Author

This Norwich Green Party *Additional Statement* is authored by Norfolk County Councillor and Norwich City Councillor Andrew Boswell. I make this statement as local politician first elected in 2005 to represent residents in the Norwich Nelson division, an area to the West of the City Centre. The Green Party holds 19 council seats [15 City Council, 4 County Council] within the Norwich urban area and is the main opposition group on the City Council. Norwich Green Party has a written constitution and over 1100 active members and supporters within the City and outlying areas of Norfolk.

Prior to being elected to Norfolk County Council, I pursued a career in scientific research and computing support for scientific research. My doctorate was in protein molecular structure and dynamics (Oxford, 1981). I worked for 10 years (1984-1994) in the design of the Very Large Scale Integrated (VLSI) circuits that have made the current digital revolution possible, and from 1995-2006 I managed the High Performance Computing (HPC) Research infrastructure at the University of East Anglia (UEA, Norwich) and worked with scientific research groups across the campus including those modelling the global climate system.

Endorsement

The submission is endorsed by Councillor Richard Bearman, Leader of the Green Party group on Norfolk County Council, and Councillor Claire Stephenson, Leader of the Green Party group on Norwich City Council.

Definitions

BAFB - Best and Final Funding Bid to the Local Authority Major Schemes Development Pool for a "Norwich Northern Distributor Route" (2011)
FBC – Community Infrastructure Fund 2 (CIF2) Postwick Hub Full Business Case (2008)
LTP3 – Local Transport Plan 3 (2011)
MSBC - NDR Major Scheme Business Case (2008)
NCC – Norfolk County Council
NDR - Norwich Northern Distributor Road

1 Introduction

1 This *Additional Statement* relates to the Infrastructure Framework in the JCS.

2 This *Additional Statement* covers these area:

- A comparison of the JCS Infrastructure Framework (JCSIF) and the GNDP Local Investment Plan and Programme (LIPP). This comparison raises some initial quality assurance issues with the oversight of the infrastructure program.
- Details of variances between the JCSIF and LIPP are given showing major discrepancies both in costings and phasing of projects.
- We posit, in response to the Inspectors question 1.17, that the JCS needs to be updated with the information from the LIPP.
- We then raise soundness concerns as a result of our comparison in these areas: the deliverability of sustainable transport projects which are suffering increased costs and slippage by up to 10 years in the LIP against JCS, rapidly escalating

costs to partners (such as the NHS for hospital beds), and the lack of available funding for infrastructure given the recent scaling down of the Community Infrastructure Levy Charging Schedules.

- We believe the infrastructure programme is now at such risk that there should be a review of it, with a public consultation, before the JCS is approved 'sound'.

2 The Infrastructure Framework

3 This section responds to the Inspector's question 1.17 – "1.17. Is the information contained in the latest version of the Local Investment Plan and Programme (LIPP) particularly that in Table 11.1, reflected in the Infrastructure Framework in Appendix 7 of the JCS for the policy 10 proposals? If not, should it? "

2.1 Introduction

4 The latest LIPP is Version 4.1, published Feb 2012, and available from the GNDP website at: http://www.gndp.org.uk/downloads/LIPP-v4.1-2012-02-03.pdf [Ruth Charles email to NNTAG, 07 May 2013]. This version is used for answering the Inspector's question 1.17.

5 The information in Appendix 7 of the JCS is laid out differently which makes a thorough comparison exceptionally difficult. However, a comparison of Table 11.1 – the North East Spatial Package has been made infrastructure item-by-item and is summarised below. Whilst this comparison is detailed, it is not comprehensive or complete, given the poor starting place of the very different layouts and structuring.

6 Infrastructure developed is phased short-term, medium and long-term over five year periods: 2011-2016, 2016-2012, 2021-2026 respectively. These terms are used below.

7 The LIPP has diverged from the JCS is several respects both in phasing and in financial costs. We highlight some of these variances below.

2.2 Initial Quality Assurance comments

8 The analysis done suggests that the JCS and the LIPP document diverged at some time in the past. The 2011 Original submitted JCS is much closer to the 2013 re-submitted JCS than either are to the LIPP.

9 The begs the question "do the Councils know which is the official 'hymn sheet'". I suspect that the LIPP is the official "working document".

10 It also begs the question "if the LIPP is the on-going working document being used by the GNDP and the Councils, why has the JCS been presented for Re-Examination with information that is wildly out-of-date?'

11 It is of great concern that the two document streams should differ so significantly in both the cost and delivery phasing for major projects.

2.3 Variances between the LIPP and JCS

12 Differences in phasing of projects.

- The Airport BRT [T12] has development spread across the short, medium and long term periods in the JCS. Whereas this development is delayed in the LIPP and only has modest investment in medium term with most development "back-loaded" into the long term period. This is effectively a 5-10 year delay of 85% of the project in the LIPP version.
- The Thickthorn junction [T4 & T17] is programmed for completion in the short-term period in the JCS, whereas its development is spread across the short and medium term in the LIPP. This is effectively a 5 year delay of the 50% of the project in the LIPP version.
- The Longwater junction [T5] is programmed for completion in the short-term in the JCS, whereas the bulk of its development is not programmed until the long-term in the LIPP. This is effectively a 10 year delay of the 90% of the project in the LIPP version.

13 Differences in costing of projects.

- The Whitlingham waste treatment plant [SP3] is estimated at £42.9m in the JCS and £61.6m in the LIPP. This is an issue of primary concerns for Anglia Water rather than the Councils.
- The NDR [T1] is estimated as £106.2m in the JCS and £110m in the LIPP.
- The Postwick Hub junction [T2a] is estimated at £19m in the JCS and £15.5m in the LIPP. The reason for an apparent saving here is not clear.
- The Yarmouth Rd BRT [T10], for delivery in the short term, is estimated at £2.5m in the JCS, and at £4m in the LIPP.
- The Salhouse Rd BRT [T11], for delivery in the short term, is estimated at £1.8m in the JCS, and at £2.8m in the LIPP.
- The BBP-Salhouse Rd development link [T15] is estimated at £2.5m in the JCS and at £5m in the LIPP.
- Hospital Beds requirements [HC23] in the short term are costed at £10m in the JCS and at £23.3m in the LIPP.
- Hospital Beds requirements [HC23] in the medium term are costed at £6m in the JCS and at £15.3m in the LIPP.
- Hospital Beds requirements [HC23] in the long term are costed at £12m in the JCS and at £34 in the LIPP.

14 Differences in project schemes

- The LIPP contains projects B1-B8 which sum to £3.9m which do not appear in the JCS.

2.4 Discussion

15 To address the Inspectors question, the above analysis shows that the LIPP and JCS infrastructure tables are radically different for some projects. *YES, the Local Investment Plan and Programme (LIPP) particularly that in Table 11.1 SHOULD BE reflected in*

the Infrastructure Framework in Appendix 7 of the JCS for the policy 10 proposals. This is the minimum level of consistency that should be expected for professional planning documents.

16 However, the Inspector's question raises other issues, particularly in the context of the downward revision of Community Infrastructure Levy rates. In October 2012, Inspector Keith Holland, BA (HONS) DIPTP MRTPI ARICS examined the Draft Community Infrastructure Levy Charging Schedules for Broadland, Norwich and South Norfolk. His report proposed that the CIL levy on new residential properties (zone A, near the City) be reduced by 35 per cent, and CIL contributions for rural areas (zone B) be reduced by 50pc.

17 A number of integrated transport projects are either delayed or suffer significantly increased costs in the analysis above. The combined cost of the T10 and T11 BRT projects for the short term delivery (ie within the next 3 years) have gone up from £4.3m to £6.8m. Whilst BRT project T12 has been delayed 5-10 years. Given that CIL rates are decreasing whilst the project costs are increasing, we posit that projects T10 and T11 are also at serious risk of delay.

18 These Bus Rapid Transport projects are a key part of the NATS proposals for promoting sustainable transport and reducing congestion in Norwich. **The existing delays and additional risks to these projects compromise the NATS proposals, and the deliverability and soundness of sustainable transport objectives of the JCS.**

19 These is also a rapidly escalating financial impact on other stakeholders such as the NHS. For example, the cost of hospital bed provision across the JCS area has rocketed from £28m in the JCS to £72.6m in the LIPP over the entire JCS timescale.

20 More generally, it has been our view for several years that there will be insufficient money to pay for the £500m minimum needed in the wider Norwich area to provide infrastructure for water, sewage treatment, public transport, health centres, schools, community facilities and green spaces alongside new homes in JCS.

21 Some GNDP leaders have recently said in the Press that it is now down to "individual Councils" to decide what to do next. [Brenda Arthur, city council leader and GNDP chairman, March 8th 2013, Eastern Daily Press, http://bit.ly/CIL-Fears and reproduced in Appendix A].

22 In May 2013, South Norfolk District Council had a report that it had a £50m shortfall for CIL funded community projects and that Section 106 agreements could not make up the difference. [Related information appears not be available publically, see Appendix A for details].

23 These recent events would suggest that the JCS is not sound in terms of delivery of sustainable infrastructure and that before the JCS is adopted, the GNDP Councils should instigate a review of the LIPP. The review should aim to set sustainable, realistic and affordable infrastructure priorities for the Norwich Policy Area. Currently, these do not

exist. The review should include a public consultation across the GNDP area so that the revised infrastructure priorities reflect public views across the area.

3 Right to Add Statement

24 The Author and Norwich Green Party reserve the right to introduce such additional documents as may be relevant to the Inquiry and the Inspector in respect of the JCS prior to and during the Inquiry. We will endeavour to notify the Inquiry of any additional documents, if necessary, through the Programme Manager and as soon as possible.

Councillor Andrew Boswell
Norwich Green Party
May 12th 2013

4 APPENDIX A : RECENT PRESS ARTICLES RELATING TO DELIVERABILITY RISKS

4.1 South Norfolk District Council (SNDC) Report on CIL

25 At the date of writing, May 12th 2013, the SNDC Cabinet report on CIL is not available on the SNDC website. The SNDC Cabinet agenda for May 7th 2013 is on the Website at: http://www.south-norfolk.gov.uk/CARMS/meetings/cab2013-05-07ag.pdf

At Agenda Item 5, it says: "5. Consideration of Examiner's Report and Recommendations to the CIL Charging Schedule for South Norfolk; (report to follow)".

The report appears not to have followed yet.

26 The Eastern Daily Press published a related article on its website on May 7th under the address:
http://www.edp24.co.uk/news/politics/norfolk_council_facing_50m_funding_shortfall_from_community_infrastructure_levy_1_2184548

27 As of May 12th, this article seems to have "disappeared". However, a Google cached version - a snapshot of the page as it appeared on 7 May 2013 22:26:21 GMT – is available at:
http://webcache.googleusercontent.com/search?q=cache:Fc_AznMUuBcJ:www.edp24.co.uk/news/politics/norfolk_council_facing_50m_funding_shortfall_from_community_infrastructure_levy_1_2184548+&cd=1&hl=en&ct=clnk&gl=uk&client=firefox-a

OR easy version: http://bit.ly/SNDC-50m-shortfall

28 I reproduce the text of this article below from the cache webpage below:

Norfolk council facing £50m funding shortfall from Community Infrastructure Levy

Dominic Bareham, senior reporter Tuesday, May 7, 2013
8:57 PM

A Norfolk council will have to make up a shortfall of over £50m for community projects when a new charge on developers is introduced next year.

South Norfolk Council had hoped to be able to collect £100m from developers when the new Community Infrastructure Levy (CIL) comes into force in April, but an examiner looking at the authority's draft charging schedule decided to reduce this figure by £50m.

The knock-on effect will be that the council will have to re-prioritise which projects are funded from the CIL, which is a charge on developers to pay for vital infrastructure, such as schools, sustainable transport, leisure and community facilities and green spaces and parks.

However, the council's leader John Fuller told a cabinet meeting on Tuesday (May 7) the shortfall could be made up from funding from other sources, such as the City Deal for Greater Norwich and the Growing Places Fund.

Currently, money from developers is secured through section 106 agreements, which are negotiated on a case-by-case basis with many obligations, such as contributions for schools and library services being calculated on a unit tariff proposed by the county council.

However, Tim Horspole, the council's head of localism and growth, warned in a report that making up the shortfall from section 106 agreements would be difficult as the changed legal situation after the introduction of the CIL would mean S106 money could only be used for on site mitigation and affordable housing.

He also said other authorities had experienced reductions in the amount of CIL they were hoping to charge and by not adopting the charging schedule the council risked missing out on a vital funding scheme through the CIL.

Councillor Trevor Lewis said: "The shortfall of £50m is still money worth fighting for and we should take whatever steps are necessary to get it."

Mr Fuller said the council had anticipated a shortfall in funding, though not as much as expected.

He added: "We always knew there would be a gap, but that gap is now bigger than what we anticipated and the question is how to fill that gap and if we can fill it from the City Deal and other sources of income.

"The CIL is the only game in town, but we owe it to our taxpayers to ensure that the cost of the infrastructure is borne fairly by our taxpayers and the authority."

The cabinet recommended the adoption of the CIL charging schedule, which will now be considered by a full council meeting in June.

4.2 Council responses to Inspector Keith Holland, BA (HONS) DIPTP MRTPI ARICS examination report on the Draft Community Infrastructure Levy Charging Schedules for Broadland, Norwich and South Norfolk.

29 The Eastern Daily Press ran an article on the GNDP Councils responses to Inspector Keith Holland's report. This is available at: http://www.edp24.co.uk/news/politics/it_means_all_they_will_be_building_is_another_dussindale_fears_grow_that_tens_of_millions_of_pounds_may_fail_to_materialise_for_roads_schools_and_services_in_and_around_norwich_1_1970389

OR easy version: http://bit.ly/CIL-Fears

30 I reproduce the text of this article below from the webpage below as accessed on May 12th 2013 :

'It means all they will be building is another Dussindale' - fears grow that tens of millions of pounds may fail to materialise for roads, schools and services in and around Norwich

Richard Wheeler Friday, March 8, 2013
5:49 PM

Fears are growing that tens of millions of pounds for roads and schools in Greater Norwich might not materialise after a new levy on developers was recommended to be slashed.

Norwich, Broadland and South Norfolk councils hoped a new charge on all house building and some business and leisure facilities could raise between £221m to £270m over the next 15 to 20 years.

This would contribute towards infrastructure improvements needed to cope with extra people, traffic and demand on services expected in, around and near Norwich. The councils' aim is to allow 37,000 new properties to be built by 2026.

It is estimated Greater Norwich will require £385m to contribute towards projects including the Long Stratton bypass, Norwich's northern bypass (NDR), sports pitches and recycling services.

But the three councils are said to have posed a "significant threat" to the potential of housing development in the area by setting the charge, known as the community infrastructure levy (CIL), too high.

The Planning Inspectorate has now recommended the levy on new houses built in or near the city (zone A) is reduced by 35pc, while the CIL contributions for those in rural areas (zone B) drops by 50pc.

If the councils agree to these recommendations and lower the charges then they will have to use other funding sources and charges on developers to raise money.

Officials say they have not yet produced projections on how the planning inspectorate's recommendations will affect the amount of money that could be available for infrastructure projects. Each council will discuss the issue.

John Fuller, South Norfolk Council leader, said they will have to "do some arithmetic" and weigh up whether to accept the recommendations compared to the charges they currently have for developers.

Mr Fuller said: "It's a marginal decision and potentially an extra burden for the taxpayers of tens of millions of pounds, which is not good really.

"We are successfully negotiating section 106 agreements, which give an adequate return and yet still provide infrastructure that supports growth, houses, roads, hospitals, sports facilities etc."

Stephen Heard, chairman of Stop Norwich Urbanisation (Snub), said: "The lower CIL makes it more viable for developers to make some profit to sell these houses but it means all they will be building is another Dussindale.

"We were always told that wouldn't be the case and that there would be green centres and infrastructure."

Broadland, Norwich and South Norfolk work collectively with Norfolk County Council as the Greater Norwich Partnership (GNDP).

And Brenda Arthur, city council leader and GNDP chairman, said the lower CIL recommendations were disappointing, but it is up to individual councils to decide what to do.

She said: "Although the lower level of residential CIL may help kick-start housing growth in the greater Norwich area it does raise issues about how the supporting infrastructure will be delivered."

Property consultants and developers have welcomed the reduced rates.

Keith Holland, of the Planning Inspectorate who examined the GNDP's CIL proposals, reported: "The evidence shows that the rates proposed by the residential development are too high and would pose a significant threat to the viability of housing development in the area."

Author

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MSBC - NDR Major Scheme Business Case (2008)
NCC – Norfolk County Council
NDR - Norwich Northern Distributor Road

1 Introduction

1 This *Additional Statement* relates to our major concern about the Proposed Submission Alternative 1: that the Climate Change implications of developing a growth triangle of 7,000 to 10,000 dwellings around a Norwich Northern Distributor Road have not been properly considered.

2 This is submitted is response to the overall theme of the Inspector's Matter 2 - "Whether policy 10's proposals and associated text for employment and housing are positively prepared, justified by the evidence, consistent with national policy, and effective".

3 Policy 10 includes the statement: "This location will deliver an urban extension extending on both sides of the Northern Distributor Road. Complete delivery of the extension is dependent on implementation of the Northern Distributor Road."

4 This *Additional Statement* covers these area:

- A background description of Climate Change, the problem and the current global situation. This is a detailed appraisal of recent scientific thinking and real geographical and geophysical events. The key point is that any increases in carbon emissions that are built-in via strategic planning decisions remain as permanent increases in CO2 emissions with the global climate system. Strategic planning must operate in the direction of reducing emissions.
- National and local policy objectives relating to transport carbon emissions are outlined.
- Increased GHG emissions "built-in" by the transport policy within the JCS NEGT area are then enumerated from official Council reports.
- We then conclude that the JCS, and particularly its transport strategy for the NEGT, will produce permanent increases to the carbon footprint of the Norwich area and so the national carbon footprint. This contravenes a number of national and local policy instruments including the UK Climate Change Act and the NPPF.

2 Climate Change: The problem and current global situation

5 Climate change ranks very high indeed as a UK government policy issue embracing very strong policy commitments to reduce greenhouse gases (so-called "mitigation") so that we can avoid the worst consequences of climate change. The science of climate change is clear that anthropogenic greenhouse gas emissions (i.e. those generated by human activity) are contributing to increases in atmospheric concentrations of greenhouse gases (GHG) including carbon dioxide (CO2) and that there is a powerful case for reducing these emissions.

6 In a seminal 2008 paper NASA and Columbia University scientist Professor James Hansen[1] states that we have already exceeded the safe level of atmospheric greenhouse gases (GHGs) to prevent ice sheet disintegration and equilibrium sea level rise of at least several metres scientist.

> *Humanity today, collectively, must face the uncomfortable fact that industrial civilization itself has become the principal driver of global climate. If we stay our present course, using fossil fuels to feed a growing appetite for energy-intensive life styles, we will soon leave the climate of the Holocene, the world of prior human history. The eventual response to doubling pre-industrial atmospheric CO2 likely would be a nearly ice-free planet, preceded by a period of chaotic change with continually changing shorelines.*

7 An article by twenty nine of the world's leading climate scientist published in the journal ***Nature*** in 2010[2] identified 9 "planetary boundaries" that should not be crossed if we are to avoid drastic consequences in terms of biodiversity, weather, food production and the continuation of liveability for our species on planet Earth. The article concluded that the safe limit (i.e. the planetary boundary) for climate change was 350 parts per millions (ppm) of CO2 in the atmosphere: this level was breached in the mid-1980s.

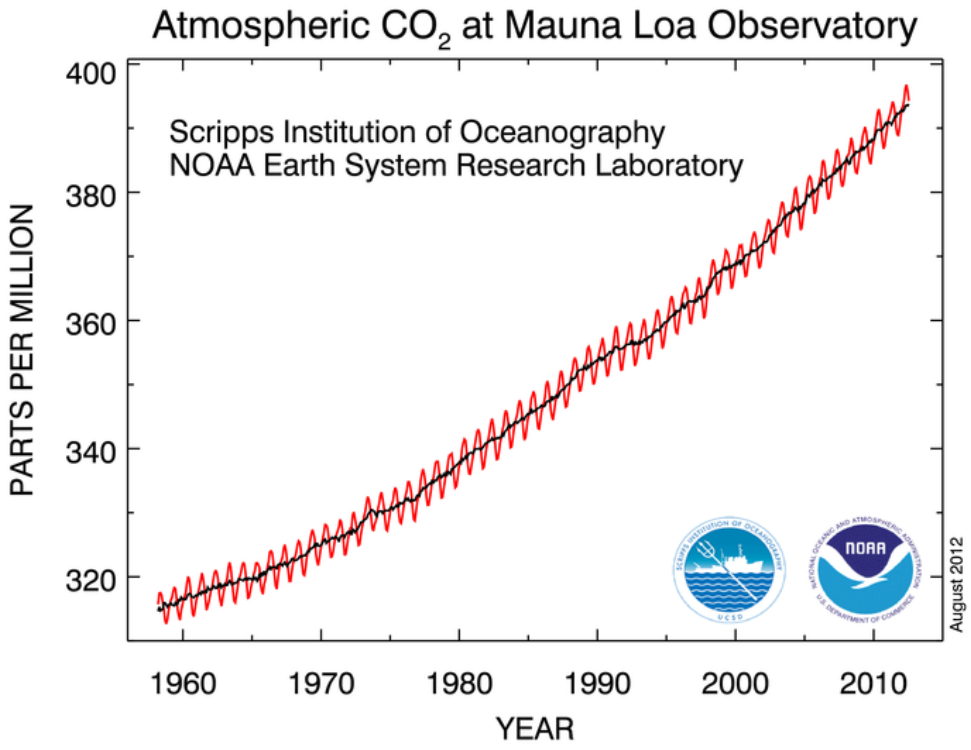
[1] '*Target Atmospheric CO2: Where Should Humanity Aim?*', Hansen J., et al, April 2008, http://www.columbia.edu/~jeh1/2008/TargetCO2_20080407.pdf

[2] *A safe operating space for humanity, Sept 24th 2009, http://www.nature.com/nature/journal/v461/n7263/full/461472a.html*

8 Correcting this breach ("mitigation") and returning to a safe planetary boundary for atmospheric gases requires nothing less than reducing GHG concentrations to 1985 levels (ie 350ppm CO2eq). Note, this is different to reducing **rates** of emissions - a decreasing, but positive rate of carbon emissions rate still generates an overall increase in GHG concentration levels over time. To reduce **concentrations** of CO2 to safe levels implies actually removing CO2 from the atmosphere (ie a negative rate of emissions).

9 This is explained using the analogy of water in a bath where water trickles into the overflow at a depth of 12 inches (350ppm), or more, causing environmental damage. We are now at 14 inches (nearly 400ppm) and water is not only pouring through the overflow but close to pouring over the side ('catastropic climate change'). As water is continually being added via the tap (the addition of about 2ppm of CO2 to the atmosphere each year), each year the bath level rises. The challenge to reach 350 ppm is not only to reduce the tap flow ("reduce emissions") but to remove water from the bath ("reduce overall concentrations of GHGs") back to no more than the 12inch level.

10 Global levels of CO2 have been measured at the Mauna Loa Observatory in Hawaii[3] since the 1950s.



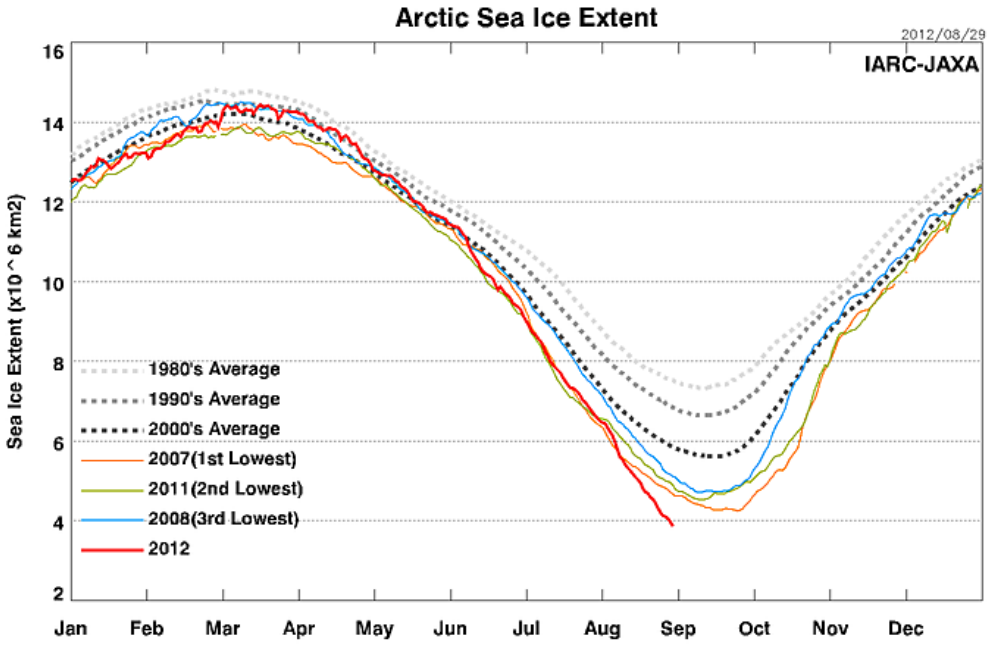
11 Pre-industrial revolution levels of CO2 were around 270ppm. The 300ppm threshold was crossed around 1950, and the 350ppm level was breached around 1986.

[3] Graph from "Trends in Atmospheric Carbon Dioxide", http://www.esrl.noaa.gov/gmd/ccgg/trends/ (accessed August 29th 2012)

12 The 400ppm level was reached, at globally averaged measurements, in May 2013[4], although localised levels of 400ppm were recorded over the Arctic in the summer of 2012[5].

13 The global average concentrations for May 2010, 2011 and 2012 were 392.95, 394.16, 396.78 ppm CO2[6].

14 One of the global physical characteristics which indicates the effect of anthropogenic global warming is the melting of the Arctic polar ice cap. On 27th August 2012, scientists at the National Snow and Ice Data Centre announced that the extent of sea ice in the Arctic had reached its lowest level since satellite measurements began[7], breaking the previous record in 2007. The graph below shows how this record was broken about 3 weeks before the usual minimum of summer ice (mid September) and how at the time of writing the ice area is still rapidly declining[8].



15 For a number of years, UK Government and international UN policy has had the objective at limiting global temperature rises to 2°C.

16 On 23rd August 2012, Prof Sir Bob Watson, in an interview with the BBC[9] said that efforts to stop a sharp rise in global temperatures were now "unrealistic". He said that

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[4] *Global carbon dioxide in atmosphere passes milestone level - Climate warming greenhouse gas reaches 400 parts per million for the first time in human history*, Guardian, May 10th 2013, http://www.guardian.co.uk/environment/2013/may/10/carbon-dioxide-highest-level-greenhouse-gas *(accessed 13th May 2013)*

[5] *Greenhouse gas levels pass symbolic 400ppm CO2 milestone*, Guardian, June 1st 2012, http://www.guardian.co.uk/environment/2012/jun/01/record-greenhouse-gas-trouble-scientists *(accessed 29th August 2012)*

[6] Data from ftp://ftp.cmdl.noaa.gov/ccg/co2/trends/co2_mm_mlo.txt (accessed 29th August 2012)

[7] "Arctic ice melts to record low levels", Daily Telegraph, 28th August 2012, http://www.telegraph.co.uk/science/science-news/9502543/Arctic-ice-melts-to-record-low-levels.html, *(accessed 29th August 2012)*

[8] Graph from "Arctic sea ice just hit a record low. Here's why it matters.", Washing Post, 28th August 2012, *http://www.washingtonpost.com/blogs/ezra-klein/wp/2012/08/28/arctic-sea-ice-just-hit-a-record-low-heres-why-it-matters/ (accessed 29th August 2012)*

[9] "Science adviser warns climate target 'out the window'", August 23rd 2012, http://www.bbc.co.uk/news/science-environment-19348194, and video of interview http://www.bbc.co.uk/news/science-environment-19359020 *(accessed 29th August 2012)*

the rise could be as high as 5°C - with dire consequences. Sir Bob is among the most respected scientists in the world on climate change policy. He is currently chief scientist at the Department for Food and Rural Affairs (DEFRA) and a former chair of the Intergovernmental Panel on Climate Change.

17 On the very current evidence, given above, we are not performing well on carbon reduction targets and tackling climate change.

18 This background has been given because it is crucially important to understand that projects like the Postwick Hub and the associated NDR, that are being proposed as the transport backbone for the North East Growth Triangle (NEGT), are building into the system **permanent future increases in CO2 emissions**, and associated increases to overall GHG concentrations. With the global issue of carbon emissions, the issue of relative scale is not relevant. Any increase in emissions anywhere increases total emissions (the water level in the bath analogy).

19 The consequences of failing to meet appropriate CO2 reduction targets are very serious indeed. They include an increase in the frequency and severity of severe weather events, floods, disruption to transport systems, loss of agricultural productivity and large public and private financial losses in an era of fiscal restraint and in the context of reduced insurance cover.

3 National and local policy objectives relating to transport carbon emissions

20 Climate Change is a very serious threat to social, economic and environmental standards both globally and locally, and has triggered the strongest possible response in the UK with a unique Act of Parliament aimed directly at eliminating these threats.

21 The JCS generates additional carbon emissions and would make an incremental change to the UK carbon balance sheet, and the level of future global carbon emissions **in the wrong direction**. This is against current national and local policy, as outlined below

3.1 The UK Climate Change Act 2008

22 The Climate Change Act (2008) is a world first and sets legally binding targets for reducing greenhouse gas emissions (GHGs - the majority component of which is carbon dioxide or CO2 from burning fossil fuels).

23 The transport sector is the second largest source of UK Carbon emissions at 26%.

24 The Climate Change Act requires a 34% reduction in GHGs by 2020 and an 80% reduction by 2050. These reduction targets are set in 5-yearly target regimes for 2008-12, 2013-17 and 2018-2022 by the Climate Change Committee, the independent body that advises the UK Government on setting carbon budgets, reports to Parliament on progress made in reducing GHGs.

25 The incrementing of carbon emissions within the JCS is contrary to the UK Climate Change Act, and also to the legal obligations on the Department for Transport and the Highways Agency under the sectorial allocation for transport under the Climate Change Act.

26 There is clearly a serious need to address transport emissions, and incrementally reduce them, at every step of planning and transport development, or simply, we, as a country, will fail completely to get anywhere near achieving this legislative target.

3.2 National Planning Policy Framework

27 The National Planning Policy Framework ("NPPF"), published on 27 March 2012, is clear (paragraph 94) that local planning authorities "should adopt proactive strategies to mitigate and adapt to climate change" *in line with the objectives and provisions of the Climate Change Act 2008 (footnote 16).*

28 At paragraph 17, bullet 11 the NPPF states that one of its core land-use planning principles that should underpin both plan making and decision-taking is

> *"actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable;"*

29 At paragraph 95, NPPF states local planning authorities should "*plan for new development in locations and ways which reduce greenhouse gas emissions"*.

30 Local and strategic planning decisions, such as the JCS adoption, that make increments carbon emissions via a singular decision are contrary to the NPPF as they are clearly NOT planning for new developments in ways which reduce greenhouse gas emissions.

3.3 2011 Department for Transport White Paper

31 The current policy of the Department for Transport is set out in its White Paper 2011 - *Creating Growth, Cutting Carbon. Making Sustainable Local Transport Happen*.

32 The minister's Foreword is clear that it is addressing two key government objectives: "to help create growth in the economy, and to tackle climate change by cutting our carbon emissions".

33 The crucial role of transport planning in reducing national carbon emissions, in line with the Climate Change Act, is made clear in paragraph 3 of the Executive summary where it says: "*And we need a coherent plan to reduce the carbon emitted by transport, not least in order to meet our binding national commitments*".

3.4 UK Committee on Climate Change: skilled transport planning can make significant emission cuts

34 In its June 2010 (2nd) Progress Report[10], the UK Committee on Climate Change[11] states:

> *Integrated land use and transport planning: we estimate that emissions reductions of up to 2 MtCO2[12] are available in 2020 through designing new residential and commercial developments to minimise additional car miles.*

35 The report notes that this level of emissions reductions (the 2 MtCO2 is part of a total of 25 MtCO2 for transport emissions in total by 2020) "*is required both to meet the first three carbon budgets, and to lay the foundations for deep cuts in transport emissions required through the 2020s*". For such large and numerically defined emission reductions to be achieved, it will be necessary for planning authorities to meet the challenge of the UK Climate Change Committee within their own localities.

3.5 UK Committee on Climate Change: concern about land-use planning failing emission reductions

36 In its June 2012 (4th) Progress Report[13], the UK Committee on Climate Change indicate concern as to whether the NPPF will result in appropriate land-use planning decisions, and indicate that the risk will be monitored:

> *In order to understand the extent of this risk, it will be important to closely monitor decisions on new developments and to assess associated impacts for transport emissions.*

3.6 Norfolk Local Transport Plan

37 Norfolk's 3rd Local Transport Plan (LTP3), *Connecting Norfolk: Norfolk's Transport Plan for 2026*, sets out Norfolk's Transport Vision*:*

> *"A transport system that allows residents and visitors a range of low carbon options to meet their transport needs and attracts and retains business investment in the county".*

38 *Reducing emissions* is one of the six strategic aims in LTP3. The JCS is contrary to this aim, and in building in high carbon travel modes at great financial cost. Provision for low carbon modes is minimal, and those projects that exist are now suffering delays and funding uncertainty [see my submission on the LIPP].

3.7 Increased Carbon emissions from the JCS in the context of the Planning System

39 The planning system is charged with producing reductions in CO2 emissions (NPPF, para 94). It is relevant to note that the logic underpinning this is explained in the Inspector's report on the Thames Gateway Bridge[14] and the statement by Paul

[10] http://www.theccc.org.uk/reports/2nd-progress-report
[11] The independent advisory body that advises UK Government on emissions targets, and reports to Parliament on progress made in reducing greenhouse gas emissions
[12] 2,000,000 tonnes of CO2 equivalents annually
[13] http://bit.ly/ngp-ccc-report4, page 187.
[14] REPORT TO THE SECRETARY OF STATE FOR COMMUNITIES AND LOCAL GOVERNMENT AND THE SECRETARY OF STATE FOR TRANSPORT - THE THAMES GATEWAY BRIDGE INQUIRY, http://bit.ly/ngp-hml6-report, page 559, sections 9.376-9.382

Stinchcombe QC at the Stansted public inquiry[15]. Both these positions are relevant to the carbon emission increments created by the Postwick Hub and NDR Scheme in the JCS, and we invite the Inspector to apply them to the JCS.

40 The fundamental point is that the JCS will increase CO2 emissions whilst there is an urgent need to reduce CO2 emissions. There are also ways of solving transport problems in East Norwich, and at Postwick, without increasing CO2 emission, or by increasing them significantly less. The JCS promoters have wilfully embarked on an irresponsible programme of increasing emissions when it need not and should not do so

41 With respect to carbon emissions, consider the analogy that we are tasked (by the Climate Change Act) to reduce the rate at which water ('carbon dioxide') is entering a bath (the 'global carbon emissions' in the atmosphere) to avoid leading to the bath overflowing ('unstoppable climate change'). It is, then, not logical or intelligent to increase the flow rate ('carbon emissions') so that more water enters the bath. Approval for the JCS is the direct equivalent of increasing the rate at which the bath fills up whilst assuming it is physically possible to adapt the bath ('the atmosphere') in some unspecified way, and at some unspecified point in the future, to cope with the increased flow.

42 In this context "detriment" not only to the overall strategic network, but also to humanity as a whole, will be created by development framework that increments carbon emissions against the existing network and/or against alternative development options.

3.8 Summary : The Joint Core Strategy Approach conflicts national and local policy

43 The NDR and Postwick Hub schemes, as fundamental infrastructure in the JCS, is based on the presumption that increases in CO2 emissions are acceptable and that transport solutions that reduce rather increase these emissions need not be designed and adopted. This is in direct conflict with the Climate Change Act, the NPPF, the DfT White Paper and the Local Transport Plan.

4 Increased GHG emissions from the JCS

44 Within the JCS NEGT transport policy, the Postwick Hub scheme, considered stand-alone, increases CO2 emissions and this is not in dispute. Further, the wider NDR scheme significantly increases GHG emissions from traffic flows around the Norwich area, also not in dispute.

45 The LIPP [see my Additional Statement on this] also shows that sustainable transport schemes have existing delays and additional risks which compromise the NATS proposals, and the deliverability and soundness of sustainable transport objectives of the JCS. These amount to additional increases in GHGs because road building options are largely planned to come first and it is well known that this locks people into high carbon, car dependent modes of travel.

[15] OPENING SUBMISSIONS ON BEHALF OF SSE, PLANNING INSPECTORATE REF: APP/C1570/A/06/2032278, http://bit.ly/ngp-stansted-stinchcombe, page 10, paras 29-31

4.1 CIF 2 Postwick Hub Full Business Case (FBC, October 2008)

46 Table 3.12 of the main report, *CIF 2 Postwick Hub Full Business Case* (FBC, October 2008), showed carbon emissions in the opening year (2012) as 1,378 tonnes. This equates to 5,052 tonnes of carbon dioxide (tCO2eq).

47 The report appears to calculate the emissions in each year of the 60 year appraisal period as the same as the opening year giving the increase in carbon emissions arising from the Postwick Hub over the whole period as 81,262 tonnes of carbon (not CO2). This equates to 297,961 tonnes of CO2 (tCO2eq) or an average around 5000 tCO2eq/year.

48 The report showed undeniable *significant* increases in CO2 emissions as a result of the Postwick Hub (i.e. do-minimum vs. Postwick Hub) on a regional scale, by outlining that in would increase *regional* CO2 emissions by 3.2% in 2012 and 1.4% in 2027[16]. On a local and county scale, this increase is likely to be much, much larger.

4.2 NDR Major Scheme Business Case (MSBC, July 2008)

49 Table 3.12 of the main report showed carbon emissions in the opening year (2012) as 24,631 tonnes. This equates to 90,313 tonnes of carbon dioxide (tCO2eq).

50 Correct application[17] of the then current WebTag guidance[18] calculates carbon emissions in the final year (2071) of the 60 year assessment period as 69285 tonnes. This equates to 254,045 tonnes of carbon dioxide (tCO2eq).

51 Correct application of the then current WebTag guidance calculates the carbon emissions over the full 60 year assessment period as 2,817,510 tonnes. This equates to 10,330,870 tonnes of carbon dioxide (tCO2eq), or an average of 172,181 tCO2eq/year.

52 In total, the MSBC, July 2008, calculates the ¾ NDR proposed in the JCS to increase carbon emissions by 2,182,592 tonnes over the 60 year appraisal period[19]. This equates to 8,002,837 tonnes of CO2 (tCO2eq) or an average around 133,000 tCO2eq/year. This figure is different to that calculate using the WebTag methodology but is the right order of magnitude.

53 Within the MSBC (pp24-25, Chapter 3), NCC's analysis showed that without the NDR Scheme, CO_2 emissions would increase by 7% from 2007 to 2012 and by a further 11% to 2027. The NDR (Preferred Scheme and Next Best Option) would increase CO_2 emissions relative to the Do-Minimum scenario, by 6% in 2012 and 8% in 2027.

4.3 Issues relating to data quality and consistency of GHG emission modelling

54 Although, these Schemes are known to increase GHG emissions, the relevant data has not yet been made available by the promoters in a clear and consistent way. For

[16] Section 3.5.1 (iii)
[17] CPRE/NNTAG submission
[18] Webtag Worksheet 3.3.5 in accordance with Webtag guidance for quantifying the costs of CO_2 emissions from road transport schemes
[19] Appendix 3.M, Appraisal Summary Tables, Table 3M.1, MSBC

example, it is not clear whether existing data is for the Postwick Hub stand-alone, or for the Postwick Hub in the full Postwick Hub and NDR Scheme.

55 Further, it is noted that the promoter's estimates of carbon emissions have altered over time. Recent figures have shown a significant downward divergence from the previously published figures. The figures are so different that they cannot be explained by changes to the underlying modelling methods. No explanation of such variances has ever been given.

56 The accumulative effect of GHG emissions relating to the JCS from completing the full Postwick Hub and NDR schemes, and further planned developments within the area, have also not been made available.

57 We invite the Inspector to ask the promoters that data on the carbon emissions from the Postwick Hub and NDR scheme is available to the Inquiry in a transparent, consistent and clear form. Previous inconsistencies and variances should be fully explained. The data for accumulative traffic growth effects, including traffic flows from future planned development, should also be available to the Inquiry in a transparent, consistent and clear form.

58 The data should be in the format specified by the WebTag guidance on climate change (section 3.5.5d) that specifies that transport appraisal must estimate greenhouse gas emissions in each of the 5 year periods set by statute in the Climate Change Act.

5 Conclusions

59 It is imperative to future generations that we tackle the problem of carbon emissions. The science is clear, and the geophysical impacts, such as the melting of the Arctic region (a huge region of continental proportions), are starting to happen.

60 The JCS is unsound as it is contrary to a number of national and local policy objectives that have been explained in detail and summarised below. .

61 The JCS builds in additional permanent carbon footprint to the national footprint and contrary to the UK Climate Change Act objective reduce UK Carbon Emissions by 80% by 2050.

62 The land use planning and transport strategy of the JCS, particularly in the NEGT, contravenes paragraphs 94, 95 of the NPPF and the core land-use planning principle at paragraph 17, bullet 11 of the NPPF.

63 The transport policy of the JCS contravenes paragraph 3 of the Executive summary of the 2011 Department for Transport White Paper

64 The JCS goes against the recommendations of the UK Committee on Climate Change on Integrated land use and transport planning and its potential to cut carbon emissions.

65 The JCS contravenes Norfolk's 3rd Local Transport Plan (LTP3) to provide residents with low carbon transport options.

6 Right to Add Statement

66 The Author and Norwich Green Party reserve the right to introduce such additional documents as may be relevant to the Inquiry and the Inspector in respect of the JCS prior to and during the Inquiry. We will endeavour to notify the Inquiry of any additional documents, if necessary, through the Programme Manager and as soon as possible.

Councillor Andrew Boswell
Norwich Green Party
May 12th 2013