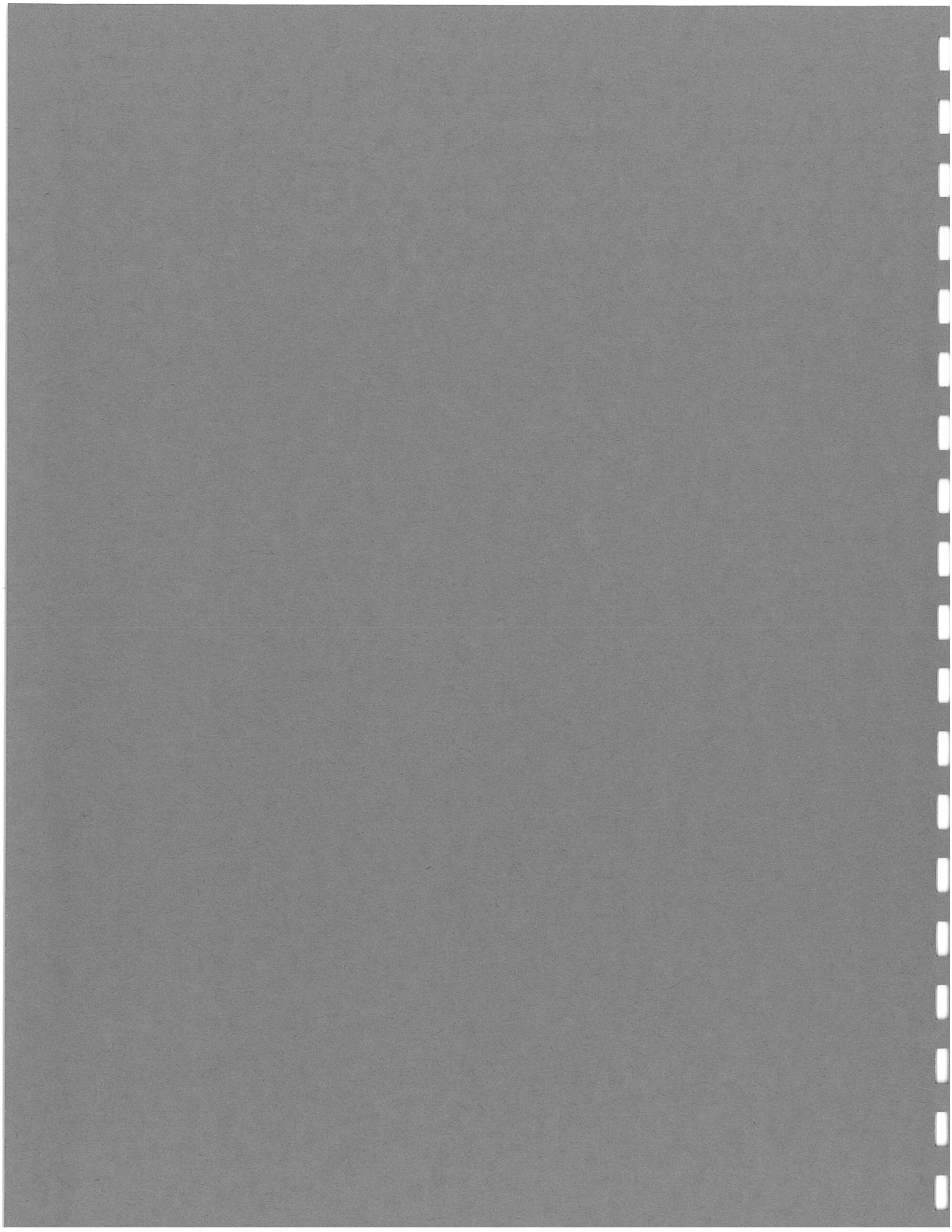

1992 Canal Park Parking Study

Prepared by the

Duluth-Superior Metropolitan Interstate Committee
330 Canal Park Drive
Duluth, Minnesota 55802
(218) 722-5545

Duluth and Superior area communities cooperating in
planning and development through a joint venture of the
Arrowhead Regional Development Commission
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INTRODUCTION

1. INTRODUCTION

The Duluth-Superior Metropolitan Interstate Committee's (MIC) Canal Park Parking Study examined current and future parking demand in the city of Duluth's Canal Park area and made recommendations for improved parking availability. The study recommendations will provide information to public and private decision-makers on the need for additional parking in the area and serve as a planning and management tool for the future.

Canal Park is a major attraction in the Duluth area for both residents and visitors. The Aerial Lift Bridge, the Corps of Engineers Marine Museum, and the surrounding park next to Lake Superior and the Duluth-Superior Harbor are visited by hundreds of thousands of people each year with a concentration during the summer months. The area is also the location for several popular restaurants and businesses, as well as the entrance point to Park Point with its boating and recreational areas. In addition, the area has long been a major employment center for the city.

The Duluth Waterfront Plan, which was adopted in 1986, proposed changes to the streets and public amenities in the area. As a part of that plan implementation, a multi-use path system called Lakewalk was constructed along the waterfront and the streets were reconstructed and landscaped. Bayfront Festival Park has grown with the addition of a covered stage area for outdoor concerts and a children's play area called Playfront Park. Expansion of the Duluth Entertainment and Convention Center (DECC) has brought larger events and the

construction of a pedestrian bridge has merged the DECC with Canal Park. Several new businesses have opened as the number of visitors has grown and the area has transformed from primarily manufacturing to primarily tourism-based businesses. The extension of Interstate 35 between the central business district and Canal Park has provided additional redevelopment and amenities.

In 1989, the Metropolitan Interstate Committee (MIC) prepared a comprehensive study of parking supply and demand in the Duluth central business district, including Canal Park. As Canal Park has undergone considerable redevelopment and increased parking demand since that time, the MIC determined that further study of the Canal Park and DECC/Bayfront areas would provide information to public and private decision-makers on the need for additional parking in the area.

The Metropolitan Interstate Committee's 1992 Canal Park Parking Study was initiated by working with the MIC's Transportation Advisory Committee (TAC), City of Duluth staff and the Duluth Waterfront Parking Committee to develop a study design outlining the study process and to determine study area boundaries. The boundaries of the study area include all parking areas bordered by I-35 to the north, Lake Superior to the east, the Aerial Lift Bridge to the south, and Bayfront Festival Park to the west.

The study process included a major parking usage survey which inventoried all available parking space in Canal Park and documented parking usage through field surveys during the peak summer tourist season and off-peak fall season. The survey also identified parking lot signage and the use of handicapped parking spaces, bike racks and truck loading zones. Additional surveys included a Parking Opinion Survey, an Employee Survey and an Employer Survey.

To assess future parking needs in Canal Park, a land-use based travel forecast was developed to project future parking demand and test alternatives for the management and expansion of existing parking. Canal Park building owners, land owners, city staff, realtors and others were contacted to determine future development plans. Trends in tourism were researched. Future development scenarios for five-year and five-to-ten year periods were developed. The impact of parking demand in each zone in Canal Park for each scenario was then analyzed.

The study results include a set of alternative recommendations for improvements to the supply or management of parking facilities. The MIC, an organization representing local units of government under an agreement between the Arrowhead Regional Development Commission and the Northwest Regional Planning Commission, will submit final recommendations from the Canal Park Parking Study to the city of Duluth and the Duluth Transit Authority for implementation. Progress made toward implementing the study recommendations will be monitored by the Waterfront Parking Committee on an on-going basis.

PARKING OCCUPANCY SURVEY

2. METHODOLOGY, RESULTS AND ANALYSIS

METHODOLOGY

The Parking Occupancy Survey was developed to determine parking utilization at all parking facilities in Canal Park. Surveys were conducted in two phases. The first phase was on a typical peak tourist season weekend day (Saturday, August 1, 1992) and weekday (Thursday, August 6, 1992). The second phase was conducted in early November to measure base demand on a weekend day (Saturday, November 7, 1992) and weekday (Tuesday, November 10, 1992). These surveys provided a peak and base level of parking demands. Analysis of this data was used to assist in developing improvement strategies and recommendations for parking in the area.

A preliminary inventory was conducted to determine the number of spaces for each parking lot within Canal Park and the DECC/Bayfront area. Surveyors visited each lot and counted the spaces that existed. Some lots were gravel and an estimate was made to the number of spaces available.

Spaces were categorized into private, handicapped and public spaces. Thirty-three parking lots or on-street areas exist in Canal Park and the DECC/Bayfront area. There are a total of 1,874 parking spaces in the Canal Park area and 1,935 parking spaces in the DECC/Bayfront area, for a total of 3,809 parking spaces. This is shown in Table 2-1 on page 4.

The Canal Park area was divided into three survey zones, similar to zones used in the 1989 Downtown Duluth Parking Study. The North Zone consisted of parking areas

between Buchanan Street and I-35 and between Lake Superior and Duluth Harbor. The North Zone was split into Canal Park Drive and Lake Avenue lots for further analysis. The South Zone consisted of parking areas between Buchanan Street and the canal and between Lake Superior and Duluth Harbor. The West Zone consisted of parking areas between the Minnesota Slip and the Bayfront Festival Park and between Commerce Street and Duluth Harbor.

The Parking Occupancy Survey recorded all vehicles parked in on-street and off-street areas in Canal Park and the DECC/Bayfront area. The study area is shown in Figure 2-1 on page 5. Parking lot locations and names are shown in Figure 2-2 on page 6. Zone boundaries are shown in Figure 2-3 on page 7.

Surveys of vehicles were recorded between 10:00 a.m. and 10:00 p.m. at two hour intervals for the August surveys. The November surveys placed an emphasis on employee parking, thus the actual recording of vehicles began two hours earlier at 8:00 a.m. and ended at 10:00 p.m. Each surveyor was supplied with a route to follow and recorded the last three digits of license plate numbers.

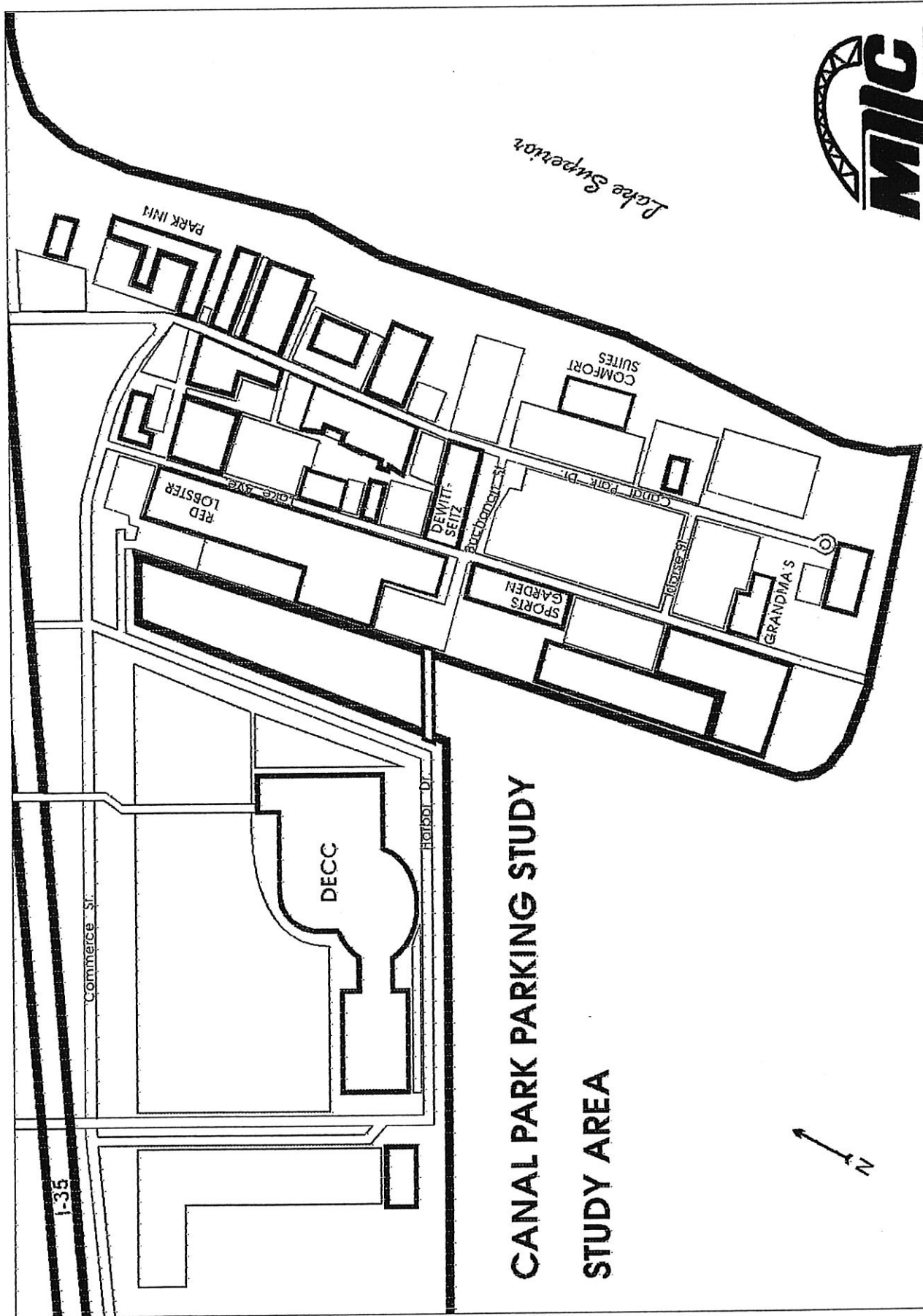
Other information was also recorded during the Parking Occupancy Survey. This information includes handicapped parking space usage, bike rack inventory and usage and parking lot signage inventory.

**METROPOLITAN INTERSTATE COMMITTEE
CANAL PARK PARKING STUDY
INVENTORY OF PARKING SPACES**

Lot or Street Name	Private		Handicapped	Public	TOTAL	Comments
	Employee	Customer				
Corner of the Lake	0	0	4	127	131	Public 3 hr. parking/ Park Inn parking
Park Inn	0	194	4	0	198	Customer parking only
Duluth Spring	8	0	0	0	8	Employee parking only
Kuettel, A.W. & Sons	15	5	0	0	20	Customer/employee parking only
Arrowhead Center	54	0	2	0	56	No public parking anytime
Road Machinery Systems	10	4	0	0	14	Customer/employee parking only
Jeep Lot	0	12	4	49	65	Public 3 hr. parking/12 hotel employee spaces after 5:00 P.M.
Comifort Suites	0	77	2	0	79	Customer parking only
Burger King	1	42	2	0	45	Customer parking only
Canal Park/Marine Museum	0	0	2	91	93	Public 3 parking
Army Corp of Engineers	21	0	0	0	21	No public parking anytime
Grandma's	0	64	3	0	67	Customer parking
Northwest Iron	0	143	2	50	195	Public 3 hr./private is open to the public
Jamar	7	8	0	0	15	Eight 1 hr. customer parking/6 private
Archer Brothers	7	0	0	0	7	Employee parking only
Sculptured Wall	0	0	1	19	20	Public 3 hr. parking
Hardee's	0	68	2	0	70	Customer parking only
Canal Park Drive Street Parking	0	0	0	66	66	Public 3 hour parking
General Electric	10	2	0	0	12	Customer/employee parking only
Waterfront Plaza	105	10	0	0	115	Ten 1 hr. customer parking/Other 3 hr./Public after 2 P.M.
Subway	1	24	0	0	25	Customer parking only
DeWilt-Seitz Back Lot	0	34	0	0	34	Eleven 3 hour customer parking/28 permit parking
Grand Slam	7	75	0	0	82	Customer parking only
Sports Garden/Paulucci Building	62	0	0	0	62	Permit parking only
Red Lobster	0	75	4	0	79	Customer/employee parking only
Marina/Meierhoff Bldg.	160	0	1	0	161	Permit parking only
Old Commerce Street	0	0	0	10	10	Public 3 hour parking
Lake Avenue Street Parking	0	0	1	123	124	Public 3 hour parking
SUBTOTAL (Canal Park area)	468	837	34	535	1874	
Visla Fleet/Curling Club	0	0	4	104	108	Visla Fleet Tours customers only
DECC	0	0	43	1420	1463	Event, employee pay lot
Back of the DECC	14	6	2	0	22	Customer parking is 10 minutes only
Old 5th Avenue West	0	0	0	30	30	Public 3 hour parking
Bayfront	13	0	7	292	312	LSC/Bayfront/Employee parking
SUBTOTAL (Bayfront/DECC area)	27	6	56	1846	1935	
TOTAL	495	843	90	2381	3809	

September 1992

TABLE 2-1



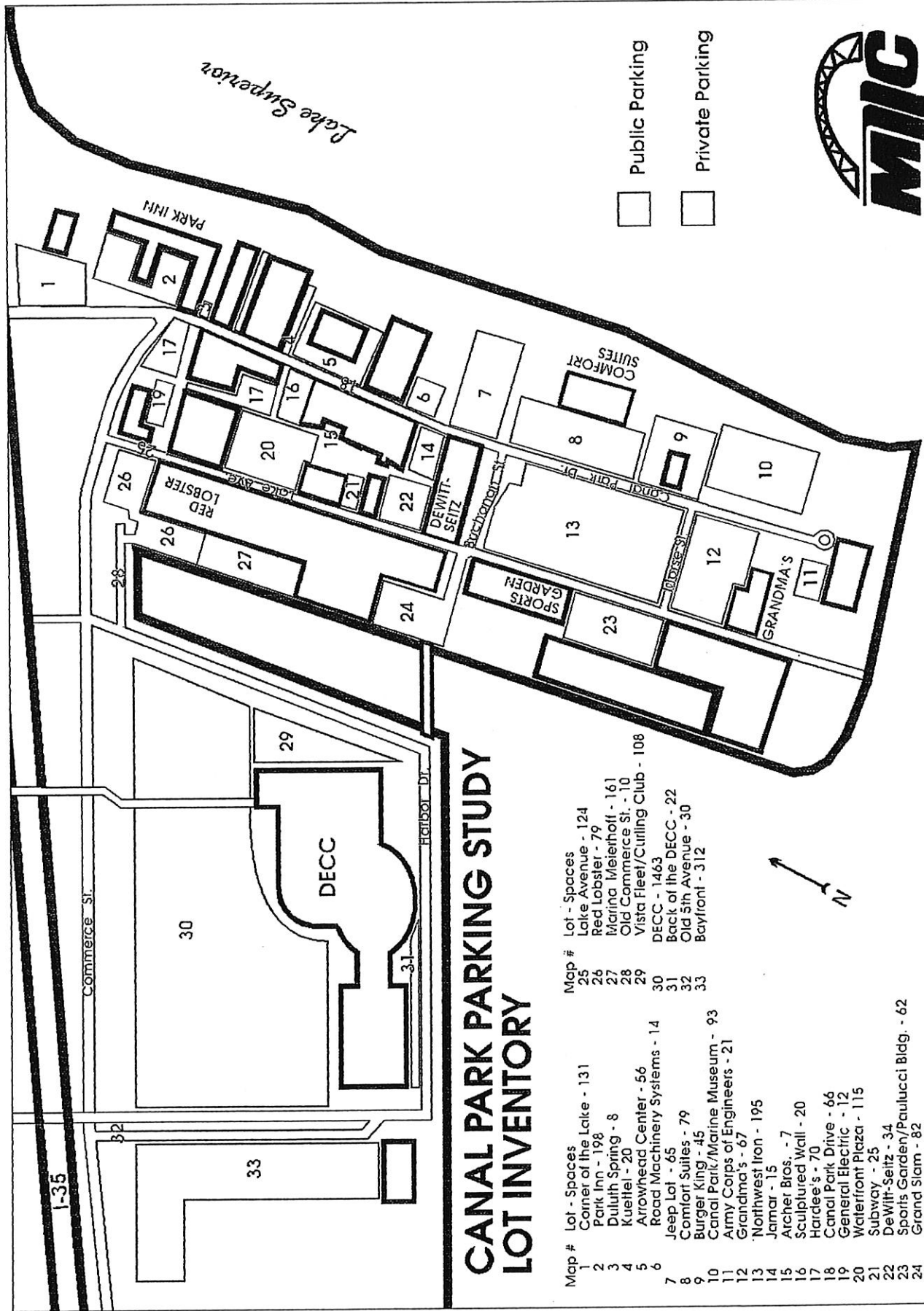
**CANAL PARK PARKING STUDY
STUDY AREA**



NOTE: Map is not to scale.

MARCH 1993

FIGURE 2-1



MARCH 1993

CANAL PARK PARKING STUDY LOT INVENTORY

Map #	Lot - Spaces	Map #	Lot - Spaces
1	Corner of the Lake - 131	25	Lake Avenue - 124
2	Park Inn - 198	26	Red Lobster - 79
3	Duluth Spring - 8	27	Marina Meierhoff - 161
4	Kuestel - 20	28	Old Commerce St. - 10
5	Arrowhead Center - 56	29	Vista Fleet/Curling Club - 108
6	Road Machinery Systems - 14	30	DECC - 1463
7	Jeep Lot - 65	31	Back of the DECC - 22
8	Comfort Suites - 79	32	Old 5th Avenue - 30
9	Burger King - 45	33	Bayfront - 312
10	Canal Park/Marine Museum - 93		
11	Army Corps of Engineers - 21		
12	Grandma's - 67		
13	Northwest Iron - 195		
14	Jamar - 15		
15	Archer Bros. - 7		
16	Sculptured Wall - 20		
17	Hardee's - 70		
18	Canal Park Drive - 66		
19	General Electric - 12		
20	Waterfront Plaza - 115		
21	Subway - 25		
22	DeWitt-Seitz - 34		
23	Sports Garden/Paulucci Bldg. - 62		
24	Grand Slam - 82		



NOTE: The Northwest Iron lot is partially privately owned.
NOTE: Map is not to scale.

PHASE I
RESULTS

AUGUST
SURVEY

PHASE I RESULTS - AUGUST SURVEY

The first phase of the Parking Occupancy Survey was conducted in August. Surveys were conducted on a weekend and weekday between 10:00 a.m. and 10:00 p.m. The weekend survey was conducted on Saturday, August 1, 1992. The high temperature was 80 degrees with partly cloudy skies. The weekday survey was conducted on Thursday, August 6, 1992. The high temperature was 70 degrees under mostly cloudy skies. Weather is noted because of its influence on attractions and activities.

The total number of vehicles parked within each lot on Saturday is shown in Table 2-2 on page 10. Each parking area and the zone that it is within is indicated throughout this table. The total number of vehicles parked within each lot on Thursday is shown in Table 2-3 on page 11.

On Saturday, 22 percent more total vehicles were present than Thursday. On Saturday, 73 percent of vehicles that parked in Canal Park stayed 2 hours or less and 90 percent stayed 4 hours or less. On Thursday, 58 percent of vehicles that parked in Canal Park stayed 2 hours or less and 75 percent stayed 4 hours or less. A difference in length of stay between the weekend and weekday is expected because of the influence of employee parking. This is shown in Table 2-4 on page 12 and Table 2-5 on page 13.

Results are based on "effective supply" of lot capacity. The "effective supply" accounts for the time and space needed by a motorist to locate and manoeuver into a parking space. Because of this, there is a loss of efficiency in the available parking supply. This loss reduces the "effective supply" available for use in a given area to below 100 percent of capacity. To allow for this diminished supply, an efficiency factor of 85 percent has

been applied to both on-street and off-street parking facilities.

ANALYSIS

Analysis of the first phase of the Parking Occupancy Survey, focusing only on Canal Park facilities, displayed a weekday demand that peaked in early afternoon with a demand of 69 percent of total capacity. The demand during the weekday continued to decline after this period of the day. This pattern reflects parking habits of employees. The weekend demand peaked in late afternoon with a demand of 64 percent of capacity. The demand declined slightly after this period of the day until early evening before increasing slightly.

The total number of vehicles examined by particular zone indicates certain parking patterns. The highest demand occurs in the South Zone during Saturday afternoon and evening. This is shown in Table 2-2 on page 10.

Demand on Thursday is highest in the north zone, especially the Lake Avenue area. Demand is highest in the Waterfront Plaza, Marina/Meierhoff and DeWitt-Seitz lots. This is shown in Table 2-3 on page 11.

The results from Phase One infer a greater number of vehicles park in parking areas in Canal Park on weekend days as compared to weekdays. However, vehicles have a longer length of stay on weekdays. Overall demand is higher during the day on weekdays than weekends. A slight increase in demand on weekend evenings is displayed. Specific areas that had parking problems, especially on Saturday, included lots that were adjacent to or near popular tourist attractions. During the weekday specific areas that had parking problems included lots that were adjacent to or near places of employment and retail businesses.

TOTAL NUMBER OF VEHICLES BY LOCATION - SUMMER WEEKEND

Saturday, August 1, 1992

NOTE: Shading indicates demand exceeds the effective supply of 85 percent of lot capacity.

NORTH ZONE	10:00-12:00		12:00-2:00		2:00-4:00		4:00-6:00		6:00-8:00		8:00-10:00		Pct in Use	
	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use
CANAL PARK DRIVE	131	10%	26	20%	54	41%	42	32%	27	21%	37	28%	37	28%
Corner of the Lake	198	48%	76	38%	87	44%	91	46%	125	63%	128	65%	128	65%
Park Inn	8	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Duluth Spring	20	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Kuettel	56	6%	8	14%	16	29%	18	32%	12	21%	11	20%	11	20%
Arrowhead Center	14	1%	0	0%	1	7%	1	7%	0	0%	0	0%	0	0%
Road Machinery Systems	15	40%	15	100%	15	100%	12	80%	10	67%	7	47%	7	47%
Jamar	7	100%	8	134%	7	100%	7	100%	4	57%	3	43%	3	43%
Archer Brothers	20	7%	12	60%	19	95%	11	55%	9	45%	9	45%	9	45%
Sculptured Wall	70	34%	29	41%	41	59%	24	34%	24	34%	21	30%	21	30%
Hardee's	66	22%	37	56%	56	85%	54	82%	32	48%	34	52%	34	52%
Canal Park Drive	183	30%	211	35%	296	49%	259	43%	243	40%	250	41%	250	41%
NORTH/CANAL PARK DR. TOTALS														

NORTH ZONE	10:00-12:00		12:00-2:00		2:00-4:00		4:00-6:00		6:00-8:00		8:00-10:00		Pct in Use	
	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use
LAKE AVENUE	12	8%	4	33%	3	25%	4	33%	3	25%	3	25%	3	25%
General Electric	115	16%	29	25%	63	55%	50	43%	41	36%	37	32%	37	32%
Waterfront Plaza	25	4%	5	20%	10	40%	5	20%	2	8%	3	12%	3	12%
Subway	34	16%	31	91%	29	85%	25	74%	22	65%	22	65%	22	65%
DeWitt-Seitz	82	34%	69	84%	59	72%	51	62%	38	46%	44	54%	44	54%
Grand Slam	79	4%	45	57%	55	70%	56	71%	51	65%	51	65%	51	65%
Red Lobster	161	19%	55	34%	56	35%	57	35%	35	22%	53	33%	53	33%
Marina/Mcierhoff	67	31%	38	57%	38	57%	36	54%	35	52%	34	51%	34	51%
Lake Avenue	10	100%	10	100%	10	100%	8	80%	8	80%	8	80%	8	80%
Old Commerce St.	134	23%	286	49%	323	55%	292	50%	269	46%	277	47%	277	47%
NORTH/LAKE AVE. TOTALS														

SOUTH ZONE	10:00-12:00		12:00-2:00		2:00-4:00		4:00-6:00		6:00-8:00		8:00-10:00		Pct in Use	
	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use
Jeep Lot	65	34%	48	74%	69	106%	50	77%	26	40%	45	69%	45	69%
Comfort Suites	79	45%	23	29%	36	46%	50	63%	51	65%	57	72%	57	72%
Burger King	45	6%	18	40%	35	78%	29	64%	26	58%	34	76%	34	76%
Canal Park/Marine Museum	93	75%	93	100%	93	100%	93	100%	84	90%	94	101%	94	101%
Army Corps of Engineers	21	11%	13	62%	10	48%	8	38%	5	24%	6	29%	6	29%
Grandma's	67	4%	65	97%	63	94%	61	91%	65	97%	65	97%	65	97%
Northwest Iron	195	59%	192	98%	187	96%	185	95%	192	98%	192	98%	192	98%
Sports Garden/Paulucci	62	34%	49	79%	45	73%	59	95%	45	73%	39	63%	39	63%
Lake Avenue	57	37%	35	61%	36	63%	24	42%	23	40%	26	46%	26	46%
SOUTH ZONE TOTALS	684	49%	536	78%	574	84%	561	82%	517	76%	558	82%	558	82%
CANAL PARK OVERALL	1874	65%	1033	55%	1193	64%	1112	59%	1029	55%	1085	58%	1085	58%

WEST ZONE	10:00-12:00		12:00-2:00		2:00-4:00		4:00-6:00		6:00-8:00		8:00-10:00		Pct in Use	
	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use	Spaces	Pct in Use
Vista Fleet/Curling Club	108	41%	70	65%	83	77%	73	68%	94	87%	180	93%	180	93%
DECC	1463	98%	149	10%	170	12%	189	13%	215	15%	283	19%	283	19%
Back of the DECC	22	5%	2	9%	15	68%	14	64%	7	32%	8	36%	8	36%
Bayfront	312	22%	104	33%	122	39%	130	42%	93	30%	78	25%	78	25%
Old 5th Avenue West	30	1%	1	3%	3	10%	11	37%	2	7%	0	0%	0	0%
WEST ZONE TOTALS	1935	167%	326	17%	393	20%	417	22%	411	21%	469	24%	469	24%
CANAL PARK & DECCA AREA	3809	818%	1359	36%	1586	42%	1529	40%	1440	38%	1554	41%	1554	41%

Surveys taken Saturday, August 1, 1992. West Zone surveys taken Saturday, August 15, 1992.

Surveys and tabulation of results performed by Metropolitan Interstate Committee.

TABLE 2-2

TOTAL NUMBER OF VEHICLES BY LOCATION - SUMMER WEEKDAY

Thursday, August 6, 1992

NOTE: Shading indicates demand exceeds the effective supply of 85 percent of lot capacity.

NORTH ZONE CANAL PARK DRIVE	Spaces	10:00-12:00		12:00-2:00		2:00-4:00		4:00-6:00		6:00-8:00		8:00-10:00	
		Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use		
Corner of the Lake	131	65	50%	72	55%	71	54%	35	27%	7	5%	19	15%
Park Inn	198	95	48%	69	35%	65	33%	64	32%	80	40%	96	48%
Duluth Spring	8	7	88%	6	75%	4	50%	3	38%	3	38%	3	38%
Kuetei	20	10	50%	7	35%	6	30%	7	35%	2	10%	0	0%
Arrowhead Center	56	37	66%	33	59%	37	66%	30	54%	13	23%	12	21%
Road Machinery Systems	14	6	43%	4	29%	5	36%	2	14%	0	0%	0	0%
Jamar	15	12	80%	14	93%	13	87%	12	80%	12	80%	7	47%
Archer Brothers	7	6	86%	6	86%	5	71%	6	86%	6	86%	6	86%
Sculptured Wall	20	12	60%	14	70%	18	90%	18	90%	13	65%	10	50%
Hardee's	70	12	17%	33	47%	24	34%	14	20%	16	23%	12	17%
Canal Park Drive	66	23	35%	28	42%	38	58%	34	52%	30	45%	23	35%
NORTH/CANAL PARK DR. TOTALS	605	285	47%	286	47%	286	47%	225	37%	182	30%	188	31%

NORTH ZONE LAKE AVENUE	Spaces	10:00-12:00		12:00-2:00		2:00-4:00		4:00-6:00		6:00-8:00		8:00-10:00	
		Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use		
General Electric	12	5	42%	5	42%	5	42%	6	50%	4	33%	4	33%
Waterfront Plaza	115	114	99%	110	96%	105	91%	96	83%	69	60%	56	49%
Subway	25	12	48%	13	52%	16	64%	5	20%	6	24%	4	16%
DeWitt-Seitz	34	30	88%	34	100%	29	85%	26	76%	19	56%	10	29%
Grand Slam	82	32	39%	38	46%	56	68%	30	37%	22	27%	22	27%
Red Lobster	79	11	14%	77	97%	46	58%	73	92%	69	87%	73	92%
Marina/Meierhoff	161	159	99%	156	97%	149	93%	100	62%	93	58%	81	50%
Lake Avenue	67	30	45%	49	73%	50	75%	28	42%	32	48%	34	51%
Old Commerce, St.	10	8	80%	10	100%	10	100%	7	70%	5	50%	8	80%
NORTH/LAKE AVE. TOTALS	583	401	69%	492	84%	466	80%	371	63%	319	55%	292	50%

SOUTH ZONE	Spaces	10:00-12:00		12:00-2:00		2:00-4:00		4:00-6:00		6:00-8:00		8:00-10:00	
		Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use		
Jeep Lot	65	27	42%	48	74%	35	54%	28	43%	20	31%	18	28%
Comfort Suites	79	39	49%	26	33%	28	35%	45	57%	50	63%	43	54%
Burger King	45	7	16%	22	49%	15	33%	6	13%	9	20%	11	24%
Canal Park/Marine Museum	93	53	57%	87	94%	85	91%	58	62%	61	66%	38	41%
Army Corps of Engineers	21	17	81%	15	71%	13	62%	7	33%	4	19%	5	24%
Grandma's	67	8	12%	61	91%	51	76%	45	67%	41	61%	24	36%
Northwest Iron	195	105	54%	192	98%	174	89%	126	65%	130	67%	97	50%
Sports Garden/Paulucci	62	44	71%	47	76%	52	84%	54	87%	42	68%	33	53%
Lake Avenue	57	20	35%	16	28%	25	44%	21	37%	23	40%	28	49%
SOUTH ZONE TOTALS	684	320	47%	514	75%	499	73%	390	57%	380	56%	297	43%
CANAL PARK OVERALL	1874	1006	54%	1292	69%	1251	67%	986	47%	881	47%	777	41%

WEST ZONE	Spaces	10:00-12:00		12:00-2:00		2:00-4:00		4:00-6:00		6:00-8:00		8:00-10:00	
		Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use	Pct in Use		
Vista Fleet/Curling Club	108	52	48%	88	81%	83	77%	56	52%	66	61%	62	57%
DECC	1463	531	36%	540	37%	531	36%	373	25%	109	7%	58	4%
Back of the DECC	22	4	18%	4	18%	4	18%	0	0%	0	0%	0	0%
Bayfront	312	55	18%	57	18%	58	19%	34	11%	27	9%	24	8%
Old 5th Avenue West	30	27	90%	25	83%	23	77%	13	43%	2	7%	0	0%
WEST ZONE TOTALS	1935	669	35%	714	37%	699	36%	476	25%	204	11%	144	7%
CANAL PARK & DECC AREA	3809	1675	44%	2006	53%	1950	51%	1462	38%	1085	28%	921	24%

Surveys taken Thursday, August 6, 1992
Surveys and tabulation of results performed by Metropolitan Interstate Committee.

TABLE 2-3

LENGTH OF STAY BY LOCATION - SUMMER WEEKEND

Saturday, August 1, 1992

NORTH ZONE CANAL PARK DR. TOTALS	<2		2-4		4-6		6-8		8-10		10-12		12-14	
	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.
Corner of the Lake	135	84%	13	8%	10	6%	2	1%	0	0%	0	0%	0	0%
Park Inn	240	63%	94	25%	39	10%	5	1%	2	1%	3	1%	0	0%
Duluth Spring	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Kuettel	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Arrowhead Center	19	58%	5	15%	5	15%	0	0%	0	0%	4	12%	0	0%
Road Machinery Systems	2	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Jamar	16	53%	2	7%	8	27%	3	10%	0	0%	1	3%	0	0%
Archer Brothers	3	30%	1	10%	0	0%	2	20%	2	20%	0	0%	0	0%
Sculptured Wall	28	65%	9	21%	3	7%	3	7%	0	0%	0	0%	0	0%
Hardee's	124	87%	14	10%	4	3%	0	0%	0	0%	0	0%	0	0%
Canal Park Drive	169	80%	36	17%	4	3%	1	0%	0	0%	2	1%	0	0%
NORTH/CANAL PARK DR. TOTALS	737	73%	174	17%	72	7%	16	2%	4	0%	12	1%	0	0%

NORTH ZONE LAKE AVENUE	<2		2-4		4-6		6-8		8-10		10-12		12-14	
	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.
General Electric	5	56%	0	0%	3	33%	1	11%	0	0%	0	0%	0	0%
Waterfront Plaza	115	72%	30	19%	10	6%	3	2%	1	1%	1	1%	0	0%
Subway	14	74%	3	16%	2	11%	0	0%	0	0%	0	0%	0	0%
DeWitt-Seitz	83	71%	23	20%	9	8%	1	1%	0	0%	1	1%	0	0%
Grand Slam	116	61%	47	25%	23	12%	1	1%	1	1%	1	1%	0	0%
Red Lobster	211	84%	38	15%	2	1%	0	0%	0	0%	0	0%	0	0%
Marina/Meierhoff	130	66%	40	20%	22	11%	4	2%	0	0%	0	0%	0	0%
Lake Avenue	100	68%	33	22%	14	9%	1	1%	0	0%	0	0%	0	0%
Old Commerce St.	7	30%	10	43%	1	4%	5	22%	0	0%	0	0%	0	0%
NORTH/LAKE AVE. TOTALS	781	70%	224	20%	86	8%	16	1%	2	0%	3	0%	0	0%

SOUTH ZONE	<2		2-4		4-6		6-8		8-10		10-12		12-14	
	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.
Jeep Lot	124	71%	25	14%	19	11%	4	2%	2	1%	1	1%	0	0%
Comfort Suites	77	55%	33	24%	15	11%	9	6%	0	0%	6	4%	0	0%
Burger King	105	88%	7	6%	4	3%	0	0%	2	2%	1	1%	0	0%
Canal Park/Marine Museum	352	82%	62	14%	11	3%	2	0%	0	0%	1	0%	0	0%
Army Corps of Engineers	9	43%	2	10%	5	24%	1	5%	2	10%	2	10%	0	0%
Grandma's	230	84%	37	14%	5	2%	0	0%	1	0%	0	0%	0	0%
Northwest Iron	577	74%	139	18%	56	7%	5	1%	3	0%	1	0%	0	0%
Sports Garden/Paulucci	44	35%	32	25%	44	35%	5	4%	1	1%	1	1%	0	0%
Lake Avenue	96	81%	15	13%	5	4%	2	2%	1	1%	0	0%	0	0%
SOUTH ZONE TOTALS	1614	74%	352	16%	164	8%	28	1%	12	1%	13	1%	0	0%
CANAL PARK OVERALL	3132	73%	750	17%	322	7%	60	1%	18	0%	28	1%	0	0%

WEST ZONE	<2		2-4		4-6		6-8		8-10		10-12		12-14	
	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.
Vista Fleet/Curling Club	120	45%	110	41%	25	9%	10	4%	1	0%	0	0%	0	0%
DECC	300	53%	158	28%	46	8%	21	4%	23	4%	21	4%	0	0%
Back of the DECC	35	85%	4	10%	0	0%	2	0%	0	0%	0	0%	0	0%
Old 5th Avenue West	13	87%	1	7%	0	0%	0	0%	1	7%	0	0%	0	0%
Bayfront	345	81%	61	14%	9	2%	7	2%	4	1%	1	0%	0	0%
WEST ZONE TOTALS	813	62%	334	25%	80	6%	40	3%	29	2%	22	2%	0	0%
CANAL PARK & DECC AREA	3945	70%	1084	19%	402	7%	100	2%	47	1%	50	1%	0	0%

NOTE: West Zone Surveys taken Saturday, August 15, 1992
Surveys and tabulation of results performed by Metropolitan Interstate Committee.

LENGTH OF STAY BY LOCATION - SUMMER WEEKDAY

Thursday, August 6, 1992

	<2		2-4		4-6		6-8		8-10		10-12		12-14	
	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.	Hours	Pct.
NORTH ZONE														
CANAL PARK DR. TOTALS														
Corner of the Lake	46	41%	14	12%	25	22%	27	24%	1	1%	0	0%	0	0%
Park Inn	159	56%	56	20%	67	24%	1	0%	1	0%	0	0%	0	0%
Duluth Spring	1	0%	2	0%	7	0%	0	0%	0	0%	0	0%	0	0%
Kuettel	3	23%	5	38%	1	8%	4	31%	0	0%	0	0%	0	0%
Arrowhead Center	46	53%	17	20%	13	15%	10	12%	0	0%	0	0%	0	0%
Road Machinery Systems	2	29%	1	14%	3	43%	1	14%	0	0%	0	0%	0	0%
Jamar	10	38%	6	23%	3	12%	2	8%	2	8%	3	12%	0	0%
Archer Brothers	0	0%	3	33%	1	11%	2	22%	0	0%	3	33%	0	0%
Sculptured Wall	24	57%	6	14%	4	10%	7	17%	0	0%	1	2%	0	0%
Hardee's	57	74%	10	13%	5	6%	5	6%	0	0%	0	0%	0	0%
Canal Park Drive	132	86%	19	12%	2	1%	0	0%	0	0%	0	0%	0	0%
NORTH/CANAL PARK DR. TOTALS	480	59%	139	17%	131	16%	59	7%	4	0%	7	1%	0	0%
NORTH ZONE														
LAKE AVENUE														
General Electric	11	61%	4	22%	2	11%	1	6%	0	0%	0	0%	0	0%
Waterfront Plaza	150	51%	73	25%	51	17%	18	6%	3	1%	0	0%	0	0%
Subway	36	76%	1	3%	6	16%	1	3%	0	0%	0	0%	0	0%
DeWitt-Seitz	66	46%	18	23%	25	32%	0	0%	0	0%	0	0%	0	0%
Grand Slam	228	58%	18	16%	28	25%	1	1%	0	0%	0	0%	0	0%
Red Lobster	131	82%	36	13%	12	4%	1	0%	0	0%	1	0%	0	0%
Marina/Meierhoff	131	38%	59	17%	140	41%	10	3%	1	0%	2	1%	0	0%
Lake Avenue	131	76%	30	17%	11	6%	4	21%	1	5%	0	0%	0	0%
Old Commerce St.	6	32%	3	16%	5	26%	4	21%	0	0%	0	0%	0	0%
NORTH LAKE AVE. TOTALS	787	58%	242	18%	280	21%	36	3%	6	0%	4	0%	0	0%
SOUTH ZONE														
JEEP LOT														
Jeep Lot	47	48%	17	18%	21	22%	10	10%	1	1%	1	1%	0	0%
Comfort Suites	51	47%	19	18%	27	25%	2	2%	7	6%	2	2%	0	0%
Burger King	42	79%	5	9%	6	11%	0	0%	0	0%	0	0%	0	0%
Canal Park/Marine Museum	188	70%	44	16%	35	13%	1	0%	0	0%	0	0%	0	0%
Army Corps of Engineers	12	43%	2	7%	13	46%	0	0%	0	0%	1	4%	0	0%
Grandma's	113	71%	27	17%	20	13%	0	0%	0	0%	0	0%	0	0%
Northwest Iron	220	52%	81	19%	80	19%	11	3%	11	3%	17	4%	0	0%
Sports Garden/Paulucci	33	27%	31	25%	58	47%	1	1%	0	0%	0	0%	0	0%
Lake Avenue	82	81%	9	9%	10	10%	0	0%	0	0%	0	0%	0	0%
SOUTH ZONE TOTALS	788	58%	235	17%	270	20%	25	2%	19	1%	21	2%	0	0%
CANAL PARK OVERALL	2055	58%	616	17%	681	19%	120	3%	29	1%	32	1%	0	0%
WEST ZONE														
VISTA FLEET/CURLING CLUB														
Vista Fleet/Curling Club	119	52%	74	32%	28	12%	5	2%	4	2%	1	0%	0	0%
DECC	119	17%	84	12%	179	26%	250	36%	33	5%	26	4%	0	0%
Back of the DECC	7	78%	1	11%	1	11%	0	0%	0	0%	0	0%	0	0%
Old 5th Avenue West	5	15%	8	24%	11	33%	9	27%	0	0%	0	0%	0	0%
Bavfront	113	72%	21	13%	20	13%	2	1%	0	0%	0	0%	0	0%
WEST ZONE TOTALS	363	32%	188	17%	239	21%	266	24%	37	3%	27	2%	0	0%
CANAL PARK & DECC AREA	2418	52%	804	17%	920	20%	386	8%	66	1%	59	1%	0	0%

Surveys and tabulation of results performed by Metropolitan Interstate Committee.

TABLE 2-5

PHASE II
RESULTS

NOVEMBER
SURVEY

