

**ThrottleWise**

# THE THROTTLEWISE LADDER — ALL 40 RUNGS

Forty lessons in four levels, one skill at a time. Riding on public roads is challenging, exciting and wonderful; every rung makes you better at it. Each rung is a four-minute video, about twenty minutes of practice in a parking lot, and a clear standard you pass or you don't. Free, for every rider, forever. Rungs go live as they are filmed; rung 1.1 is live now at [throttlewise.org/the-ladder](https://throttlewise.org/the-ladder).

**How a rung works.** Watch the video. Open the practice sheet on your phone, or print it. Practice the drill. Pass the standard: this fast, this clean, this many times in a row. Then the next rung opens. Finish a level and you earn a rank that cares only about what you can make the bike do.

## LEVEL 1 CONTROL

MAKE THE BIKE DO EXACTLY WHAT YOU TELL IT — ESPECIALLY SLOWLY.

|      |                            |                                                                                                                                                     |
|------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1  | The Friction Zone Crawl    | The clutch controls the bike below walking pace — the throttle holds steady, and the rear brake keeps it honest.                                    |
| 1.2  | Head And Eyes              | Turn your head and look where you are going — the bike goes where you look, and looking down at the front tire is why the circle wobbles.           |
| 1.3  | Counterweighting           | Below walking pace you lean the bike and keep your body upright — the opposite of everything you do at speed.                                       |
| 1.4  | The U-Turn In A Lane       | Turn the bike around inside a normal road width without putting a foot down.                                                                        |
| 1.5  | The Box                    | Two U-turns become one motion — the bars turned fully one way and then fully the other, with your head leading the bars from one exit to the other. |
| 1.6  | Smooth Throttle            | Open and close the throttle smoothly — shutting it suddenly upsets the suspension and costs you grip exactly when you need it.                      |
| 1.7  | Shifting Without The Lurch | Clutch and throttle timing, up and down the gearbox, so your helmet never nods.                                                                     |
| 1.8  | The Progressive Squeeze    | The front brake is squeezed, never grabbed — the weight has to move onto the front tire before that tire can hold it.                               |
| 1.9  | The Quick Stop             | Maximum braking, both brakes, straight up, down to first gear — the skill that matters most when a stop has to happen right now.                    |
| 1.10 | Hills                      | Stopping on a grade, holding on the rear brake, and pulling away without rolling back into the car behind you.                                      |

## LEVEL 2 CORNERS

THE SKILL THAT SEPARATES RIDERS.

|             |                                     |                                                                                                                                                                                                              |
|-------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2.1</b>  | <b>Countersteering</b>              | You steer a motorcycle by pushing the bar the “wrong” way — and above walking pace there is no other way to steer it.                                                                                        |
| <b>2.2</b>  | <b>Quick Steering</b>               | The faster you get the bike leaned over, the less time you spend leaned over — and the more road you have left.                                                                                              |
| <b>2.3</b>  | <b>Body Position</b>                | Weight the outside peg, move your upper body to the inside, keep your arms loose — same corner, same speed, less lean angle (how far the bike is leaned over).                                               |
| <b>2.4</b>  | <b>Eyes To The Exit</b>             | Look through the corner to where you want to come out, not at the thing you are afraid of.                                                                                                                   |
| <b>2.5</b>  | <b>Read It, Then Set Your Speed</b> | All the braking is finished before you start leaning into the corner, and the corner tells you the speed through the vanishing point: if the spot where the road edges meet is moving toward you, slow down. |
| <b>2.6</b>  | <b>The Delayed Apex</b>             | On a public road you start the lean late, because you cannot see — your apex (the point where you pass closest to the inside of the curve) comes later than a racer would take it.                           |
| <b>2.7</b>  | <b>The Throttle Rule</b>            | Once you are leaned, the throttle rolls on smoothly and keeps rolling on. Shutting it suddenly mid-corner makes the bike straighten and drift toward the outside of the corner.                              |
| <b>2.8</b>  | <b>The Grip Budget</b>              | You have one tire’s worth of grip and you spend it on braking or on leaning — never all of both at once.                                                                                                     |
| <b>2.9</b>  | <b>The Corner That Tightens</b>     | The corner that tightens is caught before it tightens — the vanishing point pulls toward you, and the late apex you already chose keeps the lane yours.                                                      |
| <b>2.10</b> | <b>Linking Corners</b>              | The exit of one corner is the entry of the next. Riding a road well is rhythm, not a series of separate corners.                                                                                             |

## LEVEL 3 THE ROAD

### WIN THE STREET.

|             |                                      |                                                                                                                                                         |
|-------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>3.1</b>  | <b>The Scan</b>                      | A repeatable search pattern beats a hard stare — where your eyes go, in what order, every few seconds.                                                  |
| <b>3.2</b>  | <b>Speed For How Far You Can See</b> | Never ride faster than you can stop in the distance you can actually see. The most-broken rule in motorcycling.                                         |
| <b>3.3</b>  | <b>Lane Position</b>                 | Your position in the lane buys you two things nothing else can: a longer view of the road ahead and somewhere to go.                                    |
| <b>3.4</b>  | <b>The Space Cushion</b>             | The gap in front is yours to set. The gap behind is yours to manage too, and almost nobody does.                                                        |
| <b>3.5</b>  | <b>The Left-Turner</b>               | The car turning across you is the one situation every rider has to own — and eye contact means nothing.                                                 |
| <b>3.6</b>  | <b>Being Seen</b>                    | Being seen is something you do, not something you wear. Position, movement and contrast at the moment a driver looks.                                   |
| <b>3.7</b>  | <b>City Close Quarters</b>           | Most close calls come at town speed, close to home, on a nice day — driveways, backing cars, opening doors, gravel where a driveway meets the road.     |
| <b>3.8</b>  | <b>The Highway</b>                   | The difference between your speed and everyone else’s, crosswind, and the turbulence behind a truck — the highway is easy right up until it isn’t.      |
| <b>3.9</b>  | <b>Bad Pavement</b>                  | Gravel, sand, paint, tar snakes (the lines of tar that seal cracks), steel plates and wet leaves: steady throttle, upright bike, no brakes, loose arms. |
| <b>3.10</b> | <b>Edge Traps And Crossings</b>      | Ridges, grooves, rumble strips, tracks and bridge joints will steer your bike for you unless you cross them at an angle.                                |

## LEVEL 4 MASTERY

#### WHAT THE BEST RIDERS DO WHEN THINGS GET CHALLENGING.

|      |                             |                                                                                                                                                                     |
|------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.1  | <b>Survival Reactions</b>   | Under fear your body does five things automatically, and four of them work against you. Naming them is how you beat them.                                           |
| 4.2  | <b>The Mid-Corner Fix</b>   | Running wide mid-corner is fixed by leaning more and looking further through — the exact opposite of what you want to do.                                           |
| 4.3  | <b>The Emergency Swerve</b> | Two quick countersteering pushes (push the bar the ‘wrong’ way, as in rung 2.1), no brakes during the swerve. Braking and swerving at once is how the swerve fails. |
| 4.4  | <b>Stop, Or Swerve</b>      | Deciding is the skill. The wrong choice made fast beats the right choice made late — and you cannot do both at the same time.                                       |
| 4.5  | <b>Braking From Lean</b>    | You can stop hard from a lean — if you trade lean for brake progressively as the bike comes up.                                                                     |
| 4.6  | <b>Trail Braking</b>        | Carrying a trace of front brake past the point where you start leaning in gives you a corner you can still adjust. The advanced tool, taught last on purpose.       |
| 4.7  | <b>Rain And Cold Tires</b>  | Wet pavement and a cold tire do not give you less warning — they give you less grip, and the first ten minutes ask the most of you.                                 |
| 4.8  | <b>Night</b>                | At night you can see only as far as your headlight reaches, and most riders outride it by a wide margin.                                                            |
| 4.9  | <b>The Risk Budget</b>      | Alcohol, fatigue and heat — the three things that quietly take skill away, and nobody self-assesses well.                                                           |
| 4.10 | <b>Gear That Works</b>      | A helmet that comes off when you need it was never protection. How it fits and stays fastened, then gloves, boots, and what scrapes along the road.                 |

## AFTER THE LADDER **TEN ELECTIVES**

#### REAL SITUATIONS THE CORE LEVELS LEAVE FOR LATER. TAKE THE ONES YOU RIDE.

- **Group Riding.** Formation, spacing, signals, and refusing to ride someone else's pace — the elective the community will use most.
- **Two-Up.** Carrying a passenger — braking distance, cornering, and the passenger's job.
- **Loaded.** Luggage, weight distribution and what it does to the handling.
- **Mountain Roads.** Switchbacks, elevation, engine braking (slowing by closing the throttle in a low gear), and the tourist in the rented convertible.
- **Heat And Cold.** Dehydration, numb hands, and the judgment both quietly take away.
- **Rural Roads.** Animals, farm equipment, gravel driveways and no cell signal.
- **Long Days.** Fatigue management on a real distance ride.
- **Your Bike's Setup.** Tire pressure, how much the bike settles under your weight, lever and mirror position — a better bike before you even ride.
- **Dropped It.** Picking a bike up alone, and parking so it does not happen.
- **A Different Bike.** Adapting your skills to a bike that is not the one you learned on.

The Ladder is not a replacement for in-person training; take the courses, and we recommend the good ones by name on [throttlewise.org/the-program](https://throttlewise.org/the-program). Riding is inherently risky. Practice new skills at your own risk, in a safe and controlled area, within your abilities and the law. ThrottleWise is a California nonprofit public benefit corporation, 501(c)(3), EIN 39-5030027.