



# DEDICATION CHICAGO KENNEDY RAPID TRANSIT

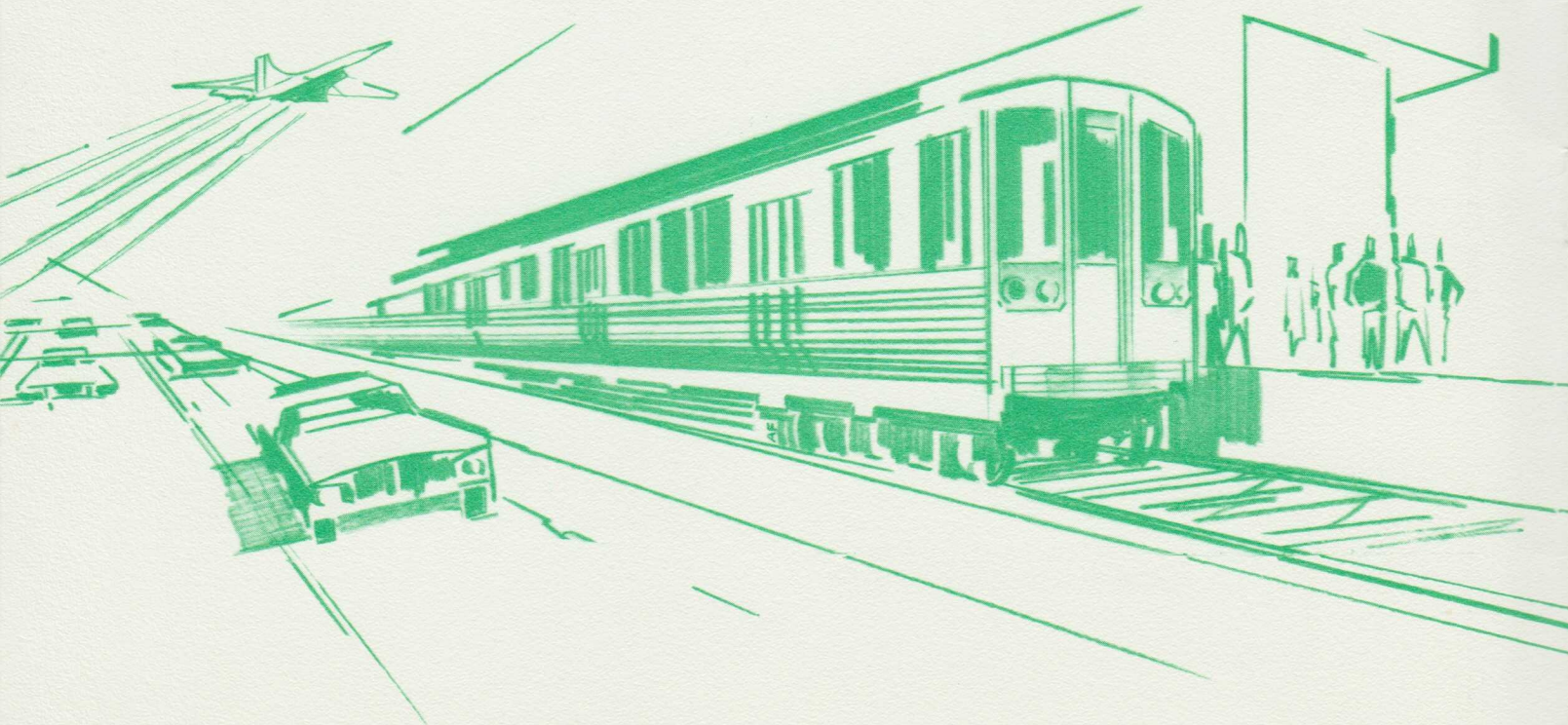
January 30, 1970



A NEW DIMENSION IN



SUBWAY







Less than ten years ago, the Northwest Expressway was opened to traffic. The event brought new flexibility of movement to and through the northwest sector of the city and provided a vital transportation link between the heart of the city and O'Hare International Airport.

Through the eventful decade since 1960, this magnificent highway, renamed the John F. Kennedy Expressway in memory of our great martyred President, has continued to serve well under constantly increasing traffic loads. It has contributed greatly to the continued growth and vitality of the central business district and introduced new economic opportunities for thousands of Chicagoans.

Today, a new dimension of transportation is being opened in this great corridor. The Kennedy Rapid Transit extension is the third electric railway service to utilize right-of-way in the median of a modern expressway. Other cities are adopting the Chicago innovation of designing expressways to incorporate rapid transit facilities, but at present, Chicago has the only three in the nation. The West Side Subway extension in the Eisenhower Expressway was the first, opened in 1958. On September 26, 1969, the city dedicated the ten mile line in the Dan Ryan Expressway, and today the city dedicates the Kennedy Line which extends the service of the west-northwest rapid transit line from the old terminal at Logan Square a distance of 5.2 miles to a new terminal at Jefferson Park.

With connections to CTA and suburban bus routes and commuter trains, the Kennedy extension will expand the comfort, convenience and economy of rapid transit service to areas of the city and surrounding communities not previously served. Thanks to the foresight of our planners and engineers in planning to meet the future needs of the city, this great improvement has been accomplished with speed and economy, and will lend itself to further extension and expansion in the future.

In a sense, the future built into the original design of the Kennedy Expressway is here today, and the present facilities prepare the way for further extension to meet the needs of the years ahead.

Because of Chicago's historic development as a transportation center, the people of the city and county enjoy a well-balanced system of diversified transportation that is the envy of other great cities of the world. The cost of this leadership is constant diligence in planning and building for the future.

**RICHARD J. DALEY**  
Mayor





## The Modern Way To Go...

### RAPID TRANSIT UP THE MIDDLE

The success of Chicago's first median rapid transit line, in the Eisenhower Expressway, has been fully up to expectations. Since that beginning, in 1958, each of the main routes in the city's system of expressways has been designed to accommodate rail rapid transit. The proposed Crosstown Expressway is also being planned to incorporate this advanced design feature.

The issuance of \$195 million in General Obligation Bonds, approved by the voters of Chicago in the referendum of June, 1966, provided \$28 million for rapid transit. These funds, together with other City bond funds and two-thirds federal matching funds, cleared the way for construction of the Kennedy extension and the Dan Ryan Line, opened in September, 1969.

On March 14, 1967, Mayor Richard J. Daley announced approval of the initial federal grants by the Department of Housing and Urban Development for construction of the Dan Ryan and Kennedy rapid transit extensions.

Urging that the two projects be pushed to completion on the highest order of priority, the Mayor said: "The many direct and related benefits to the people of Chicago rank these projects among the most important investments (of public funds) in any urban area."

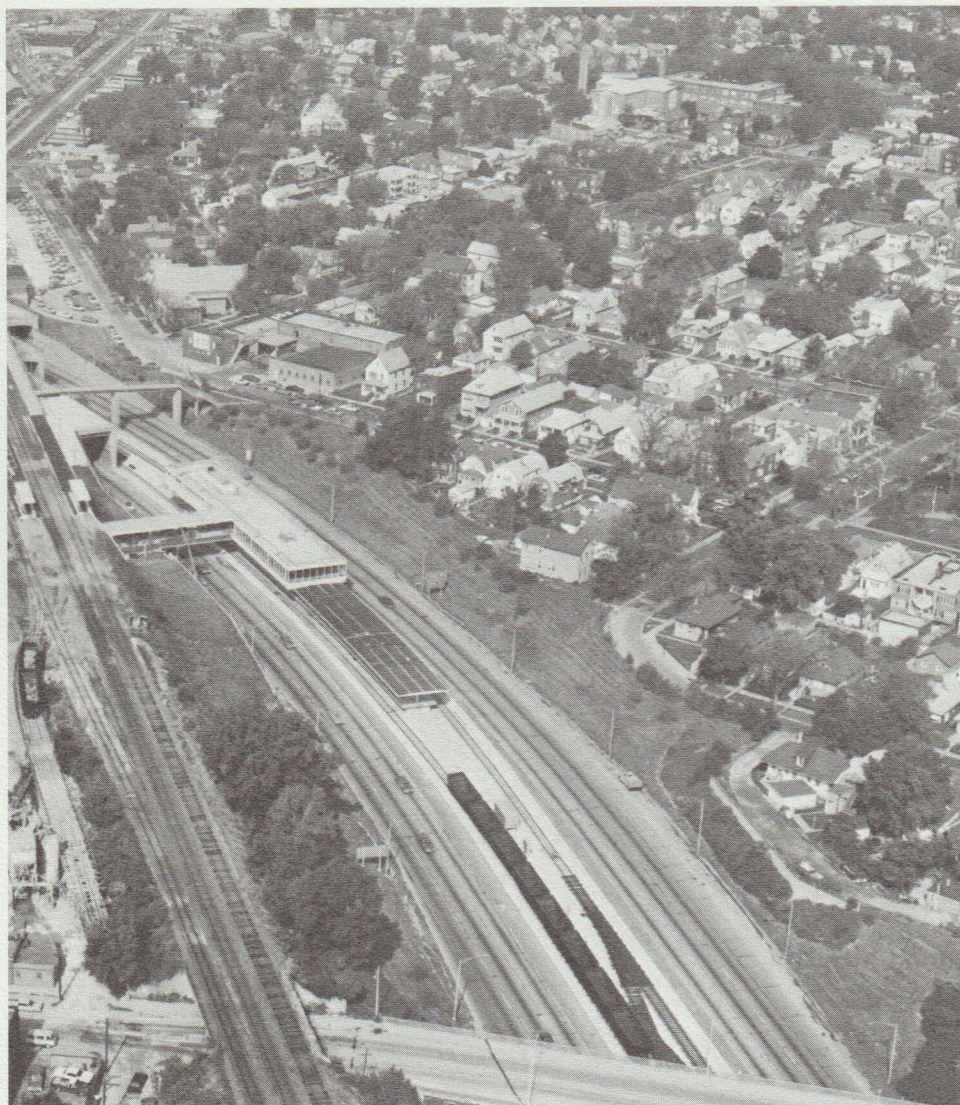
Even before the Mayor's announcement, preliminary alignment surveys and soil test borings had been started. With funding assured, the preparation of design plans and specifications pressed forward in accordance with a master timetable for simultaneous construction of both routes. Design and construction were directed by the Department of Public Works of the City of Chicago, under the direction of Commissioner Milton Pikarsky, in close cooperation with the Chicago Transit Authority.



## THE KENNEDY LINE

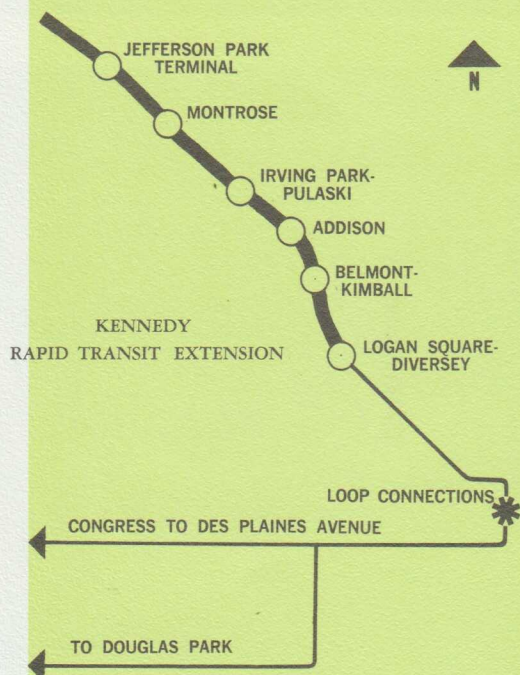
The Kennedy rapid transit line extends 5.2 miles beyond the old Logan Square "L" Terminal. At Sacramento Avenue, south of Logan Square, the tracks descend from the elevated structure and go into subway, proceeding in a northwesterly direction beneath Milwaukee Avenue, turning north in Kimball Avenue, then crossing under the south-east-bound and express lanes of the Kennedy Expressway, emerging at the surface in the median of the expressway west of Kimball Avenue and continuing northwest nearly four miles farther to a new terminal in the expressway at Jefferson Park near Milwaukee Avenue.

Along the way, in addition to the new terminal, three ultramodern stations are provided in the median — at Addison, Irving Park-Pulaski, and Montrose. In the mile and a quarter subway section there are two stations — the Logan Square-Diversey Station, with entrances on Milwaukee at Kedzie and at Spaulding near Diversey, and the Belmont-Kimball Station.





# CONSTRUCTION BEGINS



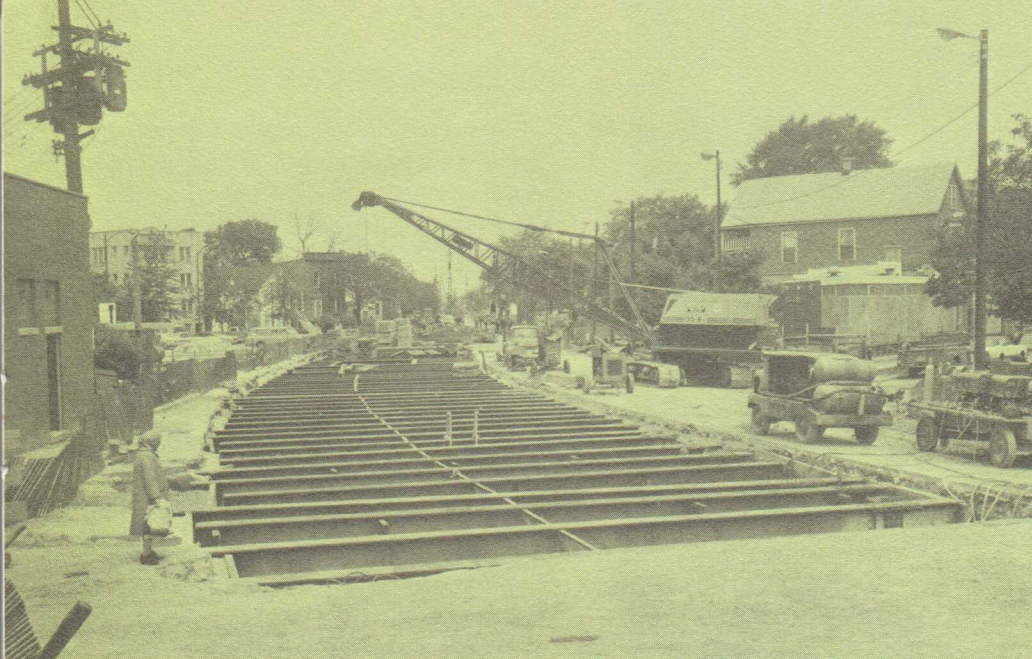
*As construction in the field gained momentum, contracts were prepared and awarded for fabrication of component equipment. The largest single contract ever awarded by the City of Chicago was a \$19.5 million order for 150 stainless steel, air-conditioned cars.*

In all, 40 major contracts were awarded for construction and equipment required to complete the two rapid transit routes, including the cars. Twenty-nine of these contracts related to the Kennedy extension and involved approximately sixty sub-contractors. Manpower employed in construction of the Kennedy subway and median extension numbered about 1,750.

The total cost of the Kennedy rapid transit extension is approximately \$50 million. All costs are subject to two-thirds participation by the U. S. Department of Transportation.







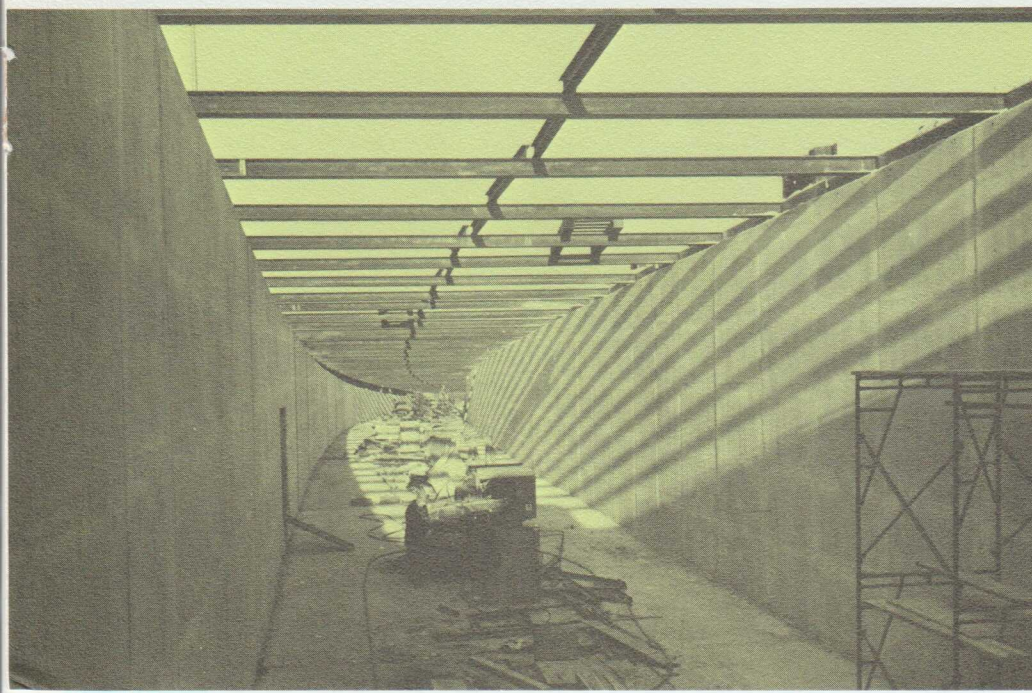
## THE SUBWAY SECTION

Subway construction in Logan Square, Milwaukee and Kimball Avenues was carried out by the open cut method in three main stages to minimize inconvenience to residents and businesses in the construction area.

1. Street traffic was re-routed, a block at a time, as excavation began in the street and holes were drilled for "soldier piles" along sidewalks on both sides of Milwaukee and Kimball Avenues. The soldier piles were part of the framework which retained the sides of the excavation and supported the temporary timber roadway to carry local traffic. Sidewalks on both sides of the streets were provided at all times.

2. Local traffic was permitted on the temporary timber roadway as excavation, relocation of utilities, and construction of the subway continued underneath. The only section of Milwaukee Avenue remaining closed to street traffic throughout this stage was in Logan Square proper where a large sewer was reconstructed to pass under the new subway. During this time traffic operated on the roadway surrounding the square.

3. After completion of the subway structure, street traffic was detoured as the temporary roadway was removed a block at a time and the excavation backfilled and compacted for restoration of pavement and surface facilities.





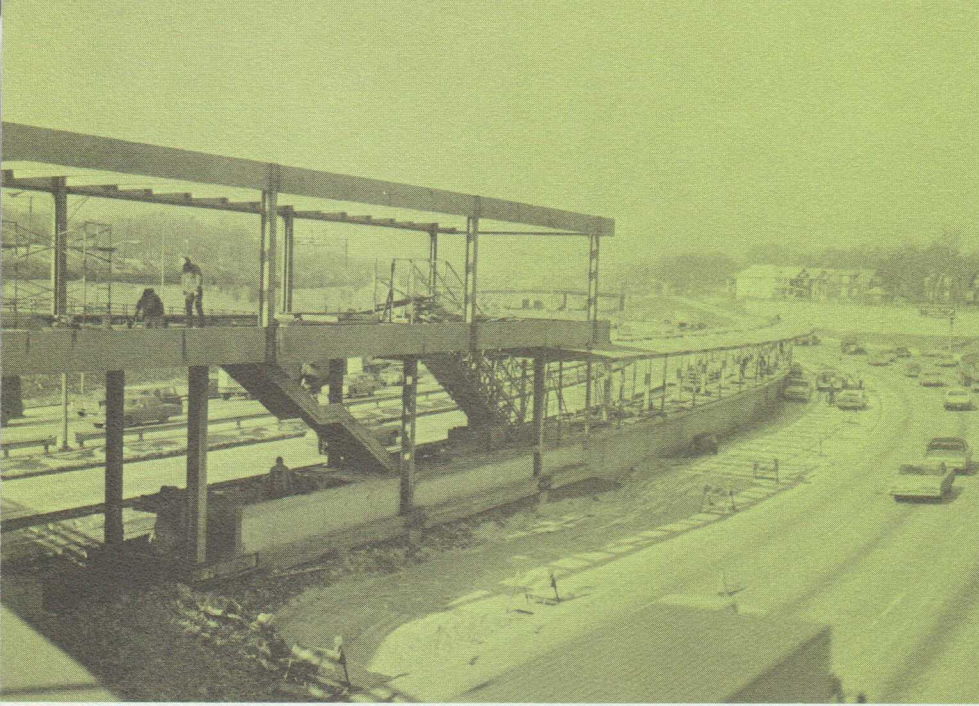
## THE EXPRESSWAY SECTION

Construction in the expressway median required some adjustment to traffic movements. A temporary detour was necessary for a period of several weeks at the point where the subway enters the expressway median. Speeds were reduced on the expressway in the construction area, but at least four lanes in each direction were kept open at all times.

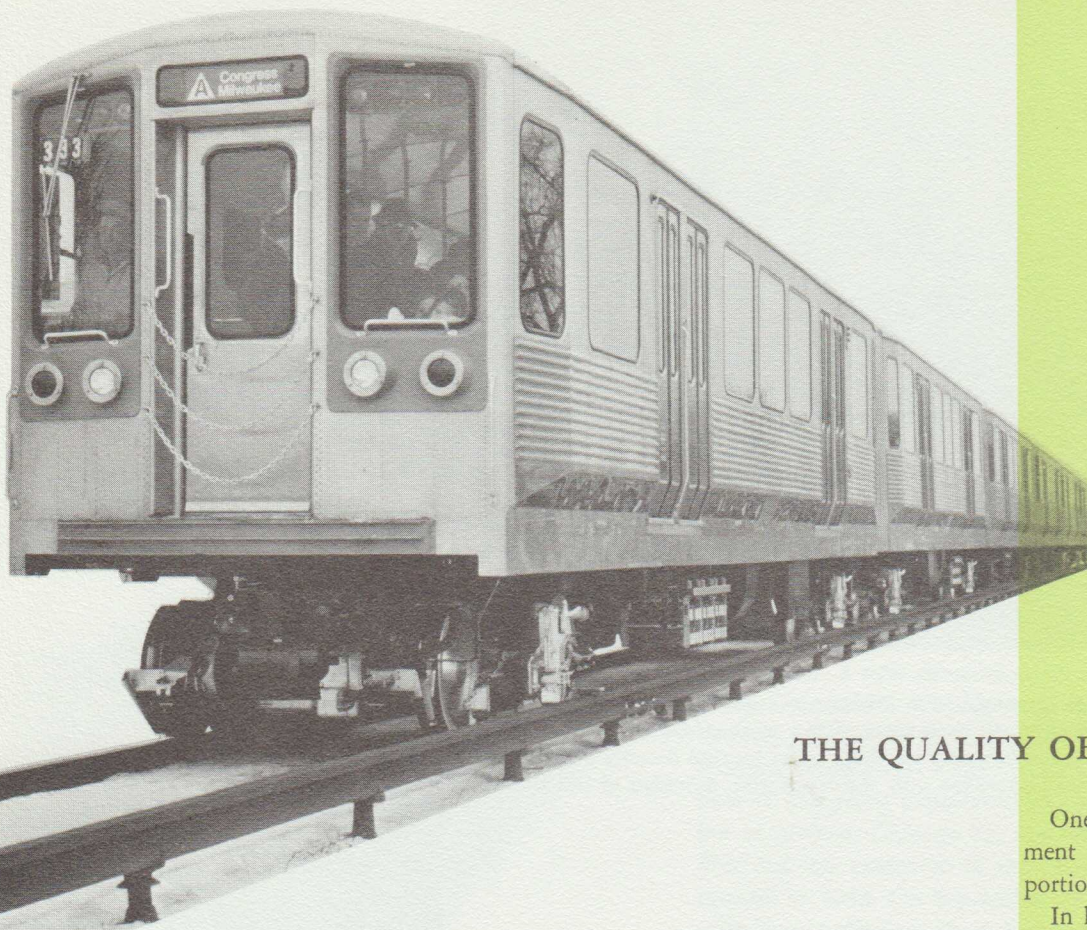
The six stations serving the Kennedy rapid transit extension are designed to provide the ultimate in passenger comfort and convenience. It is conservatively estimated that 70,000 passengers per day will be using these facilities by the end of the first year of operation.

Beyond functional efficiency, the stations are designed for esthetic excellence. Wide visibility and a high level of illumination are characteristic features in all areas. Fare collection equipment and turnstiles are of stainless steel and treadle-activated escalators supplement stairs for movement between station levels. Stations in the expressway medians are constructed of steel and glass providing maximum visibility from adjacent streets and highways. The boarding platforms are long enough to accommodate 8 car trains, with provision for extension to 10 car length. Steel columns at 22 feet intervals support cantilevered steel-framed canopies of translucent plastic extending beyond the center line of the tracks. Self-service infra-red radiant heaters are located at windbreaks in the main passenger waiting areas on the platforms.

Coinciding with the start of operations, CTA bus routes serving the northwest section of the city and adjacent suburban communities are being revised for maximum coordination of connecting service at each station.







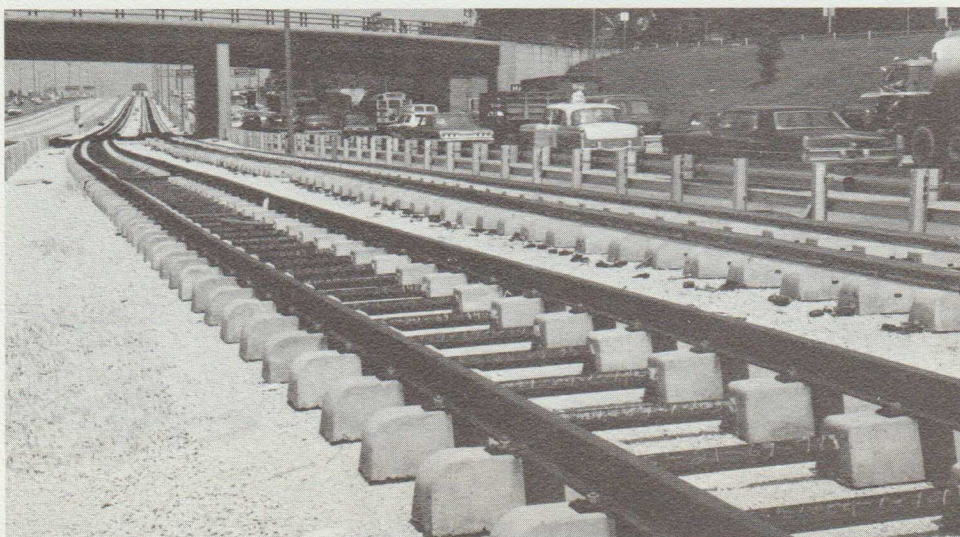
## THE QUALITY OF THE RIDE

One hundred fifty new cars will supplement cars already in service on existing portions of the rapid transit system.

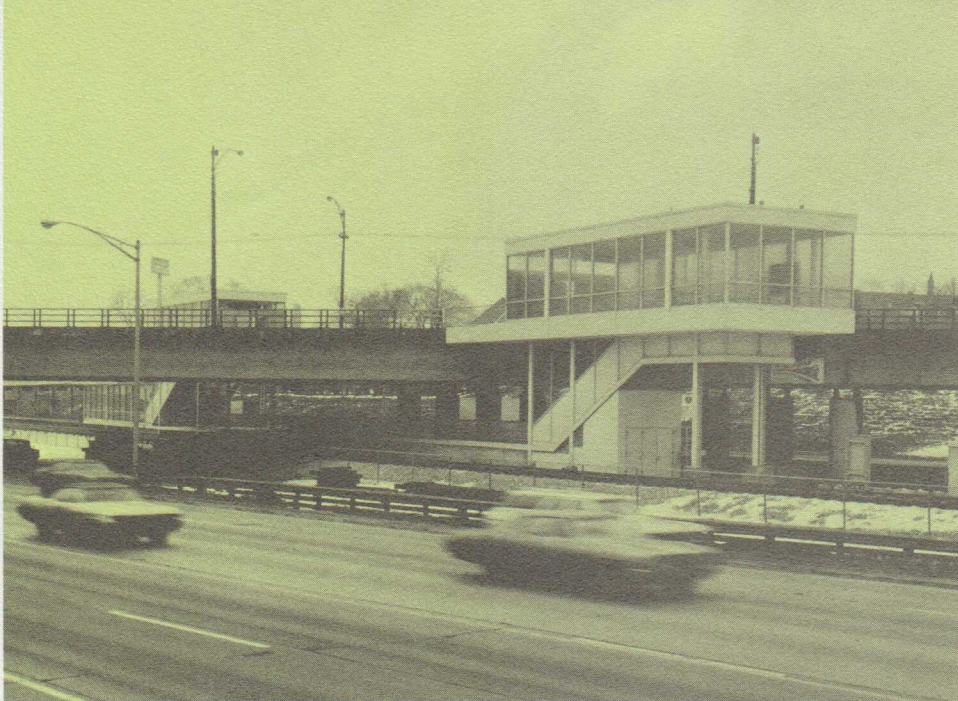
In keeping with the modern design of the entire project, the cars are of stainless steel and are equipped with exceptionally large tinted glass windows. Interiors are finished in stainless steel and transverse seats are upholstered in durable plastic. Flush-mounted fluorescent lighting panels and the absence of vertical stanchions except at the doorways convey the impression of well-lighted spaciousness as provided in the architecture of the stations.

The new cars are air-conditioned by 10 ton units mounted under the floors. Ventilation is by forced air with side wall distribution. The cars operate in married pairs with each car powered by four 100 horsepower traction motors. The first car in each pair has seating capacity for 47 passengers, the second car seats 51. Each car is 48' 3" in length with a maximum width of 9' 4" and overall height of 12 feet. The trains are capable of speeds up to 70 miles per hour and acceleration and deceleration rates of 3.2 miles per hour per second.

Safety in operation is governed by an automatic train control system with audio frequency circuits delivering signals to the cab. The system provides over-speed control to match track conditions. Train telephones provide instant communication between crews and the CTA communication center in the Merchandise Mart building.







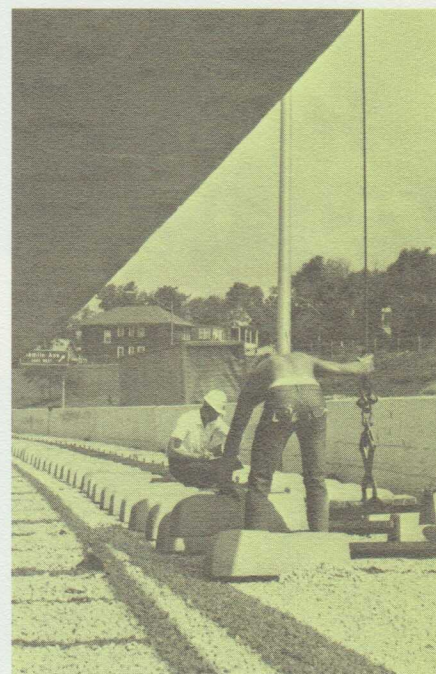
**Montrose Avenue Station** represents the first use in Chicago of a new design concept which provides complete entrance-exit facilities on both sides of the cross-street bridge spanning the expressway. This permits bus stops in both directions to be located directly in front of the entrance houses. Grade-separated passages and stairs are also provided at the Irving Park - Pulaski Station.

## ENGINEERED FOR SPEED, COMFORT, SAFETY

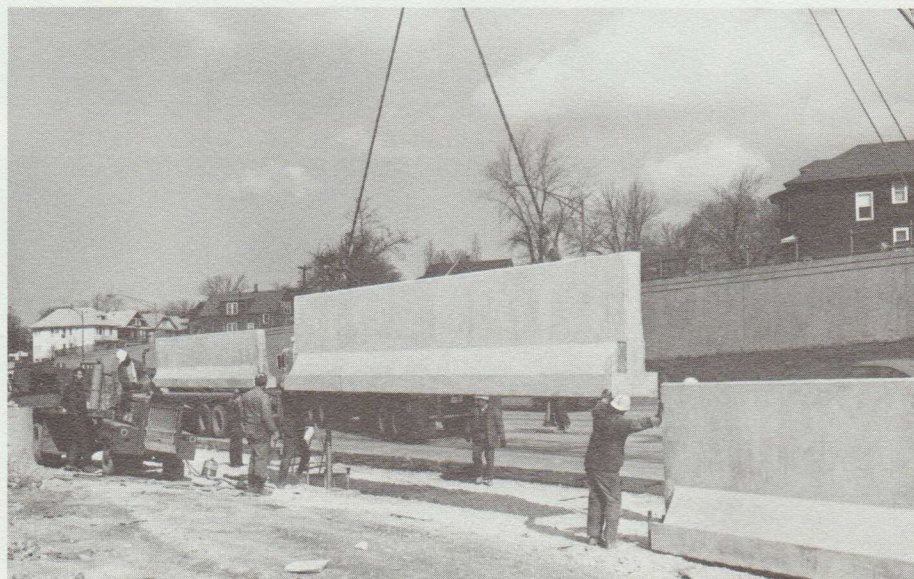
For maximum riding comfort and quiet operation, the trains will run on continuously welded rails supported by reinforced concrete ties cushioned in stone ballast. The rails were delivered to the site in conventional 39 foot lengths where they were oxyacetylene welded into 858 foot "strings" in a field welding shop. After placement on the crossties, the strings were connected by thermite welding.

The Kennedy and Dan Ryan lines are the first third-rail electric railways in this country to use concrete ties. The ties consist of two reinforced concrete blocks connected by a steel angle tie bar. The ties are spaced 30 inches apart and every third tie carries the "hot" third rail which supplies electric power to the trains. The third rail is mounted on insulator brackets. The concrete ties are used on all main runs of the track. Creosoted timber ties are used at crossovers and other special areas.

The Kennedy rapid transit extension is designed to utilize the high-speed capabilities of the new trains to the fullest extent. The major portion of the new line is designed for speeds up to 70 miles per hour, although the actual maximum operating speed will be 58 m.p.h.



**Barrier walls** separate rapid transit and highway traffic lanes at all stations and other constricted areas.





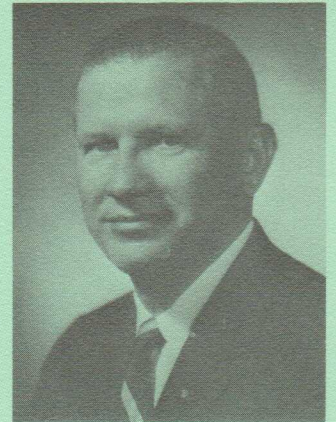


It's safe . . .  
It's fast . . .  
It's comfortable . . .

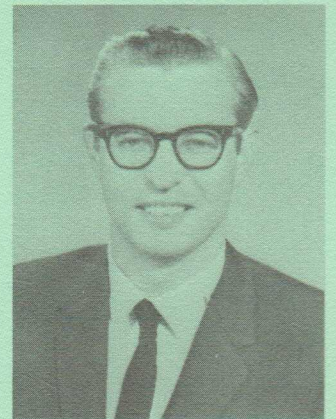
## Cooperating Agencies



John A. Volpe  
SECRETARY OF THE  
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TRANSPORTATION



Milton Pikarsky  
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George L. Dement  
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