

## ZONING REQUIREMENT FOR OFF-STREET TRUCK LOADING AND UNLOADING FACILITIES

DAVID R. LEVIN, *Head*  
*Special Administrative Studies Unit*  
*Division of Financial and Administrative Research*  
*Public Roads Administration*

Within the memory of all of us, the truck has grown from an industrial and agricultural upstart to one of the dominant factors in our national economy. The truck performs a fast, flexible and economical service from any origin to any destination desired. Approximately six and a half million trucks are moving an unprecedented tonnage of goods and produce today. On rural roads, freight movement by truck that has either its origin or its destination in a city now exceeds 63 billion ton-miles, an all-time high. Additionally, trucks carry practically all goods moved in wholesale and retail delivery in urbanized areas. The resulting benefits have been many.

But urban congestion has also been augmented by these vast trucking operations that take place in our cities because of the lack, in part at least, of adequate terminal facilities for their loading and unloading activities.

Truck terminal facilities may consist of centrally-located, multi-million dollar structures as are being planned and constructed by the Port of New York Authority in the New York-New Jersey metropolitan area; or they may be individual or multiple, enclosed or unenclosed, loading and unloading berths or platforms, located adjacent to or in the vicinity of specific commercial, industrial or other establishments. This paper is an analysis of only the latter type of truck terminal facility as required by zoning ordinances, building

codes, or other local ordinances in connection with specific uses.

As of December 1, 1947, there were in the United States at least 66 local governmental units in 28 States that had zoning or other ordinances requiring the provision of off-street truck loading and unloading facilities in connection with various property uses.<sup>1</sup> Of this total, 53 were cities, 4 towns, 4 villages, and 5 counties. It is significant to note that over two-thirds of the communities that have used their police power to cope with the truck terminal problem have utilized the same device to require the provision of off-street automobile parking facilities in connection with designated property uses.

Classification of the 66 units requiring off-street truck berths indicates that approximately two-thirds of the localities have populations of 50,000 or less. Thirteen communities have over 100,000 persons, while four of these contain over 1,000,000. Sixty-one of the units were incorporated or urban areas, while the remaining five were unincorporated, four being counties and the other a New England

<sup>1</sup> Statistics contained in this report are based on research covering hundreds of zoning ordinances. It was not practical, however, to canvass all possible local units which may have similar loading and unloading requirements, and there are doubtless many more than the 66 units known to have such requirements at the present time.

town. Apparently, local units of all sizes and complexions have been concerned with the problem of off-street truck loading and unloading facilities and have chosen the zoning mechanism to solve that problem, in part at least.

One of the earliest cities to require the provision of off-street truck loading and unloading facilities was Memphis, Tennessee, which amended its ordinance to require such provision effective October 18, 1927, over two decades ago. Among other early zoning ordinances are those for Sterling, Colorado, adopted May 6, 1929; El Paso, Texas, September 25, 1930; Thomasville, North Carolina, October 6, 1930; Pueblo, Colorado, June 1, 1931; and Croton-on-Hudson, New York, July 31, 1931.

In most instances, it was difficult to ascertain, from the information available, when truck loading and unloading provisions were first included in the ordinances. It is probable, however, that the great majority of provisions in ordinances requiring off-street truck loading and unloading facilities in connection with designated property uses were adopted or added by amendment within the last decade or so.

I should like to invite your attention to a few details relating to the administration of zoning requirements for the provision of off-street truck loading and unloading facilities. These concern agencies vested with regulatory authority, advisory bodies and enforcement officials.

In most instances, the local legislative body retains primary regulatory authority over the provision of off-street truck loading facilities through the zoning process. Of the 66 local units that have such ordinances, the city or common council, with or without the assistance of the mayor, is

designated as the regulatory agency in 30 cities. The board of city commissioners, with or without the mayor, is specified in 9 other cities. A great variety of other local public bodies or officials is vested with such authority in the remaining 27 places, including the zoning commission, the city planning commission, county commissioners of roads and revenues, and others.

In keeping with the observed trend in local legislation, it would seem desirable for the local law-making body to retain primary regulatory control with respect to the mandatory provision of off-street truck loading and unloading facilities. However, it might be appropriate for the local legislature to delegate some of its regulatory functions to a competent public parking agency, if such exists, so that the provision of off-street parking and truck loading facilities, in all their various forms, might be appropriately integrated.

Frequently, advisory agencies are designated for the purpose of investigating and making reports and recommendations to the local legislative body in connection with any proposed change in the zoning ordinance. In 37<sup>2</sup> of the 66 ordinances contained in this analysis, the planning commission or board is designated as the advisory body. In other instances, the zoning commission, the board of adjustment, the board of zoning appeals, or the planning and zoning commission are so indicated.

Because local planning bodies are generally intimately associated with zoning objectives and are concerned with the over-all development of the urban community, they should be accorded the undisputed right to serve in an advisory capacity on matters relating to the provision of off-street truck loading and un-<sup>2</sup> Of these, 29 are cities, 3 incorporated towns, 2 villages, and 3 counties.

loading facilities by means of zoning.

In addition to regulatory and advisory bodies, machinery for enforcement is almost invariably provided. In 27 instances<sup>3</sup> the building inspector is named as the enforcement official. In 6 cities, it is the commissioner or superintendent of buildings; in 3 cities, the city manager; and in two cities, the zoning administrator. In the remaining instances, the enforcement officer has been designated to be the city engineer, an official designated by the mayor, the department of building and safety engineering, the commissioner of public utilities, grounds and buildings, the street and sewer department, and a variety of others.

It seems quite obvious that the local building inspector or the department where that function is lodged is probably best equipped to enforce zoning requirements for the provision of truck loading facilities as an adjunct to buildings.

The essence of these ordinances concerns the extent of off-street truck loading and unloading facilities required for the various property uses. Study of the local laws investigated reveals that consistency in designating the extent of facilities required is strikingly lacking. Variations exist as between specifically designated property uses. Further differences are found to exist between local and general business districts. Some ordinances apply to any business, industrial, manufacturing, or other district, while others are specifically concerned with specified districts or areas. The number of permutations or combinations of these, as found in the various ordinances, is seemingly endless. Mathematical averages are all but impossible.

A grouping that is common to 14 different places in 9 States<sup>4</sup> deals

with hotels, institutional buildings, hospitals and mortuaries. In commercial and manufacturing districts in Arlington County, Virginia, for example, truck loading space not less than 15 feet in width for every 50 feet of building width, nor less than 25 feet in length and 15 feet in height is required for these uses. In Detroit and Highland Park, Michigan, on the other hand, one space is required by law for every 20,000 square feet in excess of 3,000 square feet of building-floor-use or land-use for hotel, hospital or mortuary purposes. A more complex requirement is contained in the Los Angeles ordinance, namely, one space for each 2,000 square feet of lot area, but not more than two spaces unless the building has a gross floor area of more than 80,000 square feet, in which case one additional space for each additional 40,000 square feet in excess of 80,000 square feet, or fraction thereof above 10,000 square feet, in the case of a hospital, institution or hotel. In contrast, one of the simplest provisions, found in Henrico County, Virginia, merely requires space for the loading and unloading of goods, for hotel or institutional use.

Ten cities in 6 States<sup>5</sup> have ordinances containing provisions relating to retail or wholesale

<sup>3</sup> These consist of 21 cities, 1 village, 3 incorporated towns, 1 unincorporated town, and 1 county.

<sup>4</sup> Los Angeles, California; Denver, Colorado; Fulton County, Florida; Detroit, Highland Park and Trenton, Michigan; Kansas City, Missouri; New York City, New York; Cleveland and Parma, Ohio; Arlington, Chesterfield, and Henrico Counties, Virginia; and Vancouver, Washington.

<sup>5</sup> Detroit, Highland Park and Trenton, Michigan; Rochester, Minnesota; Kansas City, Missouri; Plainfield, New Jersey; New Rochelle and New York City, New York; and Cleveland and Parma, Ohio.

stores or markets, warehouses, supply or display houses, loft buildings, laundry or dry cleaning establishments. Perhaps one of the best known is the New York City provision requiring one space for each 25,000 square feet and fraction thereof in excess of 5,000 square feet of aggregate gross floor area designed or used for storage, goods display or department store purposes. An ordinance in Pochester, Minnesota, requires that in commercial districts, a plant for pasteurization, bottling, or distribution of milk must be provided with adequate facilities for loading and unloading within the structure housing the plant.

Rear yards, of prescribed size, of business and commercial or personal service establishments in local business districts are frequently designated to be used as loading space. Such facilities or their equivalents are required in thirteen localities in 5 States.<sup>6</sup> In Tuscumbia, Alabama, for example, in connection with any business structure or use on a corner lot or on any lot accessible to or adjoining a public or private alley, a rear yard of not less than 20 feet in depth is required, appropriate to provide space adequate in the opinion of the building inspector for loading and unloading.

A few ordinances are applicable specifically to business and commercial or personal service establishments in general business districts. There are 7 local laws of this character in 5 States.<sup>7</sup>

In three other instances, requirements are applicable to any business district.<sup>8</sup> In twelve places,<sup>9</sup> business and commercial or personal service establishments in any business or industrial district are involved.

Twelve cities have ordinances requiring the provision of truck loading and unloading facilities in

specified business or industrial districts.<sup>10</sup> Other property use groupings exist, too numerous to mention in this brief summary.

Ordinance requirements dealing with the location of off-street truck loading and unloading facilities for various property uses lack uniformity. In the majority of cases, the loading facilities are required to be provided on the same lot or premises. In other instances, they are specified to be within the building, along the entire alley frontage of the lot, in the rear or side yards, or elsewhere.

It is apparent, of course, that for truck loading facilities to be of maximum benefit to those who will use them, they must be located as close as possible to the premises to which they are an adjunct. It seems thoroughly realistic to require that truck loading facilities be located on the premises convenient to the buildings or uses they are to serve.

<sup>6</sup> Clanton, Decatur, Dothan, Mountain Brook, Talladega, and Tuscumbia, Alabama; New Castle, Indiana; Montclair, New Jersey; Bristol, Clinton and Johnson City, Tennessee; and Bristol and Richmond, Virginia.

<sup>7</sup> Clanton, Dothan and Talladega, Alabama, Boulder County, Colorado; Montclair, New Jersey, El Reno, Oklahoma, and Clinton, Tennessee.

<sup>8</sup> Lawrence, Massachusetts, Thomasville, North Carolina; and Clinton, Tennessee.

<sup>9</sup> Tuscon, Arizona; Hamden, Connecticut; Fulton County, Georgia, Cambridge, Massachusetts; Biloxi, Mississippi; Omaha, Nebraska; Piqua, Ohio; Bolivar and Centerville, Tennessee; Arlington County, Virginia; Charleston, West Virginia; and Racine, Wisconsin.

<sup>10</sup> Denver, Pueblo, and Sterling, Colorado; Ft. Lauderdale and Lake Worth, Florida; Dayton, Memphis and Nashville, Tennessee; El Paso and San Angelo, Texas; Madison, Wisconsin; and Cheyenne, Wyoming.

Design features of off-street truck loading facilities, most of them relating to access, are mentioned in approximately 25 local ordinances. The best considered provisions state that loading and unloading facilities are to be provided in such a manner as not to obstruct traffic upon the streets or alleys. Some provide merely that the loading spaces shall be accessible or that convenient and adequate access at least 12 feet wide shall be provided. A well-considered requirement as to placement and character of access is desirable.

Only 8 of the 66 ordinances contained in this analysis designate the size of the off-street loading and unloading berth in precise terms. Three indicate the dimensions to be 10 feet by 25 feet, with a 14-foot height clearance.<sup>11</sup> Two specify 200 square feet of area, with minimum clear height of the area and its approaches of 14 feet.<sup>12</sup> Another provides that a space shall be 10 feet in width, 20 feet in length measured perpendicularly to the alley, and 14 feet in height.<sup>13</sup> Twenty-five feet by 10 feet, with a minimum clear height of the berth and its approaches of 12 feet, is still another specification.<sup>14</sup> Finally, a single ordinance requires a space not less than 10 feet in width and 30 feet in length.<sup>15</sup>

The adequacy of a prescribed size of loading berth is a function of a number of variables that include (1) the size of the vehicle which will use the space, (2) the nature of the property use to which the loading facility is accessory, and (3) the design and character of the access. Since motor transports are being designed for greater and greater capacities, truck loading space that has been provided in the past has a tendency to become more and more inadequate. Reasonableness, in light of all the circum-

stances, should prevail.

Penalties for the violation of legal requirements for the provision of off-street truck loading and unloading facilities are mandatory in 40 ordinances and discretionary in 10 others. Minimum penalties range from \$1 to \$50 and costs, maximum penalties from \$19 to \$500 or 90 days imprisonment, or both.

The severity of penalty provisions will vary, of course, from place to place, depending upon local custom or practice. In any event, should be of sufficient magnitude to serve as an effective deterrent to violation.

A matter that has vexed students of the problem for some time is the retroactive application of ordinance requirements for the provision of off-street truck loading and unloading facilities and the ultimate liquidation of non-conforming uses. Unfortunately, existing non-conforming facilities cannot be eliminated in the same manner that a tough commanding general issues an order of the day. What the courts ultimately will do when confronted with the issue on the merits is something for the judicious to ponder. Suffice it here to suggest that thus far at least, there has been nothing encouraging to proponents of retroactivity in existing legislative trends, and little more in judicial acceptance.

Existing ordinances requiring the provision of designated off-street truck loading and unloading facilities apply uniformly to all new structures and uses, unless specifically exempt. Additionally, a non-conforming use (with respect

<sup>11</sup> Detroit and Highland Park, Michigan, Kansas City, Missouri.

<sup>12</sup> Plainfield, New Jersey; New Rochelle, New York.

<sup>13</sup> Los Angeles, California.

<sup>14</sup> New York City.

<sup>15</sup> Village of Bronxville, New York.

to truck loading facilities) may be terminated upon the occurrence of certain events. The provision for Detroit, Michigan is typical: A non-conforming use shall be discontinued if the building is physically changed, except as may be required or as was originally planned, or if building is reconstructed following damage at an expense exceeding 60 percent of the assessed value at the time of such damage. If the non-conforming use is abandoned or discontinued for a period of two years or if it is changed to a conforming use, the building or land may not again be used for a non-conforming use. In most instances, the period of non-use is limited to one year rather than two years, as found in the Detroit ordinance.

A rather belabored attempt at the gradual elimination of non-conforming uses, at least with respect to residential zones, is found in the zoning ordinance for Los Angeles: In "R" residential zones, a building or structure designed, arranged, or intended for a use not permitted therein is to be completely removed or converted so as to be conforming at the following ages, computed from the date of erection. Buildings defined in Los Angeles City Building Code as Classes 1 and 2, 40 years; Classes 3 and 4, 30 years; and Class 5, 20 years. This regulation is not to become operative until 20 years from the effective date of article. It is apparent that this provision has little application, if any, to the adequate provision of truck loading facilities, as the zones involved are residential in character.

Zoning ordinances, building codes and other local laws are conceived of under the general police power of the State. What, precisely, are the elements of this authority, which at least 66 local units, ranging in population from approximately 1,000 to seven and a half

million, have chosen to exercise in connection with truck loading and unloading facilities? The term "police power" as used in this sense does not refer to billy-sticks, bluecoats, or brass-buttons, of course. Rather, it has been said to involve the authority of the State and of the community to project and preserve the general community welfare against abuse and injury arising from the acts of individual citizens, and to do so without compensation.

In theory, the use of zoning in providing off-street truck loading and unloading facilities, promotes the public health, safety, morals and the general welfare. This legalism can easily be translated into more tangible form.

To start with, the provision of off-street truck loading facilities through the zoning mechanism is a positive, rather than a negative approach to betterment of the urban community. For it stimulates the local citizenry to do what is right in the right place, rather than restraining them from doing the wrong thing in the wrong place. As such, it should be supported by city planners, highway administrators, traffic engineers, transportation authorities and others interested in a rational development of the city area. Truckers, shippers, consignees, commercial and industrial interests will all be benefited by the adequate provision of off-street truck loading facilities. Transportation costs will be lower, congestion will be alleviated. Property to which loading and unloading facilities are adjunct, will be rendered more accessible thereby and will become more valuable accordingly. The use of the zoning device to provide the loading facilities so urgently needed today will work on economic hardship on no one. Nobody's toes will be stepped upon.

For these many reasons, then, it is desirable for every urban community that has not already done so to amend its zoning code so as to require the reasonable provision of off-street truck loading and unloading facilities in accordance with the indicated needs of the respective property uses.

I might mention at this time that all the underlying data of this study of off-street truck loading and unloading facilities will soon be published by the Highway Research Board in bulletin form similar to our two previous monographs on parking enabling legislation.<sup>16</sup>

Suggestions for legislative use

will be included as derived from a study of existing legislation and the present need for off-street truck loading and unloading facilities. A select group of experts on the practical aspects of this problem will assist in this endeavor.

I hope that these collective efforts will be helpful to the many local communities that are now bedeviled with the bothersome truck terminal problem.

<sup>16</sup> AN ANALYSIS OF GENERAL STATE ENABLING LEGISLATION DEALING WITH AUTOMOBILE PARKING FACILITIES, Bulletin No. 2; and AN ANALYSIS OF STATE ENABLING LEGISLATION OF SPECIAL AND LOCAL CHARACTER DEALING WITH AUTOMOBILE PARKING FACILITIES, Bulletin No. 7