


<b>Government of Alberta</b>  Transportation	<b>PEDESTRIAN COUNTDOWN SIGNALS</b>		<i>Issued: JUL 2011</i>
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<b>RECOMMENDED PRACTICES</b>	PART	TRAFFIC SIGNALS	
	SECTION		
	SUB-SECTION		

**General**

Pedestrian Countdown Signals (PCS) consist of standard walk/don't walk (flashing HAND) signal indications, with the addition of a countdown feature that shows pedestrians how much crossing time remains by way of a descending numerical countdown.

Pedestrian Countdown Signals have been proven to improve pedestrian signal understanding, and have particular benefit for vulnerable road users such as seniors, children and mobility-challenged pedestrians. Greater understanding of the flashing HAND display improves safety and enhances the pedestrian crossing experience.

**Standard**

Pedestrian Countdown Signals should be installed for all department traffic signal installations wherever pedestrian signal phasing exists at the intersection.

Department standards for PCS layout and configuration, and countdown timing strategy are based on recommendations in the Transportation Association of Canada (TAC) An Informational Report on Pedestrian Countdown Signals.

*Standard Layout and Configuration*

The countdown timer shall consist of Portland orange numbers that are at least 135 mm in height (220 mm lens height) on a black opaque background. The countdown numbers should preferably be “double

stroke” to improve visibility, and provide a certain amount of “fail-safe.”

Where the pedestrian enters the crosswalk more than 30 m from the countdown pedestrian signal display, the numbers should be at least 175 mm in height (305 mm lens height).

The PCS fixture shall be of bimodal/countdown side by side configuration (Figure 1 below) with solid symbols. The fixtures should be compliant with the most recent Institute of Transportation Engineers (ITE) Pedestrian Traffic Control Signal Indicators (PTCSI) LED Signal Module Specification.

**Figure 1: PCS Fixture Layout**



*Countdown Timing Strategy*

The display of the number of remaining seconds in a PCS shall begin only at the beginning of the flashing HAND interval. After the countdown has terminated, that portion of the display shall remain dark until the beginning of the next countdown.

The PCS shall display the number of

seconds remaining until the termination of the flashing HAND interval. Countdown displays during the walk interval shall not be used.

Under vehicle actuated control, if the vehicle green phase is extended longer than the walk and flashing HAND durations, the countdown portion of the display shall remain dark with the steady HAND display for a certain duration until the onset of the next flashing HAND display (see Figure 2 below).

If the PCS is used for a pedestrian phase without a concurrent vehicle phase, the PCS should display the number of seconds in the pedestrian clearance period minus a duration equivalent to the intergreen period, such that the countdown's zero point is reached some seconds prior to the green light being displayed to conflicting vehicle traffic.

**References to Standards**

<i>Alberta Transportation Highway Traffic Signal Manual - Draft</i>	
<i>TAC An Informational Report on Pedestrian Countdown Signals, 2005</i>	
<i>ITE PTCSI LED Signal Module Specification</i>	

**Figure 2: PCS Timing**

Green (Fixed portion)	Variable	Amber	All Red	Red
	... 07, 06, 05, ..., 02, 01, 00			
Walk	Flashing Don't Walk	Don't Walk		