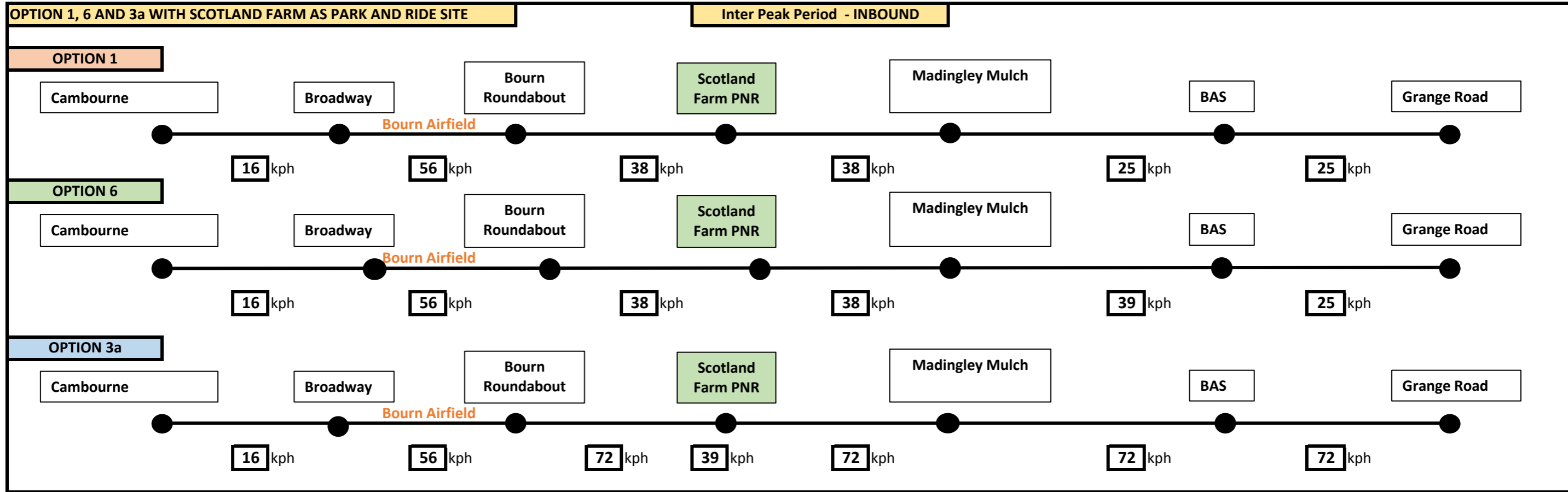


A428 Cambourne to Cambridge Better Bus Journeys - Bus Speed and Journey Time Analysis for Options 1, 6 and 3a.

Notes and Assumptions:
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 For the journey time calculations the final times have been rounded to the nearest whole number



Bus Speed assumptions (Kph):	INBOUND			OUTBOUND		
	AM	IP	PM	AM	IP	PM
Type of bus infrastructure:						
Bus lane	25	25	23	25	25	23
On-road: Cambourne	16	16	16	9	10	10
On-road: St Neots Road	39	38	38	57	55	54
Madingley Road (Hill)	19	39	43	47	54	42
Madingley Road (East of M11)	22	25	22	23	28	26
Rural busway	72	72	72	72	72	72
Urban busway	39	39	39	39	39	39

NOTE:
 AM Peak is 8am to 9am
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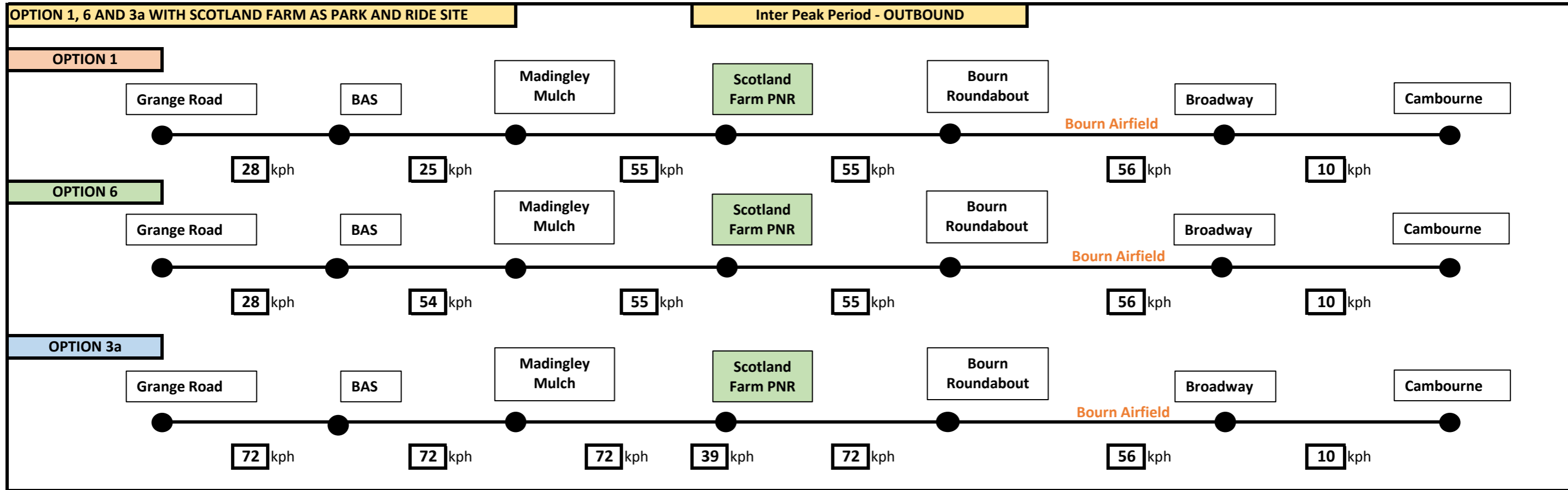
Resulting Journey Times	Option 1			Option 6			Option 3a		
	Dist	Kph	JT	Dist	Kph	JT	Dist	Kph	JT
INBOUND									
Cambourne to Broadway	1.69	16	6	1.69	16	6	1.69	16	6
Broadway to Bourn Rnbt	2.10	56	2	2.10	56	2	2.10	56	2
Bourn Rbt to Scotland Farm P&R	1.61	38	3	1.61	38	3	1.36	72	2
Scotland Farm P&R to Madingley Mulch	3.06	38	5	3.06	38	5	3.18	72	3
Madingley Mulch to BAS	3.00	25	7	3.00	39	5	2.50	72	2
BAS to Grange Road	1.77	25	4	1.77	25	4	1.49	72	1
Total journey time without factoring stops			27			25			17
Total journey times including dwell times:			30 mins			27 mins			19 mins

Dwell Time Calculations	
Assumed dwell per stop	0.5
Based on:	5
Total dwell time:	2.5

Note: Dist = distance in KM; kph = kilometers per hour; JT = journey time in minutes

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Rural busway	72	72	72	72	72	72
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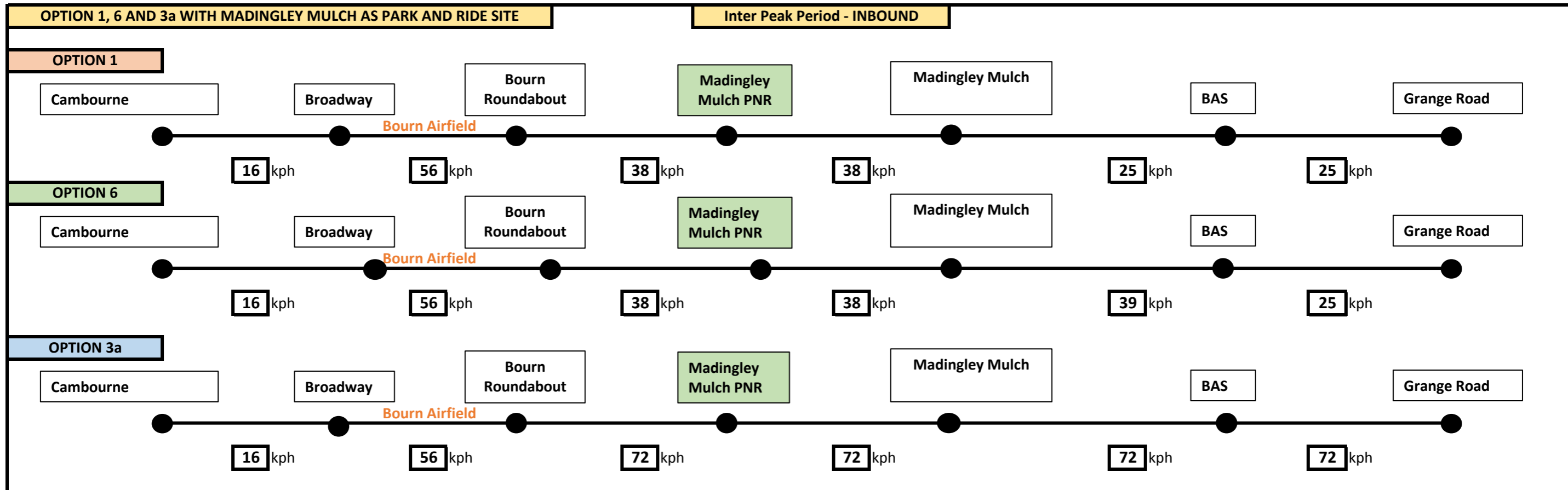
Resulting Journey Times	Option 1			Option 6			Option 3a		
	Dist	Kph	JT	Dist	Kph	JT	Dist	Kph	JT
OUTBOUND									
Grange Road to BAS	1.77	28	4	1.77	28	4	2.02	72	2
BAS to Madingley Mulch	3.00	25	7	3.00	54	3	2.50	72	2
Madingley Mulch to Scotland Farm P&R	3.06	55	3	3.06	55	3	3.18	72	3
Scotland Farm P&R to Bourn Roundabout	1.29	55	1	1.29	55	1	1.36	72	2
Bourn Roundabout to Broadway	2.10	56	2	2.10	56	2	2.10	56	2
Broadway to Cambourne High Street	1.69	10	10	1.69	10	10	1.69	10	10
Total journey time without factoring stops			28			24			21
Total journey times including dwell times:			31 mins			27 mins			24 mins

Note: Dist = distance in KM; kph = kilometers per hour; JT = journey time in minutes

Dwell Time Calculations	
Assumed dwell per stop	0.5
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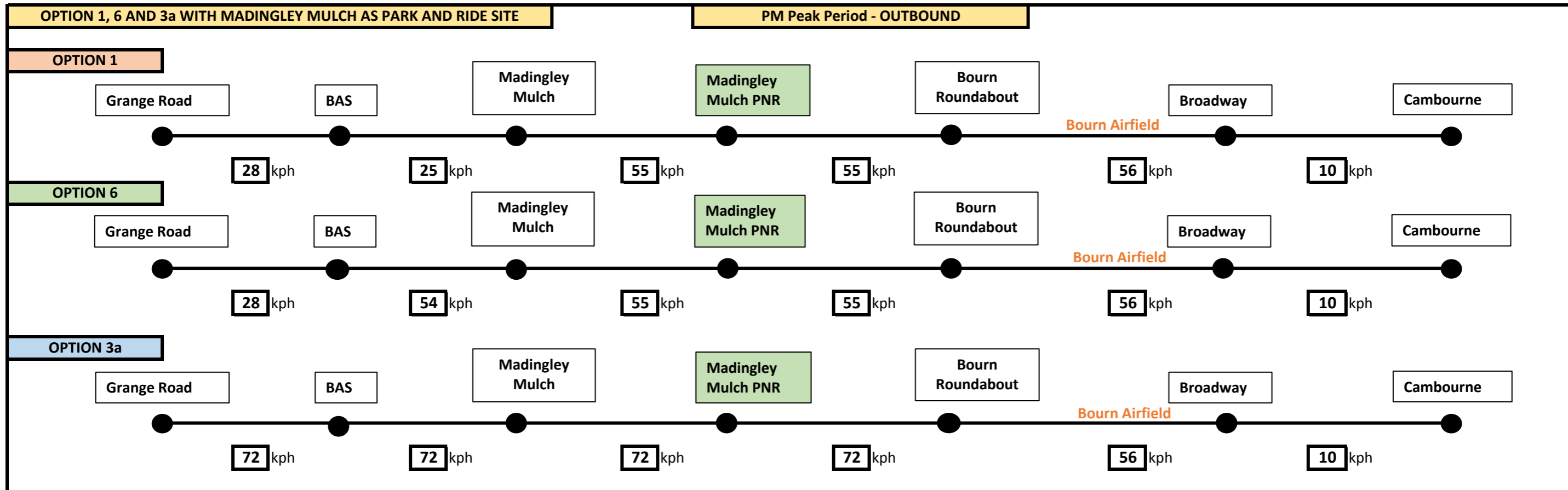
Resulting Journey Times	Option 1			Option 6			Option 3a		
	Dist	Kph	JT	Dist	Kph	JT	Dist	Kph	JT
INBOUND									
Cambourne to Broadway	1.69	16	6	1.69	16	6	1.69	16	6
Broadway to Bourn Rnbt	2.10	56	2	2.10	56	2	2.10	56	2
Bourn Rbt to Hardwick Roundabout	1.45	38	2	1.45	38	2	1.36	72	1
Hardwick Roundabout to Madingley Mulch P&R	2.90	38	5	2.90	38	5	3.18	72	3
Madingley Mulch P&R to BAS	2.70	25	6	2.70	39	4	2.50	72	2
BAS to Grange Road	1.77	25	4	1.77	25	4	2.02	72	2
Total journey time without factoring stops			26			24			16
Total journey times including dwell times:			29 mins			26 mins			19 mins

Note: Dist = distance in KM; kph = kilometers per hour; JT = journey time in minutes

Dwell Time Calculations	
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	AM	IP	PM	AM	IP	PM
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On-road: Cambourne	16	16	16	10	10	10
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Madingley Road (East of M11)	22	25	22	28	28	26
Rural busway	72	72	72	72	72	72
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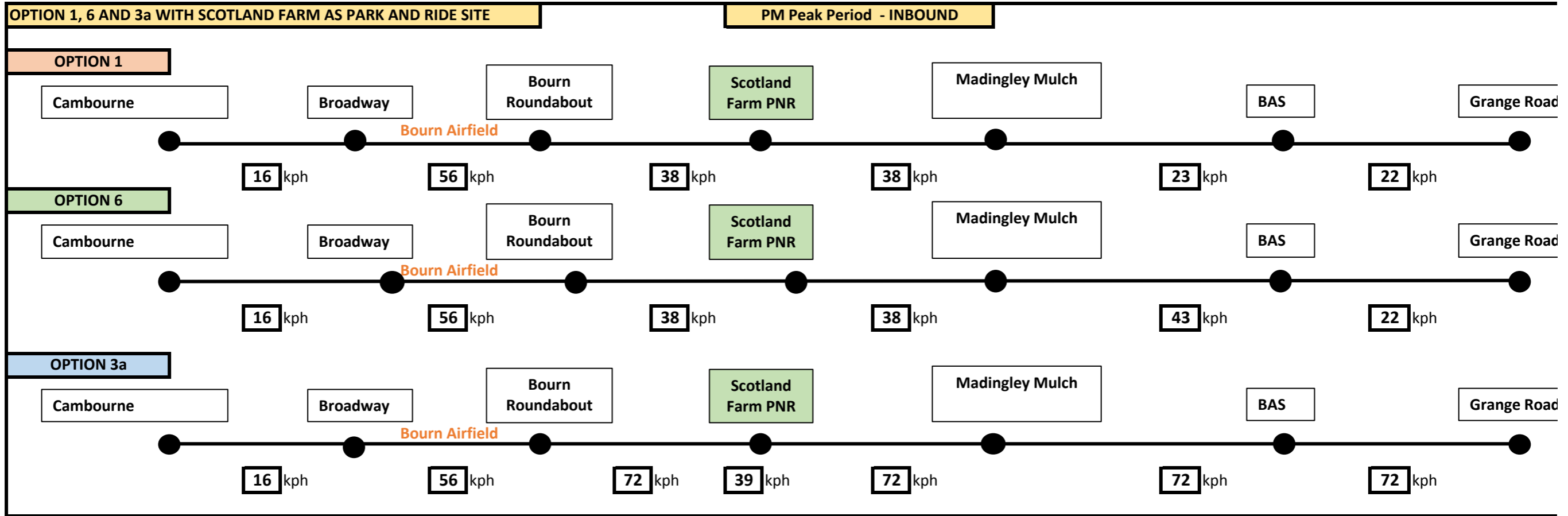
Resulting Journey Times	Option 1			Option 6			Option 3a		
	Dist	Kph	JT	Dist	Kph	JT	Dist	Kph	JT
OUTBOUND									
Grange Road to BAS	1.77	28	4	1.77	28	4	2.02	72	2
BAS to Madingley Mulch	2.70	25	6	2.70	54	3	2.50	72	2
Madingley Mulch P&R to Hardwick Roundabout	2.90	55	3	2.90	55	3	3.18	72	3
Hardwick Roundabout to Bourn Roundabout	1.45	55	2	1.45	55	2	1.36	72	1
Bourn Roundabout to Broadway	2.10	56	2	2.10	56	2	2.10	56	2
Broadway to Cambourne High Street	1.69	10	10	1.69	10	10	1.69	10	10
Total journey time without factoring stops			27			24			20
Total journey times including dwell times:			30 mins			26 mins			22 mins

Note: Dist = distance in KM; kph = kilometers per hour; JT = journey time in minutes

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Type of bus infrastructure:		AM	IP	PM	AM	IP	PM
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stops	On-road: Cambourne	16	16	16	9	10	10
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	Madingley Road (Hill)	19	39	43	47	54	42
	Madingley Road (East of M11)	22	25	22	23	28	26
	Rural busway	72	72	72	72	72	72
	Urban busway	39	39	39	39	39	39
NOTE:							
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Resulting Journey Times		Option 1			Option 6			Option 3a		
INBOUND		Dist	Kph	JT	Dist	Kph	JT	Dist	Kph	JT
Cambourne to Broadway		1.69	16	6	1.69	16	6	1.69	16	6
Broadway to Bourn Rnbt		2.10	56	2	2.10	56	2	2.10	56	2
Bourn Rbt to Scotland Farm P&R		1.61	38	3	1.61	38	3	1.29	72	1
Scotland Farm P&R to Madingley Mulch		3.06	38	5	3.06	38	5	2.73	72	2
Madingley Mulch to BAS		3.00	23	8	3.00	43	4	2.50	72	2
BAS to Grange Road		1.77	22	5	1.77	22	5	1.49	72	1
Total journey time without factoring stops				29		25		15		
Total journey times including dwell times:				31 mins		27 mins		18 mins		

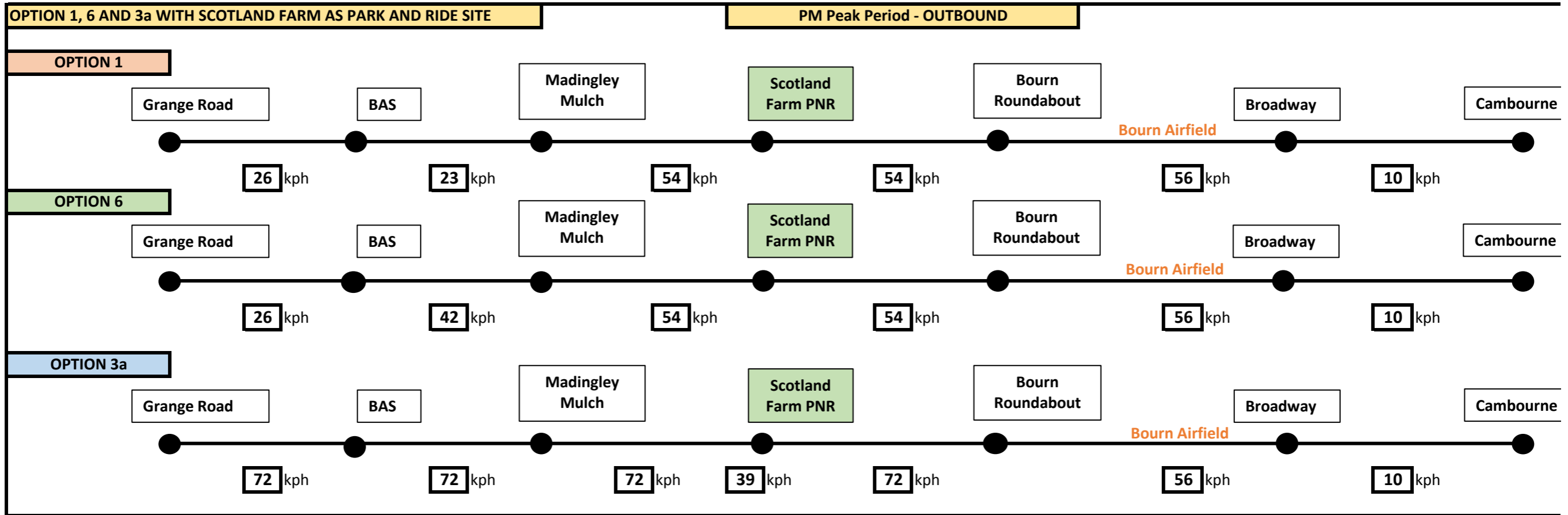
Note: Dist = distance in KM; kph = kilometers per hour; JT = journey time in minutes

Dwell Time
Assumed dwell per stop
Based on:
Total dwell time:

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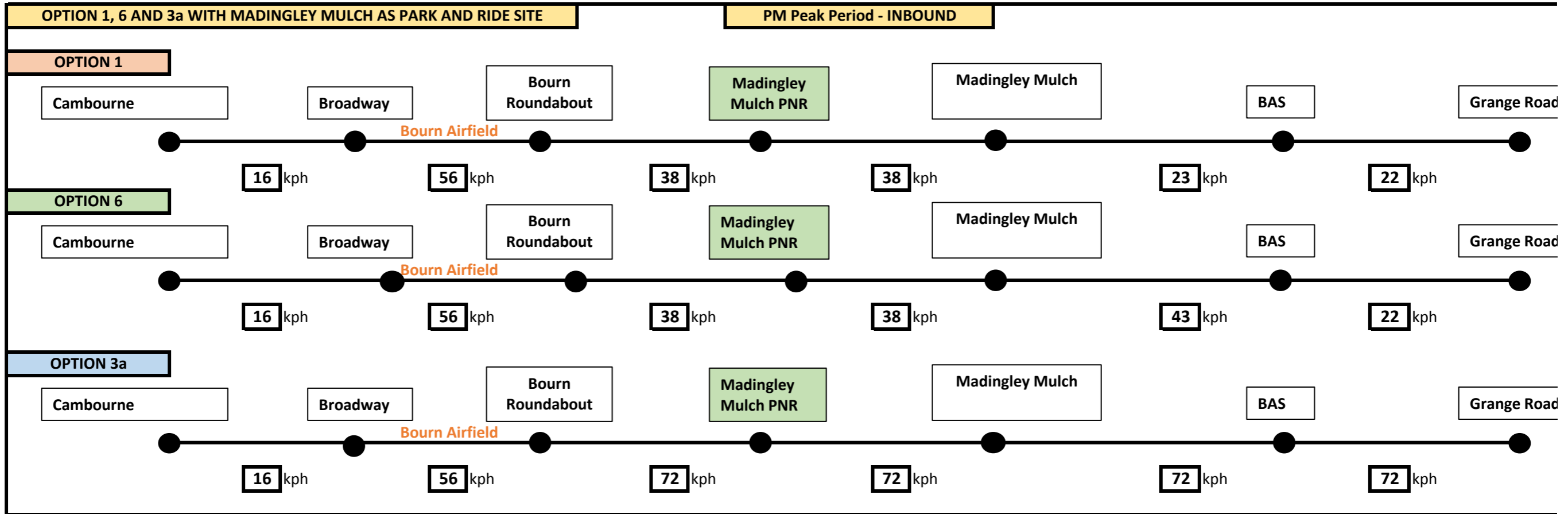
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OUTBOUND		Dist	Kph	JT	Dist	Kph	JT	Dist	Kph	JT
Grange Road to BAS		1.77	26	4	1.77	26	4	2.02	72	2
BAS to Madingley Mulch		3.00	23	8	3.00	42	4	2.50	72	2
Madingley Mulch to Scotland Farm P&R		3.06	54	3	3.06	54	3	3.18	72	3
Scotland Farm P&R to Bourn Roundabout		1.29	54	1	1.29	54	1	1.36	72	2
Bourn Roundabout to Broadway		2.10	56	2	2.10	56	2	2.10	56	2
Broadway to Cambourne High Street		1.69	10	10	1.69	10	10	1.69	10	10
Total journey time without factoring stops				29		26		21		
Total journey times including dwell times:				32 mins		28 mins		24 mins		

Note: Dist = distance in KM; kph = kilometers per hour; JT = journey time in minutes

Dwell Time
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	Rural busway	72	72	72	72	72	72
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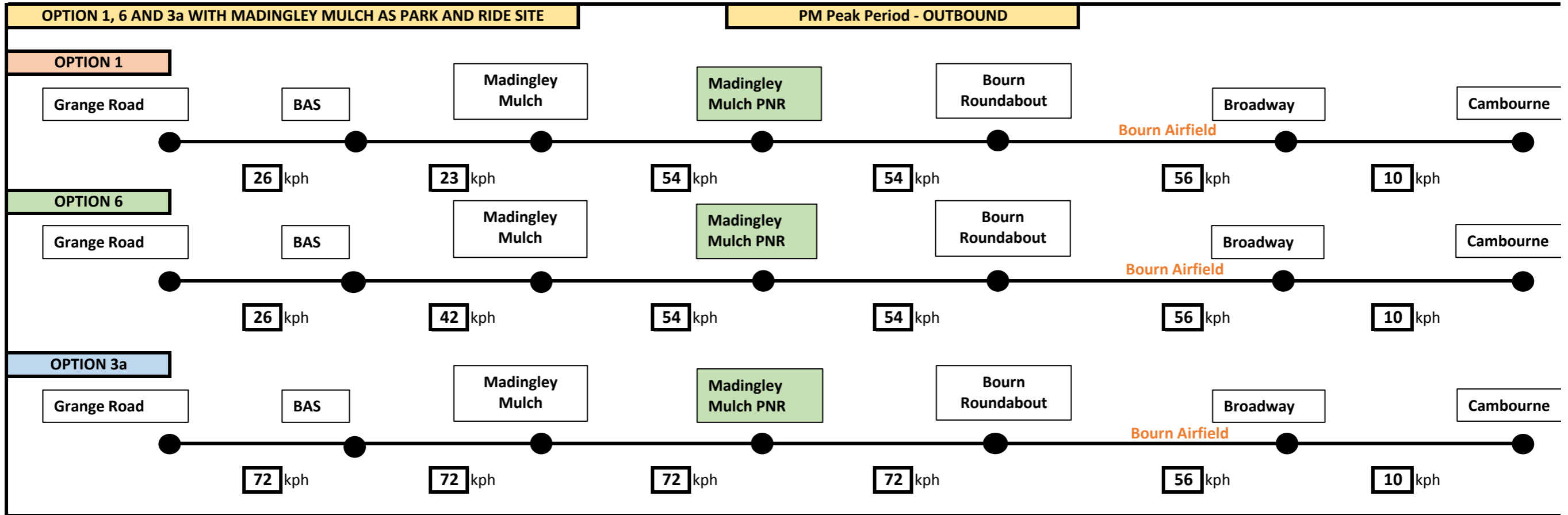
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Cambourne to Broadway		1.69	16	6	1.69	16	6	1.69	16	6
Broadway to Bourn Rnbt		2.10	56	2	2.10	56	2	2.10	56	2
Bourn Rbt to Hardwick Roundabout		1.45	38	2	1.45	38	2	1.36	72	1
Hardwick Roundabout to Madingley Mulch P&R		2.90	38	5	2.90	38	5	3.18	72	3
Madingley Mulch P&R to BAS		2.70	23	7	2.70	43	4	2.50	72	2
BAS to Grange Road		1.77	22	5	1.77	22	5	2.02	72	2
Total journey time without factoring stops				27		24				16
Total journey times including dwell times:				30 mins		26 mins				19 mins

Dwell Time
 Assumed dwell per stop
 Based on:
 Total dwell time:

Note: Dist = distance in KM; kph = kilometers per hour; JT = journey time in minutes

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Resulting Journey Times		Option 1			Option 6			Option 3a		
OUTBOUND		Dist	Kph	JT	Dist	Kph	JT	Dist	Kph	JT
Grange Road to BAS		1.77	26	4	1.77	26	4	2.02	72	2
BAS to Madingley Mulch		2.70	23	7	2.70	42	4	2.50	72	2
Madingley Mulch P&R to Hardwick Roundabout		2.90	54	3	2.90	54	3	3.18	72	3
Hardwick Roundabout to Bourn Roundabout		1.45	54	2	1.45	54	2	1.36	72	1
Bourn Roundabout to Broadway		2.10	56	2	2.10	56	2	2.10	56	2
Broadway to Cambourne High Street		1.69	10	10	1.69	10	10	1.69	10	10
Total journey time without factoring stops				28		25		20		
Total journey times including dwell times:				31 mins		28 mins		22 mins		

Note: Dist = distance in KM; kph = kilometers per hour; JT = journey time in minutes

Dwell Time
 Assumed dwell per stop
 Based on:
 Total dwell time: