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URBAN TRAFFIC FORUM

**13 answers to how big cities
can save their downtown districts
from strangling
in their own congestions.**

Members of the forum were:

ARCHITECTURE

Henry Churchill, architect
New York, N. Y.
Morris Ketchum Jr., architect
New York, N. Y.
Kenneth C. Welch, architect
Grand Rapids

AUTOMOTIVE INDUSTRY

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American Petroleum Industries Committee
George J. Crimmins, director
Dealer Relations & Business Management
Ford Motor Co.
Arthur Forster, assistant director
Field Operations
General Motors, Inc.
Nicholas Kelley Jr., secretary
Chrysler Corp.
Rodney C. Linton
Office of the secretary
Chrysler Corp.
James J. Newman, vice president
B. F. Goodrich Tire & Rubber Co.
Karl Richards, manager
Field Relations
Automobile Manufacturers Assn.

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Department of City & Regional Planning
Massachusetts Institute of Technology
Walter L. Blucher, executive director
American Society of Planning Officials
Frederick P. Clark, president
American Institute of Planners
Member, Board of Consultants, Eno Foundation
Foundation for Highway Traffic Control
John T. Howard, associate head
Department of City & Regional Planning
Massachusetts Institute of Technology
Former head, Cleveland Planning Commission
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Institute for Urban Studies
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Highway Officials
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Cleveland Transit System

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National Parking Assn.
Donald Miller, secretary, Park & Shop
Vice president, Allentown CALL CHRONICLE
Wallace Richards, chairman
Public parking authority of Pittsburgh
B. M. Stanton, president
National Parking Assn.

TRAFFIC

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William R. McConochie
DeLeuw, Cather & Co., traffic consultants
Henry K. Evans
US Chamber of Commerce
Transportation & Communications Dept.
Harold F. Hammond, manager
Transportation & Communications Dept.
US Chamber of Commerce
Past pres., Institute of Traffic Engineers
William J. Simon, safety coordinator
National Highway Users Conference
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Bureau of Highway Traffic
Yale University
Technical director, Eno Foundation
Chairman, Traffic & Operations Committee
of Highway Research Board, National
Research Council
Wilfred Owen, senior staff member
Brookings Institute

Presiding: **P. I. Prentice**,
editor & publisher ARCHITECTURAL FORUM.
vice president, TIME INC.

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How can big cities save their downtown districts from strangling in their own congestion?

Congestion at the heart of America's great cities is one of the most pressing problems facing the architectural profession and the building industry today.

This report is, we believe, the first joint statement ever approved by top-flight spokesmen from all the groups most deeply involved in the problem and its solution—groups ranging all the way from architects to department store owners, from city planners to parking garage operators, from traffic experts to truck fleet operators, from city officials to automobile manufacturers. It was drafted at a two-day forum sponsored by this magazine.

Obviously, such a brief statement cannot explore every facet of so complex a problem, but we believe it will contribute importantly to the thinking of our readers.—The Editors.

13 Answers: 1. By clearer thinking aimed at realistic goals

Much clearer thinking and much broader understanding are as necessary as much more money spent if America is to save the center of her cities from strangling in their own traffic.

We can help that clearer thinking and broader understanding only if we restate this very complex and difficult problem in the simplest possible terms—even at the obvious risk of oversimplification.

One reason the problem is so difficult is that it involves so many component problems which must all be solved together. For example, little good can come of costly new expressways to the downtown district unless better parking facilities are created for the cars brought in by faster access. Conversely, little good can come of easier parking if it attracts more cars than streets and highways can accommodate. Both the improvement and the timing must be integrated.

An equally important difficulty is that traffic relief is just one facet of the much bigger problem of urban development and redevelopment. Any attempt to cure traffic congestion "in the street" would treat the symptoms rather than the disease. No solution will be more than a brief palliative unless it is integrated into a comprehensive city plan. No solution will prove lasting unless zoning sets reasonable limits to central city density. No solution should forget the traffic relief that would result from the constructive decentralization of certain types of activity. No solution should overlook the traffic benefits that might be planned into redevelopment of the blighted area which almost always adjoins the busiest district.

All these manifold problems must be met separately, so we have agreed on certain specific recommendations for attacking each of them in turn. But all of them are so interrelated that they must also be solved together. Consequently, our first and strongest recommendations are these:

1. Every city struggling with congestion should fix in the Mayor and the Planning Commission responsibility and authority broad enough to face the problem whole and coordinate the activities of all the municipal agencies among whom various functions impinging on congestion are now scattered; viz., the Police Department, Building Department, Highway Department, Public Works Department, Traffic Engineer, etc.

2. Every city should also have a municipal agency or authority to cope directly with its parking problem. This agency should have the right of eminent domain to acquire land when and where necessary for additional off-street parking so located that the new facilities will not create bottlenecks in the streets.

3. The city's efforts to solve the downtown congestion problem need the support of a determined and well-financed citizen's group representing the entire community rather than any special interest. The model for such a citizens' group might well be the Allegheny Conference on Community Development whose activities are the principal reason why Pittsburgh is making such dramatic progress toward the solution of its municipal problems.

Even with the best organization no solution to the traffic and congestion problem of our big cities can succeed without first setting realistic limits to the goal. All of us would like to help make possible freer use of the downtown streets by private automobiles, but we are up against two hard questions:

1. Can our cities afford the space to provide at their centers the unlimited parking that is possible on their outskirts? To park all the cars whose owners would prefer to drive downtown, Boston found it might have to tear down $\frac{1}{3}$ of all its downtown buildings. Suburban shopping centers try to provide 4 sq. ft. of parking area for every sq. ft. of rentable area. Downtown we fear the best that can be hoped for is a parking ratio 1/15th as high.

2. Can our cities afford the money needed to provide highways and parking space for so many cars—an investment which at least one city estimates at \$4,000 for each added rush-hour car commuter? This is three or four times the investment per commuter that city would need for the most expensive form of rapid transit—an underground or elevated railroad.

Few large cities can solve their traffic and congestion problem without relying heavily on mass transportation rather than the private car.

Good mass transportation made the centralized big city possible, and good mass transportation is essential to preserve it.

2. By using the price mechanism to ration street use

Perhaps the first thing everybody should understand about downtown congestion is that we are dealing with an almost limitless demand pressing on street and parking facilities which must continue strictly limited. Most American families already have a car; a very large proportion of them would prefer to drive to work or shop. The number of private automobiles on the road has increased 65% since 1945 and is still soaring higher. Even a five-fold increase in street and parking facilities at a cost of perhaps \$50 billion might soon be overtaxed, for every betterment in these facilities stimulates still greater demand.

Today that demand is controlled and limited only by congestion—by the amount of delay, annoyance and inconvenience motorists are willing to put up with to use their own cars on the downtown streets. This rationing-by-congestion operates on a first come, first served basis, so a high percentage of the curbside parking space within 500' of the downtown core is apt to be taken up by all-day parkers who arrive before 9:00 A.M.

It is high time our cities worked out a more intelligent way to allocate or ration the use of their downtown streets.

Better use of the price mechanism offers perhaps the one best hope of rationalizing the use of our downtown streets, just as the price mechanism has proven the one best means to balance supply and demand in every other line. Today the price mechanism is not allowed to function at all on this problem. Not only is use of the streets for moving traffic completely free. Use of the sidewalks for loading and unloading goods is also free even on the most congested streets at the busiest hours.

Use of the streets for parking is priced at only a small fraction of its true cost. As a result, millions of people elect to drive downtown in the often mistaken belief that this is cheaper than carfare; most motorists balk at paying even the most reasonable charge for off-street parking; and shippers have no profit incentive to relocate in uncongested districts or to cooperate in getting trucks off crowded streets at busy hours.

What would happen if all the various urban services and land uses necessary to move people and goods were repriced on a more economical basis? We believe people should be free to choose their means of transportation, but they should be willing to pay some approximation of its true cost.

We believe many people would redistribute their use of transportation services and parking facilities if they were repriced so that for example, more people could see that mass transportation is the cheapest way for them to travel. We believe far more people would be willing to pay for off-street parking if curbside parking were not almost free. We believe fewer people would insist on parking so near the busiest corners if they saw the saving offered by walking two blocks more to cheaper parking sites. We believe there would be fewer trucks jamming busy streets if trucking rates reflected the true cost of curbside pickups and deliveries during busy hours on overcrowded streets.

We believe that repricing various services would also encourage uneconomic users of downtown buildings to relocate in other areas more quickly, thus freeing space for parking.

3. By constructive decentralization of some activities

Business concentrated in the center of our growing cities for one principal reason: the center was the easiest point for the largest number of people to reach. Basically, there are two types of business for which a central location is still apt to be very important:

1. Executive offices, government offices, main offices of banks, law offices, sales offices—i.e., any office which needs quick and easy accessibility to a maximum number of people.

2. Big stores whose principal competitive advantage is their ability to carry a more complete line than any small store or any suburban branch. These big stores must be so located as to attract crowds big enough to justify their large assortment. They must be located close enough, one to another, to make competitive shopping easy for customers.

Around these two central magnets many other activities have gathered downtown. The business offices have attracted service trades and service industries. The big stores have attracted hundreds of smaller stores seeking to profit by the crowds of shoppers drawn by their big competitors.

As all these businesses have grown they have generated still more business downtown. Recent surveys show that although congestion is slowing down the increase in downtown retail

trade, the concentration of executive offices, law offices, etc., and their attendant service industries is, if anything, accelerating.

On the other hand, there are other business activities for which decentralization is proving profitable. Specifically:

1. Merchants are finding suburban shopping centers a highly profitable way to increase their sales.

2. Certain businesses to which economical handling of a large volume of goods is more important than easy accessibility to people are beginning to seek locations where trucks can move more freely; wholesalers are beginning to separate their sales offices from their warehouses; department stores are beginning to set up outlying warehouses from which to deliver goods ordered downtown.

3. Many manufacturing industries now located downtown as a matter of historical accident rather than because proximity to the center was important to their distribution are beginning to move out.

This kind of decentralization is highly desirable and should be encouraged wherever possible. But decentralization offers no solution to the problems which traffic congestion is creating for those types of business for which a location easily accessible to large numbers of people is essential.



Roy Stevens

4. By separating car and truck traffic in time and space

Traffic delays have become a major element in the cost of big-city trucking. Every minute a big truck is held up in traffic costs the truck owner 10¢ to 15¢. Conversely, trucks lined up at the curb or trying to squeeze through crowded streets have become a major element in downtown traffic congestion. It is clear to all of us that it is costly for the trucking industry and bad for the city to have trucks competing with passenger vehicles for the same space at the same time on inadequate downtown streets.

There are three possible solutions to this problem, all three of which should be encouraged:

1. Separation by location: Businesses which involve large movements of goods should not be located in the most congested district.

2. Separation by off-street improvements: i.e., provision of adequate off-street facilities for the loading and unloading of trucks so that they will not block the streets by loading and unloading at the curb.

3. Separation in time: Trucking would cease to create any congestion problem at all if all pickups and deliveries in the central business district could be made before or after the crowded hours. The trucking industry is already partially organized on the basis of night and day operation and could adjust its schedules still further in that direction if stores and other buildings would have personnel available to handle early morning and early evening shipments. The truckmen's overtime or higher night wages could be largely offset by the time saved by easier passage through the streets.

Separation in time is probably the best of the three possible solutions, but it is also the most difficult. It would require a change in working hours by hundreds of different buildings and hundreds of different shippers, and it would result in higher rather than lower trucking costs unless all shippers would cooperate, for there would be no economy in picking up goods from one shipper in the early evening if the same truck had to make a daytime pickup next door.

Every reasonable municipal aid should be given to hasten and encourage all three of these solutions, but there are obvious limits to what government can do. For example:

- The city should (and usually does) enact zoning ordinances which would keep warehouses and other large handlers of goods from locating in congested central districts, but what about warehouses already there?

- The city should (and usually does) enact building standards requiring off-street loading in any future building, with adequate receiving rooms and adequate elevators, but what about existing buildings? Some cities already make these requirements retroactive. Others feel the remodeling cost would be too great. At the very least we believe every present building

should be forced to provide an adequate ground-floor shipping and receiving room to minimize the time trucks must spend at the curb.

- The city can (and in some cities already does) encourage early morning and late afternoon delivery by reserving curb space exclusively for trucks in these off hours. But how much further can government go along this line? What would happen if trucks were forbidden to enter or park in the busiest district during the congested hours?

We believe private enterprise must play a larger part in solving the truck congestion problem, and this is another case where it would be well to put the price mechanism to work.

As things stand now, trucking prices do not accurately reflect trucking costs. State and federal regulatory bodies apply the same charges for pickup or delivery anywhere in the city. This gives the shipper (or receiver) no incentive to provide personnel for shipping or receiving goods before or after hours, no incentive to undertake the capital costs required to provide adequate off-street facilities, no incentive to move to locations which trucks could reach more easily (and therefore more cheaply). Only on local shipments is the trucking industry free to reflect in its charges the great difference in its costs for making deliveries, which often vary greatly, not only from district to district but from building to building.

We suggest the time has come when trucking companies should ask permission to apply penalty charges or maintain differential rate structures which would share with shippers and building owners the savings the trucking industry could achieve by not wasting so much time in traffic delays—differential rates which would encourage owners to provide personnel for after hour or early morning pickups and deliveries, encourage the creation of off-street loading facilities, encourage large shippers to locate outside the most congested areas. Lacking any such profit incentive to do otherwise, many shippers deliberately locate in old downtown buildings with inadequate loading and elevator service just because these old buildings offer them the lowest rents.

5. By intelligent redevelopment

No solution to the downtown traffic problem should overlook the very great possibilities offered by the wisely planned redevelopment of blighted areas which almost always adjoin the heart of town. In this redevelopment one of the first objectives should be to take advantage of some of the cleared land to provide broader streets leading to the central districts or expressways leading around it, to finding low-cost land for all-day parking, and to the possibility of so developing the land in superblocks around more adequate parks, etc., that more people who work in the central district would wish to live there near their jobs.

6. By encouraging mass transit to carry more people faster

Since there are such clear limits to what can be done for private cars on downtown streets, we are all agreed that greater use of mass transportation must be encouraged.

Today the mass transportation industry finds itself in a critical position which should be a matter of serious concern to every community whose center is dependent on the continuance of good mass transportation. Some of these troubles result from rapidly rising costs. Others trace directly to the automobile, which has: 1) added to the transit companies' costs to the extent that it has contributed to congestion in the streets and so slowed trolleys and busses down; 2) taken away many of their passengers, especially the mid-day passengers which are the most profitable of all.

Ever since World War II, mass transportation has been losing passengers. In 1951 it carried 7% less than in 1950; in 1952 it carried 4% less than in 1951. But even today more than 60% of all persons entering downtown districts of cities over 100,000 population rely on mass transportation—more than 40% for cities from 100,000 to 500,000, 63% for all cities over 500,000, 80% for big cities like New York and Philadelphia. These 60% of the persons are carried by 6% of the vehicles. Contrary to general belief, the transit companies are still carrying 15% more passengers than at the end of the depression.

Faster decisions by Public Service Commissions on applications for higher fares to offset rising costs would certainly help the transit companies, but higher fares alone will fall far short of solving the problem. Too many transit companies have found that higher fares drive too many passengers to competing means of transportation and so produce little increased revenue. The transit companies cannot hope to regain prosperity by providing less and less service for more and more money.

In large measure the future of mass transportation will depend on what the transit companies do to help themselves. But here are some important ways in which the community can help too:

1. Transit companies should no longer be burdened with special taxes and charges dating back to times when mass transportation was a highly profitable monopoly. They should not be asked to carry the full burden of maintaining portions of the street, nor should they be asked to carry school children at inadequate special fares.

2. More consideration should be given to mass transportation needs in designing highway systems. (New York City, on the contrary, forbids busses on most of its highways.)

3. Every aid should be given to help mass transportation move faster through the streets. As traffic is speeded up to the point where time savings can be reflected in schedules, operating costs will drop and transit companies will be that much better able to improve their service and attract more riders.

4. Bus lines should not be required to undertake unprofitable extensions, and more turn-around service should be permitted.

5. Adequate parking facilities should be provided at key points along transit routes and tied in where practicable with special express service, in order to encourage more persons to leave their cars outside the congested districts. The city will find it much cheaper to provide parking there than downtown, and such parking facilities when wisely located have been proving their value in many places.

6. Zone fares, which are now universal all over Europe, should be brought into more general use. Lower fares for short trips would attract more passengers. Higher fares for long trips would more nearly cover the cost on long runs.

7. Every effort should be made by both the city and the operating companies to speed up service by more use of express busses, alternate block stops, etc. One bus route in Cleveland tripled its passengers by inaugurating express service.

8. Wherever possible mass transportation should be given preference on certain major streets, automobile traffic preference on the nearby parallel streets. Busses and automobiles rarely flow smoothly together through the same traffic stream, particularly in many narrow downtown streets. Such a sensible separation might be a good way to attack some wasteful route patterns based not on present need but on inheritance from old franchises and corporate structures.

9. Curb-side parking should be forbidden during daytime hours on all but the widest downtown streets heavily used by mass transportation lines.



7. By relating zoning to traffic

Traffic does not occur in a vacuum. Its amount and character are determined by the way land along the streets is developed and redeveloped. Thus, every city should re-examine its zoning ordinance to determine in what respects it promotes traffic congestion, and should revise the ordinance to coordinate its revision with the traffic capacity of the streets, or with the increased capacity for which the city is willing to pay.

8. By eminent domain if needed

Public powers to condemn, lease, sell and regulate land for parking purposes are essential to proper planning, location and operation of an adequate parking system. Private enterprise cannot always obtain necessary sites to achieve a proper balance of parking and street capacity; nor can private enterprise, without such aid and control, achieve a proper balance between short-term and long-term parking facilities.



Photos: Roy Stevens

9. By banning curbside parking or fitting its price to its cost

Most obvious single factor in the traffic congestion which is now strangling the center of so many cities is the way cars are allowed to park along the curb of so many busy streets, often in flat defiance of "no parking" signs.

Not more than 20 cars can park along a 200' block—ten on either side. But those 20 cars often block the passage of 500 moving vehicles, cutting traffic flow from 1,200 cars an hour to 700.

There is no good reason why *all* curbside parking should be banned downtown, for the street pattern of most cities developed long before the automobile, and there are still many downtown streets whose traffic flow is small enough to permit parking. But there are also many busy streets where no parking should be allowed at any price.

The most expensive possible place to have cars park is on street space needed for moving traffic. Widening a busy street to permit this curbside parking without obstructing traffic might well cost from \$10,000 to \$50,000 per parking space created. Permitting such parking without widening the street may cost still more in terms of business diverted and man-hours lost through traffic delays.

But here is the paradox—in many cities this most expensive of all parking space is still free to any motorist lucky enough or early enough to find it. Even where parking meters are installed the charge is strictly nominal. The rate on 99% of all meters (915,000 of them, to be precise) is 5¢ an hour; only 1% (9340) charge 10¢ an hour; only a handful charge more. In brief, there is an almost complete divorce between cost and price, and curbside space which really costs far more than off-street space is priced much lower.

A few cities have now begun charging 25¢ an hour (5¢ for 12 min.) for curbside parking at very desirable spots, and few of us can see any good reason why charges higher than the 5 to 10¢ an hour maximum now customary should not be inaugurated in all cities. (Note: in some states the courts have held that their purpose must be to help regulate parking and traffic rather than to raise revenue.)

In this connection it is important to note this fact: the average motorists' disregard of "no parking" signs is notorious, but he is usually very honest about parking-meter charges.

The downtown parking problem will never be solved until motorists, merchants and all other interested parties recognize the obvious fact that parking space costs money—whether it be off-street or at the curb—and someone has to pay for it. It will never be solved as long as motorists are encouraged to consider free parking an almost inalienable right.

As long as curbside parking is available to motorists at a small fraction of its true cost, motorists will be tempted to cruise looking for space at the curb, and the problem of providing adequate off-street parking will remain difficult. Off-street parking cannot be provided at the heart of any sizable city for less than 15¢ an hour, and there are few instances where the price is not higher still. Pittsburgh's new public garages, despite tax exemption, find it necessary to charge 35¢ for the first hour, as do the Boston garages erected by private capital on state-owned land.

Most of us believe that competition of free or very cheap parking at the curb is a major reason why venture capital has not yet met the demand for reasonably priced off-street parking.

10. By enticing the all-day parker away from the city center

The parking problem is really not one problem but two: 1) parking for people who drive to work and keep their cars downtown all day; 2) parking for shoppers and others who drive downtown for a short time only.

Too many people (including, unfortunately, too many downtown merchants) fail to understand that most downtown parking spaces are taken up by all-day parkers who line the curb early in the morning and leave very little space for shoppers. A Philadelphia study found 85% of all curb spaces usually filled by all-day parkers.

Research shows most short-time parkers object to walking much more than 400 feet to where they want to go, but there is no good reason why all-day parkers should feel similarly entitled to leave their cars right next to where they work. This is a problem which many cities are meeting satisfactorily by providing cheap parking at 25¢ or less for all day 800' from the most congested district and then charging higher rates for parking space close in. A transient can well afford to pay more than 10¢ to park an hour or two, but an 8-hour parker will hesitate to pay 80¢ (10¢ an hour) to save a little walk at the end of his drive.

11. By encouraging private capital into the garage business

Many hundreds of millions of dollars must be invested in off-street parking facilities if the downtown congestion problem is to be solved without imposing more restrictions than the public is likely to tolerate on the use of downtown streets by private automobiles.

All of us hope this money can and will be supplied by private investment for profit without any investment of public funds whatsoever.

But most of us are discouraged by the past failure of private capital to meet the need and question whether, in the future, private investors will be willing to provide more than the most profitable fraction of the necessary space, leaving public investment stuck with the problem of any parking which cannot command premium rentals. And spokesmen for municipal parking authorities feel they need the profit on high rent space for transients to cover their deficits on low rent space for all-day parkers. To this spokesmen for private parking answer:

1. Ninety-eight per cent of all present off-street parking is provided by privately owned facilities;
2. The best postwar record for added off-street parking has been made by cities like Washington, San Francisco, Minneapolis, Oklahoma City and Allentown, Pa., in which all, or almost all, the increase has been provided by private investment encouraged and co-ordinated by municipal cooperation;
3. Private investors can and do get better garages built cheaper, and private negotiation can usually acquire sites cheaper than public condemnation;
4. The threat of competition from publicly owned parking lots and garages subsidized by parking-meter revenue and/or by

tax exemption on both their real estate and their bonds has been a major deterrent to private investment in the parking field.

Whatever the merit of these arguments, no city should decide that private capital cannot meet its off-street parking need until it has carefully explored the reasons for private investment's past failure, in the hope that correction of those reasons and perhaps the provision of positive incentives might make private capital ready, willing and eager to provide adequate off-street parking for both transient and all-day parkers.

In most cities there have been two obvious reasons: 1) the price that can be charged has been kept too low by competition from free or almost free parking at the curb; 2) the cost of providing new parking garages has been too high.

In the closing section of our recommendations we shall report evidence that new design, construction, and management methods permit such economies that parking garages now offer a highly profitable field for investment.

The one type of off-street parking facility on which we believe private enterprise will find it hard to compete with publicly owned facilities is fringe parking lots for all-day customers on land too cheap to justify the cost of decking; i.e., land costing less than about \$5 a sq. ft. On such lots the city has a great advantage in not having to pay the cost of an attendant, for they can be operated very cheaply with parking meters and an occasional visit from the neighborhood patrolman to make sure the meter charges have been paid. (In these meters it should be possible to deposit enough coins at one time to pay for all-day parking.)

In many cities the large amount of land available for this type of cheap municipal parking will prove a major limitation on the opportunity for profitable parking ramps.

12. By building better roads to and through the downtown section

Almost all of our cities need a wholly new expressway or freeway system. Such a system should include a loop around the downtown business district, and usually an outer loop around the suburban belt, and several radial freeways connecting the two loops and running out into the metropolitan hinterland. In large metropolitan centers as many as four loops and as many as six or eight radials may be needed. Freeways should have modern limited access, uninterrupted flow, and high-speed design characteristics. They should include special design facilities and features for bus or other mass-transit services at terminals and along rights of way.

The national deficiency in modern metropolitan highway systems is so great that many years will be required to build an adequate system. Its cost will run to so many billions of dollars that present gasoline tax revenues will not pay even debt service on these and other highway requirements. An increase in these and other auto-use taxes would help accelerate construction schedules and provide funds for maintenance and control.

The outer rings and outer radials of the urban highway system might well be built first. Right-of-way costs will be

less expensive in such areas now than they will be later. Suburban and intercity travel will be facilitated while the necessary adjustments in intracity parking and land use are made. Traffic now going through central areas will be encouraged to by-pass them. Finally, this program will encourage the decentralization to suburban sites of marginal users of downtown property, thus opening the way for the reconstruction of central areas.

After the outer rings and radials of our expressway systems have been completed, and as land use and parking adjustments are made in central areas, the inner radials and rings should be completed. Even with a complete system of modern freeways, however, our central cities will continue to be congested, unless mass transit carries a large proportion of all visitors to central business districts. No highway system can be devised which will serve adequately all the people who desire to drive into high-density downtown areas. This only re-emphasizes the importance of coordinating all plans for parking, highways, land use and transit. It makes essential a readjustment in the prices of downtown highway, parking and transit services.

13. By reducing the cost of parking garages to \$1,200 per car

This question is already being answered by many architects and many private-parking garage sponsors. Their answers cover every aspect of cost—construction, land, operation and taxes.

Low construction costs—In many cities first-class multistory ramp parking garages have been built in the last five years for construction costs as low as \$900 to \$1,200 per car space. Variation in construction costs from one part of the country to another is not enough to explain a city-to-city differential of much more than this \$300. If a first-class parking garage can be built in Los Angeles for \$900, it should be possible to build a first-class parking garage in any other US city for around \$1,200 (about \$4.50 a sq. ft. for less than 300 sq. ft. per car).

If bids come in for substantially more than \$1,200, either somebody is making too much money on the construction contract, or the design is inefficient, or the garage is being erected on a difficult or inadequate site, or else the building is being overloaded with costly unnecessary requirements, like sprinkler systems, or excessive floor load allowances, or enclosure against the elements, or fireproofing on steel framing. One very important way the city authorities can help solve the parking problem is by cutting out all these costly waste requirements at once.

Parking garages erected at a cost of \$3,000 or more per car (and such wasteful and extravagant construction is still common), are not likely to prove profitable for private enterprise at rates low enough to satisfy motorists and so attract customers. But parking garages erected for \$1,200 per space can be amortized in 25 years at 5% interest by a constant payment of \$7.02 per car space per month. This capital charge is less than 30¢ a working day.

Low land costs—In recent years architects and private garage owners have also found the answer to the high cost of land for downtown garages by reserving the street floor for retail use and getting enough rent from these retail stores to cover most of the ground rent for the entire garage. In Pittsburgh, for example, the public parking authority is getting \$30,000 a year rent from its ground-floor retail tenants—a 6% return on the \$500,000 cost of the land. Some private operators report even more profitable ground-floor leases.

In this connection four points should be noted carefully:

1. The more valuable the land the higher these retail rents;
2. Even in a highly congested district like the Chicago Loop, two-thirds of the land area is not profitably developed today above the ground floor. The upper stories, if any, are occupied at very low rents by small manufacturing or warehousing operations which could better be conducted elsewhere;
3. Putting first-class retail stores on the ground floor under garages upholds and improves the character of a shopping district, whereas a parking garage with no stores along the street interrupts shopping continuity and creates a dead spot which is bad for all the stores around;
4. The rule of thumb that most of the ground rent burden

should be carried by ground-floor tenants is already applied to hotels, office buildings and many other land uses.

Low operating costs—Architects and garage owners are already developing ways to make it easier and more attractive for car owners to drive their own cars up and down the ramps. For example, they are installing escalators in large garages to make access to upper floors easier and more attractive. Most parking garages have a special problem in the number of employees needed to handle cars early in the morning and late in the afternoon. If these peaks can be reduced by such expedients as escalators, much of the remaining labor cost can be recouped from the profits of servicing parked cars during the day.

Labor cost for parking now runs 15¢ per car or more in ramp garages, figuring a \$40-a-week employee can average eight cars in and out in an hour.

Low tax costs—We are almost unanimous in recommending that under certain conditions that will protect the public interest, the city should be willing to recognize the parking garage as an extension of the street and as such give it complete or partial tax exemption. Does it make sense that off-street parking should be tax exempt if it is provided by some government agency, but if the same facility is provided by private investment it must expect to make a substantial contribution to the city treasury in taxes, which now consume from one-fourth to one-third of gross revenue of many privately owned garages?

We do not recommend that all off-street parking should be tax exempt. For example, we do not suggest that temporarily vacant lots should be given tax exemption if cars are allowed to park there, though such exemption might be the quickest of all expedients for harnessing the profit motive to provide more off-street parking. Nor do we suggest tax exemption for parking garages unless their location conforms to a well-considered city plan or unless the sponsors: 1) agree to hourly charges which would reflect their tax-exemption savings; 2) obligate themselves to continue the facility for a term of years.

Perhaps a third requirement might be that in return for tax exemption the garage should revert to the city at the end of an appropriate period. This is now the practice in Massachusetts.

Our principal reason for suggesting tax exemption for the privately owned, off-street parking garage is that it must now compete with what is, in effect, municipally subsidized parking at the curb. We believe the equalization of this competition will do much to stimulate private enterprise to enter the parking garage field on a large scale.

We believe that parking garages, erected at a cost of not more than \$1,200 per car, and with their ground rent largely covered by the retail development of the street level, should prove one of the most profitable ways by which private enterprise can redevelop large areas of run-down property still left right in the heart of the average business district. And we are pleased to hear that some large insurance companies are showing increased readiness to advance money for such structures.

Photos: Roy Stevens

