

Introduction

- 1 The following estimates relate to the traffic generation and car parking requirements of the boating component of a marina development scheme. In the example used, the boating component is based on the provision of moorings at the marina for a total of 100 boats (privately owned and hire). Estimates have also been included for other types of visitor which together can be made by pro-rata for marinas with any number of boats or varying facilities.
- 2 Estimates of traffic generation and car parking requirements for marinas can be made using these results which were obtained from an extensive survey at Sawley Marina (River Trent). Data was obtained from an electronic vehicle counter which was installed on site in March 2008, along with manual surveys and interviews on four Sundays and four weekdays during August 2008. This marina is one of the largest inland marinas in the UK with a wide range of ancillary facilities such as boat sales, chandlery and informal visitor activities. The size and range of any proposed ancillary facilities need to be taken into account when using this data to forecast non-boat related traffic generation.
- 3 Where proposed marinas do not include any ancillary facilities then these elements of the estimates can be ignored and traffic generation and car parking requirements will relate solely to boat related traffic. Where additional facilities are proposed the data is broken down into sufficient detail to allow those aspects to be included.
- 4 The 2008 survey aimed to validate the results of equivalent surveys at three marinas carried out on behalf of British Waterways (BW) in 1996, and summarised in a BW Briefing Note in 1998 ¹. (The three marinas were Sawley, Upton-on-Severn (River Severn) and Goytre (Monmouthshire & Brecon Canal)). The marinas covered in these surveys were of varied sizes and had a range of facilities. **The findings of the 2008 survey were found to be consistent with the earlier surveys (1996 results shown in brackets for information).**

¹ BW 1998, *Road Traffic Generation and Car Parking Requirements of Marinas*

Summary

Applying the information above to a 100 berth marina, the traffic generation and car parking implications of the scheme are:-

Average weekend peak traffic flow (entering & leaving) (1pm – 4pm Sunday afternoons):

Vehicles per hour, 2008 figures (1996 figures)

	<u>Marina size</u>
	<u>100 boats</u>
<u>Boat related traffic excluding incidental marina traffic</u>	
Private boats	5 (7)
Hire boats	1 (NA)
Marina management / servicing	1 (2)
Total for a moorings-only marina	7 (9)
 <u>Incidental marina traffic</u>	
Visits related to boat / equip. sales etc.	9 (9)
Looking around	9 (9)
Catering related visits (cafe etc.)	5 (5)
Others (shops etc.)	1 (NA)
Total for incidental traffic	24 (23)
 Overall Total for a marina with all the above	 31 (32)

Average weekday peak hour traffic flow (entering and leaving) (8am - 9am & 5pm - 6pm):

Vehicles per hour, 2008 figures (1996 figures)

	<u>Marina size</u>
	<u>100 boats</u>
<u>Boat related traffic excluding incidental marina traffic</u>	
Private boats	2 (2)
Hire Boats	0 (NA)
Marina management / servicing	3 (2)
Total for a moorings-only marina	5 (4)
 <u>Incidental marina traffic</u>	
Visits related to boat / equip. sales etc.	3 (3)
Looking around	1 (2)
Catering related visits (cafe etc.)	1 (1)
Others (shops etc.)	1 (NA)
Total for incidental traffic	6 (6)
 Overall total for a marina with all the above	 11 (10)

Car parking requirements (1pm – 4pm Sunday afternoons):

Parking spaces

	<u>Marina size</u>
	<u>100 boats</u>
<u>Boat related traffic excluding incidental marina traffic</u>	
Private boats	27
Marina management / servicing	4
Total	31
 <u>Incidental marina traffic</u>	
Visits related to boat / equip. sales etc.	13
Looking around	13
Catering related visits (cafe etc.)	7
Total	33
 Overall total for a marina with all the above	 64

The Key Findings of the 2008 Survey (per 100 moorings)

- Average peak traffic flow (entering & leaving - all days) per 100 moorings per hour = 26 (23) vehicle movements.
- Average peak traffic flow (entering & leaving - peak day - Sunday) per 100 moorings per hour = 31 (32) vehicle movements. The peak traffic flow on Sundays occurred during the three hour period between 1 pm and 4pm.
NOTE: The size and exact location of the ancillary facilities will greatly affect non-boat related traffic generation, therefore local circumstances must be taken into account for these elements of the forecasts.
- Average weekday rush hour traffic flow (entering & leaving - morning and evening rush hour) per 100 moorings per hour = 11 (10) vehicle movements. The maximum traffic flow entering and leaving the marina on weekdays occurred between 10am and 11am, and 2pm and 3pm at an average of 15 vehicle movements per 100 moorings per hour.
- Car parking requirements per 100 moorings including all other facilities (peak day – Sunday) = 64 (48) cars. The peak requirement on Sundays occurs between 1pm and 4pm. NOTES: 1. This survey found a higher requirement than in 1996, due to the impact of boaters parking and then using their boats for a week or more over the summer period. 2. Developers should satisfy themselves that car parking levels are appropriate for the likely number of boat owners and marina visitors at individual locations.

As previously mentioned, not all surveyed traffic relates to visits directly associated with the boats at the marina. Overall the 2008 survey indicates the percentage of visits related to the different activities is:-

Peak Days – Sundays, 2008 figures (1996 figures):

Visits to boats (both cruising/hire & non-cruising visits)	19% (22)
Marina Management/Serviceing	1% (NA)
Visits related to boat / equipment sales etc.	28% (28)
Looking around	31% (28)
Catering related visits (cafe / restaurant etc.)	15% (15)
Other (shops etc.)	6% (NA)

Weekdays, 2008 figures (1996 figures):

Visits to boats (both cruising/hire & non-cruising visits)	13% (22)
Marina Management/Serviceing	29% (NA)
Visits related to boat / equipment sales etc.	33% (28)
Looking around	11% (28)
Catering related visits (cafe / restaurant etc.)	7% (15)
Other (shops etc.)	7% (NA)

Car parking requirements (1pm - 4pm Sunday afternoons):

	<u>100 boats</u>
Visits to boats	27
Visits related to boat / equipment sales etc.	13
Looking around	13
Catering related visits (cafe / restaurant etc.)	7
Other (including site management etc.)	4
Total for a marina with all the above	64
