

# Swimming Australia 'SpeedChart'

## Male 200 LCM Freestyle



200m										Push Targets*							
	15m (r=0.53)	25m (r=0.7)	50m (r=0.83)	75m (r=0.87)	100m (r=0.92)	125m (r=0.94)	150m (r=0.97)	175m (r=0.99)	200m	1st 50m	2nd 50m	3rd 50m	4th 50m	Mid 100m	2nd 100m	75m: 50-125m	75m: 100-175m
01:40.0	5.78	10.75	23.89	35.88	49.29	1:01.30	1:14.82	1:26.88	1:40.00	23.89	25.00	25.12	24.78	50.52	50.31	37.01	37.19
01:40.5	5.80	10.80	23.99	36.04	49.51	1:01.59	1:15.17	1:27.31	1:40.50	23.99	25.12	25.26	24.93	50.78	50.59	37.20	37.40
01:41.0	5.83	10.84	24.09	36.19	49.73	1:01.88	1:15.53	1:27.74	1:41.00	24.09	25.25	25.40	25.07	51.05	50.87	37.39	37.61
01:41.5	5.86	10.89	24.18	36.35	49.95	1:02.17	1:15.89	1:28.17	1:41.50	24.18	25.37	25.54	25.21	51.31	51.15	37.59	37.82
01:42.0	5.88	10.94	24.28	36.51	50.17	1:02.46	1:16.25	1:28.61	1:42.00	24.28	25.50	25.68	25.35	51.57	51.43	37.78	38.03
01:42.5	5.91	10.98	24.37	36.67	50.39	1:02.75	1:16.61	1:29.04	1:42.50	24.37	25.62	25.81	25.49	51.83	51.71	37.98	38.25
01:43.0	5.94	11.03	24.47	36.82	50.61	1:03.04	1:16.96	1:29.47	1:43.00	24.47	25.74	25.95	25.64	52.10	51.99	38.17	38.46
01:43.5	5.97	11.07	24.56	36.98	50.83	1:03.33	1:17.32	1:29.90	1:43.50	24.56	25.87	26.09	25.78	52.36	52.27	38.36	38.67
01:44.0	5.99	11.12	24.66	37.14	51.05	1:03.62	1:17.68	1:30.33	1:44.00	24.66	25.99	26.23	25.92	52.62	52.55	38.56	38.88
01:44.5	6.02	11.17	24.76	37.29	51.27	1:03.91	1:18.04	1:30.76	1:44.50	24.76	26.11	26.37	26.06	52.88	52.83	38.75	39.09
01:45.0	6.05	11.21	24.85	37.45	51.49	1:04.20	1:18.40	1:31.19	1:45.00	24.85	26.24	26.51	26.20	53.14	53.11	38.94	39.31
01:45.5	6.08	11.26	24.95	37.61	51.71	1:04.48	1:18.75	1:31.63	1:45.50	24.95	26.36	26.65	26.35	53.41	53.39	39.14	39.52
01:46.0	6.10	11.30	25.04	37.77	51.93	1:04.77	1:19.11	1:32.06	1:46.00	25.04	26.48	26.78	26.49	53.67	53.67	39.33	39.73
01:46.5	6.13	11.35	25.14	37.92	52.15	1:05.06	1:19.47	1:32.49	1:46.50	25.14	26.61	26.92	26.63	53.93	53.95	39.53	39.94
01:47.0	6.16	11.40	25.23	38.08	52.37	1:05.35	1:19.83	1:32.92	1:47.00	25.23	26.73	27.06	26.77	54.19	54.23	39.72	40.15
01:47.5	6.18	11.44	25.33	38.24	52.59	1:05.64	1:20.18	1:33.35	1:47.50	25.33	26.86	27.20	26.92	54.45	54.51	39.91	40.36
01:48.0	6.21	11.49	25.43	38.40	52.81	1:05.93	1:20.54	1:33.78	1:48.00	25.43	26.98	27.34	27.06	54.72	54.79	40.11	40.58
01:48.5	6.24	11.53	25.52	38.55	53.02	1:06.22	1:20.90	1:34.21	1:48.50	25.52	27.10	27.48	27.20	54.98	55.08	40.30	40.79
01:49.0	6.27	11.58	25.62	38.71	53.24	1:06.51	1:21.26	1:34.64	1:49.00	25.62	27.23	27.61	27.34	55.24	55.36	40.49	41.00
01:49.5	6.29	11.63	25.71	38.87	53.46	1:06.80	1:21.62	1:35.08	1:49.50	25.71	27.35	27.75	27.48	55.50	55.64	40.69	41.21
01:50.0	6.32	11.67	25.81	39.03	53.68	1:07.09	1:21.97	1:35.51	1:50.00	25.81	27.47	27.89	27.63	55.77	55.92	40.88	41.42
01:50.5	6.35	11.72	25.90	39.18	53.90	1:07.38	1:22.33	1:35.94	1:50.50	25.90	27.60	28.03	27.77	56.03	56.20	41.07	41.64
01:51.0	6.38	11.76	26.00	39.34	54.12	1:07.67	1:22.69	1:36.37	1:51.00	26.00	27.72	28.17	27.91	56.29	56.48	41.27	41.85
01:51.5	6.40	11.81	26.10	39.50	54.34	1:07.96	1:23.05	1:36.80	1:51.50	26.10	27.85	28.31	28.05	56.55	56.76	41.46	42.06
01:52.0	6.43	11.86	26.19	39.65	54.56	1:08.25	1:23.41	1:37.23	1:52.00	26.19	27.97	28.45	28.19	56.81	57.04	41.66	42.27
01:52.5	6.46	11.90	26.29	39.81	54.78	1:08.54	1:23.76	1:37.66	1:52.50	26.29	28.09	28.58	28.34	57.08	57.32	41.85	42.48
01:53.0	6.48	11.95	26.38	39.97	55.00	1:08.83	1:24.12	1:38.09	1:53.00	26.38	28.22	28.72	28.48	57.34	57.60	42.04	42.70
01:53.5	6.51	11.99	26.48	40.13	55.22	1:09.12	1:24.48	1:38.53	1:53.50	26.48	28.34	28.86	28.62	57.60	57.88	42.24	42.91
01:54.0	6.54	12.04	26.57	40.28	55.44	1:09.40	1:24.84	1:38.96	1:54.00	26.57	28.46	29.00	28.76	57.86	58.16	42.43	43.12
01:54.5	6.57	12.09	26.67	40.44	55.66	1:09.69	1:25.19	1:39.39	1:54.50	26.67	28.59	29.14	28.91	58.13	58.44	42.62	43.33
01:55.0	6.59	12.13	26.77	40.60	55.88	1:09.98	1:25.55	1:39.82	1:55.00	26.77	28.71	29.28	29.05	58.39	58.72	42.82	43.54
01:55.5	6.62	12.18	26.86	40.76	56.10	1:10.27	1:25.91	1:40.25	1:55.50	26.86	28.84	29.41	29.19	58.65	59.00	43.01	43.76
01:56.0	6.65	12.22	26.96	40.91	56.32	1:10.56	1:26.27	1:40.68	1:56.00	26.96	28.96	29.55	29.33	58.91	59.28	43.21	43.97
01:56.5	6.68	12.27	27.05	41.07	56.54	1:10.85	1:26.63	1:41.11	1:56.50	27.05	29.08	29.69	29.47	59.17	59.57	43.40	44.18
01:57.0	6.70	12.32	27.15	41.23	56.75	1:11.14	1:26.98	1:41.55	1:57.00	27.15	29.21	29.83	29.62	59.44	59.85	43.59	44.39

### How to use the 'SpeedChart'

1. Use the target race time to set training times for specific distances. Athletes should aim to achieve race velocities in training for these intervals.

2. Predict 200m time based on training times over shorter distances. Use of the chart this way will help to ensure that training is speed specific. This is not a way to predict race times but a way of ensuring specific speeds are being attained in training.

\* Push targets are based on FEET-OFF wall to HEAD at the specified distance except for mid 100 and 2nd 100 which is FEET-OFF to HAND-TOUCH.

Note: calculations based on 0.4 seconds for FOOT CONTACT TIME for backstroke turn (used to convert 2nd, 3rd, and 4th 50m in push times.)

Always use these 'SpeedCharts' in conjunction with other race analysis information (stroke rates, stroke count, turning information (breakout etc) and breathing patterns) to ensure specificity of training and to ensure speed and technique goals are achieved.

ALL TIMES ARE BASED ON TIME FROM GUN TO HEAD  
adjustments for other timing methods:

Timing Method Adjustments:	
Feet off Blocks	+0.75
Time to hand	+0.25
Feet off wall	+0.3

1. Short intervals: look up cart time, then subtract the adjustment

2. projected race time: add adjustment and look up chart with adjusted time