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THE DISPOSAL OF JUNKED CARS

In 1964 the American public junked more than five million cars. From all indications this figure is only a forewarning of things to come. In the last few years new car production has been at record levels, and it is estimated that the production of eight or ten million cars a year will be common by 1975.

In addition to increases in production, a decline in average car life is also expected. Life expectancy has already dropped from 14 years in 1960 to 10 years in 1964, and further declines are almost certain. The combination of high production and short life will inevitably increase the number of automobiles junked each year.

What happens to cars that are no longer useful as a means of transportation? Many go through a scrapping process in which they are stripped of their parts, burned, baled, and shipped to steel mills. The entire process, from wrecked car to finished steel, can take as little as 90 days. It may take years, however, and many cars are never processed. The number processed each year depends primarily on the steel mills' demand for auto scrap. In the past decade there has been an absolute decline in the amount of scrap used by the steel industry, and this has forced the price of auto scrap to an unprecedented low level.

The combination of more cars being junked each year and fewer being processed into steel has created a disposal problem of major proportions. As wrecking yards fill to capacity, many operators simply dump their cars in vast auto graveyards. If the demand for auto scrap should rise, the graveyards might be cleared, but this appears unlikely in the near future.

The effects of the depressed scrap market are being felt by individuals who want to get rid of their old cars. Since the over-stocked auto wreckers are often unable to pay more than a few dollars for cars, private citizens find it cheaper as well as more convenient to abandon them on city streets or vacant lots. City governments across the country are spending an increasing amount of time and money on efforts to dispose of these abandoned cars.

The disposal of junked cars has, to some extent, always been a public concern. Police and fire officials, health officials, planners, tax assessors, vehicle licensing officials, and other public authorities have had a continuing interest in the locations and procedures of automobile disposal. With the number of cars junked increasing and the number processed declining, it is important to take a fresh look at the problems of car disposal. This report has been prepared to aid public officials, particularly planning officials, who have some responsibility for the control of scrap yards, auto graveyards, and auto abandonments. Its aim is to describe the problems and to evaluate the potentialities and limitations of several possible solutions.

AUTO DISPOSAL: A BACKGROUND REPORT

The Scrap Business

The scrap businesses fall into two main categories. First are the auto wreckers, who buy cars primarily for their salvageable parts. Second are the processors, who buy cars (often from the wreckers) for processing and ultimate sale to the steel industry.

Wreckers. -- The auto wrecker buys junked cars primarily for the parts he can salvage, and his primary profit is from the sale of parts. The residual bulk of the auto is a by-product of his operation and may or may not furnish additional profit. The wrecker himself does not prepare autos for the steel mill.

The wrecker handles two types of cars. One is the late-model car that has been in an accident and is beyond repair. The other is the older car that has deteriorated over time. The wrecker usually prefers the late-model wrecks, because the demand for the salvageable parts will be high. A very expensive, late-model car in which most of the parts are still in good condition may be worth as much as $1,000 to a wrecker. This is a rarity, however, and most wrecked cars are worth not more than $150. Very old cars are usually worthless to the wrecker: even if the car is running, its parts will be in poor condition, and the demand will be low for the few parts that can be salvaged. As a consequence, the wrecker will pay very little for old cars. In fact, many wreckers refuse to accept some cars even as gifts because the cars would take up space needed for more profitable acquisitions. Make, model, year, and condition are all considered by the wrecker before he decides whether he wants a car and how much he is willing to pay.

The wrecker obtains his inventory of cars from a variety of sources. Private individuals, used car dealers, body shops, and repair garages are the major ones. In addition, many wreckers buy at auctions. Insurance companies hold auctions to get rid of vehicles wrecked by their policy holders, and police departments auction off cars abandoned on city streets.

If the wrecker has a small yard where space is at a premium, he may strip the

car of the usable parts and then dispose of the remaining hulk. However, most wreckers prefer to store the cars and let the customers fill their own orders by roaming the yard until they find the needed part. This requires a larger yard, but savings are realized through lower labor costs.

A wrecker's customers are as varied as his suppliers. They include individuals who are trying to keep the family car running and garage mechanics who cannot afford to maintain a full inventory of parts. Many wreckers sell to the rebuilt auto-parts industry, which comprises some 2,000 small firms that specialize in reconditioning carburetors, generators, distributors, clutches, and other parts. To help locate hard-to-find parts, some wreckers are connected by a telephone-teletype communications system.

After the wrecker has stripped a car of its usable parts, he must dispose of it. If the market for scrap is favorable, he can sell the car to a processor. If he does this, he may have to burn the car to remove such things as glass, rubber, upholstery, and nonferrous metal; many processors will not buy a car unless it has been prepared in this manner. If he cannot sell to a processor, the wrecker must dispose of the remains some other way. If there is room in his yard, he may store cars on a corner of his lot and wait for a more favorable market. If he has no room, he may buy or lease property at another location to use as an auto graveyard.

The National Auto and Truck Wreckers Association estimates there are 8,000 wrecking yards in the country that handle between five and six million cars each year. The average size of an auto wrecking yard is eight acres. In heavily populated areas, the average is about two acres, and in areas where land is inexpensive the yards may be as large as 30 acres. On the average, a car remains in the wrecker's yard for a year, but it may be kept for only a day or for as long as four years.[1]

Processors. -- The auto processor prepares automobiles for consumption by domestic steel mills or for export to foreign mills. His interest is in the metal components of the car, not in the parts.

Auto processing is a specialized segment of a much larger ferrous scrap industry, and a typical scrap processor uses autos for only part of his scrap output. The remainder will be scrap from industrial waste, demolition scrap from bridges and buildings, or worn-out materials such as old machinery. Auto scrap usually accounts for less than 15 per cent of the scrap purchased by domestic steel mills.

Unlike the wrecker, who values the car for its parts, the processor pays for bulk. He may pay $10 to $20 for a car or, if he is purchasing in volume, he may pay $5 to $10 a ton. If the car enters the processing yard already stripped and burned by the wrecker, it is inspected to make sure it is free of impurities. If it has not been stripped, it goes through a stripping line where the radiator, ornaments, head lights, trim, heater, electrical equipment, and wiring are removed. This material is an important by-product of the processing operation. An average car contains 66 pounds of aluminum, 37

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[1]This and subsequent references will be found at the end of the report.

pounds of copper, 38 pounds of zinc, 20 pounds of lead, and 180 pounds of rubber, all of which can be profitably reclaimed. From the stripping line, the car is taken to an incinerator where it is burned to remove paint, grease, and other impurities which would lower the quality of the steel. Finally, the car is either squeezed in a hydraulic press until it is the size of a filing cabinet, or it is shredded into fist-sized chunks. The final product is shipped to a steel mill, where it becomes part of the mill's new production.

The ferrous scrap processing industry is represented nationally by the Institute of Scrap Iron and Steel.[2] According to the Institute, about 4,000 firms in the country have scrap processing equipment of some type. Not all these firms, however, have the type of equipment needed for auto processing. The Institute represents about 1,200 scrap processors, who handle about 90 per cent of the ferrous scrap in the country. The Institute recently sent a questionnaire to its members in an effort to understand better the character of the industry. The information which follows is based on a sample of the returns from that questionnaire.[3]

> Fifteen per cent of the processors do not use cars for any of their scrap output. Ten per cent use cars for 60 per cent or more of their output.
>
> Of the processors who do handle auto scrap, five per cent also sell used parts. This indicates a slight overlap between the processing and wrecking functions.
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> Fifty-five per cent of the scrap yards are smaller than five acres, and eight per cent are larger than 20 acres.
>
> Fifty-five per cent of the businesses have been in operation at the same location for more than 20 years; eight per cent have been operating for less than five years.
>
> Thirty per cent employ fewer than 10 persons; 41 per cent employ between 10 and 30 persons; and 39 per cent employ more than 30 persons.
>
> Sixty-five per cent of the processors who handle cars do not accept them unless they have been burned and stripped.
>
> Almost 80 per cent of the yards are located near a railroad track.
>
> Complaints concerning the operation of the yards include noise, smoke, dust, appearance, vibration, and television interference resulting from the use of certain equipment. The most frequent complaint is about smoke.
>
> The complaints are registered by civic groups, newspapers, neighborhood commercial and industrial enterprises; and city officials and nearby residents are the most frequent complainers.

Auto wrecking and processing are two phases of the auto scrapping process. Often, however, the two phases overlap, and the distinction between them be-

comes blurred. In general, the processor is interested in metals, prefers an industrial location near a railroad, and requires expensive specialized equipment. The wrecker is interested in parts, prefers a highway location convenient to the motoring public, and requires less equipment than the processor. Many mixed or hybrid businesses cannot be rigidly classified as either wreckers or processors. All the same, the distinction is important in analyzing and solving the problems posed by junked cars.

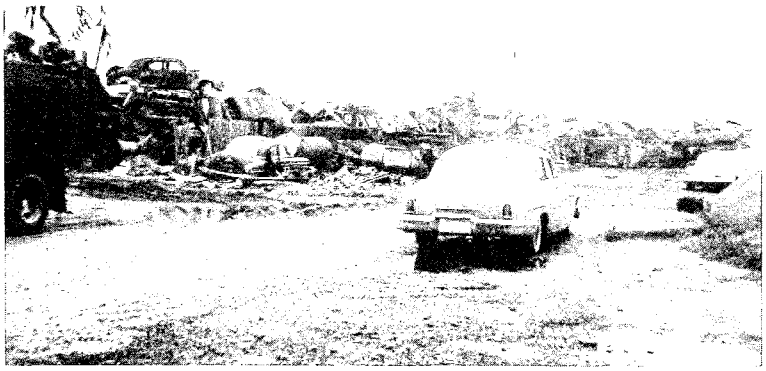
The Scrap Market

The final consumer of auto scrap is the steel mill, which uses scrap steel as one of the two basic materials (pig iron is the other) from which steel is produced. In recent years, the steel industry's scrap purchases have declined significantly. Between 1950 and 1957, total scrap purchased by the steel industry averaged 35.1 million tons a year. Between 1958 and 1963, the average was only 26.6 million tons.[4] As purchases have decreased, the industry has eliminated the lowest quality material first; and of all the types of scrap, the mills find autos and other worn-out materials the least desirable.

The decline in the amount of scrap purchased can be traced to two primary causes. First, there has been an absolute decline in the amount of steel produced. Steel production in the late fifties and early sixties dropped slightly from the higher production levels of the early fifties. Second, and more important, technological changes in the steel industry have reduced the relative amounts of scrap needed for making steel. The conventional open hearth furnace uses between 35 and 60 per cent scrap in each charge, but the new oxygen converter process can use no more than 30 per cent. The result is more steel with less scrap. In 1963 approximately eight per cent of all steel made in this country was made by oxygen converter. By 1966 it will be 25 per cent, and it is expected to be 50 per cent by 1970.[5] The decline in scrap demand has created serious problems for the ferrous scrap industry in general and the auto scrap industry in particular.

Processors. -- The unfavorable market has lowered the price of all forms of scrap. As recently as 1958, the national average price of auto scrap was $38 a ton, but by 1963 the price had dropped to $20. It costs a processor $12 to $14 a ton to prepare a car for the mills, and transportation costs are another $4 to $8 a ton. Thus, the cost of processing ($16 to $22) nearly equals the price paid by the steel industry for the finished product ($20). In this situation, many of the marginal processors are either squeezed out or turn to more profitable categories of scrap.

The decline in demand for auto scrap has not caused much stockpiling in the yards of the processors. Most processors do not maintain large inventories. They buy cars only when they are reasonably sure they have a market for the finished product. When the demand for auto scrap is low, the processor shifts his purchases to some other form of scrap and adjusts his auto inventory accordingly. When the market is more favorable he begins buying cars again. This sensitivity to market conditions enables the processor to keep his inventory at an optimum level.



Graveyard photographs by permission of Bucks County Park Board.

Wreckers. -- The wrecker, unlike the processor, does not have this freedom to adjust his inventory. To obtain new parts, the wrecker must buy cars even when he has no chance of selling the old hulks. If he is unable to sell to the processor, the wrecker must use part of his yard for dead storage or must obtain new land. This is the beginning of the "graveyard" problem.

Graveyards. -- The term "auto graveyard" is often used but rarely defined. It usually refers to an accumulation of inoperable cars that have not gone through the complete scrapping process and that seem unlikely to do so. The cars may have been through a wrecking yard to be stripped of parts, but many have missed even this step and have been placed directly in the graveyard. In a sense, all graveyards are speculative ventures. If the demand for scrap should substantially increase, the owner of the graveyard would be able to realize a profit on his cars. Although some graveyard operators may think in these terms, others probably see the graveyard only as a dump.

Some graveyards are consciously planned. For example, a New York wrecker recently bought a 132-acre farm to take the overflow from his wrecking yard. Other graveyards just "happen." A car may be abandoned on a vacant piece of land, and in a short time the lot is full of rusting hulks that have been hauled there by wreckers, gasoline station operators, repair men, or private individuals. The owner of the property may be unaware of what has happened. If he is aware, he may not care, or he may not be able to catch the culprits. What begins as an isolated abandonment often ends up as a large graveyard.

Abandonments. -- Ultimately the decline in scrap prices affects the repair men, used car dealers, gasoline station operators, and individuals who are trying to junk a car. They are usually unable to sell to a processor, and the $10 or $15 they may receive from a wrecker often goes toward a $20 towing charge. The result has been a major increase in auto abandonment. The problem of abandonments has reached such proportions that Philadelphia must employ 11 trucks to remove the cast-offs. In Chicago 22,000 cars were found abandoned in 1963. During a five-year period, New York City's street removal program increased 10-fold; 2,500 cars were removed from the streets in 1960, and 25,000 in 1964. These statistics testify to the failure of the scrap businesses to cope with the growing number of junked cars.

Increasing the Demand for Auto Scrap

To oversimplify: the problem is too many junked cars and too little demand for auto scrap. If the scrap market could be "corrected" to absorb more cars, the graveyards could be cleared, and the number of abandonments would decline. As a practical matter, the need is to make auto scrap more competitive with other forms of scrap. This could be accomplished by increasing the quality of the scrap or decreasing the costs of processing.

New Equipment. -- New processing equipment has been developed in an effort to make auto scrap more attractive to the steel mills. If successful, the new machinery may go a long way toward disposing of the backlog of junked autos. The Proler Steel Corporation of Houston, Texas, has developed a giant machine that transforms cars into pellets of almost pure steel. The pellets are of uniform quality and are in high demand by the steel industry. Each of the four Proler machines in operation can prepare 800 to 1,000 cars a day. Because of these high volumes, Proler hauls cars distances of 250 to 300 miles and occasionally as far as 600 miles. This is an important consideration for wreckers in outlying areas who have never had an outlet for their auto bodies. The Proler machinery, and similar machinery developed by Luria Brothers & Company of New York, costs between $1 and $2 million. Despite the costs, several new installations are in the planning stages.[6]

Public Subsidy. -- Although new processing techniques could improve the current situation, they are unlikely to accomplish the objective of complete disposal of all cars. In recognition of this fact, some observers have recommended that car disposal be subsidized. Recently, Senator Paul Douglas introduced a bill in the U.S. Senate to establish a fund, amounting to about $400 million a year, that would be used to subsidize various phases of the scrapping process.[7] Money for the fund would be provided by a one per cent tax on the manufacturer's list price of new cars. Senator Douglas suggested that the money might be used for:

1. Incentive payments (in effect, bounties) to defray the costs of moving autos to the wrecker or processor.

2. Grants to help pay the costs of organizing and operating auto collection systems.

3. Loans and grants to processors and wreckers for the purchase of new equipment.

4. Underwriting the cost of title transfers.

5. Underwriting the planning and land acquisition costs for the relocation of scrap businesses.

New York state legislators are also considering a proposal for subsidizing the car disposal process. A consultant, hired by the state legislature to study the problem, has recommended that publicly owned scrap centers be established throughout the state. Each center would contain an incinerator, which could be used for a fee by any individual or firm, and include areas that could be rented by any firm for the storage of stripped autos which had no immediate market value. In addition, grants-in-aid would be provided for cities and counties that organized a scrap removal and towing service.[8]

Senator Douglas's proposal and the New York proposal are designed to reduce, through various indirect and direct subsidies, the costs of processing a car. Lower processing costs would enable the processor to offer the steel to the mills at a lower cost and thus make it more competitive with other forms of scrap. Whether these proposals are ever enacted into law or not, their very existence suggests the seriousness with which the junked car problem is being treated.

Other Approaches. -- Car bodies can occasionally be useful even if they are never used for the production of steel. Near Topeka, Kansas, over 1,000 car bodies have been used along the Kansas River to prevent erosion. This is estimated to cost one-fourth the price of conventional erosion-control practices. Car bodies have also been used to create artificial reefs. (Apparently the bodies provide ideal reeding places for certain types of fish.) Cars have been used for land fill, but they are not very suitable for this purpose unless they have been crushed. Unfortunately, none of these approaches -- to say nothing of the still more imaginative proposals so popular just now, such as chaining old car bodies in drive-in theaters for the walk-in trade -- seems likely to deplete the supply of junked cars.

PUBLIC REGULATIONS

Even if new equipment or subsidies succeed in diminishing the number of junked cars, state and local regulations will still be needed to control a wide range of problems associated with auto disposal. A five-part discussion of regulations will follow. The first four parts discuss the objectives and characteristics of public regulations with respect to scrap businesses, auto graveyards, auto abandonments, and temporary storage of autos. In the final part state roadside controls will be discussed.

Scrap Business

Public regulations of wreckers and processors must strike a balance between the locational and operational needs of these businesses and the legitimate

demands of the public at large. On one hand, regulations should ensure that wreckers and processors are located in accordance with the community's plan and operated so that they are compatible with their surroundings. On the other hand, public policy should be directed toward facilitating the movement of cars from wrecker to processor to steel mill. Whether right or wrong much of the public seems to associate all "junk yards" with smoke, noise, and ugliness. While efforts must be made to deal with these and other serious problems, it makes no sense to impose oppressive regulations that needlessly reduce the ability of the scrap businesses to rid the community of unwanted cars. To strike the proper balance between these conflicting policies is not easy.

Exclusion. -- A number of local governments have completely excluded wrecking and processing yards from their jurisdictions. Interest in this approach is bound to be stimulated by Oregon City v. Hartke,[9] the recent case in which the Supreme Court of Oregon upheld such an exclusion. The court decided that the city was entitled to make a distinction between wrecking yards and other uses that were claimed to have similar characteristics.

> The city commission may have felt that the operation of an automobile wrecking yard would produce more noise, smoke or fumes and would be more unsightly than the permitted uses.

The court further concluded that the city could exclude a business solely on the ground that it was "offensive to aesthetic sensibilities."

> The prevention of unsightliness by wholly precluding a particular use within the city may inhibit the economic growth of the city or frustrate the desire of someone who wishes to make the proscribed use, but the inhabitants of the city have the right to forego the economic gain and the person whose business plans are frustrated is not entitled to have his interest weighed more heavily than the predominent interest of others in the community.

Of course, it does not follow from this landmark decision that every city and county in the land has legal authority to bar scrap yards. Although this decision (and others elsewhere) suggest judicial acceptance of the principle that every municipality need not permit every use somewhere within its borders, the validity of an exclusion will still depend on the facts of each case.

If a community believes it has legal power to exclude wrecking and processing yards, the question remains whether the power should be exercised. Exclusion of these uses from a particular jurisdiction can be defended if suitable provision is made for those uses nearby. In metropolitan areas, for example, every suburb need not accommodate a wrecking yard, although residents of each suburb should have reasonable access to a yard. Exclusion of wrecking and processing yards from a large area, however, can be expected to cause an increase in abandonments. Exclusion can thus eliminate some problems but create others.

Decisions concerning the location of scrap yards should be based on regional as well as local considerations. If a community proposes to ban the scrap

businesses, it should determine--not just hope--that neighboring jurisdictions accommodate them.

Location. -- If a community does not prohibit the scrap businesses, it should determine appropriate locations for them. The zoning ordinance is the most useful means of controlling location, although other regulations are sometimes used. Junk yard licensing ordinances, for example, are often used as an indirect method of location control, since location can be considered in deciding whether or not to grant a license.

The zoning ordinance should provide the scrap businesses with "right" locations that meet their needs as well as prohibit them in "wrong" locations where they could damage neighbors or the community at large.

Spokesmen for the wreckers and processors are not in complete agreement as to the kind of location which best serves their needs. Processors point out that their need for heavy equipment and access to rail facilities makes their yards logical candidates for a manufacturing district. Wreckers, on the other hand, emphasize the retail aspect of the wrecking operation and imply that wrecking yards should be in some kind of highway commercial district. In practice, local governments treat wrecking and processing as similar uses and almost invariably allow them only in manufacturing districts. It seems unlikely that a more permissive treatment could often be justified. The real problem thus is the proper treatment of these uses within industrial zones.

Definitions. -- An examination of numerous zoning ordinances reveals that wrecking and processing yards are seldom defined separately. Both are usually included within an all-inclusive definition of "junk yard," such as the following one from the Colorado Springs, Colorado, ordinance:

> Junk Yard -- The use of more than two hundred square feet of the area of any lot for the storage, keeping, or abandonment of junk, including scrap metals or other scrap material, or for the dismantling, demolition, or abandonment of automobiles or other vehicles or machinery or parts thereof.

Occasionally, however, definitions (or other ordinance provisions) do in effect distinguish wrecking from processing. For example, in the M2 "light" industrial zone, the Los Angeles zoning ordinance permits:

> Automobile wrecking, . . . provided . . . that no crushing, smashing, baling, or reduction of metal is performed on the premises. /no processing/

In the M3 "heavy" industrial zone, automobile wrecking is permitted without the qualifying proviso. Thus, processing is restricted to the heaviest industrial district, while wrecking is permitted in two districts.

In West Chicago, Illinois, processing is distinguished from "junk yards." No "junk yards" are permitted within the city, but

> commercial scrap metal establishments engaged only in the processing of scrap metal to be sold for the manufacture of steel /i.e., processors/. . .

are permitted in an M1 "limited" manufacturing district. Here the distinction is used to permit processors but exclude "junk yards" (which presumably includes wreckers).

Several zoning ordinances contain separate definitions for "automobile wrecking yards" and "junk yards." Apart from satisfying the strong desires of auto wreckers (and processors, for that matter) not to have their businesses labeled "junk yards," the reason for making this distinction is not apparent. In the ordinances studied, both uses were invariably made special permit uses in the same manufacturing district.

From the evidence available, it appears that separate definitions of wrecking and processing are appropriate only in the larger cities, if at all. In the larger cities, there are enough districts to accommodate some subtle distinctions between uses. Even there, though, it is not clear that the distinctions between wrecking and processing are useful for most zoning purposes. (The distinction may be relevant to establishing minimum requirements for off-street customer parking; wreckers usually have more customers.) Although the drafters and administrators of zoning ordinances should be aware of the different characteristics of the two uses, it appears that zoning objectives can ordinarily be attained more directly through the use of performance standards and other requirements than by reliance on a definitional distinction between these two uses.

Special Permits. -- Zoning ordinances occasionally permit "junk yards" by right in the most permissive industrial district. More often, these uses are permitted in that district only with a special use permit. Although reliance on a discretionary permit is not the only way to subject the scrap businesses to special requirements on operation, site development, and location, it is clearly a useful one. And, by relying on special permits, communities may be able to permit these uses in intermediate industrial zones from which they would otherwise be excluded. Although the scrap businesses are ordinarily subject to local licensing requirements, and additional discretionary power under the zoning ordinance might therefore seem unnecessary, the number and complexity of the zoning considerations relating to these uses make the widespread reliance on special permits understandable. Indeed, ordinances should probably permit these uses without a special permit only in virtually unrestricted manufacturing zones.

As in all cases where a special use permit is required, the standards for granting or denying a permit should be spelled out in as much detail as possible. Although standards such as "not injurious to the surrounding neighborhood and not contrary to the spirit and purpose of the ordinance . . ." have been upheld by some courts[10] as a basis for denying a special permit, this kind of generalized standard should be supplemented with more specific requirements.

Performance Standards, Spacing, Parking. -- Performance standards show perhaps the most promise for controlling the location of the scrap businesses within manufacturing zones. In New York City, for example, wrecking establishments, junk yards, and scrap storage areas have been grouped with establishments engaged in the manufacture of fertilizers, paint, rubber, cement, and railroad equipment. In addition, the group includes: sewage disposal plants, lumber yards, stock yards, and foundries. These uses are permitted

in the light, medium, and heavy manufacturing districts if they are able to comply with performance standards. Thus, a wrecker who objects to exclusion from a zone need only change the performance characteristics of his business to qualify for a new location and new neighbors.

Many cities require the scrap businesses to be a minimum specified distance from other uses and districts. Thus, in Rochester, New York, "junk yards" and "used automobile junk areas" require a special permit to be in M-2 heavy industrial zone. To obtain such a permit they must be at least 500 feet from every residential district and 200 feet from every other district not zoned M-2. In Los Angeles County, special use permits are required as a matter of course in the "heavy" manufacturing zone, but in the "unlimited" manufacturing zone they are required only if the proposed location is within 300 feet of a public school or park or a residential zone. If other ordinance provisions--such as performance standards and fencing requirements--ensure that the scrap businesses are no more objectionable than other permitted industries, there may be no need for these spacing requirements. In the absence of performance standards, spacing may provide a useful, if crude, form of transition zoning.

Because of the amount and character of traffic generated by the scrap businesses, they should be located so as to keep traffic through residential and commercial areas at a minimum. An odd, but not uncommon, complaint concerning scrap yards is that trucks, piled high with scrap, lose some of their load in the streets.

Like other industries, both wreckers and processors should be required to provide off-street parking spaces. The need may be particularly acute in the case of wreckers, who often have numerous customers. The Norman, Oklahoma, zoning ordinance requires that scrap storage areas:

> . . . be set-back ninety feet from any highway, section line road, or arterial street or road; provided, however, that when said road is served by a frontage road or adequate right-of-way for a frontage road the set-back may be reduced to forty feet. . . .
>
> Off street parking for customers and employees cars must be provided on the lot; provided, however, that when the ninety foot set-back is required, no parking shall be permitted in the first fifty feet adjacent to the street, highway or road; . . .

A frequent complaint against scrap yards is that their operation stirs up large quantities of dust. Norman, Oklahoma, requires that the parking area be surfaced, and in Los Angeles County, special permit recipients have been required to surface the wrecking and parking areas "so as to prevent the emission of dust."

Fencing. -- The most common requirement imposed on scrap yards is that they be fenced. Junk yard licensing ordinances and zoning ordinances almost invariably require fencing of some kind.

There seems little doubt that some kind of fencing, not necessarily sight-obscuring, should be required. Some scrap operators occasionally store cars

in required yards, on adjoining property, or even on the streets. At the present time, when wreckers have an abundance of cars, the temptation for this type of "overflow" storage is great. A fence can be of considerable aid in policing storage practices. A fence on the setback line makes it inconvenient to store cars in yards or streets and enables inspectors to determine quickly whether or not a car is illegally stored.

Most communities require a type of fence that will obscure the stored scrap from the view of neighbors and passers-by. For example, the ordinances of Portland, Oregon, and Burbank, California, provide for the following:

> all activities and operations /shall be/ within buildings or . . . completely enclosed by a sight-obscuring screen at least six feet high. Such screen shall be a masonry wall, a wooden fence, a compact evergreen hedge, or a chain link fence with evergreen vines. /Portland/

> Property used for /junk yards/ . . . shall have, in good repair entirely surrounding such property, a solid fence or wall at least six (6) feet high from the ground, and such wrecked vehicles, and parts thereof, and junk shall not exceed the height of said fence or wall. /Burbank/

One of the main arguments in favor of this kind of fencing is that, by obscuring the scrap businesses from view, it makes them more attractive and hence more compatible with other uses. However, in states where the courts have not recognized aesthetic objectives alone as a proper basis for police power regulations, local jurisdictions have sought to justify the need for a closed fence on other bases. As an example, in Lenci v. City of Seattle,[11] an ordinance requiring wreckers to conduct their activities in a building or "in premises enclosed by a view-obscuring fence or a solid wall at least eight feet high" was upheld essentially as a crime prevention measure. The city argued in effect that open auto wrecking yards are particularly susceptible to thefts and that a closed fence hides the merchandise from potential thieves. The court upheld the fence requirement as being within the city's discretion to determine the most effective means of preventing crime.

The need for this type of argument as a justification for solid fencing should be lessened as more state courts give greater consideration to aesthetic objectives. Thus, from Oregon City v. Hartke, cited previously, in which the court allowed complete exclusion of wrecking yards for aesthetic reasons, it would seem to follow that Oregon cities could impose solid-fence requirements for aesthetic reasons. Similarly, Kentucky's highest court, in Jasper v. Commonwealth,[12] decided that aesthetic objectives constituted a reasonable basis for requiring fencing and setbacks for scrap yards along major highways.

Although a sight-obscuring fence requirement is appropriate for a scrap yard that is near a residential area or surrounded by more attractive industries, it is probably inappropriate for the yard that is in the midst of the heaviest industrial district and surrounded by uses with similar visual characteristics. Some cities have recognized this by permitting the scrap businesses in a "medium" industrial district only if they are fenced and

waiving the fencing requirement in the "heavy" industrial district.

To require sight-obscuring fences for scrap yards in all locations is undoubtedly convenient for administrators; with a uniform requirement, the city need not specify when a closed fence is needed, when an open fence is sufficient, and when all fencing requirements can be suspended. No matter how convenient this practice may be, it can place the community in the position of having to defend a closed-fence requirement for a scrap yard surrounded by equally unattractive uses that are exempt from fencing requirements. It seems preferable to relate the type of fencing required to the existing or planned character of the particular area. Special permit requirements should make this possible without undue difficulty.

Burning. -- Regulations concerning burning are almost as common, and quite as necessary, as those requiring fences. The Weber County, Utah, zoning ordinance requires that:

> no burning or incineration of vehicles shall be permitted unless said burning is carried out in a completely enclosed incinerator approved by the fire department and building inspection department. Such incinerator shall be located not closer than 200 feet to any property line.

In Los Angeles County, the applicant for a special permit:

> shall comply with the requirements of the Air Pollution Control District applicable to the subject use. . . .

After the tires have been removed from a car, it still contains about 200 pounds of combustible material. About the only way this material can be eliminated is to burn it off, a process which, if done in the open, yields a lot of dense and sooty smoke. Burning in an approved incincerator may add an additional $3 to $5 to the cost of processing each car, which acts as an additional drag on the already faltering demand for auto scrap. Communities should make every effort to keep the cost of processing a car down, but not at the expense of increased air pollution. Open burning should not be tolerated.

Additional Requirements. -- In an effort to cope with the health hazards of wrecking and processing yards, New Haven, Connecticut, has included the following regulation in the zoning ordinance:

> All materials shall be stored in such a manner as to prevent the breeding or harboring of rats, insects, or other vermin. Where necessary, this shall be accomplished by enclosures in containers, raising of materials above ground, separation of types of material, preventing the collection of stagnant water, extermination procedures, or other means.

While the objective of such a provision is reasonable, it may be more in the domain of a health officer than a zoning administrator.

In Los Angeles County, some scrap businesses have been required to limit their hours of operation in order to obtain a special use permit. Such a require-

ment is based on the assumption that a particular business may not be objectionable during the day, but that it may be objectionable if it operates past, say, 6:00 p. m. or on Sundays. Although it is questionable whether or not hours of operation are a concern of the zoning ordinance, this type of regulation may make it possible to permit these businesses in some area from which they would otherwise have to be excluded as incompatible.

Auto Graveyards

From the evidence available, the number of auto graveyards and the number of cars in graveyards will increase substantially. As long as the supply of abandoned, unprocessed cars continues to grow, graveyards will be needed.

Graveyards should be subject to strict controls, as they can quickly make large areas of land useless. Once the property is filled with cars, the cost of making it suitable for any other purpose can be prohibitive. Because a graveyard can seriously limit the development potential of an area, extreme care must be exercised in determining where it is located.

Given the characteristics of graveyards, a stronger case can be made for excluding them from local jurisdictions than can be made for excluding the scrap businesses. However, the usual, all-encompassing "junk yard" definition fails to distinguish between scrap businesses and graveyards, and, as a result, many ordinances permit graveyards wherever they permit the scrap businesses. Wrecking and processing yards have a continual change of inventory and someone on the premises to maintain the area, but in a graveyard the piles of scrap get higher, weeds grow, stagnant water accumulates, and there is no one to keep the area clean.

Recognizing the differences between these uses is, however, much easier than incorporating the differences into regulations. An attempt to make a distinction is evident in a 1955 Arkansas state statute dealing with graveyards along highways. A graveyard was defined as "any place where five or more junk, wrecked or non-operative automobiles or other vehicles are deposited, parked, placed, or otherwise located." The definition was followed by a statement that "the provisions of this Act shall not apply to any automobile wrecking yard or graveyard which is now being actively operated as a going business." How well such a law would work in practice is questionable; it might be difficult to prove that a graveyard was not a business. (The Arkansas statute has been declared unconstitutional, but not on these grounds.[13])

Exclusion of graveyards from a community could perhaps be accomplished by including in the zoning ordinance a provision like this one from the Carleton, Michigan, zoning ordinance:

> The use of land for the storage or collection or accumulation of used lumber, and other used materials, or the dumping or disposal of scrap iron, junk, garbage, rubbish or other refuse or of ashes, slag, or other industrial wastes or by products shall not be permitted in any district. . . .

As in the case of the scrap business, complete exlusion of graveyards from a region would not be wise public policy. Like municipal garbage dumps, grave-

yards are necessary, despite the fact that no one wants them located nearby. In fact, the criteria used to determine graveyard location should be similar to those used in locating a dump. It should be reasonably close to its users (wreckers and processors) in order to keep transportation costs low, and it should preferably not be in the line of future development. Graveyards should not be permitted by right in any district. Their long-term effects are too serious to permit their establishment without public consideration of the particular location proposed.

Abandonments

Since publicly supported removal programs are time-consuming and expensive, any effort made to discourage abandonments will be useful. Educational programs, clean-up campaigns, and legislation making abandonment illegal seem to hold the most promise in keeping the number of abandoned cars at a minimum. However, legal sanctions have two shortcomings.

First, people who abandon cars are often from low income groups. They abandon a car because they cannot afford to get it fixed or have it towed to a wrecker. Abandonment is the least expensive alternative, and the risk of a fine may seem worth taking (assuming the violators are even aware of the law). In Pittsburgh, after the city council adopted an ordinance making abandonment punishable by a fine of up to $300, four of the first five offenders were unemployed. Abandonment was, for them, an economic necessity.

The second reason why fines may not be an effective deterrent is the difficulty of finding the owner of an abandoned car. In New York State, as in many others, state records do not match car serial numbers with owners. In New Jersey, when owners of abandoned cars have been approached by the police, they have sometimes claimed that they sold the car a few days earlier. Since the state law requires the buyer of a car, not the seller, to register the bill of sale, the police are unable to identify the real owner. Before laws prohibiting abandonments can serve as effective deterrents, changes must be made in vehicle record systems and in title transfer procedures.

Given the current market for auto scrap, educational programs and legal penalties seem unlikely to eliminate abandonments. Therefore, public agencies must be prepared to operate car removal programs.

Removal from Public Property. -- Although car removal programs do differ from one another, the Washington, D.C., program will serve as an example. Removal action is initiated by the police department. The cars are considered to be illegally parked and tagged with traffic violation notices. If they are not removed voluntarily, they are towed to an impounding yard and held for 60 days. If they are not claimed within this period, they are sold at public auction. The monthly auctions dispose of 300 to 400 cars. Most are sold to wreckers. Prices average about $20 per vehicle but occasionally drop to as little as 25 cents. The cars are hauled to the impounding yard by six police department tow trucks or by private towers who charge the city $7.50 a car.

In New York City, the sanitation department removes vehicles from the streets on order from the police department. A sanitation officer and a police crew are dispatched to the location, where the car is evaluated. If it is worth-

less, it is sent directly to an area where it is used as landfill. If it has scrap value, it is held in an impounding yard for 30 days and then sold at public auction. According to estimates made by the city, it costs more than $20 to pick up a car, store it, and sell it. Income from the auctions has been averaging $11.25 a car, which means that the city must spend almost $10 for each car it removes.

Removal from Private Property. -- Abandonments on private property are handled in much the same way as those on public property. In Washington, D.C., for example, a property owner can be prosecuted for leaving an abandoned vehicle on his property long enough to become a health hazard. He is subject to a $50 a day fine for each day the car remains after notice of removal is given by the health department. This procedure for initiating removal worked effectively as long as the property owners could get wreckers to tow cars for nothing, or at most a $5 fee. However, as the market for scrap autos dropped, the wreckers began charging $15 to $20 for each car removed. Under these circumstances, the health department was reluctant to take action against property owners who had several cars. This impasse in the removal program was finally overcome when the police department located an auto wrecker who agreed to remove the cars without charge. In exchange for the wrecker's promise to remove all cars, regardless of value, the city agreed to provide areas where the cars could be temporarily stored until they could be loaded on a large truck and taken to the wrecking yard. The police obtained written consent from the property owners to remove the cars, and this request was passed on to the wrecker, along with the police department's written permission to make the removal.

Out of 7,000 cars removed in this manner, there were only three complaints from car owners. In all three cases the cars had been illegally parked on someone else's property. The success of the Washington program depended, in part, on a corporation counsel's ruling that permitted the wrecker to haul the car away without having the title. Had a title been required, thousands of man-hours would have been used in efforts to find the car owners.[14]

In Baltimore County, Maryland, the zoning ordinance has been used to control abandonments. The ordinance states:

> Any existing junk yards in . . . any . . . residential zone . . . shall be completely eliminated not later than two years after . . . /November 17, 1962/.

The term "junk yards" was defined to include one or more junked cars. The zoning administrator printed several "ready made violation orders" and scoured a section of the county in search of violations. When a violation was encountered, the law would be explained and the property owners told that they could be taken to court if they did not remove the cars (or other junk) within 30 days. The program was highly successful in obtaining the removal of a number of cars, but the price of success was a considerable expenditure of time by the zoning administrator and his staff.

The source of authority used to require a property owner to remove a car is not limited to zoning ordinances and health laws. A community in Ohio has, for example, met with some success in using the housing code for this purpose. A provision in the code simply requires that the yard be free of junk. In Elyria, Ohio, property owners have been required to remove cars under an

ordinance which prohibits public nuisances within the city. And Portland, Maine, has begun to tax unregistered cars as personal property, thereby inducing negligent property owners to get rid of their old cars.[15]

Temporary Storage

Many cities are recognizing major problems with repair garages specializing in body and fender work. These garages sometimes look like small wrecking yards due to the number of damaged cars waiting to be repaired or hauled away. A similar problem may arise with the activities of auto hobbyists in residential zones. This kind of temporary storage should not be treated either as a scrap business or as an abandonment.

To some extent the distinct nature of this problem is recognized in the Los Angeles zoning ordinance, which defines automobile wrecking as:

> The dismantling or wrecking of used motor vehicles or trailers, or the storage, sale or dumping of dismantled, partially dismantled, obsolete or wrecked vehicles or their parts, <u>but not including the incidental storage of damaged vehicles in connection with the operation of a repair garage</u>. /underlining added/

In Clarkstown, New York, an effort is made to place a time limit on this type of storage. The zoning ordinance includes the following:

> A deposit or the storage on a lot of 2 or more wrecked or broken down vehicles or parts of 2 or more such vehicles for one month in an "R" district or for three months in any other district shall be deemed a junk yard.

Even the usual definition of "junk yard" can in practice be used as an indirect method of accommodating the storage of a few cars in connection with other uses. Take for example an ordinance that defines a "junk yard" as a lot used for the storage of two or more junked cars. Technically, this definition has no bearing on whether the storage of a single junked car is permitted in a residential backyard; all the definition does is make clear that the single car does not make a junk yard. In practice, however, the line drawn by the definition may be applied by administrative authorities in determining the amount of permitted incidental storage.

Although apparently widespread, this use of the "junk yard" definition seems to be an unfortunate, backhanded approach to a problem that can better be handled directly. The indirect approach adds to the already considerable difficulties of defining "junk yard," and there may be some practical problems in convincing a court to apply the definition literally.[16]

Perhaps the best way to handle this problem is to permit the desired amount of short-term storage explicitly, as an accessory use, with appropriate limitations as to length of storage and number of cars. In the absence of such an explicit provision, the question may arise whether the storage of a few junked cars is permissible under the general accessory use authorization contained in most ordinances.[17]

Roadside Controls

Many wrecking and processing establishments and auto graveyards are located in areas where no zoning requirements are in force. They are sometimes located just beyond municipal boundaries or just past the limits of extraterritorial zoning. In most instances, they are located next to a major highway. Several states have passed laws aimed at eliminating these uses or at least requiring that they be screened from view. A proposed federal bill would in effect require screening of all junk yards that adjoin highways built with federal aid.

A recent U.S. Department of Commerce survey revealed that 35 states either had or were currently considering legislation of this type. The same survey also gave some indication as to the number of roadside junk yards. Counts were made of the number of junk yards, auto graveyards, and scrap heaps along 265,000 miles of interstate and federal-aid highways. Out of a total of 17,726 such sites, 14,471 contained automobiles in various states of disrepair.

The primary objective of the state legislation is to keep scrap yards hidden from the view of highway travelers. In some states the legislation applies to wreckers, processors, and graveyards; in others it specifically excludes the wreckers and processors. Obscuring the uses from view is accomplished by requiring setbacks (ranging from a few hundred feet to one-half mile) or natural or artificial screening. Aesthetic considerations seem to be the prime motivation for most of the legislation. Unattractive piles of junked cars are considered particularly objectionable in states eager to attract tourists. However, because of the uncertain position of most state courts on the question of aesthetics as a basis for police power regulation, some states have sought to relate their regulations to highway safety. For example, Maine's legislation states:

> /Auto/ graveyards have become a nuisance and a menace to safe travel on public ways, often distracting the attention of drivers of motor vehicles because it appears cars are parked on the highway or that an accident has occured. It is declared that such automobile graveyards are a nuisance and are properly subject to regulation and control.[18]

Nevertheless, despite these efforts to tie the regulations to health and safety, most observers agree that the legislation is designed primarily to achieve aesthetic objectives.

A West Virginia law,[19] passed in 1959, is typical of the state roadside controls under consideration. The law applies only to junk yards outside municipalities, and a junk yard is defined as:

> an establishment or place of business which is maintained or operated for the purpose of storing, keeping, buying or selling . . . junk, or for the maintenance of an automobile graveyard.

The law provides that no junk yard shall be operated or maintained without a license issued by the state road commissioner. No license may be granted for new establishments within 1,000 feet of a primary or interstate highway. New

yards may not be located within 300 feet of a secondary highway unless "the view thereof from such highway shall be obscured by natural objects or a fence." Junk yards in existence prior to the passage of the legislation will be granted a license only if they are more than 100 feet from any primary, secondary, or interstate highway, and are obscured from view.

The required fence is:

> an enclosure at least six feet in height so constructed and maintained as to obscure the junk in said enclosure from ordinary view to those persons passing upon the public highways in this state.

The fence must be kept in good order and repair. It must be painted, and the only advertising permitted is the name of the owner and a description of the nature of the business.

Each license is to be renewed each year, and there is an annual application fee of $25. Violation of the law is punishable by a fine of $100 to $1,000, and each month of violation can be considered as a separate offense.

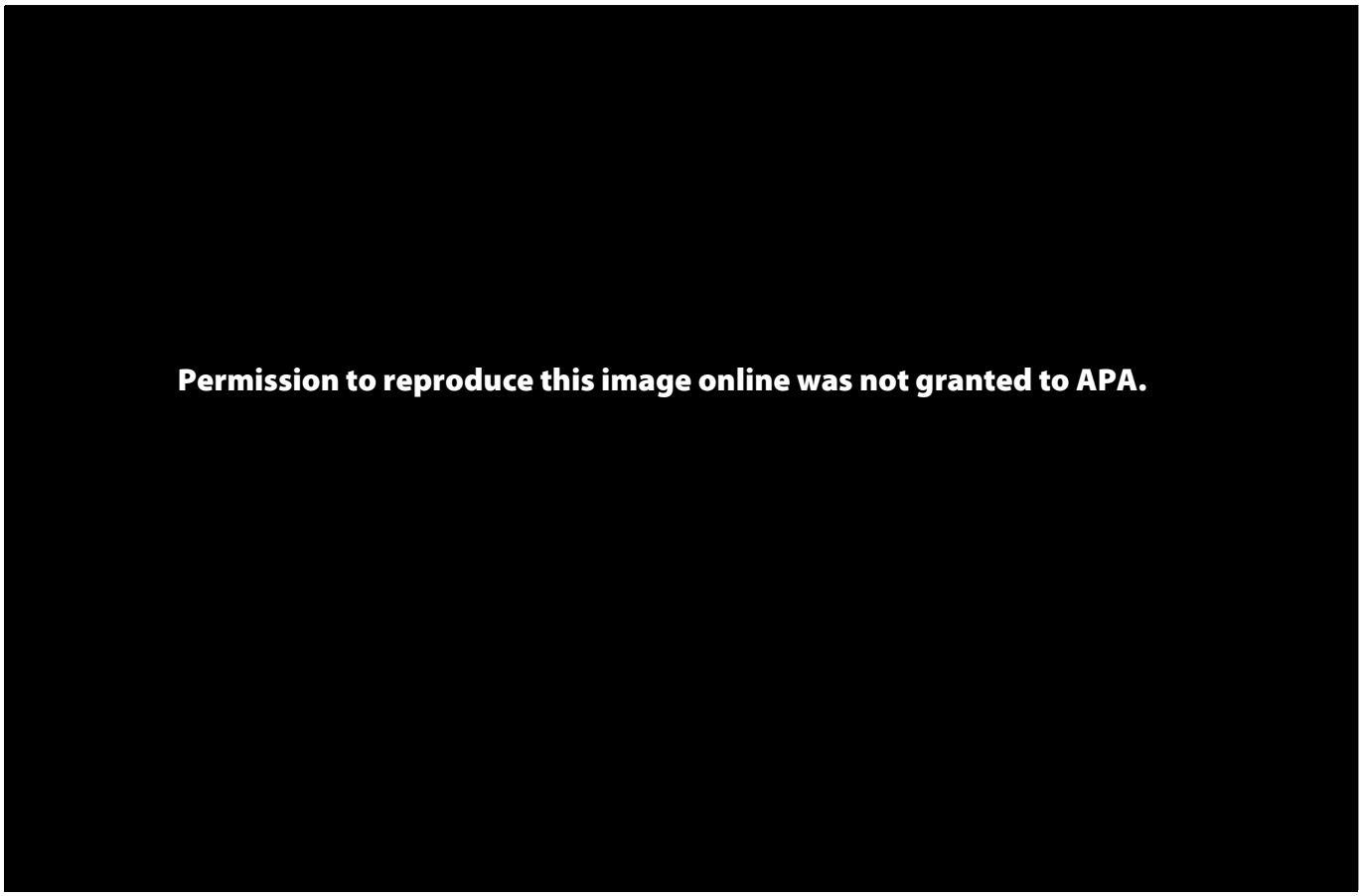
The proposed federal legislation, designed to "protect the public investment in . . . highways, to promote safety, convenience, and recreational value of public travel, and to preserve natural beauty,"[20] would require states to screen from sight all junk yards within 1,000 feet of the interstate and primary highway systems. Failure to comply with the regulations would result in the loss of federal-aid highway funds.

The validity of state junk yard legislation is not yet entirely clear. In 1959, the Supreme Court of North Carolina declared a state statute, similar to West Virginia's, unconstitutional because it was "enacted solely for aesthetic reasons. . . ."[21]

On the other hand, a decision upholding this type of legislation was handed down in 1964 by Kentucky's highest court.[22] The legislation required a permit for any junk yard within 2,000 feet of a highway. Permits could be obtained from the commissioner of highways if he found that the yard had been effectively screened from the view of motorists. The court held the law constitutional, explaining:

> the obvious purpose of this Act is to enhance the scenic beauty of our roadways by prohibiting the maintenance of unsightly vehicle graveyards within the view of travellers thereon. While there may be a public safety interest promoted, the principal objective is based upon aesthetic considerations. Though it has been held that such considerations are not sufficient to warrant the invocation of the police power, in our opinion the public welfare is not so limited. . . .

A 1962 Arkansas case raises a point which should be considered in drafting all roadside junk yard controls.[23] Arkansas legislation simply prohibited the storage of non-operable vehicles within one-half mile of a paved highway; the law made no provision for fencing or screening. The court found that the legislation was designed to achieve aesthetic objectives. Without determining whether the objectives themselves were acceptable bases for police power



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regulation, the court held that this statute was not a permissible way to attain those objectives. Fencing or natural barriers might hide old cars from view even if they were within one-half mile of a highway, the court pointed out. The objectives of the legislation would then have been met, yet the law would still have been violated.

Accordingly the court held the law unconstitutional. This decision makes clear the need for legislation to include some combination of requirements for setbacks and natural or artificial screening. If indeed the intent of the legislation is to keep the cars hidden from view, then it should be recognized that vegetation, topography, fencing, or setbacks can all be used to obscure cars from the view of travelers. In other locations, topography is such that no practical fencing or screening can obscure the view (see figure above).

Given its limited objective, state roadside legislation is a reasonable and probably effective solution. It should not, however, be considered a substitute for area-wide land use controls. In areas where there is little development, or where effective zoning is locally unacceptable, the legislation may be the most appropriate response to the problem. Elsewhere, this limited control should not be allowed to obscure the need for comprehensive planning and zoning.

CONCLUSION

The problems associated with junked cars require continuing public attention. Additional regulations are needed in some localities, as the appearance of our roadsides makes clear, and more refined regulations are needed in many others. Regulators should bear in mind, though, that the regulatory objective is a dual one: proper functioning of the scrap businesses as well as their proper control.

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10. For example, Florka v. City of Detroit, 120 N.W.2d 797 (Mich. 1963).

11. Lenci v. City of Seattle, 388 P.2d 926 (Wash. 1964).

12. Jasper v. Commonwealth, 375 S.W.2d 709 (Ky. 1964).

13. Bachman v. State, 359 S.W.2d 815 (Ark. 1962).

14. Proceedings of the National Conference on Auto Salvage, op. cit. pp. T1-T5 and U1-U6.

15. Cities which subscribe to the Management Information Service of the International City Managers' Association may wish to consult MIS Report No. 258, Removal of Abandoned Vehicles, for a fuller discussion of removal programs.

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