

## TCN Generation

The TCN for Texas DPS AFIS submissions is an 11 digit numeric field formatted in the following fashion:

xyyyzzzzzc where

xx = DPS assigned numbers. This number was originally based upon the transaction type, but now does not have any significance.

yyy = DPS assigned Livescan Identification number (LSID)

zzzzz = a "one up" numbering scheme for submissions from the device in question starting with 00001

c= check digit

The check digit is computed utilizing a modified modulus 10 computation methodology.

Example:

TCN = 0100123456c

The weighting of the relative positions of the TCN alternates between 2 and 1, starting with 2.

$$\begin{array}{r} 0 \times 2 = 0 \\ 1 \times 1 = 1 \\ 0 \times 2 = 0 \\ 0 \times 1 = 0 \\ 1 \times 2 = 2 \\ 2 \times 1 = 2 \\ 3 \times 2 = 6 \\ 4 \times 1 = 4 \\ 5 \times 2 = 10 \\ 6 \times 1 = 6 \\ \hline \end{array}$$

Total     31

Modulus 10 of 31 = 1 (31/10 leaves a remainder of 1)

The check digit will be the complement of 10 for the remainder (10 minus (-) the remainder, in this case 10 - 1 = 9).

The resulting TCN will be 01001234569

**Note:** When the remainder equals zero the check digit will be zero.