EXD/071

Colchester Transport Strategy

Interactive Workshop

Highways | Major Projects

Think Safe Home Safe

RINGWAY JACOBS integrated expertise

Essex County Council

1. Welcome and Introduction

Colchester Transport Strategy

Essex County Council, in partnership with Colchester Borough Council, is developing a Transport Strategy for Colchester. This will be a long term strategy, focusing on all modes of transport, with a timeframe in line with the Local Plan.

The aim of the interactive workshop is to discuss transport issues in Colchester and develop a vision and objectives for the Strategy

The issues and approach to Colchester's future transport network will then be consulted on more widely with residents, businesses, represented groups and visitors to ensure that everyone understands the challenges and related objectives before developing and consulting on potential interventions.

2. Purpose of this Session

The purpose today's session is to agree on the transport issues within Colchester, and generate a set of objectives for the Strategy.

The session will be formed of two parts;

- *Presentation of the background data*
- *Discussion on the issues and objectives / vision*

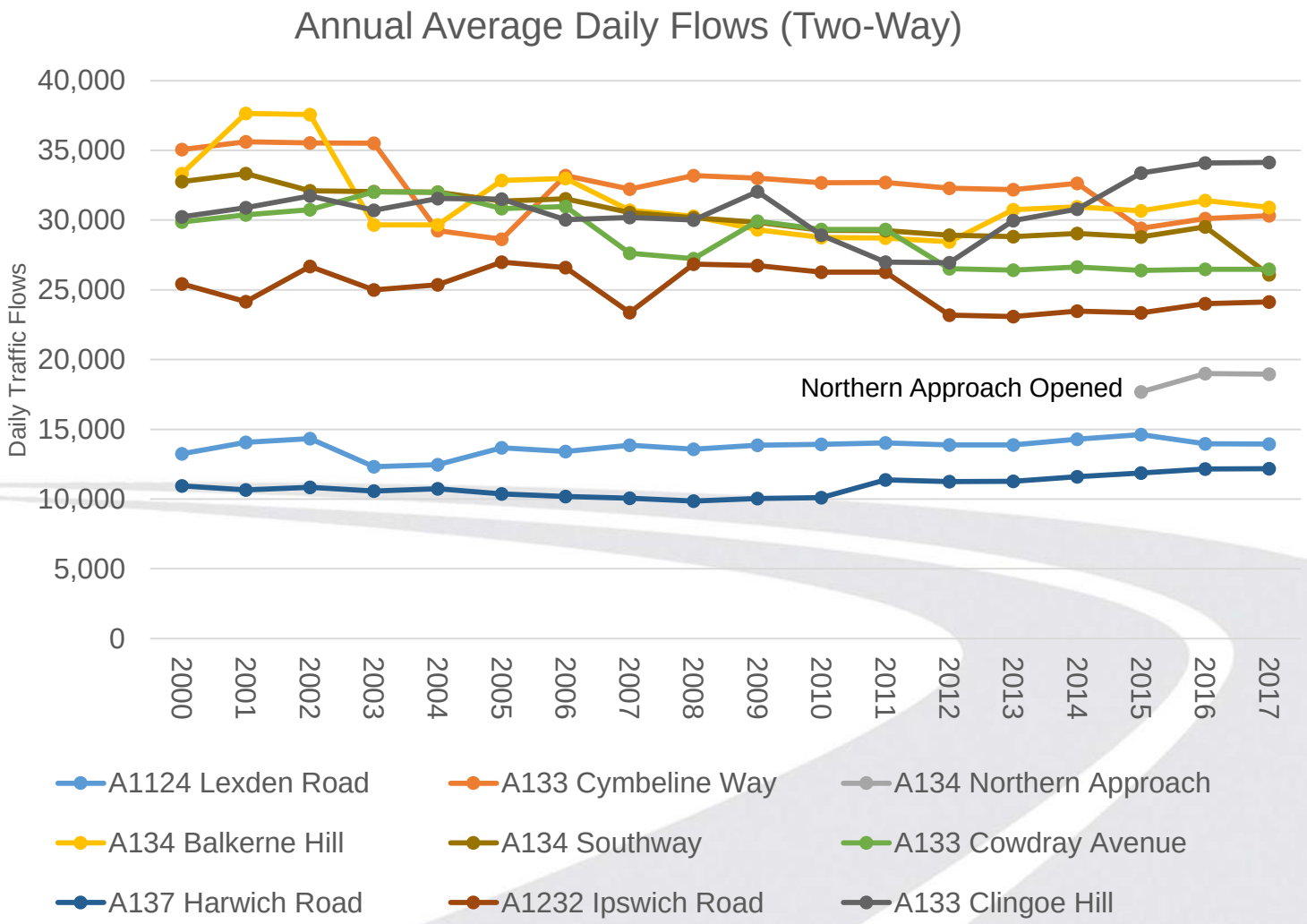
3. Progress Update

- **We (ECC/RJ) have now compiled a detailed understanding of the current and future transport picture in Colchester:**
  - Review of available traffic data
  - Review of Transport and Other Policies
  - Review of previous schemes (compiled full list)
  - Understand current demand
  - Understand the future situation

4. A Quick Quiz..

What % growth have Colchester's key urban routes experienced since 2008?

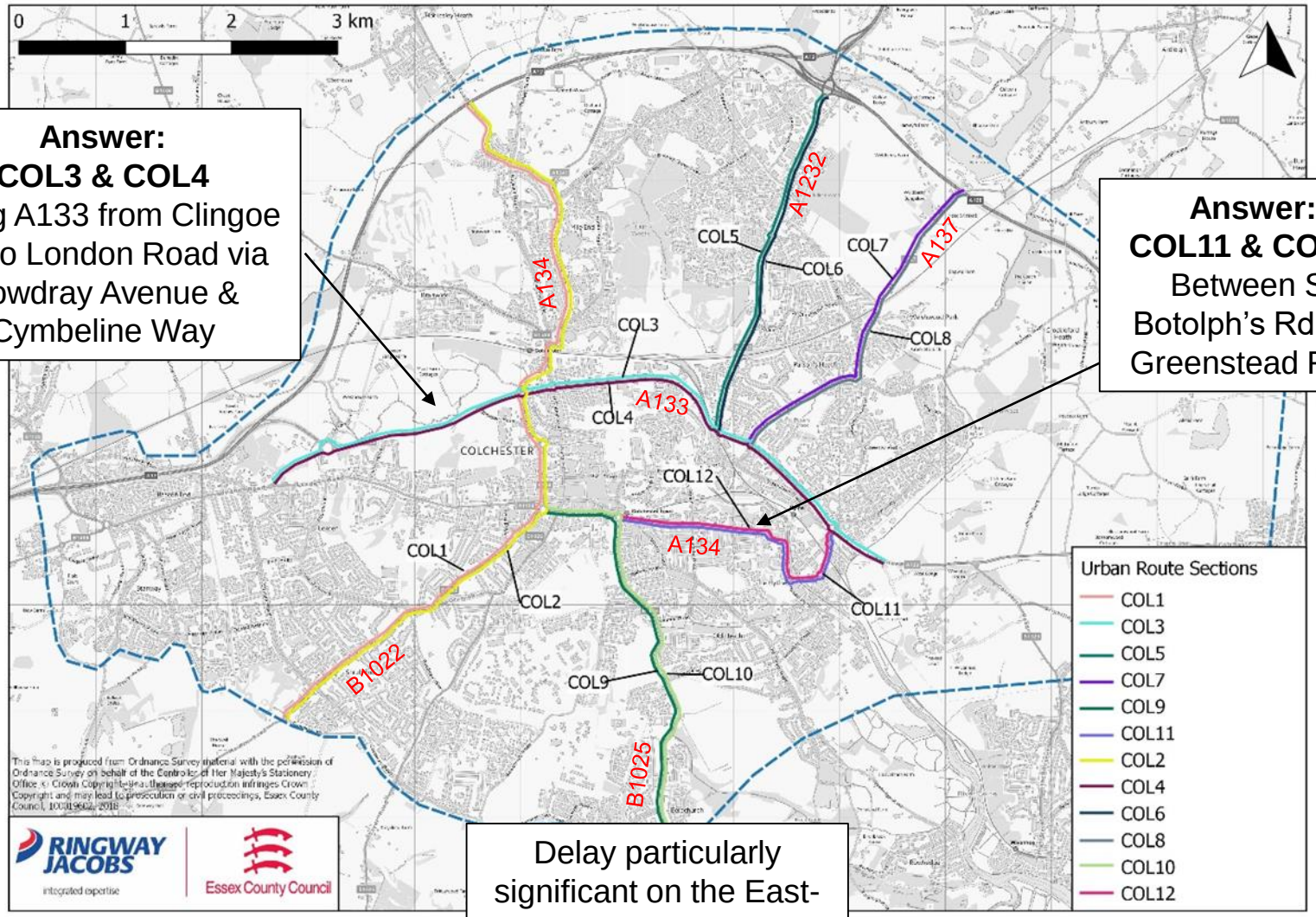
- Growth in daily flows (AADF) = **-1.49%**
- Overall decrease in flows


Annual Average Daily Flows (Two-Way)
Daily Traffic Flows
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
Northern Approach Opened
A1124 Lexden Road
A133 Cymbeline Way
A134 Northern Approach
A134 Balkerne Hill
A134 Southway
A133 Cowdray Avenue
A137 Harwich Road
A1232 Ipswich Road
A133 Clingoe Hill

Of Colchester's urban network, which sections see the highest recorded delay?

Answer:
COL3 & COL4
Along A133 from Clingoe Hill to London Road via Cowdray Avenue & Cymbeline Way

Answer:
COL11 & COL12
Between St Botolph's Rdbt & Greenstead Rdbt



Delay particularly significant on the East-West routes

What is the annual cost of delay on Colchester's urban network?

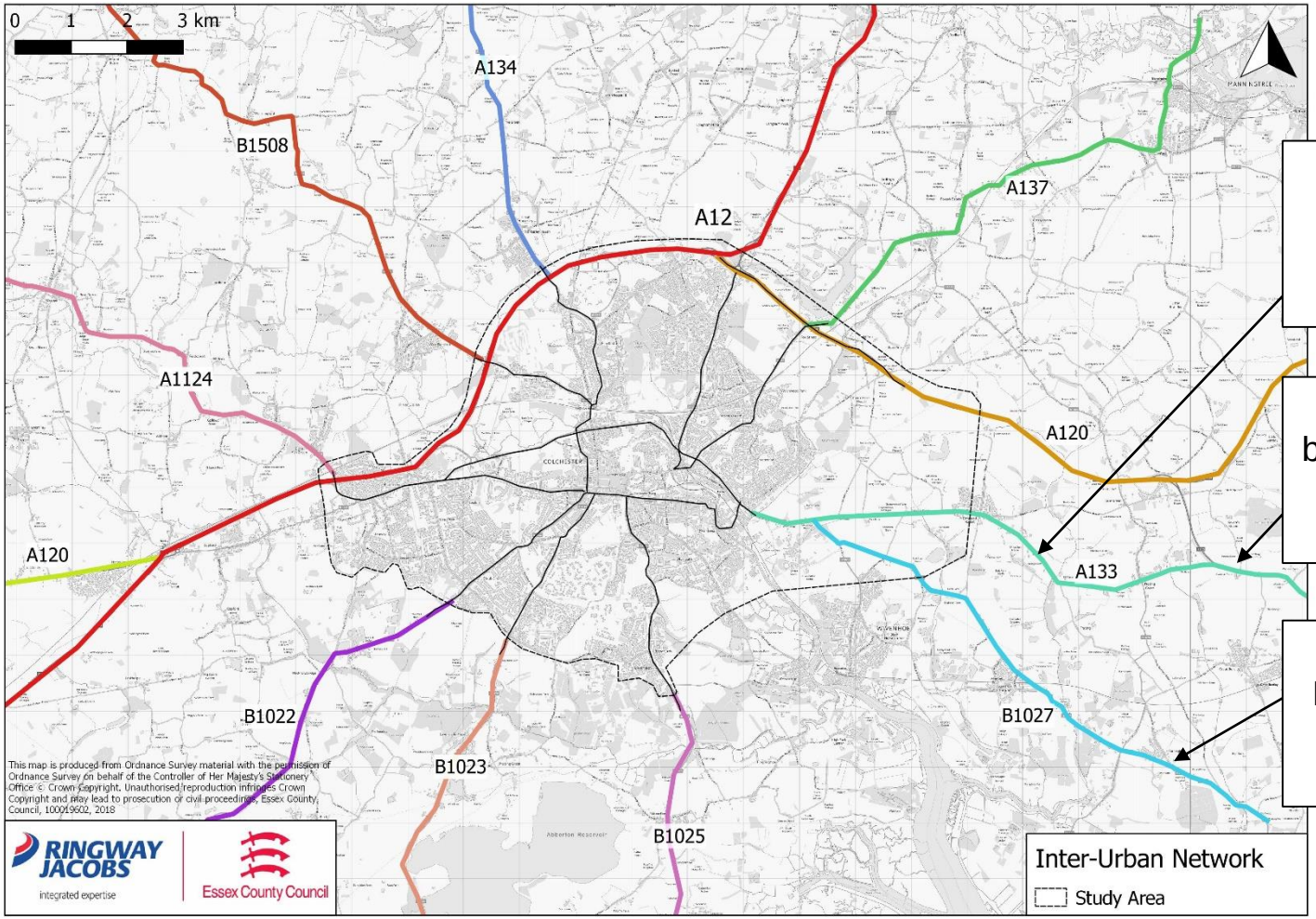
Cost of Delay = The cost of delay is calculated as the sum of the excess vehicle hours compared to a free flow journey time. The economic costs are calculated for 246 days.

Answer:

- £20,320,000 *(2017)*

Essex Total = £118,420,000

Which of the below inter-urban routes around Colchester are the least reliable in terms of journey time? *(excluding A12 & A120)*



A133 between Clacton & Colchester (westbound)

A133 / B1033 between Frinton-on-Sea (westbound)

B1027 / B1029 Brightlingsea to Colchester (westbound)

Which Colchester train station has seen the biggest increase in usage from 2015-2017?

Answer:

- Hythe Station
- 49% increase in entries and exists from 2014/15 to 2016/17

Station Name	2014-15 Station Entries and Exits	2015-16 Station Entries and Exits	2016-17 Station Entries and Exits	Change from 14/15 to 15/16	% Increase (from 14/15 to 16/17)
Colchester North	4,457,306	4,460,848	4,475,581	18,275	0.4%
Colchester Town	771,804	772,418	774,969	3,165	0.4%
Hythe	137,440	158,564	204,786	67,346	**49%**
Wivenhoe	378,700	383,030	393,050	14,350	4%
Marks Tey	503,540	523,218	557,456	53,916	11%

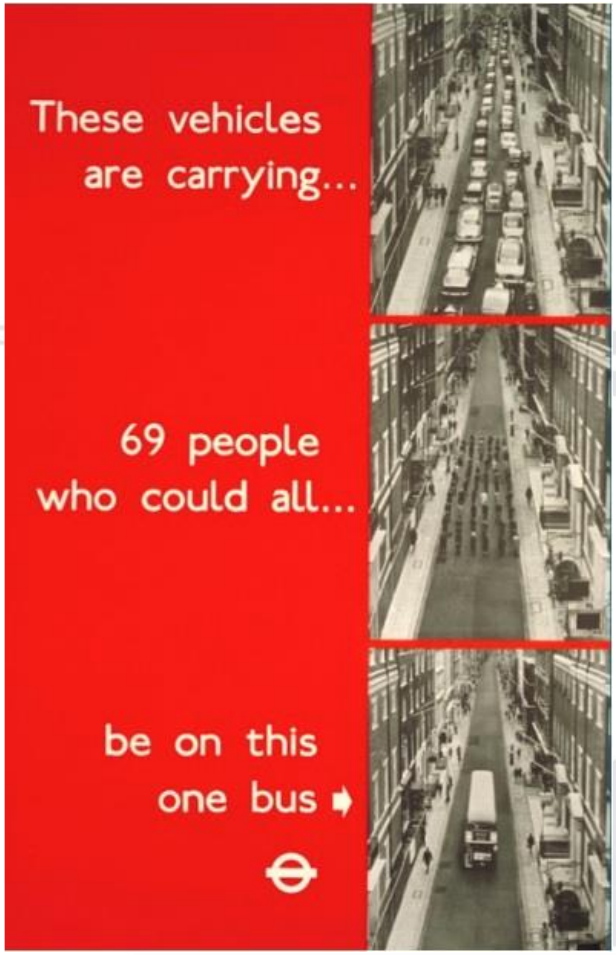
How many buses travel down Colchester High Street on an average weekday?

Answer:

- 910 buses (per day)

Look at the road space and how different modes of transport use it?

Look at the road space and how different modes of transport use it?



1960s TfL Advertising Campaign

Cycling makes up what % of journeys to work in Colchester's urban area?

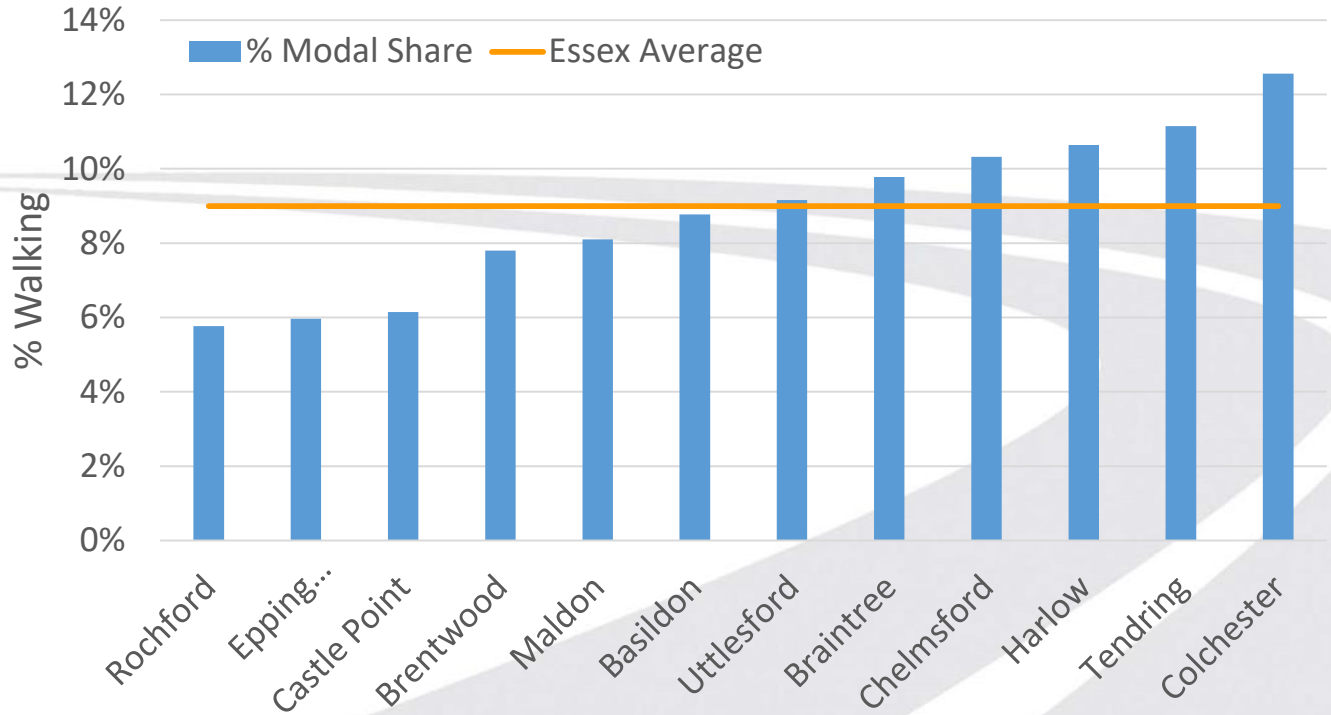
Answer: 7%

Urban Area	Cycle % Mode Share	Total Cycle Trips
Basildon	4%	858
Braintree	5%	296
Canvey Island	8%	304
Chelmsford	7%	1,491
Clacton	7%	538
Colchester	**7%**	**2,138**
Harlow	5%	817
Harwich	10%	205
Maldon	7%	209

Source: 2011 Census

Walking makes up what % of journeys to work in Colchester's urban area?

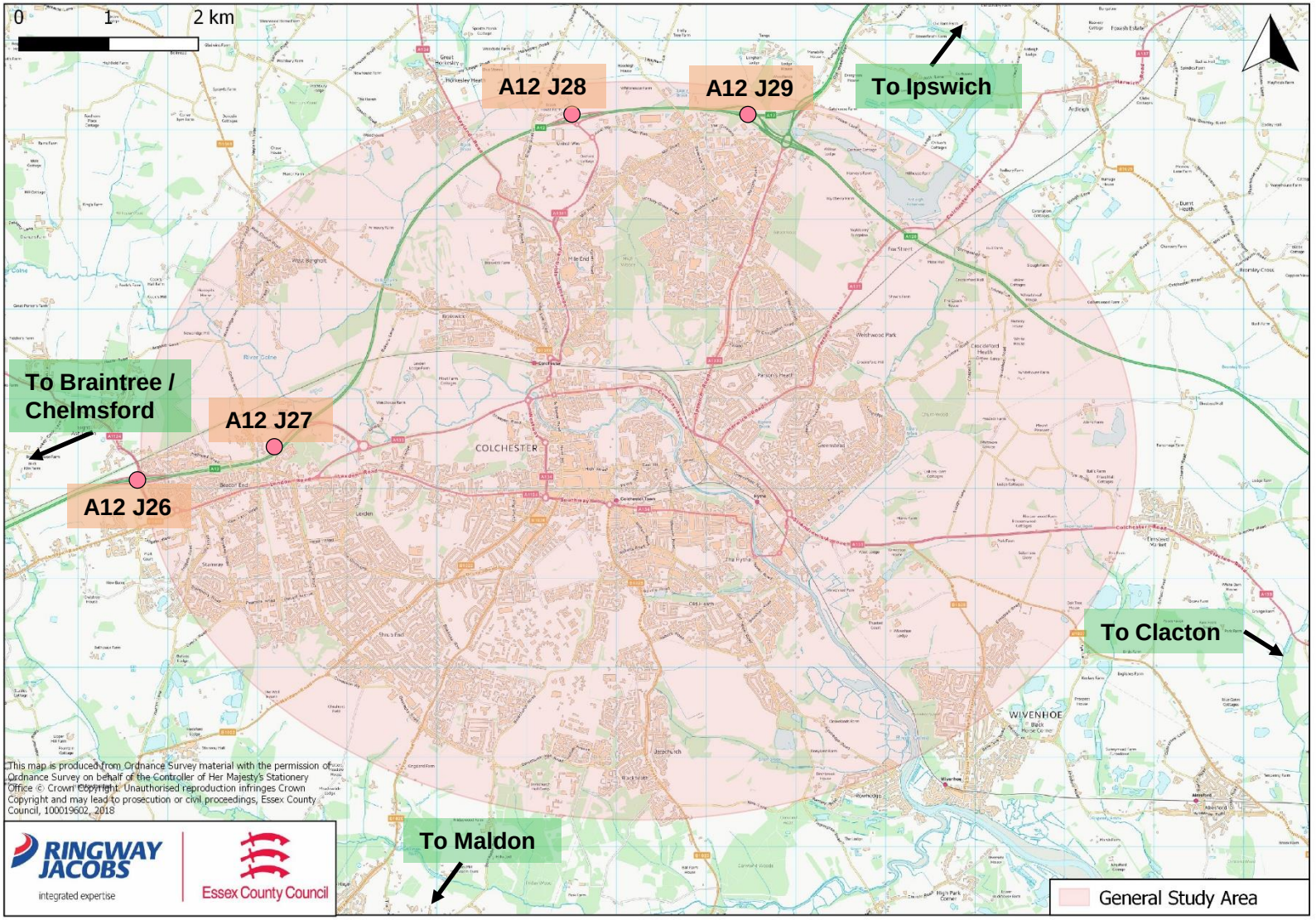
Answer: 13%



Source: 2011 Census

5. Findings/Current Issues

Study Area


0
1
2 km
A12 J28
A12 J29
To Ipswich
To Braintree / Chelmsford
A12 J27
A12 J26
COLCHESTER
To Clacton
WIVENHOE
To Maldon
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RINGWAY JACOBS
integrated expertise
Essex County Council
General Study Area

Current Travel Patterns (2011 Census)

- Colchester has a high self-containment rate of 69%
- Over 63% of all JTW trips in the Borough are made by car, as either drivers or passengers
- 91% of people commuting into Colchester (from external areas) for work travel via car or van
- 8% of work trips across the Borough are made by train, 4% by bus, 4% by bicycle and 13% on foot
- 25% of people living and working internally in Colchester commute on foot
- 7% of people living and working internally in Colchester commute by bicycle
- 40% of all journey to work trips made by car are under 5km

Traffic Flows

- DfT Annual Average Daily Flows (AADF)

Count Site	Count ID	Year	All Vehicles (AADF)	% HGV
A12 / A120				
A12 (between J26 & J27)	6208	2016	102,518	7%
A12 (between J27 & J28)	56178	2016	74,143	8%
A12 / A120 slip road)	48229	2017	38,812	12%
A120 (close to Fox Street)	38246	2017	42,102	6%
Radial Routes				
A1124 Lexden Road	57478	2017	13,935	1%
A133 Cymbeline Way	77154	2017	**30,319**	3%
A134 Northern Approach	86032	2017	18,951	1%
A134 Balkerne Hill	36712	2017	**30,905**	1%
A134 Southway	56659	2017	26,075	1%
A133 Cowdray Avenue	6672	2017	26,476	2%
A137 Harwich Road	77152	2017	12,180	2%
A1232 Ipswich Road	37621	2017	24,127	4%
A133 Clingoe Hill	26686	2017	**34,146**	2%

Highest daily flows are recorded on Clingoe Hill, Balkerne Hill and Cymbeline Way = >30,000 AADF

Traffic Flows - Peak Periods

- Ad Hoc Traffic Counts (ATC)
- 5 Day Average

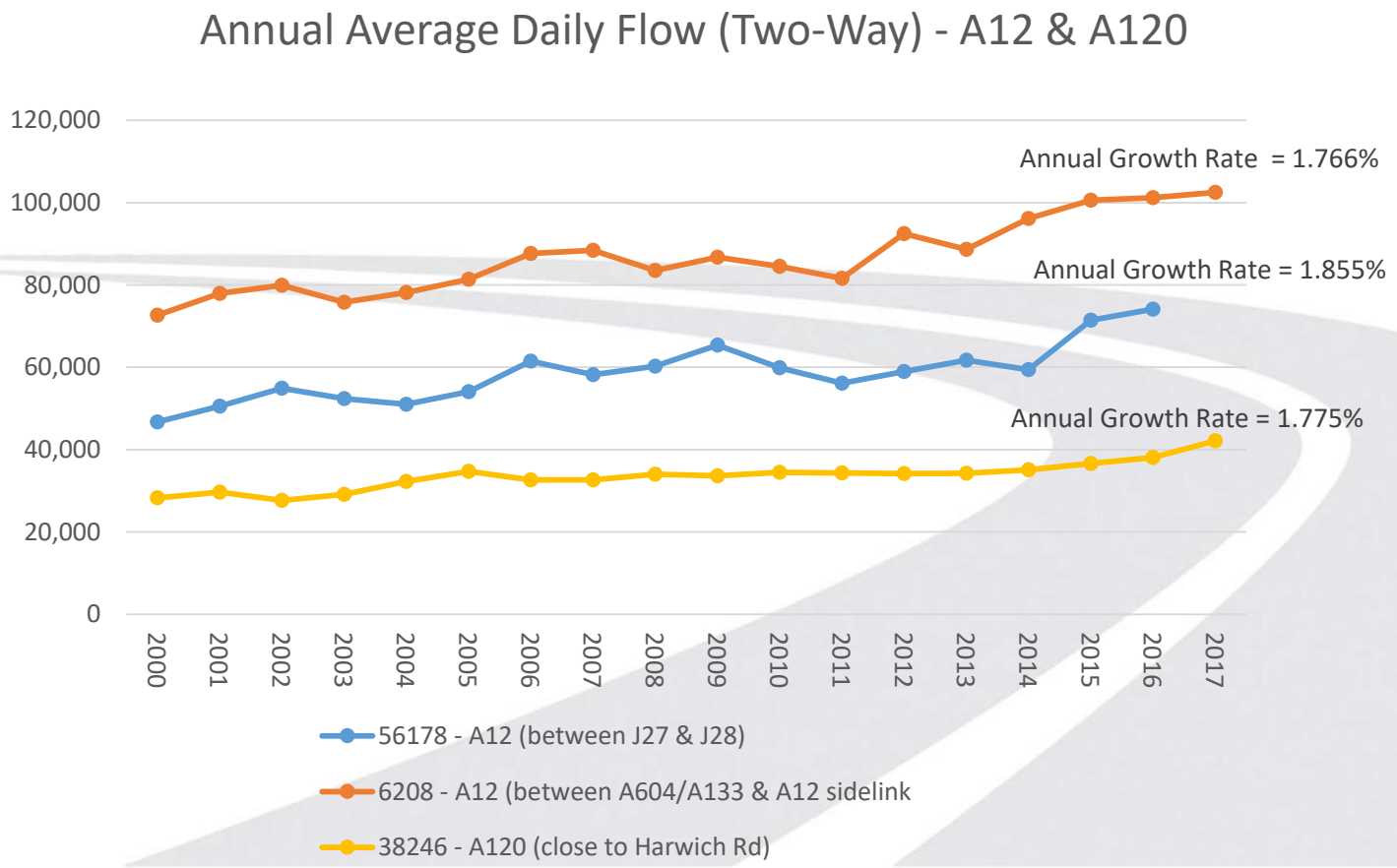
Highest **AM** flow = A133 Clingoe Hill (WB)

	ATC Year	Dir	Daily Flows	AM Peak Period		Inter Peak	PM Peak Period	
			24hrs	07:00-08:00	08:00-09:00	(10:00-16:00)	16:00-17:00	17:00-18:00
A133 Cymbeline Way	2017	EB	16,840	**1,212**	1,131	6,467	1,098	1,038
		WB	18,349	1,172	907	7,004	**1,474**	**1,395**
A134 Balkerne Hill	2016	SB	**18,476**	927	1,098	7,123	**1,361**	1,291
		NB	16,351	1,151	1,136	6,398	1,091	999
A133 Clingoe Hill	2016	EB	16,827	848	1,176	6,573	**1,355**	**1,417**
		WB	15,009	**1,271**	916	5,822	970	951
A134 Southway	2013	EB	13,528	592	811	5,218	936	914
		WB	16,590	1,078	1,101	6,635	997	834
A1232 Ipswich Rd	2017	NB	12,709	890	854	4,784	913	945
		SB	12,847	883	973	4,614	824	839
A134 Northern Approach	2017	SB	10,232	801	822	3,624	699	816
		NB	11,122	696	736	4,009	917	968
A137 Harwich Rd	2017	NEB	7,206	259	353	2,413	518	545
		SWB	6,618	523	638	2,278	386	412

Highest **PM** flow = A133 Cymbeline Way (WB)

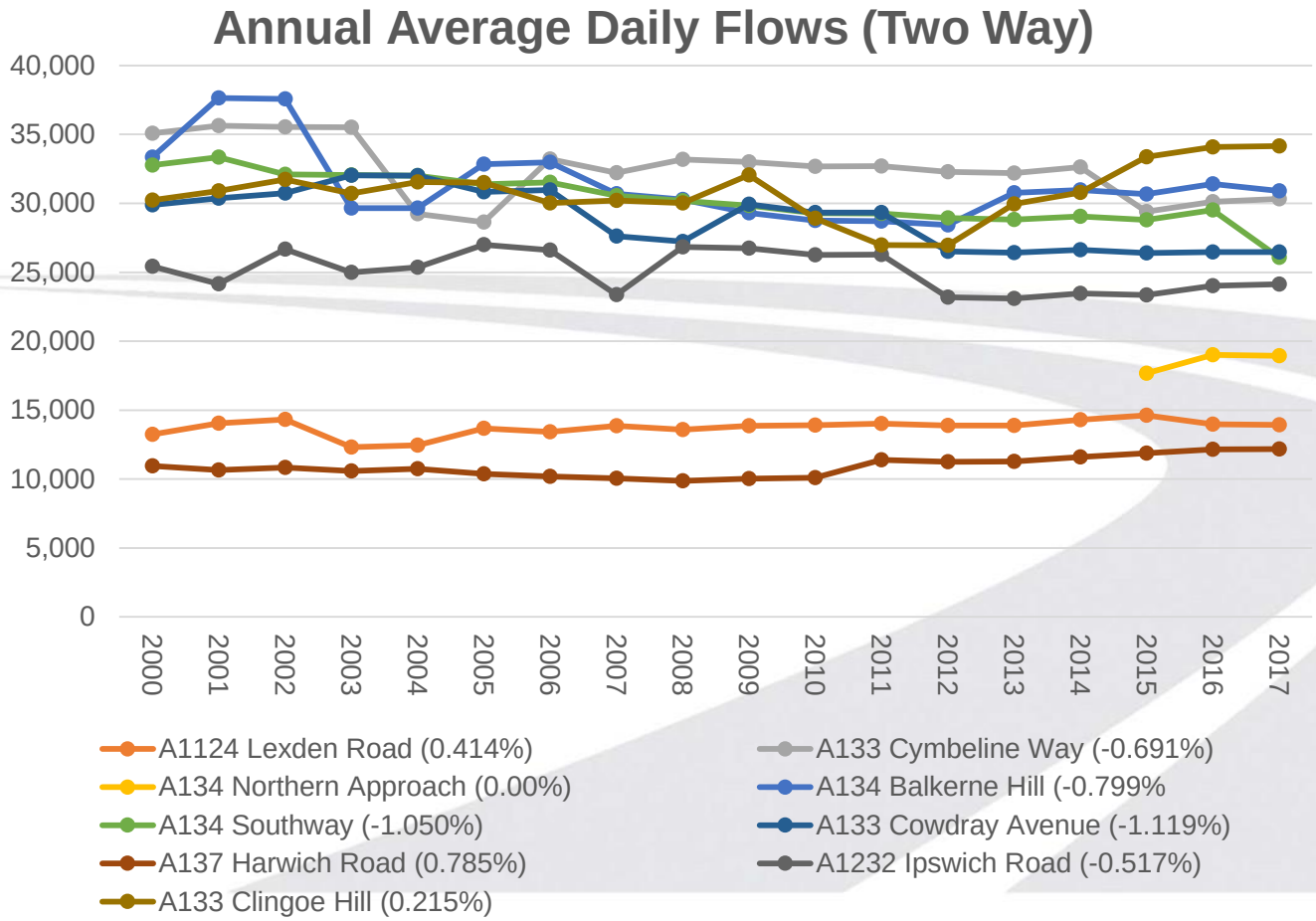
Growth on the Strategic Network

- DfT Annual Average Daily Flows (AADF) 2000-2017
- Since 2008, there has been 23% growth on the A12



Growth on Key Urban Routes

- DfT Annual Average Daily Flows (AADF) 2000-2017
- Average growth rate = **-1.49%** (excluding Northern Approach)



Little growth in traffic flows on radial routes

Journey Time Reliability and Delay

How it's calculated:

- Teletrac 2017 Data
- Measured by comparing the peak flow to the 'free flow' along each route
- 'Free flow' is measured as a median journey time/speed between 20:00 - 24:00

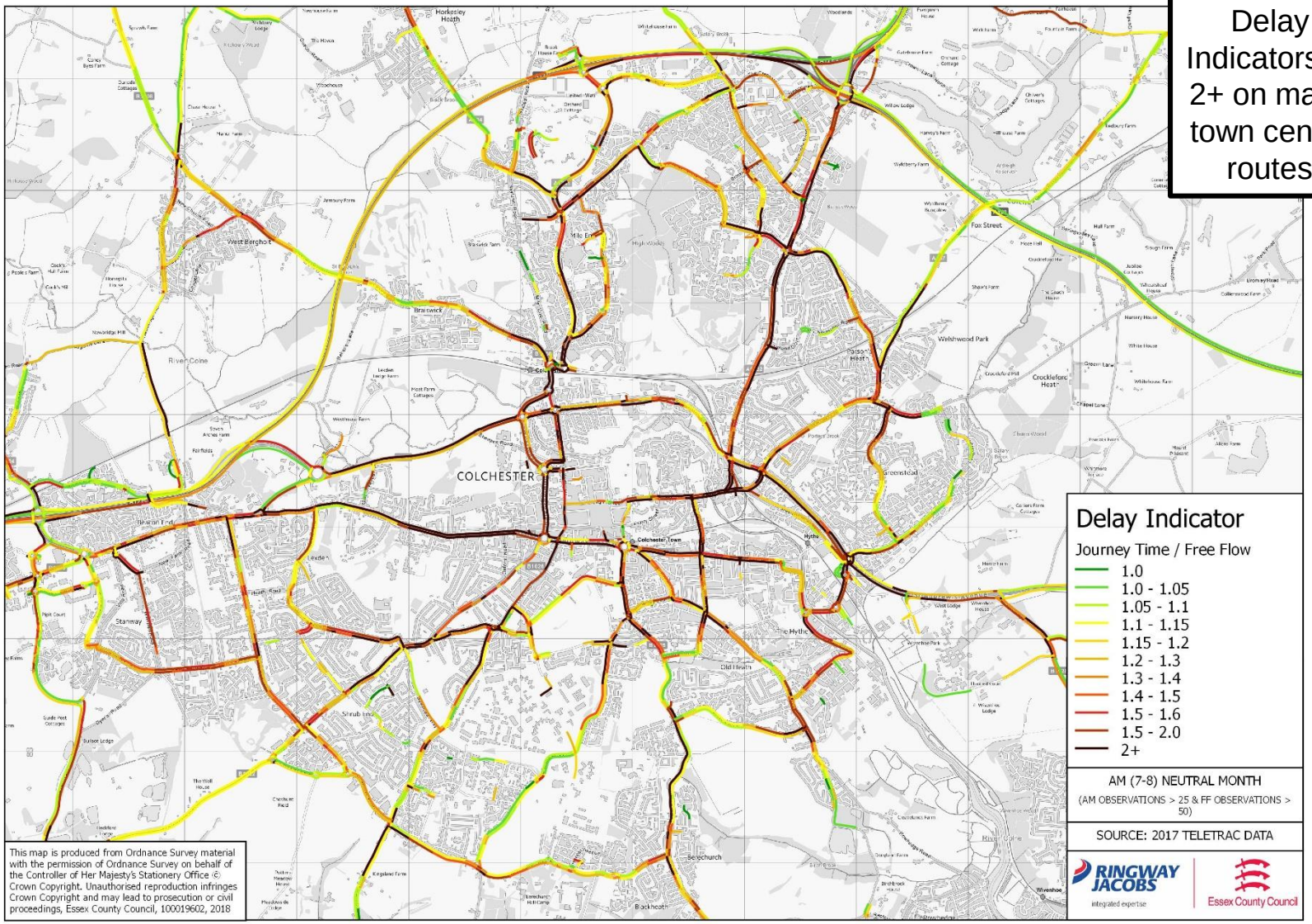
Journey Time Reliability (JTR)

- Is a measure of reliability of a particular route or section
- Calculated as the % of trips that vary from the free-flow journey time + 20%.
- The benchmark for urban routes is 90% and 95% for inter-urban routes

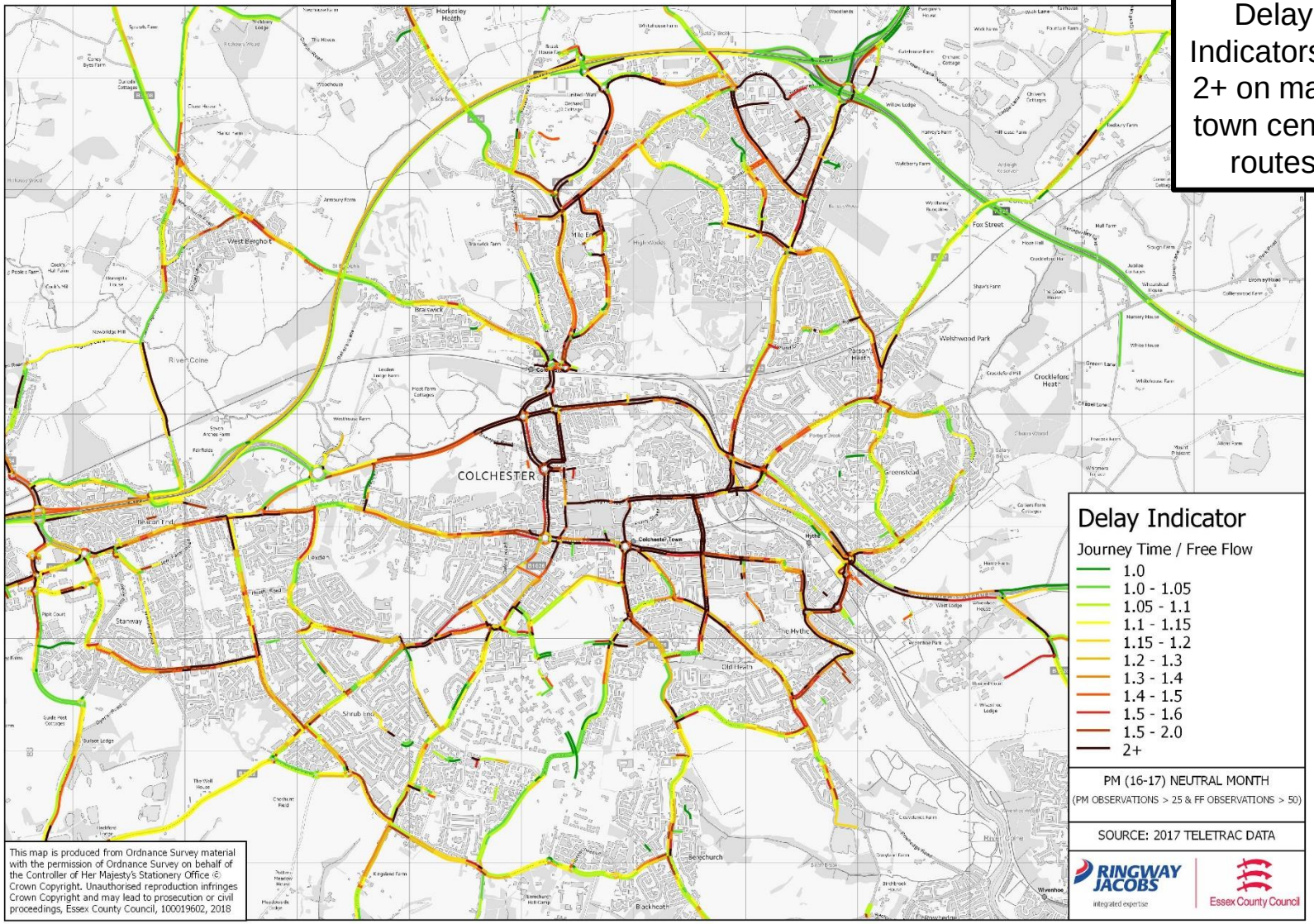
Delay Indicator

- Is a measure of the average delay experienced along a route or section
- Is expressed as a factor of journey times compared to free-flow journey times
- E.g. A delay indicator of 1.2 means it will take 20% longer than under free-flow conditions or a 5 minute journey at free-flow will take 6 minutes in the period analysed

Delay Indicator – AM (07:00-08:00) Peak hour



Delay Indicator – PM (16:00-17:00) Peak hour



Essex's Urban Networks

- JTR = Peak flow compared to 'free flow'
- Colchester JTR = 91.30% (above 90% benchmark)
- Reliability has improved since 2016

Route	Description	Journey Time Reliability (JTR) Percentage of Journeys within Average + 20%				Delay Indicator			
		2016	2017	Change from 16-17	Annual Cost of JTR (£) (2017)	2016	2017	Change from 16-17	Annual Cost of JTR (£) (2017)
SAF	Saffron Walden	85.70%	85.70%	▲	£670,000	1.75	1.73	▼	£2,120,000
LOU	Loughton	88.20%	86.60%	▼	£1,690,000	1.86	1.91	▲	£5,100,000
HAL	Halstead	89.40%	87.10%	▼	£610,000	1.5	1.55	▲	£1,810,000
RAY	Rayleigh	86.60%	87.90%	▲	£2,160,000	1.81	1.75	▼	£6,120,000
BRA	Braintree	89.20%	88.40%	▼	£1,560,000	1.78	1.81	▲	£5,740,000
CHE	Chelmsford	88.90%	89.10%	▲	£6,270,000	1.83	1.79	▼	£22,770,000
BIL	Billericay	90.60%	89.70%	▼	£1,130,000	1.48	1.52	▲	£3,810,000
WIT	Witham	91.50%	90.30%	▼	£1,130,000	1.61	1.67	▲	£5,090,000
WAL	Waltham Abbey	90.50%	90.30%	▼	£2,650,000	1.62	1.64	▲	£7,570,000
COL	Colchester	90.20%	**91.30%**	▲	**£4,630,000**	1.59	**1.58**	▼	**£20,320,000**
BRE	Brentwood	89.70%	91.50%	▲	£2,290,000	1.74	1.69	▼	£9,640,000
WIC	Wickford	91.00%	91.70%	▲	£810,000	1.45	1.46	▲	£2,310,000
HAR	Harlow	93.00%	92.10%	▼	£3,760,000	1.46	1.46	=	£14,920,000
MAL	Maldon	94.80%	95.00%	▲	£510,000	1.26	1.26	=	£2,320,000
BAS	Basildon	94.60%	95.20%	▲	£1,510,000	1.37	1.33	▼	£8,780,000
Overall	Essex	91.10%	91.4%	0.25%	£31,380,000	1.61	1.61	-0.01	£118,420,000

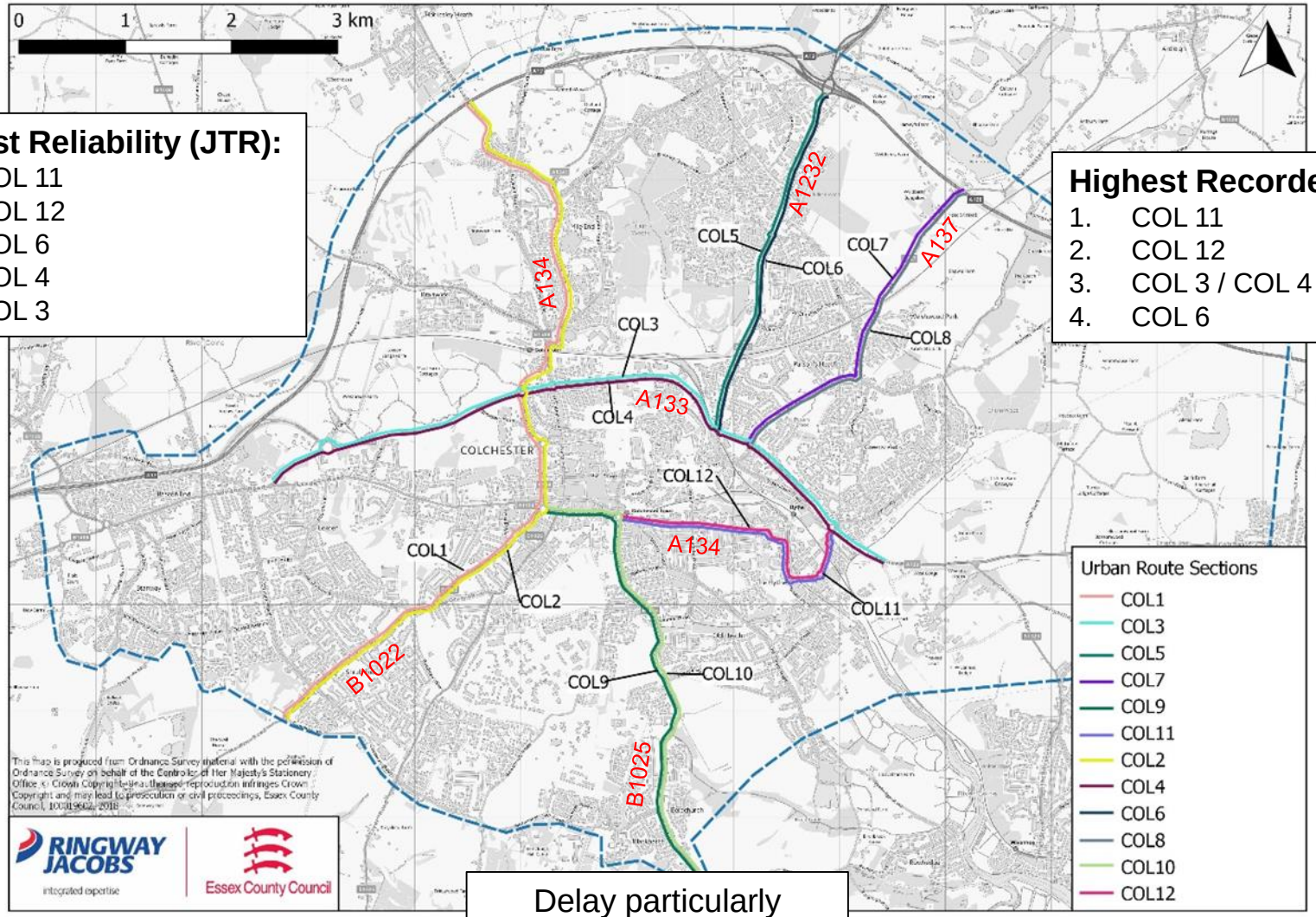
Colchester's Urban Sections

Lowest Reliability (JTR):

1. COL 11
2. COL 12
3. COL 6
4. COL 4
5. COL 3

Highest Recorded Delay:

1. COL 11
2. COL 12
3. COL 3 / COL 4
4. COL 6

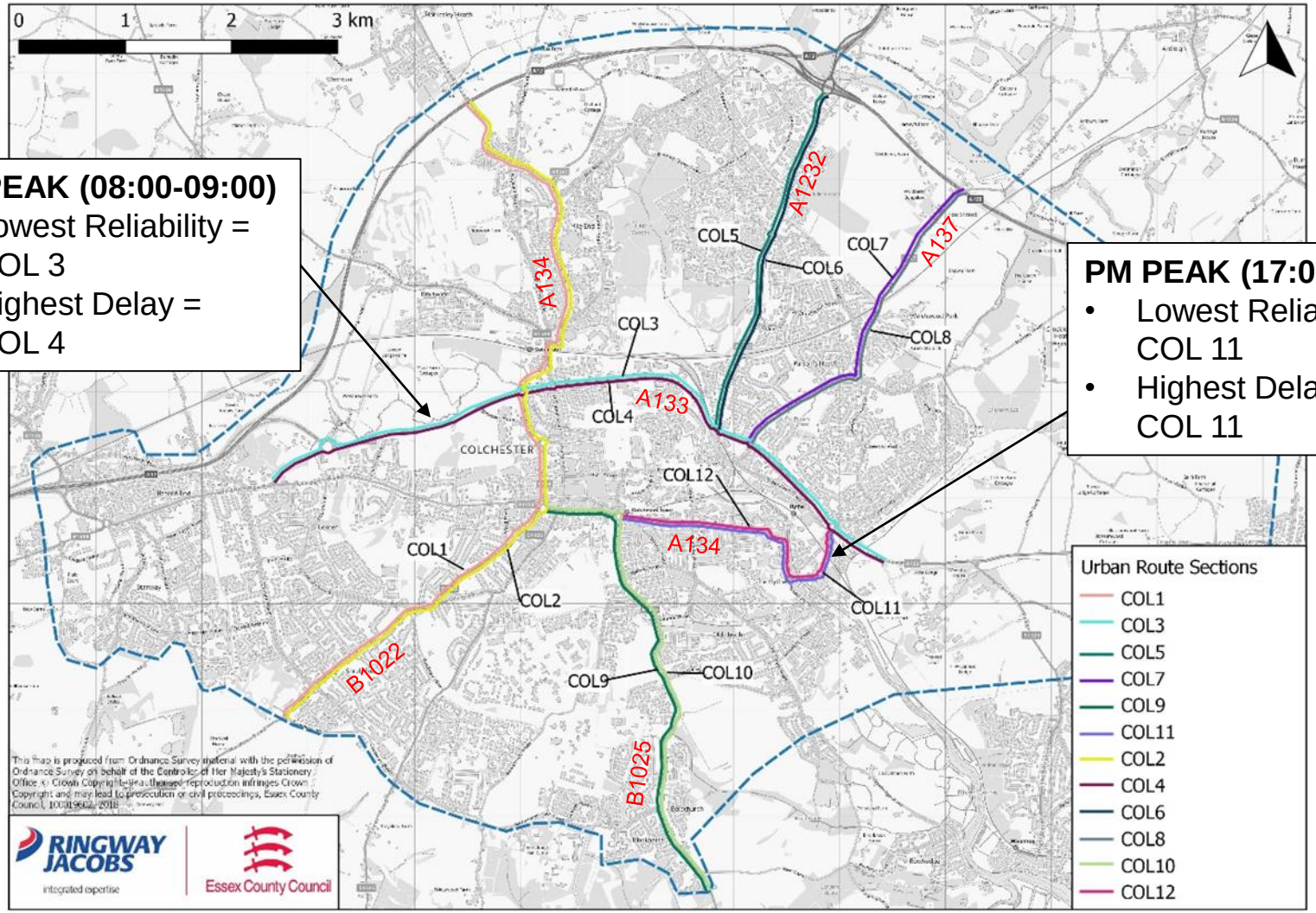


Delay particularly significant on the East-West routes

Urban Sections – Peak Hours

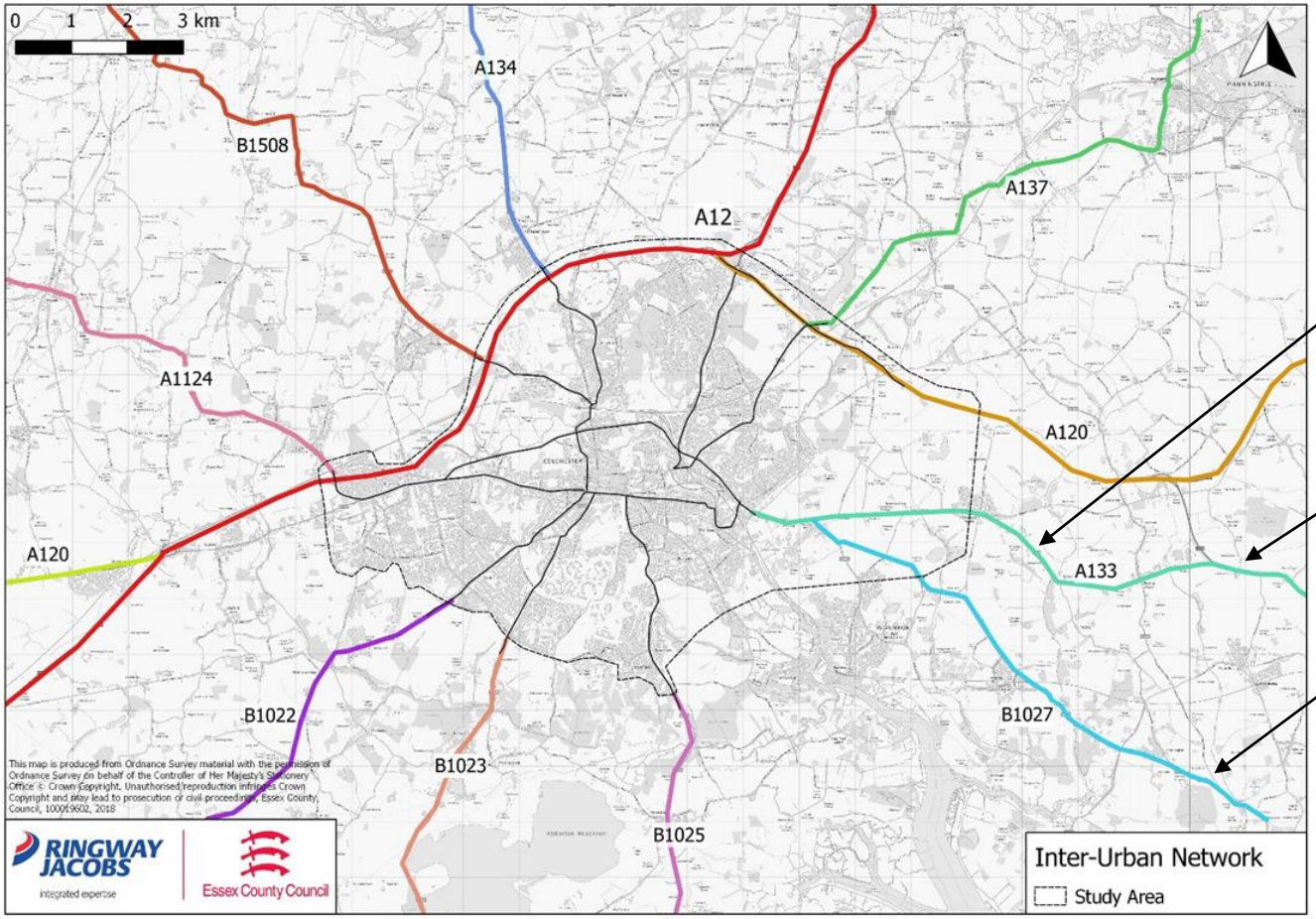
AM PEAK (08:00-09:00)
- Lowest Reliability = COL 3
- Highest Delay = COL 4

PM PEAK (17:00-18:00)
- Lowest Reliability = COL 11
- Highest Delay = COL 11



Inter-Urban Network

- Worst reliability and delay recorded on the routes to the east
- A12 also experiences poor JTR and delay in peak periods



A133 between Clacton & Colchester (westbound)

A133 / B1033 between Frinton-on-Sea (westbound)

B1027 / B1029 Brightlingsea to Colchester (westbound)

Sustainable Transport

Bus Usage

- 2011 Census:
  - 6% of journey's to work are made by bus
  - Only 3% in the rural areas

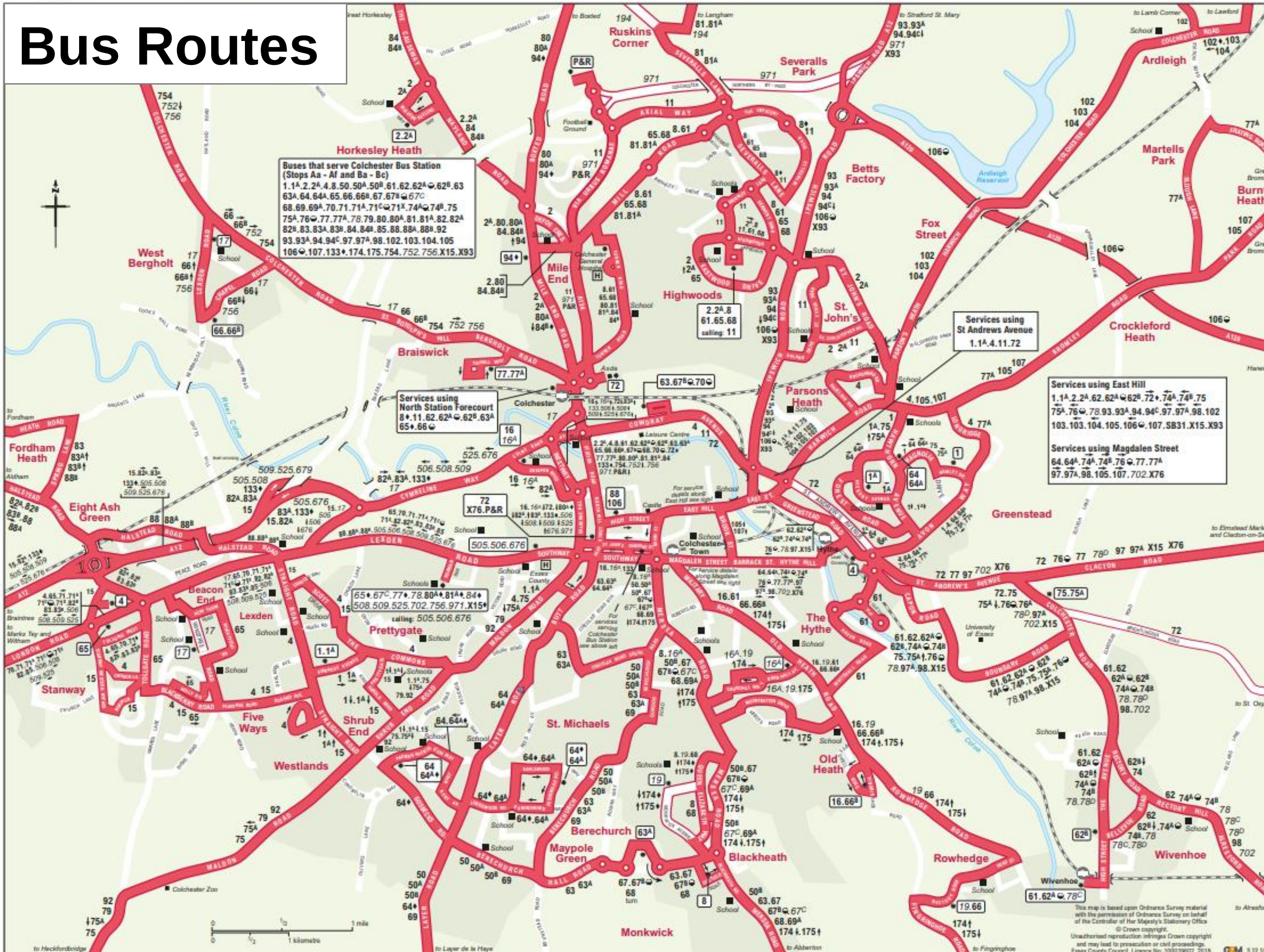
Method of Travel to Work	Total Trips	% of Total	% Urban	% Rural
Bus, minibus or coach	4,824	6%	7%	3%

- According to the Passenger Transport Team, **1,544** buses enter the town centre loop per day, with an average bus passenger capacity of 50

- Based on the 2011 Census figure of **4,824** trips made by bus, mini, or coach, it would indicate that there is significant additional capacity available on the buses in Colchester

- Full utilisation of the bus services, has the potential to remove thousands of car journeys from the network

Bus Routes


Ruskins Corner
Severalls Park
Ardleigh
Horkesley Heath
West Bergholt
Martells Park
Burnt Heath
Betts Factory
Fox Street
Highwoods
Mile End
St. John's
Crockleford Heath
Braiswick
Parsons Heath
Fordham Heath
Eight Ash Green
Greenstead
Colchester
Colchester Town
Beacon End
Lexden
Prettygate
The Hythe
Stanway
Five Ways
Shrub End
Westlands
St. Michaels
Old Heath
Berechurch
Maypole Green
Blackheath
Rowhedge
Wivenhoe
Monkwick
Services using St Andrews Avenue
1.1A.4.11.72
Services using East Hill
Services using Magdalen Street
Services using North Station Forecourt
Buses that serve Colchester Bus Station
Ardleigh Reservoir
Colchester Zoo
University of Essex
1 mile
1 kilometre

Designated Bus Lanes

- North Hill – southbound (uphill)
- Middleborough – right turn to North Hill
- Middleborough – southbound
- Middleborough – North from North Hill
- High Street – Right turn to Queen Street
- North Station Road – south from Essex Hall Roundabout
- Maldon Road – northbound from Beaconsfield Avenue
- Osborne Street – straight ahead to St John’s Street
- Hythe Hill – eastbound at Maudlyn Street
- Hythe Station Road – at Hythe Station
- Nayland Road – at Northern Approach Road

Designated Bus Lanes

Hythe Station

Hythe Hill

Park & Ride

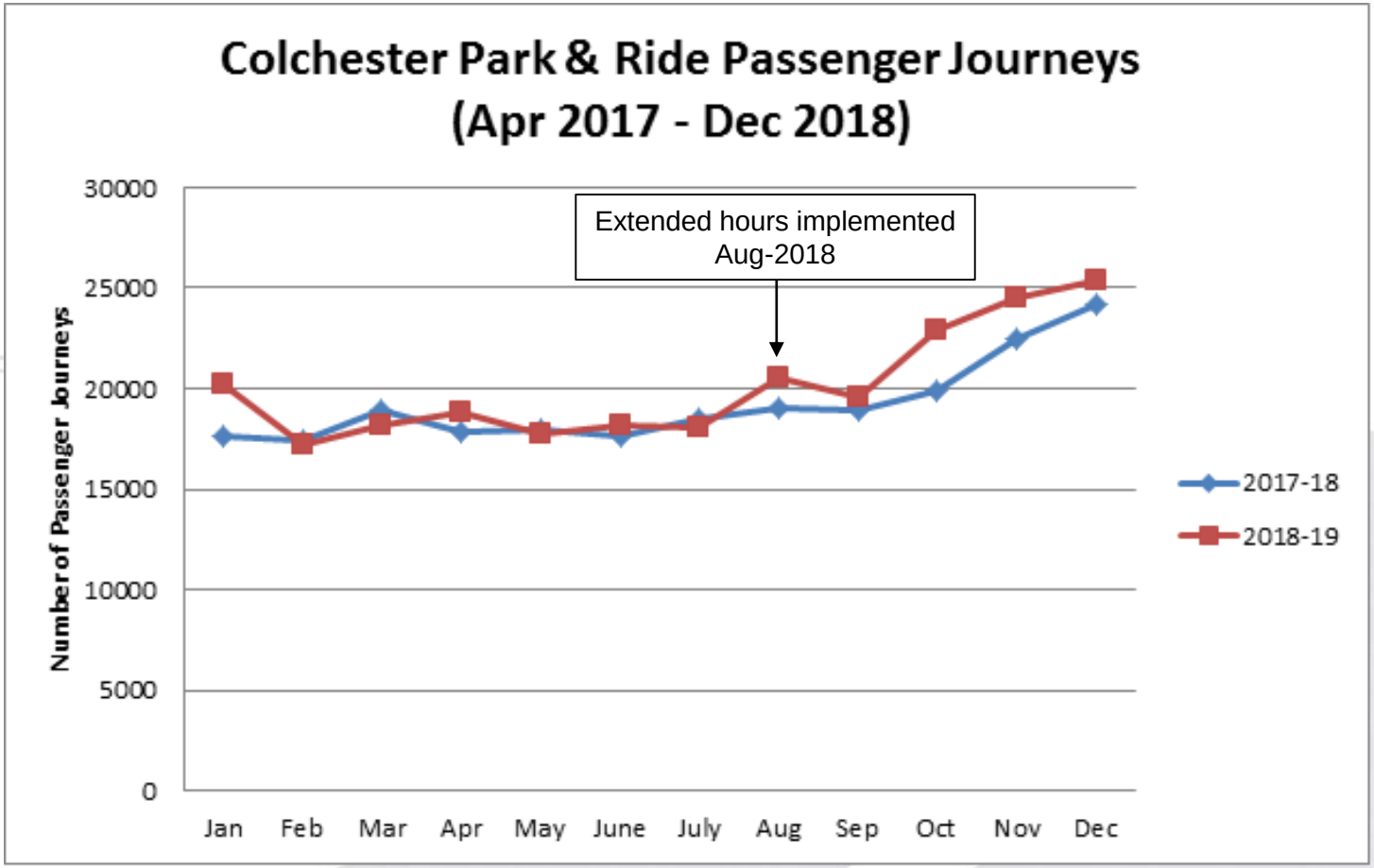
- Introduced 2015
- Provides a service every 15mins (Monday to Friday) from 05:30am-9pm (hours recently extended for a 1yr trial period) at £3.00
- Bus priority measures exist along route
- Journey times of >8 mins to Colchester Station and >12 minutes to the Town Centre
- Further opportunity to enhance uptake of the service

Feedback from ECC Engagement Survey (2017):

Current Users	Members of Public	Opportunities
• Happy with service • Bus arrives on time • Staff are friendly • Relaxing journey into town • Environmentally friendly • Easy access to various roads • Bypasses traffic for easy transfer to town	• Buses are prompt • Would use if in alternative sites • Use some park and rides in other towns • Understand the concept • Understand the benefits • Question around value for money compared to town car parks	• More advertisement • Look at potential re-routing • Future work with the hospital looking at parking demand • Contactless payment • Introductory offers • Work in conjunction with local businesses

Park & Ride

- Passenger journeys on the Park & Ride are increasing



Parking

- Large number of private and corporate parking spaces available in the town centre

- **2014 Colchester Parking Model** used the below figures in their assessment:
  - 6,500 spaces, with an additional 2,000 free on street spaces

    (Excludes private non-residential parking and residential parking, parking for retail parks over 1km from the town centre or supermarkets)

  - Study identified that Colchester has an excess of parking supply over current demand, however additional capacity is not necessarily in desirable locations

- All day parking prices are cheap in comparison to other nearby towns
  - Osborne Street NCP, Middleborough and St John's Multi-storey all offer all day parking (Mon-Friday) for £3.50

- Competitive parking prices encourages more cars onto the road network

Rail Usage

- 2011 Census:
  - 13% of people commuting into Colchester for work travel by train
- All Colchester Stations have seen an increase in usage since 2014/15
- Increase at central stations is small compared to Hythe and Marks Tey

Station Name	**2014-15** Entries and Exits	**2015-16** Entries and Exits	**2016-17** Entries and Exits	**Change** (14/15 to 15/16)	**% Increase** (14/15 to 16/17)
Colchester North	4,457,306	4,460,848	4,475,581	18,275	0.41%
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Marks Tey	503,540	523,218	557,456	53,916	**11%**

49% increase at Hythe Station in 2 years

Rail Usage

- Passenger capacity on GEML during peaks is a key issue

- Network Rail Anglia Route Study (2016), predicts the following by 2043, if no investment is carried out:
  - Over 80% standing space will be utilised between London and Chelmsford
  - 85-100% of seats will be taken between Chelmsford and Marks Tey
  - Up to 85% of seats will be taken between Marks Tey to Colchester

- GEML major freight route - balance between off-peak passenger services and freight services is a key issue
  - Weekday actual freight movements currently average 49 trains per day

- Abellio Greater Anglia investing £1.5bill for a new fleet of trains, due to be rolled out by the end of 2020
  - The fleet will include 1,043 new carriages, equating to 169 trains
  - It is expected that this will provide at least 20% more seats on every Greater Anglia route

Local Cycling and Walking Infrastructure Plans

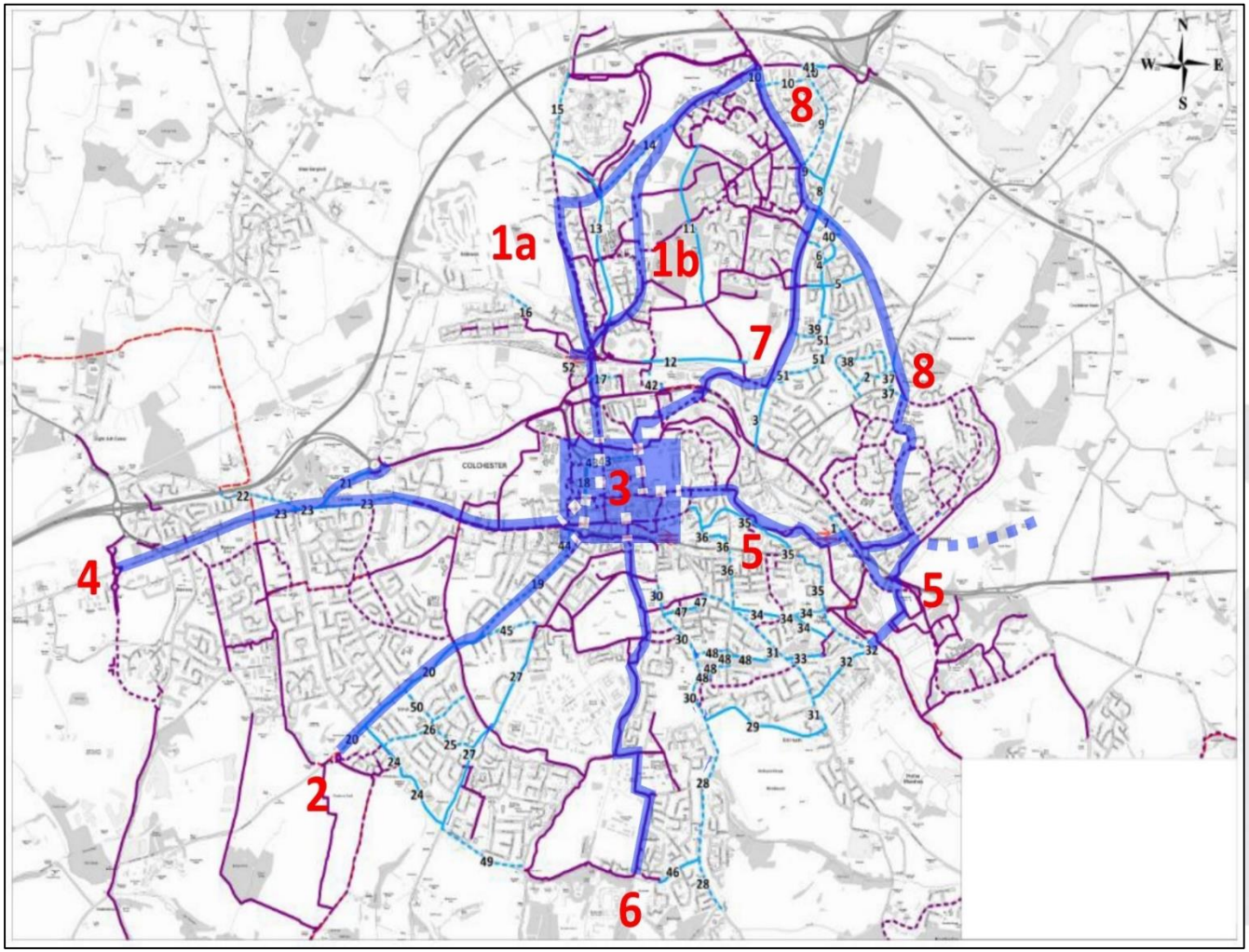
Essex County Council were selected by the Department for Transport to be part of the LCWIP programme working with WSP consultancy and Living Streets. The aim is to develop network plans for both walking and cycling. This will enable us to prioritise investment decisions based upon a robust methodology which considers future demand and the propensity to both walk and cycle. This has been a collaborative process between ECC and Colchester Borough Council.

The programme aims to help us build upon the Cycling Actions Plans and develop network plans for both walking and cycling across Essex. Progress to date:

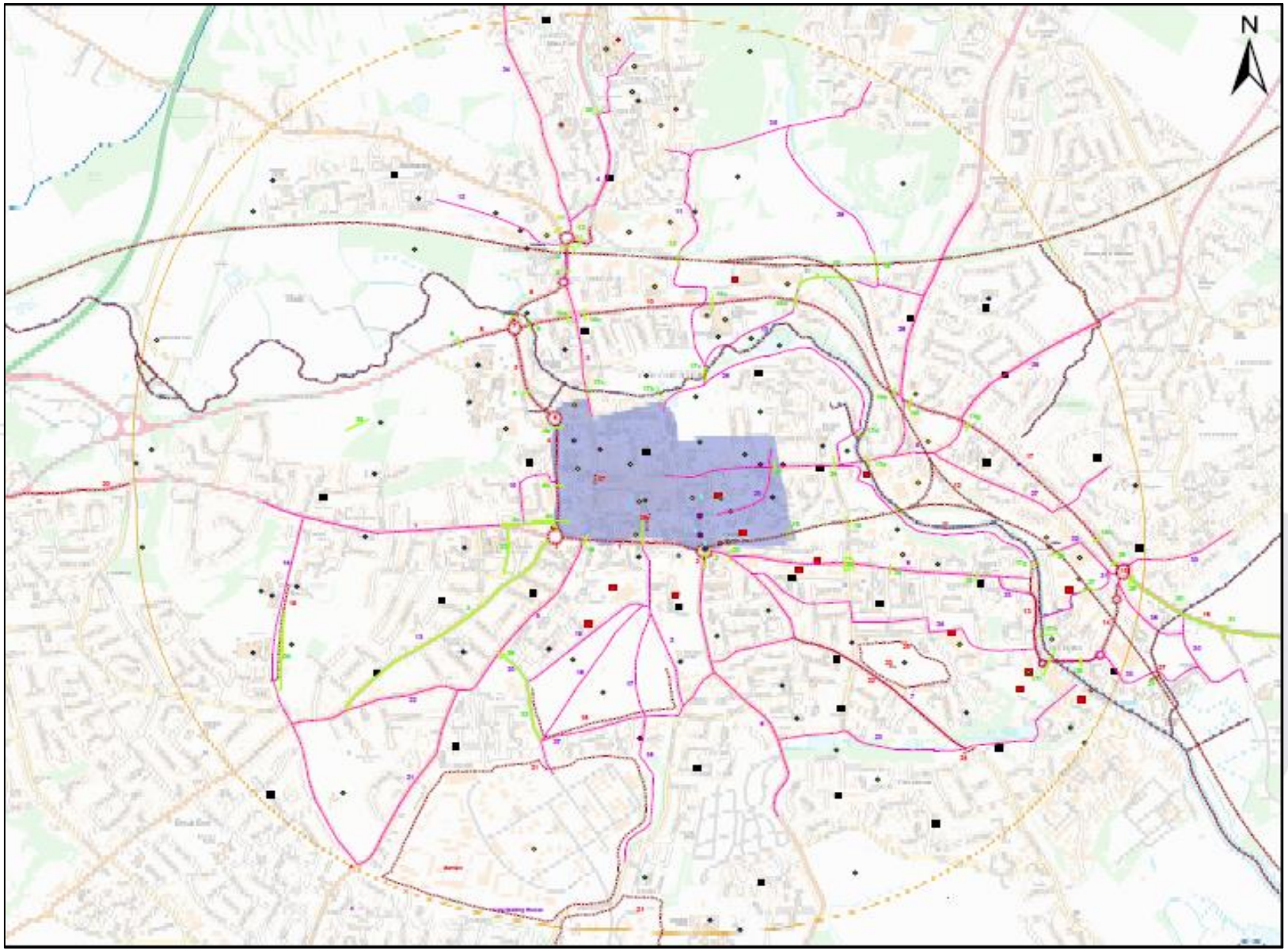
- Emerging Walking and cycling network maps developed from the LCWIP DfT Stage 3 (cycling) and 4 (walking) planning processes
- Key routes are being audited and will be prioritised
- Walking network has been assessed against the Colchester Walkability analysis (undertaken by Dr Ashley Dhanani from UCL)
- Cycling network has been assessed against the Cycling Action plan, permanent cycle count data and origin and destination data

Cycling Investment

- Colchester Cycling Action Plan (CAP)
- LCWIP – priority routes for investment

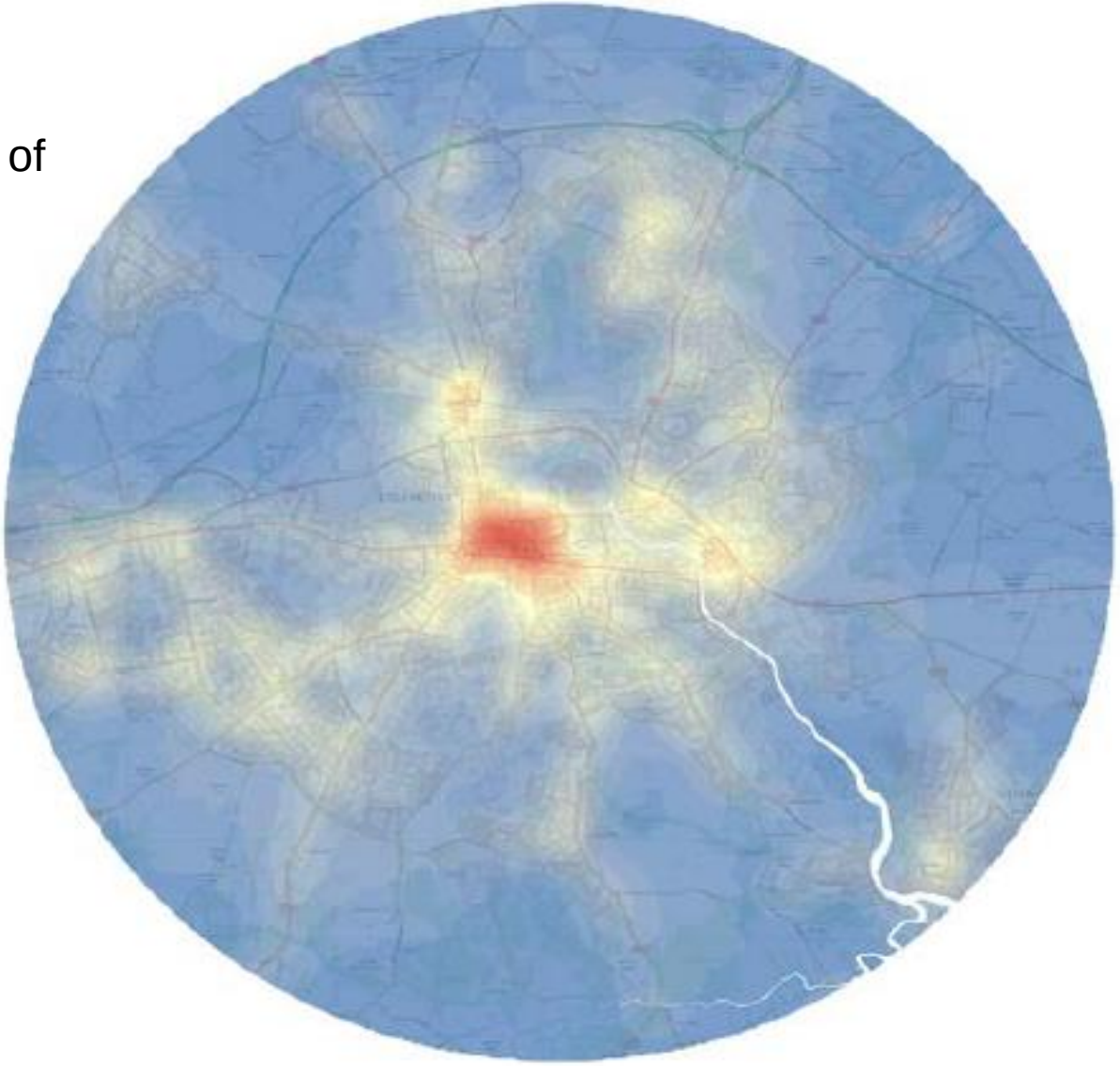


Emerging Colchester Walking Network (LCWIP)



Walkability Analysis (UCL Study)

- Validates the findings of the LCWIP Walking Analysis



Cycling

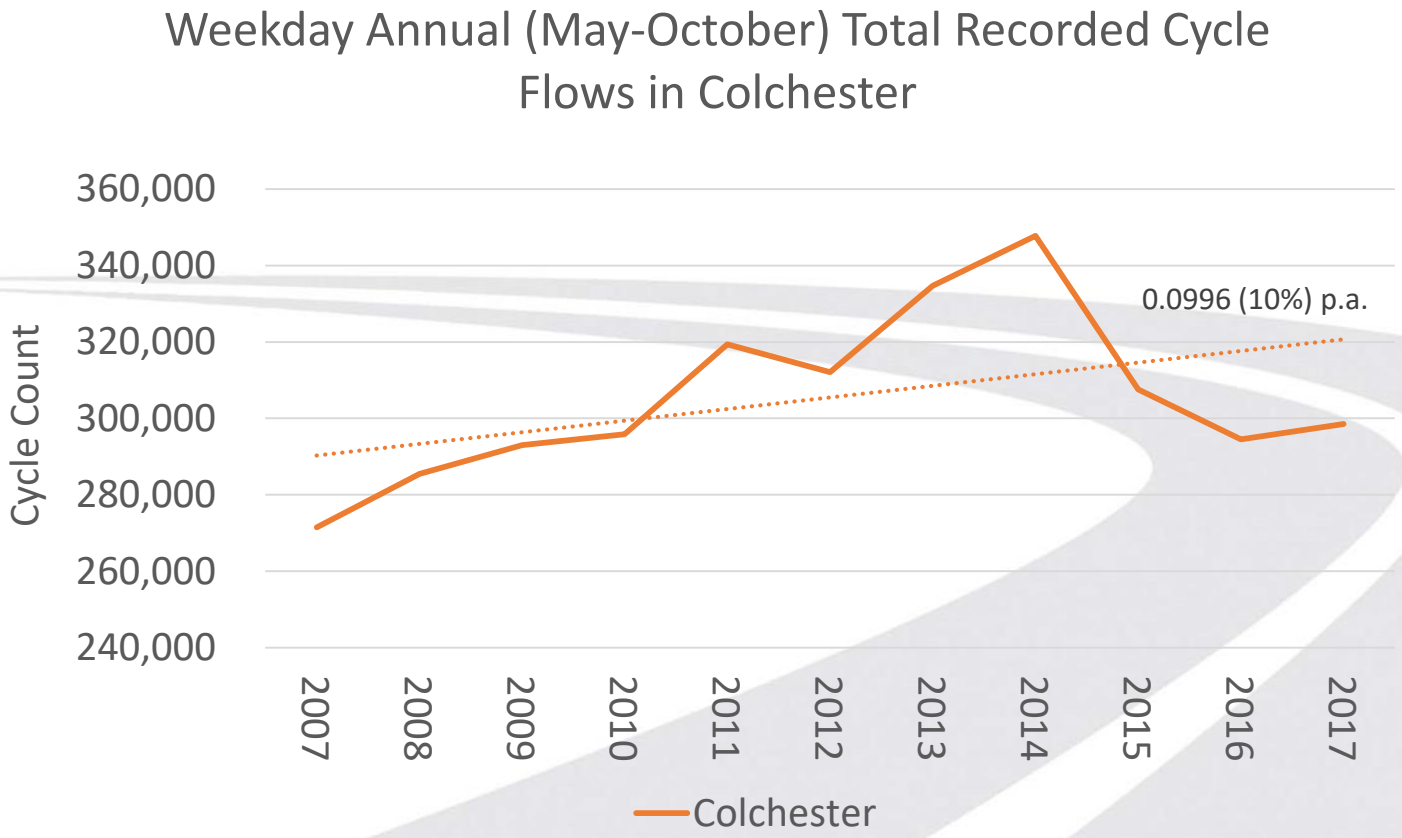
- Highest level of cycling within Essex
- 7% internal journey to work (JTW) mode share

Urban Area	Cycle % Internal Mode Share	Total Internal Cycle Trips
Basildon	4%	858
Braintree	5%	296
Canvey Island	8%	304
Chelmsford	7%	1491
Clacton	7%	538
→ Colchester	**7%**	**2,138**
Harlow	5%	817
Harwich	10%	205
Maldon	7%	209

Source: 2011 Census

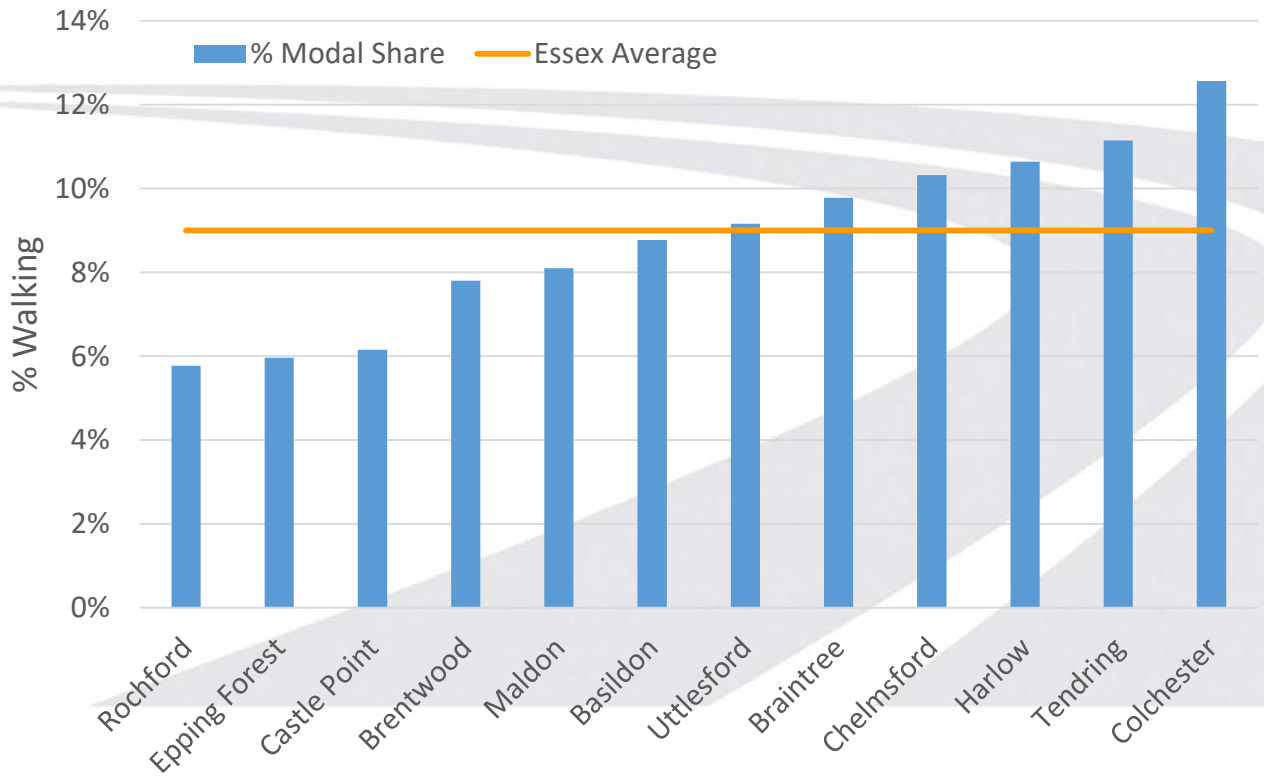
Cycling Growth

- Cycling in Colchester has increased by 10% since 2007 (at monitored sites)



Walking

- Highest mode share of walking in Essex
  - 13% of all work journeys are made on foot
  - Of all work journeys made internally (living and working in Colchester), 25% are made on foot



Walking

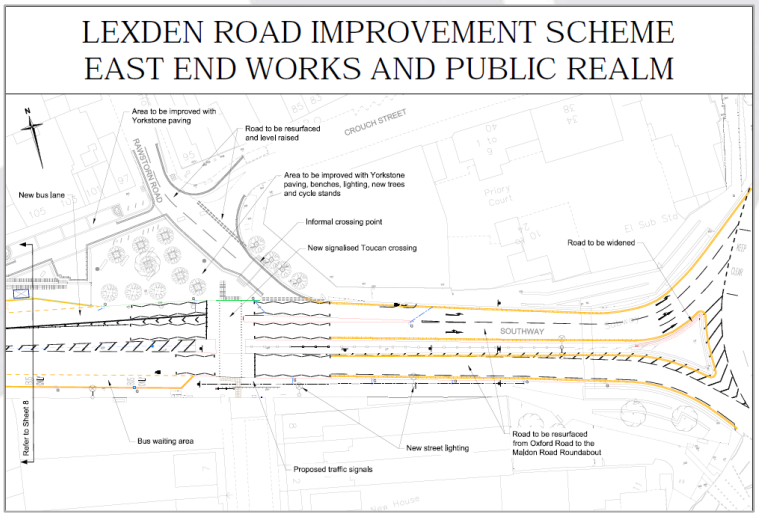
- Highest flows are seen along:
    - St Botolph’s Street; connecting Colchester Rail Station to the town centre
    - Queen Street; linking the High Street with St Botolph’s street
    - The High Street
    - High levels also seen on Culver Street, East Stockwell Street, Short Wyre Street, Lion Walk and Culver Walk within the town centre

Existing Walking and Cycling Issues

- Poor maintenance of existing routes
- Gaps in network

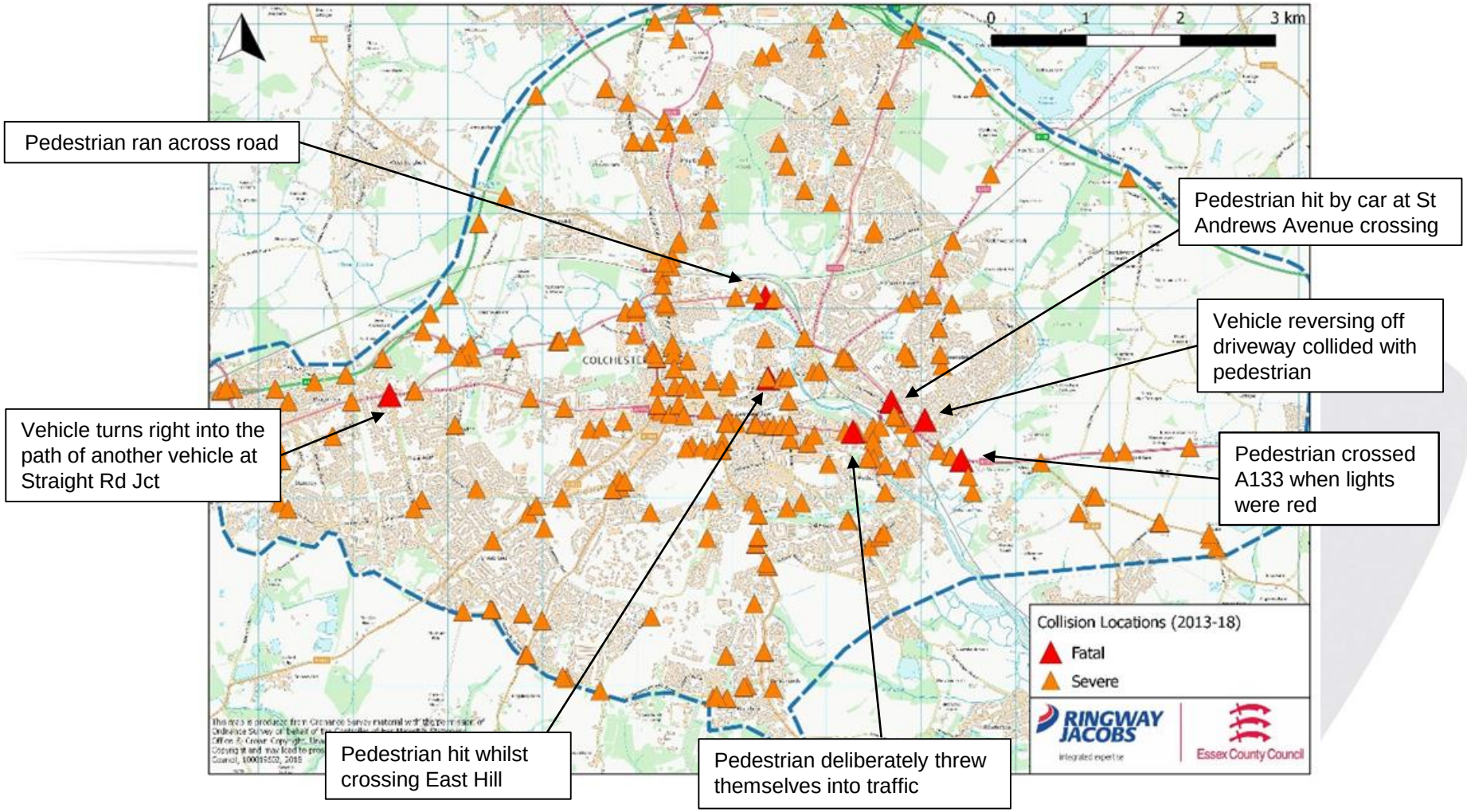
Existing Walking and Cycling Improvements

- New high quality flagship Routes
- Planning to include all modes and urban realm improvements



Collision Data (2013-18)

- 7 fatal collisions, 255 severe collisions
- 4/7 fatal collisions occurred around Hythe/Greenstead Rdbt area
- 6/7 fatalities were pedestrians



Key Environmental Constraints

- **4 Air Quality Management Areas (AQMA):**
  - Area 1: Central Corridors
  - Area 2: East Street and lower end of Ipswich Road
  - Area 3: Harwich Road / St Andrews Avenue junction
  - Area 4: Lucy Lane North and Stanway

- **Cultural Heritage – Historic Core**
  - 22 scheduled monuments
  - Approx. 100 listed buildings (predominantly in town centre)
  - Outside centre; historic port at the Hythe, civil war siege works, the 19th Garrison, World War II defences
  - 7 conservation areas
  - High potential for archaeological remains

- **3 Sites of Special Scientific Interest (SSSIs)** & **6 Local Nature Reserves (LNRs)**

- **26 Noise Important Areas (NIAs)**

- **Flood Zones 2 and 3** (subject to medium and high probabilities of flooding) affecting to the north of town centre and Hythe

6. The Future

Colchester Emerging Local Plan (2017-2033) – Growth Areas

- **Garden Communities**
  - Tendring/Colchester border – up to 2,500 homes (within plan period)
  - Colchester/Braintree Borders – up to 2,500 homes (within plan period)
  - West of Braintree – up to 2,500 homes (within plan period)

- **University / Knowledge Gateway –** research park / employment site

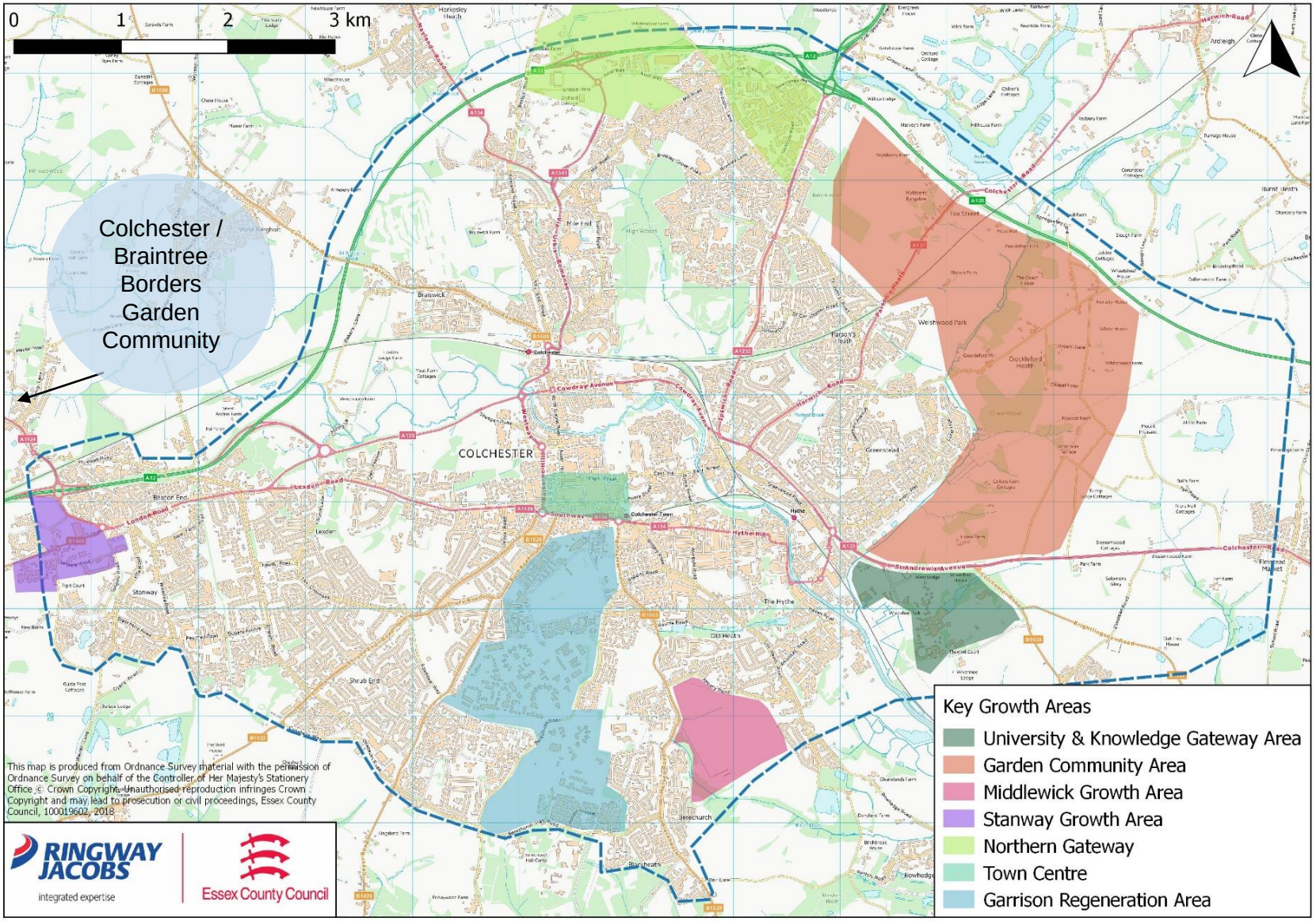
- **Northern Gateway –** new sport development, business and leisure destination

- **Stanway** – retail and commercial destination including Stane Park development

- **Town Centre –** regeneration and public realm improvements including Town Centre redevelopment

- **Other Regeneration areas** – North Station, Hythe & St Botolph's Quarter

Colchester Emerging Local Plan (2017-2033) – Growth Areas



Emerging Local Plan Modelling – Impacted Areas:

- **The A12 between Junctions 28 and 29 (both directions)**
  - Exacerbated by the presence of local plan developments & link road
  - Reroutes high traffic volumes onto A12

- **The A12 at Junction 26 in the PM peak**
  - Impacts of committed and local plan developments

- **Haven Road and Colne Causeway**
  - Colchester/Tendring GC contributes to traffic issues in local plan scenario

- **Greenstead Roundabout**
  - Various trip generators including committed employment site of Essex University

- **Ipswich Road**
  - Close to capacity, junction susceptible to delays

- **Lexden Road/Southway**
  - Already overcapacity – exacerbated in 2032 due to traffic growth

7. Problems & Issues

Overarching Issues

- Large future growth expectations - development plans across Colchester have the potential to exasperate current issues
- Lack of space in the historic core for any major network improvements
- Any network improvements for all modes restricted by topography, railway line location and the River Colne
- Attractiveness of public transport continues to be hindered by congestion/poor journey time reliability
- Increasing usage of public transport will be a challenge if cheap parking options in the town centre continues. There is also a significant number of corporate/private parking allocated within the town with no restrictions
- Poor Air Quality in the central areas (AQMA's)

Road Network

- High reliance on car trips – particularly from rural areas
- As a result, high levels of congestion throughout town centre – particularly in peak periods
- Large delay on key radial routes affecting access in and out of the town centre - North-South (A134) and East-West (A133)
- Poor journey time reliability, particularly on routes to the east of Colchester and on the A12
- No radial ‘A’ roads to the south – traffic forced to travel through the centre of Colchester or to rat-run through residential roads due to limited options
- Restricted junction capacity at key junctions e.g. North Station Roundabout and approach heavily congested in peak hours, St Botolph’s
- Hythe is the main eastern crossing point over the River Colne – significantly constrained and overcapacity in peaks

Public Transport

- Bus journeys (particularly east/west) run on un-designated lanes and therefore affected by congestion, long journey times make buses unattractive

- With many private car parks in the centre of Colchester and competitive car parking rates, the existing Park & Ride and bus services are not economically competitive

- Capacity issues and limitations of the current GEML line, partly due to freight services - whilst rail usage is increasing, any additional demand cannot be catered for without significant investment into line improvements

Sustainable Transport

- Many of the existing cycle paths in Colchester are poorly maintained

- Gaps remain in the cycling network (particularly to the south) - meaning residential areas remain heavily reliant on private car

- Limited off-road crossing points for cyclists at major barriers; the A133, A 134 Southway and Balkerne Hill, the one way system in the town centre and physical barriers such as GEML railway line and the River Colne

Group Discussion

Do these problems feel the right ones to be addressing?

8. Objectives

Potential Objectives

1. Providing the transport improvements through network connectivity, needed to accommodate housing and employment growth

2. Tackling congestion – reducing levels of traffic in town centre

3. Providing for, and promoting, sustainable forms of travel as an attractive alternative to the private car

4. Improving delay and journey-time reliability on specific routes

5. Improving air quality by reducing pollution from vehicles in urban areas

6. Improve safety within Colchester to promote a safe travelling environment, specifically aimed to reduce road collisions involving cyclists

7. Recognise the ‘bigger picture’ and overall fit with other schemes

Group Discussion

Do these Objectives feel the right ones to be addressing the issues?

9. Summary / Next Steps

Summary

- **Steps completed to date:**
  - Review available traffic data
  - Review Transport and Other Policies
  - Understand current demand
  - Understand the future situation
  - Identify issues / constraints / opportunities

- **Interactive Session:**
  - Review issues identified in study
  - Identify strategy objectives and vision

Next Steps

- **Share Issues and Objectives with additional stakeholders**
- **Review Scheme List**
- **Identify Potential Options**

Essex Highways

Thank you for your time and input

Think Safe Home Safe

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A Future Transport Strategy for Colchester

30th July 2019

Vision and Objectives Workshop

Agenda	
1. Welcome and Introductions (AL)	18:00-18:05
2. Background, Progress Update and Aims of the session (SP)	18:05-18:15
3. Key Findings/Issues/Current Situation/Future (SP / KS)	18:15-18:45
4. Draft Objectives (SP)	18:45-19:50
5. **Group Discussion** - Objectives	18:50-19:00
6. Vision and Potential Approach (SP)	19:00-19:10
7. **Group Discussion** - Vision and Potential Approaches	19:10-19:30
8. Next Steps (AL)	19:30-19:40
9. Final Thoughts (AL)	19:40-20:00

1. Welcome and Introductions

2. Background, Progress Update and Aims of the session

A Brief Recap - Background

- Colchester is the **fastest** growing area and is continuing to be a place where people want to live, work, shop and spend time
- As a result there is an increase in demand for travel on an already busy road network
- If we don't do something to reduce the pressure on the existing road network, the problem will get worse:
  - More delay
  - A negative effect on the town's economy
  - A negative effect on air quality
- There is not the available space in the centre of Colchester to increase capacity on the existing roads, or build new roads. This would also not solve the issue as it would further encourage extra car journeys and quickly use up the new space.
- As a result, a strategic approach is needed to help future proof Colchester's Transport Network

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Progress Update

- Last financial year we compiled a detailed understanding of the current and future transport picture within Colchester:
  - Review of available data
  - Review of Transport and other policies
  - Review of previous schemes (compiled into a full list)
  - Understanding of current and future demand
  - Developed a set of objectives
  - Engagement with Colchester on the problems & objectives

Next steps:

- To engage further on the **Vision** and **Objectives**
- To work in partnership (Colchester Borough and Essex County Council) to develop a strategy
- Engage more widely with residents, businesses, represented groups and visitors on the transport issues in Colchester.
- Finalise the Strategy focusing on all modes of transport, with a timeframe in line with the Local Plan

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Aims of this Session

- To recap on the main issues and challenges within Colchester
- To discuss and agree as a group the objectives to address the issues
- To discuss a potential vision (which delivers the objectives) and an approach for a future transport strategy

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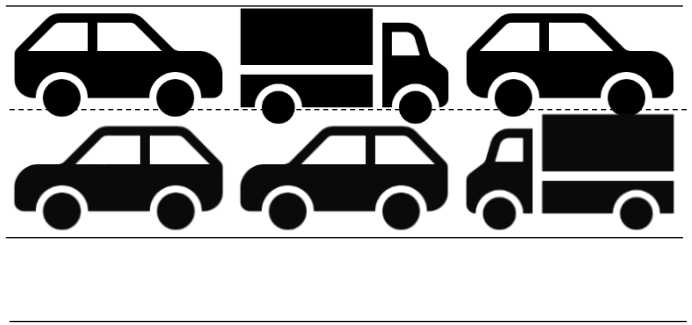
3. Findings, problems, and issues

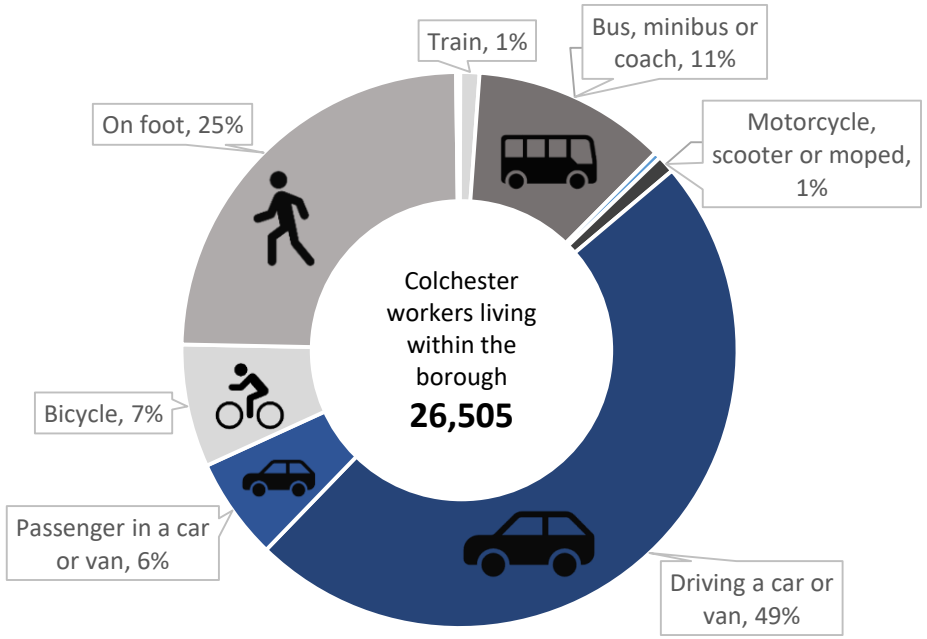
Colchester Transport in Context

Self-containment rate within Colchester was **69%** in 2011.

49% of internal work trips are made by car, with a high percentage of these under 5km



Across the Borough, 8% of work trips are made by train, 4% by bus, 4% by bicycle and 13% on foot



Of those leaving the Borough for work:

- 25% go to Greater London
- 15% to Tendring District
- 15% to Braintree District
- 10% to Chelmsford City

Colchester has the **2nd highest cost of delay** in Essex £

All urban routes experience delay in the peak periods, particularly on the East-West routes and around the town centre area

Between 2013 and 2018, there were 255 severe collisions across Colchester, 7 of which were fatal

Daily Traffic Flows

Count Site	Count ID	Year	All Vehicles (AADF)	% HGV
A12 / A120				
A12 (between J26 & J27)	6208	2016	102,518	7%
A12 (between J27 & J28)	56178	2016	74,143	8%
A12 / A120 slip road)	48229	2017	38,812	12%
A120 (close to Fox Street)	38246	2017	42,102	6%
Radial Routes				
A1124 Lexden Road	57478	2017	13,935	1%
A133 Cymbeline Way	77154	2017	**30,319**	3%
A134 Northern Approach	86032	2017	18,951	1%
A134 Balkerne Hill	36712	2017	**30,905**	1%
A134 Southway	56659	2017	26,075	1%
A133 Cowdray Avenue	6672	2017	26,476	2%
A137 Harwich Road	77152	2017	12,180	2%
A1232 Ipswich Road	37621	2017	24,127	4%
A133 Clingoe Hill	26686	2017	**34,146**	2%

- Highest daily flows are recorded on Clingoe Hill, Balkerne Hill and Cymbeline Way = >30,000 AADF
- Daily Flows in excess of 100,000 vehicles are recorded on the A12 (between J26 Eight Ash Green and J27 Spring Lane).
- Significant % of HGV's recorded on strategic routes, equating to up to 4,657 HGVs per day on the A120 and over 7,000 on the A12.

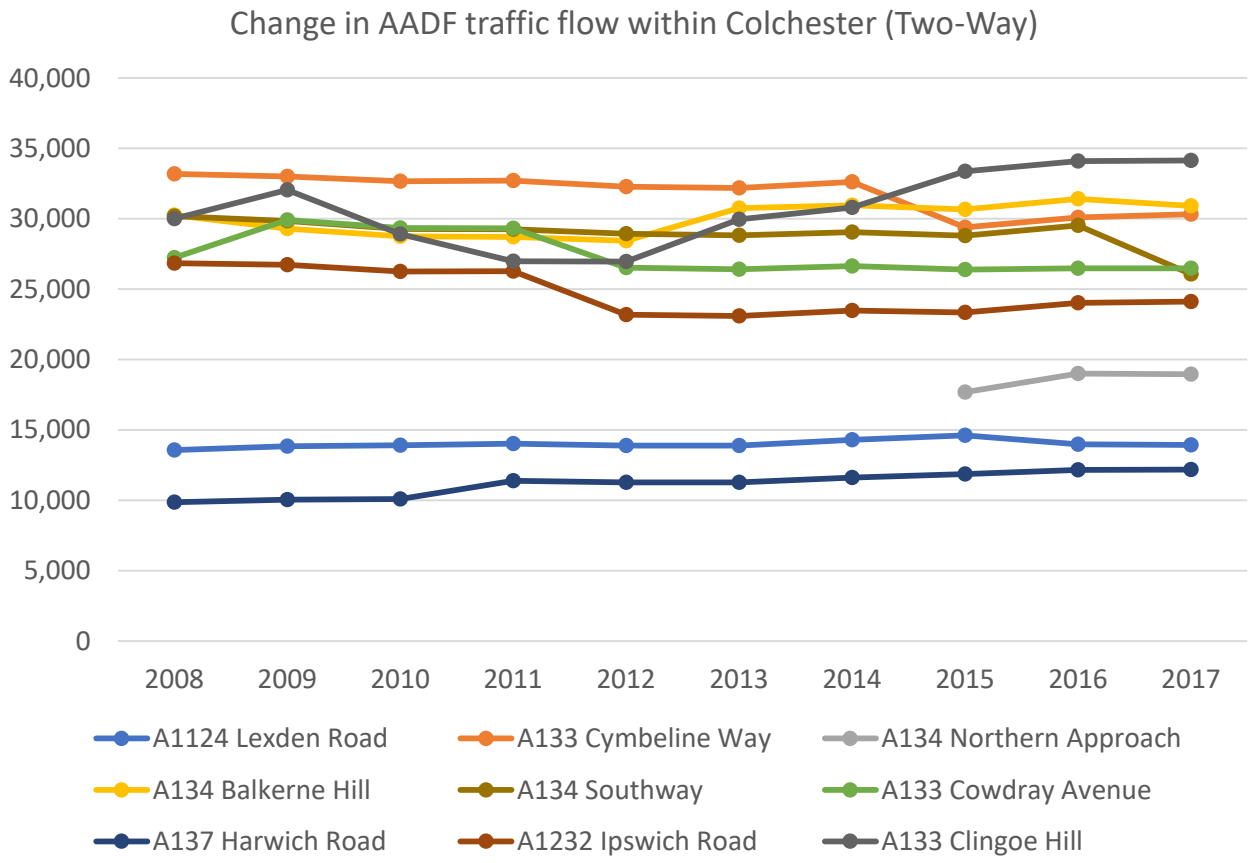
Peak Traffic Flows

- Highest AM flow on Clingoe Hill (WB) and highest PM flow on Cymbeline Way (WB)

	ATC Year	Dir	Daily Flows	AM Peak Period		Inter Peak	PM Peak Period	
				07:00-08:00	08:00-09:00	(10:00-16:00)	16:00-17:00	17:00-18:00
A133 Cymbeline Way	2017	EB	16,840	**1,212**	1,131	6,467	1,098	1,038
		WB	18,349	1,172	907	7,004	**1,474**	**1,395**
A134 Balkerne Hill	2016	SB	**18,476**	927	1,098	7,123	**1,361**	1,291
		NB	16,351	1,151	1,136	6,398	1,091	999
A133 Clingoe Hill	2016	EB	16,827	848	1,176	6,573	**1,355**	**1,417**
		WB	15,009	**1,271**	916	5,822	970	951
A134 Southway	2013	EB	13,528	592	811	5,218	936	914
		WB	16,590	1,078	1,101	6,635	997	834
A1232 Ipswich Rd	2017	NB	12,709	890	854	4,784	913	945
		SB	12,847	883	973	4,614	824	839
A134 Northern Approach	2017	SB	10,232	801	822	3,624	699	816
		NB	11,122	696	736	4,009	917	968
A137 Harwich Rd	2017	NEB	7,206	259	353	2,413	518	545
		SWB	6,618	523	638	2,278	386	412

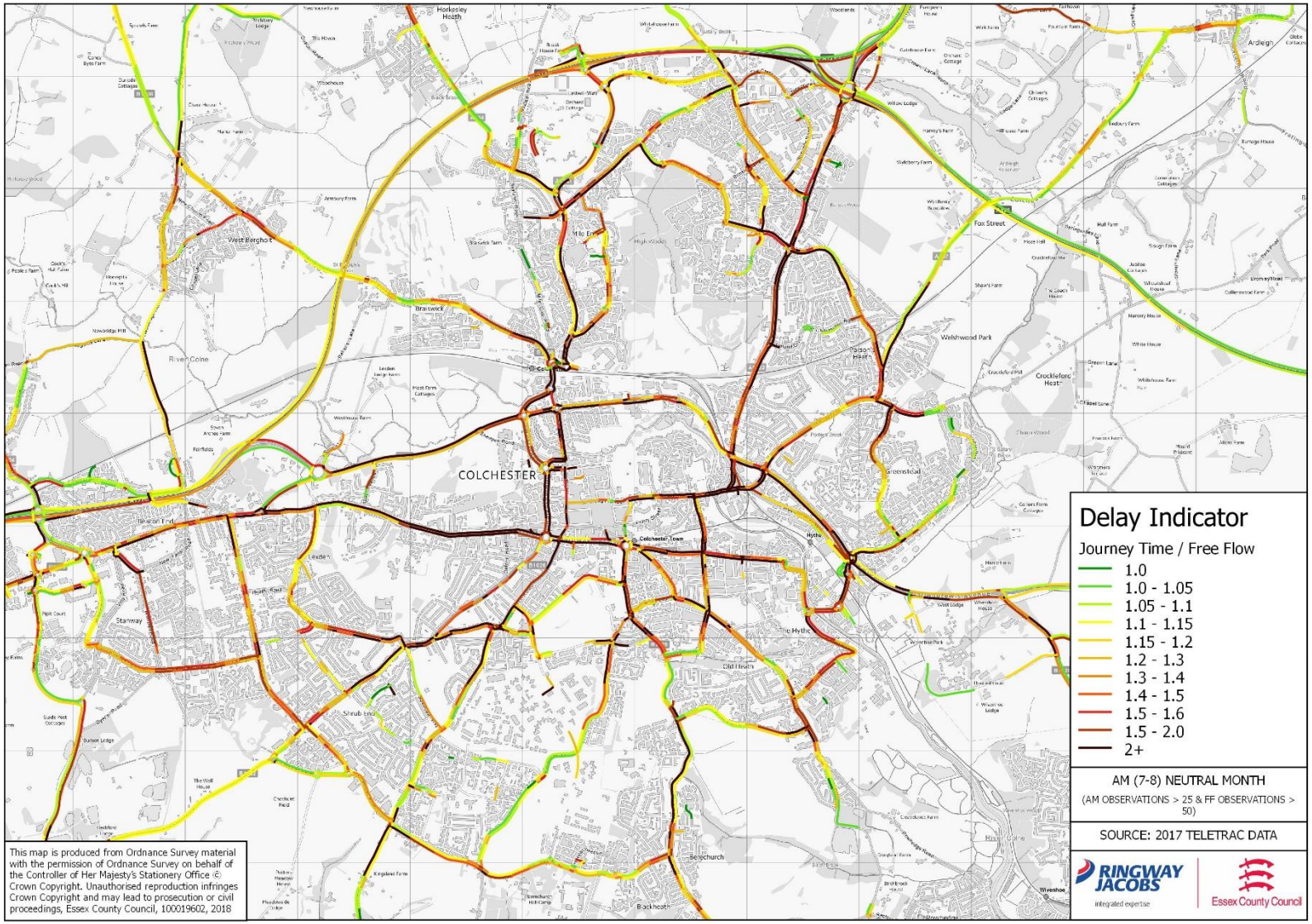
- Traffic flows are highest between 07:00-08:00 in the morning
- Afternoon peak is more evenly spread across 16:00-18:00

Growth on the Network



- **-1.49%** = Overall decrease in flows
- If we look at AADT on all key urban routes, there is little growth, with the exception of A133 Clingoe Hill
- AADT constant over last few years on all routes
- Decreases in AADT are recorded on Cymbeline Way and on Southway

Traffic and congestion



- The plot shows the degree of delay in the AM (07:00-08:00) period across Colchester
- Delay Indicators of 2+ on many town centre routes

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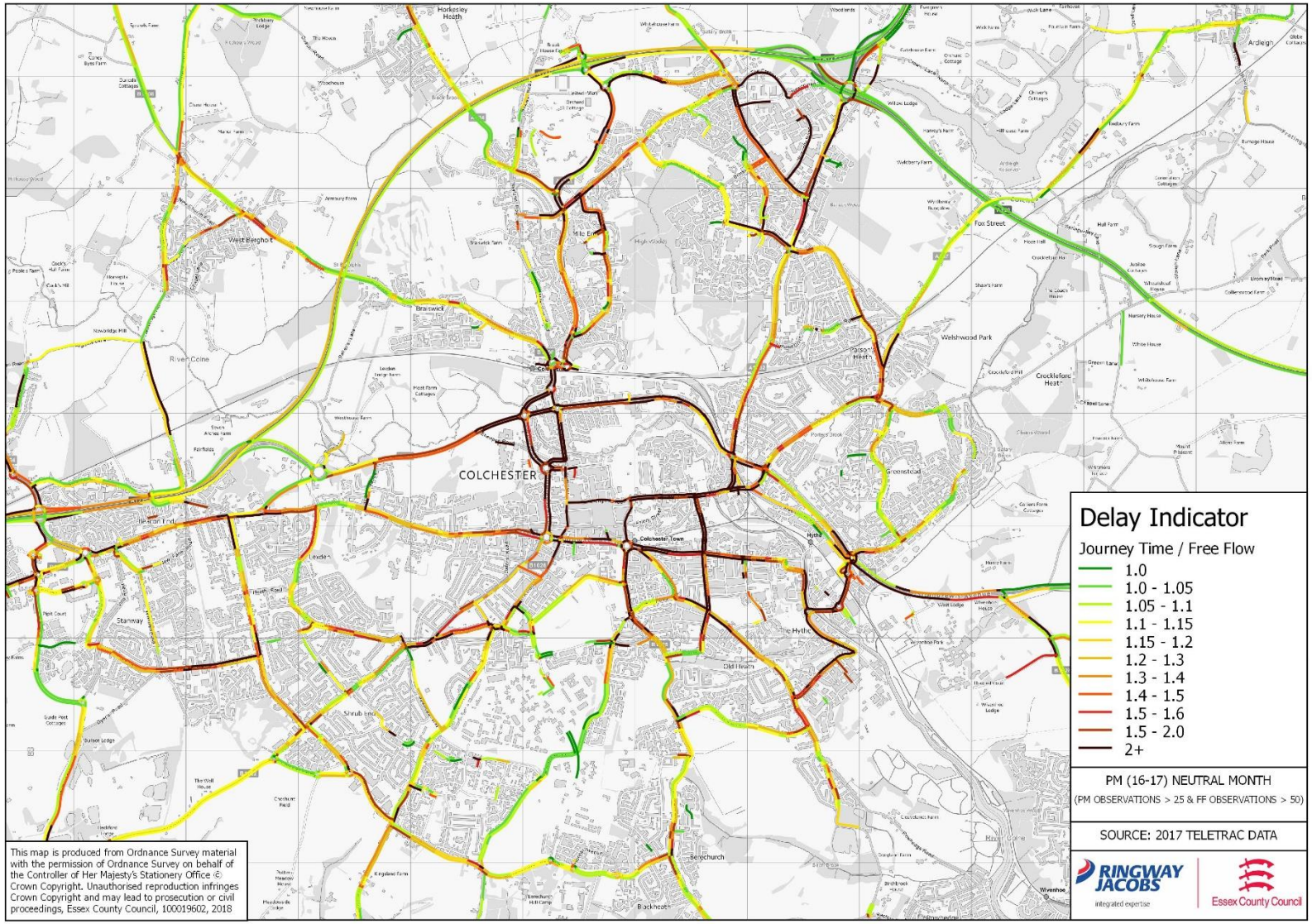
Traffic and congestion



- The plot shows the degree of delay in the PM (16:00-17:00) period across Colchester
- Delay slightly less in the PM

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Cost of Reliability & Delay

Description	Journey Time Reliability (JTR) - Percentage of Journeys within Average + 20%				Delay Indicator			
	2016	2017	Change from 16-17	Annual Cost (£) (2017)	2016	2017	Change from 16-17	Annual Cost (£) (2017)
Saffron Walden	85.70%	85.70%	▲	£670,000	1.75	1.73	▼	£2,120,000
Loughton	88.20%	86.60%	▼	£1,690,000	1.86	1.91	▲	£5,100,000
Halstead	89.40%	87.10%	▼	£610,000	1.5	1.55	▲	£1,810,000
Rayleigh	86.60%	87.90%	▲	£2,160,000	1.81	1.75	▼	£6,120,000
Braintree	89.20%	88.40%	▼	£1,560,000	1.78	1.81	▲	£5,740,000
Chelmsford	88.90%	89.10%	▲	£6,270,000	1.83	1.79	▼	£22,770,000
Billericay	90.60%	89.70%	▼	£1,130,000	1.48	1.52	▲	£3,810,000
Witham	91.50%	90.30%	▼	£1,130,000	1.61	1.67	▲	£5,090,000
Waltham Abbey	90.50%	90.30%	▼	£2,650,000	1.62	1.64	▲	£7,570,000
Colchester	90.20%	**91.30%**	▲	**£4,630,000**	1.59	**1.58**	▼	**£20,320,000**
Brentwood	89.70%	91.50%	▲	£2,290,000	1.74	1.69	▼	£9,640,000
Wickford	91.00%	91.70%	▲	£810,000	1.45	1.46	▲	£2,310,000
Harlow	93.00%	92.10%	▼	£3,760,000	1.46	1.46	=	£14,920,000
Maldon	94.80%	95.00%	▲	£510,000	1.26	1.26	=	£2,320,000
Basildon	94.60%	95.20%	▲	£1,510,000	1.37	1.33	▼	£8,780,000
Essex	91.10%	91.4%	0.25%	£31,380,000	1.61	1.61	-0.01	£118,420,000

Colchester's has the 2nd highest cost of delay in Essex

£20,320,000

(2017)

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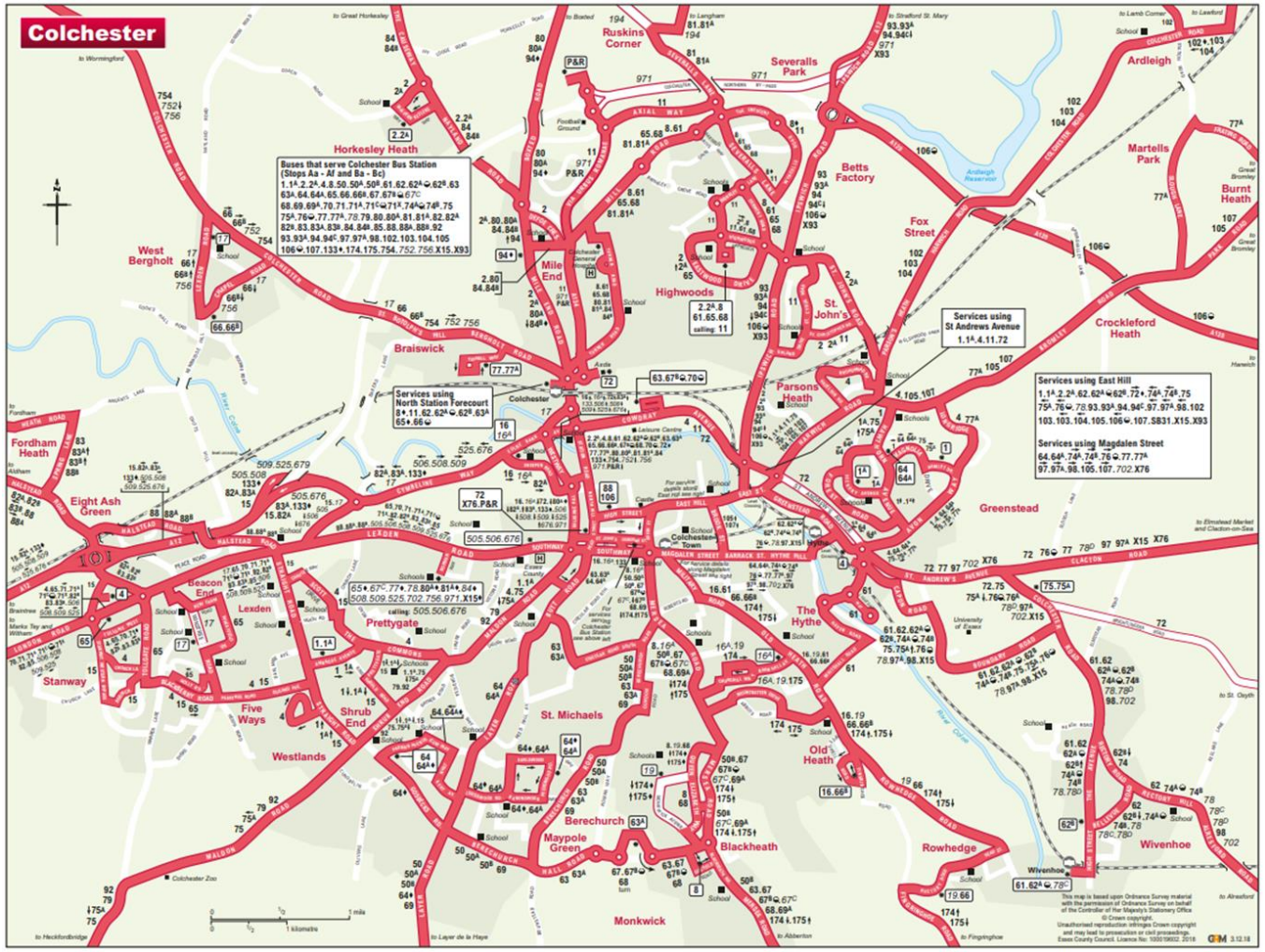
Train Usage

Station Name	2014-15 Station Entries and Exits	2015-16 Station Entries and Exits	2016-17 Station Entries and Exits	Change from 14/15 to 15/16	% Increase (from 14/15 to 16/17)
Colchester North	4,457,306	4,460,848	4,475,581	18,275	0.4%
Colchester Town	771,804	772,418	774,969	3,165	0.4%
Hythe	137,440	158,564	204,786	67,346	**49%**
Wivenhoe	378,700	383,030	393,050	14,350	4%
Marks Tey	503,540	523,218	557,456	53,916	11%

- All stations have seen an **increase** from in entries and exits from 2014/15 to 2016/16
- Central stations have seen only a small increase compared to out of town stations
- **Hythe** has seen the biggest increase – with a **49%** increase

- Passenger capacity on the GEML to accommodate future growth is a key issue
- Abellio Greater Anglia investing £1.5billion for a new fleet of trains, due to be rolled out by the end of 2020

Bus Usage



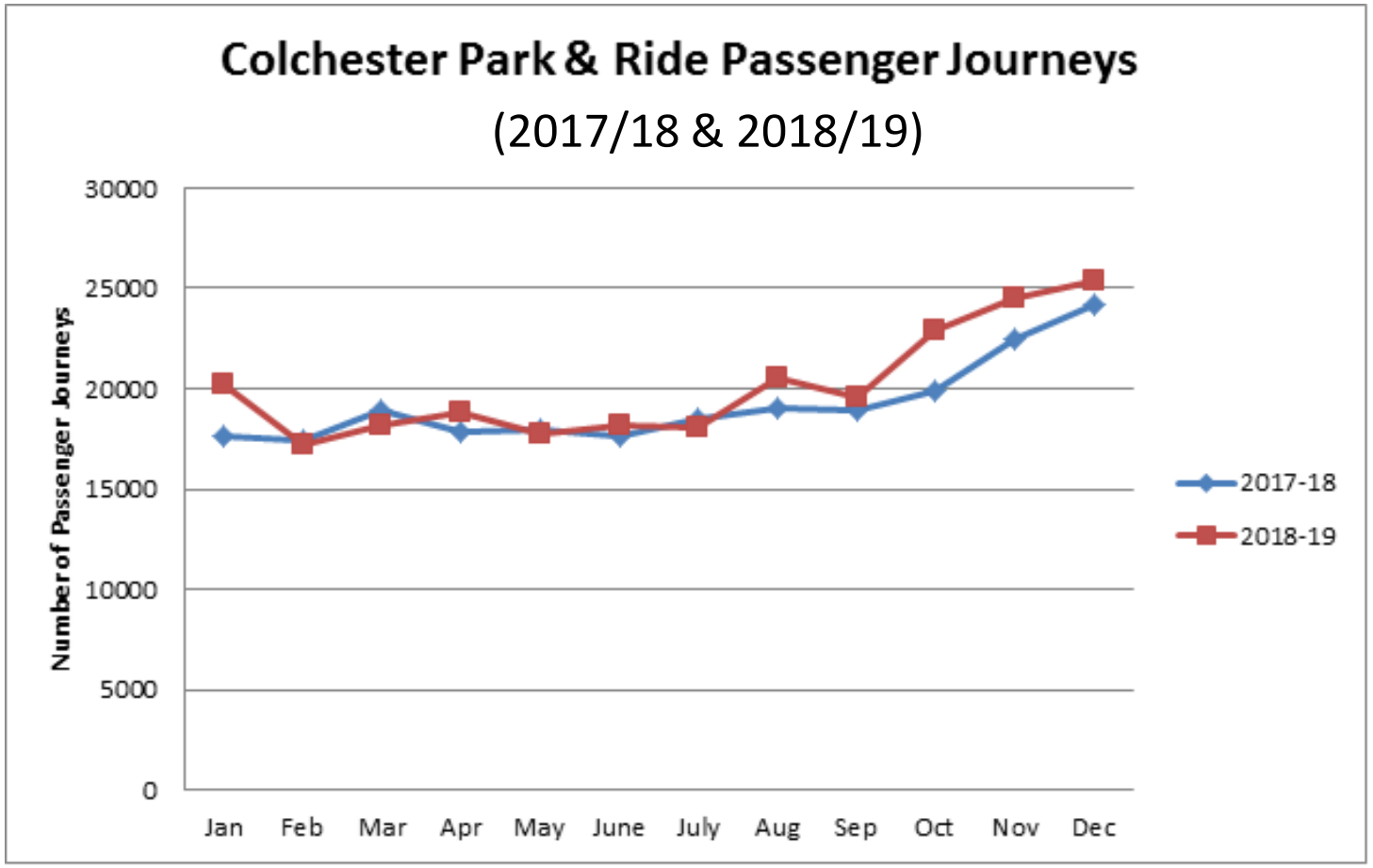
- Colchester has an extensive bus network. Each day:
  - **1,544 buses** enter the town centre loop
  - **920 buses** travel onto the high street

- 2011 Census Data indicates that only 6% of journeys to work are made by bus:

Method of Travel to Work	Total Trips	% of Total	% Urban	% Rural
Bus, minibus or coach	4,824	6%	7%	3%

- Currently existing bus services are not fully utilised – full utilisation of services has the potential to significantly remove thousands of car journeys from the network

Park & Ride



- Opened in 2015 – hours extended in August 2018
- Passenger journeys on the P&R are increasing
- Large number of private and corporate parking options in the town centre reduces attractiveness of the P&R

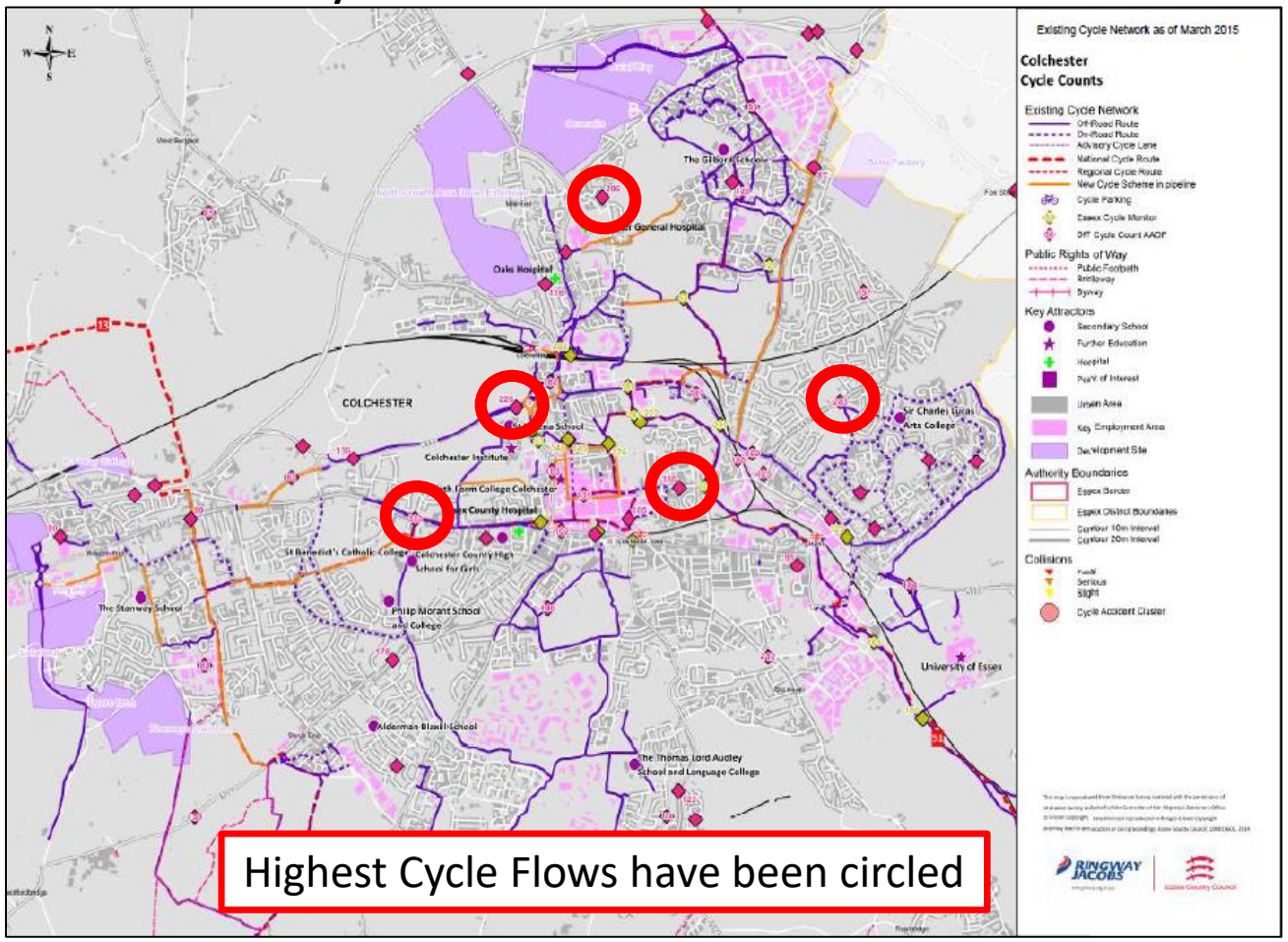
What does this mean for road space?

Parking

- Large number of private and corporate parking spaces available in the town centre
    - **2014 Colchester Parking Model** used the below figures in their assessment:
        - 6,500 spaces, with an additional 2,000 free on street spaces
        - (Excludes private non-residential parking and residential parking, parking for retail parks over 1km from the town centre or supermarkets)
- Study identified that Colchester has an **excess of parking supply** over current demand, however additional capacity is not necessarily in desirable locations
- All day parking prices are cheap in comparison to other nearby towns
- Competitive parking prices encourages more cars onto the road network

Cycling

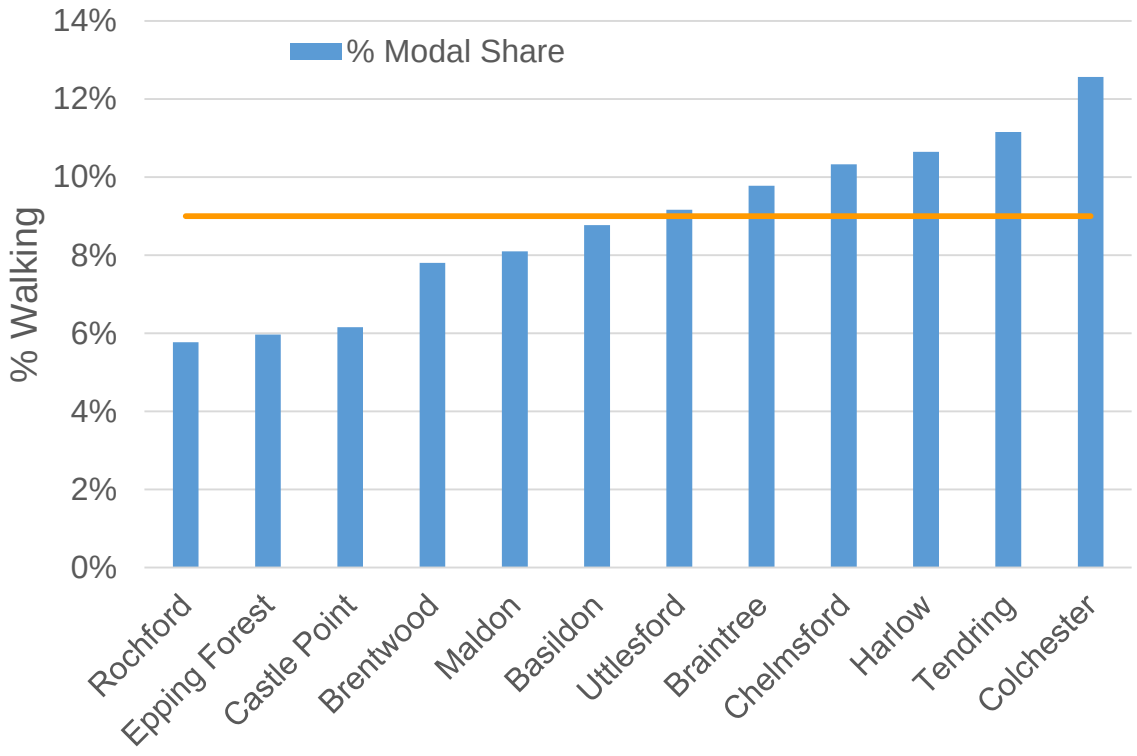
Colchester Cycle Network:



- Colchester's urban area has the highest number of cycle trips of all the Essex Districts
- 7% of internal journeys to work are made by cycling (based on 2011 Census)
- Increasing overall trend in cycle flows at monitor sites across Colchester
- Additional monitor sites needed on new routes to provide a more accurate picture of numbers

Pedestrian Movements

- Highest mode share of walking in Essex
  - 13% of all work journeys across the borough are made on foot
  - 25% of all internal work journeys are made on foot



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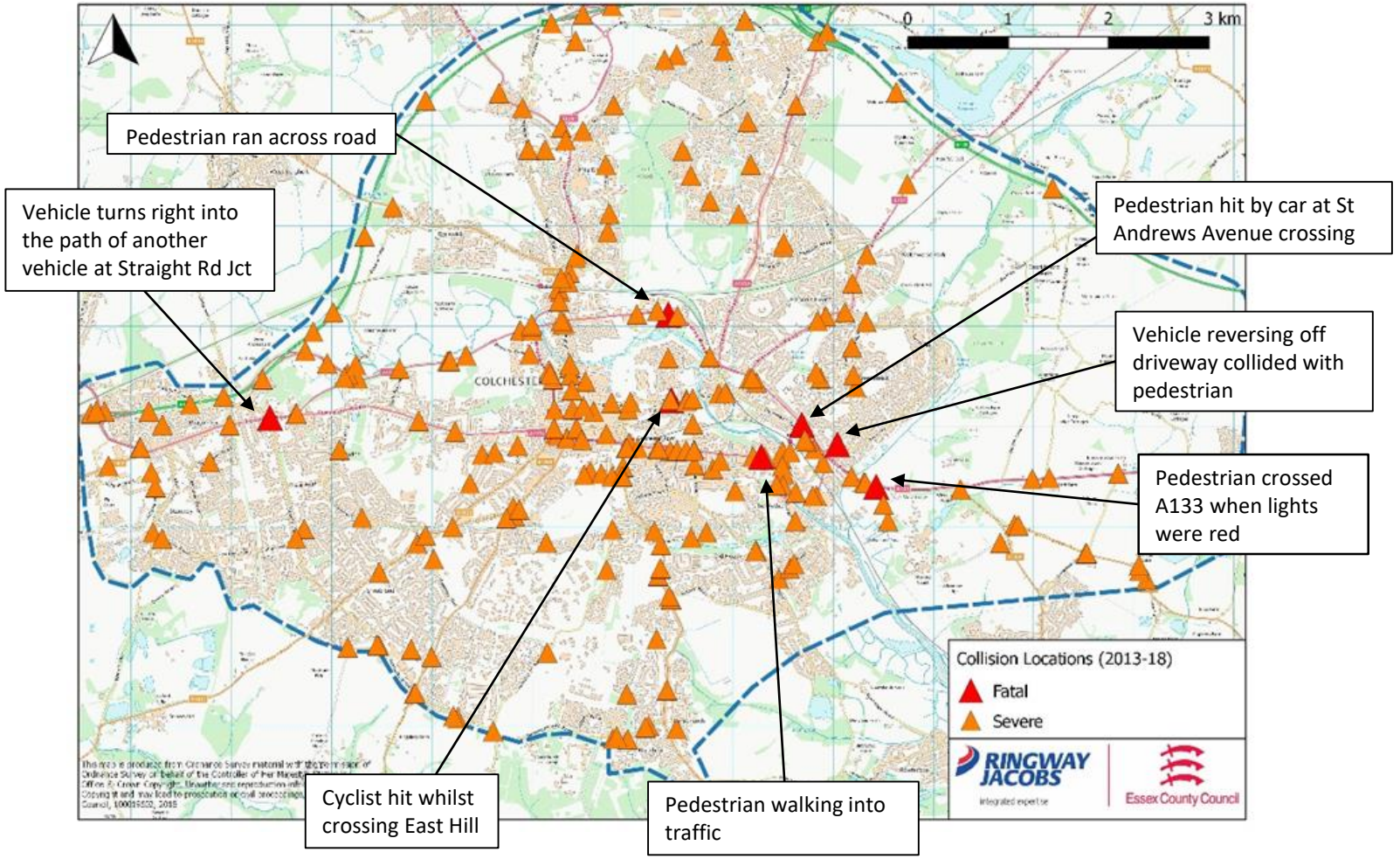
- The High Street
- High levels also seen on Culver Street, East Stockwell Street, Short Wyre Street, Lion Walk and Culver Walk within the town centre

Challenges to Active Travel

- Severance caused by road network, trainline and River Colne
- Gradient in the central area is a barrier
- Existing routes suffer from a lack of maintenance
- Gaps exist in the network

Safety

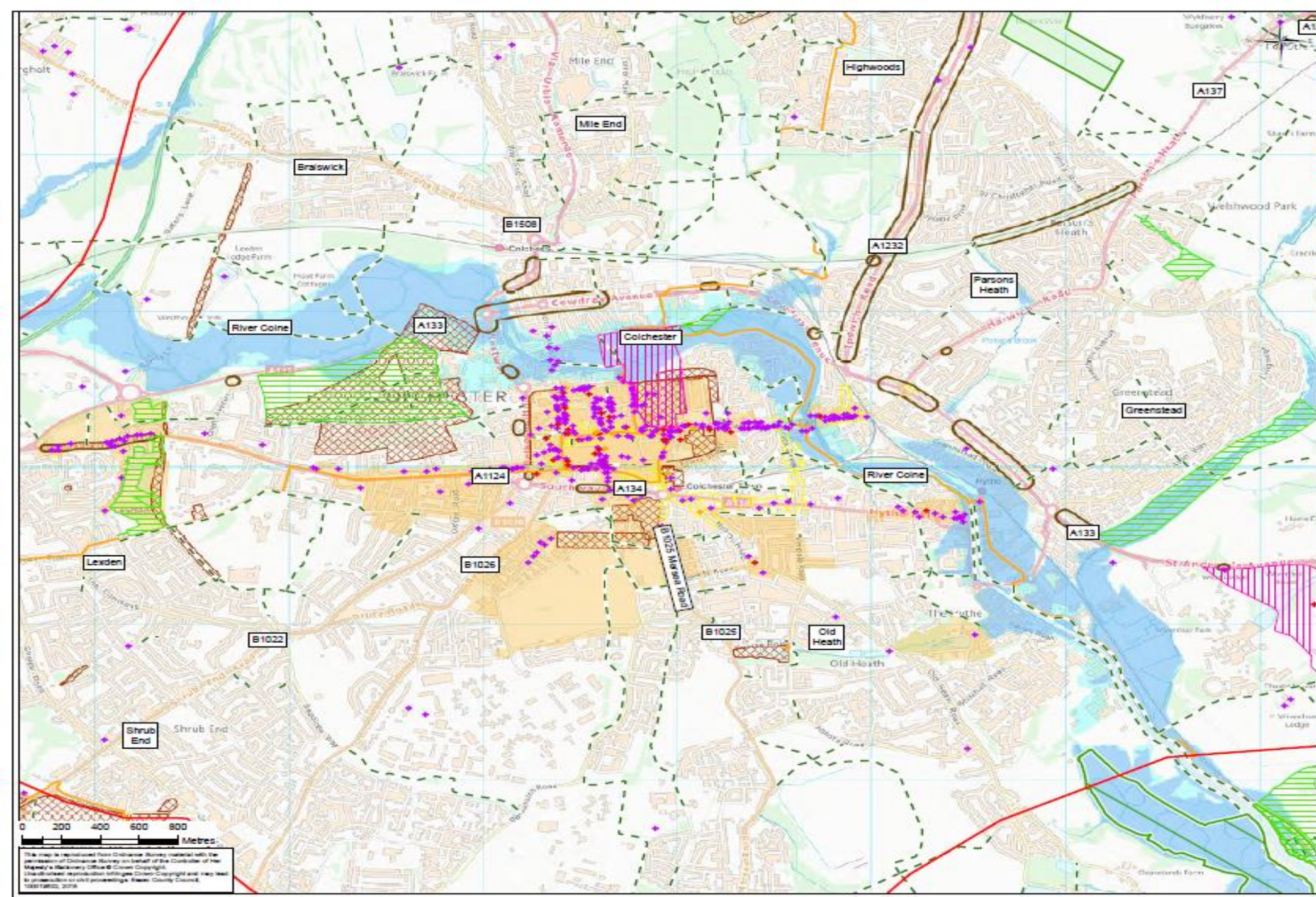


2013-2018 Collision Data:

- 7 fatal collisions and 255 severe collisions
- 4 out of 7 fatal collisions occurred around Hythe/Greenstead Rdbt area
- 6 out of 7 fatalities were pedestrians

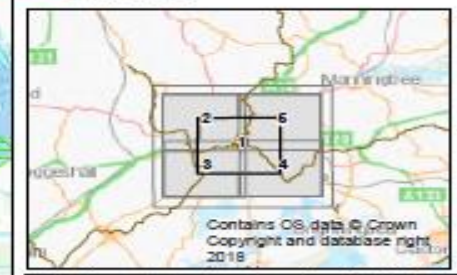
Key Environment Constraints

- 4 Air Quality Management Areas (AQMAs)
- Cultural Heritage:
  - 22 scheduled monuments,
  - approx. 100 listed buildings
  - Outside centre; historic port at the Hythe, civil war siege works, the 19th Garrison, World War II defences
- High potential for archaeological remains
- 7 Conservation areas
- 3 Sites of Special Scientific Interest (SSSIs) & 6 Local Nature Reserves (LNRs)
- 26 Noise Important Areas (NIAs)
- Flood Zones 2 and 3 affecting to the north of town centre and Hythe



Key

- Study Area
- Scheduled Monument
- Registered Park and Garden
- Listed Building Grade I
- Listed Building Grade II*
- Listed Building Grade II
- Conservation Area
- Special Protection Areas (SPA)
- Special Area of Conservation (SAC)
- Site of Special Scientific Interest (SSSI)
- Ramsar
- Local Nature Reserve (LNR)
- Air Quality Management Area (AQMA)
- Noise Important Area (NIA)
- National Cycle Network
- Public Right of Way
- Flood Zone 2
- Flood Zone 3



Rev	Date	Description of revision	Orig	Checked	Reviewed	Approved
1	12/09	Draft	LW	SK	UW	CR

Drawing Status: FOR INFORMATION

Essex Highways

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Scheme Title: Colchester Town Strategy

Drawing Title: Environmental Constraints Plan

Sheet 2 of 6

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
LW	LW	SK	UW	CR
DATE	DATE	DATE	DATE	DATE
OCT18	OCT18	OCT18	OCT18	OCT18

DRAWING UNITS U.N.O.: Metres | SCALE AT A3 (420 x 297 mm): 1:20,000

DRAWING NO.: 8555321A | REV: 1

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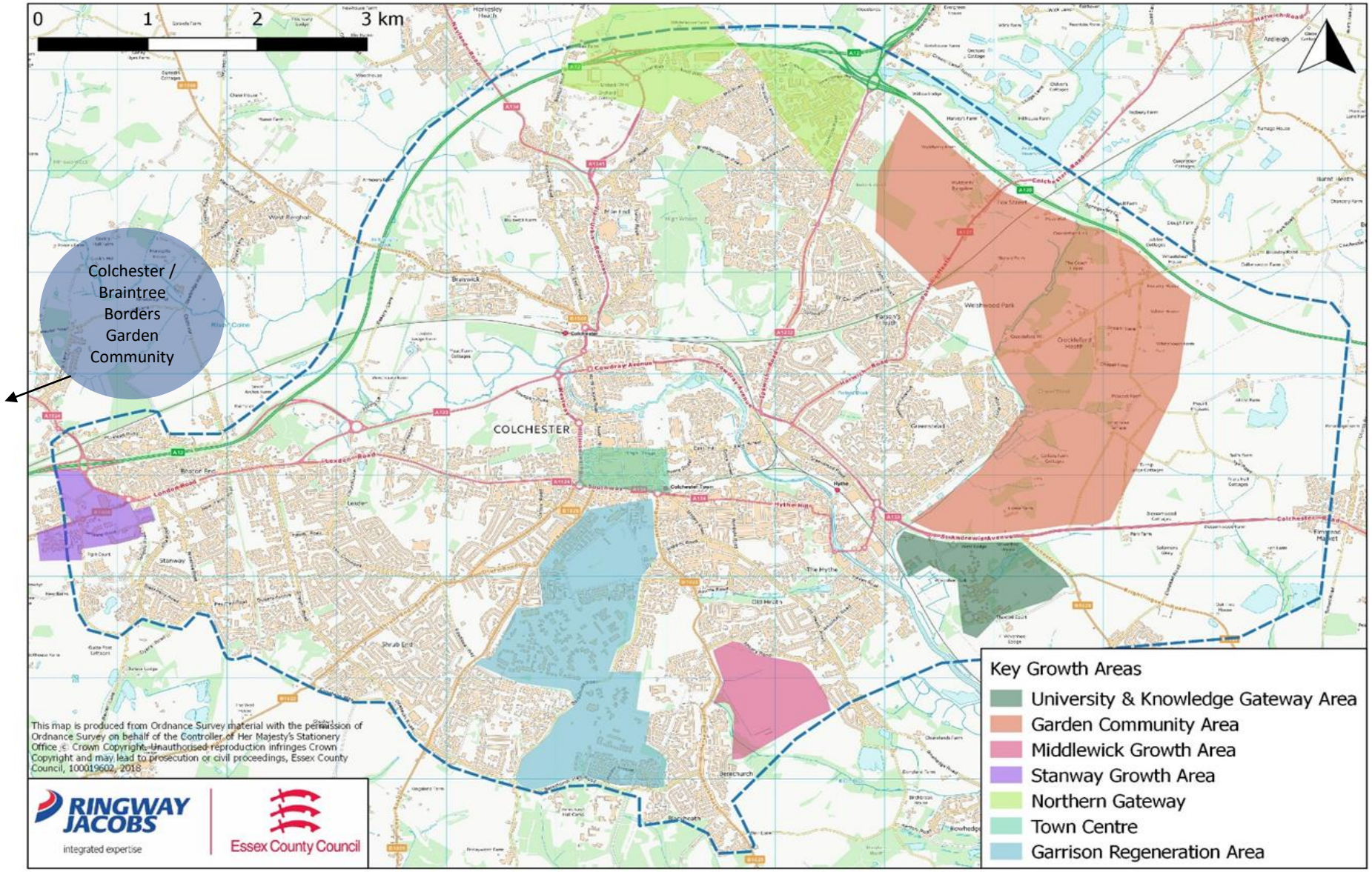
The Future

- Colchester's population has grown by 17.9% between 2001 and 2015, standing at 183,939 people in mid-2015, with large population growth expected to continue

- Administrative area is set to deliver a minimum housing supply of 18,400 new homes between 2014 and 2033, with a renewed housing need figure of 920 houses a year (emerging Local Plan Period 2017-2033)

- Growth to be focused in:
  - Tier 1: Urban Area of Colchester, particularly the town centre and surrounding built up area
  - Tier 2: Potential Garden Communities and Sustainable Settlements
  - Tier 3: Other Villages and Countryside of Colchester

Potential Key Growth Areas



Overarching Issues

- Large future growth expectations - development plans across Colchester have the potential to exacerbate current issues
- Lack of space in the historic core for any major network improvements
- Any network improvements for all modes restricted by topography, railway line location and the River Colne
- Attractiveness of passenger transport continues to be hindered by delay/poor journey time reliability
- Increasing usage of passenger transport will be a challenge if cheap parking options in the town centre continues. There is also a significant number of corporate/private parking allocated within the town with no restrictions
- Poor Air Quality in the central areas (AQMA's)

Road Network

- High reliance on car trips – particularly from rural areas
- As a result, high levels of delay throughout town centre – particularly in peak periods
- Large delay on key radial routes affecting access in and out of the town centre - North-South (A134) and East-West (A133)
- Poor journey time reliability, particularly on routes to the east of Colchester and on the A12
- No radial ‘A’ roads to the south – traffic forced to travel through the centre of Colchester or to rat-run through residential roads due to limited options
- Restricted junction capacity at key junctions e.g. North Station Roundabout and approach heavily congested in peak hours, St Botolph’s
- Hythe is the main eastern crossing point over the River Colne – significantly constrained and overcapacity in peaks

Passenger Transport

- Bus journeys (particularly east/west) run on un-designated lanes and therefore affected by delay, long journey times make buses unattractive

- With many private car parks in the centre of Colchester and competitive car parking rates, the existing Park & Ride and bus services are not economically competitive

- Capacity issues and limitations of the current GEML line, partly due to freight services - whilst rail usage is increasing, any additional demand cannot be catered for without significant investment into line improvements

Active Travel

- Existing routes suffer from a lack of maintenance
- Gaps exist in the cycling network (particularly to the south) – reduces potential for residential areas to shift to more sustainable modes
- Limited off-road crossing points for cyclists at major barriers; the A133, A 134 Southway and Balkerne Hill, the one way system in the town centre and physical barriers such as GEML railway line and the River Colne

4. Draft Objectives

Colchester Future Transport Strategy Objectives

Identified from the issues and challenges:

- **Supporting Economic Growth and Connectivity** - Providing high quality transport improvements to enhance network connectivity for all modes of transport, needed to accommodate housing and economic growth in Colchester and link communities together, providing access to key services, transport hubs and opportunities such as jobs and education
- **Improving Sustainable Transport Modes** - To encourage increased use of sustainable transport modes and services (bus, cycling, walking) by supporting improved accessibility, effectiveness and travel choice to reduce pressure on the road network
- **Managing Demand** – To manage traffic levels across Colchester's road network and reduce levels of traffic in the town centre to improve delay and journey time reliability, maximising the effective capacity through innovative solutions
- **Providing Attractive and Healthy Environments** - To protect, enhance and improve the quality of the natural, built and historic environment and reduce air pollution, to enhance residents, workers and visitor's quality of life
- **Improve safety and the perception of safety** - Improve safety within Colchester by promoting a safer travelling environment for all road users
- **Managing Assets** - Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use with sufficient resilience to cope with incidents.

Linkages with Essex Transport Strategy:

- Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration
- Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology
- Improve safety on the transport network and enhance and promote a safe travelling environment
- Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use
- Provide sustainable access and travel choice for Essex residents to help create sustainable communities.

5. Group Discussion Objectives

6. A Future Vision and Potential Approach

Vision

All to input Key Questions to Ask ourselves

- A vision which helps deliver the objectives
- Where do we want Colchester to be in the next 30 years?
- What do we want the transport network to look like? (specifically the High Street)
- Shifting to more sustainable modes for both people and goods


Outer Zone
Mid Zone
Town Centre Zone
Colchester
HIGHWOODS
West Bergholt
Fordham Heath
Playgolf Colchester
Eight Ash Green
The Castle Museum
Lexden
Beacon End
Stanway Green
Colchester Zoo
University of Essex Colchester Campus
Elmstead
Elmstead Market
Ardleigh
Great Bro
The Beth Chatto Gardens
Rowhedge
Wivenhoe
A12
A120
A134
A133
A137
B1508
B1022
B1025
B1026
B1027
B1028
B1029
Cymbeline Way
London Rd
Lexden Rd
Straight Rd
Drury Rd
Shrub End Rd
Boadicea Way
Berechurch Rd
Old Heath Rd
Haven Rd
Abbot's Rd
Clacton Rd
Bromley Rd
Ipswich Rd
Harwich Rd
Mile End Rd
Mill Rd
Boxted Rd
Via Urbis Romanae
Severalls Ln
Wyncolls Rd
St John's Rd
Hawthorn Ave
Brook St
East Hill
High St
St Andrew's Ave
Cowdrey Ave
Colchester Rd
Fingringhoe Rd
Berechurch Hall Rd
Stanway Western Bypass
Warren Ln
Gosbecks Rd
Fairstead Rd
Spring Ln
Heath Rd

7. Group Discussion on Vision and Potential Approach

8. Next Steps

Next Steps

- To engage further on the **Vision** and **Objectives**
- To work in partnership (Colchester Borough and Essex County Council) to develop a strategy
- Engage more widely with residents, businesses, represented groups and visitors on the transport issues in Colchester
- Finalise the Strategy focusing on all modes of transport, with a timeframe in line with the Local Plan

Example: Chelmsford's Future Transport Network Consultation

9. Final Thoughts

Essex Highways

Thank-you for your time

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