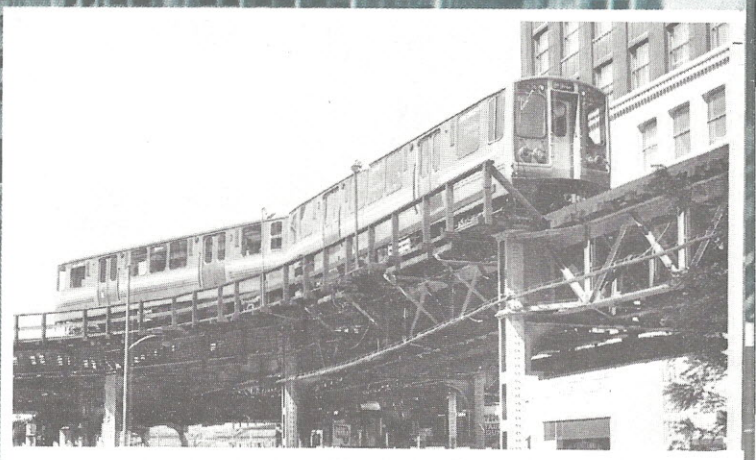
Welcome to Chicago



cta TRANSIT NEWS
SPECIAL EDITION
OCTOBER, 1981

Welcome to Chicago

Contents

Administrative Joint Commission

On August 1, 1981, the Administrative Joint Commission was created, pursuant to a grant agreement between the City of Chicago and the Chicago Transit Authority, to administer the provisions of the agreement. Members of the Administrative Joint Commission are:

Thomas V. O'Neill, Chairman

Timothy Bresnahan

Nelson Carlo

James E. Clark

Rev. Johnnie Colemon

Thomas F. Meagher

Chicago Transit Board members

Joby H. Berman, Administrator

Chicago Transit Board

On June 4, 1945, a referendum approved the creation of the Chicago Transit Authority, giving it exclusive rights to operate a unified system of local transportation in Chicago. Chicago Transit Board members are:

Eugene M. Barnes, Chairman

James P. Gallagher, Vice Chairman

Michael I. Brady

John J. Hoellen

Howard C. Medley, Sr.

Nick Ruggiero

William H. Mansker Secretary

FRONT COVER: The Magnificent Mile--North Michigan Avenue. Inset photos (top to bottom): Boeing Vertol cars on the Loop 'L'; CTA Bus Roadeo; McCormick Place, site of International Public Transit Expo, 1981; Marriott Hotel, site of 1981 APTA Annual Meeting.

Regional Transportation Authority

On March 19, 1974, a statewide referendum created the Regional Transportation Authority, which serves as a funding and regulatory body for all public transit operations in the six-county northeastern Illinois region. The Regional Transportation Authority board members are:

Lewis W. Hill, Chairman

D. Daniel Baldino

Jerry D. Boose

Edward F. Brabec

Sidney Danoff

David L. DeMotte

John T. Geary

William Griffin

James Kemp

Gene Leonard

Patrick L. O'Malley

Philip Raffe

Kenneth W. Sain

CTA TRANSIT NEWS

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The members of the American Public Transit Association are most welcome to Chicago as they gather here for the association's annual convention.

Public transit in the United States is presently undergoing challenging times. Rising costs and legitimate taxpayer concerns are combining to create transit crisis in cities throughout the nation that all too often is reflected in fare hikes and cuts in service.

The challenge to those participating in the convention and to all of us in government is to meet head-on the challenge of continuing transit service at a reasonable cost. One way of achieving this is better management efficiency and in Chicago, we can be proud that this is being done. Also, the city's upcoming capital improvements program detailing more than 600 projects at a projected cost exceeding $3.3 billion reflect our intention to keep Chicago the front-runner in transportation that it has always been.

With warmest regards,

Sincerely,

Jane M. Byrne
Mayor

Welcome to the CTA's Chicago! The Chicago Transit Authority is pleased and honored to be your host for the 1981 APTA Annual Convention. As Vice President of APTA's committee on Government Affairs, and Chairman of CTA, I will proudly wear both my "hats" throughout our deliberations.

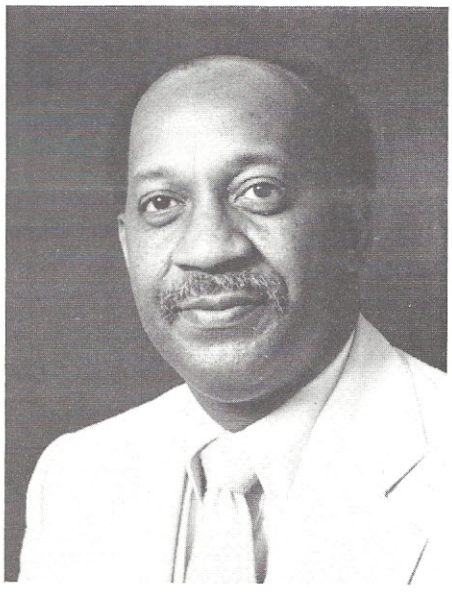
It was my good fortune to work as a CTA bus driver for 14 years before serving as a member of the Illinois House of Representatives. During most of my 10 years there, I was a member of the transportation committee and the committee on appropriation, where I was chairman for four years. Mayor Jane Byrne appointed me to the seven-member CTA Board in July, 1979, and my colleagues elected me Chairman. Our top priority has been the development of smooth cooperation between management and personnel in operations and maintenance.

Through the years, CTA's performance standards have excelled in the delivery of service. Research and creativity are trademarks of our highly skilled, professional staff which is constantly conducting innovative programs to improve the system.

During your stay in Chicago, we invite you to visit some of CTA's outlying installations where capital improvements of the system are in full force. Eight stations along the rail routes are being rehabilitated completely. The construction of a new $17.6 million bus garage at Kedzie and Van Buren is underway and a second such facility at 103rd and Stony Island is assured. On order for immediate delivery are 125 articulated buses, and we are receiving delivery of 300 new rapid transit cars. We have equipped all of our buses with radios for instant communication with the Control Center in the event of trouble, and a public address system is being installed at rapid transit stations for passenger information.

We urge you to visit and inspect the O'Hare Extension, a new mass transit line which will improve our role in the growth of the city's economy. Estimates indicate that this eight-mile addition will have 42,900 riders, 60 per cent of whom will be commuters.

The question, "How do we adequately fund mass transit systems?" is currently challenging the minds of business leaders, public officials and experts in transportation throughout the world. Chicago is no exception, but we have a Mayor who is realistically seeking a solution to the problem. Mayor Byrne has recently strengthened the managerial staff with the appointment of Theodore G. Schuster, retired head of commuter service for Burlington Northern Railroad, as Executive Director. We welcome Mr. Schuster aboard.



Eugene M. Barnes
Chairman

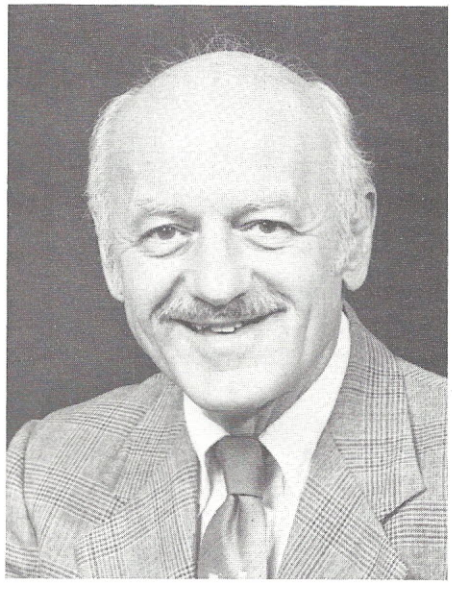
Since I came on board at CTA, I have been studying the many details of this large organization in order to gain an understanding of the challenges that face the company.

The recently completed consultant study is a valuable tool for rooting out a true picture of CTA from a financial and operational standpoint. Its recommendations will serve as a springboard, directing my efforts to the areas that require the most attention.

I take great pride, as do our employees, in the study's determination that CTA is doing a fine job as an operating body and that CTA is viewed as a superior performer among its peers in the transit industry.

CTA now faces the challenge of reconciling its financial image with its operational image. It must achieve credibility in the public eye by responding to constructive criticism and streamlining its operational and support functions, while striking a balance between public needs and the availability of operating funds. This balance will be achieved through some downsizing of the operation, because there is every indication that less funding will be available.

I believe that an improved and more cost-efficient CTA, continuing its reputation for providing appropriate levels of high quality service while maintaining its financial responsibility in our economic environment, will prove to be an even greater source of pride for both employees and the riding public.



Theodore G. Schuster
Executive Director

Serving the people of Chicago

The Chicago Transit Authority operates the second largest public transportation system on the North American continent. The service saturates the 220 square mile area of the City of Chicago and extends to 36 nearby suburbs.

Within the city, more than 98 per cent of the population is located within three blocks of CTA service, and Chicago is one of only a few cities in the world where service is operated 24 hours a day.

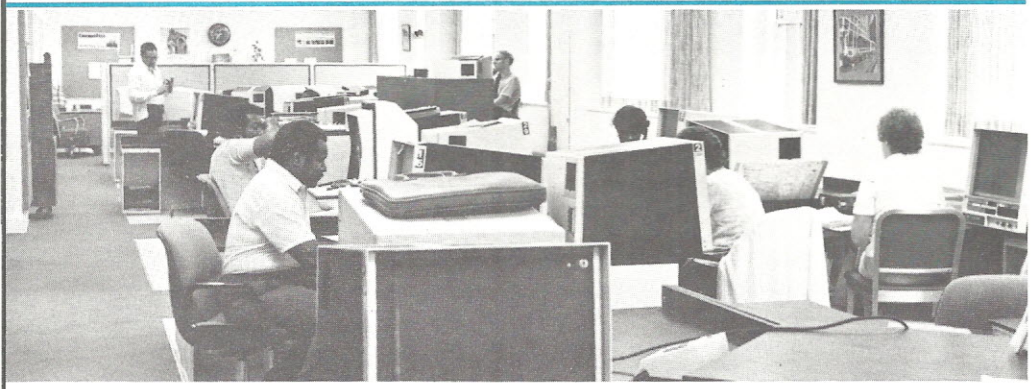
To meet the challenge of efficiently providing 2.2 million rides on an average weekday, CTA operates both a rapid transit system and an extensive bus system.

More than 500,000 rides are taken on the rapid transit system each weekday. This requires a fleet of 1100 rapid transit cars, with approximately 900 cars in service at peak times. On the eight rapid transit services, 2,400 train trips are made each weekday along 89 miles of right-of-way, with 192 track miles and 140 stations. Thirty-eight miles of the right-of-way are on elevated structure, 12 on elevated embankment, 22 in expressway medians, and 10 in subways. There are also six miles of right-of-way operating on grade level with street crossings, and one mile in open cut below grade level.

To support these operations, nine of the 11 rapid transit terminals have inspection and unit replacement maintenance facilities, with an additional facility located at Wilson Avenue along the North-South main line. Major maintenance and unit rebuilding is performed at the Rail Vehicle Maintenance Facility in the suburb of Skokie.

Field maintenance for the right-of-way, track, structure, stations, and buildings is supported by the Plant Maintenance Facility on the West Side of Chicago. To insure timely response and continuous operation, Plant Maintenance performs in-house fabrication of track and structure components.

More than 1.7 million rides are provided by the bus system each weekday, with approximately 2100 of our 2400 buses in service at peak times. Each weekday more than 31,000 bus trips are made over more than 2000 route miles, serving more than 13,000 bus stops.



What's the best way to go from your downtown office to suburban Brookfield? The RTA Travel Information Center says take a CTA shuttle bus to Union Station and board a Burlington Northern commuter train.

Inspection and preventive maintenance is performed at each of the 10 bus garages, while major maintenance and overhaul are accomplished at the Automotive Vehicle Maintenance Facility on the South Side of Chicago.

Most of CTA's 13,000 employees are directly involved in providing service to the public. This includes 5,500 bus operators, 2,400 rapid transit operating employees, and 3,600 maintenance employees. It is their dedication to duty, constant training for skill level improvement, and ability to advance and assume supervisory responsibility that enables CTA to provide high quality transit service on the large scale required in the service area.

CTA service is also an important focal point of all public transit provided in the six county area of the Regional Transportation Authority. In the central business district, many suburban rail commuters find CTA shuttle bus routes to be the most convenient last leg of their trip to the office. Outlying CTA rapid transit terminals are served by suburban bus lines as well as CTA buses, and many CTA bus lines connect with suburban bus lines at the periphery of the CTA service area.

To blend these services and make them more convenient for the public, CTA operates the Travel Information Center for the Regional Transportation Authority. Travel information representatives use a modern telephone system and a microfiche information retrieval system to quickly provide route and schedule information and trip planning in six languages, for riders of all public transit carriers in the six county area.

Evening rush hour is a busy time at the State/Lake station on the Loop 'L' (top) and the Belmont subway station on the Milwaukee rapid transit route.

Proud tradition of progress

When horsecars began operating on State Street over a two-mile route on April 25, 1859, Chicago was experiencing a period of rapid growth. As people needed to travel longer distances, the three miles per hour speed provided by animal power proved to be inadequate, and the Chicago tradition of transit growth and innovation began.

The first attempts to improve surface transit through steam and compressed-air power met with limited success, but a breakthrough occurred in 1882 with the introduction of the cable car. With a top speed of 14 miles per hour, Chicago's system grew to 86 track miles by 1883, making it the largest cable car system in the world. Downtown Chicago became known as the Loop District because the cable car systems terminated in three downtown loops.

Only seven years later, Chicago once again was ready to apply the newest technology to transit. In 1890, the faster and more convenient electric streetcars began operating on 93rd Street. Soon hundreds of cable trailers and horsecars were converted to electric power. Operations were extended to many new routes, only one-half mile apart, in a grid pattern of comprehensive service that exists to this day. By 1896, the streetcar extended transit service to 344 miles of Chicago's streets, leading to the end of horsecar and cable car operations 10 years later.

As many as 18 surface transit companies served Chicago until 1914, when they were unified under the management of the Chicago Surface Lines. This company became the largest street railway operator in the country, with 3,500 streetcars operating over 1,100 miles of track.

On June 6, 1892, the Chicago & South Side Rapid Transit Company began operating an elevated railway powered by "dinkey" steam locomotives. When the World's Columbian Exposition opened on May 1, 1893, the service extended 8½ miles between downtown Chicago and the Jackson Park Fairgrounds. Two other elevated railways serving other parts of the city also had begun operations by 1895.

Chicago's famous Loop 'L' was completed in 1897 and became a common terminal for the three railways. A fourth railway began operating on the Loop in 1900. Alternately decried as a noisy eyesore and praised as a local landmark, the Loop 'L' survives to this day as an economical alternative to conversion of downtown rapid transit to all subway operation.

Another industry innovation was pioneered by the South Side 'L' on April 20, 1898. Although it was the last of the four railways to be electrified, it was the first to use multiple-unit control electric rapid transit cars. This system used smaller electric motors in each car, rather than a large motor in one car pulling trailers. The flexibility of operation and more efficient use of electrical power of this system set the trend for future rapid transit development.

In 1924, the four electric railways were consolidated as the Chicago Rapid Transit Company.

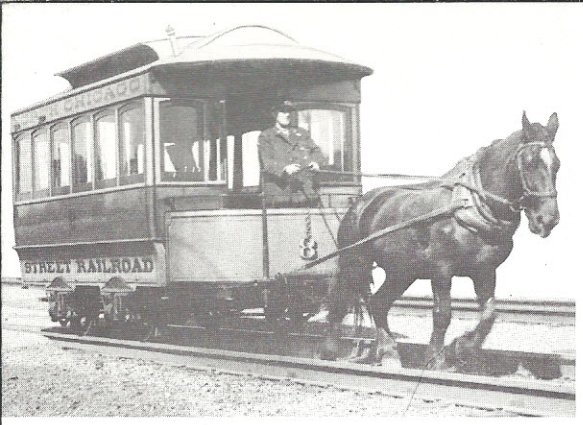
Motor buses began operating on Sheridan Road on Chicago's north side on March 25, 1917. That was the beginning of the Chicago Motor Coach system which, by 1928, served 146 miles of streets, mostly boulevards and park drives. Leading in the conversion to diesel buses, Chicago Motor Coach had put more diesel buses into operation, by 1939, than any other transit property. But they are most fondly remembered for their introduction of open top double-deck buses to Chicago, which later gave way to the closed top double-deckers that were in use until 1950.

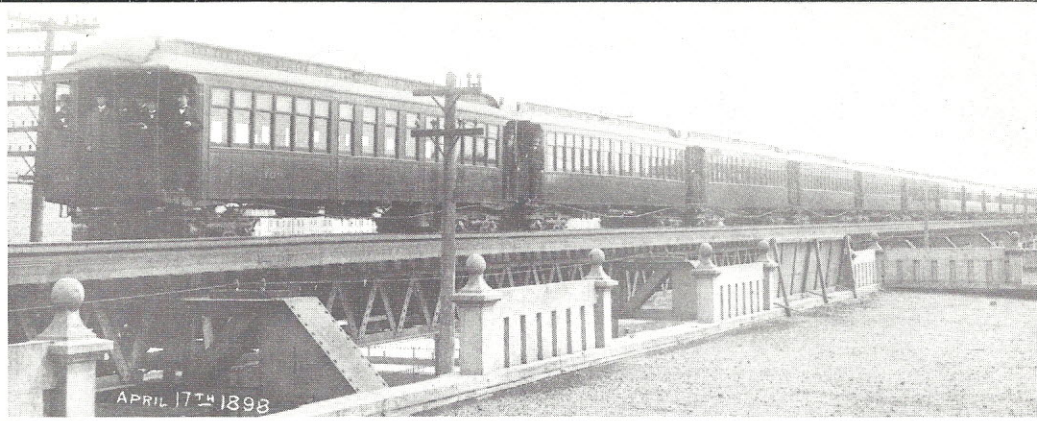
The trolley bus became a major transit vehicle largely through the efforts of the Chicago Surface Lines. On April 17, 1930, they introduced trolley buses to Chicago on the Diversey Avenue line, and later replaced or extended several other streetcar and motor bus lines with trolley buses. By 1931, Chicago Surface Lines had built up a fleet greater than the total number of all the other trolley buses in use in the world. This successful operation proved the viability of large scale trolley bus service.

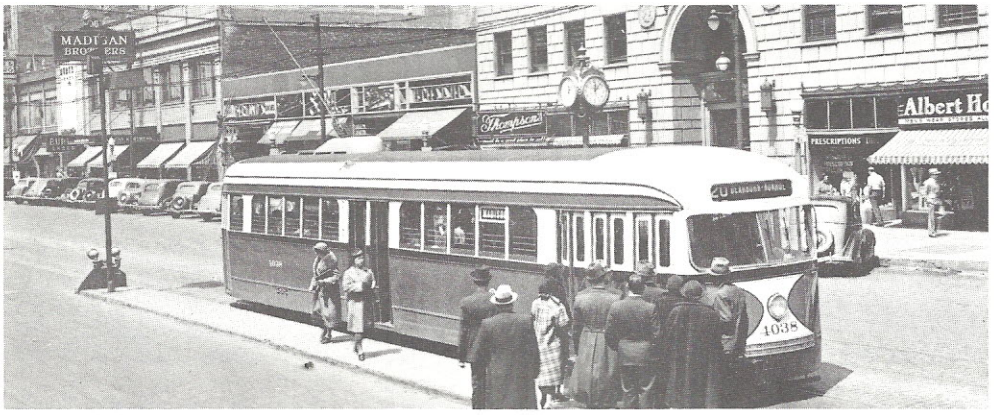
The purchase of the first PCC streetcars by Chicago Surface Lines in 1936 had similar results, and CSL became the largest operator of PCC cars. Designed at the request of a group of transit executives called the Presidents' Conference Committee, these streetcars featured advanced technology and increased performance that enabled them to compete with motor buses and automobiles. Many PCC cars are still in use elsewhere today, and the last PCC "Green Hornet" in Chicago was retired in 1958.

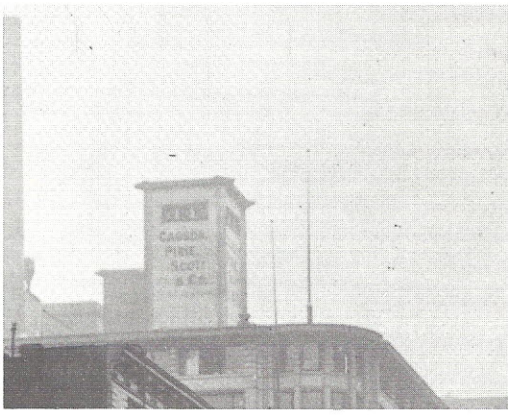
Chicago started building its subway system on December 17, 1938. Although the city's Traction Fund financed more than half of the construction cost, a federal grant enabled the city to begin construction and insured completion of the project. The State Street Subway was completed in 1943, and it pioneered the use of fluorescent lighting in subways. The new lighting system provided more pleasing, uniform light, and it was twice as energy efficient as incandescent lighting systems. The Dearborn Street Subway was completed in 1951.

During 1945-1947, the Chicago Rapid Transit Company developed the first rapid transit cars that featured electric opera-









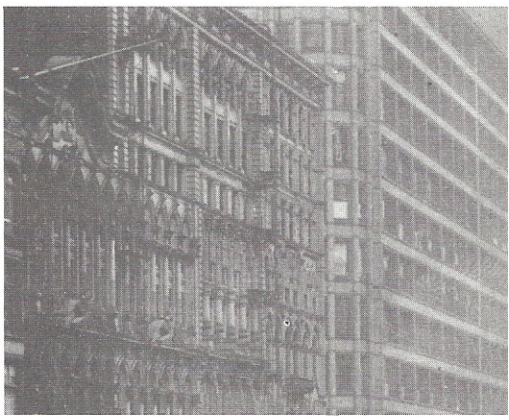
Top left: Horsecars introduced transit to Chicago in 1859.

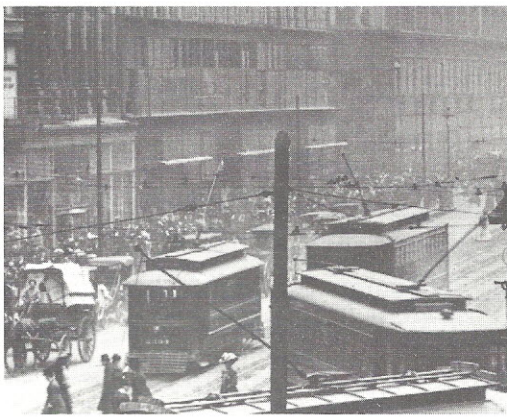
Top right: The Chicago & South Side Rapid Transit Company pioneered the use of multiple-unit control rapid transit cars in 1898.

Above: Chicago Surface Lines was a leader in the cooperative development of PCC streetcars and became their largest operator.

Right: In 1930, Chicago Surface Lines' introductory fleet of trolley buses outnumbered the rest of the trolley buses in use in the entire world.

Bottom right: Early streetcars, shown on State Street, entered the Chicago transit scene in 1890. Their speed and efficiency led to the demise of horsecar and cable car service.





tion of all systems. Delivery began in 1947, and these cars were the forerunners of CTA's modern fleet of all-electric rapid transit cars.

The Chicago Transit Authority was created by state legislation in 1945, and began operating on October 1, 1947, after acquiring the properties of the Chicago Rapid Transit Company and the Chicago Surface Lines. CTA became the sole operator of transit in Chicago on October 1, 1952, when it purchased the Chicago Motor Coach system.

Continuing the tradition of progress

After Chicago Transit Authority operations began on October 1, 1947, the tradition of transit progress in Chicago was continued through extensive modernization, expansion, and innovation. Many of the ensuing developments were later applied throughout the transit industry.

The first alternate-stop rapid transit operation in the country was implemented on the Lake Street route on April 5, 1948. During hours of heavy ridership, many stations were alternately designated as "A" or "B" stops and served by alternating "A" and "B" trains running on the same track. Terminals and a few very busy stations continued to be served by both "A" and "B" trains. On the Lake Street route, this innovation reduced travel time between the west terminal and the Loop by 10 minutes, and skip-stop service soon became standard procedure on all of our major rapid transit lines.

Chicago also pioneered the combination of rail rapid transit and a multi-lane automobile expressway in the same grade separated right-of-way, when the Congress rapid transit route began operating on the west side on June 22, 1958. Expressway median operation provides greater passenger carrying capacity, faster service, and more efficient usage of valuable land in metropolitan areas. As a result of the success of this operation, the Chicago Department of Public Works designed and built subsequent expressways with a median that would accommodate rapid transit. Similar routes were opened in the Dan Ryan Expressway extending to 95th Street on the south side in 1969, and in the Kennedy Expressway extending to the Jefferson Park Terminal on the northwest side in 1970. The Chicago Department of Public Works is now building a 7.3 mile extension of the northwest route, which will extend rapid transit service to O'Hare International Airport.

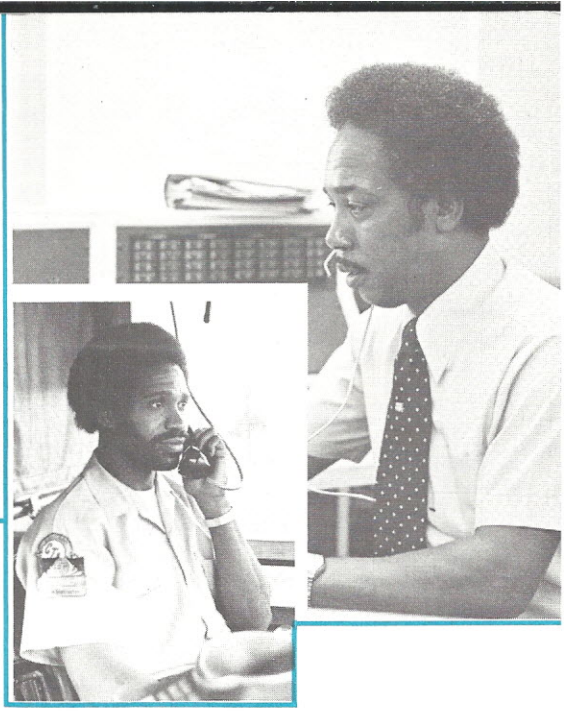
The nation's first federally funded rapid transit demonstration grant was used to develop CTA's Skokie Swift service, which operates on right-of-way acquired by CTA from the former North Shore Line, an interurban railroad. The five-mile non-stop route, extending from the Howard Street Rapid Transit Terminal on the north side to the Dempster Street Terminal in the suburb of Skokie, clearly demonstrated the viability of high-speed suburban rapid transit. Almost 4,000 riders used the service on the first day, and 3½ million rides had been provided by the end of the two-year demonstration project. Now a regular part of CTA service, the Skokie Swift carries more than 7,000 riders each weekday.

Since increased service required more rolling stock, CTA became a leader in the cooperative development of better rapid transit cars. The first advanced cars used further applications of the technology that produced the PCC streetcars in the 1930's, and, in the 1950's, CTA took an active role in the research and development programs that produced the first high speed, high performance rapid transit cars.

Most significantly, CTA became the first property in the country to operate a large fleet of air-conditioned rapid transit cars when, in 1963, it purchased 180 "NEW LOOK" cars. In addition to being designed and built as air-conditioned units, these cars introduced many other advancements including: the application of space age electronics for controlling the complex electrical equipment; the first production use of reinforced fiberglass; and the first back-lit advertising car card display panels. Since that time CTA has made three additional purchases of improved rapid transit cars with stainless steel bodies, as part of its ongoing effort to provide the best rapid transit service with modern equipment.

Surface transit in Chicago has also been expanded and improved by CTA. The most significant development was the eventual conversion of all surface routes to motor bus operation, with streetcar service ending in 1958 and trolley bus service ending in 1973.

Buses became a more appropriate answer to Chicago's transit needs for many reasons. As streets became more crowded, buses could easily change lanes to bypass obstacles. New



routes serving the terminals and stations of the expanded rapid transit system could be easily and economically implemented. Buses could be quickly rerouted in the event of a flooded viaduct or fire. And, in our inflationary economic environment, bus routing could be more effectively adjusted to insure the most cost efficient utilization of vehicles while serving the changing needs of the community.

Innovations in bus technology have also progressed at CTA. In 1950, CTA made the largest single purchase of 500 propane buses, and by 1963 became the largest operator of this type of bus. In the 1950's, propane buses were the most economical in terms of purchase price and fuel costs, and they remained in service until 1976. By that time, many other industries had converted to propane fuel to avoid rising diesel fuel, gasoline, and fuel oil prices, and the resulting increase in the price of propane made propane bus operation economically unfeasible.

More recently, CTA purchased 20 articulated buses as part of a test program in cooperation with 10 other transit systems. Since the introduction of our high capacity "Big Bend" buses in February, 1979, public response has been favorable, and CTA has ordered 125 more articulated buses.

A demonstration project for automatically monitoring 500 CTA buses from a central location began on March 12, 1970. This was the first such system to be used in the nation, and it was made possible by a grant from the U.S. Department of Transportation. Basic information concerning identification, location, and alarm status of buses is provided on a continuous basis to the Control Center. The system also provides direct two-way voice communication between the bus operator and the controller, and the bus operator can unobtrusively activate a silent alarm that alerts the controller in the event of an emergency.

The Bus Monitor system ultimately led to the development of CTA's modernized Control Center where the operation of all CTA buses and trains is monitored. The new Control Center also has direct two-way radio communications with bus operators, rapid transit motormen and conductors, and field supervisors. Other features include direct communication with Chicago Police and Fire Department dispatchers and an improved public address system for station platforms.

Far left: Rapid transit service in the median of an expressway was pioneered by CTA with the opening of the Congress line in the Eisenhower Expressway in 1958.

Left: The nation's first federally funded rapid transit demonstration grant allowed the Skokie Swift to begin operation, in 1964, and prove the value of high-speed suburban transit.

Above: A grant from the U.S. Department of Transportation, in 1970, equipped 500 CTA buses with the first electronic bus monitoring system. Now all CTA bus operators, rapid transit crew members, and field supervisors are in direct radio contact with the Control Center.

Below: When CTA put 180 "NEW LOOK" rapid transit cars into service in 1964, it became the first system to operate a large fleet of air-conditioned rapid transit cars.

Transit innovation is an ongoing process at the Chicago Transit Authority, for only through progress and industry leadership can we best serve the needs of our riding public.

Progress through innovation

Creative planning leads to innovative programs that enable CTA to grow with the City of Chicago and serve the needs of the riding public. Here are some of the programs and accomplishments that continue CTA's tradition of transit industry leadership.

Although traffic and other conditions of travel are more challenging than ever before, 1980 was **CTA's Safest Year.** By maintaining an accident frequency rate of 5.7 per 100,000 miles through 133 million miles of bus and rapid transit operations, CTA operating employees accomplished a 12 per cent improvement over 1976, CTA's previous safest year.

This resulted in net savings of $2 million in claims alone. The additional savings in potential workman's compensation is incalculable, as are the savings netted in the cost of repair and replacement of CTA vehicles and other property.

Safety Department records indicate that the accident frequency rate for the first eight months of 1981 is even lower, and they are looking forward to having a second consecutive record-breaking year.

As an incentive for safe operation, the Safety Department holds quarterly and annual safety competitions among all bus garages and all rapid transit terminals, in addition to their ongoing vigilance in identifying potential problems and revising safety procedures.

Since 1972, the **CTA Technical Institute** has become internationally recognized as a comprehensive program for studying the operation of a major mass transit system. When CTA pioneered this type of program, it served as an orientation for representatives of government agencies that provided transit funding. It has since been expanded to become an industry-wide education and information exchange program, attracting a broad range of persons from transit newcomers to seasoned veterans. Offered five times per year, this week-long program of seminars and field trips has been attended by over 800 persons from transit properties and related agencies throughout the world.

In recent years **Computerization** has increased the efficiency of CTA operations. The most notable application is the **Vehicle Maintenance System** (VMS). By monitoring preventive maintenance schedules and collecting data at the garage level, the VMS helps CTA determine performance requirements and provide the best bus service at the lowest possible cost. VMS has made buses available for more frequent service, prevented increased maintenance costs, improved safety among garage employees, and provided a better way to justify requests for operating subsidies. VMS is now being installed in Los Angeles, and other transit systems are considering implementation. CTA is also the largest transit industry user of Query By Example (QBE) which gives CTA user departments direct access to the computer on a daily basis as if it were their own personal computer.

The CTA Transportation Department has pioneered the development of an **Assault and Rape Victim Advocate Program,** which provides a sensitive, concerned response in the event that CTA employees or members of their immediate families are victimized. Volunteer women advocates throughout the company have been professionally trained at CTA-sponsored seminars. Within minutes of a victim's request, an advocate arrives to help the victim by engaging in reflective listening, explaining medical and investigative procedures, informing the victim of sources of professional counselling, and escorting the victim home. This sensitive response from another CTA employee helps the victim weather the emotional trauma that often occurs in the aftermath of an act of violence.

All of CTA's 37 **electrical substations** on the rapid transit system now feature modern, 60-cycle, solid state operation. An Engineering Department project began converting substations in 1962, when Princeton substation became the first solid-state rapid transit substation in the United States. Power distribution from the unmanned, automated substations is controlled from the Control Center, and CTA's total electrical conversion capability is now 227 megawatts.

CTA was the first property in the Transit Industry to develop an **Assessment Center** for determining the management potential of its employees, and approximately 100 employees have participated in the program since 1978. By observing these employees in a variety of deliberately structured, job-related situations, CTA discovers those persons who possess management potential

Far left: Pride in a job well done is evident as Frank Wsol, Area Superintendent, Far South, displays quarterly public safety award presented to 77th Street Garage by Tom Boyle (in light suit at left), Manager, Safety Department.

Left: Mayor Jane M. Byrne, Superintendent of Police Richard J. Brzeczek (right), and Assistant Deputy Superintendent Bill Miller (center) inspect the Chicago Transit Security System at the Chicago Police Department Communications Center.

(Photo Courtesy of Mayor's Office)

--job knowledge, communication skills, leadership ability, good judgment, responsible decision making, interpersonal relations skills - - and develops its future managers among its own employees.

CTA's new **Security Training Program** is a direct result of legislation introduced by CTA Chairman Eugene M. Barnes when he was a member of the Illinois General Assembly. The law requires security orientation training for all public transportation operating employees in the areas of assaults on personnel, crimes against passengers, recognition of dangerous behavior, hostage situations, communication, identification of assailants, and employee fear.

The Training/Development Programs section of CTA's Human Resources Department developed the training program. Videotape vignettes of simulated crimes or threatening situations stimulate class discussions and demonstrate proper procedures, and printed instructional materials reinforce the learning process.

CTA's Security Training Program is expected to be the model for similar programs which must be adopted by other operating agencies within Illinois.

Thousands of mobility-limited Chicagoans gained access to transit service when the **CTA Special Services** program began operation this September 21. Twenty new lift-equipped minibuses and three lift-retrofitted 35-foot Flxible buses provide two types of pre-scheduled, door-to-door service - - one time trips and regularly recurring trips. Specially selected employees from the Transportation and Maintenance Departments operate and maintain the vehicles, and Consumer Services Department employees provide rider certification and computerized trip planning and scheduling by telephone. All employees in the Special Services program have received sensitivity and procedural training which enables them to better serve the needs of our mobility-limited riders.

The unique **Chicago Transit Security System,** an electronic surveillance network designed to reduce crime on the rapid transit system, began operation on May 8, 1980, at Chicago Police Headquarters. The pilot program involves four stations on the Englewood/Jackson Park route: 35th Street, 40th and Indiana, 43rd and Indiana, and 55th Street.

At each station, nine closed-circuit television cameras monitor the platforms, stairwells, and ticket agent booths. These are supplemented by push button alarms and emergency telephones. Loudspeakers and microphones provide on-site two-way voice contact.

Monitored at a nine-screen control console at the Chicago Police Department Communications Center, the system scans each station for 11 seconds in continual succession. Emergency alarms or phone calls automatically switch the console monitors to the origin of the distress call.

The Chicago Department of Public Works guided the development of the program. The project's total cost is $1.7 million, funded primarily through the U.S. Urban Mass Transportation Administration and the Illinois Department of Transportation.

CTA realizes its responsibility to the community,, and **community involvement** activities have increased. In the Finance Division, every effort has been made to insure that minority vendors have an equal opportunity to bid on CTA contracts, and much of CTA's banking activity is now conducted through minority-owned institutions.

The Community Relations section meets with community groups to explain CTA service and learn how we can best serve their needs. They also present a CTA slide show and answer questions in Chicago Public School classes. Plans are now being made to adapt this presentation to the school curriculum so teachers throughout the system can present a standardized study unit about CTA and public transportation.

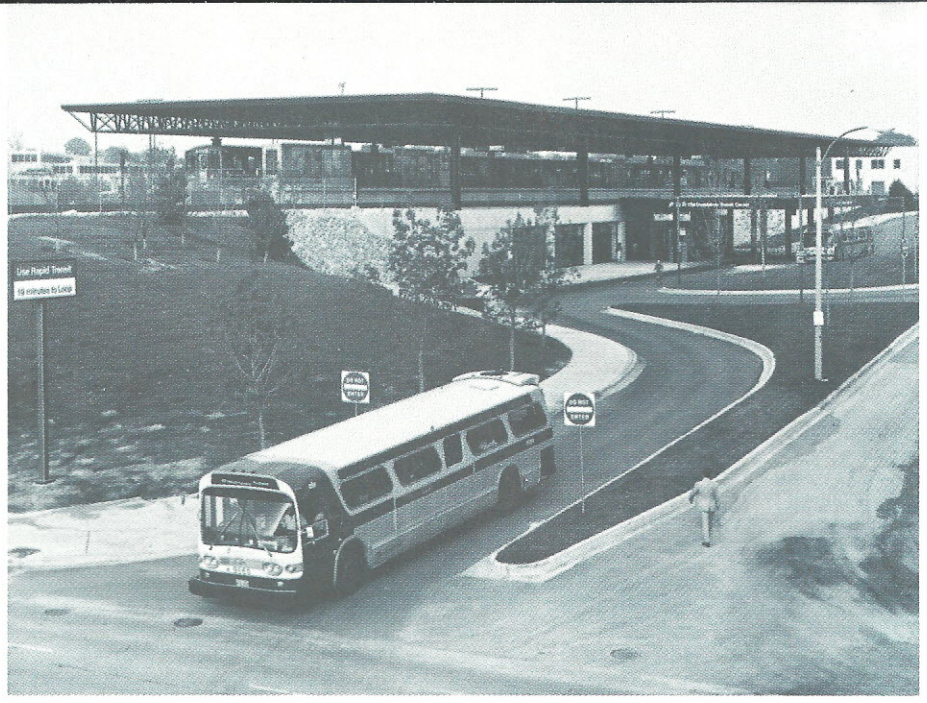
In cooperation with the Boy Scouts of America, employees from the Automotive Vehicle Maintenance Facility volunteered their time, this spring, to teach high school age Explorer Scouts various automotive maintenance techniques. Using scrap materials, and materials donated by CTA suppliers, the Scouts built a quarter-scale working model of an articulated bus and rebuilt or remodelled small utility vehicles used in the shops.

Growing to serve Chicago

The increasing and changing needs of transit riders in Chicago require continuous revitalization and expansion of facilities and equipment. With the assistance of federal and state capital funding, the CTA Engineering and Operations Planning Departments and the City of Chicago, Department of Public Works, are working together to provide more extensive, convenient, cost-effective, and efficient service for the future.

Construction under the supervision of CTA's Engineering Department will soon begin on the new Kedzie Garage on the near west side, replacing a 70-year-old structure that originally served streetcars. The new 332,000 square-foot facility will be a model of environmental concern and energy efficiency, allowing 250 buses to be stored and maintained indoors, protected from our harsh winter weather. Exhaust gasses will be used to preheat air entering the heating system, and a new dimmer lighting system will rely on skylights for primary lighting, while monitoring light levels and activating supplemental electric lighting as needed at various work locations.

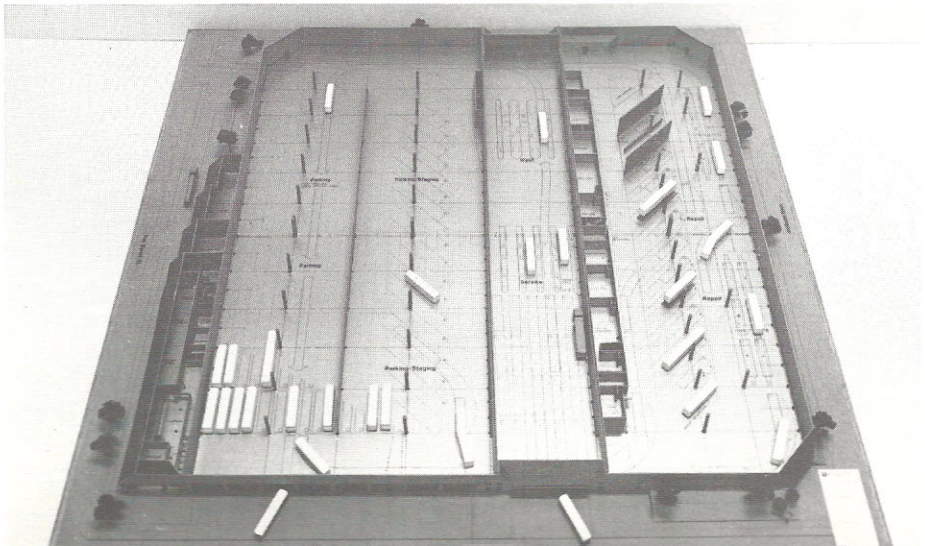
Station renovation is also planned and monitored by the CTA Engineering Department. The new Western Avenue Station on the Ravenswood rapid transit route is being developed as part of the Lincoln Square Mall project in conjunction with the city and the local business community. Other locations that have already been renovated or are now undergoing renovation include: Loyola, Granville, and 47th Street Stations on the Howard-Englewood-Jackson Park route; Cicero Avenue Station and the 15th and 16th Street bridges on the Douglas line; Kedzie Avenue Station and the bridge over the north branch of the Chicago River on the Ravenswood route; 79th Street Station on the Lake-Dan Ryan route; and the Davis Street Station on the Evanston route. All station renovations employ modern construction techniques using brick, steel and glass. Passenger comfort and safety are increased by high visibility design, fluorescent lighting, passenger activated infrared platform heaters, modern fare collection equipment, escalators and elevators.



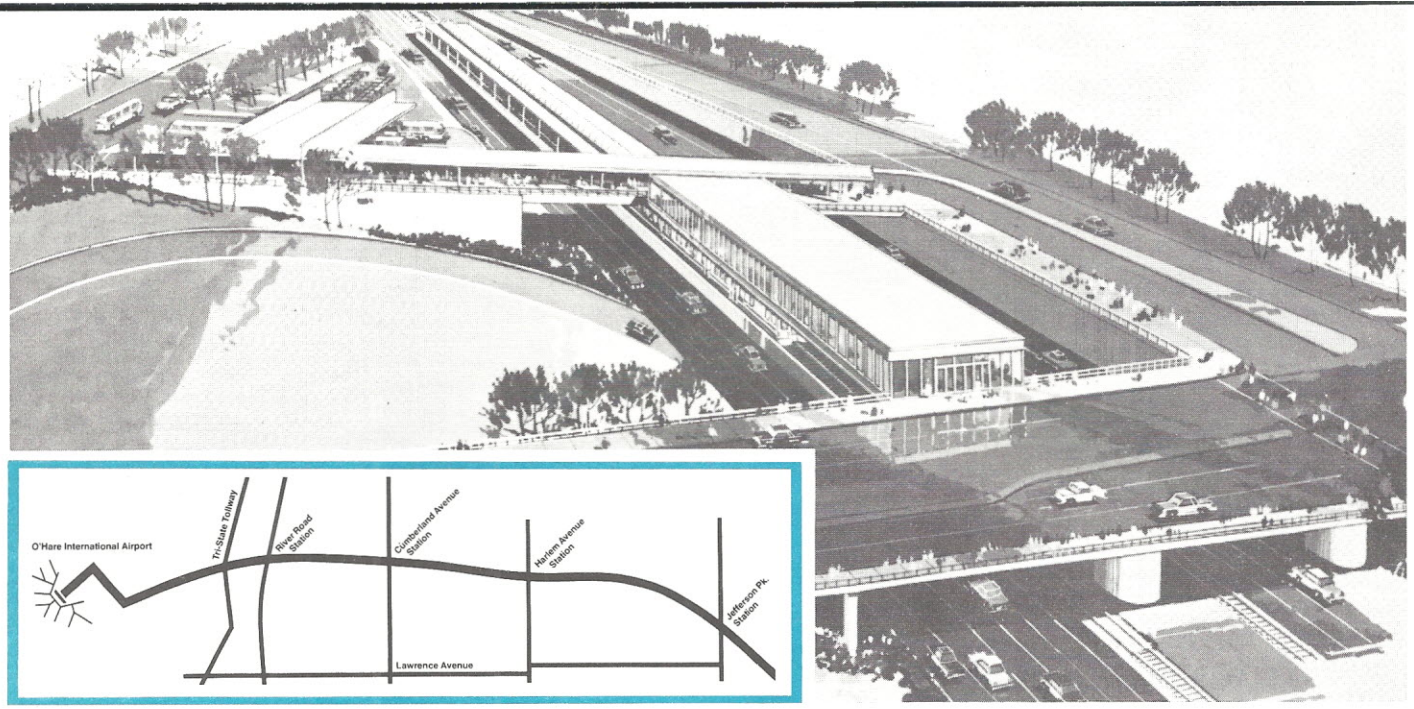
The Chicago Department of Public Works designed the new Desplaines Terminal at the end of the Congress rapid transit line in Forest Park.

In suburban Forest Park at the end of the Congress rapid transit route, the newly rebuilt $5.5 million Desplaines Terminal is now in operation. Designed by the Chicago Department of Public Works, the bi-level terminal features a 425-foot long and 28-foot wide station platform with three 16-foot windbreaks and infrared heaters. Two escalators, stairways, and an elevator lead to the lower level of the concrete, steel and glass terminal building which includes a concession area, a waiting area, and modern fare collection equipment. At ground level, the south entrance serves Greyhound buses and automobile traffic and leads to a 330-car park and ride lot, and the north entrance serves CTA and suburban transit buses.

Air travellers to O'Hare International Airport and workers from the business, industrial, and hotel facilities nearby will soon have a direct rapid transit connection to the entire CTA system. The Chicago Department of Public Works is now building a 7.3-mile, $187.5 million, extension of the Milwaukee rapid transit



CTA's new Kedzie Garage will provide maintenance facilities and storage area for 250 buses in a modern, energy efficient building.



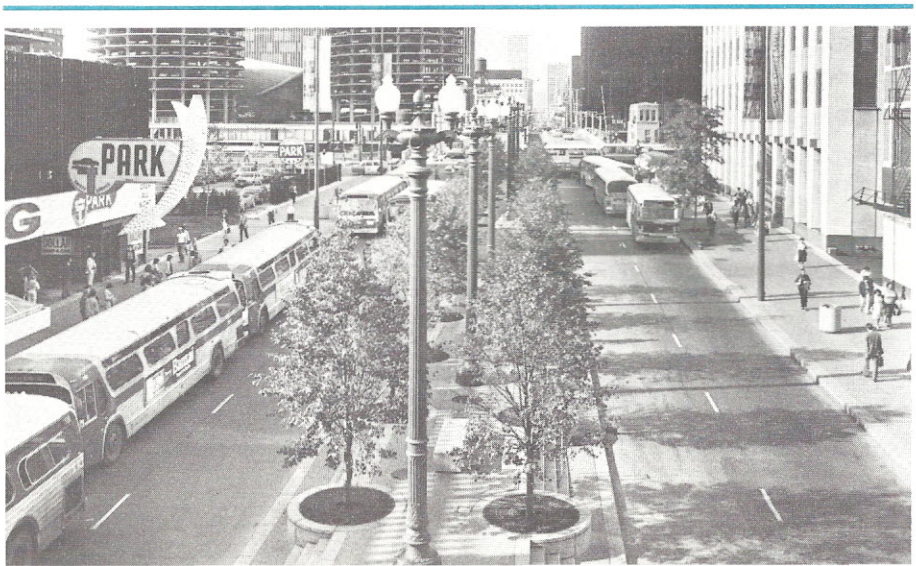
Artist's concept of the new Harlem Avenue Station in the Kennedy Expressway median. The O'Hare Extension, now under construction, will extend rapid transit service 7.3 miles from CTA's Jefferson Park Terminal west to O'Hare International Airport.

route, beginning at the Jefferson Park Terminal in the median of the Kennedy Expressway and ending at a subway terminal under the airport parking garage. In addition to the O'Hare Terminal, three new median stations are being built at Harlem Avenue, Cumberland Road and River Road. When this two-track extension is completed in late 1982 or early 1983, it will provide an 18-mile long rapid transit line from the Dearborn subway of the Milwaukee-Congress-Douglas route in Chicago's Loop to O'Hare International Airport.

CTA and the Department of Public Works have also cooperated in the development of reverse-flow bus lanes on Washington, Madison, and Adams Streets and Jackson Boulevard in the Loop area. Operating against the normal one-way flow of traffic, in exclusive curb-side lanes, CTA buses now provide quicker and more reliable east-west service between Michigan Avenue and the Union and North Western commuter railroad stations.

Similarly, in 1979, these same cooperative efforts brought about the construction and operation of the State Street Transit Mall, where CTA buses operate exclusively, northbound and southbound, between Wacker Drive and Congress Parkway. Service has been improved, especially during rush hours, and the widened sidewalks, attractive landscaping, and canopied bus stops transformed State Street into a pleasant shopping mall. Construction will soon begin at the Jackson/Adams Station of the State Street Subway to provide access for elderly and handicapped riders by means of an elevator from street level to the platform. In addition, CTA and the Department of Public Works are now planning a renovation project for all the State Street and Dearborn Street Subway stations.

The CTA Engineering Department is also responsible for designing new equipment and vehicles, supervising the manufacture or modification of equipment and vehicles, and insuring that new equipment and vehicles perform in accordance with CTA's specifications before the equipment is put into service.



Reverse flow bus lanes (above) and the State Street Mall (left) have greatly improved bus service in the Loop.

History

The American Public Transit Association and its predecessor organizations have been working to improve public transportation in the United States and Canada for almost 100 years. Common problems involving the operation of horse-drawn cars and the advent of cable cars were the focus of industry attention when the association was formed in 1882 as the American Street Railway Association.

The introduction of electric streetcars and interurban railways around the turn of the century led to expansion of the organization as the American Street and Interurban Railway Association, which soon became the American Electric Railway Association. The heyday of traction brought increased emphasis on research and development, information exchange, and legislative action in promoting the needs of the industry.

As urban motor bus and trolley coach operations began to change the face of public transportation in the 1920's and '30's, the representative of surface transit evolved into the American Transit Association, while the Institute for Rapid Transit developed as the organization for subway and elevated transit systems. The merger of these two groups in 1974 created the American Public Transit Association that is now the voice of public transit in the United States.

The following Chicago transit executives served as chairmen of APTA or as presidents of one of its predecessor organizations:

James J. McDonough, chairman, CTA; chairman, APTA, 1976-79.

George L. DeMent, chairman, CTA; president, IRT, 1965-68, ATA, 1970-71.

Walter J. McCarter, general manager, CTA; president, IRT, 1961-65.

Guy A. Richardson, president, Chicago Surface Lines; president, AERA, 1931-32.

Britton I. Budd, president, Chicago Rapid Transit Co.; president, AERA, 1923-24.

John M. Roach, president, Chicago Union Traction Co.; president, ASRA, 1899-1900.

Charles B. Holmes, president, Chicago City Railway Co.; president, ASRA, 1887-1888.

Working together

Chicago Transit Authority personnel and their forebears have taken a leading role in the activities of the American Public Transit Association and its predecessor organizations almost from their inception nearly a century ago.

In 1887-88, Charles B. Holmes, then President of the Chicago City Railway Co., became President of the American Street Railway Association, the fledgling organization of transit systems that had been founded barely four years earlier.

From members' initial concern with the price of oats for their horses and the advent of cable cars, the association has continued to seek solutions to current transit problems, right down to the present-day headache of handling dollar bill collections.

Today, more than two dozen CTA people serve on APTA committees and subcommittees, including Chairman Eugene M. Barnes, who is APTA's Vice President for Government Affairs and a member of its Program Committee. All are lending their expertise to programs aimed at helping the industry meet the needs of public transportation in the 1980's.

APTA in turn serves the industry as well as the riding public by supporting research and development projects sponsored by the Urban Mass Transportation Administration. Through its committees, APTA provides UMTA with the experienced personnel needed to insure that the projects receive the industry's most advanced thinking.

"We support the work of UMTA-funded contractors by overseeing their work, rather than engaging in the actual research itself," said Frank Cihak, APTA Director of Technology and Research Services, who formerly was CTA's chief equipment engineer and Director of Technical Services in the Maintenance Department.

"At present we have seven contracts with UMTA, ranging from safety to equipment standardization and design practices. Three of the contracts are in the area of technological matters relating to equipment and operations.

"Altogether, we have 260 transit industry people on 38 liaison boards with UMTA and the Transportation Systems Center, --another part of the U.S. Department of Transportation -- all supporting UMTA activities."

APTA committees also provide the basis for programs at regional and annual meetings, and fulfill their individual committee functions throughout the year. One of these functions is to resolve joint

After the crippling blizzard of '79, the APTA Snow Task Force visited Chicago. Shown at Skokie Shop, examining rapid transit car electric motor armatures, are: CTA General Operations Manager Harold H. Geissenheimer; C. A. Waelde, MBTA, Boston; Thomas A. Whibbs, Toronto Transit Commission, task force chairman; and former CTA Executive Director George Krambles.

The first-place winner in CTA's first Bus Roadeo, held this summer, was bus operator Martin Troglia. Congratulating Troglia and wishing him good luck in the APTA International Bus Roadeo, are (left to right): CTA Transportation Manager James Blaa, Troglia, CTA Executive Director Theodore G. Schuster, General Operations Manager Harold H. Geissenheimer, and CTA Chairman Eugene M. Barnes.

problems that might arise among the member properties.

The crippling Chicago snowstorms of January, 1979, which were accompanied by continuously subfreezing temperatures, led to the establishment of a Snow Task Force to gather information from all affected systems about common operating problems and to seek solutions.

One of the results of the task force's action was the Snow Removal Vehicle (S 500) that the CTA took delivery on in the spring of 1981 for use in future snow emergencies on its rapid transit routes.

Another specialized APTA-sponsored group was the Revenue Collection Task Force, which was organized to attack the problems of dollar bill collection on transit vehicles. Harold H. Geissenheimer, CTA General Operations Manager, is chairman of the task force, which was formed in September, 1981.

Besides committees and task forces, communication among APTA members is also maintained through the peer group review process. This is basically an interchange of visits among the personnel of different properties where the expertise of one company may be of particular value to the other.

"The peer group review," Geissenheimer said, "is a good example of interagency cooperation. It allows a new system to call upon the expertise of management and technical people from another system, and perhaps to avoid making costly errors. It represents industry helping itself."

The CTA recently sent such a group to Los Angeles, where a new rapid transit system is being developed. Special services for the disabled was the subject of another review that was held in Chicago in 1980.

Twenty-seven persons affiliated with the Chicago Transit Authority serve on various committees and subcommittees of the American Public Transit Association.

Eugene M. Barnes, CTA Chairman, APTA Vice President for Government Affairs, member of program committee.
James P. Gallagher, CTA Board Member, member of legislative committee.
Joby Berman, Administrator to the Administrative Joint Commission on the Chicago Transit Authority, member of policy and planning committee, member of elderly and handicapped transportation subcommittee of the government affairs committee.
Harold H. Geissenheimer, General Operations Manager, member and past chairman of bus operations committee, rail operations committee, chairman of transit advertising standardization subcommittee of the special services committee.
C. W. Baxa, Public Affairs Manager, member of the international bus roadeo committee.
S. M. Bianchi, Risk Management Manager, chairman of the risk management committee.
Harold Hirsch, Operations Planning Manager, chairman of service planning and scheduling subcommittee of the bus operations committee, past chairman of the schedule committee.
John Hogan, Datacenter Manager, chairman of the management systems committee.
Fred G. King, Human Resources Manager, member of the minority affairs committee.
Raleigh Mathis, Security Manager, member of the transit security steering committee.
Thomas L. Wolgemuth, Maintenance Manager, member of management subcommittee of the operations committee.
Frank Johnson, Training/Development Programs Director, member of the training and development committee.
J. R. Pankonen, Vehicle Maintenance Director, member of the car equipment committee.
Harold Reddrick, Transportation Personnel Director, member of the bus operations committee.
James Stewart, Equipment Engineering Director, member of the car equipment committee.
Ronald O. Swindell, Signal and Communications Design Director, member of the communications committee.
Edward Tobin, Procurement Director, member of the purchases and materials management committee.
C. L. Wiksten, Plant Maintenance Director, member of equipment subcommittee of the ways and structures committee.
Kendrick Bisset, Signal Design Superintendent, member of signals subcommittee #1 of the power, signals, and communications committee.
Elonzo Hill, Training Center Superintendent, member of the international bus roadeo committee.
Paul Kadowaki, Bus Instruction Superintendent, member of the international bus roadeo committee.
Walter R. Keevil, Electrical Vehicle Design Superintendent, member of noise and vibration subcommittee of the ways and structures committee.
Walter Moore, Power Distribution Group Superintendent, member of power subcommittee of the power, signals, and communications committee.
Joseph Siegel, Power and Wiring Superintendent, member of the power, signals, and communications committee, vice chairman of its power subcommittee, and member of its high resistant fault subcommittee.
Roy T. Smith, Civil Engineering Superintendent, member of the ways and structures committee, member of its track construction and maintenance subcommittee.
Frank Venezia, Bus Shops Superintendent, member of the mechanical committee, bus technology committee, elderly and handicapped transportation subcommittee of the government affairs committee, past chairman of the equipment committee.
Donald Walsh, Electrical Testing Supervisor, member of electrolysis subcommittee of the power, signals, and communications committee.

Visit cta while you're in Chicago

During the 1981 APTA Convention, we hope that you will visit CTA and meet some of the dedicated employees who keep our system running. APTA has arranged tours from 2 p.m. to 5 p.m. on Friday, October 9, of the CTA facilities that are highlighted on the following pages, as shown in the convention schedule.

You can also step back in time and ride buses from our historical collection, which will be displayed during the convention and occasionally used for shuttle service. Our historic rapid transit cars will be displayed, along with our newest 2600 series rapid transit cars and our rapid transit snow removal equipment, on Saturday, October 10, from 11 a.m. until 2 p.m., at the Madison/Wells Station on the Loop 'L'.

Vehicles from our historical collection are shown at the bottom of the following pages, and our newest vehicles are shown on the back cover.

3407

Twenty identical Model 798 buses were built by the White Motor Company in Cleveland, Ohio, for the Chicago Surface Lines, in 1944. Following World War II, additional buses of this type were purchased, without the fluted side design of the first 20. 3407 has been repainted in Chicago Surface Lines livery and is presently used in training and instructional activities.

Control Center

A fire breaks out in the 3400 block of Chicago Avenue and traffic must be blocked off. A young woman has her purse snatched on a westbound Lake Street elevated train. Carrying a full load of passengers, a southbound Michigan Avenue bus breaks down during the morning rush hour. And almost at the same time an automobile, northbound on Ashland, runs a red light, colliding with an eastbound Diversey bus.

Occurrences such as these are part of the everyday scenario of a transit company. The problems that can be created -- by weather, human behavior, equipment malfunctioning -- may sometimes be averted. But when they can't be averted, they must be coped with.

For the CTA this means being prepared, using today's technology to the fullest, recognizing that the key to coping is a continuously operating communications network.

This is the job of the Control Center.

Traffic supervisors, whether surface or rapid transit, are the CTA's first line of defense for handling delays -- no matter what the cause. But they must first be alerted to the emergency with accurate facts and then given the necessary directions and backup so that their effectiveness is maximized, their actions not wasted motion, their efforts not duplicated.

This is the job of the Control Center.

Should power on the third rail be interrupted, instructions may have to be given to Power Controllers. Power may have to be shut down. Perhaps feeder cables will need to be disconnected. Depending on the exact nature of the problem, a broad range of decisions will have to be made, appropriate instructions given and followed through.

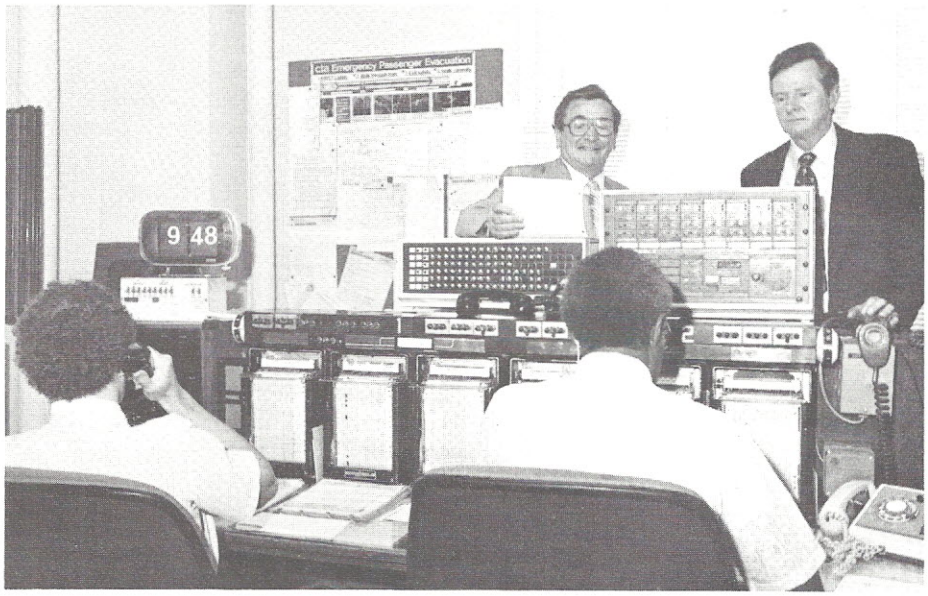
This is the job of the Control Center.

An unexpected blizzard may be moving swiftly towards the city. Emergency weather bulletins could be phoned in to bus garages and rail terminals, but what about the operator on the street? With one two-way radio call to the Control Center, he or she can pinpoint the location of the snowbound vehicle, secure the necessary help, be provided with instructions as to what to do while waiting for help, and -- perhaps most important of all -- have the feeling of not being stranded in the predicament.

Regardless of the situation, for all of the needed emergency facilities -- whether persons, power, or equipment -- to work effectively, they must be coordinated. And this is the heart of the matter. For doing this means maintaining an information net-

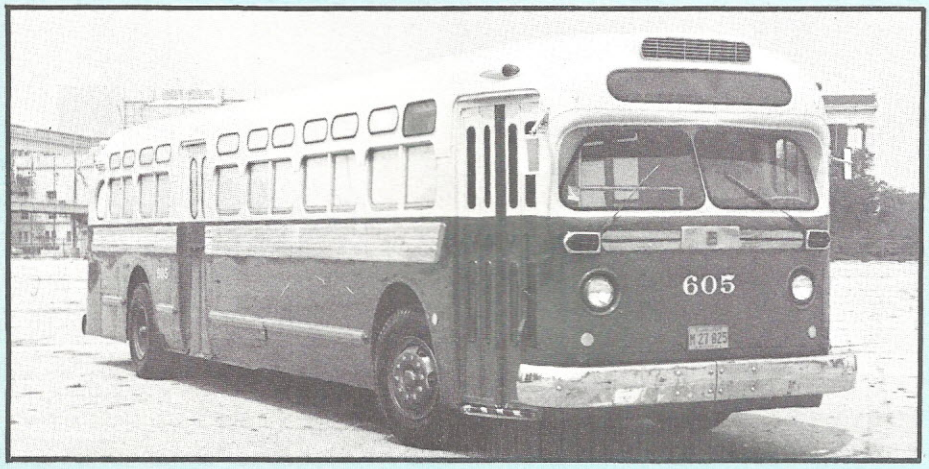
Above: Bus controllers at work in CTA's remodelled Control Center.

Right: Transportation Manager James Blaa (left) and Director of Service Michael LaVelle observe rail controllers during the morning rush hour.



work through two-way radios, platform speakers, intercom systems, telephones. It means receiving and transmitting information. It means determining the priority order in which problems will be handled, mindful that when service is maintained or restored, passenger needs are well served.

This is the job of the Control Center, and it is performed in an excellent, professional manner.



605

Among the buses acquired by CTA in its 1952 purchase of the Chicago Motor Coach Company were 100 General Motors TDH-5103's, built in 1950 and numbered 601-700. In 1970, bus 605 was removed from revenue service for use as a training bus. It has now been repainted in its original Chicago Motor Coach livery and is used as a support vehicle at special events.

Automotive Vehicle Maintenance Facilty

The H-shaped design of the CTA's sprawling Automotive Vehicle Maintenance Facility, located on the south side of Chicago, is an important factor in its being one of the best maintenance facilities of any transit property in the United States. For this unique design allows the never-ending job of automotive vehicle maintenance to be carried out in a compacted space that uses the CTA's land area to maximum effectiveness, with every department within the facility being no more than one-fourth of a block from the central point or hub of the building.

It is this kind of imaginative thinking, planning and--most important--doing, that characterizes the manner in which South Shops is operated by its managers and staffed by its craftspersons and workers. And it has led to a working innovation that has helped alleviate a problem that has plagued the entire transit industry.

The problem? The never-ending necessity for engine rebuilding. The solution? An engine assembly line.

Prior to October, 1980--and in common with other transit properties throughout the country--one craftsperson would be assigned the task of rebuilding one engine. Depending on the nature of the problem, this might take from 65 to 85 hours. However, if for some unforeseen reason that craftsperson was absent for a period of time, such as a day's illness, the engine would simply "sit." Now all that has changed.

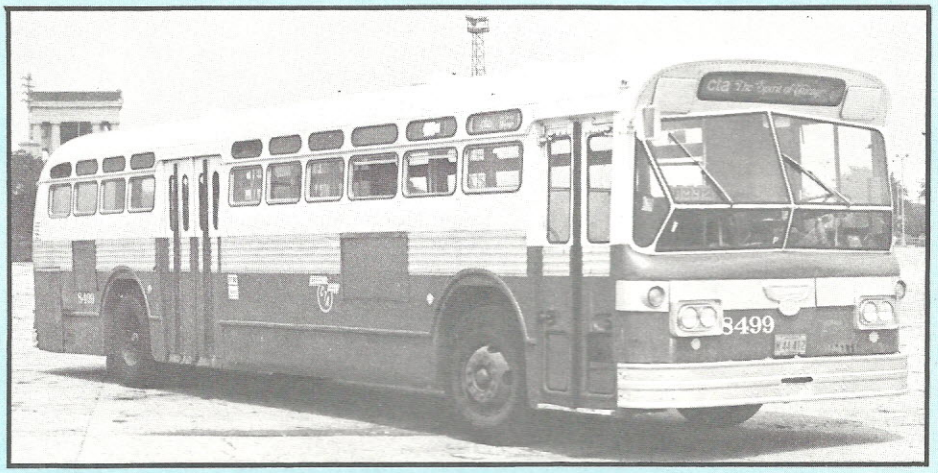
The CTA's Automotive Vehicle Maintenance Facility has created an assembly line system made up of six 4-hour stations with each station being responsible for approximately one-sixth of the total job. Every four hours the engine moves up on a wheeled carrier to a different station. Should a problem arise in the repair of a particular engine, that engine is temporarily put aside and another moves into its place. The line does not stop. In this way, South Shops is able to rebuild two engines a day, 10 a week. Before putting in the assembly line, five engines per week was the quota.

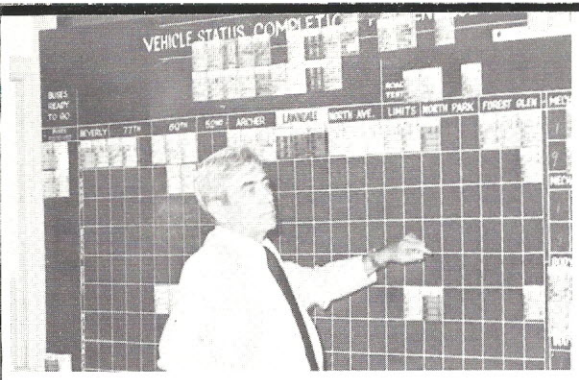
While every automotive repair requirement is not adaptable to the assembly-line technique, all automotive vehicle maintenance work--before, during, and after--is continuously examined from a time and motion perspective that enables the men and women involved to get the job done in the best possible way, in the least possible time, and with the greatest sense of personal accomplishment.

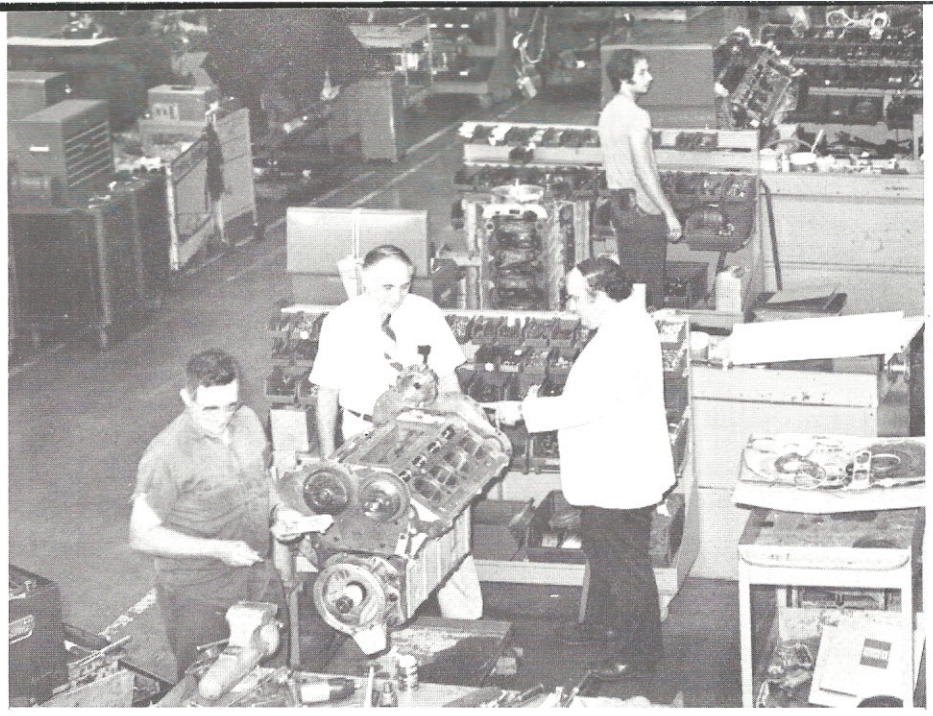
Put all of this together and it adds up to a facility that is capable of handling 30 major bus repairs in the H building. Should the need arise, another 17 major bus repairs can be added to this figure by also using the original building. At the same time, they have the capacity for completing 14 engine repairs as well as 14 brake jobs. And just for good

8499

Delivered in 1960, this bus is a cross between two distinct bus designs, combining the body of a standard 40-foot CTA propane bus of the 1950's and the Flxible 'NEW LOOK' front end. Some of the features tested on this bus were later used in the design of Flxible 'NEW LOOK' buses. 8499 became a part of CTA's historical collection in 1974, and is still used in regular service.





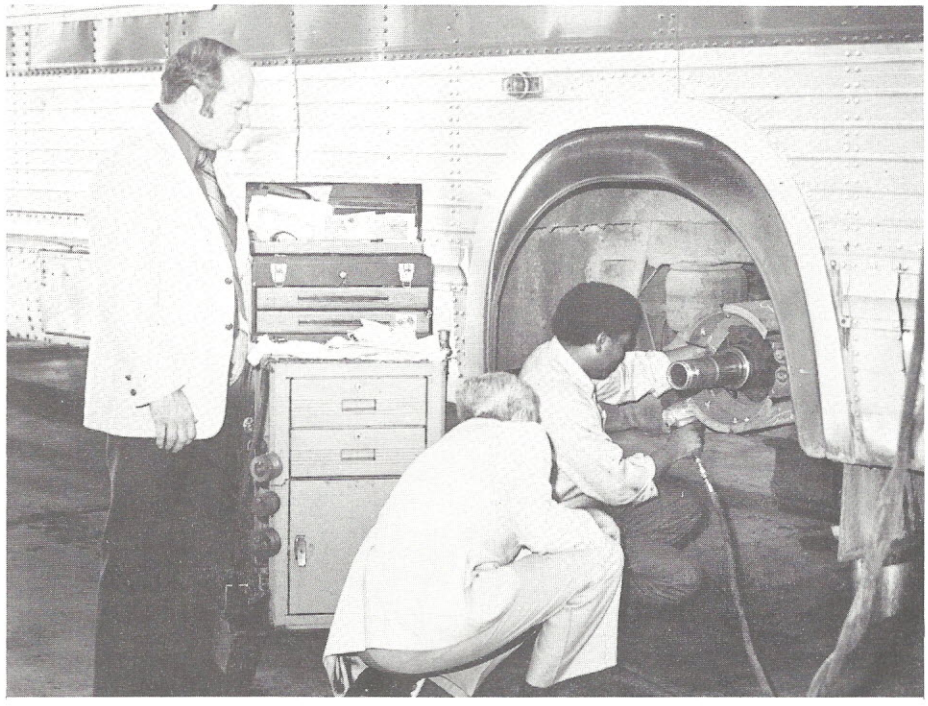


Left, above: "Mother Bus" Mobile Repair Unit, a retired Flxible bus that was modified at South Shops, stands by at special events like Chicago Bears football games or ChicagoFest. With supplies of diesel fuel, torque fluid, and engine oil, and a crew of maintenance workers, it can handle minor maintenance problems encountered by buses that have been operating in extended service.

Above: Dick Schneider, Area Superintendent, Automotive Vehicle Maintenance, monitors work in progress at South Shops.

Right top: Frank Venezia, Superintendent, Bus Shops (right, foreground) and Unit Supervisor Nick Simonetti inspect work being performed on the new assembly line in the Engine Rebuild Section.

Right: Terry McGuigan, Superintendent, Bus Garages, and Area Superintendent Dick Schneider inspect brake job being performed by Andy Shaw, Jr.



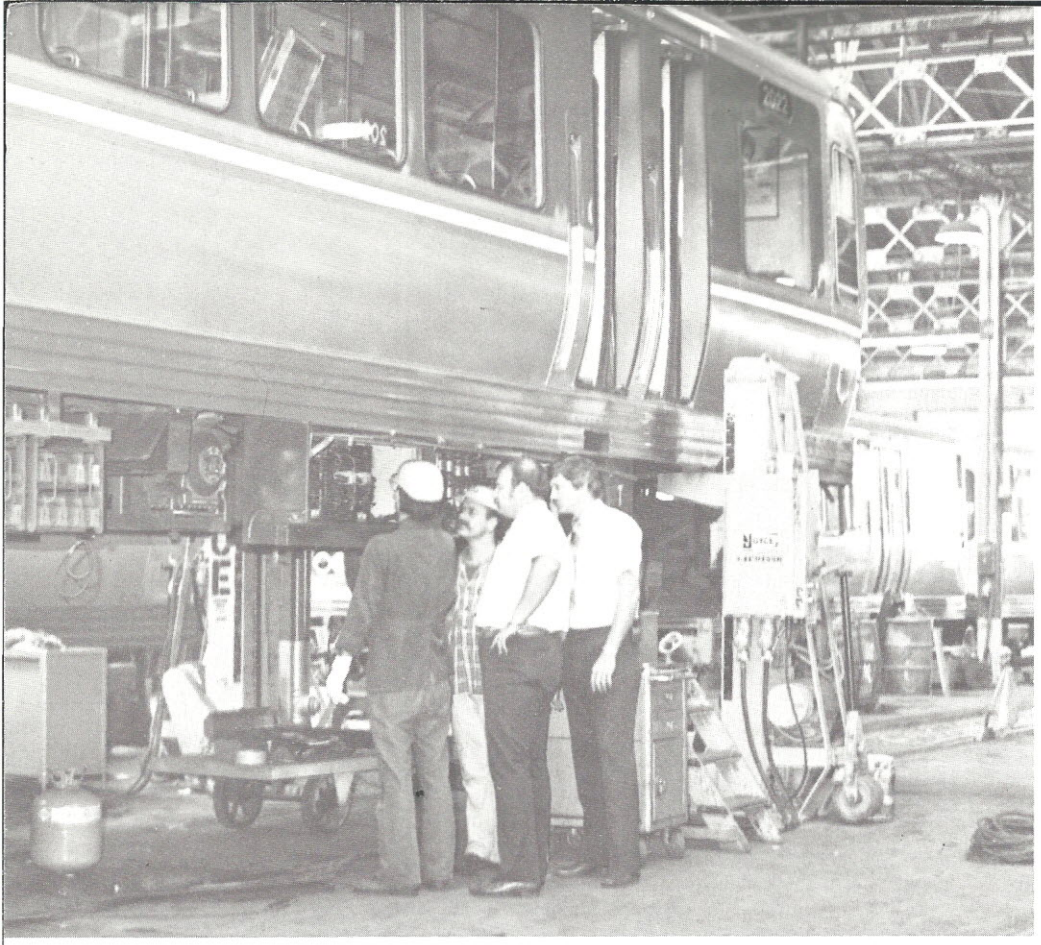
measure, by staggering the jobs from priming to spray booth, they'll also be painting nine buses.

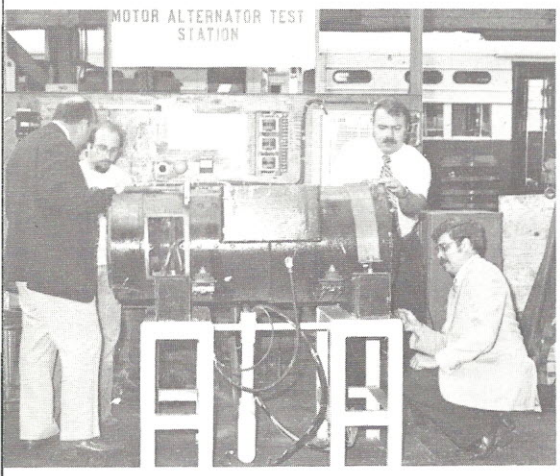
Add it up. It makes an impressive total--84 major jobs going on simultaneously! Automotive vehicle maintenance work being run by professionals, done by professionals.

This first-class Automotive Vehicle Maintenance Facility is one of the principal reasons why CTA operates one of the best bus systems in the country.

301

This bus was one of 150 buses built by General Motors and delivered to CTA in 1962-1963. One hundred and fifty similar propane buses were built by Flxible. These buses were part of a CTA program which studied the merits of diesel versus propane fuel. The 300's originally were painted with an all-green front end. Later, cream or white was added to increase visibility. Upon future retirement, it will be placed in CTA's historical collection.





Rail Vehicle Maintenance Facility

A casual glance at the outside of a seemingly outdated structure would not prepare an observer entering the building for the dramatic scene of a two-car rapid transit train suspended in the air on giant car body jacks. Yesterday's building--today's technology. It suggests a contradiction--but not to the Skokie Shop managers, with their innovative working philosophy. If a rail vehicle maintenance need exists, but the way to meet it presently does not, they will simply create it!

This is the kind of "thinking in action" that led to the development by Skokie Shop craftsmen

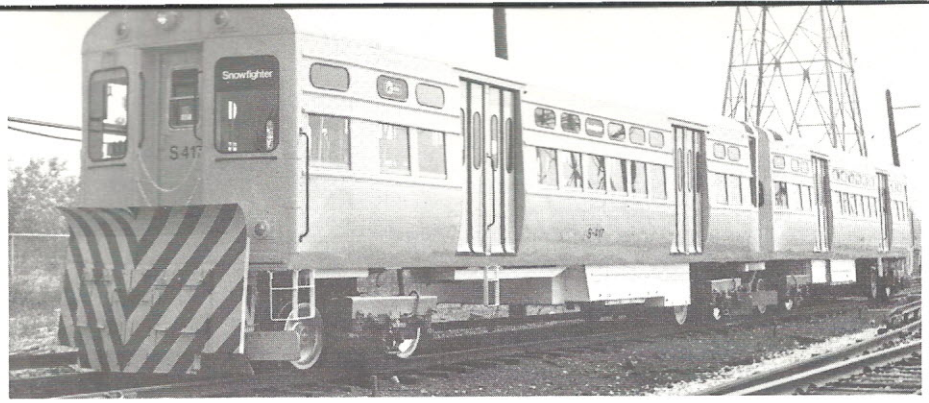
Top left: Inspecting electrical equipment under 1964 vintage, 2000 series rapid-transit car which had recently been repainted at Skokie Shop.

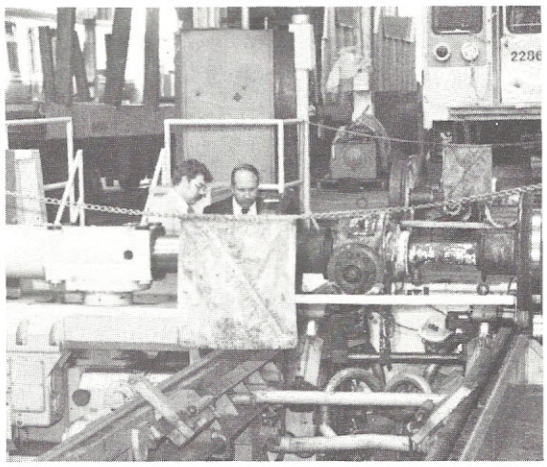
Far left: Preparing to operate new motor alternator test station are (from left): James Pankonen, Director, Vehicle Maintenance; Angelo De Angelis, electrical worker; George Haenisch, Superintendent, Rail Shop; and John Hruby, Area Superintendent, Methods & Standards.

Left: Bob Flowers, Area Superintendent, Rail Vehicle Maintenance, observes as Shopman Rudy Chucan and Rail Shop Superintendent George Haenisch build a current collector beam assembly for a 2200 series rapid transit car.

3542

Bus 3542 was part of a 200-vehicle order built by Flxible and delivered to CTA during 1966-67. They replaced former Chicago Motor Coach Company buses operating out of the Archer and 52nd Garages. 3542 remains in revenue service, but, upon future retirement, will be placed in CTA's historical collection.





Top: One of six, two-car "Snowfighter" trains modified for snow removal use by Skokie Shop.

Above: Wheels on rebuilt rapid transit car axle assembly being cut on Hegenscheidt wheel truing machine. This unit can also true wheels while they are still in place on rapid transit cars.

of an innovative motor alternator test stand. This device gives the CTA the flexibility of testing the operational mode of a motor alternator without having to take the equipment completely apart and then reassembling it. Even the vendor from whom CTA purchases the equipment did not have the capacity for doing this.

The same "we think we can do it" approach resulted in another unique test stand. The purpose of this one was to permit Skokie Shop to bench test the air conditioning unit installed in our 2400 series rapid transit cars after these units have been rebuilt or repaired. Weighing about 1,000 pounds each (and there is one installed in each car of the train), a single unit has a cooling capacity equal to the air conditioning of three average Chicago-area homes! Keeping them operating efficiently is a giant task. Using these test stands, they are able to determine that a unit is working properly before reinstalling it in a rapid transit car.

At the other end of the weather spectrum, Skokie Shop has been responsible for converting twelve 6000-series revenue cars into six Snowfighter trains. The six two-car trains can be dispersed to serve all of our rapid transit routes, or they can be combined into a few longer trains to combat heavy sleet accumulations in specific areas. Each train is equipped with large snow plows, chemical de-icing equipment, and extra third rail sleet scrapers. In modifying these trains for Chicago-snow use, the Shop also moved many of the electrical components that could be affected by snow up into the cars. How's that for preventive maintenance! Like everything they do, this equipment was subjected to rigid testing before being put into use. In fact, Skokie Shop has its own test track.

This test track is not simply a "leftover" that is occasionally used for some training purpose. It is an integral part of the Skokie Shop operation. Anything that is repaired, rebuilt, or modified on a rail vehicle must be taken out on the test track and operated satisfactorily, guaranteeing that it is functionally sound and meets CTA standards. If it does not, it is returned to the Shop for additional work.

Skokie Shop is also the repairman's repairman. For many repairs to CTA rail vehicles are done using unit exchange items repaired or rebuilt by Skokie Shop. When some part of a rail vehicle seems to malfunction or begins to wear, the defective unit may be taken out and a new unit may be installed simply and easily. This precludes the terminal repairman spending time on looking for a worn bolt or trying to determine which wire is the short-circuiting culprit. He or she simply replaces the unit. It's an immediate and cost-efficient process that enables many repairs to be made on the spot, without disrupting passenger service. It is easy to understand why Skokie Shop is the main support body for the CTA rail operation.

Car 1

Car 1 was delivered to the Chicago & South Side Rapid Transit in 1892 as a trailer to be hauled by steam locomotives over Chicago's first rapid transit line. It was later converted to electric multiple-unit operation by Frank J. Sprague and remained in service until 1930. It is now a part of CTA's historical collection.

Plant Maintenance Facility

Carrying a massive crane headed for the Louisiana oil fields, an Illinois Central Gulf train set in motion a chain of events that would momentarily focus on the work of a CTA department that is spotlighted only infrequently--the Plant Maintenance Facility. For when the crane collided with the CTA structure at 15th Street--tearing up track and structure and damaging a CTA train--the radio call that went out brought plant maintenance personnel to the scene to determine the damage, clean up the mess, and help get that section of the CTA back in operation as quickly and safely as possible.

Having direct responsibility for track and structure and, therefore, most immediately involved in this accident, was the Power and Way section of Plant Maintenance. As the section name might suggest, they are also responsible for the maintenance of the electrical power without which no CTA train would run. When the crane hit the structure, the section's "third rail men" concentrated their efforts on electrical power problems, while other Power and Way personnel stabilized the damaged structure with an invention of their own. This steel telescoping "pogo stick" was created by Plant Maintenance, working in cooperation with the CTA's Engineering Department. It has the capability of supporting open deck structure whenever and wherever such support is required. This unique innovation has, in fact, been adopted for use by outside construction companies.

"Clean up the mess"--if that conjures up a picture of janitorial service, you're partly right. For this would be one of the hundreds of jobs performed by persons working in the Buildings and Grounds section. Depending upon the unit involved--General Maintenance, Electrical/Mechanical, Rail Janitor--name the job and you'll probably find someone in this section performing it. For they run the gamut from cutting the grass on the grounds of bus garages to maintaining 13,000 bus stop signs, 600 bus shelters, and all of CTA's escalators.

This latter function is unique. Traditionally, escalator maintenance had been a service performed by an outside contractor. But when the CTA assumed its own maintenance, including training its personnel to perform the job, the number of escalators out of service per day dropped from 42 per cent to approximately four per cent!

Providing the technical support relating to plant maintenance activities as well as acting as liaison between the CTA and various regulatory agencies of Chicago and Illinois, is the section that completes the Plant Maintenance trio--Technical Services. The 15th Street incident may have challenged this section's expertise, but it certainly didn't faze it. And the talents of its staff were quickly directed to helping put the damaged section of the CTA back in operation.

Plant Maintenance sums up its role in the CTA with, "If it's CTA property and it doesn't move, what happens to it is our job." They're right. From fabricating frogs to scrubbing graffiti from walls, the management and staff of the Plant Maintenance Facility are responsible for all of the CTA's fixed facilities.

Top: Plant Maintenance workers install a new 15-ton, 72-foot steel girder on the elevated structure at 15th Street, replacing a girder that had been damaged by an oversize load of a freight train passing below.

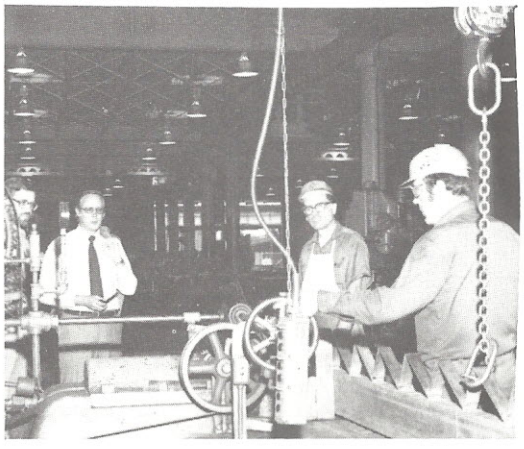
Bottom left: Inspecting the fabrication of an equilateral turnout in the Plant Maintenance Shop are (left to right): Thomas Wolgemuth, Manager, Maintenance; Paul Swanson, Superintendent, Plant Technical Service; Len Wiksten, Director, Plant Maintenance; Walter Hallford, Superintendent, Buildings & Grounds; and Walter Gaedtke, Superintendent, Power & Way.

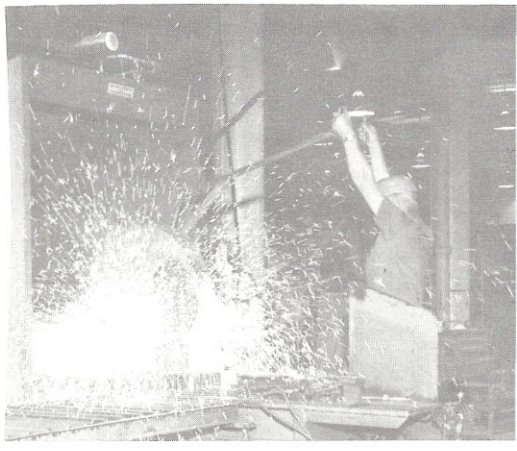
Bottom middle: Shopmen Ivan Maros and Neal Zoko straighten a stairway stringer.

Bottom right: Assistant Foreman Frank Montefalco cutting rail with a rotary power saw.

4271–4272

These two rapid transit cars were part of a 205-car order delivered to Chicago between 1923 and 1925. 4000-series cars saw service on all parts of the rapid transit system, and they inaugurated subway operations in 1943 when the State Street Subway opened. 4271-4272 were retired from regular service in 1973 and are now used only for charter service.



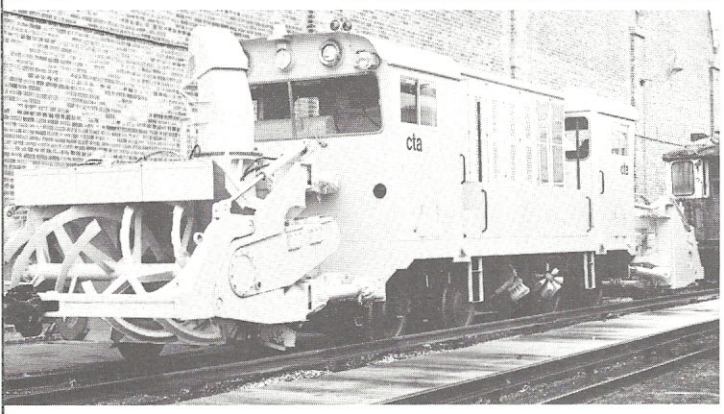


6101–6102

These cars were part of a 130-car order delivered to CTA by the St. Louis Car Co. in 1950. Their light weight alloy construction utilized PCC technology first developed for streetcars in the 1930's. By 1981, only cars 6101-6102 retained their original dual headlights. Now designated as CTA's Rail Safety Train, and repainted in their original color scheme, they are still used in regular service on the Ravenswood route.

Our newest additions

Rapid transit cars 2601-2602 (right) are the first of 300 cars being built for CTA by The Budd Company. Delivery will be completed in early 1984. Our 'Big Bend' articulated buses (below) have proven successful, and an additional 125 are on order for 1982 delivery from M.A.N. Bus & Truck Corp., Southfield, Michigan.



Lift-equipped mini-buses (above) provide service for mobility-limited riders in CTA's new Special Services program. Our new diesel-powered Snow Remover Vehicle (left), built by Niigata Engineering Company, Japan, will keep rail rights-of-way clear of excessive snow accumulation. A snow thrower at each end is capable of removing up to 1500 tons of snow per hour and casting it up to 100 feet away. Rotating brooms on each side clear snow from the third rail.

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