## Event Bus Transportation Variables & Calculation Sheet (dedicated event shuttle buses) Author: Julian Sanderson 30-Jan-13 Event & Sports Event: Goodlife Music Festival, Randwick Racecourse Projects Australia Date: Total Estimated Attendance: Operational Phase Analysis: Egress Integrated Ticket, Shuttle Bus Ops from Central to Randwick RC, 2 x dedicated Pick-up Areas Transport Overview: Target Number of People to move 11250 people 75.00% Timings & Operational Phases: Start: 6:00pm to 10:00pm Over what Total Period: 240 min = 4 Hours Preparation/ Transision Period 45 min 6:00pm - 6:45pm Phase A: 'Lead-in' 55 min 6:45pm - 7:40pm Phase B: 'Standard Off-Peak' 0 min Operational but not applicable for egress Phase C: 'Peak' 60 min Phase D: 'Lead-out' 20 min 8:40pm - 9:00pm Operational Preparation/ Transision Period 60 min 9:00pm - 10:00pm

Preparation/ Transision Period	60 min	9:00pm - 10:00pm				
Bus Type & Standard Operating Capacities	s: Single Bus		Bus Type & Standard Operatin	g Capacities: <u>Doubl</u>	e Bus	
Standard average capacity/	60 pax	service level 'A'	Standard average capacity/	120 pax	SL 'A'	
Max Capacity/ bus	70 pax	service level 'A+Max'	Max Capacity/ bus	140 pax	SL'A+Max'	
3/4 Average Capacity	45 pax	service Level 3/4	3/4 Average Capacity	90 pax	SL '3/4'	
1/2 Average Capacity	30 pax	service Level 1/2	1/2 Average Capacity	60 pax	SL '1/2'	
1/4 Average Capacity	15 pax	service Level 1/4	1/4 Average Capacity	30 pax	SL '1/4'	
Londing / Linkowing Robers	Lood Unload (b	nalf of Load time)	Double Bus Rates	Load Unio	oad (half of Load time)	
Loading/ Unloading Rates: '*Average'	Load Unload (h 2.00 1.00	min	'*Average'	3.00 1.50		
Fast	1.50 0.75	min	Fast	2.00 1.00		
Slow	2.50 1.25	min	Slow	4.00 2.00		
Lag 'Buffer' Time**:	2.50 min		' refers to a time set that adjusts the round			g times.
Different Lag 'Buffer' Time**:	10.00 min	**A different 'Lag/ Buffer Tim	ne' may be applied to a different operation	ial phase if increased tra	ffic delays may be expected.	
Round Trip Timings Including '*Average' Lo	oading Unloading & Set '*	*Lag/Buffer Time' & Usung	z SINGI F Bus			
Loading/ Unloading Rate Used:	'*Average'		,			
Round Trip 'Base' Time from Area 1	22 min		Rnd Trip 'Base' Time Area 2	27 min	Rnd Trip 'Base' Time Are	ea 3 0 min
Total Time Phase A: 'Lead-in'	37.50 min		Total Time A: 'Lead-in'	42.50 min	Total Time A: 'Lead-in'	15.50 min
Total Time Phase B: 'Standard Off-Peak'	37.50 min		Total Time B: 'Strd Off-Peak'	42.50 min	Total Time B: 'Strd Off-P	Peak' 15.50 min
Total Time Phase C: 'Peak'	38.25 min		Total Time: 'Peak'	43.25 min	Total Time: 'Peak'	15.50 min
Total Time Phase D: 'Lead-out'	37.50 min		Total Time A: 'Lead-out'	42.50 min	Total Time A: 'Lead-out'	15.50 min
		Area 1	Area 2		Area 3	
		Alison Rd	High St		nil	
Loading Areas, [calculated bus movement						
Area 1: Number of Loading bays:	2.8	4				
Area 2: Number of Loading bays:		0.0	4			
Area 3: Number of Loading bays:					0.00 4	
Number of Buses Required/ Allocated to e	each Loading Area					
Area 1: Number of Buses Allocated:		52	2			
Area 2: Number of Buses Allocated:				0		
Area 3: Number of Buses Allocated:						0
Total Buses Requir	red: <b>52</b>					
Calculating the number of Bus Movements	s per minute, by Operation			00		
No. of buses loading / minute: Phase A		1.39		.00		0.0
No. of buses loading / minute: Phase B		1.39		.00		0.0
No. of buses loading / minute: Phase C No. of buses loading / minute: Phase D		1.36 1.39		.00		0.0
No. of buses loading / minute. Phase D		1.55	0	.00		0.0
Calculation Sheet of Number of People Tra	nsported:					
Bus Type	Single					
Loading Rate Used:	2.00 min	This loading rate has been	en used for all phases			
Unloading Rate Used:	1.00 min	This loading rate has been	en asca for an phases			
Number of Loading Areas:	2 (Two)					
Total N	Number of Bus Movements	s: 186	0			186
		Area 1	Area 2		Area 3	Totals
Transport Capability	pax used	Alison Rd	High St		nil	
Operational Phase A: 'Lead-in'	60 pax	4576	0		0	4576
Operational Phase B: 'Standard Off-Peak'	0 pax	0	0		0	0
Operational Phase C: 'Peak'	70 pax	5710	0		0	5710
Operational Phase D: 'Lead-out'	45 pax	1248	0		0	1248
Transcar Lead out	45 pun	12-10	1 F			

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Totals by Transport Hub Area Capability: