

# TRAFFIC JAMS— *How We*

A 37,800-mile highway network, tying together our main cities and rural areas, offers a short cut to freedom of the road. Modernize this system and we solve our worst bottlenecks

**F**OR many years, U.S. motorists have been cherishing a dream of The Highways of the Future. These imaginary superroads are six or eight lanes wide, accidentproof and bump-free. They stretch coast-to-coast, by-pass cities, leapfrog valleys on mammoth bridges and tunnel through mountains. Over these dream highways, autos whiz at 80 to 100 miles per hour, while trucks and busses—moving in segregated lanes—rumble along at a mile-a-minute clip.

All these de luxe features would make mighty pleasant driving. However, there are several practical reasons why our dream highways never come true. We, the 75,000,000 American motorists, simply don't have enough money to network the country with superroads costing upwards of \$3,000,000 a mile. We can't even afford, apparently, to keep the essential sections of our existing 3,322,000-mile street and highway system in good condition. Over the last 20 years, we've actually fallen \$51,000,000,000 behind schedule in rebuilding and modernizing worn-out and obsolete roads and constructing vital new ones. So, instead of dream highways, we've got traffic nightmares.

According to the U.S. Bureau of Public Roads, almost two thirds of our principal highways—roughly 200,000 miles of them—are substandard in width, grade or curvature for today's fast, heavy traffic. Most of this vital mileage can be widened or straightened sufficiently to provide "safe passing" distances, and extreme traffic hazards at approximately 20,000 narrow bridges and exposed railroad crossings can be eliminated. But this long-overdue reconstruction program, endorsed by most state highway department officials, would cost an estimated \$5,500,000,000 annually for at least 15 years.

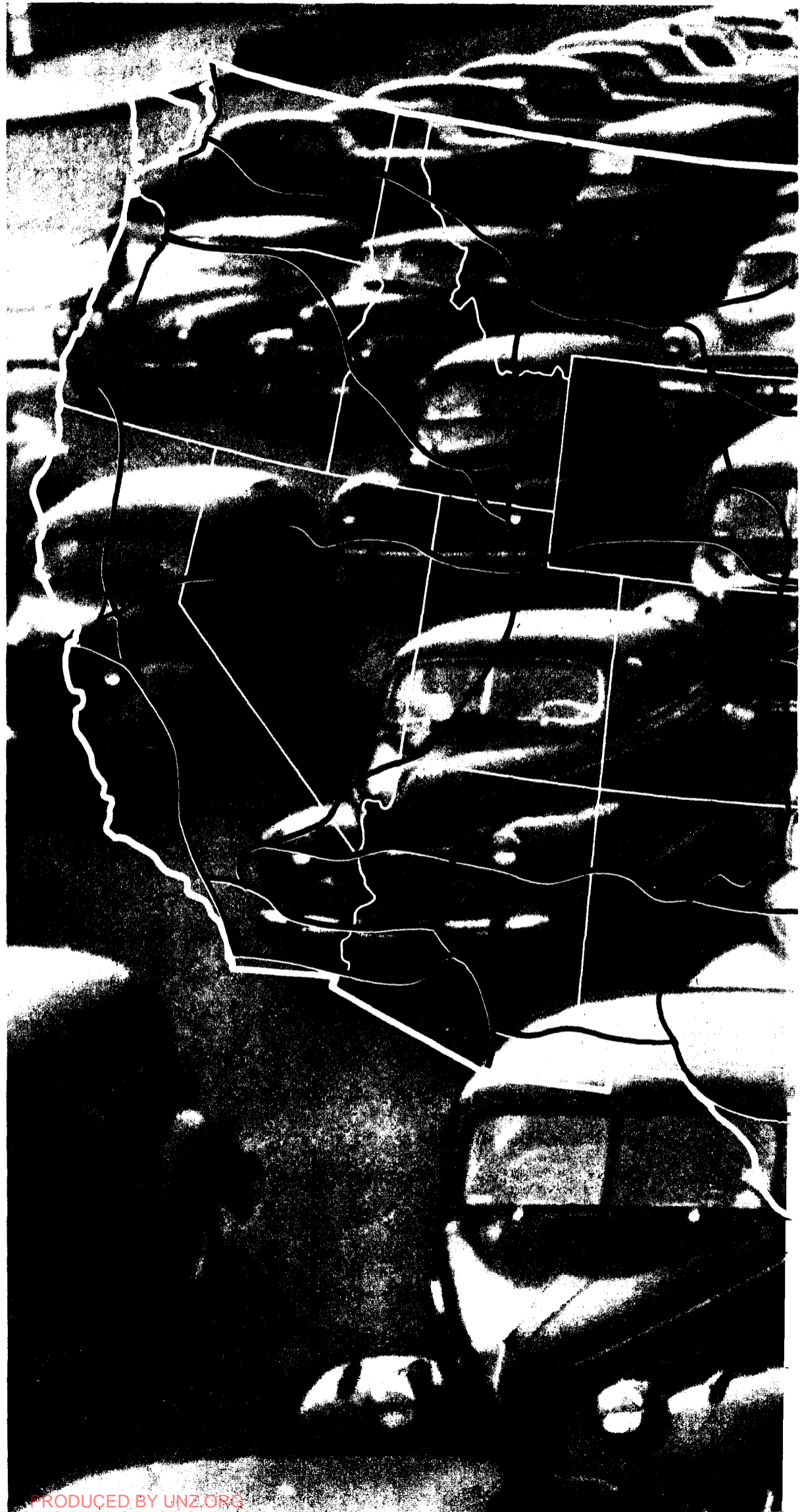
As of now, we haven't even started this urgently needed rebuilding. In 1951, we spent only \$4,200,000,000 on U.S. roads. As a result, highway officials estimate, we fell 7,000 miles short of making the repairs and replacements necessary to maintain our state highways at their admittedly inadequate 1950 levels.

That's the bleak highway picture. At our current rebuilding pace, the roads are going from bad to worse. Even if we get right to work on an \$82,500,000,000 reconstruction program, we can't expect to complete the job of modernizing our highway system until 1967.

This disturbing highway picture becomes even more bleak when viewed against the background of the nation's economic dependence on motor transportation. Last year, Americans operated a total of 52,000,000 autos, trucks and busses—60 per cent of the world's vehicles. Three fourths of our total freight tonnage moved at least part way to market in trucks. So did nearly 90 per cent of our farm products. In addition, private autos and busses accounted for 90 per cent of all intercity passenger mileage.

Obviously, these vital transportation services, already slowed to a virtual standstill by traffic congestion near and in metropolitan areas, can scarcely wait 15 or 20 years for a long-range rebuilding program to materialize. This fact poses our most urgent transportation problem. How can we recondition enough highway mileage in the next few

**The National System of Interstate Highways, America's top-priority road-repair project. Today, much of it is battered and inadequate, but it's the big hope of tomorrow's motorist**



# *Can Free Them Now*

25

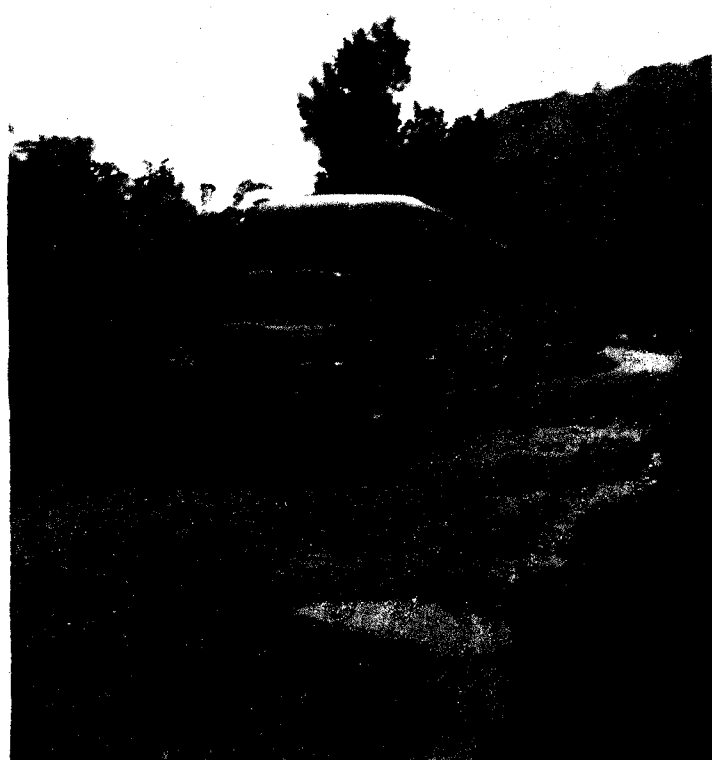
By BILL FAY





JAMES NICKELL

Near Reno, civic groups erected signs like this on Rte. 40, which runs to San Francisco from East

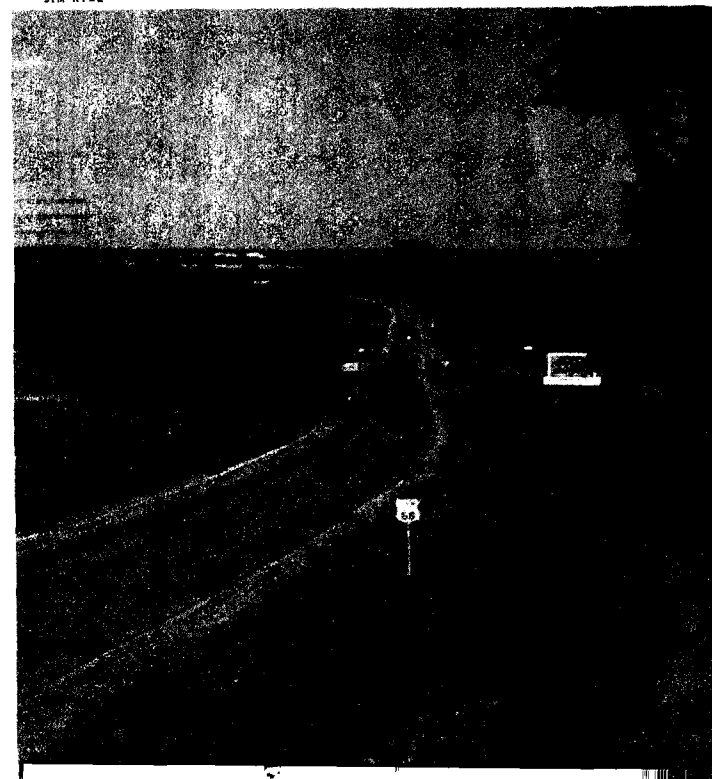


RALPH ROYLE

To avoid Pittsburgh, westbound traffic turns off speedy Pa. Turnpike—into rutted, torn Rte. 31

Oklahoma City-Tulsa road is narrow, winding and in bad repair. It will be replaced by new route

JIM KYLE



years to meet our constantly expanding industrial, agricultural and national defense needs?

There is only one possible solution—prompt, full improvement of a 37,800-mile “short cut” authorized by Congress called the National System of Interstate Highways. This overworked Interstate System, consisting of certain key roads among those maintained by the state with federal aid, comprises less than one per cent of the nation’s highways, but it carries 20 per cent of our total highway traffic. It also connects 42 state capitals and 156 of the 164 cities having more than 50,000 population.

The tightly compressed Interstate System is the life line of U.S. highway transportation. It runs through the urban areas which produce 83 per cent of all the goods manufactured in cities of 10,000-or-more population; and, equally important, it traverses rural sections which account for 43 per cent of our farm products. Populationwise, the Interstate serves 65 per cent of our city dwellers, and 45 per cent of the people who live in rural areas. It also contains the principal traffic routes of military importance designated by the War Department.

According to a Bureau of Public Roads estimate, the whole Interstate System can be improved to meet modern traffic standards for \$11,000,000,000. The job would take from eight to 15 years, depending upon the availability of construction funds and scarce building materials. Moreover, by giving top priority to the construction of expressways in metropolitan areas, the worst traffic bottlenecks on the existing Interstate System could be eliminated in two or three years.

#### Committee Picks Vital Road Network

The need for an adequate Interstate System has been acknowledged by motor transport experts in both industry and government since 1941, when the late President Roosevelt appointed a National Interregional Highway Committee to recommend a transcontinental network of roads considered most essential to the future economic welfare and defense of the country. After a three-year, state-by-state survey, the Interregional committee (headed by U.S. Public Roads Commissioner Thomas H. MacDonald) selected the Interstate System.

Acting on the committee’s recommendation, Congress directed in the federal-aid Highway Act of 1944 that—

“There shall be designated within the continental United States a national system of Interstate Highways not exceeding 40,000 miles in total extent so located as to connect by routes, as direct as practicable, the principal metropolitan areas, cities and industrial centers, to serve the national defense, and to connect at suitable border points with routes of continental importance in The Dominion of Canada and the Republic of Mexico.”

In 1948, Congress further directed the Bureau of Roads to prepare a detailed survey on “Highway Needs of the National Defense” in co-operation with the Department of Defense and the National Security Resources Board. This report, embodying suggestions and data from every state highway department, declared the Interstate System was “without doubt the most important connected network within the highway system of the country.”

Subsequently, the American Automobile Association endorsed the Interstate System as “the most important road program ever planned for the United States.”

Last May, the National Highway Users Conference, whose membership is a cross section of the automotive industry, reported: “Priorities must be established to make certain that the most important roads to defense are immediately put in adequate shape. Mobility for defense needs is provided by America’s great system of roads and streets. There is approximately one mile of highway for every square mile of this nation’s area.

“While almost all of this mileage is important in providing a particular mission, the most important highways, it is generally agreed, are embraced in the 40,000-mile Interstate Highway System. These 40,000 miles comprise the principal arteries of our commerce and are the life lines in time of war.”

In simplest terms, the Interstate System represents the most highway we can buy for the least

money in the shortest possible time. Even so, the amount of construction work required to bring the Interstate up to adequate standards would be enormous. It would include (according to a Bureau of Public Roads survey) the construction of 4,893 bridges; improvement of 5,925 bridges; relocation and construction of 11,891 miles; complete reconstruction of 14,283 miles; and improvement (mostly widening) of 8,687 miles. At present, less than 3,000 miles of the Interstate System require no improvement.

When this huge job of rebuilding the Interstate is completed, some 11,000 miles of roads, mostly in urban areas, will be four- or six-lane divided highways; the remaining 26,800 miles will be standard two-lane construction, 24 feet in width. The divided multilane highways will service areas where traffic exceeds 800 vehicles per hour. On the less heavily traveled two-lane sections, clear-sight distances of 1,500 feet will occur at frequent intervals to provide safe passing opportunities for passenger cars and trucks.

Now for a question of prime importance to traffic-jammed motorists: How fast could you expect to travel over a fully improved Interstate System?

If you were driving a passenger car, say highway design experts, you could maintain an average running speed of 50 miles per hour in rural sections. In cities, you would have to slow down to 35 or 40. Truck drivers should average 35 miles an hour over all parts of the system.

In flat, open country, the improved Interstate would be designed for safe travel at speeds upwards of 75 miles per hour for passenger cars and 60 miles per hour by trucks. However, automotive engineers consider such high speeds uneconomical for the average motorist. Here’s why:

On a 1,000-mile trip, you can save two hours and 48 minutes by increasing your average speed from 55 to 65 miles per hour. Meanwhile (due to sharply increased fuel consumption at high speeds), you also hike your gas and oil expenses about \$12. That means spending about three tankfuls of gas to save three hours on the road. Not many drivers would want to pay such a high price.

“Basically,” a BPR official said recently, “the function of an improved Interstate System would be to move traffic at moderate speeds with as few interruptions as possible. It’s the frequent stopping-and-starting which makes present-day driving so exasperating—and unnecessarily expensive.”

Recent road tests confirm this statement. For example, it has been demonstrated that one stop-and-start at a red light causes as much wear on tires as one mile of uninterrupted highway driving. Similarly, the amount of gasoline consumed in accelerating from low to high gear at a stop sign or light will carry your car about two tenths of a mile on the open road.

#### Drivers Would Get Investment Dividend

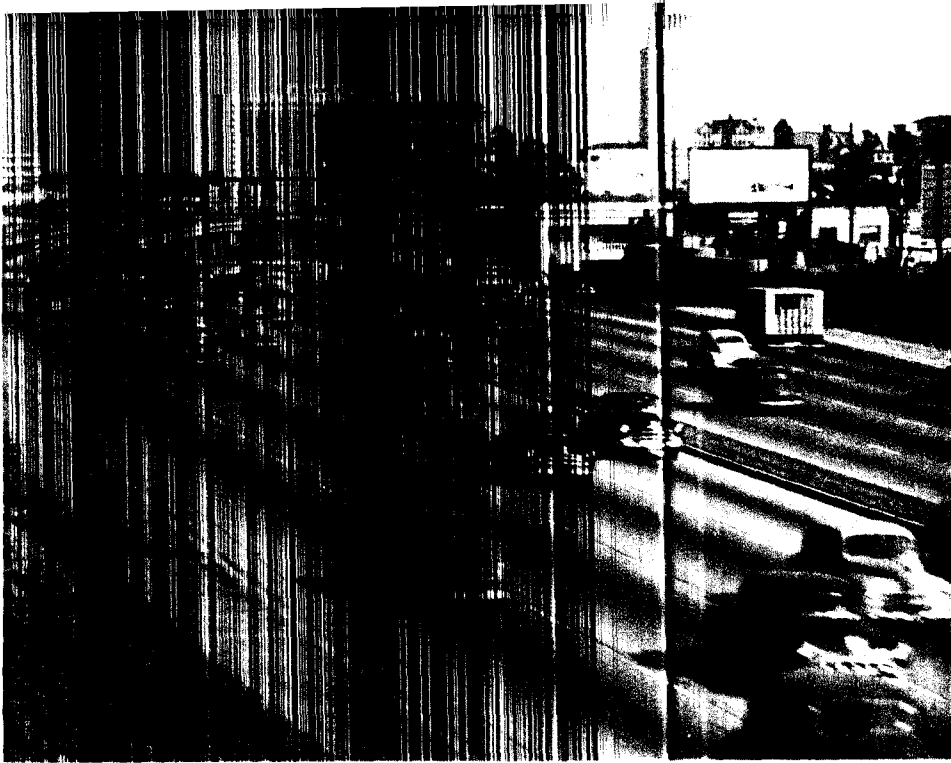
As these figures indicate, a substantial part of the proposed \$11,000,000,000 investment in improving the Interstate System eventually would be returned to motorists in the form of reduced auto maintenance costs. This is especially true in metropolitan areas.

For example, the motorists now driving on some 6,000 miles of the Interstate System in urban areas are traveling at an average speed of 21.7 miles per hour. This slowpoke pace can be blamed mostly on a total of 9,036 stop signs, stop-and-go signals and flashing beacons at congested intersections. If the Interstate were improved to meet adequate standards, these congested intersections would be eliminated and motorists would increase their average speed from 21.7 to 35 miles per hour.

Despite the fact that the Interstate project would be largely self-liquidating, the immediate financing of this \$11,000,000,000 roadnet presents complicated and difficult problems. Currently, the states are applying only \$75,000,000 of their annual federal-aid funds for Interstate construction. This amount is matched dollar-for-dollar by the various state governments. At this rate of expenditure, only \$150,000,000 annually, it will take about 100 years to complete the Interstate System.

During 1951, the federal, state and local governments spent \$4,200,000,000 on roads; of this amount, \$1,500,000,000 was allocated to administering and maintaining existing mileage, while \$2,700,000,000 was put into (Continued on page 52)

Collier’s for July 5, 1952



OVIE FLOREA

Part of magnificent system of superroads under construction in area around Los Angeles, eight-lane Hollywood Freeway runs into central highway network

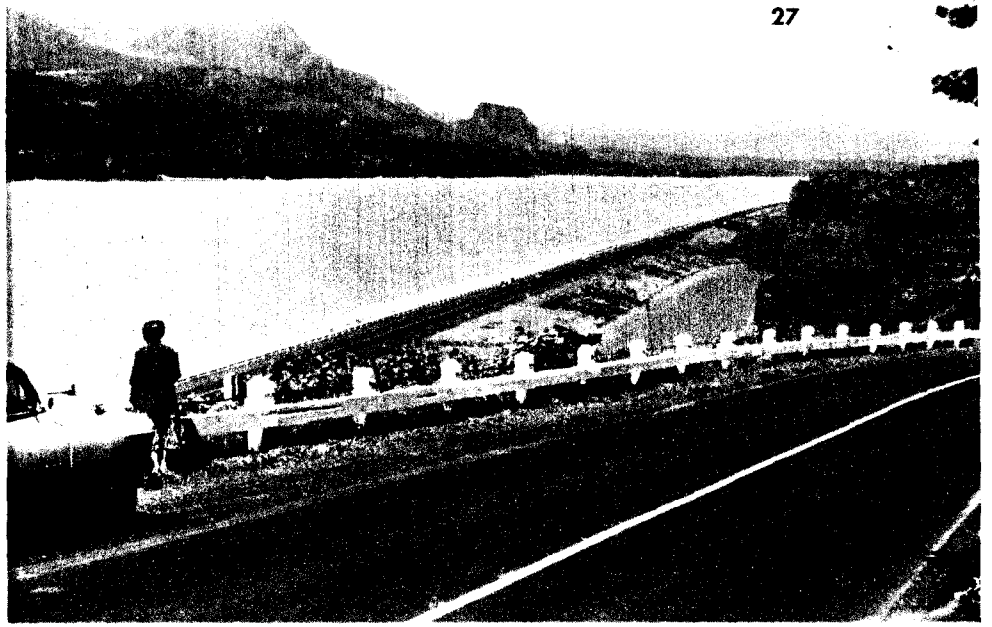


PHOTO ART STUDIO

The old and the new: east of Portland, Ore., scenic Columbia River Highway overlooks shorter, faster road which replaced it as Rte. 30

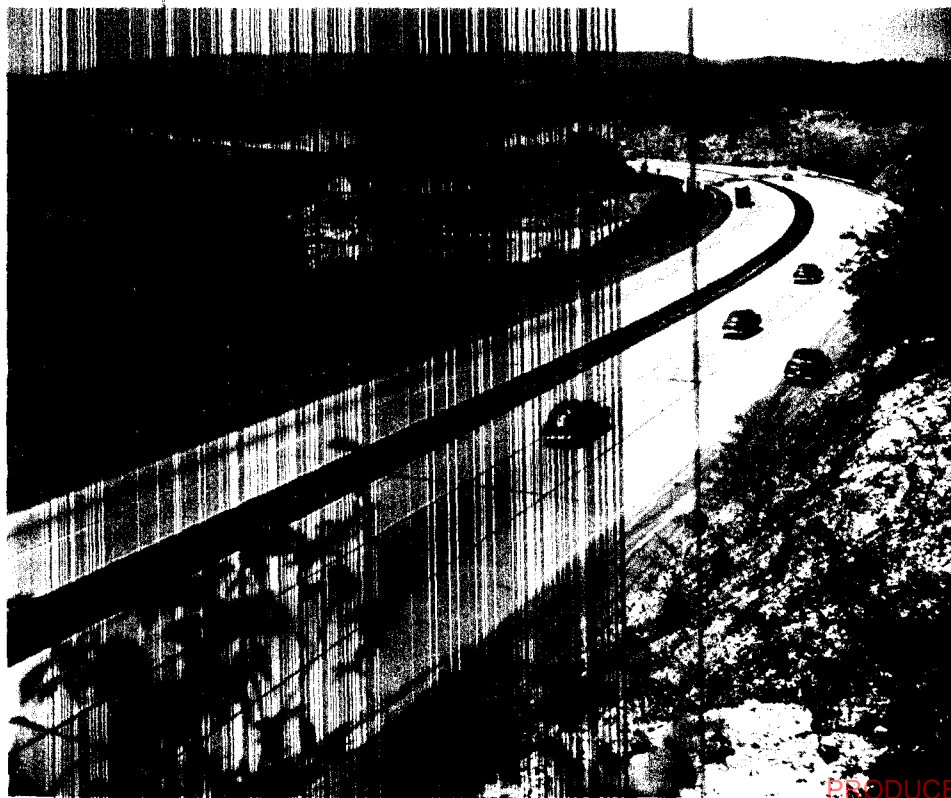


ENYAL KAUFMAN

When Detroit Expressway is complete, engineers estimate drivers will make 20-mile trip across town in about 30 minutes, instead of an hour and a half

Pennsylvania Turnpike spans state, is one of nation's finest highways. But it connects with one of worst American main roads, shown on opposite page

ALPH ROYLE



THOMAS F. HILL

Alabama's Birmingham-Bessemer highway illustrates inflationary trend. Built in 1936 for \$1,364,000, it would cost estimated \$4,000,000 now

Merritt Parkway, Connecticut, is part of Boston-New York speed route which traverses nation's most populated area but avoids city traffic

RAY MAINWARING



# The Gift of COCHISE

By LOUIS L'AMOUR

The Apache was a fighter, and he respected fighting blood.  
This pioneer woman had it—and so did this lean, angry man

TENSE, and white to the lips, Angie Lowe stood in the door of her cabin with a double-barreled shotgun in her hands. Beside the door was a Winchester '73, and on the table inside the house were two Walker Colts.

Facing the cabin were twelve Apaches on ragged calico ponies, and one of the Indians had lifted his hand, palm outward. The Apache sitting the white-splashed bay pony was Cochise.

Beside Angie were her seven-year-old son Jimmy and her five-year-old daughter Jane.

Cochise sat his pony in silence; his black, unreadable eyes studied the woman, the children, the cabin, and the small garden. He looked at the two ponies in the corral and the three cows. His eyes strayed to the small stack of hay cut from the meadow, and to the few steers farther up the canyon.

Three times the warriors of Cochise had attacked this solitary cabin and three times they had been turned back. In all, they had lost seven men, and three had been wounded. Four ponies had been killed. His braves reported that there was no man in the house, only a woman and two children, so Cochise had come to see for himself this woman who was so certain a shot with a rifle and who killed his fighting men.

These were some of the same fighting men who had outfought, outguessed and outrun the finest American army on record, an army outnumbering the Apaches by a hundred to one. Yet a lone woman with two small children had fought them off, and the woman was scarcely more than a girl. And she was prepared to fight now. There was a glint of admiration in the old eyes that appraised her. The Apache was a fighting man, and he respected fighting blood.

"Where is your man?"

"He has gone to El Paso." Angie's voice was steady, but she was frightened as she had never been before. She recognized Cochise from descriptions, and she knew that if he decided to kill or capture her it would be done. Until now, the sporadic attacks she had fought off had been those of casual bands of warriors who raided her in passing.

"He has been gone a long time. How long?"

Angie hesitated, but it was not in her to lie. "He has been gone four months."

Cochise considered that. No one but a fool would leave such a woman, or such fine children. Only one thing could have prevented his return. "Your man is dead," he said.

Angie waited, her heart pounding with heavy, meas-

ured beats. She had guessed long ago that Ed had been killed but the way Cochise spoke did not imply that Apaches had killed him, only that he must be dead or he would have returned.

"You fight well," Cochise said. "You have killed my young men."

"Your young men attacked me." She hesitated, then added, "They stole my horses."

"Your man is gone. Why do you not leave?"

Angie looked at him with surprise. "Leave? Why, this is my home. This land is mine. This spring is mine. I shall not leave."

"This was an Apache spring," Cochise reminded her reasonably.

"The Apache lives in the mountains," Angie replied. "He does not need this spring. I have two children, and I do need it."

"But when the Apache comes this way, where shall he drink? His throat is dry and you keep him from water."

The very fact that Cochise was willing to talk raised her hopes. There had been a time when the Apache made no war on the white man. "Cochise speaks with a forked tongue," she said. "There is water yonder." She gestured toward the hills, where Ed had told her there were springs. "But if the people of Cochise come in peace they may drink at this spring."

The Apache leader smiled faintly. Such a woman would rear a nation of warriors. He nodded at Jimmy. "The small one—does he also shoot?"

"He does," Angie said proudly, "and well, too!" She pointed to an upthrust leaf of prickly pear. "Show them, Jimmy."

The prickly pear was an easy two hundred yards away, and the Winchester was long and heavy, but he lifted it eagerly and steadied it against the door-jamb as his father had taught him, held his sight an instant, then fired. The bud on top of the prickly pear disintegrated.

There were grunts of appreciation from the dark-faced warriors. Cochise chuckled. "The little warrior shoots well. It is well you have no man. You might raise an army of little warriors to fight my people."

"I have no wish to fight your people," Angie said quietly. "Your people have your ways, and I have mine. I live in peace when I am left in peace. I did not think," she added with dignity, "that the great Cochise made war on women!"

The Apache looked at her, then turned his pony away. "My people will trouble you no longer," he said. "You are the mother of a strong son."

(Continued on page 41)



ILLUSTRATED BY JAMES DWYER



Seeing his chance, Ches suddenly let his knees buckle, then brought up his knee and fell back, throwing the Apache over his head and dropping him to the sand