Nottinghamshire County Council

Part IV: Parking and Servicing
Chapter 2: Commercial

Updated 15/4/26

2.1 Purpose and Status

2.1.1 This chapter provides comprehensive highway design guidance for commercial parking provision for all commercial use classes. It is intended to support consistent decision-making and robust scheme design, ensuring that parking provision remains safe, functional, and appropriate throughout the lifetime of development.

2.1.2 The guidance reflects established expectations within national planning and transport policy, recognised design principles, and prevailing local authority practice, without reliance on prescriptive numerical standards. Where indicative figures are provided, they are screening references for early validation only and do not represent minimums, maximums or targets.

2.1.3 It is intended to be used as technical guidance to inform the Highway Authority's assessment of highway safety and network operation. It does not introduce policy tests beyond those contained in Development Plans and national policy.

2.2 Policy and Design Context

2.2.1 Development proposals should provide parking arrangements that support the safe and efficient operation of the highway network, enable appropriate access for all users, and avoid adverse impacts arising from unmanaged or displaced parking.

2.2.2 Parking provision should be proportionate to the nature and intensity of the development, responsive to site accessibility, and capable of adapting to reasonable changes in how premises may operate over time. Accessibility should be evidenced proportionately, having regard to the availability, safety and convenience of walking, cycling and public transport options and the realistic ability of users to rely on them.

2.3 General Principles for All Commercial Development

Parking Typologies

2.3.1 Commercial parking provision should be clearly structured and make adequate provision for:

- operational parking necessary for the day-to-day functioning of the use,
- staff parking,
- visitor or customer parking,
- servicing, deliveries, and refuse collection,
- inclusive parking provision (including disabled bays) and provision for EV charging, cycle parking and safe drop-off/pick-up where relevant to the use.

Inadequate provision for operational or servicing needs is likely to give rise to highway safety or efficiency concerns.

Anticipating Change of Use and Operational Flexibility

2.3.2 Parking layouts should be designed with sufficient flexibility to accommodate reasonable variations in parking demand that may arise from changes in occupation or operating characteristics that could lawfully occur over time within the planning unit. Proposals that are overly dependent on a single low-demand operating scenario are unlikely to be considered robust. “Reasonable variations” include changes in operator, hours, staffing models and lawful changes in the nature of activities within the same use class.

2.4 Calculating Parking Demand, Linked Trips, Shared Parking and Operational Resilience

Indicative Starting Ratios for Initial Validation (Indicative Only)

2.4.1 To support early scoping and proportionality at the earliest stages of scheme design and application validation, the Highway Authority may have regard to the following indicative starting checks in Table 2.1. These are provided solely as a high-level reference point to support early scoping and proportionality checks.

2.4.2 The starting checks in Table 2.1 do not represent parking standards, minimums, or requirements. They should not be applied mechanistically and do not replace the need for a site-specific, evidence-led assessment in accordance with the remainder of Part IV Chapter 2 of this guidance. Proposals are expected either to be broadly consistent with these starting checks or to justify any divergence through robust evidence addressing demand calculation, peak accumulation, dwell time, shared parking, linked trips, operational headroom and resilience.

2.4.3 The level of parking assessment required under this chapter is dependent on scheme scale and risk. Development below the thresholds requiring a Transport Statement or Transport Assessment may apply proportionate and simplified evidence (Section 2.4.12). Development at or above those thresholds is expected to follow the evidence-led, peak accumulation methodology set out in Sections 2.4.14 onwards

2.4.4 The purpose of these ratios is not to define appropriate parking provision, but to provide officers and applicants with a common initial reference point for proportionality and scoping, recognising that the final quantum of parking should always flow from evidence-led peak demand testing. Floorspace-based screening checks can be misleading where operational models drive demand; operational inputs should take precedence.

Floorspace Metrics and Parking Ratios: Use of GFA and GIA

2.4.5 This section explains how Gross Floor Area (GFA) and Gross Internal Area (GIA) should be interpreted and reconciled for the purposes of parking and servicing assessments, and how external retail, storage and yard areas are to be addressed within the context of this chapter.

Parking ratio convention

2.4.5.1 For the purposes of this Highway Design Guidance, parking provision is calculated and assessed using Gross Floor Area (GFA). Where floorspace is expressed in GIA, an appropriate conversion shall be undertaken so that parking ratios are applied on a like-for-like GFA basis.

Definitions and measurement assumptions

2.4.5.2 GFA is used as a headline measure of development scale and is typically understood to represent floorspace measured to the external face of the building envelope. GIA refers to internal area measured to the internal face of external walls. Applicants must state clearly how floorspace has been measured and reconciled.

Relationship between GFA and GIA

2.4.5.3 In most circumstances GFA will exceed GIA. Direct substitution of GIA for GFA based parking ratios, without appropriate conversion, will typically result in under-provision and will not normally be accepted.

Conversion expectations

2.4.5.4 Where GIA is provided, applicants shall convert to a GFA-equivalent figure using scheme-specific measurement in preference to generic allowances. Indicative allowances may be used only where this is not reasonably practicable and shall not be relied upon where scheme-specific measurement is readily achievable.

Indicative allowances and sensitivity testing

2.4.5.5 Indicative differences commonly fall in the range of approximately 5–15%. Where outcomes are sensitive to the assumed conversion, additional evidence will normally be required.

Application to parking calculations

2.4.5.6 Once a GFA or GFA-equivalent has been established, parking provision shall be calculated in accordance with this chapter. Rounding should not increase operational risk.

Decision-making approach

2.4.5.7 Where floorspace treatment is ambiguous or inconsistent, conservative assumptions may be applied or the assessment may be treated as incomplete.

Treatment of External Retail, Storage and Yard Areas

2.4.6 Parking ratios within this guidance are expressed in GFA. However, many commercial developments include external areas that fall outside conventional GFA measurement, but which may generate material parking, servicing or operational demand. External areas that may require consideration include external retail sales areas (such as garden centres), builders' merchants and trade counters with open yards, external storage or display areas, plant or vehicle sales areas, and seasonal or temporary external sales spaces. External areas should not be automatically included within, or excluded from, GFA. Assessments should distinguish clearly between enclosed GFA used for ratio application and external operational areas that influence demand. The determining consideration is whether the external area materially affects peak parking accumulation.

2.4.7 Where external areas are customer-accessible and form an integral part of the commercial offer, parking demand associated with those areas must be reflected within the assessment. Reliance solely on enclosed GFA-based ratios without adjustment is unlikely to be robust where external sales activity is material. Where lower parking demand is asserted for external retail areas relative to enclosed floorspace, this should be supported by proportionate evidence such as operational data, comparable sites or sensitivity testing. Unsupported assumptions will be given limited weight. For builders' merchants, storage yards and trade-focused uses, parking demand is often driven by staffing, trade customers, delivery and collection activity, and fleet parking rather than floorspace. External yard or storage areas should therefore be addressed through operational demand assessment rather than notional conversion to GFA.

2.4.8 For hybrid sites combining enclosed floorspace with substantial external areas, applicants should apply GFA-based ratios only to the enclosed component for initial screening, and supplement this with an evidence-led assessment demonstrating that combined internal and external activity can be accommodated safely and efficiently on site at peak. Assessments should include a clear schedule of enclosed GFA and significant external areas by function, together with a narrative explaining how each component has been treated. Where this is unclear or unsupported, conservative assumptions may be applied.

2.4.9 Nothing in this section establishes minimum or maximum parking provision; it clarifies how external activity should be accounted for within the evidence-led demand assessment set out elsewhere in this chapter.

Table 2.1 Indicative starting checks (for early validation only)

Use	Spaces / m^2 (GFA unless otherwise stated)	Initial screening floor (not a requirement)
Food retail	One space / 14m^2 ≥100m^2	Typically, 4 spaces / Unit
Non-food retail inc. financial and professional services	One space / 20m^2 ≥100m^2	Typically, 4 spaces / Unit
Offices	Urban town* centre or edge of centre; One space / 60m^2	Typically, 2 spaces / Unit
	Rest of Urban town*; One space / 35m^2	
	Rural town centre or edge of centre; One space / 40m^2	
	Rest of rural town; One space / 30m^2	
	Out of any town; One space / 30m^2	
Light and general industry	Urban town* centre or edge of centre; One space / 130m^2	Typically, 2 spaces / Unit
	Rest of urban town*; One space / 80m^2	
	Rural town centre or edge of centre; One space / 90m^2	
	Rest of rural town; One space / 65m^2	
	Out of any town; One space / 55m^2	
	Demand typically driven by staff numbers, shift patterns and servicing. An initial check may be used as a screening proxy, but validation submissions should also state: • peak staff presence; and • shift overlap and servicing demand. Operational inputs should take precedence where they conflict with a floorspace-based estimate.	
Storage and distribution	Urban town* centre or edge of centre; One space / 300m^2	Typically 2 spaces / Unit
	Rest of urban town*; One space / 180m^2	
	Rural town centre or edge of centre; One space / 200m^2	
	Rest of rural town; One space / 150m^2	
	Out of any town; One space / 120m^2	
	Urban town* centre or edge of centre; One space / 300m^2	
	Demand driven primarily by fleet size, staff presence and shift overlap; floorspace-based starting points can be misleading.	

Use	Spaces / m^2 (GFA unless otherwise stated)	Initial screening floor (not a requirement)
	Where a numeric starting check is required, for initial screening only, provision must be validated by: • fleet type and scale (cars, vans, HGVs), • staff numbers and shift overlap, • delivery/dispatch patterns, and tested at peak.	
Restaurants, cafés	1 space per 5m^2 of public area plus 1 space per 2 f/t equivalent staff members	Typically, 2 spaces / Unit
Public houses, licensed private members clubs	1 space per 2.5m^2 of net bar area plus 1 space per 2 f/t equivalent staff members	Typically, 2 spaces / Unit
Pub restaurants	1 space per 10m^2	Typically, 2 spaces / Unit
Take-away hot food shops (excluding fast food drive-thru restaurants)	1 space per 5m^2 of public area plus 1 space per 2 f/t equivalent staff members	Typically, 2 spaces / Unit
Food & Drink - Fast food drive-thru restaurants	1 space per 8m^2	Typically, 2 spaces / Unit
	In addition to parking, assessments must demonstrate adequate on-site stacking/queuing so that vehicles do not queue onto the public highway.	
Residential care homes and nursing homes excluding secure residential institutions	1 space per 3 bedrooms + 1 space for each member of staff (maximum number of staff on-site at one time) Note: changes in the nature of care provision may require separate planning consideration; assumptions should be tested against reasonably foreseeable lawful operation.	Typically, 2 spaces
Surgeries and clinics (doctors, dentists, vets, etc.)	One space / member of staff plus two spaces / consulting room and include appropriate drop-off / pick-up and patient transport provision where relevant.	N/A
Crèche, day nursery	One space / two members of staff plus one space / six children	Typically, 2 spaces
Cinemas, conference facilities, concert halls, theatres, and other seated spectator facilities	One space / five seats	N/A
Dance halls, nightclubs, indoor play areas	One space / 22m^2	N/A
Stadia	One space / 15 seats plus coach parking	N/A
Swimming pools, health clubs, gymnasia	One space / 10m^2 of public area	N/A

Use	Spaces / m^2 (GFA unless otherwise stated)	Initial screening floor (not a requirement)
Schools	See Part IV Chapter 3 New Schools & School Extensions	
Higher and further education	One space / two staff plus one space / 15 students	N/A
Vehicle fuel filling and EV charging facilities	Demand determined largely by dwell time, stacking and queuing rather than traditional parking ratios. Initial validation should focus on: • sufficient on-site stacking and circulation, • preventing queuing onto the public highway, having regard to expected dwell times and any ancillary activity, and • fault/maintenance downtime. EV charging provision should be assessed primarily on dwell time, queuing risk and fault tolerance, recognising that individual bays may remain occupied for extended periods and therefore function more like long-stay parking.	

Note: For the purpose of screening checks only, 'town centre' and 'edge of centre' follow the Local Plan definitions.

***Urban towns – Nottinghamshire**

Arnold, Beeston, Carlton, Hucknall, Stapleford, West Bridgford, Eastwood, Kimberley, Mansfield, Mansfield Woodhouse, Warsop, Sutton-in-Ashfield, Kirkby-in-Ashfield. Everywhere else should be categorised as rural towns.

Use of the starting checks

2.4.10 Where initial validation against these starting checks suggests provision that is materially higher or lower than is typical, this does not of itself indicate acceptability or harm. The determining consideration remains whether the proposed parking capacity and layout operate safely and efficiently under realistic peak and sensitivity conditions, in accordance with the remainder of Part IV Chapter 2.

2.4.11 The indicative starting checks above are intentionally broad. When moving beyond initial validation, proposals should normally demonstrate how demand has been calculated and tested at peak, including dwell time, turnover, staff numbers, servicing activity, and any shared-parking or linked-trip assumptions.

Food vs non-food retail

2.4.11.1 Food retail typically has higher trip frequency and shorter dwell times, whereas non-food retail often has longer dwell times and more dispersed demand. These differences should be reflected in peak accumulation testing.

Food & drink typologies

2.4.11.2 Sit-down restaurants/cafés, pubs/bars, and takeaways can have materially different peaks, dwell times and delivery activity. Treat them separately at validation stage and test overlap with nearby evening uses. Floorspace-based starting checks for food and drink uses should be treated cautiously where operational models, delivery platforms, or late-night trading materially influence parking demand.

Health and childcare

2.4.11.3 Appointment overlap (health) and sharp set-down/pick-up peaks (childcare) can drive short periods of very high demand. Average demand assumptions can understate peak effects.

Industrial and logistics

2.4.11.4 B2 and B8 demand is frequently determined by staffing, shift overlap, fleet parking and servicing rather than floorspace. Floorspace ratios should be treated as secondary checks only.

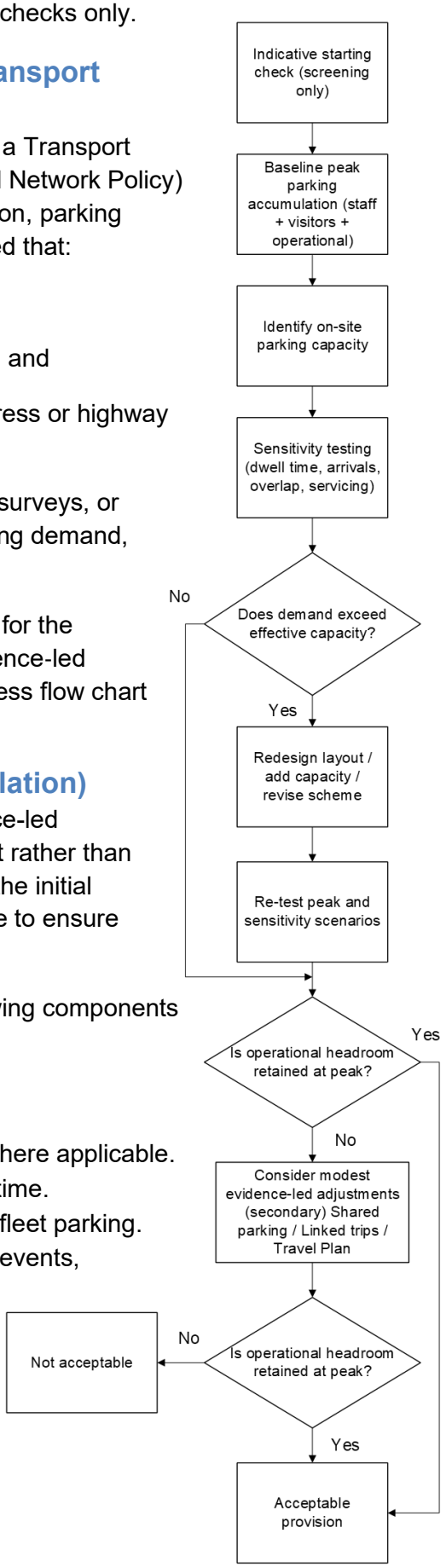
Parking Provision for Sub-Threshold Development (No Transport Statement Required)

2.4.12 For development proposals that fall below the thresholds requiring a Transport Statement or Transport Assessment (as set out in Part 1, Chapter II Road Network Policy) or otherwise agreed in pre-application discussions at the time of submission, parking provision may be derived using simplified numerical expectations, provided that:

- safe and suitable access can be achieved,
- adequate servicing and refuse arrangements are provided on-site, and
- the proposals would be unlikely to give rise to on-street parking stress or highway safety concerns.

Proportionate evidence such as site observations, short-duration parking surveys, or comparison with genuinely similar sites may be used to inform peak parking demand, provided limitations are clearly acknowledged.

2.4.13 Where a development exceeds the Transport Statement threshold for the relevant land use, parking provision should be determined using the evidence-led approach set out in Sections 2.4.14 to 2.4.37 of this chapter and the process flow chart to the right.



Calculating Parking Demand (Evidence-led, Peak Accumulation)

2.4.14 Parking demand should be calculated using a transparent, evidence-led approach that reflects the realistic operation of the proposed development rather than theoretical minimum scenarios. Demand assessment should inform both the initial parking provision and whether sufficient operational headroom is available to ensure safe and reliable day-to-day functioning.

2.4.15 Parking demand assessments should ordinarily consider the following components separately before being combined into a total peak parking accumulation.

Demand components (to be assessed separately):

- Staff demand at peak on-site attendance, including shift overlap where applicable.
- Visitor or customer demand based on realistic turnover and dwell time.
- Operational and servicing activities, including delivery drivers and fleet parking.
- Allowance for atypical but foreseeable conditions such as training events, maintenance activity, seasonal peaks, or temporary staff increases.
- Where relevant to the use, demand from taxis, private hire vehicles, coaches, and patient transport should be assessed in terms of stopping, dwell time, and interaction with parking and servicing.

Where disabled parking provision forms a material proportion of the on-site supply, assessments should demonstrate that designated spaces remain available at peak periods and are not routinely displaced by general parking demand. Demand should be expressed and tested against peak accumulation rather than average daily demand. Assessments based solely on average conditions or idealised compliance are unlikely to provide a robust basis for judging operational performance or highway impacts.

Proportionality of evidence

2.4.15.1 The level of evidence provided should be proportionate to the scale, location and operational risk of the development. In all cases the evidence must be sufficient to demonstrate that forecast peak parking accumulation, including reasonable sensitivity tests, can be accommodated safely and efficiently on-site without giving rise to operational failure or adverse highway impacts.

Operational data (preferred where available)

2.4.15.2 The most robust evidence is that which reflects how the development will actually operate. Where available, submissions should provide operational inputs including: maximum on-site staffing at peak, shift patterns and overlap, opening hours, delivery and servicing schedules (including refuse), and any fleet requirements (vehicle numbers and types, and whether vehicles remain on-site or turn over). Where operational inputs conflict with floorspace-based proxies, operational evidence should take precedence.

Visitor/customer demand: arrivals, dwell time and turnover

2.4.15.3 For visitor- or customer-led uses, parking demand should be derived from realistic arrivals and dwell time assumptions translated into spaces occupied at any one time and expressed as a peak accumulation profile over the busiest period. Evidence should identify the assumed peak window(s), arrival rates, dwell time distributions (not just averages), and any factors likely to influence dwell time (e.g. booking/appointment patterns, ancillary services, evening trading, platform delivery activity). Assertions of “short stay” or “high turnover” should be supported by quantified dwell time evidence.

Comparable site evidence (triangulation and sense-checking)

2.4.15.4 Comparable site evidence may be used to support or sense-check assumptions where bespoke operational data is not available. Comparators should be genuinely similar in use type, scale, catchment and accessibility, and should operate under broadly comparable parking constraints and management arrangements. The submission should explain why the comparator is relevant and how any differences have been accounted for. Generic case studies or non-comparable examples are unlikely to justify meaningful reductions in peak accumulation.

Local observation and proportionate surveys

2.4.15.5 For smaller development, or where appropriate as a supplementary input, proportionate local evidence may include short-duration parking beat surveys, direct observation of turnover and dwell behaviour at relevant peak times, and photographic/time-stamped logs. Where used, the survey scope, dates, weather/seasonality, and limitations should be stated, and the results should be applied to peak accumulation testing rather than relied upon as a standalone indicator of acceptability.

Atypical but foreseeable conditions (regular variability)

2.4.15.6 Assessments should explicitly address atypical but foreseeable demand conditions that can materially affect peak accumulation, such as seasonal peaks, temporary staff uplift, training events, maintenance activity, sales/promotions, or known peak trading periods. Such conditions should be incorporated into the accumulation assessment or tested as sensitivity scenarios where their frequency is lower, but the operational consequences of exceedance are high. Assessments should have regard not only to the notional layout at

opening but to foreseeable operational encroachment over time, including temporary storage, waste containment, and minor layout erosion, which can materially reduce effective parking space.

Sensitivity testing (expected in most cases)

2.4.15.7 At least one sensitivity test should ordinarily be provided to demonstrate that the development remains functional under less favourable but realistic conditions without reliance on overspill to the public highway. Sensitivity tests should be targeted at the key drivers of peak accumulation and may include: a modest uplift in arrivals, longer dwell times, higher staff presence/shift overlap, overlapping servicing activity, or reduced linked-trip/shared-parking effects where applicable. Where sensitivity testing indicates routine near-capacity operation, queuing, circulation failure, or overspill to the highway, the assumptions should be revised or the design/management measures strengthened.

Evidence that will typically be given limited weight

2.4.15.8 The following will not normally provide a robust basis for judging peak parking accumulation or operational performance when relied upon in isolation: average daily demand without peak accumulation analysis; theoretical minimum or idealised compliance scenarios; unqualified assertions that demand will be "managed" without demonstrating operational capacity; and reliance on general on-street or public parking without defined allocation, demonstrated peak-time availability, enforceability and long-term security.

Table 2.2 Example Parking Accumulation Table (Illustrative)

Assumed busiest period: Weekday 12:00–14:00

On-site parking supply: 45 spaces (including disabled bays)

Time	Staff on-site	Visitor / customer spaces occupied	Operational / servicing vehicles	Total spaces occupied	Notes
11:30	18	12	2	32	Pre-peak conditions
12:00	20	18	3	41	Demand rising
12:30	22	22	3	47	Approaching capacity
13:00 (Peak)	22	24	3	49	Peak accumulation
13:30	21	22	2	45	Capacity regained
14:00	20	16	2	38	Demand falling

Interpretation

- Unadjusted peak accumulation: 49 spaces at 13:00
- On-site capacity: 45 spaces
- Outcome: Peak demand exceeds supply, indicating insufficient operational headroom without design or management changes.

Operational Headroom and Resilience (Capacity that Works in Practice)

2.4.16 Commercial parking provision should incorporate an appropriate level of operational headroom to ensure that sites can function safely and effectively under a range of foreseeable conditions. Parking provision that regularly operates at or close to maximum theoretical capacity is unlikely to be resilient in practice and may give rise to congestion, unsafe manoeuvres, or displacement onto the public highway.

2.4.17 Operational headroom refers to the additional on-site parking capacity or spatial flexibility required to accommodate day-to-day variation in demand. Resilience is the ability of the parking layout to continue to function safely where demand increases or operational patterns change over time, including changes in

staffing models, customer behaviour, dwell time, and vehicle technology. There is no single quantum of operational headroom that will be appropriate in all cases; the adequacy of headroom must be judged by reference to use type, turnover, circulation characteristics, servicing interaction, and the consequences of occasional exceedance. Where layouts rely on flexibility rather than fixed capacity, proposals should demonstrate how spaces can be re-purposed without compromising circulation or safety at peak demand.

2.4.18 The determining consideration remains whether the proposed parking capacity and layout function safely and efficiently under realistic peak and sensitivity conditions.

In assessing operational headroom and resilience, consideration should be given to the following matters:

- Reasonable worst-case parking accumulation rather than average demand.
- The consequences of occasional exceedance of predicted demand.
- The ability of the site to manage queuing and circulation internally.
- Opportunities for re-purposing or re-configuring parking space where demand evolves.
- The interaction between car parking, servicing activity, and pedestrian movement.

Evidence-led Linked-Trip Assumptions (Adjacent Uses and Shared Parking)

2.4.19 Where a development sits alongside other commercial premises, it may be appropriate to consider whether some vehicle visits are linked trips (i.e. one parking event serving more than one destination). Any adjustment to the baseline parking assessment should be modest, clearly evidenced, and proportionate to the nature of the use, location and user profile.

Definition (what counts as a linked trip)

2.4.19.1 A linked trip is a single vehicle visit where the same vehicle parks once and the occupant visits two or more nearby destinations on foot without moving the vehicle. The relevant measure is parking events avoided, not pedestrian movement or footfall between units.

Linked trips do not include:

- visits where a vehicle re-parks elsewhere between destinations, or
- assumed “pass-by” convenience without evidence of actual linked parking behaviour.

Establish the baseline first (no discount until the unadjusted peak is clear)

2.4.19.2 Linked-trip assumptions should only be applied after a baseline assessment has been completed, comprising unadjusted peak parking accumulation for each use (staff + visitors/customers + operational/servicing) and a combined peak profile where multiple uses share a supply. Discounts that are built into the baseline, or that rely on average demand rather than peak accumulation, are unlikely to be robust.

Tests of plausibility (is linked-trip behaviour likely here?)

2.4.19.3 A linked-trip allowance will only be considered where the following are demonstrated:

- Functional complementarity between uses – linked trips are more plausible where uses are complementary rather than unrelated or competing.
- Proximity and pedestrian connectivity – destinations must be within a genuinely convenient walking distance and connected by safe, direct, legible and attractive pedestrian routes.
- Overlapping operating hours and peak periods – there must be meaningful overlap in opening hours and evidence that linkage aligns with peak parking accumulation.
- Trip purpose and dwell time – short-stay discretionary visits are more likely to link than appointment-based or long-stay activities.

Linked trips that occur outside peak parking accumulation should carry limited weight in reducing peak demand.

Evidence expectations (proportionate to scale and risk)

2.4.19.4 Evidence should be proportionate, but should normally include one or more of the following:

- local observation of parking behaviour and turnover in comparable nearby areas,
- comparable site evidence (genuinely similar in use mix, scale, catchment and parking arrangement),
- operational analysis (opening hours, likely dwell time, customer turnover and staffing patterns) supported by a clear narrative and sensitivity tests.

Generic assumptions or non-comparable case studies are unlikely to justify meaningful reductions.

How discounts will be judged (and the “typically modest” principle)

2.4.19.5 Any linked-trip discount must be clearly explained, applied conservatively, and tested against peak accumulation. As a general expectation, linked-trip discounts should be typically modest. More substantial discounts are unlikely to be supported unless the evidence demonstrates strong functional linkage, excellent pedestrian connectivity, clear overlap with peak accumulation, and robust sensitivity testing showing the site remains functional if linkage is lower than expected.

Discounts will be treated cautiously where they depend on:

- continued operation of neighbouring uses (unit churn risk),
- a specific operator model, or
- perfect user behaviour and management.

Explicit link to shared-parking scenarios (and avoiding “double counting”)

2.4.19.6 Where a shared parking supply is proposed (one parking stock serving multiple units/uses), linked trips should be treated as a subset of shared-parking behaviour and must be assessed within the shared-parking accumulation model.

In shared-parking scenarios, the assessment should:

- identify all uses drawing on the shared supply (including reasonably foreseeable lawful alternative operations),
- test each use’s peak accumulation and the combined total with realistic peak overlap,
- demonstrate that servicing/loading does not erode effective capacity at peak, and
- show how allocation, enforcement, short-stay controls and pedestrian routes support safe and efficient operation.

Linked-trip allowances must not be used to remove the operational headroom necessary for day-to-day variability. Where resilience depends on linked trips occurring consistently, the design is unlikely to be robust.

Relationship between linked trips, dwell time and shared-parking overlap

2.4.19.7 In shared-parking scenarios, the effect of linked trips must be assessed in conjunction with realistic dwell times. Linked-trip behaviour will only reduce peak parking demand where the duration of stay allows a single parking event to serve multiple uses *within the same peak accumulation period*. Where dwell times are long, or where vehicles typically remain parked across consecutive activity peaks, linked-trip assumptions are unlikely to result in a material reduction in effective peak demand.

2.4.19.8 Linked-trip discounts should therefore only be applied where it can be demonstrated that dwell time, operating hours and peak demand profiles align such that parking spaces are genuinely released and re-used during the peak period, rather than remaining occupied throughout. Where shared parking capacity relies on vehicles vacating spaces during the peak period to enable linked trips, evidence of realistic dwell time behaviour should be provided, and assumptions tested conservatively.

Sensitivity testing (required)

2.4.19.9 At least one sensitivity test should be provided to demonstrate the development remains functional where:

- linked-trip behaviour occurs at a lower level than forecast, and/or
- dwell times are longer, and/or
- arrivals are modestly higher during the peak period.

If sensitivity testing indicates routine near-capacity operation, queuing, circulation failure, or overspill to the public highway, the linked-trip discount should be reduced or removed and the design amended (capacity, layout flexibility, circulation, or management).

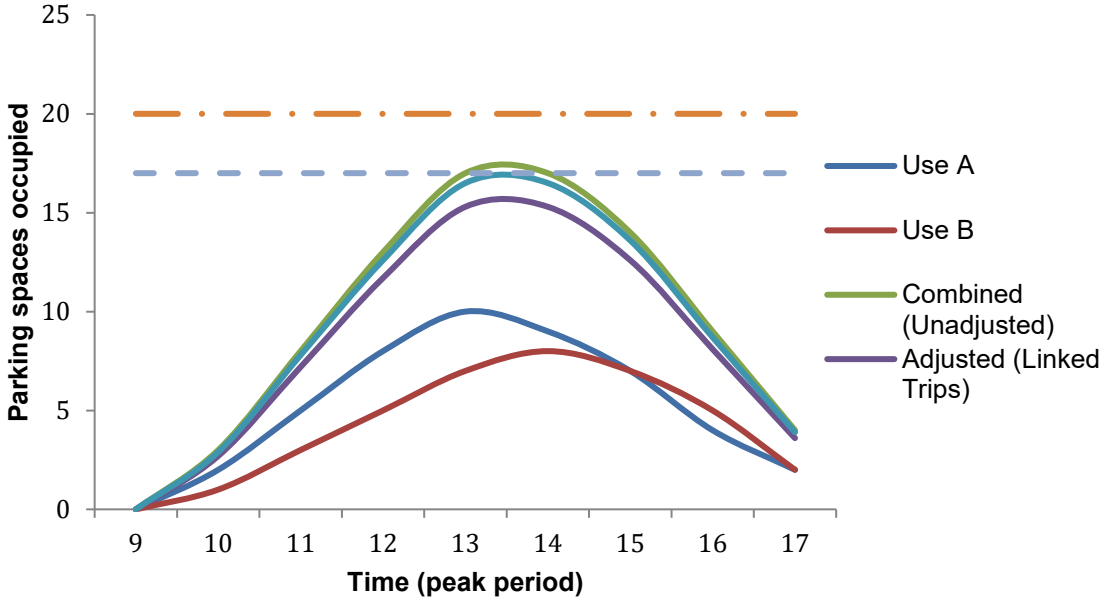
Linked-trip adjustment to peak parking accumulation.

2.4.19.10 Figure 2.1 illustrates the correct sequencing and testing of linked-trip assumptions in a shared-parking or mixed-use scenario. The unadjusted peak parking accumulation for each individual use is first established and combined to define the baseline peak demand profile. This combined unadjusted demand represents the reference case against which all subsequent adjustments must be assessed.

2.4.19.11 An adjusted demand line is then shown to reflect a typically modest linked-trip allowance, applied only after the baseline peak has been established. The figure demonstrates that any linked-trip adjustment should result in a limited reduction in peak occupancy and should not be relied upon to resolve fundamental capacity or circulation constraints. A separate sensitivity line illustrates the effect of reduced linked-trip behaviour and/or longer dwell times, testing whether the parking supply continues to operate within capacity and with sufficient operational headroom under less favourable but foreseeable conditions.

2.4.19.12 The on-site parking capacity is shown as a fixed reference line and is not treated as a demand scenario. The purpose of the figure is to demonstrate that linked-trip assumptions must be secondary, conservative, and resilient, and that parking provision should remain functional without overspill, unsafe manoeuvres, or conflict with servicing even where linked-trip behaviour is lower than forecast.

Figure 2.1: Linked-trip Adjustment to Peak Parking Accumulation



Shared Parking Scenarios (Managing Overlap Between Uses)

2.4.20 Shared parking refers to the use of a common parking supply by more than one unit, operator, or land use. Shared parking can be appropriate where demand peaks are not fully coincident and where the layout, management and pedestrian routes support safe and efficient operation.

Where shared parking is proposed, the assessment should:

- Identify all uses that may draw on the shared supply, including reasonably foreseeable alternative lawful operations.
- Test peak accumulation for each use and the combined total, including realistic overlap between peaks.
- Demonstrate how the parking supply will be managed (allocation, enforcement, short stay controls where relevant).
- Show that servicing, loading and refuse activity will not undermine the effective capacity of shared parking at peak.
- Confirm that pedestrian routes between units are safe, direct and well-overlooked

Any discounts claimed due to shared parking should be assessed conservatively and should not remove the operational headroom needed for day-to-day variability. Where shared parking depends on continued operation of neighbouring uses, the assessment should consider the implications of unit churn and future changes in operating patterns.

Table 2.3 Example Parking Accumulation Table – Shared Parking Scenario (Illustrative)

Assumed scenario: Mixed-use development with shared on-site parking

Uses: Class E food retail (Use A) and clinic / health use (Use B)

Assumed busiest overlap period: Weekday 12:00–14:00

On-site shared parking supply: 40 spaces (including disabled bays)

Time	Use A – Food Retail Spaces Occupied	Use B – Clinic Spaces Occupied	Combined Unadjusted Demand	Linked-Trip Adjustment (Illustrative)	Adjusted Shared Demand	Notes
11:30	12	8	20	-1	19	Pre-peak overlap
12:00	16	10	26	-2	24	Rising combined demand
12:30	18	12	30	-2	28	Peak overlap emerging
13:00 (Peak)	20	12	32	-3	29	Highest combined demand
13:30	18	10	28	-2	26	Demand easing
14:00	14	8	22	-1	21	Post-peak

Interpretation

- Unadjusted peak shared accumulation: 32 spaces at 13:00
- Illustrative linked-trip adjustment: 3 spaces (applied conservatively)
- Adjusted peak demand: 29 spaces
- On-site capacity: 40 spaces
- Outcome: Adequate operational headroom remains at peak. Sensitivity testing would still be required to confirm resilience if linked-trip behaviour is lower than assumed.

Travel Plans as an Input to Parking Demand Assessment

2.4.21 Travel Plans may form part of the wider package of measures accompanying commercial development and may influence how a site operates over time, particularly in relation to staff travel behaviour. However, Travel Plans are inherently reliant on behavioural response, ongoing management, and factors outside the direct control of the Highway Authority and therefore do not provide a guaranteed or fixed reduction in parking demand. Parking demand should ordinarily be assessed on the basis of realistic peak accumulation without assuming the effects of Travel Plan measures, establishing a robust baseline against which the operational performance and resilience of the parking layout can be assessed.

2.4.22 Where a Travel Plan is proposed and it is asserted that it will materially influence parking demand, any adjustment to the baseline assessment must be modest, clearly evidenced, and proportionate to the nature of the use, location, and user profile. Assertions of parking reduction based solely on the existence of a Travel Plan, policy aspiration, or intended management measures will be given limited weight. Any allowance should be explicitly justified, supported by relevant evidence (such as comparator sites operating under demonstrably similar conditions), and tested through sensitivity scenarios to demonstrate that the development would continue to operate safely and efficiently if Travel Plan outcomes are lower than anticipated.

2.4.23 Travel Plans are intended to assist in managing travel behaviour and encouraging sustainable travel choices; they are not a substitute for adequate physical parking provision or operational headroom. Parking layouts that rely on full or near-full uptake of Travel Plan measures in order to avoid congestion, queuing, unsafe manoeuvres, or overspill onto the public highway are unlikely to be considered resilient.

Capacity Testing Benchmarks (Occupancy at Peak)

2.4.24 To provide operational resilience, commercial parking layouts should not be designed to operate at full capacity under normal peak conditions. As a guide, the following levels of utilisation are generally considered appropriate:

- Up to 85% occupancy at forecast peak demand: typically provides comfortable operational headroom, allowing day-to-day variation and short-term exceedance without disruption.
- Approximately 85–90% occupancy at forecast peak: may be acceptable where circulation, layout, and management arrangements are demonstrably robust.
- Sustained occupancy above 90% at forecast peak: unlikely to be resilient and may give rise to internal congestion, unsafe manoeuvres, queuing, or displacement onto the public highway.

These benchmarks are not standards and should not be treated as targets. Any departure must be justified by clear evidence demonstrating safe, efficient and resilient operation at peak, including sensitivity testing, without reliance on informal behaviour, overspill, or ongoing management control.

2.4.25 The appropriateness of these benchmarks may vary by use type and turnover; where higher utilisation is proposed, the applicant should demonstrate through layout design and operational evidence that circulation and safety outcomes remain acceptable.

2.4.26 Where assessments indicate peak parking demand approaching or exceeding these levels, proposals should demonstrate how safe operation will be maintained in practice. This may include additional physical capacity, adaptable layout design, or clearly defined management measures that do not rely on informal behaviour or continued low demand. Not all parking spaces contribute equally to effective capacity. Spaces closest to principal entrances typically absorb demand first, with utilisation diminishing with increased walking distance. Reliance on distant or remote spaces to accommodate routine peak demand may indicate insufficient operational resilience. Where internal circulation constraints, signal-controlled accesses, or conflicts between parking manoeuvres and ingress flows are present, greater operational headroom may be required to achieve safe and efficient operation.

Worked Example (Illustrative, Non-numerical): Peak Accumulation Testing

2.4.27 A mixed commercial unit is proposed with on-site parking shared between staff, visitors/customers, and servicing. The assessment should demonstrate peak accumulation by stepping through the busiest trading period and testing the interaction of arrivals, departures, dwell time, and servicing activity. A suitable approach is:

- Identify the busiest day and time window for the proposed operation (and any reasonably foreseeable alternative lawful operation).
- Estimate staff on-site at the peak, including any overlap during shift change or handover.
- Estimate visitor/customer arrivals during the peak window and apply a realistic dwell time to translate arrivals into spaces occupied at any one time.
- Add operational demand (e.g. delivery driver waiting, fleet vehicles, maintenance) and test whether these activities overlap with customer peaks.
- Plot the combined demand as a simple accumulation profile (rising and falling occupancy) and compare against on-site supply, ensuring the forecast peak does not routinely consume all available capacity.
- Apply a sensitivity test (for example: a modest uplift in arrivals, a longer dwell time, or an additional delivery during the peak) to confirm that the site remains functional without overspill or internal circulation failure.

If the sensitivity test results in routine exceedance or near-capacity operation, the design should be adjusted (capacity, layout flexibility, circulation, or managed parking) to restore headroom and resilience.

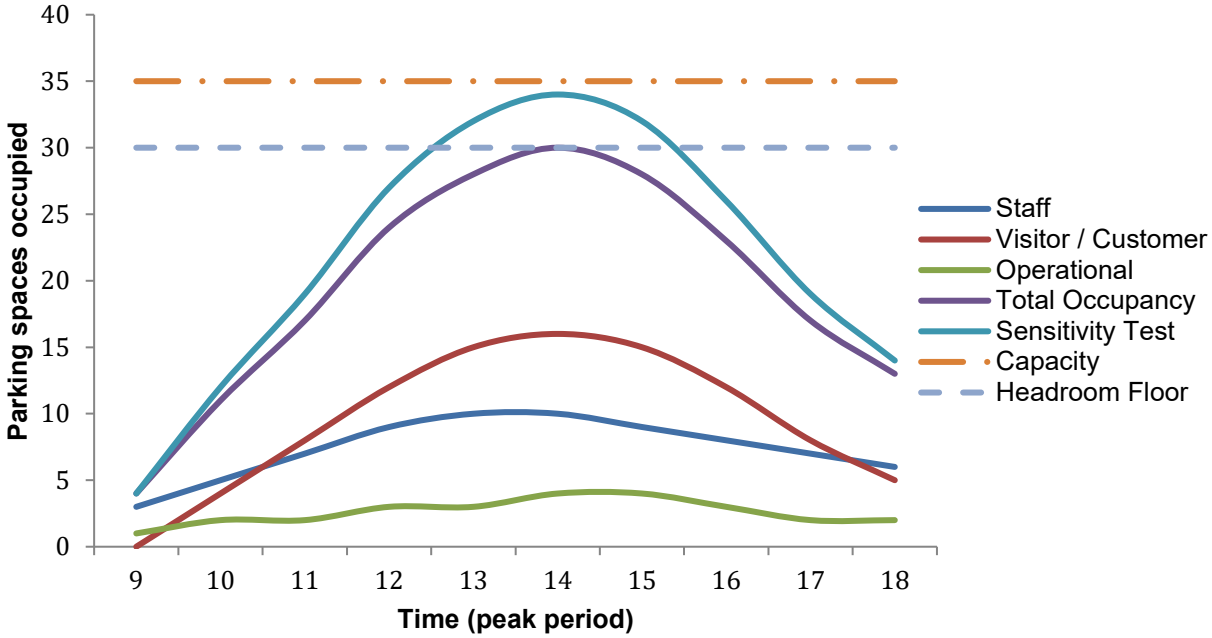
Diagram Caption Descriptions (Accumulation and Linked Trips)

2.4.28 Figure 2.2 illustrates a representative parking accumulation assessment over a peak period, separating staff, visitor/customer, and operational parking components and combining them into a total occupancy profile. The figure demonstrates how different demand components overlap in time and collectively drive the peak parking requirement, emphasising the importance of disaggregating demand before assessing overall capacity.

2.4.29 The total occupancy line is shown relative to the on-site parking capacity, with an operational headroom band identifying the desired spare capacity at the peak. This headroom represents the margin required to accommodate normal day-to-day variation in arrivals, dwell times, servicing activity, and user behaviour. The figure reinforces that parking layouts designed to operate at or close to absolute capacity at peak are unlikely to function reliably in practice.

2.4.30 A sensitivity test line is included to illustrate the effect of longer dwell times and/or higher arrivals during the peak period. This sensitivity test demonstrates whether the parking arrangement remains within capacity and retains operational headroom under less favourable but realistic conditions, without giving rise to internal congestion, queuing, conflict with servicing activity, or displacement onto the public highway.

Figure 2.2: Example Parking Accumulation Curve



Town Centre Parking and Controlled Kerbside Environments

On-street parking

2.4.31 Town centres typically operate within constrained and actively managed kerbside environments, where on-street parking is time-limited, priced, restricted to specific user groups, or subject to servicing and public transport priority measures. In such locations, on-street parking cannot be assumed to provide operational headroom or overflow capacity for new development unless this is clearly evidenced and demonstrably resilient. Where on-street parking is controlled, parking assessments should assume that any exceedance of on-site parking capacity will result in immediate operational impacts, including circulation failure, queuing, unsafe manoeuvres, or displacement onto surrounding streets, rather than being absorbed by kerbside supply.

2.4.32 Accordingly, developments within town centres should ordinarily demonstrate that peak parking demand, including reasonable sensitivity tests, can be accommodated on-site without reliance on general on-street parking. Given the dynamic nature of town-centre kerbside management, the Highway Authority will rarely agree to arrangements that effectively earmark public on-street spaces to meet a development's parking demand, even where such arrangements might be capable of being implemented in principle. Kerbside space is frequently subject to review, reprioritisation and restriction to meet wider objectives (including safety, servicing, bus priority, cycling provision, pedestrianisation and public-realm improvements) and therefore should not be relied upon to support development acceptability unless a specific, enforceable allocation is secured and demonstrably maintained for the lifetime of the development. Permit schemes or informal management measures do not, of themselves, guarantee the availability of kerbside space and will not normally be treated as allocated parking provision. Where future restriction, reprioritisation or reallocation of kerbside parking is reasonably foreseeable—such as through town-centre improvement schemes, public transport enhancements or changes to parking management—parking assessments should adopt a precautionary approach and should not assume the continued availability of such parking to underpin development viability or operational acceptability.

2.4.33 In controlled town-centre environments, near-capacity on-site operation is less tolerant of variability, and a greater emphasis should be placed on operational headroom, circulation robustness, and sensitivity testing to ensure safe and reliable day-to-day operation.

Public car parks

2.4.34 Public car parking provision, including off-street car parks serving town centres, may form part of the wider parking context in which a development operates. However, the existence of public parking should not be equated with available operational capacity. Where reliance is placed on public car parking to support a development, parking assessments should demonstrate through proportionate evidence that spare capacity exists at the relevant peak periods, having regard to existing demand, pricing, stay restrictions, and competing uses. Evidence should reflect worst-case operating conditions rather than average utilisation. Public car parking should not normally be relied upon to provide operational headroom or to mitigate near-capacity on-site operation, particularly where such parking is already subject to high utilisation, time limits, charging, or management objectives that prioritise turnover or alternative modes of travel. Where future reduction or reconfiguration of public car parking is reasonably foreseeable—such as through town-centre enhancement, redevelopment, public transport schemes, pedestrianisation, or changes to parking management—assessments should adopt a cautious approach and should not assume the long-term availability of such capacity to support development.

2.4.35 Accordingly, developments in town-centre locations should ordinarily demonstrate that on-site parking provision, including appropriate operational headroom and sensitivity testing, is sufficient to support safe and efficient operation without routine reliance on public car parking to absorb overspill or variability.

2.4.36 In some town-centre locations, where substantial, well-managed public off-street parking is available nearby and where accessibility by public transport, walking, cycling and wheeling is high, it may be operationally preferable to provide no on-site public car parking rather than a limited or materially under-provisioned on-site facility. This position may be appropriate where a small quantum of on-site public parking would be insufficient to operate safely at peak, would compromise servicing or circulation, or would give rise to inefficient or unsafe vehicle movements, and where the functional parking needs of the development can be met more effectively through existing public parking provision.

In such cases, proposals should demonstrate that:

- adequate servicing, deliveries, refuse and emergency access are fully accommodated on-site,
- any necessary staff parking is appropriately provided or managed,
- the availability, capacity, pricing and peak-period utilisation of nearby public parking are robustly evidenced,
- the development is accessible by public transport and by walking, cycling and wheeling, and
- the absence of on-site public parking would not result in unsafe displacement, informal stopping, or operational conflict on the highway network.

Public car parking should not be relied upon to provide operational headroom, and proposals should not assume that public parking will absorb variability or exceedance of on-site demand. Where public parking provision is expected to support development, assessments should demonstrate that the development can operate safely and efficiently without routine overspill or reliance on informal use of the highway.

Perception and use of on-site parking in town-centre contexts

2.4.37 In town-centre locations, on-site car parking associated with commercial development may, in practice, be perceived by users as forming part of the wider public parking supply, particularly where access is unrestricted and parking controls are limited. In such circumstances, parking demand may not be confined to the development being assessed and may include longer-stay or unrelated trips drawn from the surrounding area. Where this is likely, parking assessments should have regard to the potential operational consequences, including reduced availability for the intended user group, loss of effective operational headroom, and increased sensitivity to exceedance at peak periods. Proposals should demonstrate through layout design, proportionate management measures, or demand testing that the development can continue to operate safely and efficiently without reliance on assumptions that parking behaviour will align perfectly with the intended use.

Table 2.4 Compact Summary – Weight Given to Different Inputs

This table summarises the relative weight the Highway Authority will typically place on different inputs when assessing commercial parking demand. It is intended as an explanatory aid and does not create fixed rules or standards.

Input / Evidence Type	Typical Weight	Notes on Application
Site-specific operational data	High	Direct evidence of how the development will operate; normally given greatest weight.
Peak parking accumulation assessment	High	Core assessment tool; must reflect realistic peak and sensitivity conditions.
Sensitivity testing	High	Used to test resilience where assumptions prove optimistic or conditions worsen.
Servicing and operational interaction	High	Safety-critical and intolerant of overspill; cannot be offset by demand assumptions.
Comparable site evidence	Medium	Useful for triangulation where closely matched in use, scale and accessibility.
Shared parking analysis	Medium	Acceptable where peak demand profiles are demonstrably offset and resilience is maintained.
Linked-trip assumptions	Modest	Only where evidence shows genuine reduction in simultaneous parking events at peak.
Travel Plan measures	Limited	Behaviour-dependent; may inform modest adjustments but not replace baseline demand.
Parking management measures	Limited	May support operation but cannot resolve fundamental capacity shortfalls.

Input / Evidence Type	Typical Weight	Notes on Application
On-street or public parking availability	Lowest	Normally given limited weight unless allocated, enforceable and robust at peak.

2.5 Use-Class Parking Expectations Matrix: Table 2.5

The following matrix sets out typical parking demand characteristics and design expectations for different commercial use classes. It does not prescribe numerical standards but identifies matters that should be addressed when assessing parking layout, capacity, and flexibility.

Use Class / Type	Typical Parking Characteristics	Peak Demand Profile	Key Design Expectations	Change-of-Use Sensitivity
Class E – Retail / Service / Food & Drink	High customer turnover, mixed staff and visitor parking; short- and medium-stay demand.	Weekdays and weekends; lunchtime and early evening peaks common.	Clear customer parking, safe pedestrian routes, short-stay spaces, servicing kept separate.	High – layouts should accommodate movement between office-style and customer-facing uses.
Class E – Offices / Professional Services	Lower customer turnover; staff-dominant parking profile.	Weekday peak arrival and departure periods.	Staff parking arranged to avoid reliance on overspill; flexibility to support visitor-intensive use.	Medium to High – potential shift to retail, health, or service use.
Health, Fitness, and Leisure Uses	Visitor-led demand with longer dwell times; staff parking secondary.	Morning, evening, and weekend peaks.	Adequate visitor parking, drop-off provision, legible access, conflict-free circulation.	Medium – potential increase in turnover depending on activity type.
Hot Food Takeaways / Similar Uses	Very short-stay, high-turnover parking; delivery rider activity.	Evenings and weekends.	Dedicated short-stay bays, rider waiting areas, no reliance on highway stopping.	Low to Medium – intensity changes can materially affect safety if unmanaged.
B2 – General Industrial	Staff parking plus servicing by goods vehicles.	Shift changes and servicing periods.	Segregated staff and HGV areas, on-site turning, forward gear exit.	Medium – operational intensity may change over time.
B8 – Storage and Distribution	Fleet parking, staff parking, and significant HGV activity.	Early morning, late evening, and shift change peaks.	Generous circulation, on-site queuing, clear separation of functions.	High – intensification and changes in logistics models are common.
Vehicle Fuel / EV Charging Facilities	Short- to medium-stay dwell times; queuing risk.	Variable; often commuter and weekend peaks.	Sufficient stacking, queuing contained within site, ancillary uses accounted for.	Medium – evolving technology and dwell times may alter demand.
Hotels (C1)	Guest parking with variable dwell; staff parking; service and coach arrival/departure.	Evening arrival and morning departure peaks; events and weekend variability.	Adequate guest/staff segregation, coach drop-off, servicing access, and inclusive parking.	Medium – changes in operator, branding, or extended functions (events, restaurants).

Use Class / Type	Typical Parking Characteristics	Peak Demand Profile	Key Design Expectations	Change-of-Use Sensitivity
Trade Counters / Builders Merchants	Staff parking plus short-stay customer parking; significant HGV/van activity.	Early morning and mid-morning peaks; delivery overlap.	Clear segregation of customers, staff, and HGVs; good circulation; on-site queuing.	Medium – intensification or extended hours can materially alter demand.
Car Showrooms / Vehicle Sales	Customer parking combined with extensive vehicle display and storage.	Weekend and weekday daytime peaks; event-driven surges.	Sufficient customer spaces separate from display; servicing and test-drive circulation.	Medium – shift towards servicing, valeting, or mixed-use automotive functions.
Self-Storage Facilities	Low staff parking; customer trips often short-stay with loading/unloading.	Dispersed demand; occasional weekend peaks.	Wide aisles, loading bays, secure circulation, and short-stay loading provision.	Low to Medium – intensity may increase with smaller unit churn.
Mixed Retail Parks	Shared customer parking serving multiple units; high turnover for some uses.	Weekends and seasonal peaks; overlapping demand between uses.	Robust shared parking layout, pedestrian connectivity, servicing coordination.	High – unit churn and changes within Class E can significantly affect demand.

2.6 Parking Design and Layout

2.6.1 Parking layouts should:

- Allow vehicles to enter and leave the site in forward gear.
- Provide clear and safe pedestrian routes.
- Cycle parking should be conveniently located, secure and not obstruct pedestrian routes
- Avoid reversing manoeuvres onto the public highway.
- Minimise conflicts between servicing activity and customer parking.
- Provide inclusive parking (including disabled bays) in convenient locations with level step-free routes to entrances.
- Parking aisles should ideally be arranged so that vehicles manoeuvring into or out of parking spaces do not interrupt the free flow of entering traffic. This is particularly important where site access is signal-controlled or where platooned vehicle arrivals are likely, as conflicts between manoeuvring vehicles and ingress flows can materially reduce effective entry capacity and contribute to internal congestion during peak periods.
- Reflect pedestrian desire lines, minimising conflict with vehicle movements and providing safe crossing points where necessary.
- Incorporate lighting, visibility and passive surveillance to support personal safety and legibility.
- Demonstrate servicing, refuse and emergency access arrangements (including swept-path analysis where relevant).
- Dead-end aisles and layouts reliant on reversing manoeuvres should be avoided wherever practicable, as they increase conflict, delay circulation, and degrade operational performance during peak periods.

2.6.2 Parking layouts should be informed by realistic user behaviour, including pedestrian desire lines, likely circulation paths, and the tendency for users to seek the most direct route to the destination. Designs that conflict with intuitive movement patterns are more likely to give rise to unsafe manoeuvres, congestion, or informal crossing behaviour.

Dimensions for car parking spaces within car parks

2.6.3 Each parking space should achieve the following dimensions:

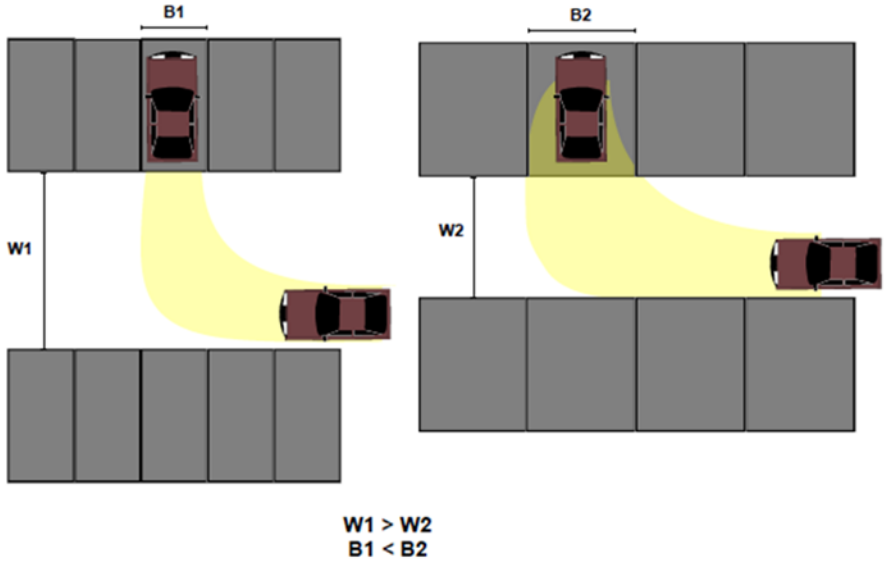
- Absolute minimum of 2.4m wide by 4.8m long (minimum 2.0m x 6.0m when parallel).
- Desirable 2.5m wide by 5.0m long (minimum 6.0m long when parallel).
- End spaces require a minimum width of 3.3m where there is a physical boundary.

The minimum aisle width for two-way working is 5.0m (usually 6.0m when parking is perpendicular).

2.6.4 The aisle width (W below) needed to access echelon or perpendicular spaces conveniently, depends on the width of the bay and the angle of approach. For a 2.4m wide bay, these values are typically:

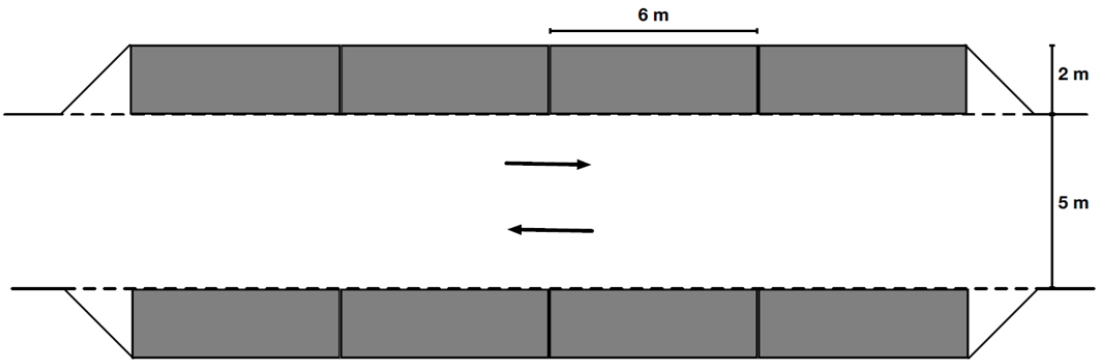
- at 90 degrees, W = 6.0m,
- at 60 degrees, W = 4.2m, and
- at 45 degrees, W = 3.6m.

The aisle width requirement can be reduced if the spaces are made wider. Swept-path analysis can be used to assess the effect of wider spaces with a reduced aisle width as illustrated in the diagram.

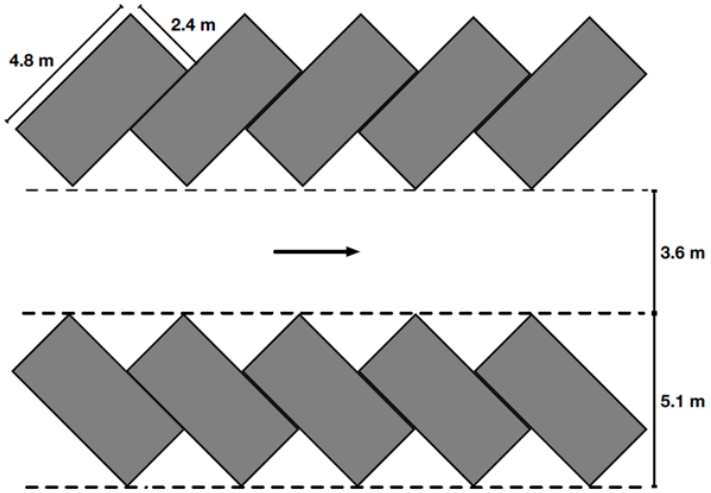


Standard parking configurations

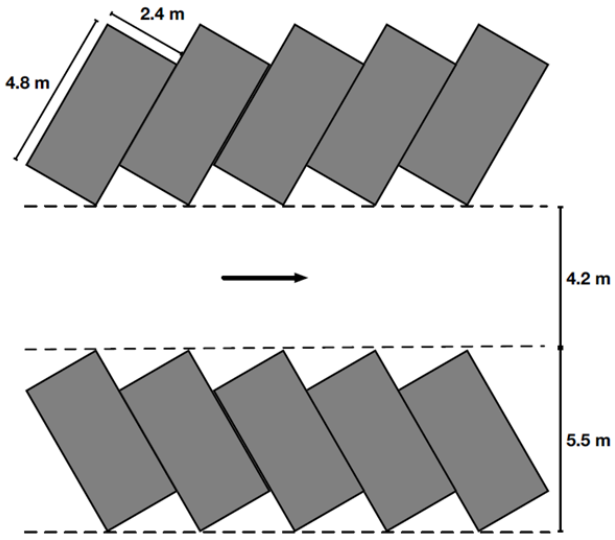
Parallel Parking



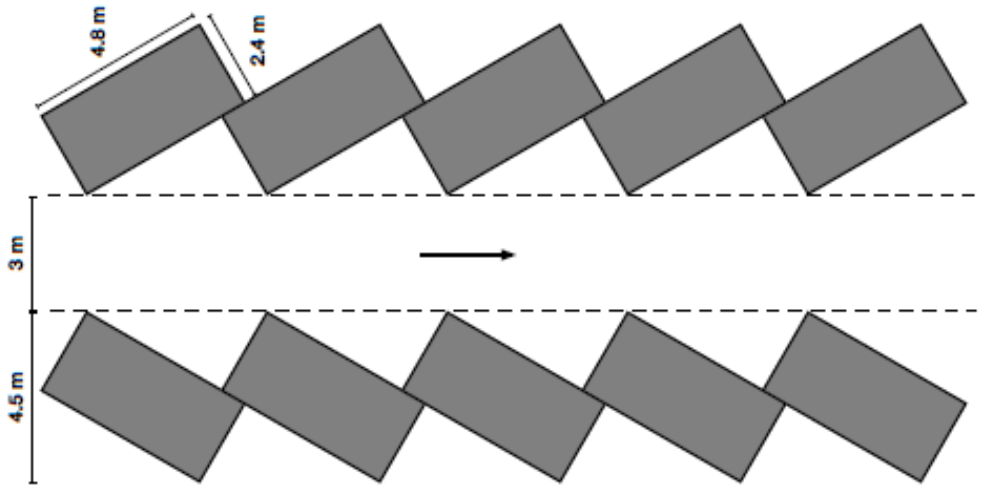
45° Parking



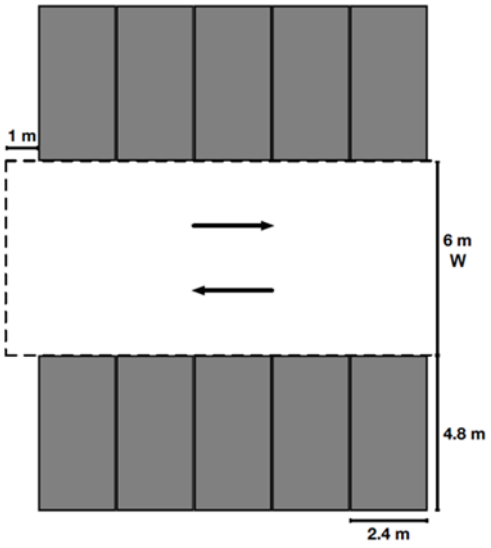
60° Parking



30° Parking



Perpendicular parking



Normal minimum disabled parking standard: Table 2.6

2.6.5 The normal minimum disabled parking provision is specified in the following table 2.6. The figures set out below represent the typical expectation for disabled parking provision in car parks serving the uses identified.

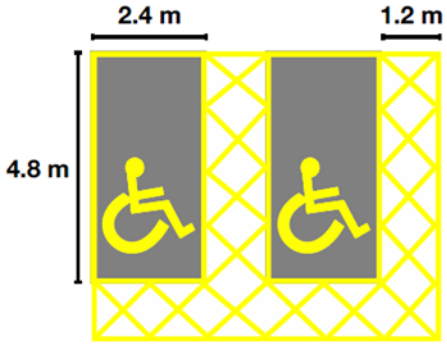
Car park use	Disabled parking provision
Employees and visitors to business premises	5% (rounded up) of the total number of parking spaces shall be designated as disabled spaces.
Shopping, recreation, and leisure	6% (rounded up) of the total number of parking spaces shall be designated as disabled spaces.
Schools and higher and further education	See Part IV Chapter 3 New Schools & School Extensions

Disabled parking spaces should be located close to the entrance of the building they serve and be provided on level or near-level ground, with gradients minimised to ensure safe and independent use. Wherever disabled or accessible spaces are at a different level from the adjacent pavement, a dropped kerb should be provided for wheelchair users, together with appropriate tactile paving.

Small car parks

2.6.6 For the purposes of this guidance, parking areas providing five parking spaces or fewer are considered to represent very small parking areas. In these instances, at least one accessible parking space should be provided where it is reasonable and practicable to do so. Where, due to site constraints, the provision of a designated disabled bay would result in a clearly disproportionate impact on site operation or layout, alternative measures that maintain equivalent functional accessibility in terms of location, dimensions, gradients and step-free access may be considered, subject to robust justification. Where necessary to avoid such operational impacts while maintaining accessible provision, this may include providing one additional parking space for disabled use. In limited circumstances, parking areas of six to ten spaces may also require a proportionate approach where strict application of percentage-based provision would clearly result in an unreasonable or operationally unworkable outcome.

90° Disabled parking bays (perpendicular)



2.7 Parking Management

Where parking provision relies on active management measures, these should be realistic, clearly defined, and capable of being implemented and maintained for the lifetime of the development. Reliance on informal or unenforceable arrangements is unlikely to be supported. Where management is relied upon, proposals should identify the mechanism for securing and maintaining it (e.g., a management plan, lease controls, or other enforceable arrangements).

2.8 Assessment and Decision-Making

Parking proposals will be assessed with regard to their effect on highway safety, network operation, and the wider street environment. Developments should demonstrate that parking demand can be accommodated on-site without resulting in unsafe or inconvenient conditions for other highway users including the risk of displaced parking, obstruction, and conflict with vulnerable road users.

2.9 Minimum Servicing Provision: Table 2.7

2.9.1 The minimum level of on-site servicing provision required for different commercial land uses is set out in Table 2.7 below. These standards establish minimum physical provision to ensure that service and delivery activity can be accommodated safely and efficiently within the site and clear of the public highway. The standards in the table are not maximums. Where the nature, scale, layout or operational characteristics of a development would reasonably be expected to generate servicing activity in excess of the stated minimums,

additional on-site provision will be required. In all cases, servicing provision must be appropriate to the likely type, size, frequency and timing of goods vehicles visiting the site.

Description of land use	Normal servicing provision
Shops	Stores above 5,000m² – One goods bay space per 1,000m²; Stores between 3,000m² and 5,000m² – One goods bay space per 750m²; Stores below 3,000m² – Provision must be made within the site for service and delivery vehicles to load and unload clear of the public highway.
Restaurants, cafés and drinking establishments	Provision must be made within the site for service and delivery vehicles to load and unload clear of the public highway.
Light industry, research and development	One lorry space for every 500m² of gross floorspace.
General industrial	One lorry space for every 400m² of gross floorspace.
Storage and distribution	One lorry space for every 400m² of gross floorspace.

General requirements for servicing

2.9.2 All commercial development must include adequate on-site servicing provision regardless of scale Compliance with the minimum standards in Table 2.7 will not, of itself, demonstrate acceptability where servicing demand has the potential to compromise highway safety or the effective operation of the site. Servicing arrangements should be informed by the realistic operation of the proposed use and demonstrated through layout design, swept-path analysis where appropriate, and supporting information proportionate to the scale and complexity of the development. The design of commercial premises should be compatible with the principles set out in the Freight Transport Association publication *Designing for Deliveries* (or any successor document), or equivalent industry guidance. Small-scale or constrained developments will not be exempt from the requirement to accommodate servicing activity on-site. Where shared servicing areas or managed servicing arrangements are proposed, these must be integral to the site layout and demonstrably capable of operating safely and efficiently.

Vehicle size, manoeuvring and management

2.9.3 Servicing areas must be designed to accommodate the largest goods vehicle likely to visit the site, and multiples thereof where relevant, with sufficient space to allow loading, unloading, turning, manoeuvring and short-term queuing or waiting to be undertaken entirely within the site. Layouts must function such that servicing vehicles can normally enter and leave in a forward gear, without obstruction of site accesses, internal circulation routes or the public highway. Vehicle manoeuvring and servicing areas should not be designed to rely on marginal clearances, extreme vehicle performance, or perfect driving behaviour; layouts should incorporate reasonable tolerance to account for variation in drivers, loading conditions, weather, and day-to-day operational clutter. Layouts that technically accommodate the design vehicle only through constrained or multi-shunt manoeuvres, extreme steering lock, or reliance on continual active management are unlikely to be considered robust. Assessments should also have regard not only to the notional layout at opening but to foreseeable operational encroachment over time, including temporary storage, waste

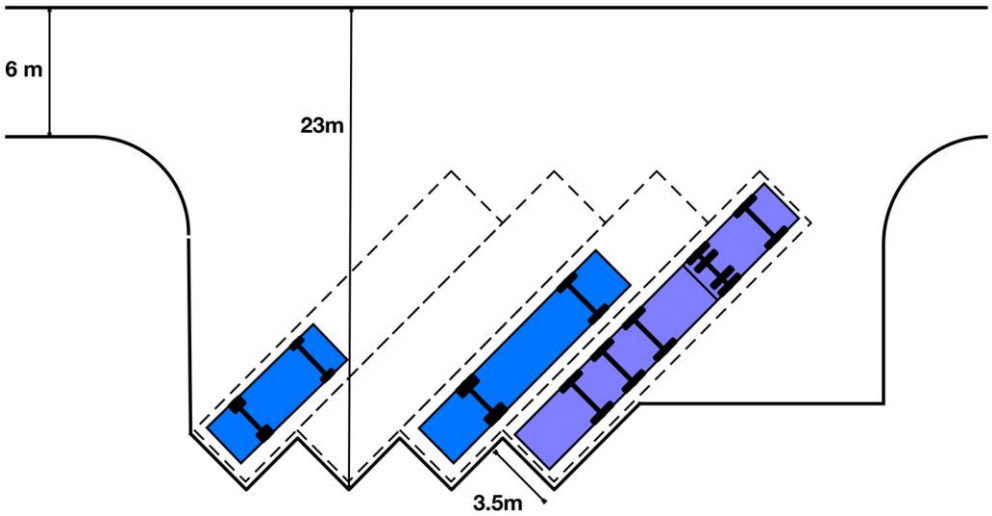
containment, parked vehicles, and minor layout erosion, which can materially reduce effective manoeuvring space.

2.9.4 Where servicing activity is subject to peak arrival patterns, operational delay, or overlap between deliveries, appropriate on-site stacking or waiting space should be provided. Reliance on vehicles waiting on access roads, internal circulation routes or the public highway will not be supported. Servicing arrangements should be assessed on the basis of realistic operation and should not assume perfect adherence to delivery schedules or the absence of occasional early, late or overlapping arrivals.

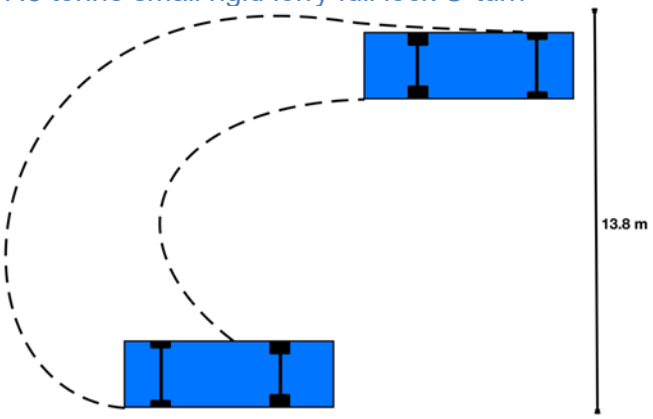
2.9.5 Where it is unlikely that servicing vehicles would normally exceed a certain length, but there remains a realistic potential for occasional larger vehicles, a Delivery and Servicing Management Plan (DSMP) may be required. In such cases, the DSMP should clearly set out how the type, size, timing and routing of servicing vehicles will be managed and controlled over the lifetime of the development.

2.9.6 Delivery and Servicing Management Plans are intended to complement, not substitute for, adequate on-site servicing provision. While DSMPs can play a useful role in managing servicing activity, their effectiveness is inherently dependent on behavioural compliance, operational discipline and ongoing management. They cannot guarantee long-term control over servicing patterns where operators, delivery practices or supply chains change and may be difficult to enforce in practice, particularly where commercial pressures or ad-hoc deliveries arise. Accordingly, DSMPs should not be relied upon to mitigate fundamental deficiencies in layout design, vehicle accommodation, manoeuvring, or queuing capacity. Proposals that depend on management measures alone to resolve shortfalls in physical servicing provision, or that assume perfect adherence to delivery restrictions, are unlikely to be considered robust. Adequate on-site servicing capacity should be provided in the first instance, with DSMPs used only to refine and manage servicing activity within a layout that is otherwise capable of operating safely and efficiently.

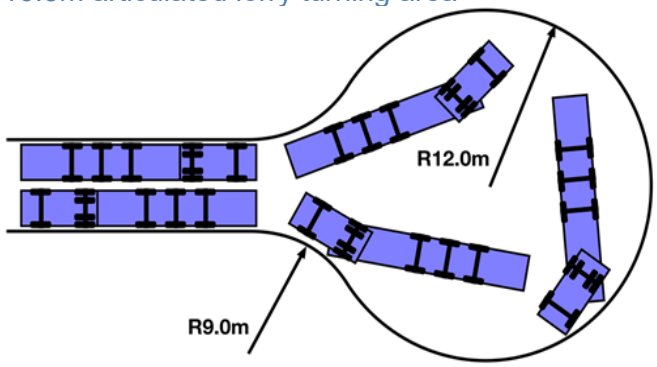
45º angled bays suitable for articulated vehicles. Depth can be reduced to 18m for rigid lorries only



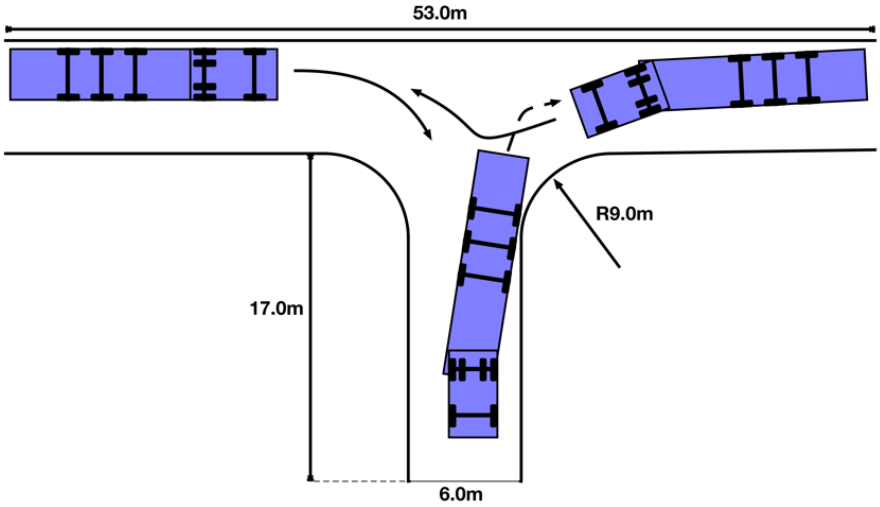
7.5 tonne small rigid lorry full lock U-turn



16.5m articulated lorry turning area



T-turning area for 16.5m articulated lorry



Relationship to parking demand assessments

2.9.7 For the avoidance of doubt, the approach to servicing provision differs from that applied to car parking demand elsewhere in this guidance. Car parking provision is assessed through an evidence-led, demand-based methodology that reflects variability in trip rates, dwell times, accessibility, shared parking and linked-trip behaviour. Servicing activity, by contrast, is typically safety-critical, time-constrained and intolerant of overspill or displacement. Accordingly, this guidance establishes minimum on-site servicing provision to ensure that service and delivery vehicles can be accommodated clear of the public highway under realistic operating conditions. Demand-led assessment is then used to determine whether additional servicing capacity is required above the stated minimums, having regard to the likely vehicle types, frequency and peak overlap of servicing activity. Management measures may assist in controlling servicing activity but are not a substitute for adequate physical provision.

2.10 Motorcycle and Moped Parking Provision

Requirement

2.10.1 Provision shall be made for motorcycle and moped parking as part of all developments that include off-street car parking, unless it can be clearly demonstrated that there is no reasonable likelihood of demand arising from the nature of the development. Motorcycle parking should be provided at a rate of one space per

ten car parking spaces (or part thereof), with a minimum of one motorcycle space where any car parking is proposed.

Design and Layout

2.10.2 Motorcycle and moped parking spaces shall be designed to be safe, convenient and fit for purpose. Spaces should normally be provided to the following minimum dimensions unless site-specific constraints justify an alternative layout:

- 2.5 metres in length and 1.5 metres in width per motorcycle,
- with a minimum spacing of 1.0 metre between adjacent motorcycles to allow for parking, manoeuvring and dismounting.

Spaces should be located in a clearly identifiable and suitably convenient position, avoiding conflict with pedestrian routes, vehicle manoeuvring areas, or servicing activity.

Security

2.10.3 Motorcycle and moped parking shall incorporate appropriate security measures. Each parking space shall be provided with a secure ground anchor point, locking rail, or equivalent fixed securing facility to enable motorcycles to be safely secured while parked. Security features should be designed to minimise trip hazards, be well-lit, and, where practicable, located within areas subject to natural surveillance or CCTV coverage.

Flexibility and Alternative Solutions

2.10.4 Where it can be demonstrated that compliance with the dimensional or layout guidance above is impractical due to site constraints, alternative designs or layouts may be acceptable provided they achieve an equivalent level of accessibility, safety and security for users. In town centre or highly constrained sites, provision may be integrated within car parking areas or provided as part of a shared motorcycle parking bay, subject to satisfactory design and security arrangements.

2.11 Minimum cycle parking provision: Table 2.8

2.11.1 The minimum cycle parking provision is set out in the following table 2.8. Cycle hoops should be secure, undercover, and in a position where they are overlooked, preferably close to the entrance of the building.

Use class	Sub-category	Short stay requirement (obvious, accessible, and close to destination)	Long stay requirement (secure and covered)
All	Parking for adapted cycles for disabled people	5% of total capacity co-located with disabled car parking	5% of total capacity co-located with disabled car parking.
Retail	Small (<200m²)	1 per 100m²	1 per 100m²
	Medium (200-1,000m²)	1 per 200m²	1 per 200m²
	>1,000m²	1 per 250m²	1 per 500m²
Employment	Office/Finance	1 per 1000m^2	1 per 200m²
	Industrial/Warehousing	1 per 1000m2	1 per 500m²
Leisure and Institutions	Leisure centres, assembly halls, hospitals, and healthcare	Greatest of: 1 per 50m² or 1 per 30 seats/capacity	1 per 5 employees

Use class	Sub-category	Short stay requirement (obvious, accessible, and close to destination)	Long stay requirement (secure and covered)
	Educational Institutions	-	Separate provision for staff and students based on Travel Plan mode share targets. Minimum: Staff: 1 per 20 staff Students: 1 per 10 students

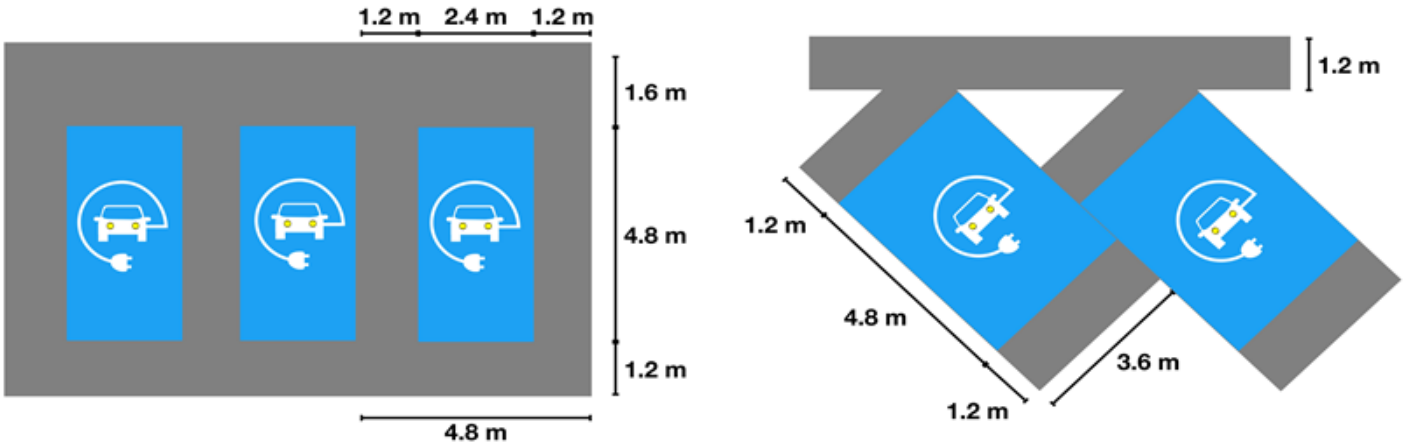
Provision should be made for the parking of cargo cycles, adapted cycles, and other larger or non-standard cycle types, particularly within long-stay facilities serving employment, retail, education and delivery-intensive uses. Where cycle parking demand assessments indicate regular use of such cycles, a proportion of spaces should be designed to accommodate their larger size, weight and manoeuvring requirements. These spaces should be step-free, conveniently located, secure, and covered, and should be provided in addition to, or integrated within, the overall cycle parking provision without reducing the availability or usability of standard cycle spaces.

2.12 Electric vehicle charging

2.12.1 EV charging requirements shall comply with The Building Regulations 2010, Infrastructure for the charging of electric vehicles, Approved Document "S". Where the development is a conversion or change of use of an existing building, the same principle should be applied. In all instances, sufficient electrical network capacity must be procured from the Distribution Network Operator to accommodate electric vehicles and their charging requirements.

2.12.2 EV charging provision should be accessible for all and should not be counted towards the general level of parking provision. Further advice is contained in BSI PAS 1899:2022 *Electric vehicles – Accessible charging – Specification.*

EV charging point configurations



2.13 Conclusion

This guidance recognises commercial parking as a fundamental element of development design. Parking provision should be well-designed, adaptable, and forward-looking to ensure that development remains acceptable in highway terms as operational circumstances evolve. Where indicative figures are cited, they are

intended only as early screening references; acceptability will always depend on site-specific evidence of safe and efficient operation.

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