

Fifteen-minute daycare arrival worksheet

Paper simulation of demand, not an approved traffic plan, parking entitlement or authorized queue. Use anonymous codes only. Four-minute handovers below are invented assumptions, not a safe-time standard.

Reproduce the example

Window: 8:00-8:15. Minute 0 means 8:00. Interval includes arrival, excludes departure. Three lawful usable general-family positions are assumed available throughout; no initial vehicles. Departures at a minute happen before arrivals at that minute. Actual turning/clearance time may require additional allowance.

Car	Baseline arrival minute	Baseline departure minute	Adjusted arrival	Adjusted departure
A	0	4	0	4
B	0	4	0	4
C	1	5	1	5
D	2	6	4	8
E	5	9	5	9
F	6	10	6	10
G	7	11	8	12
H	10	14	10	14
I	11	15	11	15

Each column below represents the minute beginning at that number. Count a car if arrival $\leq$ minute $<$ departure.

Minute starting	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
Baseline demand	2	3	4	4	2	2	2	3	3	2	2	2	2	2	1
Available positions	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Baseline shortfall	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Adjusted demand	2	3	3	3	2	2	3	3	3	2	2	3	2	2	1
Adjusted, 5-min stay	2	3	3	3	4	3	3	3	4	3	3	3	3	2	2

Baseline total demand = $9 \times 4 = 36$ stall-minutes. Available = $3 \times 15 = 45$. Average = $36 / 45 = 80\%$; peak demand = 4, so average below 100% does not establish fit. Shortfall = $\max(0, \text{demand} - \text{available})$ at each minute. Baseline exceeds availability during two one-minute intervals; this is not two distinct extra cars or a prediction of queue length.

Moving only D to minute 4 still gives peak 4 at minute 7. Moving D and G as shown reduces peak to 3 under the four-minute assumption. Five-minute stays restore peak 4; I then leaves at minute 16, outside this displayed window. Do not mistake the truncated display for the whole five-minute service demand. Extend observation when vehicles remain at the end.

If a neighbour occupies one genuinely shared position throughout, availability becomes 2: baseline peak shortfall $4 - 2 = 2$. Do not deduct a neighbour from dedicated positions without a basis, or assume all shared positions belong exclusively to the daycare.

Apply it to your property

Date / morning or afternoon window: _____

Rights evidence and permitted hours: _____

Positions excluded for staff, accessibility, loading, fire access or unavailable rights: _____

Initial occupancy at the start: _____

Anonymous code	Arrival time	Departure time	Actual usable position / relevant conflict

Draw one column per minute and mark every vehicle interval, including vehicles already present. Separately record usable available positions each minute after other lawful users. Count demand and calculate positive shortfalls; never treat a driveway queue as extra capacity. Include manoeuvring allowance if needed, and extend the window until remaining vehicles depart.

Observed peak / available at that moment: _____ / _____

Pedestrian, reversing, visibility or handover concern: _____

Proposed change / permission required: _____

Repeat test with a longer stay and neighbouring demand: _____

Remaining limitation and acquisition decision if change is not approved: _____