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Kent Highway Services

Maidstone Transport Strategy

Option Testing Summary Tables

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1 Introduction

This report details summary tables for the four option tests carried out by Jacobs using the Maidstone VISUM Model Planning Suite. The model study area is show below in figure 1.1.

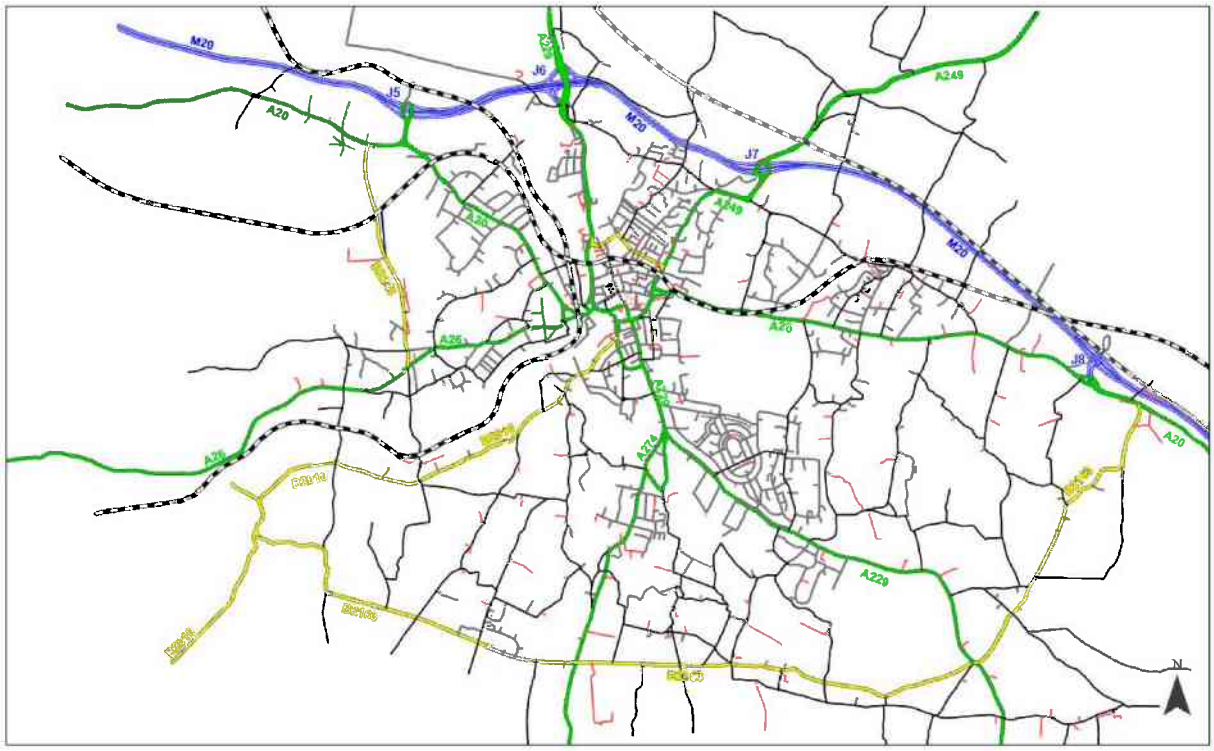


Figure 1.1 – Model Study Area

The four options tested are:

- Option A – 11,080 new homes, of which 3,725 would be in a south east urban extension
- Option B – 10,080 new homes, using amore dispersed pattern of development
- Option C – 8,200 new homes, also with dispersed distribution
- Option S - (the “Optimal” distribution) – 10,080 new homes

The report contains details on mode share, cordon traffic movements, journey times and travel demand. Figures 1.2 and 1.3 show the locations of cordon sites and the journey time routes.

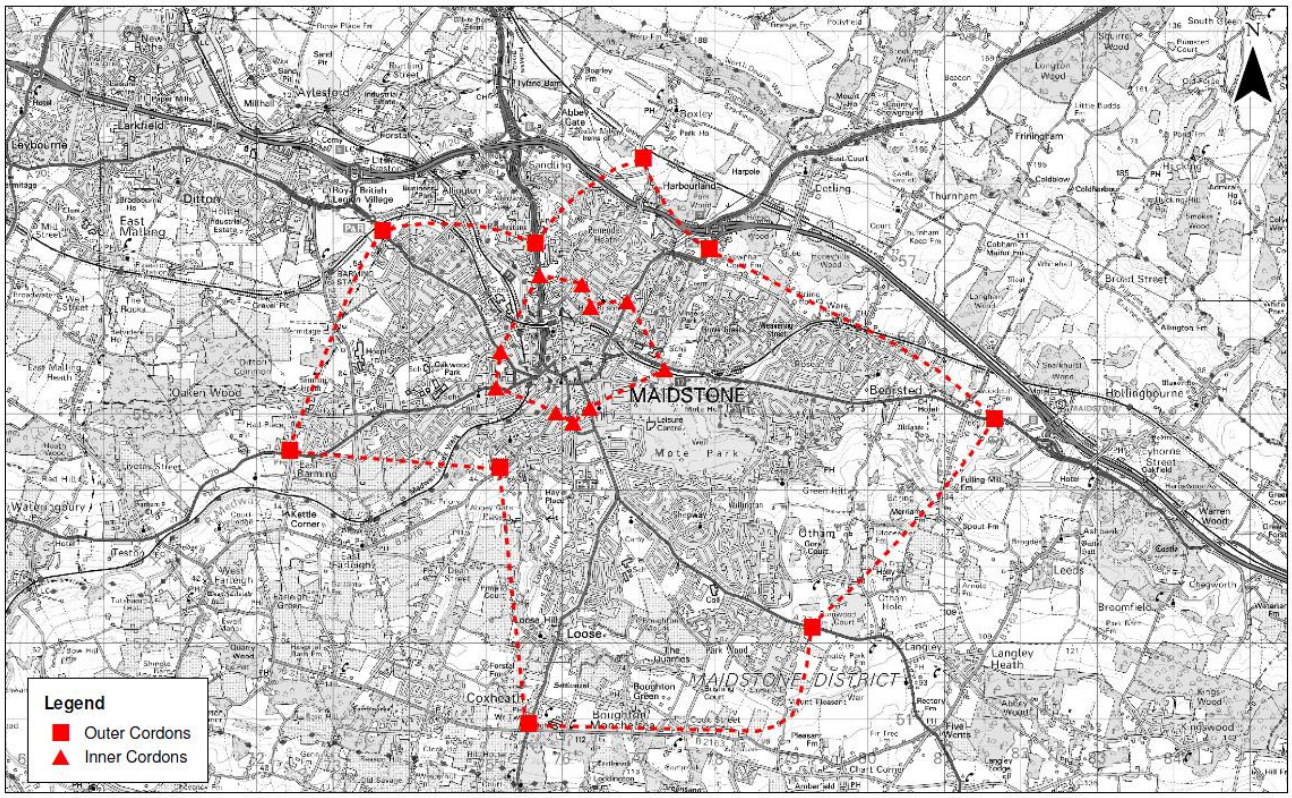


Figure 1.2 – Location of Cordons

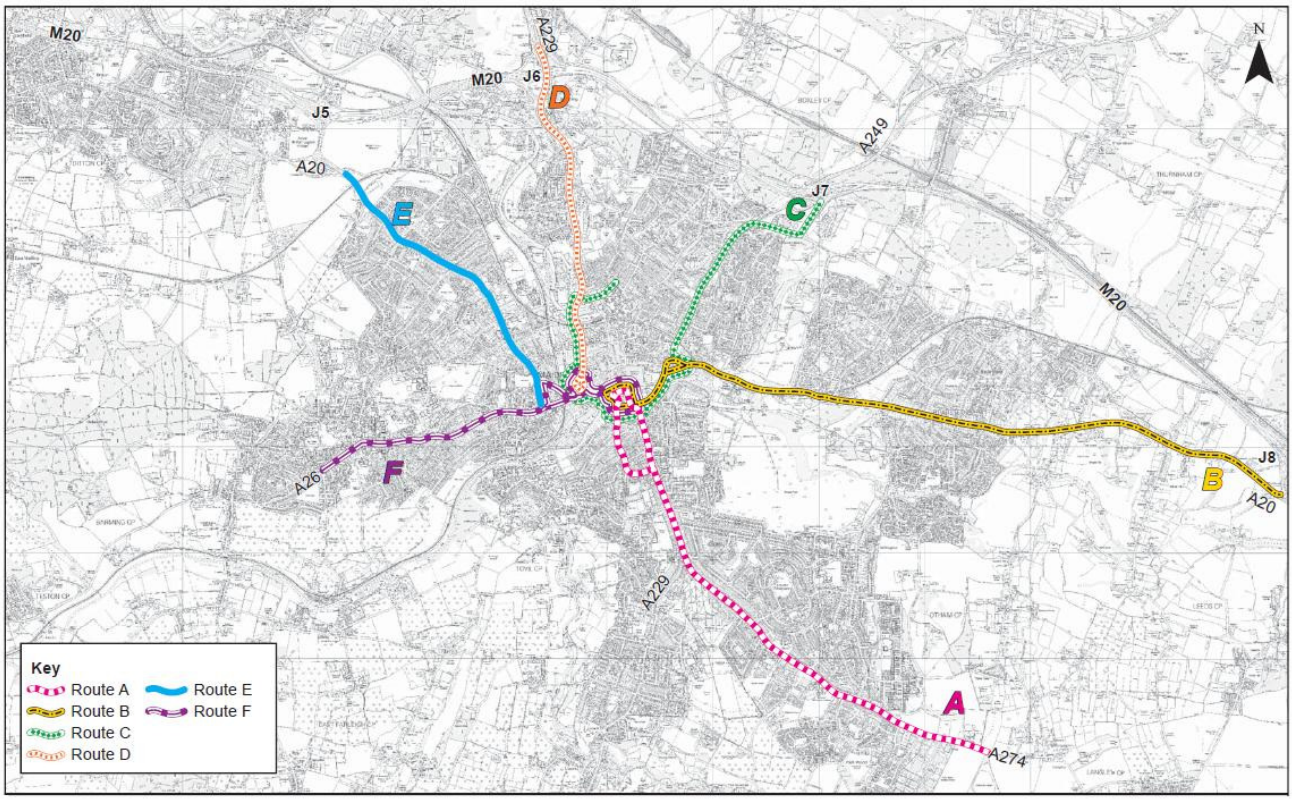


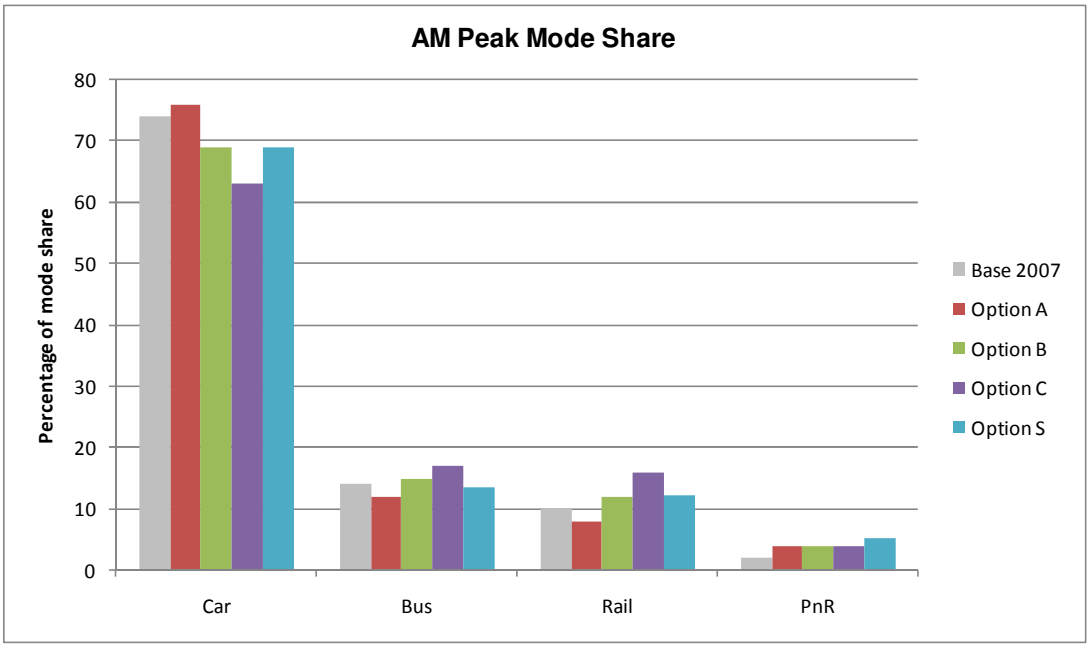
Figure 1.3 – Journey Time Routes

2 Mode Share

Mode Share – AM Peak

	AM Peak - Person Trips by Mode Share				
Mode	*Base 2007*	Option A	Option B	Option C	Option S
Car	*26,043*	34,926	31,580	28,457	30,932
Bus	*4,837*	5,587	6,921	7,439	6,056
Rail	*3,517*	3,610	5,355	7,285	5,499
PnR	*979*	1,735	1,606	1,830	2,317
Total	***35,376***	**45,858**	**45,462**	**45,011**	**44,804**

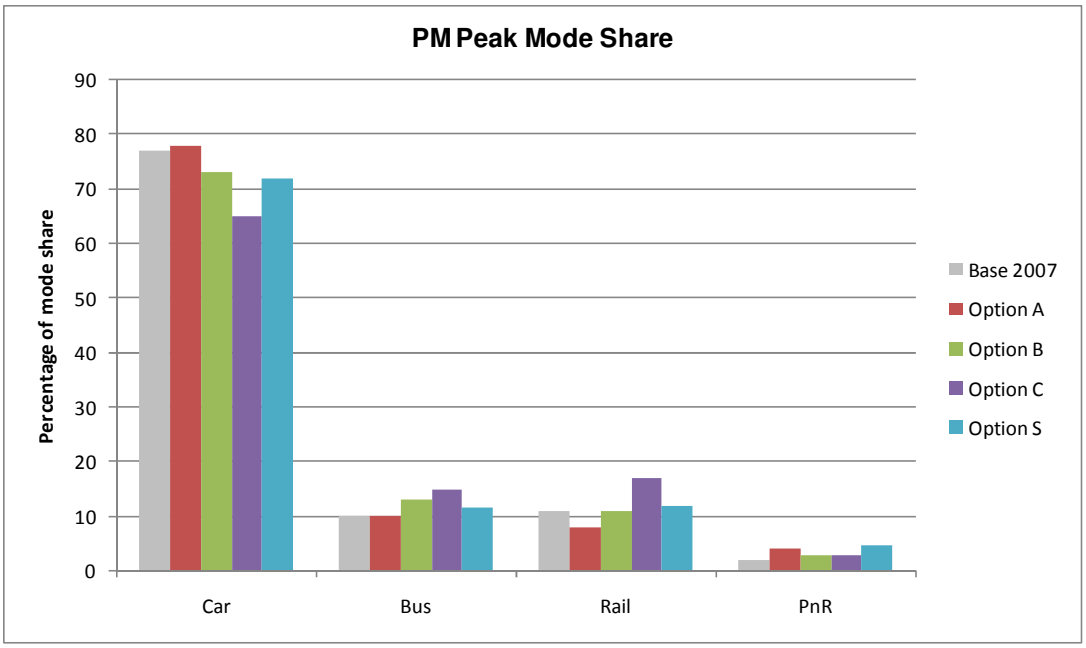
	AM Peak - Person Trips by Mode Share (%)				
Mode	*Base 2007*	Option A	Option B	Option C	Option S
Car	*73*	76	69	63	69
Bus	*14*	12	15	17	14
Rail	*10*	8	12	16	12
PnR	*3*	4	4	4	5
Total	***100***	**100**	**100**	**100**	**100**



Mode Share – PM Peak

	PM Peak - Person Trips by Mode Share				
Mode	***Base 2007***	**Option A**	**Option B**	**Option C**	**Option S**
Car	*24,247*	32,516	29,161	24,201	28,107
Bus	*3,259*	4,168	5,171	5,550	4,518
Rail	*3,347*	3,444	4,536	6,170	4,658
PnR	*593*	1,348	1,248	1,422	1,800
Total	***31,446***	**41,476**	**40,116**	**37,343**	**39,083**

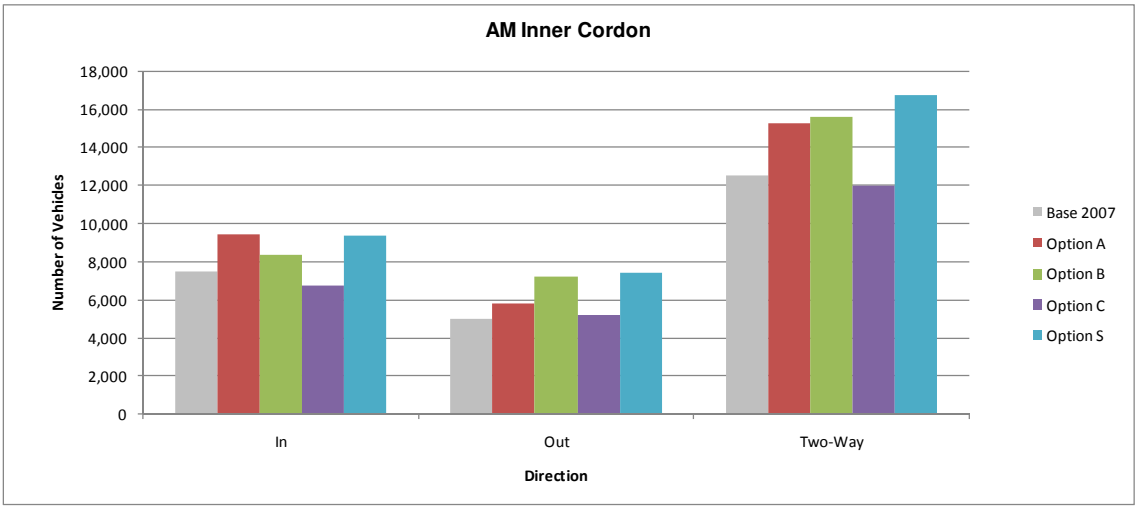
	PM Peak - Person Trips by Mode Share (%)				
Mode	***Base 2007***	**Option A**	**Option B**	**Option C**	**Option S**
Car	*77*	78	73	65	72
Bus	*10*	10	13	15	12
Rail	*11*	8	11	17	12
PnR	*2*	4	3	3	4
Total	***100***	**100**	**100**	**100**	**100**

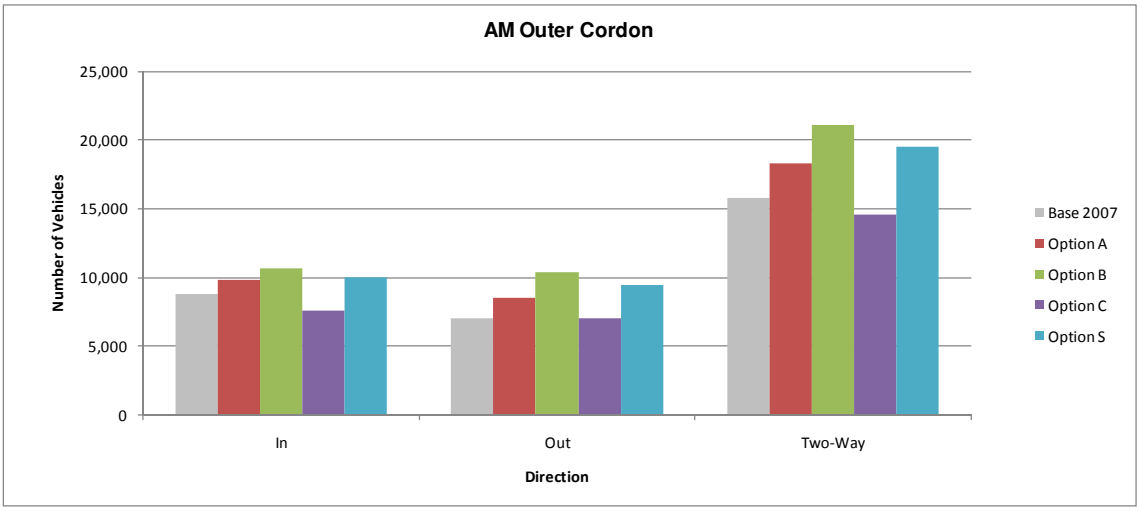


3 Cordon Traffic Movements

Cordon Traffic Movements – AM Peak

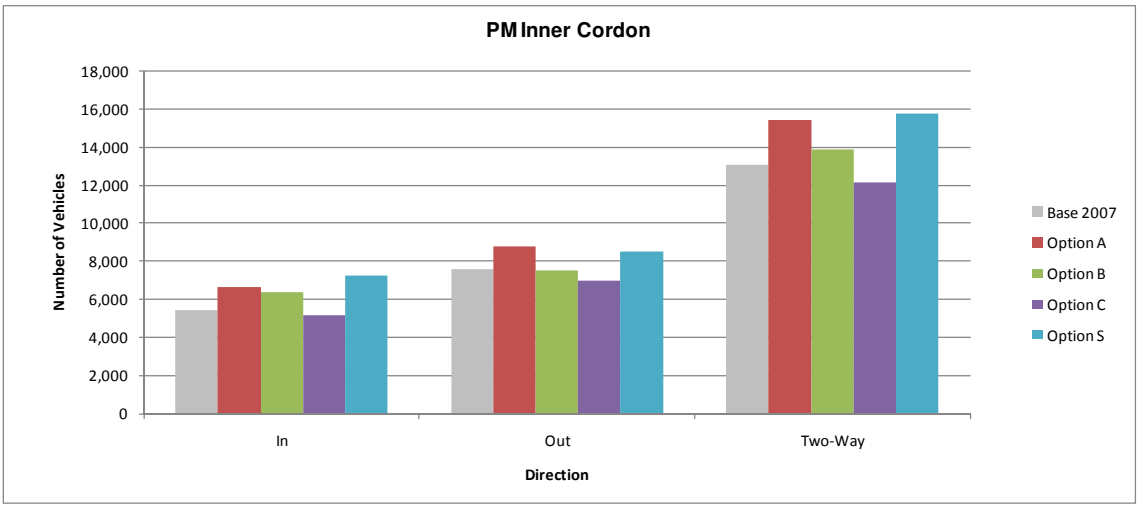
	AM Peak - Inner Cordon Traffic Flow				
Direction	***Base 2007***	**Option A**	**Option B**	**Option C**	**Option S**
In	*7,477*	9,462	8,364	6,765	9,374
Out	*5,043*	5,804	7,227	5,210	7,406
Two way	***12,520***	**15,266**	**15,591**	**11,975**	**16,780**
	AM Peak - Outer Cordon Traffic Flow				
Direction	***Base 2007***	**Option A**	**Option B**	**Option C**	**Option S**
In	*8,757*	9,804	10,676	7,542	10,030
Out	*6,996*	8,497	10,384	7,002	9,481
Two way	***15,753***	**18,301**	**21,060**	**14,544**	**19,511**

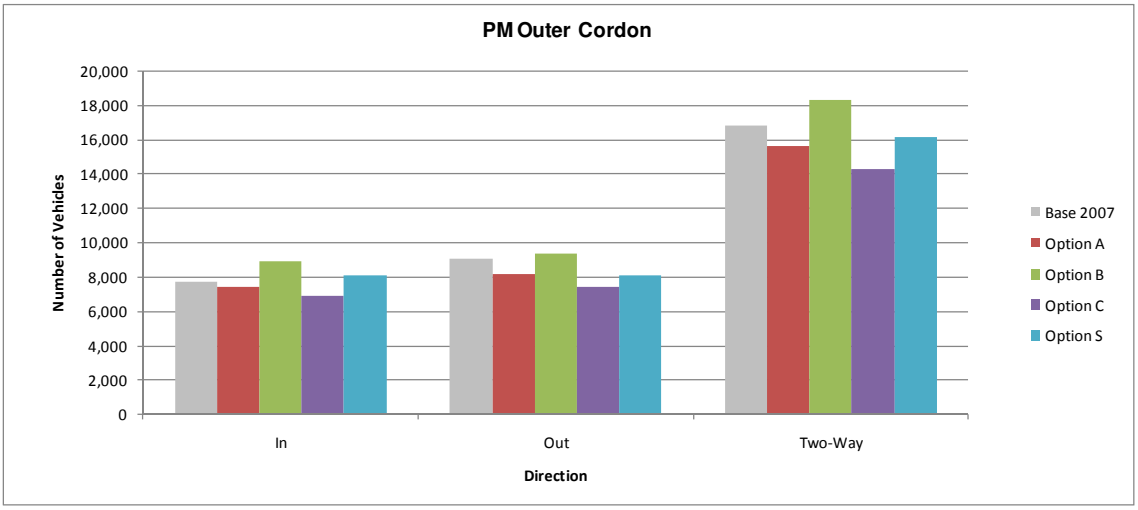


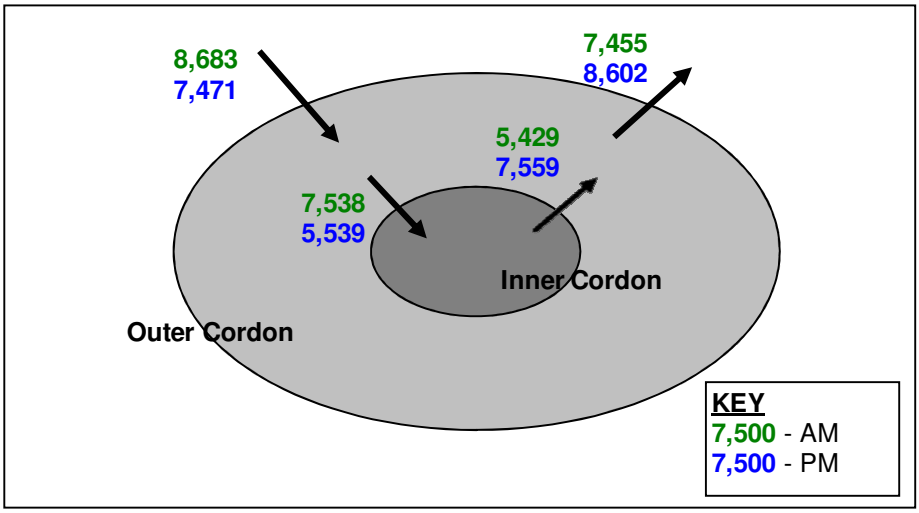


Cordon Traffic Movements – PM Peak

PM Peak - Inner Cordon Traffic Flow					
Direction	***Base 2007***	**Option A**	**Option B**	**Option C**	**Option S**
In	*5,446*	6,637	6,374	5,157	7,254
Out	*7,610*	8,820	7,512	7,013	8,501
Two way	***13,056***	**15,457**	**13,866**	**12,170**	**15,755**
PM Peak - Outer Cordon Traffic Flow					
Direction	***Base 2007***	**Option A**	**Option B**	**Option C**	**Option S**
In	*7,756*	7,434	8,934	6,899	8,100
Out	*9,044*	8,208	9,343	7,421	8,081
Two way	***16,800***	**15,642**	**18,273**	**14,320**	**16,181**





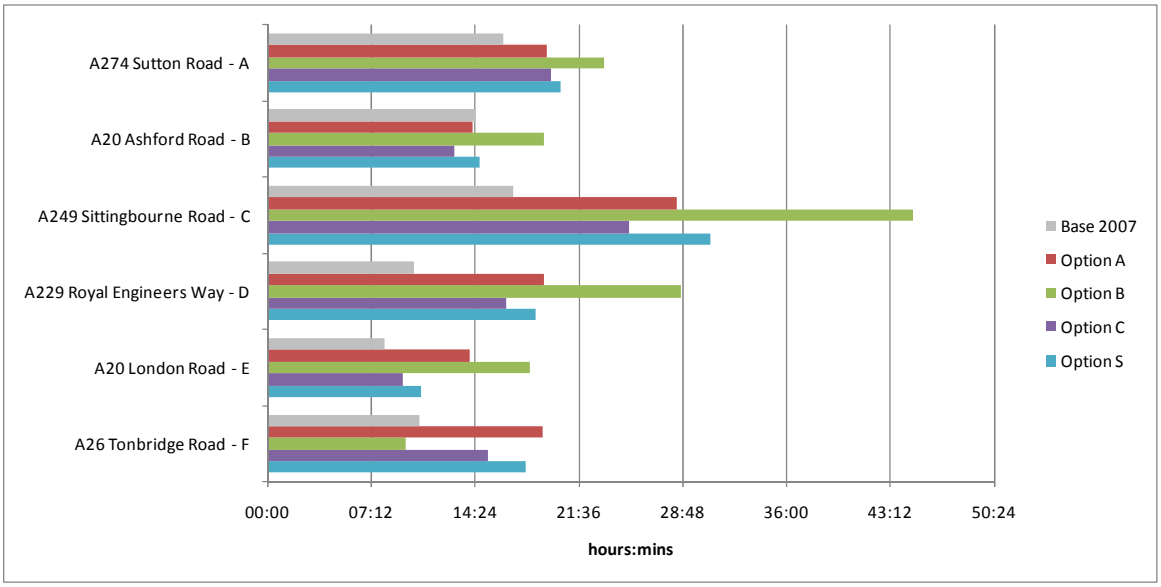


AM and PM cordon flows - 2007 Base Model

4 Journey Times

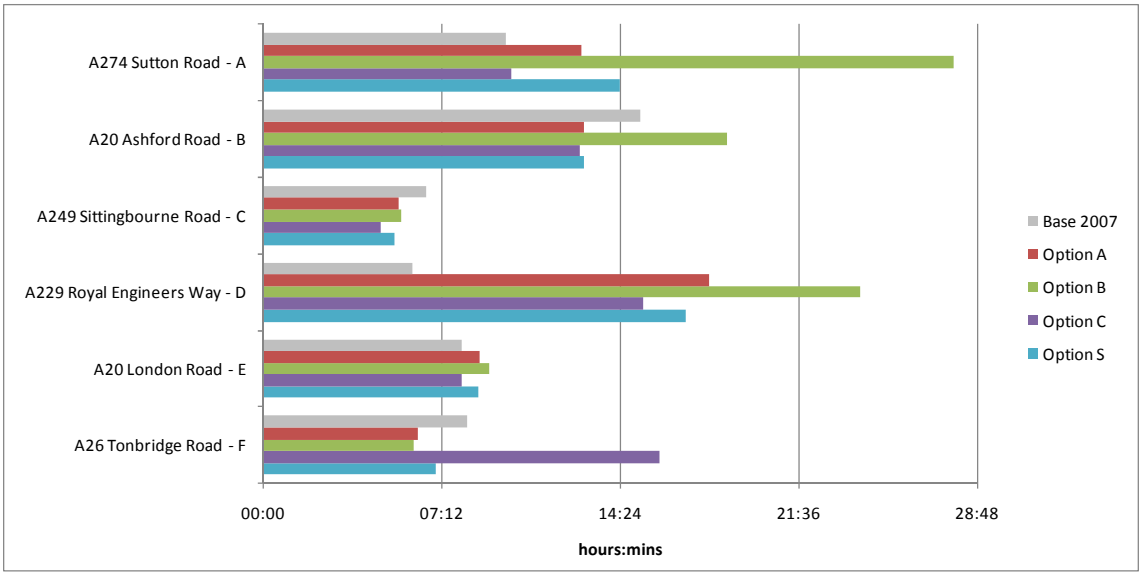
Journey Times – AM Peak

		AM Peak Journey Time (mm:ss)				
Route	Location	Base 2007	Option A	Option B	Option C	Option S
A	A274 Sutton Road	*16:20*	19:23	23:21	19:40	20:19
B	A20 Ashford Road	*14:24*	14:11	19:12	12:56	14:43
C	A249 Sittingbourne Road	*16:59*	28:22	44:47	25:03	30:41
D	A229 Royal Engineers Way	*10:08*	19:12	28:42	16:35	18:34
E	A20 London Road	*08:05*	14:04	18:11	09:21	10:39
F	A26 Tonbridge Road	*10:34*	19:04	09:36	15:19	17:56



Journey Times – PM Peak

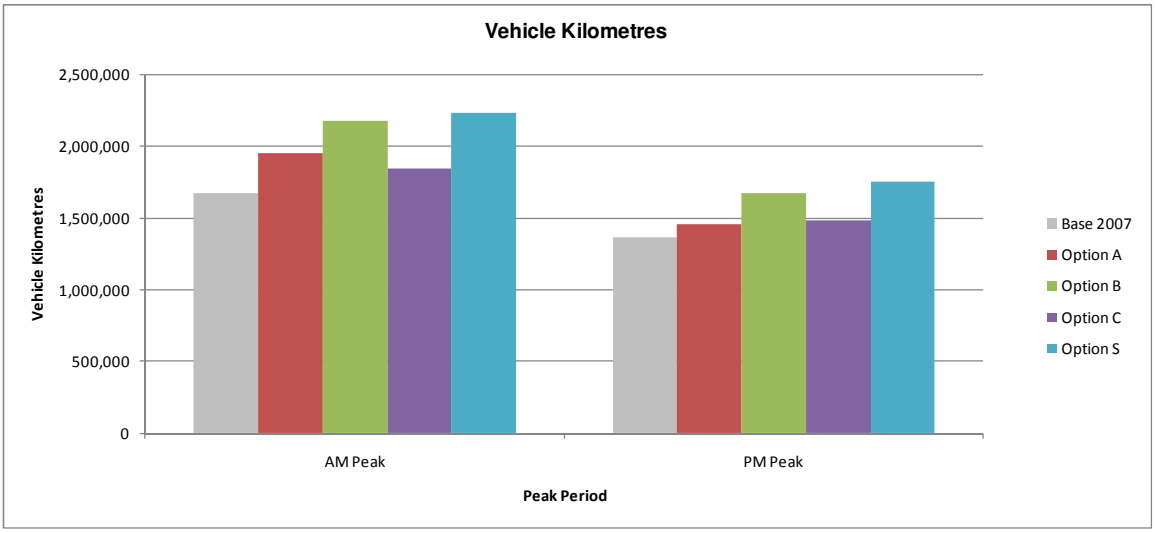
Route	Location	PM Peak Journey Time (mm:ss)				
		Base 2007	Option A	Option B	Option C	Option S
A	A274 Sutton Road	*09:47*	12:50	27:50	09:58	14:23
B	A20 Ashford Road	*15:12*	12:56	18:40	12:47	12:57
C	A249 Sittingbourne Road	*06:34*	05:28	05:35	04:45	05:17
D	A229 Royal Engineers Way	*06:00*	17:58	24:04	15:17	17:02
E	A20 London Road	*07:58*	08:43	09:07	08:01	08:39
F	A26 Tonbridge Road	*08:14*	06:14	06:04	15:59	06:57



5 Travel Demand

Travel Demand – Vehicle Kilometres

	Total Vehicle Kilometres				
	Base 2007	Option A	Option B	Option C	Option S
AM Peak	*1,667,863*	1,948,256	2,173,599	1,840,795	2,226,001
PM Peak	*1363670*	1454248	1675420	1481724	1748887



Travel Demand – Person Trips

	Total Travel Demand (Person Trips)				
	Base 2007	Option A	Option B	Option C	Option S
AM Peak	*35,376*	**45,858**	**45,462**	**45,011**	**44,804**
PM Peak	*31,446*	**41,476**	**40,116**	**37,343**	**39,083**