



Civil Engineering Department

CE 436

Project



Parking Study

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Introduction :

The key issue in parking is a determination of how many spaces are required for a particular park, and where they should be located. These requirements lead to locally based zoning regulations on minimum numbers of spaces that need to be provided when a development is built.

Factors related to parking:

The need for parking spaces depends upon many factors, some of which are difficult to assess. The type and size of land use(s) in a development is a major factor, but so is the general density of the development environment and the amount and quality of public transportation access available.

Importance of studying parking :

Studying parking provides important criteria such as:

- Continue implementation of the Parks and Recreation Strategic System Plan through the public input process.
- Renovate, acquire, and develop park facilities through specific programs.
- Coordinate with other public and private entities in the acquisition, development and shared use of existing and/or new park and recreation facilities when in the public's best interest.
- Continue enhancement of schools, universities, and public establishments through establishing excellent parks for them.
- Accomplish improvement projects.
- Develop urban, neighborhood, and unprepared parks.
- develop, maintain, and secure parks sites to protect parks from destroying.
- Improve the efficiency and level of park maintenance through internal improvement.
- Improve the appearance of urban areas with the increased usage of modern sites and enhanced landscape planting and maintenance
- Decrease the problem of over crowdedness.

- To protect, restore and enhance the natural, scenic and cultural values of the park in an ecosystem context, and to promote public responsibility, understanding, appreciation and enjoyment of this facility.
- Enhance recreation programs for special populations.
- Cooperate with public and private agencies to encourage shared use of recreational facilities such as parks.
- Modify or establish programs to meet particular community/neighborhood needs by utilizing demographic, surveys, and program evaluations.
- to protect, restore and enhance the fundamental systems of the park by ensuring the health and diversity of its native species, habitats, landscapes and general processes.

Objectives from this study :

To calculate high – demand for time period within study period .

To calculate duration , turnover & parking load



Figure.1

(Study Group)

Identify the study area :

Study area is located next to the building of **the preparatory year** (Figure.1), which we have chosen the region is that it allows anyone to enter and stand without a permit, is any public parking , as well as the advantage of being designed in a way uniformity, Which allows the observer to see the car plate is clearly.

The parking consist of more than seven aisles , each aisle consists of 80 stalls , Because it's given the large volume we took three aisles by 242 stalls

It's type of the parking is off street (surface lot).



Figure.2(Location of the study area)

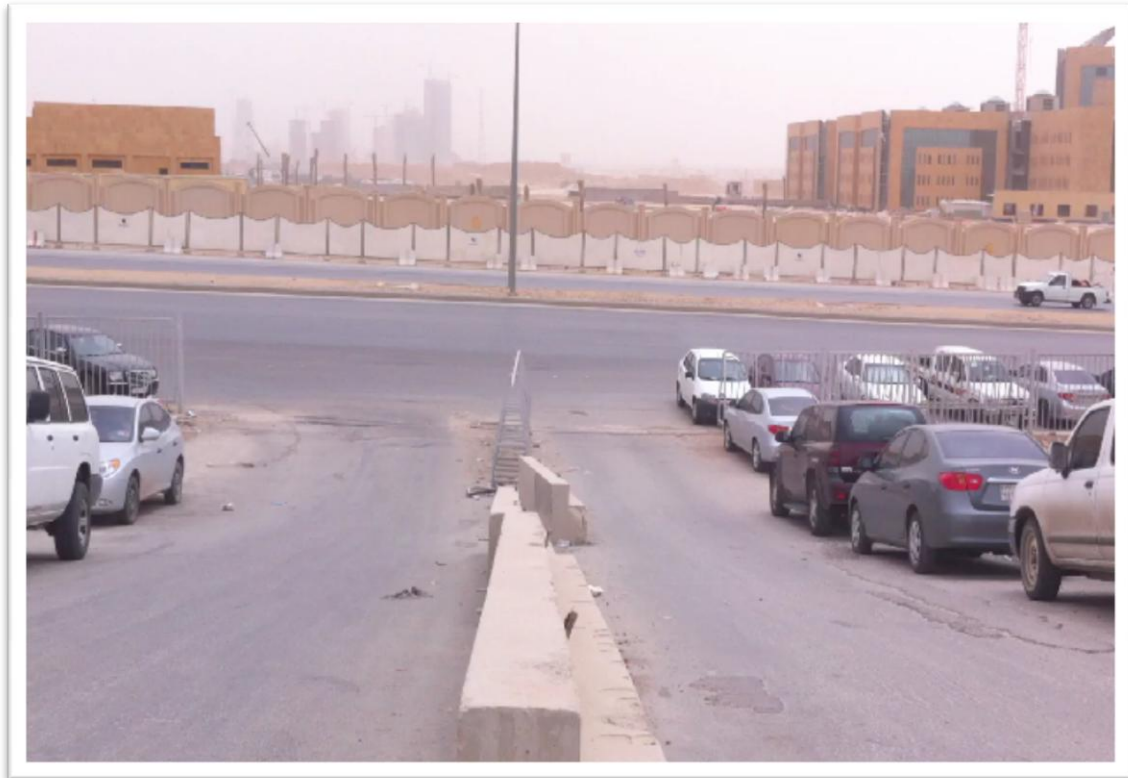


Fig.3 (parking entrance)



Fig.4 (first aisle of the parking)

Data Collection :

When data collection was the distribution of work between the Working Group is composed of 3 students, each student recorded aisle (as shown in the figure No. 2), and bearing in mind that start is equal for all as well as the end, in addition to the observer follows the same aisle at each time period , so there will be no errors in the results.

Begin the study period from 7:45 to 12:45 any length of study 5 hours, and each time period consists of one hour and forty minutes for four periods, and was numbered parking, and the observer registration plate numbers of cars on his right hand and his left on the table are numbered according to the situation, and so on for each observe and each time period (One hour and forty minutes), and recorded results in data collection sheet (Table .1)



Figure.3

(method for collection data)

Parking Study

Data Collection Form

Location : Next to preparatory Year

Observers : Mohammed ALMannaa , Meshal ALDajam ,
Mohammed ALMasned

Date : 28 /4 / 1432 H , **Time :** 7:45 – 12:45 PM , **Weather :** Sunny **Sheet** 7 to 12

Stall	Vehicles Parked			
	+100 (7:45)	+200 (9:25)	+300 (11:05)	+400 (12:45)
1	NZA	T	T	T
2	GRB	T	T	ZJH
3	TGA	T	T	T
4	BSB	T	DJA	T
5	HRB	T	T	T
6	KLL	T	T	KDS
7	XTZ	T	T	JDA
8	KGA	T	RSB	XSB
9	JUA	T	T	T
10	UTA	T	LZA	JRB
11	HNA	T	T	T
12	SZA	T	T	TZU
13	HRB	T	T	T
14	URH	T	TZU	RSB
15	LKA	T	T	T
16	RSB	T	T	RTA
17	VKH	T	T	T
18	RTA	T	T	DBA
19	ZUA	T	T	T
20	DBA	T	T	T
21	SSA	T	T	T
22	RRB	T	T	T
23	ZBB	T	T	T
24	GRB	T	T	GSB
25	UUG	T	T	T
26	JWH	T	KXB	SAA
27	HRB	T	T	ZSB
28	LZA	T	T	JRB
29	DBA	T	T	HJB
30	ZXA	T	T	ATB
31	XBA	T	JUA	-
32	KJJ	T	JRB	JVA
33	HJB	T	T	-
34	NAB	T	KJJ	-
35	JVA	T	T	T

36	SLU	T	T	T
37	JAA	T	T	T
38	BJB	T	T	T
39	EBB	T	NAB	VLU
40	ZXA	T	T	T
41	LDE	T	T	T
42	RLL	T	T	T
43	EXB	T	JRB	T
44	VDB	T	T	KNA
45	EXA	T	T	T
46	JJA	T	T	T
47	TXB	T	T	LRA
48	ATA	T	T	LTA
49	NBA	T	TXB	T
50	JXA	T	T	T
51	LNA	T	T	T
52	LBA	T	T	T
53	NRS	T	T	T
54	EKA	T	T	T
55	VSA	T	T	JAB
56	JAB	T	T	NDB
57	BXB	T	T	LFU
58	HJB	T	T	T
59	RSB	T	T	NKA
60	LHA	T	T	T
61	TSB	T	T	T
62	THN	T	GDA	T
63	KNA	T	T	T
64	JRB	T	HRB	T
65	LGE	T	T	T
66	VUA	T	T	UV
67	ZVA	T	T	T
68	SDB	T	T	T
69	LDB	T	T	T
70	ZSA	T	T	T
71	DTD	T	T	ZBB
72	RSB	T	T	T
73	HNA	T	T	T
74	LNA	T	T	T
75	ANN	T	T	KRB
76	BSB	T	T	T
77	-	BJB	T	LLL
78	JRB	T	T	T
79	-	RSB	T	T
80	ARA	T	-	VND
81	RDB	T	T	RDB
82	GAA	T	T	TXA

83	BHA	T	T	T
84	NHN	T	T	-
85	KTA	T	T	HBA
86	LDB	T	T	T
87	KVA	T	T	GSB
88	VUT	T	T	T
89	LUA	T	T	AKA
90	GZS	T	-	DAB
91	TGA	T	-	REA
92	ZSB	T	T	T
93	JKA	T	REA	T
94	RSB	T	-	KLL
95	ALA	T	JKA	T
96	JSB	T	T	T
97	HNA	T	T	T
98	RSB	T	T	T
99	HBB	T	T	T
100	EEA	T	T	T
101	HHA	T	T	T
102	JHA	T	T	T
103	DBV	T	T	T
104	HJB	T	NSB	T
105	GEA	T	T	T
106	RHA	T	T	T
107	TUA	T	T	T
108	JZU	T	T	T
109	TBA	T	T	T
110	BRE	T	-	TSB
111	UGA	T	-	DVA
112	LRA	T	T	T
113	BJB	T	T	T
114	GJB	T	T	T
115	TTA	ZUA	T	-
116	RVL	T	T	BSB
117	TEA	T	-	TTA
118	XDB	T	T	T
119	RSA	T	T	T
120	XSA	T	T	T
121	EEA	T	T	T
122	XVG	T	T	T
123	NDA	T	T	T
124	JRB	T	-	LAB
125	KHA	T	-	ZUA
126	NSH	T	T	T
127	HAD	-	HLN	T
128	ULA	T	T	T
129	NZA	T	T	T

130	ZLA	T	URB	KDA
131	RSN	T	T	KVJ
132	RTB	T	-	AXA
133	JNA	T	UNA	T
134	VSH	T	T	JUH
135	SNA	T	T	T
136	KXB	T	-	XBB
137	RSB	T	T	T
138	RSB	T	T	T
139	UAU	T	T	STA
140	JJA	T	T	RKA
141	LNA	T	T	T
142	LAB	T	-	VUA
143	KRB	T	T	T
144	VBB	T	T	T
145	DTA	T	T	JJA
146	SBA	T	T	DVZ
147	UED	T	T	T
148	KXB	T	T	BJA
149	GRB	T	T	T
150	RNN	T	T	T
151	UBA	T	T	VVA
152	KKX	T	T	JSB
153	JNA	T	T	T
154	SBJ	T	-	DNH
155	BSB	T	T	HNA
156	RJA	T		JSB
157	NXB	T	T	T
158	TUA	T	T	T
159	DAB	T	-	GSA
160	RRA	T	GTV	T
161	XBB	T	T	GEA
162	GBX	T	T	T
163	LRZ	T	T	T
164	DSA	T	HJB	T
165	HJB	T	T	T
166	ZZE	T	BRB	T
167	HXJ	T	T	T
168	JRA	AGN	ZZE	T
169	ZBB	T	T	HXJ
170	KRB	T	AGN	T
171	JEA	T	T	T
172	NDA	T	KRB	KTA
173	EXA	T	T	T
174	VDB	T	NDA	T
175	TGA	T	JJA	T
176	LDB	T	T	JRB

177	DAA	T	-	ALA
178	HEA	JBA	T	LDB
179	BSB	T	T	RRA
180	KRB	T	T	RJA
181	JUA	T	T	T
182	HLS	T	T	RRB
183	-	VJB	T	T
184	SBE	T	T	T
185	ZSB	T	T	T
186	JRB	T	T	JJV
187	LDB	T	T	T
188	XXA	T	T	BSB
189	NAB	T	T	T
190	BXB	T	T	JRU
191	501 ك	T	T	T
192	VUA	T	T H A	T
193	LZA	T	T	T
194	TKA	T	T	T
195	KAB	T	T	T
196	NRA	T	T	HAD
197	SNA	T	T	T
198	KUA	T	AYO	T
199	JKA	T	T	T
200	KHA	T	MRD	T
201	KKN	T	T	T
202	EZK	T	T	BSB
203	LDB	T	T	JRB
204	LDB	T	T	DRA
205	DAB	T	T	REA
206	BXB	T	T	T
207	TGA	T	T	T
208	REA	T	T	T
209	GRA	T	T	T
210	RSB	T	T	T
211	KUA	T	T	VTB
212	BJA	T	T	LVA
213	AZT	T	T	KUA
214	JUN	T	T	T
215	BXB	T	NZA	T
216	NZA	T	-	T
217	NHA	T	T	T
218	VHG	T	-	JSB
219	HSB	T	-	T
220	JRB	T	T	DTA
221	KVG	T	T	LGA
222	DAA	T	T	JAB
223	VXA	KVJ	T	HSB

224	NSB	T	T	DXJ
225	JJV	T	T	T
226	UAB	T	T	NDR
227	TGA	T	T	T
228	MRD	T	-	TTA
229	TKA	T	T	T
230	671 ك	T	T	T
231	ARA	T	T	TKA
232	VDT	T	SRB	T
233	VXA	T	T	T
234	REV	T	HJB	T
235	ZBB	-	GJB	T
236	-	-	GEA	T
237	LUA	T	-	-
238	ALA	T	-	RSB
239	UGA	T	T	T
240	BKU	T	HRB	T
241	JLA	T	T	RSL
242	ANB	T	-	LAB

Table.1
(Data collection sheets)

Notice for this table :

Entries should have one of three forms :

- the last digits of the license plate for vehicles first observed in a particular space .
- a Letter "T" for the same vehicle still in the space recorded on the previous .
- Dash if the space is empty .

Why we chose the period outside (10-30 minutes)?

1-Parking of a student, students usually begin their shift from eight am and 12 pm, so parking have changed very little other than if a supermarket would be a big change.

2- Book did not indicate that we have to determine the period required 10-30 minutes

3- In addition , we don't see big change in occupancy of car for parking within observation time .

Data analysis / Results :

-summarize the data :

We summarize the previous table (Table .1), so that summarize the number of vehicles that were among space during the study period, in addition to the total time for each space was busy (Table.2) . For example , Parking No. 1 stopped a one car for all the time from 7:45 - 12:45, so we say that one car was used this park for five hours (400 minutes).

Table.2 (summarize the data)

Stall	+100 (7:45)	+200 (9:25)	+300 (11:05)	+400 (12:45)	Vehicle parked	Time Used
1	1	1	1	1	1	400
2	1	1	1	1	2	400
3	1	1	1	1	1	400
4	1	1	1	1	2	400
5	1	1	1	1	1	400
6	1	1	1	1	2	400
7	1	1	1	1	2	400
8	1	1	1	1	3	400
9	1	1	1	1	1	400
10	1	1	1	1	3	400
11	1	1	1	1	1	400
12	1	1	1	1	2	400
13	1	1	1	1	1	400
14	1	1	1	1	3	400
15	1	1	1	1	1	400
16	1	1	1	1	2	400
17	1	1	1	1	1	400
18	1	1	1	1	2	400
19	1	1	1	1	1	400
20	1	1	1	1	1	400
21	1	1	1	1	1	400
22	1	1	1	1	1	400
23	1	1	1	1	1	400
24	1	1	1	1	2	400
25	1	1	1	1	1	400
26	1	1	1	1	3	400
27	1	1	1	1	2	400
28	1	1	1	1	2	400
29	1	1	1	1	2	400
30	1	1	1	1	2	400
31	1	1	1	0	2	300
32	1	1	1	1	3	400

33	1	1	1	0	1	300
34	1	1	1	0	2	300
35	1	1	1	1	1	400
36	1	1	1	1	1	400
37	1	1	1	1	1	400
38	1	1	1	1	1	400
39	1	1	1	1	3	400
40	1	1	1	1	1	400
41	1	1	1	1	1	400
42	1	1	1	1	1	400
43	1	1	1	1	2	400
44	1	1	1	1	2	400
45	1	1	1	1	1	400
46	1	1	1	1	1	400
47	1	1	1	1	2	400
48	1	1	1	1	2	400
49	1	1	1	1	1	400
50	1	1	1	1	1	400
51	1	1	1	1	1	400
52	1	1	1	1	1	400
53	1	1	1	1	1	400
54	1	1	1	1	1	400
55	1	1	1	1	2	400
56	1	1	1	1	2	400
57	1	1	1	1	2	400
58	1	1	1	1	1	400
59	1	1	1	1	2	400
60	1	1	1	1	1	400
61	1	1	1	1	1	400
62	1	1	1	1	2	400
63	1	1	1	1	1	400
64	1	1	1	1	2	400
65	1	1	1	1	1	400
66	1	1	1	1	2	400
67	1	1	1	1	1	400
68	1	1	1	1	1	400
69	1	1	1	1	1	400
70	1	1	1	1	1	400
71	1	1	1	1	2	400
72	1	1	1	1	1	400
73	1	1	1	1	1	400
74	1	1	1	1	1	400
75	1	1	1	1	2	400
76	1	1	1	1	1	400
77	0	1	1	1	2	300
78	1	1	1	1	1	400
79	0	1	1	1	1	300

80	1	1	0	1	2	300
81	1	1	1	1	2	400
82	1	1	1	1	2	400
83	1	1	1	1	1	400
84	1	1	1	0	1	300
85	1	1	1	1	2	400
86	1	1	1	1	1	400
87	1	1	1	1	2	400
88	1	1	1	1	1	400
89	1	1	1	1	2	400
90	1	1	0	1	2	300
91	1	1	0	1	2	300
92	1	1	1	1	1	400
93	1	1	1	1	2	400
94	1	1	0	1	2	300
95	1	1	1	1	2	400
96	1	1	1	1	1	400
97	1	1	1	1	1	400
98	1	1	1	1	1	400
99	1	1	1	1	1	400
100	1	1	1	1	1	400
101	1	1	1	1	1	400
102	1	1	1	1	1	400
103	1	1	1	1	1	400
104	1	1	1	1	2	400
105	1	1	1	1	1	400
106	1	1	1	1	1	400
107	1	1	1	1	1	400
108	1	1	1	1	1	400
109	1	1	1	1	1	400
110	1	1	0	1	2	300
111	1	1	0	1	2	300
112	1	1	1	1	1	400
113	1	1	1	1	1	400
114	1	1	1	1	1	400
115	1	1	1	0	2	300
116	1	1	1	1	2	400
117	1	1	0	1	2	300
118	1	1	1	1	1	400
119	1	1	1	1	1	400
120	1	1	1	1	1	400
121	1	1	1	1	1	400
122	1	1	1	1	1	400
123	1	1	1	1	1	400
124	1	1	0	1	2	300
125	1	1	0	1	2	300
126	1	1	1	1	1	400

127	1	0	1	1	2	300
128	1	1	1	1	1	400
129	1	1	1	1	1	400
130	1	1	1	1	3	400
131	1	1	1	1	2	400
132	1	1	0	1	2	300
133	1	1	1	1	2	400
134	1	1	1	1	2	400
135	1	1	1	1	1	400
136	1	1	0	1	2	300
137	1	1	1	1	1	400
138	1	1	1	1	1	400
139	1	1	1	1	2	400
140	1	1	1	1	2	400
141	1	1	1	1	1	400
142	1	1	0	1	2	300
143	1	1	1	1	1	400
144	1	1	1	1	1	400
145	1	1	1	1	2	400
146	1	1	1	1	2	400
147	1	1	1	1	1	400
148	1	1	1	1	2	400
149	1	1	1	1	1	400
150	1	1	1	1	1	400
151	1	1	1	1	2	400
152	1	1	1	1	2	400
153	1	1	1	1	1	400
154	1	1	0	1	2	300
155	1	1	1	1	2	400
156	1	1	0	1	2	300
157	1	1	1	1	1	400
158	1	1	1	1	1	400
159	1	1	0	1	2	300
160	1	1	1	1	2	400
161	1	1	1	1	2	400
162	1	1	1	1	1	400
163	1	1	1	1	1	400
164	1	1	1	1	2	400
165	1	1	1	1	1	400
166	1	1	1	1	2	400
167	1	1	1	1	1	400
168	1	1	1	1	3	400
169	1	1	1	1	2	400
170	1	1	1	1	2	400
171	1	1	1	1	1	400
172	1	1	1	1	3	400
173	1	1	1	1	1	400

174	1	1	1	1	2	400
175	1	1	1	1	2	400
176	1	1	1	1	2	400
177	1	1	0	1	2	300
178	1	1	1	1	3	400
179	1	1	1	1	2	400
180	1	1	1	1	2	400
181	1	1	1	1	1	400
182	1	1	1	1	2	400
183	0	1	1	1	2	300
184	1	1	1	1	1	400
185	1	1	1	1	1	400
186	1	1	1	1	2	400
187	1	1	1	1	1	400
188	1	1	1	1	2	400
189	1	1	1	1	1	400
190	1	1	1	1	2	400
191	1	1	1	1	1	400
192	1	1	1	1	2	400
193	1	1	1	1	1	400
194	1	1	1	1	1	400
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196	1	1	1	1	2	400
197	1	1	1	1	1	400
198	1	1	1	1	2	400
199	1	1	1	1	1	400
200	1	1	1	1	2	400
201	1	1	1	1	1	400
202	1	1	1	1	2	400
203	1	1	1	1	2	400
204	1	1	1	1	2	400
205	1	1	1	1	2	400
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207	1	1	1	1	1	400
208	1	1	1	1	1	400
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210	1	1	1	1	1	400
211	1	1	1	1	2	400
212	1	1	1	1	2	400
213	1	1	1	1	2	400
214	1	1	1	1	1	400
215	1	1	1	1	2	400
216	1	1	0	1	1	300
217	1	1	1	1	1	400
218	1	1	0	1	2	300
219	1	1	0	1	1	300
220	1	1	1	1	2	400

221	1	1	1	1	2	400
222	1	1	1	1	2	400
223	1	1	1	1	3	400
224	1	1	1	1	2	400
225	1	1	1	1	1	400
226	1	1	1	1	2	400
227	1	1	1	1	1	400
228	1	1	0	1	2	300
229	1	1	1	1	1	400
230	1	1	1	1	1	400
231	1	1	1	1	2	400
232	1	1	1	1	2	400
233	1	1	1	1	1	400
234	1	1	1	1	2	400
235	1	0	1	1	2	300
236	0	0	1	1	2	200
237	1	1	0	0	1	200
238	1	1	0	1	2	300
239	1	1	1	1	1	400
240	1	1	1	1	2	400
241	1	1	1	1	2	400
242	1	1	0	1	2	300
ACCUMULATION	238	239	219	236	374	93200
% OCCUPANCY	98.34	98.76	90.49	97.52	--	--

Table.2 (summarize data)

-Parking statistics :

Begin to analyze the data after collection and summarized in order to find the following:

1- **The parking volume** is the hourly representation of the number of vehicles using the facility during the analysis period .From Table .2 :

We can find this by adding the "vehicle parked" columns (No.6) of the data summary (table.2) and dividing by the number of hour in the observation period (5 hours)

So , **The Parking Volume** = (sum of Column .6) / (observation period)

$$= (374 / 5) = 74.8 \text{ veh / hr}$$

2-**Turnover** is the rate at which each space is used and it computed by dividing the sum of all vehicles observed by the total number of parking space .From Table.2 :

We can find this by adding the "vehicle parked" columns (No.6) and dividing by sum the number of space (column No.1).

So , **Turnover** = (Sum of column .6) / (Number of the last row of column 1)

$$= (374 / 242) = 1.55 \text{ veh per space}$$

$$= 0.3 \text{ veh/stall/hour}$$

3-**Duration** is the average time a vehicle occupies a space , and it is computed by dividing the total vehicle – hours or vehicle – minutes parked by the total number vehicles .From Table.2 :

We can find this by adding the "Time used" columns (No.7) and dividing by sum the column "vehicle parked" (No.6).

So, **Duration** = (sum of column.7) / (sum of column . 6)

$$= (93200 / 374) = 249.2 \text{ minutes per parked vehicle}$$

$$= 4 \text{ hours \& 9 minutes per parked vehicle}$$

4-Parked load is the amount of available parking actually used and is best expressed in percent . From Table.2

We can find this by the total space – hours or vehicle – minutes parked by the total space- hours or space minutes available .

So, **Parking load** = (sum of column.7) / (total space - minutes)

$$= (93200 / (400*242)) = 0.96 = 96 \%$$

Notice :

- **Parking load** allows an examination of the use of available parking from one perspective .
- A parking load of 100 % is nearly impossible to achieve , because time elapses during which vehicles search for a parking space and enter and exit spaces and lots .
- **Garber** and **hoel** , among others , suggest the average for surface lots is 85% , for garages 80% , and for on-street parking 90% . Values depend on the use of spaces as well , with employee parking load being more inclined to approach 100% than retail parking .
- In this study , the percent is very large versus with 85 % (for Garber and hoel) , because Students use parking for a long time, according to the time of work shifts extending from the beginning of the study to the end of the study , and do not go out during working hours but a few.

5- Accumulation is simply the total number of vehicles using the spaces at a particular time . From Table.2 : We can find this by sum the column 2 , 3 ,4 & 5 vehicles , versus with time 7:45 , 9 :25 , 11:05 & 12:45 respectively , we will be plotting for accumulation over time shows graphically how the parking load changes as time passes and is useful in identifying high – demand period .

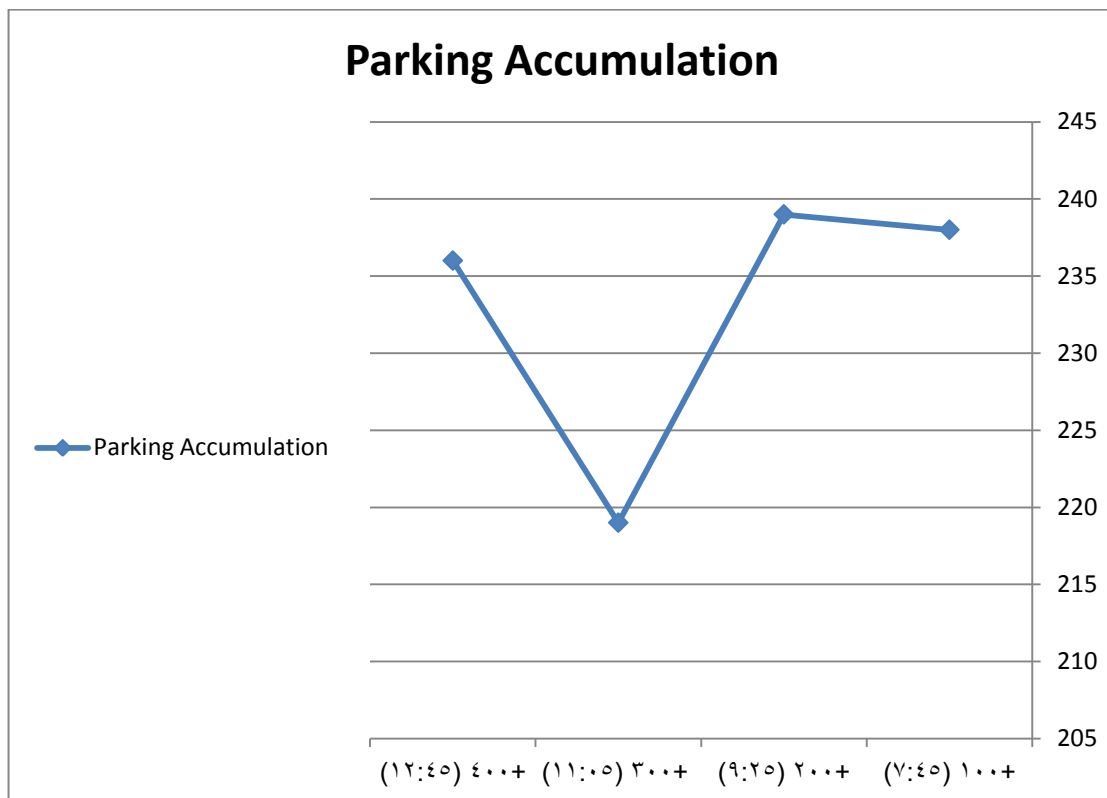


Figure.4

We notice in Fig.5 :

-at **7 :45** accumulation parked is **238** vehicles .

At **9:25** accumulation parked is **239** vehicles

At **11:05** accumulation parked is **219** vehicles

At **12:45** accumulation parked is **236** vehicles

So , at **9:25** is **high – demand period** .

Questions :

-Is the parking area fully utilized ?

No, because the parking load $\neq 100\%$, It's 96 % , but in general is almost .

-Does the parking demand appear to be satisfied ?

Yes , because Did not reach the upper limit in the parking load .

-Does the duration indicate that employees are using the area most attractive for customers ?

Here are not staff but students, so they are using the parking closest to the gate of the college, and this is evident from the study, we find that the rear lines of parking are almost empty of cars, the other hand, we find that they stop their cars to get wrong for take a distance of less!

-What does the turnover rate indicate ?

Indicates that the duration of high parking! (1.55 veh per space), where up to = 4 hours & 9 minutes per parked vehicle

-Would relocation of the access drives better utilized the parking area ?

parking are distributed correctly, we do not see that there is no need for redistribution but should emphasize the person violates the park, as well as to separate the entrance gate on the exit so that there is a bottleneck entrance at peak times, as we saw it!

-Is there one time period that exhibits a much higher demand than others? Why?

Yes , At **9:25** accumulation parked is **239** vehicles , Because Some students may be delayed and not attend the first lecture and attend the second lecture, which starts at nine in the morning

-Except for construction of new spaces , what can be done to improve parking at this location ?

As mentioned in the previous question, must be separated entrance parking for exit,

-How can video monitoring , or mobile video taping equipment , be used to improve the data collection process ?

Can sprinkle camera at the entrance to parking in addition to exit, from the beginning to the end of the day, and subtracting the number of cars entering from outside we can find the number of parking within the car in a

minute or any time we want!

In addition to the expense of time for each car entered the store the parking of the license plate number and time of entry and exit as well as when you calculate the time, so we can create parking for the accuracy of all!

Conclusion :

We find that during this study, the rate of car parking is high! , and due to the work shifts that start from the beginning to the end of the study, in addition to the high .Turnover , which means that parking the car was high .

Demand reaches its peak at nine o'clock, and due to that students may fall behind .they can not attend the first lecture and attend the second lecture at nine clock .

As well as the parking not filled with full, bringing the Park to a valley to less than 100%, which means that the parking of car-free addition to the rear lines, and we believe that it is unnecessary to create new parking , and sufficiency of such stances .improvement, and development of entrance and where it is given