Energy bill passed by both Houses of the Congress granted the Administrator of the Environmental Protection Agency the authority to suspend the parking review requirements until January 1, 1975. Though the bill did not become law at that time, the Administrator regarded it as firm Congressional guidance on the parking management issue. Consequently, the Administrator deferred the effective date for implementation of these regulations until January 1, 1975. This action was taken on January 5, 1974 (39 FR 1848). The Energy Supply and Environmental Coordination Act of 1974 which was signed into law on June 22, 1974 (Pub. L. 93-319) retained the predecessor bill's language concerning the effective date of the management of parking supply regulations.

The Administrator is today taking three general actions to clarify and aid in the implementation of these regulations:

(1) This proposal provides additional clarification of the relationship between the management of parking supply and the indirect source regulations. The clarifications elaborate upon the revisions to the indirect source regulations set forth in the July 9, 1974 FEDERAL REGISTER (39 FR 25292). The July 9 REGISTER notices explained that in areas where a parking management regulation promulgated by EPA is in effect, review of applicable facilities will be performed under parking management regulations rather than under the indirect source regulations.

(2) In this notice of proposed rulemaking, the Administrator is proposing several amendments to the existing parking management regulations. The purpose of these amendments is to clarify possible ambiguities in the existing regulations, to encourage State and local administration of programs under these regulations, to provide greater flexibility to applicants, and to assure consistency between the procedural requirements of indirect source and parking management regulations.

(3) An appendix is also being proposed by the Administrator to provide guidelines for the conduct of parking facility review and to explain the potential function of a local areawide parking management plan. The appendix provides alternative methods for meeting the requirements of the existing regulations and specifies procedures to be followed by applicant and reviewer in complying with the federally promulgated review of new parking facilities.

The basic purpose of these proposed changes is to provide a clear picture of the new parking facility application re-

quirements and the criteria by which an application under the management of parking supply regulations will be judged; to provide maximum possible flexibility to the potential owner/operator of a parking facility while not compromising the effectiveness of these parking review requirements in terms of air quality objectives; and to encourage local areas to develop their own parking management plans to replace the Federal review regulations. It is the Administrator's firm desire that local areas develop parking management plans consistent with their local problems and needs with respect to both air quality improvement and socioeconomic development. Such plans, if adequate, will be approved by the Administrator and replace the applicable Federal management of parking supply regulations. Metropolitan areas such as San Diego, Seattle, and Portland are already in the process of developing such regulations. The Administrator further feels that the changes proposed today will allow a potential applicant subject to the Federal requirements to select the approach most suitable to his demonstrating compliance of the original objectives of these methods will further aid in achievement of the original objectives of these regulations.

Philosophy of Parking Management. The management of parking supply regulations are part of a comprehensive transportation control program designed to minimize motor vehicle emissions in areas where these emissions now cause serious violations of National Ambient Air Quality Standards. In these areas, it has been determined that the air quality standards for carbon monoxide and photochemical oxidants (smog) cannot be achieved in compliance with the provisions of the Clean Air Act through the use of only stationary source and new automobile emission controls. In order to achieve the applicable standards, it is also necessary to develop and implement transportation controls which both reduce emissions from in-use vehicles on the road and reduce the vehicle miles traveled by the vehicles in the affected area. The controls set forth in the transportation plans to accomplish this task include parking management regulations, mass transit improvements, inspection and maintenance programs, carpool matching programs, exclusive bus and carpool lanes, employer incentive programs for the use of mass transit and the retrofit of older automobiles with emission control devices.

As part of the overall transportation control program, the purpose of the parking management regulations, which manages the development of new parking facilities, is twofold: (1) To reduce the areawide growth in VMT so as to contribute to the achievement of photochemical oxidant and/or carbon monoxide standards; and (2) to assure that congestion associated with the operation of a new parking facility does not cause or exacerbate a violation of carbon monoxide standards. Since the vast majority of

carbon monoxide and photochemical oxidant pollution in the transportation control areas has been demonstrated to be of automotive origin, the need to minimize the rate of increase in vehicle miles traveled must be emphasized. Although emissions per individual vehicle will vary considerably depending on model year, maintenance, speed, temperature and road characteristics, for most vehicles after the initial warm up period the emissions generated will be roughly proportional to vehicle miles traveled (VMT). Consequently, measures designed to reduce the vehicle miles traveled result in lower pollution levels. To the extent that automobile usage in these areas is characterized by low occupancy (one car, one driver) trips and particularly where much of this travel could be readily absorbed by increased use of carpools and mass transit, the resulting automotive emissions represent an avoidable contribution to the area's pollution problem and a potential area for VMT reductions. Efforts to reduce the vehicle miles traveled in an area, however, are continually neutralized by growth in areawide travel which usually leads to increased emissions and higher pollution levels. Thus, the parking management strategy which can influence the rate of increase in an area's VMT complements other elements of the transportation program such as mass transit improvement which are designed to provide alternatives to low occupancy vehicle usage and accordingly reduce VMT.

At the present time, the vehicle miles traveled in our urban areas continues to increase, in some areas at an annual rate of up to eight percent. This compounds an already serious problem and if allowed to continue can completely negate implementation of other pollution control measures and defeat expeditious attainment of air quality standards. The causes for growth in VMT are complex but the principal reasons can be briefly summarized here. The rising standard of living has brought the automobile within the reach of most families and made multi-car ownership a prevalent goal. The increase in automobile ownership has also been associated with an increase in suburban sprawl, a living pattern heavily dependent on the automobile and less easily served by mass transit. Consequently, transportation by automobile has increased relative to the use of other transit modes, patterns of low occupancy automobile usage have developed, and many mass transit systems have been gradually deteriorating as vehicle miles traveled have continued to increase.

The extremely rapid growth in the building of highways, parking lots, and other auto-related facilities has been both cause and consequence of the shifting transit patterns in our urban areas. At the same time that public transit systems have been allowed to deteriorate, billions of tax dollars and private investments have been poured into encouraging and providing the physical infrastructure for increased auto transit. This shift to an even-increasing reliance on

the automobile and the accompanying growth in vehicle miles traveled has continued to result in further emissions of pollutants, as well as an ever-increasing use of energy and natural resources.

Though growth of new parking-related facilities does not in and of itself cause air pollution, it has been demonstrated that the supply of available parking at new facilities is a major factor influencing choice of transit mode. Other influential factors are: time, costs, comfort, and convenience. Due to the interrelationship of these factors and the importance of convenient, readily available parking, effective control and planning of future parking facilities can directly influence the rate of growth in low occupancy automobile use.

Furthermore, intelligent planning of parking facilities will greatly facilitate the use of high occupancy vehicles. The various programs to improve mass transit and encourage carpools will be complemented by appropriately located and designed parking facilities such as subway parking lots and suburban park-and-ride lots, environmentally-responsible decisions on the size of parking facilities at new commercial and industrial locations, and increased use of innovative employer incentive programs to encourage carpooling and mass transit ridership. As mass transit and carpool programs continue to expand and improve, new parking facilities should be designed to focus on providing convenient parking in areas unlikely ever to be served by mass transit, not to duplicate and compete with transit in areas where it is available.

The impact new parking facilities have on local carbon monoxide levels as well as areawide oxidant and carbon monoxide concentrations must also be considered. The induced traffic associated with a new parking facility could create an area of concentrated vehicle use which may cause or exacerbate a violation of the carbon monoxide standard in the immediate vicinity of the facility. Consequently, approval of new parking facilities covered by these regulations in the transportation control cities is subject to both a review considering the facility's impact on areawide vehicle miles traveled and a demonstration that operation of the proposed facility will not cause or aggravate a localized carbon monoxide problem.

Regulations Currently in Effect. Parking management regulations in their current form require that all new modified or parking facilities above a specified size in the aforementioned metropolitan areas, for which construction will commence after January 1, 1975, must undergo pre-construction review to receive approval to construct. The application submitted by the prospective owner or operator must demonstrate that:

- (1) The proposed facility will not cause or exacerbate a violation of any national ambient air quality standard; and
- (2) The proposed facility will not violate the vehicle miles traveled control

strategy contained in the applicable transportation control plan.

The regulations provide a list of required information through which the applicant must demonstrate that the proposed facility will be in accord with the requirements listed above. The methodology included in these requirements involves a demonstration through quantitative modeling that there will be no local carbon monoxide air quality violation and similar computations to demonstrate compliance with areawide vehicle miles traveled reduction strategies. A special purpose facility, such as a park and ride lot may be approved as a result of a qualitative assessment which demonstrates that the facility inherently would result in a decrease in vehicle miles traveled and cause no carbon monoxide problems.

The current regulations are ambiguous on several points and provide the owner or operator of a proposed new parking facility with a limited amount of flexibility in the application process. The originally promulgated regulations also fail to clearly state the Administrator's policy on local participation in the implementation of parking management programs. Consequently, this notice of proposed rule-making attempts to explain existing areas of ambiguity such as the relationship between indirect source regulations and parking management, proposes certain modifications to the regulations to facilitate implementation, introduces additional flexibility through a VMT minimization option and other alternatives set forth in a newly proposed appendix, clearly provides the alternative of developing and implementing a local parking management plan to replace the Federal facility-by-facility review regulations, and states the Administrator's views concerning local participation.

Relationship of Indirect Source Review and Management of Parking Supply Regulations. The Environmental Protection Agency has two regulations which require that certain classes of proposed new parking facilities be approved by the Administrator prior to construction. These two regulations are: Indirect Source Regulations (40 CFR 52.22(b), 39 FR 25292 et seq., July 9, 1974), and Management of Parking Supply Regulations. The Indirect Source Regulations, except as they relate to highways and airports, are designed to review proposed construction of new parking facilities anywhere in the nation for which construction commences after January 1, 1975 to prevent violation or exacerbation of an existing violation of carbon monoxide standards. The size cutoff for Indirect Source Review varies depending upon the location of the proposed facility. Within Standard Metropolitan Statistical Areas (SMSA's), all new facilities with 1,000 or more parking spaces will require prior approval. Outside of the SMSA's only those proposed facilities with 2,000 or more spaces will require approval.

Parking Management Regulations are limited to specific areas found to have serious violations of autorelated air quality standards and requiring transportation control plans. These regulations include both a review for carbon monoxide impact, similar to that required under Indirect Source Regulations, and a review of the impact of the proposed facility on areawide oxidant levels through vehicle miles traveled. These regulations are generally applicable to all new facilities having a parking capacity of 250 or more motor vehicles.

As was stated in the July 9 FEDERAL REGISTER (39 FR 25296) the Indirect Source Regulations do not apply to facilities which are subject to review under EPA-promulgated Parking Management regulations. (See 40 CFR 52.22(h) (15), 39 FR 25300, July 9, 1974.) Accordingly, no single facility will be subject to more than one of these review requirements. It is incorrect to conclude, however, that the indirect source regulation has no applicability whatever in areas subject to Parking Management Regulations. Highways and airports in Parking Management areas will continue to be reviewed under the Indirect Source Regulations. In addition where residential developments are exempt from the Parking Management regulations, they will be reviewed pursuant to the terms of the Indirect Source Regulations. Moreover consistent with the Indirect Source Regulations, a facility for which a bona fide general construction contract is executed prior to January 1, 1975 (exempt from Parking Management Review), will be subject to Indirect Source Review if actual construction does not commence prior to that date, since the Indirect Source Regulation contains no "general contract" exemption.

Proposed Regulatory Clarifications. Today the Administrator is proposing a number of changes to the Parking Management regulations which should clarify the regulations' applicability, procedures for implementation, and specific review requirements. Some of the more significant changes include: Clarification of the parking facility definition; the review time schedule to be employed; the size of facilities subject to these regulations and alternative procedures for demonstrating consistency with VMT control strategies.

The Administrator has received some questions regarding the applicability of the parking management regulations as determined by the definition of "parking facility". Some have inquired about the regulation's applicability to large unpaved area in which vehicles are regularly parked. The Administrator believes that any area used to park 250 or more vehicles should be considered a parking facility subject to review under the Parking Management regulations. The intent of the current regulations is to include such areas. Accordingly the definition of "parking facility" is being changed to clarify this position.

The Administrator does not intend to construe the definition of "parking facility"

as applying to facilities such as automobile sales lots in which vehicles are temporarily stored pending sale. If there is a question as to whether a proposed construction or modification would be subject to review, owners or operators of the proposed facility should contact the appropriate EPA Regional Office, or the local agency which has delegated review authority for Parking Management, for a determination of applicability.

Inasmuch as Parking Management review is incorporating provisions similar to those contained in the Indirect Source Review regulations, the procedures for implementing Parking Management review are being amended to be the same as those required for indirect source review, as recently amended in the FEDERAL REGISTER of July 9, 1974 (39 FR 25292). The basic review timetable that appears in most of the Parking Management regulations is not being changed. The principal changes involve adding the following provisions: (1) The reviewing agency must notify the applicant if any information required in the review is not submitted in the application; (2) the applicant is given the opportunity to respond in writing to comments submitted by the public; and (3) facilities for which on-site construction does not commence within 24 months after receipt of approval must undergo another review process to take into account changed conditions since the time of initial application. Extensions of this time period proceeding commencement of construction may be requested at any time, including at the time of initial application.

One of the more significant changes being made to the Parking Management regulations concerns the size of facilities to be reviewed. A number of factors have been taken into consideration in selection of appropriate parking lot size cutoffs (in terms of number of spaces) for Parking Management review. Such factors include: Specific air pollutant to be controlled, severity of the problem, technical resources available for review, and the whole range of air quality control strategies to be employed. As a consequence, the specific size of parking facilities subject to review varies from one Air Quality Control Region to the next. Subsequent to the promulgation of some of the initial regulations, the Administrator has determined that size cutoffs in certain areas needed to be modified and these modifications are proposed today.

Through the regulatory actions proposed today, the minimum size of a parking facility to be reviewed under these regulations will be no less than 250 spaces except in the case of Fairbanks, Alaska and where parking freezes are in effect. In the Northern Alaska Intrastate Region, the meteorological conditions peculiar to Fairbanks create the need to review annually nearly all new or modified parking facilities; accordingly none of the size thresholds in this particular plan has been changed. It is further proposed that in most cases the sections of the regulations now in effect for certain areas which require notification of the Administrator prior to construction of a

facility having from 50 to 249 spaces be deleted. The Administrator has determined that in most cases it is presently not practical or productive to require that parking construction and modification involving less than 250 spaces be subject to review and approval pursuant to the Management of Parking Supply regulations. A similar determination has been made regarding the notification procedures.

The Administrator is also proposing to delete language from the California regulation regarding consideration of the social and economic impact of a facility as part of the criteria for approval. Essentially the same protection is contained in the alternatives set forth in today's proposal.

The proposed regulations also set forth alternative analytical procedures which may be used to meet the air quality and VMT control criteria. The outline of the proposed alternatives is contained in the appendix section to the proposed regulation. These alternatives provide the applicant with additional flexibility by providing a choice of methodologies to be used for compliance with the air quality and VMT reduction goals specified by these regulations. The VMT minimization procedures described below particularly highlight this flexibility.

Various other minor modifications not intended to affect the substance of this regulation have also been included for purposes of clarification. For the most part these changes deal with matters of procedure or are specific modifications unique to specific areas.

Proposed Appendix to Parking Management Regulations. The proposed appendix sets forth two basic approaches for achieving the goals of parking management. These are a facility-by-facility review and a Parking Management plan. Either the Federal government or the local government can directly implement facility-by-facility review of applicable parking structures. Due to the nature of the planning process, however, only the state or local area can adequately develop a comprehensive parking management plan. Such a plan can interrelate future parking growth with the transit and land-use plans and other unique needs of the community.

The Administrator believes that the ultimate result of these regulations should be the development by local areas of parking management plans to replace the Federal Regulations. It is therefore this Agency's policy that Federal Regulations on new parking facilities shall be applicable only until such time as approvable local parking management plans are developed and implemented. Accordingly, Appendix B sets forth a clear explanation of current requirements and alternative approaches for facility-by-facility review which can be used until such plans are developed as well as guidelines for formulation of these local Parking Management Plans. EPA Regional Offices will encourage and assist local area governments in development of these plans.

Facility-by-Facility Review. The interim facility-by-facility parking review guidelines set forth in Appendix B are basically divided into methodologies to (1) demonstrate consistency with the area's VMT control strategy and (2) demonstrate noninterference with attainment and maintenance of the national carbon monoxide standards.

I. Consistency with Vehicle Miles Traveled (VMT) Control Strategy. An applicant can select from among three alternative methods to demonstrate consistency with the VMT control strategy. These methods include: certification that the proposed facility will result in a net decrease in VMT by its very nature, quantification of the vehicle miles traveled which will be associated with the new facility, and demonstration that the proposed parking facility is both needed by the community and that all reasonable measures are being taken to minimize the VMT associated with the proposed facility. By providing these three approaches the Administrator feels that an adequate amount of flexibility is provided to the applicant while not compromising the goals of the regulation.

A. Special Purpose VMT Reduction Facility—Owners/operators of special purpose parking facilities specifically developed to reduce VMT, such as park and ride lots, will not be required to develop detailed VMT generation models of the impact of their proposed facilities. The principal requirements for approval will be certification of the facility's purpose and presentation of some means to assure that the facility will not be used to serve some other function which might increase VMT.

B. Modeling—Where an applicant has available sufficient information regarding traffic patterns and prospective clientele, he can make relatively accurate projections of VMT changes by the use of origin and destination studies, gravity models and similar studies. If no increase in VMT is indicated by these calculations and the reviewing agency concurs in the accuracy of these projections, then the applicant will be considered to have demonstrated consistency with the VMT control strategy.

C. Employment of All Reasonable VMT Reduction Measures—Where an applicant can demonstrate the need for the proposed parking facility based on community goals and inadequacy of other transit modes, a program may be submitted stipulating measures to be employed to minimize the VMT impact of the proposed facility. If this plan can be shown to employ all reasonable measures to minimize the VMT impact, a precisely quantified VMT model will not be required.

Examples of reasonable measures to minimize VMT would include: various measures to encourage use of mass transit, carpool locators and a carpool priority system, rate schedules to discourage all day parkers and dial-a-bus or chartered buses in areas not served by regularly scheduled mass transit.

The procedure to be followed by the applicant includes three phases:

1. Explanation of the need for the proposed parking facility which takes into consideration the overall interests of the community and the adequacy of existing and proposed mass transit. This shall include a description of existing and proposed transit service as well as existing parking facilities.

2. Development of a plan employing all reasonable measures to minimize VMT.

3. Projection of new reduced parking space requirements based on effective operation of the plan described in step 2 above.

Appendix B stipulates certain VMT minimization measures which must be considered by the applicant in preparing the plan. Each such measure must be utilized, or an explanation provided as to why the measure is inappropriate or impossible to use.

Demonstration of Non-interference with Attainment of Carbon Monoxide Standard. The original regulations did not define a methodology for dealing with the impact of new parking facilities on carbon monoxide concentrations in the immediate area. The appendix proposed today sets forth a methodology for demonstration that a facility does not cause or exacerbate a violation of carbon monoxide standard. This methodology varies depending upon the size of the proposed facility.

A. Facilities having a capacity for 1,000 or more spaces—These facilities are subject to the same requirements as those facilities subject elsewhere to the Indirect Source Regulations. The applicant must demonstrate by means of the appropriate indirect source guidelines (Guidelines for the Review of the Impact of Indirect Sources on Ambient Air Quality, U.S. Environmental Protection Agency, OAQPS, July, 1974), a suitable diffusion model or other appropriate analytical technique that the traffic associated with the proposed facility will not result in a violation of carbon monoxide standards. Any model submitted by the applicant must take into consideration current and projected traffic counts and background air quality.

B. Facilities having capacity for less than 1,000 spaces—Smaller facilities not elsewhere subject to Indirect Source Regulations may not need the detailed modeling required of the larger structures. The Administrator has therefore determined that additional measures should be made available for applications pertaining to these facilities. The three alternatives available to the applicant specified in the appendix include: (1) Use of the appropriate Indirect Sources modeling scheme; (2) provision of acceptable air quality monitoring data to determine if modeling is necessary; or (3) submission of some other appropriate information to demonstrate that a violation of the carbon monoxide standard will not result from operation of the facility.

The second alternative could be used by many smaller facilities to satisfy the carbon monoxide review requirements through presentation of acceptable air quality data to demonstrate that a violation is not likely to occur. The Appendix

proposed today states that if acceptable monitoring data are provided demonstrating that the worst carbon monoxide level adjacent to the proposed facility is less than 75 percent of the standard, the applicant could satisfy the local carbon monoxide impact requirements without completing a modeling study. The 75 percent figure is an approximate number which lacks an adequate technical basis and additional study is needed. The Environmental Protection Agency is undertaking further analysis of the carbon monoxide parking facility relationship in order to develop a correlation between the background carbon monoxide levels and the size of the parking facility which may cause a carbon monoxide problem. The Administrator invites comments on the formation of this correlation. Following the final modification and promulgation of this option, an owner or operator will be able to use air quality data which satisfied the requirements of this option as a basis for approval. However, if monitoring data indicate that a violation can reasonably be expected to occur, the applicant will be required to comply with the modeling criteria discussed under subpart A.

The third alternative, demonstration that a carbon monoxide is unlikely to occur, is only applicable to a small number of facilities which are located in areas clearly recognized as being in no danger of having carbon monoxide violations now or in the foreseeable future.

Parking Management Plan. The appendix sets forth guidelines for development of a parking management plan as one component of an area's overall plan for development which focuses on the interrelationships of transportation and land use and specifically describes the manner in which the growth, location and operation of parking related facilities are to be kept consistent with air quality standards. The parking management plan (PMP) further must combine the "hot spot" carbon monoxide review and the areawide VMT review of individual facilities under a comprehensive plan, relating where appropriate to an Air Quality Maintenance Plan. This means that the plan can allow certain tradeoffs among different areas within its scope, and that the plan can include control measures that are not necessarily within the limited scope of a facility-by-facility review (such as zoning changes or changes in transit service).

This program is an option available only to state or local governments. The regulations provide that parking management plans are to be submitted to EPA by such governments to replace the interim facility-by-facility review. Though EPA will work with states and local areas developing such plans, the Agency will not unilaterally prepare parking management plans.

Local Participation. The regulations as originally promulgated were somewhat ambiguous as to the role a local community could play in implementing the facility-by-facility review or in developing and implementing a parking management plan. Parking facility review

can be implemented in three different ways:

(1) EPA Regional Offices can review applicable proposed facilities,

(2) EPA can delegate to a state or local governmental body the authority and responsibility to review applicable proposed facilities under these regulations, and

(3) State or local governments can develop a parking management plan for their area, which upon approval would replace the need for Federal or local action under the facility-by-facility review regulation. The proposed regulations specifically state that these three modes of implementation are available. It is especially the Administrator's desire that state and local governmental entities be encouraged to submit local parking Management Plans at any time, which would replace the EPA promulgated regulations whenever the local plan is approved and implemented.

A. Local Delegation. In the absence of an approved local comprehensive parking management plan, it is the Administrator's desire to delegate implementation of the EPA promulgated parking facility-by-facility review procedures to State and/or local governmental entities. Accordingly the proposed regulations provide that local governmental entities—typically city or county governments, Councils of Governments, local air pollution control agencies, or regional planning agencies—may submit a request to the Administrator to be delegated the authority to carry out the review of facilities and enforcement under the EPA-promulgated regulations. The Administrator may determine the conditions under which such a request is approved. Two conditions which must be met are that: (1) Any final action taken by the delegated agency must have legal authority so that its final actions will be legally binding in the jurisdiction in which the proposed facility is to be located, and (2) the agency must either possess legal authority to enforce any final actions, or be willing to enforce actions taken under the EPA promulgated regulation using authority delegated to it by the Administrator.

B. Local Parking Management Plans. EPA regards parking management plans as a means through which future parking growth can be correlated with transit plans and the growth needs of the community. Such correlation is best performed by local governments, through a comprehensive planning approach to environmental quality and development needs.

The Administrator realizes that local governments may prefer to implement a locally devised comprehensive management plan instead of the facility-by-facility review promulgated by EPA. In the proposed regulations local governments are encouraged to develop such plans. The Administrator will make every effort to approve locally submitted plans which meet the objectives of the EPA parking management plan regulations. In order for a local plan to

receive approval, the local governmental entity submitting the plan must have legal authority to enforce compliance with its requirements. Accordingly, it is anticipated that a city or county government, Council of Governments, or in some cases a regional planning agency or local air pollution control agency, will be the local governmental entity submitting a comprehensive parking management plan.

In California, several localities have begun the process of preparing parking management plans which reflect local situations. EPA has executed an inter-agency agreement with the Urban Mass Transportation Administration in the Department of Transportation to provide one-time financial assistance to selected regional transportation agencies to develop these plans as part of their overall regional transportation plans.

These agencies include the Metropolitan Transportation Commission in the San Francisco Bay area; the Southern California Association of Governments in the Los Angeles area; the Maricopa Association of Governments in the greater Phoenix area; and the Comprehensive Planning Organization in the San Diego area. Local jurisdictions will participate in the effort through these regional entities. Both in California and Arizona the regional transportation planning process has been successful, and EPA is encouraging these efforts by incorporating the Parking Management Plans as an element of the regional transportation planning process in these areas.

Exemption for General Construction Contracts. In the preamble to the indirect source promulgation of July 9, 1974, EPA stated: "In general, developers should assume that devices used in an attempt to evade review will be scrutinized carefully to determine whether a source actually subject to the regulation is commencing construction without the required approval." This applies equally to the Management of Parking Supply regulations.

In particular, the Administrator cautions against abuse of the exemption for "construction or modification for which a general construction contract was finally executed by all appropriate parties on or before January 1, 1975" which is set forth in the Management of Parking Supply regulations. The intent of this exemption is to treat a developer who has entered into a bona fide agreement with a general contractor for construction in the immediate future as being in the same position under the regulation's "grandfather clause" as a developer who actually commences on-site construction prior to January 1, 1975. This exemption was included in the regulation under the assumption that the execution of a general construction contract is one of the very last steps taken before construction will consider any significant lapse of time between execution of a contract during 1974 and actual commencement of construction in 1975 as strong evidence that

the contract may not be valid for purposes of the regulation's "grandfather clause."

It must be emphasized that the alternative procedures for demonstrating consistency with the VMT control strategies (such as presentation of a plan employing all reasonable measures to minimize VMT) and satisfying the local carbon monoxide criteria (the non-modelling options) are features only of this proposed amendment to the Environmental Protection Agency's regulations for the management of parking supply. The proposed options cannot be officially used to satisfy the requirements of this regulation until the proposal has been submitted to the public hearing and comment process, and subsequently promulgated. Proposed new facilities which require approval prior to the promulgation of the proposed amendments must comply with the more limited provisions of the existing regulations. In such cases, it will be necessary to provide information required under quantitative modelling procedures for carbon monoxide impact and similar computations (except for special purpose VMT reduction facilities such as park and ride lots) to demonstrate compliance with areawide vehicle miles traveled reduction strategies.

Owners or operators of all other proposed new facilities covered by these regulations, which do not require an approval/disapproval decision until after promulgation of the proposed regulation may begin developing applications in accordance with this proposal. Applications using proposed options cannot be officially submitted until this proposal has been promulgated. Environmental Protection Agency personnel will be available to aid owners or operators of proposed future parking facilities in developing applications which will meet the provisions of either the existing or proposed regulations.

The following portion of this notice includes the regulation changes proposed for the affected areas, and the proposed appendix. It should be noted that the regulation modifications for each state are presented twice; first as individual revisions and then as revisions incorporated in the context of the applicable state regulation. It is hoped that this format will assist the reader in more readily understanding the elements of this proposal.

Public hearings on this proposal will be held in the affected areas in the near future at times and places to be announced in local newspapers. These hearings will be held to both receive comment on the proposed amendments and to gather information on the status of local efforts to develop parking management plans. The Administrator is especially interested in the previous local actions which provide a foundation for parking management plan development and the areas in which the Federal government can assist the plan development process. Comments are also invited on the VMT minimization and carbon

monoxide monitoring options outlined in this proposal. Interested parties may also participate in this rulemaking by submitting written comments, preferably in triplicate, to Mr. Roger Strelow, Acting Assistant Administrator for Air and Waste Management, Attention: Transportation and Land Use Policy Office, AW-443, EPA, 401 M Street, SW., Washington, D.C. 20460.

A copy of all public comments will be available for inspection and copying at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street, SW., Washington, D.C. 20406.

All comments received on or before September 23, 1974.

42 U.S.C. 1857-5(c), 1857g

Dated: August 2, 1974.

JOHN QUARLES,
Acting Administrator.

Part 52 of Chapter I, Title 40, of the Code of Federal Regulations proposed to be amended as follows:

Subpart C—Alaska

§ 52.86 [Amended]

1. In § 52.86(a), subparagraph (1) is revised to read as follows:

(1) "Parking facility" (also called "facility") means any off-street area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

2. In § 52.86(a), subparagraphs (3), (4), and (5) are deleted and replaced by new subparagraphs (3) and (4) which read as follows:

(3) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection, or installation of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(4) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

3. In § 52.86(a), subparagraphs (6) and (7) are redesignated as subparagraphs (5) and (6) respectively.

4. In § 52.86(c), the first sentence in amended by inserting the words "on or after the word "commenced."

5. In § 52.86(e), subparagraph (4) is added to read as follows:

(4) The methodology for satisfying the requirements of paragraphs (e) (1) and (e) (2) of this section is explained in Appendix B.

6. In § 52.86(h), subparagraph (8) is added to read as follows:

(8) For any parking facility having capacity for 1000 or more motor vehicles,

certain additional information is required as is specified in Appendix B.

7. In § 52.86, paragraph (1) is added to read as follows:

(1) Each application shall be signed by the owner or operator of the facility whose signature shall constitute an agreement that the facility shall be constructed and operated in accordance with the information submitted in the application. In addition, the Administrator may prescribe reasonable construction and operating conditions to any permit granted. Such conditions shall be agreed to in writing by the applicant before any permit is granted by the Administrator.

8. In § 52.86, paragraph (j) is added to read as follows:

(j) (1) Within 20 days after receipt of an application, or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) of this paragraph shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, approved with conditions in accordance with paragraph (e) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(iii) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the parking facility will be situated, as follows: state and local air pollution control agencies, the chief executive of the city and county; and any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the

applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

9. In § 52.86, paragraph (k) is added to read as follows:

(k) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon a satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

10. In § 52.86, paragraph (1) is added to read as follows:

(1) (1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to the review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive and procedural provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(3) Upon the effective date of any approved local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

11. In § 52.86, paragraph (m) is added to read as follows:

(m) (1) A local governmental entity, local air pollution control agency, or regional planning agency may, upon request to the Administrator, be delegated the authority of the Administrator for purposes of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possesses legal authority to enforce any

final action taken by such entity or agency, or that it is willing to enforce the provisions of this section using authority delegated to it by the Administrator.

(II) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(III) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

12. In § 52.86, paragraph (n) is added to read as follows:

(n) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate a parking facility in accordance with conditions imposed by the Administrator or agency designed by him; any owner or operator who modifies a parking facility in violation of conditions imposed by the Administrator or agency designated by him; or any owner or operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved parking facility may be made without applying for permission pursuant to this section only where such modification would not violate any condition imposed pursuant to paragraph (1) of this section and would not be subject to the modification criteria set forth in paragraph (c) (2) of this section.

Subpart D—Arizona

§ 52.139 [Amended]

13. In § 52.139(a), subparagraph (1) is revised to read as follows:

(1) "Parking facility" (also called "facility") means any offstreet area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

14. In § 52.139(a), subparagraph (3), (4) and (5) are deleted. New subparagraphs (3) and (4) are added to read as follows:

(3) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection, or installation of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(4) The phrase "to commence modification" means to engage in a continuous

program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

15. In § 52.139, paragraph (b) is revised to read as follows:

(b) This section is applicable to Pima and Maricopa Counties.

16. In § 52.139(c), the first sentence is amended by inserting the words "on or" after the word "commenced."

17. In § 52.139(c) (1) the number "50" is revised to read "250."

18. In § 52.139(c) (2), the number "50" is revised to read "250."

19. In § 52.139(d), the following sentence is added at the end of the paragraph to read as follows:

This section does not apply to any parking facility constructed or operated with a residential buildings or buildings for the primary use of residents of such building(s), nor does it apply to any parking facility to be constructed by a religious organization and to be used solely for religious purposes (not including high schools and college-level education).

20. In § 52.139(e), subparagraph (3) is added to read as follows:

(3) The methodology for satisfying the requirements of paragraphs (e) (1) and (e) (2) of this section is explained in Appendix B.

21. In § 52.139 the existing paragraph (g) is deleted.

22. In § 52.139, paragraph (h) is redesignated as paragraph (g) and the first sentence is revised to read as follows:

(g) All applications under this section shall include the following information unless the applicant has received a waiver from the Administrator or agency approved by him.

23. In § 52.139(g), a new subparagraph (8) is added to read as follows:

(8) For any parking facility having capacity for 1000 or more motor vehicles, certain additional information is required as is specified in Appendix B.

24. In § 52.139, a new paragraph (h) is added to read as follows:

(h) Approval to construct or modify under paragraphs (a) through (g) of this section shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon a satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

25. In § 52.139 paragraph (i) is revised to read as follows:

(i) Each application shall be signed by the owner or operator of the facility whose signature shall constitute an agreement that the facility shall be constructed and operated in accordance with the information submitted in the application. In addition, the Administrator may prescribe reasonable construction and operating conditions to any permit granted. Such conditions shall be agreed to in writing by the ap-

plicant before any permit is granted by the Administrator.

26. In § 52.139, paragraph (j) is revised to read as follows:

(j) (1) Within 20 days after receipt of an application, or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) of this paragraph shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, approved with conditions in accordance with paragraph (e) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(iii) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the parking facility will be situated, as follows: State and local air pollution control agencies, the chief executive of the city and county; and any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

27. In § 52.139, paragraph (k) is revised to read as follows:

(k)(1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to the review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive and procedural provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(iv) The plan has been reviewed by the appropriate 3C transportation planning agency.

(3) Upon the effective date of any approved local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

28. In § 52.139, paragraph (m) is added to read as follows:

(m)(1) A local governmental entity, local air pollution control agency, or regional planning agency may, upon request to the Administrator, be delegated the authority of the Administrator for purposes of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possesses legal authority to enforce any final action taken by such entity or agency, or that it is willing to enforce the provisions of this section using authority delegated to it by the Administrator.

(ii) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(iii) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

29. In § 52.139, paragraph (n) is added to read as follows:

(n) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate a parking facility in accordance with conditions imposed by the Administrator or agency designed by him; any owner or operator who modifies a parking facility in violation of conditions imposed

by the Administrator or agency, designated by him; or any owner or operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved parking facility may be made without applying for permission pursuant to this section only where such modification would not violate any condition imposed pursuant to paragraph (i) of this section and would not be subject to the modification criteria set forth in paragraph (c) (2) of this section.

Subpart F—California

§ 52.251 [Amended]

30. In § 52.251(a), subparagraph (1) is revised to read as follows:

(1) "Parking facility" (also called "facility" means any off-street area of space, lot, garage, building or structure, or combinations or portion thereof, in or on which motor vehicles are parked.

31. In § 52.251(a), subparagraphs (3) and (4) are revised to read as follows:

(3) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection or installation of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(4) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

32. In § 52.251(a), subparagraph (5) is deleted.

33. In § 52.251(c), the first sentence is amended by deleting the words "paragraphs (d) through (f) of" and by inserting the words "on or" after the word "commenced."

34. In § 52.251(e), the word "either" in the first sentence is deleted; subparagraphs (1) and (2) are deleted; subparagraph (3) (i) is redesignated as subparagraph (1); subparagraph (3) (ii) is redesignated subparagraph (2); a new subparagraph (3) is added to read as follows:

(3) Satisfaction of the requirements provided in Appendix B shall serve to fulfill all requirements of subparagraphs (e) (1) and (e) (2) of this section.

35. In § 52.251(f) subparagraph (10) is revised to read as follows:

(10) An estimate of the net change

in VMT associated with the operation of the proposed facility.

36. In § 52.251(f) subparagraph (12) is added to read as follows:

(12) For any parking facility having capacity for 1000 or more motor vehicles, certain additional information is required as specified in Appendix B.

37. In § 52.251 paragraph (h) is revised to read as follows:

(h) Each application shall be signed by the owner or operator of the facility whose signature shall constitute an agreement that the facility shall be constructed and operated in accordance with the information submitted in the application. In addition, the Administrator may prescribe reasonable construction and operating conditions to any permit granted. Such conditions shall be agreed to in writing by the applicant before any permit is granted by the Administrator.

38. In § 52.251, paragraph (i) is revised to read as follows:

(i)(1) Within 20 days after receipt of an application, or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, approved with conditions in accordance with paragraph (e) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(iii) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination in the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the parking facility will be situated, as follows: state and local air pollution control agencies, the chief executive of the city and county; and any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in

making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

39. In § 52.251, paragraphs (j) and (k) are deleted.

40. In § 52.251, a new paragraph (j) is added to read as follows:

(j) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon a satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

41. In § 52.251, paragraph (l) is redesignated as paragraph (k) and revised to read as follows:

(k)(1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to the review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(iv) The provisions of the plan are consistent with the 3-C transportation plan for the area involved.

(3) Upon a date specified by the Administrator in his approval of a local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

42. In § 52.251, a new paragraph (l) is added to read as follows:

(l)(1) A local governmental entity, local air pollution control agency, or re-

gional planning agency may, upon request to the Administrator, be delegated the authority of the Administrator for purposes of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possesses legal authority to enforce any final action taken by such entity or agency using authority delegated to it by the Administrator.

(ii) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(iii) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

43. In § 52.251 paragraph (m) the internal reference to paragraph (l) is revised to read paragraph (k); the reference to paragraph (k) is revised to read paragraph (j).

44. In § 52.251, paragraph (n) is added to read as follows:

(n) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate a parking facility in accordance with conditions imposed by the Administrator or agency designated by him; any owner or operator who modifies a parking facility in violation of conditions imposed by the Administrator or agency designated by him; or any owner or operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975 without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act.

Subpart J—District of Columbia

§ 42.493 [Amended]

45. In § 52.493(a), subparagraph (1) is revised to read as follows:

(1) "Parking facility" (also called "facility") means any off-street area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

46. In § 52.493(a), subparagraphs (3) and (4) are revised to read as follows:

(3) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection, or installation of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be

disregarded in determining whether a construction or modification program is continuous.

(4) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

47. In § 52.493(a), subparagraph (5) is deleted.

48. In § 52.493(c), the first sentence is amended by inserting the words "on or" after the word "commenced."

49. In § 52.493(e), subparagraph (3) is added to read as follows:

(3) The methodology for satisfying the requirements of paragraphs (e)(1) and (e)(2) of this section is explained in Appendix B.

50. In § 52.493(f), the following phrase is added after the word "information": "unless the applicant has received a waiver from the Administrator or agency approved by him."

51. In § 52.493(f), subparagraph (13) is added to read as follows:

(13) For any parking facility having capacity for 1000 or more motor vehicles, certain additional information is required as is specified in Appendix B.

52. In § 52.493 paragraph (g) is revised to read as follows:

(g) Each application shall be signed by the owner or operator of the facility whose signature shall constitute an agreement that the facility shall be constructed and operated in accordance with the information submitted in the application. In addition, the Administrator may prescribe reasonable construction and operating conditions to any permit granted. Such conditions shall be agreed to in writing by the applicant before any permit is granted by the Administrator.

53. In § 52.493, paragraph (h) is revised to read as follows:

(h)(1) Within 20 days after receipt of an application or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) of this paragraph shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, approved with conditions in accordance with paragraph (e) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(iii) Notify the public, by prominent advertisement in a newspaper of general

circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the parking facility will be situated, as follows: State and local air pollution control agencies, the chief executive of the city and county; and any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

54. In § 52.493, paragraph (1) is added to read as follows:

(1) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon a satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

55. In § 52.493, paragraph (j) is added to read as follows:

(j) (1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to the review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive and pro-

cedural provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(3) Upon the effective date of any approved local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

56. In § 52.493, paragraph (k) is added to read as follows:

(k) (1) A local governmental entity, local air pollution control agency, or regional planning agency may, upon request to the Administrator, be delegated the authority of the Administrator for purposes of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possesses legal authority to enforce any final action taken by such entity or agency, or that it is willing to enforce the provisions of this section using authority delegated to it by the Administrator.

(ii) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(iii) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

57. In § 52.493, paragraph (1) is added to read as follows:

(1) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate a parking facility in accordance with conditions imposed by the Administrator or agency designed by him; any owner or operator who modifies a parking facility in violation of conditions imposed by the Administrator or agency designated by him; or any owner or operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved parking facility may be made without applying for permission pursuant to this section only where such modification would not violate any condition imposed pursuant to paragraph (g) of this section and would not be subject to the modification criteria set forth in paragraph (c) (2) of this section.

Subpart V—Maryland

§ 52.1103 [Amended]

58. In § 52.1103(a), subparagraph (1) is revised to read as follows:

(1) "Parking facility" (also called "facility") means any off-street area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

59. In § 52.1103(a), subparagraphs (3) and (4) are revised to read as follows:

(3) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection, or installation of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(4) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

60. In § 52.1103(a), subparagraph (5) is deleted.

61. In § 52.1103(c), the first sentence is amended by inserting the words "on or" after the word "commenced."

62. In § 52.1103(e), subparagraph (3) is added to read as follows:

(3) The methodology for satisfying the requirements of paragraphs (e) (1) and (e) (2) of this section is explained in Appendix B.

63. In § 52.1103(f), the following phrase is added after the word "information":

"; unless the applicant has received a waiver from the Administrator or agency approved by him."

64. In § 52.1103(f), subparagraph (13) is added to read as follows:

(13) For any parking facility having capacity for 1000 or more vehicles, certain additional information is required as is specified in Appendix B.

65. In § 52.1103 paragraph (g) is revised to read as follows:

(g) Each application shall be signed by the owner or operator of the facility whose signature shall constitute an agreement that the facility shall be constructed and operated in accordance with the information submitted in the application. In addition, the Administrator may prescribe reasonable construction and operating conditions to any permit granted. Such conditions shall be agreed to in writing by the applicant before any permit is granted by the Administrator.

66. In § 52.1103, paragraph (h) is revised to read as follows:

(h) (1) Within 20 days after receipt of an application or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) of this paragraph shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, approved with conditions in accordance with paragraph (e) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determinations; and

(iii) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the parking facility will be situated, as follows: state and local air pollution control agencies, the chief executive of the city and county; and any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

67. In § 52.1103, paragraph (i) is added to read as follows:

(i) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon a satisfactory showing

that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

68. In § 52.1103, paragraph (j) is added to read as follows:

(j) (1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to the review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive and procedural provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(3) Upon the effective date of any approved local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

69. In § 52.1103, paragraph (k) is added to read as follows:

(k) (1) A local governmental entity, local air pollution control agency, or regional planning agency may, upon request to the Administrator, be delegated the authority of the Administrator for purpose of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possess legal authority to enforce any final action taken by such entity or agency, or that it is willing to enforce the provisions of this section using authority delegated to it by the Administrator.

(ii) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(iii) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

70. In § 52.1103, paragraph (1) is added to read as follows:

(1) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate a parking facility in accordance with conditions imposed by the Administrator or agency designated by him; any owner or operator who modifies a parking facility in violation of conditions imposed by the Administrator or agency designated by him; or any owner or operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975 without applying for and

receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved parking facility may be made without applying for permission pursuant to this section only where such modification would not violate any condition imposed pursuant to paragraph (g) of this section and would not be subject to the modification criteria set forth in paragraph (c) (2) of this section.

Subpart V—Maryland

§ 52.1111 [Amended]

71. In § 52.1111(a), subparagraph (1) is revised to read as follows:

(1) "Parking facility" (also called "facility") means any off-street area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

72. In § 52.1111(a), subparagraphs (3), (4), and (5) are deleted and replaced by subparagraphs (3) and (4) to read as follows:

(3) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection, or installation of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(4) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

73. In § 52.1111(c), the first sentence is amended by deleting the words "paragraphs (d) through (i) of" and by inserting the words "on or" after the word "commenced."

74. In § 52.1111(e), subparagraph (3) is added to read as follows:

(3) The methodology for satisfying the requirements of subparagraphs (c) (1) and (c) (2) of this section is explained in Appendix B.

75. In § 52.1111(f), subparagraph (12) is added to read as follows:

(12) For any parking facility having capacity for 1000 or more motor vehicles, certain additional information is required as is specified in Appendix B.

76. In § 52.1111 paragraph (h) is revised to read as follows:

(h) Each application shall be signed by the owner or operator of the facility whose signature shall constitute an agreement that the facility shall be constructed and operated in accordance with the information submitted in the application. In addition, the Administrator may prescribe reasonable construction and operating conditions to any permit granted. Such conditions shall be

agreed to in writing by the applicant before any permit is granted by the Administrator.

77. In § 52.1111, paragraph (1) is revised to read as follows:

(1) (1) Within 20 days after receipt of an application, or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) of this paragraph shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, approved with conditions in accordance with paragraph (e) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(iii) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the parking facility will be situated, as follows state and local air pollution control agencies; the chief executive of the city and county; and any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one loca-

tion in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

78. In § 52.1111 paragraphs (j) and (k) are revised as follows:

(j) (1) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon a satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

(k) (1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to the review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive and procedural provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(3) Upon the effective date of any approved local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

79. In § 52.1111, paragraph (1) is added to read as follows:

(1) (1) a Local governmental entity, local air pollution control agency or regional planning agency may, upon request to the Administrator, be delegated the authority of the Administrator for purposes of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possesses legal authority to enforce any final action taken by such entity or agency, or that it is willing to enforce the provisions of this section using authority delegated to it by the Administrator.

(ii) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(iii) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

80. In § 52.1111, paragraph (m) is added to read as follows:

(m) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or oper-

ator who fails to construct and operate a parking facility in accordance with conditions imposed by the Administrator or agency designed by him; any owner or operator who modifies a parking facility in violation of conditions imposed by the Administrator or agency designated by him; or any owner or operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved parking facility may be made without applying for permission pursuant to paragraph (h) of this section only where such modification would not violate any condition imposed pursuant to paragraph (c) (2) of this section.

Subpart W—Massachusetts

§§ 52.1128, 52.1135 and 52.1136 [Amended]

81. In § 52.1135(a), subparagraphs (1), (2), and (4) are deleted and replaced by new subparagraphs (1) and (2) to read as follows:

(1) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection, or installation of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(2) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

82. In § 52.1135(a), subparagraphs (5) through (12) are redesignated as subparagraphs (3) through (10) respectively.

83. In § 52.1135(a), the newly redesignated subparagraph (3) is revised to read as follows:

(3) "Parking facility" means any off-street area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

84. In § 52.1135(c), the internal references to subparagraph "(a) (6)" are revised to read "(a) (4)". In subparagraph (3), the internal reference to paragraphs "(h) and (k)" is revised to read "(r) and (u)".

85. In § 52.1135, paragraph (d) is revised to read as follows:

(d) The requirements of this section are applicable to the following parking facilities in the areas specified in paragraph (b) of this section, the construc-

tion or modification of which is commenced on or after January 1, 1975.

(1) Within the freeze area, any new parking facility with parking capacity for 50 or more motor vehicles, or any parking facility that will be modified to increase parking capacity by 50 or more motor vehicles;

(2) Outside the freeze area, any new parking facility with parking capacity for 250 or more motor vehicles, or any parking facility that will be modified by 250 or more motor vehicles; and

(3) Any parking facility constructed or modified in increments which individually are not subject to review under this section, but which, when all such increments occurring since January 1, 1975, are added together, as a total would subject the facility to review under this section.

86. In § 52.1135, paragraphs (g), (h), (i), (j), (k), and (l) are redesignated as paragraphs (q), (r), (s), (t), (u), and (v), respectively. Paragraph (f) is redesignated as paragraph (g) and paragraph (e) is redesignated as paragraph (f). Internal paragraph references are revised as follows:

a. In § 52.1135 (r), "(k)" to "(u)".

b. In § 52.1135 (s), "(h)" to "(r)".

c. In § 52.1135 (t), "(h)" to "(r)" and "(i)" to "(s)".

d. In § 52.1135 (u), "(d) and (e)" to "(d), (e), and (f)".

87. In § 52.1135, a new paragraph (e) is added to read as follows:

(e) No person shall commence construction or modification of any facility subject to this section without first obtaining written approval from the Administrator or an agency designated by him; provided that this paragraph shall not apply to any proposed construction or modification for which a general construction contract was finally executed by all appropriate parties on or before January 1, 1975.

88. In § 52.1135, the newly redesignated paragraph (f) is revised as follows: The dates "August 15, 1973" are revised to read "October 15, 1973"; and the word "commercial" is inserted before the words "parking facility" and again before the words "existing facility" in the first sentence; the word "permit" is changed to "approval" in the first sentence; and the reference to paragraph "(d)" is revised to read paragraph "(e)".

89. In § 52.1135, the newly redesignated paragraph (g) is revised to read as follows:

(g) No approval to construct or modify a facility requiring the permit described in paragraph (d) of this section shall be granted unless the applicant shows to the satisfaction of the Administrator or an agency approved by him that:

(1) The design or operation of the facility will not cause a violation of the control strategy which is a part of the applicable implementation plan and will be consistent with the plan's VMT reduction goals.

(2) The emissions resulting from the design or operation of the facility will

not prevent or interfere with the attainment or maintenance of any national ambient air quality standard at any time within 10 years from the date of application.

(3) Construction or modification of the facility will comply with the requirements of paragraphs (r) and (u) of this section.

(4) The methodology for satisfying the requirements of paragraph (g) (1) and (g) (2) of this section is explained in Appendix B.

90. In § 52.1135, a new paragraph (h) is added to read as follows:

(h) All applications for approval under this section shall include the following information unless the applicant has received a waiver from the Administrator or agency approved by him:

(1) Name and address of the applicant.

(2) Location and description of the parking facility.

(3) A proposed construction schedule.

(4) The normal hours of operation of the facility and the enterprises and activities that it serves.

(5) The total motor vehicle capacity before and after the construction or modification of the facility.

(6) The number of people using or engaging in enterprises or activities that the facility will serve on a daily basis and a peak hour basis.

(7) A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the facility. Such projection shall include data concerning the availability of mass transit from such areas.

(8) An estimate of the average and peak hour vehicle trip generation rates, before and after construction or modification of the facility.

(9) An estimate of the effect of the facility on traffic pattern and flow.

(10) An estimate of the effect of the facility on total VMT for the air quality control region.

(11) An analysis of the effect of the facility on site and regional air quality, including a showing that the facility will be compatible with the applicable implementation plan, and that the facility will not cause any national air quality standard to be exceeded within 10 years from date of application. The Administrator may prescribe a standardized screening technique to be used in analyzing the effect of the facility on ambient air quality.

(12) In the event the facility contains employee parking spaces, the parking space/employee ratio that will occur as a result of construction or modification of the facility.

(13) Additional information, plans, specification, or documents as required by the Administrator.

(14) For any parking facility having capacity for 1000 or more motor vehicles, certain additional information is required as is specified in Appendix B.

91. In § 52.1135, a new paragraph (i) is added to read as follows:

(i) Each applicant shall be signed by the owner or operator of the facility, whose signature shall constitute an

agreement that the facility shall be constructed or operated in accordance with the information submitted in the application. In addition, the Administrator may prescribe reasonable construction and operating conditions to any permit granted. Such conditions shall be agreed to in writing by the applicant before any permit is granted by the Administrator.

92. In § 52.1135, a new paragraph (j) is added to read as follows:

(j) (1) Within 20 days after receipt of an application, or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) of this paragraph shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, approved with conditions in accordance with paragraph (f) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(iii) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the parking facility will be situated, as follows: State and local air pollution control agencies; the chief executive of the city and county; and any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the

application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

93. § 52.1135, a new paragraph (k) is added to read as follows:

(k) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon a satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

94. In § 52.1135, a new paragraph (l) is added to read as follows:

95. (1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to the review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive and procedural provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(3) Upon the effective date of any approved local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

96. In § 52.1135, a new paragraph (m) is added to read as follows:

(m) (1) A local governmental entity, local air pollution control agency, or regional planning agency may, upon request to the Administrator, be delegated the authority of the Administrator for purposes of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possesses legal authority to enforce any final action taken by such entity or agency, or that it is willing to enforce the provisions of this section using authority delegated to it by the Administrator.

(ii) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(iii) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

97. In § 52.1135 a new paragraph (n) is added to read as follows:

(n) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate a parking facility in accordance with conditions imposed by the Administrator or agency designated by him; any owner or operator who modifies a parking facility in violation of conditions imposed by the Administrator or agency designated by him; or any owner or operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved parking facility may be made without applying for permission pursuant to this section only where such modification would not violate any condition imposed pursuant to paragraph (i) of this section and would not be subject to the modification criteria set forth in paragraph (d)(2) of this section.

98. In § 52.1135, paragraph (o) is added to read as follows:

(o) Outside the freeze area, for any new parking facility with parking capacity for 50 to 249 motor vehicles, any facility which will be modified to increase parking capacity by 50 or more motor vehicles, and any facility constructed or modified in increments which individually are not subject to review under this paragraph, but which, when all such increments occurring since January 1, 1975, are added together, as a total would subject the facility to review under this paragraph, no person shall commence construction or modification without first furnishing to the Administrator or any agency designated by him, the information required by paragraphs (h)(1) through (h)(5) of this section. No approval will be required unless the determination specified in paragraph (p) of this section is made.

99. In § 52.1135, paragraph (p) is added to read as follows:

(p) If the Administrator, or an agency designated by him, determines, and gives prominent public notice of such determination, that construction of parking facilities having parking capacity for 50 to 249 motor vehicles outside the freeze area, or modification of parking facilities to parking capacity for 50 or more motor vehicles outside the freeze area, in any geographical subdivision of the areas specified in paragraph (b) of this section, is having or is likely to have a significant detrimental effect on the control strategies in this transportation control plan or on air quality, he may require approval by him, pursuant to the procedures in

paragraphs (e) through (k) of this section prior to construction or modification of any such facilities in such a subdivision. The Administrator shall approve an application unless he determines that the facility to be constructed would either in itself or when viewed as part of a pattern of development have a significant adverse impact on the applicable transportation control strategy.

100. In § 52.1135, the newly redesignated paragraph (s) is amended by adding subparagraph (5) to read as follows:

(5) Commencing January 1, 1976, each employer shall annually report to the Administrator the number of employees within his facility(ies), the number of employee parking spaces he provides, and the ratio of parking spaces to employees.

101. In § 52.1128(b), (4), the following phrase is inserted after the words "From Fresh Pond": "to Porter Square, from Porter Square along the Cambridge City Limits"

102. In § 52.1136 as amended on January 15, 1974, (39 FR 1848), the first sentence in paragraph (b) is amended by inserting the word "commercial" before the words "parking facility".

103. In § 52.1136 as amended on January 15, 1974, (39 FR 1848), the first sentence in paragraph (c) is amended by inserting the word "commercial" before the words "parking facility".

104. In § 52.1136 as amended on January 15, 1974, (39 FR 1848), the first sentence in paragraph (d) is amended by inserting the word "commercial" before the words "parking facility".

105. In § 52.1136 as amended on January 15, 1974, (39 FR 1848), a new paragraph (e) is added to read as follows:

(e) Exemptions to this regulation shall be granted to residential parking facilities, as defined in subparagraph (a) (5) of Section 52.1135.

106. In § 52.1136 as amended on January 15, 1974, (39 FR 1848), a new paragraph (f) is added to read as follows:

(f) The City of Boston or any political subdivision or administrative bodies having jurisdiction over any off-street commercial parking facilities within the core area shall submit to the Administrator prior to December 31, 1974, a detailed compliance schedule indicating the steps it will take to enforce the parking reduction required by this section. Such schedule shall include as a minimum the following:

(1) Designation of one or more agencies responsible for the administration and enforcement of the program; and

(2) the procedures by which the designated agency will enforce the prohibition provided for in paragraph (c) of this section.

Subpart FF—New Jersey

§ 52.1583 [Amended]

107. In § 52.1583(a), subparagraph (2) is revised to read as follows:

(2) "Parking facility" (also called "facility") means any off-street area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

PROPOSED RULES

108. In § 52.1588(a), subparagraph (4) and (5) are revised to read as follows:

(4) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection or installation of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(5) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

109. In § 52.1588(a) subparagraph 6 is deleted.

110. In § 52.1588(c), the first sentence is amended by inserting the words "on or" after the word "commenced."

Administrator or an agency designated by him that the facility will be used for "residential parking only."

111. In § 52.1588(c), (1) the number "50" is revised to read "250."

112. In § 52.1588(c), subparagraph (2) is revised to read as follows:

(2) Any existing parking facility that will be modified to increase parking capacity by 250 or more motor vehicles, and

113. In § 52.1588(c), subparagraph (3) is added to read as follows:

(3) The methodology for satisfying the requirements of subparagraphs (e) (1) and (e) (2) of this section, are explained in Appendix B.

114. In § 52.1588, paragraph (g) is revised to read as follows:

(g) All applications under this section shall include the following information unless the applicant has received a waiver from the Administrator or agency approved by him:

115. In § 52.1588(g), subparagraph (8) is added to read as follows:

(8) For any parking facility having capacity for 1000 or more motor vehicles, certain additional information is required as is specified in Appendix B.

116. In § 52.1588, paragraph (h) is revised to read as follows:

(h) Each application shall be signed by the owner or operator of the facility whose signature shall constitute an agreement that the facility shall be constructed and operated in accordance with the information submitted in the application. In addition, the Administrator may prescribe reasonable construction and operating conditions to any permit granted. Such conditions shall be agreed to in writing by the applicant before any permit is granted by the Administrator.

117. In § 52.1588, paragraph (i) is revised to read as follows:

(i) (1) Within 20 days after receipt of an application or addition thereto, the Administrator shall advise the owner or

operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) of this paragraph shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, approved with conditions in accordance with paragraph (e) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(iii) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the parking facility will be situated, as follows: state and local air pollution control agencies; the chief executive of the city and county; and any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

118. In § 52.1588, paragraph (j) is added to read as follows:

(j) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon a satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

119. In § 52.1588, paragraph (k) is added to read as follows:

(k) (1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to the review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive and procedural provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(3) Upon the effective date of any approved local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

120. In § 52.1588, paragraph (l) is added to read as follows:

(l) (1) A local governmental entity, local air pollution control agency, or regional planning agency may, upon request to the Administrator, be delegated the authority of the Administrator for purposes of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possesses legal authority to enforce any final action taken by such entity or agency, or that it is willing to enforce the provisions of this section using authority delegated to it by the Administrator.

(ii) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(iii) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

121. In § 52.1588, paragraph (m) is added to read as follows:

(m) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate a parking facility in accordance with conditions imposed by the Admin-

istrator or agency designated by him; any owner or operator who modifies a parking facility in violation of conditions imposed by the Administrator or agency designated by him; or any owner or operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved parking facility may be made without applying for permission pursuant to this section only where such modification would not violate any condition imposed pursuant to paragraph (h) of this section and would not be subject to the modification criteria set forth in paragraph (c) (2) of this section.

Subpart NN—Pennsylvania

§ 52.2040 [Amended]

122. In § 52.2040(a), subparagraph (1) is revised to read as follows:

(1) "Parking facility" (also called "facility") means any off-street area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

123. In § 52.2040(a), subparagraphs (3) and (4) are revised to read as follows:

(3) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection, or installation of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(4) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

124. In § 52.2040(a) subparagraph (5) is deleted and subparagraph (6) is redesignated as subparagraph (5).

125. In § 52.2040(c), the first sentence is amended by inserting the words "on or" after the word "commenced."

126. In § 52.2040(c), (1) the number "50" is revised to read "250."

127. In § 52.2040(c), subparagraph (2) is revised to read as follows:

(2) Any parking facility that will be modified to increase parking capacity by 250 or more motor vehicles,

128. In § 52.2040(c), subparagraph (3) is added to read as follows:

(3) The methodology for the satisfying requirements of paragraphs (c)(1) and (c)(2) of this section is explained in Appendix B.

129. In § 52.2040, paragraph (g) is revised to read as follows:

(g) All applications under this section shall include the following information unless the applicant has received a waiver from the Administrator or agency approved by him."

130. In § 52.2040(g), subparagraph (8) is added to read as follows:

(8) For any parking facility having capacity for 1000 or more motor vehicles, certain additional information is required as is specified in Appendix B.

131. In § 52.2040, paragraph (h) is deleted.

132. In § 52.2040, paragraph (i) is redesignated as paragraph (h), and revised to read as follows:

(h) Each application shall be signed by the owner or operator of the facility, whose signature shall constitute an agreement that the facility shall be constructed and operated in accordance with the information submitted in the application. In addition, the Administrator may prescribe reasonable construction and operating conditions to any permit granted. Such conditions shall be agreed to in writing by the applicant before any permit is granted by the Administrator.

133. In § 52.2040, paragraph (j) is redesignated as paragraph (i) and revised to read as follows:

(i) (1) Within 20 days after receipt of an application or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) of this paragraph shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, approved with conditions in accordance with paragraph (e) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(iii) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the parking facility will be situated, as follows: State and local air pollution control agencies; the chief executive of the city and county; and

any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

134. In § 52.2040, a new paragraph (j) is added to read as follows:

(j) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon a satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

135. In § 52.2040, paragraph (k) is added to read as follows:

(k) (1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive and procedural provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(3) Upon the effective date of any approved local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

136. In § 52.2040, paragraph (l) is added to read as follows:

(l) (1) A local governmental entity, local air pollution control agency, or regional planning agency may, upon re-

quest to the Administrator, be delegated the authority of the Administrator for purposes of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possesses legal authority to enforce any final action taken by such entity or agency, or that it is willing to enforce the provisions of this section using authority delegated to it by the Administrator.

(ii) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(iii) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

137. In § 52.2040, paragraph (m) is added to read as follows:

(m) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate a parking facility in accordance with conditions imposed by the Administrator or agency designated by him; or any owner or operator who modifies a parking facility in violation of conditions imposed by the Administrator or agency designated by him; or any operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved parking facility may be made without applying for permission pursuant to this section only where such modification would not violate any condition imposed pursuant to paragraph (h) of this section and would not be subject to the modification criteria set forth in paragraph (c) (2) of this section.

Subpart SS—Texas

§ 52.2295 [Amended]

138. In § 52.2295(a), subparagraph (1) is revised to read as follows:

(1) "Parking facility" (also called "facility") means any off-street area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

139. In § 52.2295(a), subparagraphs (3) and (4) are revised to read as follows:

(3) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection, or installation

of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(4) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

140. In § 52.2295(a), subparagraph (5) is deleted.

141. In § 52.2295(c), the first sentence is amended by inserting the words "on or" after the word "commenced."

142. In § 52.2295(e), subparagraph (3) is added to read as follows:

(3) The methodology for satisfying the requirements of paragraphs (e) (1) and (c) (2) of this section is explained in Appendix B.

143. In § 52.2295(f), the following phrase is added after the word "information":

"unless the applicant has received a waiver from the Administrator or agency approved by him."

144. In § 52.2295(f), subparagraph (13) is added to read as follows:

(13) For any parking facility having capacity for 1000 or more motor vehicles, certain additional information is required as is specified in Appendix B.

145. In § 52.2295 paragraph (g) is revised to read as follows:

(g) Each application shall be signed by the owner or operator of the facility whose signature shall constitute an agreement that the facility shall be constructed and operated in accordance with the information submitted in the application. In addition, the Administrator may prescribe reasonable construction and operation conditions to any permit granted. Such conditions shall be agreed to in writing by the applicant before any permit is granted by the Administrator.

146. In § 52.2295, paragraphs (h), (i), (j), and (k) are deleted and replaced by a new paragraph (h) to read as follows:

(h) (1) Within 20 days after receipt of an application, or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) of this paragraph shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, approved with conditions in accordance with paragraph (e) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed,

a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(iii) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment of the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance of the location where the parking facility will be situated, as follows: State and local air pollution control agencies; the chief executive of the city and county; and any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

147. In § 52.2295, a new paragraph (i) is added to read as follows:

(i) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such a time period upon a satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

148. In § 52.2295, a new paragraph (j) is added as follows:

(j) (1) A local governmental entity, local air pollution control agency, or regional planning agency may, upon request to the Administrator, be delegated

the authority of the Administrator for the purposes of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possesses legal authority to enforce any final action taken by such entity or agency, or that it is willing to enforce the provisions of this section using authority delegated to it by the Administrator.

(ii) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(iii) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

149. In § 52.2295, paragraph (l) is redesignated as paragraph (k) revised to read as follows:

(k)(1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to the review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive and procedural provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(3) Upon the effective date of any approved local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

150. In § 52.2295, a new paragraph (1) is added to read as follows:

(1) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate a parking facility in accordance with conditions imposed by the Administrator or agency designated by him; any owner or operator who modifies a parking facility in violation of conditions imposed by the Administrator or agency designated by him; or any owner or operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved parking facility may be made without applying for permission pursuant to this section only where such

modification would not violate any condition imposed pursuant to paragraph (9) of this section and would not be subject to the modification criteria set forth in paragraph (c) (2) of this section.

Subpart VV—Virginia

§ 52.2443 [Amended]

151. In § 52.2443(a), subparagraph (1) is revised to read as follows:

(1) "Parking facility" (also called "facility") means any off-street area or space, lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are parked.

152. In § 52.2443(a), subparagraphs (3) and (4) are revised to read as follows:

(3) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for a parking facility in preparation for the fabrication, erection, or installation of the building components of the facility. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(4) The phrase "to commence modification" means to engage in a continuous program of on-site modification including site clearance, grading, dredging, or land filling in preparation for a specific modification of the parking facility.

153. In § 52.2443(a), subparagraph (5) is deleted.

154. In § 52.2443(c), the first sentence is amended by inserting the words "on or" after the word "commenced."

155. In § 52.2443, paragraph (g) is revised to read as follows:

(g) Each application shall be signed by the owner or operator of the facility, whose signature shall constitute an agreement that the facility shall be constructed and operated in accordance with the information submitted in the application. In addition the Administrator may prescribe reasonable construction and operating conditions to any permit granted. Such conditions shall be agreed to in writing by the applicant before any permit is granted by the Administrator.

156. In § 52.2443(f), the following phrase is added after the word "information":

"unless the applicant has received a waiver from the Administrator or agency approved by him"

157. In § 52.2443(f), subparagraph (13) is added to read as follows:

(13) For any parking facility having capacity for 1000 or more motor vehicles, certain additional information is required as is specified in Appendix B.

158. In § 52.2443, paragraph (h) is revised to read as follows:

(h)(1) Within 20 days after receipt of an application, or addition thereto, the Administrator shall advise the owner or

operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of subparagraph (2) of this paragraph shall be the date on which the required information is received by the Administrator.

(2) Within 30 days after receipt of a complete application, the Administrator shall:

(i) Make a preliminary determination whether the parking facility should be approved, with conditions in accordance with paragraph (e) of this section, or disapproved.

(ii) Make available in at least one location in each region in which the proposed parking facility would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(iii) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed parking facility would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the facility.

(3) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies; having cognizance over the location where the parking facility will be situated, as follows: State and local air pollution control agencies the chief executive of the city and county; and any comprehensive regional land use planning agency.

(4) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(5) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notifications shall be made available for public inspection in at least one location in the region in which the parking facility would be located.

(6) The Administrator may extend each of the time periods specified in subparagraphs (2), (4), or (5) of this paragraph by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.

159. In § 52.2443, paragraph (i) is added to read as follows:

(i) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon a satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.

160. In § 52.2443, paragraph (j) is added to read as follows:

(j)(1) A local governmental entity, local air pollution control agency, or regional planning agency may submit, at any time, a comprehensive parking management plan as an alternative to the review of facilities under this section.

(2) The Administrator may approve such plan if he finds that:

(i) The governmental entity or agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(ii) The provisions of the plan are consistent with the substantive and procedural provisions of this section including Appendix B.

(iii) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(3) Upon the effective date of any approved local comprehensive parking management plan, such plan shall replace all applicable portions of this section.

161. In § 52.2443, paragraph (k) is added to read as follows:

(k)(1) A local governmental entity, local air pollution control agency, or regional planning agency may, upon request to the Administrator, be delegated the authority of the Administrator for purposes of carrying out the review of facilities and enforcement under this section.

(2) The Administrator may approve such a request if the following conditions are met:

(i) Demonstration by such governmental entity or agency that it currently possesses legal authority to enforce any final action taken by such entity or agency, or that it is willing to enforce the provisions of this section using authority delegated to it by the Administrator.

(ii) Demonstration that any final action taken by such governmental entity or agency will be binding in the jurisdiction in which the proposed facility is located.

(iii) Demonstration that the review process will be consistent with the substantive and procedural provisions of this section including Appendix B.

162. In § 52.2443, paragraph (l) is added to read as follows:

(l) Any owner or operator who fails to construct a parking facility in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate

a parking facility in accordance with conditions imposed by the Administrator or agency designated by him; any owner or operator who modifies a parking facility in violation of conditions imposed by the Administrator or agency designated by him; or any owner or operator of a parking facility subject to this section who commences construction or modification thereof on or after January 1, 1975, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved parking facility may be made without applying for permission pursuant to this section only where such modification would not violate any condition imposed pursuant to paragraph (g) of this section and would not be subject to the modification criteria set forth in paragraph (c) (2) of this section.

APPENDIX B—PROCEDURES FOR DETERMINING CONSISTENCY WITH THE VEHICLE MILES TRAVELED AND AIR QUALITY GOALS OF THE PARKING MANAGEMENT REGULATIONS

1. *General.* This appendix sets forth procedures for demonstrating satisfactory compliance with the Regulations for the Management of Parking Supply contained in various transportation control plans.

These regulations provide two alternative approaches to satisfy the requirement of parking management review: (1) Facility-by-facility review and (2) preparation and implementation of a Parking Management Plan. The Federal regulations specifically provide for facility-by-facility review of all new parking facilities above a specified size both to ensure compliance with air quality standards and to ensure minimization of vehicle miles traveled (VMT). This facility-by-facility review regulation is to be administered by the Environmental Protection Agency or by an appropriate state or local agency which has been delegated this responsibility. Although this regulation has been Federally promulgated, it is the Administrator's intent to delegate implementation of facility-by-facility review to appropriate state or local agencies wherever possible.

The regulations also envision development by state or local government agencies of Parking Management Plans, which when approved by the Environmental Protection Agency and implemented by the appropriate state or local agencies will replace the facility-by-facility review procedures. A Parking Management Plan is a comprehensive plan for managing the parking supply of an area consistent with air quality standards as well as other land use and transportation considerations. As such, the plan will incorporate consideration of the relationship of an individual parking facility to an overall plan for future parking development in the area. Through

this approach tradeoffs can be made within the review area, and parking facility development can be designed to complement changes in zoning regulations and transit service. The Environmental Protection Agency prefers and encourages the Parking Management Plan option due to its inherent flexibility, its ability to reflect local goals, and its direct integration into overall transportation and land use planning processes. Until parking management plans are developed by state or local agencies and approved by the Environmental Protection Agency however, facility-by-facility review will be in effect. This appendix outlines both the procedures to be followed under facility-by-facility review and the considerations to be utilized in developing a Parking Management Plan.

2. *Facility-by-Facility Review.* Facility by facility review includes an analysis of a facility's impact on both area-wide vehicle miles traveled and local carbon monoxide concentrations. Each of these requirements includes several alternative procedures which can be used to demonstrate fulfillment of the provisions of this regulation.

The review requirements for analyzing the impact on vehicle miles traveled can be satisfied in any of three ways: (1) By certification that the facility is specifically designed to promote high occupancy vehicle use, (2) by modeling to demonstrate that there will be no net increase in vehicle miles traveled, or (3) by justification of the need for the proposed parking facility together with measures to minimize vehicle miles traveled. The applicant can select whichever technique is most appropriate to his specific circumstances.

The specific review required for carbon monoxide impact varies according to the size of the facility. Facilities having a capacity of 1000 vehicles or more must satisfy the procedures for parking-related facilities set forth in Indirect Source Regulations which are presented in the FEDERAL REGISTER of July 9, 1974 (39 F.R. 25292). Facilities having a capacity of fewer than 1000 spaces, but more than the minimum specified under these regulations, can satisfy the carbon monoxide requirements through any of three procedures: (1) By modeling the carbon monoxide impact in accordance with the referenced Indirect Source procedures; (2) by providing acceptable monitoring data which indicates that the worst existing carbon monoxide level immediately adjacent to the proposed facility is less than 75% of the carbon monoxide standard; or (3) by demonstrating to the Administrator's satisfaction that no carbon monoxide standard violation will result due to the size and location of the proposed facility. Again the applicant can select whichever technique is most appropriate to his specific circumstances.

A. *Impact on Vehicle Miles Traveled.* The first requirement under the facility-by-facility review is that all proposed facilities subject to this review shall provide adequate information to demon-

strate that operation of the proposed facility will be consistent with the need to minimize vehicle miles traveled as set forth in the applicable transportation control plan. Such consistency must be demonstrated by use of one of the three alternatives below. It should be emphasized that proposed facilities need only satisfy the requirements of one of these three alternatives.

(1) *Alternative 1: Special Purpose Facilities Specifically Designed for VMT Reduction.* This alternative is to be limited to special purpose facilities developed as an integral component of programs specifically designed to reduce VMT. Examples of such facilities are park and ride lots developed in conjunction with transit improvements and carpool programs. The application must provide the following kinds of information:

1. The type of mass transit service to be provided, if any.
2. Special arrangements for carpools.
3. The parking fee schedule.
4. Measures to avoid use of the facility as auxiliary parking by adjacent enterprises.

(II) *Alternative 2: Modeling.* This alternative is applicable to prospective owners/operators of proposed facilities for which precise information exists or can be developed regarding the locations and travel patterns of potential facility users.

Approval of a proposed facility shall be contingent upon provision of quantitative analysis demonstrating that operation of the facility will not result in a net increase in the vehicle miles traveled in the transportation control plan area subject to this review. The analysis shall consider such items as the trip origin and location of vehicles using the proposed parking facility and shall include employee origin studies for work sites, market analysis for shopping locations, and similar studies for other uses.

The techniques used for these studies must conform with generally accepted transportation planning practices. Examples of such analyses include:

1. For a work site relocating within an urban area, an analysis of residence locations and mode usage showing that fewer vehicle miles of travel will be generated to access the new site.

2. For shopping facilities, a market analysis illustrating that expected users will have shorter trips than to presently available facilities, and that longer trips from established areas will not result in a net increase in vehicle miles traveled. The mode of travel used for access must be considered in these studies, which may be based on an analysis of existing customers for current operations.

Additional sources providing information on transportation planning and traffic estimating techniques include:

(1) *Latent Demand for Urban Transportation.* Carnegie-Mellon University, Transportation Research Institute. Study in New Systems of Urban Transportation. Report to the U.S. Department of

Housing and Urban Development. Pittsburgh, Pennsylvania: 1968.

(2) *Patterns of Car Ownership, Trip Generation and Trip Sharing in Urbanized Areas.* Prepared for the U.S. Department of Transportation, Bureau of Public Roads. New Haven, Connecticut: Wilbur Smith and Associates, June 1968.

(3) *Transportation and Parking for Tomorrow's Cities.* Prepared for the Automobile Manufacturer's Association. New Haven, Connecticut: Wilbur Smith and Associates, 1966.

(4) *Modal Split: Documentation of Nine Methods for Estimating Transit Usage.* U.S. Department of Transportation, Federal Highway Administration, Office of Highway Planning. Washington, D.C.: U.S. Government Printing Office, October 1970.

(5) *Traffic Engineering Handbook.* Edited by John E. Baerwald. 3rd Edition. Institute of Traffic Engineers. Washington, D.C., 1965.

All necessary studies, surveys, and market analyses required to determine the effect on VMT will be the responsibility of the applicant who must provide the data source, methodology, and calculations used in supplying the following information:

1. The number of people using or engaging in any enterprises or activities that the facility will serve on a daily basis and a peak hour basis. This should include estimated total daily person trips to the enterprises served by all modes of travel, by mass transit, by walking or bicycle and by automobile.

2. An estimate of the total daily auto trips as well as average and peak hour vehicle trip generation rates, before and after construction or modification of the facility.

3. A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the facility. Such projection shall include data concerning the availability of mass transit from such areas. Describe existing and proposed routes, levels, and times of service of public transit within a quarter mile radius of the facility.

4. An estimate (in terms of change in vehicle miles traveled) of the effect of the facility on total VMT for the air quality control region. This should include an estimate of the mean distance traveled for users of the enterprises and activities served by the facility based on information provided in 2 and 3 above.

5. Additional information, plans, specification, or documents determined to be necessary by the Administrator.

Example. The following example is provided as an illustration of an applicant having adequate information to comply with the requirements of this alternative. This example is provided solely for the purpose of demonstrating the evaluation process to be used in reviewing applications and the conclusion reached is valid only under this narrow set of circumstances.

An insurance company with 550 employees intends to relocate and wishes to provide parking for 300 employee cars and some visitors' cars at its new location. Origin studies based on maps derived from employee records indicate that the average employee now lives 7.15 miles from the current office. Road travel studies for this area indicate road distance at 1.40 times the straight line distance giving an approximate average round trip commuting distance of 20 miles. Similar origin studies for the new destination show that the average round trip commuting distance for the new facility will be 15 miles. Surveys of employees' transit habits indicate the modal split for commuting to existing facilities, and similar studies and projections are used to predict the modal split for employee access to the new facility.

A summary of the findings of the origin destination study and the modal split survey are illustrated in the following Table I. Inasmuch as the new vehicle miles traveled figure is not greater than that associated with the replaced facility, the facility proposed by this applicant would be approvable under this alternative.

TABLE I.—Comparison of Vehicle Miles Traveled Associated with Existing and New Facility

Mode	Modal split		Per capita VMT	Total VMT	Parking spaces
	Percent	Number of employees			
Existing facility (average round trip distance, 20 miles)					
Walk.....	3	17	0	0	0
Bicycle.....	2	11	0	0	0
Mass transit.....	35	192	3	576	0
Carpool.....	30	165	8	1,320	47
Single occupancy.....	30	165	20	3,300	165
Total.....	100	550		5,196	212
New facility (average round trip distance, 15 miles)					
Walk.....	1	5	0	0	0
Bicycle.....	2	11	0	0	0
Mass transit.....	22	121	3	363	0
Carpool.....	30	165	6	990	47
Single occupancy.....	45	248	15	3,720	248
Total.....	100	550		5,073	295

¹ Average carpool occupancy for this firm was 3.5 employees.

² Average commuter trip by carpool was 40% of the single occupancy per capita VMT.

³ In this situation, mass transportation is assumed not to be as readily available as in the original location.

(III) Alternative 3: Minimization of Vehicle Miles Traveled (VMT).

Under this alternative a proposed facility will be approved if it can be demonstrated by the applicant that the facility will serve the community's welfare and that all reasonable measures are employed to minimize the new facility's impact on vehicle miles traveled.

Basically the steps to be followed by a prospective applicant selecting this alternative are as follows:

1. Justification of the need for the proposed parking facility which takes into consideration the best interests of the community and the adequacy of existing and proposed mass transit. This shall include a description of existing and proposed transit service as well as existing parking facilities. (Certification of any mass transit inadequacy by appropriate local officials may be required.)

2. Development of a specific program to minimize the VMT impact of the proposed facility.

3. Estimation of the reduction in required spaces to be achieved through implementation of the VMT reduction program.

4. Application for a permit to construct the facility.

The program to minimize the vehicle miles traveled associated with the facility should generally discourage low occupancy use of automobiles and promote use of carpools and mass transit. This can be accomplished through a variety of specific measures expressly designed to minimize the vehicle miles traveled associated with use of the proposed facility. The specific mix of measures to be employed will vary depending upon the particular circumstances affecting the facility; however, in each case all reasonable measures must be employed. Whenever special circumstances or replacement measures indicate that a particular measure is not reasonable for implementation as a VMT minimization action, the applicant must provide a detailed justification to this effect.

Table II lists measures which must be considered for inclusion in any proposed facility's program for minimization of vehicle miles traveled. Facilities are divided as to type according to five categories. In general, the purpose of providing parking facility categories has been to recognize individual circumstances and provide special treatment for special purpose facilities. However, it is

clearly recognized that many parking facilities may involve overlaps in the categories listed above. For example, a shopping center parking lot may well be used by both customers and employees of the enterprises located in the shopping center. In such cases, VMT reduction measures from both of the applicable categories will be required, and the applicant must provide sufficient information to describe user categories, VMT minimization measures considered, measures to be implemented, and justification for the omission of any applicable measure which the applicant considers inappropriate or unreasonable.

The basic categories are:

(1) *Residential*—Parking facilities to be utilized exclusively by residents of the associated apartment or condominium or their guests, and the immediate staff of the residential complex. Those parking facilities which employ measures sufficient to control residential uses and to exclude customers, clients, employees or students from other enterprises can be considered to fall solely within this category. Otherwise the requirements for additional categories shall apply.

(2) *Customer/Client*—Parking facilities to be used by customers and clients of specific commercial facilities or offices. Only those facilities which employ measures sufficient to exclude or limit use by all day parkers such as employees and students can be considered within this specific category otherwise the requirements for employee parking shall also apply. These circumstances would be applicable to parking facilities provided for shopping centers, professional buildings, restaurants or similar enterprises or some combination.

(3) *Employee*—Parking facilities to be used primarily by all day parkers such as employees and students. For purposes of this regulation an all day parker is anyone who parks at the same location for six or more hours. However, this category is not intended to apply to residential parkers or intermittent users of facilities such as stadiums, clubs, theaters, churches, or recreational facilities. Examples of such facilities would include but not be limited to: university parking facilities for students and staff and employee parking facilities associated with factories, warehouses, offices and commercial enterprises.

(4) *Recreation/Intermittent Use*—Parking facilities to be used by patrons of theaters, churches, clubs, auditoriums, sport stadiums, recreational facilities

and similar establishments not normally used on a daily basis during the work day. Only those parking facilities which employ measures sufficient to exclude shoppers, clients, employees or students of other enterprises can be considered within this specific category; otherwise the requirements for these additional categories shall also apply.

(5) *Multi-Purpose*—Parking facilities operated as commercial enterprises for use by the general public rather than to serve the patrons or employees of a specific business. An example of such a facility would be any public or private parking lot or garage intended for use by the patrons and employees of many enterprises within walking distance of the parking facility. Such parking facilities normally would not require identification and the users may well include all types of parking facility users including residents, students, employees, customers and clients.

The measures listed are not intended to be all-inclusive. Additional measures not listed may be appropriate depending on the specific circumstances associated with a proposed facility. Such additional measures may be used by the applicant to augment or serve as justification for nonemployment of one of the specified measures if such measures have the equivalent effect and are approved by the Administrator. In any case, measures enumerated for the facility in question must receive full consideration and must be included in the facility's program to minimize vehicle miles traveled except where it has been demonstrated to the Administrator's satisfaction that certain specific measures are not justified in a particular instance. All listed measures will be deemed applicable except where such demonstration has been provided and approved by the Administrator. The need for including certain measures on the list may be preempted by inclusion of other listed measures (for example, shopping facilities already well served by mass transit may not need to provide private bus service). Such tradeoffs must be clearly specified and explored. In all cases the substantive provisions of the vast majority of measures listed in Table II must be included in the program to minimize the impact on vehicle miles traveled in order to obtain approval of the proposed facility. Examples of programs employing these VMT minimization measures are included at the end of this section.

TABLE II.—Vehicle Miles Traveled Minimization Measures

	Residential	Customer/ client	Employee	Recreation and intermittent use	Independent multi- purpose
1. Measures to restrict usage:					
(a) Assigned spaces and/or decals.....	X		X		X
(b) Limited operating hours.....		X		X	X
(c) Parking fees and/or flat rate hourly per charges or other rates favor- ing short-term parking.....		X			X
(d) Ticket validation.....		X			X
(e) Posting of parking restriction/tow- ing or fines for violators.....	X	X			
2. Measures to encourage mass transit usage:					
(a) Locating near existing mass transit and/or providing or coordinating with the transit agency to pro- vide: 1. adequate levels of transit service, 2. protected comfortable shelters at transit stops, 3. cov- ered walk-ways to transit stops.....	X	X	X	X	X
(b) Publicity for mass transit usage including prominent display of mass transit schedules, maps, etc.....	X	X	X	X	X
(c) Delivery service for customers' packages.....		X			X
(d) Subscription to dial-a-ride service.....	X	X	X	X	X
(e) Private bus service provided by area businesses.....		X	X		
(f) Locator for mini-bus pool.....	X			X	
(g) Full or partial payment of transit fare.....		X	X	X	
(h) Provision of company vehicles for carpool commuting.....			X		
(i) Provision of company or chartered vehicles connecting with public transit lines or other park and ride facilities.....	X	X	X	X	
(j) Adapting company hours to be more compatible with bus sched- ules.....		X	X		

EXAMPLES OF VMT MINIMIZATION PROGRAMS

The following examples are provided as illustration of VMT minimization program to be undertaken by applicant for various types of parking facilities. These examples are provided for the purpose of clarification and any approval contingent upon use of these measures would be solely applicable to the narrow range of circumstances affecting these particular facilities.

Employee Parking. An electronics assembly plant located in a suburban portion of an area covered under parking management regulations is now undergoing expansion and proposes to increase its existing parking capacity by more than 250 spaces to provide parking for new employees. The location of the plant in this instance precludes the provision of regularly scheduled public transit service. However, this constraint has not prevented this company from providing other positive inducements for the use of low VMT type transportation. The company has coordinated with local transit agencies to ensure sufficient mass transit at peak hours along transit routes near the plant location and has also coordinated work hours with transit schedules so as to assure minimum travel time for employees. Buses will be chartered by the company to provide connecting service with nearby public transit. Convenient, comfortable and well lit waiting areas will be provided both at the factory and at nearby transfer points for the benefit of employees using these transit services. In addition, the company will purchase mini vans and lease them to employee groups desiring to use them for commuting from areas not served by mass transit.

Maps, schedules and publicity for mass transit, carpools and van-pools will be prominently displayed in all employee gathering places. Furthermore, all current and new employees will receive from the personnel office a packet of information containing the names of the ten employees living nearest to their own homes, maps and schedules for the appropriate mass transit route from their home to the plant and a detailed explanation of all applicable regulations pertaining to the operation of the parking facilities.

Maintenance of this parking facility incorporates several features designed to minimize VMT including the following provisions: (1) parking spaces closest to the building's entrances will be restricted for the use of carpools only (2) commercial rates will be charged for use of all non-carpool parking spaces (3) lockers and protected storage areas will be provided for bicycle users.

Residential Parking: A residential parking facility has been proposed for an urban renewal area which, when completed, will include stores, office buildings, and apartments. The application specifies that usage will be restricted to residents by installing automatic card-operated gate controls at the entrances and exits of the facility. Card keys will be issued to residents only and a commercial fee will be charged separately from the apartment rent.

Coordination with the local transit authority has been made to assure that a bus stop will be provided in the same block as the apartment complex and the builders of the parking facility will provide a covered walkway from the apartment entrance to an enclosed waiting area at the bus stop. In addition to the regularly scheduled public mass transit

service, the developers, together with area merchants, have also proposed the use of a dial-a-ride minibus system which will be particularly valuable for the aged and handicapped. Maps, schedules and publicity for both bus systems will be prominently displayed and all residents will be encouraged to submit their names and commuting patterns for use in developing a carpool locating system.

Curb ramps will be provided at all intersections to facilitate use of bicycles and wheel chairs. In addition, readily accessible protected storage areas will be provided for bicycles. To encourage walking for short trips a pedestrian overpass will also be provided between the apartment complex and a shopping area currently separated by a heavily traveled road.

Recreation/Intermittent Use: Developers of a new sports stadium located in the suburbs of a large metropolitan area have devised a program to minimize the VMT impact of the proposed parking facility to accompany the sports stadium. It includes measures to encourage patrons to use buses, carpools, and other low VMT type transit, and in addition makes use of part of the parking facility during the day-time as a park-and-ride lot for commuters. Extensive coordination with the transit authority has assured that extra buses will be provided during game times.

Due to the isolated nature of the sports facility (at least ½ mile from stores, offices, and other employers), it has not been necessary to employ special measures to restrict usage to the patrons of the facility.

In general the aggregate parking fees will in all cases be sufficient to cover the cost of the parking facility. The proposed fee for non-carpool cars during the game is to be \$2.00, although this may later be increased. In no case is the cost of admission tickets to subsidize the cost of parking, and package deals including the price of admission and a parking ticket will not be featured at this facility.

The use of carpools for spectators at sports events is encouraged by the following kinds of provisions: Sixty percent of the parking spaces are reserved for cars having four or more occupants. These spaces are the ones closest to the entrances and exits of the coliseum. This fact is advertised by prominently-posted signs and enforced by guards directing traffic at the entrances to the special "car pool" areas. Parking for carpools is provided at one-half the price of regular parking, and there is prominently displayed publicity for carpools including carpool locator maps showing name, phone number, and location of those desiring to share rides to future games.

Measures to encourage use of mass transit have been detailed, and include a number of significant items. In addition to regularly-scheduled bus service, extra buses are provided during the evening games. Charter bus arrangement for groups is publicized, as are maps, schedules, and notices about the advantages of taking the bus to the

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game. Bus tickets may be included as part of the purchase price of an admission ticket, and private bus lanes within the facility assure users that they will have unimpeded service right up to the entrance. Once discharged at the stadium entrance, the rider finds secure waiting areas with covered walk ways connecting loading and discharge areas with exits and entrances.

For those users of the stadium who might choose to walk or travel by bicycle, other measures are provided. Bicycle racks are located in sheltered guarded locations and bicycle paths are separated from the highways for motor vehicles. Sidewalks are well designed, and there is an overpass allowing cyclists and pedestrians to cross without getting into motor vehicle traffic.

In addition to the VMT reduction measures specifically aimed at the patrons of the coliseum, the parking facility will also be operated so as to reduce vehicle miles traveled by the area's commuters. During the daytime, when sports activities are not scheduled, the parking facility will serve as a park-and-ride lot for commuter bus lines and for carpools. To accommodate this function comfortable waiting areas, mass transit publicity, including maps and schedules, and a carpool locator showing names, phone numbers, and destinations of those desiring to share rides will be provided. In no case will the fee for using a park-and-ride lot be greater than one-half the cost of a space for a sports fan.

Commercial/Multipurpose: The proposed parking facility is to be a municipal parking garage, located in the downtown commercial district of a major city. In general, in order to discourage all day parkers, the following measures will also be included: First, only 20% of the spaces are to be available before 9:30 a.m. Parking fees will not be subsidized and will increase hourly to favor the short term parker.

In order to promote usage of buses, from the point of parking to other destinations, the facility is located along major north-south and east-west subway and bus routes, including minibuses to adjacent stores and offices. There are prominent displays of mass transit publicity, including maps and schedules. Additionally, protected comfortable waiting areas for mass transit, with covered walkways to landing and discharge areas, are provided as well as storage lockers for packages.

Carpools will also be promoted in a variety of ways. A carpool publicity campaign and a locator (including names, phone numbers, homes, and destinations of people desiring to share rides) are to be prominently displayed. Priority spaces are provided for drivers of cars with four or more occupants. These spaces are closest to the entrances and exits of the parking garage. Furthermore, parking fees for carpools are only 75% of the normal daily rate.

The facility will also provide some service for bicycle riders and pedestrians. Guarded sheltered bicycle racks are

located within the facility. All curbs adjacent to the facility have ramps for bicycles and wheelchairs, and convenient sidewalks are provided throughout the facility.

Customer/Client Parking. The following VMT minimization program accompanies a proposed parking lot for a new suburban shopping center. The proposed parking facility is to be utilized by both customers and clients of the shopping center enterprises, as well as some employees of the shopping center.

The shopping center is connected by regularly scheduled bus routes both to the downtown area and to neighboring suburbs. One-half of the roundtrip fare is paid by merchants, with proof of purchase at the stores. Also, a dial-a-bus minibus system is provided within a five mile radius of the center, and half of the round trip cost is paid by the shopping center enterprises with proof of purchase. A delivery service is provided for any bulky packages which might prove inconvenient for the customer using the bus. Furthermore, mass transit publicity including maps and schedules prominently posted is displayed throughout the shopping center, and there are protected comfortable shelters for those awaiting buses as well as covered walkways from the shopping center to bus waiting areas.

Priority parking for cars with two or more occupants is provided in spaces closest to the stores. Also, a carpool publicity campaign, with a locator including names, phone numbers, and residences of potential users, is a consistent priority of the shopping center's publicity efforts.

For those who walk or cycle to the shopping center, there are overpasses and underpasses to provide safer and more convenient access. Guarded sheltered bike racks are provided, and bicycle and foot paths separated from roadways are also available. Additionally, lockers are provided for these customers, and they can take advantage of the delivery system for bulky items.

To further encourage mass transit and carpool use by employees to enterprises located in the shopping center, special employee parking facilities are provided separately from the customer/client facilities. All employees are directed to park only in the employee area and to enforce this provision, all other parking is closed until 9:30 a.m. In addition, all other suitable measures for employee parking facilities are to be utilized for this special employee parking area. Such measures include: free bus tokens to employees; coordinating employee hours with bus schedules; providing each employee with a list of other shopping center employees working similar hours and living in the same vicinity; and the use of shopping center cars or vans for carpools.

B. Impact on Local Carbon Monoxide Concentrations. The second requirement under the Federally promulgated facility-by-facility review procedures involves analysis of the local carbon monoxide impact. In order to receive approval under this portion of the review procedure

the applicant must demonstrate that operation of the proposed facility will not cause or exacerbate a violation of the national carbon monoxide standards. The procedures for demonstrating a facility's impact vary according to the size of a proposed facility.

(i) **Parking Facilities Having Capacity for 1,000 or More Motor Vehicles.** Parking facilities having a capacity of more than 1,000 motor vehicles or being modified to increase capacity by 500 or more motor vehicles shall demonstrate through the use of a quantitative analysis that the design or operation of the facility will not result in a violation of carbon monoxide standards. Applicants may provide the required demonstration through the use of the methodology specified in the Environmental Protection Agency's Guidelines for the Review of the Impact of Indirect Sources on Ambient Air Quality or through the use of some other acceptable air quality diffusion model. If the applicant follows the appropriate methodology specified for review of indirect sources, he may either complete the modeling procedure and submit the data and results or simply submit the data for the Agency's modeling calculations. Necessary supporting data also must be provided to the extent indicated on the application form. The following types of general background information will also be required for all proposed facilities in this category.

(a) A map showing the location of the site of the facility including the topography of the area.

(b) A description of the proposed use of the site, including the normal hours of operation of the facility, and the general types of activities to be operated therein.

(c) A site plan showing the location of associated parking areas, points of motor vehicle ingress and egress to and from the site and its associated parking areas, and the location and height of buildings on the site.

(d) An identification of the principal roads, highways, and intersections that will be used by motor vehicles moving to or from the parking facility.

(e) An estimate, as of the first year after the date the parking facility will be substantially complete and operational, of the average traffic volumes, maximum traffic volumes for one-hour and eight-hour periods, and vehicle capacities of the principal roads, highways, and intersections identified in item (i) (d) above located within one-fourth mile of all boundaries of the site:

(f) Availability of existing and projected mass transit to service the site.

(ii) **Parking Facilities having a capacity for fewer than 1,000 motor vehicles.** Parking facilities subject to this review having a capacity for fewer than 1,000 vehicles, or involving modification of a facility to increase capacity by less than 500 motor vehicles shall satisfy the requirements for analyzing the carbon monoxide impact in any one of the following three ways:

Alternative 1. Modeling to demonstrate that operation of the facility will not

cause or exacerbate a violation of carbon monoxide standards. These requirements can be satisfied by following the procedures set forth in B(1) above.

Alternative 2. Provide acceptable monitoring data which indicates that the worst existing carbon monoxide level immediately adjacent to the proposed facility is less than 75% of the carbon monoxide standard. The monitoring shall be conducted for a period of 2 weeks, and may be seasonally adjusted by the Administrator to account for more adverse traffic or meteorological conditions. The monitoring instrumentation and the location of the sampling instrument shall be approved by the Administrator.

Alternative 3. Demonstrate to the Administrator's satisfaction that no carbon monoxide standard violation will result due to the size and location of the proposed facility. This alternative will be limited to a small number of facilities in areas clearly recognized as being in no danger of having carbon monoxide violations now or in the foreseeable future.

3. Parking Management Plans. The second alternative approach for satisfying the requirement of parking management review calls for the development by the affected local jurisdictions of a Parking Management Plan. A Parking Management Plan is a comprehensive plan for the control of the development of future parking facilities in the affected metropolitan area in relationship to existing parking resources and the present and projected transportation system. Such a plan would have the same basic objective as the facility-by-facility review procedures: to consider and attempt to minimize the effects of new parking facilities on areawide vehicle miles traveled and to assure that the motor vehicle traffic associated with these facilities does not cause or exacerbate a violation of air quality standards.

Although a Parking Management Plan may take many forms dependent on the goals and resources of an area, all plans will have certain features in common. They will all be long range locally developed plans which emphasize people miles traveled rather than vehicle miles traveled. All parking management plans will respond to how the city wants to grow and consider the interrelationships of transportation, land-use, and air quality. This can be accomplished by a general scheme for the placement of new parking facilities in association with plans for transit and land use development. This scheme will be created in such a way as to be consistent with the VMT minimization and air quality objectives stated above. Each proposed new facility will then be reviewed to determine whether it is in compliance with the parking management plan's pattern for future parking facility development throughout the area.

The Environmental Protection Agency definitely prefers the development of a Parking Management Plan over the Federally promulgated facility by facility approach. EPA feels that since the plan approach relies on the participation of

local officials in the plan development and implementation process it can more successfully reflect the needs and concerns of the community. As long as the plan provides for the considerations outlined under the facility-by-facility review requirements, a great deal of flexibility in the plan's form and processes is possible. Due to the myriad of local considerations which must be integrated into development of such a plan the Environmental Protection Agency has neither the capability nor intention to unilaterally develop such plans.

In general, an acceptable Parking Management Plan would have several specific advantages over the more limited facility-by-facility review. Once a plan is established, less effort would be needed to review each individual application. Prospective developers would have a better understanding of the type of development that would be found acceptable by the reviewing agency. Local zoning and transit plans not incorporated in facility-by-facility review could be incorporated in the parking management plan. Consideration of replacement of existing parking spaces in different locations within the area covered by the plan could be permitted, and tradeoffs allowed. The plan's requirements and projections could be better coordinated with an applicable Air Quality Maintenance Plan for the area. Finally, by complementing long range land use and transportation planning, such a plan would be more effective in achieving air quality goals for the entire Air Quality Control Region.

A Parking Management Plan, although representing a different approach, still provides for the same considerations and objectives as the facility-by-facility review. An acceptable Parking Management Plan must contain procedures for the review of a new facility's effect on local carbon monoxide concentrations and assure that there will be no violation or exacerbation of violations of carbon monoxide standards. This requirement may be met through a carbon monoxide review process similar to that now required under the facility-by-facility review. The plan must also provide for a minimization of vehicle miles traveled consistent with that obtained through the facility-by-facility review. This can be accomplished through a variety of methods such as: a freeze on growth of new parking facilities in certain specified areas; a policy providing for only replacement of facilities so as to maintain a constant total supply of parking for the area; an allocation system which provides that only a certain limited increase in parking may take place each year, consistent with the vehicle miles traveled minimization considerations; a policy which encourages new parking facilities which complement mass transit and encourage carpools while discouraging those which compete with mass transit; and a policy for land use development patterns which integrates considerations for minimizing vehicle miles traveled into parking and other land use decisions. Illustrations of

some of these optional approaches are provided at the end of this section. In light of the similarity of the requirement for a Parking Management Plan and those under facility-by-facility review and the insights to be gained through implementation of a facility-by-facility review process, a local government may find it beneficial to use the facility-by-facility review process as an initial stage in its development of a Parking Management Plan. This procedure, however, is not required and a local jurisdiction is encouraged to move to development of a plan as soon as possible.

In developing a comprehensive parking management plan which meets the requirements of this regulation, the local government or planning agency may find it useful to consider the following questions:

1. What are existing VMT growth rates?
2. What will be the effects of an unconstrained increase in VMT on air quality, energy land use, and the local economy and social concerns?
3. What measures are available to reduce potential VMT increase?
4. What contribution can management of parking supply realistically be expected to make in minimizing increases in vehicle miles traveled?
5. What land use and transportation decisions must be made to implement effective use of parking supply management?
6. How can these decisions be implemented?

In order to fulfill the specific requirements of the Management of Parking Supply regulation the agency applying for approval of a parking management plan must demonstrate to the satisfaction of the Administrator that the plan will control construction of the area's future parking facilities so as to minimize vehicle miles traveled and to prevent a new facility from causing or exacerbating a violation of the National Air Quality Standards. In order for the Administrator to make this determination at least the following information must be provided:

1. Inventory of existing parking facilities by type, location and capacity.
2. Inventory of average daily vehicle miles traveled.
3. Current annual growth rate in net new parking spaces and vehicle miles traveled.
4. Applicable zoning and other land use regulations in the affected areas, including any proposed or adopted amendments necessary to achieve the goals of the plan.
5. Criteria for evaluating new parking facilities.
6. Description of the evaluation and approval process.
7. Mechanisms for enforcing any decisions made during the evaluation and approval process.
8. Amount and general location of new parking spaces to be permitted.
9. Method of allocation of new parking spaces.
10. Description of interrelationships of the criteria in the proposed plan with other local transportation and land use goals.
11. Description of the relationships between the various agencies charged with responsibility for implementing this plan.

12. Description of the procedures to be employed in processing applications for new parking facilities.

13. Provision of information concerning the vehicle miles traveled reduction to be achieved through the use of this plan.

14. Documentation that a public hearing has been held on this plan and summary of the principal comments.

15. Description of the plan's procedures for assuring that the operating of any new parking facilities will not cause a violation or exacerbation of a violation of local carbon monoxide standards. Such procedures must be equivalent to the requirements set forth under the facility-by-facility review procedures.

16. Additional information may be requested by the Administrator upon or shortly after final submission of this plan for approval.

Examples of Directions in Parking Management Plans. The following examples are provided to serve as illustration of the wide variety of possible directions to be followed in the development of Parking Management Plans. The specific details of any plan and even the type of plan selected would depend upon the interests and configuration of the jurisdictions involved.

Selective Parking Freeze. A plan for controlling parking space growth which already is in effect in parts of Boston and Seattle is to establish a freeze on all new non-residential parking spaces in certain areas. As some parking spaces are replaced by new buildings, tradeoffs can be provided allowing that same number of spaces to be reallocated to another setting. Similarly, several small lots may be consolidated into one large one which is located at a mass transit terminal and better serves area merchants. However, in both these cases no net increase in parking spaces is permitted.

Specified Graduated Increases. A variation of the "freeze" approach to parking management is to expand the con-

trol area and allow a small graduated increase in parking spaces. The annual amount of new parking spaces to be permitted would be determined by reference to the current average VMT growth rate and desired reduction. Under this approach, mass transit improvements, VMT reduction programs and parking space allocations would have to be sufficiently coordinated to assure that the jointly agreed upon parking space rate of increase is not exceeded.

Use of Monthly Quotas. A further variation of the gradual increase approach would call for the establishment of monthly quotas in new parking spaces based on required minimization. Applicants for the limited number of new parking space permits could then be judged based on predetermined and published criteria. Such criteria could include such diverse elements as community need, proximity of mass transit, financial per space contribution to mass transit, VMT impact and efforts made to minimize VMT. Depending upon the specific needs and interests of a given metropolitan area, a limited number of permits for new non-residential parking spaces could also be sold as a mass transit revenue support measure with price determined so as to achieve the desired reduction.

Parking Spaces and Zoning. A city having a clearly defined and well accepted comprehensive transportation and land use plan may choose to zone various areas of the city to allow only certain categories of new parking. For example, major transportation corridors of the city could be restricted so as to exclude new parking facilities except for residential parking and facilities specifically developed as park and ride lots. Other areas located several blocks distant from existing and proposed high frequency mass transit service could permit

new parking facilities for customers and clients as well as residents, but no new employee parking facilities. (Parking for residents only can be controlled by issuing color coded stickers to residents and customer parking can also be controlled through operating hours and pricing policies.) Similarly areas located still further from transit lines could allow some new employee parking with priority given to carpools.

Maximum Space Zoning. Other metropolitan areas may not desire to fix their land use and transportation patterns quite as rigidly at this time. These areas may elect to use a form of parking space zoning that sets maximum rather than minimum numbers of spaces to be provided. Instead of requiring that a certain category of office building provide at least 3 spaces per 1,000 sq. ft. of gross leasable floor area, the locality could require that no more than 3 spaces per 1,000 sq. ft. be provided.

Maximum allowable spaces for various categories of buildings would be established so as to achieve the desired reduction in parking space growth rate. These maximum limits would, of course, reflect the availability of mass transit and the maximum allowable number of spaces for any category of enterprise could be determined in advance. Given the enterprise, its size and location, both the administering agency and the prospective developer could readily determine the maximum number of spaces to be permitted.

Local governments in all affected areas are encouraged to submit proposals for local Parking Management Plans as soon as possible. At that time specific arrangements for transition from facility-by-facility review to a Parking Management Plan can be developed and coordinated.

[FR Doc.74-18903 Filed 8-21-74; 8:45 am]

PROPOSED RULES

sidered revolutionary in their impact on affected industries and the public. "Intensive and coordinated study," therefore, would absorb the time, efforts and energies of many individuals and organizations and would require sufficient time to afford the deliberate and considered analysis which the proposals clearly deserve. The objective of such coordinated study would be the development of a consolidated statement representing, to the maximum extent possible, the views of the transportation community including all interested persons, whether members of HMAO or otherwise. It is contemplated that such a statement would include a detailed critique of the subject dockets as well as alternative proposals, which would then be presented to the Board "as objectively as possible, with dissents and affirmative votes, and reflecting all of the positions in between."

The Board has studied carefully the comments and recommendations presented by each petitioner and has decided that adequate time has been provided for review, analyses, and preparation of comments on these rulemaking proposals, both by organized groups and individuals, and that a further lengthy extension of time to submit comments is not warranted. However, the Board has decided to grant approximately 30 days additional time for the submission of comments thus allowing final review and coordination which may have been difficult during the summer months.

In accordance with the foregoing decision, the Hazardous Materials Regulations Board has extended the time to file comments on Notices 73-9 (Docket HM-112) and 73-10 (Docket HM-103) from August 31, 1974 to October 3, 1974 and has denied all petitions it has received as of August 20, 1974 requesting extensions beyond October 3, 1974.

AUTHORITY. Transportation of Explosives Act (18 U.S.C. 831-835), section 6 of the Department of Transportation Act (49 U.S.C. 1655); Title VI and section 902(h) of the Federal Aviation Act of 1958 (49 U.S.C. 1421-1430, 1472(b), and 1655(c)); Dangerous Cargo Act, as amended (46 U.S.C. 170); Tank Vessel Act of 1936 (46 U.S.C. 391a), (46 U.S.C. 375), (46 U.S.C. 416) (49 U.S.C. 1655(b)(1)), 49 CFR 1.46(b).

Issued in Washington, D.C. on August 21, 1974.

ALAN I. ROBERTS,
Secretary, Hazardous Materials
Regulations Board.

[FR Doc. 74-19773 Filed 8-26-74; 8:45 am]

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 52]

[FRL 252-5]

APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Proposed Amendments to Parking Management Regulations

Correction

In FR Doc. 74-18903, appearing at page 30440 of the issue of Thursday, August 22, 1974, the table on page 30461 was mistakenly published in incomplete form.

The entire table, including both published and omitted sections, appears below:

TABLE II—Vehicle miles traveled minimization measures

	Residential	Customer/ client	Employee	Recreation and intermittent use	Independent multi-purpose
1. Measures to restrict usage:					
(a) Assigned spaces and/or decals.....	X		X		X
(b) Limited operating hours.....		X		X	X
(c) Parking fees and/or flat rate hourly per charges or other rates favoring short-term parking.....		X			X
(d) Ticket validation.....					X
(e) Posting of parking restriction/ towing or fines for violators.....	X	X			
2. Measures to encourage mass transit usage:					
(a) Locating near existing mass transit and/or providing or coordinating with the transit agency to provide:					
1. adequate levels of transit service.....	X	X	X	X	X
2. protected comfortable shelters at transit stops, and					
3. covered walkways to transit stops.....					
(b) Publicity for mass transit usage including prominent display of mass transit schedules, maps, etc.....	X	X	X	X	X
(c) Delivery service for customer's packages.....		X			
(d) Subscription to dial-a-ride service.....	X	X	X	X	X
(e) Private bus service provided by area businesses.....		X			
(f) Locator for mini-bus pool.....	X		X	X	
(g) Full or partial payment of transit fare.....		X	X	X	
(h) Provision of company vehicles for carpool commuting.....			X		
(i) Provision of company or chartered vehicles connecting with public transit lines or other park and ride facilities.....	X	X	X	X	
(j) Adapting company hours to be more compatible with bus sched- ules.....		X	X		
3. Measures to encourage carpooling:					
(a) Carpool locator.....	X	X	X	X	X
(b) Carpool publicity campaign.....	X	X	X	X	X
(c) Restricted priority spaces for car- poolers only.....	X	X	X	X	X
(d) Designated protected pickup and discharge areas.....		X	X	X	
(e) Reduced rates for carpools.....			X		X
(f) Use of company cars for carpooling.....			X		X
4. Measures to encourage use of bicycles:					
(a) Protected bicycle racks and storage areas.....	X	X	X	X	X
(b) Bicycle paths, and lanes.....	X	X	X	X	X
(c) Shower and locker facilities.....			X		
5. Measures to encourage walking:					
(a) Lighted and protected paths and sidewalks.....	X	X	X	X	X
(b) Ground security patrol.....	X	X	X	X	X
(c) Overpass, underpass and other grade separations.....	X	X	X	X	X
6. General:					
(a) Use of commercial rates or other pricing policies. ¹	X	X	X	X	X
(b) Daytime use of parking facilities as park and ride lots.....	X			X	

¹ Use of pricing policies designed to encourage use of carpools and mass transit, and to reduce VMT should also be considered. However, because of the ban on EPA-imposed "surcharges" contained in the Energy Supply and Environmental Coordination Act, implementation of this measure is not mandatory, unless required by State or local governments.

[FRL 222-1]

KENTUCKY

Approval and Promulgation of Implementa- tion Plans

Section 110 of the Clean Air Act, as amended, and the implementing regulations of 40 CFR Part 51 require each State to submit a plan which provides for the attainment and maintenance of the national ambient air quality standards throughout the State. Each such plan is to contain legally enforceable compliance schedules setting forth the dates by which all sources must be in compliance with any applicable requirements of the plan.

On March 19, 1974 (39 FR 10277), the Administrator announced that the Ken-

tucky implementation plan had been re-submitted for the Agency's approval on December 5, 1973, following a decision of the U.S. Circuit Court of Appeals for the Sixth Circuit vacating the Administrator's original approval (37 FR 10342). Included as part of the resubmitted plan were a number of compliance schedules. This publication identifies these schedules, offers them as proposed rulemaking and solicits public comment on this proposal.

Each of the proposed compliance schedules identified below establishes a date by which an individual air pollution source must attain compliance with an emission limitation of the State implementation plan. This date is indicated in the table under the heading "Final Compliance Date." In many cases the sched-

tion of food or feed, or food or feed packaging materials.¹

(e) *Well injection.* (1) No pesticide, pesticide-related waste, pesticide container, or residue from a pesticide container shall be disposed of by well injection unless the person(s) proposing to undertake such disposal first receives approval from the appropriate State agency, demonstrates that he has exhausted all reasonable alternative methods of disposal and finds them unsatisfactory in terms of environmental considerations, submits to the Regional Administrator in the Region where the well is to be located the recommended data requirements which accompany ADS #5 (FEDERAL REGISTER, Vol. 39, No. 69, April 9, 1974), and obtains the approval of the Regional Administrator for the proposed well injection. Included in these information requirements are:

- (i) The location and design of the injection well;
- (ii) The type and amount of pesticide to be injected;
- (iii) The results of pre-injection tests made to predict the fate of materials injected;
- (iv) Provisions for monitoring the operation and the effects on the environment;
- (v) Provisions for plugging injection wells when abandoned;
- (vi) Contingency provisions for coping with injection well failures;

(2) If spills from storage containers, or from the injection operation, occur, disposers are warned of their potential liability and penalties which may be imposed under Section 311 of the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500).

(3) If at any time after approval of an application for the well injection of a pesticide there is additional information regarding adverse effects on the environment, such information shall be submitted to the aforementioned Regional Administrator.

[FR Doc. 74-23836 Filed 10-11-74; 8:45 am]

[40 CFR Part 52]

[FRL 279-8]

APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Parking Management Regulations, Postponement of Compliance Date

In the August 22, 1974, FEDERAL REGISTER (39 FR 30440) the Environmental Protection Agency proposed amendments to the parking management regulations for eighteen areas. The effective date for compliance with these regulations was set for January 1, 1975.

¹Department of Transportation has proposed hazardous materials transportation regulations (FEDERAL REGISTER, January 24, 1974, Vol. 39, No. 17) that would prohibit the mixed shipment of highly toxic pesticides and food or feed, and the transfer of any pesticide to food or feed may render such food or feed adulterated under the meaning of the Federal Food, Drug and Cosmetic Act.

Planning and organization to implement the regulations is proceeding. However, in order to provide more adequate time for successful implementation of the combined regulations and amendments, the compliance date for the parking management regulations and amendments is hereby changed to June 30, 1975. This will also allow time for adjustments made necessary by any changes adopted as a result of the various local hearings being held during this month in affected areas on the August 22, 1974, proposals.

The Administrator intends to take final action on the proposed amendments after completion of all public hearings scheduled for the affected areas, and after receipt of written comments. A notice of the dates and locations of these hearings appeared in the FEDERAL REGISTER on September 23, 1974 (39 FR 34070), with a minor correction on September 27 (39 FR 34671). At that time the period for written comment was extended to October 31, 1974.

The new compliance date only concerns the parking management regulations, and does not pertain to the indirect source regulations, which include requirements for reviews of certain parking facilities, which were published in the FEDERAL REGISTER on July 9, 1974 (39 FR 25292). The compliance date for implementation of the indirect source regulations remains January 1, 1975. These indirect source regulations are effective nationwide including all areas which would have been subject to the parking management regulations.

(Sections 110(c) and 301(a) of the Clean Air Act, (42 U.S.C. 1857c-5(e) and 1857(g)))

Dated: October 8, 1974.

RUSSELL E. TRAIN,
Administrator.

In Part 52 of Chapter I, Title 40, of the Code of Federal Regulations, the date "January 1, 1975," is amended to "June 30, 1975," in the following sections:

1. Subpart C—Alaska, § 52.86;
2. Subpart D—Arizona, § 52.139;
3. Subpart F—California, § 52.251;
4. Subpart J—District of Columbia, § 52.493;
5. Subpart V—Maryland, § 52.1103 and § 52.1111;
6. Subpart W—Massachusetts, § 52.1128, § 52.1135 and § 52.1136;
7. Subpart FF—New Jersey, § 52.1588;
8. Subpart NN—Pennsylvania, § 52.2040;
9. Subpart SS—Texas, § 52.2295; and
10. Subpart VV—Virginia, § 52.2443.

[FR Doc. 74-23837 Filed 10-11-74; 8:45 am]

FEDERAL POWER COMMISSION

[18 CFR Parts 2, 154]

[Docket No. R-478]

NATURAL GAS PRODUCED FROM WELLS COMMENCED BEFORE JANUARY 1, 1973

Just and Reasonable Rates; Notice of Extension of Time

OCTOBER 8, 1974.

On September 30, 1974, a group of producer respondents in the above-designated matter, represented by Phillips Petroleum Company, filed a motion to extend the dates fixed by notice issued September 12, 1974, and published in the FEDERAL REGISTER at 39 FR 34301, for filing comments and reply comments regarding this rulemaking.

We have concluded that it is in the public interest to grant this extension to assure the most complete evaluation of this matter. Therefore, the dates for filing comments and reply comments are extended to and including November 18, 1974 and December 16, 1974, respectively.

By direction of the Commission.

KENNETH F. PLUMB,
Secretary.

[FR Doc. 74-23890 Filed 10-11-74; 8:45 am]

WATER RESOURCES COUNCIL

[18 CFR Part 701]

FREEDOM OF INFORMATION

Proposed Policy on Disclosure of Records

Notice is hereby given that the Water Resources Council, under the authority of 5 U.S.C. 552 and 42 U.S.C. 1962d-1, proposes to add a new Subpart D to Part 701 of Chapter VI, Title 18 of the Code of Federal Regulations, as set forth below.

This new Subpart D to Part 701 describes the availability to the public of records of the Water Resources Council pursuant to the Freedom of Information Act, 5 U.S.C. 552.

This Subpart states the Council's policy of the fullest possible disclosure of records consistent with those obligations of confidentiality and administrative necessities which are recognized by the Act. In regard both to the information that is available to the public and to the sources from which it may be obtained this Subpart supplements existing procedures and does not replace or restrict them. The normal channels through which information has regularly been made available to the public will continue to be accessible.

This Subpart is intended to be consistent with, but separate from, the public participation provisions of the Council's principles and standards (38 FR 174, Sept. 10, 1973) and subsequent implementing procedures.

Interested persons are invited to submit written comments, suggestions or objections regarding this proposal to the Director, Water Resources Council, 2120 L Street, NW., Washington, D.C. 20547, on or before November 14, 1974.

Dated: October 7, 1974.

WARREN D. FAIRCHILD,
Director,
Water Resources Council.

It is proposed to amend Part 701 of Chapter VI, Title 18 of the Code of Federal Regulations by adding a new Subpart D set forth below:

Subpart D—Availability of Information
Sec.
701.200 Statement of policy.

such absence, the hearing will proceed and the case will be regarded as submitted by the absent party as provided in Rule 11.

(u) *Rule 20, Nature of hearings.* Hearings shall be as informal as may be reasonable and appropriate under the circumstances. Appellant and respondent may offer at a hearing on the merits such relevant evidence as they deem appropriate and as would be admissible under the generally accepted rules of evidence applied in the courts of the United States in nonjury trials, subject, however, to the sound discretion of the presiding Administrative Judge in supervising the extent and manner of presentation of such evidence. In general, admissibility will hinge on relevancy and materiality. Letters or copies thereof, affidavits and other evidence not ordinarily admissible under the generally accepted rules of evidence may be admitted in the discretion of the presiding Administrative Judge. The weight to be attached to evidence presented in any particular form will be within the discretion of the Board, taking into consideration all the circumstances of the particular case. Stipulations of fact agreed upon by the parties may be regarded and used as evidence at the hearing. The parties may stipulate the testimony that would be given by a witness if the witness were present. The Board may in any case require evidence in addition to that offered by the parties.

(v) *Rule 21, Examination of witnesses.* Witnesses before the Board will be examined orally under oath or affirmation, unless the facts are stipulated or the presiding Administrative Judge shall otherwise order. If the testimony of a witness is not given under oath the Board may, if it seems expedient, warn the witness that his statements may be subject to the provisions of Title 18, United States Code, sections 237 and 1001 and any other provisions of law imposing penalties for knowingly making false representations in connection with claims against the United States or in any matter within the jurisdiction of any department or agency thereof.

(w) *Rule 22, Copies of papers.* When books, records, papers or documents have been received in evidence, a true copy thereof or of such part thereof as may be material or relevant may be substituted therefor, during the hearing or at the conclusion thereof.

(x) *Rule 23, Post hearing briefs—(1) General.* Briefs must be compact, concise, logically arranged and free from burdensome, irrelevant, immaterial and scandalous matter. Briefs not complying with this rule may be disregarded by the Board.

(2) *Time of submittal.* Briefs, including reply briefs, shall be submitted at such times and upon such terms as may be agreed to by the parties and the presiding Administrative Judge at the conclusion of the hearing.

(3) *Length of briefs.* Except by permission of the Board on motion, principal briefs shall not exceed 100 8½" by 11" pages typewritten double space exclusive of any table of contents and table of

statutes, regulations and cases cited. Reply briefs shall not exceed 20 such pages.

(y) *Rule 24, Transcript of proceedings.* testimony and argument at hearings shall be reported verbatim, unless the Board otherwise orders. Transcripts of the proceedings shall be supplied to the parties at such rates as may be fixed by contract between the Board and the reporter. If the proceedings are reported by an employee of the Government, the appellant may receive transcripts upon payment to the Government at the same rates as those set by contract between the Board and the independent reporter.

(z) *Rule 25, Withdrawal of exhibits.* After a decision has become final the Board may, upon request and after notice to the other party, in its discretion permit the withdrawal of original exhibits, or any part thereof, by the party entitled thereto. The substitution of true copies of exhibits or any part thereof may be required by the Board in its discretion as a condition of granting permission for such withdrawal.

(aa) *Rule 26, Representation—The appellant.* An individual appellant may appear before the Board in person, a corporation by an officer thereof, a partnership or joint venture by a member thereof, or any of these by an attorney at law duly licensed in any state, Commonwealth, Territory or in the District of Columbia.

(bb) *Rule 27, Representation—The respondent.* Government counsel shall be designated to represent the interests of the Government before the Board. They shall file notice of appearance with the Board, and notice thereof will be given appellant or his attorney in the form specified by the Board from time to time. Whenever at any time it appears that appellant and Government counsel are in agreement as to disposition of the controversy, the Board may suspend further processing of the appeal in order to permit reconsideration by the contracting officer: *Provided, however,* That if the Board is advised thereafter by either party that the controversy has not been disposed of by agreement, the case shall be restored to the Board's calendar without loss of position.

(cc) *Rule 28, Decisions.* Decisions of the Board will be made in writing and authenticated copies thereof will be forwarded simultaneously to both parties. The rules of the Board and all final orders and decisions (except those required for good cause to be held confidential and not cited as precedents) shall be open for public inspection at the offices of the Board in Washington, D.C.

(dd) *Rule 29, Motions for Reconsideration.* A motion for reconsideration, if filed by either party, shall set forth specifically the ground or grounds relied upon to sustain the motion, and shall be filed within 30 days from the date of the receipt of a copy of the decision of the Board by the party filing the motion.

(ee) *Rule 30, Dismissal without prejudice.* In certain cases, appeals docketed before the Board are required to be placed

in a suspense status and the Board is unable to proceed with disposition thereof for reasons not within the control of the Board. In any such case where the suspension has continued, or it appears that it will continue, for an inordinate length of time, the Board may in its discretion dismiss such appeals from its docket without prejudice to their restoration when the cause of suspension has been removed.

(ff) *Rule 31, Dismissal for failure to prosecute.* Whenever a record discloses the failure of the appellant to file documents required by these rules, respond to notice or correspondence from the Board, comply with orders of the Board or otherwise to indicate an intention to continue the prosecution of an appeal filed, the Board may issue an order requiring appellant to show cause within thirty days why the appeal should not be dismissed for lack of prosecution. If the appellant shall fail to show such cause, the appeal may be dismissed with prejudice.

(gg) *Rule 32, Ex Parte communications.* No Administrative Judge or member of the Board's staff shall entertain, nor shall any person directly or indirectly involved in an appeal submit to the Board or the Board's staff, off the record, any evidence, explanation, analysis or advice, whether written or oral, regarding any matter at issue in an appeal. This provision does not apply to consultation among Board members nor to ex parte communications concerning the Board's administrative functions or procedures.

(hh) *Rule 33, Effective Date and Applicability.* These revised rules shall take effect on January 14, 1975. They govern all proceedings in appeals after they take effect and also all further proceedings in appeals then pending, except to the extent that in the opinion of the Board, their application in a particular appeal pending when the Rules take effect would not be feasible or would work an injustice, in which event the former procedure applies.

§ 210.5 Rules of the Corps of Engineers Board of Contract Appeals, Office of the Chief of Engineers [Revoked].

[Regs., January 7, 1975, DAEN] (Secs. 2391-2314, 3012, 70A Stat. 127-133, 157; 10 U.S.C. 2301-2314, 3012).

[FR Doc.75-1082 Filed 1-13-75;8:45 am]

Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY

SUBCHAPTER C—AIR PROGRAMS

[FRL 320-1]

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Suspension of Effectiveness of Parking Management Regulations Pending Promulgation of Amendments

Between November 6 and December 12, 1973, the Environmental Protection Agency promulgated or approved transportation control plans including parking management regulations for certain major urban areas requiring

such plans for the attainment and maintenance of the National Ambient Air Quality Standards for photochemical oxidants and carbon monoxide. These regulations are applicable to new or modified parking facilities for which no general construction contract has been entered prior to June 30, 1975. 39 FR 36870 (October 15, 1974).

On August 22, 1974, EPA proposed amendments to the parking management regulations in effect in the following areas: (39 FR 30440)

Alaska: Fairbanks Area
Arizona:

Phoenix Area
Tucson Area

California:

Fresno and San Joaquin Valley Area
Los Angeles Area
Sacramento Valley Area
San Diego Area
San Francisco Area

District of Columbia Interstate Area:

Washington, D.C.
Maryland Suburbs
Virginia Suburbs

Maryland:

Baltimore Area (Suburbs of D.C. listed under D.C. Interstate)

Massachusetts: Boston Area

New Jersey:

Suburbs of New York City
New Jersey Suburbs of Philadelphia (Camden, Trenton)

Pennsylvania:

Philadelphia Area
Pittsburgh Area

Texas: Houston

Virginia: (Suburbs of D.C. listed under D.C. Interstate)

The August 22, 1974, notice of proposed rulemaking involving amendments to the parking management regulations for Houston-Galveston was subsequently withdrawn. 39 FR 37212 (October 18, 1974).

The purpose of the proposed amendments was to clarify certain requirements and procedures in the parking management regulations and to provide developers of parking facilities subject to pre-construction review several alternative methods of demonstrating that the facility is consistent with the control strategy to reduce areawide VMT and will not cause or exacerbate a violation of the carbon monoxide standards. 39 FR at 30441.

Because the parking management regulations were then applicable to facilities for which general construction contracts were executed after January 1, 1975, EPA believed it necessary to continue the unamended regulations in effect so that developers could proceed with applications for permits under the existing regulations if they so desired. Since that time, EPA has deferred the date at which parking facilities become subject to review until June 30, 1975. In addition, it has become apparent that the developers affected by the regulations have not chosen to submit applications for review under the existing regulations, preferring to wait until the amendments are promulgated. Although EPA has held workshops on the application procedures, no applications for permits have been received.

Since the applicability date of the parking management regulations has been extended and the regulated parties have elected to wait until the more flexible amended regulations are promulgated, there is no longer any reason to leave the unamended regulations in effect. In addition, the existence of promulgated regulations for which significant amendments have been proposed has led to requests for stays of the existing regulations and has made the process of orderly judicial review of the regulations more difficult for both the regulated parties and the government.

For these reasons, EPA finds that there is good cause to suspend the effectiveness of the parking management regulations to be amended by the August 22, 1974 proposal, including the applicability date, pending the promulgation of the amendments. EPA expects to promulgate the amendments within the next 90 days. The suspension will not affect the final rulemaking procedures presently being followed by the Agency on this subject and will end upon promulgation of the amendments proposed on August 22, 1974. This suspension shall be effective on January 14, 1975.

(Secs. 110(e), 301(a), Clean Air Act, 42 U.S.C. 1857c-5(c) and 1857g)

Dated: January 7, 1975.

RUSSELL E. TRAIN,
Administrator.

In Part 52 of Chapter I, Title 40, of the Code of Federal Regulations, the provisions of the following sections are suspended indefinitely pending the promulgation of amendments:

1. Subpart C—Alaska, § 52.86;
2. Subpart D—Arizona, § 52.139;
3. Subpart F—California, § 52.251;
4. Subpart J—District of Columbia, § 52.493;
5. Subpart V—Maryland, § 52.1103 and § 52.1111;
6. Subpart W—Massachusetts, paragraph (d) of § 52.1135;
7. Subpart FF—New Jersey, § 52.1588;
8. Subpart NN—Pennsylvania, § 52.2040; and
9. Subpart VV—Virginia, § 52.2443.

[FR Doc.75-1071 Filed 1-13-75; 8:45 am]

SUBCHAPTER E—PESTICIDE PROGRAMS [FRL 320-8]

PART 180—TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES

Methidathion

Two petitions (PPs 4F1512 and 4F1522) were filed (39 F.R. 26479, 26929) by CH3A-GEIGY Corp., Post Office Box 11422, Greensboro, NC 27409, in accordance with provisions of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 346a), proposing establishment of tolerances (40 CFR Part 180) for residues of the insecticide methidathion (O,O-dimethyl phosphorodithioate, S-ester with 4-(mercaptomethyl)-2-methoxy - 1,3,4-

thiadiazolin-5-one) in or on the raw agricultural commodities sorghum forage and fodder at 2 parts per million and sorghum grain at 0.2 part per million. (PP 4F1512) and peaches, pecans, and walnuts at 0.05 part per million (negligible residue) (PP 4F1522).

Based on consideration given the data submitted in the petition and other relevant material, it is concluded that:

1. The insecticide is useful for the purpose for which the tolerances are being established.

2. There is no reasonable expectation of residues in eggs, meat, milk, or poultry and § 180.8(a)(3) applies.

3. The tolerances established by this order will protect the public health.

Therefore, pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (sec. 408(d)(2), 68 Stat. 512; 21 U.S.C. 346a(d)(2)), the authority transferred to the Administrator of the Environmental Protection Agency (35 FR 15623), and the authority delegated by the Administrator to the Deputy Assistant Administrator for Pesticide Programs (39 FR 18805), § 180.298 is amended by revising the paragraphs "2 parts per million . . ." and "0.2 part per million . . ." and by adding the new paragraph "0.5 part per million . . ." to the end of the section, as follows:

§ 180.298 Methidathion; tolerances for residues.

2 parts per million in or on grapefruit, oranges, and sorghum fodder and forage.

0.2 part per million in or on cottonseed, potatoes, and sorghum grain.

0.05 part per million (negligible residue) in or on peaches, pecans, and walnuts.

Any person who will be adversely affected by the foregoing order may at any time on or before February 13, 1975, file with the Hearing Clerk, Environmental Protection Agency, Room 1019E, 4th & M Streets, S.W., Waterside Mall, Washington, D.C. 20460, written objections thereto in quintuplicate. Objections shall show wherein the person filing will be adversely affected by the order and specify with particularity the provisions of the order deemed objectionable and the grounds for the objections. If a hearing is requested, the objections must state the issues for the hearing. A hearing will be granted if the objections are supported by grounds legally sufficient to justify the relief sought. Objections may be accompanied by a memorandum or brief in support thereof.

Effective date. This order shall become effective January 14, 1975.

(Sec. 408(d)(2), 68 Stat. 512 (21 U.S.C. 346a(d)(2)))

Dated: January 9, 1975.

EDWIN L. JOHNSON,
Deputy Assistant Administrator
for Pesticide Programs.

[FR Doc.75-1208 Filed 1-13-75; 8:45 am]

APPENDIX B
PARKING MANAGEMENT QUESTIONNAIRES

NEWARK CBD EMPLOYER QUESTIONNAIRE

1. DO YOU PROVIDE PARKING FOR EMPLOYEES?

Yes, for all employees ☐

Yes, for some employees ☐

No ☐ If no, please go to Question B

A. If you provide parking:

How many spaces are provided at:

Company lot or garage _____

Contracted lot or garage _____

How much does parking cost employees?

It's free ☐

\$ _____ per space (per day)

B. If you provide limited or no parking:

Where do employees (who can't use company spaces) park?

On the street ☐

Commercial lot or garage ☐

2. HOW DO YOU FEEL ABOUT CARPOOLS? (Are they a good idea? Why?)

3. DO YOU HAVE A CAR POOLING POLICY?

Yes ☐

No ☐ Please go to Question 4

If you have a car pooling policy:

a. Which of the following do you provide?
(check one or more)

Priority in parking space assignment ☐

Advertisement and Promotion of Carpools ☐

Matching System (Coordinate Riders) ☐

Other (Please specify) _____ ☐

b. How many employees participate?

4. DO YOU PROVIDE PARKING FOR CUSTOMERS OR VISITORS?

Yes ☐

No ☐

a. If Yes, how many spaces are provided that are:

Free on company lot/garage _____

Free with validation at commercial lot/garage _____

b. If No, where do your customers or visitors park?

On the street ☐

Commercial lot/garage ☐

5. WOULD CHANGES IN AVAILABLE PARKING AFFECT YOUR BUSINESS OR EMPLOYMENT?

Yes ☐ Why? _____

No ☐ Why? _____

6. WOULD YOU CONSIDER YOUR PARKING SUPPLY IS:

a. Very important ☐ Why? _____

b. Important ☐ Why? _____

c. Somewhat important ☐ Why? _____

d. Not at all important ☐ Why? _____

7. WOULD REDUCED TRAFFIC CONGESTION AFFECT YOUR BUSINESS OR EMPLOYMENT?

Yes ☐ Why? _____

No ☐ Why? _____

8. DO YOU PLAN TO MOVE FROM YOUR PRESENT LOCATION WITHIN THE NEXT 5 YEARS?

Yes ☐

No ☐

a. If yes, where would you move?

Within downtown Newark ☐

Outside of downtown but remain in Newark ☐

Outside Newark but within Essex County ☐

Outside Essex County ☐

b. Would you rank by importance the reasons for moving:

	<u>Somewhat Important</u>	<u>Important</u>	<u>Very Important</u>
Newark high labor cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High tax rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neighborhood deterioration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decreasing profits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inadequate parking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inadequate space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>Somewhat Important</u>	<u>Important</u>	<u>Very Important</u>
Traffic congestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Excessive rent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pollution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. WOULD THE FOLLOWING PARKING MANAGEMENT CONTROLS, IF INSTITUTED IN THE DOWNTOWN NEWARK AREA TODAY, NEGATIVELY AFFECT YOUR BUSINESS?

	Yes	No	Don't Know
Time limit on all on-street parking in downtown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On-street parking reduced or eliminated in the downtown area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number and size of all off-street parking lots (company and commercial lots) restricted to present size or reduced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
An increase in the cost of parking all day in company, commercial and on-the-street parking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Persons in carpools are the only ones allowed to park in downtown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FOR OUR STATISTICAL SUMMARIES:

10. HOW LONG HAS YOUR FIRM BEEN AT ITS PRESENT ADDRESS?

Less than a year ☐

One to 5 years ☐

5 to 10 years ☐

10 or more years ☐

11. WHAT ARE YOUR REGULAR WORKING HOURS?

_____ am to _____ pm

12. HOW MANY EMPLOYEES DO YOU HAVE

Full Time _____

Part Time _____

a. How many of these are salaried?

b. How many of your employees fall into the following annual income categories?

\$ 0 to 7,999 _____

\$ 8,000 to 14,999 _____

\$15,000 + _____

13. IN THE FUTURE, WILL YOUR EMPLOYMENT:

Expand ☐

Decline ☐

Remain the same ☐

14. TYPE OF BUSINESS: _____
(e.g. manufacturing)

(Optional)

NAME OF ORGANIZATION: _____

ADDRESS: _____

COMMENTS: _____

THANK YOU FOR YOUR PARTICIPATION

NEWARK CBD EMPLOYEE QUESTIONNAIRE

1. WHAT WAS YOUR PRINCIPAL MEANS OF TRAVEL TO WORK TODAY?

(check as many as applicable)

- Newark City Subway ☐
- Erie-Lackawana Railroad ☐
- PennCentral, Central New Jersey and
Reading Railroads into Penn Station ☐
- PATH System into Penn Station ☐
- Bus (Route Number _____) ☐
- Car driver ☐
- Car passenger ☐
- Walk ☐
- Other (Please specify) _____ ☐

2. HOW LONG DOES IT NORMALLY TAKE YOU TO GET TO WORK?

_____ Minutes

If you came to work by car, please go to Question 4.

3. IF YOU CAME TO WORK BY BUS OR TRAIN TODAY:

a. Did you find a seat?

Yes ☐ No ☐

b. How much will you pay for Today's Round Trip? _____ Dollars

Monthly passes? Yes ☐ No ☐

c. Why did you take the train or the bus?

(check one or more)

- No driver's license ☐
- No car at home ☐
- Car at home not available ☐
- Cheaper than auto ☐
- Safer than auto ☐
- No parking problems ☐
- No driving strain ☐
- Faster ☐
- Other (please specify) _____ ☐

d. What do you dislike about bus or train service?

Bus and train riders please go to Question 5.

4. IF YOU CAME TO WORK BY CAR TODAY:

a. How many people were in the car including yourself?

1	<input type="checkbox"/>	4	<input type="checkbox"/>
2	<input type="checkbox"/>	5	<input type="checkbox"/>
3	<input type="checkbox"/>	6 or more	<input type="checkbox"/>

b. Where was the car parked?

On the street	<input type="checkbox"/>
Company owned lot or garage	<input type="checkbox"/>
Private or City-owned lot or garage	<input type="checkbox"/>
Other (please specify) _____	<input type="checkbox"/>

c. What was the car parking cost?

\$ _____ per

day
week
month

 (circle one)

d. How much was your share of the parking cost?

\$ _____ per

day
week
month

 (circle one)

e. What is the greatest amount you are willing to pay for parking before you leave your car home or do not ride to work in a car?

\$ _____ per

day
week
month

 (circle one)

f. What if parking at work became more than you are willing to pay? Would you:

Join a carpool	<input type="checkbox"/>
Take a bus or train to work	<input type="checkbox"/>
Look for a job where parking is cheaper	<input type="checkbox"/>
Other (Please specify) _____	<input type="checkbox"/>

g. Why did you come to work by car?

(check one or more)

Car is <u>cheaper</u> than bus or train	<input type="checkbox"/>
Car is <u>safer</u> than bus or train	<input type="checkbox"/>

- Car is faster than bus or train ☐
- Car is more dependable than bus or train ☐
- Free parking at work ☐
- Low cost parking at work ☐
- Can always find parking on the street ☐
- Car or carpool is available ☐
- Need car for work ☐
- Need car after work ☐
- Bus or train stops are too far from home ☐
- Bus or train schedule is too confusing ☐
- Bus or trains run too infrequently ☐
- Hate fixed schedules of buses and trains ☐
- Other (Please specify) _____

5. PLEASE RATE IN ORDER OF EFFECTIVENESS FROM 1 TO 10 (1 = most effective; 10 = least effective) THE ITEMS YOU FEEL WOULD BE MOST EFFECTIVE IN ENCOURAGING THE USE OF BUSES OR TRAINS? (Please use each number only once)

RATING

- 1 = Most Effective,
- 2 = Next most effective,
- 3 = The next, etc.

- Cleaner and newer vehicles _____
- Faster travel _____
- Air-conditioned vehicles _____
- More frequent service _____
- Lower fares _____
- Parking lots at stops and stations _____
- Shelters against bad weather at stops and stations _____
- Better security to assure personal safety _____
- Better located stops and stations _____
- Other (Please specify) _____

6. HOW DO YOU FEEL ABOUT EACH OF THE FOLLOWING PARKING PROPOSALS?

	Very Accept- able	Some- what Accept- able	Neither Accept- able nor Unaccept- able	Some- what Unaccept- able	Very Unaccept- able
Time limit on all on- street parking in downtown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>Very Accept- able</u>	<u>Some- what Accept- able</u>	<u>Neither Accept- able nor Unaccept- able</u>	<u>Some- what Unaccept- able</u>	<u>Very Unaccept- able</u>
On the street parking reduced or eliminated in the downtown area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number and size of all off-street parking lots (company and commercial lots) restricted to present size or reduced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
An increase in the cost of parking all day in company, commercial and on the street parking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Persons in carpools are the only ones allowed to park in downtown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. DO YOU LIVE WITHIN 3 BLOCKS OF A BUS OR TRAIN STOP?

- Yes ☐
- No ☐
- Don't know ☐

8. DO YOU HAVE A DRIVER'S LICENSE?

- Yes ☐
- No ☐

9. HOW MANY CARS IN YOUR FAMILY?

- 0 ☐
- 1 ☐
- 2 ☐
- 3 or more ☐

a. What year is each?

1st car _____

2nd car _____

3rd car _____

10. HOW LONG HAVE YOU LIVED AT YOUR PRESENT ADDRESS?

- Less than 6 months ☐
6 months to a year ☐
1 to 5 years ☐
More than 5 years ☐

What is your zip code? _____

11. WITHIN THE NEXT 3 YEARS, DO YOU PLAN TO MOVE FROM THE COUNTY WHERE YOU NOW LIVE?

- Yes ☐
No ☐
Don't know ☐

12. CHECK:

- a. Female ☐
Male ☐

b. Age:

- | | |
|--------------------------------------|--------------------------------------|
| 15-19 years <input type="checkbox"/> | 45-54 years <input type="checkbox"/> |
| 20-24 years <input type="checkbox"/> | 55-59 years <input type="checkbox"/> |
| 25-34 years <input type="checkbox"/> | 60 + years <input type="checkbox"/> |
| 35-44 years <input type="checkbox"/> | |

c. Marital Status

- married ☐ single ☐

13. WHAT WAS YOUR FAMILY INCOME LAST YEAR?

- | | |
|---|--|
| \$0-4,999 <input type="checkbox"/> | \$11,000-12,999 <input type="checkbox"/> |
| \$5,000-6,999 <input type="checkbox"/> | \$13,000-14,999 <input type="checkbox"/> |
| \$7,000-8,999 <input type="checkbox"/> | \$15,000 + <input type="checkbox"/> |
| \$9,000-10,999 <input type="checkbox"/> | |

14. COMMENTS: _____

THANK YOU