

2 A21 Traffic Delays Economic Costs

Table 2.1 provides a summary of the economic cost of delay resulting from the proposed RVR level crossing at Robertsbridge operating once per hour per direction per day (8 closures) between the hours of 10:00 and 18:00. The results are based on a 51 second closure time and a 112 second closure time.

For the purposes of this report traffic flow data was downloaded from the Highways Agency Journey Time Data Base for March, April, May, June, September and October 2012, to correspond with the same months of the year relied upon in previous reports completed by Mott MacDonald in October 2011¹ and August 2013². The economic data covers weekdays and weekends over the period, but excludes Bank Holidays.

The total economic cost of traffic delay over the 6 month operational season assessed is £1,910.65 for a 51 second closure and £9,214.63 for a 112 second closure (2015 values, 2010 “market prices”).

Table 2.1: Summary of economic costs due to traffic delays on the A21 at proposed RVR level crossing

		51 second closure time			112 second closure time		
		Weekdays PM Peak	Weekdays Off Peak	Weekends	Weekdays PM Peak	Weekdays Off Peak	Weekends
		17:00-18:00	10:00-17:00	10:00-18:00	17:00-18:00	10:00-17:00	10:00-18:00
Southbound	Average hourly traffic flow (veh/hr)	862	513	569	862	513	569
	Average Maximum Queue at railway level crossing during period (veh)	12	7	8	27	16	18
	Total delay to traffic over 6 month period (veh.hrs)	9.9	41.1	24.2	47.5	198.0	116.7
Northbound	Average hourly traffic flow (veh/hr)	491	461	549	491	461	549
	Average Maximum Queue at railway level crossing during period (veh)	7	7	8	15	14	17
	Total delay to traffic over 6 month period (veh.hrs)	5.6	36.9	23.4	27.1	178.2	112.7
	Value of Time (£ per hr per veh, 2015 values, 2010 market prices ³)	£14.21	£14.21	£12.24	£14.21	£14.21	£12.24
	Economic cost of delays (£) over operational season	£219.85	£1,108.59	£582.22	£1,060.27	£5,346.46	£2,807.90
	Total economic cost of delays (£) over operational season per closure time			£1,910.65			£9,214.63

¹ Mott MacDonald report - Traffic Impact Assessment, 288755/ITD/ITW/001/E

² Mott MacDonald report - Highways & Traffic Assessment Report - A21 Assessment of Delays, 313090/ITD/ITQ/011/B

³ The Value of Time, 2010 price was obtained from webtag 3.5.6d section 2.5.8 - October 2013. This has been factored to 2015 (proposed year of opening) by applying forecast growth factors shown in Table 3b of webtag 3.5.6d - October 2013.

3 B2244 Traffic Delays Economic Costs

The RVR extension is proposed to cross the B2244 (Junction Road) east of Robertsbridge and approximately 6 km south of Hawkhurst. A similar economic cost evaluation to that described in **Section 2** has therefore been carried out for the B2244.

Traffic flow data was obtained from East Sussex County Council from an Automatic Traffic Count site (Site Reference: 00000021, B2244 Junction Road Cripps Corner) for the same months as those assessed for the A21 evaluation in **Section 2**.

Table 3.1 provides a summary of the economic cost of delay resulting from the proposed RVR level crossing on the B2244 operating once per hour per direction per day (16 closures) between the hours of 10:00 and 18:00. The results are based on a 51 second closure time and a 112 second closure time.

The total economic cost of traffic delay over the 6 month operational season assessed is £473.10 for a 51 second closure and £2,281.67 for a 112 second closure (2015 values, 2010 “market prices”).

Table 3.1: Summary of economic costs due to traffic delays on the B2244 at proposed RVR level crossing

		51 second closure time			112 second closure time		
		Weekdays PM Peak	Weekdays Off Peak	Weekends	Weekdays PM Peak	Weekdays Off Peak	Weekends
		17:00-18:00	10:00-17:00	10:00-18:00	17:00-18:00	10:00-17:00	10:00-18:00
Southbound	Average hourly traffic flow (veh/hr)	254	140	144	254	140	144
	Average Maximum Queue at railway level crossing during period (veh)	4	2	2	8	4	4
	Total delay to traffic over 6 month period (veh.hrs)	2.9	11.2	6.1	14.0	54.1	29.5
Northbound	Average hourly traffic flow (veh/hr)	139	104	109	139	104	109
	Average Maximum Queue at railway level crossing during period (veh)	2	1	2	4	3	3
	Total delay to traffic over 6 month period (veh.hrs)	1.6	8.3	4.6	7.7	40.1	22.4
	Value of Time (£ per hr per veh, 2015 values, 2010 market prices ⁴)	£14.21	£14.21	£12.24	£14.21	£14.21	£12.24
	Economic cost of delays (£) over operational season	£63.90	£277.51	£131.69	£308.18	£1338.36	£360.81
	Total economic cost of delays (£) over operational season per closure time			£473.10			£2,281.67

⁴ The Value of Time, 2010 price was from webtag 3.5.6d section 2.5.8 - October 2013. This has been factored to 2015 (proposed year of opening) by applying forecast growth factors shown in Table 3b of webtag 3.5.6d - October 2013.