

# New Roads And Urban Chaos

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THE *Wall Street Journal* does not commonly describe any undertaking of the Eisenhower administration as "A vast program thrown together, imperfectly conceived and grossly mismanaged, and in due course becoming a veritable playground for extravagance, waste and corruption." It must, to the White House, seem notably unkind for the *Journal* to speak thus of an enterprise the administration has declared "the biggest public works program ever undertaken anywhere or at any time throughout the world." But even the President has conceded that all is not well with the \$45-billion Interstate and Defense Highway program.

The program provides for the construction of 41,000 miles of superhighway, connecting ninety per cent of the nearly three hundred cities of the continental United States with populations of 50,000 or more. When completed, the system will carry twenty per cent of the nation's traffic. Up to ninety-five per cent of the cost will be paid by the Federal government. Half of it will be spent in the cities the system connects.

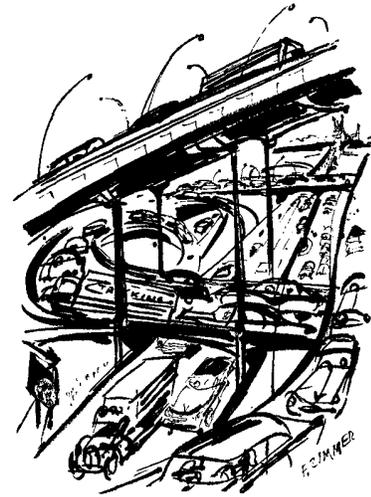
Washington abounds with administration task forces, Congressional committees, and special-interest groups—all investigating this program. Those in Congress who are looking for scandal will likely find no end of it. Those in the President's office looking for ways to cut back the program will have an even easier task, although they may encounter more difficulty getting their findings published during this election year. But very few seem to be asking whether, quite apart from corruption or extravagance, the program is bringing about changes for the worse

in the efficiency of our transportation system and the character of our cities.

ONE OF THE best-publicized resolves of the administration that took office in 1953 was to redress the balance of Federal-state relations by divesting the national government of such usurpations of state sovereignty as vocational education and aid to the dependent blind. While almost nothing has come of this endeavor, an important change in Federal-state relations has in fact taken place during the Eisenhower years. The Federal government, through the Federal Aid Highway Act of 1956, has assumed the direction of highway construction—one of the few areas of significant government activity in which the states still had the initiative after the New Deal.

Although the Federal government has been providing some highway aid to the states since 1916, road building was almost entirely a state and local affair until 1956. The Federal Bureau of Public Roads was, as late as 1939, a small agency in the Department of Agriculture helping to "get the farmer out of the mud" by supplementing state highway budgets. The states spent the money pretty much as they pleased.

The system was permissive but not disorganized. Standards for highway construction, for example, and national routes (the familiar US sign) were successfully established on a voluntary basis. For the most part, however, these roads followed trails that had originated far back in frontier history. With the coming of the automobile they were just surfaced, and widened and



straightened somewhat. Our counterparts of the "rolling English drunkard" who laid out Chesterton's "rolling English road" were the Iroquois war party and the Conestoga wagon: more purposeful but not less circuitous as they sought out the passes and water-level routes north and south, and across the continent. The Roman roads Hilaire Belloc has written of, struck like a lash across the conquered provinces, were not reproduced in America until we too established a dominant central government.

The idea of a Federal system of superhighways arose during the First World War. It was revived by the Roosevelt administration as a public-works project for building 14,000 miles of transcontinental routes. A study made by the Bureau of Public Roads, which the President commended to Congress in 1939, revealed that there was surprisingly little cross-country traffic and suggested that the concept be changed to a 26,700-mile intercity system. The idea was popularized by General Motors' Futurama exhibit at the New York World's Fair.

In 1944, after some further study, Congress authorized construction of a National Interstate Highway system on this basis. The size was increased to 40,000 miles. Thus, from the outset there has been more mileage authorized for the system than anyone knew exactly what to do with.

## More Roads for More Cars

Authorization is the first step in a Federal public-works program. It more or less commits Congress to

appropriate money at a future date and provides time for plans and other necessary arrangements to be made. Plans for the interstate system went ahead. In 1947 the Federal government and the states agreed on the location of 37,700 miles of the system, leaving the rest for additional urban connections. The roads were to be limited-access, multilane high-speed routes designed to the highest standards. But no special funds were appropriated to build them; only regular Federal highway-aid funds were made available, on the standard fifty-fifty matching basis. This required the states to take sizable amounts of money from regular projects to spend on interstate mileage.

**T**HE RESULT was that the interstate mileage didn't get built. Highway-construction expenditure multiplied by nearly eight times from 1945 to 1952, but the states just wouldn't use their money on interstate highways. It had never, after all, been their idea. Special funds were thereupon appropriated and the Federal share increased to sixty per cent, but still with little effect. By 1952, less than one per cent of the system had been completed. Three years later President Eisenhower declared: "At the current rate of development, the interstate network would not reach even a reasonable level of extent and efficiency in half a century."

For the highway transportation industry this raised a serious question. Automobile registrations had almost doubled in the first decade after the war. By 1955 there was a motor vehicle for every seven hundred feet of lane in both directions on all the streets and roads of the nation. It was expected that registrations would rise another forty per cent in the following decade, to a total of eighty-one million. Yet already the cities were chockablock with cars. Unless more room was made for automobiles, the automobile industry itself might feel the pinch. "Either the roads must be made adequate for the traffic," stated the *Engineering News-Record*, "or the end of national expansion as we know it must be accepted."

Few pains were spared to popularize this notion. General Motors even went into the essay-sponsoring

business, offering \$25,000 for the best theme on "How to Build the Roads We Need." (The prize was won, naturally, by Robert Moses.)

But the Eisenhower administration needed little persuading. Highway transport had become, in the words of the Brookings Institution, "the greatest single combination of economic activities in men's history."

In July, 1954, the President proposed a "grand plan" for a national highway system. His plan was to build the interstate system Roosevelt had proposed and Congress had authorized. He next appointed a committee composed of General Lucius D. Clay and assorted men of substance, including Dave Beck, as was *de rigueur* in those days, to devise means for doing so. The committee quickly reported that the system would cost only \$27.5 billion, and could be built, with borrowed money, in ten years. It proposed that the Federal government pay ninety per cent of the cost generally and up to ninety-five per cent in states with extensive untaxed Federal landholdings. The President submitted this proposal to Congress in February, 1955.

### Something for Everybody

Introducing a highway program in today's Congress is like letting a tariff bill loose in the old days: the figures go up and up and up. The economic interest in highways affects not only General Motors but also countless numbers of garage owners, automobile dealers, road contractors, real-estate developers, and similar large and small businesses throughout the land. Conservatives think of roads as good for business. Liberals think of them as part of the litany of public investment they so love to chant: "Better Schools, Better Hospitals, Better Roads . . ." Plain politicians think of roads as the indispensable means by which the owners of seventy million motor vehicles derive the benefits from what is for most of them the largest or second largest investment they ever make.

Highway construction is especially important to the professional politicians, since it provides the largest single supply of money available

these days to support their activities. The alliance of the county leader and the contractor is ancient and by no means dishonorable. Public works represents the most beneficent outlet yet devised for the politician's need to make a living and at the same time please the public. If it occasionally takes the form of paving stream beds in Kansas City, it may also produce a New York State Thruway.

**I**N MOST STATES a symbiotic relationship has been established between the contracting firms and the local political organizations which obviates the usual forms of corruption. The contractors pay an honest tithe to the parties' exchequers out of fair profits, which are large mostly because the sums involved are vast. It is a point of pride with many contractors to make all contributions by check and often, as it were, in public through advertisements in party yearbooks. To the extent that this system works, it provides an excellent if informal means of financing our parties out of tax funds: contractors are normally apolitical, asking only that there be just a little more than enough work to go around. The politicians usually do their best.

One special attraction of the interstate program was that these roads, for the most part, would be brand-new. Seventy-two per cent of the mileage, both in urban and rural areas, would be on entirely new locations. Along most of these thirty-thousand-odd miles, property values are destined to soar. This is sure to please the owners, whether the property has been in the family for years or, by good fortune, recently acquired. The redoubtable George Washington Plunkett of Tammany Hall was not the last American politician who could suggest as his epitaph "He Seen His Opportunities, and He Took 'Em."

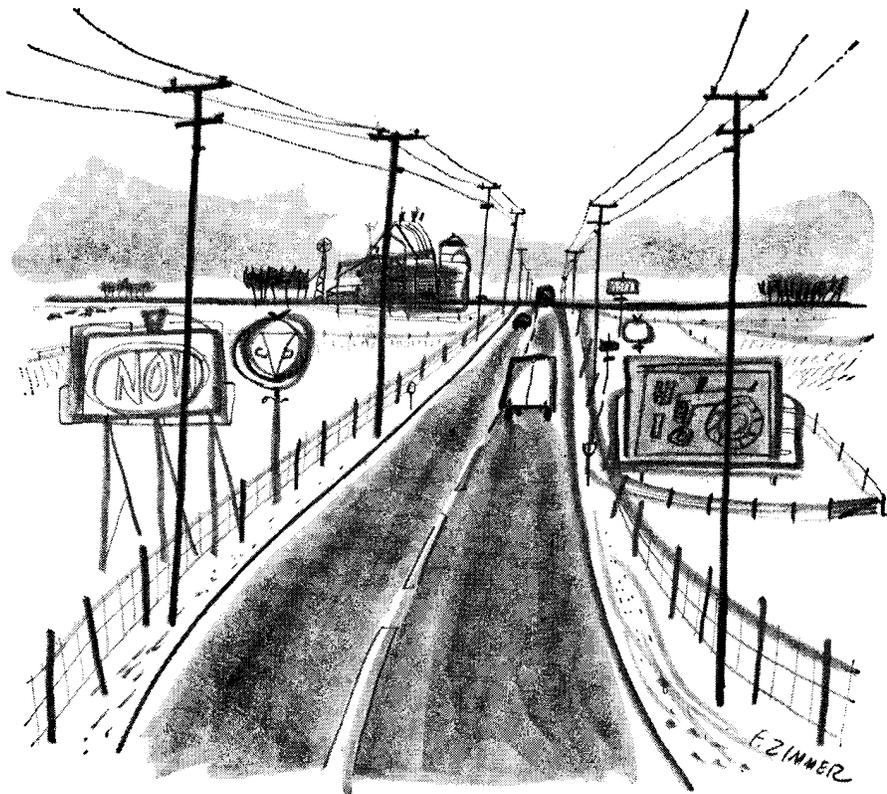
In a Democratic Congress dominated by Southern and Western representatives, the program had the further advantage of providing a considerable subsidy to those parts of the country. Far the heaviest concentration of traffic and automobiles in the nation is located in a parallelogram running from Boston to Milwaukee down to St. Louis

over to Washington and back up to Boston. The area's fourteen states and the District of Columbia had just under half the nation's motor vehicles in 1955. However, only a quarter of the interstate mileage is located in these states. Mississippi, with one-third to a half as many automobiles as Massachusetts, is to get almost one and a half times the mileage. Texas, with five-sixths as many automobiles as New York, is to get almost three times as much mileage.

**I**T WAS FORTUNATE for the President that there were so many sound political reasons to support his program. There weren't many others. With the railroads running at fifty per cent of capacity, a sudden, sharp increase in intercity transportation facilities represented, if anything, a threat to the economic stability of the entire transportation industry. Almost certainly the 40,000-mile figure was too large: it had no basis other than the enthusiasm of the wartime Congress for a peacetime program that might be years away. In 1944 Congress had little idea where this mileage was to be located, much less whether it would be needed. Ten years later the Clay Committee appointed by President Eisenhower found that only 8,500 miles of the system could expect enough traffic to pay for themselves as toll roads—and of these, all but 3,500 were already built or being built.

There was no question that city streets were jammed, and it was always understood that half the cost of the program would go to urban arterials. But this aspect of the program should have evoked the Malthusian specter raised by New York City's Deputy Administrator Lyle C. Fitch: the number of automobiles increases to fill all the space provided.

A few months after the program was adopted, Geoffrey Crowther of the London *Economist*, returned from a trans-American tour, told a New York meeting of the Committee for Economic Development: "I have driven myself with my own hands over 12,000 miles. . . . I could tell you a great deal about the . . . fabulous development of the highways in the United States. I find myself



puzzled by the statements—that are taken for granted in this country now—that your highways are obsolete. I think I can claim to know as much about them now as anybody in this room and I say it is not so. Your highway system is magnificent. It is overburdened in the immediate vicinity of the large cities; but get away from the large cities and your highways are empty.

"I wonder," said Crowther, speaking of the new interstate program, "if the matter has been investigated as thoroughly as it should be." It had been. Any number of congressmen had wondered if it could not be made bigger. It was. The President's proposal was adopted with only one other important change. Ever alert to the call of patriotism, Congress lengthened the title to make it the *Interstate and Defense Highway* program.

#### Who Pays the Bill?

The urge to have the highways was not matched by an urge to pay for them. From the outset the financing of the program has been the object of much controversy and muddle.

The Clay Committee had proposed that the program be financed through an independent Federal Highway Corporation which would

sell some \$20 billion worth of bonds to raise money to build the highways in a ten-year period. The bonds would be retired over thirty years by the returns on the two-cent Federal gasoline tax. This would have permitted an increase in government borrowing and spending of billions of dollars each year, without any increase in the debt limit, the budget, or taxes.

The fiscal conservatives in Congress were upset by this proposal for deficit financing. The partisan Democrats were loath to let the President carry off such a political coup. The two groups combined to insist on what is substantially a pay-as-you-go program, matching increased expenditures with increased taxes. After some difficulty over which taxes would be increased, a bipartisan program passed the House in April, 1956, by a vote of 388-19. The Senate approved its measure and the President promptly signed the conference bill.

The Highway Act of 1956 gave the President the \$25 billion he had asked to construct the interstate system (to be matched by \$2.5 billion from the states) and provided a third more than he had asked for regular highway aid. The authorized mileage of the interstate system

was increased to 41,000. It was to be built over a thirteen-year period, at a rate of Federal expenditure rising to \$2.2 billion per year.

To provide the money, the fuel tax was increased from two cents to three cents per gallon and the tax on new tires from five cents to eight cents per pound. These increases, together with some smaller ones on other taxes, brought an increase of almost two-thirds in taxes on highway use. A Highway Trust Fund was set up to receive these and some related taxes. The receipts of the Trust Fund would be used to pay for the highway program.

The device of the Trust Fund satisfied the administration's wish to keep the increased level of government spending from showing up in the budget. The bulk of highway expenditure is now carried as a separate item, similar to Social Security payments. Thus in the budget for fiscal 1961, highway expenditures are shown as \$3 million, although they will actually be something like \$3 billion.

**T**HE PROGRAM got under way on July 1, 1956, but it was in trouble even before it began. The financial plan provided for the Highway Trust Fund to incur some deficits during the peak construction years. These would be balanced by surpluses obtained during the early period when the program was still on the drawing boards and during the latter years as it was tapering off. At the last minute, Senator Harry Byrd of Virginia, supported by Secretary of the Treasury George M. Humphrey, added an amendment that forbade the Trust Fund ever to incur a deficit. This meant the scheduled program would have to be cut back as soon as the small initial surplus was used up.

A deficit seemed imminent in March, 1958, when the President asked Congress to permit the expenditure of an additional \$600 million on the interstate system as an anti-recession measure. Congress eagerly responded with \$800 mil-

lion. The 1958 recession thus caused an increase in expenditures and at the same time a decrease in receipts because of lowered economic activity. In January, 1959, the Secretary of Commerce reported to Congress that unless receipts were increased the fund would soon be exhausted. There would be no interstate funds apportioned for fiscal 1961 and only \$500 million for 1962.

To prevent this the President asked that fuel taxes be increased from three cents to four and a half cents a gallon. This aroused opposition from the oil companies, and for a time it seemed that the program might be seriously interrupted, but at the last moment Congress enacted a one-cent gas-tax increase. The President asked for the other half cent in his recent budget message, but nothing will be done until after the election.

**S**OMETHING will have to be done soon, however, for the financial problems of the interstate system have become more difficult than simply maintaining the level of expenditures envisioned in 1956. Since then the estimated cost of the system has almost doubled.

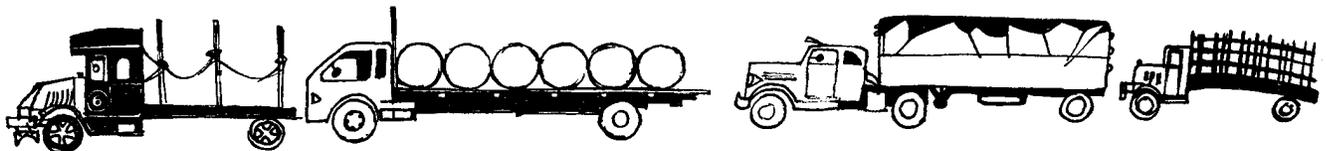
In January, 1958, the Secretary of Commerce announced that revised estimates indicated that instead of \$25 billion, the Federal share of the interstate cost would be nearly \$34 billion. This was for only 38,548 miles, however, which, it turned out, was all the routes laid out in 1947 required. To build the remaining 1,452 of the 40,000 miles originally planned (never any question of just dispensing with them as a tribute to efficient management) and the extra thousand miles authorized in 1956 will require another \$2.2 billion. Technically the revised estimate did not even cover all of the 38,548 miles, since it did not include the cost of reimbursing the states that had already built parts of the system with their own funds or as toll roads. This would add perhaps \$4.3 billion. There is also the mat-

ter of some \$1.5 billion for relocating railroad tracks, telephone lines, and other utilities disturbed by the new highways, as authorized by Congress. Also, another half billion dollars might be needed to provide the extra 1.5 per cent of the cost to states that forbid billboards along the new routes, as authorized by Congress. This could bring the total Federal-state cost to something like \$45 billion. The sole prospect of economy is that the states aren't taking up the no-billboard option.

### Who Runs It?

This is not the end of it: rising costs are built into the interstate system. From the outset the program has been undermined by the administration's desire for Big Government achievements without Big Government. The Clay Committee envisioned the largest public-works program in history being carried on with no increase in public personnel. ". . . The Federal Highway Corporation should consist only of a board of directors with secretarial assistants"—a kind of bureaucratic fantasy in which almost everyone is a member of the board and there is no overhead. The Clay Committee proposed that the interstate program be operated through the Bureau of Public Roads as an ordinary Federal highway-aid program, with all the work of picking sites, drawing plans, letting contracts, and so forth, done by the states. For extra help the states, many of which were altogether incapable of doing such work anyway, would turn to the "private engineering organizations capable of providing sound engineering in this field." All of this, in some way, would further "the President's stated desire for 'a cooperative alliance between Federal Government and the States so that government . . . will be the manager of its own area.'"

The President has had his desire. The Bureau of Public Roads, with only a handful of extra help, depends on the states, which depend on consulting engineers. The consulting



engineers, normally paid by a percentage of cost of the projects they design, depend on the Rotary Club for forecasts of the traffic potential of whatever town they happen to be tearing up.

### Where Is It Built?

Many instances of almost incredible mismanagement have appeared in scathing reports by the Comptroller General, but there is nothing to be done about it. The interstate program is not a Federal enterprise; it is only a Federal expense. Washington is simply committed to keep supplying money until it is finished. But the states have no real freedom of action either. The basic decision to build the system has been made for them: the enormous "bargain" of the 90-10 money makes it politically impossible to do anything but take the money as fast as possible and try to match it. Since all contracts are closely scrutinized by the U.S. Bureau of Public Roads, the states hardly see it as their responsibility to control the costs of the program, as indeed it is not. But the bureau, under equally heavy pressure to keep the program rolling and Congress happy, exercises little real control. It functions rather as a company comptroller who fusses over items on an expense account without ever daring to ask if the trip was necessary. In fairness, the bureau could hardly do otherwise: in 1958 it had two investigators to cover the entire United States.

The Comptroller General's men recently came upon a three-mile segment in "a very sparsely settled area" of Nevada on which three interchanges have been built at a cost of \$384,000. They will handle a daily traffic load of eighty-nine vehicles, serving, in the words of the General Accounting Office, "some old mines, a power line, four or five small ranches, and a house of ill repute."

From Arkansas the state auditors reported: "On every hand among both employees and commissioners we encountered a strange and distressing apathy at any extravagant use of highway funds." In Indiana apathy was replaced by enthusiasm: the boys had organized a syndicate with highway-department employees to take *all* the risks

out of speculating on capital gains from right-of-way condemnations. The Pennsylvania highway department, one hundred per cent patronage, was performing less than ten per cent of the preliminary engineering on interstate routes, while passing out contracts to consulting engineers at the rate of a \$1 million a month. In West Virginia, "... only about ten per cent of the state's project engineers... were registered or graduate engineers."

With no strong direction of the program, there has been no way to resist the political pressures to build a little bit of interstate highway in every county along the 41,000-mile route. Limited-access highways over



new locations are more like bridges than ordinary roads. Until they make the complete crossing from one city to another they are relatively useless, starting, likely as not, at one of the cities and ending in a cornfield. A minimum of businesslike management would have arranged for the system to be built in complete segments, concentrating on the more important ones. Instead it is being built in fragments strewn across the continent. It will be years before these are connected into anything like a national system.

**T**HE REPEATED financial crises of the program have created a mistaken impression that it is slowing down. Apportionments of funds for the next two fiscal years will be down as much as \$600 million, but this will no more than offset the increases provided in 1958. According to Federal Highway Administrator Bertram D. Tallamy, who built

the New York State Thruway and is in charge of the interstate program, expenditures are running some four per cent ahead of the schedule envisioned by the 1956 legislation. Fifteen thousand miles of the system are either in the contract stage or have actually been completed. Routes have been located and plans are in process for ninety-five per cent of the remaining mileage.

True, unless more funds are made available, the program will stretch out. But there is much support for providing more funds. The President's recent budget message, which calls for cuts in housing, hospital, water pollution, and similar programs and makes clear that a serious education bill will be vetoed, nonetheless proposes more funds to "permit the construction program for the Interstate System to proceed at a higher and more desirable level." Congress continues to share the President's unflagging interest in highways. Senator Albert Gore, who sponsored the 1956 legislation, was talking awhile back about adding another seven thousand miles.

A few legislators such as Senator Paul Douglas of Illinois have questioned whether this is the very best way to spend our money. Senator Eugene McCarthy of Minnesota has asked whether the program wasn't merely hastening the day when "You'll be able to drive eighty miles an hour along superhighways from one polluted stream to another, from one urban slum to another, from one rundown college campus to another."

The only certain consequence of the rising costs of the program is that there is no longer much serious possibility of reimbursing the states that built sections of the system as toll roads. In the postwar years, after the outlines of the interstate system had been established, a number of states did this. From the outset of the present program it has been recognized that justice entitled these states to be reimbursed so that they might either remove the tolls or build additional roads. Five years ago it seemed unthinkable that this would not be done. An administration spokesman told the House Committee on Public Works that not to reimburse these

states would be like saying, "Boys, we are sorry, you took care of yourselves, so you do not get anything."

The 1956 legislation declared the intent of Congress to settle this matter, but as one financial crisis has followed another, the intention has grown weaker. It is now practically settled that those states which did not wait around for Uncle Sam to look after them will in fact get nothing. So much for the fate of the bird dogs in the Eisenhower years.

Not surprisingly, seventy per cent of these toll roads are located in the states of the northeastern parallelogram, which as a result will get even less than a quarter of the interstate mileage.

This development only compounds the inequity of paying for the interstate system with gasoline taxes. Drivers on the Massachusetts Turnpike, the Indiana Toll Road, the New York State Thruway, and similar highways will not only have to pay tolls to use their portion of the interstate system, but they will be paying extra gasoline taxes to build the other portions.

### Who Benefits Most?

Apart from any regional imbalance, the gasoline tax is still a highly questionable way of distributing the burden of paying for the interstate system in terms of the benefits that will be derived from it. The fuel levy really amounts to a household tax—more than fifteen dollars a year on the average—on the seven out of ten American families that own an automobile. Most of these families will use the interstate from time to time, but hardly enough to get their money back.

By contrast, the system will provide a great subsidy to industry in the form of cheap road transport. The nature of this subsidy has been obscured by the endless arguments concerning the precise share of highway costs that should be paid by trucks as against private automobiles. (The Federal government and the states are currently spending \$22 million running tractor-trailers over a road near Ottawa, Illinois, to determine just how much they damage the pavement.) Although it appears that truckers do

not pay a fair portion of highway costs, this in itself is not the secret of their economic success. The truckers' main advantage is that railroads must pay *all* the cost of building and maintaining their transportation system, while trucks pay only when they actually use the roads. Of each railroad revenue dollar, twenty cents goes to right-of-way costs. For trucks the figure is four and a half cents.

As a result of this advantage, in the words of the industry's trade association, "Within one generation, trucking has become the dominant form of transportation in the United States." This dominance will be confirmed by the completion of the interstate system, at a presently estimated cost of some \$45 billion. The net investment in our entire 220,000-mile railroad system is only \$28 billion. Were it not for the trucking subsidy, the railroads would almost certainly be running at better than their current fifty per cent of capacity.

Some of this imbalance could be righted if the Interstate Commerce Commission were authorized to take the road subsidy into account in fixing trucking rates. But actually only a third of the road transport is conducted by firms operating as common carriers in direct competition with railroads and under regulation by the icc. Railroad analyst A. Joseph Debe of Standard & Poor's estimates that two-thirds of it is conducted by or for private industries hauling their own products. It is these companies, spread across the entire range of American industry, that benefit most from the highway subsidy.

Because two-thirds of truck traffic is subject to no rate regulation, the only practical way to restore any economic balance in intercity

transportation would be to impose a toll on the commercial users of the interstate system. A permit system would not send trucks to parallel routes: they gladly pay as much as ten cents a mile to use a road like the New York State Thruway. (This may give some indication of the size of subsidy on free roads.)

**T**HE QUESTION of tolls must also be asked in connection with the problem of how the system is to be maintained by the states once it is built. Running a limited-access highway is a complex, exacting job requiring intensive, continuous supervision, much as does running a railroad. The great turnpikes are, in fact, very much like railroads; they are not public facilities nearly so much as they are public enterprises. Their headquarters are elaborate communications centers receiving information and dispatching orders, often of much urgency. The forces required to keep the routes open in winter, repair damage, keep up with maintenance, and generally look after things are far greater than those required on ordinary roads. The costs run as high as \$10,000 per mile per year. Few states have this kind of money; fewer have the organization to spend it effectively. Only tolls can really be expected to provide either.

The problem will be vastly enlarged by the absence of any food or fuel facilities on the interstate system. Limited-access highways are isolated travel corridors; it is essential that they be as self-contained as possible. Restaurants and service stations are automatically included in plans for any large toll road. Anyone who has used a turnpike knows how busy these facilities are. They produce income from concessionaire fees and provide indispensable services to motorists. But the Highway Act of 1956 specifically provided that there should be *no* service facilities on the system.

A motorist on the interstate system who has car trouble or needs gas will have to leave the main road at an interchange to find a service station. At four in the afternoon he will almost certainly find one open. At four in the morning he will almost certainly find them all closed. The oil companies are thus



free of any obligation to set up stations on interstate routes where their prices might be regulated, where they might have to share their profits with the state governments, and most particularly where they might have to stay open in the unprofitable hours of the early morning. And, of course, nothing will help real-estate values at those interchanges like a gas station and a honky-tonk or two. As far as the public is concerned, it means the interstate routes will almost certainly be poorly maintained and will be dangerous to drive on at night or at any time during the winter.

### Chaos in Concrete

It is not true, as is sometimes alleged, that the sponsors of the interstate program ignored the consequences it would have in the cities. Nor did they simply acquiesce in them. They exulted in them. Thanks to highways, declared the Clay Report, "We have been able to disperse our factories, our stores, our people; in short, to create a revolution in living habits. Our cities have spread into suburbs, dependent on the automobile for their existence. The automobile has restored a way of life in which the individual may live in a friendly neighborhood, it has brought city and country closer together, it has made us one country and a united people."

This rhapsody startled many of those who have been concerned with the future of the American city. To undertake a vast program of urban highway construction with no thought for other forms of transportation seemed lunatic.

The 1939 report that Roosevelt sent to Congress—prepared in the Department of Agriculture—took it as axiomatic that the new highways would be part of, and provide the occasion for, a "radical revision of the city plan," which would coordinate other urban programs such as slum clearance and provide for a "reintegration of facilities for the various forms of transportation." The 1944 legislation had much the same intent. But so far as the Highway Act of 1956 goes, there is no form of transportation but the automobile, and the act has no objective save providing more room for it.



It had always been understood that a large portion of the interstate funds would be spent in the metropolitan areas, but the 1956 legislation went further to declare that "local needs . . . shall be given equal consideration with the needs of interstate commerce," thus authorizing construction of arterial highways only by courtesy connected with the interstate system.

It was clear at the time that locating the metropolitan portions of the interstate system would constitute an unprecedented venture into national planning. It was estimated that the size of our metropolitan areas would double by 1975. For good or ill, the location of the interstate arterials would, more than any other factor, determine how this growth would take place. Yet no planning provisions of any kind were included.

In the absence of any other provisions, the "planning" would be done by highway engineers. Theirs, admittedly, is an unjustly maligned profession. Nothing in the training or education of most civil engineers prepares them to do anything more than build sound highways cheaply. In the course of doing this job they frequently produce works of startling beauty—compare the design of public highways with that of public housing. Yet, in the words of John T. Howard of the Massachusetts Institute of Technology, "It does not belittle them to say that, just as war is too important to leave to the generals, so highways are too important to leave to the highway engineers."

Highways determine land use,

which is another way of saying they settle the future of the areas in which they are built. It stands to reason that engineers should be required to conform their highway plans to metropolitan land-use plans designed in the context of more general economic and social objectives.

Yet in 1956 we had no metropolitan area plans, as we had no metropolitan area governments. The only one we have now is in Dade County (Miami), Florida, which is just getting started.

In this predicament, there was considerable sentiment for a moratorium on the urban interstate program until planning requirements could be imposed. Most of those concerned, however, as the distinguished transportation economist Wilfred Owen is frank to say, felt if the program went ahead it would precipitate such a crisis that something would have to be done at last about our metropolitan areas.

Across the nation there seemed to be an increasing awareness among those who actually run the cities and suburbs that to do nothing more than build bigger highways only produced bigger traffic jams. There seemed a growing belief that a complex system of mass transit had to be preserved, or revived, or even indeed created—if only to make automobile transportation feasible.

The sorry results of carrying on a number of Federal urban-development programs completely independent of each other had become increasingly evident. Thus the American Municipal Association formally requested legislation requiring that the urban-renewal and highway program be co-ordinated.

**T**HE CRISIS has come. It has been impossible for the cities to resist the offer of unprecedented amounts of money, however futile they might know it will be to spend it on highways alone. In one metropolis after another the plans have been thrown together and the bulldozers set to work.

Here and there, as in Milwaukee, a vigorous and established city planning authority has been able to get intolerable plans redrawn. But in general the program is doing about what was to be expected: throwing up a Chinese wall across Wilming-

ton, driving educational institutions out of downtown Louisville, plowing through the center of Reno. When the interstate runs into a place like Newburgh, New York, the wreckage is something to see. Down the Hudson, Robert Moses is getting set to build the Canal Street Expressway, the first hundred-million-dollar mile.

The Bureau of Public Roads recently considered an edict requiring that some area plans be developed before interstate funds are allocated, but the idea was abandoned. Some felt it was too late anyway. As for relating the highway program to urban renewal, a recent policy statement of the American Institute of Planners said simply: "Except for the coordination which may be supplied at the local level . . . each one is apparently operating entirely independently of the other." The legislation asked by the Municipal Association was never introduced. It was with compassion that Paul Ylvisaker of the Ford Foundation recently addressed a meeting of city planners as the "Beaten Profession."

Just ahead for all of us, perhaps, is Los Angeles, in the words of Harrison Salisbury, "nestled under its blanket of smog, girdled by bands of freeways, its core eviscerated by concrete strips and asphalt fields, its circulatory arteries pumping away without focus . . . the prototype of Gasopolis, the rubber-wheeled living region of the future."

### Money Talks

Yet we may be learning our lesson after all: Owen may be right. All across the country, area planners and highway engineers are discussing what they recognize as their common problems with a new sense of urgency. It is clear that if the areas in which Federal highways are to be built were required to work out adequate plans for the use of land and transportation before the money was handed over, the planning would almost certainly be done. The demand for 90-10 highway funds is so great that there is almost nothing, however sensible, that local governments would not do to get their share.

It is true that metropolitan-area planning will not be an easy matter to bring off. Dennis O'Harrow, director of the American Society of

Planning Officials, says candidly: "There is a shortage of planners, a shortage of information, a shortage of money to support studies, and more fundamentally, a shortage of information as to what should be done if you could do what you wished." But this is a normal condition of human affairs. Almost any effort to think a bit about what we are doing would help.

Simply by providing some flexibility in the program, we could produce great savings. If the cities were permitted to do what they thought best with, say, fifty per cent of the more than \$20 billion of interstate funds allotted to them, much of it would almost certainly go to mass transit and commuter facilities. This kind of money could reshape urban transportation in America: our total national investment in public transit is less than \$4 billion, and a combined highway-mass transit-commuter program could almost certainly produce the same results at lower cost than a program dependent on highways alone.

It is becoming increasingly apparent that American government, both national and local, can no longer ignore what is happening as the suburbs eat endlessly into the countryside. Since the spreading pollution of land follows the roads, those who build the roads must also recognize their responsibility for the consequences. There are a number of obvious steps that could be taken. Public authorities could, for example, buy up the development rights of open land in the suburbs—not the property itself, but only an easement to prevent it from being turned into a factory site or a housing development. This could be done, as it is in England, in accordance with an area land-use plan that fixes the perimeter of the metropolitan area, or alternates built-up sections with open



spaces. What this really amounts to is effective zoning regulations.

How could the money be found to pay for the development rights? A practical solution would be the technique of "excess-taking" as proposed by President Roosevelt in his 1939 message to Congress. As he put it: "The government, which puts up the cost of the highway, buys a strip on each side of the highway itself, uses it for the rental of concessions and sells it off over a period of years to home builders and others who wish to live near a main artery of travel. Thus the government gets the unearned increment and reimburses itself in large part for the building of the road."

This "unearned increment" can be staggering; a five thousand per cent increase in land values is not uncommon. At a time when state and local governments are reaching a limit of the money they can get out of taxpayers, here is an opportunity to get money that doesn't belong to anyone: it doesn't exist, as it were, until the government builds the highway. It represents a legitimate source of government revenue of great potential. Used to shape the development that the highways make possible, it could transform the suburbs of the next half century.

ALL THESE possibilities are enlivened by the investigation of the interstate program now getting underway in Congress. So much thieving, mischief, and blunder will be uncovered (if not, it will be necessary to investigate the investigators) that the public should be prepared for a serious reappraisal of the program by the next administration, Democratic or Republican.

We may yet impart some sanity and public purpose to this vast enterprise. We may yet establish some equity in paying for the highways and restore some balance between them and other elements of our transportation system. We may even refute Belloc's dictum, "The general rule in history is that a city having reached its highest point of wealth becomes congested, refuses to accept its only remedy, and passes on from congestion to decay." But we shall not escape his rule that "the Road moves and controls all history."

Roads can make or break a nation.