Appendix A: Current Conditions

Transport Network

Colchester's transport network is primarily radial, with routes radiating outward from the city centre.

Bus services are most frequent within the city centre and along strategic routes, but significantly less frequent in rural areas. Strategic cycle routes are limited in availability.

Rail services connect Colchester city centre (with two stations), Marks Tey, Hythe, Wivenhoe, and Chapel & Wakes Colne. However, the rural north and south of the district have no rail connections. Colchester railway station serves as a key hub, linking to London and other regions.

Major road routes of the A12 and A120 provide critical access points to Colchester. Additionally, the strategic routes of the A133 and A134 pass through the city centre.

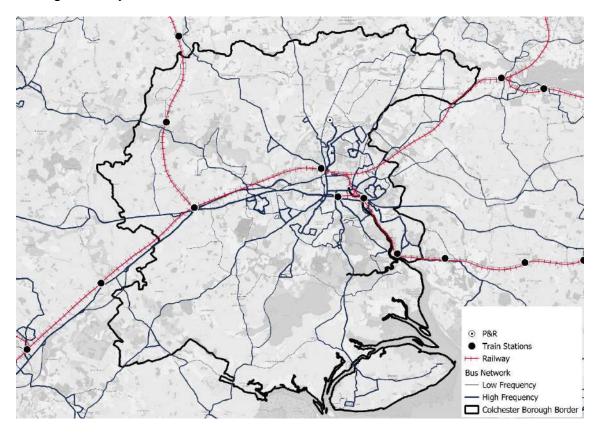


Figure 1: Public Transport Network

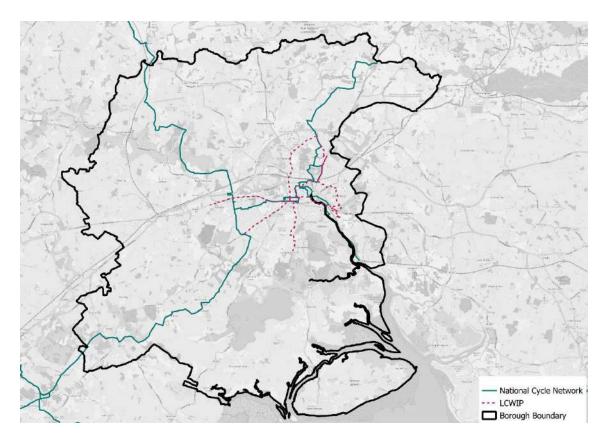


Figure 2: Cycling Network

Key Attractors

The majority of key attractors are located within the Colchester city centre area. Key employment sites are situated to the north of the city centre alongside the A12/A120, extending into Tendring and Braintree along the A120, and southeast along the A134. These locations often have limited public transport options, making them more car dependent. An exception is along the A134, where bus services also connect to the University.

Retail activities are predominantly concentrated in the city centre, offering good public transport links, proximity to bus routes, and train stations. The Tollgate retail park, located close to the A12 J26, provides ample car parking and is accessible via bus services. Colchester General Hospital is accessible by bus and has available car parking, though it is limited.

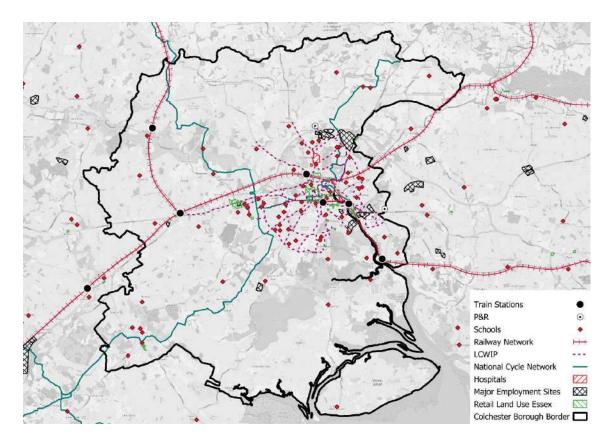


Figure 3: Key Attractors

Mode Share

The percentage of car share varies across Middle Super Output Areas (MSOA) in Colchester Borough, based on journey to work data from 2011, uplifted to 2019 using NTEM 8 data. The highest car share is concentrated in the western and southern parts of the borough, where lower residential and commercial density necessitates longer commutes to access amenities and fewer public transport options exist. Conversely, the lowest car share is generally found in the central and eastern areas, which tend to have higher residential and employment density, and better access to public transport, particularly along high-frequency rail lines.

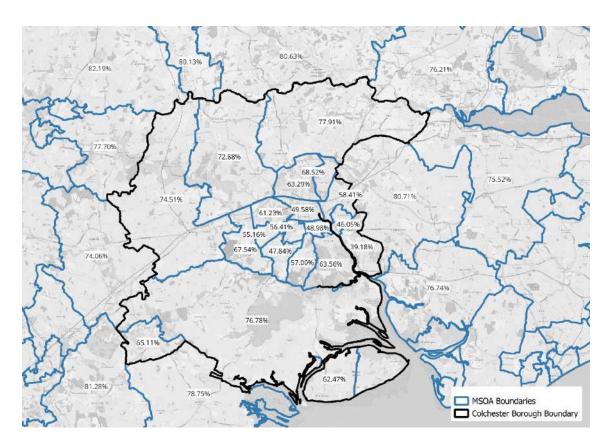


Figure 4: Mode Share - Car

The mode share of sustainable transport options, based on journey to work data from 2011 and uplifted to 2019, varies across Colchester Borough.

Bus usage varies across the borough, with higher usage in suburban areas around the city centre. Train usage is concentrated in specific zones, reflecting the location of train stations.

Bicycle mode share is relatively low in most zones, suggesting a need for improved cycling infrastructure to encourage more people to choose cycling as a mode of transport.

Walking is a significant mode of transport, particularly in urban or built-up areas, indicating the importance of pedestrian-friendly infrastructure and safe walking routes.

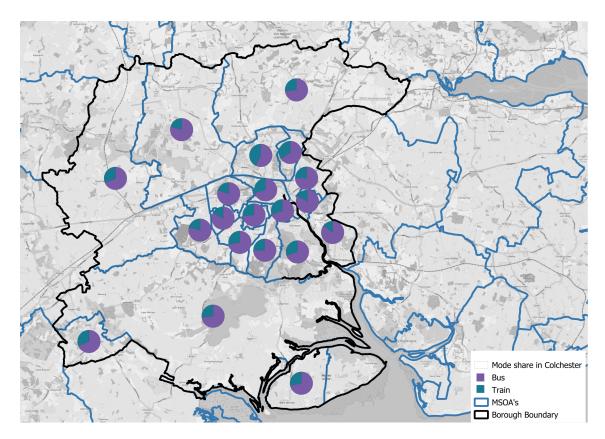


Figure 5: Mode Share - Public Transport

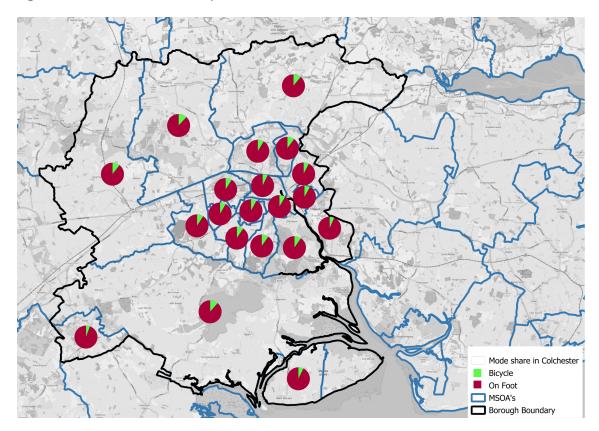


Figure 6: Mode Share - Active Travel

Travel Time to Key Centres

Within the Borough

Figure 7 provides a visual representation of the accessibility of key centres within Colchester by car. Travel time to the city centre varies significantly across the borough, primarily based on distance. Shorter distances typically have a travel time range of 3-10 minutes, while longer distances can exceed 19 minutes. Travel time to the hospital is generally shorter than to the city centre, with most areas within a travel time range of 4-24 minutes. Travel time to Severalls business park has a travel time range of 2-34 minutes.

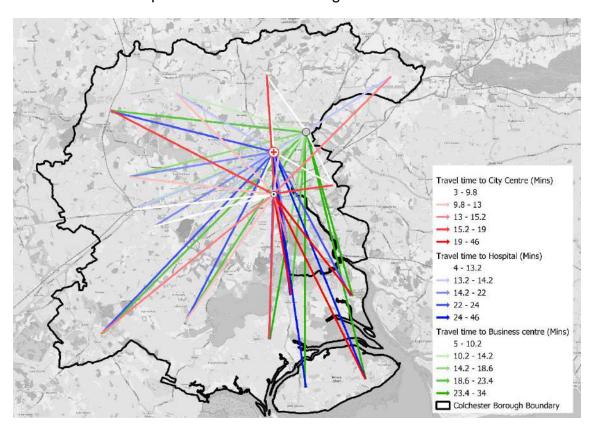


Figure 7: Accessibility of Key Centres within Colchester - Car

Figure 8 visually represents the accessibility of key centres within Colchester by bus and rail, while Figure 2 9 by bicycle.

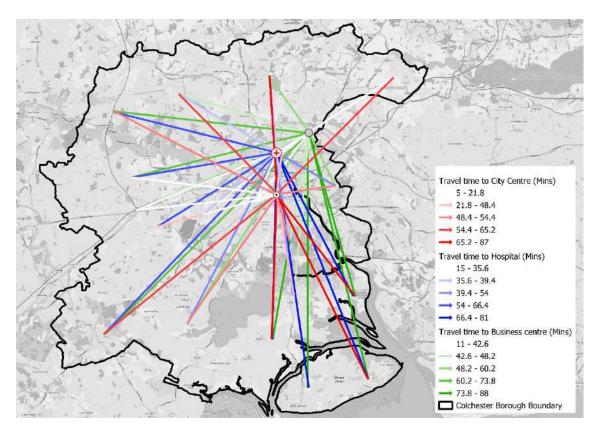


Figure 8: Accessibility of Key Centres within Colchester - Public Transport

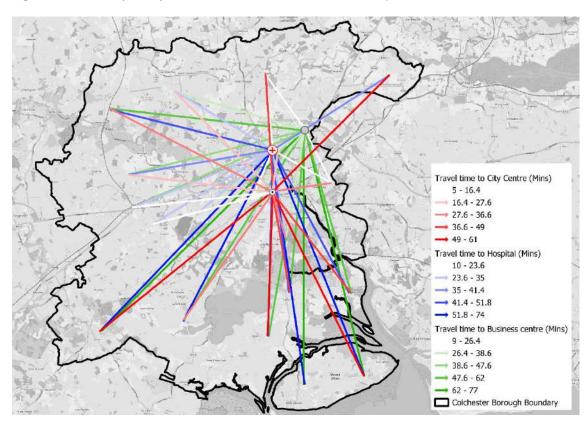


Figure 9: Accessibility of Key Centres within Colchester - Cycling

Outside the Borough

Figure 10 visually represents the accessibility of key centres outside of Colchester borough by car. Travel times to key centres outside of Colchester borough vary significantly depending on the destination and the location within the borough. Travel times to Chelmsford are generally shorter than those to Braintree or Ipswich. Major roads and highways have a significant impact on travel times, with areas closer to these roads being more accessible to key centres outside the borough. In some cases, specific routes that follow these roads can lead to shorter travel times to Braintree and Ipswich, even from locations that are further away from these centres.

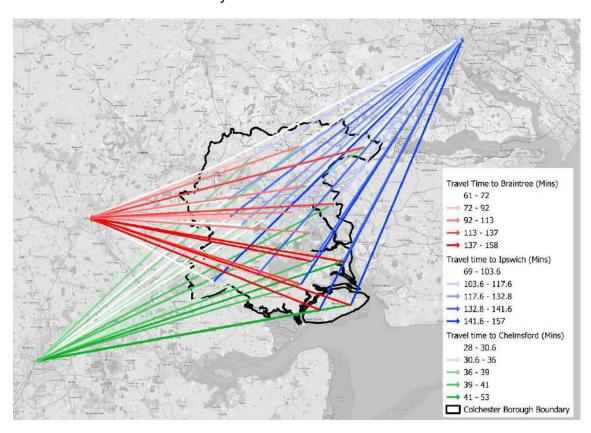


Figure 10: Accessibility of Key Centres outside Colchester - Car

Figure 11 visually represents the accessibility of key centres outside of Colchester borough by bus and rail. Travel times to Braintree are generally shorter compared to Ipswich and Chelmsford. Travel times to Chelmsford show the widest range, reflecting a wider diversity of routes, travel modes, and distances. West Mersea and the south of the borough tend to have the longest travel times.

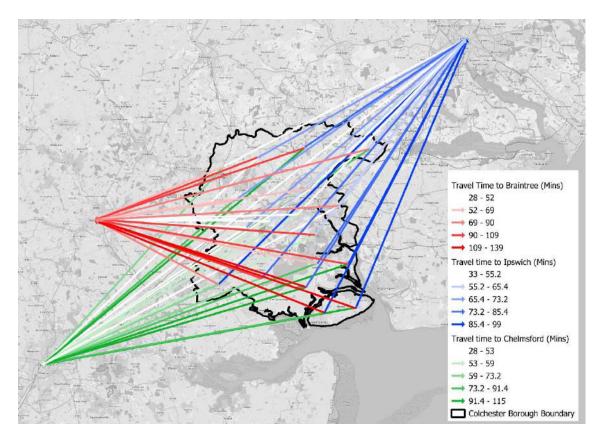


Figure 11: Accessibility of Key Centres outside Colchester - Public Transport

Trips between Zones

Trips are primarily attracted to the central and western parts of Colchester borough, as well as Wivenhoe, due to greater employment, retail, and residential density. The northern and southern parts of the borough generate the most trips, likely due to different land use patterns, such as rural and dispersed development.

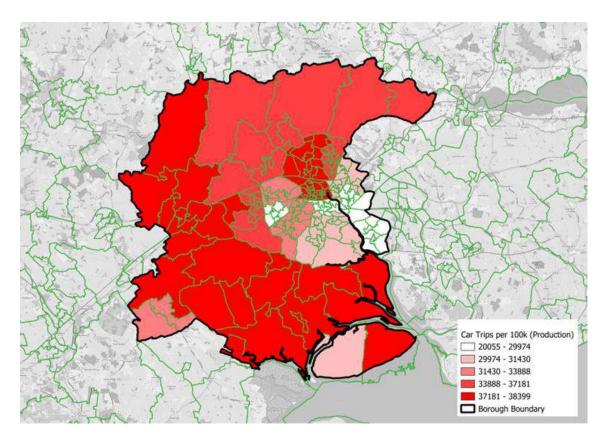


Figure 12: Where Car Trips are Generated

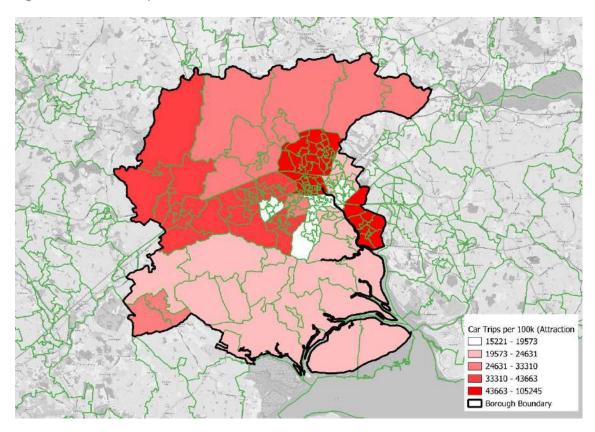


Figure 13: Where Car Trips are Drawn to

Highway Network

Figure 14 shows the roads in Colchester with Volume over Capacity (V/C) ratio over 80%.

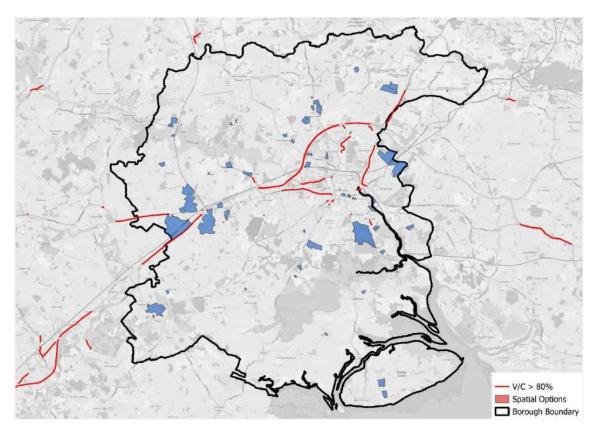


Figure 14: V/C over 80% in the AM and PM time peaks

Figure 15 shows the junctions in Colchester with Level of Service (LOS) D-F in AM peak.

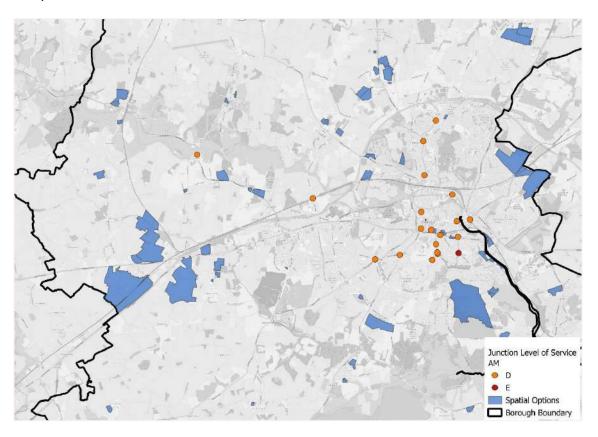


Figure 15: Junction in Colchester with LOS D-F, AM peak

Figure 16 shows the junctions in Colchester with LOS D-F in PM peak.

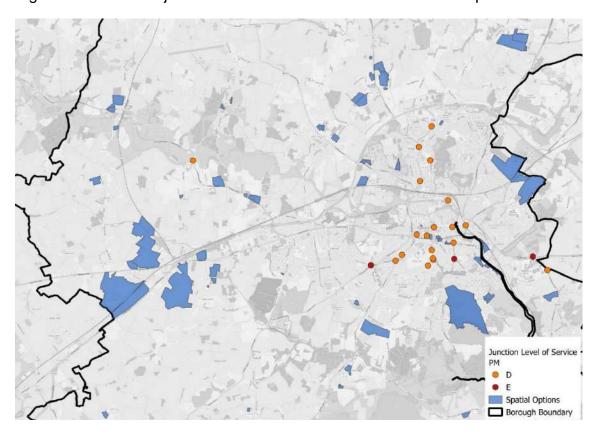


Figure 16: Junction in Colchester with LOS D-F, PM peak

Appendix B: Sustainable Location Assessment (MSOA)

Table 1: High level review of Central Borough MSOA's

		002	004	009	014	013	007	011	008
	Health/ Retail/ Key Employment								
Land Use	Key attractor within 2km								
	Key attractor within 5km								
	Connection with high frequency bus network	ŧ		Ħ	ŧ	ŧ			
Public Transport	Proximity to rail station	No Development		No Development	No Development	No Development			
	Potential for bus connectivity improvements	o Deve		o Deve	o Deve	o Deve			
	Connection with existing/committed cycle routes	Ž		Ž	Ž	Ž			
Active	Propensity to cycle to the city centre								
Travel	PRoW to transport/key attractors								
	Potential for active travel improvements								

Table 2: High level review of Outer Borough MSOA

		001	003	010	019 (C & E)	019 <i>(w)</i> /020	021	012	015	018	016	017
Land Use	Health/ Retail/ Key Employment											
	Key attractor within 2km											
	Key attractor within 5km											
Public Transport	Connection with high frequency bus network		Most sites on HF, Fordham sites LF	Currently no stops off the A12/A120	Sites in LDLH on HF, other site on LF					ment		
	Proximity to rail station									No Development	1.5k	1.5k
	Potential for bus connectivity improvements									N O		
Active Travel	Connection with existing/committed cycle routes	East sites on NCN West sites no cycle link	Close to the NCN		LDLH Close to the NCN connection with LCWIP, other sites no link	Close to the NCN		Close to the NCN & LCWIP	Close to the NCN & LCWIP		Close to the LCWIP	Close to the NCN & LCWIP
	Propensity to cycle to the city centre	Not according	Not according to	Not according	Borders MSOA with			Borders MSOA with				

	001	003	010	019 (C & E)	019 <i>(w)</i> /020	021	012	015	018	016	017
	to PCT but within 5k so with improved facility	PCT but within 5k so with improved facility	to PCT but within 5k so with improved facility	high propensity			high propensity			Borders MSOA with high propensity	
PRoW to transport/key attractors											
Potential for active travel improvements		Connection to NCN & check NCN quality			Connection to NCN & check NCN quality		Connecting to Lexden Rd LCWIP	Connecting 2 LCWIP corridors		Connecting to Berechurch Rd LCWIP – or new Old Heath Rd	Connect to Uni LCWIP & NCN (check quality)

Appendix C: Long-List of Spatial Options

Col	obactor City Contra	
	Chester City Centre	150 hamas
20	Britannia Car Park	150 homes
12	J	150 homes
21		40 homes
22	St Runwald Car Park	40 homes
58		6 homes
5	146 Magdalen Street	15 homes
_	th Colchester	1001
26	Land off Bakers Lane	100 homes
2	Braiswick	50 homes
	Land west Oxley Parker Drive	10 homes
	Land accessible via Chesterwell (Colchester Golf Club Site 2)	50 homes
Eas	st Colchester	
3	Buildings Farm & Land north of Bromley Road & Welshwood Park	2000 homes
24	Derelict Coal Yard Site	50 homes
13	Land West of Hawkins Road	50 homes
15	Gas Works Site & Allotment	200 homes
Reg	generation Area	
	Land East of Hawkins Road	150 homes
18	King Edward Quay Industrial Park	150 homes
	Ford Car Showroom	100 homes
	st Mersea	
7	Dawes Lane, West Mersea	250 homes
63	Cross Lane, West Mersea, Essex	100 homes
Sou	uth Colchester	1
28	Berechurch Hall Road, Colchester	500 homes
53	Gosbecks Road, Colchester, CO2 9JS	40 homes
37		80 homes
86	Old Heath Road, Colchester	15 homes
36	Mersea Road, Colchester	1000 homes
87	Mersea Road	600 homes
	st Colchester	
76	Land west of Western Approach	5 homes
	tree	3
29	Oak Road, Tiptree	500 homes
30	40 Oak Road, Tiptree, Colchester, CO5 0NF	30 homes
31	Kelvedon Road, Tiptree, Colchester, CO5 0LY	10 homes
	venhoe	10 11011100
8	Colchester Road, Wivenhoe, CO6 3QA	175 homes
	perton and Langenhoe	
9	Abberton Road, Fingringhoe, Colchester, CO5 7AW	50 homes
		1 30 11011103
Bo	KIEG	
Bo 2	Boxted Straight Road, Boxted Cross	150 homes

RO		
	whedge	
	Rectory Road, Rowhedge	40 homes
	appel and Wakes Colne	
47	,	75 homes
	Land north of the A1124, Wakes Colne and Chappel	35 homes
	Swan Grove, Chappel	35 homes
Eig	ht Ash Green	
10	, 0	180 homes
88	,	250 homes
Co	oford	
83	London Road, Copford	50 homes
82	London Road Marks Tey	30 homes
65	School Road Copford	175 homes
77	School Road Copford	50 homes
66	School Road, Copford	30 homes
67	124 School Road, Copford, Colchester, CO6 1BX	3 homes
	dham and Dedham Heath	
52	Long Road, Dedham	15 homes
	dham Green	
50	Plummers Road, Fordham, Colchester	25 homes
51	Moat Road, Fordham	20 homes
	eat Tey	
	Earls Colne Road, Great Tey	75 homes
	ngham	
	Wick Road, Langham, Colchester, CO4 5NJ	11 homes
	School Road, Langham	Homes
	Park Lane, Langham, Colchester CO4 5PA	450 homes
	gringhoe	
81		5 homes
	don	o mornio
	St Ives Road, Peldon	25 homes
	ver De La Haye	20 11011100
61	The Furze, Layer de La Haye, CO2 0JA	
<u> </u>		10 homes
48		10 homes
48	The Folley, Layer de la Haye CO2 0JA	60 homes
49	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ	
49 We	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt	60 homes 30 homes
49 We 32	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt	60 homes 30 homes 60 homes
49 We 32 33	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt Colchester Road, West Bergholt	60 homes 30 homes
49 We 32 33 Gre	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt Colchester Road, West Bergholt eat Horkesley	60 homes 30 homes 60 homes 90 homes
49 We 32 33 Gre 73	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt Colchester Road, West Bergholt eat Horkesley School Lane, Great Horkesley	60 homes 30 homes 60 homes 90 homes 13 homes
49 We 32 33 Gre 73 41	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt Colchester Road, West Bergholt eat Horkesley School Lane, Great Horkesley Ivy Lodge Road, Great Horkesely	60 homes 30 homes 60 homes 90 homes 13 homes 10 homes
49 We 32 33 Gre 73 41 84	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt Colchester Road, West Bergholt eat Horkesley School Lane, Great Horkesley Ivy Lodge Road, Great Horkesley Coach Road, Great Horkesley	60 homes 30 homes 60 homes 90 homes 13 homes 10 homes
49 We 32 33 Gre 73 41 84 85	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt Colchester Road, West Bergholt eat Horkesley School Lane, Great Horkesley Ivy Lodge Road, Great Horkesley Coach Road, Great Horkesley Coach Road, Great Horkesley, Colchester	60 homes 30 homes 60 homes 90 homes 13 homes 10 homes 110 homes
49 We 32 33 Gre 73 41 84 85 44	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt Colchester Road, West Bergholt eat Horkesley School Lane, Great Horkesley Ivy Lodge Road, Great Horkesley Coach Road, Great Horkesley Coach Road, Great Horkesley, Colchester The Causeway, Great Horkesley, Colchester, CO6 4EQ	60 homes 30 homes 60 homes 90 homes 13 homes 10 homes 165 homes 110 homes 70 homes
49 We 32 33 Gre 73 41 84 85 44	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt Colchester Road, West Bergholt eat Horkesley School Lane, Great Horkesley Ivy Lodge Road, Great Horkesley Coach Road, Great Horkesley Coach Road, Great Horkesley, Colchester The Causeway, Great Horkesley, Colchester, CO6 4EQ The Causeway, Great Horkesley, Essex, CO6 4HL	60 homes 30 homes 60 homes 90 homes 13 homes 10 homes 165 homes 110 homes 70 homes
49 We 32 33 Gre 73 41 84 85 44 57 45	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt Colchester Road, West Bergholt eat Horkesley School Lane, Great Horkesley Ivy Lodge Road, Great Horkesley Coach Road, Great Horkesley Coach Road, Great Horkesley, Colchester The Causeway, Great Horkesley, Colchester, CO6 4EQ The Causeway, Great Horkesley, Essex, CO6 4HL The Causeway, Great Horkesley, CO6 4HF	60 homes 30 homes 60 homes 90 homes 13 homes 10 homes 165 homes 110 homes 70 homes
49 We 32 33 Gre 73 41 84 85 44 57 45	The Folley, Layer de la Haye CO2 0JA 42 Malting Green Road, Layer-de-la-Haye, Colchester, CO2 0JJ st Begholt Land between White Hart Lane & Manor Road, West Bergholt Colchester Road, West Bergholt eat Horkesley School Lane, Great Horkesley Ivy Lodge Road, Great Horkesley Coach Road, Great Horkesley Coach Road, Great Horkesley, Colchester The Causeway, Great Horkesley, Colchester, CO6 4EQ The Causeway, Great Horkesley, Essex, CO6 4HL	60 homes 30 homes 60 homes 90 homes 13 homes 10 homes 165 homes 110 homes 70 homes

80 Land South of Marks Tey	4000 homes							
68 Godmans Lane, Marks Tey, Colchester, CO6 1LU 140 homes								
Aldham								
69 New Road, Birch	15 homes							
Birch								
70 Mill Lane, Birch	15 homes							
Messing								
71 Kelvedon Road Messing	30 homes							

Appendix D: Sites by MSOA

002	00	04	009	014	013	007		011		008		022	
	Site Ref	No. Homes				Site Ref	No. Homes	Site Ref	No. Homes	Site Ref	No. Homes	Site Ref	No. Homes
ent	6	10	ent	ent	ent	20	150	15	200	16	150	3	2000
No Development	27	50	No Development	No Development	No Development	12	150	19	100	13	50	75	
No De	26	100	No De	No De	No De	22	40	5	15			4	
	2	50						58	6			24	50
								21	40				
	North Col	chester				Colcheste Centre	r City	Colcheste Centre Regenerat East Colch	tion Area	Regenera East Colch		East Colch	nester

001		003		010 (s)	010 (1	n)	019		020		021		012		015		018	016		017	
Site Ref	No. Homes		Site Ref	No. Homes	Site Ref	No. Homes																
52	15	33	90	88	250	34	75	29	500	31	10	7	250	76	5	53	40		36	100 0	8	175
54	11	32	60	69	15	35	35	71	30	89	??	63	100			28	500		87	600		
64	100	51	20	82	30	60	35	70	15				1				1		25	40		
40	450	50	25	83	50	47	75	48	60										86	15		
56	150	10	180	77	50			61	10										37	80		
57	158			65	175			49	30										18	150		
45	400			66	30			9	50											l		
44	70			67	3			72	25									pment				
85	110			78	150 0			81	5									No Development				

001	003	010 (s)	010 (n)	019	020	021	012	015	018	016	017
84 165		80 68	400 0									
Dedham & Dedham Heath Langham Boxted Great Horkesley	West Bergholt Fordham Green Eight Ash Green	Eight Green Aldha Copfo Marks	n am ord	Great Tey Chappel and Wakes Colne	Tiptree, Birch Messing Layer de la Haye Abberton & Langenhoe Peldon Fingringho e	Tiptree	West Mersea	West Colchester	South Colchester		South Colchester Rowhedge Regenerati on area	Wivenhoe

Appendix E: Further Growth Options Detailed Analysis

Table 1below shows sites, and their growth options analysed compared to their proximity to main highway, public transport and active travel routes. By evaluating these elements, the aim is to identify sustainable and efficient strategies for future development. The focus is on enhancing connectivity and accessibility, ensuring that any proposed growth aligns with broader transportation and infrastructure goals.

Table 1: Detailed Assessment of 9 options

Site	Low	High	Nearby growth	Highway network	PT network	AT network
South Colchester						
Land south of Berechurch Hall Road	500	800	The Furze (10 homes) Land west The Folley (60 homes) Land South Malting Green Road (30 homes)	Junction improvements likely to be required – to be confirmed	Close to high frequency bus services - 5 bus routes (Routes 50 seasiders, 50A, 50B, S6 Colchester) Colchester train station available (45 mins by bus)	Close to LCWIP 10 Site located near residential area and rural area
Place Farm	15	80	Middlewick (600-1,000 homes) Rowhedge Business Park (40-100 homes)	Old Heath Road - over capacity at Old Heath Road/Whitehall Road Old Heath Road/Bourne Road LOS E	Close to high frequency bus services - 3 bus routes (Routes 16b, 174, S9 Colchester shuttles) Colchester and Wivenhoe train stations available (30 mins by bus)	Close to LCWIP 9
Middlewick	600	1000	Place Farm (15-80 homes) Rowhedge Business Park (40-100 homes)	Old Heath Road - over capacity at Old Heath Road/Whitehall Road Old Heath Road/Bourne Road LOS E	 Close to high frequency bus services 9 bus routes available (Routes 8, 67, 68, 86, etc) Colchester train station is the closest (20 mins by bus) 	Close to LCWIP 9 and 11 Walkable distance to Colchester Town Centre (25 mins)
Chappel and Wakes Co	olne					
Land north A1124/Land west of Station Road	35	75	 Land west of Station Road (75 homes) Land north A1124 (35 homes) Swan Grove (35 homes) 	Halstead Road signals LOS D	Close to high frequency bus services - 4 bus routes available (82, 82B, 88, 88A) Close to rail - Chappel and Wakes Colne Station	Not close to NCN/LCWIP routes Site is located in rural area

Site	Low	High	Nearby growth	Highway network	PT network	AT network
Copford						
The Car Boot field/Land North London Road	30	50	Marks Tey developments (total 5,640) Copford developments (total 113-258 homes)	A120 Coggeshall Road - over capacity A12 London Road - over capacity Next to Marks Tey development	Close to high frequency bus services - 10 bus routes available (X20 airlink, 71, 371, 320, etc) Close to rail and station - Marks Tey Station	Close to LCWIP 3
Land East of School Road	50	175	Marks Tey developments (total 5,640) The Car Boot field/Land North London Road (30-50 homes) Copford developments (total 63-83 homes)	A120 Coggeshall Road - over capacity A12 London Road - over capacity Next to Marks Tey development	Close to high frequency bus services - 10 bus routes available (X20 airlink, 71, 371, 320, etc) Close to rail - Marks Tey Station	Close to LCWIP 3
Great Horkesley						
Woodlands Farm/Black Brook Farm	158	400	Great Horkesley developments (total 368 homes)	A12 - over capacity	Close to high frequency bus services - 3 bus routes available (2, 84 Boomerang, 784 Boomerang) Colchester train station is the closest (30 mins by bus)	Close to LCWIP 1B
Langham						•
Land south School Road/Land north of Park Lane	100	450	Land opposite Wick Road (11 homes)	Ipswich Road - over capacity	 Close to low frequency bus services - 3 bus routes available (81, 81A, 694) Colchester Train Station available (> 1 hour by bus) 	Close to NCN Site located in rural area
Rowhedge						•
Rowhedge Business Park	40	100	Middlewick (600-1,000 homes) Place Farm (15-80 homes)	Junction improvements likely to be required – to be confirmed	Close to high frequency bus services 2 bus routes available (174 and S9 Colchester shuttles) Colchester Train Station available (45 mins by bus) Wivenhoe Train Station available (1 hour by bus)	Not close to NCN/LCWIP routes Site is located in rural area

Transport Evidence

The table presents recommendations derived from a comprehensive analysis of potential growth options. By focusing on these critical factors, the recommendations aim to promote sustainable development and enhance overall connectivity. The goal is to ensure that future growth is well-integrated with existing transportation infrastructure and supports broader accessibility objectives.

Table 2: Recommendations

Site	Low	High	Is there a local highway issue?	Is there a wider highway issue?	Recommendation
South Colchester					
Land south of Berechurch Hall Road	500	800	 Previous modelling doesn't indicate capacity issues in the area V/C B1026 Butt Road NB and B1022 Maldon Road SB reach 85% and 90% in the low scenario and 90% and 98% in the high scenario after the introduction of development trips 	1,500-2,500 car trips may be generated by the development Most likely with a destination in Colchester's congested city centre	High scenario as long as sustainable measures in place given the location and size of the development to address wider highway issues
Place Farm	15	80	Close to Old Heath Road (over capacity in some sections) V/C (Old Heath Road) reaches 93-95% in some sections after the introduction of development trips Close to Middlewick (600-1,000 homes)	Only 50-250 car trips may be generated by the development Most likely with a destination in Colchester's congested city centre	High scenario as long as sustainable measures in place given the location of the development to address wider highway issues
Middlewick	600	1000	 Close to Old Heath Road (over capacity in some sections) V/C shows an increase along B1025 Mersea Road in the high scenario reaching between 86 to 103% after the introduction of development trips 	 2,000-3,000 car trips may be generated by the development Most likely with a destination in Colchester's congested city centre 	 Both scenarios have similar impact on local and wider highway network High scenario as long as sustainable measures in place given the location of the development to address local and wider highway issues

Site	Low	High	Is there a local highway issue?	Is there a wider highway issue?	Recommendation
Chappel and Wakes	Colne				
Land north A1124/Land west of Station Road	35	75	 Previous modelling doesn't indicate capacity issues in the area V/C (Colchester Road) under 50% after the introduction of development trips (in both low and high scenario) 	 Only 80-180 car trips may be generated by the development Most likely with a destination in Colchester's congested city centre 	High scenario as long as sustainable measures in place to address wider highway issues
Copford					
The Car Boot field/Land North London Road	30	50	Close to A12, which operates close to capacity Close to Marks Tey	Similar amount of traffic will be generated by both scenarios (70-120) Most likely with a destination in Colchester's congested city centre	Both scenarios have similar impact on local (A12 already congested) and wider highway network High scenario as long as sustainable measures in place given the location of the development to address local and wider highway issues
Land East of School Road	50	175	Close to A12, which operates close to capacity Close to Marks Tey	Similar amount of traffic will be generated by both scenarios (120-400) Most likely with a destination in Colchester's congested city centre	Both scenarios have similar impact on local (A12 already congested) and wider highway network High scenario as long as sustainable measures in place given the location of the development to address local and wider highway issues
Great Horkesley					
Woodlands Farm/Black Brook Farm	158	400	Previous modelling doesn't indicate capacity issues in the area V/C on A134 under 40% after adding the development trips	However, the development is very close to city centre (11 minutes by car) 400-1,000 car trips may be generated by the development	High scenario as long as sustainable measures in place given the location and size of the development to address wider highway issues

Site	Low	High	Is there a local highway issue?	Is there a wider highway issue?	Recommendation			
				Most likely with a destination in Colchester's congested city centre				
Langham								
Land south School Road/Land north of Park Lane	100	450	V/C (Ipswich Road) 82% V/C (Ipswich Road) reaches 83% (low scenario)/84% (high scenario) in some sections after the introduction of development trips	200-1,000 car trips may be generated by the development Most likely with a destination in Colchester's congested city centre	High scenario as long as sustainable measures in place given the location and size of the development to address wider highway issues			
Rowhedge								
Rowhedge Business Park	40	100	Close to Old Heath Road (over capacity in some sections) V/C (Old Heath Road) reaches 93-95% in some sections after the introduction of development trips Close to Middlewick (600-1,000 homes)	Only 100-240 car trips may be generated by the development Most likely with a destination in Colchester's congested city centre	High scenario as long as sustainable measures in place given the location of the development to address wider highway issues			

Appendix F: Sustainable Transport Maps

Figure 1 shows the spatial options put forward by Colchester along with the existing Bus Network and the main Rapid Transit Route (RTS). The map clearly defines a gap in regular, efficient services in the south and north of the borough which deprives the spatial options in these areas of a frequent bus services. The east and west corridors are served well with frequent bus services. This illustrates a need for consistent route coverage throughout the borough so that most spatial options are picked up and regional inequalities in service are mitigated, within reason and capability.

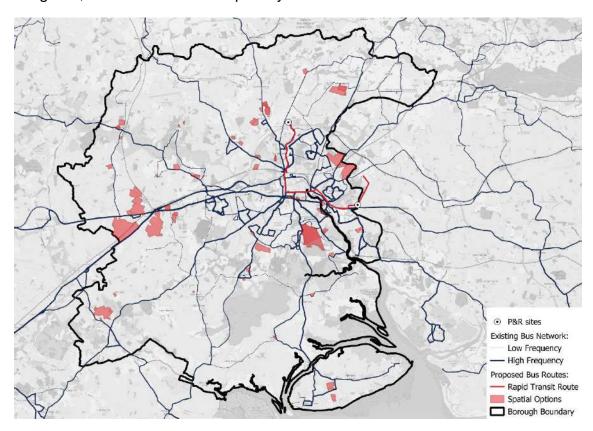


Figure 1: Spatial options and Bus Network with RTS

Figure 2 accompanies this assessment, showing the existing 'in-development' RTS route (shown in bold), alongside potential future extensions to the network - most notably linking to Marks Tey (onwards to Braintree) and Clacton.

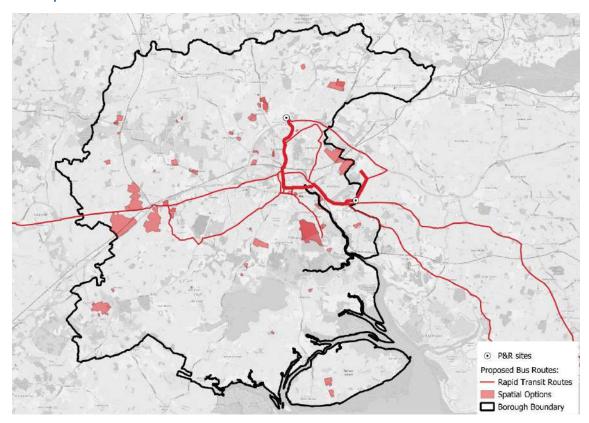


Figure 2: Spatial options and with RTS and potential extensions

While central Colchester is for the most part considered heavily within these plans, the spatial options to the west and east of the city would be captured by these potential extensions, while the rural north and south would not benefit from RTS infrastructure. Improvements to the existing bus network could be used to improve transit connectivity by increasing frequency and utilising hubs within the boroughs to provide connections to the RTS route(s).

Hubs would be heavily supported by an extensive borough-wide cycle network, much like the LCWIP proposals around the city centre. Figure 3 classifies two different type of cycling routes into the LCWIP and the National Cycle Network. It connects to many of the spatial options in the north and south of the borough as well as some of the western. Minor extensions to the proposed LCWIP routes would strengthen cycling connectivity for some spatial options – most notably at Marks Tey.

Mersea Island and Tiptree are unconnected to any major cycling route, Tiptree having the NCN on the periphery of the town, albeit a significant distance from Colchester.

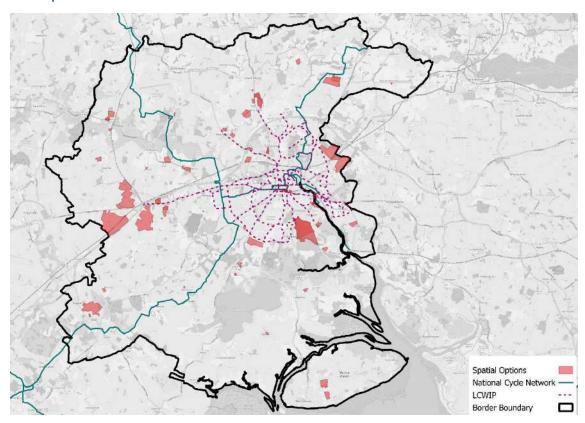


Figure 3: Spatial options and Cycle network

Public rights of way (PRoW) are paths, tracks and other routes that the public can use to pass over land at all times. Figure 4 shows the PRoW's within the borough limits as well as their location in relation to the spatial options.

Many of the spatial options have PRoW passing through the land area and offering connection to the road network. These routes can be used as a basis for active travel connections both within the development and connecting to the wider travel network. In urban areas this could connect to walking and cycling routes, while in more rural geographies, could connect developments to bus stops and village centres.

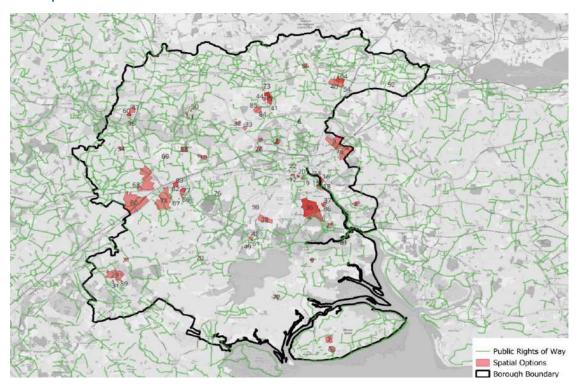


Figure 4: Spatial options and Public rights of way (PRoW)