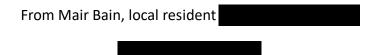
### A38 Derby Junctions by Highways England

## Response to The Examining Authority's Rule 17 letter 19 March 2020



https://infrastructure.planninginspectorate.gov.uk/document/TR010022-001148

- 8.2 Derby Climate Coalition Are the claimed economic benefits of the scheme are sufficiently supported by evidence from comparable road improvement schemes, having regard to the concerns expressed [REP6-030] and the documents appended to it?
- **8.2** This issue is not about economic benefits when compared to other road schemes. It is the how the Applicant and Department for Transport determine what is valuable and beneficial. In this Road Investment Strategy: Economic analysis of the investment plan document dated March 2015, it explains how the cost-benefit ratios for road schemes are calculated. These do not account for the costs of climate change from further green house gas emissions.
  - "2.7 Whilst the appraisal process allows some impacts to be expressed in monetary terms, this is not possible for all impacts. These 'nonmonetised' impacts can be significant. The Department's Value for Money (VfM) process is designed to ensure these impacts are taken into account. Figure 2.2 shows a summary of these impacts for those schemes where an assessment of non-monetised impacts has been completed. This chart provides an indication of the potential impacts, though it should be noted that the assessment in some cases has not yet been completed. The figures above each of the columns represents the number of schemes for which each of the impacts have been assessed."
  - "2.12 Further monetisation of some of the environmental impacts would be likely to reduce the BCRs. A further factor which could influence impacts is the use of a new design panel for sensitive major schemes and a greater commitment to the landscape and aesthetic impact of schemes and tighter environmental standards. This may reduce the environmental impacts, but might have some impact on scheme costs. It will also raise some challenges around monetisation for these factors. The appraisal for these schemes will continue to be updated as the schemes develop. It is possible that some of these major schemes will as a result of further analysis of the economic, strategic and delivery cases be found to not be justified. In which case they would not be pursued and Highways England would have to explore other means of tackling the identified problems"

So 2.7 shows that environmental factors have not been fully taken into account when calculating the CBR of the A38 junction works. There is no mention of the Paris Agreement, carbon budgets or future risks from climate change in these. 2.12 also highlights that these are subject to change. The UK has declared a climate emergency and committed to net zero by 2050.

Highways England should conduct an updated economic benefits analysis that considers the latest climate and environmental policy. If they do this, it is likely that the scheme cannot be justified.

If the applicant (Highways England) are unaware of the predicted economic impacts of climate change then <a href="here is a report by the McKinsey Global Institute">here is a report by the McKinsey Global Institute</a> and <a href="here one by J.P. Morgan">one by J.P. Morgan</a> that I would urge them to read. When making any economic assessments, the costs of climate change cannot be ignored.

# 9.2 a) Does the Applicant's approach to carbon emissions adequately consider the Government's updated target for net zero carbon by 2050 (Climate Change Act 2008 (2050 Target Amendment) Order 2019)?

I again wish to draw attention to this <u>Road Investment Strategy: Economic analysis of the investment</u> <u>plan document</u> and 2.12. "..... It is possible that some of these major schemes will as a result of further analysis of the economic, strategic and delivery cases be found to not be justified. In which case they would not be pursued and Highways England would have to explore other means of tackling the identified problems"

Plans for a third runway at Heathrow airport have been ruled illegal by the court of appeal because ministers did not adequately take into account the government's commitments to tackle the climate crisis. This has set a precedent and the whole road investment strategy and A38 junction scheme urgently needs reviewing. The assessments were done in a pre-climate crisis era. They don't take into account the UK's commitment to Net Zero emissions.

# 9.4 a) Are there any comments or concerns regarding the mitigation set out in the OEMP to ensure that the carbon footprint would not be unnecessarily high?

**9.4 a)** I wish to ask if Highways England (the Applicant) and the Department for Transport fully grasp the severity of the climate emergency and the urgent need to cut greenhouse gas emissions?

Do they know what life will look like in 2050 If projects like the A38 junctions and other out of date development schemes continue without considering the latest climate science and policy?

Many of the people involved in this planning process will be parents or grandparents. I wish all them to read this extract from "The Future We Choose" and reflect on how their present actions and decisions will impact on future generations.

"It is 2050. Beyond the emissions reductions registered in 2015, no further efforts were made to control emissions. We are heading for a world that will be more than 3C warmer by 2100

The first thing that hits you is the air. In many places around the world, the air is hot, heavy and, depending on the day, clogged with particulate pollution. Your eyes often water. Your cough never seems to disappear. You think about some countries in Asia, where, out of consideration, sick people used to wear white masks to protect others from airborne infection. Now you often wear a mask to protect yourself from air pollution. You can no longer simply walk out your front door and breathe fresh air: there might not be any. Instead, before opening doors or windows in the morning, you check your phone to see what the air quality will be.

Fewer people work outdoors and even indoors the air can taste slightly acidic, sometimes making you feel nauseated. The last coal furnaces closed 10 years ago, but that hasn't made much difference in air quality around the world because you are still breathing dangerous exhaust fumes from millions of cars and buses everywhere. Our world is getting hotter. Over the next two decades, projections tell us that temperatures in some areas of the globe will rise even higher, an irreversible development now utterly beyond our control. Oceans, forests, plants, trees and soil had for many years absorbed half the carbon dioxide we spewed out. Now there are few forests left, most of them either logged or consumed by wildfire, and the permafrost is belching greenhouse gases into an already overburdened atmosphere. The increasing heat of the Earth is suffocating us and in five to 10 years, vast swaths of the planet will be increasingly inhospitable to humans. We don't know how hospitable the arid regions of Australia, South Africa and the western United States will be by 2100. No one knows what the future holds for their children and grandchildren: tipping point after tipping point is being reached, casting doubt on the form of future civilisation. Some say that humans will be cast to the winds again, gathering in small tribes, hunkered down and living on whatever patch of land might sustain them.

More moisture in the air and higher sea surface temperatures have caused a surge in extreme hurricanes and tropical storms. Recently, coastal cities in Bangladesh, Mexico, the United States and elsewhere have suffered brutal infrastructure destruction and extreme flooding, killing many thousands and displacing millions. This happens with increasing frequency now. Every day, because

of rising water levels, some part of the world must evacuate to higher ground. Every day, the news shows images of mothers with babies strapped to their backs, wading through floodwaters and homes ripped apart by vicious currents that resemble mountain rivers. News stories tell of people living in houses with water up to their ankles because they have nowhere else to go, their children coughing and wheezing because of the mould growing in their beds, insurance companies declaring bankruptcy, leaving survivors without resources to rebuild their lives. Contaminated water supplies, sea salt intrusions and agricultural runoff are the order of the day. Because multiple disasters are often happening simultaneously, it can take weeks or even months for basic food and water relief to reach areas pummelled by extreme floods. Diseases such as malaria, dengue, cholera, respiratory illnesses and malnutrition are rampant.

You try not to think about the 2 billion people who live in the hottest parts of the world, where, for upwards of 45 days per year, temperatures skyrocket to 60C (140F), a point at which the human body cannot be outside for longer than about six hours because it loses the ability to cool itself down. Places such as central India are becoming increasingly challenging to inhabit. Mass migrations to less hot rural areas are beset by a host of refugee problems, civil unrest and bloodshed over diminished water availability.

Food production swings wildly from month to month, season to season, depending on where you live. More people are starving than ever before. Climate zones have shifted, so some new areas have become available for agriculture (Alaska, the Arctic), while others have dried up (Mexico, California). Still others are unstable because of the extreme heat, never mind flooding, wildfire and tornadoes. This makes the food supply in general highly unpredictable. Global trade has slowed as countries seek to hold on to their own resources.

Countries with enough food are resolute about holding on to it. As a result, food riots, coups and civil wars are throwing the world's most vulnerable from the frying pan into the fire. As developed countries seek to seal their borders from mass migration, they too feel the consequences. Most countries' armies are now just highly militarised border patrols. Some countries are letting people in, but only under conditions approaching indentured servitude.

Those living within stable countries may be physically safe, yes, but the psychological toll is mounting. With each new tipping point passed, they feel hope slipping away. There is no chance of stopping the runaway warming of our planet and no doubt we are slowly but surely heading towards some kind of collapse. And not just because it's too hot. Melting permafrost is also releasing ancient microbes that today's humans have never been exposed to and, as a result, have no resistance to. Diseases spread by mosquitoes and ticks are rampant as these species flourish in the changed climate, spreading to previously safe parts of the planet, increasingly overwhelming us. Worse still, the public health crisis of antibiotic resistance has only intensified as the population has grown denser in inhabitable areas and temperatures continue to rise.

The demise of the human species is being discussed more and more. For many, the only uncertainty is how long we'll last, how many more generations will see the light of day. Suicides are the most

obvious manifestation of the prevailing despair, but there are other indications: a sense of bottomless loss, unbearable guilt and fierce resentment at previous generations who didn't do what was necessary to ward off this unstoppable calamity.

This is an edited extract from The Future We Choose: Surviving the Climate Crisis by Christiana Figueres and Tom Rivett-Carnac, published by Manilla Press

No amount of mitigation can substitute simply not proceeding with the A38 junctions scheme with regard to carbon emissions. It is not just the carbon from the construction phase but that transport infrastructure for fossil fuel powered cars is still being considered. The department of transport needs to review its whole road investment strategy and focus on decarbonised transport.

A policy prescription for slow, steady carbon reduction that might have been sufficient 25 years ago is no longer fit for purpose. Because we have left it so late to tackle carbon emissions from transport, we now have to take urgent action. Climate scientists are warning that the carbon targets set by the Committee on Climate Change are too lax and that we <u>need to reach net zero emissions much sooner.</u> But there is an almost total policy disconnect between the advice of these climate scientists and the thinking of the transport policy community, which is working on the relatively comfortable assumption - because it seems so distant - that we have until 2050 to get transport carbon emissions down to zero.

The current Department for Transport carbon strategy is focused on electrifying the vehicle fleet, while still allowing traffic volumes to grow, building roads and expanding airport capacity. But if only 50% of new car sales are electric by 2030 (which is the government's current aim), car mileage will have to be cut by as much as 60% in order for emissions reductions to stay on track. And even if all new car sales are electric by 2030, it will still be necessary for car mileage to be at least 20% lower in 2030 than now (and possibly more than this), in order for our emissions to stay within a fair carbon budget.

The carbon arithmetic is inescapable. It means that we must instigate a rapid transformation of our transport system to reduce car use, as well as achieving a faster transition from petrol and diesel to electric cars and significantly cutting aviation emissions.

Road transport accounts for 91% of the UK's domestic transport emissions. So encouraging traffic growth whilst waiting for fantasy techno fixes is clearly going to lead to a car crash in terms of climate change. Research by Transport for Quality of Life for Friends of the Earth shows that even accepting the most optimistic forecasts for new electric car sales (100% market share by 2030), we would still need 20% traffic reduction to reach net-zero by 2050. Which shows we do not need bigger roads.

### 9.4 b) Has enough support been given to other transport modes and behavioural change?

**9.4 b)** At Derbyshire City Council's event, "Tackling Climate Change Together", Adam Jones explained how his company LiftShare has helped local authorities and large organisations all over the UK reduce congestion, green house emissions and air pollution through ride share schemes.

LiftShare already have some data on the daily commute journeys happening through Derby City. They could do a much larger scoping report of journey routes and suggest more sustainable travel options. They are also willing to share this information with local bus operators so bus routes can be adapted to journey deamnds.

Derby City is performing poorly on air quality (according to Client Earth <a href="https://www.clientearth.org/press/lawyers-issue-legal-risk-warning-over-council-air-pollution-inaction/">https://www.clientearth.org/press/lawyers-issue-legal-risk-warning-over-council-air-pollution-inaction/</a>) and this urgently needs to be addressed. Ride sharing could be one quick and low cost method to tackling this and result in the cancellation of the A38 junction scheme. I have emailed both Adam Jones and Councillor Matthew Holmes on 13 March 2020 regarding this but have received no reply yet (as of 25 March 2020).

9.4 c) Has enough consideration been given to the climate change with respect to the loss of mature trees and the planting of new trees?

**9.4 c)** This is an additional question. Has Highways England (the Applicant) calculated the carbon capture and biodiversity benefits of mature trees versus planting of saplings? While also factoring in the predicted survival rates of saplings to mature trees?