



# COMPETITIVE RIDER JOURNEY

ROAD RACING

The **AusCycling Competitive Rider Journey**\* is a holistic approach to the rider development pathway from entry to elite levels, through to life-long participation. This document provides specific information for the **Road Racing** disciplines with a more detailed explanation of the various stages of development and key principles. It should be used to help develop and align coaching programs and skill development to the appropriate level for riders.

**Road** is an endurance discipline and includes:

- **Road Racing** is held on the open road. Riders start races in a large group and the first rider over the line is the winner. The events range from under an hour for junior races, to up to six or seven hours for professionals. There are also multi-stage Tours which last for several days where in fact the winner may not be the first person across the line but the person with the shortest accumulated time. Successful professional road racers require many qualities if they are to succeed, including endurance, speed (to sprint for the line at over 70 km/h) and strength (to climb steep mountain passes up to 3,000 metres).
- The **Criterion** (or Crit) is a high intensity road cycling event which is run on a shorter closed roadway with the international regulation lap distance of no less than 800 metres and no greater than 3km. Generally, in Australia it is accepted that the criterium is run on the smaller circuits. The race can be configured by laps or time plus laps (i.e. 45 min + 3 laps) with generally the first person crossing the line determined as the winner. To add further excitement there are intermediate sprints for points or prizes during the race that can alter the race dynamics and final outcome on a points count back.
- An individual **Time Trial** is a form of road racing where a rider competes alone against the clock with the person recording the fastest time over a set distance being the winner. A **Team Time Trial - TTT** is where 3-7 riders ride in a team to record a time. In Australia and around the world, the length of time trials varies with some of the most common distances in Australia are generally between 15 and 40km.

\*The term 'Journey' has been used instead of the traditional term 'Pathway' in order highlight that individual development is usually non linear and not always the same between riders.



## AUSCYCLING COMPETITIVE ROAD RIDER DEVELOPMENT PATHWAY

The Journey Elements outlined in the table appear linear for ease of the reader however most riders don't follow a direct linear progression.

Progressions	Foundation		Extension and Refinement		Sport Specific Commitment			Elite and Mastery			
<b>Age</b>	5-12 years old	8-14 years old	12-16 years old	14-17 years old	15-19 years old	17-21 years old	17-23 years old	22 plus years old			
<b>Years in Cycling</b>	0 - 2 years from entry to the sport		2 - 4 years from entry to the sport		4 plus years from entry to the sport			4 - 6 years from entry to the sport			
<b>Primary Focus</b>	Learning and acquiring the basic foundations of cycling through off the bike movement skills, cycling skills instruction, and free play on bikes.	Introduction to the various cycling disciplines through developmentally appropriate club and school programs. Sampling competition in modified forms with a high emphasis on recreation.	Regular skills instruction, practice and competition through developmentally appropriate club, school and AusCycling endorsed programs. Continued recreational participation.	Continued sport specific commitment. Performance potential identified through competent skills demonstration.	Continued potential identification through skills demonstration, race results and participation at development and performance camps and academies	Performance potential verified through athlete profiling, physiological testing and race results	Commitment to pre elite preparation and holistic athlete development through a structured training plan.	Transition to Elite international competition through individual programs, ACT	Podium success at international benchmark events (Olympics, Commonwealth Games, World Championships, Nations Cups).	Sustained international success over multiple high performance cycles (Olympics, Commonwealth Games, World Championships).	
<b>Environment</b>	<ul style="list-style-type: none"> <li>Clubs</li> <li>Schools</li> <li>Community Groups</li> <li>Participation Events</li> </ul>		<ul style="list-style-type: none"> <li>Clubs</li> <li>Schools</li> <li>Participation Events</li> <li>Private Coaching and Skills Instruction</li> <li>Regional &amp; State / Territory Academies</li> </ul>		<ul style="list-style-type: none"> <li>Clubs</li> <li>Schools</li> <li>Private Coaching and Skills Instruction</li> <li>Regional &amp; State / Territory Academies</li> <li>State and Territory Institutes</li> <li>Regional &amp; National Development and Performance Camps</li> <li>Event Support</li> </ul>			<ul style="list-style-type: none"> <li>Clubs (including mentoring and coaching)</li> <li>State / Territory / Institute / Academies</li> <li>National Performance Camps</li> <li>National Teams</li> <li>Trade Teams</li> <li>Event Support</li> </ul>			
<b>Coach / Instructor Level</b>	Community or Foundation Instructor		Foundation or Development Coach Foundation or Development Instructor		Development or Advanced Coach			Advanced or Elite Coach			
<b>Training Structure</b>	None		<ul style="list-style-type: none"> <li>Learning to train.</li> <li>1 – 2 programmed sessions per week.</li> <li>Limited session structure / phase planning.</li> </ul>		<ul style="list-style-type: none"> <li>Transition to phased planning.</li> <li>Introduction to Strength &amp; Conditioning.</li> </ul>		<ul style="list-style-type: none"> <li>Full phase planning and session structure year round.</li> </ul>		<ul style="list-style-type: none"> <li>Full phase planning and session structure.</li> <li>World class coaching, testing and sports science support.</li> </ul>		
<b>Competition / Racing</b>	<ul style="list-style-type: none"> <li>Club training environment.</li> <li>Club &amp; state events.</li> </ul>	<ul style="list-style-type: none"> <li>Club, State and National events (U15).</li> </ul>	<ul style="list-style-type: none"> <li>Continued club level racing.</li> <li>Build competency at state level events.</li> <li>Participation at National events.</li> </ul>	<ul style="list-style-type: none"> <li>Continued club level racing.</li> <li>State and National Events.</li> </ul>	<ul style="list-style-type: none"> <li>Club, State and National Events.</li> <li>U19 introduction to International camps and events.</li> </ul>	<ul style="list-style-type: none"> <li>International camps and events.</li> <li>Key events: State &amp; National Championships &amp; NRS.</li> </ul>	<ul style="list-style-type: none"> <li>Key events: NRS, National Championships, Continental Championships &amp; Junior Worlds.</li> </ul>	<ul style="list-style-type: none"> <li>National and international racing blocks.</li> <li>Key events: Nations Cups, Continental Championships, World Championships, Commonwealth Games &amp; Olympic Games.</li> </ul>			
<b>Cross Discipline Focus</b>	Encourage and facilitate participation on any bike.	Encourage and facilitate participation on any bike. Actively encourage and facilitate riders experiencing other disciplines.	Continue to facilitate multiple disciplines.		Discipline crossover may narrow to 60-70% primary discipline			Discipline focus 80%-20% or as needed.			
<b>Multi-Sport Focus</b>	Cycling is included in a broad range of physical activities and free play. Formalised cycling is not necessarily facilitated year-round.		Cycling continues to be combined with other sports.		Cycling becomes primary focus.			Cycling Only.			
<b>Education and Knowledge</b>			<ul style="list-style-type: none"> <li>Training fundamentals.</li> <li>Basic hygiene, hydration, and nutrition.</li> </ul>	<ul style="list-style-type: none"> <li>Introduction to domestic travel.</li> <li>Process goal setting.</li> </ul>	<ul style="list-style-type: none"> <li>Introduction to International travel.</li> <li>Basic sleep management and recovery techniques.</li> <li>Advanced hydration and nutrition.</li> </ul>		<ul style="list-style-type: none"> <li>Highly refined international travel, hygiene, jet lag, heat and altitude adaption processes and techniques.</li> <li>Advanced recovery techniques and performance nutrition.</li> </ul>				
<b>Categorisation Level</b>						Emerging	Developing	Podium Potential	Podium Ready	Sustained Success	

**Age:**

Refers to the approximate age of children entering the sport. This will vary with a range of factors particularly physical maturation.

**Competition:**

Age and developmentally appropriate competition is critical at each stage of the journey. Recommended competition levels are aligned to each stage of development and progress from grassroots club and school events through to world championship, Commonwealth and Olympic Games. More information on running age and development appropriate racing for all disciplines can be found in the [AusCycling Junior Policy](#).

**Multi-Discipline Focus:**

An emphasis on experiencing all cycling disciplines is strongly encouraged at the early stages of development and a multi-discipline approach continues through to elite level. There is strong evidence that competing in multiple disciplines increases the chance of success at benchmark events. There is a strong physiological correlation in the disciplines grouped together in the Endurance and Acceleration sub pathways, and there is particularly high skill and physiological correlation in combining the following, however any combination is encouraged especially at entry level:

- BMX Racing / Track Sprint
- MTB Endurance / CX / Road / Track Endurance
- MTB Gravity / BMX Freestyle

**Environment:**

Refers to the athletes' primary place of support and training delivery.

**Multi-Sport Focus:**

Cycling is a late specialising sport and combining cycling with other sports is strongly encouraged until later in the rider's journey. Transfer from other sports to cycling is possible and encouraged at any stage in the journey. This could include Speed Skating, Cross Country Running, Rowing, and Triathlon (as examples).

**Years in Cycling:**

Is of particular relevance to riders entering the sport late or transitioning from other sports. Years in cycling gives an approximation of the time required to progress to each stage in the development pathway. Although the diagram is linear, your actual route will evolve depending on your discipline, location, priorities, education, opportunity, and injury.



## ROAD CYCLING SKILLS INVENTORY AND PROGRESSION

Progressions	Foundation	Extension and Refinement	Sport Specific Commitment	Elite and Mastery		
Years in Cycling	1	2	3	4	5	6+
<b>Riding Lines</b>	<ul style="list-style-type: none"> <li>Understanding a paceline and taking a turn.</li> <li>Contact with each other, riding in 2 lines and through the middle.</li> <li>Holding your line and managing a gap.</li> </ul>	<ul style="list-style-type: none"> <li>Ride safely in a group with 2 rotating lines.</li> <li>Able to move between double to single and single to double pacelines.</li> <li>Able to ride in Team Time Trial formation.</li> </ul>	<ul style="list-style-type: none"> <li>Develops competency and understanding of Team Time Trial within racing conditions.</li> <li>Understands lead out trains.</li> <li>Understands riding in echelon formation.</li> <li>Can pull through without surging.</li> </ul>	<ul style="list-style-type: none"> <li>Can manage pacelines relevant to wind direction and conditions.</li> <li>Understands reasons for double or triple echelons.</li> <li>Understands positioning and benefit of sitting behind body size and rider height.</li> </ul>	<ul style="list-style-type: none"> <li>Technical proficiency at organising and delivering lead out trains.</li> <li>Technical proficiency within double and triple echelons.</li> <li>Effectively communicates intention to not pull through.</li> </ul>	
<b>Bunch Skills</b>	<ul style="list-style-type: none"> <li>Develop group riding skills - Riding as a team, looking out for each other, signalling to riders and traffic, pointing out hazards, navigating junctions, pacing over distance, understanding road signage.</li> </ul>	<ul style="list-style-type: none"> <li>Ride and rotate in a bunch @90rpm+, eating and drinking on the bike, passing bottles to team mates.</li> <li>Looking out for weaker riders and pulling them back to the bunch.</li> <li>Game sneaky thief – can steal a bar/gel from a pocket and distribute to other riders.</li> </ul>	<ul style="list-style-type: none"> <li>Increased proficiency at moving through a bunch and distributing bottles.</li> <li>Correctly takes a bottle in a feed zone with soft hands and arm back.</li> <li>Understands how to come back to car for service.</li> <li>Understands need to move up and protect position in bunch.</li> </ul>	<ul style="list-style-type: none"> <li>Understands convoy and subtlety of using caravan.</li> <li>Communicates hand signal correctly for feeding, mechanical, flats, discussion.</li> <li>Can remove and replace clothing and return bidons correctly to team car or commissaire's car.</li> </ul>	<ul style="list-style-type: none"> <li>Has inherent ability to move through large bunches on narrow roads.</li> <li>Can ride highly technical terrain at high speeds.</li> </ul>	
<b>Bike and Race Craft</b>	<ul style="list-style-type: none"> <li>Riding and drinking one handed.</li> <li>Weaving and completing figure 8's through cones.</li> <li>Manoeuvring or jumping obstacles.</li> </ul>	<ul style="list-style-type: none"> <li>Smooth pedalling 'souplesse', work on cadence, gears, position on bike.</li> <li>Maintain position while taking a drink.</li> </ul>	<ul style="list-style-type: none"> <li>Capable of negotiating coming off and on road edges safely.</li> <li>Able to move up to team mates in the bunch and communicate.</li> </ul>	<ul style="list-style-type: none"> <li>Refines negotiating road edges to hold or improve position.</li> <li>Understands and can plan moving back relative to road conditions, winding roads, sharp bends and general terrain.</li> </ul>	<ul style="list-style-type: none"> <li>Consistently executes race strategies and can adapt strategies as required.</li> <li>Instinctive understanding and reaction to individual and team tactics.</li> </ul>	
<b>Cornering</b>	<ul style="list-style-type: none"> <li>Learns the safest line to take through a corner.</li> <li>Learns basics of body positioning and when to decelerate and accelerate out of corner.</li> </ul>	<ul style="list-style-type: none"> <li>Learns correct tyre pressure relative to road and weather conditions.</li> <li>Develops ability to enter and exit corner effectively.</li> </ul>	<ul style="list-style-type: none"> <li>Understands tyre choice (width and pressure) for specific conditions.</li> <li>Understands gearing choice for entry and exit.</li> <li>Holds a wheel through the corner.</li> </ul>	<ul style="list-style-type: none"> <li>Displays advanced ability to choose correct line, entry and exit.</li> <li>Consistently maintains position in the line through the corner.</li> </ul>	<ul style="list-style-type: none"> <li>Consistently executes advanced level of technical proficiency through corners.</li> <li>Able to improve race position and gain time in timed events.</li> </ul>	
<b>Climbing</b>	<ul style="list-style-type: none"> <li>Learns appropriate gear choice and when to change.</li> <li>Learns to ride up a hill seated and out of saddle.</li> </ul>	<ul style="list-style-type: none"> <li>Develops efficient gear changing</li> <li>Learns how to scope the climb and understand the type of climb your about to approach.</li> <li>Understands need to be relaxed, body position, on the hoods, climbing rhythm.</li> </ul>	<ul style="list-style-type: none"> <li>Developing comprehension on technical components of gradients and length of climb.</li> <li>Learn how to interpret a climb from a technical guide.</li> <li>Able to climb effectively while holding the right line.</li> </ul>	<ul style="list-style-type: none"> <li>Can shift weight out of saddle and select appropriate gears to ensure bike moves forward not back</li> <li>Understand your opposition and how to climb relative to ability in a race</li> </ul>	<ul style="list-style-type: none"> <li>Technically proficient at pacing a climb and attacking over the top.</li> <li>Consistently displays advanced climbing technique.</li> </ul>	
<b>Descending</b>	<ul style="list-style-type: none"> <li>Learns braking for speed and distance.</li> <li>Learns to descend on drops relaxed and in control.</li> <li>Learns basics of descent terrain, technical features, wind direction and weather conditions for safety.</li> </ul>	<ul style="list-style-type: none"> <li>Can descend in a line of riders.</li> <li>Increased awareness of road surface and environment such as potholes, rough surfaces, wet or icy conditions.</li> </ul>	<ul style="list-style-type: none"> <li>Builds understanding of body position and aerodynamics.</li> <li>Ability to determine tyre pressures to suit conditions.</li> <li>Confident in descending within a bunch.</li> </ul>	<ul style="list-style-type: none"> <li>Ability to maintain or gain position while descending in a bunch.</li> <li>Can interpret the scope of the descent from a technical guide.</li> </ul>	<ul style="list-style-type: none"> <li>Consistently demonstrates awareness of technical features, terrain and cross wind sections while maintaining competent performance outcomes.</li> </ul>	
<b>Tactical Knowledge and Execution</b>	<ul style="list-style-type: none"> <li>Learns the basics of racing tactics including observation skills such as looking over your shoulder.</li> </ul>	<ul style="list-style-type: none"> <li>Through game sense activities learns the subtleties of team work, when to chase, when not to chase.</li> <li>Learns to execute a tactical direction from club coach and learns from the outcome.</li> </ul>	<ul style="list-style-type: none"> <li>Able to execute attack and counter attack.</li> <li>How to judge a suitable size gap.</li> <li>Learns to acknowledge the strength of riders in break and in bunch.</li> </ul>	<ul style="list-style-type: none"> <li>Can communicate effectively with DS or Coach.</li> <li>Understands collaborations can occur.</li> <li>Hones observation skills to understand who is in the bunch.</li> </ul>	<ul style="list-style-type: none"> <li>Displays advanced timing capability in bringing back break, gap management.</li> <li>Displays advanced ability in managing workload output in a break.</li> <li>Displays inherent understanding of the subtleties of being on the front of the bunch.</li> </ul>	

**LET'S RIDE TOGETHER**

