

# Hayling Island Transport Assessment Addendum

Technical Note following the Operations and Place Shaping Board meeting of 10 March 2020

Issued 15 March 2020

This technical note has been prepared by Havant Borough Council officers with technical input from Campbell Reith regarding the matters relating to the appropriate use of traffic data.

## **1. Introduction**

- 1.1 The Havant Borough Local Plan sets out a vision and a framework for the future development, growth and prosperity of the Borough.
- 1.2 Crucial to ensuring that the Local Plan's proposals constitute sustainable development is the provision of infrastructure to support the scale and distribution of development proposed in the plan. Part of the Local Plan evidence base is provided by the Hayling Island Transport Assessment (January 2019) and its Addendum (January 2020). These documents (collectively referred to as the 'HITA') review the existing traffic and transport network, examine future demand and identify required mitigation and improvements to accommodate Local Plan development.
- 1.3 The HITA has been prepared in line with the Government's methodology for undertaking Local Plan Transport Assessments<sup>1</sup>. The HITA concluded that with new development but without mitigation, the local plan proposals would lead to a cumulative severe impact on the road network. However, with a costed and proportionate mitigation package, new development can be accommodated on the road network without a cumulative severe impact.
- 1.4 A microsimulation model, using the 'Paramics' software package, was built for the HITA to assist in assessing the impact of future development on the road and transport network on Hayling Island and any required infrastructure improvements.

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<sup>1</sup> Available at <https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements>

- 1.5 A first iteration of the HITA was published in January 2019 alongside the Pre-Submission Havant Borough Local Plan. Notwithstanding the recognition of the need for future work, at the Council meeting on 30<sup>th</sup> January 2019, an amendment<sup>2</sup> was approved as follows:
- “n) Delegates authority to the Planning Policy Manager, in consultation with the Cabinet Lead for Communities, Development and Housing, to publish version two of the Hayling Island and Mainland Transport Assessments, in order to clarify the mitigation packages needed to accommodate development, prior to the submission of the Havant Borough Local Plan 2036 to the Secretary of State for Housing, Communities and Local Government.”*
- 1.6 Further work took place on the HITA and takes the form of the HITA Addendum (dated January 2020). The work on the addendum took place largely in 2019 involving, as per the recommendation, additional design work and runs of the microsimulation model in order to clarify what the mitigation package should be to support the Local Plan’s proposed development on Hayling Island. The decision to publish the HITA Addendum was made on 20 February 2020. The decision to publish the HITA Addendum was called in on 27 February 2020. As per the Council’s standing order, this was scrutinised at the Operations and Place Shaping Board on 10 March 2020.
- 1.7 At that meeting, the Board referred the decision back to the decision maker on four grounds:
- 1) Document to include phased funding timeline with trigger points;
  - 2) Further research in respect of flooding and how this might affect the mitigation measures proposed;
  - 3) The feasibility of the Hayling Billy mitigation measure; and
  - 4) Whether the addendum and mitigation measures would be altered based upon updated data that the Council holds since the 2011 census, including windfall development.
- 1.8 This Technical Note is intended to address the concerns of the Scrutiny Board by providing clarification and / or signposting to information answering the four points raised by the Board. This will enable the decision maker to fully and comprehensively consider the Board’s recommendations in deciding this matter.

## **2. Document to include phased funding timeline with trigger points**

- 2.1 When the mitigation package will be implemented is dependent on when new development takes place as this will both increase the pressure on the island’s transport network and provide the funding for the implementation of the mitigation package. It would also depend on the availability and phasing of any external funding which can be levered in to support the island’s transport network.
- 2.2 The Council publishes five year housing land supply updates which set out where and when development is likely to take place in the short to medium term. The latest (December 2019) update is available at <https://www.havant.gov.uk/localplan/evidence-base>. This sets out a development trajectory, sub-divided into the five areas of the Borough, including Hayling Island. As such, it is possible to see the trajectory of development on the island up to the 2023/24 financial year. In turn,

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<sup>2</sup> <http://havant.moderngov.co.uk/mgAi.aspx?ID=14196> minute 51(n) retrieved 5 August 2019

this indicates the scale and rate at which impact from new development will take place and funding would be available.

- 2.3 As set out at the OPS Board meeting, there is a current planning application that the Council is determining at Sinah Lane<sup>3</sup>. If granted planning permission, the following contributions would be made towards transport infrastructure:

Type of funding	Amount
Community Infrastructure Levy	£1,708,219
Direct contribution (through S106) to improvements along the A3023 corridor up to, and including, the A27 roundabout	£679,000
Walking route from the development to Mengham Infant and Junior Schools	£35,000
<b>TOTAL:</b>	<b>£2,422,219</b>

- 2.4 The table below sets out how the contribution from the Sinah Lane scheme represents a proportionate contribution towards the cost of implementing the mitigation package. This includes all of the measures north and south of the Langstone Roundabout. In reality, it is expected that development (particularly through CIL) in other parts of the Borough would also contribute to these schemes (which are a sizeable proportion of the mitigation package) given the roundabout's role as a key node in the Borough's transport network.

Total cost phase early phase	£10,634,000
Total cost later phase	£2,320,000
Total cost of mitigation package	£12,954,000
Number of homes proposed on Hayling Island	1177
Number of homes proposed at Sinah Lane	195
Proportion of total housing delivery to come from Sinah Lane	17%
Expected contribution from Sinah Lane	£2,146,160
Proposed contribution	£2,422,219
Difference	£276,059

- 2.5 The Council has a published five year supply position<sup>4</sup> which sets out the likely phasing of development up to 31 March 2024. This splits the Borough into five areas, including Hayling Island. Using the Council's CIL rate for 2020 and the proportionate Section 106 contribution from the Sinah Lane development, it is possible to create a cash flow of development contributions which can be put towards implementation of the mitigation package in the short term. It should be stressed that this is an indication of potential funding levels and flow. In particular, the funding from CIL is based on the Council's 2020 rate, which will change year by year and when a new charging schedule

<sup>3</sup> APP/18/00724 - Land at Sinah Lane, Hayling Island - Erection of 195No. dwellings, associated open space, pumping station, sub-station and formation of new vehicular access off Sinah Lane. Change of use of land from agricultural to a Wader and Brent Geese Refuge Area.

<sup>4</sup> Available at [https://www.havant.gov.uk/sites/default/files/documents/Five%20Year%20Housing%20Land%20Supply%20Update\\_December%202019\\_0.pdf](https://www.havant.gov.uk/sites/default/files/documents/Five%20Year%20Housing%20Land%20Supply%20Update_December%202019_0.pdf) (accessed 13 March 2020)

comes into force. It is also based on a standard 2 bedroom, four person, two storey home, which is 79 square metres in the nationally described space standard<sup>5</sup>.

- 2.6 The total quantity of development being planned for on Hayling Island would give a total contribution, using this formula, of £12,114,800. This is slightly short of the £12,954,000 of the total cost of the mitigation package. However with mainland development expected to part-fund the improvements to the Langstone Roundabout, this would clearly be sufficient to cover the expected costs of the mitigation package. All of the mitigation scheme costings include an industry standard 44% optimism bias.

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<sup>5</sup> Available at <https://www.gov.uk/government/publications/technical-housing-standards-nationally-described-space-standard> (accessed 13 March 2020)

HBLP2036 Ref & Permission Ref	Site Name	Site Status	Total	2019/20	2020/21	2021/22	2022/23	2023/24
Perm (17/00311)	188-190 Sea Front	Permission	18	18				
Perm (16/00060)	36, 38 & 40 & 1 West Lane Station Road	Permission	15	15				
Perm (17/00529)	380 Sea Front	Permission	13		13			
Perm (13/00317)	Yacht Haven Development Site, Copse Lane	Permission	6	6				
Perm (17/00610)	3 Elm Grove	Permission	6	6				
H29 (18/00724)	Land north of Sinah Lane	Application (Under consideration)	195			40	50	50
H31 (18/01297)	Manor Nurseries	Application (Under consideration)	15			15		
H27	Rook Farm	Allocation	390					20
KP3	Beachlands	Allocation	100					
KP3	Land North of Tournerbury Lane	Allocation	55					
H28	Fathoms Reach	Allocation	55			30	25	
UE49	Northney Marina	Allocation	40					
KP3	The Nab Car park (Southwood Road)	Allocation	35					
KP3	Eastoke Corner (north)	Allocation	20					
H32	Pullingers	Allocation	15					
H33	R/O 13-21 Mengham Road	Allocation	7					
	Small site perms (less than 5 dwellings)		48	48				
Total expected floorspace (standard two bedroom dwelling (see above))				7,347	1,027	6,715	5,925	5,530
Total expected floorspace discounting 30% for affordable housing				5,143	719	4,701	4,148	3,871
Anticipated CIL liability (2020 rate of £149.11 per square metre)				£766,858	£107,195	£700,892	£618,434	£577,205
Anticipated S106 contributions (£3,482 per dwelling – proportionate contribution at Sinah Lane) (sites with planning permission not included)				£323,826	£45,266	£295,970	£261,150	£243,740
<b>TOTAL:</b>				<b>£1,090,684</b>	<b>£152,461</b>	<b>£996,862</b>	<b>£879,584</b>	<b>£820,945</b>

£3,940,536

- 2.7 Considering the trajectory above, phasing of development would itself create trigger points as funding becomes available. However establishing firm trigger points is not considered necessary as development trajectories can vary due to local issues (such as the need for development to be nutrient neutral) and wider macroeconomic fluctuations. Of course, if the phasing of development changes compared to what is currently expected, so too would the phasing of the severe harm on the highway network. As a result, the implementation of the mitigation package would also adjust with the phasing of development and funding. The HITA indicates measures that are priorities for implementation (eg Northney Road) and those which could take place later (eg Mill Rythe).
- 2.8 In order to establish a potential phased introduction of the measures, those identified for early intervention have been prioritised in the table below. This is the priority order established using the information available. As feasibility progresses (which could be done across multiple projects simultaneously), a firmer priority list for implementation would be inevitably established.

Highway scheme	Map location	Scheme cost	Cumulative cost
Northney Road unhooked left turn	C	£370,000	£370,000
Mitigation package M1A (north)	5, 6, 7, 8, 9, 10, 16	£,538,000	£908,000
Northney Road folded right turn	C	£780,000	£1,688,000
Mitigation package M1A (south)	12, 13, 14, 1	£679,000	£2,367,000
West Lane Priority Junction	B	£1,840,000	£4,207,000

- 2.9 The Council does not have a Capital Programme which can fund the immediate implementation of the HITA, nor is it possible to extract development funding in order to ensure that mitigation is in place prior to development. However officers are also already discussing the Transport Assessment measures and funding externally. This would clearly continue and expand should the HITA be published. This is not guaranteed of course. However the nature of CIL is that funding can be used from new development across the Borough. It is in the Council's gift to fund the feasibility and detailed design stages earlier so that implementation can proceed swiftly.
- 2.10 Overall, it is considered that the phased nature of new development will create a phased implementation trajectory of the mitigation package. Implementation will take place whenever there is funding available.

### **3. Further research in respect of flooding and how this might affect the mitigation measures proposed**

3.1 It is recognised that a high proportion of the mitigation sites lie within Flood Zone 2 or Flood Zone 3 as indicated on the Environment Agency's Flood Map. With climate change this will increase. The location of the mitigation sites is determined by where they are most effective in transport terms, not by the level of flood risk. In any case, the road of course already exists and would be subject to the effects of flooding with or without mitigation measures. If anything, implementation of mitigation measures brings an opportunity to consider the vulnerability of these sections of road to flood risk and to address it. Where planning permission is needed for essential infrastructure in Flood Zone 3, there is a requirement to demonstrate that it would be safe for its lifetime. In addition, a coastal defence strategy for Hayling Island is currently in production, seeking to protect infrastructure as well as properties. Flood risk will also be fully considered as part of the detailed feasibility work of each mitigation proposal, and where needed, solutions will be built into the design of the scheme. This process would not take place if no changes to the road were proposed.

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3.3 Considering the flood risk to individual transport interventions is the role of a Feasibility study, not that of a Local Plan TA. The Local Plan TA sets the overarching approach, which is then followed by a five-stage process to progress works proposals to implementation, as set out below

- 1) **Feasibility** – options appraisal; top level constraints; key design issues; land ownership; environmental considerations; supporting studies
- 2) **Preliminary** – initial design showing layouts compliant to current standards (or agreed departures from them); initial build cost estimates; top level identification and cost estimates for statutory undertaker plant impacts; supporting studies of preferred option
- 3) **Detailed** – finalisation of design; refined cost estimate; agreement of statutory undertaker changes required; detailed studies; traffic regulation orders; land purchase; legal agreements
- 4) **Implementation** – construction of the mitigation, including a 12-month contractual maintenance period after completion
- 5) **Maintenance** – ongoing maintenance of the new works by the highway authority.

3.4 The commission of a feasibility study, including consideration of the vulnerability to flood risk of each scheme in context of ongoing strategic flood defence planning, will be the first stage of developing each mitigation scheme. It would be entirely disproportionate at the Local Plan TA level to consider in detail flood risk to the mitigation schemes. The HITA has extended far beyond what is considered the normal scope of a Local Plan Transport Assessment. Extending the scope of the TA to include the Feasibility Study stage (or further) is not necessary in order to comply with the Government's methodology for undertaking Local Plan Transport Assessments. Undertaking further stages towards implementation would clearly come at significant public cost. It would also further delay the preparation of the Local Plan, jeopardising the Council's ability to take decisions on new development locally and apply the standards in the new plan.

## 4. The feasibility of the Hayling Billy mitigation measure

4.1 The HITA proposes that the Billy Trail is upgraded to make better use of it, potentially expanding its use from a permissive route to a transport corridor. This is contained in Chapter 7 of the HITA Addendum. A number of possible options for the future use of the Billy Trail have been identified in the report. This includes use as an emergency access route, upgrading its surface to enable use by cyclists of all abilities and a connected autonomous vehicle route.

4.2 The Board expressed concerns that the Trail could be compromised by future erosion combined with predicted sea level rise. The HITA Addendum makes clear that the threat to the Trail is recognised. This is not however a reason to ignore its presence completely and the role it could play

in improving the island's transport network. Indeed the appropriate course of action is for a project to be identified in a transport assessment, which would then proceed to a feasibility study rather than the other way around.

- 4.3 A Community Infrastructure Levy (CIL) funded feasibility study into the future role of the Trail has been commissioned by Havant Borough Council and will be undertaken in 2020/21. This represents the start of work to determine the exact role the Trail could provide in terms of transport. The feasibility study will consider the matters raised by the Board including addressing flood risk and erosion control. The long term policy for the Trail surface will also be determined as part of the study. It would be entirely inappropriate and disproportionately cautious to await the results of the feasibility study work before publishing the HITA Addendum and progressing the Local Plan.
- 4.4 The HITA has identified a number of non-highway based mitigation measures, including but not exclusively the upgrading of the Hayling Billy Trail. The role of a Local Plan Transport Assessment is to identify a solution to ensure that the cumulative impact of development on the road network would be less than severe, it is not to identify the exact solution.
- 4.5 In assessing mitigation using the transport hierarchy, sustainable travel options – such as the use of the Billy Trail – should be prioritised over car based solutions. Given that the future of the Billy Trail remains uncertain, at this point, it is not included within the 'clarified mitigation package' for development funding. However this does not diminish the current and future potential of the Billy Trail as a leisure and commuting route. However ultimately it is considered that if the Billy Trail is not available, then there are alternative measures which can ensure that cumulatively, development does not create severe harm on the highway network.
- 4.6 The forthcoming Local Cycling and Walking Infrastructure Plan (LCWIP) is further assessing potential future routes, however the Council has already published an Aspirational 2036 Cycle Network Map<sup>6</sup>. This includes central and eastern routes as well as the Billy Trail. This is also referred to in the HITA.

## **5. Whether the addendum and mitigation measures would be altered based upon updated data that the Council holds since the 2011 census, including windfall development**

- 5.1 The Board expressed concerns over the datasets used in building and validating the model. Particular concern was raised over the reference and apparent reliance on Census 2011 when the next census is a year away.
- 5.2 This concern can be addressed and satisfied in two parts. First, the use of Census data is industry standard and is typically used to understand the distribution of traffic. As traffic modelling is based on national standards and datasets it is the most recent Census data that underpins model design and build. There is nothing out of the ordinary with using Census 2011 data in building the microsimulation model for Hayling Island and given the existing network, it is not considered that there will be a significant change in the percentage of people that travel to and from the island for work purposes as a result of the 2021 census data. The Sub-Regional Transport Model (SRTM) which informs the Mainland Transport Assessment and all other Transport Assessments being prepared for Local Plans across the Solent area, is likewise based on Census 2011 data.
- 5.3 Nonetheless, census data is only the starting point, not the end point with a number of datasets being used to update and supplement this base data. This includes several which were

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<sup>6</sup> Further information and the Aspirational 2036 Cycle Network Map available at <https://www.havant.gov.uk/local-cycling-and-walking-infrastructure-plan>

commissioned specifically for the HITA in terms of the volume of traffic data on a particular stretch of road. Timed runs<sup>7</sup> have been undertaken of the model area were undertaken as part of the build of the microsimulation model. Hampshire County Council have undertaken Bluetooth journey time monitoring of the A3023 which provides accurate, real world, monitoring of journey times. These datasets were used to validate the model, which resulted in a high fit to reality. This is set out in more detail in Chapter 8 of the January 2019 HITA and its associated model build report. In addition, trip rates were established based on data obtained using counters on Billy Lane and St Benedict Road (for the recently completed Goldring Close development). This ensured that there was a bespoke trip rate for the modelled new development. This is fully explored in the January 2019 HITA, Chapter 8.

- 5.4 The microsimulation model is based on actual flows recorded on the network both in terms of traffic data (surveys) and journey time data against which the model is validated. This is, to a degree, entirely independent of the resident / visitor data contained in the Census. The validation of the model is not against population *per se* but against the volume of traffic on the network and the journey time taken by that traffic between known fixed points. Even if only Census 2011 data had been used in the model design and build, the closeness of validation (to within 97% of reality) would correct for housing / population growth since that date.
- 5.5 Windfall development is accommodated in the Addendum. Sites with planning permission are included. An allowance is made for small-scale predictable windfall development as per the Council's Windfall/Unidentified Housing Development background paper<sup>8</sup>. This is specifically limited to smaller windfall developments, of less than five new homes. Larger windfall development takes place within settlement boundaries across the Borough and there have been recent such schemes on Hayling Island. However they will always be unpredictable as they are sporadic in when sites come forward. The scale of development is also entirely dependent on the specific whereas smaller windfall development by its nature is more predictable. If such development comes forward, it would represent a funding contingency, further ensuring the deliverability of the package overall.
- 5.6 In summary, whilst census 2011 provides a starting point, the datasets commissioned far more recently and specifically for the HITA, ensure a high fit to reality.

## 6. Conclusion

- 6.1 The Operations and Place Shaping Board at its meeting on 10 March 2020 raised concerns over trigger points for mitigation and sources of funding for the mitigation package, flood risk, the use of the Hayling Billy Trail and the use of perceived out of date data in the model build. These concerns resulted in the Board supporting the 'call-in' and requesting that the Portfolio Holder reconsider the decision to publish the HITA addendum.
- 6.2 This Technical Note has addressed each of these points and demonstrated that the concerns of the Board can be satisfactorily explained without a need to amend the HITA.
- 6.3 It is also appropriate to highlight the stated views of Hampshire County Council as the relevant local highway authority. In responding to the Sinah Lane planning application, the County Council state as its recommendation *"The applicant has satisfactorily addressed the outstanding matters raised in the Highway Authority's previous response to this application. Whilst the Highway Authority has reviewed the mitigation measures identified within the emerging Hayling Island Transport Assessment and considered them sufficient to agree the mitigation required for this development,*

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<sup>7</sup> Actual vehicles driving on the roads, being timed and taking video footage of road conditions.

<sup>8</sup> Available at <https://www.havant.gov.uk/sites/default/files/documents/RE-ISSUE%20-%20Windfall%20Unidentified%20Housing%20Development%20%28Final%20-%20Word%20Document%29.pdf> (accessed 13 March 2020)

*the planning authority should satisfy itself that the approach is in accordance with the local plan process. Subject to the LPA considering the above acceptable, the Highway Authority raises no objection the application*<sup>9</sup>. This recommendation is subject to the contributions outlined above in this technical note, S278 works, a travel plan, the necessary bond and a condition securing a Construction Traffic Management Plan.

- 6.4 Finally, it should be reiterated that new development represents the best opportunity to invest in Hayling Island's transport network. This provides the opportunity to use CIL and direct contributions. However it also opens the door to enable discussions with bodies such as Government, Homes England and the Solent Local Enterprise Partnership in particular about funding opportunities. Given Government's clear desire to substantially boost housebuilding, funding opportunities through those bodies are typically couched in the amount of new homes that the funding will facilitate. As such, it is not considered possible for funding from these bodies to come if it does not include new development.
- 6.5 This Technical Note has therefore demonstrated that the HITA and its Addendum provide a robust basis on which to make sound decisions regarding the Local Plan and are an effective tool to use in development management decision making.

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<sup>9</sup> Hampshire County Council response to planning application APP/18/00724, HCC reference 6/3/13/185 (APP1883), dated 7 February 2020.