

## **Seaburn Technical Note – Transportation**

A Transport Assessment (TA) and Travel Plan (TP) will be prepared by Cundall to accompany the planning application. The TA sets out the key issues in relation to the transportation impacts of the development as a whole and has been prepared in accordance with agreements reached with Sunderland City Council (SCC).

### ***Junction capacity assessment***

SCC requested that junction capacity analysis is undertaken at the following junctions:

- Whitburn Road / Lowry Road;
- Whitburn Road / Dykelands Road;
- Dykelands Road / Seafields; and
- Lowry Road West / Lowry Road North / Service Access.

As agreed with SCC, traffic surveys were carried out on two different days, one being a neutral day (Tuesday 31.03.15) and the other being a bank holiday (Monday 06.04.15, Easter Monday).

### ***Vehicle trips generated by the development***

The TA has been based on the following floor areas / unit numbers;

- 280 residential dwellings –previous masterplan allowed for up to 400 residential dwellings. This has been influenced by our traffic modelling work
- Approximately 9,200m<sup>2</sup> of retail / leisure facilities
- The retail element will be capped at 2,000m<sup>2</sup>

The vehicle trip generation for the individual uses has been extracted from the TRICS database. These trip generation rates are based on similar developments around the country.

	AM Peak (08:00 – 09:00)			PM Peak (17:15 – 18:15)		
	Arrival	Departure	Total	Arrival	Departure	Total
280 residential dwellings;	27	98	125	80	47	126
Retail units (up to 2,000m <sup>2</sup> );	108	106	214	84	94	179
Leisure uses (between 7,200m <sup>2</sup> and 9,200m <sup>2</sup> )	The number of vehicles generated by the proposed leisure elements will be lower than existing leisure uses would generate if fully occupied (which have a floor area of 13,017m <sup>2</sup> ) and will result in reduced vehicle trips on the network.					

Vehicles generated from the development have been assigned to the network according to the distribution patterns. These, together with the surveyed flows have been used to model the junctions in the local area. The modelling shows that whilst the development will increase vehicle flows in the local area, the junctions will continue to operate within their theoretical design capacity.

## Car parking

Parking surveys were undertaken in May 2015 and September 2015, these have been used to determine the maximum and average occupancy of the existing public car park, the results of which are shown in the table below.

Existing data (223 spaces)									
Date	May surveys				Date	September surveys			
	Max Count	Max Occ.	Average Count	Average Occ.		Max Count	Max Occ.	Average Count	Average Occ.
Tues 31st	37	16.6%	18	8.1%					
Wed 1st	25	11.2%	16	7.1%					
Thurs 2nd	38	17.0%	20	9.1%					
Fri 3rd	45	20.2%	13	5.9%	Fri 28th	72	32.3%	34	15%
Sat 4th	98	43.9%	37	16.6%	Sat 29th	48	21.5%	23	10%
Sun 5th	151	67.7%	76	33.9%	Sun 30th	157	70.4%	65	29%
Mon 6th	168	75.3%	46	20.5%	Mon 31st	108	48.4%	38	17%
<b>KEY</b> <i>Bank holiday weekend</i> <i>Car boot sale / charity walk</i>					Tues 1st	80	35.9%	34	15%
					Wed 2nd	36	16.1%	22	10%
					Thurs 3rd	40	17.9%	17	8%
					Fri 4th	29	13.0%	15	7%
					Sat 5th	107	48.0%	63	28%
					Sun 6th	219	98.2%	119	53%
					Mon 7th	54	24.2%	27	12%

The table below sets out the revised parking accumulation figures, based on the existing survey results and the additional retail units. The currently masterplan proposals show 186 proposed car parking spaces within the public car parking areas, this has been used in the table below to show likely level of occupancy.

Proposed leisure and retail (186 spaces)									
Date	May surveys				Date	September surveys			
	Max Count	Max Occ.	Average Count	Average Occ.		Max Count	Max Occ.	Average Count	Average Occ.
Tues 31st	80	43.2%	53	28.7%					
Wed 1st	68	36.6%	50	27.1%					
Thurs 2nd	79	42.7%	55	29.6%					
Fri 3rd	90	48.5%	49	26.3%	Fri 28th	117	63.1%	70	38%
Sat 4th	124	66.6%	64	34.3%	Sat 29th	74	39.7%	47	25%
Sun 5th	170	91.7%	104	55.8%	Sun 30th	182	97.7%	95	51%
Mon 6th	213	114.7%	90	48.5%	Mon 31st	148	79.6%	75	40%
<b>KEY</b> <i>Bank holiday weekend</i> <i>Car boot sale / charity walk</i>					Tues 1st	120	64.5%	72	39%
					Wed 2nd	81	43.7%	56	30%
					Thurs 3rd	75	40.5%	52	28%
					Fri 4th	72	38.8%	51	27%
					Sat 5th	133	71.4%	91	49%
					Sun 6th	245	131.6%	154	83%
					Mon 7th	86	46.2%	63	34%

It can be seen from the table above that, with the exception of the bank holidays and local event days, the proposed parking provision of 186 spaces would accommodate the public demand for parking. The proposed maximum occupancy calculated indicates a demand for 133 vehicles within the car park, which equates to an occupancy of 71.4%. The results show that the maximum demand for parking is typically between 70 – 90 vehicles or 40% - 50% maximum occupancy.