Weightings and formula for calculating the **Modified Flows** ( $P_{mod}$  and  $V_{mod}$ ) and  $PV^2$  Adjustment Factor (AF)

To calculate the **Modified Pedestrian Flow (P**<sub>mod</sub>) use the following weightings for vulnerable road user groups:

Children (<16yrs) x 4, Elderly (>65yrs) x 4, Disabled / Blind x 6, Adult x 1

To calculate the **Modified Vehicle Flow**  $(V_{mod})$  use the following weightings:

HGV x 2.5, LGV / Bus x 2, Car / Minivan x 1, Motorbike x 0.75, Pedal Cycle x 0.5

Accident factor (A) = 1 + N/10 where N is number of ped casualties in previous 3 year period

To calculate the **Crossing Delay Factor (D)** use the following factors:

<20 sec = 1, 20-40 sec = 1.2, 41-60 sec = 1.4, 60+ sec = 1.6

To calculate the Road Width Factor (W) use the following values:

Single carriageway: Width<7.3m use 1, Width>7.3m use Width/7.3,

Dual carriageway: 1/2Width<7.3m use 1, 1/2Width>7.3m use 1/2Width/7.3

To calculate the **Speed Factor (S)** use the following values (use the 85<sup>th</sup> percentile speeds):

< 20 mph = 0.8, 21-30 mph = 1, 31-35 mph = 1.1, 36-40 mph = 1.2, 41-45 mph = 1.3, 46-50 mph = 1.4

To calculate the **Proximity to Pedestrian Trip Attractors Factor (T)** use the following:

If not near a school, healthcare site, leisure facility, old peoples' home or employment site use 1, if near one of the above use 1.1, if near two of the above use 1.2, if near 3+ of the above use 1.3

## $PV^2$ Adjustment Factor (AF) = A x D x W x S x T

Adjusted  $PV^2$  (APV<sup>2</sup>) =  $P_{mod} \times (V_{mod})^2 \times AF$