

Building Segment of Orange Freeway Is Logistic Nightmare

BY HOWARD SEELYE

Times Staff Writer

BREA—Cutting the Orange Freeway through a canyon oil field had all the characteristics of a logistic nightmare for State Division of Highways engineers.

An intricate network of oil and gas pipelines had to be relocated, two producing oil wells had to be capped and a small mountain had to be moved to provide an approach to a bridge which will cross the oil field.

The problem was further complicated by negotiations and condemnation proceedings.

Earth-Moving Machines

But the problem is being solved, thanks to a fleet of mammoth earth-moving machines and the expenditure of an estimated \$900,000 beyond the normal cost of freeway construction.

The freeway segment covers a distance of 2.2 miles from Imperial Highway in Brea to the entrance of Brea Canyon at the Orange-Los Angeles county line.

The route cuts across Tonner Canyon, where 18 pipelines ranging from 2 to 14 inches in diameter, are being relocated. They are owned by three oil companies—Union, Shell and Mobil—and Pacific Lighting Services Co., holding company for Southern Counties Gas Co.

Two wells which were in the freeway path have been abandoned and the state and Union Oil are conducting negotiations over a settlement.

Biggest problem encountered by construction workers in the oilfield was sorting out the tangle of pipelines. The lines were scattered all over the canyon and surrounding hillsides and had to be gathered together before the freeway could be built.

The 18 lines are being relocated at the bottom of Tonner Canyon, where a 60-foot high bridge will span the canyon. Some of the lines came from the 140-foot cut is being made.

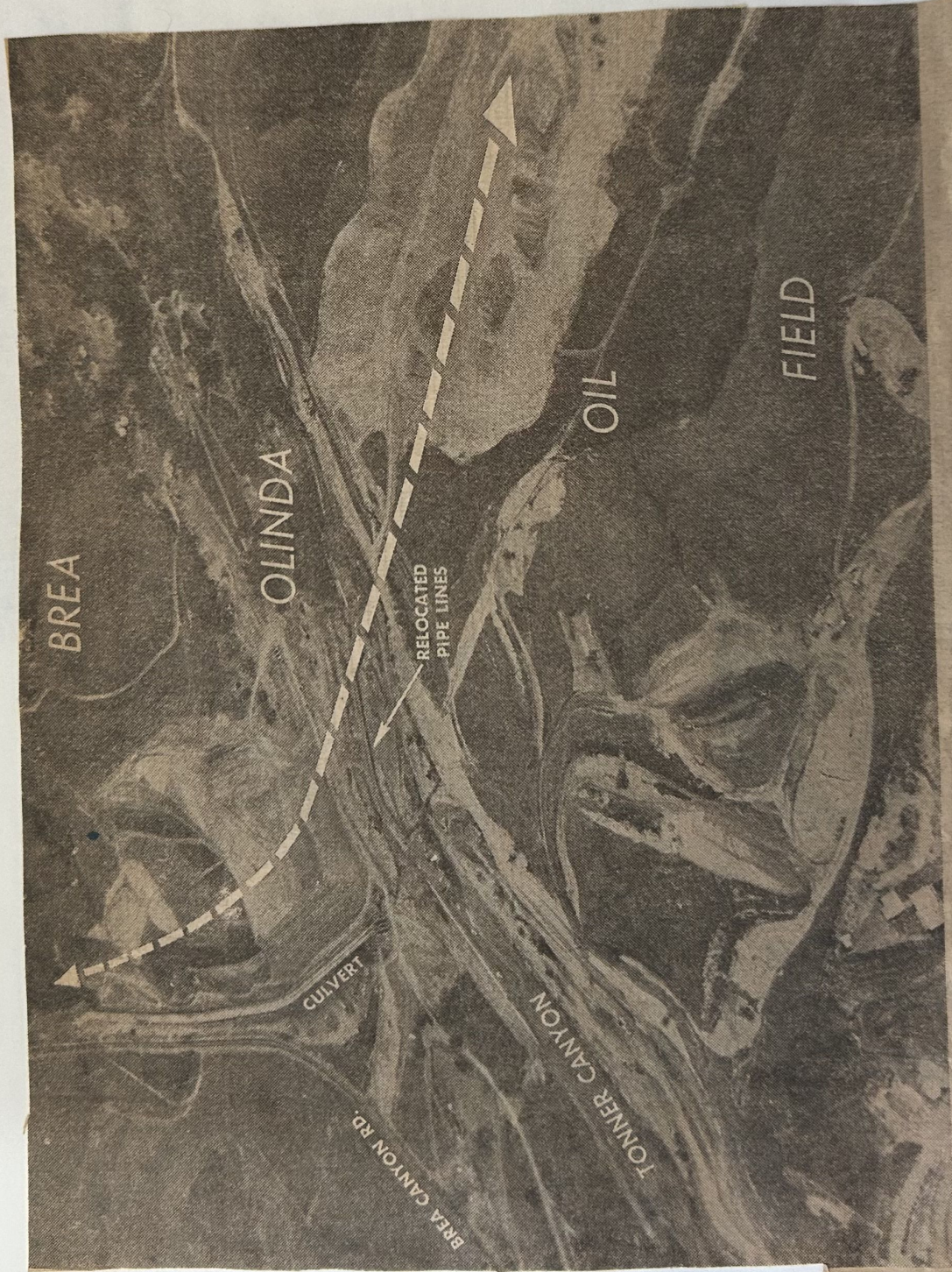
Freeway engineers say that the Tonner Canyon site for crossing the field was chosen because it disrupted fewer wells—and thus cost less.

Standard Procedure

Because of the state's standard procedure of filing condemnation proceedings at the outset to gain use of property and negotiating settlements later, the project has not been materially delayed by the oil field, a spokesman for the state reports.

The mountain removal project involves cutting a 140-foot deep swath through a hill south of Tonner Canyon by removing 2 million cubic yards of dirt.

A fleet of 40 trucks and 6 giant scrapers is busily engaged in the job of leveling the hill for the 8-lane freeway, which will be completed to the courtesy line in another 18 months.



CUTTING THROUGH OIL FIELD — Broken line on aerial photo shows path being cut through Brea Olinda oil field for Orange Freeway. Times photo by Maxine Reams

JANUARY COMPLETION DATE

New Freeway Construction Changes Idyllic Brea Canyon

BY HOWARD SEELYE

Times Staff Writer

7-Mile Respite

Soon Brea Canyon will be something more than a 7-mile respite between the urbanization of the Fullerton and Pomona areas.

It will be the vital last link of the Orange Freeway connecting the Riverside Freeway on the south with the Pomona and San Bernardino freeways to the north.

When the Brea Canyon freeway segment is completed next January a second exit from Orange County will be available for motorists heading for the mountains, desert or Las Vegas.

The completion of the Santa Ana Canyon portion of the Riverside

Freeway—scheduled for this fall—will not supply adequate superhighway facilities for the residents of northern Orange County and the Pomona-Covina-West Covina area.

Thus, the Orange Freeway was born of the necessity to ease traffic in a northeasterly direction out of Orange County and provide a direct route from inland areas to the freeway's ultimate terminus at Newport Beach.

Overwhelming Need

So, because of the overwhelming need for more and better traffic arteries, a quiet, pastoral piece of California landscape in Brea Canyon is falling victim to progress.

The new freeway segment is being shaped out of mountains, lifted across a producing oil field and routed through tracts of homes.

At one point it rises 70 feet above the old Brea Canyon Road. A bridge 1,000 feet long spans the oil pipelines of Tonner Canyon. In the middle of the seven-mile stretch, a cut was made 380 feet deep.

A complex interchange is being constructed where the Orange and Pomona freeways meet. Off-ramps are being built at Pathfinder Road, Diamond Bar Blvd., Tonner Canyon and Lambert Road.

The southern portion of the project is due for completion in September, but because of inadequacies of the present Brea Canyon Road, only northbound traffic will use that segment of the freeway until the northern portion is completed in January.

Today Brea Canyon Road handles about 10,000 vehicles a day in both directions. But highway projections estimate that 40,000 vehicles will use the canyon after the freeway link is completed in January, and this total will rise

Garden Grove freeways are built—at a cost of \$23.8 million more—the total 24 miles from the San Bernardino to the Garden Grove freeways will have cost \$53.8 million.

This does not include two miles of the Pomona Freeway, where the Orange Freeway runs concurrently, nor a portion of the Kellogg Hill interchange allotted to the Orange Freeway.

Construction of the Orange Freeway was pushed ahead several years ago when the Angels moved to Anaheim Stadium because it was believed that the freeway—which will run near the stadium—would help ease traffic problems in the area.

steadily to 76,000 daily by 1990.

Total cost of the project is \$21.8 million, which will bring to \$35.3 million the amount spent on the freeway when the work is done. Already spent is \$13.5 million to develop an interchange with the Riverside Freeway and build 4.3 miles north to Imperial Highway.

Another \$4.7 million is being spent on the final northerly section which will connect the Pomona and San Bernardino freeways.

Ultimately, when two sections of the freeway between the Riverside and

At the southern end of Brea Canyon oil derricks stand silhouetted against the sky.

Cattle can be seen grazing behind white rail fences, pepper trees line what once was a dusty trail and eucalyptus trees rise majestically over a twisting two-lane road.

Rising above the canyon are rolling hills covered with oak trees and underbrush which protect an occasional deer and other wildlife.

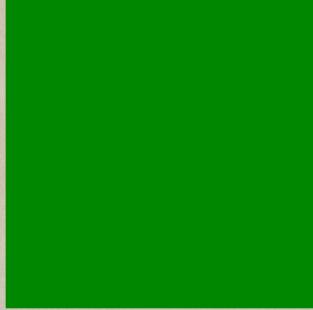
A tiny stream trickles down the canyon floor, fed as much by gardeners as by mountain springs.

For decades Brea Canyon had remained pretty much in this picturesque state, mostly unspoiled by progress and the population crunch occurring to the north and to the south.

But, all that has changed now.

First came the subdividers to carve up the charming Diamond Bar ranch into homesites, with split-level homes, shopping centers and other urban developments taking over.

And then comes the freeway to replace the often dangerous two-lane Brea Canyon Road with a modern, high-speed, eight-lane highway.



RESHAPING OF CANYON—Aerial photo shows how face of Brea Canyon is changing as segment of Orange Freeway is being constructed.

Orange Freeway Leg Provides Many Hurdles

The two wells which were abandoned are part of an oil field which was discovered by Union Oil in 1905.

It is the Brea-Olinda field, considered one of the best producers in the Union system. The field ranks 10th in California among the larger fields.

Original Wells

Most of the original wells were drilled prior to 1910, but a spokesman for Union Oil said in an interview that wells still are being drilled.

The two wells were not considered heavy producers but were pumping oil steadily and were considered by the oil company as profitable.

The pipeline relocation project involves an area about 2,800 feet across Tonner Canyon, including moving lines which run up slopes 200 feet high.

At the base of the canyon, 10 pipelines converge on an automatic metering satellite, which records the amount of oil pumped from each well. The satellite will not be disturbed by the relocation, however.

Not Unusual

Negotiating for rights-of-way to build a freeway through an oil field involves unusual problems, although an official of Union Oil said that it is not unusual any more.

In the Brea field, the State Division of Highways acquired rights to 100 feet below the surface of the ground but the oil companies retained mineral rights.

Thus, they will be able to remove oil from beneath the freeway by using slant drilling techniques.

One of the major cases on record of a freeway encroachment into an oil field occurred in Long Beach when the state was building the San Diego Freeway through the Signal Hill oil fields in 1961.

Before work could begin on the freeway, 95 abandoned wells had to be capped and reabandoned in five rights-of-way clearance projects.

Miscellaneous Trash

Some of the wells had been abandoned for years and were filled with wine, casing, pipe, wood, rock, gravel, stones, concrete and miscellaneous trash.

Before the project was completed there were 134 wells which were abandoned, 32 of which were producing crude oil. They were abandoned in groups of 20 under separate contracts.

Since that time, there have been a number of instances in which highway construction has caused oil well abandonment. A union Oil official said that there have been many cases in San Joaquin Valley and in one case, wells were abandoned to make way for the State Water Project.

While abandonment of two wells in the Brea field

is a relatively small project, bridging Tonner Canyon presents one of the larger construction efforts in Orange County freeway development.

A dirt fill has been put in place on the northern edge of the future junction with Brea Canyon Road, where a bridge 60 feet high will span Tonner Canyon, where a road, small creek and the relocated pipelines will pass underneath.

To move the large hill at the south of Tonner Canyon, the Griffith Co., contractors on the project, must move 2 million cubic yards of dirt.

The dirt is being hauled out by a fleet of 40 trucks, which make five to six round trips a day to a dumping site 15 miles away in Orange. Each truck carries 23 tons of dirt (16 cubic yards),

which are loaded by two skiploaders.

The 6 giant scrapers are moving 30 tons of dirt in each trip down the face of the cut to provide embankment material for Lambert Road and Brea-Olinda Blvd. overcrossings. Off-ramps will be located at Lambert Road.

The oil field project is the second of two construction projects on the Orange Freeway presently under construction. The

other spans the distance from Nutwood Ave. in Fullerton to Imperial Highway and is expected to be completed this year.

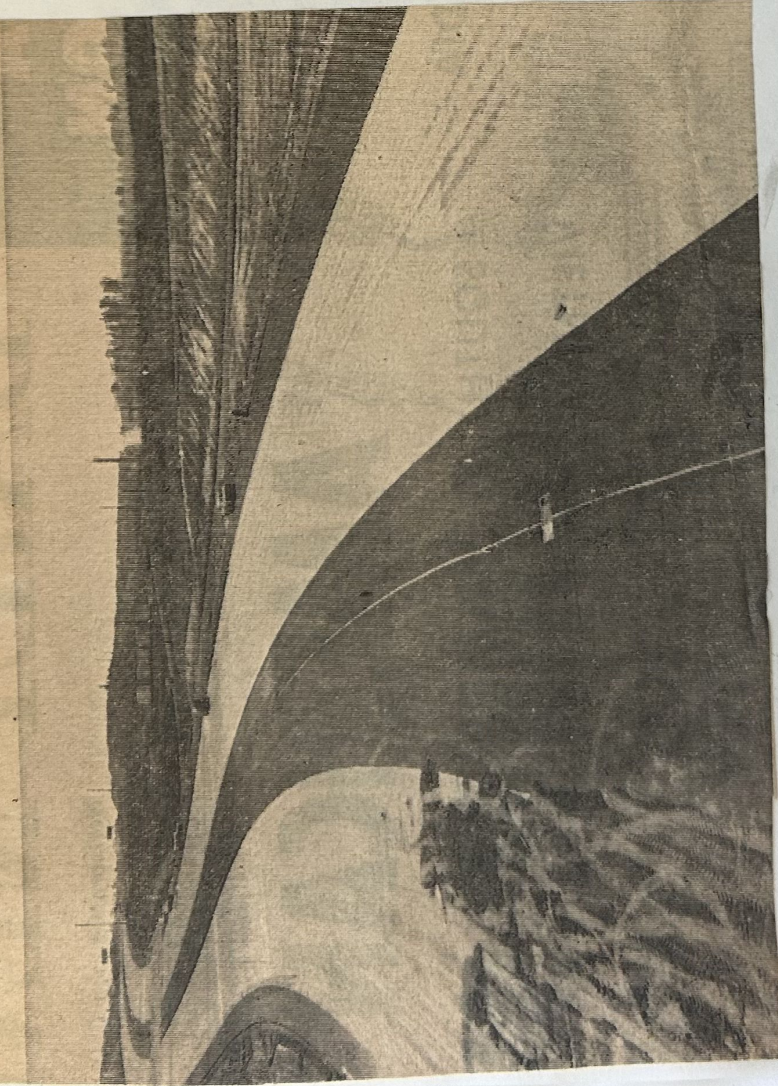
Late this month bids will be opened for a 4.9-mile section of the freeway from the Los Angeles County line to the Pomona Freeway in the Walnut area. Two miles of the freeway already are open from the Riverside Freeway to Nutwood Ave., near Cal State Fullerton.



News Tribune Photo by Ray Rhoads

ORANGE FREEWAY — Another section of the Orange Freeway has gone to bid to carry the north-south right-of-way through Brea Canyon to the Pomona Freeway. Two other jobs not yet complete, reach from Nutwood in Fullerton through the Puente Hills to Brea Canyon Road north of Brea. Shown above, the construction can be seen from a point south of Bastanchury in Fullerton through the hills at the top of the picture where the new job will begin.

June Freeway Completion Seen



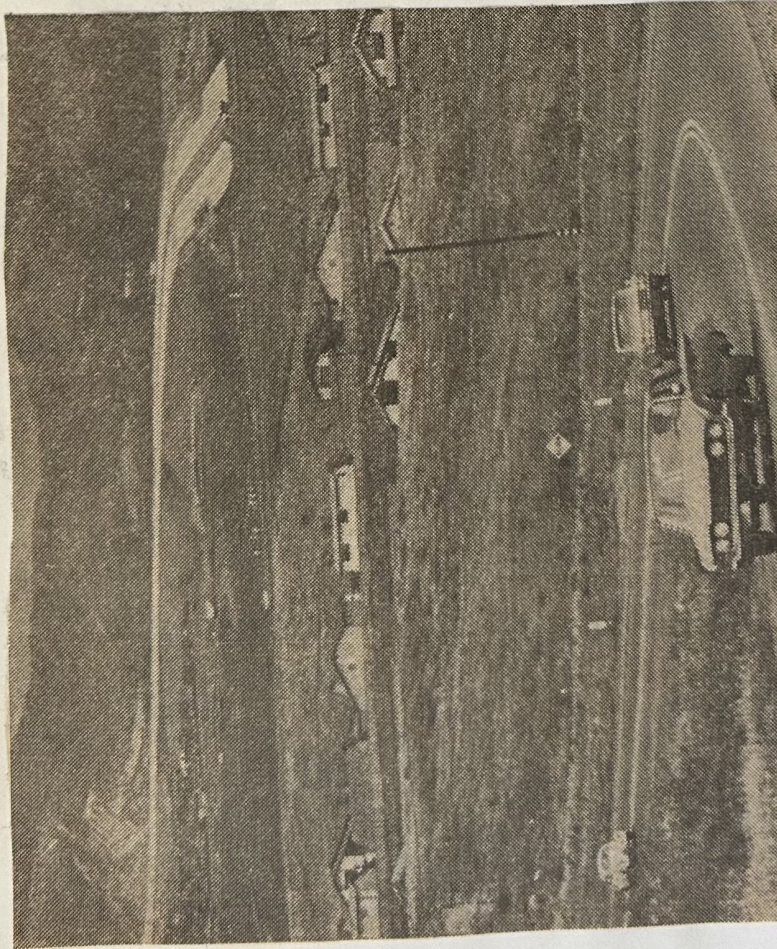
News Tribune Photos

ORANGE FREEWAY PROJECT REACHES BREA

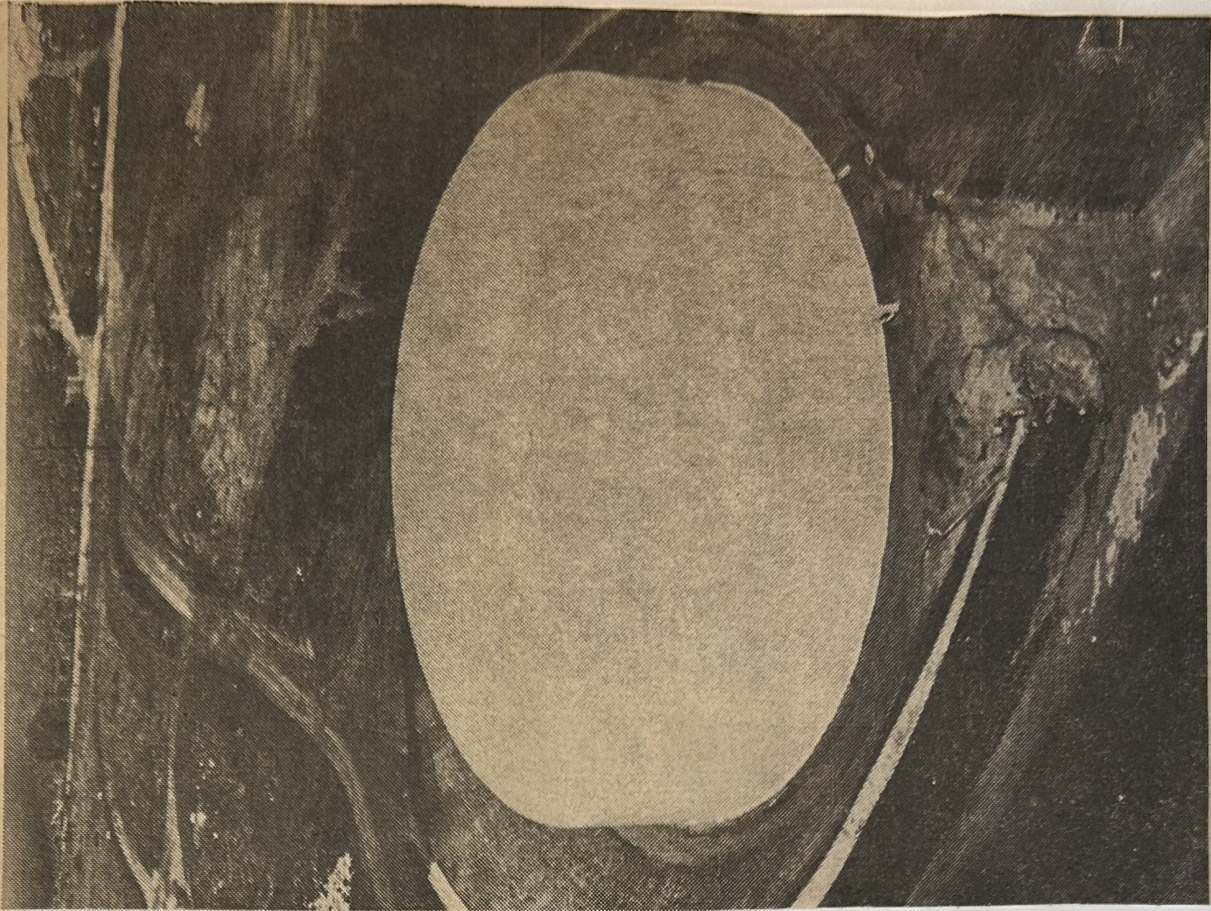
Snaking concrete ribbon of the new four-lane freeway slithers under the bridge at Imperial Highway just west of Associated Road. The top view shows the freeway as it goes under the bridge while the lower view shows work being done on a clover leaf and the northern end of

the freeway as it goes through Brea and into the Puente Hills to its eventual connection with the San Bernardino Freeway. Supplementary projects include the widening of Imperial Highway through Brea. Dedication ceremonies for the freeway are anticipated early in June.

Brea Thinks Big



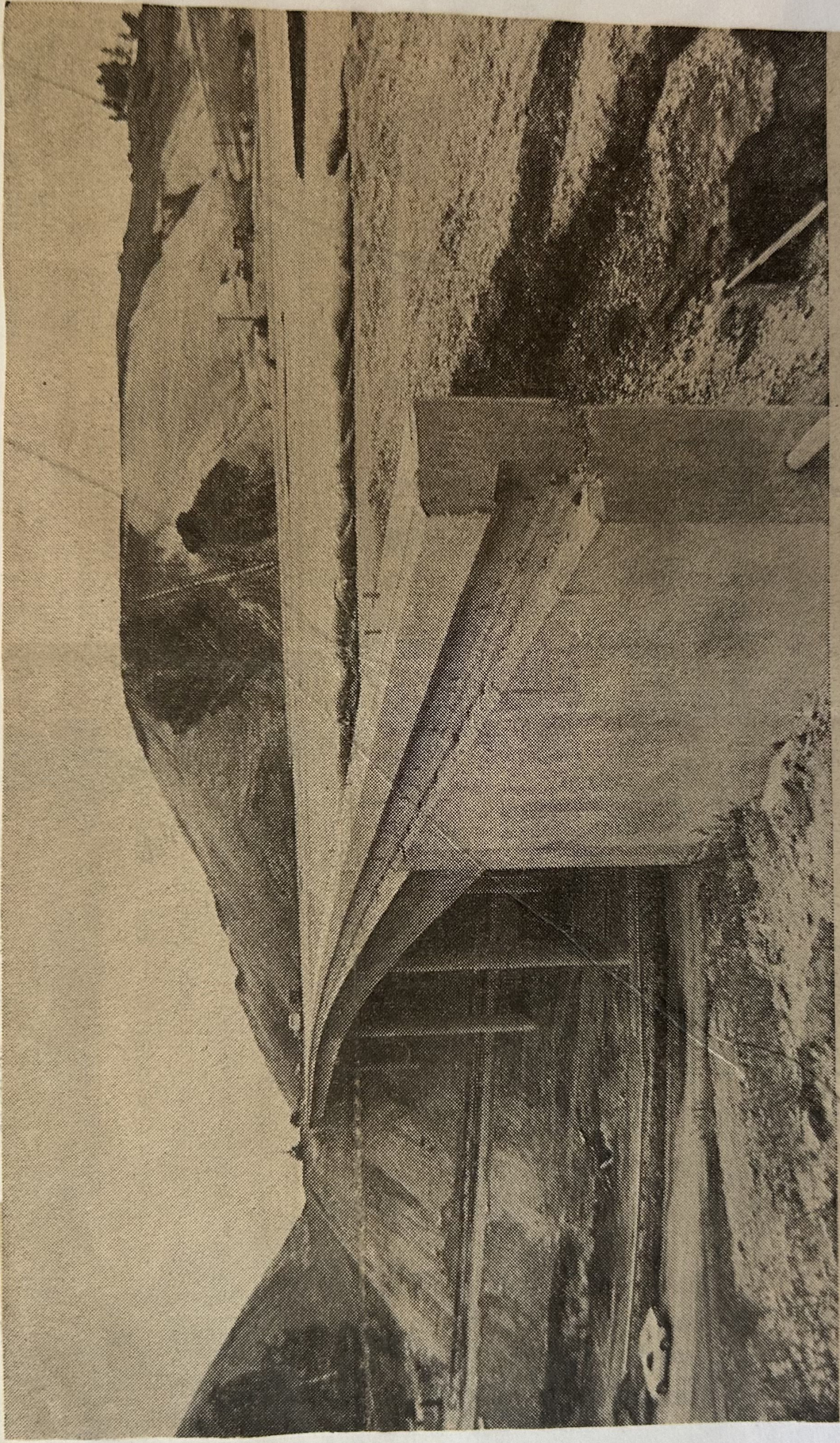
RIBBON OF HIGHWAY — The new Orange Freeway appears like a ribbon of highway on the Brea landscape. The freeway is now open from the Riverside Freeway in Anaheim to Imperial Highway in Brea. It will be open through Brea Canyon early next year.



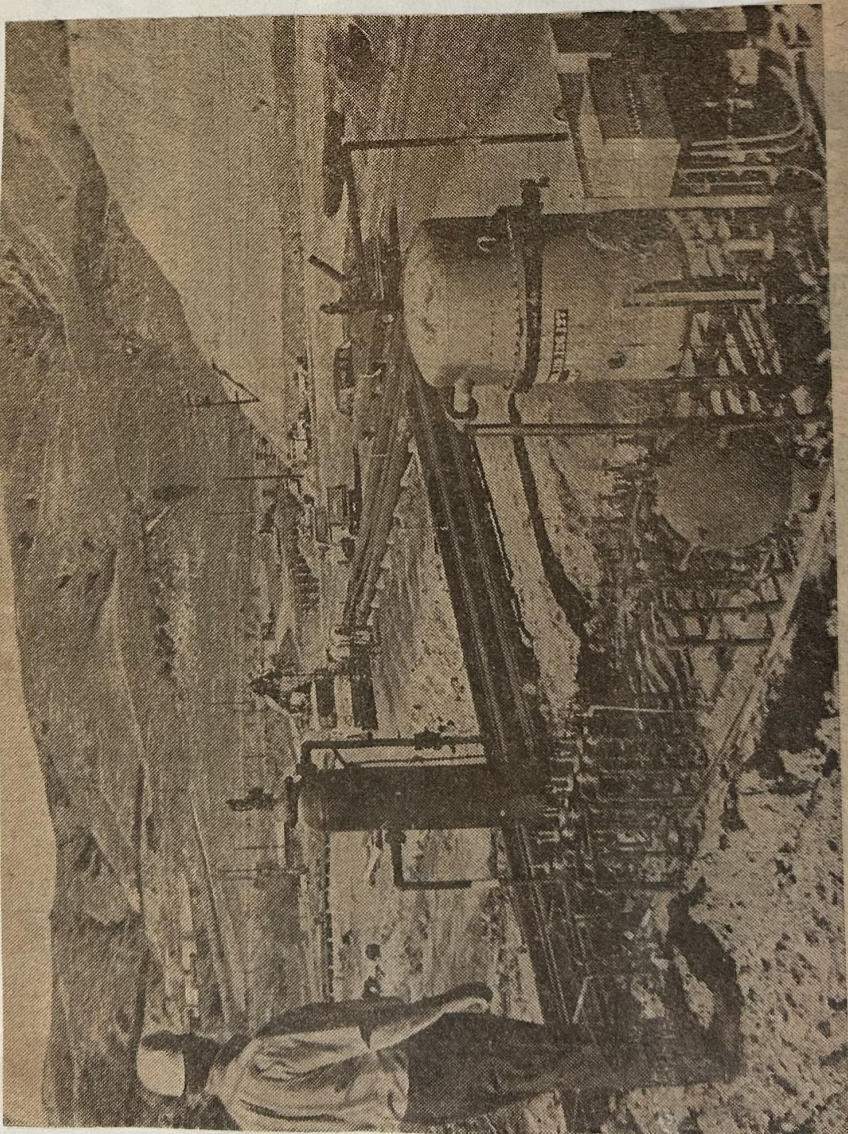
NO FLYING SAUCER — This photograph is not one of a downed flying saucer, but rather the largest potable water tank in Southern Cali-

fornia, one of the newest additions to the city of Brea. The 10-million gallon reservoir was completed recently.

DAILY STAR-PROGRESS
Wednesday Evening, April 28, 1971
LA HABRA-BREA, CALIFORNIA

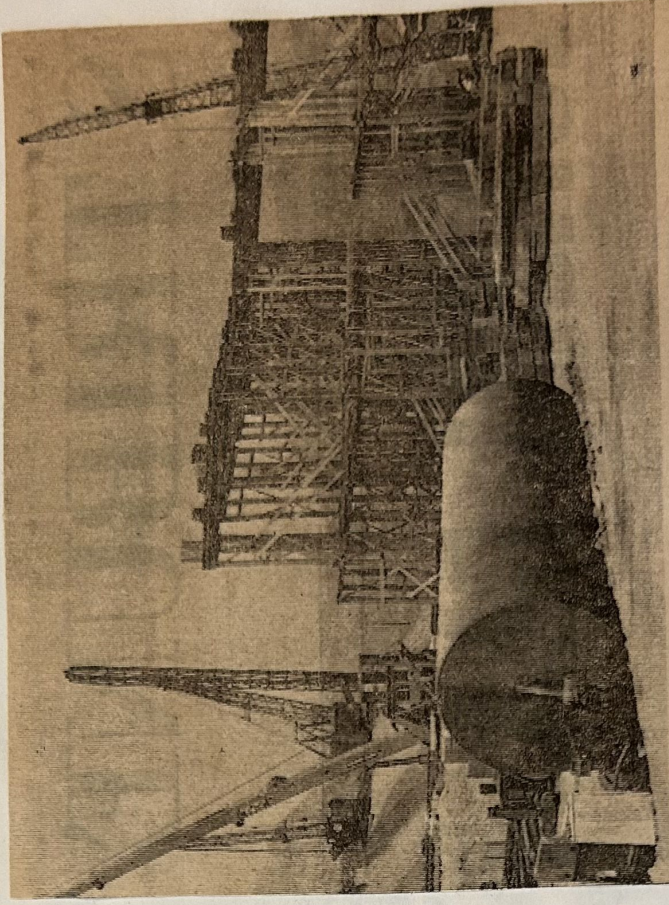


New freeway to serve Brea



RELOCATED PIPELINES — Pipelines relocated through cut in Tonner Canyon meet at oil well

meter station, in foreground. Relocation was needed to provide area for building Orange Freeway. Times photo by Yinoe Streatano



News Tribune Photo

BRIDGE BUILDERS — Tonner Canyon will be spanned by this structure which is part of the north-south Orange Freeway north of Brea which is expected to be completed around March of next

year. The Freeway now extends to Imperial Highway. Latest segment will complete the Orange County phase of the Freeway which eventually connects to the San Bernardino Freeway.

THE PROBLEM

Jet-Age Population...

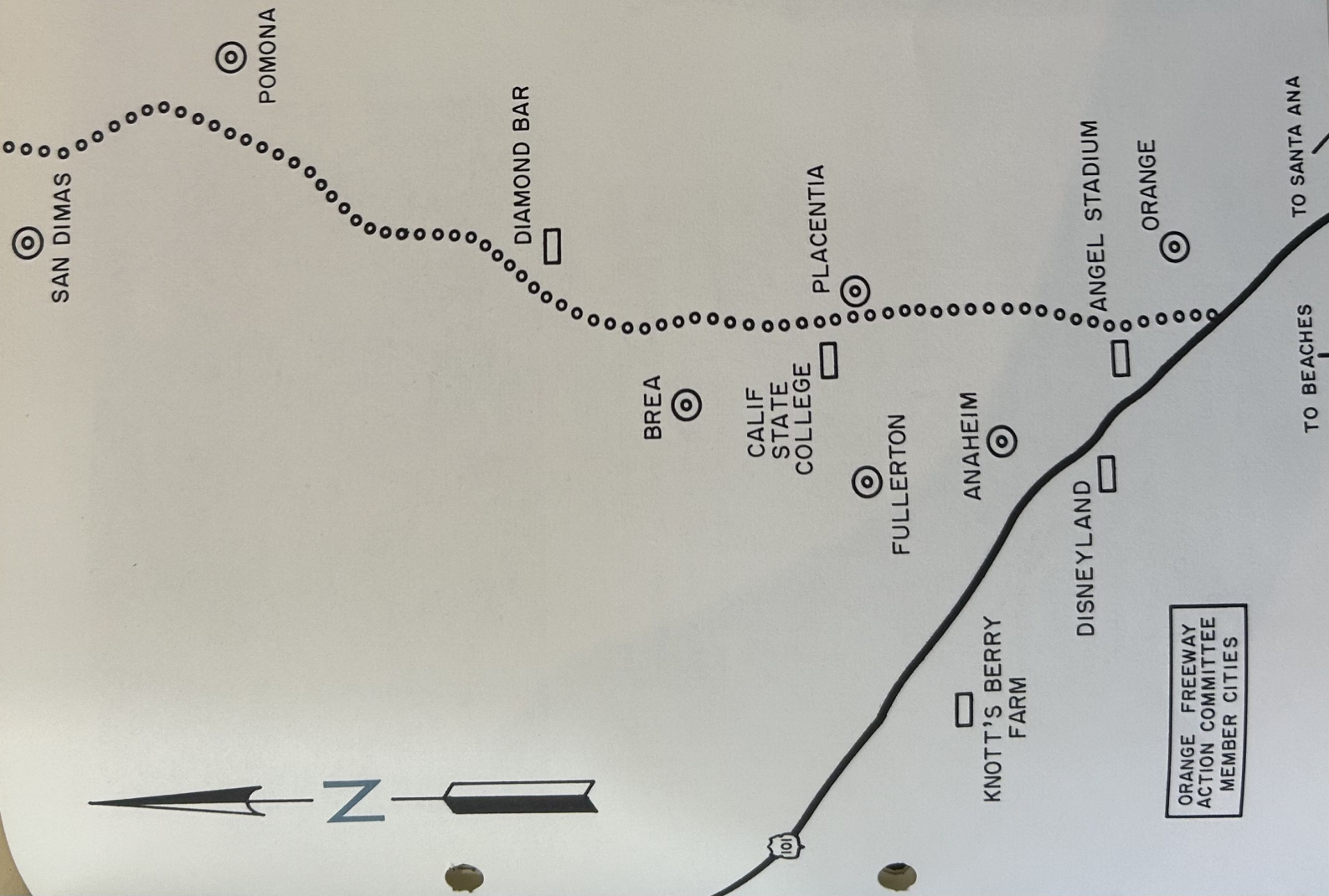
...Horse-and-Buggy Road!

A fast and steadily growing population... expanding industry with its high levels of employment... dynamic educational institutions... unique recreational facilities attracting millions of tourists... all have produced a North-South traffic-congestion and safety-hazard situation of concern to residents and businesses alike in Orange County and the Pomona Valley.

Existing freeways serving the area are predominantly East-West routes. The proposed Orange Freeway (Route 57) will serve as an urgently-needed North-South connection between these freeways and between the exploding population pools in Orange County and Pomona Valley... a "missing-link" of major importance.

Traffic today is crowded onto the two-lane Brea Canyon Road (State Highway 19), which has seen no major improvements in 30 years--while the surrounding population has increased more than 700 per cent!

Continued area development and continued population expansion magnifies this problem on a daily basis.



ORANGE FREEWAY
ACTION COMMITTEE
MEMBER CITIES

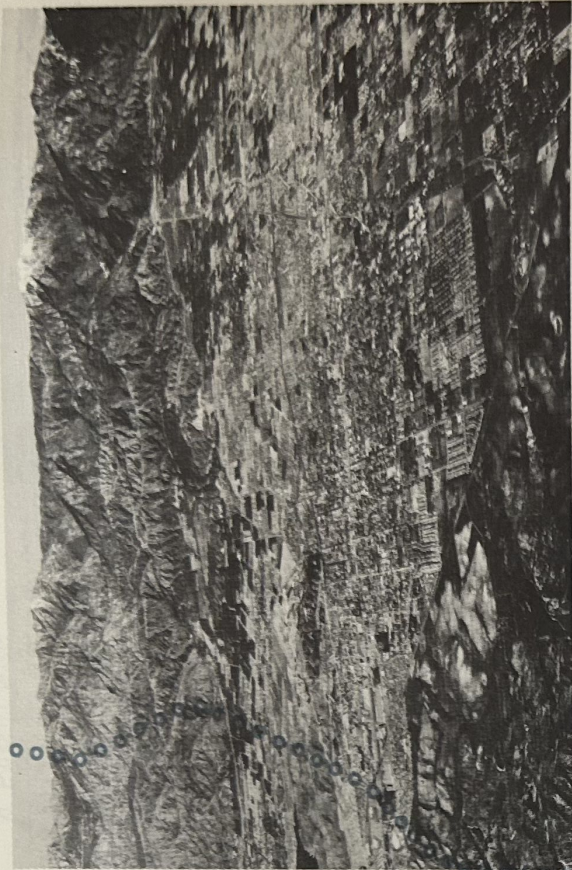
The Need is NOW!

Pomona Valley

The Pomona Valley Area is in the final stages of transition to an area in which manufacturing, trade, public and private services, and construction provide the major sources of employment. Its population has been doubling on an average of every 10 years, is expected to be more than 800,000 by 1980. Orange Freeway will provide an access to the coast for this population.

Missing Link

Existing freeway facilities serving the Orange County and Pomona Valley areas are predominately East-West routes. Dangerous and congested two-lane roads, with no major improvements on them for the



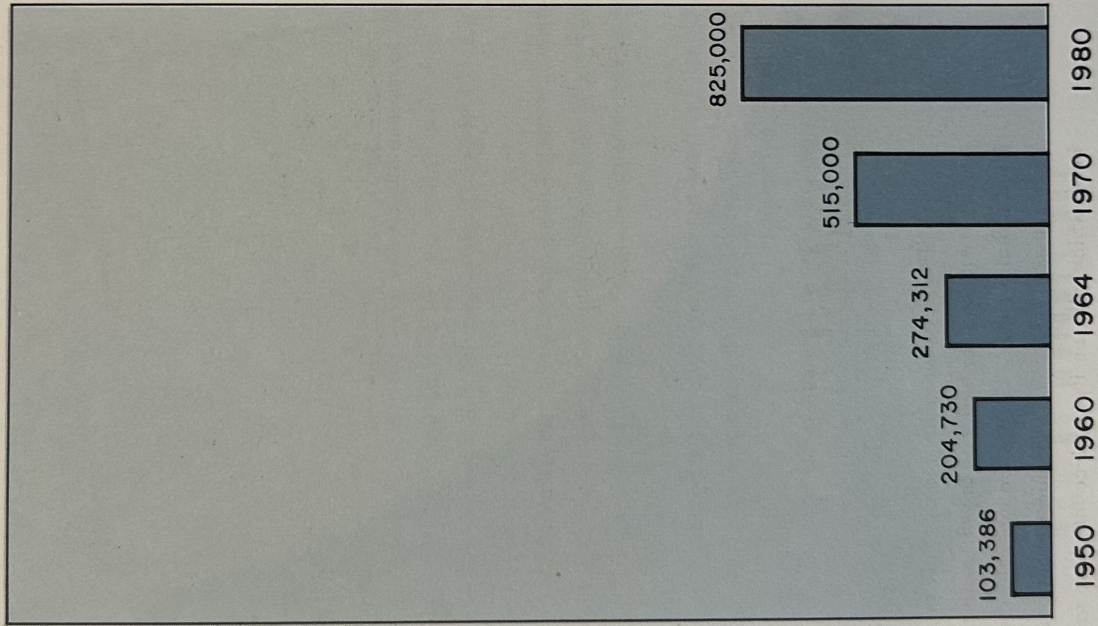
past 20-30 years, now provide the connection between these freeways and between the exploding population pools of Orange County and Pomona Valley. Orange Freeway, long promised, stands today as the missing link.

Orange County

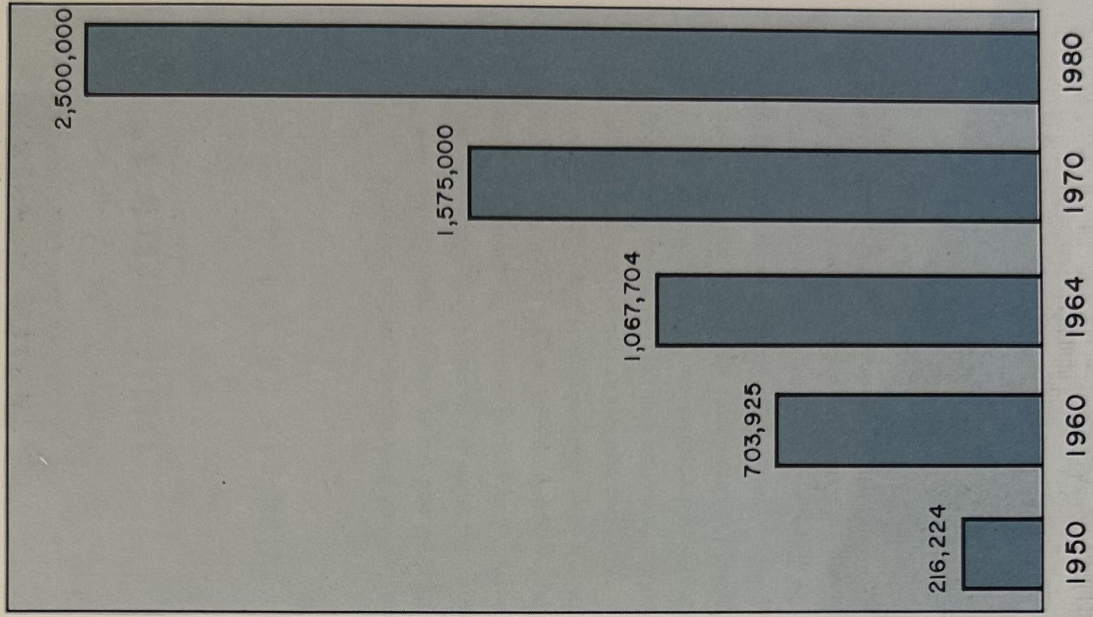
One of the most volatile and dynamic population and business areas to be found anywhere in the United States today, Orange County attracts millions of tourists annually, is in the midst of a population boom which will see its head-count climb to more than 2,500,000 by 1980. The proposed Orange Freeway would provide a North-South access to serve its expanding industrial, home, educational, and recreational facilities.

WHY THE FREEWAY IS NEEDED...

POPULATION POMONA VALLEY



POPULATION ORANGE COUNTY



THE SOLUTION

A Modern Artery...

....For An Exploding Area

Orange Freeway, designated Route 57 and scheduled to replace State Route 19, will link San Diego Freeway in Orange County to the San Bernardino Freeway in Pomona Valley and will provide the only freeway connection between the other major and predominately East-West freeways serving the rapidly-expanding areas of Orange County and Pomona Valley.

More than 11 years in planning, Orange Freeway should be started now. Immediate construction of this proposed--and long-promised--high-speed route is urgently needed to accommodate business as well as recreational traffic and to replace congested and overloaded two-lane routes, which daily are becoming more of a menace in lives and dollars to highway safety.

Planning for the new freeway began in the early 1950's. The route has been approved and adopted. Freeway plans have been completed. Necessary negotiations have been carried out with interested city and county governmental organizations. Rights-of-way have been purchased.

Interested civic, political, business, educational, and recreational leaders in Orange County and Pomona Valley, backed by an interested and concerned press, urge immediate budgeting and early construction of Orange Freeway--Route 57.

The Problem is NOW

RESOLUTIONS

100 EAST THIRD STREET • NATIONAL BLDG

POMONA CHAMBER OF COMMERCE

POMONA, CALIFORNIA

RESOLUTION

WHEREAS the Pomona Chamber of Commerce has evaluated the route of the ORANGE FREEWAY, adopted by the California State Highway Commission in 1955, and has found it to be a wholly acceptable route; and

WHEREAS, in an attempt to convince the California State Highway Commission of the urgency of the project, the Highway Committee of the California State Chamber of Commerce on June 25, 1964 did act in official session and changed the ORANGE FREEWAY from Category B to Category A; and

WHEREAS Dr. Gerhard N. Rostvold, an Economic and Government Consultant, has studied the report (a copy of which is attached) that in the next five and one-half years the population of the Pomona Valley will increase 87% from 274,312 in July 1964 to 515,000 in 1970; and

WHEREAS with this phenomenal growth comes the inevitable increase in commerce, industry, education, finance, and government which produces more traffic to the already overloaded and heavily traveled connection between the Pomona Valley and North Orange County.

NOW THEREFORE BE IT RESOLVED THAT the Pomona Chamber of Commerce at its regular meeting of the Board of Directors on August 25, 1964 did unanimously recommend expediting the Highway Commission's recommendation of expediting the completion of the ORANGE FREEWAY along the route that the Commission adopted nine years ago.

Fred W. Burner
Fred W. Burner
General Manager
Pomona Chamber of Commerce

August 25, 1964

RESOLUTION OF THE CHAMBER OF COMMERCE OF FULLERTON RECOMMENDING IMMEDIATE CONSTRUCTION OF THE ORANGE FREEWAY CALIFORNIA STATE ROUTE 57

WHEREAS, the California State Highway Commission adopted the route of the Orange Freeway State Route 57 in February of 1956, and been started, and

WHEREAS, construction of the Orange Freeway to date has not needed immediate action to connect two major metropolitan areas of Pomona Valley and Orange County, and

WHEREAS, evidence is noted daily that the Orange Freeway and Orange County areas continues to increase at a tremendous rate, and

WHEREAS, the growth in population of the Pomona Valley and Orange County areas continues to increase at a tremendous rate, and

WHEREAS, no other freeway route has been proposed to solve the problem of the inadequate, overcrowded and unsafe route through Brea Canyon, and

WHEREAS, a large amount of right-of-way has been acquired and freeway design has been completed for most of the Orange Freeway, and

WHEREAS, construction funding could start actual freeway development leading to the alleviation of this growing traffic problem.

NOW THEREFORE BE IT RESOLVED THAT: The Board of Directors of the Fullerton Chamber of Commerce recommends as follows:

SECTION 1.

That the Fullerton Chamber of Commerce respectfully recommends to the Highway Commission of the State of California the immediate budgeting of construction funding for the Orange Freeway in its entirety and that the Highway Commission be urged to expedite the Commission in pursuit of construction for this vital freeway link.

SECTION 2.

That the Chamber Manager be, and is hereby authorized to and directed to transmit copies of this resolution to the Secretary of the State Highway Commission; members of the Commission; the County Board of Supervisors; members of the City Council; the State of Fullerton; the press; and other interested citizens of the State of California.

Introduced, approved and adopted the 12th day of August, 1964.

ATTEST:

Frank M. Neva
Frank M. Neva, Executive Vice President
Chamber of Commerce
Fullerton, California

Marvin F. Gade
By Fullerton Chamber of Commerce
Marvin F. Gade
President

...Area-wide support for early budgeting and construction of the Orange Freeway (Route 57) includes resolutions by the County of Orange and the Cities and respective Chambers of Commerce of Anaheim, Brea, Fullerton, Orange, Placentia, Pomona--- as well as the press, industry, education, interested citizens, and elected representatives.