Document Title	**Stansted G2 Surface Access – Post TA Sensitivity Tests**
Tests Covered:	**Test 9**
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This Document contains descriptions of the results of a sensitivity test undertaken to examine the impact of Crossrail on mode shares for surface access at Stansted. The results are compared with those in the Transport Assessment for Stansted Generation 2.

1 Introduction

1.1 The air passenger mode share forecasts underpinning the Transport Assessment for Stansted Generation 2 are based on the London Airports Surface Access Model (LASAM). As Crossrail was not a committed scheme, these forecasts were based on a central London rail network without Crosssrail. This note assesses the mode choice impacts for Stansted Airport surface access of assuming Crossrail to be in place.

1.2 The G2 Assessment mode shares are presented in the TA as an average of four different airport access charging scenarios:

- £2.50 paid by the air passenger;
- £2.50 paid by the driver;
- £5.00 paid by the air passenger; and
- £5.00 paid by the driver.

1.3 Therefore, the tests discussed in this note have been carried out assuming all four of these scenarios separately and the results have been averaged, in line with the TA. All other aspects of the ASAS have been included in the forecasts.

2 Crossrail Service Specification

2.1 Crossrail was modelled in LASAM in line with a provisional specification provided by Mott MacDonald. The service pattern assumed is given in Table 1. For this sensitivity test it has been assumed that all Crossrail services are additional to the Base Case without any substitution.

Table 1 Crossrail High Level Coding Specification

Service Segment	Eastbound trains per hour	Westbound trains per hour
Heathrow - Abbey Wood	4	4
Maidenhead – Shenfield	4	4
West Drayton – Shenfield	2	2
Shenfield - Paddington	6	6
Abbey Wood - Paddington	8	8

3 Annual Mode Share Comparison

3.1 A comparison of mode shares by scenario is given in Table 2 and is shown graphically in Figure 1.

3.2 When Crossrail is added to the G2 ASAS rail specification, there is an increase of 0.4 percentage points in STEx mode share with bus/coach, park and fly, kiss and fly and standard rail mode shares dropping by approximately 0.1 percentage points each. There is also an increase of 0.2 percentage points in the total PT mode share.

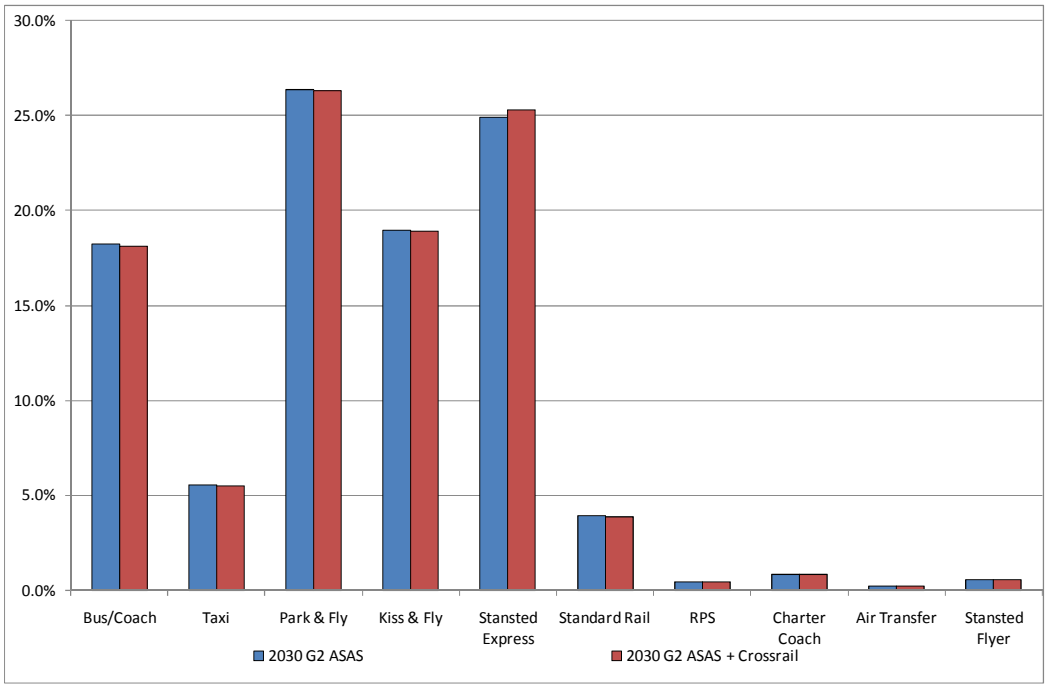
3.3 The changes in mode share are focused on the Crossrail corridor, including Abbey Wood, Ealing Broadway and zones in inner and central London.

3.4 The inclusion of Crossrail results in an increase of less than one percent in air passenger demand on rail services to/from Stansted Airport in the peak periods.

Table 2 Annual Mode Share Comparison

Mode	2030 G2A		2030 G2A with Crossrail	
	Number (m)	%	Number (m)	%
Bus/Coach[1]	10.3	18.2%	10.3	18.1%
Taxi	3.1	5.5%	3.1	5.5%
Park and fly	15.0	26.4%	14.9	26.3%
Kiss and fly	10.8	19.0%	10.7	18.9%
Stansted Express	14.1	24.9%	14.3	25.3%
Standard Rail	2.2	3.9%	2.2	3.9%
RPS	0.3	0.5%	0.3	0.5%
Charter Coach	0.5	0.9%	0.5	0.9%
Air Transfer	0.1	0.2%	0.1	0.2%
Stansted Flyer	0.3	0.6%	0.3	0.6%
Total	**56.7**		**56.7**	
PT Share[2]		*49.1%*		*49.3%*

Figure 1 Annual Mode Share Comparison



[1] Although there is a 0.1% percentage point difference in the bus/coach mode share when rounded to one decimal place, the underlying absolute change in patronage is not apparent when the numbers of passengers are rounded to one decimal place.

[2] The sum of the individual shares in this table (for bus/coach, Stansted Express, standard rail, RPS, charter coach, air transfer and Stansted Flyer), do not sum to these totals, due to rounding.

4 Conclusion

4.1 The results are compatible with the conclusions about the transport implications of the G2 development as set out within the G2 Transport Assessment.