# Joint Committee for Transforming Cities Fund Projects

Date:16 October 2019Time:2pmVenue:Edwards Room, County Hall, Norwich

Persons attending the meeting are requested to turn off mobile phones.

#### Membership:

Cllr Martin Wilby (Chairman) Cllr Barry Stone (Vice-Chairman)

Cllr Lana Hempsall Peter Joyner Cllr Kay Mason-Billig Cllr Steve Morphew Cllr Mike Stonard Cllr Ian Stutely Cllr Brian Watkins Norfolk County Council Norfolk County Council

Broadland District Council New Anglia Local Enterprise Partnership (LEP) South Norfolk District Council Norfolk County Council Norwich City Council Norwich City Council Norfolk County Council

For further details and general enquiries about this Agenda please contact the Committee Officer:

Hollie Adams on 01603 223029 or email <u>committees@norfolk.gov.uk</u>

Under the Council's protocol on the use of media equipment at meetings held in public, this meeting may be filmed, recorded or photographed. Anyone who wishes to do so must inform the Chairman and ensure that it is done in a manner clearly visible to anyone present. The wishes of any individual not to be recorded or filmed must be appropriately respected.

#### Agenda

# 1 To receive apologies and details of any substitute members attending

#### 2 Minutes

(Page 3)

To confirm the minutes of the meeting held on 14 August 2019

#### 3 Members to Declare any Interests

If you have a **Disclosable Pecuniary Interest** in a matter to be considered at the meeting and that interest is on your Register of Interests you must not speak or vote on the matter.

If you have a **Disclosable Pecuniary Interest** in a matter to be considered at the meeting and that interest is not on your Register of Interests you must declare that interest at the meeting and not speak or vote on the matter

In either case you may remain in the room where the meeting is taking place. If you consider that it would be inappropriate in the circumstances to remain in the room, you may leave the room while the matter is dealt with.

If you do not have a Disclosable Pecuniary Interest you may nevertheless have an **Other Interest** in a matter to be discussed if it affects, to a greater extent than others in your division

- Your wellbeing or financial position, or
- that of your family or close friends
- Any body -
  - Exercising functions of a public nature.
  - Directed to charitable purposes; or
  - One of whose principal purposes includes the influence of public opinion or policy (including any political party or trade union);

Of which you are in a position of general control or management.

If that is the case then you must declare such an interest but can speak and vote on the matter.

# District Council representatives will be bound by their own District Council Code of Conduct.

4 To receive any items of business which the Chairman decides should be considered as a matter of urgency

#### 5 TCF programme for submission to DfT

(Page 24)

Report by the Executive Director of Community and Environmental Services

Chris Walton Head of Democratic Services County Hall Martineau Lane Norwich NR1 2DH

Date Agenda Published: 8 October 2019



If you need this document in large print, audio, Braille, alternative format or in a different language please contact 0344 800 8020 or (textphone) 18001 0344 800 8020 and we will do our best to help.



## Joint Committee for Transforming Cities Fund projects

#### Minutes of the Meeting held on 14 August 2019 at 2pm in the Council Chamber, County Hall, Norwich

#### Present:

Cllr Martin Wilby (Chairman) Cllr Barry Stone (Vice-Chairman)

Norfolk County Council Norfolk County Council

#### Substitute Members Present

Cllr Emma Corlett for Cllr Steve Morphew

#### **Officers Present:**

Linda Abel	Senior Transportation Planner, Norwich City Council
Bruce Bentley	Principal Transportation Planner, Norwich City Council
Tony Cozens	Project Engineer, Norfolk County Council
Zoe Tebbutt	Landscape Architect, Norwich City Council
Jeremy Wiggin	Transport for Norwich Manager, Norfolk County Council

#### 1 **Apologies for Absence**

Apologies were received from Peter Joyner and Cllr Steve Morphew (Cllr Emma 1.1 Corlett substituting)

#### 2. Minutes

2.1 The minutes of the meeting held on the 1 July 2019 were agreed as an accurate record and signed by the Chairman subject to amending the spelling of Cllr Jane Sarmezey's name in the body of the minutes.

#### 3. **Declarations of Interest**

- 3.1 Cllr Lana Hempsall declared a non-pecuniary interest against item 5, "Transforming Cities - Tombland", as a parent of children who attended the Norwich School however her children travelled by train and were not users of the public transport
- 3.2 The Chairman noted that all members of the Committee had been lobbied about the items on agenda; Cllr Corlett had not been lobbied.

#### **Urgent Business** 4.

4.1 The Chairman agreed for Cllr Ian Stutely to raise urgent business indicated to the Chairman prior to the meeting.

- Cllr Stutely discussed the Transport for Norwich scheme to relieve congestion in the South Park Avenue and Colman Road area and A11 roundabout agreed at the March 2019 Norwich Highways Agency Committee (NHAC) meeting
- During the NHAC meeting Cllr Stutely was supportive of the scheme; the report received had addressed most issues raised by the public related to crossings on South Park Avenue and staggered crossings at junctions.
- There were schools and nursery schools at the site which was busy at the start and end of the school day. The junction at South Park Avenue / Colman Road had two crossings with a crossing patrol officer. Concern was raised by NHAC about the proposed staggered crossing with a central island for pedestrians, which they felt would not allow the crossing officer to work the crossing safely
- NHAC Committee had recommended that this scheme would impact on crossing patrols at the junction and asked the Transport for Norwich Manager to explore impact and further resources needed here.
- Norfolk County Council had stated that the Council did not require crossing patrols at junctions unless there were exceptions. Cllr John Fisher, Cabinet Member for Children's Service and Chairman of NHAC, stated that it was the responsibility of parents or guardians to get children to school safely. Cllr Stutely was unhappy with these responses, noting that some children walked to school alone for various reasons.
- Cllr Stutely felt this scheme posed a risk to children at the South Park Avenue / Colman Road crossing and withdrew his support for the scheme. He asked for the scheme to be put on hold.
- 4.2 The Transport for Norwich Manager reported that the changes to this junction would be constructed in the new year, 2020. The decision from the Council about school crossing patrols was a corporate policy. The Transport for Norwich Manager confirmed a single operative would be at the crossing

#### 5. Transforming Cities - Tombland

- 5.1 The Committee received the report outlining proposals developed for the Tombland area of Norwich with a view to securing funding from Transforming Cities Funding for delivery of these works. A diagram of the proposed parking areas was displayed; see appendix A
- 5.2 The following points were discussed and noted
  - Some Members welcomed the proposals outlined in the report, noting the proposals would enhance the area and make the space more useable
  - At the beginning and end of the school day, many children from Norwich School waited for buses on Tombland. Some Members were concerned that moving the inbound bus-stop to Upper King Street where the pavement was narrower would impact on safety for these children and other passengers and accessibility for people with disabilities
  - The Principal Transportation Planner of Norwich City Council noted there were a range of demands on Tombland including loading facilities, disabled parking spaces and buses, and limited kerb space to accommodate these; the outbound bus stops, which had been identified as the busiest, would be located on Tombland
  - Some Members felt that the proposed widening of the pavement would not accommodate all the school children; this had been highlighted by the bus company in the consultation report
  - Norwich School did not raise concerns about the proposal to move the bus stop

in their meetings with design team members. the Principal Transportation Planner confirmed that the school's own bus could continue to pick up and drop off in the loading bay on Tombland.

- A Member felt that having loading bays and bus stops separate from each other would better meet safety criteria for pedestrians and disabled road users
- Concerns were raised that Norwich School were not a key consultee, and that parents of the school may not have been consulted, based on the lack of responses in the report from parents
- Cllr Mason-Billig **proposed** that a mixed-use bay was put in place on Tombland to be used as a bus stop for a restricted time during school drop off and pick up. The Principal Transportation Planner confirmed it would be legally possible to restrict use of the loading bay during certain times; this would allow it to be used for school drop off and pick up by buses during these restricted times but that dual use bays of this type did lead to confusion and consequent misuse
- The Vice chair noted there were other uses to consider as well as the school and was concerned that a mixed-use bay could be confusing for road users
- Norwich Cycling Campaign had raised concerns about connectivity between Tombland and Prince of Wales Road; The Principal Transportation Planner clarified there was not room to extend the cycle track which linked to Prince of Wales Road, which needed to re-join the carriageway between the beginning of Tombland and Upper King Street. There was controlled access to the carriageway here
- A concern was raised about the poor air quality in this area highlighted by high levels of nitrous oxide, and that an air quality survey should be conducted. The Principal Transportation Planner reported that the air quality concerns were seen across the whole city centre; to substantially improve air quality, traffic would need to be significantly reduced in the area, which was outside the scope of this project
- The capacity for high frequency bus routes was queried; Officers were looking at kerb space and how bus stop provision could be maximised in the area
- Some Members were concerned that a mixed-use bay could be difficult to enforce
- More information was requested on formal motorcycle provision and bicycle provision; The Principal Transportation Planner confirmed that motorcycle parking was proposed for the other side of Bank Plain along with additional cycle parking. Some motorcycle parking would be kept in Tombland
- The Principal Transportation Planner confirmed that discussions and meetings had been held with the Head Teacher of Norwich School who did not raise the movement of the bus stop as an issue; he **agreed** to find out how many children were alighting and boarding the buses each day.
- 5.3 It was **PROPOSED** and duly seconded that a time-based restriction be put in place in the loading bays on Tombland, so that these bays could be used for buses to pick up and drop off children at certain times of the day, keeping the location of the bus stops as proposed in the report for the remainder of the day. With 2 votes in favour and 6 against, the motion was **lost**.
- 5.4 With 6 votes for and 2 against, the Joint Committee **RESOLVED**:
  - (1) to APPROVE the proposals for Tombland that improve facilities for pedestrians, cyclists and public transport users by better managing existing traffic movements and creating an improved environment to boost the local economy as shown in the plan appendices 1 & 2 of the report
  - (2) that the statutory procedures **COMMENCE** associated with the following traffic

regulation orders and notices

- a) revise the Pedestrian and Cycle Zone in the Tombland Triangle extending into St Faiths Lane allowing access to the Cathedral Close and St Faiths Lane only
- b) widen the existing Pelican crossing to the north of Queen Street and place it on a raised table
- c) implement a no waiting and no loading restriction within the Tombland pedestrianised area with a formal motorcycle provision
- d) introduce a new loading bay (taxi rank at night), taxi bay and Blue Badge bay on Tombland, replacing the existing inbound bus stop
- e) move the inbound bus stop to Upper King Street
- f) relocate the outbound bus stop from Upper King Street to a lengthened stop on Tombland

#### 6. Transforming Cities – Dereham Road area 20mph and pedestrian facilities at Heigham Street / Mile Cross Road and Dereham Road / Bowthorpe Road junctions – Consultation results

- 6.1 The Committee received the report outlining proposals for introduction of a 20mph area off Dereham Road and installing signalised pedestrian crossing facilities at the junctions of Heigham Street / Mile Cross Road and Dereham Road / Bowthorpe Road using £500,000 from the first tranche of Transforming Cities Funding. The report also outlined the consultation response.
- 6.2 The following points were discussed and noted
  - The Wensum Residents' Association had asked about the possibility of a diagonal crossing at Dereham Road; Officers had determined that a diagonal junction would cause too much delay for traffic, including public transport; the measures proposed here were deemed appropriate based on the level of traffic
  - The Senior Transportation Planner from the City Council clarified that the junction of Nelson Street and Dereham Road had seen a high level of accidents, therefore Officers did not want to encourage drivers using Nelson Street as a cut through when travelling north.
  - There was not space to put a pedestrian refuge on the east side of Heigham street as it met the junction; this road could only take two lines of traffic and had a narrow footpath. Installing a refuge would impact on the turning circle of large vehicles travelling south down Mile Cross Road towards Heigham Street. The scheme proposed a safe crossing across the west arm of Heigham Street and Mile Cross Road.
  - It was queried why the 20mph zones had not been extended further than the proposed areas. The Senior Transportation Planner reported that some people had requested Waterworks Road and Heigham Street to be 20mph however, for this to be implemented, traffic calming measures would be needed as well as signs and the budget would not cover the cost of this at this time. It was hoped that this could be revisited in future if the budget arose
  - Implementing 20mph on Bowthorpe Road was suggested. The Senior Transportation Planner suggested that parking bays may be able to be installed on Bowthorpe Road to help with issues of people parking on pavements and reduce the available width to traffic. The design team would attempt to install these road markings. Some Members agreed that narrowing this road would help calm traffic and support disabled users by removing parked cars from the path.
  - The Senior Transportation Planner highlighted to Members the two circulated

diagrams, appendices 3 and 4 of the report, that had been amended based on the comments received from the consultation, and on which the decision of the Committee would be based; see appendix B of the minutes

• Additional comments received from the consultation after publication of the agenda were circulated to the Committee; see appendix C of the minutes; further comments received during the consultation refered to as appendix 5 in the report, would be circulated to the Committee after the meeting (see appendix D of the minutes).

#### The Joint Committee **RESOLVED** 6.3

- 1. To APPROVE the Dereham Road area 20mph scheme for installation including:-
  - Complete the necessary statutory processes associated with the installation of the 20mph Speed Restriction Order for the Dereham Road area as shown in Appendix 1 of the report
- 2. To **APPROVE** the installation of pedestrian crossing facilities at the junctions of Heigham Street / Mile Cross Road and Dereham Road / Bowthorpe Road (amended Appendices 3 and 4 of the report as shown at appendix B of the minutes) including:-
  - Complete the necessary statutory processes associated with the installation • of the amended double yellow lines on Dereham Road, Heigham Street and Waterworks Road (as detailed on amended Appendices 3 and 4 of the report as shown at appendix B of the minutes)

The meeting ended at 15:00

#### CHAIRMAN

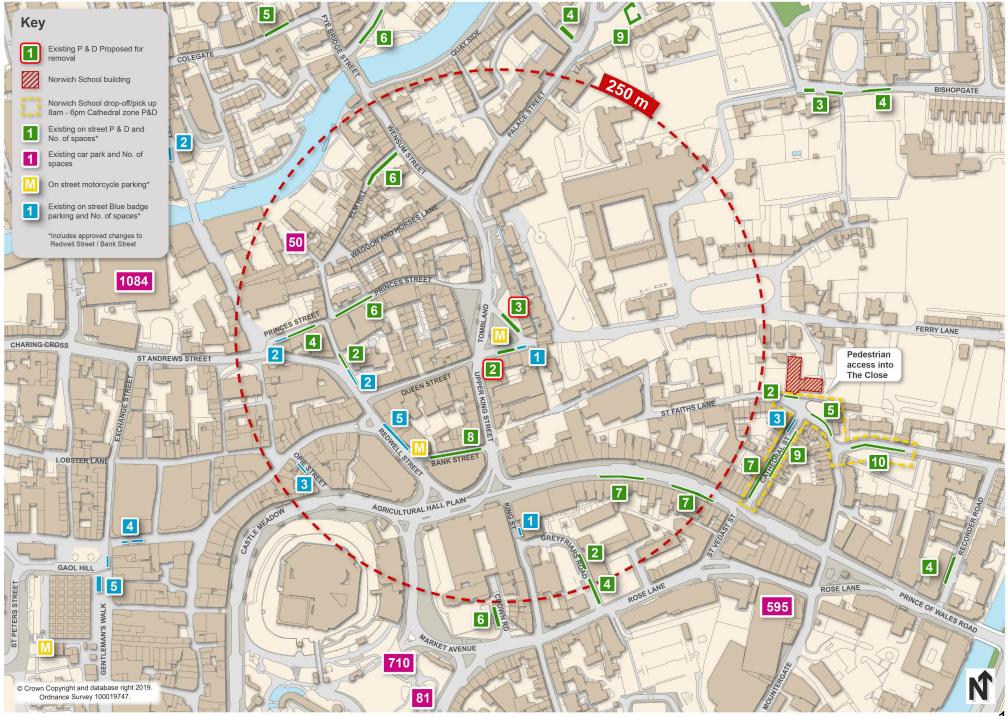


If you need this document in large print, audio, Braille, alternative format or in a different language please contact Customer Services on 0344 800 8020 or 0344 communication for all 800 8011 (textphone) and we will do our best to help.

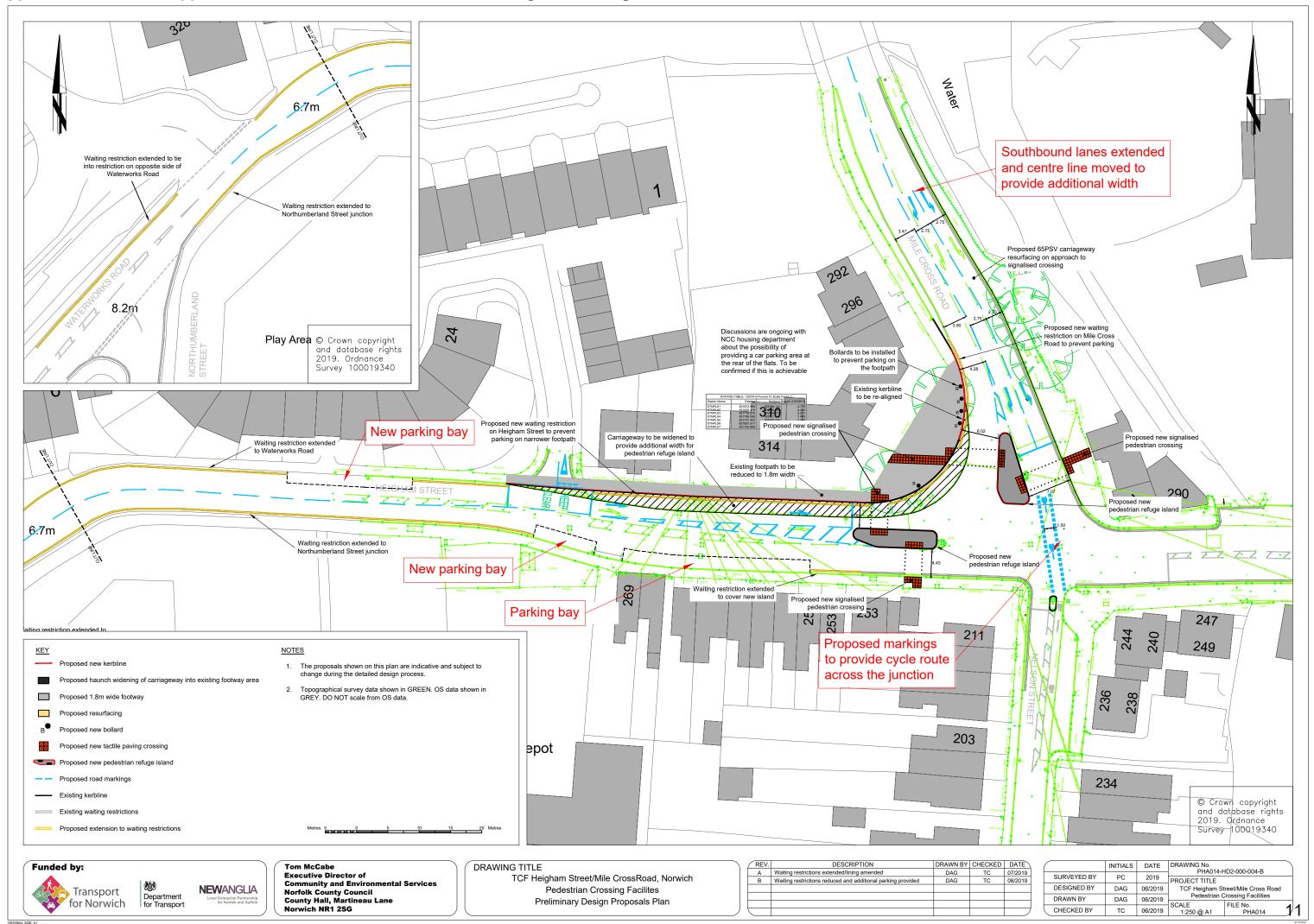
Appendix A

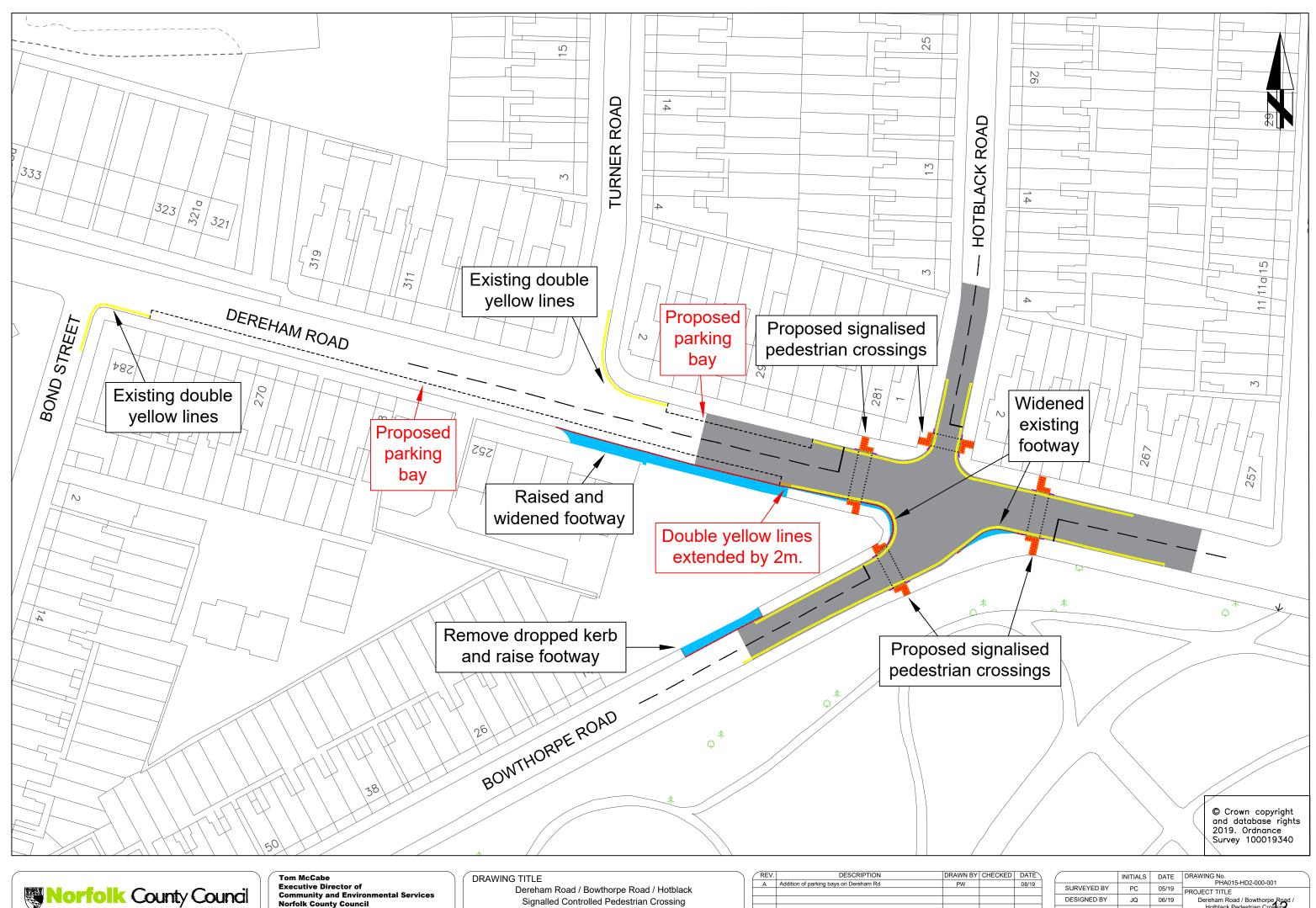
# Joint Committee for Transforming Cities Fund Projects

Tombland



Appendix B; amended appendices 3 and 4 to Item 6 considered during the meeting





Norfolk County Council County Hall, Martineau Lane Norwich NR1 2SG

Signalled Controlled Pedestrian Crossing Proposed Lay Out For Consultation

	REV.	DESCRIPTION	DRAWN BY	CHE
	Α	Addition of parking bays on Dereham Rd	PW	
1				

DATE	C	INITIALS	DATE	DRAWING No.		)
08/19	SURVEYED BY	PC	05/19	PHAU15- PROJECT TITLE	HD2-000-001	-
	DESIGNED BY	JQ	06/19	Dereham Road	/ Bowthorpe Road /	
	DRAWN BY	PW	08/19		destrian Crossing	-
	CHECKED BY			SCALE NTS	PHA015	

## Appendix C - Consultation responses

Road Address or Association	Supports the Crossings	Comments		Wensum Residents Association Template used - support with comments	Wensum Residents Association Template used - full support with no comments
Livingstone Street	Y	1	Support welcomed	Y	
Dereham Road	Y	A crossing is also needed on Mile Cross Road near the entrance to Anderson's Meadow.	This area is out of the scope of the current scheme However, in the future there will be housing developments in the local area. We will work with developers to provide necessary infrastructure improvements.		
Waterworks Road	Y			Y	
Hotblack Road	Y		A	- P	Y
Hotblack Road	Y	Broadly supports the proposals but would like better indication and facility for cyclists travelling south on Mile Cross Road to Nelson Street.	Support for proposals welcomed. The new lining and supporting sign to indicate to cyclists where to position themselves if travelling south to Nelson Street is proposed and will be shown on plan at committee.	Y	

Responses to the consultation on Heigham Street / Mile Cross Road and Dereham Road / Bowthorpe Road junctions received on 6th August or later

Responses to the consultation on Heigham Street / Mile Cross Road and Dereham Road / Bowthorpe Road junctions received on 6th August or later

Road Address or Association	Supports the Crossings	Comments	Officer Comments	Wensum Residents Association Template used - support with comments	Wensum Residents Association Template used - full support with no comments
Cllr Denise Carlo	Y	each arm of the Dereham Road / Bowthorpe Road junction, but would like consideration of traffic management issues in the wider area. These include drivers rat running through Merton Road and Bond Street, speed of vehicles on Bowthorpe Road, cyclist safety on Bowthorpe Road and consideration of installing a zebra crossing on Bowthorpe Road near Bond Street and the	The support for the crossings at the Dereham Road / Bowthorpe Road junction is welcomed. The request for 20mph in Bowthorpe Road is covered in the 20mph section of this report and is not possible with the current budget. Consideration of the traffic management issues in the wider area is out of the scope of this scheme and not possible at present. Decisions for the TCF bidding will be finalised this Autumn.		
		Cemetery entrance. Would like these to be added to the forthcoming bid for TCFs.			

Responses to the consultation on Heigham Street / Mile Cross Road and Dereham Road / Bowthorpe Road junctions received on 6th August or later

Road Address or Association	Supports the Crossings	Comments	Officer Comments	Wensum Residents Association Template used - support with comments	Wensum Residents Association Template used - full support with no comments
White Swan Walk	Y	Supports the crossings, but would like the Heigham Street / Mile Cross Road junction to be made into a roundabout as turning right out of Old Laundry Court is difficult, so turning left to the roundabout and using that to go west on Heigham Street would be helpful.	Support for the crossings is welcome, but the suggestion of completely changing the Mile Cross Road / Heigham Street junction is not possible to consider with our limited budget.		
Old Laundry Court	Y	Supports the crossings but is concerned about the lack of parking for residents and visitors with the extent of double yellow lines proposed.	Support for the crossings is welcome. To achieve these crossings at the Mile Cross Road / Heigham Street junction it was necessary to narrow the pavement and stop pavement parking. We have provided a plan at committee with proposals to install parking bays in the areas we believe will encourage drivers to park fully on the road and not cause obstruction to pedestrians.		

## Appendix D

Road Address	Supports the crossings	Objects to the double yellow lines	Comments	Officer Comments
Adelaide Stret	Yes		Concerned with the safety of cyclists travelling from Mile Cross Road to Nelson Street at junction. Cyclists need to be told to use the right lane only, there has been near misses.	We intend to install a sign to advise cyclists and there will be road marking at the junction to guide cyclists.
Heigham Street	Yes	Yes	There will be less space for residents to park, nearby streets are full. Concerned with the crossings causing more holdups to traffic. My dog will not like the noise caused by construction works. Would it not be better to put a stand alone crossing such as a zebra.	report. The scheme has been designed to maintain capacity at this junction. Contractors will reduce installation noise where
Heigham Street	No	Yes	We need parking spaces close by as we leave for work early in the dark and do not feel safe. You say we may have alternative parking provision, but the plans are not in place. Stop these changes.	For parking response please see report.
Heigham Street		Yes	Parking is difficult enough in this area without extra restrictions. I feel it is not safe to expect residents to walk in the dark if we need to park further away. You should consider the residents you will be putting in danger as you make the crossing "safer".	For parking response please see report.

Road Address	Supports the crossings	Objects to the double yellow lines	Comments	Officer Comments
Heigham Street			Would like more information on what is proposed to help parking for residents of 292 to 314 Heigham Street (flats)	We are working with Norwich City Council housing section and NPSNorwich to hopefully provide a residents car park on the hard standing area behind the block of flats numbered 292 to 314 Heigham Street. This project is ongoing at the moment, so cannot give a definite answer if this will be possible.
Old Laundry Court	Yes	Yes	The double yellow lines will add pressure to existing parking limitations. Suggests a car park at the back of the block of flats near the junction.	As above
Waterworks Road	Yes		Agrees with the double yellows on Waterworks Road. Cars need to stop blocking footpaths.	Support welcome

Road Address	Supports the crossings	Objects to the double yellow lines	Comments	Officer comments
Bowthorpe Road	Yes	Yes	I am fully in favour of the crossings but against the increase in double yellow lines. This is a dense residential area and parking is difficult. Dereham Road is wide enough to accommodate parking and moving traffic.	Please see report for response to parking issue.
Dereham Road				acceptable level. The junction will be aligned to slow traffic, poles

Road Address	Supports the crossings	Objects to the double yellow lines	Comments	Officer comments
Dereham Road	Yes		The light phasing must prioritise pedestrians otherwise pedestrians will not wait. Please take measures to stop cyclists from using footpaths.	The phasing will be designed to maximise the times for all travel. Dereham Road is a main radial road into Norwich. Traffic must have minimum delay as this interferes with public transport, deliveries and can push drivers to rat run in inappropriate residential streets. Cyclists on footpaths is a difficult problem to address. However, by making the road environment more appealing to cyclist, they are encouraged to stay on the road.
Resident		Yes	The yellow lines will further restrict the parking where there are lots of residents needing parking spaces.	Please see report for response to parking issue.

Road Address or association	Supports the crossings	Comments	Officer comments	Wensum Residents Association Template used - support with comments	Wensum Residents Association Template used - full support with no comments
Cllr Carlo	Yes	Supports the schemes, but would like cyclists considered	consideration has been given to cyclists and aids to cyclists have been included where possible.		
Norwich Cycling Campaign	Yes	Please see report for comments.	Please see report for comments.		
Norfolk Constabulary	Yes	Norfolk Constabulary are fully in favour of both schemes and do not object,	Support Welcomed		
Wensum Residents Association	Yes	Please see report for comments.	Please see report for comments.	Y	
Armes Street	Yes		Support Welcomed	Y	
Armes Street	Yes		Support Welcomed	Y	
Armes Street	Yes		Support Welcomed		Y
Atthill Road	Yes		Support Welcomed	Y	
Atthill Road	Yes		Support Welcomed	Y	
Bowthorpe Road	Yes		Support Welcomed	Y	
Bowthorpe Road	Yes		Support Welcomed	Y	
Dereham Road	Yes		Support Welcomed	Y	
Dereham Road	Yes		Support Welcomed	Υ	
Dereham Road	Yes		Support Welcomed	Υ	
Dereham Road	Yes		Support Welcomed	Y	
Dereham Road	Yes		Support Welcomed		Y
Dereham Road	Yes	Concerned with the extent of the double yellow lines, where will everyone park?	For parking response please see report.		

Road Address or association	Supports the crossings	Comments	Officer comments	Wensum Residents Association Template used - support with comments	Wensum Residents Association Template used - full support with no comments
Godric Place	Yes		Support Welcomed		Υ
Grant Street	Yes		Support Welcomed		Υ
Grant Street	Yes		Support Welcomed	Y	
Heigham Street	Yes		Support Welcomed	Y	
Holly Drive	Yes	Concerned that the dropped kerbs at the junction should be suitable for wheelchair use as many in this area are not.	All new dropped kerbs for this scheme will be designed to enable easy access for all road users.		
Hotblack Road	Yes	Would like Hotblack Road to be in a 20mph zone.	Hotblack Road is proposed to be included in a 20mph zone.		
Hotblack Road	Yes		Support Welcomed	Y	
Hotblack Road	Yes		Support Welcomed	Y	
Hotblack Road	Yes		Support Welcomed	Y	
Hotblack Road	Yes	Hotblack Road should be closed at the junction.	Considering, modelling and analysing the effect of alternative traffic management on the surrounding area is beyond the scope of this scheme.	Y	
Hotblack Road	Yes		Support Welcomed	Y	
Hotblack Road	Yes		Support Welcomed	Y	
Hotblack Road	Yes		Support Welcomed	Y	
Livingstone Street	Yes		Support Welcomed	Y	Y
Livingstone Street	Yes		Support Welcomed		Y

Road Address or association Merton Road	Supports the crossings Yes	Comments A pedestrian crossing is needed	Officer comments This issue is addressed in the report.	Wensum Residents Association Template used - support with comments Y	Wensum Residents Association Template used - full support with no comments
		on Bowthorpe Road near Bond Street.			
Nelson Street	Yes	Please do not consider putting any parking restrictions in Nelson Street as the parking situation is very difficult	Comment noted.	Y	
Nelson Street	Yes		Support Welcomed	Y	
Nelson Street	Yes	Nelson Street needs 20mph speed limit and more traffic calming, it is used as a rat run, cyclists ride on pavements. Residents need a safe environment.	Nelson Street is proposed to be included in the 20mph zone. However, there are no plans to increase the amount of existing traffic calming.	Y	
Nelson Street		Nelson Street is used as a rat run by large vehicles and should be made one way south travelling.	Considering, modelling and analysing the effect of alternative traffic management on the surrounding area is beyond the scope of this scheme.		
Nelson Street	Yes	Corner shops should not have parking areas (except for disabled parking), people should be encouraged to walk there.	For parking response please see report. Corner shops do need areas for deliveries and potential customers who may have limited mobility.	Y	

Road Address or	Supports the	Comments	Officer comments	Wensum	Wensum
association	crossings			Residents	Residents
				Association	Association
				Template used -	Template used -
				support with	full support
				comments	with no
					comments
Nile Street	Yes		Support Welcomed	Y	
Nile Street	Yes		Support Welcomed	Y	
Northumberland	Yes		Support Welcomed	Y	
Street					
Resident	Yes		Support Welcomed		Υ
Resident	Yes		Support Welcomed		Y
Resident	Yes		Support Welcomed	Y	
Resident	Yes		Support Welcomed	Y	
Resident	Yes		Support Welcomed	Y	
Resident	Yes		Support Welcomed	Y	
Resident	Yes		Support Welcomed	Y	
Resident	Yes		Support Welcomed		Y
Speke Street	Yes		Support Welcomed	Y	
St Bartholomews	Yes		Support Welcomed		Y
Close					
Turner Road	Yes		Support Welcomed	Y	
Waddington Street	Yes		Support Welcomed		Υ
Waterworks Road	Yes		Support Welcomed	Y	
Waterworks Road	Yes		Support Welcomed	Y	
Waterworks Road	Yes		Support Welcomed	Y	
West End Street	Yes		Support Welcomed	Y	
West End Street	Yes		Support Welcomed	Y	
West End Street	Yes	1	Support Welcomed	Y	
West End Street	Yes	1	Support Welcomed	Y	
Winchcomb Road	Yes		Support Welcomed	Y	

## Report to: Transforming Cities Fund Joint Committee

Report title:	Transforming Cities Funding Submission
Date of meeting:	16 October 2019
Responsible Cabinet Member:	Martin Wilby (Cabinet Member for Highways, Infrastructure and Transport)
Responsible Director:	Tom McCabe (Executive Director, Community and Environmental Services)
Is this a key decision	Yes

#### **Executive Summary**

The Department for Transport (DfT) has shortlisted Norwich as a city that is eligible to apply for capital funding from the Transforming Cities Fund (TCF). The County Council's successful application is based on a vision to "Invest in clean and shared transport, creating a healthy environment, increasing social mobility and boosting productivity through enhanced access to employment and learning." The TCF provides the opportunity to deliver a sustainable high-quality integrated transport network for the Greater Norwich area.

We have already successfully secured £6.1m of funding from an earlier tranche of TCF funding, and this paper outlines our application for the remaining TCF allocation. It should be noted that we have also been successful in being shortlisted for funding from the Future Mobility Zones Fund, which is only open to cities seeking funding through the TCF.

To give clear direction to our application, the guiding principles and overall objectives relating to the delivery of transport in Greater Norwich were agreed at the County Council Environment, Development and Transport Committee in January 2019.

As part of the co-development process, a draft Strategic Outline Business Case (SOBC) was submitted to DfT in June 2019. The initial feedback from DfT was positive and they liked the ambition of the programme and they identified a number of areas that we need to address in the final submission. Since then we have worked with the DfT and stakeholders to shape the contents of our formal SOBC submission. The deadline for submitting our final SOBC is 28 November.

#### Recommendations

- a) Consider the programme outlined in this report
- b) Recommend to the County Council Cabinet on 4 November that the programme outlined in this report is submitted to government on 28 November as the Norfolk TCF application

### 1. Background and Purpose

1.1 The Department for Transport (DfT) has shortlisted Norwich as a city that is eligible to apply for capital funding from the Transforming Cities Fund (TCF).

The County Council's successful application is based on a vision to "Invest in clean and shared transport, creating a healthy environment, increasing social mobility and boosting productivity through enhanced access to employment and learning".

1.2 Congestion across Greater Norwich contributes to poor air quality and the city centre is designated as an Air Quality Management Area. Buses have insufficient priority on main corridors and congestion means that the bus network is not operating at optimal efficiency.

#### **Objectives of the TCF**

- 1.3 Aligned to the Government's Industrial Strategy, the objectives of the TCF are to improve productivity through investment in improved public and sustainable transport and improved connections between urban centres and suburbs.
- 1.4 The TCF is intended to encourage an increase in journeys made by low carbon, sustainable modes of transport, with a significant focus on public transport, cycling and walking. Additionally, the TCF aims to support wider cross-cutting priorities such as:
  - Improving access to employment and delivering growth
  - Encouraging the use of new mobility systems and technology
  - Tackling air pollution and reducing carbon emissions
  - Delivering more homes
  - Delivering apprenticeships and improving skills

#### **Transport for Norwich Strategy Review**

- 1.5 The Transport for Norwich (TfN) Strategy is currently under review.
- 1.6 From the outcomes of public consultation earlier in 2018, as well as a review of existing background evidence, problems and issues, three Guiding Principles and three Delivery Themes were identified and agreed at a meeting of the Environment, Development and Transport Committee in January 2019. These define what the strategy is trying to do and provides a direction to the ongoing development of the strategy, its policies and implementation plan.
- 1.7 The Guiding Principles and Delivery Themes are outlined below.

#### **Guiding Principles**

#### Strengthening Norwich as the regional capital

• Enhancing the health and vitality of the city.

#### Access for all

• A transport system that gets people where they need to go.

#### Keeping people on the move

• Reducing congestion and making journeys more reliable.

#### **Delivery Themes**

#### Balancing the needs of the city and its users

- Identify priority areas for different users to inform network improvements.
- Take account of the competing travel needs of residents, businesses and

others.

#### Collaborating to provide cost-effective and efficient transport

- Build strong partnerships with transport service providers.
- Develop opportunities for private sector investment.
- Share responsibility for positive change.

#### Embracing new technology

- Encourage and trial new means of travel.
- Inform people's travel choices
- Optimise and evolve our existing network.

## 2. Proposals-Key deliverables

- 2.1 A number of key deliverables were outlined in our original application and these remain valid as we have developed our programme. A summary of these is outlined below:
  - Improvements along three principal transport corridors; Airport to Broadland Business Park; Wymondham to Sprowston; and Easton to Rackheath
  - Quicker journeys by cleaner vehicles serving the Norwich Research Park, University of East Anglia and the hospital, making use of a route crossing the River Yare
  - More frequent bus services that are better co-ordinated between operators, with more evening services
  - Improvements to public transport ticketing
  - Improvements to walking and cycling networks to support the delivery of enhanced public transport
  - Improvements to public transport, walking, cycling and general highway capacity in the Longwater area
  - More direct and quicker public transport routes to and from the Broadland Growth Triangle, the UK's largest urban extension
  - Provision of much needed additional bus stop capacity in the city centre, better connecting the train and bus stations and providing extra inner ring road junction capacity
  - Delivering fully accessible transport hubs that provide a range of facilities and multi-modal transport options

#### **Mobility hubs**

- 2.2 In developing our TCF programme, we have included consideration for the provision of mobility hubs across Greater Norwich. We have defined these as key places within the city where citizens can access shared mobility services buses, trains, club cars and hire bikes. Key features of these are:
  - Easy for people to reach these places on foot and by bicycle
  - Close to public facilities (shops, schools, libraries), density of employment and are at the centre of neighbourhoods, suburbs and settlements
  - Well designed so people feel comfortable, secure and informed
  - Buses are able to pull up alongside the kerb in the right place and at the right angle so all passengers can board and alight easily
  - Regular bus services are provided, as well as interchange between

#### services

The specific features available at each hub location will vary according to the space available and links to other shared transport services.

#### Definition of corridors

2.3 For the purposes of developing our funding programme and providing flexibility in terms of evaluation of schemes, we have split the three corridors into their six (6) constituent elements either side of the city centre, as summarised in Table 1 below. The City Centre was kept as a separate entity.

Corridor in Expression of Interest	Corridor in Funding Submission
Wymondham - Sprowston	Wymondham – City Centre
	Sprowston – City Centre
Airport – Broadland Business Park	Airport – City Centre
	Broadland Business Park – City Centre
Easton - Rackheath	Easton – City Centre
	Rackheath – City Centre
City Centre	City Centre

#### Table 1: Summary of corridors assessed

#### Workstreams undertaken

2.4 A number of workstreams have been undertaken to develop our proposed programme for submission and these are summarised in **Table 2**.

#### Table 2. Workstreams undertaken

Workstream	Outcome
Engagement with DfT and stakeholders	There has been regular written and verbal engagement with DfT, which has provided helpful advice on how our programme should be developed, appraised and presented. There has been engagement with stakeholders through the Transforming Cities Stakeholder Group, as well as through 1:1 discussions.

Development of 5 cases that make up SOBC	Draft versions of the 5 case documents that make up the business case were presented to DfT in June 2019. Final versions of these need to be submitted in November 2019.
Outline feasibility of schemes by engineers, including review of scheme costs, risks and dates of construction	A significant amount of outline feasibility design of a wide range of potential infrastructure schemes has been undertaken. This has considered scheme costs, benefits, risks, construction dates and deliverability. This has formed a key element of identifying appropriate schemes and prioritising corridors for investment.
Strategic and localised traffic modelling of emerging schemes	Traffic modelling provides an invaluable tool for indicating that potential impact of schemes on the wider transport network and is an important element of informing the economic appraisal of individual schemes and the wider programme. Advice from DfT has been an important element of this.
Equality Impact Assessment	An Equality Impact Assessment ensures that policies, projects or schemes do not discriminate against any disadvantaged or vulnerable people. This assessment has engaged with local equality groups to identify the impacts of our programme.
Carbon / Air Quality Assessment	Addressing carbon emissions and improving local air quality are key objectives of the TCF. The impact of our programme on carbon and air quality has been considered and schemes selected which maximise the contribution to these aspects.
Review of Park and Ride	Park and Ride is a key element of our existing transport network and transport strategy. A review of Park and Ride has started as part of the TfN Strategy and emerging findings of this have been considered in our programme.
Collation of metrics for the corridors (population, number of businesses, education, deprivation, car ownership, etc)	Identifying the different metrics that make up the transport corridors in Greater Norwich is important in terms of identifying how and where our programme will make the greatest positive impact.

#### **Corridor metrics**

2.5 The following metrics for each corridor have been used to assist in the assessment of each corridor:

#### Demographics

Population (including future growth Number living within 400m of proposed mobility hubs along the corridor No. of households where 25% have no car Number of residents less than 16 years of age Number of residents aged 65 and over Number of residents in most deprived quartile Number of residents whose day-to-day activities are limited No. of buses along corridor

#### Transport

No. of buses along corridor Bus patronage along corridor Park & Ride (average monthly car park occupancy No. of cars along corridor No. of people walking No. of people cycling

#### **Businesses and education**

No. of students at educational sites No. of businesses

2.6 By ranking each corridor against each of these separate metrics (with '1' representing the corridor with the highest value, through to '6' for the corridor with the lowest value), the corridors perform as set out in **Table 3** below:

 Table 3: Ranking of corridors against common metrics

Corridor	Average ranking score
Wymondham – City Centre	1.7
Easton – City Centre	2.9
Airport – City Centre	3.1
Sprowston – City Centre	3.9
Rackheath – City Centre	4.3
Broadland Business Park – City Centre	5.0

2.7 In addition to ranking against common metrics, each corridor has been assessed in terms of deliverability, impacts on carbon and air quality, benefits to public transport, walking and cycling and impacts on employment.

#### Schemes identified for each corridor

2.8 The information in **Appendix A** details all proposals in the high funding scenario. Discussions with DfT has identified a likely constraint on funding, hence the requirement for low, medium and high funding scenarios being presented.

#### 3. Impact of the proposal

3.1 The SOBC is being submitted at a programme level and is not based around a single individual scheme. Different case documents are required to be submitted to DfT, which makes up the contents of the business case. A summary of the contents of each of these is outlined in **Table 4**.

·	
Type of case	Required evidence
Strategic case	Outlines how the programme meets the core policy objectives of the fund for the low, medium and high funding scenarios
Economic case	An appraisal of the economic impacts of the programme, such as user benefits, but also including the wider impacts e.g. increasing access to employment through greater connectivity
Commercial case	A description of the level of market engagement and procurement strategy for the programme.
Financial case	Evidence on the financial sustainability, project costs and affordability. This should include a funding profile, broken down by the total scheme cost, Fund contribution, total public-sector contribution and/or private sector contribution
Management case	Overarching deliver plan and implementation strategy with clear timetable for delivery.

**Table 4:** Case documents required for an SOBC submission.

#### 4.0 Evidence and Reasons for Decision

4.1 The programme outlined in this report has been developed in conjunction with both private and public sector partners, as well as with input from the DfT. The programme maximises the potential for the bid to be successful and is therefore recommended to the Joint Committee.

## 5.0 Alternative Options

5.1 Alternative options include to not submit a bid, or to submit higher or lower programme options. As the bid has been developed with input from the DfT, neither of these alternative options are recommended.

### 6.0 Financial Implications

- 6.1 There is a requirement to submit funding programmes based on low, medium and high funding scenarios. We have been advised by DfT that the greatest emphasis regarding assessment will be placed on the low and medium scenarios. Indications from the DfT are that they are likely to allocate funding in the low or medium category.
- 6.2 At this current stage of preparing our programme, we are proposing the funding programme outlined in **Table 5** below. This builds on feedback from the DfT regarding our initial proposals in draft SOBC.

	F	unding Scenar	io
Corridor	Low (£000)	Medium (£000)	High (£000)
Airport	4,910	4,910	13,681
Broadland Business Park		2,199	21,822
Easton	9,642	9,642	13,426
Rackheath	3,086	3,086	6,042
Sprowston			13,090
Wymondham	11,801	25,215	25,215
City Centre	24,574	24,574	30,487
All corridors	20,739	20,739	38,461
Total	74,751	90,364	162,213

**Table 5:** Summary of programme by corridor

6.3 A summary of the programme is outlined in **Table 6** below.

 Table 6: Overall summary of programme

Funding Source	Low (£000)	Medium (£000)	High (£000)
DfT	54,890	70,499	130,924
Local contribution	19,862	19,866	31,300
Total	74,751	90,364	162,223

#### 7. **Resource Implications**

- 7.1 **Staff:** A review of resourcing required to deliver the TCF programme is underway and includes consideration of design, construction and programme management. Appropriate use will be made of existing staff and framework contracts.
- 7.2 Property: None
- 7.3 **IT:** None

#### 8. Other Implications

- 8.1 Legal Implications: None
- 8.2 Human Rights implications: N/A
- 8.3 **Equality Impact Assessment (EqIA):** An Equality Impact Assessment has been carried out for our programme. Should our funding application be successful, assessments will also be carried out as part of the development of individual schemes.
- 8.4 Health and Safety implications: N/A
- 8.5 **Sustainability implications:** The objectives of the business case are specifically targeted at improving the impact transport has on carbon emissions, air quality and public health.
- 8.6 **Any other implications:** None

#### 9. Risk Implications/Assessment

9.1 A risk register is maintained as part of the technical design and construction delivery processes.

#### 10. Recommendation

- a) Consider the programme outlined in this report
  - b) Recommend to the County Council Cabinet on 4 November that the programme outlined in this report is submitted to government on 28 November as the Norfolk TCF application

## 11. Background Papers

11.1 Report to:

10.1

<u>County Council Cabinet – June 2019</u> <u>County Council Cabinet – May 2019</u> <u>Environment, Development and Transport Committee – Jan 2019</u>

#### **Officer Contact**

If you have any questions about matters contained in this paper, please get in touch with:

Officer name : Jeremy Wiggin Tel No. : 01603 223117

Email address : jeremy.wiggin@norfolk.gov.uk



If you need this report in large print, audio, braille, alternative format or in a different language please contact 0344 800 8020 or 0344 800 8011 (textphone) and we will do our best to help.

# Appendix A. Corridor Scheme Summaries

#### All Corridors

Scheme name	Summary description and scheme benefits
Traffic signal priority for all buses	<ul> <li>The existing traffic control system provides the capability for buses to request priority through traffic junctions. However, there is more that can be done to develop this system to maximise benefits to public transport and keep traffic moving in the most efficient way.</li> <li>Develop the traffic control system to enable all buses to benefit from priority measures being available, improving the reliability of the public transport network</li> </ul>
Pedalway wayfinding	<ul> <li>Feedback is that the current wayfinding provision for cycling makes navigating the cycleways difficult and confusing.</li> <li>Complete an audit of existing and required cycle signage and deliver a coherent wayfinding programme that encourages increased levels of cycling for commuting and leisure activities, linking together mobility hubs and promoting the cultural assets across Greater Norwich.</li> </ul>
LED street lighting and readiness for Smart City Technology	<ul> <li>The current approach to street lighting is based around reducing energy consumption through initiatives that include the implementation of new technologies such as Light Emitting Diode (LED) lanterns and the Central Management Systems (CMS). In addition, there is the opportunity to trial the use of traffic counting cameras and other sensors for highway network analysis, which could be used to control street lighting level, inform road users of live traffic conditions and help plan maintenance and development of the highway network.</li> <li>Seek to roll out across Greater Norwich new LED street lighting and associated technologies that will enable Smart City Technology to be deployed.</li> </ul>

Scheme name	Summary description and scheme benefits
Norfolk Car Club Expansion across all corridors	<ul> <li>As well as general public use, small and medium sized enterprises are regular users of the Norfolk Car Club, increasing economic activity, productivity and jobs and using Club vans is popular among business members as it enables them to reduce transport costs by not owning vehicles, allowing the savings to be reinvested into staff recruitment and business growth.</li> <li>Expand the provision of car club vehicles across Greater Norwich and the City Centre</li> </ul>
Provision of high quality disruption information for all transport users	<ul> <li>Norfolk currently utilises systems that enables the locations of buses to be compared against scheduled timetables, so that information can be presented to bus users on when buses are predicted to arrive at bus stops. This is a complex process involving different parties, back-office systems and standards of data. More needs to be done to develop and improve these systems.</li> <li>Work across all relevant parties and data providers to improve the quality and quantity of travel information presented to users, particularly during times of network disruption. This will improve the confidence that network users have in the information provided, encouraging greater use of more sustainable transport modes.</li> </ul>
Initiatives to support car sharing	<ul> <li>Surveys have shown that, on average, 85% of private vehicles on the roads in Greater Norwich have one person in them. At peak times, this can increase to more than 95%. These low levels of vehicle occupancy limit the number of people that the road network can carry, causes congestion, delay and worsening air quality, and impacts the ability of the network to meet future travel demands of businesses and individuals.</li> <li>Support initiatives aimed at encouraging motorists to share vehicles, such as marking out of shared parking bays in car parks and development of appropriate IT. This would be supported by a comprehensive behaviour change programme.</li> </ul>

# City Centre

Scheme name	Summary description and scheme benefits
St Stephens Street / Red Lion Street / Castle Meadow	<ul> <li>General traffic was removed from St Stephens Street in 2014 but the streetscape and public transport infrastructure remains the same as when it carried more traffic. Buses are often unable to align with the kerb resulting in delays to traffic and difficult boarding / alighting buses.</li> <li>Change kerblines to provide more capacity for buses to pick up and drop off passengers, help buses to align better with the kerb so people with restricted mobility can access buses without difficulty and reduce air pollution that results from buses waiting to access stops or pass other buses.</li> <li>Better pedestrian crossings and a more attractive pedestrian and cycle environment will ease movement, reduce stress and encourage investment.</li> </ul>
Foundry bridge junction and train station mobility hub	<ul> <li>This is a vital gateway to the city and existing facilities for all users could be improved.</li> <li>Explore the opportunity to improve the efficiency of the Foundry Bridge junction and provide bus priority and cycling safety by examining options of making Thorpe Road between Riverside Road and Lower Clarence Road past Norwich rail station bus, cycle and pedestrian access only. Impacts from displaced traffic will need to be carefully assessed and mitigated.</li> <li>Introduce mobility hub facilities in the catchment to further improve interchange between different transport modes.</li> </ul>
Thorpe Road contraflow (Clarence Road – Carrow Road)	<ul> <li>Inbound buses and cyclists are currently diverted, along with general traffic, away from the direct route along Thorpe Road towards the city centre.</li> <li>Allow contraflow movement for buses and cyclists to encourage greater use of more sustainable modes by saving time and improving safety when accessing the city centre. This will complement the proposed works on Thorpe Road at Norwich rail station to improve facilities for buses, pedestrians and cyclists.</li> <li>Review bus stops and pedestrian crossings in the area to ensure access is maintained.</li> </ul>

Scheme name	Summary description and scheme benefits
Grapes Hill Roundabout	<ul> <li>Grapes Hill roundabout is a critical point on the highway network that carries large volumes of general traffic and buses. Significant numbers of pedestrians and cyclists need to cross near the roundabout to access routes to and from the city centre.</li> <li>Improve the flow of traffic through a review of signalling arrangements while maintaining, but also seeking to improve, pedestrian and cycle crossing facilities.</li> </ul>
St Stephens Street roundabout	<ul> <li>The roundabout and its associated subway system provides an unattractive arrival experience for pedestrians and can be dangerous for cyclists to negotiate. It is especially heavily used by students moving to and from City College.</li> <li>Provide an improved environment for pedestrians and cyclists and an enhanced gateway to the city.</li> </ul>
Chapel Field North / East	<ul> <li>All the buses to the west of the city exit the city centre via Chapel Field North and queuing traffic significantly delays buses, which operate some of the busiest public transport routes in the region.</li> <li>Identify options to prioritise Chapel Field North outbound for public transport, with general traffic using Chapel Field East.</li> <li>Maintain access to the Theatre Royal for picking up / dropping off and to Chantry car park, including the possibility of time-restricted arrangements that could enable general evening use of Chapel Field North.</li> <li>Impacts on Chapel Field car park entry / exit will need to be fully explored.</li> </ul>
City centre west-east through-traffic restriction	<ul> <li>A considerable amount of through traffic drives from west to east through the city centre between Grapes Hill and Barn Road to Foundry Bridge via St Andrew's Street, Exchange Street, Agricultural Hall Plain and Prince of Wales Road.</li> <li>Examine options to manage traffic differently on St Andrew's Street to restrict through traffic thereby enabling pavements to be widened, cycle and pedestrian facilities made safer and improving environmental conditions and public transport routes on streets currently used by through traffic.</li> <li>Maintain access to properties and car parks.</li> </ul>

Scheme name	Summary description and scheme benefits
Wayfinding	<ul> <li>Feedback is that pedestrian and cycling wayfinding systems are currently confusing and opportunities for strengthening the cultural and artistic interventions in the street to enliven the pedestrian experience have been missed.</li> <li>Create a coherent environment and stimulate economic growth by promoting the cultural assets of the city centre that can be enjoyed by exploring Norwich on foot and by bicycle through culture-led wayfinding interventions in the city centre and at key mobility hubs.</li> </ul>
Magdalen Street / Anglia Square mobility hub	Magdalen Street is a key historic pedestrian thoroughfare in the north of the city centre that is used by all the public transport services travelling to and from the north of Norwich and forms part of the blue pedalway.
	<ul> <li>Improve pedestrian crossings, widen pavements, reduce street clutter, and increase bus stop capacity at Anglia Square to create a more attractive and safer environment for all. Introduce mobility hub facilities.</li> </ul>
Tombland	Tombland is an historic public space that accommodates multiple competing transport requirements but its design is not fit for purpose.
	<ul> <li>Implement the pedestrian, cycling and public realm improvements approved at the Transforming Cities Joint Committee in August 2019.</li> </ul>
Pink pedalway: Palace Street	Palace Street offers a poor level of service to cyclists using the pink pedalway between the city centre and the north east of the city.
	<ul> <li>Extend the two way off-carriageway cycle track from Tombland to St Martin at Palace Plain.</li> </ul>

Scheme name	Summary description and scheme benefits
King Street	<ul> <li>King Street is a well-connected historic street in the city centre that is experiencing significant development along its length, houses the National Writers Centre and Wensum Lodge, provides a vital pedestrian and cycle link from the city centre to the East Norwich Regeneration Area on the edge of the city centre and forms part of national cycle route 1.</li> <li>Improve street surfaces and pedestrian priority to encourage activity and investment to flow towards development sites and cultural institutions on King Street and in East Norwich.</li> </ul>
City Centre low / zero emission zone	<ul> <li>The City Council formally declared the whole of the city centre as an air quality management area (AQMA) in November 2012 and further action is needed to improve air quality.</li> <li>Make the minimum emission specifications more rigorous in the heart of the city centre, supported by other projects in the programme that aim to improve air quality</li> </ul>

# Wymondham to City Centre

Scheme name	Summary description and scheme benefits
Wymondham train station mobility hub	<ul> <li>More than 1 million people travelled between Norwich and Cambridge by rail in 2018, which is the highest ever amount. However, no bus services call at the station to enable convenient onward travel. This means that people travelling to the Norwich Research Park (NRP) must travel into Norwich and then travel back out. Explore options for travelling directly to the NRP from Wymondham.</li> <li>Provide step-free access to the Cambridge-bound platform. Dravide facilities for burge and enables to adapte the state.</li> </ul>
	<ul> <li>Provide facilities for buses and coaches to adequately serve Wymondham station forecourt. Introduce mobility hub facilities.</li> </ul>
Thickthorn Park & Ride mobility hub expansion	Thickthorn is the most popular Park & Ride site and there is the potential for additional bus services to run to the University of East Anglia (UES) / NRP, as well as the city centre, to meet growing demand.
	Expand Thickthorn Park & Ride site
Norfolk and Norwich University Hospital (NNUH)	The current arrangement for bus manoeuvres and access to bus stops around the outpatient entrances is congested, with conflict between many different types of vehicles and hospital users.
mobility hub	• Provide a new bus interchange within the hospital site and additional bus stops to better serve the wider hospital site.
Cross Valley Link	The lack of a direct connection between UEA and NRP that is usable by buses requires lengthy routing via Earlham Road to serve the NNUH, NRP and UEA.
	<ul> <li>Provide a new transport link across the Yare Valley from the western end of Chancellors Drive to cater for the increasing movements of people across the wider UEA, NNUH and NRP site, providing segregated routing for buses, pedestrians and cyclists.</li> </ul>

UEA – City centre via South Park Avenue and Unthank Road including Unthank Road mobility hub	<ul> <li>Buses are delayed by localised pinch points caused by narrow carriageway widths and on-street parking.</li> <li>Address localised pinch points to ease bus flow.</li> <li>Introduce mobility hub facilities.</li> </ul>
Newmarket Road (Eaton Road - Christchurch Road) including Newmarket Road mobility hub	<ul> <li>Newmarket Road forms part of the blue pedalway between Wymondham, Hethersett, Eaton and the city centre. There is currently no signalised crossing facilities at Eaton Road for cyclists or pedestrians that are using the shared path on the south side. The stepped cycle track, which offers space and protection for inbound cyclists, is missing from the section between Christchurch Road and the outer ring road.</li> <li>Extend stepped cycle track from Christchurch Road to the outer ring road and provide a controlled crossing over Eaton Road</li> <li>Review measures through the Eaton Road, outer ring road and Christchurch Road junctions that will improve bus and general traffic flow</li> </ul>
St Stephens to City College	<ul> <li>There are thousands of pedestrian movements to and from City College but the pavements on St Stephen's Road are too narrow to comfortably accommodate the demand.</li> <li>Provide a substantially wider footway to support existing and future growth in further education provision at the college.</li> </ul>
Mobility Hubs at Wymondham Market Cross and Hethersett (in addition to those mentioned above)	<ul> <li>Introduce mobility hub facilities and catchment works.</li> </ul>

## Easton to City Centre

Scheme Name	Summary description and scheme benefits
Dereham Road / Longwater Lane	Delays are experienced by bus passengers on the section of Dereham Road between Longwater Lane and the Wendene roundabout and cyclists are forced to share the carriageway with heavy, fast moving traffic.
	<ul> <li>Introduce bus lanes and an off-carriageway cycle path.</li> </ul>
Dereham Road / Richmond Road (including link to Bowthorpe)	The crossing of Dereham Road between the Bowthorpe cycle path and Richmond Road is a popular place to cross for school children moving between Bowthorpe and Ormiston Victory Academy and residents of Costessey accessing outbound bus stops on Dereham Road and jobs at the Barnard Road industrial estate. It also provides a connection for people living in Costessey who wish to cycle into the city along the Green pedalway
	<ul> <li>Upgrade the crossing so it is capable of being used conveniently by people on foot and cycle.</li> </ul>
Dereham Road / Breckland Road and Costessey / Bowthorpe mobility hub	A cluster of bus stops to the east of the Wendene roundabout have the potential to become a central location where residents of Costessey and Bowthorpe can access express bus services. However, buses are currently delayed on the approach to the roundabout and it is unclear where passengers should go to access the various bus services. This is compounded by the unattractive pedestrian subway beneath Dereham Road. • Allow buses to access a bus gate bypass of Wendene
	roundabout on the old alignment of Dereham Road combined with the consolidation of bus stops and better access by replacing the subway with a signal controlled pedestrian and cycle crossing. Introduce mobility hub facilities.

Scheme Name	Summary description and scheme benefits
Purple pedalway (Earlham Green Lane – Marriott's Way)	<ul> <li>The Purple pedalway in this part of the city connects Hellesdon, Marriott's Way, Costessey, Bowthorpe and the NRP where significant housing and jobs growth is planned. It is also an important green infrastructure link between the Wensum and Yare valleys. The section in the vicinity of Dereham Road is the weakest part of the route, presenting cyclists with difficulties accessing Marriott's Way at the bottom of Oval Road, contending with fast moving traffic on Norwich Road and the lack of a crossing over Dereham Road.</li> <li>Upgrade the quality and safety of the purple pedalway between Marriott's Way and Bowthorpe Three Score to further encourage sustainable travel in this area.</li> </ul>
Marriott's Way to Hellesdon Road	<ul> <li>Marriott's Way provides a popular and convenient traffic-free walking and cycling connection between the city centre, Drayton and beyond. It follows the track bed of the former railway apart from the section between Hellesdon Road and Gunton Lane where the route awkwardly deviates with a difficult crossing at the bottom of Marl Pit Lane.</li> <li>Realign Marriott's Way with a surfaced and ramped path on a more direct route along the track bed of the railway enabled by the installation of a new cycle and pedestrian crossing close to Hellesdon Bridge.</li> </ul>
Dereham Road outbound approach to Larkman Lane including Larkman mobility hub	<ul> <li>Delays are experienced by bus passengers on the outbound approach to the Larkman Lane junction and the facilities for shared mobility including bus stops and access to them needs to be improved at this important community focus.</li> <li>Introduce an outbound bus lane on the approach to Larkman Lane and introduce mobility hub facilities.</li> </ul>
Dereham Road approach to Bowthorpe Road	<ul> <li>Delays are experienced by bus passengers on the inbound approach to Bowthorpe Road.</li> <li>Provision of an inbound bus lane on the approach to Bowthorpe Road.</li> </ul>

Scheme Name	Summary description and scheme benefits
Ocheme Name	Summary description and scheme benefits
Dereham Road / Old Palace Road / Heigham Road	<ul> <li>Delays are experienced by bus passengers on the inbound approach to Old Palace Road. Cyclists riding outbound on the section of Dereham Road between Heigham Road and Bowthorpe Road lack protected space.</li> <li>Options are being considered for bus and cycle lane provision.</li> </ul>
Longwater junction	<ul> <li>There is considerable current and planned housing development in Easton and Costessey around Longwater. These areas are beyond the current limit of the Norwich cycle network that largely because the Longwater junction presents a barrier to cycling beyond Bowthorpe.</li> <li>Extend the Green pedalway from Bowthorpe to Easton via a new pedestrian / cycle bridge over the A47 that avoids the Longwater junction to connect communities with schools, services and jobs in the city.</li> </ul>
Mobility Hubs at Easton, Queens Hills, Dereham Road (near Hotblack Road) and Dereham Road (near Duoro Place) (in addition to those mentioned above)	Introduce mobility hub facilities and catchment works.

## Airport to City Centre

Scheme name	Summary description and scheme benefits
Yellow pedalway extension to Horsham St Faith	<ul> <li>Horsham St Faith and The Nest community sports facility are within cycling distance of the city but cut off by the lack of any cycling infrastructure that would enable cyclists to avoid riding with heavy traffic on Holt Road between the airport and the Broadland Northway.</li> <li>Provide an off-carriageway cycle path on the east side of Holt Road to better connect these locations.</li> </ul>
Norwich Airport access – industrial estate link	<ul> <li>The lack of a public route between the airport terminal and airport industrial estate that is useable by pedestrians, cyclists and bus passengers means that fewer people can access the airport industrial estate and International Aviation Academy without a car and the yellow and purple pedalways cannot provide a safe route to the airport and Horsham St Faith from the city centre.</li> <li>Provide a new public transport, pedestrian and cycling connection between Amsterdam Way and the airport industrial estate and identify further priority for buses to serve the industrial estate.</li> </ul>
Cromer Road and Aylsham Road (Fifers Lane – Glenmore Gardens)	<ul> <li>Cromer Road and Aylsham Road provide a key public transport corridor from North Norfolk, Hellesdon and the Airport P&amp;R site but bus passengers are currently delayed by congested conditions along Cromer Road and Aylsham Road.</li> <li>Provide significant lengths of inbound bus lanes on Cromer Road and Aylsham Road.</li> </ul>
Boundary junction	<ul> <li>Bus passengers are delayed on Cromer Road and Reepham Road approaching the Boundary junction and conditions for cycling on Reepham Road are not favourable.</li> <li>Seek to prioritise bus movements on Cromer Road and Reepham Road approaches to the Boundary junction, assisting cyclists and pedestrian crossing movements.</li> </ul>

Scheme name	Summary description and scheme benefits
Vera Road – Rye Avenue crossing	<ul> <li>Access into the city from Hellesdon for cyclists is difficult because there are no crossings over the Boundary Road section of the outer ring road for cyclists.</li> <li>Provide new signalised crossing of the outer ring road for cyclists and pedestrians between Rye Avenue and Vera Road.</li> </ul>
St Augustine's Gate	<ul> <li>Buses and long vehicles approaching the St Augustine's Gate junction from Aylsham Road are unable to position themselves within the traffic lanes due to the existing highway geometry.</li> <li>Modify the approach to this junction to reduce conflict between road users.</li> </ul>
Airport P&R mobility hub	<ul> <li>Consider the potential for a new P&amp;R site accessed off the Broadland Northway junction on A140. This could provide additional capacity and would benefit from other public transport measures along the corridor.</li> </ul>
Mobility hubs at Vulcan Road and Mile Cross (in addition to those mentioned above)	<ul> <li>Introduce mobility hub facilities and catchment works.</li> </ul>

## Sprowston to City Centre

Scheme name	Summary description and scheme benefits
Wroxham Road	<ul> <li>Wroxham Road is a key access for longer distance buses from North Norfolk, villages to the north of Norwich and the Sprowston Park and Ride. Delays are experienced by bus services and there is little cycling infrastructure provided.</li> <li>Extend existing bus lane on Wroxham Road and convert to 24hrs to improve reliability of buses</li> <li>Improve path on west side and allow cycling between Allen's Avenue and Blue Boar Lane with new crossings on Wroxham Road and Chartwell Road.</li> </ul>
Sprowston Road (south of the outer ring road)	<ul> <li>As with Wroxham Road, bus delays and unreliability are experienced by passengers and there is little cycling infrastructure.</li> <li>Provide new inbound and outbound bus lanes and seek to provide an outbound segregated cycle track.</li> </ul>
Sprowston Road (Magdalen Road - Denmark Road)	<ul> <li>The section of Sprowston Road between Magdalen Road and Denmark Road is very narrow, causing delays for buses and general traffic, difficulties for cyclists and obstructed footways for pedestrians.</li> <li>Options considered for addressing this could include parking removal or the introduction of a one-way system.</li> </ul>
North East Norwich new Park & Ride supersite	<ul> <li>An option could be considered for a new potential replacement Park &amp; Ride site accessed from the Broadland Northway serving the Sprowston Road corridor.</li> </ul>

Mobility hubs at Wroxham Road shops, Sprowston Road near Templemere and Sprowston Road near	<ul> <li>Introduce mobility hub facilities and catchment works.</li> </ul>
Road near Denmark Opening	

## Rackheath to City Centre

Scheme name	Summary description and scheme benefits
Pink pedalway: Salhouse Road	<ul> <li>Traffic conditions on Salhouse Road between the end of the pink pedalway at Harrison's Wood and the Broadland Northway make it hard for people to cycle between the city, new housing development on Salhouse Road and Rackheath.</li> <li>Extend the Pink pedalway with an off-carriageway cycling and walking path between Harrison's Wood and the Broadland Northway.</li> </ul>
Plumstead Road / Woodside Road	<ul> <li>The current double mini roundabout at this location is difficult to navigate, particularly for public transport.</li> <li>Consider options to amend the junction layout to make it easier to navigate for buses and other road users.</li> </ul>
Heartsease Fiveways roundabout	<ul> <li>The current roundabout is key pinchpoint on Plumstead Road and delays buses and general traffic and is difficult for cycles and pedestrians to navigate.</li> <li>Consider options to improve the junction to provide improved facilities for all users.</li> </ul>
Kett's Hill roundabout	<ul> <li>Buses are delayed on the Kett's Hill approach to the roundabout and there is a poor accident record for cyclists.</li> <li>Introduce a bus lane on Kett's Hill approach facilitated by the removal of parked cars and alterations to the roundabout to improve safety for cyclists.</li> </ul>
Mobility hubs at Plumstead Road shops, Salhouse Road (near Atlantic Avenue) and Rackheath	<ul> <li>Introduce mobility hub facilities and catchment works.</li> </ul>

## Broadland Business Park to City Centre

Scheme name	Summary description and scheme benefits
Broadland Way	<ul> <li>Traffic-free cycling and pedestrian access between Rackheath and Broadland Business Park in the growth triangle as part of a planned longer route to Wroxham would encourage cycling to work.</li> <li>Provide traffic-free pedestrian and cycle path between Middle Road and Broad Lane.</li> </ul>
Yarmouth Road / Pound Lane	<ul> <li>Traffic congestion causes delays to bus passengers.</li> <li>Provide eastbound bus lane on approach and seek to reduce delays and improve capacity through the junction.</li> </ul>
Yarmouth Road / Thunder Lane	<ul><li>The signalised junction at Thunder Lane causes delays to buses on Yarmouth Road.</li><li>Identify options to provide priority to the main traffic flow on Yarmouth Road.</li></ul>
Thorpe Road / Harvey Lane – bus priority	<ul> <li>Delays are experienced by bus passengers on the approach to Harvey Lane.</li> <li>Introduce a bus lane on the outbound approach to Harvey Lane.</li> </ul>
Removal of parking at pinch points	<ul> <li>On-street parking at various locations along Yarmouth Road creates pinch points that delays general traffic, particularly buses, and creates difficult cycle conditions.</li> <li>Seek to relocate some existing on street parking to off-road parking on Yarmouth Road.</li> </ul>

Scheme name	Summary description and scheme benefits
Purple Pedalway: Lion Wood	<ul> <li>The purple pedalway connects Thorpe Road to Plumstead Road via Lion Wood. The path through the ancient woodland is heavily rutted and flash floodwater collects in the valley and surges down to Wellesley Avenue South and Thorpe Road.</li> <li>Provide a more appropriate surfaced path so cyclists and people with mobility problems can access the woodland and move between neighbouring areas.</li> <li>Install sustainable urban drainage features to capture and infiltrate floodwater to mitigate flooding.</li> </ul>
Rackheath – East-West highway link across railway	<ul> <li>New highway access is required to serve housing development in the growth triangle.</li> <li>Build a highway bridge over the rail line as part of the growth triangle link road.</li> </ul>
Postwick Park and Ride mobility hub	<ul> <li>Expansion of existing P&amp;R site</li> </ul>
Mobility hubs along Thorpe Road at Harvey Lane, near Primrose Crescent and Broadland Business Park	Introduction of mobility hub facilities and catchment works.