

SKOKE SWIFT

A MASS TRANSPORTATION
DEMONSTRATION GRANT PROJECT



FOREWORD

"Skokie Swift," the high-speed, non-stop commuter shuttle, began service April 20, 1964. Traffic far exceeding all expectations developed immediately, and has aroused nation-wide interest in this locally-sponsored, federally-aided Mass Transportation Demonstration project.

In a letter dated January 27, 1964, Mr. Robert C. Weaver, Administrator, Housing & Home Finance Agency advised Mr. George L. DeMent, Chairman of Chicago Transit Authority that a Federal grant of \$349,217 for the Skokie Mass Transportation Project had been approved. Subsequently, Contract No. H-619 effective January 21, 1964 was executed by HHFA and CTA and the project got under way.

In accordance with the Application for Federal Aid by Chicago Transit Authority dated January 10, 1964, Exhibit D, page 2, "Progress reports summarizing the current status of the project are to be furnished to HHFA each quarter after the grant is made until the completion of the test. A quarterly financial report reflecting the status of the project is also to be submitted to HHFA."

Herewith the first quarterly report is submitted. The first part of the report deals with the work done and the second part is the financial report. Because there were only ten days of operation in this quarter and during these the project staff were preoccupied with solving the many problems attendant upon the spectacular results, information learned from studies, largely of a comparative nature, must await subsequent reports. Similarly, revision of the project budget will be more practical in the second quarter, when the proportions of the service have begun to stabilize.

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THE WORK DONE

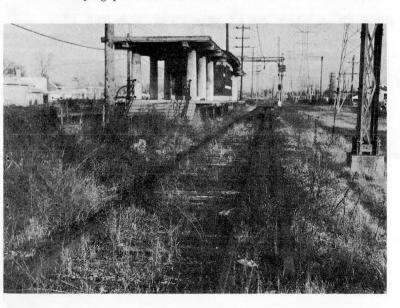
CONSTRUCTION AND REHABILATION

Acquisition of the property from the Chicago North Shore and Milwaukee Railway was completed on December 30, 1963. Preliminary plans for rehabilitation were drawn in sufficient detail to support the application for grant even before this date, but serious detailed design work began during January when it became evident that favorable consideration of the grant by HHFA was a likelihood. Thus, by February 1, when the grant became known to the grantee, it was possible to swing into action on almost all phases of the conversion of the derelict interurban railway into a high speed rapid transit line.

TRACK

Track was generally in excellent shape but ties are well beyond the half-life point, on the average. Principal rehabilitation requirements involved surface grinding, debris cleanup, clearing of grooves and tightening of planking at grade crossings.

Major track construction of the project was the installation of a turnout at the Dempster terminal to route cars from the arriving track into the departing track. This special work was designed and constructed in the grantee's shop. It was assembled in place after stripping out portions of the former CNS&M track which had previously formed a continuation of double track to the north. A bumping post was installed at the end of the tail track.



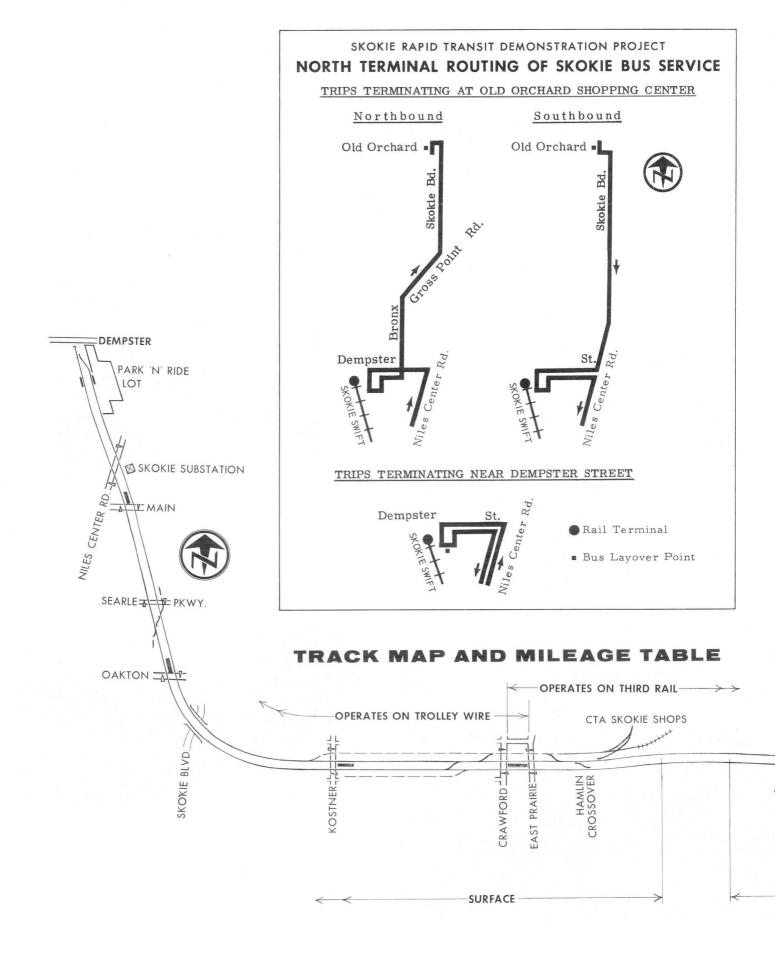


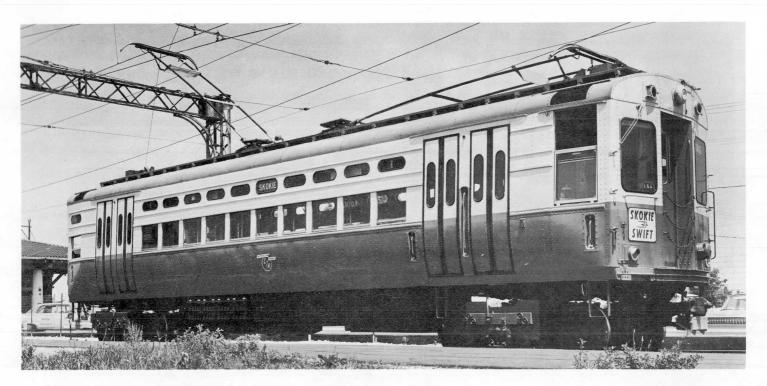
New Switch and trolley wires installed at Dempster Station.

Newsmen, press, and TV photographers visiting the project shortly after the start of rehabilitation work saw the rail grinder train at work polishing irregularities from the surface of the long-unused rails.



Years of deferred maintenance and a year of total disuse gave weeds and general deterioration a tight grip on the right-of-way, shown here at Crawford avenue in February, 1964.





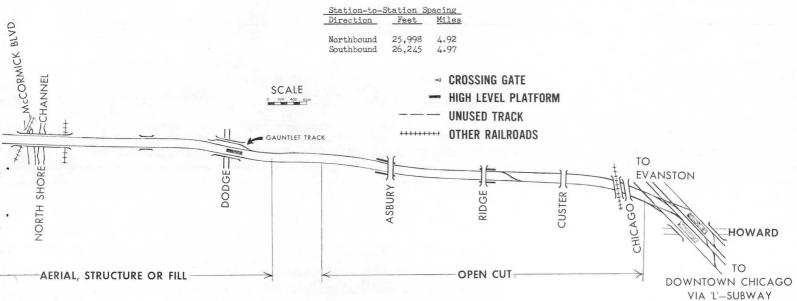
Skokie Swift cars No. 1-2-3-4 are the first on CTA regularly assigned to continuous service at top speeds of 60-70 mph. At this writing, they are also the only all-electric cars used in high speed service in North America. Each car has a different type of truck and there are two kinds of motors and controls used, all under experimental development. However, the four cars are almost identical in performance and are well suited for Skokie Swift service.

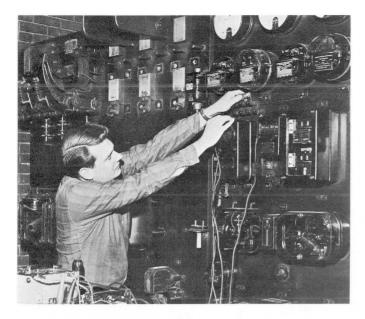
Skokie Route

	NORTHBOUND (Rea	ad Down)			The second second second
Distance from or Jun	Last STATION ction	Accumulated From Howard		STATIONS or	Accumulated From Dempster
Feet	Miles	_Feet_	Miles	Junctions	Feet
0	0	0	0	Howard Turnback	26,877
680	.13	680	.13	Lv. HOWARD Arr.	26,443
232	.04	912	.17	Howard Junction	25,949
13,612	2.58	14,524	2.75	Hamlin Crossover	12,303
852	.16	15,376	2.91	E. Line, E. Prairie Rd.	11,451
66	.01	15,442	2.92	W. Line, E. Prairie Rd.	11,385
362	.07	15,804	2.99	E. Line, Crawford Ave.	11,023
10,874	2.06	26,678	5.05	Arr. DEMPSTER Lv.	198
199	.04	26,877	5.09	Dempster Turnback	0

	SOUTHBOUL	ND (Read Up)	
Accumulated From Dempste		Distance from or June	
Feet	Miles	Feet	Miles
26,877	5.09	434	.08
26,443	5.01	494	.09
25,949	4.91	13,646	2.58
12,303	2.33	852	.16
11,451	2.17	66	.01
11,385	2.16	362	.07
11,023	2.09	10,825	2.05
198	.04	198	.04
0	0	0	0

Station-to-Station Spacing 4.92 Northbound





Thorough cleaning and recalibration of control relays was carried out in the Skokie substation, power source for the west end of the project.

GRADE CROSSINGS

It was hoped that the grade crossings would last the life of the project without major renewal. However, shortly after train operation was begun, the accumulated internal deterioration at East Prairie, Crawford, Kostner, Oakton, Main and Niles Center Road became painfully evident. Their roughness for street traffic is rapidly becoming intolerable. It is now apparent that they will require renewal beginning in the second quarter.

Of all, Oakton crossing presents the greatest dangers to pedestrian and train operation. A slow order has been placed in effect here. Modifications to the gate and traffic signal installation are being studied which will be

put into effect promptly if it appears impractical to wait with them until the roadways are rebuilt as part of a street program scheduled by Skokie for execution in 1965.

FENCING

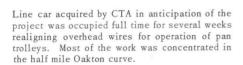
The condition of right-of-way fencing is another item which has proved far worse than anticipated. So that trespassing may be adequately controlled it is probable that installation of sturdy fencing will be necessary, particularly between East Prairie and Oakton, and on the west side of the Dempster terminal area.

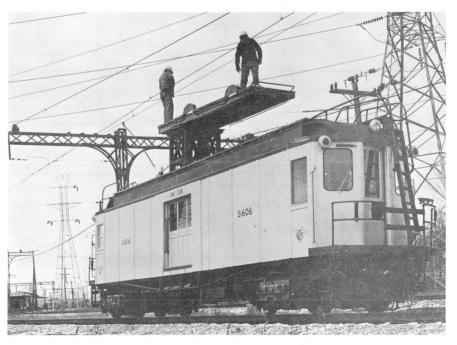
POWER AND POWER DISTRIBUTION

Power is fed to the route from Calvary Substation (an existing CTA facility) near Howard Station and Skokie Substation, at the crossing of Niles Center Road. The equipment in the latter station was included in the purchase from CNS & M Ry. This station has a rotary converter with automatic and supervisory control, not new, but adequate for the anticipated load requirements.

The equipment had been idle in an unheated building for more than a year. It had to be thoroughly dried out and completely cleaned, overhauled and tested to insure dependable service. The feeder circuit breakers were reconnected suitably for the service and supervisory equipment was installed with control and indication in the power supervisor's office at the operation control center 15 miles away.

Propulsion power is fed to trains via the running rails on the negative side and through third rail and trolley on the positive side. After North Shore Line abandonment January 21, 1963, the portion of line between East Prairie Road and Howard Station had been in continuous use (although at irregular, infrequent intervals) by CTA equipment trains going between the system and its main shop located in Skokie near Hamlin crossover. This section of line has third rail and the positive and negative power distribution facilities, being in serviceable condition, required only general inspection.







Wiring control case for new crossing gate installation at Searle Parkway.

flashing at East e Road.

Preparing for installation of standard flashing lights at reconditioned crossing gate at East Prairie Road.

West and north of East Prairie Road, however, a great deal of work was required. The third rail system extends only an additional 400 feet to Crawford Avenue. An overhead catenary trolley wire system begins at East Prairie Road and continues for the balance of the route. This equipment all required extensive repair and reconditioning. Unlike the trolley pole operation of the North Shore line, the Skokie Swift uses remote-control pan trolleys so that the transition between third rail and overhead wire can be made with one-man high speed cars without slackening speed. This desirable feature required substantial modification to the inclined compound catenary on the long high speed curve between Kostner and Oakton crossings. The final system, which required 22 wood line poles and pull-off spans to be installed, is an original design of chord-inclined compound catenary. New simple catenaries were installed to follow the new track work at Dempster terminal, where it was impractical to use the former North Shore Line tangent compound catenary. Cracked or defective porcelain and wood insulators were renewed.

The DC negative return is taken via the running rails while the AC signal current is blocked by impedance transformers and bonds near each insulated joint. Many of these, along with rail joint bonds, had been stolen and had to be replaced in the rehabilitation. Also, a number of insulated rail joints for signal and crossing gate operation had become deteriorated with disuse and had to be renewed.

All power, control and communication connections which formerly ran through beyond Dempster Station into the remainder of the North Shore Line system were separated.

SIGNALS AND CROSSING GATES

The signal system between Howard and Dempster had been disused since the abandonment of North Shore Line and had proven especially vulnerable to vandalism. Most

signal and switch stand lenses and lamps had to be replaced along with some relays. Crossing gates, 35 years old, came back to life after general overhaul. Some of these old gates, of an obsolete design for which parts are no longer available, may require replacement before the project is completed. Flasher light and motorman indicator signals were added to meet CTA safety standards.

After abandonment of North Shore Line, a new grade crossing was opened at Searle Parkway under an order entered by the Illinois Commerce Commission. Completely new crossing gates of the most modern type were installed here. Negotiations have been under way so that the project may be partially relieved of the cost of these through reimbursement by the State of Illinois from the Highway Crossing Protection Fund.

Automatic flashers and bells were installed at a new pedestrian crossing in low speed track territory at the Dempster Station. These are activated by modern radiofrequency presence detectors which avoid the need for insulated joints and simplify the relay circuitry required.

Development of wheel and rail scrubbing devices as mentioned in the Application for Grant was deferred when it proved that dependable signal and crossing gate operation was obtained without them.

SWITCH HEATERS

The one heavy, wet snow storm which fell on the project just before regular service began reminded us that the spring switch operation at Dempster terminal and at Hamlin crossover would be impractical without dependable snow melters. This omission in the original rehabilitation program will need to be corrected before next winter.



Linemen installing new cable at Dempster Terminal. Test train in background checking trolley wire alignment



Continuous, wired radio-frequency train telephone communication was installed to and in each train. A portable train phone set is carried on to each car by the operator and makes available immediate contact with the operations control center.

Automatic train despatching from Dempster Station and supervisory monitoring equipment at the center were installed to complete the control system. In addition to its





Motorman's view, looking south at Oakton, obstructed by unused station. Note auto (arrow) in the crossing between tracks. Four stations presenting this visibility problem will be demolished before closing the rehabilitation phase of the project.

obvious despatching functions, this equipment enables the control center to assist passengers and crews in various kinds of service and emergency problems.

Telephones were installed for use of the operating departments at Dempster Station, at the emergency crossovers and in Skokie Substation. The original telephone cable, after nearly 40 years of service is no longer dependable in wet weather, and yet must be depended upon for train phone and line supervision as well as telephone. The aerial portion of this cable, between East Prairie and Howard, will be replaced during 1964 (at no cost to the project) and this should improve performance.

A public telephone installed in the Kiss'N'Ride area of the Dempster Station will be contributing to project receipts.

BUILDINGS AND STATIONS

No buildings were required to be built for the project. A portion of the rented property at Dempster terminal was adapted for use as an employes' toilet. Except for the case of installing an outside door, independent lights and certain other modest changes, this will be no expense to the project.

It had been planned to retain unused station buildings and platforms of the predecessor at East Prairie, Kostner, Oakton and Main. Their rugged construction of reinforced concrete and brick presented a formidable demolition problem, which it was originally thought might be

Line supervisors at the Operations Control Center in the Merchandise Mart regulate Skokie Swift service through automatic train despatching and train recorder charts. By using the train phone, the line supervisor can talk directly to the operator of a Skokie Swift train even while travelling at high speed.

deferred. However, these stations impair the view of adjacent grade crossings, create an attractive nuisance for children to play around and are unsightly in their deteriorated condition (unused for about 16 years). After only a week's experience with operation, the hazards caused by these buildings to vehicle or pedestrian incicent were agreed by the operating staff to be incompatible with the high speed train operation. The buildings and platforms will be cleared away during the second quarter, working on Sundays to avoid interference with service.

A completely new Dempster Station was built by the project, since the location and accommodations of the predecessor were not suited for the operation of high-level platform cars with pre-collection of fares at some periods.

A new 60 ft. long platform was built for arriving trains and another 85 ft. long for departing trains. A completely new design was developed for windbreak and canopy cover, utilizing formed H-beams and corrugated fiberglass cover. The platforms were fabricated of creosoted timber. A portion of the outbound platform was partially enclosed with fiberglass panels to form a shelter. This shelter has quartz-tube electric radiant heaters. A self-service pushbutton provides five minutes of heat.

Footwalks leading to the platforms were made of stone and screenings surfaced with bituminous concrete. The platforms are lighted with fluorescent fixtures and the footwalks with mercury-vapor luminaires.

The station platforms and passenger controls, although designed for a traffic 100% greater than anticipated, were overloaded from the first day and will have to be expanded during the second quarter.

PARKING LOT AND BUS TERMINAL

Adjacent to the train platforms and terminal track at Dempster was built a modern parking lot and bus terminal partly on property owned by CTA and partly, after the necessary negotiations, on easement rights on land owned by the Commonwealth Edison Company.

The land was irregular with many sharp changes of grade. A small portion was occupied by a virtually unimproved coarse stone parking area. Another portion contained the remains of an unused reinforced-concrete high-level train platform. A frame residence building and two or three associated out-buildings occupied another



A waiting room, located on the south end of the south platform at Dempster terminal is equipped with a unique "self service" infrared heat unit installed in the ceiling. A customer who wishes heat pushes a wall button and the heat is turned on for a few minutes.



Two views of new Dempster station platforms under construction. Short platform accommodates arriving trains, while larger platform with booth serves southbound traffic.



Paving work in progress.

The space to be used for the principal entrance driveway was occupied by the northbound track of the abandoned North Shore Line.

After development of the design for the new facility construction was let out on a general contract. The land was cleared and graded, drainage installed, retaining wall built where required, sub-base spread, rolled and surfaced with bituminous concrete. An Edison pole line running through the property was relocated to an alignment permitting a more favorable parking arrangement and mercury-vapor street lighting was installed to floodlight the area. Steel bumper guard was provided to delineate the driveways and limits of the various areas. Concrete aprons and curbing were installed at the entrances and exits. Automatic electric gates were purchased and installed to provide free entrance at two locations and exit on payment of 25¢ at two locations. Fencing was repaired or installed as necessary to enclose the area. Striping and signing completed the initial installation providing capacities as follows:



Concrete ramparts, remnants of a long-unused platform, blocked area to become throat of park'n' ride and bus terminal area. Photo below shows area after clearance. Predecessor's station in background is not used in the project except for a corner containing sanitary facilities used by transportation employes only.



Park'N'Ride (25¢ per day)
Kiss'N'Ride (15-min. limit
free)
Cab Stand

386 car spaces

29 car spaces 4 car spaces 2 bus spaces

Total

Bus Stand

419 cars and 2 buses

Concurrent with the opening of the project service, the Village of Skokie posted on adjacent streets parking and traffic directional restrictions, designed to encourage the use of the parking lot and to minimize on-street parking by commuters in residential streets near the station.

The parking lot proved to have insufficient capacity from the first day of service, when it was filled by 8:50 AM. An additional area for 64 cars, on adjacent land owned by Edison was immediately prepared for paving and will be completed early in May.

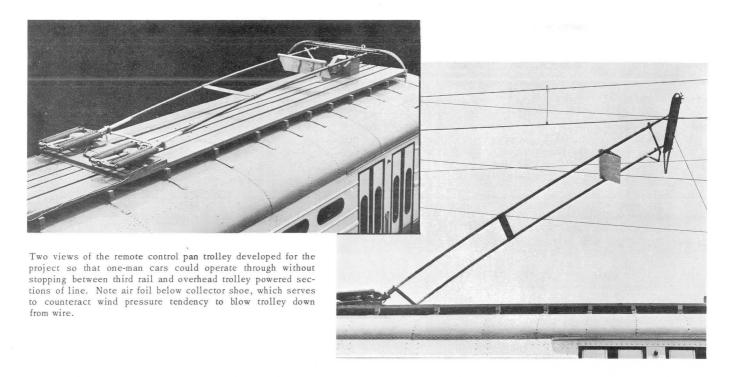


64-car addition to park-'n'-ride lot being rushed to completion late in April to handle overflow immediately experienced upon opening of project. Binder and finish courses will be applied in second quarter.



The very small part of the park-'n'-ride area which had been paved by the predecessor railroad, poorly graded and in bad condition, had to be torn out along with old frame buildings seen in the distant background. Photo below shows grading in progress.





New panel of pushbuttons and pilot light at eye-height on operator's left provides complete control of pan trolleys.



HIGH SPEED RAPID TRANSIT CARS

As stated in the project application proposal, four highperformance cars (numbers 1, 2, 3 and 4) built in 1960 and then-currently being used in standard rapid transit service on the CTA Ravenswood route were freshly painted and then reassigned to the project. On all four of these cars, registering-type fare boxes and SKOKIE destination signs were installed. A feature of the project was to be its non-stop operation, for which a means had to be developed to change from third-rail to overhead trolley (and vice versa) at about the midpoint of the run. North Shore Line conductors had had to raise and lower trolley poles, a slow manual process that often required the train to make a full stop. It was originally thought that a remotecontrol pantograph type current collector, light enough in weight to be usable on the roof of available cars, could be purchased in Europe for this application. Inquiry after the grant was made, however, revealed that serious delay (6 to 8 months) would be required while a device suitable for the 23 ft. trolley wire height on the project could be designed and built (European trolley heights are evidently much lower).

A shop-built substitute was therefore developed utilizing components available locally. This device resembles the bow-trolley occasionally found in European or Japanese low-speed tramway work. For the heavier electric current drawn by Skokie Swift cars, a locomotive pantograph shoe was provided to contact the wire. This was supported from the ends of two standard trolley poles mounted parallel. To overcome the effect of wind pressure tending to blow the trolley poles down at high speeds, an air foil, similar in contour to an airplane wing, was mounted near the top of the trolley poles. A magnetically-activated latch and a motor-driven retriever were developed to release and lower, respectively, the springraised trolley. Finally, push-button controls, with interlock and indicating pilot light were installed in each driving cab so that the device could be raised or lowered from the driving cab by the operator of the one-man car. Automatic changeover switches connect the car power

load to either third-rail or trolley, whichever source is "alive". In actual operation, the transition between third-rail and trolley is made at full speed, often exceeding 65 mph.

These pantrolleys, incorporating many features original to the Skokie Swift, have worked well enough to defer indefinitely the purchase of pantographs.

Estimates had anticipated a maximum of two cars on the road at any one time. However, from the first day it developed that up to five cars were required at once. The grantee had no immediate alternative but to employ trolley-pole equipped one-man cars diverted from spares assigned to the nearby Evanston shuttle route. While the bodies of these cars are practically identical to those of the high-performance cars, their top speed is about 20-25% less and the stop to change trolleys by hand would take additional time.

To meet the traffic requirement two cars (numbers 25 and 26) in addition to the planned four were committed to the project before May 1. These cars were fitted with remote control trolleys on a crash program, much of the work being done over a week-end. It is anticipated that additional cars will need to be assigned to handle traffic growth in the second quarter. Tests will also be carried out to see whether the speed of this slower equipment can be increased at reasonable cost.

RIDERSHIP PROMOTION

An unusual aspect of this project is its relatively intense promotional campaign, underwritten by a budget which would have been equal to more than 20% of the estimated gross receipts over the two year period of operation, a noteworthy exception in the transit field where appropriations of 1/10 to 3/10 of 1% of the gross would be above average.

The promotional campaign included publicity and paid advertising. The publicity campaign was greatly aided by the general acceptance by the press, radio and TV media of the need for expanding transportation in the metropolitan area over private rights-of-way free of the congestion prevalent on urban streets, boulevards and especially on the newest, most modern limited-access expressways. A press trip over a portion of one track on February 12 (a legal holiday in Illinois) yielded space and time in all media that got public interest in the rehabilitation work off to a good start. Subsequent followup was maintained through releases and interviews as work progressed.

Inaugural day ceremonies were scheduled for a Saturday when many people would be free of work-day schedules and could come to the show. A festive air was maintained which was culminated in free demonstration rides

With the beginning of regular service on April 20 the overwhelming acceptance by the travelling public stimulated additional publicity. To keep this interest alive, special checks were set up and arrangements were made to feed fresh information on passenger traffic to the media within a few minutes of key deadline times. As traffic increased and as additional service was added, releases sustained the momentum of media concern in the project.

The concept of a "named" rapid transit train was the inspiration of Mr. Arthur D. Dubin, noted Chicago authority on prestige passenger trains. Consideration of a large number of possibilities eventually led to the catchy name "Skokie Swift". Each train carries a sign bearing this name and a distinctive logotype design.

About half of the advertising budget of the project was allocated for press and radio. A well-known agency was retained to handle this program and they laid out an intensive campaign to saturate the service area in a 13-week period bracketing the start of operation. Art work for a basic advertisement was laid out, as well as scripts for the radio commercials. Certain radio spots in the modern, light-hearted vein, were taped by professional actors.

A portion of each of several issues of Skokie's "Village News", a four-page monthly newsletter distributed to every household in the village, was devoted to short feature articles about the project. Similarly, the CTA monthly magazine "Transit News" ran illustrated stories to keep 15,000 transit employes informed. The trade and railfan journals also carried short items about the project and it is expected that their interest will grow as the results of the project become more apparent.

Planners and civic officials have been advised of the start of the project through newsletters and other activities of the cooperating agencies.

Poster, signs and timetables were also used in the ridership promotion program. Outside services were used to design the initial time table folder, which received very wide distribution. As it turned out, the initial timetable was superseded by improvised issues almost daily for about a week. Naturally, on such short notice the subsequent time tables could only be produced by multilith offset with no artwork.

An attractive station entrance promotional sign featuring the SKOKIE SWIFT name and emblem was built and installed at the Dempster station. This is an internally illuminated plastic-faced sign approximately 6 ft. x 15 ft., and is located at the entrance forecourt.

The results obtained in the very short operating period contained in the first quarter indicate that revision of the promotional budget for future promotional thrusts may well be justified and will be considered.

Newspaper and magazine clippings from before and after inauguration of Skokie Swift service are reproduced on the next two pages, the newspaper advertisement is on the back cover of this report

Samples of press comment before operation began



Samples of press comment immediately following start of operations







was marked by enthusiastic throngs awaiting rides, and talks by leading

left, crowds board train. In inserts, Skokie DeMent, Ray Simon, administrative assistant to Mayor comfort is helped by overhead heating units in wait-on Greisdorf (left) and George DeMent, Richard Daley; William Hurd, of U.S. Housing and ing area (right, below). In group testing area are, from

CTA board chairman, address gathering. Ribbon cut-ting ceremony (center) is conducted by, from left, dressed crowd at dedication (right photo). Passenge

wift Surpasses Hopes northbroak Star







New Hope for C.T.

The new nonstop, high-speed shuttle line itreet in Skokie and Howard street in Chicas





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CHICAGO DAILY NEWS



PRIL PAGE STAFF: KENNETH McARDLE, ASSOCIATE EDITOR
Paul Georp Watter R. Green Sydney J. Harris Cedi Jense

THURSDAY, APRIL 30, 1964

Gain for Rapid Transit

THE INITIAL SUCCESS of the "Skokie Swift" service has startled even its strong-est supporters. The rapid transit extension feeding into the north-south elevated-sub-way line at Howard St. has attracted far more riders than were expected.

more riders than were expected.

Perhaps novelty has something to do with it and support will slacken later. Only time and further experience can provide all the answers, and the purpose of the trial is to seck those answers. The Skokie service is a joint experiment combining the resources of the CTA, the village of Skokie, and the federal government. Some unexpected obstacles already have appeared, notably the controversy among the Skokie neighbors over the parking provided for riders of the new extension. We hope the complaints of traffic hazards can be ironed out.

While the returns are far from com-

While the returns are far from cor While the returns are far from com-plete, however, the experiment seems well on its way toward proving that fast, com-fortable service will lure back to mass transit some of the riders lost to the pri-

that of transporting people tropolis, and it grows more pre-

tropolis, and it grows more piec.

In recent years, the emphasis from public transport to freeward roads that accommodate the tomobile. The limits in that fast being approached. It is further than the phasis shifted back to importation and redressin [80].

transportation and redressing when by the As congestion increases fluctury, the every means of transpose the home finance further strained. The free varieties and the commuter railroy compete with but must can be the finance of the rail to the compete with but must can be considered as the competency of the carried of the carried with the competency of the carried of the railed to the carried of the carried of the railed to the railed to the carried of the railed to the carried of the railed to the rail

SKOKIE TAKES TO CTA SWIFTLY CTA's New Skokie Route o Howard in service was Is a Hit with Commuters or on Page BY THOMAS BUCK
In back seeps, the supership of the supers SKOKIE BRANCH

25 CENTS ON EXIT

WINS SUPPORT OF COMMUTERS Mayor Orders More Parking Facilities

Christys Tobuse

The Skokie extension of the rapid transit system is the most promising new idea to emerge in a long time. We hope it is just the beginning of a trend.



CTA and suburban bus routes pick up passengers under a loading shed at the Howard station of Skokie Swift. Direct across-the-platform connections are also made at this station with North-South and Evanston rapid transit trains.

BUS SERVICE COORDINATION

The grantee's #97 Skokie bus route, which roughly parallels the rail route, was modified considerably with the commencement of Skokie Swift operation. The north terminal of the route, which had been several blocks away, was relocated to the train terminal. The daytime service frequency was actually increased, with buses 15 (instead of 20) minutes apart to provide reasonable connections with trains for the short reverse ride into the business and shopping center in downtown Skokie.

In addition, approximately half of the trips during the business day were extended about one mile north to Old Orchard, a modern prestige type shopping center. While this shopping center is designed to depend primarily on driving customers, this bus line extension feeds both workers and shoppers to the Skokie Swift.

No changes have as yet been made in the routes of other suburban bus companies to serve Dempster Station. However, the Skokie Swift is expected to benefit by the rerouting into the CTA Howard terminal of buses of the Evanston Bus Company and the United Motor Coach Company, effective May 1, with the resulting greater convenience for passengers making connections.

CAB SERVICE COORDINATION

Communities such as Skokie depend considerably upon taxicabs for good distribution of passengers locally. Three cab companies here have been invited to use a

designated cab stand area of the Dempster station at no cost initially. In return for a trial period of one month, they will carry free of charge, groups of four riders going together into any of four zones of Skokie between 4:30 and 6:30 p.m. It is their hope that this will set a pattern which will enable them to generate a new type of traffic. This activity, like the bus service changes, is attributable to the project but is financially independent.

STUDY PROGRAM

Parts of the comprehensive study program associated with the project are being carried out by each of several agencies. To kick off this work a coordinating meeting was held on February 4. A plan was formulated for distributing the work of the checks and surveys to be made before the service began. Forms and procedures were then developed and by February 24 the first surveys were under way.

The project area was surveyed by foot and by automobile for the following land uses:

Apartment, home, commercial and industrial vacancies.

Vacant residential, commercial and industrial property.

Sales tax numbers were accumulated for specific business areas with the project. These will be used to compare dollar volume of sales over the life of the project.

CTA's Skokie No. 97 bus route was routed into the Dempster station and extended to Old Orchard to feed Skokie Swift from the north.





Questionnaires were distributed on all Skokie buses on Thursday, March 16, as part of a survey to determine the riding habits of persons using the Skokie service. The cards were distributed from 6 a.m. to 10 p.m. on eastbound buses between the Bronx-Grove terminal and Lawndale Avenue in Skokie. Car cards informed passengers about the survey.

The land use study was begun by updating the Village of Skokie land use map. The volume of rezoning and/or zoning appeal petitions for the period 1960-1963 have been recorded on forms and also on a base map of the project area. A questionnaire has been prepared and a copy is attached to each new petition. From this voluntary information it is hoped to determine whether the "Skokie Swift" has any influence on such action.

The influences on workers and employers of selected commercial and industrial forms as to employment turnover rates and need for private bus transportation was also surveyed.

The total number of employes for a cross section of commercial and industrial employers was surveyed.

A return reply survey card was prepared to establish the travel mode and preferences of patrons of CTA, Evanston and United Motor Coach buses operating in the area. Checks were also set up to determine the total volume of riders on all routes. After the public was informed through press notice and placards in the CTA buses, the survey was made on Thursday, March 19. The information contained on the approximately 1100 cards returned (roughly 35% of those issued) is now being prepared for computer processing and analysis. Some work has also been done on a home interview study which is expected to yield travel mode information from people not necessarily using the bus lines.

A number of other before-type studies, as proposed in the application, were also made, such as those involving parking lot sticker counts at Howard and Linden Stations, vehicular traffic speed and volume counts near Dempster Station, passenger volume counts at certain railroad suburban stations and on the CTA Evanston rapid transit line. During the first ten days following inauguration of Skokie Swift service on April 20, a number of

special checks had to be made (even though not originally so intended) due to the high volume and growth rate of the train traffic.

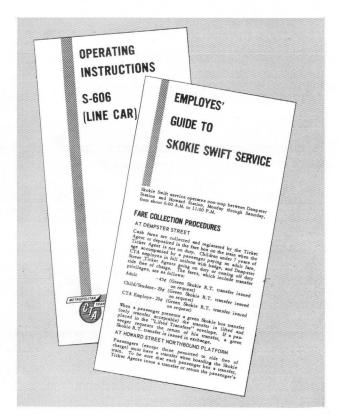
Results of the "before" series of studies will more appropriately be recorded in the second quarterly report.

TRAINING PROGRAM

Because of the many innovations of operating technique and equipment, as well as the line familiarization problems attendant upon a new route, an unusually detailed training program was developed for the Skokie Swift. This began with the preparation of a leaflet describing a line car just acquired by CTA (not at project cost) which was to be used extensively in the rehabilitation of the trolley system.

Later came a manual of fare collection procedures that would be new on this route. Next, came a leaflet detailing other operating procedures new here, such as high speed operation, remote control trolleys and so forth. Instruction outlines were made. Finally, from all of this material, instruction was ultimately given to the agents and operators.

It might be assumed that for a planned service involving only two cars at any one time, the instruction phase would be a short one. Actually, for greatest efficiency in scheduling the men, it was planned to use 8 operators and 2 agents in Skokie service each day. Seven of the operators would also spend part of each day's work on the adjacent Evanston route. To be sure that any of the rather large number of men working at Howard Terminal who are qualified for one-man car work on the Evanston line would also be qualified for the Skokie Swift, instruction including both classroom work and a number of quali-



fication trips had to be given to 59 operators. Instruction in fare collection was given to some 44 ticket agents.

Instruction from more detailed guides was also given to about 100 supervisors and superintendents any of whom might be called upon to deal with operating emergencies or routine service control problems.

Lastly, a few simplified orientation trips were run for the benefit of administrative personnel of certain other departments whose duties would later require them to have special knowledge about the Skokie Swift. All in all, some 139 instruction trips for an estimated 250 persons were made in preparation for regular service.

The large number of people available from this intensive training program, was of incalculable value in dealing with the rush of passenger traffic that immediately had to be served.

MISCELLANEOUS PREPARATIONS

Many important preparatory activities were in progress during the quarter. Schedules, with the related problems of providing maximum service with minimum cost, were prepared for Skokie Swift trains and connecting Skokie #97 buses. In due course, the pieces of work

established by these schedules had to be "picked" (chosen) by the qualified personnel.

A variety of maps ranging through engineering and operating needs to public information requirements in several forms were delineated.

Signs were produced for operating and passenger information purposes. Forms and procedures for the processing of administrative and control detail were developed. Progress report photographs were taken at intervals. Even the lowly paper transfer slip that makes available the entire 2,000-mile CTA system to the Skokie Swift rider had to be designed and printed.

Leases, contracts and other legal documents were executed. Real estate and insurance matters had to be dealt with. Conference after conference was held to reach decisions affecting several departments or agencies.

INAUGURAL CEREMONIES

At the start of the grant, April 13th had been selected as the earliest practicable starting date for train service, although the application provided for a rehabilitation period of 3 to 4 months. Early in April it appeared that the

To bring the official party to the inaugural ceremonies the four cars of the original Skokie Swift fleet were coupled to make this impressive train.



The ribbon-cutting ceremony which officially marked the start of service on the new Skokie Swift route was presided over by George L. DeMent, chairman, Chicago Transit Board. Snipping the ribbon are, left to right, Raymond Simon, representing Mayor Richard J. Daley; William B. Hurd, of United States Housing and Home Finance Agency, and Skokie Mayor Myron Greisdorf.





Pictured here are some of the CTA personnel who were on hand to assure the successful operation of Skokie Swift service on Saturday, April 18, when the new service was inaugurated.

Materials used in connection with inaugural ceremony



JOINTLY FINANCED DEMONSTRATION PROJECT

Inauguration of this five-mile rail rapid transit extension is an historical event in Chicago metropolitan area transportation. It marks the first time that the Federal government, a suburban community, and the area's major transit operator have joined forces to finance the establishment and operation of a rapid transit extension. Conceivably this demonstration project could set a pattern for future extensions of rapid transit in the Chicago metropolitan area.

Net cost of the project is estimated at

Net cost of the project is estimated at \$523,825. This is the anticipated amount by which revenues will fail to meet the costs of providing the physical facilities and operating the service for a two-year period.

Ing the service for a two-year period.

To defray the \$\$23,825 net cost, the Housing and Home Finance Agency is contributing \$349,217. CTA's contribution is \$137,415 in cash and services; Skokie's is \$37,193, also in cash and services.

Not included in CTA's contribution, however, are the cost of the right-of-way from Howard station, Chicago, to Dempster station, Skokie, and the cost of the four high-speed cars assigned to the project.

CTA bought the right-of-way and related operating fixtures from the defunct North Shore interurban for \$2,000,000. However, the Commonwealth Edison company is paying CTA \$300,000 for a perpetual easement to

use part of the right-of-way, thus reducing the right-of-way cost to \$1,700,000. Commonwealth Edison is also paying a rental of \$16,800 for a two year period which is being credited to project income. Cost of the four high-speed cars assigned to the service is \$353,604.

is \$353,604.

For its own purposes, CTA needed to purchase only the right-of-way from Howard station to East Prairie Road, Skokie, for access to and from its rapid transit shops, but when the demonstration project was proposed CTA consented to buying the stretch from East Prairie Road to the Dempster station terminal in Skokie.

in Skokie.

Studies are already underway to evaluate the benefits derived from the project. These include effect of the new service on land use, rents, employment, building construction, traffic accidents, and traffic congestion in the project's sphere of influence; on rider usage, the number of persons diverted from automobiles, and the effect of the service on existing mass transportation facilities in the area.

the area.

Participating with CTA and Skokie in these studies are the Chicago Area Transportation Study, the Northeastern Illinois Metropolitan Area Planning Commission, the Department of City Planning, City of Chicago, and the highway agencies of Cook County and the State of Illinois.

COMMUTER SERVICE new 10

HIGH SPEED RAPID TRANSIT

BETWEEN

DEMPSTER STATION, SKOKIE and HOWARD STATION, CHICAGO



SOUTHBOUND

SKOKIE SWIFT SERVICE

PROCEDURE FOR PAYING SKOKIE SWIFT FARE

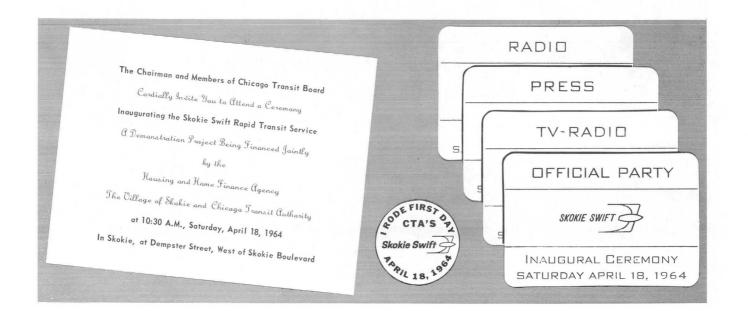
NORTHBOUND (Adult): Customer riding Evanston Express to Howard pays 20¢ to trainman and receives transfer for ride to Skokie. Arriving at Howard on "L", subway train customer pays 20¢ to agent at the Skokie Swift boarding area on the northbound when a voil di transfer is presented to the Evanston Express trainman or to the platform agent at Howard.

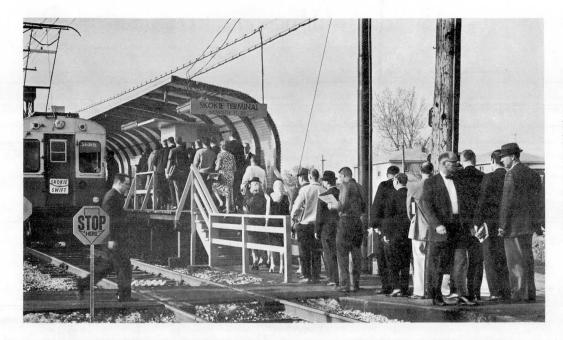
Boarding the Skokie Swift train at Howard, customer surrenders transfer to the operator, and receives another trans-fer when alighting at Dempster station if continuing trip on Skokie bus."

continuing trip on Skokie Duss

SOUTHBOUND (Adult): Customer originating in Skokie pays 45¢ and obtains transfer, if needed, for continuation ride in the Middle Zone or Evanston.

*Operates 24 hours daily, 7 days a week.





From the first day, rush hour passengers were lined up to pay fares and to board trains, which were running every few minutes. The car in the two photos on this page is No. 25, one of the standard speed cars diverted to the project and equipped with pan trolleys during the first quarter.

construction work that didn't have to be done until the opening of service and the work that had to be done before instruction could begin plus the practice operation itself would actually converge on Friday, April 17th. (Actually, the last crossing gate was gotten into service at 4:45 p.m. of that date.) The starting date for regular service was therefore fixed as Monday, April 20, with inaugural ceremonies at Dempster Station followed by free rides over the project on Saturday, April 18.

The ceremonies at 10:30 a.m. on that day were attended by several hundred persons who gathered to hear officials of the cooperating municipalities and agencies and to celebrate the occasion. As the day wore on more

and more people arrived to sample the trip to Howard and back. All four of the project's high speed cars worked valiantly to make 43 round trips in 5 1/2 hours. They carried 3,100 passengers, for an average of 72 per trip in cars seating only 46!

On Sunday, a final inspection was made by line car S606, which worked all day making last minute adjustments to the experimental trolley system.

INITIAL OPERATION

Opening day, Monday, April 20, began a cool grey day with intermittently heavy rain. The first trip at 6:00



20 SKOKIE SWIFT



Filled to capacity shortly after the first trains began operating on regular schedules on April 20, the 385-car parking lot proved inadequate to accommodate all the motorists who drove to the Dempster street terminal from outlying areas and used the fast rapid transit service. This picture is looking north towards the station. A 25-cent charge is made for all-day parking.

a.m. from Dempster left with half a load. As a precaution against the chance of a sudden surge of traffic or unexpected operating problems, an extra car was brought out to Skokie from Howard yard, as planned, with the intention of holding it through the rush period, unused unless needed. The 6:30 departure was made with a full load and it then became evident that not only would the extra (third) car be needed, but also the fourth, probably. As a further precaution against car equipment trouble, it had been arranged to relocate two cars from Linden yard to Howard yard. These cars had bodies identical to the high speed Skokie Swift cars, but had a maximum speed of 50 mph and collected power from an ordinary trolley pole.

Nevertheless passengers were coming into Dempster Station in such numbers that it was necessary to order the fourth (and last high speed) car and even a fifth car! Intervals between trains were reduced to 5 minutes (from the planned 10 minutes), but with the loads of 70-80 passengers per car (compared to seating capacity of 46 and anticipated load of 50), it became necessary to increase the time at terminals. Thus it required five cars to double the planned peak service. The off-peak traffic also was sufficient to warrant double the planned service and 15-minute headways were therefore instituted.

Dempster Park'n'Ride lot was filled to capacity by 8:50 a.m. and some of the parking restrictions in adjoining streets with vacant frontage had to be temporarily suspended.

By Thursday of the first week of service it was evident that some Saturday service would be justified without waiting for the detailed study provided for in the application for grant. It was decided to operate one car to give a 30-minute service from 7:00 a.m. to 7:00 p.m. This proved to be inadequate for the traffic.

Following are traffic and parking data for the ten operating days of the quarter:

Day of	Date	Passengers			Parking	
Week	$\underline{\text{April}}$	North	South	Both	Receipts	
M	20	1,928	2,010	3,938	\$103.30	
T	21	1,990	2,148	4,138	101.40	
W	22	2,099	2,182	4,281	100.95	
T	23	1,975	2,130	4,105	94.85	
F	24	2,142	2,334	4,476	109.00	
S	25	912	902	1,814	23.80	
M	27	2,189	2,306	4,495	108.75	
T	28	2,226	2,284	4,510	104.55	
W	29	2,114	2,275	4,389	103.05	
T	30	2,121	2,284	4,405	108.55	
10 Days	Total			40,551	\$958.20	

The average level of weekday traffic of 4,300 compares to 975 estimated to be the average for the first quarter of service on attachment 2, Exhibit E of the application for grant. No Saturday traffic at all was expected in the application.

Both the weekday and Saturday frequencies and periods of operation will undoubtedly require adjustments to cope with growth during the second quarter.

THE FINANCIAL REPORT

First Quarter (Period Ending April 18, 1964)

The original budget prepared by Chicago Transit Authority, with the cooperation of the Village of Skokie, upon which the grant of the Housing and Home Finance Agency was based, estimated that operating and rehabilitation costs would exceed revenues by \$523,825 and included the following principal items:

Service improvement costs - operation of Skokie shuttle service and parking lot	\$ 42,253	
Construction or rental contracts - rehabilitation of Skokie line, construction of parking lot, and interest in lieu of rental of R.O.W. and equipment	338,807	
Other project costs - data collection, analysis and reporting, and promotional activities	87,965	
Contingencies	54,800	
Total Project Budget	\$523,825	

The original allocation of funds contemplated a grant of 349,217 (66.67%) from the Housing and Home Finance Agency, a contribution by the Village of Skokie in the amount of 37,193 (7.10%) and CTA's portion of 137,415 (26.23%).

This first quarterly financial report covers CTA's accounting period ending April 18, 1964, which coincided with the physical completion of major rehabilitation of the operating facilities and the inaugural ceremony and free rides on Saturday, April 18, 1964, preparatory to commencement of regular operations on Monday, April 20, 1964.

The only functions (other than rehabilitation) which were performed during the period ending April 18, 1964, were related to preliminary work on data collection, analysis and reporting, and rather extensive promotional activities.

At the close of its accounting period April 18, 1964, CTA had not yet received bills from any of the contractors engaged on the project, including the Village of Skokie. Consequently, the only costs accumulated against the project during this period represented those arising from payment of CTA payrolls and vouchers and charges for CTA material used, and do not reflect the physical

activities described in earlier sections of this first quarterly report. See tables on page 23.

FORECAST

As previously indicated, although major portions of the rehabilitation work had been physically completed by the end of the first accounting period, April 18, 1964, the total costs of such rehabilitation were not yet reflected in the project records because contractors had not yet submitted bills for services rendered to that date.

In spite of the lack of these costs, however, and the inability to make proper determinations with respect to budget performance, two major developments have arisen during the rehabilitation period and the first days of operation that will make necessary the filing of an amended budget for this project. Comments relative to these have been made in previous sections of this report.

Fortunately, the effects of these two developments directly counteract each other so that the revised Total Project Budget which is proposed to be submitted is not expected to vary materially, if at all, from that already approved.

The first major development requiring a re-evaluation of costs arose during the early stages of the rehabilitation period when it was discovered that the estimates of work to be done and the costs thereof had been substantially understated because of the impossibility of accurate determination by CTA's engineers of the condition at date of abandonment of the structures and equipment which had been acquired for the project, and the deterioration of such structures and equipment from their being out of service for a substantial period of time.

The second development which must be reflected in a revised project budget fortunately counteracts the expected additional costs of rehabilitation and arose as soon as operation commenced, when it became apparent that riding was substantially heavier than had been anticipated. This means that revenues, miles operated and attendant operating costs, equipment assigned and costs related thereto have all been substantially underestimated and must be revised to more properly reflect results being achieved.

DETAIL OF COSTS

A comparison of actual expenditures made during the period ended April 18, 1964, with related budget items follows:

		Budget	Expended to April 18, 1964
Ser	vice improvement costs	\$_42,253	\$
R	nstruction or rental contracts - lehabilitation of Skokie line construction of parking lot nterest in lieu of rental of	190,800 67,875	109,709.50
	right-of-way and equipment	80,132	
	ner project costs - kokie - Data collection,	338,807	109,709.50
	analysis and reporting IMAPC - Data collection,	17,075	-
	analysis and reporting kokie - Promotional activities	29,010 34,230	2,112.85
	TA - Promotional activities	7,650 87,965	<u>1,614,28</u> 3,727.13
Cor	ntingencies	54,800	50,296.33
	Total	\$ <u>523,825</u>	\$ <u>163,732.96</u>

A list of job order descriptions covering the work performed in rehabilitating the Skokie line and also those presently classed under contingencies are set forth below:

	Budget	Expended to April 18, 1964
Modify track circuits Terminal signals & crossover trolley Crossing gates Gate controls Lighting at Dempster terminal Telephone - underground cable Line supervision - track circuits Train phones Bumping post - Dempster Crossover - Dempster Station platform - Dempster Station platform - Dempster Station windbreaks - Dempster Agent's booth - Dempster Trolley poles - cars Fare boxes - cars Signs - cars and platforms	\$ 24,000 20,000 75,000 27,000 1,400 2,000 1,500 2,000 2,000 4,700 2,000 4,700 2,000 5,000 2,000 5,400 5,400 4,000	\$ 11,362.08 11,057.90 23,420.97 497.49 7,517.18 2,926.02 3,136.46 1,876.90 244.12 8,100.29 12,602.15 7,141.21 691.54 1,159.21 17,595.24 324.62 56.12
Contingencies -	190,800	109,709.50
Skokie substation Cut grooves in paving Grind rail Repair tracks Spike unused turnouts Remove rail - Dempster Clean right-of-way Construct footwalk - Dempster Install fence - Dempster Repair fence - Main line Repair trolley and cables		10,281.60 560.63 1,572.45 450.08 132.72 767.22 305.36 953.52 229.20 3,341.30 31,702.25
	\$54,800	\$50,296.33

ORGANIZATION & STAFF

The project is a cooperative venture with Chicago Transit Authority the grantee and manager. Participation in the net project cost is divided as follows:

Chicago Transit Authority	26.23%
Village of Skokie	7.10%
Housing & Home Finance Agency	66.67%

Included in the project costs are study services of the Northeastern Illinois Metropolitan Area Planning Commission. Study and data analysis services of the Chicago Area Transportation Study are contributed to the project.

Contracts or agreements establishing these relationships were executed during the quarter. Project manager and Chicago Transit Authority representative is George Krambles. Project representative for Skokie is Bernard L. Marsh; for Northeastern Illinois Metropolitan Area Planning Commission is Matthew L. Rockwell; and for Chicago Area Transportation Study is E. Wilson Campbell.

For administrative convenience, the Village of Skokie assumed responsibility for the design, construction, maintenance and operation of the Dempster parking lot, including all driveways, roadways, bumper guards and the parking gates. Chicago Transit Authority assumed responsibility for design, construction, rehabilitation, maintenance and operation of the rail line and all its appurtenances including the Skokie platforms and footwalks at Dempster. The ridership promotion program was carried out jointly by Village of Skokie and CTA. The study program was divided between all of the cooperating agencies, each being responsible for certain parts.

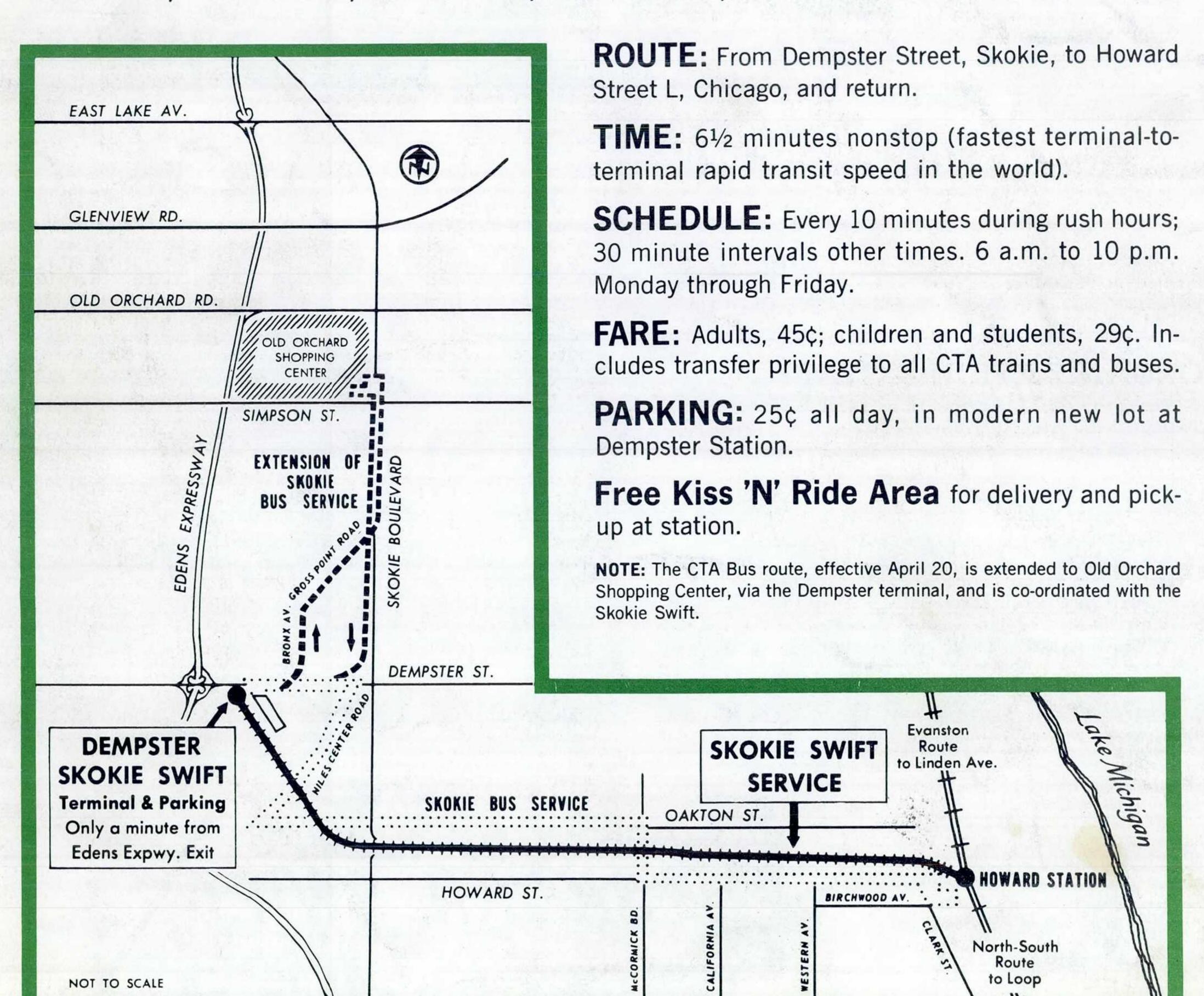
Such is the story of Skokie Suift's first quarter. The second report will cover operations through June 30. It will also contain preliminary reports on the comprehensive study program.



Announcing a new CTA rail service starting April 20:



Serving commuters to and from Chicago, Skokie, Morton Grove, Wilmette, Winnetka, Glenview, Northfield, Northbrook and Glencoe.



SKOKIE SWIFT—the carefree commuter