Transport for NSW

AusRAP case study

Princes Highway

Issue

The Princes Highway had a significant road safety issue from July 2012 to June 2017, recording 1494 crashes, 30 fatalities, and 350 serious injuries over 5 years.

Risks reduced

Transport used AusRAP to determine the highest risk sections of road to be prioritised for upgrades.

Since 2015, significant upgrades have reduced the proportion of 2-star and 1-star roads by increasing their star ratings to a minimum of 3 stars.

Star rating	2015 length kms	2019 length kms	
****	2.5	4.2	
***	14.9	79.7	
***	138.5	217.5	
**	235.3	168.8	
*	78.9	9.9	
Totals*	470.1	480.1	

^{*} Differences in total values between 2015 and 2019 are due to new road constructed in the region between Gerringong and Berry.

Five different mass action treatment scenarios were modelled using AusRAP, with varying levels of investment and speed limit revisions. The five scenarios demonstrated potential savings in fatalities and serious injuries. **Low investment+** was the most cost effective, achieving a high business case rating (BCR) of 1.53 and a safety performance indicator (SPI) of 14.01.

Scenario	FSI saved per year	FSI saved per project/ analysis period	Present value of safety benefit	FSI saved per year	BCR	SPI
High investment	12.90	257.46	\$140,870,133	\$250,405,500	0.56	5.14
Medium investment	4.85	96.97	\$53,057,725	\$165,916,500	0.32	2.92
Low investment	3.78	75.57	\$41.348,375	\$81,916,500	0.50	4.61
Medium investment+	12.29	245.85	\$134,517,599	\$165,916,500	0.81	7.41
Low investment+	11.48	229.52	\$125,581,634	\$81,916,500	1.53	14.01





Strategic road safety investment

The Princes Highway project was delivered under targeted funding within legacy Safer Roads Program upgrades, where the highest risk sections of the road were prioritised to be upgraded to 3 star.

