Keep Left Unless Overtaking

Operational Instruction 2.29

KEEP LEFT UNLESS OVERTAKING

END KEEP LEFT UNLESS OVERTAKING
Keep Left Unless Overtaking - 2.29

AMENDMENT RECORD

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1. Scope

This Operational Instruction sets out general requirements for the installation of “KEEP LEFT UNLESS OVERTAKING” (KLUO) signs on multi-lane roads. This Instruction applies only to 80km/h speed zones on roads under the care and control of the Department of Planning, Transport and Infrastructure (DPTI). The objective of this instruction is to provide consistently in applying the restriction to keep slower moving vehicles to the left of the road where appropriate, which in turn should reduce unnecessary traffic delays and driver frustration.

This instruction also expands on the Australian Standards - Manual of Uniform Traffic Control Devices, Part 2: Traffic Control Devices for General Use discussed (AS1742.2-2009 clause 4.13.5) and Australian Road Rules, Part 11 – Rule 130.

2. Background

The Australian Road Rules state that a driver on a multi-lane road must not drive in the right hand lane, where the speed limit is over 80km/h, unless turning right, making a U-turn, overtaking, avoiding an obstruction or if traffic is congested (refer to Australian Road Rules, Rule 130).

Furthermore, to allow jurisdictions some flexibility, the rule can be extended where appropriate to roads of lower speed limits by the use of KLUO signs.

3. Criteria of Sign Installation

The KLUO sign (R6-29) is to be used in accordance and in conjunction with the Australian Road Rules. It is clear that the rule is not intended to apply to all roads. However, under certain conditions it may be appropriate to apply the rule to some 80km/h roads. It is not proposed to apply the rule to roads zoned less than 80km/h speed in South Australia.

The conditions under which the rule may be applied on roads with 80km/h speed limits are discussed below.

3.1 Length of Speed Zone

KLUO signs shall not be installed on sections of 80km/h speed zones of less than 2km (ie, approximately one and a half minutes driving). Lengths of road less than 2km are not considered to be of a sufficient length to provide the necessary space and time for motorists to re-position their vehicles and satisfy the road rules.
3.2 Traffic Volumes

Traffic volumes play an important role in determining whether motorists in an 80km/h speed zone should be required by law to keep left unless overtaking. Traffic volumes fluctuate depending on the times of the day hence both peak hour and business hour traffic volumes should be considered (uninterrupted flow traffic volumes are calculated theoretically from AADT data, when requested). It should also be noted that there will be situations where KLVO signs are installed but will not have much effect during certain times of the day (in particular during peak times – 7am to 9am, and 4pm to 6pm). The following should be considered;

- During peak hours, traffic volumes are considered low if the Volume Capacity Ratio (v/c) is less than or equal to 0.67. It is likely that the majority of vehicles will keep to the left unless overtaking or positioning vehicle for a right turn. For the purpose of the exercise Level of Service (LOS) A and LOS B (v/c < 0.67) are considered to be in this category. In such cases, the KLVO signs are not recommended.

- KLVO signs have merit in situations where the Volume Capacity Ratio (v/c) on each lane is greater than 0.67 but less than 1.0 on a multi-lane road, as slow moving vehicles shall be regulated to the left to allow faster moving traffic past. For the purpose of the exercise LOS C (0.67 < v/c < 0.83) to LOS D (0.83 < v/c < 1.00) are considered to be in this category. The KLVO signs are therefore recommended.

- Once the left hand lane exceeds theoretical capacity (ie, v/c > 1.00), then it is questionable if the KLVO signs will have any effect, because lane changing becomes more difficult and drivers are increasingly unwilling to leave the right hand lane, as they may not be able to rejoin it later. For the purpose of the exercise LOS E (v/c = 1.00) and LOS F (v/c > 1.00) are considered to be in this category (for left lane only). Therefore, the KLVO signs are not recommended in this category.

- The proportion of slow moving (heavy) vehicles should also be considered in the analysis, particularly if the section of 80km/h zone is uphill or downhill and/or winding (poor sight distance). Heavy vehicles are likely to be moving slower where grades become “specific” (0-3% for more than 1.6km or > 3% for more than 800m). KLVO signs have merit in these situations because the rule should reduce unnecessary delays on these multi-lane roads. In such cases, the KLVO signs are recommended.

3.3 Right Turn Opportunities

If the distance between right turn opportunities is low (particularly if the right turns are at major intersections), it is likely that there will be traffic in the right lane anticipating a right turn in that section of 80km/h zone. Right Turn Opportunities (RTOs) are considered as intersections, right hand slip lanes, and median openings for right turns or U-turns.

For practical reasons, if the average distance between right turn opportunities is less than 700m (less than 30 seconds travel time) then it is likely that there will be...
traffic in the right hand lane anticipating a right turn. If this distance is greater than 700m (ie, greater than 30 seconds travel time) it is considered that the section of road is a candidate for KLUO signs.

In some cases (for example, Tapleys Hill Road, South Australia) the opportunity to turn right varies significantly in opposing directions. Roads that fit into this category shall have KLUO signs in both directions if one direction meets the average distance between RTO criteria.

3.4 Duplication of KEEP LEFT UNLESS OVERTAKING Signs

Repeater KLUO signs shall be installed where duplicated 80km/h speed restriction signs (R4-1(80)) are installed (at the start of the speed zone and at any repeater signs). The duplicated KLUO signs shall be placed between 60m and 100m after the speed restriction sign (refer to figure 3). If this is not achievable for example there are pedestrian crossings, rail crossings, other signs, etc within this section, then KLUO signs shall be installed either at the minimum distance of 40m prior to the speed restriction sign or as close as reasonably achievable 100m after the speed restriction sign.

Note that repeater speed restriction signs are normally installed after any major intersections. In some cases KLUO signs can be installed in advance of repeater speed signs, provided that KLUO signs can not be installed between 60m and 100m beyond the repeater speed sign (for example there are intersections closely proceeding the repeater speed signs).

If the initiating 80km/h speed zone is located within 300m in advance of a signalised intersection, then the KLUO signs shall be installed after the speed restriction repeater sign (which should be located directly after the signalised intersection). This measure aims to increase lane storage at a signalised intersection.

4. Unsuitable Locations for KEEP LEFT UNLESS OVERTAKING Sign

The KLUO sign will not be installed along a section of road under the following circumstances;

- Where the speed limit is other than 80km/h, unless it has more than 2 lanes in one direction, for example the Southern Expressway.
- The road is not multi-lane, or duplicate lanes merge into a single lane within the 80km/h zone, or a traffic sign or road marking on the road that indicates that the road is no longer a multi-lane road.
- The length of 80km/h section is less than 2km in both directions.
- Level of Service for the road is LOS D \((0.83 < v/c \leq 1.00)\) or LOS E \((v/c = 1.00)\) in business hours.
- Level of Service for the road is LOS A or LOS B \((v/c < 0.67)\) in peak hours.
- Distance between right turn opportunities is 690m or less in both directions
- If the road ends at a T-intersection or the end of the road at less than 500m.
5. Installation of Signs

5.1 KEEP LEFT UNLESS OVERTAKING sign (R6-29)

On 80km/h speed zone roads at which it has been determined by DPTI that the KLVO rule shall apply, and signs shall be installed as follows;

- To provide clear vision of the signs, signs shall be installed after the end of a merge lane or an acceleration lane, and not be installed on a curving section or road.
- A minimum clearance of 50m should be kept between KLVO signs and other traffic control devices (eg signs, traffic lights etc).
- Signs shall be installed within 60m to 100m after the 80km/h speed restriction signs consistently, duplicated if possible.

5.2 END KEEP LEFT UNLESS OVERTAKING sign (R6-32)

Duplicated END KLVO signs shall be installed where;

- The speed limit is reduced to less than 80km/h. END KLVO signs shall be placed between 60m and 100m after the speed restriction sign (R4-1(70) or R4-1(60)) (refer to Figure 3).

END KLVO signs are not required where;

- The section of 80km/h road is terminated, such as at the T-intersection with another road where the other road takes priority.
- The speed limit is increased to greater than 80km/h.
- A multi-lane road merges to form a single lane road in one direction.

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Diagram showing the installation of signs at different speeds and distances.
5.3 Size and Manufacture

Signs KLUO (R6-29) and END KLUO (R6-32) shall comply with AS1743-2001 Road Sign Specification for size, shape and colour.

6. Responsibilities

The KLUO and END KLUO signs are traffic control devices under the Code of Technical Requirements for the Legal Use of Traffic Control Devices-2011 (refer to Appendix A). Such signs require approval in accordance with the Ministers Delegation (Operational Instruction 18.3) to be legally installed.

Furthermore, the signs should be shown on the appropriate traffic control drawings.

Subsequent to approval, DPTI will install the signs on roads under the care and control of DPTI, and provide on-going maintenance.