

TIME TRIALS AND PROGNOSTIC PERFORMANCE STANDARDS

Time trials have been successfully used within the national program as a means of benchmarking athletes for many years. The use of time trials as a method of establishing national performance standards have also been used as a quantifiable measure of performance potential and improvement against international benchmarks in each of the three legs of triathlon.

Triathlon, by its nature is a sport with many variables. It is almost impossible to compare times between one triathlon course and another or even compare times on the same course on different days! Variables include, positioning of swim buoys, weather, wind, topography, accuracy of the course, size of transition, distance to run in transitioning and quality of the field.

It is however, desirable to encourage triathletes to improve in each leg and it is important for them to be able to quantify their improvement. It is also important for AusTriathlon to be able to monitor the development of athletes from a young age.

The **Prognostic Performance Standards** (PPS) (Table 1) allows athletes to view where they are positioned against International Podium Standard. It is important to highlight to athletes and coaches the current international standards within World Triathlon and what it is likely going to require to medal in LA 2028 and beyond.

Swim and run times have been used to calculate prognostic percentages across individual disciplines as well as a combined swim and run performance. The combined time takes in to account that some athletes will be stronger in one discipline over another. For instance a male athlete may swim 8:54 and run 14:29, their corresponding prognostic percentages will be 95.5% and 91.5%, respectively. Their combined prognostic would be 23:23, or, 93.0%.

The tool is designed to assess athlete progression in each discipline as well as providing an indication of where athletes need to progress to in future years. It should be emphasised that performances in draft legal triathlon is still the most important performance indicator that determines athlete's performance...especially for senior athletes.

The combined prognostic can be used to calculate benchmarks for various levels of categorisation, where the required competition performance standards have not been met. There is also potential that in the future, minimum performance standards may be used as an eligibility requirement for selection into national squads and teams.

The podium standards utilised in the PPS table are likely to change throughout the cycle and hence the national performance standards will change accordingly. The table is dynamic and at the end of each international season, the table will be updated to reflect current podium standards.

The following time trial distances will be utilised from 2025 onwards:

Category (Age)	Swim	Run
Senior	800m	5km
U23	800m	5km
Junior (16-19yr)	800m	5km
Youth (13-15yr)	400m	1.5km

Time Trial Protocols:

For time trials to be considered as a measure of athlete performance and registered in the National Performance Standards (NPS) database, the following protocols must be adhered to:

SWIM:

- Conducted in a 50m pool (with lane ropes).
- The swim is timed from a DIVE start; where it is not possible to dive, athletes may begin with a PUSH start.
- The swim concludes with a hand to the wall finish.
- No drafting off other swimmers is allowed.
- Maximum 2 swimmers per lane, starting at opposite ends of the pool
- Lane allocations set so that the swimmers of equal ability are in the same lane to avoid lapping
- Swim wear must be compliant with competition rules and no wetsuits permitted
- Swims may be conducted in one the following ways:
 - an official swimming carnival, subject to published official electronic timing that has been ratified by a swimming official
 - an AusTri supervised time trial session

RUN:

- Conducted on a 400m synthetic running track.
- Mass start “race” situation is allowed.
- Male and female athletes are permitted to race together.
- Shoes must be IAAF compliant
- Runs may be conducted in one the following ways:
 - an official athletics meet, subject to published official electronic timing that has been ratified by an athletics official
 - an AusTri supervised time trial session
 - road races may also be permitted if the distance can be IAAF certified and subject to published official electronic timing that has been ratified by an athletics official

IMPLEMENTATION RECOMMENDATIONS

- It is recommended Junior and U23 athletes should be completing these standardised time trials a maximum of two to three times per year as a method of monitoring performance progression. Senior athletes should be aiming to complete a maximum of once or twice yearly.
- Athletes need to register their intention to conduct a time trial prior to completing it. This is to ensure the right protocols are being utilised and that athletes performances are planned.
- Athletes are encouraged to use the Prognostic Performance Standards Table as goals to aim for in the longer term. The National Performance Standards have not been

developed to intimidate, but rather a true reference points to gauge performance standards against world's best.

- These standards are especially useful benchmarks for athletes who do not have the opportunity to race internationally, providing them benchmark target.
- Combined swim plus run performance time trials will be used to develop a combined prognostic percentage that will be used against certain performance standards utilised for athlete categorisation and future team/squad selections.
- A national database will be maintained to monitor performance progression of athletes against international benchmarks throughout their athletic journey.

Table 1: Prognostic Performance Standards (PPS):

Prognostic Percentage	Male			Female		
	SWIM	RUN	Combined	SWIM	RUN	Combined
	800m	5km		800m	5km	
100% (Pod. Standard)	08:30.0	13:15.5	21:45.5	09:10.0	14:42.2	23:52.2
99.5%	08:32.6	13:19.5	21:52.1	09:12.8	14:46.6	23:59.4
99.0%	08:35.2	13:23.5	21:58.7	09:15.6	14:51.1	24:06.7
98.5%	08:37.8	13:27.6	22:05.4	09:18.4	14:55.6	24:14.0
98.0%	08:40.4	13:31.7	22:12.1	09:21.2	15:00.2	24:21.4
97.5%	08:43.1	13:35.9	22:19.0	09:24.1	15:04.8	24:28.9
97.0%	08:45.8	13:40.1	22:25.9	09:27.0	15:09.5	24:36.5
96.5%	08:48.5	13:44.4	22:32.8	09:29.9	15:14.2	24:44.1
96.0%	08:51.3	13:48.6	22:39.9	09:32.9	15:19.0	24:51.9
95.5%	08:54.0	13:53.0	22:47.0	09:35.9	15:23.8	24:59.7
95.0%	08:56.8	13:57.4	22:54.2	09:38.9	15:28.6	25:07.6
94.5%	08:59.7	14:01.8	23:01.5	09:42.0	15:33.5	25:15.6
94.0%	09:02.6	14:06.3	23:08.8	09:45.1	15:38.5	25:23.6
93.5%	09:05.5	14:10.8	23:16.3	09:48.2	15:43.5	25:31.8
93.0%	09:08.4	14:15.4	23:23.8	09:51.4	15:48.6	25:40.0
92.5%	09:11.4	14:20.0	23:31.4	09:54.6	15:53.7	25:48.3
92.0%	09:14.3	14:24.7	23:39.0	09:57.8	15:58.9	25:56.7
91.5%	09:17.4	14:29.4	23:46.8	10:01.1	16:04.2	26:05.2
91.0%	09:20.4	14:34.2	23:54.6	10:04.4	16:09.5	26:13.8
90.5%	09:23.5	14:39.0	24:02.5	10:07.7	16:14.8	26:22.5
90.0%	09:26.7	14:43.9	24:10.6	10:11.1	16:20.2	26:31.3
89.5%	09:29.8	14:48.8	24:18.7	10:14.5	16:25.7	26:40.2
89.0%	09:33.0	14:53.8	24:26.9	10:18.0	16:31.2	26:49.2
88.5%	09:36.3	14:58.9	24:35.1	10:21.5	16:36.8	26:58.3
88.0%	09:39.5	15:04.0	24:43.5	10:25.0	16:42.5	27:07.5
87.5%	09:42.9	15:09.1	24:52.0	10:28.6	16:48.2	27:16.8
87.0%	09:46.2	15:14.4	25:00.6	10:32.2	16:54.0	27:26.2
86.5%	09:49.6	15:19.7	25:09.2	10:35.8	16:59.9	27:35.7
86.0%	09:53.0	15:25.0	25:18.0	10:39.5	17:05.8	27:45.3
85.5%	09:56.5	15:30.4	25:26.9	10:43.3	17:11.8	27:55.1
85.0%	10:00.0	15:35.9	25:35.9	10:47.1	17:17.9	28:04.9
84.5%	10:03.6	15:41.4	25:45.0	10:50.9	17:24.0	28:14.9
84.0%	10:07.1	15:47.0	25:54.2	10:54.8	17:30.2	28:25.0
83.5%	10:10.8	15:52.7	26:03.5	10:58.7	17:36.5	28:35.2
83.0%	10:14.5	15:58.4	26:12.9	11:02.7	17:42.9	28:45.5
82.5%	10:18.2	16:04.2	26:22.4	11:06.7	17:49.3	28:56.0
82.0%	10:22.0	16:10.1	26:32.1	11:10.7	17:55.9	29:06.6
81.5%	10:25.8	16:16.1	26:41.8	11:14.8	18:02.5	29:17.3
81.0%	10:29.6	16:22.1	26:51.7	11:19.0	18:09.1	29:28.1
80.5%	10:33.5	16:28.2	27:01.7	11:23.2	18:15.9	29:39.1
80.0%	10:37.5	16:34.4	27:11.9	11:27.5	18:22.8	29:50.3
79.5%	10:41.5	16:40.6	27:22.1	11:31.8	18:29.7	30:01.5
79.0%	10:45.6	16:47.0	27:32.5	11:36.2	18:36.7	30:12.9
78.5%	10:49.7	16:53.4	27:43.1	11:40.6	18:43.8	30:24.5
78.0%	10:53.8	16:59.9	27:53.7	11:45.1	18:51.0	30:36.2
77.5%	10:58.1	17:06.5	28:04.5	11:49.7	18:58.3	30:48.0
77.0%	11:02.3	17:13.1	28:15.5	11:54.3	19:05.7	31:00.0
76.5%	11:06.7	17:19.9	28:26.5	11:59.0	19:13.2	31:12.2
76.0%	11:11.1	17:26.7	28:37.8	12:03.7	19:20.8	31:24.5
75.5%	11:15.5	17:33.6	28:49.1	12:08.5	19:28.5	31:37.0
75.0%	11:20.0	17:40.7	29:00.7	12:13.3	19:36.3	31:49.6

Explanation

Calculated based on a % of expected Podium Standard (LA 2028) for Swim and Run

800m Swim - Based on Podium Standard Triathletes pool swimming times for 800m

5km Run - Based on track World Records for 5km (100th percentile = 95% of track World Record for 5km) alongside validation data of current worlds best WTCS triathletes 5km times.