

On-Site School Parking Guidelines

April 2013



Prepared by Hampshire County Council
April 2013

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Executive Summary

Hampshire County Council's previous car parking standards for educational establishments were contained within 'Hampshire Parking Strategy and Standards' (2002). In respect of schools, the maximum parking standard of 1.5 spaces per classroom has not changed since the mid 1990s. However, over this time the manner in which education is provided has changed, with the majority of schools now employing teaching and learning assistants to supplement formal teaching staff, as well as a greater number of administrative staff. Recent planning applications have highlighted the fact that the 2002 standards no longer reflect current school parking demand, and their application has often resulted in informal and overflow staff car parking within school sites or on surrounding roads. Furthermore, the publication of the National Planning Policy Framework in March 2012 has identified a shift in government policy away from maximum car parking standards that are designed to influence travel behaviour.

The above issues have highlighted the need to review the current school parking standards and guidance, in order to avoid some of the car parking problems which occur on and around school sites, and to provide guidance which is fit for current education provision. There is also an opportunity to clarify the recommended approach to the provision of cycle parking and other school travel demands.

The review, which was based on a sample audit of school sites across Hampshire to understand the travel patterns of staff, estimate the associated parking demand and measure this demand against current provision and the 2002 standards, found that:

- Whilst it was found that the vast majority of teaching staff drive to school alone (especially at infant and junior schools), significantly lower levels of non-teaching staff drive alone.
- Although the level of parking on sample school sites is generally above the 2002 standard, there is a general parking shortfall of approximately 30% relative to estimated demand¹.
- The 2002 standards were benchmarked against the adopted standards of neighbouring local authorities, the majority of which were found to be staff-based and providing a higher car parking allocation.

The above exercise has enabled the development of On-Site School Parking Guidelines for Hampshire which provides new, evidence-based guidance to aid decisions on car, cycle and PTW parking provision on school sites. The recommended standards are tabulated overleaf.

¹ With the exception of secondary schools, where sufficient parking was observed at some sites.

Type	Recommended parking standard (see Notes 1-10, Chapter 6)
Cars	1 space per teaching member of staff plus 2 spaces per 3 non-teaching staff ² . Disabled parking should be counted as 5% of the above allocation or a minimum of 1 space.
Cycles	Primary schools – 1 scooter space per 10 pupils plus 1 cycle space per 20 pupils. Secondary schools – 1 cycle space per 10 pupils In addition (for all schools) – 1 cycle space per 20 staff in a non-pupil area
Powered two-wheelers (PTW)	Minimum of 1 space or 1 space per 25 car spaces.

The above standards represent a “demand-led” situation. In some cases it may be appropriate or necessary to reduce the level of parking provided, for example in the case of school redevelopments or extensions on existing sites, where particular facilities (for example outdoor teaching spaces and/or servicing areas off the public highway) could not otherwise be accommodated. A process for adjusting the recommended (car) parking standard is presented in **Chapter 6**.

As well as providing an appropriate level of parking, it is important that proposals for new and extended schools incorporate good design, which takes into account the needs of all school users. Advice on parking design and layout is provided in **Appendix E**.

Although the On-Site School Parking Guidelines focuses upon parking **within** school sites by staff and visitors, the information gathered during the sample school audits confirmed that off-site parking (primarily by parents) is also a major concern. An holistic view of on- and off-site parking issues is needed if the effectiveness of the Strategy is to be maximised. **Chapter 7** provides an initial consideration of the tools available to manage off-site parking issues.

In conclusion, the new On-Site School Parking Guidelines provide clear, evidence-based guidance on parking provision at school sites which will assist in the design and delivery of appropriate school facilities by the County Council and other parties, and will enable the County Council to make sound decisions based upon relevant and up-to-date evidence. The Guidelines are also commended to the District, City and Borough Councils in Hampshire in their role as Local Planning Authorities, in order to provide advice for parking provision connected with school applications that they determine.

² **Teaching** staff are assumed to comprise class teachers, headteachers and deputy headteachers permanently based at the school. Peripatetic specialist teachers are not included in this definition (these staff are classed as visitors). All other persons employed at the school (including teaching assistants) are classed as **non-teaching** staff.

Chapter 1 – Introduction

Hampshire County Council's previous car parking standards for educational establishments were contained within 'Hampshire Parking Strategy and Standards' (2002). In respect of schools, the parking standard had not changed since the mid 1990s and was based upon the number of classrooms present on a school site. However, since these standards were introduced, the manner in which education is provided has changed in two key respects:

- The majority of schools now employ teaching and learning assistants to supplement the formal teaching staff and to attend to special needs; and
- More administrative staff are employed than previously, as schools now have extended responsibility for the delivery of education.

With schools now employing a significantly greater number of staff, recent planning applications have highlighted the fact that the 2002 standards did not reflect current school parking demand. On a number of sites, their application resulted in informal and overflow staff car parking either within school sites or on surrounding roads, causing general annoyance and (in some limited circumstances) safety concerns.

In addition, central government policy has moved away from the imposition of restrictive parking standards which have often been ineffective in managing car use, particularly at school sites. The National Planning Policy Framework (March 2012) has removed the obligation for local authorities to set maximum car parking standards.

The above issues have highlighted the need to review the current school parking standards and guidance, in order to avoid some of the car parking problems which occur on and around school sites, and provide guidance which is fit for current education provision. Alongside this, there is an opportunity to clarify the current approach to the provision of cycle parking as well as other transport demands on school sites.

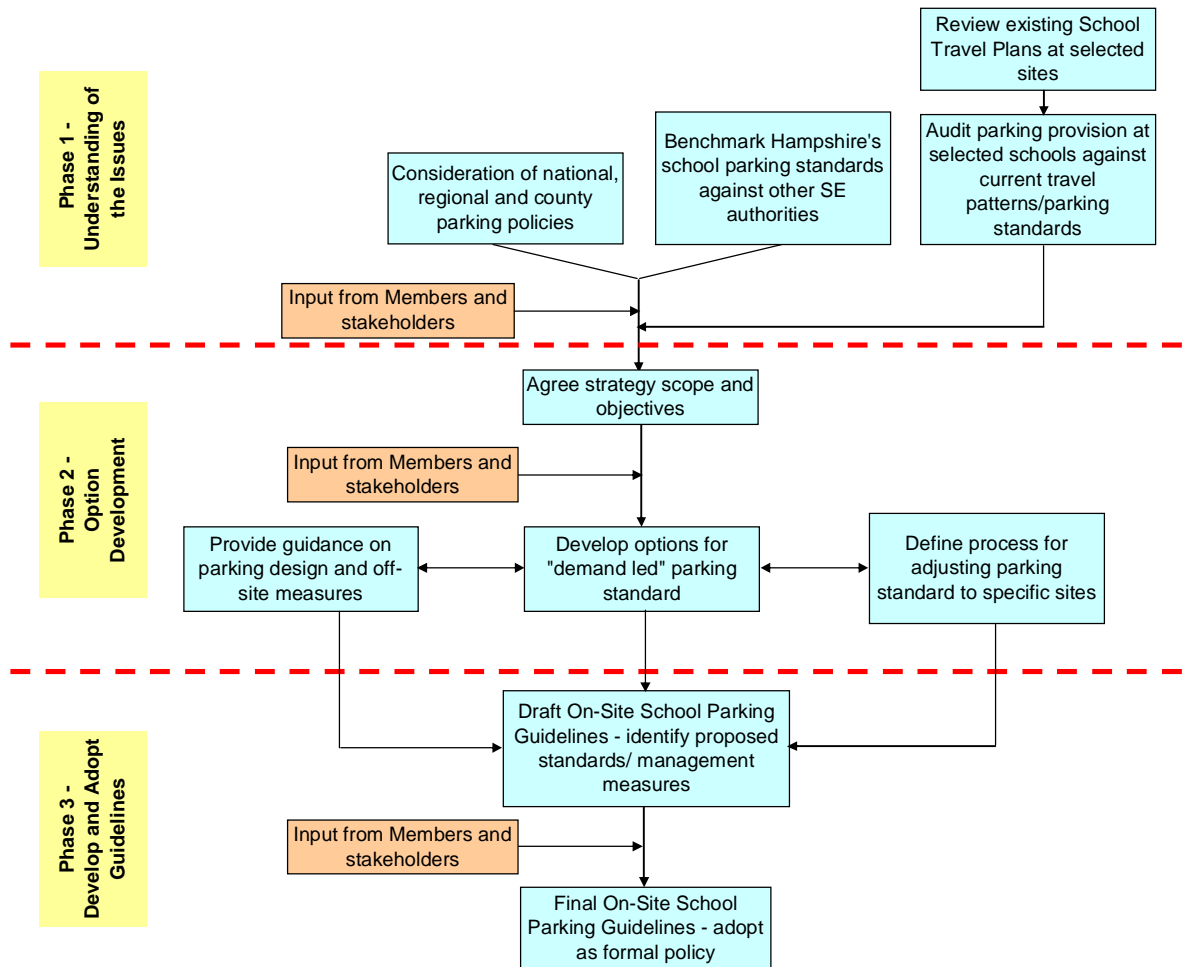
This document presents On-Site School Parking Guidelines for Hampshire which seek to provide new, local, evidence-based guidance to aid decisions on car parking provision and cycle parking on school sites in the county. It is structured as follows:

- Chapter 2 outlines the methodology used to carry out the review of current standards and develop a new parking strategy;
- Chapter 3 summarises the national, regional and county policy context;
- Chapter 4 benchmarks Hampshire's current parking standards with those adopted across the South East sub-region;
- Chapter 5 sets the scene regarding current school staff and pupil travel patterns and presents the findings of a sample audit of school sites;
- Chapter 6 proposes new, evidence based, car and cycle parking standards for schools;
- Chapter 7 briefly outlines the tools available to manage off-site parking; and
- Chapter 8 draws together the key findings of the above Chapters.

Chapter 2 – Approach to Developing the Guidelines

The diagram below shows the process by which the On-Site School Parking Guidelines have been developed.

The review was overseen by a School Parking Standards Member Advisory Group and developed by the officer Project Group, which was led by the Economy, Transport and Environment department and included representatives from Children’s Services and Property, Business and Regulatory Services.



Chapter 3 – Policy Context

National policy

A significant change in the direction of Government planning and transport policy was marked in January 2011 with the publication of an updated Planning Policy Guidance (PPG) Note 13 (Transport), which abolished national maximum parking standards. In March 2012, this and all other PPG Notes were replaced by the National Planning Policy Framework (NPPF).

It is now for local authorities to set their own standards in accordance with local circumstances. In setting local parking standards for residential and non-residential development, the NPPF encourages local authorities to take into account:

- the accessibility of the development;
- the type, mix and use of development;
- the availability of and opportunities for public transport;
- local car ownership levels; and
- an overall need to reduce the use of high-emission vehicles.

County policy

Hampshire County Council's previous car and cycle parking standards for educational establishments were contained within 'Hampshire Parking : Strategy and Standards'. The strategy was adopted in February 2002 as Supplementary Planning Guidance to support policy T2 of the former Hampshire County Structure Plan 1996-2011 (Review) for application within the area covered by the County Council. The Structure Plan was superseded and its policies ceased to have force, when the Regional Spatial Strategy for the South East Region - the 'South East Plan' - was approved by the Government in May 2009. However, the Coalition Government revoked all Regional Strategies (including the South East Plan) in July 2010.

The previous education car parking standards³ are shown in Table 4 of the 2002 strategy and reproduced below.

	Maximum parking limit	Parking in accessible locations (50% of maximum permitted standard)
Schools	1.5 spaces per classroom	1.5 spaces per 2 classrooms
16+ Colleges and further education colleges	1 space per 2 full-time staff	Allocation to be justified within transport assessment and travel plan

There was no defined standard for cycle parking provision; instead the transport assessment and school/college travel plan was required to justify the proposed cycle parking allocation to staff, students or community users.

³ Table 4 in the 2002 strategy also presents car and cycle parking standards for day nurseries/playgroups (private) and crèches. It is considered that these standards remain robust and so have not been included in this review.

Chapter 4 – Current Parking Standards in the Surrounding Region

A review of car, cycle and Powered Two Wheeler (PTW) parking standards relating to schools in authorities within the surrounding region has been undertaken for benchmarking against Hampshire’s previous school parking standards.

Car parking

Current school car parking standards in a selection of nearby local authorities are presented in **Appendix A**. Standards in other local authorities, where adopted, all pre-date the publication of the NPPF and generally set maximum standards. It can be seen that the majority of local authorities use staff-based parking standards when determining parking requirements for new and extended schools. Parking for visitors and the disabled is generally included within the specified allocation.

The table below benchmarks Hampshire’s previous car parking standards against those in selected local authorities⁴ where prescriptive standards are published. The table demonstrates the results of applying these standards to a hypothetical new build 1 FE primary school with 30 staff (comprised of 10 teaching staff and 20 non-teaching staff), 210 pupils and seven classrooms.

	Number of parking spaces ⁵
Aylesbury Vale ⁶	21
South Bucks	14
Wycombe	33
Dorset ⁷	11
East Sussex	19
Essex	14
Isle of Wight	30
Kent	33
Southampton	11
Wiltshire	24
Hampshire	11

It can be seen that, assuming that parking standards are used as maxima, the level of car parking provided for the new primary school under Hampshire’s previous standards would be lower than the majority of the local authorities shown in the above table, and in a number of cases significantly lower. It is clear that the previous standards are out of step with the guidance provided by a number of other local authorities in the surrounding region.

⁴ Local authorities cited in Appendix A which have not published prescriptive standards, namely Surrey and West Sussex, are not included in the above table.

⁵ The level of parking provision assumes the maximum permitted standard in each local authority, with no reduction for higher levels of public transport or walk/cycle accessibility.

⁶ Aylesbury Vale’s specified standard is one space per **full-time equivalent** (FTE) staff member. For the purpose of comparison with other authorities whose standards do not explicitly distinguish between FTE and headcount, the staff FTE to headcount ratio is assumed to be 70%.

⁷ Dorset’s standard, unlike Hampshire’s previous standard, is exclusive of visitor and disabled parking. This is assessed individually.

Cycle/Powered Two Wheeler (PTW) parking

Current cycle and PTW parking standards for the same selection of nearby local authorities is presented in **Appendix B**.

Hampshire's previous standards suggested that the level of cycle provision would be determined on a site by site basis. However, many other local authorities suggest a minimum level of cycle parking but with an ability to provide a higher level should the need be demonstrated. The level should provide the scope to achieve School Travel Plan modal share targets.

There is no PTW parking standard specific to schools. However, for non-residential uses Hampshire's previous standard was 1 space per 25 car parking spaces. This is comparable with the PTW parking standards set in other local authorities, where these are specified.

Chapter 5 – Existing Travel Patterns of School Staff

Overview

To understand the travel patterns of school staff and so provide an initial overview of the adequacy and suitability of the previous parking standards, a review of School Travel Plans for an initial sample list of ten schools was undertaken. However, with the emphasis of School Travel Plans being on pupil travel, information on staff travel patterns was found to be variable, with some schools providing no data at all.

A sample audit of school sites was undertaken to measure actual parking arrangements against the existing policy requirements and estimated parking demand. A sample list was agreed with the Member Advisory Group; these included suggestions from Children's Services and from Members, to provide a typical cross-section of schools covering all types (i.e. infant, junior, primary, secondary and special schools). Letters were sent to the Headteachers and Admin Officers of sample schools requesting consent to undertake site audits, and a letter was sent on behalf of the Chair of the Member Advisory Group to Members in the electoral divisions affected.

Site audits were undertaken during November and December 2012, with a total of 48 schools being visited⁸. This represents 9% of the 537 state schools across Hampshire (as of October 2012). The focus of the site audits was to collect information on staff car parking provision and demand, but the opportunity was also taken to summarise arrangements with respect to cycle parking, parent pick up/set down and bus/coach parking, as well as identifying walk, cycle and public transport routes in the vicinity of the school site.

Given the variability in the level of staff travel data contained within the School Travel Plans, the site audits were supplemented by questionnaires sent to each of the sample schools, requesting information on:

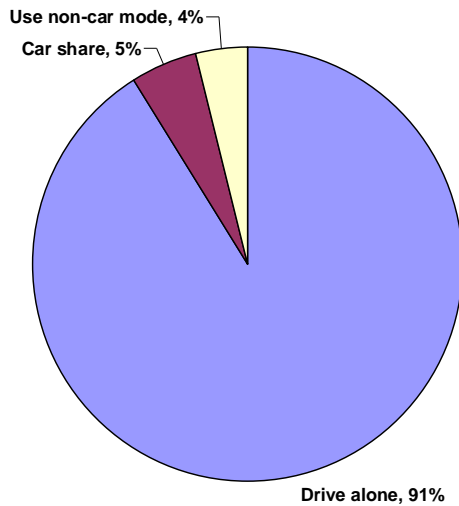
- home postcodes and travel patterns of school staff, divided into six main categories:
 - teachers
 - learning assistants
 - administrative support
 - site managers/caretakers
 - catering staff
 - other staff (e.g. cleaners, youth workers);
- the number of staff employed under the above categories (headcount and full-time equivalent); and
- the main barriers to the use of non-car modes for the journey to school.

Responses were received from 38 schools (a response rate of 79%), with 33 fully completed questionnaires and five partially completed questionnaires.

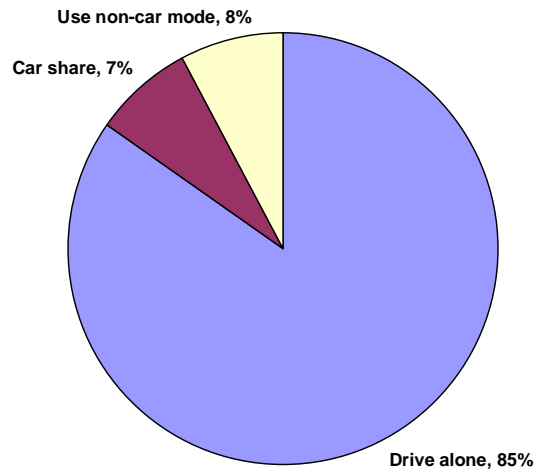
⁸ Infant and junior schools on shared sites are counted as separate schools.

Staff travel by car

Based on the data provided by schools, the charts below presents the average percentage of **teaching** staff travelling to school by car (alone or car sharing) and by other (non-car) modes, for primary and infant/junior schools as well as secondary schools. These school types accounted for 28 of the 38 questionnaires returned.

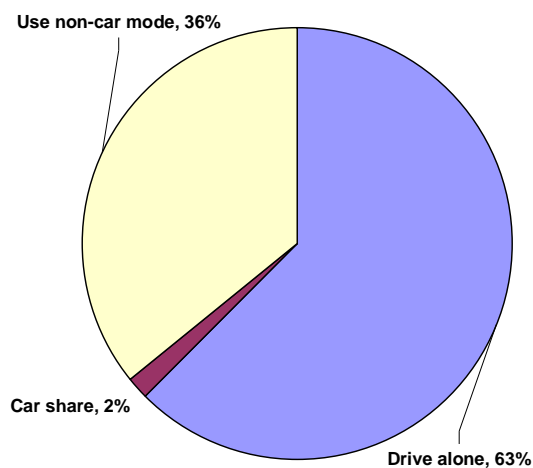


Travel Patterns of Teaching Staff – Primary & Infant/Junior Schools

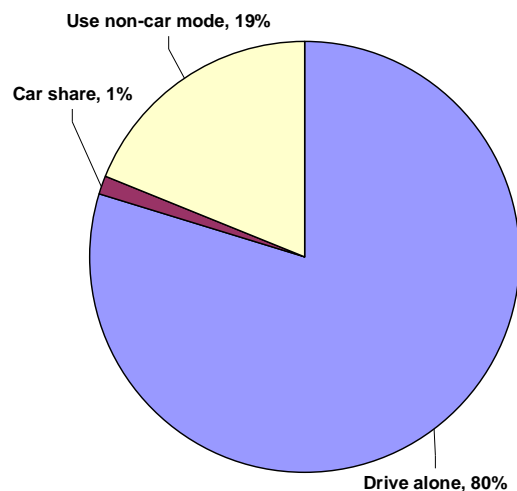


Travel Patterns of Teaching Staff – Secondary Schools

The chart below presents the same information for **non-teaching** staff, i.e. learning assistants, administrative support, site managers/caretakers, catering staff and other staff (e.g. cleaners, youth workers).



Travel Patterns of Non-Teaching Staff – Primary & Infant/Junior Schools



Travel Patterns of Non-Teaching Staff – Secondary Schools

Travel patterns for each non-teaching staff category, together with teaching/non-teaching staff travel data for individual schools, is included as **Appendix C**.

The charts show that the vast majority of teaching staff drive alone to the school site. The level of staff car sharing is low, although it is slightly more widespread amongst teaching staff at secondary schools and amongst non-teaching staff at special schools. It is also notable that lower levels of non-teaching staff drive alone at infant/junior schools (c. 60%) than at secondary/special schools (c. 75%).



It is notable from the site audits that the level of parking provision is generally above the 2002 standard of 1.5 spaces per classroom, across all school types. Furthermore, from the detailed staff travel data for individual schools (**Appendix C**), a general parking shortfall has been identified of more than 30% relative to estimated demand. Secondary schools are an exception to this rule, with some sites for which staff travel data was available observed to have sufficient parking available within designated spaces. Nevertheless, other sites were audited where a parking shortfall was clearly evident, with vehicles commonly parked on grass verges.

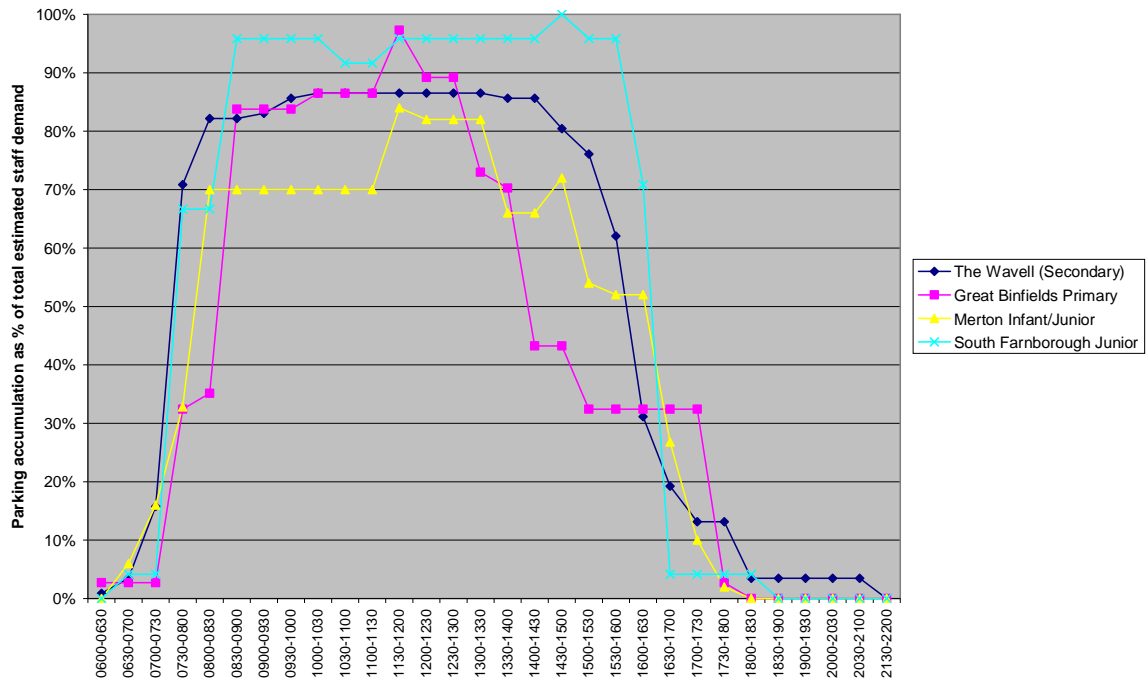


In reality, vehicles driven by part-time staff will not all be parked at the same time, so the actual on-site parking shortfall will be lower than 30%. To investigate this, further information was obtained from five of the audited schools (Merton Infant, Merton Junior, South Farnborough Junior, Great Binfields Primary and The Wavell) to understand the specific times at which staff within each category typically arrive and depart during the school day. Information on visitor movements was also obtained. This enabled profiles of parking demand throughout the day to be created for each school, to identify the peaks and troughs in demand.

The graph below shows the typical staff car parking accumulation profile⁹ for each of the five schools¹⁰. There are variations in the typical profile between the schools, but in all cases the peak staff parking accumulation is reached by late morning. The peaks range from approximately 85% of total estimated staff demand (based on travel mode data) at The Wavell and Merton Infant/Junior, to approximately 95% of total estimated staff demand at Great Binfields Primary and South Farnborough Junior.

⁹ The profile considers only the car parking accumulation associated with teaching and non-teaching staff. It does not take into account parking demand associated with visitors (such as peripatetic music teachers, social services, ICT staff, teaching staff from other primary schools and County Council representatives).

¹⁰ Merton Infant and Junior have a shared car park and so have been considered together.



Staff/pupil travel by cycle

To ensure that staff and pupils cycling to school can store their cycles safely and securely, on-site cycle parking is required. The table below shows the average percentage of staff cycling to school, as well as the average percentage of pupils scootering/cycling to school, based on site observations and the published 2012 school roll for each site.

	INFANT	JUNIOR	PRIMARY & INFANT/JUNIOR	SECONDARY	SPECIAL
No. of schools returning usable questionnaires	3	4	23	5	3
Average % of staff arriving by cycle	2.6%	3.7%	2.2%	1.5%	0.0%
Average % of pupils arriving by scooter	3.8%	2.8%	2.3%	0.0%	0.0%
Average % of pupils arriving by cycle	1.1%	2.6%	0.9%	3.2%	0.0%

The table shows that the cycle mode share for staff is very low (averaging 2.1% across all school types). There is clear potential to improve this mode share through the provision of dedicated, secure and covered staff cycle parking and the promotion of cycling through School Travel Plans.

Cycling and scootering amongst school pupils is also limited, although the figures should be treated with caution as the site audits were undertaken during the late autumn and winter months. The County Council's School Travel Planning team reports that some other schools (not included in the sample audit) achieve high levels of cycling amongst pupils, for example:

- Hamble Primary School – 14.4% (41 pupils);
- Bay House School (secondary) – 46.7% (965 pupils); and
- Prospect School (special) – 16.9% (9 pupils).

It was commonly noted by school staff during the site audits that cycling and scootering by pupils is much more widespread in the summer months. Nevertheless, scootering was observed to be popular at primary, infant and junior schools, with the number of scooters parked exceeding that of cycles at most sites.

Cycle/scooter usage is also influenced by the quality of parking facilities. The site audits found that this varies from cycle shelters with "Sheffield" type stands to no formal provision at all, with scooters and cycles left in the open air remote from the building entrances.



Chapter 6 – Revised School Parking Standards

Recommended parking standards

Revised school car parking standards have been identified based on the evidence collected from desktop research, liaison with Members and stakeholders and the findings of the school parking audits. The new standards are staff-based, consistent with the standards adopted by the majority of neighbouring local authorities. They also give due regard to how education is now provided, with the ratio of staff to classrooms now considerably higher than when Hampshire's previous school parking standards were introduced in 2002.

The primary objective of the review of school parking standards has been to identify a realistic, evidence-based, level of car parking provision to be adopted when developing proposals for new and extended schools, to reduce the problems caused by informal and overflow staff car parking. However, the review has also presented an opportunity to clarify the desired approach with regard to cycle and PTW parking provision. Whilst a realistic level of car parking should be provided to meet the needs of school staff, there remains the need to ensure that a choice of travel modes is available and that parking policy can contribute to achieving central Government's carbon reduction objectives. With respect to cycle parking, the introduction of prescriptive standards covering both staff and pupils can also contribute towards achieving the objectives of Hampshire's Healthy Schools programme. The recommended parking standards are tabulated below.

Type	Recommended parking standard (see Notes 1-10)
Cars	1 space per teaching member of staff plus 2 spaces per 3 non-teaching staff. Disabled parking should be counted as 5% of the above allocation or a minimum of 1 space.
Cycles	Primary schools – 1 scooter space per 10 pupils plus 1 cycle space per 20 pupils. Secondary schools – 1 cycle space per 10 pupils In addition (for all schools) – 1 cycle space per 20 staff in a non-pupil area
Powered two-wheelers (PTW)	Minimum of 1 space or 1 space per 25 car spaces.

Notes

1. **Teaching** staff are assumed to comprise class teachers, headteachers and deputy headteachers permanently based at the school. Peripatetic specialist teachers are not included in this definition (these staff are classed as visitors). All other persons employed at the school (including teaching assistants) are classed as **non-teaching** staff.
2. Visitor parking is included within the above parking allocations.
3. The car parking allocation does not cater for minibuses or delivery vehicles, for which separate facilities must be provided unless otherwise justified.
4. There will be a requirement for a bus/coach loading area (on-site in the case of secondary and special schools), unless otherwise justified.
5. The disabled parking allocation must consist of marked spaces of sufficient size, as specified in **Appendix D** of this Strategy.
6. All cycle parking should be under cover, close to pedestrian access points to buildings and consist of "Sheffield" type stands (one stand is assumed to accommodate two cycles). Scooter parking is best accommodated using pods (if space is especially restricted, shared pods can be used to accommodate scooters and cycles).
7. The actual level of cycle parking provided, and the split between cycle/scooter parking, should be flexible depending on the travel trends identified within the School Travel Plan. However, as the School Travel Plan evolves, there should remain the scope to provide additional parking in the future.

8. For special schools, the level of cycle parking for pupils and staff will be assessed on a site-specific basis. For pupils, this will be informed by the nature of the special educational needs as it may be appropriate to provide cycle parking facilities, both for cycling to school and to store pool cycles for training purposes.
9. For secondary schools with sixth form pupils, the requirement for additional car parking will be assessed on a site-specific basis.
10. For 16+ colleges and further education colleges, the parking requirement will be identified on a site-specific basis, justified with reference to the Transport Statement/Assessment and Travel Plan.

The above standards apply to **new** provision, whether in the form of entirely new build schools or extensions to existing facilities. In the case of the latter, the standard will only be applied to the extension and **not** to the school as a whole. Whilst the parking problems experienced by individual schools have been fully substantiated by the findings of the school parking audits, it is not feasible to retrospectively address these problems through proposed modifications to school sites, which need to be considered on their own merits.

The table below refers back to the hypothetical new build 1 FE primary school as presented in **Chapter 4**, with 30 staff (comprised of 10 teaching staff and 20 non-teaching staff), 210 pupils and seven teaching spaces. The recommended car parking standard is benchmarked against the previous 2002 standard and the same local authorities presented in **Appendix A**. The proposed level of cycle parking is also shown.

	Number of car spaces		Number of cycle spaces
Aylesbury Vale ¹¹	21		24 (12) ¹²
South Bucks	14		No specified standard
Wycombe	33		42
Dorset ¹³	11		Assessed individually
East Sussex	19		17
Essex	14		76
Isle of Wight	30		No specified standard
Kent	33		5
Southampton	11		17 (3 for staff, 14 for pupils) ¹⁴
Wiltshire	24		52 ¹⁵
Hampshire	Previous	Recommended	34 (2 for staff, 32 for pupils (21 scooter/11 cycle))¹⁶
	11	23	

It should be stressed that the recommended standards represent a “demand-led” level of parking provision, based on an understanding of parking needs gained from the sample school audits. They do not form maximum or minimum standards but rather a guideline which is desirable to achieve in order to avoid some of the problems commonly associated with school parking.

¹¹ Aylesbury Vale’s specified standard is one space per **full-time equivalent (FTE)** staff member. For the purpose of comparison with other authorities whose standards do not explicitly distinguish between FTE and headcount, the staff FTE to headcount ratio is assumed to be 70%.

¹² 1 space per 10 employees/users in Aylesbury, 1 space per 20 employees/users in other areas.

¹³ Dorset’s standard, unlike Hampshire’s previous standard, is exclusive of visitor and disabled parking. This is assessed individually.

¹⁴ This is specific to primary schools – for secondary schools a separate standard applies.

¹⁵ No specified cycle parking standard could be identified for Wiltshire; the number of spaces is instead based on Appendix 6 of the Salisbury Local Plan.

¹⁶ As ¹⁴ above.

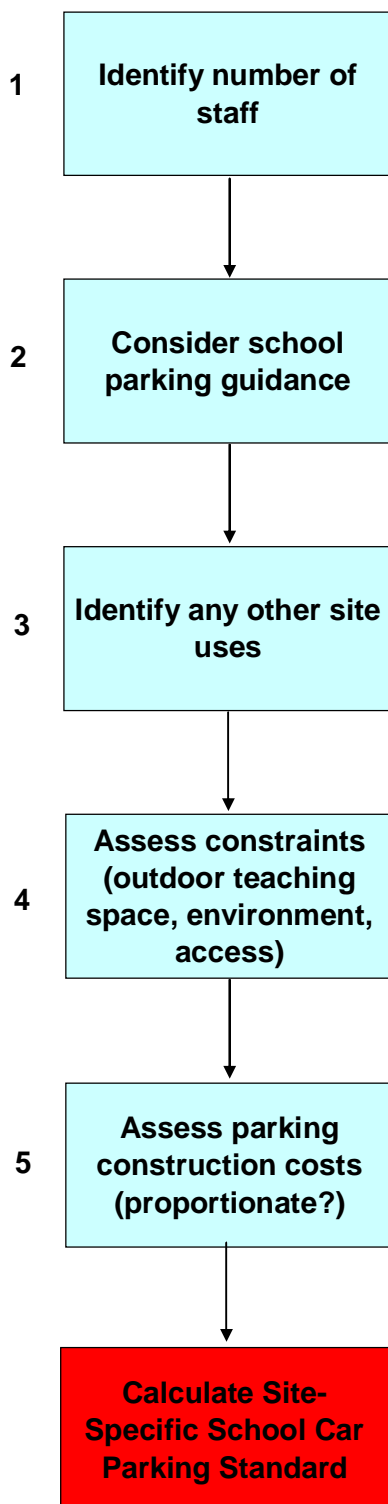
Adjusting the recommended parking standards for specific sites

As stated previously, the recommended parking standards represent a “demand-led” situation. When appraising potential sites for new build schools, such as within Major Development Areas (MDAs) and on Greenfield sites, the aim should be to select sites of a suitable land area and topography which can achieve this standard. The guidance provided here can help to ensure sufficient land is acquired.

It is noted however that it becomes significantly more difficult to achieve increased parking provision when dealing with existing school sites with their associated land use constraints, and where to provide additional parking would compromise the ability to deliver other educational facilities, such as outdoor teaching spaces and servicing areas. In order to provide a clear, logical and rational approach to determining the level of car parking provision to be provided for school expansions on existing school sites, a new approach is required as shown overleaf. A similar approach should be used to determine the level of cycle parking provision.

In all cases, it is assumed that a robust and regularly monitored School Travel Plan will be in place, with appropriate modal share targets and specific, timed, measurable and achievable measures.

As well as providing an appropriate level of car, cycle and PTW parking, it is important that proposals for new and extended schools incorporate good design, which takes into account the needs of all school users. Key design principles are outlined in **Appendix D**.



Step 1	The first step is to identify the number of staff (headcount/FTE) to be employed within the new school facilities. Within an entirely new school this would be the total number of staff employed, whereas within an extension to an existing school this would relate solely to the number of additional staff to be employed.
Step 2	The second step is to calculate the number of car parking spaces which would be provided under the 2013 “demand-led” parking guidance.
Step 3	If the proposed school development includes community facilities which will be open to the public or other schools during the daytime (e.g. sports facilities, community halls), or other uses such as children’s centres, the third step is to add an appropriate number of parking spaces to that identified in Step 2. This needs to be justified with reference to the transport statement and/or site travel plan.
Step 4	<p>The fourth step is to assess the technical deliverability of the recommended number of parking spaces (the 2013 “demand-led” parking guidance plus any other daytime site uses). On-site considerations may include:</p> <ul style="list-style-type: none"> • the need to provide an adequate area for playing fields/outside teaching areas; • avoiding land with ponds and trees; • topography; • providing servicing facilities clear of the public highway; • providing adequate pick up/set down facilities for buses/coaches and (in the case of special schools) parents; and • avoiding a high risk of conflict between vehicles and pedestrians. <p>Where available space is constrained by the above, it may be appropriate to promote tandem parking arrangements to help achieve the recommended number of parking spaces.</p>
Step 5	Costs are also a consideration in the deliverability of school development proposals. The uppermost priority in any such scheme is to fund the provision of improved teaching facilities. The cost of providing the number of parking spaces which it is technically feasible to provide (following the Step 4 assessment) will therefore need to be reasonable and proportionate.

Chapter 7 – Managing Off-Site Parking

The focus of the On-Site School Parking Guidelines has been upon identifying new, evidence based parking standards, as well as defining the key design principles, for parking **within** school sites by staff and visitors. However, the information gathered during the sample school audits confirmed that off-site parking (primarily by parents) is also a major concern. The need for a holistic school parking strategy covering both on- and off-site parking issues is fully recognised. Tools available to manage off-site parking issues include the following.

- **School Travel Plans** – these cover all the issues relevant to journeys to and from the school premises. Essentially they are a statement of problems which need to be addressed and a strategy for overcoming and reducing them. School Travel Plans can bring together a tool box of measures, including those indicated below, to help reduce congestion and improve safety around school sites. The measures identified can be considered for funding within local capital transport programmes;
- **“Parkwise Promise”** – utilising a scheme used by Buckinghamshire County Council, the County Council is due to launch a pilot during 2013 whereby parents sign a “promise” agreeing to park responsibly when they drive their children to school. Those signing up will receive a car sticker, which it is hoped will encourage other parents to do the same;
- **Walking buses/cycle trains** – these involve children being collected from along a pre-arranged route at an agreed time and escorted to school by volunteers who have been vetted as suitable to work with children. Local guidance is available at www.hants.gov.uk/schooltravelplans/wb.index.html;
- **Staggered school opening hours** – these can spread the “school run” over a longer time period and also facilitate the “double tripping” of school buses;
- **“School run car-sharing”** – parents can arrange this on an informal, ad-hoc basis, but coffee mornings, notice boards and the use of bespoke school car share websites can help to widen participation. Local guidance is available at www.hants.gov.uk/schooltravelplans/car_share.html;
- **Off-site shared use parking** – the use of nearby car parking for “Park and Stride” schemes, whether public car parks or private car parks for which consent has been obtained, is already helping to manage on-street parking issues affecting some Hampshire schools;
- **Non-statutory school buses** – it may be possible for parents of children who are not entitled to free school transport to group together to commission their own home to school transport;
- **Traffic Regulation Orders (TROs)** – these are regularly made in the vicinity of school entrances to manage on-street parking issues; and
- **Safer Routes to Schools** – improvements to pedestrian and cycle infrastructure on the key access routes to schools can improve safety and increase the willingness of parents to allow their children to walk or cycle, rather than being driven, to school. On-site infrastructure, such as waiting shelters for “Park and Stride” parents and additional pedestrian/cycle access gates, can also encourage walking to school, whilst spreading residual on-street parking over a wider area.

The above list is not intended to be exhaustive and other tools may be available. Future work will investigate the role that these tools can play in managing the parking demand associated with schools.

Chapter 8 – Conclusion

A detailed review has been undertaken in order to assess the adequacy and suitability of the 2002 parking standards for the needs of Hampshire's schools. The review has included the benchmarking of these standards against those of other nearby authorities, as well as collecting empirical evidence from sample audits at almost 10% of Hampshire's state schools to estimate current parking demand and measure this against current provision and the requirements of the 2002 standards.

The data assembled during this review clearly demonstrates that parking demand significantly exceeds the level of provision required under the 2002 standards, which have become outdated as a result. Analysis of the data has informed the creation of new, evidence based, guidance on parking provision at school sites which reflects the fact that schools now have a significantly greater number of non-teaching support and administrative staff compared with when the previous standards were introduced.

These On-Site School Parking Guidelines for Hampshire will assist in the design and delivery of appropriate school facilities by the County Council and other parties, and will enable the County Council to make sound decisions based upon relevant and up-to-date evidence.

The Guidelines are also commended to the District, City and Borough Councils in Hampshire in their role as Local Planning Authorities, in order to provide advice for parking provision connected with school applications that they determine.

Appendix A – Current Car Parking Standards in the Surrounding Region

Local authority	Adoption date	Car parking standard	Parents/Bus Parking	Reduction in parking for greater accessibility?
Buckinghamshire	County-wide standards not available, but District standards (where available) are outlined below.			
<i>Aylesbury Vale</i>	May 2000	1 space per full-time equivalent staff member, 1 per 6 students aged over 16, visitor allocation included within this	Not specified	Not specified
<i>South Bucks</i>	March 1999	2 spaces per classroom	Pick up/set down provision to be made, details not specified.	Not specified
<i>Wycombe</i>	January 2004	Zone 1 - assessed individually. Zone 2 - 1 space per staff member plus 2 visitor spaces for schools with up to 40 staff, 1 visitor space per 20 staff thereafter. Zones 3 to 5 - 1 space per staff member plus 2 visitor spaces for schools with up to 20 staff, 1 visitor space per 10 staff thereafter.	Not specified - but space on school site should be allocated for coaches on school outings.	Yes
Dorset	Unadopted	1 space per 2 full time staff plus visitor and disabled provision	Not specified	Not specified
East Sussex	February 2002	Maximum of 1 space per teaching member of staff, 1 space per 3 non-teaching staff, 2 spaces for visitors, 1 per 10 pupils aged 17 and over	To be provided on-site, standard not specified but secondary schools must also accommodate buses	Yes
Essex	September 2009	1 space per 15 pupils. Disabled parking 1 bay or 5% of the total allocation	Parent parking not specified, although for special schools pick up/set down facilities should be taken into consideration. Coach parking facilities to be considered.	To be considered for sites in urban locations.
Hampshire	February 2002	1.5 per classroom, 1.5 per 2 classrooms in accessible areas (based on public transport accessibility model). Disabled parking 5% of the total allocation	Parking allocation caters for parents. Requirement for bus/coach loading area on/off-site unless otherwise justified.	Yes
Isle of Wight	Unadopted	1 space per staff member, 1 space per 8 pupils aged 17 and over.	May take the form of a layby/service road in front of school. Should not involve need to reverse.	Yes
Kent	July 2006	1 space per staff member + 10%, inclusive of disabled provision (<50 spaces = 1 space plus 2 of sufficient size but not designated, 50 to 200 spaces = 3 or 6% of total capacity, >200 spaces = 4 plus 4% of total capacity).	Appropriate provision in a manner not unduly affecting public highway.	Local variations may be adopted subject to agreement between County and District.
Portsmouth	School parking standards not published – as Hampshire's 2002 standards were approved by Portsmouth City Council, it is presumed that these remain applicable.			
Southampton	September 2011	1.5 per classroom, 0.75 per classroom in accessible areas (based on public transport accessibility model)	Parent parking not specified, although coach parking should be demonstrated to be adequate for the activity generated.	Yes
Surrey	January 2012	To be assessed individually, to include staff, visitor and overflow parking if also used by community.	Parent parking should not be provided (existing sites may be an exception), however space should be allowed for buses to enter school site where appropriate.	Not specified
West Sussex	November 2003	To be assessed individually, but as a general rule 1 space per 2 teaching staff	Not specified	Not specified
Wiltshire	March 2011	Maximum of 2 spaces per 3 staff, 1 visitor space per 7 staff, 1 per 10 2nd year 6th formers	1 parent space per 12 infant pupils, 1 per 20 primary pupils, 1 per 30 secondary pupils	Yes

Appendix B – Current Cycle and Powered Two-Wheeler (PTW) Parking Standards in the Surrounding Region

Local authority	Adoption date	Cycle parking standard	PTW parking standard
Buckinghamshire	County-wide standards not available, but District standards (where available) are outlined below.		
<i>Aylesbury Vale</i>	May 2000	Decided on merit, but typically 1 space per 10 employees/users in Aylesbury and 1 space per 20 employees/users in other areas.	Not specified
<i>South Bucks</i>	March 1999	Not specified	Not specified
<i>Wycombe</i>	January 2004	Generally, 1 space per 5 pupils, to reflect Green Transport Plans and local safer routes to school policy	Not specified
Dorset	Unadopted	Individual assessment	Parking in line with Manual for Streets recommendations (section 8.4, p. 112/113).
East Sussex	February 2002	1 long term space per 10 full time staff plus: Primary and junior schools: 1 long term space per 15 students Secondary schools: 1 long term space per 5 students	Secure parking to be considered on its merits for all new developments.
Essex	September 2009	Minimum 1 space per 5 staff plus 1 space per 3 pupils	1 space, + 1 per 20 car spaces (for 1st 100 car spaces), then 1 space per 30 car spaces (over 100 car spaces)
Hampshire	February 2002	Transport appraisal and school travel plan to determine provision and facilities	1 space per 25 car parking spaces
Isle of Wight	Unadopted	Primary schools: not specified. Secondary schools: minimum of 1 space per 5 staff and 1 space per 5 pupils	Not specified
Kent	July 2006	Junior schools: minimum of 1 space per 50 pupils. Secondary schools: minimum of 1 space per 7 pupils.	Minimum 1 space + 1 space for every 20 car parking spaces provided
Portsmouth	School parking standards not published – as Hampshire's 2002 standards were approved by Portsmouth City Council, it is presumed that these remain applicable.		
Southampton	September 2011	Primary schools: 1 space per 15 students and 1 space per 10 employees. Secondary schools: 1 space per 4 students and 1 space per 10 employees. Cycle parking under cover, secure, and located where overlooked.	Minimum 1 space per 25 car parking spaces
Surrey	January 2012	School travel plan required, to incorporate a site specific cycle strategy.	Not specified
West Sussex	November 2003	Not specified	1 space plus 1 space per 10 car parking spaces
Wiltshire	March 2011	Not specified (car parking standards within LTP 2011-2026 Car Parking Strategy); however Appendix 6 of the Salisbury Local Plan requires a minimum of 1 space per 3 staff, 1 space per 45 visitors, 1 space per 5 pupils (5-11 yrs) and 1 space per 3 pupils (over 11 yrs)	Not specified

Appendix C – Detailed Analysis of School Staff Travel Pattern Data

APPENDIX C - DETAILED ANALYSIS OF STAFF TRAVEL PATTERN DATA

	SELF CONTAINED INFANT SCHOOLS (Reception, Year 1, Year 2)			SELF-CONTAINED JUNIOR SCHOOLS (Year 3 to Year 6)				PRIMARY SCHOOLS AND COMBINED INFANT/JUNIOR (Year 1 to Year 6)														COMBINED INFANT/JUNIOR (data incomplete)				SECONDARY SCHOOLS (Year 7 to Year 11) (data incomplete)					SPECIAL SCHOOLS			
	Petersfield	Tavistock	North Baddesley	All Saints	S Farnboro	Herne	North Baddesley	Brockenhurst	King's Worthy	Hook Infant/Junior	Bramley CE	Purbrook Infant/Junior	Merton Infant/Junior	Great Binfields	Nightingale	St John the B, Titchfield	Manor Infant/Junior	Vigo Infant/Junior	Nursing CE	St Peter's, Winchester	Winnall	Liphook Infants	Trosnant Infants	Fleet Infants	Leesland Junior	Connaught	John Hanson	The Wavell	Robert Mays	Crestwood	Maple Ridge	Osborne	Wolverdene	
1. SITE DETAILS																																		
Size (form entry)	4	3	2	3	2	4	2	1	50 pan	3	2	3	2	1	1.5	1.5	3	2	1	1.5	20 pan	3	2	3	2	N/A	N/A	N/A	8	5	N/A	N/A	N/A	
No. of teaching spaces	12	7	6	12	8	16	8	7	11	25	14	21	14	7	10.5	10.5	21	14	7	12	5	9	6	9	6	43	51	58	64	39	8	19	7	
Actual parking spaces (see note 1)	16	18	13	25	20	40	12	18	21	36	23	40	18	12	23	29	42	39	12	34	8	N/A	N/A	N/A	N/A	94	84	104	86	93	5	45	30	
Vehicles parked within site boundary during audit	17	17	8	24	17	35	9	17	29	43	34	36	35	19	20	30	48	45	14	36	14	N/A	N/A	N/A	N/A	84	78	89	104	79	32	49	21	
2. STAFF NUMBERS (HEADCOUNT)																																		
No. of staff (teachers)	15	14	9	22	17	21	14	12	17	27	24	34	21	12	16	12	35	22	12	14	13	15	14	13	10	50	58	63	100	37	13	20	9	
No. of staff (learning assistants)	20	20	7	19	9	21	7	12	16	27	19	42	18	19	16	21	30	29	11	12	13	11	15	30	11	16	7	11	32	15	24	39	16	
No. of staff (admin support)	3	3	3	3	4	3	4	3	2	6	4	7	4	2	4	4	4	4	2	4	3	2	3	4	2	11	10	29	26	17	2	6	2	
No. of staff (site management)	2	1	3	1	1	1	1	1	1	2	1	4	2	1	1	1	2	2	1	1	1	1	2	1	1	4	3	2	3	3	1	2	1	
No. of staff (catering)	21	2	0	4	0	0	0	1	1	8	10	27	13	3	10	5	2	8	2	5	6	10	6	3	0	5	5	5	0	0	2	1	0	
No. of staff (other - e.g. cleaners/youth workers)	0	7	0	4	0	15	0	1	1	12	0	16	14	7	7	2	11	8	8	2	2	3	4	0	8	7	6	22	0	1	4	4	9	
Total no. of staff	61	47	22	53	31	61	26	30	38	82	58	130	72	44	54	45	84	73	36	38	38	42	44	51	32	93	89	132	161	114	46	72	37	
3. STAFF NUMBERS (FTE)																																		
No. of staff (teachers)	14.5	10.2	7.5	19.6	14.1	17.6	11.6	9.4	14.6	26.4	18.9	28.7	17.6	10.7	15.1	11	30.8	20.4	9.5	14	9.2	11.5	10.5	11.1	9.4	48.1	55.6	59.6	91	37	11.2	19.2	8.8	
No. of staff (learning assistants)	9.1	8.6	3.7	11	8	7.9	3.5	6.2	10.1	20.5	12.5	21.1	13.2	12.3	13.4	11.8	21.3	19.3	6.7	12	11.7	7.5	12	15.4	7.7	11.7	6.8	10	20.6	15	17.2	39	14.4	
No. of staff (admin support)	2.1	1.9	1.6	3	2.5	2.9	2.2	2.2	1.7	5.2	2.7	5.6	4	1.6	3.6	2.5	3.6	3.8	1.5	2.8	2.2	2	2.4	2.7	2	9.8	9.4	25.9	18.9	17	1.9	5.2	1.9	
No. of staff (site management)	1.3	0.6	0.9	1	1	1	1	1	1	2	0.9	2.8	1.5	1	1	0.8	2	1.7	0.6	1	0.6	0.8	1.6	0.3	1	2.6	3	2	3	3	1	2	1	
No. of staff (catering)	3.1	1.1	0	2	0	0	0	0.1	0.2	1.7	2.9	4.4	3.5	1.3	1.1	0.6	0.4	2.8	0.9	1	0.6	1	1.4	1.3	0	3.7	3.6	5	0	0	0.2	1	0	
No. of staff (other - e.g. cleaners/youth workers)	0	1.2	0	1.2	0	3.4	0	0.3	0.4	9.3	0	4.4	2.8	0.7	2.7	0.8	1.9	2.3	1.5	1	0.2	1.4	1.6	0	1.9	5.7	6	7.8	0	1	2.7	4	8.2	
Total no. of staff	30.1	23.6	13.7	37.8	25.6	32.8	18.3	19.2	28	65.1	37.9	67	42.6	27.6	36.9	27.5	60	50.3	20.7	31.8	24.5	24.2	29.5	30.8	22	81.6	84.4	110.3	133.5	43	34.2	70.4	34.3	
4. STAFF TRAVEL MODE TO SCHOOL																																		
% of teaching staff arriving by car (alone)	100%	100%	100%	100%	83%	96%	100%	83%	100%	97%	100%	94%	75%	92%	73%	100%	83%	82%	100%	100%	100%	100%	100%	69%	90%	80%	69%	90%	92%	77%	72%	100%		
% of teaching staff arriving by car (sharing)	0%	0%	0%	0%	0%	0%	0%	17%	0%	0%	0%	3%	25%	0%	20%	0%	0%	9%	0%	0%	0%	0%	0%	0%	15%	0%	4%	17%	6%	6%	3%	8%	6%	0%
% of learning assistants arriving by car (alone)	68%	45%	60%	71%	56%	65%	100%	45%	75%	26%	78%	48%	73%	89%	46%	80%	63%	69%	82%	100%	46%	100%	67%	84%	45%	79%	43%	100%	93%	67%	75%	69%	88%	
% of learning assistants arriving by car (sharing)	0%	0%	0%	0%	22%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	0%	0%	0%	0%	0%	7%	11%	0%	0%	0%	0%	7%	7%	21%	5%	0%	
% of admin support staff arriving by car (alone)	33%	100%	67%	100%	60%	100%	0%	100%	50%	57%	100%	86%	67%	100%	75%	100%	75%	100%	100%	75%	100%	100%	50%	100%	100%	79%	77%	93%	94%	94%	100%	100%	100%	
% of admin support staff arriving by car (sharing)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
% of site management arriving by car (alone)	0%	100%	100%	100%	100%	100%	100%	100%	0%	100%	0%	50%	100%	100%	100%	0%	100%	50%	0%	100%	0%	100%	100%	100%	0%	33%	67%	50%	100%	100%	100%	100%	0%	
% of site management arriving by car (sharing)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
% of catering staff arriving by car (alone)	0%	0%	20%	40%	0%	100%	0%	0%	0%	0%	20%	37%	40%	67%	13%	100%	50%	25%	50%	100%	0%	60%	67%	89%	33%	60%	100%	60%	0%	0%	0%	67%	0%	
% of catering staff arriving by car (sharing)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
% of other staff arriving by car (alone)	0%	14%	0%	100%	0%	11%	0%	100%	100%	0%	63%	60%	57%	25%	50%	0%	38%	75%	83%	0%	100%	100%	0%	20%	89%	83%	64%	90%	100%	25%	25%	71%		
% of other staff arriving by car (sharing)	0%	0%	0%	0%	0%	22%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%
% of non-teaching staff arriving by car (alone)	38%	42%	53%	74%	60%	59%	81%	56%	67%	31%	61%	52%	66%	81%	40%	81%	53%	59%	72%	93%	36%	85%	68%	85%	41%	76%	66%	81%	93%	83%	67%	70%	81%	
% of non-teaching staff arriving by car (sharing)	0%	0%	0%	0%	13%	6%	0%	0%	0%	0%	0%	0%	0%	0%	7%	0%	0%	4%	0%	0%	0%	7%	4%	9%	0%	0%	0%	0%	3%	3%	18%	4%	0%	
4. PARKING PROVISION AND DEMAND																																		
No. of parking spaces (current maximum standard)	18	11	9	18	12	24	12	11	17	38	21	32	21	11	16	16	32	21	11	18	8	N/A	N/A	N/A	N/A	65	77	87	96	N/A	12	29	11	
Shortfall (no. of spaces) - actual provision versus standard	-2	8	4	7	8	16	0	8	5	-2	2	9	-3	2	7	13	11	18	2	16	1	N/A	N/A	N/A	N/A	30	8	17	-10	N/A	-7	17	20	
Estimated staff parking demand (see Note 2)	30	28	18	45	24	41	22	20	31	51	45	80	50	37	29	39	54	50	30	37	22	N/A	N/A	N/A	N/A	73	68	115	154	N/A	36	53	31	
Shortfall (no. of spaces) - actual provision versus estimated demand	-14	-10	-5	-20	-4	-1	-10	-2	-10	-15	-22	-40	-32	-25	-6	-10	-12	-11	-18	-3	-14	N/A	N/A	N/A	N/A	21	16	-11	-68	N/A	-31	-8	-1	

Notes

1. In cases where some/all parking spaces are not formally marked, number estimated based on hardstanding area available and no. of vehicles actually parked, assuming that (a) double parking is not permitted and (b) servicing areas are not included. The number of spaces relates only to those available within the school boundary (including any disabled/visitor parking).

2. For calculation purposes it is assumed that car share vehicles have an occupancy of two persons. Estimated parking demand is a worst case peak parking accumulation which does not take into account the vehicle arrival/departure profile throughout the day. The figure assumes that all car driving staff park at the same time. For some of the school day this will not be the case as some staff work part-time. However, by the late morning, when teaching assistants and catering staff and generally on site, the parking accumulation will approach this worst case peak, as corroborated by the staff parking accumulation graph in Chapter 5.

Appendix D – Parking Design & Layout

Overview

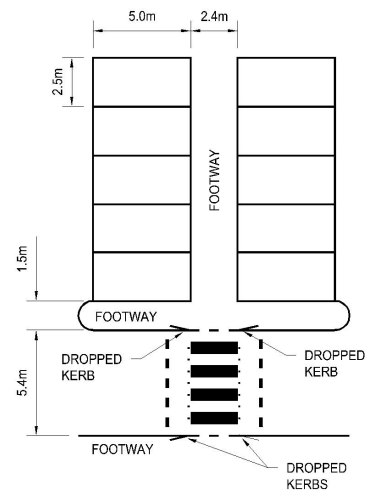
As well as providing an appropriate level of car, cycle and PTW parking, it is important that proposals for new and extended schools incorporate good design, which takes into account the needs of all school users. Key design principles are outlined in the following sections. Specific design guidance is also available from the Department for Transport.

Pedestrians

The needs of pedestrians should be taken into account when designing the layout of parking. This should include both those who have parked and those accessing the school on foot. Pedestrian access both to the development and across a car park should, wherever possible, be provided along the pedestrian desire lines rather than simply relying on the vehicular route.

Within the car park, provision should be made so that pedestrians can walk through it easily and safely. The provision of raised footways through the car park and crossing points across main vehicle routes (as illustrated above) will help to alleviate conflict between pedestrians and vehicles. A tactile distinction should be made between pedestrian areas and vehicular areas, in order that people with visual impairment can distinguish between the two. The provision of raised areas, footway areas and tactile paving at all dropped kerbs should achieve this.

TYPICAL LAYOUT OF FOOTWAY IN PARKING AREA



Vehicle parking

Parking bay sizes

The generally accepted minimum parking bay size is 4.8m x 2.4m, which would provide approximately 0.2m clearance around an average car. However, as the loading and unloading of cars would be relatively common within school sites, a larger bay size would be preferable. Furthermore, there is evidence that average car sizes are increasing, as popular models increase in size and 4x4s, sport utility vehicles (SUVs) and multi-purpose vehicles (MPVs) take a greater market share.

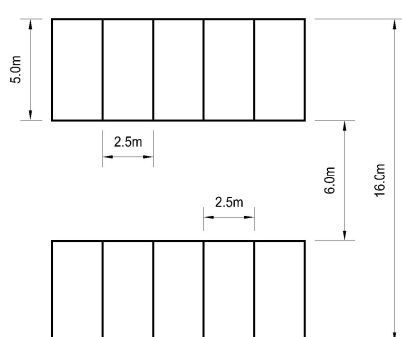
The table overleaf gives the preferred sizes of parking bays for school development proposals in Hampshire, for a range of vehicle types (bays for the mobility impaired are considered in the following section).

Preferred Parking Bay Size	Length	Width
Cars ^{17 18}	5.0m	2.5m
Powered Two Wheelers (PTW) ¹⁹	2.5m	1.5m
Minibuses ²⁰	8.0m	4.0m
Light Goods Vehicles	7.5m	3.5m
Coaches ²¹	14.0m	4.0m

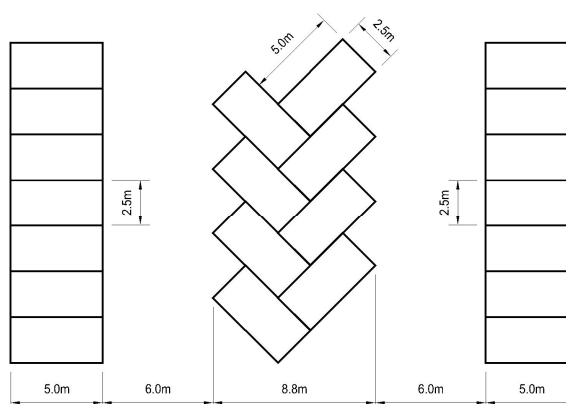
For car parking bays, the dimensions specified above assume an average car length of 4.4m and width of 2.0m. Although the average car size is increasing, as fuel prices rise the use of micro cars may become more widespread in the future. Micro cars can park “end on” in parallel spaces, and so there may be scope to provide designated micro car spaces to accommodate more vehicles within the parking area available. This can be addressed through School Travel Plans and on-site parking management as appropriate.

Parking layouts

Examples of parking layouts are shown below. The most common layout and the one often regarded as most economical in terms of land use is 90 degree square parking with parallel aisles. A minimum width of 6.0m is required for the aisles to give direct access to square parking. Whilst encouraging maximum use of the parking areas in order to minimise the risk of indiscriminate parking and overspill onto nearby streets, it is also important to take into account design features such as security and landscaping. As well as adequate bay sizes that are easy to enter and exit, clear directional markings such as exit signs will increase the appeal of the parking area.



90 degree square parking



90 and 45 degree mixed parking

¹⁷ For bays parallel to, or abutting, a carriageway, aisle or drive the preferred size should be 6.0m x 2.5m to allow vehicles to manoeuvre into the bay when adjoining bays are occupied.

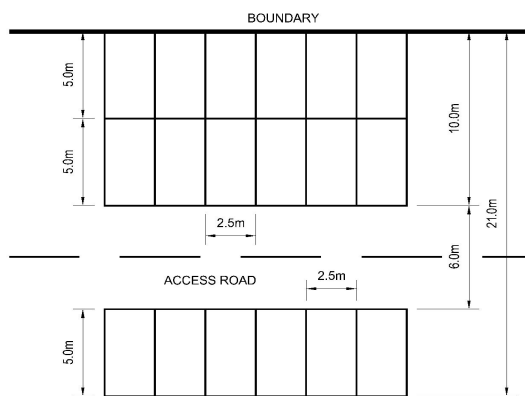
¹⁸ 5.0m x 2.5m is the **preferred** size, but in exceptional circumstances (at existing school sites only) 4.8m x 2.4m bays would be acceptable as an absolute minimum.

¹⁹ A minimum space of 1.0m should be allowed between each PTW.

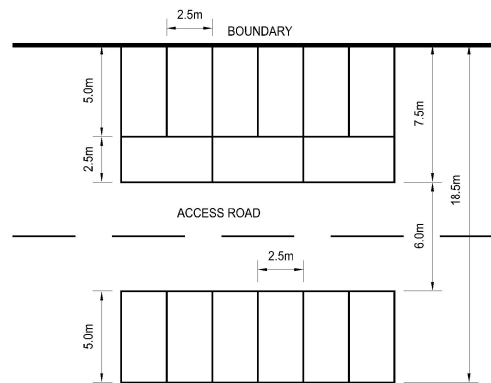
²⁰ A width of 4.0m is the minimum necessary for passengers to embark/disembark safely.

²¹ As ¹⁹ above.

For extensions to existing schools, where space is especially constrained, it may be appropriate to promote **tandem parking** arrangements, with full-time staff being “blocked in” by part-time staff on occasions throughout the school day. Example layouts are shown below.



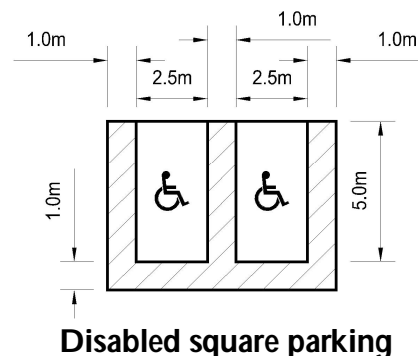
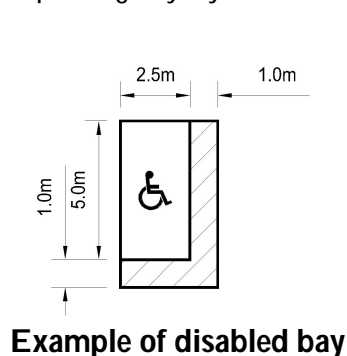
“Nose to end” tandem parking



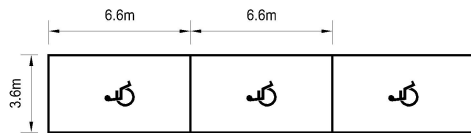
“Side on” tandem parking

Parking for the Mobility Impaired

Parking bays for disabled people should be located adjacent to school building entrances where possible. They should be designed so that drivers and passengers, either of whom may have a disability, can get in and out of the car easily and safely. Disabled parking bays should be at least 5.0m x 2.5m, with additional space for driver and/or passenger access/egress. Where bays are parallel to the access aisle, 6.6m x 3.6m²² is recommended. Disabled parking bay layouts are illustrated below.



²² In exceptional circumstances a minimum parallel bay width of 2.7m is acceptable.



Disabled parallel parking

Bays should be marked with lines and the International Symbol for Access with the safety zone/aisle between the bays marked with hatchings. Dropped kerbs should be provided where necessary and pedestrian routes to and from car parks for people with disabilities should be free from steps, bollards and steep slopes.

Bus/coach parking

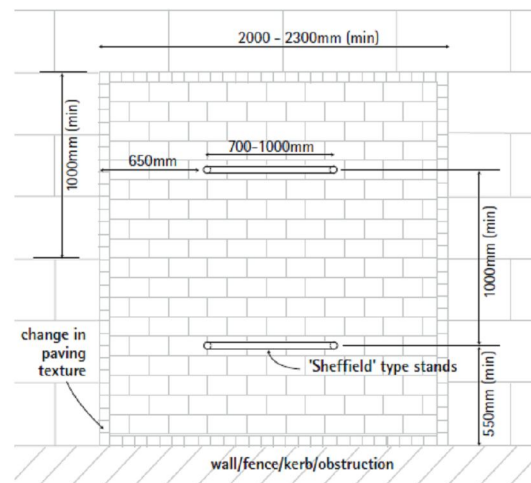
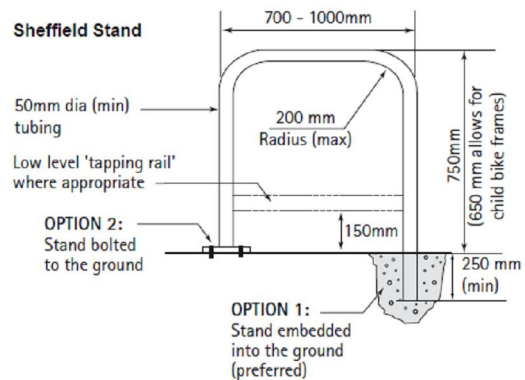
On all new secondary and special school sites where it is likely that pupils will travel to and from school in coaches, sufficient space should be reserved to allow coaches to enter the site, drop off and pick up pupils. Where appropriate, bus stops, bays, raised kerbs, seating and shelters shall be provided on the highway by the applicant.

Cycle Parking

All cycle parking must:

- be secure and covered;
- be conveniently located adjacent to entrances to school buildings;
- enjoy good natural observation;
- be easily accessible from roads and/or cycle routes;
- be well lit; and
- be located so it does not obstruct pedestrian and cycle routes.

Normally **Sheffield** stands should be provided. Stands that grip only the front wheel do not provide adequate support or security. When placed 1m apart and 0.5m from the wall, Sheffield stands can accommodate two cycles. Where more than two stands are required, a 'toast rack' facility is commonly used. For pupil cycle parking, a lower stand height of 650mm is recommended, as illustrated.



Cycle parking stand 'footprint' (plan view)

(Source: Sustrans 2004, Information Sheet FF37 - Cycle Parking)

Scooter Parking

In the case of infant, junior and primary schools, specific facilities for **non-motorised scooters** should form part of the cycle parking allocation. The proportion should be determined by the travel trends identified within the School Travel Plan.

Scooter parking can be provided using modified Sheffield stands, which have a cross strut added to accommodate multiple scooters. However, **Pods** can use space very efficiently and can either be free standing or (preferably) secured to the ground. Shared pods are available which can accommodate both scooters and cycles where space is especially limited. In determining the location of scooter parking facilities, the same considerations should be made as for cycle parking.



PTW Parking

In locating motorcycle parking, level sites with a non-slip surface should be chosen. Parking areas should only be provided to the rear of footways in exceptional circumstances and under the condition that they would not interfere with pedestrian movements or jeopardise pedestrian safety. It is often not possible to pass a lock through a motorcycle frame. Hence any anchor point needs to be at a suitable height for locking the wheel.

Ground level anchor points require regular maintenance and can be dirty to use. **Raised** anchor points are therefore preferable. These consist of horizontal bars, provided at a height of approximately 400-600mm above ground. This is generally provided at the edge of the carriageway. It can represent a trip hazard or impediment if installed along the edge of footways. Provision should be integrated with pedestrian railings or protected by means to safeguard pedestrians, particularly those with impaired vision.

