

Norwich Area Transportation Strategy (NATS) Implementation Package

Report by the Director of Environment, Transport and Development

Summary

This report provides Members with emerging outputs of work being undertaken on an Implementation Plan for the Norwich Area Transportation Strategy (NATS). This summarises key outputs from public and business consultation and outlines how a wide range of transport schemes, including the Northern Distributor Road (NDR) are being assessed. An update is also provided on the NDR / Postwick work to date.

Extensive public consultation was carried out between October – November 2009 and key transport issues raised as needing improvement were congestion, bus services, cycling and parking. Overall, there was strong support for the proposed changes in the city centre as well as the proposed cycle routes shown. There was an overall view that Bus Rapid Transit (BRT) would improve travel into Norwich and that the proposals as a whole would deliver improvements to the transport network in Norwich.

Consultation with businesses and a wide range of other stakeholders indicated that the NDR was the main transport intervention that would bring the greatest benefit. Other proposals receiving strong support were BRT and rail and bus service enhancements. Overall, over 80% of businesses agreed that the Implementation Plan would improve the local economy.

Detailed modelling work is being undertaken to assess the Implementation Plan and provide supporting evidence for transport elements of the Joint Core Strategy (JCS). Initial findings have demonstrated that the Implementation Plan deals with future congestion, including traffic generated from planned growth in the JCS, and provides capacity for enhanced priority for buses, cyclists and pedestrians.

A Strategic Environmental Assessment (SEA), incorporating a Health Impact Assessment, is being undertaken and consultation with statutory bodies on an Environmental Report takes place during February / March 2010. Socio-economic analysis is underway.

It is expected that funding for the Plan will come from a variety of sources, including Growth Funding, developers, the Regional Funding Allocation (RFA) and County Council. The speed of implementation will be dependent on progress with the NDR and availability of funding, particularly from developers.

Action Required

Members are asked to comment on the emerging Implementation Plan, and endorse recommended changes to a small number of NATS policies and that the NATS area becomes consistent with the Norwich Policy Area.

1. **Background**

- 1.1. The Norwich Area Transportation Strategy (NATS) has already brought major improvements to transport and the environment that benefits thousands of people who live, shop and work in and around Norwich. However, our transport system is under strain and pressure will increase over time. We therefore need to create a further step-change in transport provision to realise the full potential of NATS and cater for the transport needs of a vibrant and growing regional centre.
- 1.2. The development of the Joint Core Strategy (JCS) by the Greater Norwich Development Partnership (GNDP) has led to the need for a more detailed Implementation Plan being developed for NATS. It will also firm up on the complementary measures for the Northern Distributor Road (NDR) planning process.

The key features of the emerging Implementation Plan are:

- The NDR
 - A bus rapid transit (BRT) network
 - City centre improvements
 - A package of cycling and walking improvements
 - Smarter Choices initiatives, like travel planning
 - Integrated ticketing and improved information
 - Specific rail service improvements.
- 1.3. The Department for Transport (DfT) confirmed in December 2009 that it will invest £67.5m for Norfolk County Council to deliver the NDR from the A47 at Postwick to the A140 junction. This also confirmed £21m of CLG CIF funding for the Postwick Hub improvement scheme. Work at Postwick is scheduled to commence during the Spring of 2010 and will deliver an improved junction at Postwick, increased park and ride capacity and provide the potential to unlock sites for up to 1,600 homes.
 - 1.4. The County Council has stated its intention to ensure the construction of an NDR scheme from Postwick to the A1067, seeking alternative sources of funding to do so. However the DfT decision creates a risk that the section of the NDR between the A140 and A1067 may not be affordable, or may be built in a later phase. If there were a period where the NDR stops at the A140, modelling data is showing that this will still accommodate the planned growth identified in the JCS for NE Norwich.
 - 1.5. Assuming a period whereby the NDR does stop at the A140, concerns about the impact of traffic movements on the existing network between the A140 and the A1067 are recognised. Modelling analysis comparing the NDR stopping at the A140 with the NDR stopping at the A1067 indicates there are increases in traffic flows in the existing road network around Drayton and Taverham but in general these remain within road design capacities, with only Holt Road and the link to Hall Road exceeding their design capacity in the morning peak period. It is important to note, however, that while traffic flows increase compared to the A1067 NDR, they are generally similar to the forecast position with no NDR. Further analysis needs to be completed on traffic flows in this north-western sector and we will continue to look at the impacts in detail and report back to members. In particular this will focus on the link from the A140 to Hall Lane and other traffic management proposals on key roads in residential areas.

- 1.6. The GNDP has completed pre-submission consultation on the JCS and it was considered for approval by individual councils during February 2010.

2. **Contents of Report**

Consultation

- 2.1. Public consultation was carried out between October and November 2009 in the form of a questionnaire and exhibitions. Over 1,000 people attended the exhibitions and just over 11,500 responses were received. Key transport issues raised as needing improvement were congestion, bus services, cycling and parking. There was overall support for the proposed changes in the city centre as well as the proposed cycle routes shown.
- 2.2. When asked what improvements would encourage people to use the bus more often, priorities were stated as being more frequent and reliable buses, more flexible routing of services, one ticket to use on all services and improved shelters and waiting facilities.
- 2.3. In terms of encouraging more people to cycle, priorities were stated as being the provision of more off-road cycle routes, more dedicated on-road cycle facilities, secure cycle parking and reduced traffic flows in the city centre.
- 2.4. There was an overall view that BRT proposals would improve travel into Norwich and that they would deliver improvements to the transport network in Norwich. In general, the routes suggested for BRT services were agreed.
- 2.5. In terms of rail travel, key priorities were stated as being improvements in rail service reliability, increased frequency and quicker journeys.
- 2.6. There were nearly 23,000 individual comments made during the consultation and these have all been considered and summarised. The main points raised related to public transport fares being too expensive, support for greater pedestrian and cycle access in the city centre and increased reliability of bus services. These responses will be considered further in continuing to develop the Implementation Plan.
- 2.7. Consultation with businesses and a wide range of other stakeholders was carried out in the form of workshops, individual meetings and a bespoke questionnaire covering specific business-related issues. Over 100 businesses responded to the questionnaire and key transport problems highlighted were delays, unreliable journey times and congestion on the transport network.
- 2.8. In terms of helping improve business performance, the NDR was highlighted as the most important scheme within NATS. Other proposals receiving strong support were BRT and rail and bus service enhancements. Overall, over 80% of businesses agreed that the Implementation Plan would improve the local economy.

Assessment

- 2.9. Detailed modelling work is being undertaken to assess the Implementation Plan and provide supporting evidence for the Joint Core Strategy (JCS). Initial findings have demonstrated that the Implementation Plan deals with future congestion, including traffic generated from planned growth in the JCS, and provides capacity for enhanced priority for buses, cyclists and pedestrians. This modelling will include an assessment of environmental indicators.

- 2.10. A Strategic Environmental Assessment (SEA), incorporating a Health Impact Assessment, is being undertaken and consultation with statutory bodies on the Environmental Report takes place during February / March 2010. Socio-economic analysis is considering the impacts of the Implementation Plan on social and economic factors and incorporates an Equality Impact Assessment.
- 2.11. Delivery and funding mechanisms for the Implementation Plan are being considered, along with scheme appraisal and assessment.

Emerging Implementation Plan

- 2.12. Work is on-going to develop the NATS Implementation Plan and emerging outputs are outlined below. **Appendix A** presents a draft programme for delivery of the Implementation Plan. Implementation will need to be phased over the period up to 2026, dependent on funding and progress on the NDR. **Appendix B** presents commentary on the emerging Implementation Plan.
- 2.13. In developing the Implementation Plan, the opportunity has been taken to re-align a small number of the NATS policies to reflect developments in national policy and the JCS, and to amend the NATS area to that of the Norwich Policy Area for consistency with the JCS. Information on this is presented in **Appendix C**.
- 2.14. **Next Steps**

In addition to this committee, the Implementation Plan is being considered at various committees during March and April 2010 as outlined below:

- GNDP Policy Group – **25 March 2010**
- Norwich Joint Highways Agency Committee – **26 March 2010**
- Norfolk County Council Cabinet – **6 April 2010**

Cabinet approval for the NATS Implementation Plan will be sought in April.

3. Resource Implications

3.1. Finance :

Work on NATS Implementation is estimated to cost £1.094M in 2009/10, which is higher than the £950,000 outlined at Cabinet in October 2009. This increase comes from additional modelling work and environmental assessment being undertaken. Provision has been made to cover £640,000 and the balance will be met from a variety of sources, including savings and efficiencies within the departmental budget.

- 3.2. Funding for delivery of the Implementation Plan will come from a variety of sources, including Growth Funding, developers, the Regional Funding Allocation (RFA) and County Council. The speed of implementation will be dependent on availability of funding, particularly from developers.

3.3. Staff :

Staff across P&T, the P&T Strategic Partnership and GNDP will be involved in taking the NATS Implementation Plan forward for delivery. For specific schemes, this will involve feasibility work, consultation and scheme delivery.

3.4. **Property :**
None

3.5. **IT :**
None

4. **Other Implications**

4.1. **Legal Implications :**
None

4.2. **Human Rights :**
None

4.3. **Equality Impact Assessment (EqIA) :**
An EqIA is being completed for the NATS Implementation Plan.

4.4. **Communications :**
A Communications Steering Group is set up and co-ordinates communications work with stakeholders, the general public and within NCC. All appropriate communications will be undertaken as schemes undergo feasibility and delivery.

4.5. **Health and safety implications :**
Appropriate health and safety implications will be assessed on an individual basis as schemes come forward for feasibility and delivery.

5. **Section 17 – Crime and Disorder Act**

5.1. Impacts on crime and disorder will be assessed on an individual basis as schemes come forward for feasibility and delivery. The Implementation Plan seeks to minimise crime and disorder.

6. **Risk Implications/Assessment**

6.1. A risk assessment has been undertaken for development of the Implementation Plan. The key risks for delivering the Implementation Plan are around funding, timescales and planning. These risks are being managed through active project management and ongoing engagement with a wide range of stakeholders. Significant elements of the Plan are dependent on progress with the NDR.

6.2. There are specific risks associated with local government reorganisation. Any successor authority may decide against delivery of the NATS Implementation Plan or may decide to take forward elements of the Plan in a different way. These risks are minimised by the recognition by the County Council and its partners in Norfolk of the strategic importance of the NATS Implementation Plan and by our continued close working with stakeholders.

7. **Alternative Options**

7.1. The assessment of the Implementation Plan has tested a wide range of transport interventions. The Plan will identify the package of measures, which best meet objectives and can be delivered within the likely available resources.

8. **Conclusion**

8.1. Public and business consultation has demonstrated strong support for the emerging NATS Implementation Plan. Implementation will have to be phased with the availability of funding and progress on the NDR.

8.2. It was confirmed in December 2009 that the DfT will invest up to £67.5m to deliver the NDR as far as the A140 junction. £21m of funding has been earmarked for the Postwick Hub improvement scheme. Work is scheduled to commence early-2010.

8.3. Other elements of the Plan will be funded from a variety of sources, particularly developer contributions.

Action Required

- (i) Members are asked to comment on the emerging Implementation Plan at the Panel meeting on 3 March.
- (ii) Members are asked to endorse recommended changes to a small number of NATS policies and that the NATS area becomes consistent with the Norwich Policy Area.

Background Papers

None.

Officer Contact

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

Name	Telephone Number	Email address
Jeremy Wiggin	01603 226737	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 and ask for Jeremy Wiggin or textphone 0344 800 8011 and we will do our best to help.

Appendix A - Summary of revised NATS Implementation Programme

NDR open to traffic

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	JCS Challenges	NATS Objectives	DaSTS Objectives
Bus Rapid Transit (BRT)																			
Dereham Road																	High	High	High
Newmarket Road																			
Rackheath																			
Other BRT routes																			
Bus Schemes																			
Upgrade core bus routes																	Low	Low	Low
Upgrade interchanges																	High	High	High
New bus services linking residential and employment areas																	Low	Medium	Medium
Further develop multi-operator and multi-modal ticketing																	Medium	Medium	Medium
Feasibility and delivery of off-bus ticketing																			
Review and introduce additional P&R services																			
Northern Distributor Road (NDR)																			
Main scheme																	High	High	High
Associated works on surrounding roads to 'lock-in' benefits																			
Postwick Hub and expand Postwick P&R																			
Other Highway																			
Southern Bypass junctions																	High	Medium	Medium
Broadland Local Plan housing link																			
Norwich Research Park (NRP) transport infrastructure																			
City Centre Works																			
St Augustines Gyratory / Anglia Square																	Medium	High	High
Pedestrianisation schemes																			
Bus-only roads (eg. St Stephens Street, Prince of Wales Road)																			
Public realm works																			
Consolidation of car parks																			
Safety																			
20mph works in residential areas - Costessey																	Low	Low	Medium
20mph works in residential areas - general																			
Traffic Management																			
Traffic light priority and enhancement to traffic signals																	Low	Medium	Medium
Variable messaging signing to aid driver and passenger information																	Low	Low	Low
Rail																			
Award of new East Anglia franchise																	Medium	Medium	Medium
Rail service enhancements																	Medium	High	Medium
Possible new station construction																			
Cycling																			
Develop extended cycle map with user groups																	Low	High	Medium
Additional cycle storage facilities																	Low	Low	Low
Implement contra-flow cycle lanes																	Low	High	Medium
Feasibility and delivery of a core cycle network																	Low	Low	Low
Increased cycle priority at junctions																			
Potential cycle hire scheme																			
Walking																			
New pedestrian crossings and refuges																	Low	Medium	Medium
Increased pedestrian priority at junctions																			
Smarter Travel Choices																			
Develop journey planning tools																	Low	High	High
Campaigns to raise awareness of sustainable modes																			
Development of green travel plans with businesses																			
Freight																			
Review access restrictions in the city centre																	Low	Medium	Low
Work with partners to promote freight consolidation																			

Appendix B – Commentary on emerging NATS Implementation Plan

Bus Rapid Transit

There was a good level of support from the general public to proposals for a BRT network, with over 63% of those questioned stating that they considered BRT would improve travel in and out of Norwich. The most important factors identified in the consultation in terms of bus travel were frequent buses (every 10 mins), reliability of service, flexibility of routing and ticketing, better quality bus stops and shelters and improved provision of travel information. These are key attributes of a BRT service.

Assessment of transport corridors in Norwich against a clearly defined set of objectives for a high quality rapid transit service identified that up to six corridors could be considered for upgrading to a BRT service. Important factors considered were the ability to link major growth locations with the city centre and strategic employment areas and the ability to increase public transport patronage and public perception of public transport. Other corridors will be considered as core bus routes where service frequency, journey time and reliability will be improved.

Deliverability of works along BRT corridors will be based on a number of factors, including the availability of funding, delivery of housing and jobs and progress on delivering the NDR. Some BRT corridors are more dependent on the NDR than others in terms of being able to provide the necessary levels of priority for buses. Whilst it is considered that traffic light priority can be delivered along all corridors, some will only benefit from the full potential of bus priority through key junctions once levels of general traffic are reduced following the opening of the NDR. Similarly, full benefits from road space reallocation will only be realised on some corridors once the NDR is open. Corridors most affected by the NDR are those serving Rackheath, Postwick, Airport and Drayton. For these corridors, the full benefits of BRT can only be realised after the opening of the NDR. Corridors least affected by the NDR are those serving the A11 corridor and along the Dereham Road. Works can progress along these routes as early as 2010/11.

In addition to priority measures, there are other important factors that complement BRT and will encourage modal shift from car to bus. These include new bus shelters, high quality and up-to-date travel information, high quality vehicles (provided by operators) and improved ticketing arrangements. These are more flexible in terms of their delivery and BRT corridors can benefit from these schemes in advance of bus priority measures going in. Works could progress on delivering these measures as early as 2010/11.

There are significant opportunities for works undertaken to develop BRT to complement other initiatives such as Smarter Travel Choices, Park & Ride, walking and cycling networks and incorporation of green infrastructure. By adopting a whole corridor approach to BRT, it will be possible to identify where linkages with walking and cycling can be maximised and where bus stops should be located to best serve residential areas and access to key services, such as libraries, health facilities and local shops.

There are several options for how BRT could be run and managed and assessment work is underway to identify what would be the best option for Norwich. This includes consideration of powers available under the Transport Act 2008. Options include the use of Voluntary and Statutory Bus Partnerships, as well as the introduction of a Quality Contract. More work is needed on this.

Other Bus Schemes

In general, there was support for proposals to enhance public transport provision along core bus routes. These routes, provided by a range of different bus operators, serve destinations such as the Norwich Research Park, UEA and hospital and already provide a comprehensive bus network across the NATS area.

Improvements along these corridors will focus on smaller-scale works, particularly at junctions, to alleviate areas of congestion and provide opportunities where buses can be given additional priority through traffic signals and by using short lengths of bus lane. In addition, improvements to bus stops and information provision will be provided, as these issues were identified in the consultation as being areas where improvements are needed. The current bus shelter contract within the city centre is up for review in 2011 and this provides an ideal opportunity to consider what arrangements in terms of bus shelter provision, maintenance and design / style are best for Norwich.

Opportunities will be sought to address concerns raised during the consultation that existing ticketing arrangements are inflexible and expensive. This will include working with transport providers and raising awareness of the existing PlusBus ticketing scheme operating in Norwich where rail and bus travel can be combined on a single ticket. In addition, the recently launched multi-operator bus ticket (Fusion) in Norwich will be reviewed to ensure it is as effective as possible. This may involve the addition of more operators and a wider range of ticket options. Off-bus ticketing is an important part of realising the full benefits of a BRT network through reduced bus boarding times and quicker and more reliable journeys. Detailed feasibility will be required to identify the most appropriate solution for Norwich. Where possible, benefits to the wider core bus network would also be considered and incorporated. Feedback from students and younger people during the consultation highlighted that consideration should be given to fare incentives for 16-19 year olds and greater flexibility in terms of the use of student travel passes. Again, this will be fully considered and taken forward as appropriate with the full involvement of younger people and all those involved. The issue of fares is something that the County Council currently has little control over due to the deregulated bus market. All feedback received on this issue will be shared with the transport operators as it is important that this message is clearly understood. As outlined in Section 2.19, there are several options available to review in terms of controls over bus services and these will be considered.

Feedback was received that Park & Ride services should run later in the evenings and should run on Sundays and Bank Holidays. Questions were also raised as to whether more flexible routing could be considered to link Park & Ride sites with large employment locations outside the city centre and whether routing in the city centre could be amended. Regular reviews are undertaken on Park & Ride and these comments will be fully considered. It is likely that funding support from the private sector would be required to deliver some of these initiatives. Overall, Park & Ride was well received in the consultation.

New bus services linking key residential and strategic employment growth areas will be considered in partnership with developers and transport providers. Delivery of these will, in most cases, be dependent on the delivery of growth. It will be important for any new route to be supported by good quality bus stops (infrastructure and information), good quality vehicles, convenient frequencies, journey times and routings and bus priority measures where possible.

The way in which bus services currently serve the city centre was raised in the consultation and it was generally felt that improved bus stop facilities were needed in the northern city

centre. Current works to deliver a new gyratory traffic circulation at St Augustines during 2010, which facilitates development of Anglia Square and is part of the Northern City Centre Area Action Plan, will provide significantly improved bus stop facilities in this area.

City Centre Circulation Changes

There was strong support from the consultation for proposals to make the city centre more accessible for sustainable modes, such as public transport, walking and cycling. Over 73% of those responding to the public consultation stated that they agreed with the proposals. In addition to public support, there was strong support from the business community, as it was stated that there are strong links with investment and the overall economic performance of the city. There are clear linkages between the city centre proposals and those set out in the St Stephens Masterplan.

Proposals to change city centre circulation and restrict access for general traffic on some roads are, to a significant extent, dependent on the capacity created by the NDR. However, initial assessments indicate that some works could be implemented in advance of the NDR. These include the closure of Westlegate and Gaol Hill / Exchange Street to general traffic. Feedback from stakeholders indicates that Westlegate will have a significant positive impact on investment and will create the conditions for real improvements for pedestrians. As part of the Westlegate works, further consideration will need to be given to works required to make Chapelfield North two-way for buses and general access as locations such as the Theatre Royal and Chapelfield Shopping Centre have specific requirements in terms of coach access and delivery of goods respectively. . In terms of Gaol Hill / Exchange Street, further work will be needed to understand where traffic using these roads is travelling from and to, such as accessing city centre car parks, and what implications closing these roads will have on displacing this traffic.

Other works within the city centre, such as the closure of St Stephens Street and Prince of Wales Road to general traffic and two-way operation on Rose Lane will be dependent on delivery of the NDR and the alternative route options the NDR provides.

City centre proposals provide significant opportunities to provide much-needed additional capacity for bus stops, which will be needed to cater for new services generated to serve growth. Existing bus stops are close to capacity and delays can be caused. These proposals enable new stops to be provided in places such as Theatre Street, and enable some buses to use revised routing, which frees up capacity elsewhere in the city. The current bus shelter contract within the city centre is up for review in 2011 and this provides an ideal opportunity to consider what arrangements in terms of bus shelter provision, maintenance and design / style are best for Norwich. Two-way operation for buses on Chapelfield North and Prince of Wales Road open up new public transport corridors through the city and further enhance the concept of a core public transport route linking the rail station with the city centre.

The consultation highlighted that facilities for visiting coaches and for demand responsive vehicles needed to be improved. There are currently few locations for coaches to use for pick-up and drop-off and park during the day. Options to address this will be considered. Demand responsive vehicles have differing requirements to buses as they often need to be parked at a stop for longer periods of time so additional assistance can be provided for passengers getting on and off vehicles, often in wheelchairs. Appropriate locations will be sought and agreed with appropriate facilities provided.

Concerns were raised during the consultation that city centre proposals would remove

access to disabled parking areas, key car parks, residential locations and areas and would restrict the opportunities for pick-up and drop-off being provided. Access to these facilities would be retained. As plans are taken forward for the city centre, consideration will be given to ensuring that adequate and convenient pick-up and drop-off locations are provided.

Proposals for the city centre will bring significant benefits to walking and cycling networks as there are opportunities to create the conditions required to encourage greater use of these modes. More information on this is outlined in the walking and cycling sections below.

Walking

Nearly 50% of people who responded to the consultation stated that reduced traffic flows in the city centre would encourage them to walk more. In addition, over 20% said that more pedestrian crossings would have the same effect. As well as reducing traffic flows and providing the opportunity for more pedestrian crossings, proposals for the city centre will also enable increased levels of priority to be given to pedestrians at signalised junctions. This will significantly improve the ability to navigate the city by foot.

There are a number of new pedestrian crossing facilities across the NATS that will be delivered in the next couple of years. These include works at Rosary Road, Ketts Hill, Earlham Road, Harvey Lane and Newmarket Road. The public consultation highlighted a number of additional locations where improved crossing facilities are sought and these will be fully considered. Phasing of future schemes will be dependent on funding.

Recent schemes, such as the opening of the Lady Julian Bridge at Riverside, have opened up new walking and cycling routes and it will be important for these routes to be supported through the NATS Implementation Plan. The St Stephens Masterplan sets out aspirations for improved walk links and these will be considered. Works will continue to develop a comprehensive walking network across the NATS area and the consultation indicated that clear and up-to-date maps showing walking routes should be provided.

There are opportunities to deliver public realm improvements in areas such as Tombland, St Stephens Street, Magdalen Street, Prince of Wales Road, Queens Road and St Benedicts Street as part of delivering the city centre proposals. Phasing of schemes such as this will be dependent on the delivery of funding and complementary works.

Cycling

There was strong feedback from the public consultation that the cycle network in Norwich needs to be better connected and joined together. The Implementation Plan provides a significant opportunity to achieve this.

The most important issues raised through the public consultation related to more off-road cycle routes (22% of people stated this), more dedicated on-road facilities (17% of people stated this), secure cycle parking (13% of people stated this), reduced traffic flows in the city centre (11% of people stated this) and contra-flow cycle lanes (6% of people stated this). Over 55% of people agreed with the locations of the proposed locations of core cycle routes. The consultation also provided a significant amount of information about other locations within the NATS area where new cycle routes and facilities should be provided. All of these will be considered.

There are opportunities to provide complementary benefits to cycling as part of delivery of BRT and city centre proposals. Reduced traffic flows in the city centre and along some key

routes will create the conditions for increased cycle use. Reduced traffic flows through busy junctions, such as in the city centre and on the ring roads, will enable increased levels of priority to be given to cycle crossings. A key part of the proposals is to develop a core network of cycle routes along less-trafficked roads linking strategic employment locations and the city centre with existing and future housing locations.

Plans are in place for the Lakenham Way to be made adoptable during 2010/11 and a feasibility study will start during 2010, as part of the Northern City Centre Area Action Plan, to look at what improvements are necessary to improve the cycle corridor between the city centre and the airport. Cycle route facilities associated with the Rackheath Eco-town proposal are being assessed and will be taken forward as part of the Growth Point work. Subsequent feasibility works will be carried out along the other routes identified in the consultation and full involvement of cycle groups and other stakeholders will be sought. Delivery of schemes will be dependent on the availability of funding and rate of development.

Feasibility work for the development of contra-flow cycle lanes at selected locations will commence during 2010 and will look at areas such as Duke Street, Bull Close Road, Carrow Hill, St Giles Street, Bethel Street and Westwick Street. Additional locations were presented during the consultation and will be fully considered.

Increased cycle parking within the city centre and at key locations such as the bus and rail stations and at key businesses and trip attractors will be taken forward. This will also consider options for improving the availability of parking for motorcycles. Options to combine cycle parking and cycle routes with BRT stops will be considered to ease interchange between modes. We will continue to work with businesses and schools in terms of identifying joint ways in which cycle use can be promoted.

The Implementation Plan seeks to review cycling in pedestrianised areas and identify the most appropriate restrictions to apply.

The consultation highlighted there was a need for raising awareness of cycling and its wide range of benefits (health, well-being, 'green' credentials, etc) and for high quality information (paper and electronic) to be available on cycle routes and facilities. It is proposed that this is taken forward with the production of a new cycle map, where cyclists have a significant involvement, and use being made of existing electronic media, such as bus shelter signage and information kiosks, to raise awareness.

The option of providing a cycle hire scheme similar to those being promoted in other UK and European cities will be considered, although this will be closely dependent on availability of significant funding and the provision of adequate facilities for cycle parking and routes.

Rail Services

There was strong business support for improvements to rail links and there is a significant opportunity to bring about improvements through the re-franchising of the National Express East Anglia franchise, which will be re-let in 2011. The County Council is actively engaged in this process.

Key aspirations for rail for the Norwich to London main line include faster journey times (down to 90 mins) and higher quality inter-city style rolling stock with facilities such as wifi. Norfolk County Council is actively engaged in the 'Norwich in 90' proposal, which raises awareness of the journey time aspirations.

Other aspirations include the provision of increased capacity and frequency on the Norwich to Cambridge service, as this is an important route for accessing employment and serving existing and future growth. An increased level of service and capacity on the Bittern and Wherry Lines is also sought, but it is recognised that this will have a lower priority when compared to lines to London and Cambridge. We will continue discussions with developers and the rail industry with regards to options to deliver tram-train proposals from the Rackheath Eco-town.

Opportunities for new stations to serve Postwick, Broadland Business Park and the eco-town at Rackheath will be subject to further feasibility. Delivery would be closely dependent on availability of funding from development and programmes within the rail industry.

The County Council has an excellent record of delivering improvements to rail stations in partnership with the rail industry and we will look to continue this in the future. The most significant station improvement scheme within the NATS area relates to access at Wymondham, where significant investment is needed to provide DDA-complaint access to the Cambridge-bound platform. Increased cycle parking at stations will be delivered as part of on-going improvement works.

Smarter Travel Choices

Smarter Travel Choices play an important role in supporting modal shift from car to more sustainable modes and this will be further developed as part of the NATS Implementation Plan.

All schools within the NATS area have travel plans and these are proving successful in encouraging use of sustainable modes for journeys to school. Whilst there are a relatively small number of businesses with travel plans, the Implementation Plan aims to significantly increase this, with attention being focussed on the largest employers in the area. We are working with stakeholders on establishing area-wide travel plans, which provide economies of scale and a collective working towards a common goal.

Personalised journey planning has proved to be effective in encouraging modal shift and opportunities to further develop this across the NATS area will be sought. Other initiatives include sustained publicity campaigns, promotion of car-sharing and provision of on-line travel planning and information.

There are clear linkages between Smarter Travel Choices and the other initiatives promoted in NATS.

Other Highway Schemes

There are a number of other highway schemes that will be taken forward as growth develops. These include a Broadland Local Plan link road, a link road from Broadland Business Park to Salhouse Road, new road infrastructure directly related to proposed expansion of the Norwich Research Park and improvements to the junctions on the southern bypass (A47) at Thickthorn, Longwater and Harford to cater for growth. Delivery of these schemes are closely linked with the rate of associated development.

Traffic Management and Safety

There are a number of schemes that are associated with traffic management and safety.

Feasibility will be undertaken during 2010/11 to identify whether to make an experimental one-way operation on Silver Street permanent and work will be undertaken to review the existing bus-gate at Albion Way near the Riverside development.

The principle of car-park consolidation is proposed, which involves the possible removal of smaller city centre car parks and the expansion of one or more sites to accommodate these spaces. This approach would retain a limit on the number of car parking spaces within the city. Car parks that could be removed include Chantry, Pottergate, Monastery Court, Golden Dog Lane, Magdalen Street, Westwick Street, Chatham Street, Chapelfield East and Queens Road. Delivery of this would be dependent on city centre circulation works and availability of funding.

Controlled Parking Zones (CPZs) are to be reviewed with a view to extending this and introducing on-street parking charges during the evenings and on Sundays.

The option of introducing 20mph speed limits is partially dependent on further advice from the Department for Transport on the use of 20mph speed limits in residential areas. The NATS consultation identified a number of locations where safety measures are sought and these will be considered once the national guidance is confirmed and the Norfolk County Council strategy on speed has been reviewed.

To maximise highway capacity and benefits deriving from the NDR, appropriate 'tools' will be used to control traffic flow. This includes an expansion in the use of already used technology, such as SCOOT and MOVA at junctions. This technology enables traffic signals to adapt to varying traffic conditions and provide appropriate levels of priority for other modes, such as walking cycling.

Options will be sought to develop improved communications links with transport providers and other stakeholders, such as emergency services, the media and general public, to ensure disruption on the highway network is minimised. This will include technologies such as Variable Message Signs (VMS) on the highway and use of media such as the internet and SMS text messaging.

Freight

A review of all existing waiting and loading restrictions within the city centre will be undertaken.

Promotion of freight consolidation will be continued with the support of stakeholders. Opportunities to expand this approach to other radial routes other than Newmarket Road will be explored.

Appendix C: Re-alignment of NATS policies

NATS Alignment	Justification
NATS Area: Amend the NATS area to that of the Norwich Policy Area	The Norwich Policy Area is a defined area used in regional planning documents and local planning documents. There is no compelling reason why the NATS area should be different, and there are many advantages to having a commonly defined area, not least for clarity.

Current Policy	NATS Alignment	Justification
<p>Policy 4: Discouraging through traffic from the city centre Motorised traffic (except buses) will be prevented from driving straight through the city centre, and will be redirected onto the Inner Ring Road, or other appropriate routes. Access to the city centre will be maintained.</p>	<p>Title: Discouraging through traffic from the city centre Text: Vehicular traffic will be discouraged from driving through the city centre where appropriate in order to deliver a more pedestrian friendly environment.</p>	<p>To reflect the realities of delivering a city centre environment which meets the needs of all road users, ie there is no one solution that will meet the needs of all users on every road. It will allow much more flexibility in order to ensure that the most appropriate measures are implemented.</p>
<p>Policy 15: Public Transport The reliability and overall quality of public transport services and information will be improved.</p>	<p>Title: Public Transport Text: To seek to improve the reliability, punctuality and overall quality of public transport services and information through a step change in transport provision.</p>	<p>To strengthen the public transport strategy and to reflect the need to deliver a major shift in emphasis across the Norwich Policy Area towards travel by public transport as required by policy NR1 in the RSS.</p>
<p>Policy 16: Bus Priority Measures Bus priority measures will be focussed on the core bus network. Where this core bus network is on main roads (Primary Distributors), new bus priority measures will not introduce delays for other, general traffic.</p>	<p>Title: Bus Priority Measures Text: Bus priority measures will be focussed on the core bus network. Where this core bus network is on main roads (Primary Distributors), new bus priority measures will lock in the benefits of the NDR.</p>	<p>To strengthen the public transport strategy and to reflect the need to deliver a major shift in emphasis across the Norwich Policy Area towards travel by public transport as required by policy NR1 in the RSS. The NDR provides an opportunity to deliver bus priority measures.</p>

Current Policy	NATS Alignment	Justification
<p>Policy 18: Frequency of bus services The strategy will seek to maintain or improve existing bus frequencies within the urban area. In co-operation with bus operators, daytime frequencies of at least 10 minutes and evening frequencies of at least 30 minutes on principal bus routes in the urban area will be sought. Improvements in reliability and punctuality will be sought.</p> <p>A twenty-minute daytime frequency (hourly evening and Sundays) will be sought for principal links from settlements in the hinterlands to the centre of Norwich.</p> <p>Hourly daytime frequency and two hourly evening and Sundays will be sought between other local market centres and the centre of Norwich.</p>	<p>Title: Frequency of Bus Services Text: We will aim to achieve a high quality bus network within the Norwich area with:</p> <ul style="list-style-type: none"> • Turn up and go frequencies on the BRT routes with 30 minute frequencies evenings and Sundays • A minimum 15/20 minute frequencies on core routes and hourly services evenings and Sundays • 30 minute frequencies elsewhere in the Norwich area, hourly evenings and Sundays 	<p>As above, in particular this policy sets more ambitious targets which are required in order to reflect policy NR1 in the RSS. Achieving these high frequency services may be dependent on the NDR on some corridors.</p>
<p>Policy 48: Improvements to the Main Roads Measures including junction improvements will be considered for implementation on the Primary Distributors to relieve problems of chronic congestion</p>	<p>Title: Improvements to the Main Roads Text: Measures to reduce congestion, including junction improvements, will be pursued where they have a beneficial impact on the road network as a whole. In particular, measures that improve capacity for sustainable modes will be considered most favourable.</p>	<p>To reflect RSS and DaSTS which emphasise the need to prioritise capacity improvements for low carbon modes</p>

Current Policy	NATS Alignment	Justification
<p>Policy 52: Promotion and education Public awareness of the problems associated with traffic growth and the benefits of alternative means of travel will be raised through publicity and public awareness campaigns.</p>	<p>Title: Smarter Choices Text: In the Norwich area measures that encourage a modal shift to sustainable modes of transport will be investigated before road capacity improvements. These will include:</p> <ul style="list-style-type: none"> • School and workplace travel plans • Residential travel plans for all new developments • Travel awareness campaigns • Car sharing schemes • Information and publicity around walking, cycling and public transport • Personalised journey planning 	<p>To strengthen the policy and align it with the RSS and DaSTS which state that significant change in behaviour will be brought about through a concerted programme of policies to raise awareness of sustainable travel. In order to better reflect Climate Change Act 2008 and associated carbon reduction targets</p> <p>The policy is usefully merged to create an overall statement around Smarter Choices</p>
<p>Policy: 53 Soft Measures Soft transport measures, designed to give better information and opportunities, will be intensively developed.</p>	<p>Title: Soft Measures</p> <p>Remove this policy and combine with the policy above on Smarter Choices</p>	<p>As above</p>
<p>Policy 54: Travel plans Local businesses, schools and other major organisations will be encouraged to develop travel plans. Travel Plans will be required for new developments, or extensions to existing developments in the following cases:</p> <ul style="list-style-type: none"> • Where a Transport Assessment is required • Where a travel plan would help address a particular local traffic problem associated with the planning application, which might otherwise have to be refused on local traffic grounds • It is a major development comprising 	<p>Title: Travel Plans</p> <p>Remove this policy and combine with the policy above on Smarter Choices</p>	<p>As above</p>

Current Policy	NATS Alignment	Justification
<p>jobs, shopping, leisure or services</p> <ul style="list-style-type: none"> • It is a smaller development comprising jobs, shopping, leisure or services that would generate significant amounts of travel in, or near to, air quality management areas • It is a smaller development outside an air quality management areas where there are local initiatives or targets set out in the development plan or local transport plan for the reduction of road traffic, or the promotion of public transport, walking and cycling 		
<p>Policy 57: Pollution The strategy will seek to address the adverse environmental impacts of traffic (primarily air and noise pollution, and greenhouse gas emissions) in the Norwich area.</p>	<p>Title: Tackling Climate Change and Pollution Text: We will seek to reduce emissions from road transport, including carbon emissions and to improve air quality in the Norwich area by:</p> <ul style="list-style-type: none"> • Encouraging a modal shift to less polluting modes of travel • Reducing emissions from vehicles that emit the most • Ensuring that new development is planned and located to reduce the need to travel and maximise the opportunities for the most sustainable modes of travel. 	<p>To ensure NATS reflects the need to reduce emissions from road transport and aligns with the strong emphasis in both the RSS and DaSTS on responding to the threat of climate change. In order to better reflect Climate Change Act 2008 and associated carbon reduction targets</p>

Current Policy	NATS Alignment	Justification
<p>Policy 59: Cleaner vehicles The Council will work with local authorities to raise awareness of and promote energy efficiency in transport, including the use of sustainable vehicles and fuels, and best practice in relation to fuel efficiency and pollution.</p>	<p>Title: Cleaner Vehicles</p> <p>Remove this policy and combine with the Tackling Climate Change and Pollution policy</p>	<p>Promoting cleaner vehicles is a key element of delivering the above policy on climate change, it could</p>