Passenger Car Unit (PCU) values from TfL Traffic Modelling Guidelines v3. Table 1	PCU	Length metres
Passenger Cars & Light Goods Vehicles	1.0	6m
Buses & Coaches	2.0	12m
Heavy Goods Vehicles	2.3	13.8m
Articulated Buses	3.2	19.2

Notes:
Practical Reserve Capacity is a measure of how much additional traffic could pass through the junction whilst maintaining a maximum degree of saturation of 90% on all Links.
Degree of Saturation is the ratio of Flow to Capacity

		A10 High Street Northbound Left Turn Lane				A10 High Street Northbound Ahead Lane				B104 Church Street				A10 High Street Southbound Right Turn Lane				A10 High Street Southbound Ahead Lane			
Layout & Scenario Details	Practical Reserve Capacity (%)	Existing Traffic Flow	Surveyed Average Queue (m)	Mean Max Queue (m/pcu)	% Degree of Saturation	Existing Traffic Flow	Surveyed Average Queue (m)	Mean Max Queue (m/pcu)	% Degree of Saturation	Existing or Proposed Traffic Flow	Surveyed Average Queue (m)	Mean Max Queue (m/pcu)	% Degree of Saturation	Proposed Traffic Flow	Surveyed Average Queue (m)	Mean Max Queue (m/pcu)	% Degree of Saturation	Proposed Traffic Flow	Surveyed Average Queue (m)	Mean Max Queue (m/pcu)	% Degree of Saturation
AM peak																					
Existing Junction Model 88s Cycle Time AM peak with full pedestrian stage appearance for 2 out of 3 stages (66%)	34.6%	292	35m	36m / 6pcu	53.9%	577	53.4m	58.2m / 9.7pcu	66.9%	279	43.2m	39m / 6.5pcu	52.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Proposed Layout 88s Cycle Time AM peak without additional stage for right turn indicative arrow & with full pedestrian stage every cycle		Existing				Existing				Proposed 50% split 140 left and 139 right				Proposed right turn flows from 5% to 20% of total southbound flow				Proposed AM southbound flow total 565			
Scenario 1 Southbound Right Turn 20%	-1.7%	292		33.6m / 5.6pcu	50.1%	577		87.6m / 14.6pcu	82.1%	279		64.8m / 10.8pcu	91.5%	113		27.6m / 4.6pcu	89.3%	452		57.6m / 9.6pcu	64.3%
Scenario 2 Southbound Right Turn 15%	3.9%	292		35.4m / 5.9pcu	52.9%	577		95.4m / 15.9pcu	86.6%	279		51.6m / 8.6pcu	82.4%	85		18m / 3pcu	79.4%	480		66m / 11pcu	72.1%
Scenario 3 Southbound Right Turn 10%	3.9%	292		35.4m / 5.9pcu	52.9%	577		95.4m / 15.9pcu	86.6%	279		51.6m / 8.6pcu	82.4%	57		8.4m / 1.4pcu	53.3%	508		73.2m / 12.2pcu	76.3%
Scenario 4 Southbound Right Turn 5%	3.9%	292		35.4m / 5.9pcu	52.9%	577		95.4m / 15.9pcu	86.6%	279		51.6m / 8.6pcu	82.4%	28		3.6m / 0.6pcu	26.2%	537		81m / 13.5pcu	80.6%
Proposed Layout 88s Cycle Time AM peak with additional stage for right turn indicative arrow & with full pedestrian stage every cycle		Existing				Existing				Proposed 50% split 140 left and 139 right				Proposed right turn flows from 5% to 20% of total southbound flow				Proposed AM southbound flow total 565			
Scenario 5 Southbound Right Turn 20%	-23.8%	292		43.2m / 7.2pcu	68.0%	577		295.8m / 49.3pcu	111.4%	279		144.6m / 24.1pcu	109.9%	113		12.6m / 2.1pcu	51.0%	452		53.4m / 8.9pcu	59.6%
Scenario 6 Southbound Right Turn 15%	-23.8%	292		43.2m / 7.2pcu	68.0%	577		295.8m / 49.3pcu	111.4%	279		144.6m / 24.1pcu	109.9%	85		9m / 1.5pcu	38.3%	480		58.2m / 9.6pcu	63.3%
Scenario 7 Southbound Right Turn 10%	-23.8%	292		43.2m / 7.2pcu	68.0%	577		295.8m / 49.3pcu	111.4%	279		144.6m / 24.1pcu	109.9%	57		5.4m / 0.9pcu	25.7%	508		63.6m / 10.6pcu	67.0%
Scenario 8 Southbound Right Turn 5%	-23.8%	292		43.2m / 7.2pcu	68.0%	577		295.8m / 49.3pcu	111.4%	279		144.6m / 24.1pcu	109.9%	28		2.4m / 0.4pcu	12.6%	537		69.6m / 11.6pcu	70.8%
Proposed Layout 96s Cycle Time AM peak without additional stage for right turn indicative arrow & with full pedestrian stage every cycle		Existing				Existing				Proposed 50% split 140 left and 139 right				Proposed right turn flows from 5% to 20% of total southbound flow				Proposed AM southbound flow total 565			
Scenario 9 Southbound Right Turn 20%	5.1%	292		35.4m / 5.9pcu	48.3%	577		90m / 15pcu	79.1%	279		58.8m / 9.6pcu	85.6%	113		23.4m / 3.9pcu	83.5%	452		60m / 10pcu	62.0%
Scenario 10 Southbound Right Turn 15%	10.1%	292		36m / 6pcu	49.4%	577		92.4m / 15.4pcu	81.0%	279		54.6m / 9.1pcu	81.7%	85		13.8m / 2.3pcu	67.3%	480		67.2m / 11.2pcu	67.4%
Scenario 11 Southbound Right Turn 10%	10.1%	292		36m / 6pcu	49.4%	577		92.4m / 15.4pcu	81.0%	279		54.6m / 9.1pcu	81.7%	57		7.8m / 1.3pcu	45.2%	508		73.2m / 12.2pcu	71.3%
Scenario 12 Southbound Right Turn 5%	10.1%	292		36m / 6pcu	49.4%	577		92.4m / 15.4pcu	81.0%	279		54.6m / 9.1pcu	81.7%	28		3.6m / 0.6pcu	22.2%	537		80.4m / 13.4pcu	75.4%
Proposed Layout 96s Cycle Time AM peak with additional stage for right turn indicative arrow & with full pedestrian stage every cycle		Existing				Existing				Proposed 50% split 140 left and 139 right				Proposed right turn flows from 5% to 20% of total southbound flow				Proposed AM southbound flow total 565			
Scenario 13 Southbound Right Turn 20%	-14.6%	292		43.8m / 7.3pcu	62.9%	577		198m / 33pcu	103.1%	279		93.6m / 15.6pcu	99.9%	113		13.8m / 2.3pcu	55.6%	452		55.8m / 9.3pcu	57.9%
Scenario 14 Southbound Right Turn 15%	-14.6%	292		43.8m / 7.3pcu	62.9%	577		198m / 33pcu	103.1%	279		93.6m / 15.6pcu	99.9%	85		9.6m / 1.6pcu	41.8%	480		60.6m / 10.1pcu	61.5%
Scenario 15 Southbound Right Turn 10%	-14.6%	292		43.8m / 7.3pcu	62.9%	577		198m / 33pcu	103.1%	279		93.6m / 15.6pcu	99.9%	57		6m / 1.0pcu	28.0%	508		66.6m / 11.1pcu	65.1%
Scenario 16 Southbound Right Turn 5%	-14.6%	292		43.8m / 7.3pcu	62.9%	577		198m / 33pcu	103.1%	279		93.6m / 15.6pcu	99.9%	28		3m / 0.5pcu	13.8%	537		72.6m / 12.1pcu	68.8%
PM peak																					
Existing Junction Model 88s Cycle Time PM peak with full pedestrian stage appearance for 2 out of 3 stages (66%)	24.2%	330	30.6m	46.8m / 7.8pcu	62.7%	634	59.4m	63.6m / 10.6pcu	68.3%	399	37.8m	60.6m / 10.1pcu	72.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Proposed Layout 88s Cycle Time PM peak without additional stage for right turn indicative arrow & with full pedestrian stage every cycle		Existing				Existing				Proposed 50% split 200 left and 199 right				Proposed right turn flows from 5% to 20% of total southbound flow				Proposed PM southbound flow total 482			
Scenario 17 Southbound Right Turn 20%	-30.4%	330		44.4m / 7.6pcu	63.3%	634		177m / 29.5pcu	100.8%	399		174m / 29pcu	107.1%	96		69m / 11.5pcu	117.3%	386		49.8m / 8.3pcu	61.4%
Scenario 18 Southbound Right Turn 15%	-15.4%	330		45m / 7.5pcu	65.2%	634		214.8m / 35.8pcu	103.8%	399		135.6m / 22.6pcu	102.5%	72		21.6m / 3.6pcu	88.0%	410		55.8m / 9.3pcu	67.2%
Scenario 19 Southbound Right Turn 10%	-15.4%	330		45m / 7.5pcu	65.2%	634		214.8m / 35.8pcu	103.8%	399		135.6m / 22.6pcu	102.5%	48		8.4m / 1.6pcu	58.7%	434		60.6m / 10.1pcu	71.1%
Scenario 20 Southbound Right Turn 5%	-15.4%	330		45m / 7.5pcu	65.2%	634		214.8m / 35.8pcu	103.8%	399		135.6m / 22.6pcu	102.5%	24		3.6m / 0.6pcu	29.3%	458		66.6m / 11.1pcu	75.0%
Proposed Layout 88s Cycle Time PM peak with additional stage for right turn indicative arrow & with full pedestrian stage every cycle		Existing				Existing				Proposed 50% split 200 left and 199 right				Proposed right turn flows from 5% to 20% of total southbound flow				Proposed PM southbound flow total 482			
Scenario 21 Southbound Right Turn 20%	-52.3%	330		62.4m / 10.4pcu	86.0%	634		643.8m / 107.3pcu	137.1%	399		373.8m / 62.3pcu	130.9%	96		10.8m / 1.8pcu	43.3%	386		45.6m / 7.6pcu	54.9%
Scenario 22 Southbound Right Turn 15%	-52.3%	330		62.4m / 10.4pcu	86.0%	634		643.8m / 107.3pcu	137.1%	399		373.8m / 62.3pcu	130.9%	72		7.8m / 1.3pcu	32.5%	410		49.2m / 8.2pcu	58.3%
Scenario 23 Southbound Right Turn 10%	-52.3%	330		62.4m / 10.4pcu	86.0%	634		643.8m / 107.3pcu	137.1%	399		373.8m / 62.3pcu	130.9%	48		4.8m / 0.8pcu	21.6%	434		54m / 9pcu	61.7%
Scenario 24 Southbound Right Turn 5%	-52.3%	330		62.4m / 10.4pcu	86.0%	634		643.8m / 107.3pcu	137.1%	399		373.8m / 62.3pcu	130.9%	24		2.4m / 0.6pcu	10.8%	458		58.2m / 9.7pcu	65.1%
Proposed Layout 96s Cycle Time PM peak without additional stage for right turn indicative arrow & with full pedestrian stage every cycle		Existing				Existing				Proposed 50% split 200 left and 199 right				Proposed right turn flows from 5% to 20% of total southbound flow				Proposed PM southbound flow total 482			
Scenario 25 Southbound Right Turn 20%	-29.8%	330		42.6m / 7.1pcu	55.9%	634		115.2m / 19.2pcu	89.0%	399		266.4m / 44.4pcu	116.9%	96		46.2m / 7.7pcu	104.5%	386		48.6m / 8.1pcu	54.2%
Scenario 26 Southbound Right Turn 15%	-9.9%	330		46.8m / 7.8pcu	61.8%	634		160.8m / 26.8pcu	98.4%	399		116.4m / 19.4pcu	98.9%	72		28.8m / 4.8pcu	96.0%	410		57.6m / 9.6pcu	63.6%
Scenario 27 Southbound Right Turn 10%	-9.9%	330		46.8m / 7.8pcu	61.8%	634		160.8m / 26.8pcu	98.4%	399		116.4m / 19.4pcu	98.9%	48		9.6m / 1.6pcu	64.0%	434		63m / 10.5pcu	67.3%
Scenario 28 Southbound Right Turn 5%	-9.9%	330		46.8m / 7.8pcu	61.8%	634		160.8m / 26.8pcu	98.4%	399		116.4m / 19.4pcu	98.9%	24		3.6m / 0.6pcu	32.0%	458		68.4m / 11.4pcu	71.1%
Proposed Layout 96s Cycle Time PM peak with additional stage for right turn indicative arrow & with full pedestrian stage every cycle		Existing				Existing				Proposed 50% split 200 left and 199 right				Proposed right turn flows from 5% to 20% of total southbound flow				Proposed PM southbound flow total 482			
Scenario 29 Southbound Right Turn 20%	-38.5%	330		58.2m / 9.7pcu	78.2%	634		511.8 / 85.3pcu	124.6%	399		314.4m / 52.4pcu	122.4%	96		11.4m / 1.9pcu	47.2%	386		48m / 8pcu	52.9%
Scenario 30 Southbound Right Turn 15%	-38.5%	330		58.2m / 9.7pcu	78.2%	634		511.8 / 85.3pcu	124.6%	399		314.4m / 52.4pcu	122.4%	72		8.4m / 1.4pcu	35.4%	410		51.6m / 8.6pcu	56.2%
Scenario 31 Southbound Right Turn 10%	-38.5%	330		58.2m / 9.7pcu	78.2%	634		511.8 / 85.3pcu	124.6%	399		314.4m / 52.4pcu	122.4%	48		5.4m / 0.9pcu	23.6%	434		56.4m / 9.4pcu	59.5%
Scenario 32 Southbound Right Turn 5%	-38.5%	330		58.2m / 9.7pcu	78.2%	634		511.8 / 85.3pcu	124.6%	399		314.4m / 52.4pcu	122.4%	24		2.4m / 0.4pcu	11.8%	458		60.6m / 10.1pcu	62.8%