

Instructor Manual

LTR Activity 1 Rationale:

Key objectives:

- Proper motorcycle for fit for a training motorcycle (prep for - A1)
- New rider process and repetitions for activating the front brake
- Early development of blending controls

Set up for activity for LTR Activity 1: Helmet fit and use, riding gear check and motorcycle selection are required to be complete before the Activity 1 briefing. Before selecting a loaner helmet, riders should be shown proper fit, how to put a helmet on, and how to fasten their helmet. It is assumed the riders have no experience riding and may have never sat on a motorcycle before.

Riders must be taught the six points of proper fit for a training motorcycle.

1. Balls of both feet can touch the ground
2. Rider can move the handlebars full left and right (to lock) without hitting the knees while their feet are on the foot pegs
3. Rider can place their foot on top of and below the shifter and move the shifter while sitting in the proper riding position
4. Rider can apply the rear brake
5. Rider can squeeze the clutch and maintain control to its full release (strength and distance) while the handlebars are at full lock in both directions
6. Rider can reach and apply the front brake while the handlebars are at full lock in both directions

This puts the choice and responsibility of motorcycle selection in the rider's hands and allows you as the instructor to identify potential challenges related to fit. Riders should sit on several motorcycle models if available to see which motorcycle fits best. If necessary, for the rider's success, you may need to coach them in their final selection; or need to override a rider's choice of motorcycle due to motorcycle size, weight, fit or performance characteristics.

When facilitating LTR A1 effectively, the entire activity should not exceed the 20-minute window allotted and can often be effectively completed in less time. It is important to NOT exceed the 1:8 rider to instructor ratio unless there are extenuating circumstances. The smaller ratio of 1:8 provides a more intimate learning environment for the riders than a 2:16 ratio with one instructor providing primary instruction. The smaller instructor-to-rider ratio increases the rider's propensity to ask for help and for the instructor (you) to see and help riders who need coaching or adjustment in their technique. It also helps you as the instructor to use a lower volume in your voice which decreases rider stress and saves your voice. The smaller group size creates a less formal feel allowing you to move about the riders looking them in the eyes as you provide guidance and to connect and gain trust from each rider. Creating a feeling that the learning is focused on each of them individually is an important part of the LTR.

LTR Activity 1 includes mounting and dismounting the motorcycle, manipulating the primary controls to ride a motorcycle and the controls necessary to start and stop the motorcycle engine. The locations of "where" and functions of "what" the controls do are not the most critical lessons for LTR A1. The uses of "how" each control is used and how to operate them are the greatest focus. The highest importance of these being placed on the flat throttle-wrist position and the process for braking.

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The activity provides guidance and focus only on the controls necessary to ride the motorcycle. Riders should not be introduced to, or overwhelmed, with non-critical controls. Secondary controls are added as needed in later activities. Controls such as the horn (introduced in LTR A9) and the turn signals (introduced in LTR A12) are not necessary for early riding activities.

Mounting the motorcycle can be done from either side of the motorcycle. Which side of the motorcycle riders choose to mount from should always be up to rider preference and not dictated as a mandate by you as the instructor. It is reasonable to offer guidance or share information. Ultimately as the instructor, your job is to educate, not to control the rider's choices. LTR A1 usually ends with the riders queued for Activity 2 along the long side of the riding area. How you move the riders into position for LTR A2 is your choice as the instructor. The process does not matter as long as it is safe and effective. *(Riders are NOT allowed to move into position for LTR A2 with their engines running)*

Allow the riders to practice using each control on their own after you introduce each control. Ensure riders mount and dismount with balance and have smooth operation of the fundamental controls and can start and stop the engine. **Riders must be able to squeeze the clutch, roll off the throttle as they reach for the brake, prior to moving to Activity 2.** This activity does not need to be run to the time on the cards and can end as soon as riders are ready. End this activity with the riders queued for Activity 2, position each rider beside a cone.

The most critical learning elements of LTR A1 are:

1. **Building habits (muscle memory) for using the front brake.**
 - *Begin with a flat wrist position, then roll the throttle on 1/8th of a turn.*
 - *Squeeze the clutch*
 - *Reach for the front brake AS you roll the throttle to the full closed position*
 - *Squeeze the front brake*
2. **The introduction of blending controls** *(overlapping control use during braking)*
3. **Introduction and rehearsal of using the clutch (gray-zone).**

Note: Ensure riders begin with a flat wrist position, with their wrist slightly lower than the handlebar, before rolling the throttle on. They should begin the roll off as they are reaching for the front brake.

Riders need to be taught how a clutch works and the importance of the gray-zone. As the instructor, you must ensure riders are able to manipulate the clutch in the gray-zone (proper control and motorcycle fit) and also able to fully release the clutch while maintaining control without their fingers slipping off the clutch lever. If a rider has an issue, confirm proper motorcycle fit and adjust the controls or switch motorcycles if possible. Introducing the clutch during LTR A1 is important to prevent stalling or out of control riders during LTR A2. This step should not be cut short.

The first braking rehearsal is with the engine(s) off allowing coaching and perfection of the front brake application process without the distraction, stress, or risk of a running engine. The second braking session introduces the distraction of noise and engine feedback from throttle application prior to the braking process. This second rehearsal of front brake application practice is critical to reducing anxiety during LTR A2. As a subtlety, riders will learn how much throttle is needed while increasing throttle prior to squeezing the clutch, closing the throttle and brake application.

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When applying the front brake, closing (rolling off) the throttle MUST be done as a single action, “roll off the throttle AS you reach for the brake”. This is a three-step process not a four-step process. Do NOT roll off the throttle and THEN reach for the brake. The reach for the front brake helps to ensure the throttle is fully closed when they begin braking. The action of reaching for the front brake as they close the throttle reduces reaction time and reduces the potential of a rider overrevving the throttle while braking. This will also reduce the potential of bike-to-bike contact or crashes during the learning process.

Turning the braking technique into a habit requires repetition and time. The LTR A1 (40+ reps) combined with LTR A2 (40+ reps) provides 80+ repetitions before beginning LTR A3. During LTR A1 riders will rehearse the process a minimum of 20 times with the motor not running, then a minimum of 20 times during a second session with the motor running. In total, riders should complete the entire braking process a minimum of 40 times before moving onto LTR A2.

Braking is the most important skill riders need before riding during A2 and A3. The complete process of casual braking is developed in a building block process throughout A1 and A2. As an instructor, it is best to think of A1 and A2 as a single braking activity that is a series of building blocks.

1. **Engine off:** With the engine off riders learn and practice the LTR process of using the front brake
 - *throttle on 1/8th of a turn...*
 - *squeeze the clutch and roll off the throttle as you reach for the front brake*
 - *squeeze the front brake*

The first-time rider's practice braking, it is done with minimal distractions (engine off). This keeps rider stress to a minimum and allows you as the instructor to easily flow to each of your eight (or less) riders to ensure they have the proper wrist position and braking process before moving on onto the next phase of developing the braking process. Riders need to perform enough repetitions to develop habit. The LTR is designed to not just expose riders to process but to develop proficiency and habit. The riders MUST have the wrist position and process correct before moving on. It is critical to coach this through all 20+ repetitions as needed. It is ok for riders to look at their controls during this phase. Looking at physical actions is natural during initial learning.

2. **Engine on:** Now that the riders have rehearsed the process of braking, the added realism (stressor) of a running engine is added to the process. Most riders will naturally self-correct initial overrev of the throttle as they practice the braking process again. As the riders repeat the braking process (20+ times) make sure you coach for riders. Do NOT have riders practice revving the engine with the throttle. This should be a self-discovery while practicing front brake application.

Common errors to watch for and correct if not self-corrected by the rider:

- not rolling on the throttle to begin the process
- too much roll on (lack of self-correction when revving the engine)
- timing (braking process out of order)
- overreaching to apply the front brake & increasing revs while squeezing the brake
- not applying pressure to the front brake
- begin encouraging riders to brake while not looking at their controls

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LTR A1 is one of the exceptions to conducting the activity wrap up as a full class (two instructor class) since it is likely that a two-instructor class will move from LTR A1 to LTR A2 at different times. Because of this, it is common to do a small group wrap up after LTR A1. To move into position for LTR A2, riders must not ride or have running motorcycles. Riders may push the motorcycle while standing to the side (it is suggested you provide guidance to let the motorcycle lean slightly into them as they push), they may straddle walk the motorcycle while seated or standing above the seat. If necessary, you may choose to help a rider push their motorcycle or push the motorcycle for a rider. This may be done in consideration of rider disability, age, size, strength, or other considerations. Moving the motorcycle into position is not a critical learning point to learning to ride. This move is done only to get into position for LTR A2.

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LTR Activity 2 Rationale:

Key objectives:

- Blending controls (adding throttle, while using the gray zone)
- Proper use of the front brake while the motorcycle is in motion
- Blending controls (braking process for the front brake and rear brake together, while closing the throttle and squeezing the clutch)
- Successful use of the gray zone to move the motorcycle

Most training crashes in the LTR are the result of the rider's inability to blend controls and the improper use of the front brake and/or clutch operation. This activity is crucial in eliminating crashes in the LTR. Activity 2 provides the confidence for riders to put their motorcycle in motion using the engine, and conduct safe and controlled stops using both brakes. Activity 2 is done in two parts; walk and stop and gray and go. The objective of part 1 is to continue developing proper front brake application while also developing slow engagement of the clutch's "gray-zone". **It is imperative that riders initially move only one-two steps at a time (2' to 3'). This may be best done by having the riders count their steps "add throttle then, ease into the gray zone, when the bike begins to move, pause your clutch release and count your steps, One, Two, squeeze the clutch, roll the throttle closed as you reach and apply the front brake"** This minimizes movement, maximizes practice and provides you as the instructor better control of the class and access to riders who need your help the most. Move to Part 2 when the riders operate the clutch and front brake smoothly.

The primary objective for A2 is to ensure the riders complete enough repetitions of proper braking technique to establish braking habits before they need to rally in A3. By the beginning of A3 riders should no longer be thinking about the process for braking with the front brake. Students will gain proficiency of adding the rear brake as their training progresses. A2 requires riders to use both brakes before continuing to A3 but does not require proficiency with both brakes. However, proficiency of disconnecting power and using the front brake is required. Riders who cannot use the front brake properly or do not activate both brakes together at least one time cannot continue onto A3. This minimum requirement for braking is for safety.

The primary objective of braking is a continuation of the braking development in A1. In A1 riders rehearse braking with minimal stressors (engine off), then with the stressor of a running engine. Activity 2 is the first-time riders will use their brakes with feedback from the motorcycle.

Primary rider objective: braking

Part 1: Front brake use (continued)

Part 2: Using both brakes

During part 1, riders will need to also develop the secondary objective of using the gray zone of the clutch to put the bike in motion. This is the third level of rider distraction, which is movement. **Riders should not fully engage the clutch during this activity** as the focus is to only provide enough forward movement to give them feedback when squeezing the brake as they roll the throttle closed. Braking needs to be done as a single motion of extending the fingers as they roll the throttle closes while

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reaching for the front brake, then squeezing the brake lever. **This combined overlapping of controls is referred to as “blending controls”.** Riders should only need to move far enough forward to take one or two steps. It may be helpful to have the riders count out loud “one, two, clutch in, brake”. This will cause a delay in clutch control and keep them calm as they work through the front brake application. This will also help them delay the release of the clutch to feel the motorcycle move them forward in a controlled manner. Having the rider clearly understand that they will NOT fully release the clutch and to pause in the release of the clutch when it begins to move forward will be key in their success later in the LTR.

Secondary rider objective: gray zone

Part 1: gray zone only (no full clutch engagement)

Part 2: gray zone with full clutch engagement

During part 2 riders will put their feet up so they can add the use of the rear brake. **As a subtlety, riders will balance and ride the motorcycle in preparation for Activity 3.** This activity may end before the time listed on the cards and does not need to be run to “time” if riders are ready to move onto A3. **End A2 when all the riders are starting and stopping smoothly using the front brake and have successfully used both brakes a minimum of one time with control.** Riders that fail to balance or put their feet on the pegs to activate the rear brake with the front brake are not considered under control. Do not coach for speed, only for starting and stopping. You do not want riders becoming overconfident with inline speed before A3 or they may increase risk of running wide while cornering in A3 part 1. The LTR advances quicker and at a more natural pace than other beginner training currently used in the U.S. to include the MSF BRCU and the Oregon BRT (this includes the variants of the BRC used in ID and CA).

Note: Do not coach riders who are stable to “speed up” during A2; you know it is time to move to A3 when each rider has used both brakes smoothly.

Activity 3 MUST begin with riders confident in their ability to stop and start but not yet confident with speed. Because A3 begins with riding and cornering, riders have not been provided any technique for cornering and it may be a hazard to both the riders if the riders begin A3 at speeds that are beyond natural development. **Developing overconfidence in riders’ abilities by encouraging higher speeds during A2 can increase the potential for crashes in A3.** Riders should be coached to gain enough speed for balance to use the rear brake. Once the riders have successfully used the rear brake it is time to move to A3. Rider will gain an understanding of speed for stability during A3 part 1 as they naturally gain confidence.

Riders should be watched and coached for gray zone use before adding the rear brake. New riders that are not restricted to small 2’-3’ movements are likely to have underdeveloped clutch usage skills in later activities.

Time tips: If path of travel allows, the circle(s) for A3 may be put in place or located outside the riding path for A2. During wrap up move single cones for offset for A6 if A2 cones will be used for A6.

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LTR Activity 3 Rationale:

Key objectives:

- Create a sense of rider success prior to first break (first ride)
- Personal choices and responsibility for safety (life saver & queuing)
- Recognizing the importance of proper eye placement (Scan)
- Use countersteering to initiate lean (achieve 15mph during part 2)

Activity 3 provides riders the opportunity to self-discover how motorcycles become more stable with momentum (speed). **Rider must be allowed time to naturally build up speed during the discovery ride.** Riders are not introduced to shifting as a safety measure. Given time, riders will naturally increase speed and thus stability. Every rider should be allowed the opportunity to ride the smaller POT (circle) before moving to part 2.

For most classes, a rotation of 3 groups of riders into the circle will provide the proper time for speed to develop on the larger POT. Generally, more experience or confident riders will gain the most from the smaller POT where less confident riders will benefit from more time on the larger POT. If a rider struggles with POT control on the smaller POT, they can be merged back into the larger POT. **There is no minimum number of laps required on the smaller POT during part 1.**

The LTR is based on having constant movement of riders. **A3 is intended to only have 75% to 66% of the riders on the largest riding POT during the majority of the activity,** 25% to 33% of the riders should always be transitioning into, out of, on riding the small POT.

Activity 3 is the first activity where vision becomes a cornerstone coaching point and should be reinforced as much as needed. Using proper vision is one of the most common skills for riders. Riders should be coached to “Scan” their path of travel, so they know where to go. This will develop into the Home Position in A4. **Do not overwhelm riders by introducing Home Position before A4.**

Activity 3 is the first activity of several where a “discovery ride” is used. This is a good time to introduce (define) to the riders what a discovery ride is. **Discovery rides provides the opportunity for the riders to use what they have already learned before being given new skills or coaching.** Every “discovery ride” will end with a mid-activity briefing and potential riding demonstration before they repeat the activity. As soon as all the riders are on the large loop, you will begin wedging in 2 to 4 riders at a time (having riders divided into three groups is ideal for time management while also ensuring sufficient time riding the outer loop) onto the smaller loop. Begin with the strongest or most experienced riders ending with the slowest most timid riders.

Activity 3 has one primary lesson for part 1 and one primary lesson for part 2.

- Part 1, lesson 1: Life Saver
- Part 2, lesson 2: Countersteering

The riders start out in a discovery ride, which ensures riders have a chance to experience “designed failure” before they are given formal processes or coaching. Discovery rides build the value of training

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and will increase the return rate of riders to attend Street Skills. **Do not provide coaching (*safety coaching only*) during the discovery ride and keep all discovery rides to a minimum of only 2-3 laps on the small loop.** It is critical to introduce the “life saver” as the only new skill prior to the discovery ride. It is “ok” if riders in the class shift, if they know how and choose to use multiple gears, but do not offer or brief this.

Introduce the “Lifesaver” in this activity before the riders begin riding. Ensure they understand the difference between a head check and a lifesaver. Additionally, review how a rider can adjust speed BEFORE the corner. Braking and slowly rolling off the throttle are the two primary methods. How a rider slows is their personal choice.

Slow prior to the turn: (do not pull in the clutch)

1. Roll off the throttle prior to the turn
2. Use both brakes to slow as needed

SALT is introduced to the riders, but the primary lesson should be countersteering. Part 1 is used for riders to naturally develop the confidence to increase speed enough to use countersteering to initiate lean. Coaching speed during the mid-activity lesson needs to focus on achieving enough speed (around 15mph) to accomplish countersteering. Coaching riders to “speed up” without direct purpose creates a stressful environment for riders with low confidence. **To keep it personal, it is often best to pull riders going under 12mph out of the riding circuit and to coach calmly and precisely, reinforcing the objective of countersteering.** Riders who lack sufficient speed will be unable to accomplish the SALT process, including Adjusting speed for the corners and initiating Lean using countersteering.

If a rider has difficulty the first time on the small loop, immediately move the rider back on to the large loop. After the riders have completed the inner circle, stop the riders in a straight-line and introduce countersteering and SALT. Perform a static practice of SALT with an emphasis on countersteering, then reverse direction, and let the riders ride. The primary goal for part 2 is for riders to experience countersteering. The remaining steps of SALT will be built on and reinforced as the LTR progresses.

Queuing and rallying places responsibility on the riders and encourage good choices to ensure the safety of themselves and others during the LTR. The LTR rallies riders during mid-activity lessons and for end of activity wrap-up forcing riders to use their own judgement to ensure their safety and the safety of others. Confident riders are free to rally in close to the instructor(s) and other riders with less skill or confidence are free to park at a comfortable distance from other riders. Releasing riders from a rally point area should be done in the same fashion. Riders are given the freedom to find a safe way onto the riding circuit or to a queue. You MUST NOT overcontrol the rally point. When releasing riders, allow the confident riders to lead the class. This is also an opportunity for riders to watch others, so they understand the path of travel or to ask for more clarification before entering the riding circuit. **Rallying is one of the best and most consistent opportunities for riders to apply good judgment and take responsibility for their actions and safety.**

With the introduction of SALT, instructors should constantly reinforce the process using the terms. Rather than “eyes up” it should be a specific, measurable phrase such as “SCAN the corner” or “Eyes on the horizon”. The LTR is designed to consistently develop and reinforce real world decision making and

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processes. The development of critical thinking and judgment are core concepts of the training. Ensure you review the ways a rider can adjust speed BEFORE the corner.

During the wrap up of A3 ensure that rider judgment is discussed regarding life savers, merging into traffic and adjusting speed for the corners. **Judgment is the common thread that should be tied into every post activity wrap up when possible.** Judgment cannot be taught in the classroom workshops; it must be a hands-on experience.

Activity 3 will be one of the highlights of the LTR as it is the first activity where riders are successful in their goal to ride a motorcycle. **It is important that riders start A3 prior to their first break so they have an impactful experience to share with the other riders.** This is also a bonding activity for the class as they will have successes and failures to share with each other during the break. As you reset the riding area during break, the riders have the opportunity to learn from each other.

Time tips: For classes over 8 riders set two small circles if space allows. When two instructors are available, always divide the class in two groups so each instructor only needs to track a portion of the total number of the riders to ride from the large loop to the small loop.

For each circle, the riders should split into three groups for the best management of time available but without cutting riders short of riding time/mileage. (group size should range from 1-3)

Groups do not need to be equal in the number of riders. Groups may be divided unequally to manage riding speeds, coaching needs to riders needing extra attention or for safety.

Braking “V” can be preset, leave A6 weave in place.

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LTR Activity 4 Rationale:

Key objectives:

- Reinforce use and control of the gray zone from a stop (important to coach stop signs)
- Become proficient at combining both brakes while stopping (blending controls)

Note: *Shifting is a rider objective but is not critical for rider safety. **Shifting needs to be coached but is not the most important objective.** As the instructor, your primary concern needs to be first on riders using proper braking process to include using both brakes. Secondary is to coach any riders still struggling with the gray zone. If two instructors are available, one instructor should be focused on the shifting/braking area, **the second instructor should be seeking out riders still struggling with the gray zone at the stop signs.***

Activity 4 introduces shifting, which will allow for acceleration through an intersection, finishing with coming to a safe stop at a red light or stop sign. As riders become proficient, adding the downshifting to first gear during the stop should be offered.

There are two phases that make up the first lesson before the riders ride in A4;

- phase 1) Slow controlled static practicing for shifting up and down (step-by-step),
- phase 2) Static practice shifting at real-life speed

Once riders begin riding, they should be coached to pick up their feet as soon as they are stable and to shift as soon as their feet are on the pegs. The objective is to shift, not to speed up until they NEED to shift. This is a critical coaching point as it will reduce the stress of the riders by giving more time to complete the shifting process and by keeping revs low.

Watch for riders that are engine braking to a stop instead of downshifting or that do not activate the rear brake. **It is important riders maximize their opportunities to ride so make sure when you are coaching riders that you do not impede the flow of riders.** Coaching should be kept simple, brief and to the point. Make sure you identify the most critical point that riders need to improve and save secondary points for improvement for later development. When two instructors are available, it recommended that only one instructor manage the stop signs at the end of the intersection shifting area and the second, if available (initially), manage rider flow to keep riders moving. Riders are normally resistant to “stacking” at the stop sign at end of the intersection shifting area, once riders understand and are flowing with a stack of no more than 3 riders at a time, then the instructor should move to the starting from a stop sign area to help riders who need coaching to develop their gray zone control and starts from a stop.

The layout of the LTR should facilitate access to riders needing coaching without creating a situation of instructor interference. Ensure riders understand the difference between engine braking and downshifting while stopping.

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LTR Activity 5 Rationale:

Key objectives:

- Each rider maintains path of travel while cornering
 - Must have proper speed to use countersteering
 - Must adjust to a proper entry speed for the corners
 - Does NOT initiate slowing after entering the corner
- Understands and uses Home Position

Although the rider's objective is to shift gears while moving, and should be coached, this is NOT the most critical skill to develop during A5. Riders will continue to gain shifting practice as the LTR progresses. Maintaining path of travel and good vision are the skills most important to keeping riders alive on the road.

The Interstate Highway standards for the U.S. Interstate Highway System uses a 12-foot (3.7 m) standard for minimum lane width. Riders should be reminded as needed to use countersteering (speeds need to be near 15 mph or higher) which was introduced with SALT in Activity 3. Riders who fail to achieve the speed necessary to use countersteering or to maintain POT need to be coached. **It may be most effective to call those riders in need of coaching outside the path of the riding circuit to give coaching without the distraction of riding.** Keep coaching short and to the point, do not interfere with their hands-on practice time more than necessary.

Teach what "home position" is and how to use it before starting A5. It is critical that each rider understands the home position concept before riding A5. Home Position becomes a primary concept during A5 and every following LTR activity.

Example of a Home Position static activity: Have each rider face forward and then shift their eyes to the side to look at something. Ask them to express out loud when they start to feel eye strain or discomfort. Then have each rider repeat the activity by turning to look directly at the same object/person and repeat the question (using the Home Position). The concept of developing peripheral vision will come during later activities and courses.

Do not move from part 1 to part 2 until riders have met the key objectives of the path of travel "POT" and vision use. The majority of A5 should be focused on the key objectives, repetition is critical. Coach riders as needed, every rider must be able to maintain their POT through each corner with control. Riders must be able to maintain POT while cornering to continue forward. Riders that are not able to maintain a POT in a corner are a hazard. The vast majority of motorcycle fatalities and crashes are related to rider's inability to corner successfully due to judgment and/or skill. **It is your responsibility as an instructor to identify riders that are high risk or struggling and to fix or remove riders before a training crash or near crash occurs.** As speeds increase so does the risk of riders running wide.

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Watch carefully for all the skills introduced up to this point:

- Vision (Home Position)
- Adjusting speed before the corner
- Countersteering
- Relaxed grip on the bars
- The ability to maintain or add throttle before and after the apex
- Space cushioning between riders
- Applying good rider judgment

Make sure you stay active in observing riders so that you can provide an accurate and specific facilitated mid-activity reflection and wrap up.

The mid-activity lesson should be done as a “reflective” discussion guided by the riders and before adding countersteering and reversing direction. **Upon reversing the riding circuit, use only one lane placement and one shifting area.**

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LTR Activity 6 Rationale:

Key objectives:

- Blending controls (throttle with Gray Zone)
- Turn from a stop in a single lane

New riders often struggle with maintaining lane discipline when turning from a stop or slow speed maneuvers. Because this is such a common deficiency in self-taught riders, **the LTR provides repeated practice of full steering lock turns and slow speed maneuvers (A6, A8, A11, A12).** Activity 6 introduces both full steering lock turns from a stop and slow speed maneuvering to develop better use of the gray zone and counterbalancing. **Vision, counterbalancing and blending of the gray zone with the throttle should be your primary coaching.**

It is critical to the success of the riders that the turn from a stop process, to include leaning the motorcycle during the turn, is coached. The skills coached to be successful for the turn from a stop will be reinforced during the weave and uncontrolled intersections (balance, gray zone & vision). Riders do not need to master this skill during A6 but must understand the process so that they can build on it during later activities.

It is critical to the key objectives that a clear and precise demonstration is done with the riders standing at the intersection. **Do not cut this demonstration short and make sure to clearly demonstrate the need to use full lock steering and to lean the motorcycle prior to, or during the turn.**

Common rider errors for turn from a stop:

- Not using Home Position
- Not leaning the motorcycle prior to and/or during the turn
- Not having good control of the gray zone (*commonly due to instructor neglect during A2 & A4*)
- Picks up the inside foot before moving or refuses to pick up the outside foot when needed
- Improper bike fit
 - Reach too far to maintain control of the clutch when handlebars are turned
 - Handlebars restricted from being at full lock (rider to tall)

Activity is run as two parts:

- Part 1 is a discovery ride where riders get to use the skills learn up through A5
- Part 2 is a repeat of the riding circuit after a mid-activity lesson to include a riding demonstration

Part 1 is completed in 2 or 3 laps with minimal or no coaching. The discovery ride provides the riders a chance to figure out the POT for the riding circuit while applying the skills and techniques learn up to this point. **As the instructor, your job is to closely observe the riders on what needs to be emphasized during the mid-activity lesson so that you can provide specific feedback and coaching to specific riders.** It is important to be able to offer individualized feedback to riders to help them improve. The personalization improves rider performance and rewards them for personal accomplishment and choices.

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The mid-activity lesson includes a required demonstration so that riders can see how the techniques look in motion. The riding demonstration needs to include the points listed on the briefing card but may include more tips or techniques if it is a benefit to the riders. **It is also ok to show a “don’t do this demo” followed by a selection of proper techniques.** The demonstration is to help the riders perform well. Make sure your demonstration flexes with the needs of your riders the same as your coaching.

During the static practice, reinforce the Home Position as well as emphasizing the full lock of the handlebars and allowing the motorcycle to roll/slip underneath the rider (counterbalancing).

Demonstration: Turn from a stop/maneuvering/uncontrolled intersections

- Vision (home position)
- Motorcycle leans (rolls) under you (counterbalance)
- Late Apex – line strategies
- Use gray zone (clutch)
- Clear (45-degree scan) uncontrolled intersections (yield gates)
- Begin scan as you approach the uncontrolled intersection
- Slow and go using gray-zone

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LTR Activity 7 Rationale:

Key objectives:

- Use controlled brake pressure to decrease stopping distance compared to casual stopping
- Use proper braking technique with the increased stress of stopping quickly
- Stop without “grabbing” the front brake
- Keep the Home Position and vision on the horizon while braking
- Swerve without applying brakes

Note: A7 is not a “stacking” activity, however riders may start before their POT travel is clear in anticipation of it being clear when they arrive. They must understand that if the rider stalls or is not clear they need to stop short of the other rider. **Do not over control travel flow unless riders pose a hazard by stacking or are using poor judgment.** Ultimately you as the instructor are responsible for keeping the riders as safe as possible while they are learning.

Activity 7 has subtle skills that can be developed after the primary objective of stopping is achieved. It is important that riders and coaching focuses on technique first. Riders are primarily working on how they stop not where they stop. Where they stop is a higher-level skill that most riders are unlikely to achieve during A7 as it is a skill of judgment and prediction. Because riders who may meet the key objectives quickly are most likely new, they are also often inconsistent in their riding abilities. Riders with previous riding experience may be capable of achieving the secondary skill of judging when to begin braking to end up near the braking zone cones. Riders must be doing their best stop and NOT adjusting their braking to stop near the stop area cones.

Skill development

- Riders work on their best stop

Judgment development

- Riders time their best stop to end near the stop area cones

During the pre-ride briefing demonstration, begin near 15mph and work up to 20mph. Riders should see as many braking runs as are needed to understand the activity. The primary objective of the demonstration ride during A7 is to model controlled quick stops. Riders have been using both brakes for 5 activities before this and only need to be shown how to stop quickly without drama and with good technique. Demo a quick stop that shows all the components of a quick stop.

Activity 7 is one the most difficult activities to run without creating long delays in lines. Begin the riders at the stop signs of each swerve to delay the time it takes for riders to back up the braking queue. Emphasize the need to always do a legal stop at the stop sign before each swerve. This full stop slows down rider movement around the riding circuit, controls riders approach speed to the swerve and provides additional start and stop practice for blending controls (clutch, throttle and brake release).

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To help reduce long wait times in the braking queue, coach riders outside the braking area and be precise and to the point. Work to **keep the riders in motion**. One of the goals of the LTR is to provide a positive rider perception of rider training. We must keep riding activities fun, educational, challenging and free flowing in a way that is SAFE but minimizes riders waiting in lines.

Note: When setting up this activity, ensure there is enough runoff at the end of the braking area and that there will be no cross traffic behind any braking area or swerve area. Stopping requires the distance beyond the target stop point (stop line), when traveling at 15 – 20 mph, a run off of 30'/10p to a Level 1 or Level 2 object and 40'/14p to a Level 3 object.

With large classes, it may be a benefit to the riders to use the minimum approach distance to the stopping area to decrease delays in riders approaching braking area. This can help reduce wait times in line. Also maximizing the route to return to the braking queue will help shorten wait times.

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LTR Activity 8 Rationale:

Key objectives:

- Provide an activity that combines all of the learning during the first practical workshop
- Coach (clean up) riding skills
 - Home position
 - Relaxed riding tips (vision, posture, grip, body tension)
- Provides an exit activity that maximizes riding time and leaves riders with a feeling of success

Activity 8 is the grand finale of practical workshop one (PW1) allowing riders to use every skill learned up to this point. The greatest gain for the riders is during part 1 where most of the riding time should be dedicated. As the instructor, your primary focus should be to find those riders who need help cleaning up their riding technique before moving to part 2. Riders should be able to “stack” at the stop signs, any delay in flow should be completely controlled by the riders. **When you coach riders, do not slow the flow of the activity.**

- Vision
 - Home position
 - Scan (each corner and intersection)
 - Look before you ride
- Judgement/choice:
 - Gauging braking to a designated stopping point behind riders
 - Merging with traffic (life saver)
 - Choose their POT (choose which corner to ride)
- Blending of controls
 - Braking in a curve
 - Turning from a stop sign
 - Slow speed control at the merge point
- Basic cornering skills
 - Proper riding posture
 - Relaxed grip

The LTR focuses on avoiding emergency maneuvers using vision, judgment and PLAN. Activity 8 part 2, along with the Swerve during A7, are only used as a premise to define what an “evasive maneuver” is during the concept workshop.

Activity 8 part 2 only requires a small portion of the riding time allotted for the activity. Most riders will accomplish the skill in only 1 or 2 attempts, most classes will only require 2-4 stops (total) per rider before ending part 2. Part 2 is the exception to the fundamental principal of the LTR to not only accomplish a riding skill successfully but to also practice it enough to gain a level of proficiency.

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Activity 8 fulfills the 'walk' portion of the Crawl-Walk-Run process. A hidden element of this activity is developing habits that will become used for trail-braking during the Street Skills training. Part 1 of this activity prepares riders when they return for the 'run' level of training (Street Skills):

- Crawl – Activity 2: Blending Controls
- Walk – Current activity
- Run – Advanced Street Skills 101

During **Part 1**, it is expected to have multiple riders moving on each circle. Make sure every rider makes a legal stop at the stop sign before leaving the circle. This is critical practice for the gray zone and rider judgment. On smaller ranges that require shorter paths of travel or smaller diameter circles, may require a limit of how many riders may be in the curve at any given time. Riders need to be able to use countersteering to initiate their turn and carry enough speed to require the use their brakes while in a curve. **Keep the riders moving, riders MUST be allowed to free flow during Part 1 for traffic interacting while stopping in the curve.**

Part 2: Ensure riders understand that that the “**square the handlebars then brake**” is a controlled quick stop, not a panic stop. Riders need to focus on technique. In Part 2, only one rider at a time may ride in the circle. For the best time management, you will need to predict the time needed for the rider exiting the circle and the rider approaching the circle to reduce zero time.

it is critical riders commit to the corner with the head in the home position before giving the stop signal. Riders may ride ½ to 2 laps before the instructor provides the stop signal. This should be a relaxed signal to stop and not a stress inducing activity. This activity forces riders to use the brakes while leaned over without complicating it by blending controls adding throttle for an exit.

Maximizing the return POT to the queue from the stop point ensures more riding and less waiting in line. Use all the space designated as the secured riding area for the return path of travel.

Monitor rider fatigue closely as you conduct this activity. It is important that the first part of this activity teaches and encourages calm, controlled, low stress stops. The accuracy of the stop point is unimportant, and coaching should focus vision and technique.

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LTR Activity 9 Rationale:

Key Objectives:

- Provide a warm up for the riders
- Re-evaluate riders before introducing higher speeds and more complex riding activities.
- Provide an activity to coach PW1 techniques
 - Home position
 - SALT
 - Rider judgement (intersection)

It is important for riders to understand the LTR PW2 builds on the PW1 skills taught. The PW2 picks up where riders left off from the PW1 and adds more challenge and detail. Practical workshop 2 does not add any new skill not taught during PW1 but does revisit all the riding skills with more detail and challenge. **Riders struggling with the basic skills of balance, vision and blending of controls are often a result of a lack of targeted mid-activity lessons, wrap ups and/or coaching during PW1.**

Activity 9 is a red herring activity. The riders are told they will be learning to manage intersections, but they have actually been managing traffic interaction as early as A3. The rider objectives are used only to give the riders something to focus on and to provide structure to their warm up/review ride. **A thorough review of PW1 skills is critical before riders begin this activity to include, home position and “when, where and how to adjust speed”.**

Riders are given a 45° scanning strategy (scan 45° left and right) to identify safe gaps in traffic and to use judgment to “time the gap”. To add more structure, introduce the horn as a new tool they can use and discuss ways to communicate with other traffic before sending riders out to ride. Instruct the riders to work at timing the gap and riding without stopping when possible. The riders should be looking for the gap as they exit the corner prior to the intersection. **Avoid managing the intersection unless there is a safety concern.** By establishing a position behind the intersection, you (the instructor) will be behind the action point but nearby for riders who may stall or have POT issues. This is the warm up activity and should be run to the maximum time allowed.

All the PW2 riding activities must be related to PW1 & CW1 (concept workshop one) activities to reinforce previous learning. Sharing “Street Skills” concepts strengthen the riders understanding of the importance of returning for Street Skills training and is also a key component of the day’s activities. It is critical to continue to reinforce the importance of decision making and how each riding activity relates to the road.

This is a warm up activity – Do not run this activity beyond time – Monitor speed for safety

Time tip: preset A10

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LTR Activity 10 Rationale:

Key objectives:

- Build on Activity 7 learning objectives to develop rider's ability to smoothly stop in the shortest distance they can
- Improve the rider's perception/judgment of their stopping ability vs distance needed to stop

Activity 10 is the continuation of A7, all the rationales from A7 applies to A10 so you need to know that rational before reading any further. In A7, riders are taught techniques for stopping quickly but speeds are kept unrealistically low for the street for safety. Activity 10 gives riders the opportunity to practice the skills learned in A7 after having time off the motorcycle. Learning becomes concrete during the human sleep cycle. Because of this, it is critical to use A7 to introduce new skills and to review those same skills after the riders have had time to sleep and have time away. Part 1 of A10 is used for riders to review and apply skills and for the instructor(s) to evaluate rider skill before increasing speed. Part 1 is also critical for safety as riding conditions may have changed between PW1 and PW2.

The time between part 1 and part 2 of A10 depends on rider performance. If riding conditions have changed drastically, it may be necessary to provide a much larger portion of the activity time to Part 1. If conditions have improved or are unchanged, then Part 1 may be a much smaller percentage of the time allotted to A10. As the instructor, you must evaluate your riders and ensure they have good skills before increasing speeds.

Activity 10 raises approach speeds to simulate riding on residential roads of up to 25 mph. Riders are given the choice to choose between 15 mph and 25 mph for safety. Riders who are struggling with skills or fear may be encouraged to continue practicing at lower speeds, as needed. It is your responsibility as the instructor to help riders stay as safe as possible. Riders primarily work on **"how they stop" not "where they stop"**.

It is important that riders and coaching focuses on:

- technique first
- stopping distance second
- distance judgment third

The mid-activity lesson is critical in both its detail and riding demonstration. It is very important to address rider questions and concerns. **Because of this customized learning, the demonstration rides may also need to change with each class.** Every class will need to see proper threshold braking but, depending on their needs, **they may need to see a good demo/bad demo comparison or repeated stops with a single element shown.** As such, it is important to have good communication between instructors if there is more than one instructor available. Demonstration speeds should begin at 20mph and not exceed 25mph. **Expect to perform between 8-12 demonstration rides for an average class.** Do

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not rush the mid-activity lesson. Riders will have had a significant amount of breaking practice and need time to dissect the details of a quick stop to improve.

Mid-activity demo

- At 15-25 mph, demonstrate an emergency braking run for an average rider (0.6 -0.7 G), then
- At 15-25 mph, demonstrate a threshold braking run (0.75 - 1.0 G)
- Discuss brake application and the importance of using technique
- Repeat as needed for riders to observe signs of good braking (use coaching points)
- Early demo runs must be unthreatening
- Later demo runs demonstrate experienced rider / motorcycle capability

Demonstration points: *no more than two points should be addressed at one time, provide as many demonstration runs as needed for the riders to clearly understand what they need to do. Expect to do 8-12 runs for an average class.*

- Eye placement
 - On the horizon and level (chin raises as forks compress)
 - Rider uses Home Position
 - Scan the horizon
- Show a relaxed riding posture
 - Shoulders relaxed
 - Slight bend in the arms
 - Loose grip at the bars (no pulsating brakes)
- Set speed early, do not “rush” the braking process
 - Ensure the suspension is settled before braking
- Braces with the lower body
 - Braces with the knees against the tank (upright/forward posture, sport, tourer or standard)
 - Braces against the foot pegs/boards (reclined seating position, ie. cruiser)
- Fork compression
 - Point out the continuing compression of suspension to match traction
 - Show full compression braking (full stroke of the fork)
 - Show an ABS stop (if available)
- Show “bad” demos if/when needed
 - Grabbing brakes
 - Locking rear wheel
 - Eyes down
 - Tense riding posture
 - Pumping brakes
 - One brake stopping
 - Light braking (long stop)

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The mid-activity is a good time to also clarify or introduce the second key objective of A10, improving rider perception/judgment. Clearly explain the need to perform their best stop but to work at timing the initial braking so that their best stop ends next to the braking area cones. This is about developing accurate perception of abilities vs the reality of their abilities. This should also be shown during the riding demonstration as each stop becomes better timed to stop next to the braking area cones.

Judgment is a critical element of the LTR and this objective is easily missed by both riders and instructors. Make sure to be clear that “how they stop” is more important than “where they stop” but being able to understand and predict the distance needed to stop is critical in making good choices as a rider. Judgment on following distance and speeds through parking lots, intersections or crowded areas are important to avoid crashing.

As motorcycles increase in speed, the resistance in changing directions increases exponentially. Activity 10 also offers a clutch-in swerving technique that gives quicker lateral movements without the risk of adding unwanted throttle. A clutch in swerve is introduced to the riders, which provides a greater margin of error for new riders making it a safety technique to use.

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LTR Activity 11 Rationale:

Key objectives:

- Blending of controls
- Low speed balance
- Home Position

This activity builds on the blending of controls for low speed and turn from a stop practice in A6. To make your briefing most effective, it is good to refer back to the turn from a stop technique taught where they rolled the motorcycle underneath them to counterbalance from a stop. Activity 11 takes this counterbalance from being a static action from a stop to a dynamic action in motion. Activity 11 is a continuation of blending of controls and counterbalancing while taking the Home Position/life saver to a new level.

U-turns can be intimidating to new riders because they often find it difficult to blend controls, while counter-weighting the motorcycle, coupled with maintaining travel at low speed, while finding home position. Refer back to PW1 and review with the riders the same technique used in A6 and how the same techniques can be applied to riding the four corners and the U-turn. This reach back to A6 will help tie earlier learning into the A11 riding circuit.

Riders are given a restricted lane to begin their U-turn that is the same width as a road but are not restricted at the exit. It is important that the riders understand the importance of staying as far to the inside of the new lane as possible and the importance of looking into that lane for traffic before turning (life saver/home position).

It is important during the demonstration that the instructor demonstrates their best U-turn. This should be in control and in a distance of 20' or less on their own motorcycle. It is not important to demonstration the U-turn in both directions.

Demonstration points: *Each of the points below should be demonstrated, if possible*

- Full steering lock
- Counterbalance the upper body (roll the bike underneath you)
- The motorcycle clearly leans independent of the demonstration rider
- Demonstrate blending of controls
 - Gray zone
 - Drag brake(s)
 - Throttle blip (for gyroscopic stability)
- Throttle only U-turn
- Home position/lifesaver
- Start with larger U-turn of 24' and work into smaller U-turn of 20' or less (*many large road bikes are capable of U-turn near 15'*)

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Make sure to demonstrate each corner as a slow speed sharp turn demonstrating counterbalancing.

Riders can enter or exit the large POT to the small POT from any direction if it is safe to do so.

It is easy to lose time during A11 if you lose track of the riders. **During the discovery ride, make sure that the U-turn area is never empty.** As soon as the riders have completed a single lap, prepare to switch out riders. If you wait until all the riders have completed their 3 laps, then you will lose time in the transition and create congestion on the outer POT. The LTR is based on having constant movement of riders. **A11 is intended to only have 75% to 66% of the riders on the largest riding POT at any given time,** 25% to 33% of the riders should always be transitioning into, out of, or around the U-turn.

The minimum 40' center of the U-turn is best with 3 riders at a time.

NOTE: add an extra rider for every 10' extra distance between the U-turn lanes.

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LTR Activity 12 Rationale:

Key objectives:

- Coach and reinforce skills already used during the LTR
 - Turn from a stop
 - Vision
 - Blending controls
 - Counterbalancing
 - Traffic merging
 - Lane change
 - Gap selection
 - Rider to rider communication

Activity 12 adds a process for safely performing lane changes but the main goal of the riding circuit in A12 is to reinforce skills already introduced and practiced during earlier activities. This is your chance as the instructor to identify those riders still struggling with the key objectives of A12. Riders who are still struggling with these skills and have not been able to self-correct should be coached.

This activity lowers rider risk of a mishap or crash by developing safe lane changes and turning from a stop at an intersection. Both are critical skills for the new motorcyclist. Riders will also continue to develop building a habit of using home position and life savers.

Recommended starting positions:

Queue riders facing the entry to the lane change area and direct riders in an alternating fashion to divide them evenly. The second instructor (if available) ensures riders turn towards the closest stop sign after the lane change. Riders need to visually clear the intersection by scanning at 45° before arriving at the intersection.

Tip: To reduce early congestion, it is recommended to divide the class into 4 groups and send each group to one of the stop signs. Once riders are in motion, instructor(s) should move toward the corners to assist riders with turn from a stop.

Time tip: Use the corners and lanes from A11 to form the lanes and corners for A12

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LTR Activity 13 Rationale:

Key objectives:

- Rider judgment for passing, merging and life saver practice
- Observe, coach, discuss judgment failures
- Cornering using SALT
- Negotiate decreasing radius corners

This riding circuit provides the riders the opportunity to ride through inconsistent curves, pass other riders and merge into traffic allowing further practice of the SALT cornering process. A subtlety of this activity is the addition of a passing lane and zipper area similar to an onramp merger. Riders will be forced to use judgment and the skills learned during the LTR to complete this activity successfully.

Steps for Passing:

- Look for a safe merger after the pass
- Prepositioning for a pass
- Make your pass
- Perform a lifesaver (primary path of travel and zipper lane)
- Slowing after a pass
- Adjust speed for the corner

During Part 1 of A13, provide minimal coaching and pay careful attention to the passing and merging area for POT, safety and riders who demonstrate poor judgment. Provide enough riding time during part 1 to observe judgment errors and/or riding errors. **Do not allow part 1 to run long enough to become a safety hazard.** Once riders fail to self-correct riding errors or demonstrate poor judgement, rally the riders for the mid-activity discussion.

The mid-activity discussion should be a facilitated discussion to bring out the observed rider errors. **The riders should identify the errors they made (judgment and/or riding skill) and provide a solution.** Once the mid-activity is finished, riders can be released back onto the riding circuit. If space and run out allow a reversed direction, remind the riders that it is not a mirrored course and to focus on SALT and Home Position.

Common errors for A13

- Close passes
- Not merging safely after the zipper lane
- Entering the corner too fast after passing
- Poor life saver
- POT control issues
- Poor use of space cushioning

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- Lack of communication with other riders
- Not using Home Position and/or Scan
- Using the Zipper lane when the primary POT is open

Riders enjoy A13 tremendously, but the activity only works well when everyone follows the correct path of travel. Make sure riders do not use the zipper lane unless there is a rider to pass.

This is the final coaching activity. Keep coaching to a minimum while the riders are in motion. Focus on the most critical coaching points (vision, entry speed for corners and space cushioning). Coaching safety hazards such as inappropriate passing or speed is always ok.

Ensure all riders conduct a life saver before merging. Riders may pass other riders in a safe manner, using the merger lanes.

If your riding area has limited space, eliminate the passing lane and focus on cornering through multiple corners.

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LTR Activity 14 Rationale:

Key objective:

- Provide a hands-on experience to illustrate the need for the delayed commitment cornering process that they will learn in the Street Skills 101 course
- Riders feel the effects of turning in early for a corner (common error)
- Riders feel the benefit of a late turn in

Activity 14 is about being able to experience the difference in entry points for any given corner. It is to provide the riders a discovery ride so they can experience firsthand that they have learned fundamental motorcycling skills and need more training. **Managing the riders POT is critically important for A14 to provide the needed feedback to the riders.** The instructors MUST ensure the POT is correct and that riders do not miss the apex and that they begin their corner before the force cones. **If the riders miss the apex, exit, or do not begin turning where they are supposed to, this activity loses its entire purpose.**

Coach for POT and safety issues only. This activity should leave the riders wanting to continue their learning. Use this activity to introduce the concepts that will be learned when they return for their street skills training. This is your last chance during the practical workshops to educate riders as to why they need to return for more training. Do not lecture, facilitate conversation so that riders declare they need more practice and skills. To facilitate an A14 wrap up properly, the instructor must understand what is taught in the Street Skills 101 course. Simply stating they should get more training is NOT an acceptable wrap up, the riders need to be left wanting more training and truly understand the value. **Instructors are not salespeople, they are educators and if the riders are not educated to truly understand where their skills are and what the need to stay alive, then we have failed them**