

**HARROGATE DISTRICT LOCAL PLAN
SUBMISSION DRAFT 2018**

**A PRELIMINARY REVIEW OF THE TRANSPORT EVIDENCE
BASE IN RESPECT OF PN17 (HOUSING)
PN18 (EMPLOYMENT) AND PN19 (HOUSING)**

Report prepared on behalf of:

Pannal and Burn Bridge Parish Council

November 2018

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1 INTRODUCTION

Background

- 1.1 THaT Consultancy (transport planners and traffic engineers) have been appointed by Pannal and Burn Bridge Parish Council ('the Parish Council') to review the transport evidence base prepared by Harrogate District Council as part of the Submission Draft Local Plan which was submitted to the Secretary of State on 31 August 2018.
- 1.2 Although our investigations have focused on the transport evidence base insofar as it relates to 3 sites in Pannal (these being PN 17, PN 18 and PN 19) some of our findings relate to the transport evidence base as a whole.

Report structure

- 1.3 The remainder of this report is structured as follows:
- In **Section 2** we summarise the relevant sections of the NPPF (2012) and Planning Practice Guidance which together explain how the Government expects transport issues to be dealt with in the preparation of a Local Plan.
 - In **Section 3** we present a timeline of the Council's actions leading to the inclusion of PN 17, PN 18 and PN 19 in the draft Local Plan. We document the Council's assessment of the transport issues relating to the sites.
 - In **Section 4** we present our assessment of the transport issues based upon the information submitted by the Borough Council. We summarise our findings under the following subheadings:
 - accessibility/transport connectivity
 - highway safety
 - traffic impact/modelling
 - new transport infrastructure/services
 - Finally, in **Section 5** we present our conclusions

2 THE NATIONAL PLANNING POLICY FRAMEWORK (2012) AND ASSOCIATED PLANNING PRACTICE GUIDANCE (2014)

- 2.1 In this section of the report we summarise the relevant sections of the NPPF (2012) which explain how transport issues should be addressed in the development of Local Plans. We then go on to summarise the relevant Guidance “Transport Evidence Bases in Plan Making and Decision Taking” (2014/15).
- 2.2 Taken together these documents explain how the Government expects transport issues to be dealt with in the preparation of a Local Plan to ensure that the transport impacts of both existing and proposed development are properly considered, thereby promoting sustainable development and ensuring that any transport infrastructure or investment needed is identified at the plan making stage rather than delayed until the planning application stage after a Local Plan has been adopted.
- 2.3 This approach ensures that local communities, and other stakeholders, are fully engaged in an open, and transparent, decision making process. Ultimately this approach serves to reduce costs and delays and ensures the integrity of the Local Plan making process.
- 2.4 This section therefore sets out the relevant transport policy and guidance background against which the emerging Local Plan should be evaluated.

NPPF (2012)

- 2.5 Paragraph 17 sets out the 12 Core Planning Principles that should underpin both plan making and decision taking. Principle 11 states that planning should:
- “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”*
- 2.6 Section 4 (paras 29-41) explain how the planning system should promote sustainable transport.
- 2.7 Paragraph 29 states:
- “Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. Smarter use of technologies can reduce the need to travel. The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice*

about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas.”

2.8 Paragraph 30 states:

“Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.”

2.9 Paragraph 31 explains that local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development.

2.10 Paragraph 32 states:

“All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- safe and suitable access to the site can be achieved for all people; and*
- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.”*

2.11 The Government did not provide any formal definition of “severe”. It was left to the decision-maker to decide what constituted “severe” in the context of any particular situation.

2.12 The Government has, however, changed this approach somewhat in the current NPPF which was published in July 2018. This is important because, even though the “soundness” of the emerging Local Plan will be judged against the 2012 version of the NPPF future planning applications will be evaluated against the 2018 version. As will be demonstrated later the Local Plan as currently drafted leaves many transport

related issues, in particular transport infrastructure issues, to be resolved at the planning application stage.

2.13 Paragraph 109 of the new NPPF (2018) states:

“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”

2.14 It will be noted that the Government has introduced a new, explicit, reference to highway safety. It should also be noted that highway safety is not subject to the “severe” test. The Government explains its reasoning in the publication “Government response to the draft revised National Planning Policy framework consultation” (July 2018). In this report it explains that the “severe” test relates to road capacity rather than highway safety and goes on to say that further advice on this test will be set out in revisions to national planning guidance.

2.15 Paragraphs 34 and 35 of the NPPF (2012) highlight the importance of locating new development where the need to travel is minimised and the use of sustainable transport modes is maximised.

2.16 Paragraphs 150-185 deal with Plan Making.

2.17 Paragraph 156 explains that a Local Plan should include, amongst other matters, policies to deliver transport infrastructure.

2.18 Paragraph 157 explains that Local Plan should:

“allocate sites to promote development and flexible use of land, bringing forward new land where necessary, and provide details on form, scale, access and quantum of development where appropriate.”

2.19 Paragraphs 173-177 explain how a Local Plan should be prepared “ensuring viability and deliverability”.

2.20 Paragraph 173 states:

“Pursuing sustainable development requires careful attention to viability and costs in plan making and decision taking. Plans should be deliverable. Therefore, the sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirement likely to be applied to development,

such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.”

2.21 Paragraph 177 goes on to state:

“It is equally important to ensure that there is a reasonable prospect that planned infrastructure is deliverable in a timely fashion. To facilitate this, it is important that local planning authorities understand district wide development costs at the time Local Plans are drawn up. For this reason, infrastructure and development policies should be planned at the same time, in the Local Plan. Any affordable housing or local standards requirements that may be applied to development should be assessed at the plan making stage, where possible, and kept under review.”

2.22 Paragraph 182 explains that a “sound” plan is one that is:

- **“Positively Prepared** - the plan should be prepared based on a strategy which seeks to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so and consistent with achieving sustainable development;
- **Justified** - the plan should be the most appropriate strategy, when considered against the reasonable alternatives, based on proportionate evidence;
- **Effective** - the plan should be deliverable over its period and based on effective joint working on cross boundary strategic priorities; and
- **Consistent with National Policy** - the plan should enable the delivery of sustainable development in accordance with the policies in the Framework.”

Planning Practice Guidance:

Transport Evidence Bases in Plan Making and Decision Taking

Paragraph: 001 Reference ID: 54-001-20141010 (Revision date: 10 10 2014)

2.23 This paragraph explains that:

“It is important for local planning authorities to undertake an assessment of the transport implications in developing or reviewing their Local Plan so that a robust transport evidence base may be developed to support the preparation and/or review of that Plan.”

2.24 It goes on to explain that:

“The transport evidence base should identify the opportunities for encouraging a shift to more sustainable transport usage, where reasonable to do so; and highlight the infrastructure requirements for inclusion in infrastructure spending plans linked to the Community Infrastructure Levy, section 106 provisions and other funding sources.”

Paragraph: 002 Reference ID: 54-002-20141010 (Revision date: 10 10 2014)

2.25 Paragraph 002 explains that:

“A robust evidence base will enable an assessment of the transport impacts of both existing development as well as that proposed, and can inform sustainable approaches to transport at a plan making level. This will include consideration of viability and deliverability.”

Paragraph: 003 Reference ID: 54-003-20141010 (Revision date: 10 10 2014)

2.26 This paragraph explains that:

“The key issues, which should be considered in developing a transport evidence base, include the need to:

- *assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms*
- *assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport*

- *highlight and promote opportunities to reduce the need for travel where appropriate*
- *identify opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate*
- *consider the cumulative impacts of existing and proposed development on transport networks*
- *assess the quality and capacity of transport infrastructure and its ability to meet forecast demands*
- *identify the short, medium and long-term transport proposals across all modes.*

The outcome could include assessing where alternative allocations or mitigation measures would improve the sustainability, viability and deliverability of proposed land allocations (including individual sites) provided these are compliant with national policy as a whole.”

Paragraph: 004 Reference ID: 54-004-20141010 (Revision date: 10 10 2014)

2.27 This paragraph explains that:

“An assessment of the transport implications should be undertaken at a number of stages in the preparation of a Local Plan:

- *as part of the initial evidence base in terms of issues and opportunities*
- *as part of the options testing*
- *as part of the preparation of the final submission*

The last of these stages should highlight the scale of and priorities for investment requirements and support infrastructure spending plans. Like a sustainability appraisal, it will be an iterative process and become more refined and detailed as the process draws to a conclusion.”

Paragraph: 005 Reference ID: 54-005-20141010 (Revision date: 10 10 2014)

2.28 This paragraph considers what baseline information should inform a transport assessment of a Local Plan. It goes on to say:

“The following list indicates the key aspects that should be addressed in the transport assessment. This list is not exhaustive, and there may be additional issues that are important to consider locally.

- *all current transport issues as they affect all modes and freight covering, for example, accessibility, congestion, mobility, safety, pollution, affordability, carbon reduction across the whole Plan area and, within relevant areas of the Plan, including existing settlements and proposed land allocations*
- *the potential options to address the issues identified and any gaps in the networks in the short, medium and longer term covering, for example, accessibility, congestion, mobility, safety, pollution, carbon reduction*
- *the locations of proposed land allocations and areas/corridors of development and potential options for the provision of sustainable transport and transport networks to serve them*
- *solutions to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport*
- *the scope and options for maximising travel planning and behavioural change.*
- *accessibility of transport nodes such as rail/bus stations to facilitate integrated solutions”*

Paragraph: 006 Reference ID: 54-006-20141010 (Revision date: 10 10 2014)

2.29 This paragraph explains what detailed information is required for the transport assessment of the Local Plan. It explains that much of the information required will already be available from the “development needs and land availability assessments”.

Paragraph: 007 Reference ID: 54-007-20141010 (Revision date: 10 10 2014)

2.30 This paragraph explains how the transport assessment of the Local Plan can be undertaken. It explains that “a transport assessment is likely to be scenario based and in terms of projections look at a range of potential outcomes given a number of

assumptions, for example, a movement in the proportion of people using different forms of transport consistent with best practice.”

Paragraph: 008 Reference ID: 54-008-20141010 (Revision date: 10 10 2014)

2.31 This paragraph explains how the impact of land allocations should be considered in assessing the transport implications of Local Plans.

2.32 It explains that the first step is to provide an estimate of the person trips (for all types of transport) that are likely to be generated by the proposed allocation. It goes on to explain that *“there needs to be a description of the type of development at each of the locations proposed in as much detail as possible at the time. Where this is not possible a likely scenario will need to be employed to set out the potential transport impact.”*

Paragraph: 009 Reference ID: 54-009-20141010 (Revision date: 10 10 2014)

2.33 This paragraph explains how safety considerations should be addressed and accident analysis used effectively in the transport assessment of the Local Plan.

2.34 It states that:

“All types of transport should be covered by safety considerations and accident analysis, taking into account the objective of facilitating, where reasonable to do so, the use of sustainable modes of transport. The level of detail required will be dependent on the stage of the Local Plan.”

2.35 It goes on to say that:

“Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed land allocations will exacerbate existing problems and whether highway mitigation works or traffic management measures will be required to alleviate such problems. The accident records should be compared with accident rates on similar local roads.”

3 THE COUNCIL'S ASSESSMENT OF THE TRANSPORT ISSUES RELATING TO PN 17, PN 18 AND PN 19

Preamble

- 3.1 The 3 sites that are the main focus of this report have only been included in the Draft Local Plan following the additional sites consultation in July 2017.
- 3.2 Site PN 17 (housing) was considered for inclusion in the 2016 draft local plan [DLP 08] but the recommendation at that time was not to allocate for a number of reasons including the site's poor accessibility and significant transport impacts.
- 3.3 Sites PN 18 (employment) and PN 19 (housing) were not considered for inclusion in the 2016 draft local plan. Site PN 14 (housing, 277 units) was included in the 2016 draft local plan. This site occupied parts of sites PN 18 and PN 19. Sites PN 18 and PN 19 have replaced site PN 14 in the draft Local Plan as submitted for examination [CD 01].
- 3.4 It will be noted that most of the local plan evidence base relating to transport and infrastructure predates the inclusion of these three sites in the draft local plan. It should be noted though that additional traffic modelling was undertaken following the call for additional sites. The results of this modelling are summarised in a report dated January 2018 [EBTI 09].
- 3.5 The Parish Council has advised us that sites PN 18 and PN 19 are owned by Harrogate Borough Council. This is, potentially, interesting for the following reasons:
- in our experience when a Council seeks to grant itself planning permission, or allocate Council owned land for development, the Council will be particularly keen to ensure that the decision-making process is rigorous and transparent;
 - according to the "site-specific" development criteria (see below) presented in the emerging local plan the Council expects the access (or accesses) to sites PN 18 and PN 19 to be taken from the A61 with the access to site PN 18 (employment) taking into account the need to provide access to PN 19 (housing).

Local Plan (Publication Version) (January 2018) [CD 01]

- 3.6 Each of the proposed site allocations requires the development of the site to meet the generic site requirements set out in Chapter 10 (paragraph 10.2) of the draft local plan [CD 01, page 259]. Of particular relevance to our investigations are bullet point 4, 5 and 7. For convenience these are reproduced below:

“4 seek to reduce the need for car use and maximise sustainable modes of travel, including, where appropriate, provision for: public transport; walking and cycling infrastructure; include facilities to recharge electric vehicles.....; the Harrogate car share scheme; and other measures to reduce congestion/improve air quality.

5 Be accompanied by a transport statement or transport assessment and travel plan where development generate significant amounts of traffic, or where the highway authority, North Yorkshire County Council, indicate that this is required.

7 Deliver and/or contribute to infrastructure requirements set out in the councils Infrastructure Delivery Plan together with other infrastructure requirements identified at the time of the planning application.”

Site specific requirements

- 3.7 Each of the three sites requires the submission of a transport assessment and travel plan.
- 3.8 PN 17 (housing) requires vehicle, cycle and pedestrian access to be taken from Spring Lane, with highway improvements to Spring Lane and a pedestrian footway along the site frontage.
- 3.9 PN 19 (housing) does not make any specific reference to the most appropriate access arrangements. Pedestrian and cycle links are required within the site and from the site.
- 3.10 PN 18 (employment) requires vehicle, cycle and pedestrian access to be taken from Leeds Road (A61) and goes on to say *“the location and design of this access should take account of the need to also provide vehicle, cycle and pedestrian access to site PN 19 and will need to be agreed in discussion with the highway authority, North Yorkshire County Council. Footway improvements will be required.”*

Objections to Local Plan (Publication Version) (January 2018)

- 3.11 The proposed allocations in Pannal attracted objections from the Parish Council and numerous local residents. The Parish Council's objections were supported by expert reports prepared by Arrowsmith Associates (planning), BWB (traffic modelling) and Smeeden Foreman (landscape).

Local Plan: Publication Draft Key Issues Report 2018 (August 2018) [CD 08]

- 3.12 Having considered the representations made in response to the Publication Draft consultation the Council decided not to make any amendments in respect of the 3 sites in Pannal. The Council's reasoning is presented in the "Key Issues Report 2018" (August 2018) [CD 08].
- 3.13 The Key Issues in respect of PN 17 (housing) are presented in Table 12.70 [CD 08, page 229].
- 3.14 The Key Issues in respect of PN 19 (housing) are presented in Table 12.71 [CD 08, page 231].
- 3.15 The Key Issues in respect of PN 18 (employment) are presented in Table 12.86 [CD 08, page 249].
- 3.16 The Council has issued the same, generic, response in respect of each of the 3 sites in Pannal, and indeed many other sites.
- 3.17 Those aspects of this generic response pertinent to our investigations are presented below:

"As set out in the evidence base, many sites have been considered through the site selection process. Sites had been allocated that are considered to offer the greatest sustainability benefits and considerations such as the scale of development, access, and impacts on highways, landscape, ecology, heritage assets and flooding were taken into account during the site assessment process."

"Potential adverse impacts of development of the site were considered through the site assessment process. Where potential adverse impacts were identified, it is considered that these are not insurmountable and could potentially be mitigated, as

set out in the Site Requirements. Further assessment of these issues will be undertaken as part of the planning application process if required at this stage.”

“It is recognised that new development, both individual sites and from the cumulative impact of several sites, will place extra pressure on existing infrastructure and may need new or improved infrastructure to support it. The Council continues to work with the County Council, utility and other infrastructure/service providers to make sure the infrastructure implications of the allocated sites are fully assessed and where necessary mitigation measures are identified and put in place to address development impacts. Funding contributions from developers will be sought where needed to increase capacity to provide local infrastructure.”

**Sustainability appraisal updated following publication draft consultation
(August 2018) [CD 03]**

- 3.18 The matrix on page 34 [CD 03, page 34] of the updated sustainability appraisal assesses the compatibility of the revised draft local plan objectives with the sustainability appraisal objectives. It will be noted that the 7 local plan objectives are considered to be compatible with each of the 16 sustainability appraisal objectives (where applicable) except in 2 areas, both of which relate to Sustainability Appraisal objective 10 “transport network that maximises access”.
- 3.19 It is “uncertain” whether Local Plan Objective 2 (to support business, enterprise, job creation in order to achieve a strong sustainable economy et cetera) complies with Sustainability Appraisal objective 10 “transport network that maximises access”.
- 3.20 It is “uncertain” whether Local Plan Objective 3 (increase the supply of new housing to address housing needs for all) complies with Sustainability Appraisal Objective 10 “Transport network that maximises access”.
- 3.21 Updated sustainability appraisals of the sites in Pannal are included in the August 2018 report [CD 03]. The Council’s analysis of each site in respect of Sustainability Appraisal Objective 10 “*a transport network which maximises access whilst minimising detrimental impacts*” are summarised below:
- 3.22 PN 17 (housing)

- “significant transport/and or accessibility/cumulative impact problems requiring substantial mitigation
- increased public transport provision and extension of services cannot be predicted at this stage
- poor connectivity to cycle routes
- lack of pavements does not encourage pedestrian access to services
- significant barrier to accessibility”

3.23 PN 18 (employment)

- “significant transport and/or accessibility problems although developer funded mitigation can address
- increased public transport provision and extension of services cannot be predicted at this stage
- poor connectivity to cycling routes
- some pedestrian access and safety issues
- severance can be overcome
- opportunity to provide new rail station”

3.24 PN 19 (housing)

- “significant transport and/or accessibility problems although developer funded mitigation can address
- increased public transport provision and extension of services cannot be predicted at this stage
- poor connectivity to cycling routes
- convenient and safe pedestrian routes to access services and facilities
- severance can be overcome

- opportunity to enhance existing rail facilities”

Transport Background Paper (August 2018) [SD 15]

- 3.25 The Transport Background Paper explains that *“the underpinning theme of the growth strategy is to locate development close to quality public transport corridors.”* [SD 15, paragraph 5.2].
- 3.26 It goes on to say that the sites north of Pannal could assist in *“supplying passengers to boost rail patronage and enhance any business case for investment”* [SD 15, paragraph 2.6 and paragraph 5.3].
- 3.27 At paragraph 5.14 it says that *“HBC and Harrogate bus company are actively looking for opportunities to fund a Park and Ride site to maximise the opportunities offered by the existing high-frequency provision of the 36 on the A 61 between Harrogate and Leeds. Such an initiative will strongly help to reduce vehicle trips to and from the employment allocations north of Pannal.....”*.
- 3.28 It is clear that these are only aspirations, no detail or further information is provided.
- 3.29 The Council has noted in its Sustainability Appraisal summarised above that increased public transport provision and extension of services cannot be predicted. We note that no additional money was provided for public transport in the November 2018 Budget.
- 3.30 We note also that in the Council’s Option 3 Traffic Modelling Update (January 2018) [EBTI 09] that the Council has assumed that the traffic generation of PN 18 (employment) will be significantly below that of all other employment sites included in the Harrogate District Transport Model. We can see no justification whatsoever for making such an assumption on the basis of the evidence available to us. The effect of this reduction will be to significantly reduce the forecast traffic impact arising from this proposed development thereby reducing the need for off-site highway improvements and also reducing the proportion of such costs that should be properly borne by this development. We expand upon this in the next section of this report.
- 3.31 In section 6 *“Impact of the Local Plan”* the only section of highway in the Pannal area requiring improvement as a result of the proposed local plan allocations is the A61/Pannal Bank/Follifoot Road junction. The Council explains that *“the mitigation solution to this junction requires the purchase of third-party land and involves*

changing the alignment of the junction to remove the current staggered design which is not efficient.” No further information is provided.

- 3.32 At paragraph 6.4 the Council says *“Work is underway to apportion the impact of each development on junctions requiring mitigation and therefore allocate contributions in a fair and equitable manner. This work will be available for the plan examination.”*
- 3.33 At paragraph 6.5 the Council explains that it has had separate informal and commercially confidential meetings with major bus operators. It then goes on to say that *“It is likely that there will be a requirement on developers to support services prior to the full build out of sites in order to ensure that newly arrived residents have the option of bus travel from there move in date.”*
- 3.34 In Section 7 “Growth Areas” the Council provides more information on each of the identified growth areas in the district.
- 3.35 At paragraph 7.1 the Council states *“The proposed allocations in West Harrogate and Pannal are critical to delivering early plan period growth.”*
- 3.36 At paragraph 7.3 (bus provision) the Council states: “Sites PN 18 and PN 19 both lie adjacent to the A61 and as such, service 36 to Leeds and Ripon, the service to Leeds-Bradford airport and Bradford and services to Ilkley, provide excellent direct bus connectivity.”
- 3.37 At paragraph 7.4 (rail) the Council states: “Sites PN 18 and PN 19 will require some improvement to connections to Pannal rail station but their close proximity to this station offer significant opportunity for high rail mode share in trips to and from the sites.”
- 3.38 At paragraph 7.5 and 7.6 (walking and cycling) the Council highlights the need to provide new routes between Pannal village, the railway station and sites PN 18 and PN 19 including a new crossing on the A 61.

Infrastructure Delivery Plan Submission Update (August 2018) [SD 16]

- 3.39 The Infrastructure Delivery Plan establishes what additional infrastructure and service needs are required to support the level of development proposed in the Local Plan.
- 3.40 It should be noted that the Infrastructure Delivery Plan does not seek to address existing deficiencies in infrastructure provision.

- 3.41 This is potentially an important consideration because the Borough Council has agreed with the local highway authority, North Yorkshire County Council, that:
- “the requirement for the local plan is that a junction solution needs only to mitigate the impact of the cumulative site allocations rather than it being necessary to bring junctions to a stage where they will no longer suffer from congestion. This does not preclude a junction from requiring mitigation in future should a traffic assessment identify a requirement for intervention.”*
- (Transport Background Paper, August 2018, paragraph 6.2) [SD 15].
- 3.42 There is only one highway improvement included in the Infrastructure Delivery Plan as of August 2018 that relates to the sites in Pannal. This improvement relates to the A61/Pannal Bank/Follifoot Road junction. No details are provided although it is noted that a compulsory purchase order (CPO) is required. The delivery mechanism/funding source is said to be “developers”, but no specific “contributing sites” are listed.
- 3.43 No specific public transport improvements relating to the Pannal area are listed.
- 3.44 Site PN 19 is one of the sites listed as a “contributing site” towards the cost of improving cycling and walking routes between Pannal and Harrogate town centre and showground.

Comment

- 3.45 It is clear from the above summary of the Council’s actions leading to the inclusion of PN 17, PN 18 and PN 19 in the Publication Draft Local Plan that the decision to include these sites was only made after the 2017 Housing and Economic Needs Assessment (HEDNA) concluded that additional housing and employment land was required.
- 3.46 On the basis of the information available on the Council’s website the transport evidence in support of these allocations is only partially complete. Many important issues have not been fully addressed and it is clear that the Council is deferring, or delaying, making important decisions particular regarding transport infrastructure requirements until the planning application stage .
- 3.47 We know from the traffic modelling work undertaken on behalf of the Parish Council by BWB (which was submitted to the Council during the consultation period in January 2018) that the traffic modelling undertaken by the Council is overly optimistic and that the highway network will experience significant problems in the Pannal area.

- 3.48 It is striking to note that the only two areas where the Local Plan Objectives are not definitely compatible with the Sustainability Appraisal Objectives (which are derived from the NPPF) relate to the allocation of employment and housing land and its relationship to transport network.

4 ASSESSMENT

Preamble

- 4.1 In this section of the report we consider various aspects of the transport evidence base which both individually and collectively demonstrate that the transport issues associated with the proposed allocations of PN 17, PN 18 and PN 19 have not been considered in the rigorous, and transparent, manner that we would expect.
- 4.2 It should be remembered that the transport evidence base should be proportionate to the scale of development proposed and the magnitude of the transport issues raised. It is not necessary for a local planning authority to resolve all of the transport issues associated with a proposed allocation. However, before an allocation can be considered “sound” the decision-maker has to be confident that all the significant transport impacts have been properly considered, taking into account both individual development sites and the cumulative impact of a number of sites. The decision-maker must then be confident that any significant transport infrastructure or services needed as a result of the proposed new development(s) have been identified and that any such infrastructure/services can be funded and delivered in an appropriate manner.
- 4.3 In this case, and on the basis of the information provided by the Council, we do not consider that the transport evidence base can be considered “sound”.
- 4.4 Our concerns relate to all three proposed allocations. However, our major area of concern relates to the proposed employment allocation PN 18. The Council expects this site to deliver 93,000 m² (1,001,000 ft²) of employment floorspace. This represents 39% of the total employment allocation for the whole of the Borough (ref. Policy DM 2 Employment Allocations). Even if we were to accept the Council’s reduced vehicle trip rates for this site (and the evidence we have seen does not support the reduced figures) then the number of vehicle movements into/out of this site in the morning peak hour would be 1509 vehicles per hour. Using the Council’s trip rates as used at all other employment sites in the Borough this figure increases to 1917 vehicles per hour. The 2018 baseline flows on the A 61 as taken from the BWB report (March 2018) commissioned by the Parish Council are 1742 vehicles per hour in the AM peak and 1904 vehicles per hour in the PM peak. The forecast traffic generation of the PN 18 allocation is therefore much the same, or slightly higher than, the existing peak hour flows on the A 61 as it passes the site. Of course these figures increase even

further when we consider the proposed housing allocation (PN 19) on the opposite side of the A 61 and which will itself generate 160 vehicle movements in the peak hours using the Council's own figures.

4.5 Our concerns are set out below under the following headings:

- accessibility/transport connectivity
- highway safety
- traffic impact/modelling
- new transport infrastructure/services

Accessibility/Transport Connectivity

4.6 A fundamental objective of the NPPF is to reduce the overall need to travel, and to encourage the uptake of sustainable modes of travel in preference to the private car by focusing development in locations which are or can be made sustainable. (See Section 2 above).

4.7 It is pertinent to note that in the latest Sustainability Appraisal [CD 03] the 7 local plan objectives are considered to be compatible with each of the 16 sustainability appraisal objectives (where applicable) except in respect of Sustainability Appraisal Objective 10 "a transport network which maximises access whilst minimising detrimental impacts" as it relates to Local Plan Objective 2 "to support business, enterprise, job creation et cetera" and Local Plan Objective 3 "increase the supply of new housing to address housing needs for all".

4.8 An important step in the preparation of the transport evidence base in respect of a Local Plan is a transport accessibility or connectivity study. The Council refers to having undertaken a TRACC analysis in the Sustainability Appraisal. However, no further detailed information is available. We have requested a copy of the TRACC report/analysis, but nothing has been forthcoming from the Council.

4.9 As noted above sites PN 17, PN 18 and PN 19 were only included in the draft Local Plan following the additional sites consultation in 2017. We do not know whether the accessibility analysis was undertaken/updated what we do know though is that the Sustainability Appraisal has identified significant transport and/or accessibility problems with each site (Ref. paragraphs 3.2-3.24 above).

- 4.10 From what we have seen in the reports as submitted to the Secretary of State it would appear that the Council has concluded that sites PN 18 and PN 19 are sustainable locations simply because they are located on the A 61 which is a bus route and to the north of Pannal and there is a railway station in Pannal.
- 4.11 On this basis the Council has also concluded that in respect of site PN 18 the car mode share for the B 1 use will only be 55%.
- 4.12 We have seen no evidence to justify this figure.
- 4.13 When we look at the “method of travel to work” data from Census 2011 in respect of workplace zone E33013613 (see Figure 1 below) we see that 88% of people working in the area travel to work by car/van either as a driver or passenger. This compares to a figure of 74% for the whole of the Harrogate Borough. Only 2% of workers travel to work by train and only 3% by bus, it should be noted that the workplace zone includes the railway station.

Selection of areas

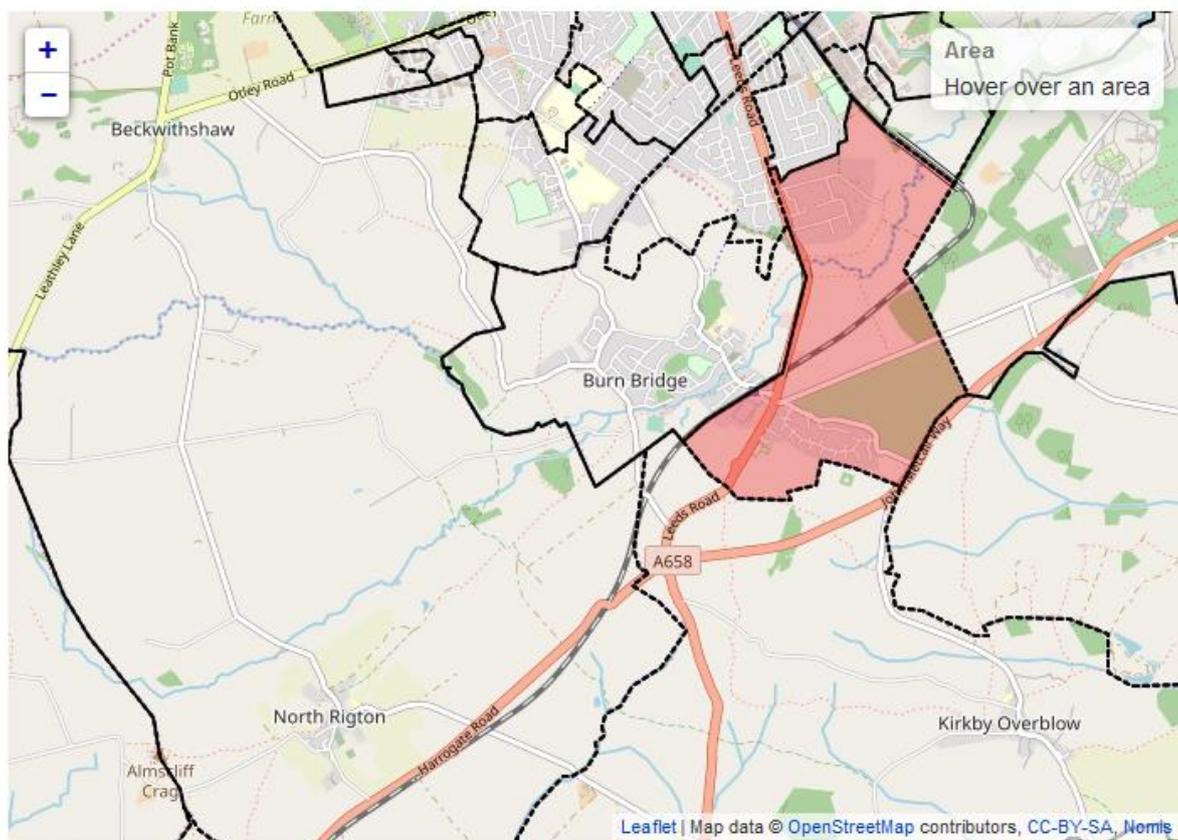


Figure 1 Census 2011 workplace zone

- 4.14 The “method of travel to work” for those working in this workplace zone (excluding those who work mainly at or from home) is presented in Table 1 below together with the data relating to the whole of Harrogate Borough.

Method of travel to work	Harrogate Borough	Workplace Zone E33013613
Underground, Metro, light rail	0%	0%
Train	2%	2%
Bus, minibus or coach	5%	3%
Taxi	0%	0%
Motorcycle, scooter or moped head	1%	1%
Driving a car or van	68%	83%
Passenger in a car or van	6%	5%
Bicycle	3%	2%
On foot	16%	3%
Other	1%	1%
Total	100%	100%

Table 1 Method of Travel to Work (census 2011)

- 4.15 We note that, according to the data submitted by the Council in the Transport Background Paper (August 2018) [SD 15], the number of bus passengers and rail passengers has decreased in the Borough since 2011.
- 4.16 We can therefore see no evidence to support the Council’s assumption that car mode share should be 55% in respect of the B 1 use at PN 18. Indeed the Council’s reduced trip rates mean that approximately 400 more people will travel to/from PN 18 by public transport, walking or cycling in the AM peak hour than has been assumed that all other employment sites in the Borough.
- 4.17 To put this in context, the Number 36 bus carries approximately 70 passengers at maximum capacity. If the Council’s assumptions are correct and if we assume that the 400 people who would otherwise drive choose to travel by bus instead then this would equate to an additional 6 full busloads of passengers in the AM peak hour. We

consider this to be a wholly unrealistic, and aspirational, target on the part of the Council.

- 4.18 As noted in the Parish Council's previous submissions during the consultation stage each of the 3 sites is located beyond desirable walking distances of the facilities in Pannal, including the railway station.
- 4.19 The Council's own assessment as presented in the Sustainability Appraisal concludes that Site PN 17 scores very poorly for accessibility and that sites PN 18 and PN 19 performed relatively poorly. The Council's assessment is taken from the centre of each site. Sites PN 18 and PN 19 are so large that the walking distance within the site can be longer than the distance between the site and the village.

Comment

- 4.20 Based upon our review of the evidence as submitted by the Council we conclude that accessibility/transport connectivity issues have not been properly considered particularly in respect to the proposed allocations of PN 17, PN 18 and PN 19.
- 4.21 Furthermore, we consider the Council's assessment and assumptions with regard to the likely uptake of public transport, particularly with regard to PN 18 this, to be overly optimistic.
- 4.22 This being the case we conclude that the transport evidence base insofar as it relates to accessibility/transport connectivity and encouraging the use of public transport and other sustainable modes of travel in preference to the private car to be flawed and therefore in conflict with the NPPF and Planning Guidance.

Highway Safety

- 4.23 We have seen no detailed assessment of highway safety issues insofar as they relate to the A 61 and the proposed allocations in Pannal.
- 4.24 NPPF (2012) and Planning Guidance require safety be considered across all modes of transport and goes on to say that accident records should be compared with accident rates on similar local roads (see Chapter 2 above). The importance of highway safety is reiterated in NPPF (2018) which now contains an explicit reference to highway safety and goes on to explain that this is excluded from the "severe" test that applies to highway capacity issues.

- 4.25 The Department for Transport has a Count Point (ID 77626) on the 1.68 mile (2.7 km) long section of the A 61 between the A658 to the south and Fulwith Road to the north.
- 4.26 In 2017 the Annual Average Daily Flow (AADF) on this stretch of road was 15381 vehicles.
- 4.27 This section of the A 61 as it passes through Pannal is classified as “rural”. This classification relates to the area classifications from Census 2011 rather than any highway engineering considerations.
- 4.28 Each year the Department for Transport publishes accident data. Table TSGB0803 (RAS 10002a), copy attached at Appendix 1, presents “reported accidents and accident rates by road class and severity”. In 2016 the accident rate for rural A roads, this being the category into which the A61 falls, was 245 accidents per billion miles.
- 4.29 Interrogation of the crashmap database for the 5 year period 2013-2017 (inclusive) shows that there were 47 personal injury accidents only 1.68 mile long section of the A 61. These accidents are shown in the map presented at Appendix 2

- 4.30 The accident rate on this section of the A 61 can therefore be calculated as follows:

annual average daily traffic flow	15,381 vehicles
traffic flow per year	15,381 x 365 = 5,614,065 vehicles
distance travelled per year	5,614,065 x 1.68 = 9,431,629 vehicle miles
distance travelled in 5 years	5 x 9,431,629 = 47,158,146 vehicle miles
1 billion = 1,000 million = 1,000,000,000	
47,158,146 = 0.047158146 billion	

Accident Rate $47/0.047158146$ billion
(calculated over the 5 year period) = 997 accidents per billion miles

This compares with the average accident rate for a rural A road of 245 accidents per billion miles.

- 4.31 It is clear therefore that the accident rate on the section of the A 61 passing through Pannal in the last 5 years is over 4 times as high as the national average for this type of road.
- 4.32 We would have expected that this fact on its own would have led the Borough Council to undertake a thorough assessment of the likely traffic impacts arising from the major

proposed allocations in Pannal before considering including these allocations in the draft Local Plan.

- 4.33 Clearly this hasn't happened, and these major allocations are being proposed without a robust transport evidence base to support the allocations.

Comment

- 4.34 The potential highway safety implications of the proposed allocations do not appear to have been given proper consideration in the decision-making process. Given the very poor accident rate on the A 61 in the vicinity of the proposed allocations we consider that a robust assessment should be undertaken to ensure that the significant volumes of additional traffic (the additional traffic is more than the total traffic currently using the A 61) arising from the proposed allocations will not have a serious adverse impact on highway safety

Traffic Impact/Modelling

- 4.35 The Council has modelled the potential traffic impact of the proposed local plan allocations using the Harrogate District Transport VISUM Model. The original modelling work was undertaken in 2016. Additional modelling work was undertaken in 2017 to incorporate the additional sites including PN 17, PN 18 and PN 19 which are the main focus of our report. The results of this additional modelling are presented in a report entitled Harrogate District Transport Model: Option 3 Traffic Modelling Update (January 2018) [EBTI 09].
- 4.36 At paragraph 6.2 of the Transport Background Paper (August 2018) [SD 15] the Council explains that the modelling they have undertaken is "strategic in nature and will need to be supported by transport assessments specific to planning applications in due course". The Council goes on to explain that whilst the Harrogate District Transport Model identified junctions where capacity problems were forecast more detailed individual junction assessments, using different modelling software, has shown that no improvements are needed in many cases.
- 4.37 The Parish Council commissioned traffic modelling work from BWB which was submitted to the Council as part of the Parish Council's consultation response in early 2018. This modelling work showed that, contrary to the Council's findings, problems would be experienced at numerous junctions as forecast by the Council's original modelling work.

4.38 The BWB modelling work identified significant problems at the following junctions:

- A 61/A658 roundabout
- A 61/Burn Bridge Lane junction
- A 61/Follifoot Road/Pannal Brook junction
- A 61/Hookstone Road/Leadhall Lane junction

4.39 It is clear from the various modelling outputs that determine whether or not a junction will experience problems as a result of the Local Plan allocations is very sensitive to the modelling software used, and the assumptions made in terms of inputs to those models.

4.40 It should be noted that the Council’s modelling work has used the lower traffic generation forecasts for the employment site PN 18. As explained above we do not consider this a reasonable approach on the basis of the information available to us.

4.41 In Table 2 below we have presented a comparison of the forecast traffic generation from PN 18 in the weekday AM and PM peak hours using the Borough Council’s “normal” trip rates as used at all other employment sites in the Borough and the lower trip rates used in respect of PN 18 only.

	Standard trip rates			Reduced trip rates		
	In	Out	Total	In	Out	Total
AM peak hour	1692	225	1917	1309	200	1509
PM peak hour	181	1361	1542	100	748	848

Table 2 Forecast AM and PM Vehicle Movements
PN 18 (employment) 93,000 m²
HBC standard and reduced trip rates

4.42 It should be noted that the Baseline 2018 traffic flows on the A 61 are:

AM peak hour 1742 vehicle/hour

PM peak hour 1904 vehicle/hour

- 4.43 It is clear looking at these figures that irrespective of whether we accept the Borough Council's lower trip rates the development of PN 18 will introduce very high levels of traffic onto what we know to be a sensitive section of highway, with an accident record approximately 4 times higher than the average for this type of road.
- 4.44 In our opinion development of this scale is likely to necessitate highway improvement work beyond that currently envisaged. The Council's Infrastructure Delivery Plan only identifies the A 61/Pannal Bank/Follifoot Road junction as requiring improvement due to the cumulative impact of Local Plan allocations.
- 4.45 Given the output from the Council's original modelling work, which is supported by the BWB modelling work, we consider it essential that additional modelling work is undertaken to ensure that all necessary highway infrastructure is identified, and funding mechanisms secured, before the sites in Pannal are allocated.
- 4.46 We are not convinced that appropriate highway infrastructure measures can be satisfactorily dealt with by deferring any decisions until a future planning application. Indeed, the decision by the Borough Council to reduce the forecast traffic generation of PN 18 will serve to reduce the financial burden on that site at the planning application stage, leaving it to either the public purse or future planning applications on other sites to resolve any highway problems that manifest themselves once PN 18 has received planning permission.

Comment

- 4.47 On the basis of the information currently available to us we do not consider that the traffic modelling work undertaken in support of the proposed allocations of PN 17, PN 18 and PN 19 is sufficiently robust to support the proposed allocations. We recommend that the modelling work be revisited and that some form of sensitivity testing be undertaken particular to determine how sensitive of site traffic impacts are to assumptions made on trip rates at PN 18.

New Transport Infrastructure/Services

- 4.48 It will be apparent from our assessments as summarised above that we do not have confidence in the Borough Council's assessment of what transport infrastructure/services are necessitated by the proposed Local Plan allocations.

- 4.49 We do not consider it reasonable that the Borough Council should leave matters to be determined at the planning application stage after sites had been allocated in the emerging Local Plan.
- 4.50 The Government is keen to ensure that the appropriate transport infrastructure and/or services are identified early on in the planning process particularly when the need for infrastructure/services is a result of the cumulative impact of various proposed allocations.
- 4.51 In order to ensure a robust, fair and transparent planning system developers need to know what contributions they are expected to make and local communities have a right to know what infrastructure/services they can expect to be delivered by developments in the area.
- 4.52 We note that in this case the Borough Council is delaying major decisions until the planning application stage, and even with those infrastructure/services that they have identified they only expect to be able to apportion the impact of each development on junctions requiring mitigation by the time of the local plan examination stage.
- 4.53 The identification and delivery of transport infrastructure is an iterative process and details become firmed up as proposals progress through the planning system. However, in this case the Borough Council is proposing to allocate major developments without having undertaken any detailed work to identify the potential impacts, and any associated mitigation measures.

Comment

- 4.54 We are not convinced that the work undertaken by the Borough Council is sufficiently detailed, robust and transparent so that the local community, and indeed developers, can have confidence in the Borough Council's findings.

5 CONCLUSIONS

- 5.1 We have undertaken a preliminary review of the transport evidence base as prepared by Harrogate Borough Council in support of the emerging Local Plan. Our investigations have focused primarily on the issues associated with the proposed allocations of PN 17 (housing), PN 18 (employment) and PN 19 (housing).
- 5.2 Our work builds on previous submissions made by, and on behalf of our client (Pannal and Burn Bridge Parish Council) at the time of the local plan consultation.
- 5.3 Our investigations as summarised in this report lead us to conclude that the transport evidence base as currently submitted to the Secretary of State is not sufficiently robust to support the proposed allocations.

THaT Consultancy
November 2018

APPENDIX ONE

Reported accidents and accident rates by road class
and severity: 2009 to 2016

Table TSGB0803a (RAS 10002a)

Department for Transport

Table TSGB0803a (RAS10002a)

Reported accidents and accident rates by road class and severity, Great Britain, 2010-14 average: 2009 to 2016

Number of accidents/rate per billion miles

	2010-14 average	2009	2010	2011	2012	2013	2014	2015	2016
Urban roads^{2,3}									
A roads									
Fatal	295	374	307	330	289	262	287	296	301
Fatal and serious	5,413	5,656	5,391	5,718	5,636	5,092	5,230	4,964	5,269
All severities	42,577	45,473	43,697	44,016	42,206	40,050	42,916	40,402	38,448
Rate	861	902	875	885	862	819	862	806	761
Other roads⁴									
Fatal	290	347	265	294	327	258	304	281	292
Fatal and serious	7,171	7,448	6,943	7,265	7,529	6,864	7,253	7,128	7,667
All severities	52,565	58,108	54,853	54,337	52,174	49,085	52,376	50,718	49,280
Rate	800	861	841	828	789	755	786	763	722
All urban roads⁵									
Fatal	585	721	572	624	616	520	591	577	593
Fatal and serious	12,584	13,104	12,334	12,983	13,165	11,956	12,483	12,092	12,936
All severities	95,142	103,581	98,550	98,353	94,380	89,135	95,292	91,120	87,728
Rate	826	879	856	853	820	782	819	781	738
Rural roads^{2,3}									
A roads									
Fatal	650	790	657	711	607	643	630	623	679
Fatal and serious	4,888	5,559	4,931	5,036	4,751	4,740	4,983	4,807	5,179
All severities	25,339	28,676	26,577	25,873	24,960	24,373	24,912	23,878	23,002
Rate	289	325	306	295	286	279	279	261	245
Other roads⁴									
Fatal	359	432	389	370	334	348	352	320	336
Fatal and serious	4,053	4,593	4,125	4,062	3,996	3,895	4,188	4,043	4,534
All severities	21,015	24,654	22,787	21,429	20,616	19,755	20,488	19,508	20,479
Rate	494	573	530	512	504	469	459	429	440
All rural roads⁵									
Fatal	1,008	1,222	1,046	1,081	941	991	982	943	1,015
Fatal and serious	8,941	10,152	9,056	9,098	8,747	8,635	9,171	8,850	9,713
All severities	46,354	53,330	49,364	47,302	45,576	44,128	45,400	43,386	43,481
Rate	356	406	380	365	355	341	339	317	310
All roads⁵									
Motorways									
Fatal	93	114	113	92	80	97	85	96	87
Fatal and serious	686	798	781	702	626	641	680	712	769
All severities	5,792	6,643	6,500	5,819	5,615	5,397	5,630	5,550	5,405
Rate	92	107	107	94	90	85	87	83	80
A roads									
Fatal	945	1,164	964	1,041	896	905	917	919	980
Fatal and serious	10,302	11,215	10,322	10,754	10,387	9,832	10,213	9,771	10,449
All severities	67,916	74,149	70,274	69,889	67,166	64,423	67,828	64,280	61,455
Rate	495	534	513	508	493	473	488	454	425
Other roads⁴									
Fatal	648	779	654	664	661	606	656	601	628
Fatal and serious	11,224	12,041	11,068	11,327	11,525	10,759	11,441	11,171	12,202
All severities	73,580	82,762	77,640	75,766	72,790	68,840	72,864	70,226	69,761
Rate	680	749	717	705	680	642	655	627	608
Total⁵									
Fatal	1,686	2,057	1,731	1,797	1,637	1,608	1,658	1,616	1,695
Fatal and serious	22,212	24,054	22,171	22,783	22,538	21,232	22,334	21,654	23,420
All severities	147,288	163,554	154,414	151,474	145,571	138,660	146,322	140,056	136,621
Rate	478	526	504	494	476	452	464	438	418

1. Figures have been rounded to the nearest whole number.

2. Excludes motorways.

3. See urban and rural definitions.

4. B roads, C roads and unclassified roads: excludes cases where road class was not reported.

5. Includes cases where road class was not reported.

Source: DfT STATS19, DfT National Road Traffic Survey

Last updated: 28 September 2017

Next update: September 2018

Telephone: 020 7944 6595

Email: roadacc.stats@dft.gsi.gov.uk

The figures in this table are National Statistics

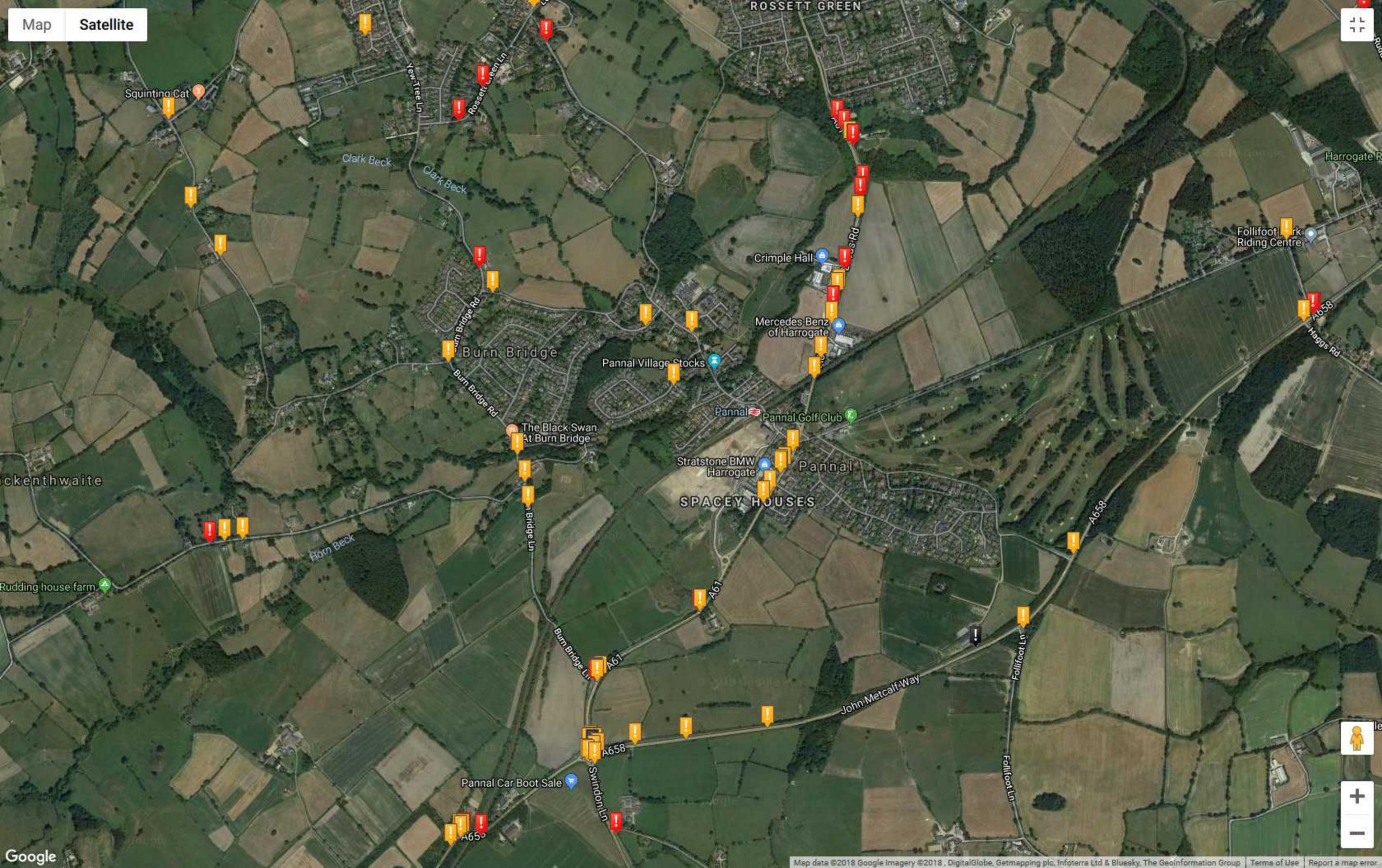
Changes in severity reporting systems for a large number of police forces in 2016 mean that serious injury figures, and to a lesser extent slight injuries, are not comparable with earlier years. More information is available in the 2016 annual report

APPENDIX TWO

A Plot of Personal Injury Accidents on the A61

2013-17 (inclusive)

Crashmap Data



Wickenthwaite

Rudding house farm

