

Traffic Calming Calculations

The Safer Roads Investment Plan (SRIP) provides the BCR for the countermeasures. A copy of this from the IRAP ViDA software is shown in Appendix C.

ViDA SRIP analysis (Appendix C) provides 0.30km of traffic calming measures. PCC has identified 2.17km to maximise the benefits

To utilise the SRIP analysis, directly it is necessary to scale by the additional distance the scheme covers.

Scale factor: $2.17 / 0.30 = 7.2$

The SRIP analysis forecasts and FSI saving over a 20 year period of 1FSI (Fatal Seriously Injured).

Applying our scale: $1 * 7.2 = 7.2$ FSI saved

Assuming these to be serious collisions (ViDA assumes 1 in 10 casualties as fatal) and applying the TAG Databook July 2016, Table A4.1.1 value for a serious (£174,878) provides an estimated ROI (return on investment) for a 20 year period.

ROI: $7.2 * 174,878 = £1,259,121.60$

This ROI provides the value of the benefits. Dividing the ROI by the value of investment (£212,000) provides the BCR (Benefit Cost Ratio) over a 20 year period.

BCR: $1,259,121.60 / 212,000 = 5.9$

Cycle Route Calculations

Stats19 data for the 5 year period 01-Jan-2012 AND 31-Dec-2016 shows 9 pedal cycle casualties (all slight).

Annual average: $9 / 5 = 1.8$

The TAG Databook July 2016, Table A4.1.1 value for a slight is £13,481. Applying the annual average casualty figure to this cost provides an annual potential saving.

Potential annual saving: $£13,481 * 1.8 = £24,265.80$