Preliminary Analysis: Converting Casual Members into Annual Members

Michael Szyszko

2023-12-21

Preliminary Finding Summary

Generally, the most popular members stations do not match with the most popular casual stations. Further investigation is needed, however, based on the station names that include keywords such as "aquariam", "planetarium", "park", suggest that casual riders may be using the service more for leisure relatively compared to member riders.

Data Used in Preliminary Analysis

This preliminary analysis focused on internal data collected in Q1 of 2020 for member and casual rides during that period. Further analysis is needed to verify the findings for other quarters and years. There were suspicious entries that had very short and long trip durations that were excluded in this preliminary analysis that require further investigation. This does call into question the validity of the data given the amount of errors seen.

Recommendations Based on Preliniary Finding Summary

- 1) Investigate potential membership benefits that could be bundled with local tourist attractions and leisure activities (e.g., member discounts for entry to the local aquarium).
- 2) Targeted marketing campaigns at the most popular stations for casual riders.
- 3) Investigate the feasibility of creating guided activities or interactive maps that could be offered to members.

```
trips_2020_q1 <- read.csv("Trips_2020_Q1.csv")</pre>
```

Including Plots

1 EACB19130B0CDA4A

2 8FED874C809DC021

You can also embed plots, for example:

```
trips_2020_q1_membership <- trips_2020_q1 %>%
    rename(membership = member_casual)
trips_2020_q1_with_duration <- mutate(trips_2020_q1_membership, duration=difftime(ended_at, trips_2020_q1_with_clean_duration <- trips_2020_q1_with_duration %>%
    filter(duration >= 1, duration <= 600)
trips_2020_q1_with_extreme_duration <- trips_2020_q1_with_duration %>%
    filter(duration < 1 | duration > 600)
head(trips_2020_q1)
## ride_id rideable_type started_at ended_at
```

docked bike 2020-01-21 20:06:59 2020-01-21 20:14:30

docked_bike 2020-01-30 14:22:39 2020-01-30 14:26:22

```
## 3 789F3C21E472CA96
                         docked bike 2020-01-09 19:29:26 2020-01-09 19:32:17
                         docked_bike 2020-01-06 16:17:07 2020-01-06 16:25:56
  4 C9A388DAC6ABF313
                         docked bike 2020-01-30 08:37:16 2020-01-30 08:42:48
  5 943BC3CBECCFD662
##
  6 6D9C8A6938165C11
                         docked_bike 2020-01-10 12:33:05 2020-01-10 12:37:54
           start_station_name start_station_id
                                                               end station name
## 1 Western Ave & Leland Ave
                                                          Clark St & Leland Ave
      Clark St & Montrose Ave
                                            234 Southport Ave & Irving Park Rd
       Broadway & Belmont Ave
## 3
                                            296
                                                       Wilton Ave & Belmont Ave
## 4
       Clark St & Randolph St
                                             51
                                                       Fairbanks Ct & Grand Ave
## 5
                                             66
         Clinton St & Lake St
                                                          Wells St & Hubbard St
## 6
        Wells St & Hubbard St
                                            212
                                                   Desplaines St & Randolph St
##
     end_station_id start_lat start_lng end_lat
                                                  end_lng member_casual
## 1
                326
                       41.9665
                                -87.6884 41.9671 -87.6674
                                                                  member
## 2
                318
                       41.9616
                                -87.6660 41.9542 -87.6644
                                                                  member
## 3
                                -87.6455 41.9402 -87.6530
                                                                  member
                117
                       41.9401
## 4
                 24
                       41.8846
                                -87.6319 41.8918 -87.6206
                                                                  member
## 5
                212
                       41.8856
                                -87.6418 41.8899 -87.6343
                                                                  member
## 6
                 96
                       41.8899
                                -87.6343 41.8846 -87.6446
                                                                  member
```

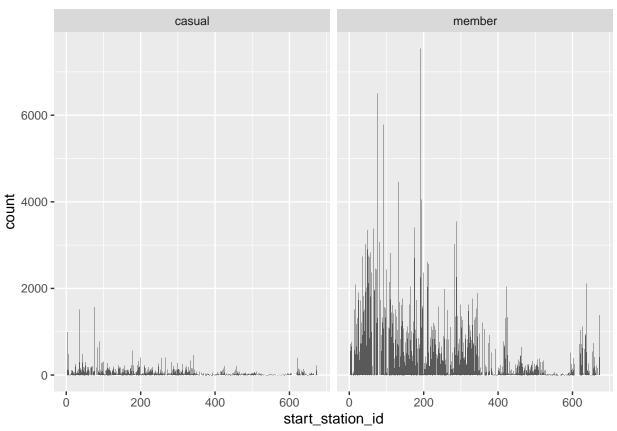
There were rides that were very short and long (e.g., only a few seconds). It is likely that there are some data entry errors or system malfunctions. For the purposes of this analysis all extreme values, those below 1 minute and those above 10 hours have been removed. However, further investigation into why these values exist and if it may be also be impacting the remaining data being analyzed.

```
ggplot(data=trips_2020_q1_with_extreme_duration)+
  geom_bar(mapping=aes(x=membership))+
  ggtitle("Ride Data by Membership with Extreme Durations that are Excluded")
```

Ride Data by Membership with Extreme Durations that are Excluded



```
#data_trips_2020_q1_by_station <- data_trips202_q1 %>%
ggplot(data=trips_2020_q1_with_clean_duration)+
geom_bar(mapping=aes(x=start_station_id))+
facet_wrap(~membership)
```



```
trips_2020_q1_with_clean_duration %>%
filter(membership=="casual") %>%
count(start_station_id, start_station_name) %>%
arrange(-n)
```

##		start_station_id	start_station_name	n
##	1	76	Lake Shore Dr & Monroe St 1	571
##	2	35	Streeter Dr & Grand Ave 1	511
##	3	3	Shedd Aquarium	986
##	4	90	Millennium Park	770
##	5	85	Michigan Ave & Oak St	626
##	6	177	Theater on the Lake	558
##	7	6	Dusable Harbor	487
##	8	43	Michigan Ave & Washington St	486
##	9	341	Adler Planetarium	462
##	10	199	Wabash Ave & Grand Ave	398
##	11	268	Lake Shore Dr & North Blvd	398
##	12	255	Indiana Ave & Roosevelt Rd	394
##	13	623	Michigan Ave & 8th St	387
##	14	334	Lake Shore Dr & Belmont Ave	330
##	15	2	Buckingham Fountain	328
##	16	195	Columbus Dr & Randolph St	324

шш	17	88	I - l - Ol D - 4 Ol - C+	244
##		99	Lake Shore Dr & Ohio St	311
##		36	Franklin St & Jackson Blvd	302
##	19	52	Michigan Ave & Lake St	302
##	20	284	Michigan Ave & Jackson Blvd	292
##	21	97	Field Museum	289
##	22	44	State St & Randolph St	287
##	23	110	Dearborn St & Erie St	278
##	24	94	Clark St & Armitage Ave	276
##	25	300	Broadway & Barry Ave	276
	26	249	Montrose Harbor	257
	27	25	Michigan Ave & Pearson St	254
##		77	Clinton St & Madison St	250
##		313	Lakeview Ave & Fullerton Pkwy	249
##		26	McClurg Ct & Illinois St	246
	31	176	Clark St & Elm St	231
##		141		230
			Clark St & Lincoln Ave	
##		192	Canal St & Adams St	227
##		211	St. Clair St & Erie St	226
##		181	LaSalle St & Illinois St	218
##		51	Clark St & Randolph St	214
##		673	Lincoln Park Conservatory	214
##		157	Lake Shore Dr & Wellington Ave	212
##		324	Stockton Dr & Wrightwood Ave	207
	40	53	Wells St & Huron St	206
##		426	Ellis Ave & 60th St	206
	42	289	Wells St & Concord Ln	204
##		459	Lakefront Trail & Bryn Mawr Ave	203
##		71	Morgan St & Lake St	202
##	45	7	Field Blvd & South Water St	199
##	46	24	Fairbanks Ct & Grand Ave	197
##	47	127	Lincoln Ave & Fullerton Ave	197
##	48	247	Shore Dr & 55th St	197
##	49	67	Sheffield Ave & Fullerton Ave	189
##	50	196	Cityfront Plaza Dr & Pioneer Ct	188
##	51	197	Michigan Ave & Madison St	186
##	52	56	Desplaines St & Kinzie St	185
##	53	59	Wabash Ave & Roosevelt Rd	185
##	54	210	Ashland Ave & Division St	183
##	55	144	Larrabee St & Webster Ave	180
##	56	47	State St & Kinzie St	177
##	57	232	Pine Grove Ave & Waveland Ave	177
##	58	117	Wilton Ave & Belmont Ave	176
##	59	220	Clark St & Drummond Pl	176
##	60	329	Lake Shore Dr & Diversey Pkwy	176
##	61	48	Larrabee St & Kingsbury St	174
##	62	66	Clinton St & Lake St	173
##		81	Daley Center Plaza	171
##			Mies van der Rohe Way & Chestnut St	170
##		194	Wabash Ave & Wacker Pl	170
##		321	Wabash Ave & 9th St	169
##		69	Damen Ave & Pierce Ave	166
##		112	Green St & Randolph St	163
	69	38	Clark St & Lake St	161
##		49	Dearborn St & Monroe St	159
π#	10	43	pearboin by a monitoe by	109

##	71	337	Clark St & Chicago Ave	154
##	72	172	Rush St & Cedar St	153
##	73	182	Wells St & Elm St	153
##	74	212	Wells St & Hubbard St	153
##	75	113	Bissell St & Armitage Ave	151
##	76	140	Dearborn Pkwy & Delaware Pl	149
##	77	126	Clark St & North Ave	148
##	78	423	University Ave & 57th St	148
##	79	143	Sedgwick St & Webster Ave	146
##		153	Southport Ave & Wellington Ave	146
##		229	Southport Ave & Roscoe St	146
##		624	Dearborn St & Van Buren St	145
##		340	Clark St & Wrightwood Ave	143
##		301	Clark St & Schiller St	141
##		150	Fort Dearborn Dr & 31st St	139
##		174	Canal St & Madison St	139
##		227	Southport Ave & Waveland Ave	138
##		639	Lakefront Trail & Wilson Ave	137
##		33	State St & Van Buren St	135
##		133	Kingsbury St & Kinzie St	133
##		291	Wells St & Evergreen Ave	133
##		303	Broadway & Cornelia Ave	133
	93	287	Franklin St & Monroe St	130
	94	34	Cannon Dr & Fullerton Ave	129
	95 95	173		129
	96	296	Mies van der Rohe Way & Chicago Ave	129
##		290 627	Broadway & Belmont Ave LaSalle Dr & Huron St	129
		4	Burnham Harbor	127
	98			
	99	114	Sheffield Ave & Waveland Ave	127
	100	322	Kimbark Ave & 53rd St	127
	101	165	Clark St & Grace St	126
	102	142	McClurg Ct & Erie St	125
	103	41	Federal St & Polk St	124
	104	61	Wood St & Milwaukee Ave	124
	105	273	Michigan Ave & 18th St	124
	106	219	Damen Ave & Cortland St	123
	107	84	Milwaukee Ave & Grand Ave	122
	108	254	Pine Grove Ave & Irving Park Rd	121
	109	80	Aberdeen St & Monroe St	120
	110	344	Ravenswood Ave & Lawrence Ave	120
	111	109	900 W Harrison St	119
	112	304	Broadway & Waveland Ave	119
	113	454	Broadway & Granville Ave	119
	114	115	Sheffield Ave & Wellington Ave	117
##	115	331	Halsted St & Clybourn Ave	116
##	116	39	Wabash Ave & Adams St	115
##	117	283	LaSalle St & Jackson Blvd	115
##	118	299	Halsted St & Roscoe St	114
##	119	161	Rush St & Superior St	113
##	120	91	Clinton St & Washington Blvd	112
##	121	198	Green St & Madison St	111
##	122	231	Sheridan Rd & Montrose Ave	111
##	123	312	Clarendon Ave & Gordon Ter	111
	101	OFC	Broadway & Sheridan Rd	110
##	124	256	broadway & Sherrdan Nu	110

	125	420	Ellis Ave & 55th St	110
##	126	123	California Ave & Milwaukee Ave	108
##	127	158	Milwaukee Ave & Wabansia Ave	108
##	128	13	Wilton Ave & Diversey Pkwy	107
##	129	100	Orleans St & Merchandise Mart Plaza	107
##	130	168	Michigan Ave & 14th St	107
##	131	16	Paulina Ave & North Ave	106
	132	286	Franklin St & Adams St (Temp)	106
	133	638	Clinton St & Jackson Blvd	106
	134	37	Dearborn St & Adams St	105
	135	106	State St & Pearson St	105
	136	164	Franklin St & Lake St	105
	137	45		103
			Michigan Ave & Ida B Wells Dr	
	138	226	Racine Ave & Belmont Ave	104
	139	31	Franklin St & Chicago Ave	103
	140	424	Museum of Science and Industry	103
	141	632	Clark St & Newport St	101
	142	5	State St & Harrison St	100
##	143	87	Racine Ave & Fullerton Ave	100
##	144	320	Loomis St & Lexington St	100
##	145	156	Clark St & Wellington Ave	99
##	146	225	Halsted St & Dickens Ave	99
##	147	240	Sheridan Rd & Irving Park Rd	99
##	148	294	Broadway & Berwyn Ave	99
##	149	58	Marshfield Ave & Cortland St	98
##	150	672	Franklin St & Illinois St	97
##	151	107	Desplaines St & Jackson Blvd	96
##	152	118	Sedgwick St & North Ave	96
##	153	191	Canal St & Monroe St	96
##	154	74	Kingsbury St & Erie St	94
##	155	111	Sedgwick St & Huron St	92
##	156	62	McCormick Place	90
##	157	180	Ritchie Ct & Banks St	89
	158	626	Delano Ct & Roosevelt Rd	89
	159	98	LaSalle St & Washington St	88
	160	175	Wells St & Polk St	88
	161	125	Rush St & Hubbard St	87
	162	414	Canal St & Taylor St	87
	163	641	Central Park Ave & Bloomingdale Ave	86
	164	18	Wacker Dr & Washington St	85
	165	338	Calumet Ave & 18th St	
				85
	166	75	Canal St & Jackson Blvd	84
	167	217	Elizabeth (May) St & Fulton St	83
	168	621	Aberdeen St & Randolph St	83
	169	190	Southport Ave & Wrightwood Ave	82
	170	230	Lincoln Ave & Roscoe St	82
	171	310	Damen Ave & Charleston St	82
	172	461	Broadway & Ridge Ave	82
##	173	359	Larrabee St & Division St	81
##	174	451	Sheridan Rd & Loyola Ave	81
##	175	17	Honore St & Division St	80
##	176	332	Burling St (Halsted) & Diversey Pkwy (Temp)	80
##	177	349	Halsted St & Wrightwood Ave	80
##	178	417	Cornell Ave & Hyde Park Blvd	80
			·	

##	179	511	Albany Ave & Bloomingdale Ave	80
	180	260	Kedzie Ave & Milwaukee Ave	79
	181	465	Marine Dr & Ainslie St	78
	182	14	Morgan St & 18th St	77 77
	183	264	Stetson Ave & South Water St	77
	184	54	Ogden Ave & Chicago Ave	76
	185	119	Ashland Ave & Lake St	75
	186	293	Broadway & Wilson Ave	75
	187	134	Peoria St & Jackson Blvd	74
	188	307	Southport Ave & Clybourn Ave	74
	189	50	Clark St & Ida B Wells Dr	71
	190	60	Dayton St & North Ave	70
	191	302	Sheffield Ave & Wrightwood Ave	70
	192	635	Fairbanks St & Superior St	70
	193	419	Lake Park Ave & 53rd St	69
##	194	458	Broadway & Thorndale Ave	69
##	195	506	Spaulding Ave & Armitage Ave	69
##	196	40	LaSalle St & Adams St	68
##	197	223	Clifton Ave & Armitage Ave	68
##	198	327	Sheffield Ave & Webster Ave	67
##	199	406	Lake Park Ave & 35th St	67
##	200	20	Sheffield Ave & Kingsbury St	66
##	201	72	Wabash Ave & 16th St	66
##	202	96	Desplaines St & Randolph St	66
##	203	128	Damen Ave & Chicago Ave	66
##	204	130	Damen Ave & Division St	66
##	205	108	Halsted St & Polk St	65
##	206	166	Ashland Ave & Wrightwood Ave	65
##	207	248	Woodlawn Ave & 55th St	64
##	208	241	Morgan St & Polk St	63
	209	306	Sheridan Rd & Buena Ave	63
	210	328	Ellis Ave & 58th St	63
	211	636	Orleans St & Hubbard St	63
	212	21	Aberdeen St & Jackson Blvd	62
	213	288	Larrabee St & Armitage Ave	62
	214	418	Ellis Ave & 53rd St	62
	215	46	Wells St & Walton St	61
	216	86	Eckhart Park	61
	217	152	Lincoln Ave & Diversey Pkwy	60
	218	224	Halsted St & Willow St	60
	219	295	Broadway & Argyle St	60
	220	92	Carpenter St & Huron St	59
	221	213	Leavitt St & North Ave	59
	222	394	Clark St & 9th St (AMLI)	59 59
	223	154	Southport Ave & Belmont Ave	58 E0
	224	463	Clark St & Berwyn Ave	58
	225	89	Financial P1 & Ida B Wells Dr	57 57
	226	350	Ashland Ave & Chicago Ave	57 57
	227	507	Humboldt Blvd & Armitage Ave	57 57
	228	628	Walsh Park	57
	229	29	Noble St & Milwaukee Ave	56
	230	290	Kedzie Ave & Palmer Ct	56
	231	22	May St & Taylor St	55
##	232	57	Clinton St & Roosevelt Rd	55

## 233	73	Jefferson St & Monroe St	55
## 234	188	Greenview Ave & Fullerton Ave	55
## 235	242	Damen Ave & Leland Ave	55
## 236	116	Western Ave & Winnebago Ave	54
## 237	319	Greenview Ave & Diversey Pkwy	54
## 238	88	Racine Ave & Randolph St	53
## 239	323	Sheridan Rd & Lawrence Ave	53
## 240	425	Harper Ave & 59th St	53
## 241	325	Clark St & Winnemac Ave	52
## 242	659	Leavitt St & Chicago Ave	52
## 243	186	Ogden Ave & Race Ave	51
## 244	222	Milwaukee Ave & Rockwell St	51
## 245	237	MLK Jr Dr & 29th St	51
## 246	239	Western Ave & Leland Ave	51
## 247	253	Winthrop Ave & Lawrence Ave	51
## 248	318	Southport Ave & Irving Park Rd	51
## 249	364	Larrabee St & Oak St	51
## 250	620	Orleans St & Chestnut St (NEXT Apts)	51
## 251	245	Clarendon Ave & Junior Ter	50
## 252	148	State St & 33rd St	49
## 253	309	Leavitt St & Armitage Ave	49
## 254	481	California Ave & Montrose Ave	49
## 255	120	Wentworth Ave & Cermak Rd (Temp)	48
## 256	214	Damen Ave & Grand Ave	48
## 250 ## 257	236		47
## 257 ## 258	347	Sedgwick St & Schiller St Ashland Ave & Grace St	47
	54 <i>1</i> 509		
## 259		Troy St & North Ave	47 46
## 260	15	Racine Ave & 18th St	46
## 261	234	Clark St & Montrose Ave	46
## 262	346	Ada St & Washington Blvd	46
## 263	131	Lincoln Ave & Belmont Ave	45
## 264	596	Benson Ave & Church St	45
## 265	603	Chicago Ave & Sheridan Rd	45
## 266	605	University Library (NU)	45
## 267	305	Western Ave & Division St	44
## 268	345	Lake Park Ave & 56th St	44
## 269	501	Richmond St & Diversey Ave	44
## 270	218	Wells St & 19th St	43
## 271	233	Sangamon St & Washington Blvd	43
## 272	622	California Ave & Cortez St	43
## 273	129	Blue Island Ave & 18th St	42
## 274	261	Hermitage Ave & Polk St	42
## 275	460	Clark St & Bryn Mawr Ave	42
## 276	505	Winchester Ave & Elston Ave	42
## 277	637	Wood St & Chicago Ave (*)	42
## 278	27	Larrabee St & North Ave	41
## 279	32	Racine Ave & Congress Pkwy	41
## 280	55	Halsted St & Roosevelt Rd	41
## 281	121	Blackstone Ave & Hyde Park Blvd	41
## 282	124	Damen Ave & Cullerton St	41
## 283	447	Glenwood Ave & Morse Ave	41
## 284	205	Paulina St & 18th St	40
## 285	276	California Ave & North Ave	40
## 286	292	Southport Ave & Clark St	40
	202	Southern mo a orary po	

## 287	282	Halsted St & Maxwell St	39
## 288	311	Leavitt St & Lawrence Ave	39
## 289	326	Clark St & Leland Ave	39
## 290	370	Calumet Ave & 21st St	39
## 291	520	Greenview Ave & Jarvis Ave	39
## 292	30	Ashland Ave & Augusta Blvd	38
## 293	208	Laflin St & Cullerton St	38
## 294	277	Ashland Ave & Grand Ave	38
## 295	450	Warren Park West	38
## 296	499	Kosciuszko Park	38
## 297	258	Logan Blvd & Elston Ave	37
## 298	503	Drake Ave & Fullerton Ave	37
## 299	525	Glenwood Ave & Touhy Ave	37
## 300	19	Throop (Loomis) St & Taylor St	36
## 301	238	Wolcott (Ravenswood) Ave & Montrose Ave	36
## 302	298	Lincoln Ave & Belle Plaine Ave	36
## 303	504	Campbell Ave & Fullerton Ave	36
## 304	162	Damen Ave & Wellington Ave	35
## 305	178	State St & 19th St	35
## 306	342	Wolcott Ave & Polk St	35
## 307	343	Racine Ave & Wrightwood Ave	35
## 308	374	Western Ave & Walton St	35
## 309	478	Rockwell St & Eastwood Ave	35
## 310	518	Conservatory Dr & Lake St	35
## 311	138	Clybourn Ave & Division St	34
## 312	183	Damen Ave & Thomas St (Augusta Blvd)	34
## 313	482	Campbell Ave & Montrose Ave	34
## 314	93	Sheffield Ave & Willow St	33
## 315	160	Campbell Ave & North Ave	33
## 316	215	Damen Ave & Madison St	33
## 317	132	Wentworth Ave & 24th St (Temp)	32
## 318	244	Ravenswood Ave & Irving Park Rd	32
## 319	476	Kedzie Ave & Leland Ave	32
## 320	604	Sheridan Rd & Noyes St (NU)	32
## 321	259	California Ave & Francis Pl (Temp)	31
## 322	315	Elston Ave & Wabansia Ave	31
## 323	500	Central Park Ave & Elbridge Ave	31
## 324	135	Halsted St & 21st St	30
## 325	146	Loomis St & Jackson Blvd	30
	491		
## 326 ## 327		Talman Ave & Addison St	30
## 327 ## 328	657	Wood St & Augusta Blvd	30
## 328	660	Sheridan Rd & Columbia Ave	30
## 329	664	Leavitt St & Belmont Ave (*)	30
## 330	185	Stave St & Armitage Ave	29
## 331	257	Lincoln Ave & Waveland Ave	29
## 332	381	Western Ave & Monroe St	29
## 333	654	Racine Ave & Washington Blvd $(*)$	29
## 334	101	63rd St Beach	28
## 335	169	Canal St & Harrison St	28
## 336	250	Ashland Ave & Wellington Ave	28
## 337	475	Washtenaw Ave & Lawrence Ave	28
## 338	597	Chicago Ave & Washington St	28
## 339	666	Cherry Ave & Blackhawk St	28
## 340	163	Damen Ave & Clybourn Ave	27
010	100	Damen Ave & Orybourn Ave	۷1

##	341	228	Damen Ave & Melrose Ave	27
##	342	267	Lake Park Ave & 47th St	27
##	343	432	Clark St & Lunt Ave	27
##	344	480	Albany Ave & Montrose Ave	27
##	345	643	Smith Park (*)	27
##	346	28	Larrabee St & Menomonee St	26
##	347	280	Morgan St & 31st St	26
##	348	410	Prairie Ave & 43rd St	26
##	349	470	Kedzie Ave & Foster Ave	26
##	350	510	Spaulding Ave & Division St	26
##	351	23	Orleans St & Elm St	25
##	352	308	Seeley Ave & Roscoe St	25
##	353	442	California Ave & 23rd Pl	25
##	354	464	Damen Ave & Foster Ave	25
##	355	487	California Ave & Byron St	25
##	356	497	Kimball Ave & Belmont Ave	25
##	357	625	Chicago Ave & Dempster St	25
##	358	68	Clinton St & Tilden St	24
##	359	243	Lincoln Ave & Sunnyside Ave	24
##	360	272	Indiana Ave & 31st St	24
##	361	333	Ashland Ave & Blackhawk St	24
	362	377	Kedzie Ave & Lake St	24
	363	457	Clark St & Elmdale Ave	24
	364	477	Manor Ave & Leland Ave	24
	365	251	Clarendon Ave & Leland Ave	23
	366		Cottage Grove Ave & Oakwood Blvd	23
	367	523	Eastlake Ter & Rogers Ave	23
	368	246	Ashland Ave & Belle Plaine Ave	22
	369	285	Wood St & Hubbard St	22
	370	354	Sheridan Rd & Greenleaf Ave	22
	371	376	Artesian Ave & Hubbard St	22
	372	498	California Ave & Fletcher St	22
	373	202	Halsted St & 18th St	21
	374	297	Paulina St & Montrose Ave	21
	375	339	Emerald Ave & 31st St	21
	376	502	California Ave & Altgeld St	21
	377	316	Damen Ave & Sunnyside Ave	20
	378	383	Paulina St & Flournoy St	20
	379	489	Drake Ave & Addison St	20
	380	12	South Shore Dr & 71st St	19
	381	102	Stony Island Ave & 67th St	19
	382	206	Halsted St & Archer Ave	19
	383	216	California Ave & Division St	
	384	351	Cottage Grove Ave & 51st St	19 19
			S	
	385 386	448	Warren Park East (Ravenswood) Ave & Balmoral Ave	19
				19
	387	526	Oakley Ave & Touhy Ave	19
	388	42	Wabash Ave & Cermak Rd	18
	389	184	State St & 35th St	18
	390	252	Greenwood Ave & 47th St	18
	391	263	Rhodes Ave & 32nd St	18
	392	330	Lincoln Ave & Addison St	18
	393	453	Clark St & Schreiber Ave	18
##	394	492	Leavitt St & Addison St	18

	395	655	Hoyne Ave & Balmoral Ave	18
##	396	658	Leavitt St & Division St (*)	18
	397	147	Indiana Ave & 26th St	17
##	398	204	Prairie Ave & Garfield Blvd	17
##	399	382	Western Ave & Congress Pkwy	17
##	400	403	Wentworth Ave & 33rd St	17
##	401	490	Troy St & Elston Ave	17
##	402	602	Central St & Girard Ave	17
##	403	170	Clinton St & 18th St	16
##	404	275	Ashland Ave & 13th St	16
##	405	336	Cottage Grove Ave & 47th St	16
##	406	508	Central Park Ave & North Ave	16
##	407	279	Halsted St & 35th St	15
##	408	422	DuSable Museum	15
##	409	438	Central Park Ave & Ogden Ave	15
##	410	471	Francisco Ave & Foster Ave	15
##	411	494	Kedzie Ave & Bryn Mawr Ave	15
##	412	630	Kildare Ave & Montrose Ave	15
##	413	661	Evanston Civic Center	15
##	414	149	Calumet Ave & 33rd St	14
##	415	159	Claremont Ave & Hirsch St	14
##	416	203	Western Ave & 21st St	14
##	417	373	Kedzie Ave & Chicago Ave	14
##	418	378	California Ave & Lake St	14
##	419	401	Shields Ave & 28th Pl	14
##	420	452	Western Ave & Granville Ave	14
##	421	484	Monticello Ave & Irving Park Rd	14
##	422	9	Leavitt St & Archer Ave	13
##	423	103	Clinton St & Polk St	13
##	424	314	Ravenswood Ave & Berteau Ave	13
##	425	365	Halsted St & North Branch St	13
##	426	366	Loomis St & Archer Ave	13
##	427	368	Ashland Ave & Archer Ave	13
##	428	435	Kedzie Ave & Roosevelt Rd	13
##	429	496	Avers Ave & Belmont Ave	13
##	430	171	May St & Cullerton St	12
##	431	207	Emerald Ave & 28th St	12
##	432	405	Wentworth Ave & 35th St	12
##	433	428	Dorchester Ave & 63rd St	12
##	434	469	St. Louis Ave & Balmoral Ave	12
##	435	483	Avondale Ave & Irving Park Rd	12
##	436	631	Malcolm X College	12
##	437	656	Damen Ave & Walnut (Lake) St (*)	12
##	438	137	Morgan Ave & 14th Pl	11
##	439	412	Princeton Ave & 47th St	11
##	440	474	Christiana Ave & Lawrence Ave	11
##	441	619	Keystone Ave & Fullerton Ave	11
##	442	317	Wood St & Taylor St	10
##	443	335	Calumet Ave & 35th St	10
##	444	431	Eberhart Ave & 61st St	10
##	445	467	Western Ave & Lunt Ave	10
##	446	485	Sawyer Ave & Irving Park Rd	10
	447	486	Oakley Ave & Irving Park Rd	10
##	448	515	Paulina St & Howard St	10

##	449	517	Clark St & Jarvis Ave	10
	450	559	Racine Ave & Garfield Blvd	10
	451	271	Cottage Grove Ave & 43rd St	9
##	452	348	California Ave & 21st St	9
##	453	352	Jeffery Blvd & 67th St	9
##	454	388	Halsted St & 63rd St	9
##	455	449	Clark St & Columbia Ave	9
##	456	455	Maplewood Ave & Peterson Ave	9
##	457	456	2112 W Peterson Ave	9
##	458	472	Lincoln Ave & Winona St	9
##	459	488	Pulaski Rd & Eddy St (Temp)	9
##	460	514	Ridge Blvd & Howard St	9
##	461	573	State St & 79th St	9
##	462	594	Western Blvd & 48th Pl	9
##	463	595	Wabash Ave & 87th St	9
##	464	599	Valli Produce - Evanston Plaza	9
##	465	644	Western Ave & Fillmore St (*)	9
##	466	274	Racine Ave & 15th St	8
##	467	385	Princeton Ave & Garfield Blvd	8
##	468	402	Shields Ave & 31st St	8
##	469	413	Woodlawn Ave & Lake Park Ave	8
##	470	434	Ogden Ave & Roosevelt Rd	8
##	471	439	Kedzie Ave & 21st St	8
##	472	493	Western Ave & Roscoe St	8
##	473	572	State St & 76th St	8
##	474	591	Kilbourn Ave & Milwaukee Ave	8
##	475	167	Damen Ave & Coulter St	7
##	476	278	Wallace St & 35th St	7
##	477	281	Western Ave & 24th St	7
##	478	353	Clark St & Touhy Ave	7
##	479	367	Racine Ave & 35th St	7
##	480	415	Calumet Ave & 51st St	7
##	481	479	Drake Ave & Montrose Ave	7
##	482	547	Ashland Ave & Pershing Rd	7
##	483	552	Ashland Ave & McDowell Ave	7
##	484	592	Knox Ave & Montrose Ave	7
##	485	598	Elmwood Ave & Austin St	7
##	486	601	Central St Metra	7
	487	646	State St & 54th St	7
	488	663	Lincolnwood Dr & Central St	7
	489	355	South Shore Dr & 67th St	6
	490	369	Wood St & 35th St	6
	491	399	South Shore Dr & 74th St	6
	492	416	Dorchester Ave & 49th St	6
	493	421	MLK Jr Dr & 56th St	6
	494	437	Washtenaw Ave & Ogden Ave	6
	495	468	Budlong Woods Library	6
	496	495	Keystone Ave & Montrose Ave	6
	497	532	Austin Blvd & Lake St	6
	498	544	Austin Blvd & Madison St	6
	499	589	Milwaukee Ave & Cuyler Ave	6
	500	645	Archer (Damen) Ave & 37th St	6
	501	662	Dodge Ave & Mulford St	6
	502	136	Racine Ave & 13th St	5
			1.001110 11.0 0 10011 00	9

	503	444	Albany Ave & 26th St 5	
	504	522	Bosworth Ave & Howard St 5	
	505	546	Damen Ave & Pershing Rd 5	
	506	560	Marshfield Ave & 59th St 5	
	507	587	Wabash Ave & 83rd St 5	
	508	590	Kilbourn Ave & Irving Park Rd 5	
##	509	600	Dodge Ave & Church St 5	
##	510	95	Stony Island Ave & 64th St 4	
##	511	179	MLK Jr Dr & Pershing Rd 4	
##	512	262	Halsted St & 37th St 4	
##	513	270	Stony Island Ave & 75th St 4	
##	514	396	Yates Blvd & 75th St 4	
##	515	407	State St & Pershing Rd 4	
##	516	427	Cottage Grove Ave & 63rd St 4	
##	517	430	MLK Jr Dr & 63rd St 4	
##	518	436	Fairfield Ave & Roosevelt Rd 4	
##	519	466	Ridge Blvd & Touhy Ave 4	
##	520	529	Cicero Ave & Lake St 4	
##	521	551	Hoyne Ave & 47th St 4	
##	522	563	Ashland Ave & 63rd St 4	
##	523	581	Commercial Ave & 83rd St 4	
##	524	585	Cottage Grove Ave & 83rd St 4	
##	525	675	HQ QR 4	
##	526	200	MLK Jr Dr & 47th St 3	
##	527	201	Indiana Ave & 40th St 3	
##	528	209	Normal Ave & Archer Ave 3	
##	529	393	Calumet Ave & 71st St 3	
##	530	408	Union Ave & Root St 3	
##	531	440	Central Park Ave & 24th St 3	
##	532	519	Wolcott Ave & Fargo Ave 3	
##	533	527	Western Ave & Howard St 3	
##	534	528	Pulaski Rd & Lake St 3	
##	535	549	Marshfield Ave & 44th St 3	
##	536	550	Central Ave & Chicago Ave 3	
##	537	555	Ashland Ave & 50th St 3	
##	538	556	Throop St & 52nd St 3	
##	539	557	Seeley Ave & Garfield Blvd 3	
##	540	579	Phillips Ave & 79th St 3	
##	541	653	Cornell Dr & Hayes Dr 3	
##	542	122	Ogden Ave & Congress Pkwy 2	
##	543	356	Stony Island Ave & 71st St 2	
##	544	384	Halsted St & 51st St 2	
##	545	386	Halsted St & 56th St 2	
##	546	392	Perry Ave & 69th St 2	
##	547	441	Kedzie Ave & 24th St 2	
##	548	446	Western Ave & 28th St 2	
##	549	540	Laramie Ave & Madison St 2	
##	550	548	Morgan St & Pershing Rd 2	
##	551	554	Damen Ave & 51st St 2	
##	552	558	Ashland Ave & Garfield Blvd 2	
##	553	562	Racine Ave & 61st St 2	
##	554	583	Stony Island Ave & 82nd St 2	
##	555	584	Ellis Ave & 83rd St 2	
	556	586	MLK Jr Dr & 83rd St 2	

```
## 557
                     588
                                          South Chicago Ave & 83rd St
                                                                           2
                                               Bernard St & Elston Ave
## 558
                     640
                                                                           2
## 559
                     651
                                               Michigan Ave & 71st St
                                                                           2
## 560
                                                Jeffery Blvd & 71st St
                      11
                                                                           1
## 561
                     193
                                                    State St & 29th St
                                                                           1
## 562
                                      Sacramento Blvd & Franklin Blvd
                     375
                                                                           1
## 563
                                               Wentworth Ave & 63rd St
                     390
                                                                           1
                                                  Halsted St & 69th St
## 564
                     391
                                                                           1
## 565
                     398
                                                         Rainbow Beach
                                                                           1
## 566
                     409
                                                 Shields Ave & 43rd St
                                                                           1
## 567
                     429
                                          Cottage Grove Ave & 67th St
## 568
                                             Kedzie Ave & Harrison St
                     433
                                                                           1
## 569
                     443
                                                 Millard Ave & 26th St
                                                                           1
## 570
                                            Austin Blvd & Chicago Ave
                     524
                                                                           1
## 571
                     530
                                               Laramie Ave & Kinzie St
                                                                           1
## 572
                     535
                                           Pulaski Rd & Congress Pkwy
                                                                           1
## 573
                     539
                                               Cicero Ave & Quincy St
                                                                           1
## 574
                     541
                                            Central Ave & Harrison St
## 575
                                             Central Ave & Madison St
                     542
                                                                           1
## 576
                     545
                                               Kostner Ave & Adams St
## 577
                     567
                                                      May St & 69th St
                                                                           1
## 578
                     570
                                                   Evans Ave & 75th St
## 579
                     575
                                          Cottage Grove Ave & 78th St
                                                                           1
## 580
                     580
                                               Exchange Ave & 79th St
                                                                           1
## 581
                     593
                                                  Halsted St & 59th St
                                                                           1
## 582
                     648
                                                Carpenter St & 63rd St
                                                                           1
## 583
                     649
                                            Stewart Ave & 63rd St (*)
                                                                           1
                     670
## 584
                                                         MTL-EC05.1-01
                                                                           1
trips_2020_q1_with_clean_duration %>%
  filter(membership=="member") %>%
  count(start_station_id, start_station_name) %>%
  arrange(-n)
```

```
##
       start_station_id
                                                   start_station_name
                                                                          n
## 1
                                                  Canal St & Adams St 7540
                     192
## 2
                      77
                                              Clinton St & Madison St 6491
## 3
                      91
                                        Clinton St & Washington Blvd 5779
## 4
                     133
                                             Kingsbury St & Kinzie St 4456
## 5
                                            Columbus Dr & Randolph St 4050
                     195
## 6
                     287
                                              Franklin St & Monroe St 3541
                                                Canal St & Madison St 3398
## 7
                     174
## 8
                                                 Clinton St & Lake St 3384
                      66
## 9
                      48
                                           Larrabee St & Kingsbury St 3349
## 10
                      81
                                                   Daley Center Plaza 3067
## 11
                      43
                                        Michigan Ave & Washington St 3024
## 12
                     283
                                            LaSalle St & Jackson Blvd 3019
## 13
                      49
                                              Dearborn St & Monroe St 2892
## 14
                      56
                                            Desplaines St & Kinzie St 2825
## 15
                     110
                                                Dearborn St & Erie St 2813
## 16
                                               Michigan Ave & Lake St 2752
                      52
## 17
                                           Franklin St & Jackson Blvd 2737
                      36
## 18
                      53
                                                  Wells St & Huron St 2723
## 19
                     176
                                                    Clark St & Elm St 2694
## 20
                     211
                                               St. Clair St & Erie St 2606
```

		0.40		
##		212	Wells St & Hubbard St	
##		71	Morgan St & Lake St	
##		74	Kingsbury St & Erie St	
##		100	Orleans St & Merchandise Mart Plaza	
##		59	Wabash Ave & Roosevelt Rd	
##		199	Wabash Ave & Grand Ave	
##		289	Wells St & Concord Ln	
##		191	Canal St & Monroe St	
##		107	Desplaines St & Jackson Blvd	
##		51	Clark St & Randolph St	
##		638	Clinton St & Jackson Blvd	
##		18	Wacker Dr & Washington St	
##		164	Franklin St & Lake St	
##		423	University Ave & 57th St	
##		210	Ashland Ave & Division St	
##		47	State St & Kinzie St	
##		255	Indiana Ave & Roosevelt Rd	
##		69	Damen Ave & Pierce Ave	
##	39	67	Sheffield Ave & Fullerton Ave	
##	40	44	State St & Randolph St	1917
##	41	24	Fairbanks Ct & Grand Ave	1897
##	42	344	Ravenswood Ave & Lawrence Ave	
##	43	38	Clark St & Lake St	1822
##	44	58	Marshfield Ave & Cortland St	1808
##	45	142	McClurg Ct & Erie St	
##	46	331	Halsted St & Clybourn Ave	1767
##	47	111	Sedgwick St & Huron St	1735
##	48	181	LaSalle St & Illinois St	1734
##	49	84	Milwaukee Ave & Grand Ave	1724
##	50	26	McClurg Ct & Illinois St	1723
##	51	182	Wells St & Elm St	1722
##	52	31	Franklin St & Chicago Ave	1716
##	53	50	Clark St & Ida B Wells Dr	1706
##	54	134	Peoria St & Jackson Blvd	1680
##	55	300	Broadway & Barry Ave	1627
##	56	161	Rush St & Superior St	1623
##	57	320	Loomis St & Lexington St	1620
##	58	140	Dearborn Pkwy & Delaware Pl	1618
##	59	117	Wilton Ave & Belmont Ave	1609
##	60	196	Cityfront Plaza Dr & Pioneer Ct	1586
##	61	37	Dearborn St & Adams St	1577
##	62	240	Sheridan Rd & Irving Park Rd	1575
##	63	94	Clark St & Armitage Ave	1570
##	64	241	Morgan St & Polk St	1538
##	65	98	LaSalle St & Washington St	1533
##	66	198	Green St & Madison St	1527
##	67	342	Wolcott Ave & Polk St	1527
##	68	13	Wilton Ave & Diversey Pkwy	1510
##	69	125	Rush St & Hubbard St	
##		41	Federal St & Polk St	
##		264	Stetson Ave & South Water St	
	72	321	Wabash Ave & 9th St	
	73	39	Wabash Ave & Adams St	
	74	113	Bissell St & Armitage Ave	
			5	

	75	118	Sedgwick St & North Ave	
	76	672	Franklin St & Illinois St	
##	77	291	Wells St & Evergreen Ave	1357
##	78	301	Clark St & Schiller St	
##	79	127	Lincoln Ave & Fullerton Ave	1346
##	80	286	Franklin St & Adams St (Temp)	1345
##	81	340	Clark St & Wrightwood Ave	1336
##	82	426	Ellis Ave & 60th St	1334
##	83	90	Millennium Park	1323
##	84	96	Desplaines St & Randolph St	1319
##	85	420	Ellis Ave & 55th St	1318
##	86	21	Aberdeen St & Jackson Blvd	1317
##	87	75	Canal St & Jackson Blvd	1313
##	88	337	Clark St & Chicago Ave	1281
##	89	80	Aberdeen St & Monroe St	1275
##	90	304	Broadway & Waveland Ave	1261
##	91	175	Wells St & Polk St	1248
##	92	144	Larrabee St & Webster Ave	1239
##	93	173	Mies van der Rohe Way & Chicago Ave	1233
##	94	359	Larrabee St & Division St	1212
##	95	33	State St & Van Buren St	1210
##	96	89	Financial Pl & Ida B Wells Dr	1204
##	97	227	Southport Ave & Waveland Ave	1200
##	98	73	Jefferson St & Monroe St	1194
##	99	115	Sheffield Ave & Wellington Ave	1181
##	100	20	Sheffield Ave & Kingsbury St	1171
##	101	112	Green St & Randolph St	1167
##	102	332	Burling St (Halsted) & Diversey Pkwy (Temp)	1150
##	103	322	Kimbark Ave & 53rd St	1149
##	104	229	Southport Ave & Roscoe St	1136
##	105	141	Clark St & Lincoln Ave	1125
##	106	156	Clark St & Wellington Ave	1119
##	107	627	LaSalle Dr & Huron St	1117
##	108	220	Clark St & Drummond Pl	1115
##	109	273	Michigan Ave & 18th St	1109
##	110	106	State St & Pearson St	1093
##	111	194	Wabash Ave & Wacker Pl	1090
##	112	303	Broadway & Cornelia Ave	1089
##	113	145	Mies van der Rohe Way & Chestnut St	1075
##	114	108	Halsted St & Polk St	1074
##	115	109	900 W Harrison St	1074
##	116	93	Sheffield Ave & Willow St	1072
##	117	143	Sedgwick St & Webster Ave	1064
##	118	364	Larrabee St & Oak St	1062
##	119	128	Damen Ave & Chicago Ave	1054
##	120	197	Michigan Ave & Madison St	1053
##	121	54	Ogden Ave & Chicago Ave	1051
	122	177	Theater on the Lake	1050
##	123	232	Pine Grove Ave & Waveland Ave	1048
##	124	284	Michigan Ave & Jackson Blvd	1043
##	125	130	Damen Ave & Division St	1040
##	126	621	Aberdeen St & Randolph St	1040
##	127	225	Halsted St & Dickens Ave	1039
##	128	68	Clinton St & Tilden St	1034

шш	100	Clark Ct & Himmons And	1000
	129 130	325 Clark St & Winnemac Ave 85 Michigan Ave & Oak St	
	131	85 Michigan Ave & Oak St 40 LaSalle St & Adams St	
	132		
	133	168 Michigan Ave & 14th St 153 Southport Ave & Wellington Ave	999
	134	116 Western Ave & Winnebago Ave	996
	135	61 Western Ave & winnebago Ave	995
	136	72 Wabash Ave & 16th St	993
	137	158 Milwaukee Ave & Wabansia Ave	969
	138	172 Rush St & Cedar St	960
	139	349 Halsted St & Wrightwood Ave	958
	140	636 Orleans St & Hubbard St	938
	141	313 Lakeview Ave & Fullerton Pkwy	929
	142	35 Streeter Dr & Grand Ave	922
	143	87 Racine Ave & Fullerton Ave	920
	144	376 Artesian Ave & Hubbard St	915
	145	635 Fairbanks St & Superior St	911
	146	254 Pine Grove Ave & Irving Park Rd	900
	147	233 Sangamon St & Washington Blvd	889
	148	346 Sangamon St & Washington Blvd	881
	149	327 Sheffield Ave & Webster Ave	875
	150	114 Sheffield Ave & Waveland Ave	873
	151	60 Dayton St & North Ave	871
	152	299 Halsted St & Roscoe St	865
	153	219 Damen Ave & Cortland St	861
	154	99 Lake Shore Dr & Ohio St	855
	155	186 Ogden Ave & Race Ave	848
	156	55 Halsted St & Roosevelt Rd	846
	157	180 Ritchie Ct & Banks St	845
	158	157 Lake Shore Dr & Wellington Ave	841
	159	17 Honore St & Division St	837
	160	256 Broadway & Sheridan Rd	836
	161	223 Clifton Ave & Armitage Ave	833
	162	296 Broadway & Belmont Ave	833
	163	92 Carpenter St & Huron St	831
	164	138 Clybourn Ave & Division St	828
##	165	312 Clarendon Ave & Gordon Ter	826
##	166	230 Lincoln Ave & Roscoe St	824
##	167	268 Lake Shore Dr & North Blvd	822
	168	260 Kedzie Ave & Milwaukee Ave	821
	169	123 California Ave & Milwaukee Ave	820
	170	317 Wood St & Taylor St	813
	171	328 Ellis Ave & 58th St	806
	172	165 Clark St & Grace St	802
	173	345 Lake Park Ave & 56th St	785
	174	414 Canal St & Taylor St	775
	175	7 Field Blvd & South Water St	763
	176	242 Damen Ave & Leland Ave	758
	177	307 Southport Ave & Clybourn Ave	747
	178	152 Lincoln Ave & Diversey Pkwy	745
	179	374 Western Ave & Walton St	741
	180	324 Stockton Dr & Wrightwood Ave	740
	181	119 Ashland Ave & Lake St	739
	182	657 Wood St & Augusta Blvd	739
		•	

##	183	333	Ashland Ave & Blackhawk St	735
##	184	32	Racine Ave & Congress Pkwy	725
##	185	302	Sheffield Ave & Wrightwood Ave	723
##	186	29	Noble St & Milwaukee Ave	719
##	187	293	Broadway & Wilson Ave	719
	188	129	Blue Island Ave & 18th St	716
	189	4	Burnham Harbor	712
	190	624	Dearborn St & Van Buren St	709
	191	22		708
			May St & Taylor St	707
	192		rleans St & Chestnut St (NEXT Apts)	
	193	334	Lake Shore Dr & Belmont Ave	701
	194	190	Southport Ave & Wrightwood Ave	700
	195	231	Sheridan Rd & Montrose Ave	700
	196	288	Larrabee St & Armitage Ave	699
##	197	417	Cornell Ave & Hyde Park Blvd	695
##	198	131	Lincoln Ave & Belmont Ave	678
##	199	46	Wells St & Walton St	677
##	200	76	Lake Shore Dr & Monroe St	667
##	201	338	Calumet Ave & 18th St	664
##	202	248	Woodlawn Ave & 55th St	660
##	203	5	State St & Harrison St	658
##	204	217	Elizabeth (May) St & Fulton St	656
	205	19	Throop (Loomis) St & Taylor St	649
	206	463	Clark St & Berwyn Ave	648
	207	418	Ellis Ave & 53rd St	639
	208	318		633
	209	282	Southport Ave & Irving Park Rd Halsted St & Maxwell St	629
	210	30	Ashland Ave & Augusta Blvd	628
	211	626	Delano Ct & Roosevelt Rd	622
	212	188	Greenview Ave & Fullerton Ave	613
	213	239	Western Ave & Leland Ave	612
##	214	623	Michigan Ave & 8th St	612
##	215	224	Halsted St & Willow St	611
##	216	57	Clinton St & Roosevelt Rd	607
##	217	183 I	amen Ave & Thomas St (Augusta Blvd)	604
##	218	329	Lake Shore Dr & Diversey Pkwy	603
##	219	88	Racine Ave & Randolph St	599
##	220	394	Clark St & 9th St (AMLI)	594
##	221	632	Clark St & Newport St	593
	222	343	Racine Ave & Wrightwood Ave	592
	223	45	Michigan Ave & Ida B Wells Dr	582
	224	15	Racine Ave & 18th St	569
	225	261	Hermitage Ave & Polk St	566
	226	166	Ashland Ave & Wrightwood Ave	553
	227	86	Eckhart Park	551
		294		550
	228		Broadway & Berwyn Ave	
	229	3	Shedd Aquarium	549
	230	28	Larrabee St & Menomonee St	544
	231	25	Michigan Ave & Pearson St	541
	232	654	Racine Ave & Washington Blvd (*)	538
	233	146	Loomis St & Jackson Blvd	532
	234	637	Wood St & Chicago Ave (*)	532
##	235	226	Racine Ave & Belmont Ave	528
##	236	14	Morgan St & 18th St	524

##	237	305	Western Ave & Division St	522
##	238	596	Benson Ave & Church St	521
##	239	383	Paulina St & Flournoy St	519
##	240	277	Ashland Ave & Grand Ave	513
##	241	295	Broadway & Argyle St	513
##	242	214	Damen Ave & Grand Ave	512
##	243	247	Shore Dr & 55th St	507
##	244	154	Southport Ave & Belmont Ave	505
##	245	243	Lincoln Ave & Sunnyside Ave	503
##	246	350	Ashland Ave & Chicago Ave	496
##	247	622	California Ave & Cortez St	495
##	248	306	Sheridan Rd & Buena Ave	491
##	249	326	Clark St & Leland Ave	488
##	250	245	Clarendon Ave & Junior Ter	486
##	251	16	Paulina Ave & North Ave	484
##	252	234	Clark St & Montrose Ave	482
##	253	159	Claremont Ave & Hirsch St	480
##	254	23	Orleans St & Elm St	475
##	255	257	Lincoln Ave & Waveland Ave	475
##	256	341	Adler Planetarium	469
##	257	213	Leavitt St & North Ave	467
##	258	160	Campbell Ave & North Ave	460
##	259	285	Wood St & Hubbard St	457
	260	425	Harper Ave & 59th St	455
	261	148	State St & 33rd St	451
	262	460	Clark St & Bryn Mawr Ave	450
	263	237	MLK Jr Dr & 29th St	446
	264	464	Damen Ave & Foster Ave	445
	265	169	Canal St & Harrison St	444
	266	290	Kedzie Ave & Palmer Ct	444
	267	461	Broadway & Ridge Ave	441
	268	126	Clark St & North Ave	437
	269	205	Paulina St & 18th St	428
	270	137	Morgan Ave & 14th Pl	426
	271	347	Ashland Ave & Grace St	419
	272	673	Lincoln Park Conservatory	412
	273	309	Leavitt St & Armitage Ave	408
	274	659	Leavitt St & Chicago Ave	408
	275	244	Ravenswood Ave & Irving Park Rd	398
	276	604	Sheridan Rd & Noyes St (NU)	392
	277	319	Greenview Ave & Diversey Pkwy	391
	278	308	Seeley Ave & Roscoe St	387
	279	511	Albany Ave & Bloomingdale Ave	380
	280	121	Blackstone Ave & Hyde Park Blvd	378
	281		(Ravenswood) Ave & Montrose Ave	377
	282	459	Lakefront Trail & Bryn Mawr Ave	377
	283	419	Lake Park Ave & 53rd St	376
	284	163	Damen Ave & Clybourn Ave	367
	285	339	Emerald Ave & 31st St	366
	286		Milwaukee Ave & Rockwell St	363
		222		
	287	298	Lincoln Ave & Belle Plaine Ave	360
	288	258	Logan Blvd & Elston Ave	358
	289	292	Southport Ave & Clark St	355
##	290	454	Broadway & Granville Ave	354

## 291	507	Humboldt Blvd & Armitage Ave	353
## 292	310	Damen Ave & Charleston St	350
## 293	250	Ashland Ave & Wellington Ave	348
## 294	27	Larrabee St & North Ave	343
## 295	236	Sedgwick St & Schiller St	341
## 296	6	Dusable Harbor	340
## 297	251	Clarendon Ave & Leland Ave	334
## 298	523	Eastlake Ter & Rogers Ave	334
## 299	506	Spaulding Ave & Armitage Ave	333
## 300	253	Winthrop Ave & Lawrence Ave	323
## 301	493	Western Ave & Roscoe St	320
## 301	170	Clinton St & 18th St	316
## 303	639	Lakefront Trail & Wilson Ave	315
## 304	432	Clark St & Lunt Ave	311
## 305	162	Damen Ave & Wellington Ave	309
## 306	458	Broadway & Thorndale Ave	307
## 307	147	Indiana Ave & 26th St	305
## 308	275	Ashland Ave & 13th St	303
## 309	658	Leavitt St & Division St (*)	301
## 310	120	Wentworth Ave & Cermak Rd (Temp)	297
## 311	515	Paulina St & Howard St	295
## 312	149	Calumet Ave & 33rd St	292
## 313	520	Greenview Ave & Jarvis Ave	292
## 314	207	Emerald Ave & 28th St	290
## 315	97	Field Museum	284
## 316	276	California Ave & North Ave	284
## 317	184	State St & 35th St	281
## 318	462	Winchester (Ravenswood) Ave & Balmoral Ave	279
## 319	249	Montrose Harbor	278
## 320	202	Halsted St & 18th St	273
			269
## 321	323	Sheridan Rd & Lawrence Ave	
## 322	206	Halsted St & Archer Ave	266
## 323	315	Elston Ave & Wabansia Ave	265
## 324	42	Wabash Ave & Cermak Rd	260
## 325	644	Western Ave & Fillmore St (*)	260
## 326	465	Marine Dr & Ainslie St	257
## 327	311	Leavitt St & Lawrence Ave	255
## 328	605	University Library (NU)	254
## 329	499	Kosciuszko Park	253
## 330	314	Ravenswood Ave & Berteau Ave	251
## 331	246	Ashland Ave & Belle Plaine Ave	250
## 332	482	Campbell Ave & Montrose Ave	248
## 333	597	Chicago Ave & Washington St	246
## 334	259	California Ave & Francis Pl (Temp)	243
## 335	502	California Ave & Altgeld St	243
## 336	503	Drake Ave & Fullerton Ave	241
## 337	447	Glenwood Ave & Morse Ave	240
## 338	628	Walsh Park	240
## 339	451	Sheridan Rd & Loyola Ave	239
## 340	491	Talman Ave & Addison St	
## 340	491		237
иπ О / 4	007	D1:	
## 341	297	Paulina St & Montrose Ave	236
## 342	208	Laflin St & Cullerton St	234
## 342 ## 343	208 478	Laflin St & Cullerton St Rockwell St & Eastwood Ave	234 234
## 342	208	Laflin St & Cullerton St	234

##	345	406	Lake Park Ave & 35th St	233
##	346	365	Halsted St & North Branch St	232
##	347	625	Chicago Ave & Dempster St	232
##	348	185	Stave St & Armitage Ave	224
##	349	272	Indiana Ave & 31st St	224
##	350	330	Lincoln Ave & Addison St	222
##	351	505	Winchester Ave & Elston Ave	220
	352	178	State St & 19th St	219
	353	489	Drake Ave & Addison St	219
	354	504	Campbell Ave & Fullerton Ave	217
	355	34	Cannon Dr & Fullerton Ave	213
	356	150	Fort Dearborn Dr & 31st St	213
	357	475	Washtenaw Ave & Lawrence Ave	212
	358	664	Leavitt St & Belmont Ave (*)	211
	359	457	Clark St & Elmdale Ave	210
	360	655		208
	361	215	Hoyne Ave & Balmoral Ave	207
	362	481	Damen Ave & Madison St	204
	363	228	California Ave & Montrose Ave	204
			Damen Ave & Melrose Ave	
	364	62	McCormick Place	200
	365	216	California Ave & Division St	200
	366	660	Sheridan Rd & Columbia Ave	197
	367	453	Clark St & Schreiber Ave	195
	368	366	Loomis St & Archer Ave	192
	369	490	Troy St & Elston Ave	192
	370	501	Richmond St & Diversey Ave	190
	371	413	Woodlawn Ave & Lake Park Ave	188
	372	370	Calumet Ave & 21st St	183
	373	136	Racine Ave & 13th St	180
##	374	467	Western Ave & Lunt Ave	180
##	375	252	Greenwood Ave & 47th St	176
##	376	509	Troy St & North Ave	176
##	377	124	Damen Ave & Cullerton St	175
##	378	483	Avondale Ave & Irving Park Rd	175
##	379	486	Oakley Ave & Irving Park Rd	174
##	380	472	Lincoln Ave & Winona St	173
##	381	209	Normal Ave & Archer Ave	171
##	382	171	May St & Cullerton St	169
##	383	402	Shields Ave & 31st St	167
	384	354	Sheridan Rd & Greenleaf Ave	165
	385	122	Ogden Ave & Congress Pkwy	164
	386	449	Clark St & Columbia Ave	161
	387	280	Morgan St & 31st St	157
	388	666	Cherry Ave & Blackhawk St	157
	389	103	Clinton St & Polk St	156
	390	601	Central St Metra	152
	391	218	Wells St & 19th St	151
	392	382	Western Ave & Congress Pkwy	148
	393	405	Western Ave & Congress FRWy Wentworth Ave & 35th St	147
	394	656	Damen Ave & Walnut (Lake) St (*)	147
	. 1.7.+	000	namen was a mathing (rake) of (*)	141
##		267	Inles Danle Area & 17+1 C+	110
	395	267	Lake Park Ave & 47th St	146
##	395 396	381	Western Ave & Monroe St	145
## ##	395			

	399	274	Racine Ave & 15th St	137
	400	204	Prairie Ave & Garfield Blvd	134
	401	203	Western Ave & 21st St	130
	402	135	Halsted St & 21st St	129
	403	484	Monticello Ave & Irving Park Rd	129
	404	179	MLK Jr Dr & Pershing Rd	126
	405	437	Washtenaw Ave & Ogden Ave	126
	406	498	California Ave & Fletcher St	122
	407	497	Kimball Ave & Belmont Ave	121
	408	500	Central Park Ave & Elbridge Ave	121
	409	452	Western Ave & Granville Ave	118
	410	602	Central St & Girard Ave	117
##	411	351	Cottage Grove Ave & 51st St	116
##	412	471	Francisco Ave & Foster Ave	116
##	413	527	Western Ave & Howard St	116
##	414	474	Christiana Ave & Lawrence Ave	114
##	415	598	Elmwood Ave & Austin St	113
##	416	508	Central Park Ave & North Ave	112
##	417	263	Rhodes Ave & 32nd St	110
##	418	476	Kedzie Ave & Leland Ave	108
##	419	517	Clark St & Jarvis Ave	108
##	420	640	Bernard St & Elston Ave	107
##	421	496	Avers Ave & Belmont Ave	105
##	422	434	Ogden Ave & Roosevelt Rd	102
##	423	279	Halsted St & 35th St	101
##	424	631	Malcolm X College	101
##	425	525	Glenwood Ave & Touhy Ave	100
##	426	477	Manor Ave & Leland Ave	98
##	427	132	Wentworth Ave & 24th St (Temp)	96
##	428	401	Shields Ave & 28th Pl	96
##	429	348	California Ave & 21st St	95
##	430	488	Pulaski Rd & Eddy St (Temp)	95
##	431	663	Lincolnwood Dr & Central St	95
##	432	479	Drake Ave & Montrose Ave	94
##	433	641	Central Park Ave & Bloomingdale Ave	90
##	434	469	St. Louis Ave & Balmoral Ave	89
##	435	510	Spaulding Ave & Division St	88
##	436	2	Buckingham Fountain	87
	437	336	Cottage Grove Ave & 47th St	86
##	438	377	Kedzie Ave & Lake St	86
##	439	424	Museum of Science and Industry	86
	440	442	California Ave & 23rd Pl	86
	441	645	Archer (Damen) Ave & 37th St	86
##	442	335	Calumet Ave & 35th St	85
	443	416	Dorchester Ave & 49th St	85
	444	12	South Shore Dr & 71st St	82
	445	193	State St & 29th St	82
	446	492	Leavitt St & Addison St	82
	447	378	California Ave & Lake St	78
	448	385	Princeton Ave & Garfield Blvd	78
	449	470	Kedzie Ave & Foster Ave	78
	450	403	Wentworth Ave & 33rd St	75
	451	487	California Ave & Byron St	74
	452	368	Ashland Ave & Archer Ave	73
##	1 02	300	Abiliand ave & Alchel Ave	13

##	453	373	Vodgio Avo & Chicago Avo	73
	454	448	Kedzie Ave & Chicago Ave Warren Park East	73 72
	455	271	Cottage Grove Ave & 43rd St	71
	456	552	Ashland Ave & McDowell Ave	70
	457	592	Knox Ave & Montrose Ave	68
	458	600	Dodge Ave & Church St	66
	459	356	Stony Island Ave & 71st St	65
	460	410	Prairie Ave & 43rd St	62
	461	619	Keystone Ave & Fullerton Ave	61
	462	643	Smith Park (*)	60
	463	367	Racine Ave & 35th St	59
	464	480	Albany Ave & Montrose Ave	58
	465	591	Kilbourn Ave & Milwaukee Ave	58
##	466	495	Keystone Ave & Montrose Ave	57
##	467	101	63rd St Beach	55
##	468	281	Western Ave & 24th St	53
##	469	522	Bosworth Ave & Howard St	53
##	470	265	Cottage Grove Ave & Oakwood Blvd	51
##	471	355	South Shore Dr & 67th St	51
##	472	375	Sacramento Blvd & Franklin Blvd	51
##	473	415	Calumet Ave & 51st St	49
##	474	450	Warren Park West	49
##	475	466	Ridge Blvd & Touhy Ave	48
##	476	353	Clark St & Touhy Ave	47
##	477	590	Kilbourn Ave & Irving Park Rd	47
##	478	485	Sawyer Ave & Irving Park Rd	45
##	479	514	Ridge Blvd & Howard St	45
##	480	589	Milwaukee Ave & Cuyler Ave	44
##	481	262	Halsted St & 37th St	42
##	482	427	Cottage Grove Ave & 63rd St	40
##	483	519	Wolcott Ave & Fargo Ave	40
##	484	439	Kedzie Ave & 21st St	39
##	485	630	Kildare Ave & Montrose Ave	39
##	486	661	Evanston Civic Center	39
##	487	526	Oakley Ave & Touhy Ave	38
##	488	167	Damen Ave & Coulter St	36
##	489	518	Conservatory Dr & Lake St	36
##	490	558	Ashland Ave & Garfield Blvd	36
	491	11	Jeffery Blvd & 71st St	35
	492	369	Wood St & 35th St	35
	493	9	Leavitt St & Archer Ave	34
	494	422	DuSable Museum	32
	495	494	Kedzie Ave & Bryn Mawr Ave	32
	496	456	2112 W Peterson Ave	31
	497	550	Central Ave & Chicago Ave	31
	498	201	Indiana Ave & 40th St	30
	499	468	Budlong Woods Library	30
	500	411	Halsted St & 47th Pl	29
	501	412	Princeton Ave & 47th St	29
	502	599	Valli Produce - Evanston Plaza	29
	503	573	State St & 79th St	29 27
	504	662	Dodge Ave & Mulford St	27
	505	547	Ashland Ave & Pershing Rd	24
				24 24
##	506	559	Racine Ave & Garfield Blvd	24

##	507	571	Vernon Ave & 75th St	23
##	508	390	Wentworth Ave & 63rd St	22
##	509	428	Dorchester Ave & 63rd St	21
##	510	532	Austin Blvd & Lake St	21
##	511	270	Stony Island Ave & 75th St	20
##	512	445	California Ave & 26th St	20
##	513	200	MLK Jr Dr & 47th St	19
##	514	407	State St & Pershing Rd	17
##	515	535	Pulaski Rd & Congress Pkwy	17
##	516	429	Cottage Grove Ave & 67th St	16
##	517	436	Fairfield Ave & Roosevelt Rd	16
##	518	446	Western Ave & 28th St	15
##	519	594	Western Blvd & 48th Pl	15
##	520	399	South Shore Dr & 74th St	14
##	521	433	Kedzie Ave & Harrison St	13
##	522	586	MLK Jr Dr & 83rd St	13
##	523	388	Halsted St & 63rd St	12
##	524	570	Evans Ave & 75th St	12
##	525	430	MLK Jr Dr & 63rd St	11
##	526	575	Cottage Grove Ave & 78th St	11
##	527	408	Union Ave & Root St	10
##	528	421	MLK Jr Dr & 56th St	10
##	529	524	Austin Blvd & Chicago Ave	10
##	530	548	Morgan St & Pershing Rd	10
##	531	574	Vernon Ave & 79th St	10
##	532	581	Commercial Ave & 83rd St	10
##	533	595	Wabash Ave & 87th St	10
##	534	352	Jeffery Blvd & 67th St	9
##	535	398	Rainbow Beach	9
##	536	443	Millard Ave & 26th St	9
##	537	542	Central Ave & Madison St	9
##	538	544	Austin Blvd & Madison St	8
##	539	95	Stony Island Ave & 64th St	7
##	540	102	Stony Island Ave & 67th St	7
##	541	444	Albany Ave & 26th St	7
	542	531	Central Ave & Lake St	7
##	543	551	Hoyne Ave & 47th St	7
	544	553	Elizabeth St & 47th St	7
	545	572	State St & 76th St	7
	546	576	Greenwood Ave & 79th St	6
	547	440	Central Park Ave & 24th St	5
	548	441	Kedzie Ave & 24th St	5
	549	455	Maplewood Ave & Peterson Ave	5
	550	540	Laramie Ave & Madison St	5
	551	569	Woodlawn Ave & 75th St	5
	552	580	Exchange Ave & 79th St	5
	553	653	Cornell Dr & Hayes Dr	5
	554	528	Pulaski Rd & Lake St	4
	555	534	Karlov Ave & Madison St	4
	556	539	Cicero Ave & Quincy St	4
	557	549	Marshfield Ave & 44th St	4
	558	556	Throop St & 52nd St	4
	559	671	HUBBARD ST BIKE CHECKING (LBS-WH-TEST)	4
##	560	384	Halsted St & 51st St	3

561	400	Cottage Grove Ave & 71st St	3
562	431	Eberhart Ave & 61st St	3
563	435	Kedzie Ave & Roosevelt Rd	3
564	438	Central Park Ave & Ogden Ave	3
565	538	Cicero Ave & Flournoy St	3
566	554	Damen Ave & 51st St	3
567	577	Stony Island Ave & South Chicago Ave	3
568	583	Stony Island Ave & 82nd St	3
569	587	Wabash Ave & 83rd St	3
570	642	Latrobe Ave & Chicago Ave	3
571	646	State St & 54th St	3
572	647	Elizabeth St & 59th St	3
573	670	MTL-EC05.1-01	3
574	386	Halsted St & 56th St	2
575	392	Perry Ave & 69th St	2
576	395	Jeffery Blvd & 76th St	2
577	396	Yates Blvd & 75th St	2
578	409	Shields Ave & 43rd St	2
579	530	Laramie Ave & Kinzie St	2
580	533	Central Park Blvd & 5th Ave	2
581	543	Laramie Ave & Gladys Ave	2
582	545	Kostner Ave & Adams St	2
583	555	Ashland Ave & 50th St	2
584	649	Stewart Ave & 63rd St (*)	2
585	650	Eggleston Ave & 69th St (*)	2
586	391	Halsted St & 69th St	1
587	393	Calumet Ave & 71st St	1
588	536	Kostner Ave & Lake St	1
589	541	Central Ave & Harrison St	1
590	557	Seeley Ave & Garfield Blvd	1
591	560	Marshfield Ave & 59th St	1
592	563	Ashland Ave & 63rd St	1
593	567	May St & 69th St	1
594	578	Bennett Ave & 79th St	1
595	579	Phillips Ave & 79th St	1
596	584	Ellis Ave & 83rd St	1
597	585	Cottage Grove Ave & 83rd St	1
598	593	Halsted St & 59th St	1
	562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597	562 431 563 435 564 438 565 538 566 554 567 577 568 583 569 587 570 642 571 646 572 647 573 670 574 386 575 392 576 395 577 396 578 409 579 530 580 533 581 543 582 545 583 555 584 649 585 650 586 391 587 393 588 536 589 541 590 557 591 560 592 563 593 567 594 578 595 579 596 584 597 5	562 431 Eberhart Ave & 61st St 563 435 Kedzie Ave & Roosevelt Rd 564 438 Central Park Ave & Ogden Ave 565 538 Cicero Ave & Flournoy St 566 554 Damen Ave & 51st St 567 577 Stony Island Ave & South Chicago Ave 568 583 Stony Island Ave & 82nd St 569 587 Wabash Ave & 83rd St 570 642 Latrobe Ave & Chicago Ave 571 646 State St & 54th St 572 647 Elizabeth St & 59th St 573 670 MTL-ECO5.1-01 574 386 Halsted St & 56th St 575 392 Perry Ave & 69th St 576 395 Jeffery Blvd & 75th St 577 396 Yates Blvd & 75th St 578 409 Shields Ave & 43rd St 579 530 Laramie Ave & Kinzie St 580 533 Central Park Blvd & 5th Ave 581 543 Laramie Ave & Gladys Ave