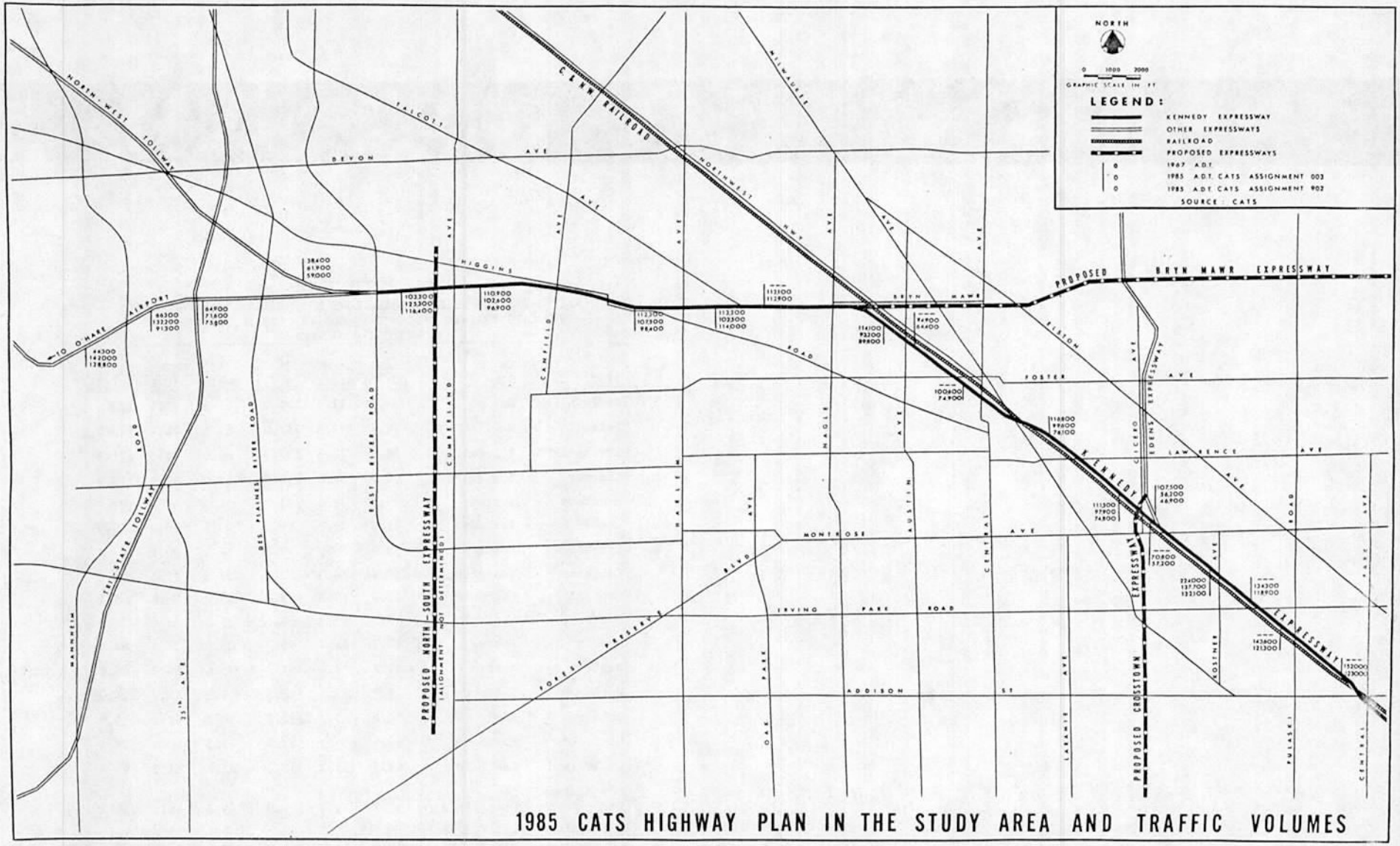


1985 CATS HIGHWAY PLAN IN THE STUDY AREA AND TRAFFIC VOLUMES

COOK COUNTY HIGHWAY DEPARTMENT

PARK-N-RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 9

removed from the Tollway by 1985, and the CTA will not have been extended to O'Hare by 1985. This is, essentially, the CATS Committed Plan in the study area.

CATS Assignment 902 assumes that the Crosstown, Bryn Mawr, and North-South Expressways will have been completed by 1985, that tolls have been removed from the Tollways by 1985, and that the CTA has not been extended to O'Hare by 1985. This is, essentially the Interim Plan Highway Network proposed by CATS for 1985 in the study area.

It should be noted that in most cases, the Committed Expressway Plan results in a substantial decrease of traffic on the Kennedy Expressway in the area near and east of the proposed Crosstown Expressway and the recommended Interim Plan results in a still greater decrease in projected 1985 traffic on the Kennedy Expressway in this area.

For purposes of this report, future demand for Park-N-Ride facilities will be estimated on the alternative assumptions that:

1. No new urban expressways will be built by 1985.
2. The CATS Committed Highway System will have been implemented by 1985.
3. The CATS Interim Plan Highway Network will have been implemented by 1985.

B. Future Park-N-Ride Demand Assuming No New Urban Expressways Will Be Built By 1985

If no new urban expressways are constructed by 1985, it is expected that traffic congestion will continue to worsen on the Kennedy Expressway. If an extensive system of access ramp control lights is instituted to preserve the traffic flow on the Kennedy Expressway, this congestion will be transferred from the Expressway to the major alternate routes used to reach Chicago. In either case, the increasingly congested roadway system of the study area will make the use of Park-N-Ride facilities, both at suburban commuter railroad stations, and on the Kennedy Expressway, relatively more attractive in the future as traffic and congestion both increase.

Past traffic on the Kennedy Expressway is shown on Tables No. 24 and 25. These counts were provided by the Illinois Division of Highways, Bureau of Planning. The counting station was located at Illinois Route 50, Cicero Avenue and was activated November 15, 1968. Weekday counts for the period April 9 through April 19, were compared for the years 1969, 1970 and 1971 because data was available for this period in each of these years and because being springtime data it was comparable with the time runs made by the Consultant's staff. Figures for the period April 9-19 of 1968 were not available. However, figures for the period December 9-19 for 1968, were available. These figures were adjusted to April 1968 by using the ratio of 1.03 to 1, which was one-half the ratio of December 1969 to April 1969 total traffic.

Table No. 24 shows the peak hour and daily total traffic on the Kennedy Expressway for the period April 9 through April 19 for the years 1968 through 1971. Table No. 25 summarizes peak hour and daily traffic on an annual basis for the years 1968 through 1971 and shows the annual percentage increase or decrease of these factors.

The most important of these factors is probably the peak, peak hour of the 7 weekdays for each of the years in question. This has increased from 4,670 traffic movements in 1968 to 4,950 traffic movements in 1971. The annual percentage increase has ranged from 0.2%

TABLE NO. 24

WEEKDAY TOTAL TRAFFIC AND MORNING PEAK HOUR SOUTHEAST BOUND TRAFFIC ON THE KENNEDY EXPRESSWAY

	TRAFFIC (A)											
	1968(B)			1969			1970			1971		
	PEAK HOUR(C)	DAILY TRAFFIC(D)	PEAK HOUR % OF DAILY TRAFFIC	PEAK HOUR(C)	DAILY TRAFFIC(D)	PEAK HOUR % OF DAILY TRAFFIC	PEAK HOUR(C)	DAILY TRAFFIC(D)	PEAK HOUR % OF DAILY TRAFFIC	PEAK HOUR(C)	DAILY TRAFFIC(D)	PEAK HOUR % OF DAILY TRAFFIC
April 9	4,670	105,550	4.4	4,130	109,020	3.8	4,710	112,650	4.2	4,170	113,010	3.7
April 10	4,450	107,770	4.1	4,670	111,370	4.2	4,730	119,140	4.0	SAT.	SAT.	SAT.
April 11	4,600	110,080	4.2	4,760	116,600	4.1	SAT.	SAT.	SAT.	SUN.	SUN.	SUN.
April 12	4,550	106,780	4.2	SAT.	SAT.	SAT.	SUN.	SUN.	SUN.	4,530	116,400	3.9
April 13	4,620	105,500	4.4	SUN.	SUN.	SUN.	4,580	106,470	4.3	4,730	110,620	4.3
April 14	SAT.	SAT.	SAT.	4,490	105,100	4.3	4,610	110,640	4.0	4,360	114,910	3.8
April 15	SUN.	SUN.	SUN.	4,580	109,700	4.2	4,770	114,800	4.2	4,760	118,440	4.0
April 16	4,430	105,050	4.2	4,180	109,340	3.8	4,700	114,780	4.1	4,490	124,420	3.6
April 17	4,480	110,040	4.1	4,050	106,760	3.8	4,700	119,500	3.9	SAT.	SAT.	SAT.
April 18	-	-	-	-	-	-	-	-	-	SUN.	SUN.	SUN.
April 19	-	-	-	-	-	-	-	-	-	4,550	116,800	4.2
7 Weekday TOTAL	31,000	752,770	4.3	30,860	767,890	4.0	32,600	798,180	4.1	31,990	814,600	3.9
7 Weekday AVERAGE	4,570	107,540	4.3	4,410	109,700	4.0	4,660	114,030	4.1	4,570	116,370	3.9

(A) Counts provided by the Illinois Division of Highways, Bureau of Planning Station located at Ill. 50, Cicero Avenue. Station Activated 11/15/68

(B) 1968 figures are for 12/9-12/19, adjusted to April 1968 levels by the ratio of 1.03 to 1, which is one half the ratio of December 1969 to April 1969 Total Daily Traffic.

(C) Peak Hour Morning Traffic Southeast Bound (To CBD).

(D) Daily Traffic in Both Directions.

Source: Illinois Division of Highways, Bureau of Planning.

TABLE NO. 25

GROWTH OF TRAFFIC ON THE KENNEDY EXPRESSWAY 1968-1971

	PEAK HOUR TRAFFIC				DAILY TRAFFIC			
YEAR	AVERAGE OF 7 WEEKDAYS	PERCENT INCREASE	PEAK OF 7 WEEKDAYS	PERCENT INCREASE	AVERAGE OF 7 WEEKDAYS	PERCENT INCREASE	PEAK OF 7 WEEKDAYS	PERCENT INCREASE
1968	4,570	-	4,670	-	107,540	-	110,080	-
1969	4,410	-3.5	4,760	+1.9	109,700	+2.0	116,600	+5.9
1970	4,660	+5.7	4,770	+0.2	114,030	+3.9	119,500	+2.5
1971	4,570	-1.9	4,950	+3.8	116,370	+2.1	124,420	+4.1

NOTE: Capacity of the Kennedy Expressway is considered to be 1,500 vehicles per lane per hour, corresponding generally to level of service C. At Cicero Avenue where counts were taken, Kennedy consists of 3 lanes in each direction. Therefore, one way capacity would be 4,500 vehicles per hour.

SOURCE: Illinois Division of Highways, Bureau of Planning.

TABLE NO. 26

PROJECTED MORNING PEAK TWO HOUR DEMAND FOR USE OF A
PARK-N-RIDE PROJECT LOCATED NEAR RIVER ROAD

TIME	TRAFFIC		DEMAND METHOD I		DEMAND METHOD II				Average Of Two Methods	Recommended Design Demand
A	B	C	D	E	F	G	H	I	J	
Year	Average Number of Passenger Vehicles in Peak Hour	Estimated Total Passenger Car Traffic In A.M. Peak Two Hour Period	Estimated Percent of Total Passenger Car Traffic In A.M. Peak Two Hour Period Which Would Use Project	Estimated Demand Method I (Col. C x Col. D)	Estimated Percent of Passenger Car Drivers With CBD Or Beyond Destinations In A.M. Peak Two Hours	Potential CBD Or Beyond Park-N-Ride Market In A.M. Peak Two Hours (Col. C x Col. F)	Estimated Percent of Passenger Car Traffic In A.M. Peak Two Hours With CBD Or Beyond Destinations Which Would Use Park-N-Ride Project	Estimated Demand Method II (Col. G x Col. H)	(Cols. E + I + 2)	
1971	1,776	3,552*	22.0%	781	24.0%	852	64%	545	663	650
1972	1,829	3,658	22.1%	808	24.0%	878	65%	571	690	675
1973	1,884	3,768	22.2%	836	23.9%	901	66%	595	716	700
1974	1,941	3,882	22.3%	866	23.9%	928	67%	622	744	750
1975	1,999	3,998	22.4%	896	23.8%	952	68%	647	772	775
1976	2,059	4,118	22.5%	927	23.8%	980	69%	676	802	800
1977	2,121	4,242	22.6%	959	23.7%	1,005	70%	704	832	850
1978	2,184	4,368	22.7%	992	23.7%	1,035	71%	735	864	875
1979	2,250	4,500	22.8%	1,026	23.6%	1,062	72%	765	896	900
1980	2,317	4,634	22.9%	1,061	23.6%	1,094	73%	799	930	925
1981	2,387	4,774	23.0%	1,098	23.5%	1,122	74%	830	964	950
1982	2,459	4,918	23.1%	1,136	23.5%	1,156	75%	867	1,002	1,000
1983	2,533	5,066	23.2%	1,175	23.5%	1,191	76%	905	1,040	1,050
1984	2,609	5,218	23.3%	1,216	23.4%	1,221	77%	940	1,078	1,075
1985	2,687	5,374	23.4%	1,258	23.4%	1,258	78%	981	1,120	1,100

* From Table No. 21, assumed to grow at the rate of 3% per year.

between 1969 and 1970, to 3.8% between 1970 and 1971. Because of the uncertainties introduced into traffic growth on the Kennedy Expressway by the opening of the CTA line in the median of the Kennedy Expressway on February 1, 1970, and the severe economic slowdown occurring in this approximate time period, a growth of 3% per year will be used for projecting peak hour traffic growth on the Kennedy Expressway till the year 1985. Table Nos. 26 through 32 show the derivation of the estimated demand for the use of a Park-N-Ride project, at the seven sites previously considered, for the years 1971 - 1985. Derivation of these demands is essentially the same as the derivation of existing demand, except that it is based upon projected rather than present traffic on the Kennedy Expressway.

Columns D and H of Tables No. 26 through 32 show an increase in the percentage of drivers who would use Park-N-Ride projects. This percentage increases to a maximum of 43.4% in Column D at Irving Park Road and a maximum of 80% at Cumberland Road and other sites closer to the CBD in Column H. This is because it is expected that as congestion on the Kennedy increases and as the shortage of parking spaces in the CBD becomes more severe, more and more Expressway drivers will use the Park-N-Ride facilities.

Column F shows a small decline in the percentage of morning peak hour traffic with the CBD as a destination. This is done to recognize the declining relative importance of the CBD in the Chicago metropolitan area.

The computation of design demand shown in Table Nos. 26 through 32, with the exceptions noted above, is the same as is shown in Table No. 21. This demand should be considered as unrestrained demand. In practice, where the capacity of the Kennedy Expressway is exceeded, by any substantial amount, it will be impossible for this demand to be satisfied.

The demand derived for each of the sites considered is summarized and shown for the years 1971 - 1985 in Table No. 33 and indicated by straight lines on Figure No. 10. It is estimated that the demand for a Park-N-Ride project in 1985, the design year of this study, assuming no new expressways are constructed, will reach about 1,100 spaces at River Road (no access from Tollway), about 2,800 spaces at Cumberland Avenue, about 2,900 spaces at Oriole Avenue, about 3,100 spaces at Harlem Avenue, about 350 spaces at Gladstone Park if only C&NW service is provided, about 4,100 spaces at Jefferson Park, and about 6,900 spaces at Irving Park Road.

If a series of facilities is contemplated, adjustments to demand should be made, similar to those made for adjusting 1971 demand. Table No. 34 shows the projected passenger car ramp traffic between River Road and Irving Park Road which are needed to make these adjustments. These ramp volumes are projected at the same 3% rate of increase as traffic flow on the expressway.

C. Future Park-N-Ride Demand Assuming the Expressway Plan Corresponding to CATS Traffic Assignment 003 or 902 Is Completed By 1985

Estimates of demand for a Park-N-Ride project on the Kennedy Expressway for the year 1985 are shown in Table No. 35 for CATS Traffic Assignment 003 and in Table No. 36 for CATS Traffic Assignment 902. These estimates have been prepared to determine if there would be a demand for the use of Park-N-Ride facilities if the expressway plans

TABLE NO. 27

PROJECTED MORNING PEAK TWO HOUR DEMAND FOR USE OF A PARK-N-RIDE PROJECT LOCATED NEAR CUMBERLAND AVENUE

TIME	TRAFFIC		DEMAND METHOD I		DEMAND METHOD II				Average Of Two Methods	Recommended Design Demand
A	B	C	D	E	F	G	H	I	J	
Year	Average Number Of Passenger Vehicles In Peak Hour	Estimated Total Passenger Car Traffic In A.M. Peak Two Hour Period	Estimated Percent Of Total Passenger Car Traffic In A.M. Peak Two Hour Period Which Would Use Project	Estimated Demand Method I (Col. C x Col. D)	Estimated Percent Of Passenger Car Drivers With CBD Or Beyond Destinations In A.M. Peak Two Hours	Potential CBD Or Beyond Park-N-Ride Market In A.M. Peak Two Hours (Col. C x Col. F)	Estimated Percent Of Passenger Car Traffic In A.M. Peak Two Hours With CBD Or Beyond Destinations Which Would Use Park-N-Ride Project	Estimated Demand Method II (Col. G x Col. H)	(Cols. E + I + 2)	
1971	3,905	7,811*	24.0%	1,875	27.0%	2,109	69%	1,455	1,665	1,650
1972	4,022	8,044	24.1%	1,939	27.0%	2,172	70%	1,520	1,730	1,750
1973	4,143	8,286	24.2%	2,005	26.9%	2,229	71%	1,583	1,794	1,800
1974	4,267	8,534	24.3%	2,074	26.9%	2,296	72%	1,653	1,864	1,850
1975	4,395	8,790	24.4%	2,145	26.8%	2,356	73%	1,720	1,933	1,950
1976	4,527	9,054	24.5%	2,218	26.8%	2,426	74%	1,795	2,007	2,000
1977	4,663	9,326	24.6%	2,294	26.7%	2,490	75%	1,868	2,081	2,100
1978	4,803	9,606	24.7%	2,373	26.7%	2,565	76%	1,949	2,161	2,150
1979	4,947	9,894	24.8%	2,454	26.6%	2,632	77%	2,027	2,241	2,250
1980	5,096	10,192	24.9%	2,538	26.6%	2,711	78%	2,115	2,327	2,350
1981	5,249	10,498	25.0%	2,625	26.5%	2,782	79%	2,198	2,412	2,400
1982	5,406	10,812	25.1%	2,714	26.5%	2,865	80%	2,292	2,503	2,500
1983	5,568	11,136	25.2%	2,806	26.4%	2,940	80%	2,352	2,579	2,600
1984	5,735	11,470	25.3%	2,902	26.4%	3,028	80%	2,422	2,662	2,650
1985	5,907	11,814	25.4%	3,001	26.3%	3,107	80%	2,486	2,744	2,750

* From Table No. 21, assumed to grow at the rate of 3% per year.

TABLE NO. 28

PROJECTED MORNING PEAK TWO HOUR DEMAND FOR USE OF A PARK-N-RIDE PROJECT LOCATED NEAR ORIOLE AVENUE

TIME	TRAFFIC		DEMAND METHOD I		DEMAND METHOD II				Average Of Two Methods	Recommended Design Demand
A	B	C	D	E	F	G	H	I	J	
Year	Average Number of Passenger Vehicles In Peak Hour	Estimated Total Passenger Car Traffic In A.M. Peak Two Hour Period	Estimated Percent Of Total Passenger Car Traffic In A.M. Peak Two Hour Period Which Would Use Project	Estimated Demand Method I (Col. C x Col. D)	Estimated Percent Of Passenger Car Drivers With CBD Or Beyond Destinations In A.M. Peak Two Hours	Potential CBD Or Beyond Park-N-Ride Market In A.M. Peak Two Hours (Col. C x Col. F)	Estimated Percent Of Passenger Car Traffic In A.M. Peak Two Hours With CBD Or Beyond Destinations Which Would Use Park-N-Ride Project	Estimated Demand Method II (Col. G x Col. H)	(Cols. E + I ÷ 2)	
1971	3,948	7,895*	25.0%	1,974	29.0%	2,290	71%	1,626	1,800	1,800
1972	4,066	8,132	25.1%	2,041	29.0%	2,358	71%	1,698	1,870	1,850
1973	4,188	8,376	25.2%	2,111	28.9%	2,421	73%	1,767	1,939	1,950
1974	4,314	8,628	25.3%	2,183	28.9%	2,493	74%	1,845	2,014	2,000
1975	4,443	8,886	25.4%	2,257	28.8%	2,559	73%	1,919	2,088	2,100
1976	4,576	9,152	25.5%	2,334	28.8%	2,636	76%	2,003	2,169	2,150
1977	4,713	9,426	25.6%	2,413	28.7%	2,705	77%	2,083	2,248	2,250
1978	4,854	9,708	25.7%	2,495	28.7%	2,786	78%	2,173	2,334	2,350
1979	5,000	10,000	25.8%	2,580	28.6%	2,860	79%	2,259	2,420	2,400
1980	5,150	10,300	25.9%	2,668	28.6%	2,946	80%	2,357	2,513	2,500
1981	5,305	10,610	26.0%	2,759	28.5%	3,024	80%	2,419	2,589	2,600
1982	5,464	10,928	26.1%	2,852	28.5%	3,114	80%	2,491	2,672	2,700
1983	5,628	11,256	26.2%	2,949	28.4%	3,197	80%	2,558	2,754	2,800
1984	5,797	11,594	26.3%	3,049	28.4%	3,293	80%	2,634	2,842	2,850
1985	5,971	11,941	26.4%	3,153	28.3%	3,380	80%	2,704	2,929	2,900

* From Table No. 21, assumed to grow at the rate of 3% per year.

TABLE NO. 29

PROJECTED MORNING PEAK TWO HOUR DEMAND FOR USE OF A PARK-N-RIDE PROJECT LOCATED NEAR HARLEM AVENUE

TIME	TRAFFIC		DEMAND METHOD I		DEMAND METHOD II				Average Of Two Methods	Recommended Design Demand
A	B	C	D	E	F	G	H	I	J	
Year	Average Number of Passenger Vehicles In Peak Hour	Estimated Total Passenger Car Traffic In A.M. Peak Two Hour Period	Estimated Percent Of Total Passenger Car Traffic In A.M. Peak Two Hour Period Which Would Use Project	Estimated Demand Method I (Col. C x Col. D)	Estimated Percent Of Passenger Car Drivers With CBD Or Beyond Destination In A.M. Peak Two Hours	Potential CBD Or Beyond Park-N-Ride Market In A.M. Peak Two Hours (Col. C x Col. F)	Estimated Percent Of Passenger Car Traffic In A.M. Peak Two Hours With CBD or Beyond Destinations Which would Use Park-N-Ride Project	Estimated Demand Method II (Col. G x Col. H)	(Cols. E + I ÷ 2)	
1971	4,032	8,064*	26.0%	2,097	30.0%	2,419	72%	1,742	1,920	1,900
1972	4,153	8,306	26.1%	2,169	30.0%	2,492	73%	1,819	1,994	2,000
1973	4,278	8,555	26.2%	2,241	29.9%	2,558	74%	1,893	2,067	2,050
1974	4,406	8,813	26.3%	2,318	29.9%	2,635	75%	1,976	2,147	2,150
1975	4,538	9,076	26.4%	2,396	29.8%	2,705	76%	2,056	2,226	2,250
1976	4,674	9,348	26.5%	2,477	29.8%	2,786	77%	2,145	2,311	2,300
1977	4,814	9,628	26.6%	2,561	29.7%	2,860	78%	2,231	2,396	2,400
1978	4,958	9,917	26.7%	2,648	29.7%	2,945	79%	2,327	2,488	2,500
1979	5,107	10,213	26.8%	2,737	29.6%	3,023	80%	2,418	2,578	2,600
1980	5,260	10,520	26.9%	2,830	29.6%	3,114	80%	2,491	2,661	2,650
1981	5,418	10,836	27.0%	2,926	29.5%	3,197	80%	2,558	2,742	2,750
1982	5,581	11,161	27.1%	3,023	29.5%	3,293	80%	2,634	2,830	2,850
1983	5,748	11,497	27.2%	3,127	29.4%	3,380	80%	2,704	2,916	2,900
1984	5,920	11,840	27.3%	3,232	29.4%	3,481	80%	2,785	3,009	3,000
1985	6,098	12,196	27.4%	3,342	29.3%	3,573	80%	2,858	3,100	3,100

* From Table No. 21, assumed to grow at the rate of 3% per year.

TABLE NO. 30

PROJECTED MORNING PEAK TWO HOUR DEMAND FOR USE OF PARK-N-RIDE PROJECT LOCATED NEAR GLADSTONE PARK

TIME	TRAFFIC		DEMAND METHOD I		DEMAND METHOD II				Average Of Two Methods	Recommended Design Demand If Served by CTA &/Or CTA & C&NW	Recommended Design Demand If Served by C&NW Only @ 10% Of CTA Demand To Nearest 50
A	B	C	D	E	F	G	H	I	J		
Year	Average Number of Passenger Vehicles In Peak Hour	Estimated Total Passenger Car Traffic In A.M. Peak Two Hour Period	Estimated Percent Of Total Passenger Car Traffic In A.M. Peak Two Hour Period Which Would Use Project	Estimated Demand Method I (Col. C x Col. D)	Estimated Percent Of Passenger Car Drivers With CBD Or Beyond Destination In A.M. Peak Two Hours	Potential CBD or Beyond Park-N-Ride Market In A.M. Peak Two Hours (Col. C x Col. F)	Estimated Percent Of Passenger Car Traffic In A.M. Peak Two Hours With CBD Or Beyond Destinations Which Would Use Park-N-Ride Project	Estimated Demand Method II (Col G x Col. H)	(Cols. E + I + 2)		
1971	4,151	8,302 *	28.0%	2,325	33.0%	2,740	74%	2,028	2,177	2,200	200
1972	4,276	8,552	28.1%	2,403	33.0%	2,822	75%	2,117	2,260	2,250	200
1973	4,404	8,808	28.2%	2,484	32.9%	2,898	76%	2,202	2,343	2,350	250
1974	4,536	9,072	28.3%	2,567	32.9%	2,985	77%	2,298	2,433	2,450	250
1975	4,672	9,344	28.4%	2,654	32.8%	3,065	78%	2,391	2,523	2,500	250
1976	4,812	9,624	28.5%	2,743	32.8%	3,157	79%	2,494	2,619	2,600	250
1977	4,957	9,914	28.6%	2,835	32.7%	3,242	80%	2,594	2,715	2,700	300
1978	5,105	10,210	28.7%	2,930	32.7%	3,339	80%	2,671	2,801	2,800	300
1979	5,258	10,516	28.8%	3,029	32.6%	3,428	80%	2,742	2,886	2,900	300
1980	5,416	10,832	28.9%	3,130	32.6%	3,531	80%	2,825	2,978	3,000	300
1981	5,578	11,156	30.0%	3,347	32.5%	3,626	80%	2,901	3,124	3,100	300
1982	5,746	11,492	30.1%	3,459	32.5%	3,735	80%	2,988	3,224	3,200	300
1983	5,918	11,836	30.2%	3,574	32.4%	3,835	80%	3,068	3,321	3,300	350
1984	6,096	12,192	30.3%	3,694	32.9%	3,950	80%	3,160	3,427	3,450	350
1985	6,279	12,558	30.4%	3,818	32.3%	4,056	80%	3,245	3,532	3,550	350

* From Table No. 21, assumed to grow at the rate of 3% per year.

TABLE NO. 31

PROJECTED MORNING PEAK TWO HOUR DEMAND FOR USE OF A PARK-N-RIDE PROJECT LOCATED NEAR JEFFERSON PARK

TIME	TRAFFIC		DEMAND METHOD I		DEMAND METHOD II				Average Of Two Methods	Recommended Design Demand
A	B	C	D	E	F	G	H	I	J	
Year	Average Number of Passenger Vehicles in Peak Hour	Estimated Total Passenger Car Traffic In A.M. Peak Two Hour Period	Estimated Percent Of Total Passenger Car Traffic In A.M. Peak Two Hour Period Which Would Use Project	Estimated Demand Method I (Col. C x Col. D)	Estimated Percent Of Passenger Car Drivers With CBD Or Beyond Destinations In A.M. Peak Two Hours	Potential CBD Or Beyond Park-N-Ride Market In A.M. Peak Two Hours (Col. C x Col. F)	Estimated Percent Of Passenger Car Traffic In A.M. Peak Two Hours With CBD Or Beyond Destinations Which Would Use Park-N-Ride Project	Estimated Demand Method II (Col. G x Col. H)	(Cols. E + I + 2)	
1971	4,307	8,613*	31.0%	2,670	39.0%	3,359	76%	2,553	2,612	2,600
1972	4,436	8,872	31.1%	2,759	39.0%	3,460	77%	2,664	2,712	2,700
1973	4,569	9,138	31.2%	2,851	38.9%	3,555	78%	2,773	2,812	2,800
1974	4,706	9,412	31.3%	2,946	38.9%	3,661	79%	2,892	2,919	2,900
1975	4,847	9,694	31.4%	3,044	38.8%	3,761	80%	3,009	3,027	3,000
1976	4,993	9,986	31.5%	3,146	38.8%	3,875	80%	3,100	3,123	3,100
1977	5,143	10,286	31.6%	3,250	38.7%	3,981	80%	3,185	3,218	3,200
1978	5,297	10,594	31.7%	3,358	38.7%	4,100	80%	3,280	3,319	3,300
1979	5,456	10,912	31.8%	3,470	38.6%	4,212	80%	3,370	3,420	3,400
1980	5,620	11,240	31.9%	3,586	38.6%	4,339	80%	3,471	3,529	3,550
1981	5,788	11,576	32.0%	3,704	38.5%	4,457	80%	3,566	3,635	3,650
1982	5,961	11,922	32.1%	3,827	38.5%	4,590	80%	3,672	3,750	3,750
1983	6,141	12,282	32.2%	3,955	38.4%	4,716	80%	3,773	3,864	3,850
1984	6,325	12,650	32.3%	4,086	38.4%	4,858	80%	3,886	3,986	4,000
1985	6,514	13,028	32.4%	4,221	38.3%	4,990	80%	3,992	4,107	4,100

* From Table No. 21, assumed to grow at the rate of 3% per year.

TABLE NO. 32

PROJECTED MORNING PEAK TWO HOUR DEMAND FOR USE OF A PARK-N-RIDE PROJECT LOCATED NEAR IRVING PARK

TIME	TRAFFIC		DEMAND METHOD I		DEMAND METHOD II				Average Of Two Methods	Recommended Design Demand
A	B	C	D	E	F	G	H	I	J	
Year	Average Number of Passenger Vehicles in Peak Hour	Estimated Total Passenger Car Traffic In A.M. Peak Two Hour Period	Estimated Percent Of Total Passenger Car Traffic In A.M. Peak Two Hour Period Which Would Use Project	Estimated Demand Method I (Col. C x Col. D)	Estimated Percent Of Passenger Car Drivers with CBD Or Beyond Destinations In A.M. Peak Two Hours	Potential CBD Or Beyond Park-N-Ride Market In A.M. Peak Two Hours (Col. C x Col. F)	Estimated Percent Of Passenger Car Traffic In A.M. Peak Two Hours With CBD Or Beyond Destinations Which Would Use Park-N-Ride Project	Estimated Demand Method II (Col. G x Col. H	(Cols. E + I + 2)	
1971	5,254	10,507*	42.0%	4,413	55.0%	5,779	78%	4,508	4,461	4,450
1972	5,412	10,824	42.1%	4,557	55.0%	5,953	79%	4,703	4,630	4,650
1973	5,574	11,148	42.2%	4,704	54.9%	6,120	80%	4,896	4,800	4,800
1974	5,741	11,482	42.3%	4,857	54.9%	6,304	80%	5,043	4,950	4,950
1975	5,913	11,826	42.4%	5,014	54.8%	6,481	80%	5,185	5,100	5,100
1976	6,091	12,182	42.5%	5,177	54.8%	6,676	80%	5,341	5,259	5,250
1977	6,273	12,546	42.6%	5,345	54.7%	6,863	80%	5,490	5,418	5,400
1978	6,461	12,922	42.7%	5,518	54.7%	7,068	80%	5,654	5,586	5,600
1979	6,655	13,310	42.8%	5,697	54.6%	7,267	80%	5,814	5,756	5,750
1980	6,855	13,710	42.9%	5,882	54.6%	7,486	80%	5,989	5,936	5,950
1981	7,060	14,120	43.0%	6,072	54.5%	7,695	80%	6,156	6,114	6,100
1982	7,272	14,544	43.1%	6,268	54.5%	7,926	80%	6,341	6,305	6,300
1983	7,490	14,980	43.2%	6,471	54.4%	8,149	80%	6,519	6,495	6,500
1984	7,715	15,430	43.3%	6,681	54.4%	8,394	80%	6,715	6,698	6,700
1985	7,946	15,892	43.4%	6,897	54.3%	8,629	80%	6,903	6,900	6,900

* From Table No. 21, assumed to grow at the rate of 3% per year.

TABLE NO. 33

SUMMARY OF TOTAL DEMAND FOR PARK-N-RIDE FACILITIES AT VARIOUS LOCATIONS ALONG THE KENNEDY EXPRESSWAY 1971-1985 ASSUMING NO MAJOR NEW EXPRESSWAYS ARE CONSTRUCTED

ESTIMATED TOTAL DEMAND FOR PARKING SPACES

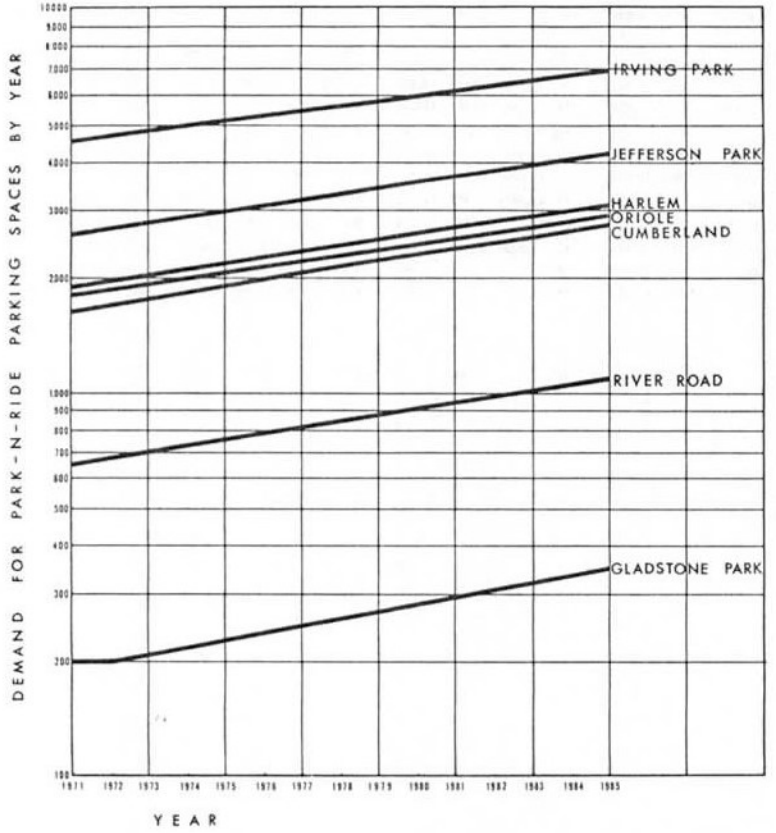
YEAR	RIVER ROAD*	CUMBERLAND	ORIOLE	HARLEM	GLADSTONE PARK**	JEFFERSON PARK	IRVING PARK
1971	650	1,650	1,800	1,900	200	2,600	4,450
1972	675	1,750	1,850	2,000	200	2,700	4,650
1973	700	1,800	1,950	2,050	250	2,800	4,800
1974	750	1,850	2,000	2,150	250	2,900	4,950
1975	775	1,950	2,100	2,250	250	3,000	5,100
1976	800	2,000	2,150	2,300	250	3,100	5,250
1977	850	2,100	2,250	2,400	300	3,200	5,400
1978	875	2,150	2,350	2,500	300	3,300	5,600
1979	900	2,250	2,400	2,600	300	3,400	5,750
1980	925	2,350	2,500	2,650	300	3,550	5,950
1981	950	2,400	2,600	2,750	300	3,650	6,100
1982	1,000	2,500	2,700	2,850	300	3,750	6,300
1983	1,050	2,600	2,800	2,900	350	3,850	6,500
1984	1,075	2,650	2,850	3,000	350	4,000	6,700
1985	1,100	2,750	2,900	3,100	350	4,100	6,900

* Excludes Tollway Traffic

** If Only C&NW Serves This Facility

NOTE: Table portrays total demand for a single Park-N-Ride Facility. Adjustments should be made if multiple Park-N-Ride facilities are built.

FORECAST OF TOTAL DEMAND FOR PARK-N-RIDE PARKING SPACES ALONG THE KENNEDY EXPRESSWAY ASSUMING NO NEW EXPRESSWAY IS CONSTRUCTED



RALPH H. BURKE INC.
CHICAGO – PARK RIDGE, ILLINOIS

FIGURE 10

proposed by CATS were, in fact, implemented by 1985.

In both cases, a demand for the use of Park-N-Ride facilities does exist. This demand approximates the existing 1971 demand in the vicinity of Irving Park Road, as the otherwise projected growth in traffic is relieved by either of the above two proposed new Expressway Systems. Near River Road, however, the growth in traffic and congestion is such that even using CATS projections, the 1985 Park-N-Ride demand actually slightly exceeds the previously projected 1985 demand.

The southeast bound entrance ramp volume for the Kennedy Expressway in 1985 as projected by CATS is shown in Table No. 37. Because some of this data is not available, no attempt has been made to obtain cumulative entrance ramp traffic volumes along the Kennedy Expressway.

Review of Tables 35 and 36 indicates that future demand for Park-N-Ride facilities exists on the Kennedy Expressway even if the entire CATS Interim Plan Highway Network is completed by 1985. Planning in the remainder of this report, however, will be made under the assumption that the previously studied model of unrestrained growth, shown in Tables No. 26 - 32, will prevail. This is done for the following reasons:

1. Experience has shown that it is much easier to reduce a plan in scope or delay its implementation than it is to increase the scope of a plan.

2. Highway improvements, once built, have a habit of generating demand in excess of that forecast. This can be accommodated by building a series of Park-N-Ride projects, subsequent to the original project, if provisions are made for this in the original planning.

TABLE NO. 34

PROJECTED ENTRANCE RAMP TRAFFIC VOLUMES ON THE KENNEDY EXPRESSWAY
ASSUMING NO MAJOR NEW EXPRESSWAYS ARE BUILT BY 1985

ENTRANCE RAMP	1971		1972		1973		1974		1975		1976		1977		1978		1979		1980		1981		1982		1983		1984		1985	
	T	C	T	C	T	C	T	C	T	C	T	C	T	C	T	C	T	C	T	C	T	C	T	C	T	C	T	C	T	C
Northwest Tollway*	5,346	5,346	5,506	5,506	5,671	5,671	5,841	5,841	6,016	6,016	6,196	6,196	6,382	6,382	6,573	6,573	6,770	6,770	6,973	6,973	7,182	7,182	7,397	7,397	7,619	7,619	7,848	7,848	8,083	8,083
Northbound Cumberland	400	5,746	412	5,918	424	6,095	437	6,278	450	6,466	464	6,660	478	6,860	492	7,065	507	7,277	522	7,495	538	7,720	554	7,951	571	8,190	588	8,436	606	8,689
Southbound Cumberland	707	6,453	728	6,646	750	6,845	773	7,051	796	7,262	820	7,480	845	7,705	870	7,935	896	8,173	923	8,418	951	8,671	980	8,931	1,009	9,199	1,039	9,475	1,070	9,759
Canfield	526	6,979	542	7,188	558	7,403	575	7,626	592	7,854	610	8,090	628	8,333	647	8,582	666	8,839	686	9,104	707	9,378	728	9,659	750	9,949	773	10,248	796	10,555
Northbound Harlem	480	7,459	494	7,682	509	7,912	524	8,150	540	8,394	556	8,646	573	8,906	590	9,172	608	9,447	626	9,730	645	10,023	664	10,323	684	10,633	705	10,953	726	11,281
Southbound Harlem	139	7,598	143	7,825	147	8,059	151	8,301	156	8,550	161	8,807	166	9,072	171	9,343	176	9,623	181	9,911	186	10,209	192	10,515	198	10,831	204	11,157	210	11,491
Sayre	257	7,855	265	8,090	273	8,332	281	8,582	289	8,839	298	9,105	307	9,379	316	9,659	325	9,948	335	10,245	345	10,554	355	10,870	366	11,197	377	11,534	388	11,879
Nagle	217	8,072	224	8,314	231	8,563	238	8,820	245	9,084	252	9,357	260	9,639	268	9,927	276	10,224	284	10,530	293	10,847	302	11,172	311	11,508	320	11,854	330	12,209
Foster	313	8,385	322	8,636	332	8,895	342	9,162	352	9,436	363	9,720	374	10,013	385	10,312	397	10,621	409	10,939	421	11,268	434	11,606	447	11,955	460	12,314	474	12,683
Central	278	8,663	286	8,922	295	9,190	304	9,466	313	9,749	322	10,042	332	10,345	342	10,654	352	10,973	363	11,302	374	11,642	385	11,991	397	12,352	409	12,723	421	13,104
Lawrence	356	9,019	367	9,289	378	9,568	389	9,855	401	10,150	413	10,455	425	10,770	438	11,092	451	11,424	465	11,767	479	12,121	493	12,484	508	12,860	523	13,246	539	13,643
Montrose	431	9,450	444	9,733	457	10,025	471	10,326	485	10,635	500	10,955	515	11,285	530	11,622	546	11,970	562	12,329	579	12,700	596	13,080	614	13,474	632	13,878	651	14,294
Edens*	3,520	12,970	3,626	13,359	3,735	13,760	3,847	14,173	3,962	14,597	4,081	15,036	4,203	15,488	4,329	15,951	4,459	16,429	4,593	16,922	4,731	17,431	4,873	17,953	5,019	18,493	5,170	19,048	5,325	19,619
Kostner	128	13,098	132	13,491	136	13,896	140	14,313	144	14,741	148	15,184	152	15,640	157	16,108	162	16,591	167	17,089	172	17,603	177	18,130	182	18,675	187	19,235	193	19,812
Irving Park	488	13,586	503	13,994	518	14,414	534	14,847	550	15,291	567	15,751	584	16,224	602	16,710	620	17,211	639	17,728	658	18,261	678	18,808	698	19,373	719	19,954	741	20,553
Total Traffic Entering Expressway Northwest Tollway Through Irving Park	13,586		13,994		14,414		14,847		15,291		15,751		16,224		16,710		17,211		17,728		18,261		18,808		19,373		19,954		20,553	

* Estimated

T = Total passenger car traffic entering Kennedy Expressway during morning peak two hour period.

C = Cumulative passenger car traffic entering Expressway during peak two hour period in southeast direction.

Source: 1971 ESP, 1972 and thereafter are KHB projections.

TABLE NO. 35

ESTIMATE OF 1985 MORNING PEAK HOURS DEMAND FOR USE OF A PARK-N-RIDE PROJECT AT VARIOUS LOCATIONS ALONG THE KENNEDY EXPRESSWAY BASED ON CATS TRAFFIC ASSIGNMENT 003

LOCATION	TRAFFIC			DEMAND METHOD I		DEMAND METHOD II				Average Of Two Methods	Recommended Design Demand
A	B	C	D	E	F	G	H	I	J	K	L
Possible Site Location	CATS Estimate of 1985 Total Daily Traffic Based on Traffic Assignment 003*	Average Number of Vehicles in A.M. Peak Hour (4% of Col. B)	Total Traffic in A.M. Peak Two Hour Period (Col. Cx2)	Estimated Percent of Total Passenger Car Traffic in A.M. Peak Two Hour Period Which Would Use Project (From Tables 26 - 32)	Estimated Demand Method I (Col. D x Col. E)	Estimated Percent of Passenger Car Drivers With CBD or Beyond Destinations in A.M. Peak Two Hours (From Tables 26 - 32)	Potential CBD Park-N-Ride Market in A.M. Peak Two Hours (Col. D x Col. G)	Estimated Percent of Passenger Car Traffic in A.M. Peak Two Hours With CBD or Beyond Destination Which Would Use Park-N-Ride Project (From Tables 26 - 32)	Estimated Demand Method II (Col. H x Col. I)	(Col. F + Col. J ÷ 2)	
River Road**	71,600	2,864	5,728	23.4%	1,340	23.4%	1,340	78%	1,045	1,193	1,200
Cumberland Ave.	125,300	5,012	10,024	25.4%	2,546	26.3%	2,636	80%	2,109	2,328	2,350
Oriole Ave.	102,600	4,104	8,208	26.4%	2,167	28.3%	2,323	80%	1,858	2,013	2,000
Harlem Ave.	107,500	4,300	8,600	27.4%	2,356	29.3%	2,520	80%	2,016	2,186	2,200
Gladstone Park	93,200	3,728	7,456	30.4%	2,267	32.3%	2,408	80%	1,927	2,097	2,100***
Jefferson Park	99,600	3,984	7,968	32.4%	2,582	38.3%	3,052	80%	2,442	2,512	2,500
Irving Park	134,300	5,372	10,744	43.4%	4,663	54.3%	5,834	80%	4,667	4,665	4,650

* In Vehicle Equivalents

** Excludes Tollway Traffic

*** 210 if C&NW Service Only Provided

TABLE NO. 36

ESTIMATE OF 1985 MORNING PEAK HOURS DEMAND FOR USE OF A PARK-N-RIDE PROJECT AT VARIOUS LOCATIONS ALONG THE KENNEDY EXPRESSWAY BASED ON CATS TRAFFIC ASSIGNMENT 902

LOCATION	TRAFFIC			DEMAND METHOD I		DEMAND METHOD II				Average Of Two Mehtods	Recommended Design Demand
A	B	C	D	E	F	G	H	I	J	K	L
Possible Site Location	CATS Estimate of 1985 Total Daily Traffic Based on Traffic Assignment 902*	Average Number of Vehicles in A.M. Peak Hour (4% of Col. B)	Total Traffic in A.M. Peak Two Hour Period (Col. Cx2)	Estimated Percent of Total Passenger Car Traffic in A.M. Peak Two Hour Period Which Would Use Project (From Fig. 6)	Estimated Demand Method I (Col. D x Col. E)	Estimated Percent of Passenger Car Drivers With CBD or Beyond Destinations in A.M. Peak Two Hours (From Tables 26 - 32)	Potential CBD Park-N-Ride Market in A.M. Peak Two Hours (Col. D x Col. G)	Estimated Percent of Passenger Car Traffic in A.M. Peak Two Hours With CBD or Beyond Destinations Which Would Use Park-N-Ride Project (From Tables 26 - 32)	Estimated Demand Method II (Col. H x Col. I)	(Col. F + Col. J + 2)	
River Road**	75,900	3,036	6,072	23.4%	1,421	23.4%	1,421	78%	1,108	1,266	1,250
Cumberland Ave.	116,400	4,656	9,312	25.4%	2,365	26.3%	2,449	80%	1,959	2,162	2,150
Oriole Ave.	96,900	3,876	7,752	26.4%	2,047	28.3%	2,194	80%	1,755	1,901	1,900
Harlem Ave.	98,400	3,936	7,872	27.4%	2,157	29.3%	2,306	80%	1,845	2,001	2,000
Gladstone Park	89,800	3,592	7,184	30.4%	2,184	32.3%	2,320	80%	1,856	2,020	2,000***
Jefferson Park	76,100	3,044	6,088	32.4%	1,973	38.3%	2,332	80%	1,866	1,920	1,900
Irving Park	118,900	4,756	9,512	43.4%	4,128	54.3%	5,165	80%	4,132	4,130	4,150

* In Vehicle Equivalents

** Excludes Tollway Traffic At This Site

*** 200 If C&NW service only provided.

TABLE NO. 37

CATS PROJECTED 1985 SOUTHEAST BOUND ENTRANCE RAMP TRAFFIC VOLUMES ON THE KENNEDY EXPRESSWAY FOR TRAFFIC ASSIGNMENTS 003 AND 902

ENTRANCE RAMP	DAILY TRAFFIC VOLUME* ASSIGNMENT 003	ASSIGNMENT 902
Addison	25.6	23.2
Hamlin	0.0	0.0
Pulaski	5.0	0.1
Irving Park	2.7	1.4
Keeler	N.A.	N.A.
Kostner	8.8	7.9
Montrose	10.6	11.5
Edens	30.9	26.3
Lawrence	9.7	6.6
Central	5.7	2.7
Foster	7.1	8.2
Austin	5.8	5.1
Nagle	11.4	20.8
South of Bryn Mawr	4.9	6.4
Harlem	1.6	5.3
Canfield	3.8	5.1
Cumberland	10.6	11.0
River Road	N.A.	30.0
Mannheim Road	3.0	1.6
Northwest Tollway	32.1	30.8

* Thousands of Vehicle Equivalents

N.A. = Not Available.

3. No criticism of the CATS Expressway Plan is intended or implied, but the current climate of public opinion is strongly against the construction of new expressways, particularly in urban areas. Therefore, it may be difficult or impossible to complete any new expressways in the Chicago area by 1985.

4. The proposed Crosstown Expressway is designed to make use of a rapid transit system. People who currently drive to a destination which would be served by such a rapid transit system might prefer to Park-N-Ride on the Kennedy and use this rapid transit system to reach their destination. These people could greatly increase the need for Park-N-Ride facilities on the Kennedy Expressway beyond any estimate based on current data.

5. This report assumes that freedom of automobile access to the CBD will continue in the future and that there will be a reasonably adequate supply of parking space in the CBD in the future to accommodate these cars. In practice, automotive access to the CBD, especially during peak traffic hours, may be eliminated or greatly curtailed in the future. This could be done by public policy or the prevention of the construction of new parking facilities in the CBD. Either of these eventualities would greatly increase the demand for Park-N-Ride facilities. Therefore, the maximum reasonably foreseeable future Park-N-Ride demand should be planned for.

VIII. SITE SELECTION AND SCHEMATIC DRAWINGS

A. Introduction

The scope of this study requires that the location of the Park-N-Ride project be established near Central Avenue. This has been interpreted to mean the area between the Irving Park Road and Des Plaines River Road areas of the Kennedy Expressway, inclusively. Within this area, a total of seven different sites, including the areas near Des Plaines River Road (Site 1), Cumberland Avenue (Site 2), Oriole Avenue or Canfield-Oriole (Site 3), Harlem Avenue (Site 4), Gladstone Park (Site 5), Jefferson Park (Site 6), and Irving Park Road (Site 7), were evaluated. The seven sites selected for final evaluation together with the principal sites evaluated and discarded, are shown on Figure No. 11.

The seven sites were initially chosen for selection by visual observation of the Kennedy Expressway and study of aerial photographs of the Kennedy Expressway. The principal site criteria used at this stage were convenient automobile access to the facility, a site area that appeared adequate, and convenient access to an existing, currently planned, or reasonably feasible future CTA or Chicago and North Western Station. Although other sites were initially considered, only these seven sites were chosen for futher investigation both because they appeared to meet the basic criteria for site selection, and because these sites appeared to lend themselves to the ultimate construction of a system of Park-N-Ride facilities along the Kennedy Expressway.

No sites were considered within an area of approximately one half mile in either direction from Cicero Avenue because the proposed Crosstown Expressway is expected to be located somewhere in this area. The Irving Park Road site discussed in this report is the first site east of this one-half mile band on either side of Cicero Avenue which could be used by drivers on the Edens Expressway. It is, however, so close to the CBD that time and cost savings over driving are marginal at this location. It appears that a structure could be built at the Montrose Avenue CTA station which could be used by drivers on both the Edens and Kennedy Expressway which would provide more time and cost savings than could a structure at Irving Park. Because the Crosstown Expressway is designed to have some form of rapid transit, consideration should be given to the possibility of a Park-N-Ride facility at Montrose Avenue to serve the Edens, Kennedy and Crosstown Expressways.

B. Schematic Drawings and Preliminary Plans

A schematic drawing of the type of facility considered for each site is shown on Figures No. 12-18. Several schematics were prepared and evaluated for each site. The schematic that received the highest rating at each site is reproduced in this report. Each of the sites is described briefly below.

Site 1, the River Road Site (Figure 12), is located near the intersection of Des Plaines River Road and the Northwest Tollway. The Park-N-Ride facility shown at this site is a surface parking lot of about 848,500 square feet with a capacity of about 2,100 cars and a CTA station. Land use in the area is almost entirely highway. The principal problem in the development of this site would be the construction of a fairly complex system of entrances and exit ramps.

Site 2, the Cumberland Avenue Site (Figure 13) is located just to the west of the point where Cumberland Avenue crosses the Kennedy Expressway. The Park-N-Ride facility proposed for this site consists of

COOK COUNTY HIGHWAY DEPARTMENT

PARK-N-RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 11

a three level parking structure located above the Kennedy Expressway and a CTA station. The structure has an area of about 630,000 square feet and a capacity of about 1,600 cars. Because this structure is located entirely within the existing Cumberland-Kennedy Interchange, land uses in the immediate vicinity of this structure is entirely highway. The principal problem in the development of this site would be the difficulties in constructing a structure over the Kennedy Expressway without seriously disrupting the traffic flow on this Expressway.

Site 3, The Canfield-Oriole Site (Figure 14) is located adjacent to the Expressway between Canfield and Oriole Avenues. The boundaries of this site are Seminole Avenue, Ozanam Avenue, Bryn Mawr Avenue and Overhill Avenue. The Park-N-Ride facility proposed for this site consists of a two level, depressed structure of about 660,000 square feet with a capacity of about 1,650 cars, and a CTA station. Land use in the vicinity of the project is primarily residential. The impact of the project on the community could be softened, however, by the construction of a park or recreation area on top of the proposed Park-N-Ride project. The principal problem in the development of this site would be land acquisition.

Site 4, the Harlem Avenue Site (Figure 15) is located just to the west of the point where Harlem Avenue crosses the Kennedy Expressway. The Park-N-Ride facility proposed for this site consists of a two level parking structure located above the Kennedy Expressway and a CTA station. The structure has an area of about 533,800 square feet and a capacity of about 1,350 cars. The structure is completely surrounded by streets or highways. Land use in the area adjacent to these street and highways is primarily commercial together with some residential land use. The principal problem in the development of this site would be the same as at Cumberland Avenue.

Site 5, the Gladstone Park Site (Figure 16) is located near the intersection of Austin Avenue and the Kennedy Expressway, near the existing Gladstone Park C&NW station. The Park-N-Ride facility proposed for this site consists of a three level parking structure located above the Kennedy Expressway with access to the existing C&NW station. The structure has an area of about 540,000 square feet and a capacity of about 1,350 cars. Land use in the area of the Park-N-Ride project is primarily highway, and railway. The principal problems in the construction of this Park-N-Ride facility are the same as at the Cumberland and Harlem sites.

Site 6, the Jefferson Park Site (Figures 17, 17A, 17B and 17C) is located just to the east of the existing Jefferson Park CTA and C&NW stations. The Park-N-Ride facility proposed for this site consists of a four level parking structure with access to both CTA and C&NW stations, located above the Kennedy Expressway. The structure has an area of about 504,000 square feet and a capacity of about 1,250 cars. Land use in the vicinity of this project is primarily highway, railway and commercial. The principal problems in the construction of this site are those common to all the structures constructed over the Expressway and the extremely limited site available for this structure. In order to determine whether or not it was physically feasible to construct such a facility at this site, Figures 17A, 17B, and 17C were prepared.

Figure 17A shows the physical limitations of this site in somewhat more detail than Figure 17. In addition, this figure locates the Jefferson Park site in the Expressway System in more detail than

does Figure No. 17.

Figure No. 17B shows the details of the ramp system at the Jefferson Park site. Although somewhat constricted by the physical features of the site, this ramp system was designed to conform as much as possible to the highway design criteria established for the design of the Kennedy Expressway. It is believed that the ramp system shown constitutes a viable system, although certain individual criteria may not have been met.

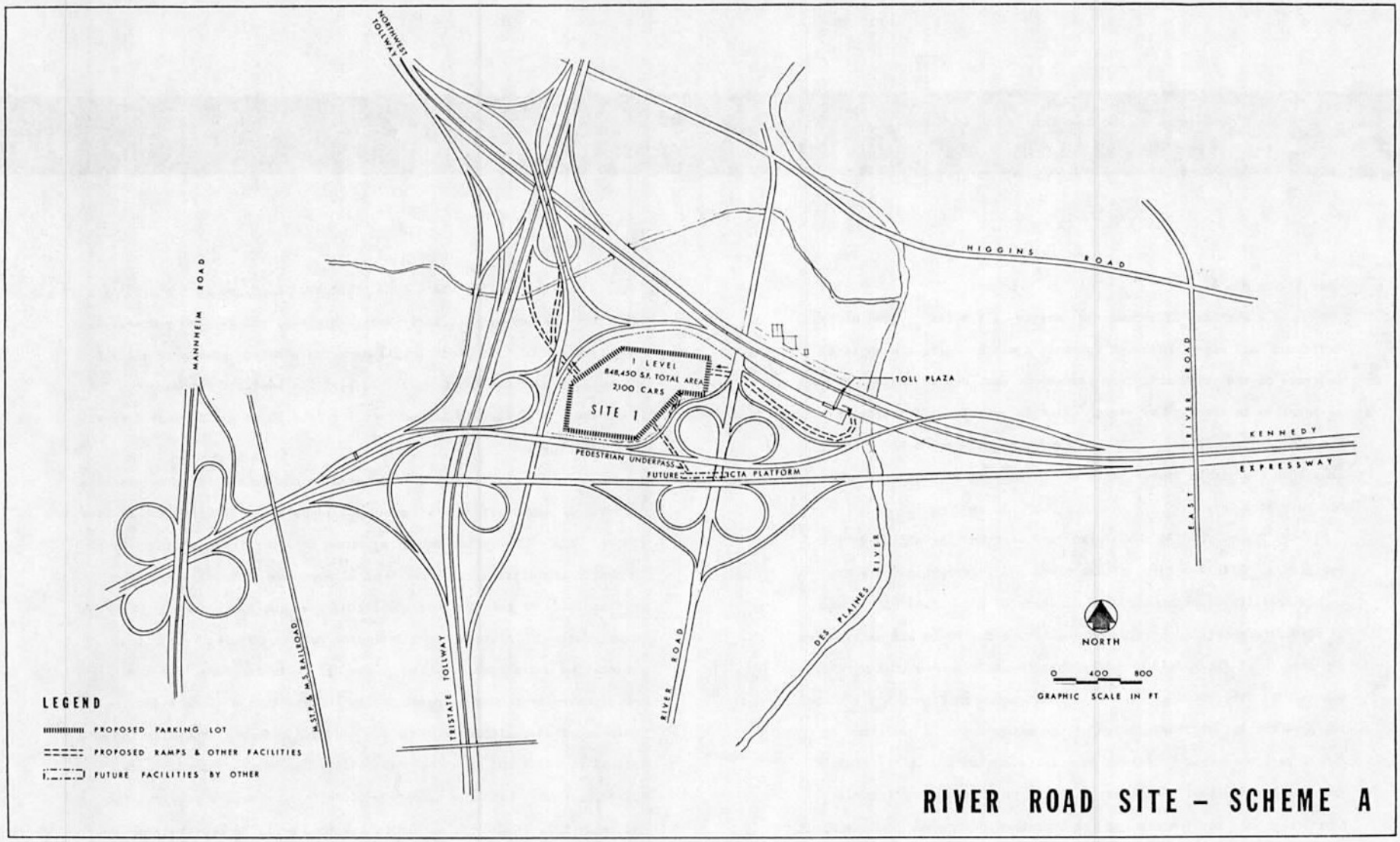
Figure No. 17C shows plans and sections for a Park-N-Ride facility at Jefferson Park. These plans and sections indicate how such a facility might appear when constructed and a possible method of providing revenue controls for automotive access to and egress from the structure. It should be noted that the actual number of parking spaces will vary somewhat from the number shown on Figure No. 17 depending upon the actual final design of the structure. In addition, it should be noted that Crosstown Associates, in their traffic studies, have recommended that additional lanes be provided on the Kennedy Expressway from the junction of the Crosstown Expressway to Cumberland Avenue. The effect of this should be taken into consideration in the final design.

Site 7, the Irving Park Site (Figure 18) is the only structure proposed in this report which has access to both the Kennedy and Edens Expressways. The Park-N-Ride structure proposed at this location is located above the Kennedy Expressway in the vicinity of Irving Park Road. The Park-N-Ride facility proposed for this site consists of a three level parking structure, with an area of about 684,000 square feet and a capacity of about 1,700 cars. The structure would have access to the existing CTA & C&NW stations. Land use in the area of this Park-N-Ride project is primarily highway, railway and commercial. Construction of this project will have the problems common to all the structures over the Expressway. In addition adequate entrance and exit ramps will have to be provided for both Edens and Kennedy Expressway traffic.

It should be noted that based on the schematics shown in this report, it appears that a structure could be built at each of the sites shown. All of the sites shown, along or over the Expressway, present construction difficulties that must be overcome. These involve the difficulties of constructing a building over the Expressway at Cumberland, Harlem, Gladstone Park, Jefferson Park and Irving Park sites, relocation and access problems at the Oriole Avenue site, and a rather complicated system of entrance and exit ramps at the River Road site. More detailed preliminary plans are required before a determination of actual physical and technical feasibility can be determined. Such plans, however, with the exception of Jefferson Park, are beyond the scope of this study, but should be prepared prior to construction. The preliminary plans prepared for the Jefferson Park site indicate that it appears to be physically and technically feasible to construct a Park-N-Ride facility above the Expressway at this location.

C. Site Evaluation

After selection of the seven initial sites, each site was evaluated to determine its relative desirability as the site for the project, or as the initial site for a series of projects. This was done by the use of a rating system which assigned values to various factors considered to be important to the success of the project, in

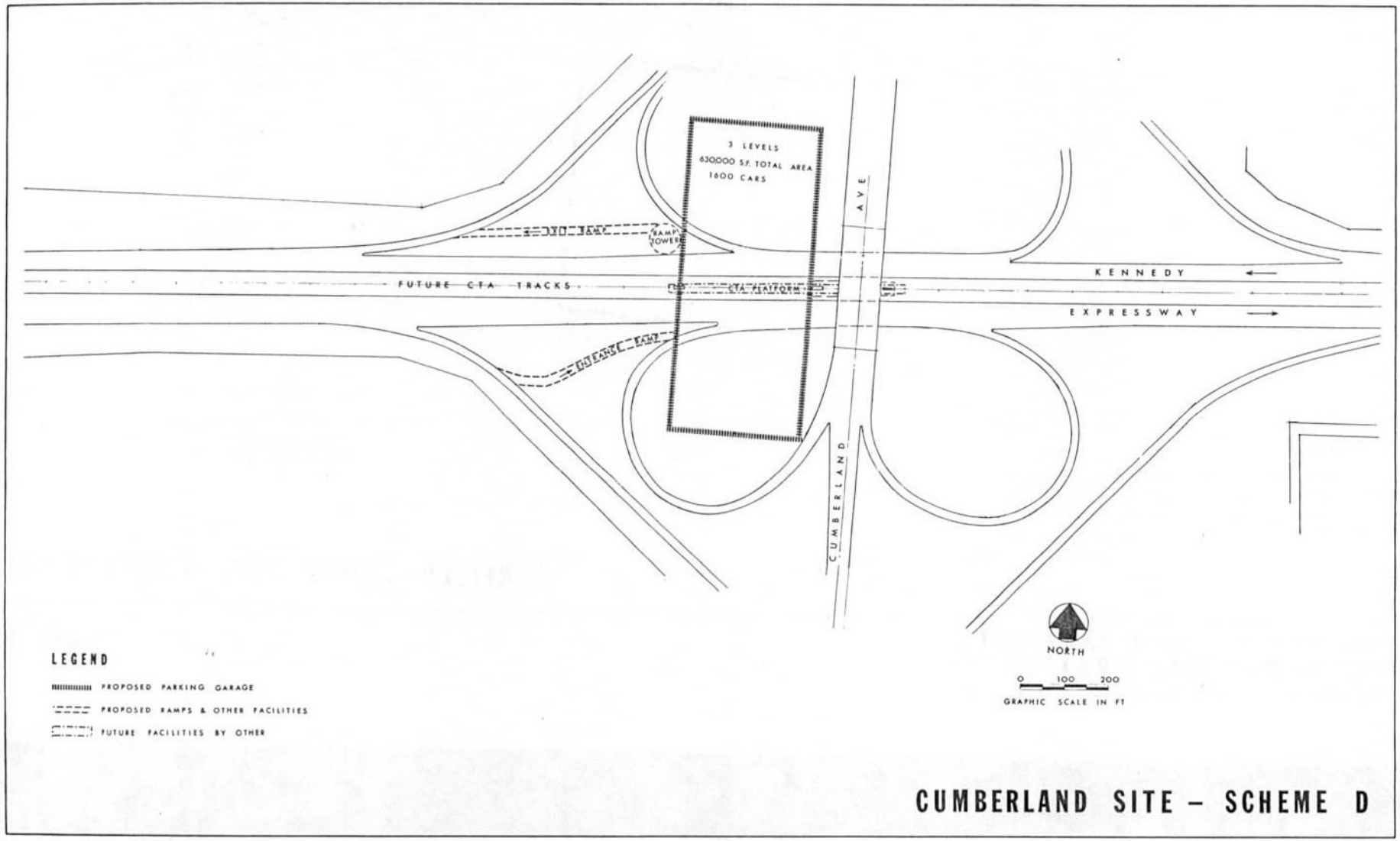


RIVER ROAD SITE - SCHEME A

COOK COUNTY HIGHWAY DEPARTMENT
PARK-N-RIDE PROJECT
PREPARED BY RALPH H. BURKE INC.

NOTE: The ramp geometrics shown on all site plans are not to be considered as of preliminary design quality. They are only schematic in nature, and are intended to merely show access and egress capability.

FIGURE 12



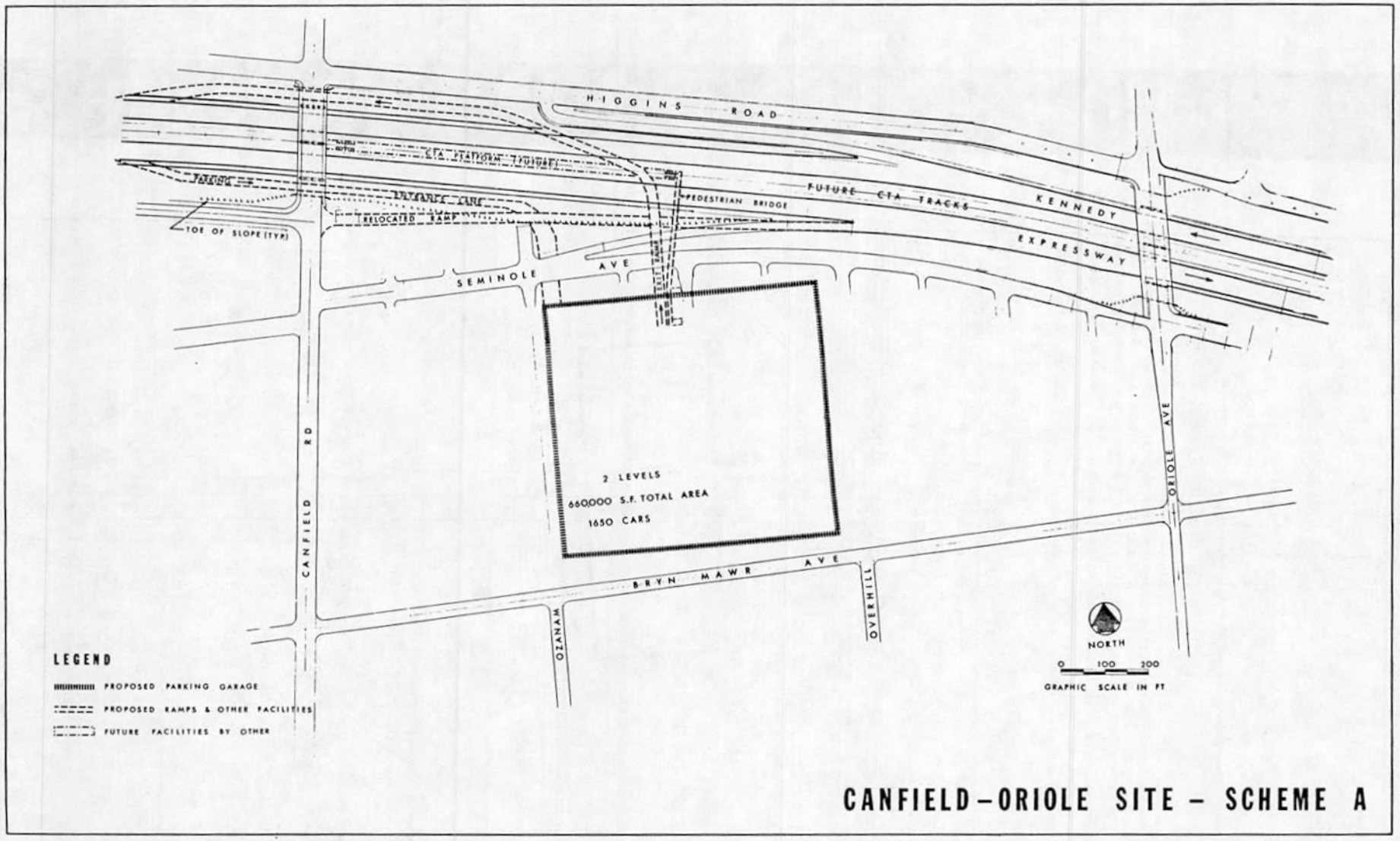
CUMBERLAND SITE – SCHEME D

COOK COUNTY HIGHWAY DEPARTMENT

PARK-N-RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 13



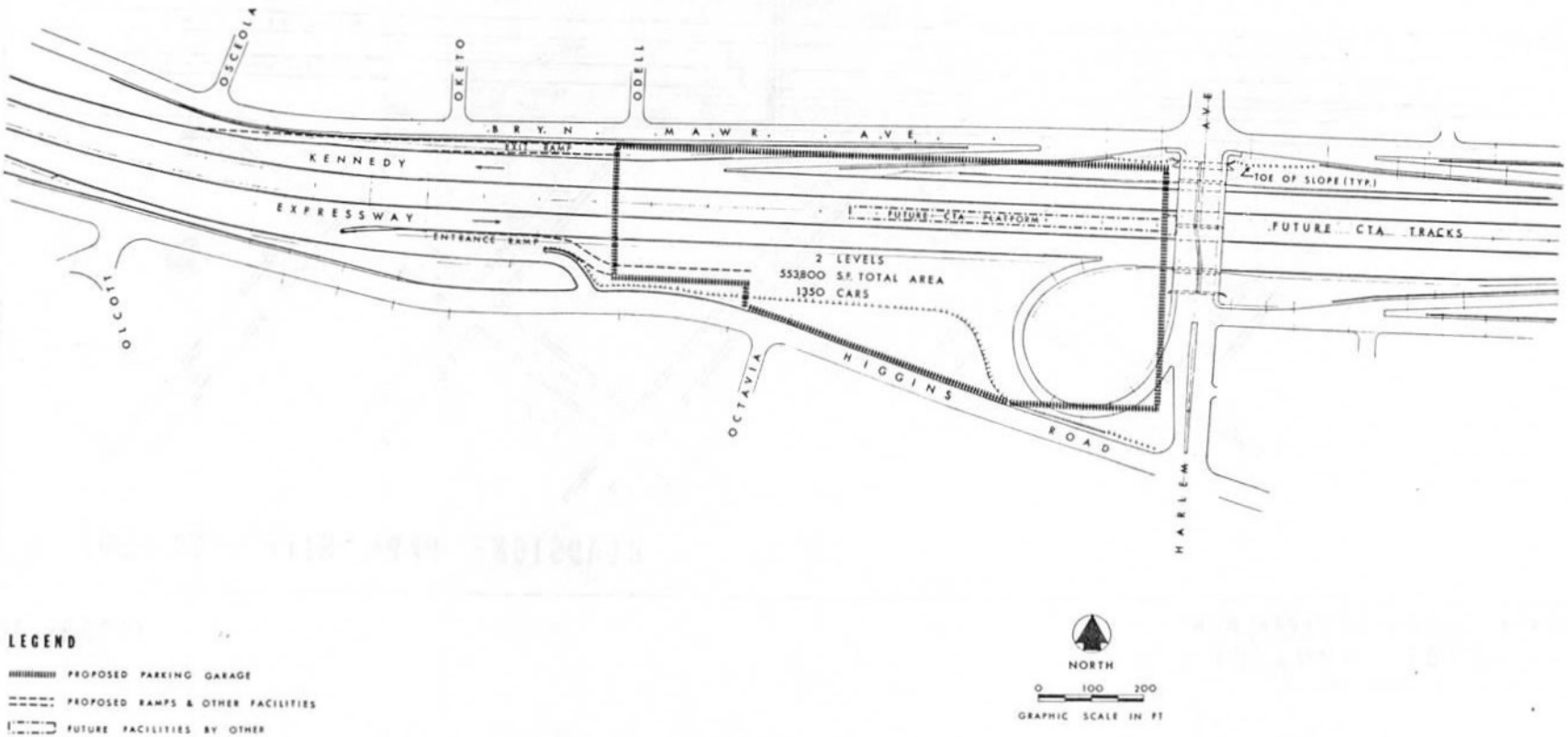
CANFIELD–ORIOLE SITE – SCHEME A

COOK COUNTY HIGHWAY DEPARTMENT

PARK–N–RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 14



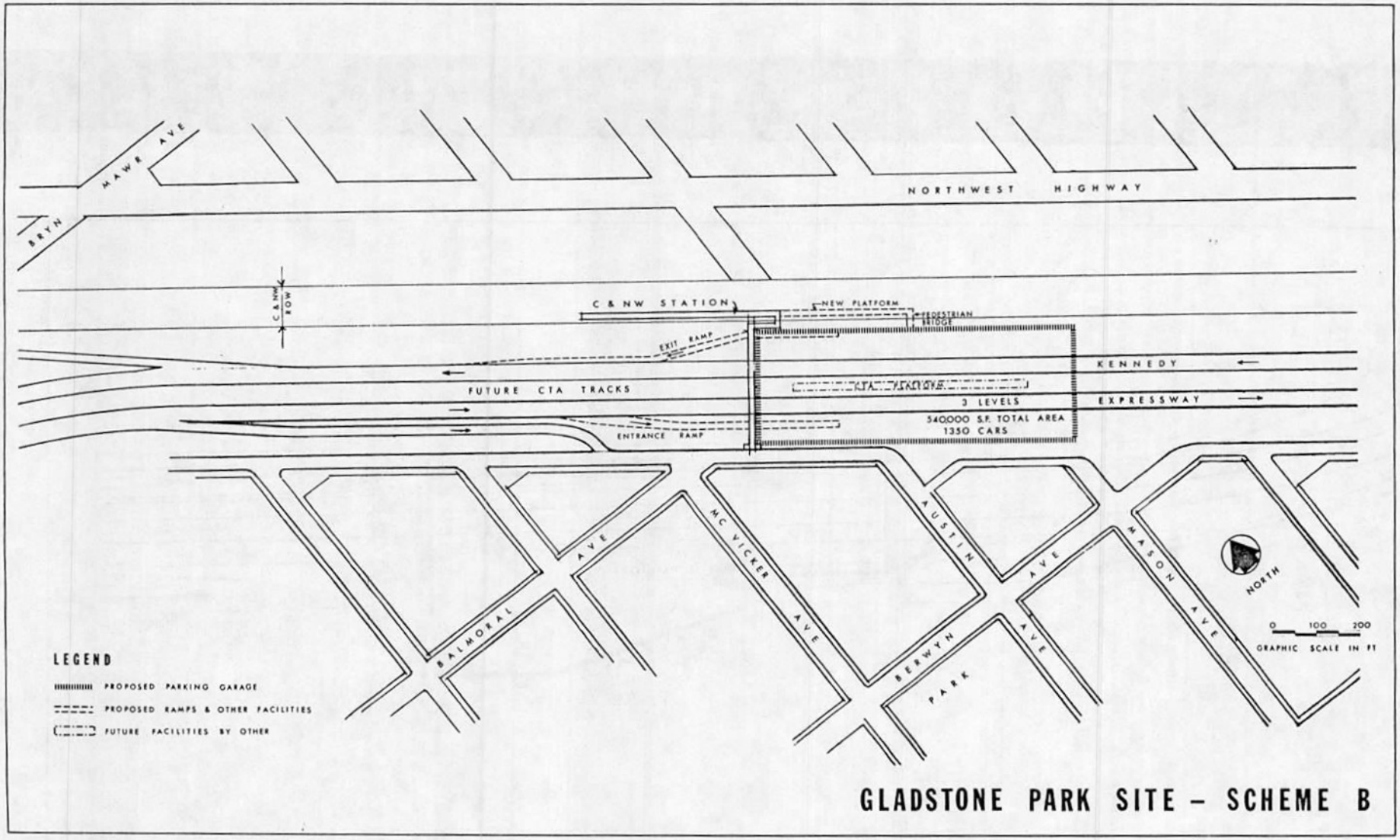
HARLEM SITE – SCHEME C

COOK COUNTY HIGHWAY DEPARTMENT

PARK-N-RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 15



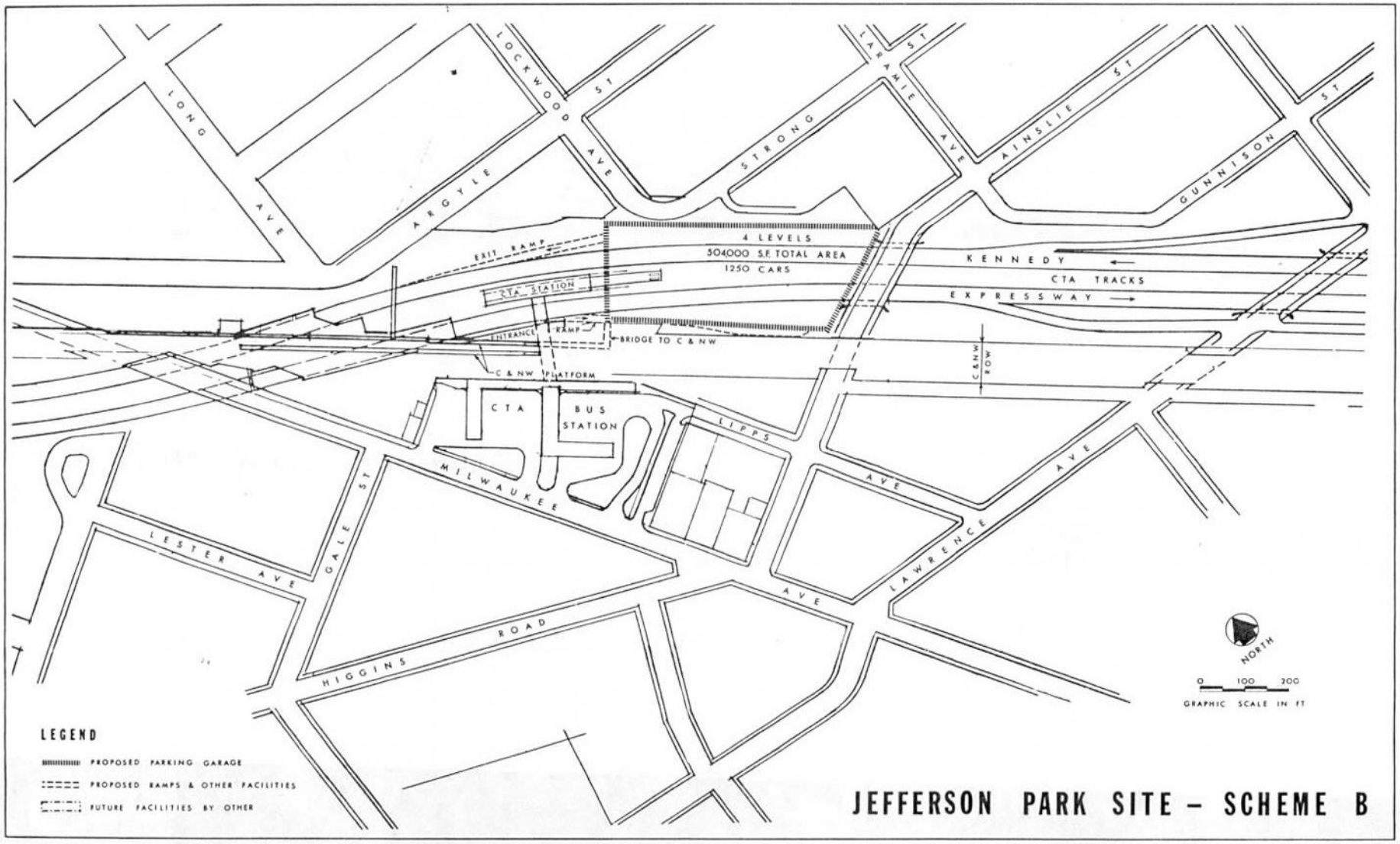
GLADSTONE PARK SITE – SCHEME B

COOK COUNTY HIGHWAY DEPARTMENT

PARK–N–RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 16

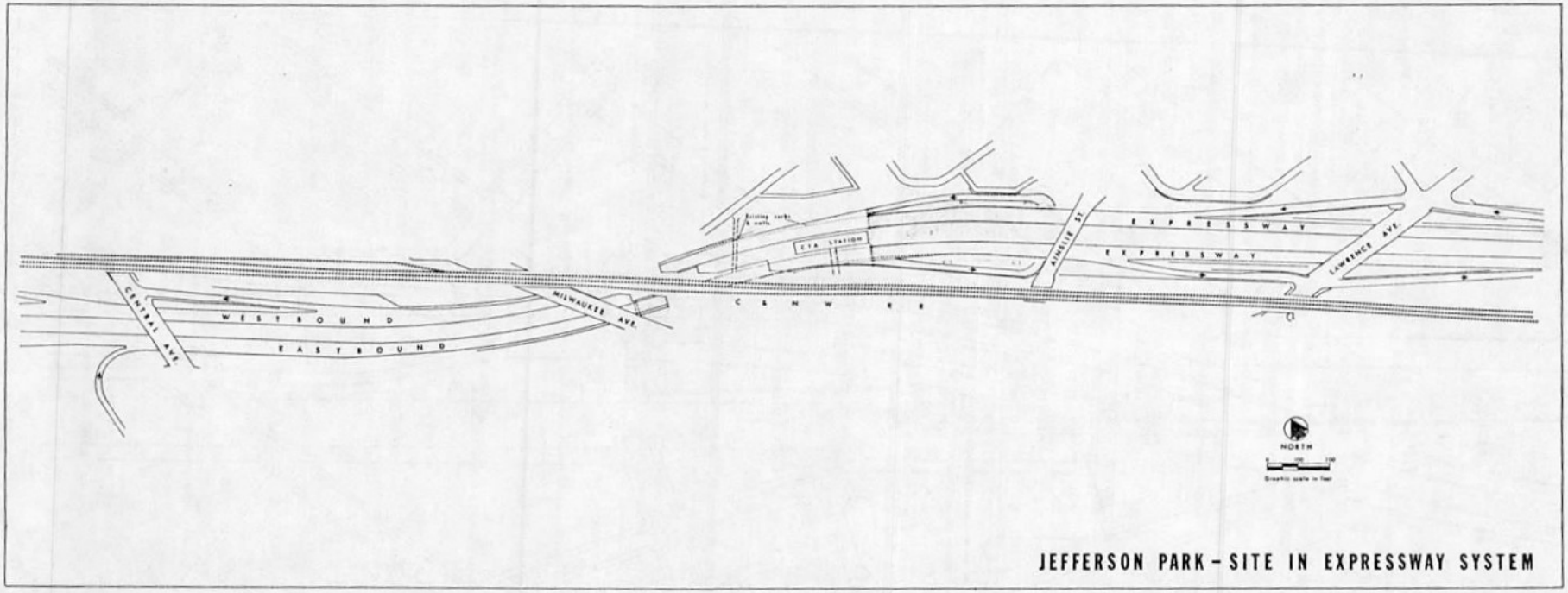


COOK COUNTY HIGHWAY DEPARTMENT

PARK-N-RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 17



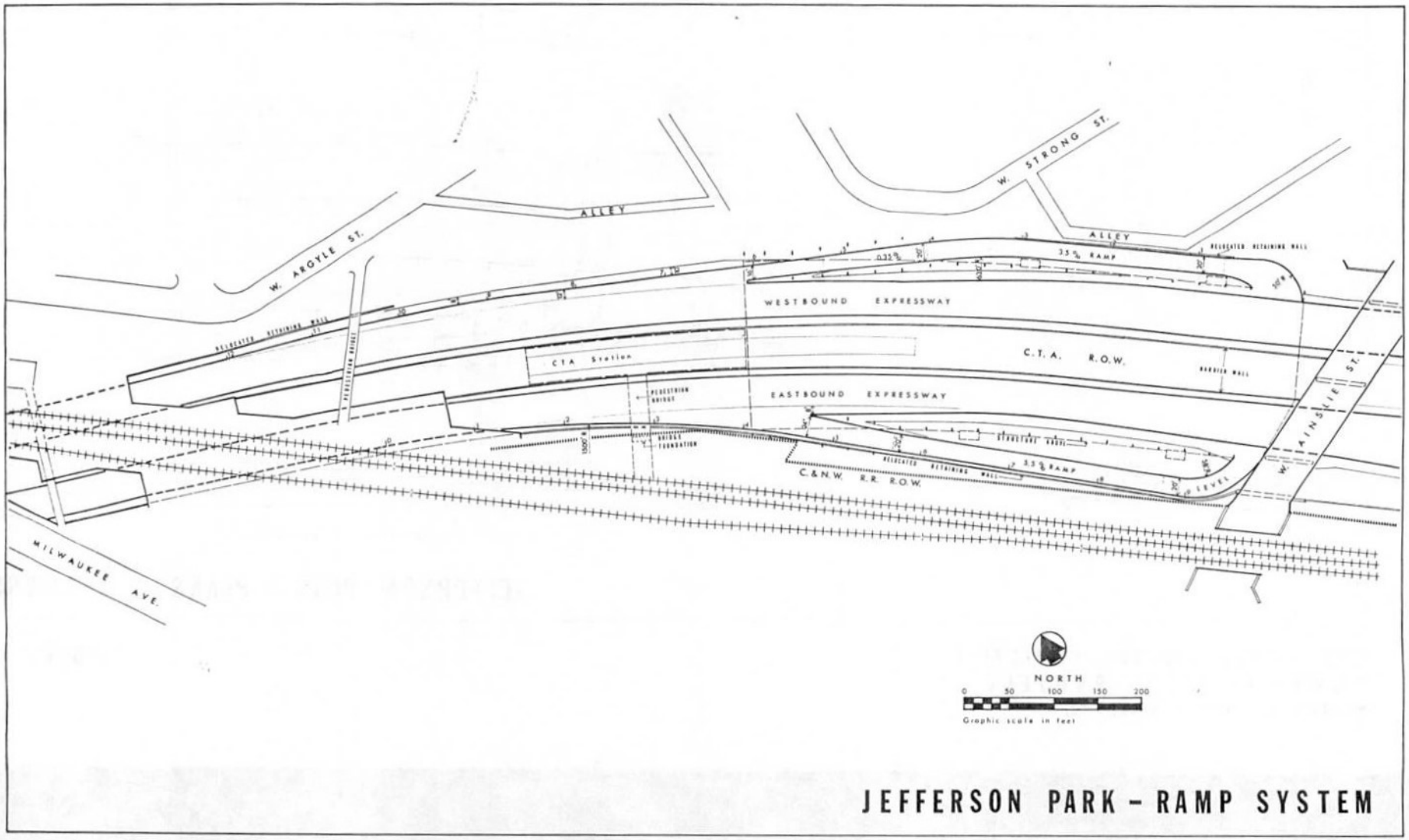
JEFFERSON PARK - SITE IN EXPRESSWAY SYSTEM

COOK COUNTY HIGHWAY DEPARTMENT

PARK-N-RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

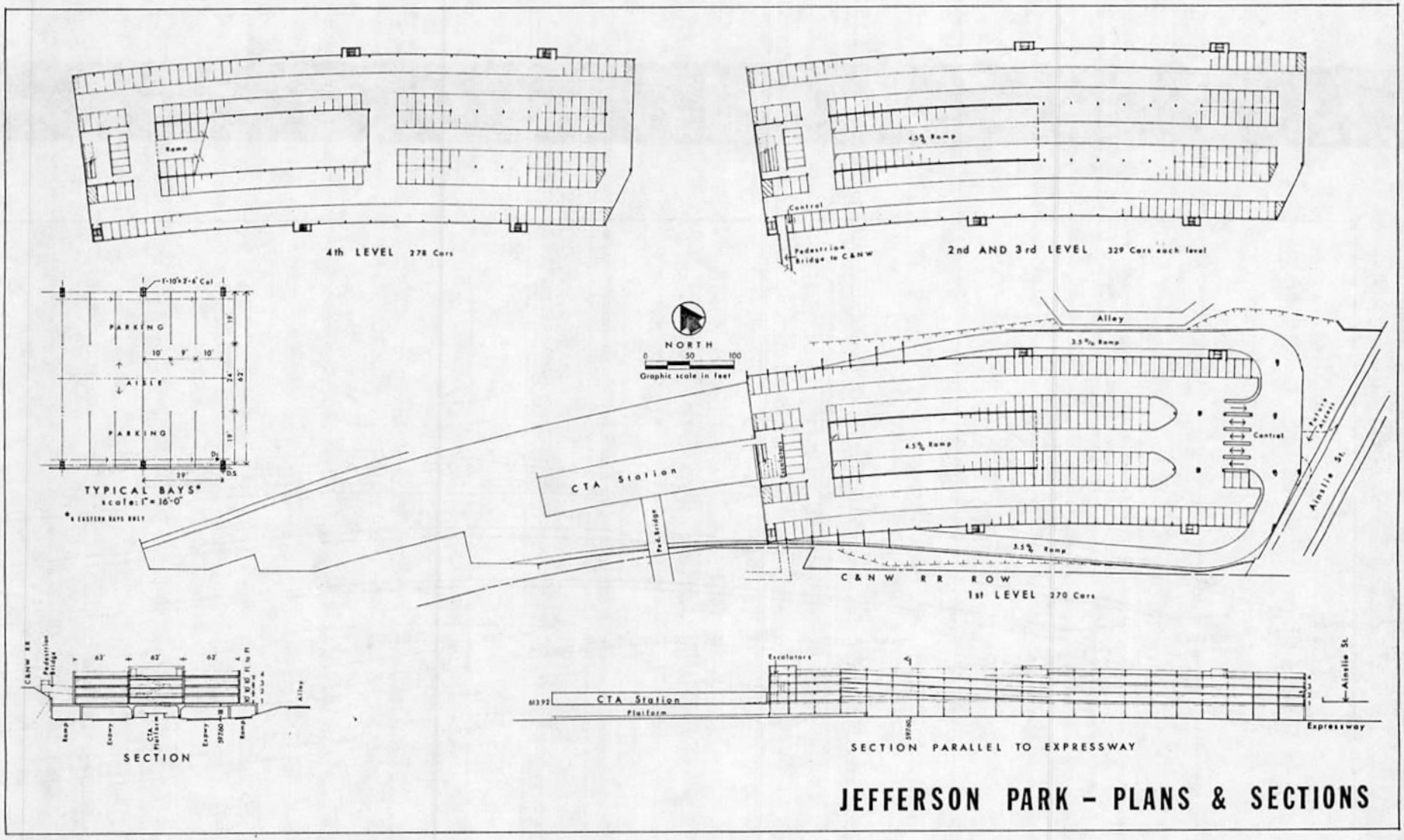
FIGURE 17A



JEFFERSON PARK - RAMP SYSTEM

COOK COUNTY HIGHWAY DEPARTMENT
PARK-N-RIDE PROJECT
PREPARED BY RALPH H. BURKE INC.

FIGURE 17B



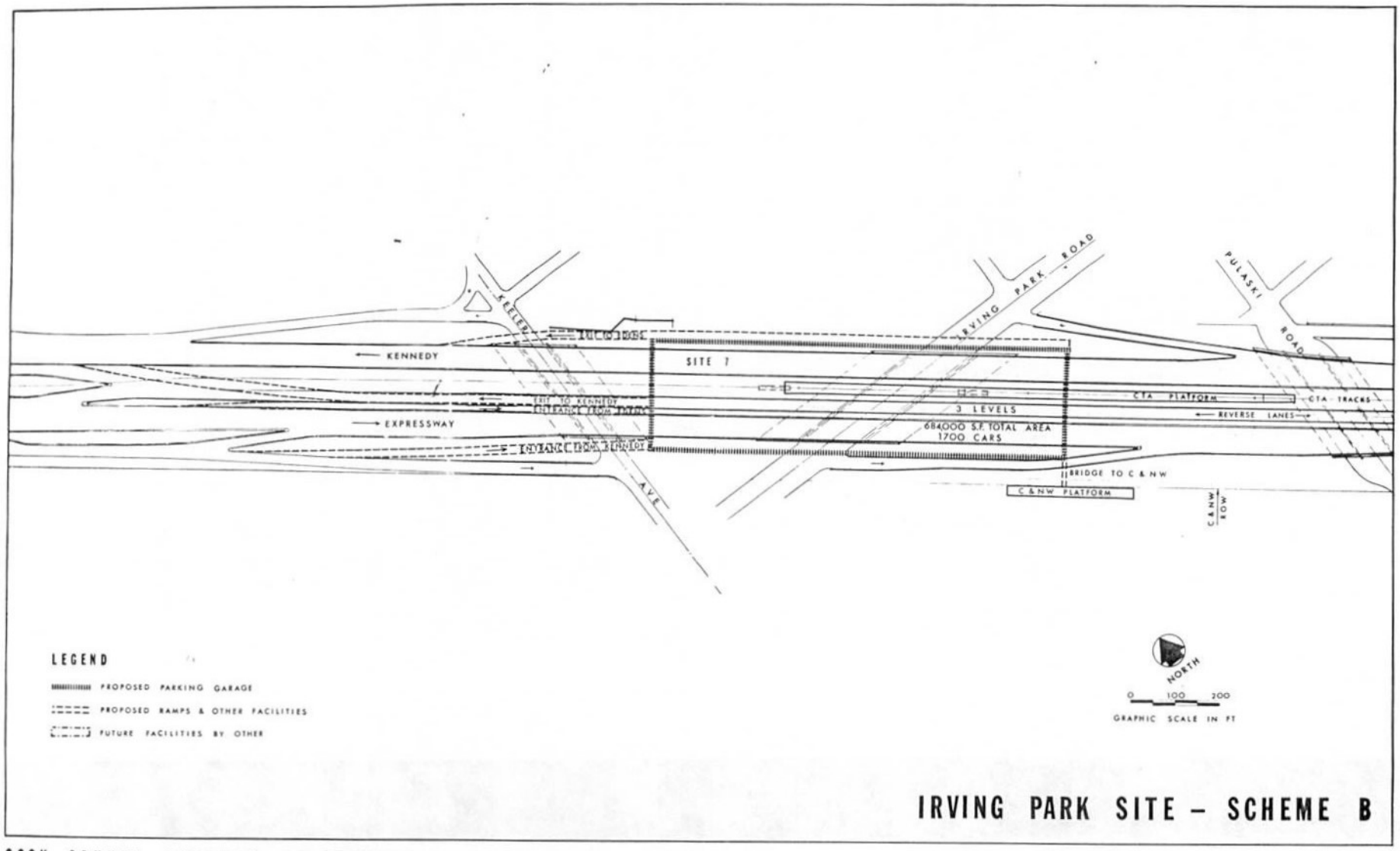
JEFFERSON PARK - PLANS & SECTIONS

COOK COUNTY HIGHWAY DEPARTMENT

PARK-N-RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 17c



IRVING PARK SITE – SCHEME B

COOK COUNTY HIGHWAY DEPARTMENT

PARK-N-RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 18

TABLE NO. 18

PARK-N-RIDE SITE EVALUATION TABLE

GROUPS AND SUB GROUPS	INDEX SUB GROUP FACTOR	INDEX GROUP FACTOR	BASES FOR ADJUSTMENT OF FACTOR	SITE 1 RIVER ROAD SCHEME A, 2100 CARS SUB GROUP FACTOR	SITE 1 GROUP FACTOR	SITE 2 CUMBERLAND AVENUE SCHEME D, 1600 CARS SUB GROUP FACTOR	SITE 2 GROUP FACTOR	SITE 3 ORIOLE AVENUE SCHEME A, 1650 CARS SUB GROUP FACTOR	SITE 3 GROUP FACTOR	SITE 4 HARLEM AVENUE SCHEME C, 1350 CARS SUB GROUP FACTOR	SITE 4 GROUP FACTOR	SITE 5 GLADSTONE PARK SCHEME B, 1350 CARS SUB GROUP FACTOR	SITE 5 GROUP FACTOR	SITE 6 JEFFERSON PARK SCHEME B, 1250 CARS SUB GROUP FACTOR	SITE 6 GROUP FACTOR	SITE 7 IRVING PARK SCHEME B, 1700 CARS SUB GROUP FACTOR	SITE 7 GROUP FACTOR
I ADEQUACY - 25 Points																	
Area																	
(A) First Stage	3		1 Per 83,000 Sq. Ft. Maximum of 3	3.0		3.0		3.0		3.0		3.0		3.0		3.0	
(B) Expansion Capability	3		1 Per 50,000 Sq. Ft. over 249,000 Maximum of 3	3.0		3.0		3.0		3.0		3.0		3.0		3.0	
Distance From CBD	6		1 Point for each 2.5 Miles	6.0		5.5		5.0		4.9		4.3		3.9		3.0	
Driving Time to CBD (Rush Hours)	7		1 Point for each 7.2 Minutes (Max. 7)	7.0		7.0		6.8		6.8		6.3		5.8		5.0	
Alternate Total Travel Time to CBD (Park, Walk, Headway + Rapid Transit Time)	6	25	1 Point for each 3 minutes saved over driving	5.3	24.3	5.2	23.7	5.2	23.0	5.1	22.8	5.0	21.6	4.8	20.5	3.4	17.4
II AVAILABILITY - 25 Points																	
Land																	
(A) Homes to Acquire	6		Subtract 1 Per 5 Homes	6.0		6.0		0		6.0		6.0		6.0		6.0	
(B) Cost of Land	9		Subtract 1 for Each $100,000	9.0		9.0		0		9.0		9.0		9.0		9.0	
(C) Air Rights Site	5		5 Points for Low Site, 2.5 Points for High	5.0		5.0		5.0		5.0		2.5		2.5		2.5	
Construction Costs																	
(A) Per Parking Space	5	25	Subtract 1 for Each $500 Above $2,500	5.0	25.0	1.0	21.0	1.0	6.0	2.0	22.0	1.0	18.5	1.0	18.5	0	17.5
III ACCESS & TRAFFIC - 30 Points																	
Driving Access																	
(A) From Kennedy	4		Subtract 4 if Access to Project is not Direct From and To Expressway	4.0		4.0		4.0		4.0		4.0		4.0		4.0	
(B) To Kennedy	4		Subtract 4 if Access to Project is not Direct From and To Expressway	4.0		4.0		4.0		4.0		4.0		4.0		4.0	
(C) From Edens	2		Subtract 2 if Access to Project is not Direct From and To Expressway	0		0		0		0		0		0		2.0	
(D) To Edens	2		Subtract 2 if Access to Project is not Direct From and To Expressway	0		0		0		0		0		0		2.0	
(E) To C&NW Station	5		Subtract 5 if No Access to C&NW Station	0		0		0		0		5.0		5.0		5.0	
(F) To CTA Station																	
1. CTA - Station Construction Required	2		Subtract 2 if New Station Required	0		0		0		0		0		2.0		2.0	
2. CTA - Track Extension Required	2		Subtract 2 if Track Extension Required	0		0		0		0		0		2.0		2.0	
3. CTA - Station Planned or Existing	1		Subtract 1 if No Station Planned or Existing	1.0		0		0		1.0		0		1.0		1.0	
(G) Ramps into Structure																	
1. Straight Approach	1		Subtract 1 if Turning Movement Required	0		1.0		1.0		1.0		1.0		1.0		1.0	
2. Turning Movement Required	1		Subtract 1 for each 45° of Turning Movement Required	0		1.0		0		1.0		1.0		1.0		1.0	
Pedestrian Access from Structure To:																	
(A) C&NW Station	1		Subtract 1 for each 500' of Walking Distance	0		0		0		0		1.0		0		0	
(B) CTA Station	1		Between Station & Furthest Parking Space*	0		1.0		0		1.0		0		1.0		1.0	
Project Located Beyond Peak Period Traffic Congestion	4	30	Subtract 4 if East of Harlem Avenue	4.0	13.0	4.0	15.0	4.0	13.0	4.0	16.0	0	16.0	0	21.0	0	25.0
IV ENVIRONMENT - 20 Points																	
Compatibility to Adjacent Uses																	
(A) Highway or Industrial	5		Subtract 1 for Each 200' to Closest Industry	5.0		5.0		5.0		5.0		5.0		5.0		5.0	
(B) Commercial	5		Subtract 1 for Each 400' to Closest Commercial Use	3.0		5.0		4.0		5.0		5.0		4.0		5.0	
(C) Residential, Schools & Churches	3		3 Points if 600' to Residence, School or Church	3.0		3.0		0		0		0		0		0	
Height of Structure	7		Subtract 1 for each Level Over 1, Add 1 for each Level Underground	7.0		5.0		7.0		7.0		5.0		4.0		5.0	
		20			16.0		18.0		16.0		17.0		15.0		13.0		15.0
		100	SITE TOTALS		80.3		77.7		58.0		77.8		71.1		73.0		74.9
			SITE RANK		1		3		7		2		6		5		4

* Refers to C&NW and CTA Stations.

such a manner that the most important items received the highest number of points.

The point system was chosen for site selection because it provides a relatively consistent method of rating alternative sites, once the assignment of values has been determined. The point scores, however, should be considered an important guide to the location of the project, rather than the only possible determinant of the project's location.

The criteria used for the site selection were divided into the major groups of I Adequacy (25 points), II Availability (25 points), III Access (30 points), and IV Environment (20 points). The total number of points equals 100.

Each major group contains several subgroups. These subgroups, the points assigned to them and the basis for adjusting each factor are shown in detail on Table No. 38.

Using the point rating system, the sites ranked as follows:

Rank	Site	Points
1	River Road	80.3
2	Harlem Avenue	77.8
3	Cumberland Avenue	77.7
4	Irving Park	74.9
5	Jefferson Park	73.0
6	Gladstone Park	71.1
7	Oriole Avenue	58.0

D. Recommended Program

1. Ideal Situation

Because the demand for Park-N-Ride facilities derived in Chapter VII is greater than the demand which can be accommodated in a single structure, two or more structures along the Kennedy Expressway will be needed to accommodate the Park-N-Ride demand estimated for 1985. Ideally, Park-N-Ride facilities would be provided at the highest ranking sites, which are River Road, Harlem Avenue, and Cumberland Avenue in conjunction with the extension of the CTA.

If Park-N-Ride facilities were provided in conjunction with the presently planned Harlem Avenue and River Road CTA stations, a total of 3,450 Park-N-Ride spaces could be provided on the Kennedy Expressway west of the most severe area of traffic congestion on this Expressway. If the Tollway is connected to the River Road Park-N-Ride facility and no CTA station is constructed at Cumberland, there will be a demand for all of the 2,100 spaces at River Road as all of the estimated demand of 2,750 cars at Cumberland Avenue will have to be accommodated at River Road, or points further east. The difference, of 650 spaces, between the demand of 2,750 spaces and the River Road Park-N-Ride facility's capacity of 2,100 spaces, will have to be accommodated at points east of River Road. At Harlem Avenue, under these conditions, estimating demand on the basis of projected entrance ramp traffic volumes, in the same manner as in Chapter VII, there will be a demand of 850 + 650 or 1,500 cars. This results in an excess demand of 1,500 cars minus 1,350 cars or 150 cars at Harlem Avenue which could be accommodated by building the first level of the structure proposed at Cumberland Avenue, if a CTA station is located there, or by a structure located east of Harlem Avenue, such as Jefferson Park.

The above plan would provide 3,600 Park-N-Ride spaces west of the most seriously congested parts of the Kennedy Expressway if the

station and structure at Cumberland Avenue were to be constructed and would approximately equal the projected 1985 demand for Park-N-Ride facilities located before the Kennedy-Edens junction. In addition the Cumberland Avenue Park-N-Ride facilities would have expansion capabilities for about another 1,000 cars if demand should exceed estimates or continue to grow after 1985.

Under the above conditions, a demand for about 800 cars would still exist at Jefferson Park. If the Cumberland Avenue station were not built, this demand at Jefferson Park would approximate 1,000 cars.

Therefore, if the CTA is extended to O'Hare, it is recommended that Park-N-Ride facilities for 2,100 cars at River Road, 1,350 cars at Harlem Avenue, and 1,250 cars at Jefferson Park, be constructed. If a CTA station is located at Cumberland Avenue, consideration should be given to the provision of a Park-N-Ride facility at this location.

2. Existing Situation

At the present time, 1971, the CTA rapid transit line does not go northwest of Jefferson Park. Although this station is in an area of the Expressway which is already often seriously congested during rush hours practical considerations dictate locating the Park-N-Ride facility at this location unless the CTA is extended. Because there are many obstacles to the extension of the CTA, it is impossible to estimate when, or even if, the CTA will be extended in the median strip of the Kennedy Expressway. Therefore, under present conditions, it will be necessary to construct the initial Park-N-Ride project in the vicinity of the Jefferson Park CTA station.

A possible alternative to building the first Park-N-Ride project at Jefferson Park would be to build the Park-N-Ride facility at a more desirable location to the west and provide a means of transportation to the Jefferson Park CTA Terminal. This could be done by shuttle bus, by an Air Cushion Vehicle, by monorail, etc. In all cases, however, it would require another intermodal transfer between car and ultimate method of finishing the trip and it is believed that most people would find this procedure objectionable, in addition such a procedure would greatly increase the operating costs of the project. Therefore, this procedure is not recommended.

It is recommended, therefore, that the initial Park-N-Ride project be located in the vicinity of the Jefferson Park CTA-C&NW station and be initially constructed to its ultimate capacity.

IX. OPERATION OF THE PROJECT

A. Traffic Control

The objective of the Park-N-Ride project is to relieve traffic congestion on the Kennedy Expressway. Therefore, a system of traffic controls will be required for the project which will make entry into and exit from the project as quick and convenient as possible.

Operation of the project should be designed to provide fast, convenient entry into the project, and to provide fast, convenient exiting from the project, onto the expressway, while maintaining free movement on the Expressway. This will require free or ticket dispenser entry into the project in order to avoid backing Park-N-Ride traffic up on the Expressway. Some kind of metering device will be necessary for exiting traffic in order to prevent congestion at the exit ramps of the project. This device could be some kind of ramp control lights similar to those used by the ESP project.

A counting device should be installed in the project to indicate the number of spaces available and to indicate, at suitable locations on the Expressway, when the project is full in order to prevent the entry of cars which would be unable to find a parking place. This information should also be broadcast on the morning traffic reports to assist the driver in making a decision as to whether he should continue to drive downtown or whether he should Park-N-Ride.

In order to maintain the flow of traffic inside the project, some sort of "pathfinder" device which would direct entering cars to the first available space is highly desirable. Such a device should be installed if technically and economically feasible.

The detailed design of a Park-N-Ride project is beyond the scope of this study. However, the project, as finally designed, should incorporate an adequate number of entrance and exit control stations and ramps to maintain a free flow of traffic into and out of the structure. This will increase the attractiveness of the Park-N-Ride project to the user.

B. Revenue Collection

The most economical method of operating the project would be for CTA cashiers to sell both CTA tokens and parking tokens. This would eliminate the need for a separate staff of cashiers to operate the project. The parking token sold by the CTA cashier could be deposited in convenient coin collection devices, similar to those used in the exact change lanes of the Illinois Tollway.

When the CTA is extended to O'Hare, it will probably be necessary to provide parkers with some kind of ticket to indicate the length of their stay and cashiers to collect their money as they leave. This will be necessary to prevent people from using the Park-N-Ride project as a long term parking lot when flying from O'Hare. Rates should be adjusted for the second and succeeding days stay in the project so that it is more expensive to park for two consecutive days in the project than it is to park at O'Hare. This should permit the charging of an economical rate to the commuter for whom the project is intended and prevent the project from becoming filled with long term parkers who are flying from O'Hare.

C. Security in the Project

If people are to be attracted to the project, security for their persons and their cars must be provided. This would probably be best performed by the use of a closed circuit TV system together with

random patrols of the project. Coordination with local police officials could result in a maximum of security at a minimum of cost. The same principles of security should be applied to CTA stations and trains along the entire CTA system.

D. Hours of Operation

Although the Park-N-Ride project will be used primarily during the 7 A.M. - 7 P.M., Monday through Friday period by all day parkers, it should be operated on a 7 day a week, 24 hour a day basis. This will encourage weekend and night time visitors to Chicago to park their cars and ride the CTA to Chicago, resulting in a lessening of highway and downtown traffic congestion and an increase in off-peak ridership on the CTA. Off peak ridership on the CTA could be further increased by offering available off-peak parking space in the project at reduced or even free rates.

X. FINANCIAL ASPECTS OF THE PROJECT

A. Estimates of Cost

1. Jefferson Park

Table No. 39 shows a cost estimate for the Jefferson Park Park-N-Ride project based on the schematic drawings and preliminary plans shown as Figures No. 17, 17A, 17B, and 17C of this report. It is estimated, based on 1972 prices, that it would cost about $9,506,000 to construct a Park-N-Ride parking structure at Jefferson Park.

This cost is somewhat higher than the cost would be for an equivalent structure not located above the Kennedy Expressway because of the difficulties of construction over the Expressway and, in the particular case of Jefferson Park, the relatively limited site available and the several retaining walls which must be moved. It shall be noted, however, that the advantages in construction cost of a parking structure located at grade level in the Jefferson Park area would probably be offset by the costs or difficulties of land acquisition.

2. Harlem Avenue and River Road

Preliminary cost estimates were prepared for each of the sites evaluated in Table No. 38. These estimates were prepared for purposes of comparing the expected costs at each of the sites evaluated. Because, with the exception of Jefferson Park, even preliminary plans are beyond the scope of this study, the cost estimates prepared for the other sites should be considered only as indicators of the relative preliminary costs of the Park-N-Ride structures.

The estimated costs in terms of 1972 dollars, of the Park-N-Ride facilities proposed in this report located at Harlem Avenue and

TABLE NO. 39

ESTIMATED COST OF A PARK-N-RIDE PARKING STRUCTURE LOCATED ABOVE THE KENNEDY EXPRESSWAY AT JEFFERSON PARK IN 1972 PRICES

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Parking Structure	450,500	S.F.	$ 10.50	$4,730,250
Demolition				
Removal of Retaining Walls North and South	67,000	C.F.	$ 2.00	$ 134,000
Temporary Shoring and Sheeting	455	T.	$500.00	$ 227,500
Excavation	26,000	C.Y.	$ 5.00	$ 130,000
Retaining Walls North and South Sides	910	L.F.	$625.00	$ 568,750
Retaining Walls (Interior) and Ramp Slabs	4,207	C.Y.	$130.00	$ 546,910
General Conditions				$ 633,740
Special Conditions				$ 316,870
Overhead and Profit				$ 633,740
SUB TOTAL - CONSTRUCTION COST				$7,921,760
Engineering & Contingencies @ 20%				$1,584,352
TOTAL COST				$9,506,112
SAY				$9,506,000

River Road are listed below:

Location	Estimated Cost
Harlem Avenue	$9,120,000
River Road Lot	$2,140,000

An allowance of 30%, rather than the more customary 20%, has been included in the above estimates for contingencies and engineering because the preparation of preliminary plans at these sites was beyond the scope of this study.

These figures should be considered as only a very basic approximation of the magnitude of the cost of a Park-N-Ride facility in 1972 prices. The preparation of a more meaningful cost estimate at these sites would require the preparation of at least a detailed preliminary plan for a facility at these sites.

The total cost of the Park-N-Ride projects located at Jefferson Park, Harlem Avenue, and River Road is estimated to be $20,766,000 in 1972 prices.

B. Estimated Expenses and Revenues

1. Estimated Expenses

It is contemplated that the Park-N-Ride project will be financed by a combination of Federal, State and Local grants. Therefore, there will be no capital debt to be paid from the operation of the Park-N-Ride project. The only expenses which would have to be paid from the operation of the Park-N-Ride project would be actual maintenance and operation (M and O) expenses of the project.

Detailed estimates of the M & O expenses expected for the proposed initial Jefferson Park Park-N-Ride parking garage are shown in Table No. 40. These expenses total $212,500 per year or $170 per

TABLE NO. 40

PRO FORMA EXPENSE STATEMENT
FOR FIRST YEAR OF OPERATION
OF JEFFERSON PARK PARK-N-RIDE PARKING GARAGE

LABOR		ANNUAL COST
Manager - Day operation	1	$ 12,500
Manager - Evening operation	1	10,000
Manager - Night operation	1	10,000
Manager - Relief and Sunday	1	10,000
Cashiers - Day operation	2 @ $7,000	14,000
Cashiers - Evening operation	2 @ $7,500	15,000
Cashiers - Relief	4 @ $7,500	30,000
Floormen - Day operation	3 @ $7,000	21,000
Floormen - Relief operation	2 @ $7,500	15,000
Janitors	2 @ $7,000	14,000
SUB-TOTAL PAYROLL		$151,500
Payroll taxes 8.2%		12,500
Vacation and sick time		7,000
SUB-TOTAL LABOR		$171,000
Repairs and maintenance of building		$ 7,000
Tickets, stationery, and miscellaneous supplies		2,500
Equipment repairs		1,500
Janitor and housekeeping supplies		1,000
Telephone		500
Light and power		21,500
Insurance		7,500
SUB-TOTAL OTHER EXPENSES		$ 41,500
TOTAL ESTIMATED EXPENSES		$212,500
Estimated Parking Spaces = 1,250		
Estimated Expenses Per Space =		$ 170

space in terms of 1972 dollars.

Table No. 41 shows the estimated M and O expenses for the Park-N-Ride facilities proposed in this report, based on a cost of $170 per space per year for the parking structures, and a cost of $50 per space per year for the parking lot, in terms of 1972 dollars.

Total M and O expenses for the four Park-N-Ride facilities proposed in this report are estimated to be $819,000 per year.

2. Estimated Revenues

Revenues from the project will be determined by a combination of demand for the use of the project and public policy. The project serves public ends, therefore, complete or partial public subsidization of the project is justified. The public ends served by the project include the relief of rush period traffic on the Kennedy Expressway, the relief of rush period traffic congestion in the Chicago CBD, and the diversion of parking demand from the CBD to outlying areas. Because the project serves public ends in addition to the ends of the people directly benefiting from the project, it is not equitable to assess users of the project with the full costs of the project.

If the Park-N-Ride project is developed as a Federal Demonstration Project, parking rates must be set at a level no higher than that rate which will cover all costs of maintenance and operation of the project, and there is no requirement that any charge be made at all. This rule assumes that Federal, State and Local grants will be used to finance the project and that State or Local funds may be used to subsidize all or part of the maintenance and operation expenses of the project.

It is believed that the Park-N-Ride projects should yield

TABLE NO. 41

ESTIMATED MAINTENANCE AND OPERATION EXPENSES
FOR PROPOSED PARK-N-RIDE FACILITIES

Proposed Park-N-Ride Facility	Approximate Number of Spaces	Estimated M. & O. Costs Per Space Per Year	Estimated Annual M. & O. Costs
Jefferson Park	1,250	$170	$212,500
Harlem Avenue	1,350	$170	$229,500
Cumberland Avenue	1,600	$170	$272,000
River Road	2,100	$ 50	$105,000
TOTALS	6,300		$819,000

NOTE: Expenses based on 1972 Dollars.

enough revenue to pay their M and O expenses. Because Park-N-Ride demand was estimated on the basis of a $0.50 per day parking fee, revenues will also be estimated on the basis of a $0.50 per day parking fee. It should be noted that according to Figure No. 6 and 8 an increase in this fee will result in a decrease in the demand for use of the Park-N-Ride facilities.

Table No. 42 shows the revenues estimated from a Park-N-Ride project located at Jefferson Park based on a $0.50 per day parking fee. Estimated annual revenues are $212,900 including weekday revenue, weekend revenue, and concession revenue. This results in a small annual surplus of $400. This should be placed in a reserve fund to be used for unusual M and O expenses of the Park-N-Ride project or to be used in the event a deficit is incurred in the operation of the Park-N-Ride during a poor year.

The estimates prepared herein assume a weekday turnover rate of 1.25 in the Park-N-Ride project during weekdays, a turnover rate of 0.25 on Saturdays, and a turnover rate of 0.08 on Sundays. All these turnover rates assume that the C&NW will continue to provide its high quality suburban commuter service and that the CTA will continue its present efforts to make itself more attractive to its present and potential future riders.

TABLE NO. 42

ESTIMATED REVENUES AT THE PROPOSED JEFFERSON PARK PARK-N-RIDE PROJECT WITH A $0.50 PER DAY PARKING FEE

ANNUAL WEEKDAY REVENUES		ANNUAL WEEKEND REVENUES		CONCESSION REVENUES
Monday through Friday		Saturday	Sunday	
Number of Spaces	1,250	1,250	1,250	
Times Estimated Turnover	1.25	0.25	0.08	
Average Space Uses During Day	1,563	313	100	
Times Parking Rate	$0.50	$0.50	$0.50	
Estimated Daily Revenue	$ 782	$ 157	$ 50	
Times Number of Weekdays	5			
Weekly Revenues	$3,910	$ 157	$ 50	
Times Weeks in Year	50.4*	52	52	
Annual Revenues	$197,064	$8,164	$2,600	$5,000
SAY	$197,100	$8,200		

TOTAL ANNUAL REVENUE	
Weekdays	$197,100
Saturdays	8,200
Sunday	2,600
Concessions	5,000
Total Annual Revenue	$212,900
Total Annual M. & O. Expenses	$212,500
Annual Surplus	$ 400

* Allowance of 8 days (1.6 weeks) made for effect of holidays.

XI. EFFECT OF THE PROPOSED PARK-N-RIDE PROJECT ON LAND USE, TRAFFIC, AND EXISTING MASS TRANSIT CARRIERS

A. Introduction

The purpose of this study, as previously stated, is to determine the feasibility of relieving traffic congestion on the Kennedy Expressway through the use of one or more Park-N-Ride facilities to be located on or adjacent to the Kennedy Expressway. Provision of Park-N-Ride facilities along the Kennedy Expressway should help to relieve traffic congestion on this Expressway. The provision of Park-N-Ride facilities along the Kennedy Expressway will probably also have effects on land use in the vicinity of each project and the existing mass transit carriers currently serving the project or operating in the vicinity of the Park-N-Ride project. The effects of the proposed Park-N-Ride project on these items will be analyzed in this section of the report.

B. Effect of the Proposed Park-N-Ride Project on Existing Land Use in the Vicinity of the Project

None of the proposed Park-N-Ride projects can be expected to have a marked effect on the land use in their immediate vicinity. This is primarily because most of the land in the vicinity of each proposed project is already fairly extensively developed. With the exception of the River Road site, which is completely surrounded by highways and the Cumberland Avenue site which is located entirely within an Expressway interchange, there is little or no vacant land in the vicinity of any of the proposed sites.

It is not expected that the presence of a Park-N-Ride project will have a great or immediate effect on land use in its vicinity. Where land becomes available in the vicinity of a Park-N-Ride project, however, it is expected that the presence of such a project will favor commercial land use over other types of land use. This is because the presence of such a project will insure the presence of a large pool of potential purchasers for commercial establishments during weekdays. Also, if the public transportation facilities serving the Park-N-Ride project are lightly used on Saturdays and Sundays, the project could be used as parking for patrons of local commercial establishments on these days. Therefore, it is expected that the construction of a Park-N-Ride project would encourage a shift to commercial land use in cases where other land uses currently exist.

C. Effect of the Proposed Park-N-Ride Project on Traffic Congestion on the Kennedy Expressway

In 1985, according to Table No. 31, there will be a peak hour demand for about 7,296 southeast bound vehicle movements (including 12% for commercial traffic) on the Kennedy Expressway in the vicinity of Jefferson Park if no new expressways are built in this area by that year. If the expressways proposed in CATS Interim Plan are constructed by 1985 there will be an estimated peak hour demand for about 3,044 vehicle movements per hour by 1985.

The proposed Park-N-Ride facility at Jefferson Park has a capacity of about 1,250 cars. If the Jefferson Park Park-N-Ride project were the only Park-N-Ride project constructed by 1985, demand (4,100 See Table No. 31) would be considerably in excess of the number of spaces which could possibly be supplied at this location if no new urban expressways are constructed by 1985. Table No. 36 shows that even if the CATS Interim Plan is implemented by 1985, there would still be a demand for 1,900 Park-N-Ride parking spaces at Jefferson Park if this

was the only Park-N-Ride structure constructed.

Because estimated demand for Park-N-Ride facilities greatly exceeds the supply that can be provided at this one structure, it is reasonable to assume that this structure will normally fill to its capacity during the morning peak two hour period used for estimating demand. This is currently being experienced at the Des Plaines Avenue CTA Park-N-Ride lot. Nevertheless, a figure of 95% of capacity will be used for estimating traffic entering the project during the morning peak two hour period. This will result in about 1,190 cars entering the project during the morning peak 2 hour period, or about 595 cars an hour entering the project during this period.

The capacity of the Kennedy Expressway, at Level of Service C, as defined in the Highway Capacity Manual, has previously been defined as about 1,500 cars per lane per hour. At Jefferson Park, the Kennedy Expressway consists of 3 lanes in each direction. This results in a capacity of 3 x 1500 or 4,500 traffic movements per hour in each direction.

If no new expressways are built in this area by 1985, there will be a demand for about 7,296 southeast bound traffic movements at Jefferson Park in 1985 versus a capacity of 4,500 movements per hour resulting in a highway capacity deficiency of 2,796 movements per hour during peak hours. Removing 595 cars from each of the 2 peak hours on the Kennedy Expressway will reduce this deficiency by about 21% to 2,201 movements per hour.

If the CATS Interim Plan system of expressways is completed by 1985, there will be a demand for about 3,044 vehicle movements in the southeast bound direction in the peak hour by 1985. Although this is below the Kennedy's capacity of 4,500 the removal of an additional 595 cars leaving a demand for 3,044 - 595 or 2,500 cars should result in the improvement of traffic flow on the Kennedy Expressway.

If the Park-N-Ride facilities proposed at River Road, and Harlem Avenue were constructed in addition to the Park-N-Ride structure proposed at Jefferson Park, relief from traffic congestion at Jefferson Park would be substantially greater than with the use of a single structure. This would occur as 95% of 2,100 or 1,995 cars at River Road and 95% of 1,350 or 1,283 cars at Harlem Avenue (a total of 3,278 cars) would be removed from the Expressway prior to reaching Jefferson Park in the morning peak two hour period. This would result in the removal of about 1,640 cars from the Expressway in each of the two morning peak hours, leaving a demand of about 7,296 - 1,640 or 5,656 vehicle movements in the morning peak hour at Jefferson Park. The removal of another 595 cars from the Expressway during the morning peak hour period, by the Park-N-Ride structure at Jefferson Park, would reduce vehicular demand for use of the Expressway at this point to about 5,061 vehicle movements per hour. This is still somewhat above the defined capacity of the Kennedy Expressway of 4,500 vehicle movements per hour at Jefferson Park, but is a marked improvement over the otherwise projected demand of 7,296 vehicle movements per hour at this location. The removal of 2,235 cars per hour from the Expressway would reduce highway capacity deficiencies at Jefferson Park by about 80% during peak hours in 1985.

In the event that the CATS Interim Plan or committed Plan Expressways are built, these Expressways will provide some relief for traffic congestion on the Kennedy Expressway. They will not, however,

provide any relief for downtown parking congestion, nor can they be expected to provide substantial relief for downtown traffic congestion. Therefore, even if the Expressways Plan proposed by CATS is in operation by 1985, there will still be a demand for Park-N-Ride facilities along the Kennedy Expressway.

It must be concluded that if no new urban expressways are built by 1985 that a system of Park-N-Ride facilities will be needed to provide relief for the traffic congestion anticipated on the Kennedy Expressway, or major arterials. If new urban expressways are built by 1985, Park-N-Ride facilities will still be needed to provide relief for downtown traffic congestion and downtown parking congestion.

D. Effect of the Proposed Park-N-Ride Project on Existing Mass Transit Operations

1. Introduction

Because of the location of the project, only three existing mass transit carriers should be expected to be strongly affected by the project. The major financial effects of the project should be felt by the CTA's extension in the median strip of the Kennedy Expressway, the Northwest Line of the C&NW, and the bus operations of the United Motor Coach Company in the Northwest Chicago suburban area.

It must be remembered that the principal purpose of the project, is to reduce the present and forecast future traffic congestion on the Kennedy Expressway. Ideally, the project would result only in the transfer of a significant proportion of rush hour drivers who are currently, or who would in the future, be using their cars to reach the CBD, from their cars to a mass transit carrier serving the Kennedy Expressway. Ideally, there would be no attraction of riders from a competing mass transit carrier to the Kennedy mass transit carrier because this would merely increase traffic on the Kennedy Expressway, while the project is designed as a highway improvement, to reduce traffic congestion. Historically, however, improvements to transportation in the Chicago area, notably the Kennedy Expressway and the extension of the CTA to Jefferson Park in the median strip of the Kennedy Expressway, have had an effect on the existing mass transit carriers in the area. Therefore, the financial effects of the project must be examined and any damage done to an existing mass transit carrier must be considered before the project is constructed.

This section will study the financial effects of the proposed Park-N-Ride project on the following mass transit carriers.

a. The CTA Rapid Transit Line in the Median of the Kennedy Expressway.

b. The C&NW Railway Northwest Line.

c. United Motor Coach.

2. Effect on the CTA Kennedy Rapid Transit Line

The primary effect of a Park-N-Ride project, if located at Jefferson Park, will be to increase the number of CTA passengers, and consequently CTA revenues. The number of CTA passengers will not be increased by the total amount of cars parked in the project, however, because some of the cars which will park in the project, will be the cars of CTA riders who already park in the Jefferson Park Terminal area. The Park-N-Ride project should serve to remove these cars from the local streets, but these cars will not provide new CTA riders. In addition, the project will have access to the C&NW station at Jefferson Park, as well as the CTA station and will, therefore, attract new C&NW riders to

the Jefferson Park C&NW station. This demand will be particularly strong among C&NW riders who prefer the lower city fares offered at the Jefferson Park C&NW station to the higher suburban fares assesed just a few miles beyond Jefferson Park.

The parking structure proposed at Jefferson Park will have a capacity of about 1,250 cars. Assuming the Park-N-Ride project fills to 95% of its capacity during the peak two morning hours, and about 1.1 passengers, the present average at CTA Park-N-Ride lots, are carried by each car, an average of approximately 650 total passengers will be provided to public transportation carriers by the project during each of the morning rush hours, for a total of 1,300 passengers.

An additional 30% of the Park-N-Ride project must be filled before and after the morning rush hours if the Park-N-Ride project is to achieve its estimated 1.25 weekday turnover rate. This would provide approximately an additional 410 weekday total passengers from the project. This would result in the Park-N-Ride project's providing a total of about 1,710 passengers per day for existing public transportation carriers by 1985.

Assuming that 80% of the total morning peak hours passengers represent new passengers for public transportation carriers and that 80% of this market would use the CTA and 20% would use the C&NW approximately 420 new passengers would be delivered to the CTA for each of the morning peak two hours, for a total of 840 new riders. Assuming all the off-peak hour riders would be delivered to the CTA, about 330 new off peak hour passengers would be delivered to the CTA during the average weekday for a total of about 1,170 new weekday riders for the CTA as a result of the Park-N-Ride project.

The estimated 1,170 new weekday CTA passengers, at a round trip fare of $0.90 apiece, for a 5 day week, 50 week year, would produce additional annual revenues of about $263,000 for the CTA in 1985, the design year of the Park-N-Ride facility. In order to retain conservatism of financial estimates, it will be assumed that no new CTA passengers will be produced by the Park-N-Ride project on weekends. This situation might change, however, when the new Loop Distributor Subway is completed because this would make a much larger portion of Chicago accessible to both weekend visitors and to those who normally work on weekends than is now conveniently accessible by the CTA.

Discussions with CTA officials indicate that present CTA facilities could easily assimilate the projected increase in daily and peak hour CTA passengers at the Jefferson Park Station. Therefore, the estimated increase of $263,000 in CTA revenues from the Jefferson Park Station in 1975 would not be offset by an increase in operating costs because of the increased passengers provided by the Park-N-Ride project. Therefore, it is estimated that the provision of a Park-N-Ride structure at Jefferson Park would result in an increase of about $263,000 in CTA annual net revenue in 1985.

3. Effect On the Chicago and North Western Railway

a. Introduction

The Park-N-Ride project, as currently planned, provides access to both the CTA and C&NW stations at Jefferson Park and drivers will have freedom to choose either rail mode to complete their trip to the CBD. Nevertheless, the C&NW objects to the construction of the proposed Park-N-Ride project. These objections are related primarily to the C&NW's previously expressed objections to the extension of the

CTA in the median strip of the Kennedy Expressway, which the C&NW estimates has cost it between $300,000 and $350,000 of annual revenue, and 2% of the C&NW's total passengers. The C&NW, has, however, agreed that the CTA may construct a parking facility not to exceed 400 spaces along or at the end of its line in the Kennedy Expressway.

The C&NW, although it recognizes the need for improved transportation in the Chicago area, feels that it must obstruct improvements in the public transportation system of the Chicago area which are financed wholly or in part by public funds because such projects divert passengers and revenue from the C&NW. In effect, the C&NW feels that the C&NW railroad as a private, profit making enterprise, which in most cases is not eligible for public subsidy, simply cannot afford to compete against transportation projects which are funded by public monies. This applies to all forms of subsidized public transportation including expressways, new rail lines, or Park-N-Ride facilities.

The C&NW, together with other Chicago suburban railroads, has been requesting a unified mass transportation system for the Chicago Metropolitan Area for several years. Such a plan, in effect, is the price the C&NW feels it must exact to survive against the large number of subsidized projects which have been completed or proposed in recent years. Analysis of such a plan is beyond the scope of this study. However, it should be noted that many federal programs require such a plan before they can be funded. Because of this and because preliminary observation indicates that the Chicago Metropolitan Area could be well served by a unified mass transportation system such as already exists in Munich and Toronto, it is recommended that careful consideration be given to a unified urban transportation system for the Chicago area.

Recently, the creation of suburban mass transit districts has allowed some commuter railroads to secure federal funds for the purchase of new rolling stock. The C&NW would not benefit from such a district, however, because it had, previous to the creation of these districts, used its own funds to equip itself with a very high quality of rolling stock. This is an inherently inequitable situation and should be corrected.

The use of federal funds to provide commuter parking at suburban railroad stations should be considered. This would help to relieve traffic on expressways, arterials, and local streets by minimizing the distance that must be driven before a commuter has access to public transportation. Such local Park-N-Ride facilities could entirely eliminate the need of many people to use expressways.

The remainder of this section will estimate the effect the Park-N-Ride project will have on C&NW operations and revenues.

b. Effects of the CTA Extension on C&NW Total Suburban Territory

The C&NW Railway in the study area has been shown on Figure No. 2. This territory consists of a North Line, a Northwest Line, and a West Line as indicated on Figure No. 2.

The Northwest Line is the C&NW Suburban Line which has been most strongly affected by the CTA extension in the median strip of the Kennedy Expressway. It is this line which it is expected would be most strongly affected by the construction of the project.

The number of annual passengers carried by station by the C&NW is shown on Tables No. 43 - 45 for the Northwest, North, and West

TABLE NO. 43

NUMBER OF PASSENGERS CARRIED BY STATIONS C&NW NORTHWEST LINE

	1966	1967	1968	1969	1970
Clybourn	20,249	17,400	9,681	10,664	9,159
Irving Park	140,121	170,536	186,668	208,689	135,214
Jefferson Park	297,414	368,371	413,272	447,581	295,048
Gladstone Park	112,559	127,278	133,065	141,711	93,627
Norwood Park	380,270	426,909	439,187	484,883	382,797
Edison Park	475,921	510,503	550,783	580,045	472,289
Park Ridge	884,554	949,009	979,623	1,014,898	953,569
Dee Road	199,304	229,867	269,562	302,809	305,234
Des Plaines	837,870	882,715	862,328	874,371	842,785
Cumberland	393,725	425,483	431,745	437,381	438,431
Mount Prospect	1,325,143	1,399,272	1,446,457	1,453,646	1,430,173
Arlington Heights	1,635,375	1,768,608	1,915,779	2,087,208	2,195,492
Palatine	857,869	908,741	928,426	981,168	1,061,028
Barrington	856,895	879,227	909,981	951,265	981,053
Fox River Grove	116,734	111,819	101,792	98,112	97,496
Cary	200,430	201,900	210,636	216,924	216,522
Crystal Lake	426,889	440,594	446,673	456,341	464,496
Woodstock	106,021	107,649	106,503	107,477	109,697
Hartland	2,096	2,000	1,097	618	1,141
Harvard	40,861	42,805	40,483	40,160	42,401
McHenry	114,821	121,238	115,006	109,104	106,988
Ringwood	9,510	11,997	11,375	13,165	12,662
Richmond	16,362	15,483	15,022	15,387	14,856
Genoa City	4,810	4,585	5,050	4,875	5,878
Pell Lake	8,005	8,443	7,413	7,844	7,265
Lake Geneva	26,383	29,800	27,540	31,471	25,465
TOTALS	9,490,191	10,162,232	10,565,147	11,077,797	10,700,766
PERCENT INCREASE (DECREASE)	7.08	3.96	4.85	(-3.40)	

NOTE: The number of revenue passengers carried is based on ticket sales and does not include cash fares because this data is not available by station.

SOURCE: C&NW

TABLE NO. 44

NUMBER OF PASSENGERS CARRIED BY STATIONS C&NW NORTH LINE

	1966	1967	1968	1969	1970
Ravenswood	58,231	67,995	79,321	90,685	102,831
Rogers Park	153,039	174,174	210,602	247,657	259,933
Main Street	206,761	229,927	263,966	310,626	321,696
Evanston	277,674	301,316	314,218	351,117	366,718
Central Street	364,317	383,669	409,309	429,903	429,538
Wilmette	531,102	574,220	599,198	621,247	619,604
Kenilworth	327,056	346,098	341,294	332,011	333,220
Indian Hill	218,717	233,349	241,168	242,124	242,294
Winnetka	404,282	417,283	419,470	434,685	416,752
Hubbard Woods	311,879	339,467	330,988	324,477	318,722
Glencoe	422,255	437,475	466,406	489,473	470,798
Braeside	176,548	180,068	186,883	200,819	197,769
Ravinia	161,076	198,286	218,314	197,246	193,093
Highland Park	758,573	803,993	771,812	789,892	771,061
Highwood	117,192	123,247	125,353	129,071	124,936
Fort Sheridan	62,255	71,992	72,711	79,175	77,843
Lake Forest	497,962	527,432	536,924	551,082	532,721
Lake Bluff	169,288	175,271	181,085	188,068	187,024
Great Lakes	405,755	401,669	326,500	271,990	191,354
North Chicago	289,452	281,137	284,127	260,758	244,117
Waukegan	463,919	483,619	474,782	483,922	468,608
Zion	26,795	25,798	25,158	23,775	29,635
Winthrop Harbor	7,302	8,113	8,289	6,773	6,537
Kenosha	136,938	151,408	155,821	153,220	137,238
TOTALS	6,548,368	6,937,006	7,043,699	7,209,796	7,044,042
PERCENT INCREASE (DECREASE)	5.93	1.54	2.36	(-2.30)	

NOTE: The number of revenue passengers carried is based on ticket sales and does not include cash fares because this data is not available by station.

SOURCE: C&NW

TABLE NO. 45

NUMBER OF PASSENGERS CARRIED BY STATIONS C&NW WEST LINE

	1966	1967	1968	1969	1970
Kedzie	546	863	584	666	194
Oak Park	40,059	45,293	64,025	55,794	88,529
River Forest	23,563	23,775	29,789	39,909	45,859
Maywood	90,031	95,405	91,724	93,782	98,560
Melrose Park	67,612	68,879	85,905	87,412	88,919
Bellwood	94,054	112,073	149,530	163,561	174,700
Berkeley	21,401	31,848	43,149	52,264	53,770
Elmhurst	931,815	983,105	993,536	985,292	961,108
Villa Park	765,853	784,283	814,548	830,743	822,871
Lombard	779,882	825,960	831,392	828,346	827,303
Glen Ellyn	952,133	1,014,272	1,033,992	1,071,760	1,113,004
College Avenue	164,284	179,898	183,689	196,899	200,689
Wheaton	738,068	751,625	750,816	750,306	749,079
Winfield	100,147	109,642	119,187	130,578	132,742
West Chicago	214,357	218,664	225,098	218,620	207,422
Genevea	342,939	352,811	339,295	342,225	348,053
TOTALS	5,326,744	5,598,396	5,756,259	5,848,157	5,912,802
PERCENT INCREASE (DECREASE)	5.10	2.82	1.60	1.11	

NOTE: The number of revenue passengers carried is based on ticket sales and does not include cash fares because this data is not available by station.

SOURCE: C&NW

Lines of the C&NW for the years 1966 - 1970. Table No. 46 summarizes the total passengers carried by these stations by years and shows the annual percentage increase or decrease. It should be noted, that between 1969, before the CTA opened its extension in the median strip of the Kennedy Expressway, and 1970, which was after the CTA opened its northwest extension, C&NW traffic declined 3.40% on the Northwest Line, increased 1.11% on the West Line, and decreased 2.30% on the North Line. Some of the decrease in North Line traffic must be attributed to a major reduction in training activities at the Great Lakes Naval Station. The factors of decreases in or a lack of increase in employment during the 1969 - 1970 period, probably applied about equally to all lines of the C&NW. Therefore, it would appear that the opening of the CTA's Northwest extension probably did affect traffic on the Northwest Line of the C&NW.

c. Effects of the CTA Extension on C&NW Northwest Line

Because the effect of the CTA northwest extension was most apparent in the C&NW's northwest line, this line was investigated in somewhat more detail than the North and West Lines of the C&NW. Table No. 47 shows a month to month comparison of C&NW passengers on the Northwest Line from February, 1970, when the CTA extension opened, to April of 1971, the last C&NW figures available before the 1971 strike. Table No. 48 shows the same information for passenger revenues at these stations. In both cases, severe drops can be noted between months in 1969 and 1970, for the C&NW stations located near the Kennedy CTA extension. Excluding the Clybourn station these month to month drops range from 47% for passengers at Irving Park to 44% for revenues at Irving Park. Edison Park appears to be the last station to the west

TABLE NO. 46

TOTAL ANNUAL PASSENGERS CARRIED BY C&NW BY LINE

	1966	% CHANGE*	1967	% CHANGE	1968	% CHANGE	1969	% CHANGE	1970
Northwest Line	9,490,191	7.08	10,162,232	3.96	10,565,147	4.85	11,077,797	-3.40	10,700,766
West Line	5,326,744	5.10	5,598,396	2.82	5,756,259	1.60	5,848,157	1.11	5,912,802
North Line	6,548,368	5.93	6,937,006	1.54	7,043,699	2.36	7,209,796	-2.30	7,044,042
TOTAL	21,365,303	6.24%	22,697,634	2.94%	23,365,105	3.30%	24,135,750	-1.98%	23,657,610

* % change between adjacent years, e.g. 1966-1967, 1967-1968, 1968-1969, 1969-1970.

SOURCE: C&NW

TABLE NO. 47

MONTHLY PASSENGERS CARRIED BY STATION
NORTHWEST LINE-CHICAGO AND NORTHWESTERN RAILWAY

	CLYBOURN			Percent Increase		IRVING PARK			Percent Increase		JEFFERSON PARK			Percent Increase	
	2/69-1/70	2/70-1/71	2/71-4/71	2/69-2/70	2/70-2/71	2/69-1/70	2/70-1/71	2/71-4/71	2/69-2/70	2/70-2/71	2/69-1/70	2/70-1/71	2/71-4/71	2/69-2/70	2/70-2/71
February	145	590	509	307%	-14%	17,353	14,013	9,460	-19%	-32%	37,452	29,328	20,921	-28%	-29%
March	563	91	202	-84%	122%	17,657	12,294	9,287	-30%	-24%	38,219	26,198	21,684	-31%	-17%
April	1,091	135	137	-88%	1%	17,336	11,577	9,569	-33%	-17%	37,586	24,664	21,449	-34%	-13%
May	882	331		-62%		17,036	10,810		-37%		36,838	23,310		-37%	
June	1,054	963		- 9%		16,806	9,824		-42%		35,592	22,179		-38%	
July	1,883	1,173		-38%		16,770	10,038		-40%		36,276	22,685		-37%	
August	1,339	1,126		-16%		17,116	10,232		-40%		35,043	22,301		-36%	
September	1,261	1,393		10%		17,123	9,147		-47%		36,581	21,784		-40%	
October	1,212	1,095		-10%		17,738	9,972		-44%		37,989	21,988		-42%	
November	991	954		- 4%		17,827	10,010		-44%		37,270	21,378		-43%	
December	96	975		916%		18,017	9,877		-45%		38,448	21,146		-45%	
January	333	815		145%		17,420	9,893		-43%		38,087	20,906		-45%	
ANNUAL TOTAL	10,850	9,641		11%		208,199	127,687		-39%		445,381	277,867		-38%	

	GLADSTONE PARK					NORWOOD PARK					EDISON PARK				
February	12,245	9,752	6,472	-20%	-34%	39,072	35,333	28,245	-10%	-20%	48,376	44,070	35,211	- 9%	-20%
March	12,243	9,043	6,639	-26%	-27%	39,476	34,327	29,457	-13%	-14%	49,538	42,673	36,320	-14%	-15%
April	12,079	8,375	6,357	-31%	-24%	39,948	32,718	28,700	-18%	-12%	49,041	40,388	36,136	-18%	-11%
May	11,953	7,709		-36%		39,854	31,337		-21%		49,135	39,445		-20%	
June	12,325	7,051		-43%		40,834	29,505		-28%		48,857	38,011		-22%	
July	11,755	6,649		-43%		39,970	29,718		-26%		48,240	37,123		-23%	
August	10,982	6,650		-39%		39,438	29,573		-25%		48,121	36,105		-25%	
September	11,468	6,864		-40%		39,695	29,049		-27%		45,113	36,194		-20%	
October	11,497	6,515		-43%		42,183	29,871		-29%		47,109	36,671		-22%	
November	10,944	6,719		-39%		40,758	29,628		-27%		46,943	36,449		-22%	
December	11,557	6,845		-41%		42,576	29,426		-31%		49,394	36,531		-26%	
January	11,455	6,755		-41%		42,313	29,505		-30%		48,629	36,680		-25%	
ANNUAL TOTAL	140,503	88,927		-37%		486,118	369,990		-24%		578,496	460,340		-20%	

	PARK RIDGE					DEE ROAD					DES PLAINES				
February	81,968	80,352	76,486	- 2%	- 5%	25,497	25,617	25,631	0%	0%	72,814	70,587	68,675	- 3%	- 3%
March	81,332	81,975	78,697	1%	- 4%	25,206	25,772	25,909	2%	1%	73,763	73,746	71,888	0%	- 3%
April	83,934	80,644	79,121	- 4%	- 2%	25,385	25,508	25,522	0%	0%	74,027	72,148	71,217	- 3%	- 1%
May	82,372	79,478		- 4%		25,053	25,024		0%		72,047	71,501		- 1%	
June	84,336	79,732		- 5%		24,987	24,962		0%		72,083	71,329		- 1%	
July	84,690	78,921		- 7%		24,935	24,428		- 2%		70,979	67,516		- 5%	
August	80,355	74,844		- 7%		24,041	24,834		3%		69,388	65,048		- 6%	
September	85,149	75,180		-12%		25,238	24,811		- 2%		71,012	66,833		- 6%	
October	88,312	79,307		-10%		25,939	25,882		0%		74,685	70,808		- 5%	
November	85,720	77,328		-10%		25,168	26,018		3%		72,939	70,042		- 4%	
December	88,563	79,229		-11%		25,850	25,904		0%		74,598	70,858		- 5%	
January	86,579	76,962		-11%		26,474	26,785		1%		72,369	70,572		- 2%	
ANNUAL TOTAL	1,013,310	943,952		- 7%		303,772	305,545		+ 1%		870,704	840,988		- 3%	

NOTE: CTA's Kennedy Rapid Transit Line Opened February 1, 1970.

C&NW FARE INCREASES: June 1, 1969, 5%
June 1, 1970, 6%
May 1, 1971, 7%

SOURCE: C&NW

TABLE NO. 48

MONTHLY PASSENGER REVENUE BY STATION
NORTHWEST LINE-CHICAGO AND NORTHWESTERN RAILWAY

	CLYBOURN			Percent Increase		IRVING PARK			Percent Increase		JEFFERSON PARK			Percent Increase	
	2/69-1/70	2/70-1/71	2/71-4/71	2/69-2/70	2/70-2/71	2/69-1/70	2/70-1/71	2/71-4/71	2/69-2/70	2/70-2/71	2/69-1/70	2/70-1/71	2/71-4/71	2/69-2/70	2/70-2/71
February	$ 336	$ 460	$ 385	37%	-16%	$7,989	$6,586	$4,682	-18%	-29%	$17,490	$16,267	$10,868	-19%	-24%
March	75	52	122	-31%	135%	7,873	5,748	4,574	-27%	-20%	17,230	12,760	11,504	-26%	-10%
April	770	81	78	-89%	- 4%	7,897	5,487	4,784	-31%	-13%	17,340	12,117	11,314	-30%	- 7%
May	601	263		-53%		7,730	5,161		-33%		17,218	11,520		-33%	
June	381	879		13%		8,664	4,922		-39%		17,605	11,679		-34%	
July	1,619	1,156		-29%		8,113	5,059		-38%		18,048	12,077		-33%	
August	1,075	1,040		- 3%		8,256	5,173		-37%		17,559	11,804		-33%	
September	961	835		-13%		8,273	4,967		-40%		18,306	11,397		-38%	
October	893	916		2%		8,519	4,961		-42%		18,880	11,321		-39%	
November	765	809		6%		8,485	4,978		-41%		18,306	11,262		-38%	
December	57	779		1267%		8,701	4,911		-44%		19,183	10,990		-43%	
January	219	646		195%		8,135	4,910		-41%		18,924	10,705		-43%	
ANNUAL TOTAL	$ 8,354	$ 7,936		-6%		$ 98,253	$ 62,863		-36%		$216,316	$142,009		-34%	

	GLADSTONE PARK					NORWOOD PARK					EDISON PARK				
February	$ 5,536	$ 4,485	$ 3,109	-19%	-31%	$19,543	$18,215	$15,301	- 7%	-16%	$25,325	$23,717	19,919	- 7%	-16%
March	5,505	4,176	3,231	-24%	-23%	19,209	17,737	16,049	- 8%	-10%	24,747	23,013	20,572	- 7%	15%
April	5,356	3,838	3,100	-28%	-19%	19,865	16,858	15,708	-15%	- 7%	25,290	21,436	20,786	-15%	- 4%
May	5,391	3,531		-35%		19,861	16,121		-19%		25,197	21,169		-16%	
June	5,795	3,513		-39%		21,544	16,232		-25%		26,898	21,855		-19%	
July	5,574	3,330		-40%		21,239	16,488		-22%		26,687	21,302		-19%	
August	5,230	3,330		-36%		21,007	16,448		-22%		26,562	21,030		-21%	
September	5,470	3,432		-36%		21,064	15,983		-24%		26,367	20,923		-21%	
October	5,383	3,214		-37%		22,111	16,345		-26%		25,301	20,684		-18%	
November	5,105	3,269		-36%		21,142	16,135		-24%		25,078	20,549		-18%	
December	5,482	3,337		-39%		22,855	16,009		-29%		27,325	20,931		-23%	
January	5,320	3,320		-38%		22,157	15,989		-28%		26,366	20,747		-21%	
ANNUAL TOTAL	$65,151	$42,777		-34%		$251,377	$194,560		-23%		$309,633	$257,954		-17%	

	PARK RIDGE					DEE ROAD					DES PLAINES				
February	$45,122	$47,104	$47,335	4%	1%	$14,931	$13,956	$16,680	-7%	32%	$47,999	$48,643	$49,866	1%	2%
March	45,873	48,270	49,076	4%	2%	14,976	14,132	17,008	-6%	32%	47,392	51,484	52,751	9%	2%
April	46,575	47,485	49,593	2%	4%	15,013	15,931	16,868	6%	42%	48,384	50,003	52,290	3%	5%
May	45,880	46,574		1%		16,923	15,580		-7%		46,960	49,291		5%	
June	50,136	50,141		0%		15,719	16,618		6%		49,965	52,684		5%	
July	50,418	49,933		- 1%		15,887	16,343		3%		49,338	50,052		1%	
August	48,457	47,681		- 2%		15,370	16,614		8%		48,806	48,720		0%	
September	50,885	47,176		- 7%		16,031	16,443		3%		49,271	49,434		0%	
October	52,455	49,588		- 5%		16,289	17,102		5%		51,407	52,043		1%	
November	50,551	47,929		- 5%		15,739	17,060		8%		49,985	51,208		2%	
December	53,244	50,022		- 6%		16,446	17,120		4%		52,030	52,336		1%	
January	51,305	47,664		- 7%		16,535	17,328		4%		49,790	51,328		3%	
ANNUAL TOTAL	$591,901	$579,579		- 2%		$187,879	$198,438		6%		$591,348	$607,286		3%	

NOTE: CTA's Kennedy Rapid Transit Line Opened February 1, 1970.

CNW FARE INCREASES: June 1, 1969, 5%
June 1, 1970, 6%
May 1, 1971, 7%

SOURCE: CNW

TABLE NO. 48 (Continued)
MONTHLY PASSENGER REVENUE BY STATIONS
NORTHWEST LINE CHICAGO AND NORTHWESTERN RAILWAY

	CUMBERLAND			Percent Increase		MOUNT PROSPECT			Percent Increase		ARLINGTON HEIGHTS			Percent Increase	
	2/69-1/70	2/70-1/71	2/71-4/71	2/69-2/70	2/70-2/71	2/69-1/70	2/70-1/71	2/71-4/71	2/69-2/70	2/70-2/71	2/69-1/70	2/70-1/71	2/71-4/71	2/69-2/70	2/70-2/71
February	$24,123	$25,576	$27,343	6%	7%	$86,672	$88,053	$95,047	2%	8%	$123,272	$139,499	$153,029	13%	10%
March	23,991	25,836	27,680	8%	8%	86,039	90,253	98,617	5%	2%	123,110	140,441	159,085	14%	13%
April	24,668	25,123	27,674	1%	11%	86,761	90,176	97,716	4%	8%	128,785	145,942	161,862	13%	11%
May	23,971	24,913		4%		85,872	89,098		4%		127,487	143,095		12%	
June	24,912	24,886		0%		89,440	95,152		6%		131,341	154,581		18%	
July	24,761	24,342		6%		88,859	93,760		6%		134,339	150,063		12%	
August	23,827	25,255		6%		87,324	91,829		5%		130,458	148,231		14%	
September	24,803	27,219		10%		88,437	93,058		5%		136,579	149,970		10%	
October	26,202	27,517		5%		91,965	97,994		6%		141,777	156,154		10%	
November	25,749	27,382		6%		88,456	96,267		9%		136,933	155,217		14%	
December	25,852	27,569		7%		93,222	95,396		2%		147,729	134,801		6%	
January	26,253	27,764		6%		91,728	95,548		4%		141,538	155,240		10%	
ANNUAL TOTAL	$298,912	$317,362		6%		$1,064,375	$1,116,444		5%		$1,603,453	$1,795,714		12%	

	PALATINE					BARRINGTON					FOX RIVER GROVE				
February	$62,452	$70,615	$81,027	13%	15%	$68,169	$73,527	$80,838	6%	10%	$ 7,917	$ 7,813	$ 7,948	-1%	2%
March	62,162	74,884	84,120	20%	12%	66,199	77,592	82,536	17%	6%	7,703	8,234	8,460	7%	3%
April	63,332	75,457	84,355	19%	12%	67,824	76,267	84,862	12%	11%	7,721	8,268	8,532	7%	3%
May	61,600	74,213		20%		68,669	76,371		11%		7,179	7,623		6%	
June	67,334	79,348		17%		73,302	82,136		12%		7,911	9,007		14%	
July	67,350	78,605		17%		74,863	80,834		8%		7,818	8,577		10%	
August	67,369	77,330		14%		73,773	80,049		9%		7,657	8,575		12%	
September	69,070	78,392		13%		72,371	78,872		9%		7,642	8,181		7%	
October	72,879	82,387		13%		75,520	82,548		9%		8,240	8,203		0%	
November	71,516	81,804		14%		74,477	84,424		13%		7,963	8,172		3%	
December	75,197	84,465		12%		79,559	84,025		6%		7,813	7,983		2%	
January	73,143	82,307		13%		76,243	82,148		8%		8,148	8,062		-1%	
ANNUAL TOTAL	$813,324	$939,987		16%		$872,175	$958,791		10%		$93,812	$98,648		5%	

	CARY					CRYSTAL LAKE					WOODSTOCK				
February	$16,471	$17,516	$19,327	6%	10%	$39,736	$41,766	$44,442	5%	6%	$10,185	$11,173	$11,255	10%	1%
March	16,422	18,709	19,843	14%	6%	37,950	45,719	47,101	20%	3%	9,879	11,779	12,178	19%	3%
April	15,980	18,162	20,395	14%	12%	39,177	44,125	48,133	13%	9%	10,821	11,384	12,881	5%	13%
May	16,303	17,861		9%		38,787	44,186		14%		10,338	11,816		14%	
June	18,387	19,495		5%		41,832	46,132		10%		10,609	11,864		12%	
July	18,543	19,639		6%		42,558	46,581		9%		11,266	12,586		12%	
August	18,647	19,184		3%		44,009	47,017		7%		10,683	11,936		10%	
September	17,574	18,627		5%		41,821	45,995		8%		10,451	11,690		12%	
October	18,153	19,631		8%		43,901	47,402		8%		11,557	11,525		0%	
November	17,879	19,362		8%		44,208	47,428		7%		11,422	11,868		4%	
December	19,308	19,431		1%		47,841	49,270		3%		12,372	12,193		-1%	
January	17,728	18,928		7%		42,924	45,562		6%		11,184	11,358		1%	
ANNUAL TOTAL	$211,005	$226,345		7%		$504,744	$520,263		3%		$130,977	$141,192		8%	

NOTE: CTA's Kennedy Rapid Transit Line Opened February 1, 1970

FARE INCREASES: June 1, 1969, 5%
June 1, 1970, 6%
May 1, 1971, 7%

to be severely affected by the CTA extension. Stations to the North and West of Edison Park appear to have shown traffic and revenue growth, or small decreases in the same period that stations at and east of Edison Park showed substantial drops in patronage and revenues. To a lesser extent these losses in traffic may even extend to Des Plaines. Therefore, it must be concluded that the opening of the CTA's Kennedy extension severely affected the C&NW at and to the east of Edison Park and had a measurable effect as far as Des Plaines. It should be noted, however, that the worst recession in ten years was affecting the country and the Chicago area during the 1969-1970 period. Therefore, some of the decline in C&NW traffic during this period must be attributed to the effects of the recession and not entirely to the opening of the CTA Kennedy Extension. It does not appear to be possible, however, to separate the effects of the CTA extension and the results of the recession on C&NW traffic.

d. Effects of the Park-N-Ride Project on C&NW Northwest Line Operation

Although it appears that the opening of the Kennedy extension of the CTA has had a severe effect upon C&NW passengers and revenues, the construction of a Park-N-Ride facility at Jefferson Park would have a much smaller effect on C&NW ridership. The size of the structure, about 1,250 spaces, most of which will be occupied by former Expressway drivers, and those who formerly parked on the streets in the Jefferson Park area, will simply not permit a large volume of C&NW passengers from other stations to Park-N-Ride at Jefferson Park.

It has been previously estimated that approximately 1,300 total passengers would be delivered to existing public transportation carriers as a result of the Park-N-Ride project during the morning peak two hour period and that about 840 of them would be new CTA passengers at Jefferson Park.

Ideally, all these new CTA passengers would be people who formerly drove to the CBD on the Expressway. However, an allowance of 10% will be made for people who formerly took the C&NW and changed to driving and parking and taking the CTA because of the Park-N-Ride facility. This would result in a loss of about 84 daily passengers per month to the C&NW. This loss should be confined to the stations between Jefferson Park and Park Ridge, namely Gladstone Park, Norwood Park, and Edison Park. The average cost of a monthly unlimited individual ticket at these stations is about $22.85. Therefore, loss of 84 daily passengers per month at these stations would result in a revenue loss of about $1,900 per month, or about $22,800 per year in 1985, the design year of the Park-N-Ride facility.

It should be noted that it has previously been estimated that the Park-N-Ride project would generate 100 new passengers a day for the C&NW Railway at Jefferson Park. To the extent that these passengers are new C&NW passengers rather than former C&NW passengers using the Jefferson Park station in preference to their previous station, the above estimated loss would be reduced.

The reasoning behind assigning the passenger and revenue losses to the three C&NW stations of Gladstone Park, Norwood Park and Edison Park is as follows. First, the Jefferson Park station is already served by both the CTA and the C&NW. Therefore, the construction of a Park-N-Ride project at Jefferson Park should not result in a further shift of passengers between the CTA and the C&NW at this location. It

is believed that people living east of the Jefferson Park station will be unwilling to drive several miles out of their way in order to use the Jefferson Park Park-N-Ride project. Therefore, there should be relatively little effect on the division of traffic between the C&NW and the CTA at Jefferson Park or east of Jefferson Park.

C&NW stations within a distance of about 5 miles north and west from Jefferson Park should show the greatest effects from a Park-N-Ride structure constructed at Jefferson Park. Beyond this approximate radius, any reductions in train travel time and cost would be offset by increasing driving time frustration, and costs. This five mile radius includes the C&NW stations of Gladstone Park, Norwood Park, Edison Park, Park Ridge and Dee Road. It is not expected, however, that Park Ridge or Dee Road will be as seriously affected by the Park-N-Ride project at Jefferson Park because access to the Expressway is fair in this area and the general affluence of the residents of the area makes economic considerations in the choice of commutation modes of secondary importance. Therefore, the previously estimated loss of 85 passengers a day for the C&NW is expected to be confined primarily to the C&NW stations of Gladstone Park, Edison Park and Norwood Park.

The above analysis considers the financial effect of a Park-N-Ride facility at Jefferson Park on the C&NW. The other recommended Park-N-Ride facilities depend upon the extension of the CTA to O'Hare or at least to Des Plaines River Road. If this is done, there will be two effects on the C&NW, one as a result of the CTA extension itself, and one as a result of the Park-N-Ride facilities provided at the new CTA stations. Both effects are expected to be considerably smaller than the previous effects of the CTA extension on the C&NW. This is primarily because the CTA extension beyond Jefferson Park will be further away from the C&NW tracks than the present extension and some traffic currently using the Jefferson Park CTA station would use CTA stations further to the west if the CTA were extended. Nevertheless, an allowance of $22,800 per year, equal to the amount estimated at Jefferson Park, will be made for the financial effect on the C&NW of providing Park-N-Ride facilities at new CTA stations. The total annual financial effect of the three recommended Park-N-Ride facilities on the C&NW, therefore, will be about 3 times $22,800 or $68,400 per year.

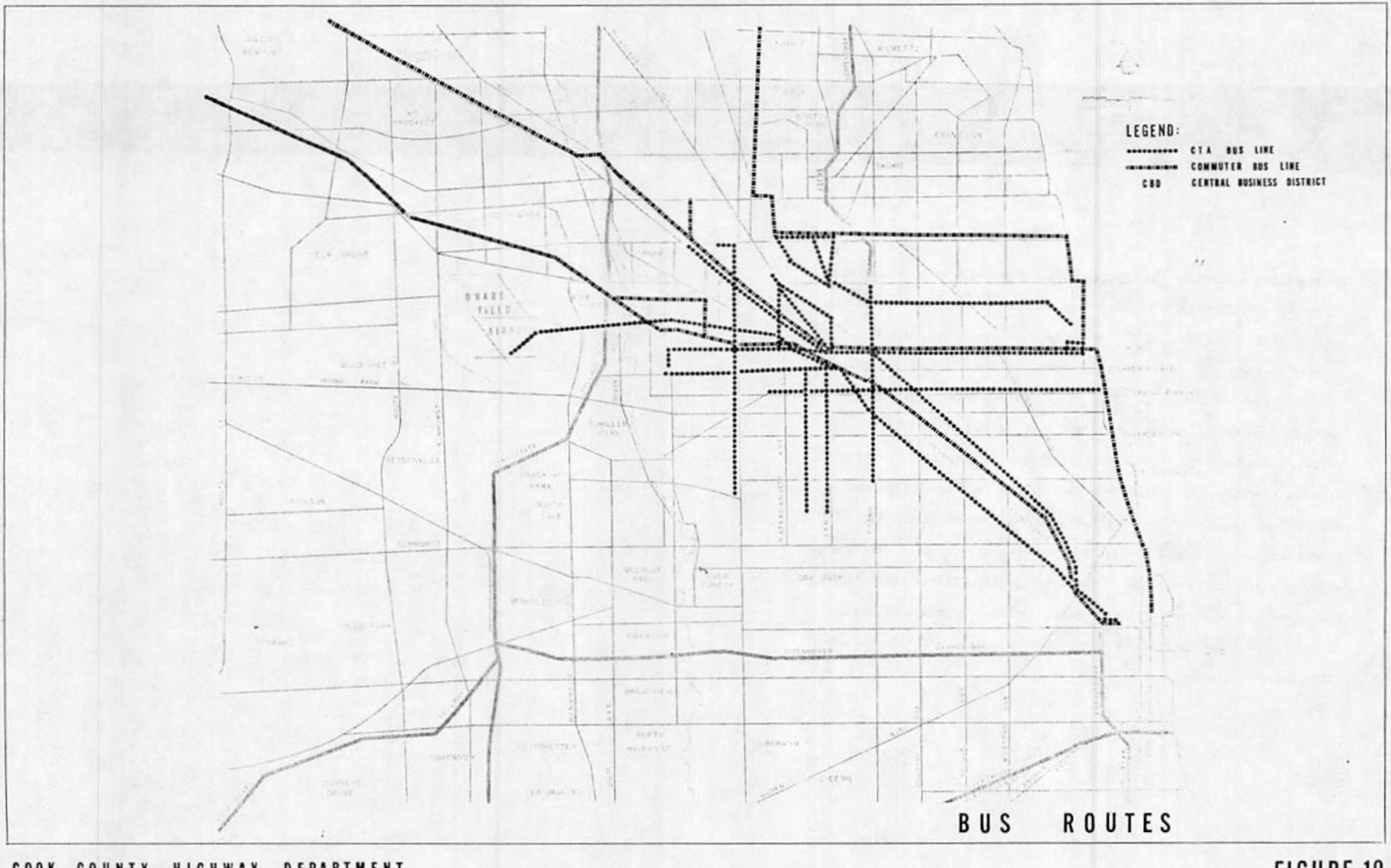
E. Effect of the Proposed Park-N-Ride Project on United Motor Coach and CTA Bus Routes

Both the CTA and United Motor Coach currently provide service to Jefferson Park. The routes provided by these carriers in the North and West Chicago areas are shown on Figure No. 19.

The CTA currently provides excellent feeder bus service to the Jefferson Park Terminal as shown on Figure No. 19. The major effect upon CTA operations in this area would occur if some current bus riders changed to driving their cars to the Park-N-Ride project after the project opened. It is believed, however, that most people currently using the bus to reach the Jefferson Park CTA Terminal prefer the convenience of bus travel to the frustrations of driving their own cars. Therefore, it is believed that the effect of the Park-N-Ride project on CTA feeder bus service will be minimal.

United Motor Coach operates routes to the Jefferson Park CTA Terminal. These routes, however, are generally longer than the feeder bus routes operated by the CTA. In addition, United Motor Coach, as shown on Figure No. 19, operates long distance routes from the

Northwestern suburbs to the Chicago CBD, including some routes operating on the Kennedy Expressway. Because of the nature and location of its routes, it is expected that United Motor Coach would be the bus carrier most strongly affected by the proposed Park-N-Ride project at Jefferson Park. As shown in Table No. 49 United Motor Coach has suffered from declining passengers and revenues during the 1965 - 1970 period. This has been true of many mass transit operators, particularly bus operators, in this time period. This decline in passengers and revenues is apparently not related to the opening of the CTA Kennedy extension because the decline has been steady on all the routes shown over the last six years. Therefore, it is believed that although passengers and revenues of United Motor Coach may continue to decline in the future, the CTA Kennedy extension will not be directly responsible for this decline.



COOK COUNTY HIGHWAY DEPARTMENT

PARK-N-RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 19

TABLE NO. 49

UNITED MOTOR COACH PASSENGERS AND REVENUES 1965 - 1970

ROUTE

Year	Jefferson Park-Des Plaines		Elk Grove-Chicago Loop		Chicago-Barrington		Evanston-Des Plaines		Rogers Park-Des Plaines	
	Passenger	Revenue	Passenger	Revenue	Passenger	Revenue	Passenger	Revenue	Passenger	Revenue
1965	270,174	$76,560	47,424	$27,520	704,704	$321,843	310,886	$121,662	623,066	$188,015
1966	262,182	72,665	53,663	30,991	684,126	311,401	331,992	116,656	645,968	193,912
1967	232,346	73,402	59,669	35,267	611,566	297,163	308,235	114,710	611,353	202,815
1968	163,089	50,407	53,858	32,165	571,067	276,007	258,092	99,765	557,132	197,819
1969	100,169	37,289	45,586	33,369	446,895	249,762	198,541	79,352	539,039	217,499
1970	68,952	26,712	36,809	28,537	328,610	192,071	160,323	58,466	467,666	187,369

Source: United Motor Coach

XII. COSTS AND BENEFITS OF THE PROPOSED PARK-N-RIDE PROJECT

The cost of providing Park-N-Ride projects at Jefferson Park, Harlem Avenue, and River Road would be about $20,766,000 in 1972 prices. To this cost should be added (for purposes of analysis) the estimated annual damage sustained by the C&NW Railway, which has previously been estimated at about $68,400 per year. Assuming a 30 year life for the project, the total costs of the project to the C&NW (excluding interest) over a 30 year period would be 30 times $68,400 or $2,052,000. The total cost of the project would then be $20,766,000 plus $2,052,000 or $22,818,000.

The principal benefit of the Park-N-Ride project will be to provide an alternative to the automobile for many of the work trips expected to be generated in the Northwest Chicago area by 1985. These trips, as estimated by CATS, are shown in Figure No. 20 for the years 1965 and 1985.

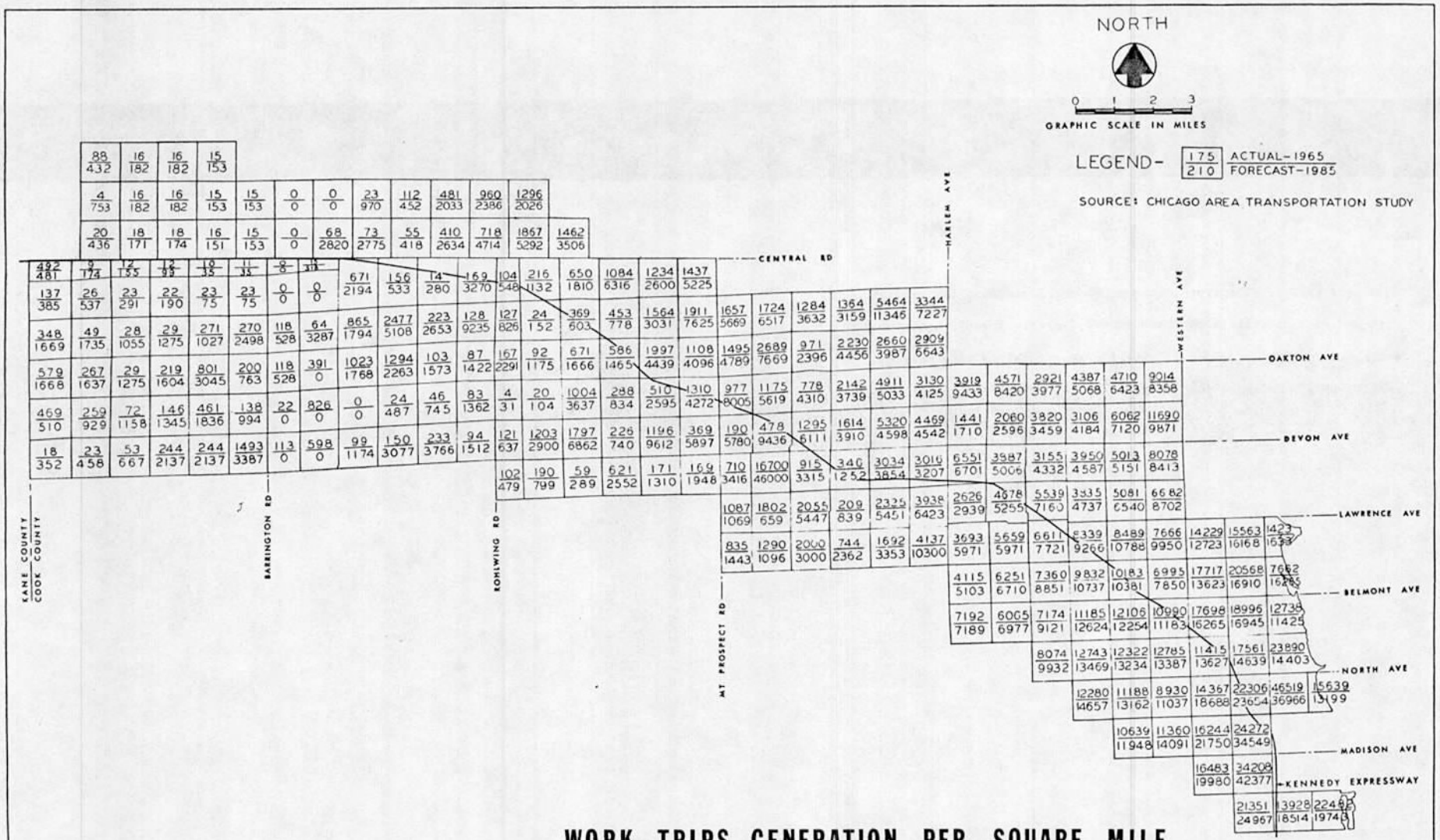
The existing CTA installation in the median strip of the Kennedy Expressway has been of very limited use to Expressway drivers. As shown in Table No. 24, between 1969, the year before the CTA's Kennedy extension opened and 1970, when this extension operated for 11 months, peak hour traffic on the Kennedy Expressway actually increased from 4,760 movements to 4,770 movements. Between 1970 and 1971 peak hour traffic on the Kennedy Expressway increased from 4,770 movements to 4,950 movements. It must be concluded that the existing CTA Kennedy extension is having at best a very minor effect upon Expressway usage. This is undoubtedly because of the lack of adequate parking with convenient access to and from the Expressway at the stations along this CTA extension.

In quantitative terms, the three Park-N-Ride projects proposed herein, are expected to remove about 2,233 cars from the southeast bound Kennedy Expressway during each of the peak two morning hours prior to the Kennedy's point of maximum congestion. The total number of cars intercepted at points about and beyond 10 miles from the Chicago CBD is estimated at about 4,465 during the morning peak two hour period in 1985.

The alternative to providing Park-N-Ride facilities for the estimated 1985 traffic on the Kennedy is to provide extensive improvements to the Kennedy Expressway itself or to adjoining major arterials. For purposes of cost comparisons, it can be assumed that these improvements would take the form of adding an additional lane to the Kennedy Expressway in each direction from Des Plaines River Road to the termination of the Kennedy in the CBD, a one way distance of about 15 miles, or a total of 30 miles of additional lane. At an estimated cost of $1,500,000 per lane per mile, this would result in a total cost of $45,000,000.

Therefore, the provision of about $23 million worth of Park-N-Ride facilities in lieu of $45 million worth of new Expressway lanes would result in a net savings of $45 million - $23 million or $22 million. This saving of $22 million is a very conservative estimate of the benefits to be derived from the Park-N-Ride project because it does not include the money saved by drivers using the Park-N-Ride project nor the value of the time saved by drivers using the Park-N-Ride project. Nor is any attempt made to estimate the value of CBD land which would have to be converted to parking facilities if Park-N-Ride facilities are not provided. To this estimated saving of $23 million should be added the benefits of the estimated $263,000 addition to the net revenues of the CTA. This would amount to an estimated $7,890,000 over

a 30 year period. Therefore, it must be concluded that the provision of Park-N-Ride facilities along the Kennedy Expressway could have total estimated benefits of about $31 million over a thirty year period. This results in a benefit to cost ratio of 1.5 to 1.



COOK COUNTY HIGHWAY DEPARTMENT

PARK-N-RIDE PROJECT

PREPARED BY RALPH H. BURKE INC.

FIGURE 20

APPENDIX A

CTA PARK-N-RIDE STATION QUESTIONNAIRE

DEAR COMMUTER: The Cook County Highway Department has engaged our firm for a study to determine the conditions which will make Park and Ride facilities more convenient, desirable and attractive for Chicago area commuters. By giving a few minutes of your time to answering these questions, you will be contributing to the success of this project.

The completed card may be dropped in any mailbox. Thank you for your cooperation.

How far from station do you live? (Check Box)	How did you get to station?	How often do you ride from this station?
Less than 1 mile ☐	Drove and Parked ☐	5 or more times/week ☐
1 to 5 miles ☐	Passenger in car which parked ☐	3-4 times/week ☐
5 to 10 miles ☐	Passenger in car which did not park ☐	1-2 times/week ☐
Over 10 miles ☐	Walked ☐	Less than once/week ☐
	Rode Bus ☐	
	Other ☐ Please Specify	

Destination:	Purpose of Trip:	If better parking facilities were available, would you use them?
Loop ☐	Work ☐	No ☐ Why?
Before Loop ☐	School ☐	Yes ☐ How often? 4 or more times per week ☐
Beyond Loop ☐	Shopping ☐	1-3 times per week ☐
	Other ☐ Please Specify	Less than once per week ☐

Suggestions for improvement of parking at this station

PLEASE DROP IN ANY MAILBOX

Nº 1190 **RIDER SURVEY FORM**

Thank you,
RALPH H. BURKE, INC.
Consulting Engineers

APPENDIX B

SUMMARY OF SPECIFIC COMMENTS RECEIVED ON CTA SURVEY CARDS BY STATION

CATEGORY OF COMMENT	LINDEN AVENUE	HOWARD STREET	DES PLAINES AVE.	SKOKIE SWIFT
1. Improve access or egress between lot and street.	Repair gates; install better coin collection device.	Widen entrance & exit; install better, more convenient coin collection device; allow free entry; payment to be made upon exit only; initiate monthly parking ticket; keep gates working; provide stop light at Clark and Birchwood; improve traffic and enforce regulations on nearby streets.	Repair gates; install "Call for Help" phone at exit payment gate; install $0.25 all day meters instead of present gate system; install dollar bill changer at gate; install exits to and entrances from Expressway; relieve congesting at 5:30 P.M., separate entrance to lot and Expressway; split left turns for lot and Expressway.	Repair gates; install coin collection device similar to those on Tollway; monthly rate with automatic eye card; restore Carol Street exit; speed up exit; more exits; exit to North easier access to Main Street; posted sign about getting $0.25 back when gates don't work; additional approaches to lot.
2. Provide more space or build structure.	-	-	-	Provide more space close to train; enlarge lot to get cars off nearby local streets.
3. Improve lot; lot maintenance, lot security, lot traffic and parking controls.	Beautify lot with shrubs, etc., light lot at night, clean lot up, provide better snow and ice removal, resurface lot, provide slanted parking places, provide compact car only section.	Better lighting at night, especially in winter, add trees, clearly mark stalls, promptly plow in winter, need way to keep cars orderly when snow covers parking lines, more room between cars, publish rates, hours, etc., better drainage.	Provide security guard, keep cars in marked spaces, better snow and ice removal, wide spaces, repair lot, fill holes.	Clean lot, better snow removal, broadcast if lot is closed, prevent cars from bunching up around towers, remove pigeons, remove solicitors who place advertisements under windshield wipers, clear up pedestrians at entrance, provide lights at major streets, keep buses from blocking entrance, separate cars and buses.
4. Improve Kiss-N-Ride Area	-	-	Separate buses from Kiss-N-Ride area, provide more adequate holding area for Kiss-N-Ride traffic at night, provide better separation for Kiss-N-Ride traffic, stop people from parking all day in Kiss-N-Ride area.	Separate drop off areas for cars and buses, separate Kiss-N-Ride area entrance from other entrances, do not allow parking in Kiss-N-Ride loop, widen Dempster so about 10 cars could wait 5 minutes there.
5. Improve access and egress between lot and station.	-	Eliminate traffic mess in bus terminal that has to be crossed when entering station from lot, provide covered walkway to station.	Better access to station from west, entrance and exit to trains in front of and back of station.	Better walking conditions, snow removal, etc., install pedestrian entrance at Carol Street, sheltered walkway to station, stop at south end of lot.
6. Free parking or reduce parking rates.	-	-	-	-
7. Improve station, train, or bus.	Faster trains, transfer at Belmont or Fullerton, monthly ride tickets, more trains in morning rush hour, better cars and better times, enlarge station waiting room, improve fare collection.	Heated, sheltered bus platform, trees, etc., remove corrugated plastic roof, "You wouldn't ask if you rode the cattle cars from Howard Street", heated station platform, public toilet, smoother ride, adequate heat on Evanston Express, covered walkway to station, additional entrances and exits, clean station, lower fares, "forget the parking, keep the drunks and the lunatics off the CTA", improve buses not parking, coordinate buses and trains, commuter bus to Skokie Swift and more stops east of Dempster Street, on bus 96 leave passengers off the same place they get on, have Evanston train go straight down Wells, "why not have Skokie Swift stop at Oakton, Kostner, and Crawford, with shuttle bus to these points?"	Lower fares, particularly the extra $0.10 to return from the City at night, CTA bus instead of west suburban, remove roaches from trains, extend CTA line, provide shuttle bus down Des Plaines and west on Roosevelt Road with transfer, provide sheltered waiting room, provide new terminal, provide rest rooms, provide waiting area by bus turn around.	Provide safer place (inside for people to wait for bus, more frequent bus service to and from Skokie and Old Orchard, provide more inside shelter, provide better access to station from west, heat lights while waiting for bus and train, also more shelter, extend Swift; to Glenview, to Old Orchard, provide double cars, provide better connections at Howard Street, lower fares.
8. Miscellaneous Comments	Provide parking at every station.	Provide parking lots at other stations along the line, publicize facilities, "anything would be better than at present", "CTA and its parking stink", "TNT", "Burn it down, put in a park", charge more for parking less for CTA fare, eliminate threatening attitude of Chicago policemen and Evanston bus Company, provide roof over bicycle rack.	Less use of salt in lots, improve parking but keep rates the same, extend parking lot 2 blocks and provide another station for west Forest Park.	Motorcycles and bicycles should pay.

APPENDIX C

CTA STATISTICS

1) Capacity

a) Station - Passengers entering peak hour

	Cash	Transfer	Total
Jefferson Pk.	1,100	2,100	3,200
95th	1,650	3,550	5,200
79th	650	1,450	2,100
69th	500	1,400	1,900
Desplaines	960	440	1,400

b) Line: These facilities were designed to permit operation of up to 10 car trains on a 90 second interval, however, due limitation of short platforms at the many very old stations along both routes and smaller than maximum traffic demand only 6 car trains are operated on the headways shown in item #2.

Passengers on trains at max. load point - max hour (Oct., 1970):

Route	Passengers	Point
West-Northwest		
Milwaukee	12,000	Grand (A)/Chicago (B)
Congress	4,250	Kedzie
West-South		
Dan Ryan	11,350	35th

2) Headways (minutes) - Leaving terminal

	Rush	Base	Evening	Owl
West-Northwest				
Jefferson Pk.	2	3½	4	15
Desplaines	4	7	8	30
West-South				
95th	3	5	8	30

3) Time to CBD (minutes)

West-Northwest	
Jefferson Pk.	20
Desplaines	21
West-South	
95th	20
79th	17
69th	16

SOURCE: CTA

APPENDIX D

C&NW RAILWAY NORTHWEST LINE SCHEDULES TO CHICAGO, MAY 1, 1971

To Chicago
MONDAYS THRU FRIDAYS

Read Down	602	604	606	608	610	612	614	616	618	630	632	634	636	638	640	642	644	646	648	650	652	654	656	658	660	662	664	666	668
	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM	PM	PM	PM
HARVARD Lv				5.48						6.20						7.08				7.40				10.40				1.00			4.40			8.40
Hartland										f 6.30						f 7.17				f 7.48													
Woodstock				6.02						6.38						7.33				7.54				10.53				1.53			4.53	5.03		8.53
Crystal Lake	4.55	5.25	5.45	6.13		6.24		6.40		6.49				7.03		7.36				8.06		9.05	10.05	11.05	13.05	1.08	2.08	3.08	4.08	5.08	6.08	8.08	9.08
Cary	5.03	5.33	5.52			6.31				6.57						7.45				8.13		9.11	10.11	11.11	13.11	1.11	2.11	3.11	4.11	5.11	6.11	8.11	9.11
Fox River Grove	5.06	5.35	5.55			6.34				7.00						7.48				8.16		9.14	10.14	11.14	13.14	1.14	2.14	3.14	4.14	5.14	6.14	8.14	9.14
Barrington	5.15	5.44	6.03	6.26		6.43				7.10		7.23		7.18		7.54		7.50	8.04	8.25	8.45	9.21	10.21	11.21	13.21	1.21	2.21	3.21	4.21	5.21	6.21	8.21	9.21
Palatine	5.23	5.52	6.12	6.35	X 6.51			6.59		X 7.20				7.27				7.59		8.37	8.53	9.28	10.28	11.28	13.28	1.28	2.28	3.28	4.28	5.28	6.28	8.28	9.28
Arlington Park (See Note)																													
Arlington Heights	5.29	5.58	6.18	X 6.42		X 6.58		7.07	7.19					7.33	X 7.43	X 8.01				8.33		9.33	10.33	11.33	13.33	1.33	2.33	3.33	4.33	5.33	6.33	8.33	9.33
Mount Prospect	5.34	6.03	6.23	X 6.48		X 7.03		7.12	7.25					7.38	X 7.50					8.43		9.38	10.37	11.37	13.37	1.37	2.37	3.37	4.37	5.37	6.37	8.37	9.37
Cumberland	5.37	6.04	6.26	X 6.51		X 7.06		7.15		X 7.32				7.42	X 7.53					8.46		9.41	10.41	11.41	13.41	1.41	2.41	3.41	4.41	5.41	6.41	8.41	9.41
Des Plaines	5.41	6.09	6.30	X 6.55	6.46	X 7.10	7.05	X 7.19				7.33		7.45	X 7.57		X8.12			8.48		9.44	10.44	11.44	13.44	1.44	2.44	3.44	4.44	5.44	6.44	8.44	9.44
Des Plaines	5.44	6.12	6.34		6.50		7.09					7.37			X 8.02					9.14		9.47	10.47	11.47	13.47	1.47	2.47	3.47	4.47	5.47	6.47	8.47	9.47
Park Ridge	5.47	6.15	6.37		6.53	X 7.16	7.13	X 7.26				7.41			X 8.06			8.10		9.17		9.50	10.50	11.50	13.50	1.50	2.50	3.50	4.50	5.50	6.50	8.50	9.50
Edison Park	5.50	6.18	6.40		6.56		7.16					7.44	7.54					8.13		9.20		9.53	10.53	11.53	13.53	1.53	2.53	3.53	4.53	5.53	6.53	8.53	9.53
Norwood Park	5.53	6.21	6.43		7.01		7.20					7.48	7.58					8.16	8.25	9.23		9.56	10.56	11.56	13.56	1.56	2.56	3.56	4.56	5.56	6.56	8.56	9.56
Gladstone Park	5.56	6.24	6.46		7.04		7.23					7.51						8.19															
Jefferson Park	5.59	6.27	6.49		7.07		7.26					7.54	8.02					8.22		9.27		10.00	11.00	12.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	9.00	10.00
Irving Park	6.02	6.31	6.54		7.12		7.31					7.59						8.27		9.31		10.04	11.04	12.04	1.04	2.04	3.04	4.04	5.04	6.04	7.04	9.04	10.04
Clybourn (Madison St. Sta.)	6.10	6.36	7.01	X 7.18	7.19	X 7.31	7.38	X 7.41	X 7.46	X 7.51	7.56	X 8.02	8.06	8.11	X 8.21	X 8.26	X8.31	8.34	8.38	9.42	9.10	9.38	10.11	11.11	12.11	1.11	2.11	3.11	4.11	5.11	6.11	7.11	9.11	10.11
CHICAGO Ar	6.19	6.45	7.10	7.24	7.28	7.40	7.47	7.50	7.55	8.00	8.05	8.11	8.15	8.20	8.30	8.35	8.40	8.43	8.47	9.50	9.19	9.47	10.20	11.20	12.20	1.20	2.20	3.20	4.20	5.20	6.20	7.20	9.20	10.20
	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM	PM	PM	PM

SOURCE: C&NW

APPENDIX E

C&NW RAILWAY NORTHWEST LINE SCHEDULES FROM CHICAGO, MAY 1, 1971

From Chicago
MONDAYS THRU FRIDAYS

Read Down	601	603	605	607	609	611	613	615	617	619	621	623	625	627	629	631	633	635	637	639	641	643	645	647	649	651	653	655	657	659	661	663	665
	AM	AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	AM
CHICAGO Lv	6.30	7.30	8.30	9.30	10.30	11.30	12.30	1.30	2.20	3.20	4.13	4.39	4.43	4.48	4.58	5.04	5.09	5.13	5.18	5.30	5.33	5.36	5.30	5.42	6.20	6.30	7.30	8.30	9.30	10.30	11.30	12.30	
(Madison St. Sta.)																																	
Clybourn	6.38	7.38	8.38	9.38	10.38	11.38	12.38	1.38	2.38	3.38	4.31	4.48	X4.51	4.57	X5.07	X5.13	5.18	5.30		X5.39	5.33	X5.39	X5.51	5.53	6.38	6.38	7.38	8.38	9.38	10.38	11.38	12.38	
Irving Park	6.43	7.43	8.43	9.43	10.43	11.43	12.43	1.43	2.43	3.43	4.37			5.04				5.38			5.42			6.00	6.43		7.43	8.43	9.43	10.43	11.43	12.43	
Jefferson Park	6.48	7.48	8.48	X 9.48	X10.48	X11.48	X12.48	X1.48	X2.48	3.48	4.43			5.08			5.28	5.33			5.47			6.03	6.48		7.48	8.48	9.48	10.48	11.48	12.48	
Gladstone Park										3.50	4.46			5.11				5.36				5.50			6.08	6.50		7.50	8.50				
Norwood Park	6.52	7.52	8.52	X 9.52	X10.52	X 11.52	X 12.52	X1.52	X2.52	3.53	4.50			5.14				5.40				5.53			6.11	6.53		7.53	8.53	9.53	10.53	11.53	12.53	
Edison Park*	6.55	7.55	8.55	X 9.55	X10.55	X 11.55	X 12.55	X1.55	X2.55	3.55	4.52			5.16			5.34					5.55			6.13	6.55		7.55	8.55	9.55	10.55	11.55	12.55	
Park Ridge	6.57	7.57	8.57	X 9.57	X10.57	X 11.57	X 12.57	X1.57	X2.57	3.57	4.54	5.03		5.22			5.37				5.49	5.58		6.04	6.17	6.57		7.57	8.57	9.57	10.57	11.57	12.57	
Des Road	7.00	8.00	9.00	X10.00	X11.00	X 12.00	X 1.00	3.00	X3.00	4.00	4.46			5.25				5.44			6.00				6.20	6.50		8.00	9.00	10.00	11.00	12.00	1.00	
Des Plaines	7.04	8.04	9.04	X10.04	X11.04	X 12.04	X 1.04	X3.04	X3.04	4.04	4.50	5.09		5.30		X5.35	5.43	5.53			5.59	6.08		X6.13	6.35	6.54		8.04	9.04	10.04	11.04	12.04	1.04	
Cumberland	7.07	8.07	9.07	X10.07	X11.07	X 12.07	X 1.07	X3.07	X3.07	4.07	4.53	5.13				5.38					6.02			X6.16		6.57		8.07	9.07	10.07	11.07	12.07	1.07	
Mount Prospect	7.10	8.10	9.10	X10.10	X11.10	X 12.10	X 1.10	X3.10	X3.10	4.10	4.56	5.17		5.37	X5.39	5.43					6.07		X6.03	X6.20		7.00	6.56	8.10	9.10	10.10	11.10	12.10	1.10	
Arlington Heights	7.15	8.15	9.15	X10.15	X11.15	X 12.15	X 1.15	X3.15	X3.15	4.15	5.01	5.22		5.43		5.49				X5.56	6.12		X6.09	X6.25		7.03	X7.01	8.13	9.13	10.13	11.13	12.13	1.13	
Arlington Pk. (See Note)	7.17	8.17	9.17	X10.17	X11.17	X 12.17	X 1.17	X3.17	X3.17	4.17	5.03			5.44										X6.27		7.07							
Palatine	7.21	8.21	9.21	X10.21	X11.21	X 12.21	X 1.21	X3.21	X3.21	4.21	5.07	5.30				5.59			X5.53		6.21		X6.17	X6.31		7.11	X7.07	8.21	9.21	10.21	11.21	12.21	1.21	
Barrington	7.30	8.30	9.30	10.30	11.30	12.30	1.30	3.30	3.30	4.30	5.16	5.39	5.33	6.03		6.15				6.13	6.30		6.37	6.40		7.20	7.13	8.30	9.30	10.30	11.30	12.30	1.30	
Fox River Grove			9.37	10.37	11.37	12.37	1.37	3.37	3.37	4.37			5.33			6.33							6.34	6.47		7.37	7.23	8.37	9.37	10.37	11.37	12.37	1.37	
Cary			9.41	10.41	11.41	12.41	1.41	3.41	3.41	4.41			5.37			6.37							6.38	6.51		7.41	7.27	8.41	9.41	10.41	11.41	12.41	1.41	
Crystal Lake			9.50	10.50	11.50	12.50	1.50	3.50	3.50	4.50		5.55		6.07		6.36				6.15			6.47	7.00		7.50	7.33	8.50	9.50	10.50	11.50	12.50	1.50	
Woodstock			10.00			1.00		3.00		4.00										6.36							6.59		7.44		10.00	11.00			2.00
Hartland																				f 6.32														
HARVARD Ar			10.15			1.18		3.18												6.45							7.15		8.00					2.15
	AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	AM

SOURCE: C&NW

APPENDIX F

C&NW RAILWAY NORTHWEST LINE FARES, MAY 1, 1971

TICKET FARES (EFFECTIVE MAY 1, 1971)

Between CHICAGO and	COMMUTATION FARES: Unlimited Monthly Individual	Unlimited Semi-Monthly Individual	Unlimited Weekly Individual	25 Single Trip Booklet	10 Ride Ticket	ROUND TRIP	ONE WAY
Clybourn	$21.15	$11.65	$ 4.60	$18.00	$ 7.20	$ 1.40	$ .80
Irving Park	21.15	11.65	4.60	18.00	7.20	1.40	.80
Jefferson Park	21.15	11.65	4.60	18.00	7.20	1.40	.80
Gladstone Park	21.50	11.85	6.70	19.15	7.65	1.70	.85
Norwood Park	22.85	12.55	7.15	19.15	7.65	1.70	.85
Edison Park	24.20	13.30	7.55	21.40	8.55	1.90	.95
Park Ridge	25.50	14.05	7.95	22.50	9.00	2.00	1.00
Des Plaines	28.10	15.45	8.80	24.75	9.90	2.20	1.10
Des Plaines	30.10	16.55	9.40	25.90	10.35	2.30	1.15
Cumberland	31.10	17.10	9.70	27.00	10.80	2.40	1.20
Mt. Prospect	33.05	18.20	10.35	28.15	11.25	2.50	1.25
Arlington Heights	34.40	18.90	10.75	30.40	12.15	2.70	1.35
Palatine	37.05	20.40	11.60	31.50	12.60	2.80	1.40
Barrington	41.05	22.60	12.85	34.90	13.95	3.10	1.55
Fox River Grove	44.30	24.35	13.85	38.25	15.30	3.40	1.70
Cary	44.95	24.70	14.05	39.40	15.75	3.50	1.75
Crystal Lake	48.50	26.55	15.10	42.75	17.10	3.80	1.90
Woodstock	#53.60	#29.50	#16.75	#47.25	#18.90	4.20	2.10
Hartland	36.85	31.25	17.75	53.75	20.70	4.60	2.30
Harvard	61.45	33.80	19.20	58.50	23.40	5.20	2.60
McHenry	#53.60	#29.50	#16.75	#47.25	#18.90	4.20	2.10
Ringwood	#55.55	#30.55	#17.35	#50.65	#20.25	4.50	2.25
Richmond	#60.20	#33.10	#18.80	#56.25	#22.50	5.00	2.50
Genoa City	60.85	33.45	19.00	57.40	22.95	5.10	2.55
Fall Lake	63.45	34.90	19.85	61.90	24.75	5.50	2.75
Lake Geneva	$68.70	$37.80	$21.45	$66.40	$26.55	5.90	2.95

GENERAL TICKET INFORMATION

Tickets should be purchased before boarding train. If ticket office is open at train departure time, conductors are required to charge an additional 15¢ when collecting one way cash fare on train. No refund will be made of fares collected from passengers failing to present tickets on train.

Children under 5 years of age carried free when accompanied by parent or guardian.

Children 5 through 11 will be charged ½ of adult fares, rounded upward to the nearest 0 or 5¢.

‡ Tickets between Chicago and Lake Geneva will also be honored between Chicago and Harvard, Illinois, if desired; passengers to make their own arrangements beyond.

Tickets between Chicago and McHenry, Ringwood or Richmond will also be honored between Chicago and Woodstock, Ill., if desired; passengers to make their own arrangements beyond. Tickets between Chicago and Woodstock will also be honored if desired between Chicago and McHenry.

BEARER TICKETS

ONE WAY, ROUND TRIP, 10-Ride Tickets and 25 SINGLE TRIP TICKETS IN BOOK FORM—Limited for use to six months from date of sale.

INDIVIDUAL COMMUTATION TICKETS

(Honored Only When Presented By Person Named on Ticket, and Good for Unlimited Use Only During Period For Which Sold)

Monthly—On sale beginning 20th of month.

Semi-Monthly—honored only during period for which sold—either 1st to 15th incl., or 16th through last day of month. On sale beginning 10th or 20th of each month.

Weekly—honored only during week (Monday through Sunday) for which sold. On sale beginning Thursday of preceding week.

Commutation tickets should be signed by individual using ticket before presentation on train. Your signature, address and telephone number on back of ticket will afford you additional protection in the event of loss or misplacement. Lost or misplaced tickets recovered by the railroad may be redeemed at Window 1, Chicago Passenger Terminal.

Refunds—where applicable, can be made only to person for whom issued as indicated by signature on ticket. Applications for refund on commutation tickets should be made by U. S. Mail to Auditor Passenger and Station Accounts, C. & N.W. Ry., 4809 Ravenswood Ave., Chicago, Illinois 60640. Postmark on envelope determines final date of use.

Refunds—are computed on the basis of charging 180% of the one-way fare applicable between the same points (rounded to 0 or 5) for each day up to and including the postmark date, excluding Saturdays, Sundays and Holidays. The C. & N. W. Ry. cannot be responsible for lost, stolen or destroyed tickets.

SOURCE: C&NW

APPENDIX G

TOLLROAD DRIVER SURVEY QUESTIONNAIRE

DEAR COMMUTER: The Cook County Highway Department has engaged our firm for a study to determine the feasibility of "fringe area" parking facilities over or adjacent to the Kennedy Expressway near Central Avenue so as to provide relief of peak hour congestion on the Kennedy. Motorists now using the Kennedy could park and transfer to the CTA or C&NW commuter service to complete the trip. By giving a few minutes of your time to answering these questions, you will be contributing to the success of this project.

THE COMPLETED CARD MAY BE DROPPED IN ANY MAILBOX. Thank you for your cooperation.

Location of Residence:

City, village, Town

State

From what highway did you enter onto the Kennedy?

- I-90 from the northwest ☐
- I-294 from the south ☐
- I-294 from the north ☐
- Other _____ (specify)

Number of people in car (including driver)?

Purpose of trip: (for driver only)

- Work ☐
- School ☐
- Shopping ☐
- Other _____ (specify) ☐

How often do you use the Kennedy during rush hours?

- 5 or more times/week ☐
- 3-4 times/week ☐
- 1-2 times/week ☐
- Less than once/week ☐

Destination:

- Before Loop ☐
- Loop - East Side ☐
- Loop - West Side ☐
- Beyond Loop ☐

At what exit do you leave Kennedy?

If adequate, economical, fringe area parking were provided, with direct access to the CTA or C&NW commuter service, would you be inclined to use the parking facility?

Yes ☐ No ☐ Not Sure ☐

Qualified Answer (Please explain) _____

Suggestions or comments:

PLEASE DROP IN ANY MAILBOX.

№ 1880 COMMUTER SURVEY FORM

Thank you,
RALPH H. BURKE, INC.
Consulting Engineers

APPENDIX H

QUALIFIED ANSWERS TO THE QUESTION
"WOULD YOU USE PARK-N-RIDE FACILITIES?"

a. Qualified Yes

1. Emphatic Yeses

Would definitely use, it would be great!!

Definitely so!

Would save a lot of time instead of wasting time.

Faster, cheaper. 3

2. To Avoid Driving

To be free of car responsibilities in loop.

Don't care to drive in Chicago.

3. Yes, If Convenient and Economical

Would use facilities when I go to the loop & don't need car. 31

If no more than $.50.

Parking should be economical or I wouldn's use it.

Must make parking cheap like Skokie Swift. 4

Too expensive to park downtown.

Combined cost of parking & commuter service would have to be low enough to make the change worthwhile. 3

Parking facilities must be reasonable with adequate facilities. 1

For CTA if free parking. 3

4. Yes, At Certain Locations or With Certain Transportation

Commuter service to Skokie.

If good public transportation to 5000 N. Broadway.

If also connected to Kennedy. I've parked previously, but it takes too long to get off Expressway, park and walk to "L".

If it was at O'Hare or beyond. 2

Would use CTA only, more convenient.

River Road or O'Hare Field - yes.

If the CTA would provide sufficient seating to handle the increase in passengers.

If the facilities were extended further west to avoid all the driving now necessary to reach Central. 2

Contingent upon number of transfers to reach destination.

If public transportation is available from Lombard to Skokie.

If CTA goes to Michigan Avenue.

5. Yes, Miscellaneous

Public transportation does not serve my 15 hour work period.

I leave the Kennedy before Central Avenue and park in Jefferson Terminal area.

It would be especially helpful in winter months.

The "L" stops 1-1/2 blocks from work.

b. Not Sure

1. Would Use IF:

Occasionally, in bad weather, or would try service: 10.

If it was more economical than existing travel method: 8.

Usually ride C&NW from Mt. Prospect, but would change if proposal would be more economical.

If it was faster and at least as convenient as driving: 10.

Better transportation from C&NW to North Michigan Avenue and return.

Parking is way too high - so is gas. Train rates up 7%. Advantage of driving is only to beat later poor train schedules (C&NW) in getting to school on time in suburbs.

Only if C&NW stopped at Chicago Avenue.

Depends on cost and time for reaching loop, relative to my normal commute via C&NW from Palatine.

If the service could drop me within a block of Fulton & Western, I would use it.

Still more economical to drive since not sufficient bus routes near work in Merchandise Mart.

Work at 4141 West Belmont and don't know if a stop near here.

Depends on cost and connections: 4.

Would have to take bus from "L", bad neighborhood. Train (C&NW) nice, too expensive.

When I leave the train, I have to wait for bus. Cost and time are very close, so convenience is a factor.

Present CTA & C&NW not convenient to northeast from northwest.

Too many transfers to get to Michigan Avenue.

Because of where I work after school.

Not close enough at destination.

Would depend upon CTA connections to Irving and Western.

CTA not convenient to office.

Need to reach Chicago and Larrabee.

Depends on train schedules after rush hours. Not good now. 2

Depends on economy, safety and convenience. 2

Depends on transportation at destination.

Convenience of car. After work stops.

My work is at 900 N. Franklin. Therefore, there would be two transfers involved.

Teacher. Need car at school.

Whatever would be faster would rate highest.

Eisenhower to Route 20 more direct.

If parking were protected.

Protection of cars after dark would be of great concern.

Only if parking was protected.

2. Miscellaneous

Can use C&NW at Palatine

North-South transportation poor.

Leave Expressway at Lawrence Avenue.

Use C&NW commuter train most of time, directly from Arlington Heights.

Too vague - generally we're at mercy of CTA inadequacies & high prices.

Need more information.

Appendix H (Continued)

c. Qualified No

1. Could Not Use Facilities Because:

Need car for work. 121

Leave Expressway before CTA could provide adequate service. 59

CTA or C&NW access is not convenient. 47

To: Skokie-Lincolnwood area - 12

Ridge & Devon - 2

Oak Park - 2

Grand & Outer Drive - 1

7400 North Cicero - 1

4600 North - Near Lakeshore - 1

California & Augusta - 1

600 West Chicago Avenue - 1

North on Nagle to Touhy - 1

Touhy & Central - 1

Montgomery Ward - 1

Northside - Touhy - 1

Cicero, Lincoln Area - 1

Kennedy & Ogden - 1

5050 North - 1

Park Ridge from Winfield - 1

Appendix H (Continued)

2. Would Not Use Because:

of cost: 15.

of lack of convenience or benefit:

Work two nights a week late - 1.

Driving is more convenient - 3.

Have parking at work - 9.

Ride C&NW except when car is needed for business - 1.

Probably not, since I would be driving most of the way anyway - 2.

Central Avenue - No.

Because I'm too independent in my ways.

It is not the parking, but the several transfers that would be too complicated and time consuming - 8.

Would have to leave 45 minutes earlier - 1.

If adequate connections were possible, I'd come in by train & CTA.

I already have excellent service from C&NW, only use Expressway when faster than C&NW - 1.

I can walk to C&NW from my home - 1.

I could get C&NW at Arlington Heights.

Not enough flexibility with C&NW transportation - CTA would be better.

If you ever used the CTA you wouldn's need a qualified answer.

I work on the fringe area of Chicago - no use to me. If needed I would take the Milwaukee Road in Bartlett.

Do repair work at night.

I am coming home from work at 7 A.M.

Mt. Prospect station more convenient when riding train.

Inconvenient.

Would use if work was close to a station.

Working hours too irregular.

Parking to train distance (bad weather) too great. Parking lot pilferage. Time consuming parking lot toll gates?

Stop trying to jam the CTA down our throats - nothing can replace an individual's own transportation.

I hate public transportation & I go to grad school after teaching all day, so I need my car.

3. Miscellaneous

If driving individually, would use.

In parking business.

Drive only when not staying downtown.

APPENDIX I

GENERAL SUGGESTIONS OR COMMENTS FROM TOLLROAD DRIVER SURVEY

a. Improve Expressway System

Finish N-S or Crosstown Expressway - 3
Widen the Kennedy - 4
Confine buses to two right lanes
Ban trucks in rush hour - 7
Eliminate or improve entrance ramp lights - 8
Double deck Kennedy - 5
Direct and improve overpass connection both ways between Kennedy and Edens Expressways - 4
Enforce truck speeds - great safety hazard
Keep trucks in one lane - extreme right only
Charge toll for use of Kennedy, use funds to support CTA - 2
Ban all small cars
Ban all traffic from expressway except salesmen
Increase capacity of Kennedy
Have express lanes in use more hours of the day
Prohibit Edens traffic from exiting at Irving Park Road, just as N-W traffic is prohibited from using express lanes - 2
If parking cannot be provided, close one entrance between Irving Park and Belmont southbound
Eliminate police flashing lights when stopping motorists
Make O'Hare exit three lanes to help evening west local traffic
Reexamine loop exit traffic to see if it can be moved faster to help clear traffic on the Kennedy
Reallow express lane use for Kennedy and Edens both ways
Close entrance at Diversey to express lanes in P.M.
Why were exits (southbound) between Irving Park and Lawrence closed?
How about a 24 hour phone number to report accidents, or unusually tied up intersections feeding expressways?
Why not close some entrances during peak periods?
Take the studded tires off the expressway
People need educating on expressway driving
Open express lanes to both expressways inbound
Could inside shoulder be used during peak hours only?
Most traffic encountered is between Cumberland and Central (Car exited at Foster).

KENNEDY EXPRESSWAY PARK-N-RIDE COMMENTS

b. Improve Tollway

Add entrance and exit ramp at Roselle Road - 3
No closing of lanes during rush hours
Lower or eliminate tolls - 10
Better westbound entrance to I-90 - 2
Make a complete cloverleaf at Barrington Road on I-90 - 2
Have monthly commuter ticket - 2
Have three lanes between Barrington Road and Route 53
Exit and entry from west on Arlington Heights Road
Open more toll booths, repair well, not often
Cashier should give 2 nickel, 1 dime, and 2 quarters instead of 2 dimes and 2 quarters as change from a dollar.

c. Improve CTA and/or C&NW

Extend CTA to O'Hare or beyond and provide parking there (Some said would use if this happened) - 49
Extend CTA in median of Edens to north
Would use C&NW if there was a station at California and Diversey
Lower CTA fare
Build and subsidize public transportation
Public transportation does not serve the public well, it is slow and poorly managed
CTA too slow
We must have public transportation in the Elk Grove Area
Too expensive to ride either CTA or C&NW - 2
I hate public trains!
Feasibility study of train on median of Tri State and E-W Tollways
Rapid CTA trains on vacant land on Touhy
Who wants to stand on L platform at night, alone. I'd rather have my car close at hand.
Put commuter service near Route 53 on the northwest Tollway
CTA & C&NW should work out a deal for commuters using both means.
CTA is unsafe, crowded and expensive.
Mass transportation should be expanded.
Suggest all commuter service be under "private" business.
Fewer people would drive if public transportation was more accessible and convenient.
Modernize CTA
More public transportation especially to work and back.

APPENDIX I (Continued)

KENNEDY EXPRESSWAY PARK-N-RIDE COMMENTS

d. Comments Concerning Proposed Parking Facility

Good Idea!, etc. - 23
Don't waste the taxpayers money - 2
Control Fee
I turn off at Cumberland because I can't get to Central during the rush hours. Better pick another spot for parking place.
Economical or free parking is important - 4
Now park on side streets near Jefferson Park. Inadequate, long walk.
Hoping it would alleviate daily traffic snarls back to Cumberland during rush hours.
If it creates construction tie-ups during rush hours for 6 months, forget it!
Why Central Avenue, too congested as it is.
Kennedy would still be congested at the parking facility - 3
If parking were free and CTA reasonable, I believe many people would use suggested plan. In Milwaukee many people used such facilities. Parking was free. Bus was $0.45 for about 15 mile trip.
Chicago Land lot's of parking room.
Why should I pay toll, parking, CTA, and gas? Defeating my own purpose.
If I drove this far I'd drive all the way.
Work and park near Jefferson Park CTA - Parking is needed, Commuters like myself are jamming the area around Jefferson Park and local merchants are complaining.
I think it is a waste of CTA facilities not to provide parking.
Consider Jeff Park Terminal. Parking is needed there.
It sounds like a good idea. If this project should prove a success, it would make it easier for me to drive in.
Paid parking areas at OASIS with parking fee paying for transportation to CTA or C&NW.

e. Miscellaneous Comments

Tax downtown parking
Improve Nagle Avenue
Promote staggering work hours for industries.
Encourage drivers to take a passenger rather than everyone driving himself - Would cut traffic in half.
Require safety checks of vehicles.
Would like to see results of survey published in newspapers.
Don't hand things like this out at toll gate - Too many damn fools read it while driving away.
Have my employer move to suburbs.

KENNEDY EXPRESSWAY

PARK-N-RIDE

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KENNEDY EXPRESSWAY PARK-N-RIDE

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- Mr. Mahmet Civgin
- Mr. Garred Jones
- Mr. John Miller

Chicago and North Western Railway

- Mr. Ralph W. Coakley
- Mr. Harold A. Lenske

Chicago Transit Authority

- Mr. John P. O'Connor

City of Chicago

- Mr. Albert Baker
- Mr. Cemal Egemen
- Mr. John McCue
- Mr. Raymond H. Naras
- Mr. Charles Petzold
- Mr. Jerome Sachno
- Mr. Marshal Suloway

Cook County

- Mr. Jim Andrews
- Mr. Louis Quinlan
- Mr. Hugo Stark
- Mr. Leo Wilkie

Expressway Surveillance Project

- Mr. Roy Fonda
- Mr. Ron Mack

Federal Highway Administration

Mr. Dave Phillips, Washington, D. C.

Mr. James Williams, Homewood Office

United Motor Coach

Mr. Elmer Schuemann

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CONCLUSIONS AND RECOMMENDATIONS

1. This study was authorized by the Board of County Commissioners for the Department of Highways of Cook County, Illinois to study the feasibility of reducing rush hour vehicular volumes, thereby improving the level of service on the Kennedy Expressway.

2. This study evaluates the practicality of providing relief from rush hour traffic congestion on the Kennedy Expressway by providing parking facilities, together with access to public transportation (Park-N-Ride facilities), located upstream of the area of highest traffic congestion on the Kennedy Expressway. Then, this study determines the feasibility, optimum location, and size of Park-N-Ride projects designed to accommodate those persons whose trips are destined for the City of Chicago's Central Business District (CBD). By providing a convenient transfer point to public transportation and improving the flow of traffic, the proposed Park-N-Ride facilities should benefit both motorists who must drive to the CBD and those who are able to park and use a transit carrier to their CBD destination.

3. By mutual agreement with CATS (Chicago Area Transportation Study) the Chicago CBD is defined as that area within the City of Chicago which is bounded by the Chicago River on the north and west, Lake Michigan on the east and Roosevelt Road on the south. (See Figure 1)

4. The area chosen for this study permits interception of automobiles at points prior to the heaviest congestion of vehicular traffic on the Kennedy Expressway. Therefore, this study is confined to the area of the Kennedy Expressway between Irving Park Road and Des Plaines River Road, also referred to as River Road. Study of an area beyond Jefferson Park, the current (1972) terminus of the CTA (Chicago Transit Authority) rapid transit line in the median strip of the Kennedy Expressway, assumes that a public transportation system will be constructed to, or beyond, the proposed Park-N-Ride sites at some future date.

5. In order to determine the successful and unsuccessful features of existing Park-N-Ride facilities, a large volume of literature (listed by major category in the bibliography provided at the end of this report) has been reviewed in the course of this study. The review of this literature indicates that Park-N-Ride facilities are often, but not always successful. Major factors influencing the use of Park-N-Ride facilities are the quality of transit service provided, comparative times and costs of transit versus driving, and attitudes of drivers toward driving or riding. Modern, comfortable, safe, fast, economical, and convenient transit service attracts drivers to Park-N-Ride facilities, while obsolete, slow, high cost or otherwise undesirable transit service deters drivers from the use of Park-N-Ride facilities. Low cost downtown parking generally serves as a deterrent to the use of Park-N-Ride facilities while such facilities which provide economical, safe, paved, lighted, vandal free areas, in which drivers are almost always guaranteed a space, and a transit service that has created a good image both through its marketing and its service and equipment, generally serves to attract riders to Park-N-Ride facilities.

6. The major existing CTA Terminal Transfer (Park-N-Ride) facilities now operating in the Chicago Area were reviewed as a part of this study. Parking lot counts and a post card questionnaire survey were taken at the Linden Avenue (Wilmette), Des Plaines Avenue (Forest Park), Howard Street, and Skokie Swift CTA Terminals as a part of this review. The purpose of this review was to determine the successful

and non-successful features of the existing Chicago area terminal transfer facilities so that the successful features could be incorporated into and the non-successful features avoided in the planning and design of the proposed Park-N-Ride project.

7. Results of the parking lot counts indicated that the existing CTA Park-N-Ride lots are, with the exception of Linden Avenue, used to capacity, which is not adequate. A later spot check of the Linden Avenue Park-N-Ride lots indicated that use of this facility was also approaching capacity.

8. The post card questionnaire survey taken at the existing CTA Park-N-Ride lots yielded several basic conclusions. First, most CTA passengers using these four stations live within 1 to 5 miles of the station they use, but where an expressway provides convenient access to a station, the station's market radius may be extended beyond 10 miles. Secondly, the location and facilities provided at each station tend to determine how people reach the station. Where stations are located near residential areas, many people will walk to them, and where good bus service is provided, many people will ride the bus to the station. In all cases surveyed, however, with the exception of Howard Street, which is the least accessible location by car, and which also has the least adequate parking facilities, a total of over 60% of the passengers surveyed either drove and parked (42.3%) or were dropped off at the station by cars which did not park (19.3%). Even at Howard Street a total of almost 25% of those surveyed either drove and parked (14.3%) or were passengers in cars that did not park (9.7%). It is concluded that at outlying locations the automobile is the primary means of bringing passengers to the CTA stations.

9. The results of the post card questionnaire survey and the consultant's experience formed the basis for design criteria to be included for the Park-N-Ride facilities being considered in this study. Successful Park-N-Ride facilities require that:

A. An adequate number of parking spaces be available.

B. Access to and from the Park-N-Ride facilities be as quick and easy as possible, including direct access to and from expressways.

C. Park-N-Ride facilities be clean and well maintained, including adequate provision for snow removal.

D. Park-N-Ride facilities be well lighted at night and have adequate provision for insuring the security of the passenger and his car.

E. The Park-N-Ride facility have a Kiss-N-Ride area.

F. The Park-N-Ride facility have convenient, sheltered access to the station and free or low parking rates.

G. The Park-N-Ride facility requires a high quality, low cost, public transportation system.

H. Park-N-Ride facilities should be provided at more than one CTA station.

10. As determined in Chapters II and III, the principal reasons that people use fringe area parking are: to save money, to save time, to avoid driving in congested roadways enroute to downtown and to avoid driving and parking in congested downtown areas. In order to determine whether or not the conditions for a successful fringe parking facility were present on the Kennedy Expressway, and to estimate the demand for such a facility, comparisons of the time and cost of driving all the

way downtown or parking and taking public transportation downtown were made.

11. The results of the time comparisons indicated that, under the Spring of 1971 traffic conditions (prior to the resurfacing of the Expressway), the use of the CTA or the C&NW and associated Park-N-Ride facilities is faster than driving to the CBD in the study area. In the area of Cumberland and Harlem Avenue round trip time savings approaching 20 minutes a day can be realized if the CTA is extended to these points. In the area of Jefferson Park, about 15 minutes a day (round trip) can be saved by the use of the CTA, and about 7 minutes a day (round trip) by the use of the C&NW. Non standard conditions, such as accidents, bad weather or a possible future increase in vehicular traffic volumes on the Expressway, could further increase the time advantage of the use of Park-N-Ride facilities over the use of automobiles for trips to the CBD.

12. Cost comparisons were made between the cost of using the Park-N-Ride facilities to reach the CBD and the cost of driving to and parking in the CBD. These comparisons were based on existing (1971) CTA and C&NW fares and a $0.50 fee for parking at the proposed Park-N-Ride facilities and a cost of $0.05 per mile for driving to the CBD plus a cost of $2.55 per day for parking in the CBD. The results of the cost comparisons indicated that the use of the Park-N-Ride facilities rather than driving to and parking in the CBD would save drivers substantial amounts of money. At Jefferson Park, for example, based on a 20 day month, it is estimated that it would cost a driver $70 per month to drive to and park all day in the CBD. Using the Park-N-Ride facilities, comparable costs would be about $28 per month using the CTA and about $31.20 per month using the C&NW. This results in a cost saving of $42 per car per month using the CTA and $38.80 per car per month using the C&NW.

13. It is expected, based upon many people's dislike for driving and parking in relatively congested areas, that many people would use a Park-N-Ride facility purely as a matter of personal preference, with matters of time and cost as secondary considerations. For example, many people do not like to drive in expressway traffic, particularly during the rush hour. Other people would prefer to read a newspaper, book or just relax on the trip to the CBD, rather than drive to the CBD.

14. It is concluded that the savings in time, savings in money, and convenience factors that attract drivers to the use of Park-N-Ride facilities would exist for Park-N-Ride facilities constructed on the Kennedy Expressway.

15. In order to provide a quantitative basis for the estimates of the demand for the use of Park-N-Ride facilities on the Kennedy Expressway a returnable card survey was taken of the drivers at Toll Plaza 19, of the Northwest Tollway, where traffic from the Northwest and Tri State Tollways funnels into the Kennedy Expressway, during the morning inbound rush hour. This location was near the first westerly location where Park-N-Ride service could be provided in the study area defined in our agreement with the county. It was believed that if a significant number of drivers, at this point, indicated a desire to use the proposed facility, this would be a strong indication that a demand for the proposed Park-N-Ride facilities, did, in fact, exist.

16. The results of the survey indicated that a strong interest in the use of Park-N-Ride facilities existed in the drivers passing through this point. Two thousand cards were distributed, of which more than 896 were returned, for a response rate of about 45%. In answer to the question "If adequate, economical, fringe area parking were provided, with direct access to the CTA or C&NW commuter service would you be inclined to use the parking facility?", some 24% of the total drivers surveyed answered yes, another 12% indicated they weren't sure, for a total of 36% who would or might use Park-N-Ride, and some 64% said no. Those drivers with the CBD as a destination when answering this question indicated that about 46% would use Park-N-Ride facilities and another 16% might use Park-N-Ride facilities, for a total of about 62% of CBD bound drivers who would or might use Park-N-Ride facilities.

17. Estimates of existing (1971) Park-N-Ride demand have been prepared as a part of this study at the seven sites considered for the location of a Park-N-Ride facility. The estimates were based on the survey results and related study criteria. The seven sites considered were: River Road, Cumberland Avenue, Oriole Avenue, Harlem Avenue, Gladstone Park, Jefferson Park, and Irving Park Road.

18. The recommended parking space design demand for a single Park-N-Ride structure in 1971, assuming a $0.50 per day parking fee (estimated to be required for the maintenance and operation expenses of the Park-N-Ride facilities in 1972 prices), is estimated to be 650 spaces at River Road, 1,650 spaces at Cumberland Avenue, 1,800 spaces at Oriole Avenue, 1,900 spaces at Harlem Avenue, 2,200 spaces at Gladstone Park, 2,600 spaces at Jefferson Park, and 4,450 spaces at Irving Park Road.

19. The primary purpose of this study is to determine ways of reducing peak hour congestion on the Kennedy Expressway. A large concentration of automobiles at any one location on the Expressway may contribute to rather than alleviate peak hour congestion. For example, it would be difficult for a Park-N-Ride facility with a single exit ramp to the Expressway to unload more than 750 cars per hour into the Expressway. Assuming a two hour rush period, and that about 500 cars would enter and leave the facility in relatively off peak periods, it appears that even with adequate merging facilities and modern traffic control techniques that a facility parking about 2,000 cars is the largest practical size for a facility designed to relieve traffic congestion. Therefore, in cases where the demand for a project is in excess of 2,000 cars, it is recommended that two or more smaller facilities be constructed rather than one very large facility.

20. In the event that two or more Park-N-Ride facilities are built the estimates of demand for a single facility must be adjusted to reflect the effect of the additional facility or facilities. The estimate of Park-N-Ride demand of 4,450 spaces in 1971 for a single facility at Irving Park Road, for example, is too large for a 2,000 car facility. To accommodate this demand in Park-N-Ride facilities of 2,000 parking spaces or less would require at least three Park-N-Ride facilities.

21. Future Park-N-Ride demand on the Kennedy Expressway will be strongly related to the future volume of traffic on this Expressway. Substantial growth in this traffic, with resulting congestion and delays, could cause a significant increase in the demand for the use

of Park-N-Ride facilities. Conversely, a decrease in traffic on the Kennedy Expressway could cause a reduction in, or at least a decline in the rate of growth of, the demand for Park-N-Ride facilities.

22. Estimates of the future volume of traffic on the Kennedy Expressway depend to a great extent on the highway system expected to exist in the future. The construction of new expressways in the vicinity of the Kennedy Expressway can be expected to have a particularly strong effect on traffic using the Kennedy Expressway. In theory, the construction of new expressways in the vicinity of the Kennedy Expressway should serve to relieve traffic on the Kennedy Expressway. In practice, however, the construction of new expressways in the vicinity of the Kennedy Expressway might greatly increase traffic on the Kennedy Expressway.

23. The Chicago Area Transportation Study (CATS) has prepared an Interim Plan Highway Network for 1985 which includes several new expressways, notably, the Crosstown Expressway, the Bryn Mawr Expressway, and the First Avenue or North-South Expressway. Because of the uncertainties, both financial and political, surrounding the construction of future urban expressways, some or all of the expressways recommended for construction by the year 1985 in the Interim Plan may not be built by then. In the event the CATS Interim Plan is not fully implemented by 1985 it is most probable that (a) the CATS Committed Highway System, consisting mainly of the Crosstown Expressway will have been completed, or (b) no new major urban expressways will have been built in the Chicago area.

24. For purposes of this report, future demand for Park-N-Ride facilities have been estimated on the alternative assumptions that:

A. No new urban expressways will be built by 1985, or

B. The CATS "Committed" Highway System will have been implemented by 1985, or

C. The CATS Interim Plan Highway Network will have been implemented by 1985.

25. If no new urban expressways are constructed by 1985, it is expected that traffic congestion will continue to worsen on the Kennedy Expressway. This will occur primarily as the existing rush periods on the Kennedy are extended in duration. In the event that no new expressways are constructed in the study area by 1985 it is estimated that the parking space demand for a single Park-N-Ride project in 1985, the design year of this study, will reach about 1,100 spaces at River Road (excluding Tollway traffic at this site), about 2,800 spaces at Cumberland Avenue, about 2,900 spaces at Oriole Avenue, about 3,100 spaces at Harlem Avenue, about 400 spaces at Gladstone Park if only C&NW service is provided, about 4,100 spaces at Jefferson Park, and about 6,900 spaces at Irving Park Road. If a series of facilities is contemplated, adjustments to demand should be made, similar to those made for adjusting 1971 demand. (See Section VIII.)

26. Estimates of demand for a Park-N-Ride Project on the Kennedy Expressway have also been prepared on the assumption that the Expressways proposed in the CATS Committed Plan or CATS Interim Plan Highway Networks are completed by 1985. In both cases, a demand for the use of Park-N-Ride facilities does exist. This demand approximates the existing 1971 demand in the vicinity of Irving Park Road, as the otherwise projected growth in traffic is relieved by either of the above two

proposed new Expressway Systems. Near River Road, however, the growth in traffic and congestion is such that even using CATS projections, the 1985 Park-N-Ride demand actually slightly exceeds the previously projected 1985 demand which was based on the assumption that no new urban expressways will be built by 1985.

27. The scope of this study requires that the location of the Park-N-Ride project be established near Central Avenue. This has been interpreted as meaning the area between Irving Park Road and Des Plaines River Road areas of the Kennedy Expressway, inclusively. Within this area, a total of seven different sites, including the areas near Irving Park Road, Jefferson Park, Gladstone Park, Harlem Avenue, Oriole Avenue, Cumberland Avenue and Des Plaines River Road were evaluated. No sites were considered within an area of approximately one half mile in either direction from Cicero Avenue because the proposed Crosstown Expressway is expected to be located somewhere in this area and it was desired to plan a facility that would not interfere with the proposed Crosstown Expressway.

28. Because the Crosstown Expressway is designed to have some form of rapid transit, consideration should be given to the possibility of a Park-N-Ride facility near Montrose Avenue to serve the Edens, Kennedy and Crosstown Expressways. Such a Park-N-Ride Facility would provide access to the rapid transit systems serving both the Kennedy and Crosstown Expressways.

29. A schematic drawing of the type of facility considered for each site is shown on Figures No. 12-18 and a brief description of each site appears in the text.

30. With the exception of the River Road site and Oriole Avenue sites, the Park-N-Ride facility contemplated at each site consists of a parking structure located above the Kennedy Expressway with access to an existing or planned future C&NW or CTA station. The River Road Park-N-Ride facility consists of a parking lot with access to a planned CTA station while the Canfield-Oriole site consists of a parking structure located adjacent to the Expressway with access to a possible future CTA station.

31. The approximate number of parking spaces which can be provided at each site considered are as follows:

Site	Parking Spaces
River Road	2,100
Cumberland Avenue	1,600
Canfield-Oriole Avenue	1,650
Harlem Avenue	1,350
Gladstone Park	1,350
Jefferson Park	1,250
Irving Park	1,700

31. It should be noted that based on the schematics shown in this report, it appears that a structure could be built at each of the sites shown. All of the sites shown, along or over the Expressway, present construction difficulties that must be overcome. More detailed preliminary plans, similar to those prepared for the Jefferson Park Site, are required before a determination of actual physical and technical feasibility can be determined. The preliminary plans prepared for the Jefferson Park Site indicate that it is technically and physically feasible to construct a Park-N-Ride facility at this site.

32. After selection of the seven initial sites, each site was evaluated to determine its relative desirability as the site for the project, or as the initial site for a series of projects. This was done by use of a rating system which assigned values to various factors considered to be important to the success of the project, in such a manner that the most important items received the highest number of points. Using the point rating system, the sites ranked as follows:

Rank	Site	Points
1	River Road	80.3
2	Harlem Avenue	77.8
3	Cumberland Avenue	77.7
4	Irving Park	74.9
5	Jefferson Park	73.0
6	Gladstone Park	71.1
7	Oriole Avenue	58.0

33. If the CTA is extended to O'Hare, it is recommended that Park-N-Ride facilities be constructed in conjunction with the presently planned Harlem Avenue and River Road CTA stations. If a CTA Station is located at Cumberland Avenue, at least the first level of a Park-N-Ride facility should be located at Cumberland Avenue. This plan would intercept about 4,000 cars during morning peak periods at distances in excess of 10 miles from the Chicago CBD in 1985.

34. At the present time, 1971, the CTA rapid transit line does not go north west of Jefferson Park. Although this station is in an area of the Expressway which is already often seriously congested during rush hours practical considerations dictate locating the Park-N-Ride facility at this location unless the CTA is extended. Because there are many obstacles to the extension of the CTA, it is impossible to estimate when, or even if the CTA will be extended in the median strip of the Kennedy Expressway. Therefore, under present conditions, it will be necessary to construct the initial Park-N-Ride project in the vicinity of the Jefferson Park CTA station. Because there will be a Park-N-Ride demand of about 1,000 cars at Jefferson Park in 1985 even if the Harlem Avenue and River Road CTA Park-N-Ride facilities are built, it is recommended that the initial Park-N-Ride project be located in the vicinity of the Jefferson Park CTA-C&NW station and be initially constructed to its ultimate capacity of about 1,250 spaces.

35. The Park-N-Ride project should be operated on a 24 hour a day, 7 day a week basis. It should provide ease of entry and exit, minimum walking distances, and maximum security to the passenger and his car.

36. The costs of the three Park-N-Ride facilities recommended in this report in 1972 prices, are Jefferson Park $9,506,000, Harlem Avenue $9,120,000, and River Road $2,140,000.

37. It is contemplated that the Park-N-Ride project will be financed by a combination of Federal, State and Local grants. Therefore, there will be no capital expenses to be paid from the operation of the Park-N-Ride project. The only expenses which would have to be paid from the operation of the Park-N-Ride project would be actual maintenance and operation (M and O) expenses of the project.

38. Maintenance and Operation expenses for the initial structure to be located at Jefferson Park are estimated to be $212,500 per year in terms of 1972 dollars.

39. It is estimated that the Park-N-Ride structure's revenues will be sufficient to pay its Maintenance and Operation expenses at a $0.50 per day parking rate. These estimates of revenue assume a weekday turnover rate of 1.25 in the Park-N-Ride project during weekdays, a turnover rate of 0.25 on Saturdays, and a turnover rate of 0.08 on Sundays. All these turnover rates assume that the C&NW will continue its high quality suburban commuter service and that the CTA will continue its present efforts to make itself more attractive to its present and potential future riders.

40. It is not expected that the presence of a Park-N-Ride project, at the sites shown in this report, will have a great or immediate effect on the land use in its vicinity, because of the developed nature of the land use surrounding the sites studied in this report. Where land becomes available in the vicinity of a Park-N-Ride project, however, it is expected that the presence of such a project will favor commercial land use over other types of land use.

41. If the Park-N-Ride facilities proposed in this report at Jefferson Park, Harlem Avenue, and River Road are constructed, it is estimated that in 1985 (assuming no new urban expressways are built by 1985) that about 2,235 cars would be removed from the Expressway in each of the morning peak hours at or west of Jefferson Park. This would reduce projected highway demand in 1985 at Jefferson Park from 7,296 vehicles per hour to about 5,061 vehicles per hour. Because the capacity of the Kennedy Expressway at Jefferson Park is about 4,500 vehicle movements per hour (for Level of Service C, as defined in the Highway Capacity Manual), the construction of the above proposed system of Park-N-Ride projects would reduce projected highway capacity deficiencies at Jefferson Park by about 80% in 1985.

42. It is concluded that if no new urban expressways are constructed by 1985 that a system of Park-N-Ride facilities will be needed to provide relief for the traffic congestion anticipated on the Kennedy Expressway, or major arterials. Even if new urban expressways are built by 1985, Park-N-Ride facilities will still be needed to provide relief for downtown traffic congestion and downtown parking congestion.

43. It is expected that the possible major financial effects of the proposed Park-N-Ride project, consisting of parking and transportation facilities for 1,250 cars at Jefferson Park, 1,350 cars at Harlem Avenue, and 2,100 cars at River Road, would be felt by the CTA, the C&NW, and United Motor Coach.

44. It is estimated that by 1985, the Park-N-Ride project will produce additional annual net revenues of at least $263,000 for the CTA, cost the C&NW about $68,400 per year in diverted passengers, and have no direct effect upon the passengers and revenues of United Motor Coach.

45. It is estimated that the construction of a system of Park-N-Ride structures located at Jefferson Park, Harlem Avenue, and River Road in lieu of extensive highway improvements will result in total benefits of about $31 million over a thirty year period if no new urban expressways are built in the Chicago area. Total costs of the three Park-N-Ride facilities are estimated to be about $23 million. This results in a benefit to cost ratio of 1.5 to 1.