

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT



LOS ANGELES CITY COUNCILMAN THOMAS G. BRADLEY VIEWS RTD'S STEAM BUS — Councilman Thomas G. Bradley, 10th District, was one of the first viewers of RTD's new steam powered bus during its unveiling in Sacramento. Unveiled at the same time were two other steam powered buses which will operate in San Francisco and Oakland. All three buses will be operated under normal operations on city streets.

Team Of Engineers Using Aerospace Techniques Seek Subway Solutions

Aerospace techniques are being used by a small group of Southern California engineers to develop information which will lead to improvements in subway and subway station design.

Working in a small laboratory at Developmental Sciences Inc., City of Industry, a team led by Dr. G. R. Seemann is using two miniature subways, complete with tracks and trains, to run tests proving—or disproving—theoretical calculations.

The results of their efforts are expected to help future subway builders save millions of dollars through improved tunnel design and through better venting, which will lead to lower construction costs.

The work is being sponsored by a dozen members organizations of the Institute for Rapid Transit, with principal financing coming from the Urban Mass Transportation Administration of the U.S. Department of Transportation.

It originated from a request by RTD, which is contributing \$30,000 to the project, and whose chief engi-

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El Monte-Los Angeles Busway Groundbreaking Marks New Era for RTD

Groundbreaking was held in January for the nation's first facility for high-speed buses operating in their own right-of-way.

Federal, State and Southern California Rapid Transit District officials participated in the ceremony heralding the start of construction for the El Monte-Los Angeles Busway.

By fall, the first eight miles of the 11-mile exclusive express facility are expected to be open to travel by 60-mile-an-hour and faster RTD Busway Flyers.

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Defeat of Watson Amendment, Prop. 9 Urged By RTD

The defeat of Proposition 9 and the Watson Amendment on the June and November ballots has been urged by RTD's Board of Directors. They have declared either issue could seriously affect Los Angeles area public transit operations.

In a unanimously adopted resolution, the RTD board said approval by the voters of Proposition 9, which appeared on the June 6 ballot, and was defeated, would bring an immediate and almost total elimination of bus services within the District.

In a second resolution, the transit agency directors said that should the voters pass the Watson Amendment in November, the District would be forced to drastically increase bus fares.

RTD's Steam Powered Bus Makes Debut In Sacramento

A public transit bus powered by steam was demonstrated in Sacramento April 26 by RTD.

Members of the Legislature, including Speaker of the Assembly Bob Moretti, were shown the vehicle, which will be tested in Los Angeles area public transit service in the near future.

A grant to the Assembly by the Urban Mass Transportation Administration of the federal Department of Transportation has made the program possible.

Jack R. Gilstrap, RTD general manager, said the prime goal of the effort, one of three steam bus testing projects under way in California, is to determine the feasibility of steam propulsion for city buses.

He also noted that the demonstration will permit the measuring of exhaust, emissions, smoke, odor, noise and engine performance under the demanding duty imposed on transit vehicles in the Los Angeles area.

RTD Continued Study For Rapid Transit

RTD's Board of Directors acted May 2 to insure continued orderly programming for additional rapid transit development in the Los Angeles area.

Members of the RTD Board authorized the monitoring and evaluating, required by the federal government, of the El Monte-Los Angeles Busway operation once service commences in the fall.

At the same time the public agency officials approved the formal filing of a federal grant application for the monies necessary to complete the coordinated rapid transit effort being undertaken jointly by the RTD and the City and County of Los Angeles.

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SPECIAL Avid Sports Fan Travels RTD To All Local Games

The 4:40 p.m. bus pulls into the RTD bus terminal at Bailey and Comstock Streets in Whittier. A white-haired man grabs his two newspapers, his transistor radio and a small bag of peanuts.

"I come here a lot, yes I do," says Louis Hammerton, a 63-year old retired railroad worker who is well known at local sports events as Laker Louie, Ram Louie and Dodger Louie. Hammerton might also be appropriately known as RTD Louie as well.

Buses are as important to Louis as are his beloved Lakers, Rams and Dodgers. Without the buses he couldn't

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"The steam bus program," Gilstrap added, "speaks to the concern of the District, as a 'citizen' in the community for the state of the environment. The threats of congestion of people and motor vehicles, pollution, and related social problems, force us to define our goals and to proceed with vigorous measures to provide relief."

RTD's general manager lauded federal and state officials for their contribution to the implementation of the project and the development of the steam power plant.

The Department of Transportation in an indication of the success of the steam bus progress to date, is granting an additional \$683,041 to the California Steam Bus Project to provide for upgrading the performance of the engines and to develop specifications for production prototypes.

Officials who have cooperated in the effort to test the bus include Carlos C. Villarreal, administrator of the Urban Mass Transportation Administration; Moretti; and John Burton, chairman of the Assembly Rules Committee.

Gilstrap observed that in the design of the power system, special emphasis has been placed on the development of innovative fail-safe devices for the safety of RTD customers and the public at large.

The transit vehicle used for the project — RTD ExtraCAR 6200 — was originally powered by a V-6 diesel engine with a rating of 255 horsepower. Steam Power Systems, Inc., San Diego, has reequipped the bus with a six cylinder reciprocating double-

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Groundbreaking

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Officially turning soil at the event were Frank J. Walton, California secretary of business and transportation, and Dr. Norman Topping, president of RTD.

Walton, who represented Governor Ronald Reagan at

the event, said California was making history in developing the Busway, adding:

"This project is the first attempt to wean the driver away from his automobile and at the same time provide him with the mobility that only rubber-tired transit can make available."

Dr. Topping termed the

effort a milestone in federal, state and local cooperation.

"Visualize, if you will," RTD's president said, "Busway Flyers operating in their own right-of-way—moving at 60 miles an hour and faster—bypassing four lanes of commuters' automobiles stalled in bumper to bumper morning and evening traffic."

RTD Study

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Required by the Urban Mass Transportation Administration before federal participation in transit projects becomes a reality, the immediate effort will lead to the selection of a corridor, or corridors for initial high-speed rapid transit construction.

Dr. Norman Topping, RTD president, said the analysis to be undertaken with the grant funds will provide the following data:

—An analysis of the specific available transit financing resources at the local, state and federal levels.

—A description of the kind of rapid transit system most suitable for the area.

—A determination as to where the rapid transit routes should be built—and the priorities.

In addition, a clear picture of the effect of rapid transit development on the citizenry will be obtained, along with the details on the environmental impact of rapid transit on the various areas selected for development.

"Were it not for the information developed for the 1968 rapid transit proposal submitted area voters," noted Jack R. Gilstrap, RTD's general manager, "a much more exhaustive and expensive undertaking would be necessary at this time."

Completion of the action program, transit agency officials explained, will make it possible to file an application for construction monies.

The use of existing railroad facilities for commuter ser-

vice, along with the development of an expanded bus system, also will be examined.

Another element of the activity will be the programming to insure the ability of Southern California to meet 1974 transit grant standards being established by UMTA for both bus and rapid transit services.

Dr. Topping said the combined projects have been made possible by the pending availability — for the first time — of public fund support for transit development on a continuing basis.

Gasoline will become subject to the general sales tax next July 1, providing the monies which will make it possible to qualify for federal matching funds to place rapid transit on the construction track at an accelerated pace, Dr. Topping noted, providing sufficient federal matching support can be obtained.

Members of the District Board, in a resolution, said "the District is committed to an action program culminating in the operation of a major rapid transit system in the Los Angeles region.

Projects to be undertaken, Gilstrap said, will be coordinated by the Southern California Association of Governments, the agency designated by UMTA to oversee regional transportation planning in the Los Angeles area.

The RTD Board authorized the budgeting for \$629,666 for the effort with additional funds to be forthcoming from the federal government once the grant applications are approved.



Frank J. Walton, California secretary of business and transportation, County Board of Supervisors Chairman Warren M. Dorn and RTD President Norman Topping, take the first shovels full of dirt to commemorate the beginning of construction on RTD's El Monte-Los Angeles Busway.



California Assemblyman Wadie P. Deddeh (D-Chula Vista) and RTD General Manager Jack R. Gilstrap "dig in" at groundbreaking ceremony commemorating the beginning of construction for RTD's exclusive express busway from El Monte to Los Angeles.

Insurance Manager And Deputy Administrator For Equal Employment Opportunities Join RTD Staff



TWO NEW STAFF EMPLOYEES VISIT DIVISIONS — John C. Miller, insurance manager (2nd from left) and Robert C. Williams, deputy administrator-equal employment opportunities, (3rd from left) talk with Operators (left to right) Harry Zipper, Roscoe Dawkins and Jesse Gomez at Division 7.

John C. Miller, recently named Insurance Manager for the District, has been associated with the insurance part of bus operations for 35 years.

He comes to RTD having been a local insurance consultant, 21 years with Transit Casualty and 13 years with Continental Casualty Company of Chicago.

As Insurance Manager for RTD Miller has the overall supervision of the District's fire and casualty insurance programs and to direct administration of the self-insured workman's compensation program.

Robert G. Williams has been named Deputy Administrator-Equal Employment Opportunities for the District after having been Director of Affirmative Action for the Western Area of Atlantic Richfield Oil Company.

As Deputy Administrator for Equal Employment Opportunities Williams is responsible for a plan of action designed to maintain the District's Equal Employment Opportunities policy and Affirmative Action Program. He also serves as the District's Contract Compliance Officer.

Engineers

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 neer, Richard Gallagher, is responsible for establishing many of the program's objectives.

City and County officials joined Transit District directors and officials in previewing the initial phase of the project under way at DSI laboratories earlier this year.

As Dr. Seemann explains it, the cost of maintaining proper temperatures in subway stations may be as much as 10 percent of the total construction costs, and power consumption for environmental control systems may run as high as half that required for moving subway trains. In dollars, environmental control construction may be as high as \$5 million per mile of subway.

"Most systems completed in recent years have had problems. In many cases costly retrofitting has been required, and even this hasn't been satisfactory. And many older systems are experiencing progressively worse conditions," Dr. Seemann explains.

"No extensive practical research in subway and station design had been done since the 1940's," Dr. Seemann said, "and the current project was conceived in 1968 when the RTD was in the preliminary design phase of a subway line for Los Angeles.

When the program is completed, Dr. Seemann and his associates will prepare a design handbook which can be used by all future subway builders. It will be published by the U.S. Government Clearing House.

Inputs to the handbook are also being made by a group of researchers at Cal Tech, where considerable analytical mathematical studies are being undertaken, led by Dr. Gordon Harris, and by a group called the Associated Engineers. In the group are Parsons, Brinckerhoff, Quade & Douglas, Kaiser Engineers, and DeLeuw Cather.

Steam Bus

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 acting steam engine with a recorded 277 horsepower.

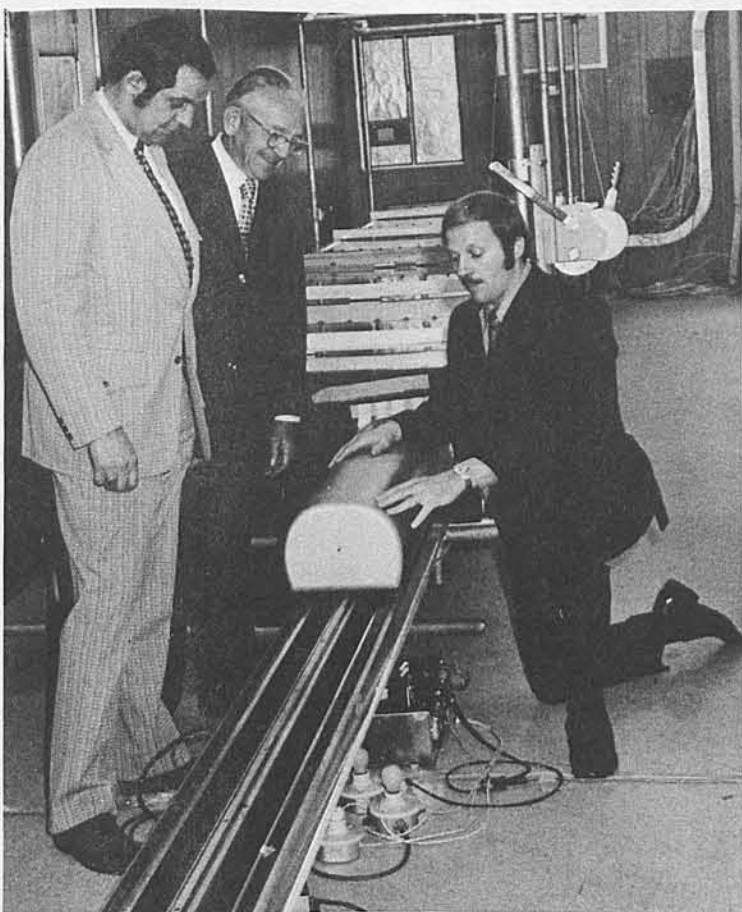
RTD's steam bus has been designed to provide a top speed of 65 miles per hour with all standard accessories in operation.

The SPS power system uses a steam generator instead of a traditional boiler and, accordingly, eliminates the possibility of dangerous rupture.

Steam is produced by heating the water in the steam generator by burning a petroleum fuel such as kerosene or diesel fuel in a manner similar to a home hot water heater. Even though using a fossil fuel, this power plant is inherently low polluting since as an external combustion system it has an abundance of air and achieves virtually complete combustion.

A system of automatic controls monitors power needs and governs the flow of fuel, air, and water in the bus to provide the required steam output.

Give Blood



A special testing unit using a test scale model transit train is shown to RTD Directors David K. Hayward and Herbert H. Krauch by Dr. G. R. Seemann who heads a small group of Southern California engineers studying subway and subway station design. The model is used to correlate the effects of train speed, blockage ratio, train geometrical parameters (i.e. nose shapes, body detail, etc.) drag and power consumption, tunnel geometrics, vent shafts, station configuration and roughness of tunnel linings. The test also enables the study of aerodynamics interaction effects between two trains in the same tunnel and the transient phenomena of tunnel entrance buffeting as a function of the train, tunnel and speed parameters.



BUSWAY CONSTRUCTION MOVES RIGHT ALONG—Concrete barrier walls (top photo) constructed to separate the Busway lanes from the Southern Pacific Railroad tracks rapidly take shape. Busway lanes 17 feet wide will parallel the barriers with a line of brightly colored rubber pylons on the outside of the lanes. A 20-foot shoulder between the pylons and the freeway's number one lane will be used as an emergency parking area for Busway buses and freeway vehicles. Overpasses, such as the one at San Fabiel Boulevard (bottom photo) are being modified for the Busway. Some overpasses had to be reinforced while others needed to be widened.

Sports Fan

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get to the games. He has never driven a car—buses are his only means of transportation. "Only two or three times," he says, "has anyone offered me a ride."
 "Weekdays, I take the 4:40 afternoon bus, transfer to the No. 5 downtown and get there at 6:30," he says. For Sunday games, (one hour earlier), he leaves Whittier at 4:05. Homeward-bound, it takes Louis 10 minutes to walk to Manchester and Market for his No. 5 bus to Sixth and Broadway and eventually, the 11:51 to Whittier."

"This is all I've got," Ham-merton says. "I've always loved sports and I've got something to do year-round. Basketball is my favorite, by far. You can't beat the Lakers."

"I've been coming to these games for a long time," Ham-merton added. "I've followed the Lakers ever since we got them from Minneapolis." He has attended almost every Rams game for 20-odd years and Dodger games since 1958.

The hours may be long, but he doesn't mind. To be on hand for the game is everything—the trip is well worth it to Louis.



REELECTED—Los Angeles attorney Thomas G. Neusom (left) congratulates Dr. Norman Topping as the two men were reelected for another term to head the District's Board of Directors.

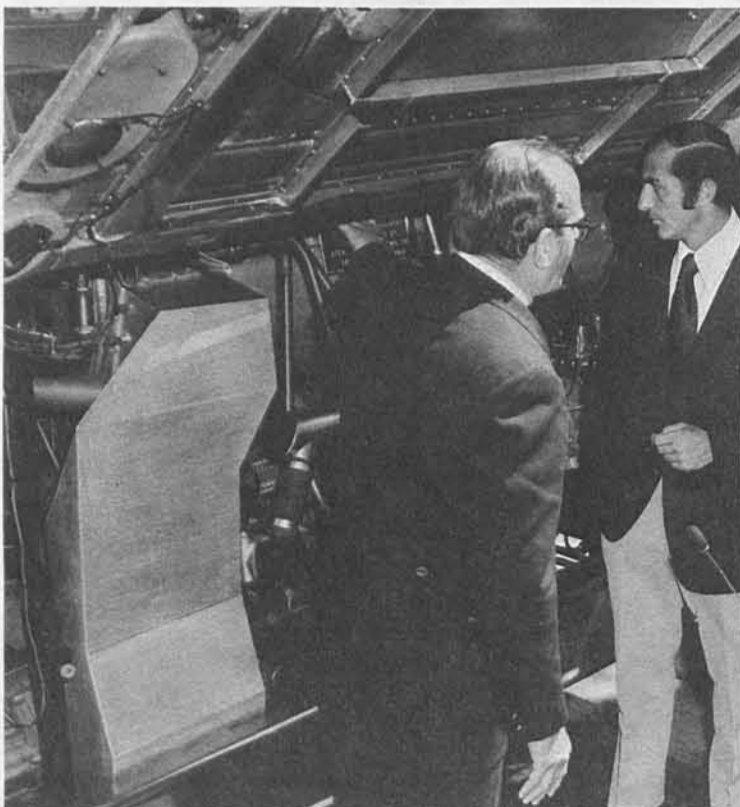
Dr. Norman Topping, president of RTD, and Thomas G. Neusom, vice-president, were unanimously reelected for another term by their fellow Directors in March.

The reelection marked Neusom's third term as vice president.

Topping, an appointee to the Board by Mayor Sam Yorty, has been with the Dis-

trict since 1964. Long an advocate of improved public transportation in the Los Angeles area, Dr. Topping is chancellor and former president of the University of Southern California.

A Los Angeles attorney, Neusom was appointed to the Board in 1969 by Supervisor Kenneth Hahn and is a former member of the County's Assessment Appeals Board.



RTD STEAM BUS ON DISPLAY IN SACRAMENTO — Cornelius D. Dutcher, (far left) president, Steam Powers Systems, Inc., San Diego, explains the power plant of RTD's new steam bus to Bob Moretti, (2nd from left) Speaker of the California State Assembly.

150 Years Of Transit Service



GOLDEN ANNIVERSARIES — Three South Park employees (left to right) Tommy Rocha, Raymond Shollin and Geronimo Gutierrez will have 50 years' service in public transportation by September 16. During break times they sometimes gather at one of the benches outside to talk about the "old days" and how things were in transportation back in the 20's.

A century and a half of transit service has been compiled by three men at RTD's South Park Shops.

Geronimo Gutierrez, age 67, hit his golden anniversary in March. Raymond Shollin, age 70, will reach his in July and Tommy Rocha, age 65, in September.

All three men started with the Los Angeles Railway in 1922 and during their transit career worked many jobs. Gutierrez and Rocha had

similar careers. Both are mechanics today and both first started as construction workers. Gutierrez is in the South Park body shop and Rocha is leadman in the brake shop. Shollin, presently a pattern maker, has spent his career working with wood.

When asked when they plan to retire, each said "someday." Each man looks younger than his years and according to Gus Gundersen at South Park, "If they were to retire now, they'd be awfully hard to replace."

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- A. J. Eyraud, Jr.
- Leonard S. Gleckman
- David K. Hayward
- Herbert H. Krauch
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- Don. C. McMillan
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- Virginia Rees, Secretary

Published by and for the employees of the Southern California Transit District.

- JACK R. GILSTRAP, General Manager
- GEORGE F. GOEHLER, Manager of Operations
- ROBERT R. SCHOLL, Director of Public Information
- WILLIAM A. REASON, Editor



PARK/RIDE PIONEERS—Downtown Los Angeles businessmen celebrate success of Park/Ride service established by RTD's board of directors. The program offers easy access to Convention Center parking with a quick Mini-bus trip to the Central Business District. Spaces are available for individuals or groups on a limited first come, first serve basis. Now operating from 7 a.m. to 7 p.m., the service will commence at 6:30 a.m. starting June 1. Joining Jack R. Gilstrap, RTD general manager, in calling attention to the Park/Ride operation are (left to right) Ted Wootton, vice president, Bank of America; G. M. Mumford, manager, employee relations, Atlantic Richfield Co.; Robert Dunn, controller, Peat, Marwick, Mitchell & Co.; M.D. McDermott, vice president-deputy controller, Bank of America; Guy Bennett, personnel manager, Latham & Watkins; Byron Trimble, director, Los Angeles Convention Center; and Ray Lawson, assistant vice president, Bank of America.

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 1060 South Broadway, Los Angeles 90015

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