



Lower Thames Crossing Response to community impacts consultation

May 2022

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Foreword



Matt Palmer

Lower Thames Crossing
Executive Director

Our last consultation in 2021 was one of the most comprehensive ever delivered by National Highways. Focusing on our proposals for building and operating the new road, it helped us to further develop our plans for this transformative project, so we can maximise its benefits and minimise its impacts.

Feedback on our community impacts consultation showed us that almost 60% of you support how we plan to build the Lower Thames Crossing and almost half of you back our proposals to operate the new road.

This is really positive, but I recognise that some of you also highlighted concerns. We've put together this document to outline the most common issues that were raised, provide our response, and explain how they have helped us to refine our proposals, taking on board your feedback. It does not cover all the issues raised but we hope it's a valuable summary.



Almost **60%**
of you support how we
plan to build the Lower
Thames Crossing

Local refinements

I know you're interested in understanding how we have used your feedback. This document helps to do that. It also outlines some of the relevant changes we have developed. Some of these are minor and have been discussed with stakeholders or landowners. The others, involving local refinements, will be part of our upcoming consultation, which is about improving the project for local people.

We're now drafting responses to all the issues raised in our consultations and these will be in our Consultation report, which will form part of our Development Consent Order (DCO) application that we plan to submit later this year.

Benefitting the region and beyond

Since we first consulted on the route of the Lower Thames Crossing, tens of thousands of you have helped us design a project that will improve lives across the region and beyond.

As well as offering improved journeys, our proposals include creating two new public parks, proposing more than 60km of new, realigned or improved footpaths, cycleways and bridleways, plus new and improved habitats for wildlife.

We couldn't have got here without you, so thank you for your continued involvement.

A handwritten signature in black ink that reads "Matt Palmer". The signature is written in a cursive, flowing style.

Matt Palmer

Lower Thames Crossing Executive Director

Introduction

This document summarises the feedback received from our community impacts consultation. We also explain how this document was developed, include a breakdown of how you answered our questions, summarise the most common concerns and share our responses to them.

We are currently drafting detailed responses to all the issues raised. These will form a chapter of the Consultation report within our DCO application, which we plan to submit later this year.

Since our community impacts consultation, we have continued to refine and improve our proposals. We have worked closely with a range of stakeholders, including statutory consultees, local authorities and utility companies. We have also engaged with affected landowners and others with an interest in land. This work has led to us making and taking forward a range of minor refinements to the project. Some of these changes are set out at the end of this document.

About the community impacts consultation

We held a community impacts consultation between 14 July and 8 September 2021. We asked for your views on:

- our plans to build and operate the Lower Thames Crossing and how we would mitigate its impacts
- changes to the project since the design refinement consultation in 2020
- how issues and suggestions about the project have been addressed following earlier rounds of public consultation

We produced a range of materials to help people understand our plans. These included our:

- Guide to community impacts consultation
- Construction update
- Operations update
- Ward impact summaries
- You said, we did document
- maps
- draft DCO application documents
- videos explaining the proposals
- interactive map
- fly-throughs of the proposed route during construction and when the road opens

All documents are available to view or download from www.ltccconsultation.highwaysengland.co.uk/document-library/

We also created a consultation website, held **18** events, made materials available at a number of locations along the route, held **six** webinars and provided a telephone surgery to answer your queries.

3,218 responses were received to the community impacts consultation.

Breakdown of response type



2,556
Response
form online



512
Email



150
Letter and response
form (hardcopy)

Developing this document

As with our previous consultations, we worked with specialist agency, Traverse, to collate and analyse responses to the community impacts consultation. We have used this analysis, and our consideration of issues raised, to develop this document.

Using the data and analysis provided by Traverse, we identified the top 10 concerns per consultation question and have provided a response to each of those concerns.

What you said and our response

In our community impacts consultation we asked a number of questions to understand the level of support for the project's different elements. Consultees could also expand on their answers. The response form was split into the following four sections:

- The project's impacts and mitigation
- Changes since the design refinement consultation
- Order Limits
- You said, we did

We have used these four sections in this document to summarise the feedback received and have included graphs showing the results for each question. We've highlighted the most common positive feedback, and in tables summarised the most common concerns for each question with our response to the issues raised.

The project's impacts and mitigation

In the community impacts consultation, we presented the project's construction and operational impacts, and our plans to mitigate the effects of the project on local communities and road users. The information was included in detail in the Construction update and the Operations update documents, as well as being broken down on a ward by ward basis within the three volumes of the Ward impact summaries.

The Construction update covered all the steps we plan to take during construction to reduce the impacts of the project. This includes, but is not limited to, reducing HGV use, traffic management, avoiding the local road network where possible and limiting working hours and noise near residential areas.

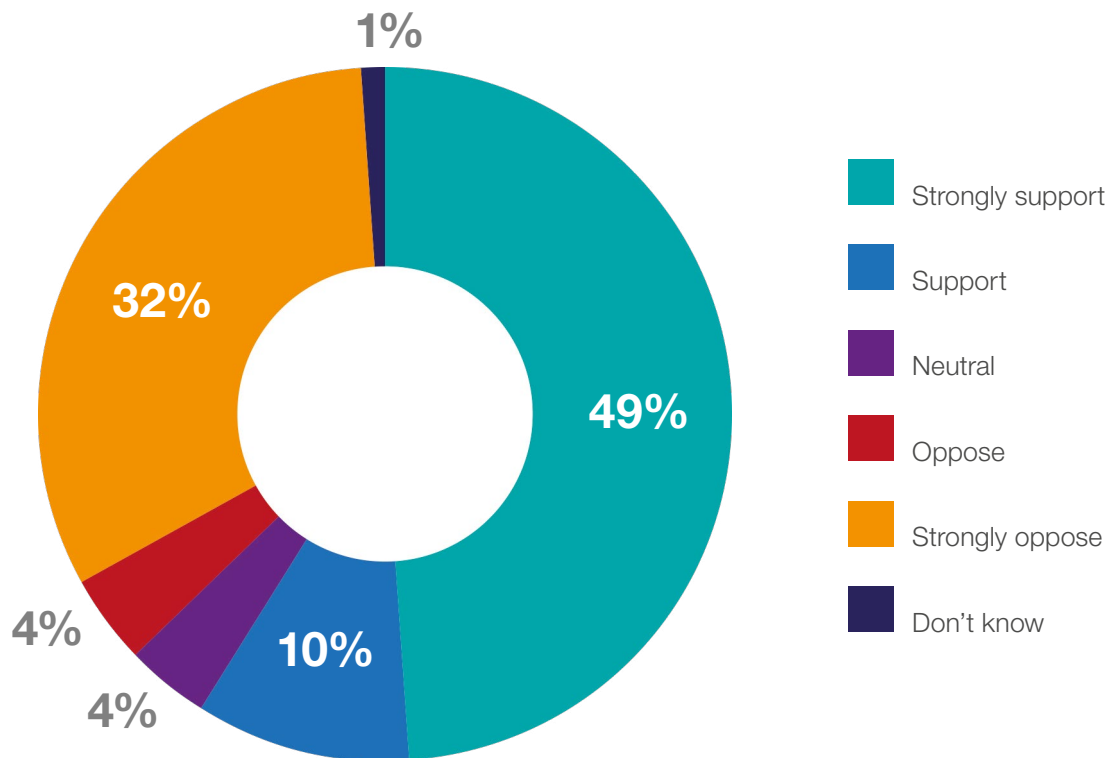
The Operations update set out the mitigation measures we are implementing to reduce the impact of the Lower Thames Crossing once it is open. These include the use of false cuttings, low-noise road surfacing, noise barriers and limiting the entry and exit points from the new route to the local road network.

The Ward impact summaries presented the impacts of the project during construction and operation at a local level. This allowed consultees to form a clear understanding of the impacts they can expect in their local area. It included details such as changes to local traffic, noise, air pollution, footpath closures and diversions, and road impacts and diversions.

We are now in the process of updating our assessments and these will be presented in the Environmental Statement, which will form part of our DCO application that we plan to submit later this year.

The following pages summarise the feedback we received.

We asked: do you support or oppose how we plan to build the Lower Thames Crossing?



59%

supported our plan to build the Lower Thames Crossing

- **2,648** consultees answered this question
- **2,541** respondents were members of the public and other non-statutory organisations
- **101** respondents were people with an interest in land
- **6** respondents were from statutory bodies and local authorities
- **1,564** (59%) respondents supported or strongly supported our plan to build the Lower Thames Crossing
- **973** (36%) respondents opposed or strongly opposed our plan to build the Lower Thames Crossing

The most common positive feedback about our plans for building the Lower Thames Crossing included:

- supporting the delivery of the project as soon as possible
- stating that it provides the best solution to current problems and that it is highly necessary to reduce congestion at the Dartford Crossing
- that consultees felt they have been waiting for another crossing for a long time and that any negative effects have been sufficiently minimised or mitigated

The table on the right summarises the most common concerns about our plans for building the Lower Thames Crossing.

Table 1: Most common concerns about our plans for building the Lower Thames Crossing

Summary of the most common concerns raised about our plans for building the Lower Thames Crossing	Our response
Local community	
<ul style="list-style-type: none"> ■ Comments that building the crossing would have a detrimental impact on the local community, that it would cause significant disruption and negatively affect the mental and physical wellbeing of local residents. ■ That local properties and property prices could be impacted, with some consultees concerned about how construction would affect other development plans. 	<p>We consulted on the impacts of the project’s construction and our proposed mitigation measures at our community impacts consultation.</p> <p>The Ward impact summaries described how the construction of the project would affect each local authority ward area, including the health impacts for local residents. The summaries also described the mitigation measures we would adopt in each area to manage the effects of construction.</p> <p>Impacts would be mitigated through good practice construction measures relating to dust emissions, working hours, visual screening, traffic management measures and community engagement. We would be legally required to implement these measures, as set out in the Code of Construction Practice (CoCP) and Register of Environmental Actions and Commitments (REAC).</p> <p>Whilst there would be some disruption to local roads during construction, we have also developed a number of traffic management proposals to seek to minimise this disruption where practicable.</p> <p>Where the value of a property is affected by the completed project, there is a defined process through which property owners may be able to claim compensation. We’ve publicised this during our consultation and through engagement with nearby property owners.</p> <p>We have also considered the development plans within the relevant local authorities’ local plans and other infrastructure projects to understand and minimise the project’s impact on housing and other developments. An example of this is the Thames Freeport announcement, in response to which we have revised our proposals for Tilbury Fields. This will be presented in the local refinement consultation.</p>

Summary of the most common concerns raised about our plans for building the Lower Thames Crossing

Our response

Traffic impacts during construction

- Comments that there would be a detrimental impact on traffic as a result of construction in specific locations, including Orsett (Baker Street, Rectory Road, Stifford Clays Road), Chadwell St. Mary, Upminster, Cranham, Shorne (Pear Tree Lane, Green Farm Lane), South Ockendon (North Road), Linford (Muckingford Road) and Romford (Brentwood Road).
- That disruption would have a negative impact on local residents, including local roads becoming rat runs. Some said that building the crossing would lead to an increase in traffic, HGVs and road closures, and therefore impact journey times on local roads. Comments also included that disruption would be experienced on public transport and routes for walkers, cyclists and horse riders, and have a negative impact on local residents for a long period of time.

The Ward impact summaries, presented during the community impacts consultation, set out the impacts of construction on traffic on a ward by ward basis. This included measures proposed to mitigate those impacts.

We have followed a thorough process to identify traffic management measures. We have kept our proposals under ongoing review, and in some areas we have changed them in order to reduce or eliminate the need for traffic management during construction, for example the need for narrowed lanes, speed restrictions, temporary diversions, and temporary traffic lights. The process has been iterative and involves considering the design, traffic and construction implications of our proposals. Where issues have been identified, we have refined the construction approach and/or design to eliminate or minimise traffic management. Some examples of measures we have taken include the use of haul roads for HGV movements, introducing landscaping features that reuse excavated materials to reduce construction traffic using the road network, and limiting road closures to night times and weekends.

Throughout the design and development of the project, we have made efforts to reduce the impact of construction on local communities and the road network. For example, during the 2018 statutory consultation, we predicted an average of 17,500 HGV journeys per month during the project’s construction, whereas for the community impacts consultation, this had been reduced to 10,350 per month.

Continued on next page...

Summary of the most common concerns raised about our plans for building the Lower Thames Crossing

Our response

Traffic impacts during construction

Following the community impacts consultation, we are proposing additional design and landscaping changes to the project, which would minimise the quantities of excavated material that require off-site disposal and the associated pressures on local waste management infrastructure. This would further considerably reduce truck movements from the local road network during the construction period (compared with the proposals at the community impacts consultation). Changes to the design and landscaping proposal will be presented in our local refinement consultation.

During the community impacts consultation, we presented information about the impacts of construction on Public Rights of Way in the vicinity of the project, including information about the length of closures and which routes would benefit from temporary diversions to keep them open. Since that consultation, we have identified a number of routes where the closure is likely to be reduced in duration. We have also identified additional routes where it is likely that diversions would allow journeys to be maintained during the construction period.

We are updating our proposals for Public Rights of Way during construction. Information about all closures and diversions for walkers, cyclists and horse riders will be presented in our application for development consent later in 2022.

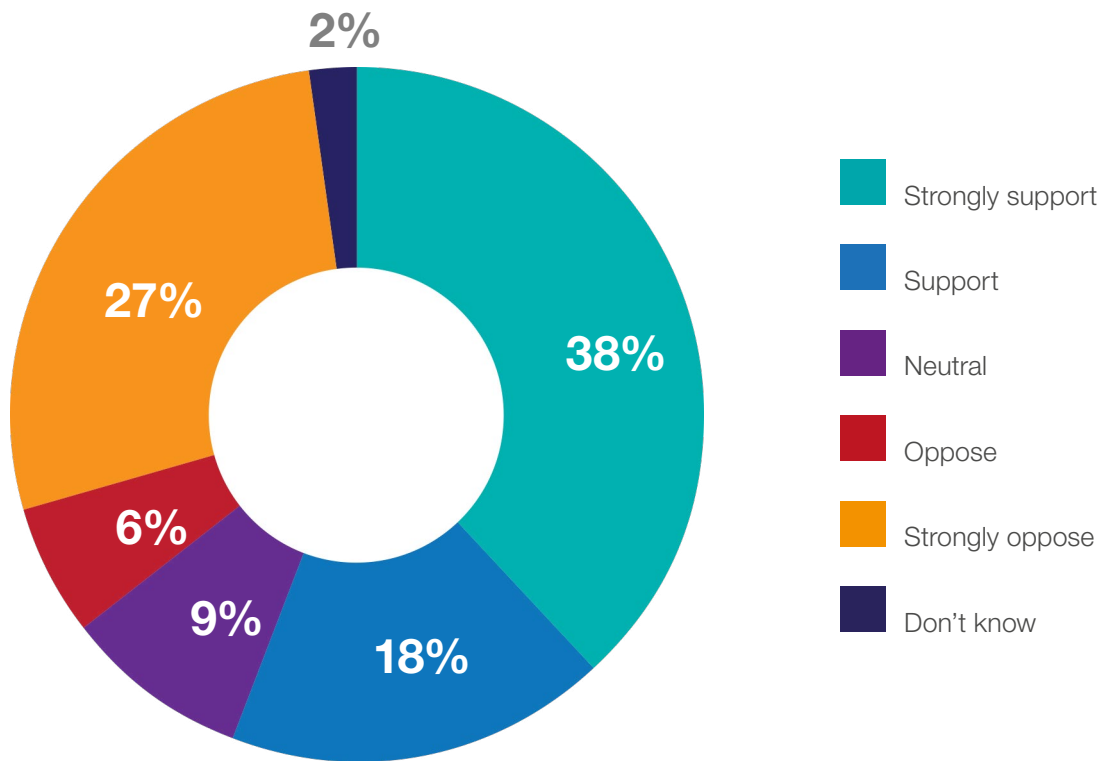
We presented the predicted impacts to public transport in the ward impact summaries in the community impacts consultation. We also published the outline Traffic Management Plan for Construction (oTMPfC) which set out the role of the Traffic Management Forum (TMF). Public transport operators would be part of this forum, therefore our contractors would engage with them on planned traffic management arrangements. Our appointed contractors would carry out a programme of communications that would ensure planned disruptions are publicised at the appropriate time.

Summary of the most common concerns raised about our plans for building the Lower Thames Crossing	Our response
Construction work	
<ul style="list-style-type: none"> ■ Comments that due to the length of time required to build the crossing, any negative impact, such as noise, pollution and traffic disruption, would potentially be experienced by the local community for many years. ■ Comments about the working hours (some are proposed to be 24/7) and the potential impact of these. 	<p>Construction is estimated to take six years but, as with all large projects, the exact timings would be confirmed once contractors are appointed and the detailed design is finalised. Our timings have been determined using industry-standard planning methods. These are supported by realistic development, design and construction times, verified against other projects of similar scale and complexity.</p> <p>We consulted on the impacts of the project’s construction and our proposed mitigation measures at our community impacts consultation. This included impacts on air quality, traffic, noise and vibration. The Ward impact summaries described how the construction of the project would affect each local authority ward area. The summaries also described the mitigation measures we would adopt in each area to manage the effects of construction.</p> <p>Impacts would be mitigated through good practice construction measures relating to dust emissions, noise, working hours, traffic management measures and community engagement. We would be legally required to implement these measures, as set out in the CoCP, REAC and oTMPfC.</p> <p>The use of extended core hours and 24/7 working in some locations would help reduce the overall duration of the construction period and allow our contractors to work efficiently to minimise impact on communities. Tunnelling and other underground works would be carried out 24/7 because operating the tunnel boring machines and lining the tunnel continuously help to minimise risks associated with tunnel construction. We would use noise reduction measures such as fencing around construction compounds, low-noise equipment and locate noisy activities as far away as possible from sensitive receptors, such as people’s homes to reduce disturbance to local people.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about our plans for building the Lower Thames Crossing	Our response
Construction work	
	<p>In addition to the tunnelling construction activities, we have identified highways and utilities construction activities and locations that may be undertaken on a 24-hours, seven days a week basis.</p> <p>These works, which include the support of the tunnelling works and works over the Tilbury loop railway or works on the public highway, have been identified as they may need to be undertaken at night to maintain safety and reduce disruption to road, railway and utility networks.</p> <p>The timings of these works is anticipated to be nights and weekends, associated with specific works activities for highways and utilities.</p>

Summary of the most common concerns raised about our plans for building the Lower Thames Crossing	Our response
Environment	
<p>Comments were received on a broad range of topics including air quality, noise and/or vibration, impacts on wildlife, habitats and biodiversity, and loss of green belt, agricultural land and ancient woodland. Comments in this category included that building the crossing would:</p> <ul style="list-style-type: none"> ■ lead to a worsening in air quality due to the construction work and increase in traffic/construction vehicles. Specific locations commonly mentioned include Chadwell St. Mary, Orsett, Ockendon, Blackshots, East Tilbury, Chalk, Gravesend, Riverview Park, Shorne, Cranham and Upminster ■ negatively impact the visual amenity of the area ■ lead to an increase in noise and/or vibration levels that would negatively impact local residents ■ disturb local wildlife (there were questions about the suitability of replacing or relocating species) 	<p>Minimising adverse environmental impacts is one of the project's objectives. Our proposals have been designed to provide an appropriate balance between the need to reduce environmental impacts during construction and operation, and fulfilling the other project aims including the need to reduce congestion at the Dartford Crossing.</p> <p>We consulted on the impacts of the project's construction and our proposed mitigation measures during the community impacts consultation. This included information regarding the impacts of the project on air quality, visual amenity, noise and vibration, and wildlife. The Ward impact summaries described how the construction of the project would affect each local authority ward area. The summaries also described the mitigation measures we would adopt in each area to manage the effects of construction.</p> <p>Impacts would be mitigated through good practice construction measures relating to dust emissions, noise, working hours, visual screening, biodiversity, traffic management measures and community engagement. We would be legally required to implement these measures, as set out in the CoCP and REAC.</p>

We asked: do you support or oppose how we propose to mitigate the impacts of building the Lower Thames Crossing?



- **2,621** consultees answered this question
- **2,517** respondents were members of the public and other non-statutory organisations
- **98** respondents were people with an interest in land
- **6** respondents were statutory bodies and local authorities
- **1,475** (56%) respondents supported or strongly supported how we propose to mitigate the impacts of building the Lower Thames Crossing
- **871** (33%) respondents opposed or strongly opposed how we propose to mitigate the impacts of building the Lower Thames Crossing

56%

supported how we propose to mitigate the impacts of building the Lower Thames Crossing

The most common positive feedback about our plans to mitigate the impacts of building the Lower Thames Crossing included:

- support for the proposals and the project overall
- backing for the proposed mitigation measures – that they are sufficient and effective, there is a comprehensive strategy in place and the overall benefits outweigh the negative impacts
- support for the proposed mitigation measures in relation to the visual landscape, including the construction of green bridges, the reuse of excavated soil, the additional planting of trees, and the proposed design of the new structures
- general support for the measures taken to reduce the project’s impact on the environment

The table below summarises the most common concerns about how we plan to mitigate the impacts of building the Lower Thames Crossing.

Table 2: Most common concerns raised about plans to mitigate the impacts of building the Lower Thames Crossing

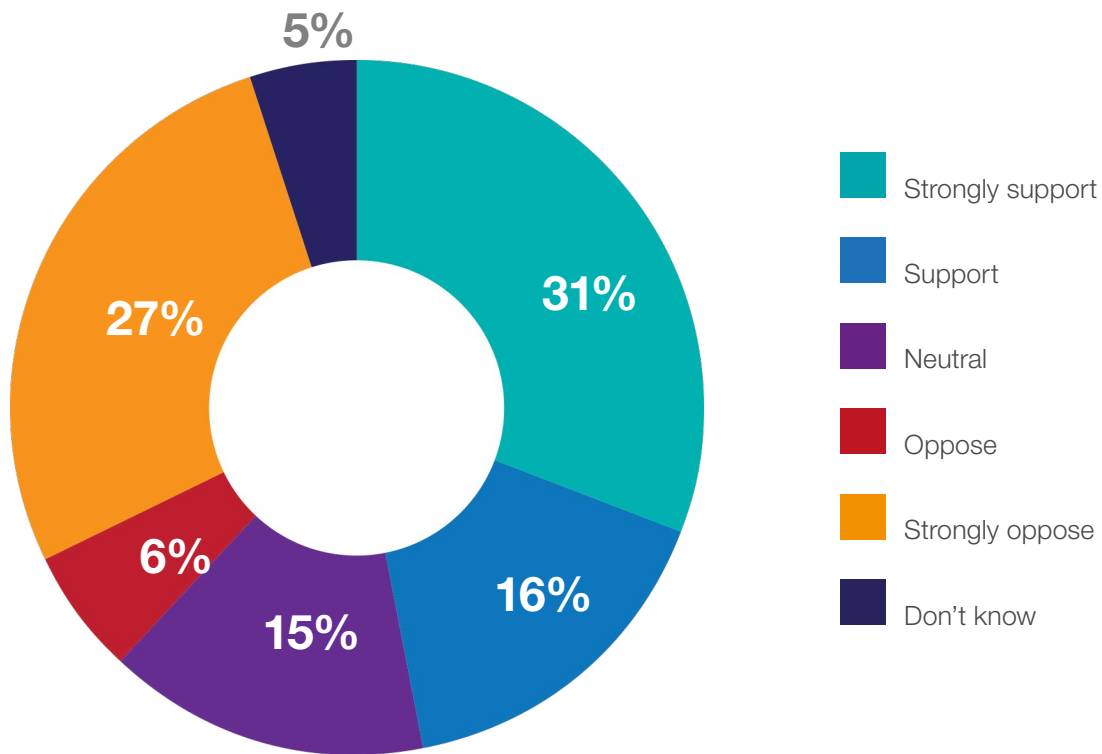
Summary of the most common concerns raised about plans to mitigate the impacts of building the Lower Thames Crossing	Our response
Mitigation	
<ul style="list-style-type: none"> ■ Comments that the proposed measures are insufficient or ineffective at mitigating the perceived detrimental impacts of the project on the environment, wildlife and the local community. ■ That the proposed mitigation measures will not be implemented. 	<p>More than half of those who responded to this question, supported or strongly supported our proposals for plans to mitigate the impacts of building the project.</p> <p>Reducing the effect of the Lower Thames Crossing on the environment and communities is one of the project’s main aims. Environmental mitigation measures have been developed to minimise the impacts of the new road.</p> <p>We consulted on proposed mitigation measures during construction at our community impacts consultation. The Ward impact summaries described the mitigation measures we would adopt in each area to manage the effects of construction.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about plans to mitigate the impacts of building the Lower Thames Crossing	Our response
Mitigation	<p>Impacts would be mitigated through good practice construction measures relating to dust emissions, noise, working hours, visual screening, biodiversity, traffic management measures and community engagement. We would be legally required to implement these measures, as set out in the CoCP, REAC and draft protected species licenses, as agreed with Natural England.</p>
<ul style="list-style-type: none"> ■ General opposition to the proposed measures, including comments that no mitigation would be necessary if the crossing was not built. 	<p>To make sure the most effective and appropriate mitigation strategy is adopted, we have an extensive, ongoing programme of engagement with relevant statutory bodies – such as the Environment Agency, Natural England and Historic England. We have also considered feedback to statutory and non-statutory consultation, and worked with non-statutory community groups wherever possible.</p>
Environment	
<ul style="list-style-type: none"> ■ Concerns around the proposed environmental mitigation measures. 	<p>We recognise the irreplaceable nature of habitats such as ancient woodland and have reduced the project’s impacts on these areas wherever practical. Where impacts on land containing ancient woodland cannot be avoided, compensatory woodland planting would help offset the impacts. Where appropriate, other suitable habitats would be created to mitigate the impacts of habitat loss and provide replacement habitats for protected species.</p>
<ul style="list-style-type: none"> ■ Comments around measures proposed to mitigate the impact on visual amenities, particularly the loss of the aesthetic benefits of green land and ancient woodland. 	
<ul style="list-style-type: none"> ■ Comments around the proposed mitigation measures for wildlife and habitats, including that they are irreplaceable therefore no mitigation would suffice. 	<p>Proposed mitigation measures will be secured and become a binding requirement of the DCO.</p>
<ul style="list-style-type: none"> ■ That the measures proposed to mitigate carbon emissions do not adequately address the environmental impact of the project or the carbon impact of construction activity. 	<p>Continued on next page...</p>

Summary of the most common concerns raised about plans to mitigate the impacts of building the Lower Thames Crossing	Our response
Environment	
<ul style="list-style-type: none"> ■ Comments around the proposed mitigation measures for noise pollution from construction work. That the noise barriers would be ineffective and the noise from 24/7 work would be detrimental to local residents. 	<p>We have sought to reduce carbon emissions related to construction of the project. We have done this through careful design, such as specifying the use of low-emission materials, using those materials efficiently and reducing the distance they would need to be transported. Earlier this year, the Lower Thames Crossing was designated a ‘pathfinder’ project, meaning we will explore carbon neutral construction as part of our efforts to make the new crossing the greenest road ever built in the UK. We would work with our appointed contractors to identify ways to build the new road while further reducing carbon emissions.</p> <p>Construction noise levels would be controlled by using best available techniques, with specific measures at some locations. These measures could include installing hoarding around construction compounds, installing temporary acoustic screening around areas likely to generate noise and turning off plant and machinery when not in use. Where possible, we would locate noisy activities as far away as possible from sensitive receptors, such as people’s homes to reduce disturbance to local people. During the construction phase, noise and vibration levels would be monitored to ensure that construction limits are not exceeded, and mitigation measures are working effectively.</p>

Summary of the most common concerns raised about plans to mitigate the impacts of building the Lower Thames Crossing	Our response
Traffic impacts during construction	
<ul style="list-style-type: none"> ■ Concerns about the proposed traffic management measures in specific locations, road closures, subsequent diversions and the suitability of those roads for increased traffic. ■ Comments that the proposed traffic management measures are insufficient to combat the adverse impacts on local traffic. This includes comments about increased congestion, the risk of accidents, the increase in pollution from traffic, and the extended period of time over which these impacts would be felt. 	<p>We presented our construction traffic management proposals as part of our community impacts consultation.</p> <p>We have followed a thorough process to identify traffic management measures. We have kept our proposals under ongoing review, and in some areas we have changed them in order to reduce or eliminate the need for traffic management during construction, for example the need for narrowed lanes, speed restrictions, temporary diversions, and temporary traffic lights. The process has been iterative and involves considering the design, traffic and construction implications of our proposals. Where issues have been identified, we have refined the construction approach and/or design to eliminate or minimise traffic management. Some examples of measures we have taken include the use of haul roads for HGV movements, introducing landscaping features that reuse excavated materials, to reduce construction traffic using the road network and limiting road closures to night times and weekends.</p> <p>We also published the oTMPfC, which was developed in collaboration with local authorities and stakeholders. It describes the approach that will be followed when undertaking temporary traffic management for the safe construction of the new road, including measures available to our contractor to reduce the impact on the local community. It also describes the role of the TMF, which would review planned traffic management arrangements and review the performance of implemented traffic management measures.</p> <p>As part of our local refinement consultation, we will be presenting a number of changes that would have the effect of reducing the traffic management measures which are necessary to deliver the project.</p>

We asked: do you support or oppose how we plan to operate the Lower Thames Crossing?



47%
supported our plan to operate the Lower Thames Crossing

- **2,592** consultees answered this question
- **2,491** respondents were members of the public and other non-statutory organisations
- **95** respondents were people with an interest in land
- **6** respondents were statutory bodies and local authorities
- **1,231** (47%) respondents supported or strongly supported our plan to operate the Lower Thames Crossing
- **847** (33%) respondents opposed or strongly opposed our plan to operate the Lower Thames Crossing

The most common positive feedback about our plans to operate the Lower Thames Crossing included:

- general comments supporting our plans, with people saying they are fair and reasonable
- support for the plans if the crossing charge is aligned with the charge at the Dartford Crossing

The table on the right summarises the most common concerns about our plans to operate the Lower Thames Crossing.

Table 3: Most common concerns raised about plans to operate the Lower Thames Crossing

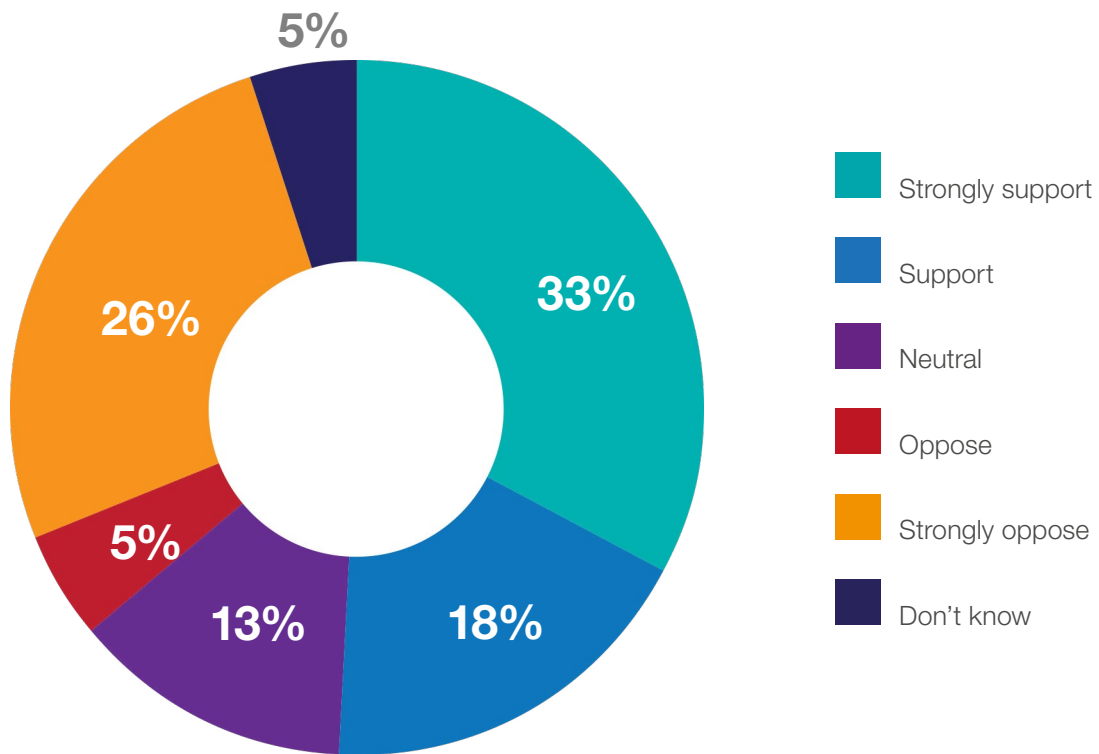
Summary of the most common concerns raised about plans to operate the Lower Thames Crossing	Our response
Crossing charge	
<ul style="list-style-type: none"> ■ General opposition to implementing a charge for the crossing. ■ Comments that the charge would not be removed when costs have been recouped, which is what is perceived to have happened with the Dartford Crossing. ■ That the charge would be too expensive, used to make a profit or sold to an overseas operating company, or that profits would not be spent on the local community. 	<p>It is Government policy that major river crossings would normally be charged and therefore the Lower Thames Crossing is aligned with that policy. Charging would help manage demand and network performance across the existing Dartford Crossing and proposed Lower Thames Crossing. Charges at the new crossing would be equal in value to those in force at the Dartford Crossing.</p> <p>There are no plans to operate the Lower Thames Crossing without a road user charge. It is expected that by lowering or removing the proposed charges more traffic would use the new route, increasing congestion at the crossing and its approaches.</p> <p>We expect that discounts will be offered to account holders, on the same terms as the account discounts that apply at the Dartford Crossing. The DCO will also include powers enabling the Secretary of State for Transport to apply a local resident discount for charges imposed under the DCO to residents of the local authorities in which the tunnel entrances would be situated, which would mean those living in Gravesham and Thurrock.</p> <p>The Dartford Crossing is a Government asset managed by National Highways and it has not been sold to any private company, overseas or otherwise. Like at Dartford, charges for the new crossing would be collected on behalf of the Secretary of State for Transport.</p> <p>Toll charges were levied at the Dartford Crossing until 2003 when the debts associated with the Queen Elizabeth II Bridge had been discharged. A road user charge has been applied since then to manage traffic demand. Our assessments show that without the charge, traffic would increase and the economic benefits from the crossing would reduce significantly.</p>

Summary of the most common concerns raised about plans to operate the Lower Thames Crossing	Our response
Design	
<ul style="list-style-type: none"> ■ Comments that the safety and design of smart motorways, including the absence of a hard shoulder, would be dangerous and increase the number of fatal accidents. ■ Comments about safety measures, including the length of the tunnel, the proposed 70mph speed limit, the road layout, ventilation, the potential for road traffic accidents and collisions, and how emergencies in the tunnel would be managed. 	<p>Improving safety is one of the project’s objectives. The Lower Thames Crossing would be an all-purpose trunk road, similar to the A13 and other A-roads. It is being designed and built to the highest safety standards recommended, but we will continue to adapt our proposals in line with new guidance.</p> <p>The new road’s safety features would include vehicle detection, emergency areas, variable mandatory speed limits and lane closure signals in the event of an incident, such as a vehicle breakdown or collision.</p> <p>Control measures across the route, including in the tunnel, would identify vehicles stopping in a live lane and allow for rapid changes of traffic management to avert danger.</p> <p>In the tunnels, recovery services would be provided for any stopped vehicle. Technology would also help the emergency services to access incidents. This includes signage that can be changed to alert road users of lane closures, speed restrictions and incidents ahead.</p> <p>If one tunnel is blocked, emergency vehicles could access incidents using the pedestrian cross-passages that connect the two tunnels at regular intervals.</p>

Summary of the most common concerns raised about plans to operate the Lower Thames Crossing	Our response
Traffic	
<ul style="list-style-type: none"> Comments that operating the crossing would increase traffic and journey times, as well as create congestion on surrounding routes. Locations most often cited included Thurrock, Dartford, Tilbury, Stanford-le-Hope, Corringham, Benfleet, Canvey Island, Godman Road, the A227, M25 and A13. 	<p>The project would reduce traffic flows at the Dartford Crossing by 21% on average in the opening year. As a result, journey times across the existing Dartford Crossing would become more reliable. Due to the lower volumes of traffic, the Dartford Crossing and approach roads would recover more rapidly from minor incidents on the crossing. As well as providing relief at the Dartford Crossing, the project would have an impact on other parts of the strategic road network and local roads.</p> <p>The Ward impact summaries, presented during the community impacts consultation, set out the predicted impacts of the project on traffic once in operation on a ward by ward basis. These showed some predicted increases and decreases in traffic flows.</p> <p>Whilst the project is expected to provide wide-reaching benefits to the road network, it is recognised that some of the junctions and links that are predicted to experience increased traffic flows may not have sufficient capacity to cater for this additional traffic.</p> <p>In response to this, we also consulted on the draft Wider Network Impacts Management and Monitoring Plan (WNIMMP) during the community impacts consultation. This document provided further information about the proposed traffic monitoring once the road is open. It also outlined some areas where the predicted increased traffic flows would create conditions that could be suitable for interventions. Where appropriate, National Highways would work with the relevant authority to support engagement with the Department for Transport (DfT) to seek funding for further highway works.</p> <p>An updated version of the WNIMMP, which accounts for feedback received during consultation, will be presented as part of our DCO application.</p>

Summary of the most common concerns raised about plans to operate the Lower Thames Crossing	Our response
Environment	
<ul style="list-style-type: none"> ■ Comments that levels of pollution from vehicles using the crossing would have a detrimental impact on air quality and human health. ■ Some consultees mentioned specific areas in relation to air quality and human health impacts. These included East Tilbury, Thurrock, Dartford, Chalk, Chadwell St. Mary, Gravesham, Orsett, Upminster, Linford, Maidstone, Ockendon, Brentwood Road, the A13 and around the tunnel itself. ■ That the operation of the crossing would increase noise pollution. 	<p>We provided information about the predicted impact of the new road once open on air quality during the community impacts consultation. This was presented on a project level within the Operations update and at a ward level within the Ward impact summaries.</p> <p>The project has been designed to reduce impacts on air quality wherever practical, such as by ensuring the road largely avoids built-up areas (where the existing air quality tends to be worse) and by providing enough capacity to allow for free-flowing journeys, avoiding congestion.</p> <p>Once the road is open, air quality is predicted to improve in some areas but worsen in others due to changes in traffic flows across the region. These effects have been considered across hundreds of miles of road network, using a detailed air quality model. The model accounts for predicted changes in air quality in response to improvements in emissions from vehicles, as cleaner vehicles enter the fleet (including the increased adoption of electric vehicles), based on the latest vehicle emission factors issued by Government. However policies that are likely to accelerate the adoption of electric vehicles such as the Transport decarbonisation plan are not currently incorporated into the emission factors used in the assessment.</p> <p>Air quality is assessed across the whole project, taking into account the improvement and reduction in air quality. Our assessments, which we presented during the community impacts consultation, concluded that there would be no significant effects associated with air quality impacts on human health.</p> <p>During the community impacts consultation, we also presented information about the predicted noise impacts of the new road along with proposed mitigation. This showed that there would be increases and decreases in noise due to traffic. In some locations we have proposed noise barriers, and we would also use low-noise road surfacing to reduce traffic noise once the road is in use.</p>

Summary of the most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing



- **2,570** consultees answered this question
- **2,469** respondents were members of the public and other non-statutory organisations
- **95** respondents were people with an interest in land
- **6** respondents were statutory bodies and local authorities
- **1,286** (51%) respondents supported or strongly supported our proposed mitigations for the operational impacts of the Lower Thames Crossing
- **801** (31%) respondents opposed or strongly opposed our proposed mitigations for the operational impacts of the Lower Thames Crossing

51%

supported our proposed mitigations for the operational impacts of the Lower Thames Crossing

The most common positive feedback about our proposed mitigation for the operational impacts of the Lower Thames Crossing included:

- general comments supporting the measures as the impacts have been thoroughly considered and sufficiently addressed
- acknowledgement that there would be negative effects from operating the crossing but that the proposals provide the best solution to mitigate these

The table below summarises the most common concerns about our proposed mitigation for the operational impacts of the Lower Thames Crossing.

Table 4: Most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing

Summary of the most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing	Our response
Proposals	
<ul style="list-style-type: none"> ■ Comments that the proposals to mitigate the effects of operating the crossing are insufficient and ineffective. Some consultees feel that the changes do not go far enough, particularly in mitigating against increased traffic, and air and noise pollution. ■ That air and noise pollution levels would not be monitored once the crossing is operational. 	<p>During the community impacts consultation, we presented information about the predicted noise and air quality impacts of the new road, along with proposed mitigation. This was presented on a project level within the Operations update and at a ward level within the Ward impact summaries.</p> <p>This showed that there would be increases and decreases in noise due to traffic. In some locations we have proposed noise barriers, and we would also use low-noise road surfacing to reduce traffic noise once the road is in use. These would be committed to as part of the DCO and become a binding requirement.</p> <p>Continued on next page...</p>

<p>Summary of the most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing</p>	<p>Our response</p>
<p>Proposals</p>	
<ul style="list-style-type: none"> ■ That the mitigation proposals are insufficient, that there is no benefit to those living near the proposed road and that local communities have been ignored. ■ Doubts were expressed about the commitment to implementing the mitigation proposals. 	<p>The project has been designed to reduce impacts on air quality wherever practical, such as by ensuring the road largely avoids built-up areas (where the existing air quality tends to be worse) and by providing enough capacity to allow for free-flowing journeys, avoiding congestion.</p> <p>Once the road is open, air quality is predicted to improve in some areas but worsen in others due to changes in traffic flows across the region. These effects have been considered across hundreds of miles of road network, using a detailed air quality model. The model accounts for predicted changes in air quality in response to improvements in emissions from vehicles, as cleaner vehicles enter the fleet (including the increased adoption of electric vehicles), based on the latest vehicle emission factors issued by Government. However policies that are likely to accelerate the adoption of electric vehicles such as the Transport decarbonisation plan are not currently incorporated into the emission factors used in the assessment.</p> <p>Air quality is assessed across the whole scheme, taking into account the improvement and reduction in air quality. Our assessments, which we presented during the community impacts consultation, concluded that there would be no significant effects associated with air quality impacts on human health.</p> <p>Based on the assessments we have undertaken, we do not anticipate a need to carry out operational monitoring for air quality and noise. Monitoring would only be required if our assessments identified a significant effect.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing	Our response
Proposals	
	<p>Once the project is operational, traffic impacts on the affected road network would be monitored, including local roads. We consulted on the draft WNIMMP during the community impacts consultation. This document provides further information about the proposed traffic monitoring once the road is open. It also outlined some areas where the predicted increased traffic flows would create conditions that could be suitable for interventions. Where appropriate, National Highways would work with the relevant authority to support engagement with the DfT to seek funding for further highway works.</p> <p>An updated version of the WNIMMP, which accounts for feedback received during consultation, will be presented as part of our DCO application.</p> <p>We have consulted with local people and stakeholders at appropriate stages of the project's development, with feedback influencing how the impacts on local communities would be mitigated.</p> <p>The project has also been designed to provide benefits for local communities, for example through the creation of green bridges, reducing existing Public Rights of Way severance and, where practical, improving existing access. We have also set out to create a positive legacy of green infrastructure and have identified an opportunity to improve access to semi-natural open spaces, such as the proposals for Chalk Park and Tilbury Fields. Updated proposals for Tilbury Fields and additional publicly accessible green space linked to the east of Chalk Park will be included in the local refinement consultation, demonstrating our commitment to improve and seek feedback on our proposals. We also intend to provide opportunities for local people to work on the construction of the route, and are helping businesses nearby to form part of our supply chain to build the route.</p>

Summary of the most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing	Our response
Environment	
<ul style="list-style-type: none"> ■ That operating the crossing would have an impact on air quality and the health implications for tunnel users and local communities. Concerns that the mitigation is insufficient and the proposed tunnel fans would not be fully operational or would push air pollution to surrounding areas. ■ That noise pollution caused by operating the crossing would not be sufficiently mitigated. Comments include concerns about insufficient noise barriers and that requests in previous consultations for greater noise mitigation measures have been ignored. ■ That greenbelt and agricultural land would be lost and that any impact cannot be mitigated against sufficiently, as trees and other landscaping measures to visually screen the project would take years to develop. 	<p>During the community impacts consultation, we provided information about the impacts of the project on air quality, noise, health and biodiversity in the Ward impact summaries. Environmental mitigation measures have been developed to minimise the impacts of the new road. These were described within the Ward impact summaries.</p> <p>Designing the crossing as a tunnel instead of bridge reduces the environmental and community impacts because tunnels have substantially fewer visual and noise impacts. Air in the tunnels would be refreshed primarily by the movement of traffic through each tunnel. In support of this, there would be a ventilation system with jet-fans mounted within each tunnel at regular intervals. The tunnels would be equipped with equipment to monitor visibility, carbon monoxide and nitrous oxide levels, and the ventilation would operate automatically to disperse concentrations of gases. The distance between the project tunnel entrances and receptors (such as properties) allows tunnel emissions to be well dispersed before reaching receptors.</p> <p>The project has been designed to reduce impacts on air quality wherever practical, such as by ensuring the road largely avoids built-up areas (where the existing air quality tends to be worse) and by providing enough capacity to allow for free-flowing journeys, avoiding congestion.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing	Our response
Environment	
<ul style="list-style-type: none"> ■ That air pollution and traffic would have a negative impact on wildlife. Concerns were expressed about the difficulty of relocating species elsewhere and that this would not compensate for the wildlife and habitat lost. 	<p>Once the road is open, air quality is predicted to improve in some areas but worsen in others due to changes in traffic flows across the region. These effects have been considered across hundreds of miles of road network, using a detailed air quality model. The model accounts for predicted changes in air quality in response to improvements in emissions from vehicles, as cleaner vehicles enter the fleet (including the increased adoption of electric vehicles), based on the latest vehicle emission factors issued by Government. However policies that are likely to accelerate the adoption of electric vehicles such as the Transport decarbonisation plan are not currently incorporated into the emission factors used in the assessment.</p> <p>Air quality is assessed across the whole project, taking into account the improvement and reduction in air quality. Our assessments, which we presented during the community impacts consultation, concluded that there would be no significant effects associated with air quality impacts on human health.</p> <p>Based on the predicted noise impacts of the new road, in some locations we have proposed noise barriers, and we would also use low-noise road surfacing to reduce traffic noise once the road is in use. The location of noise barriers were presented within the materials for the community impacts consultation.</p> <p>The project has been developed to minimise the amount of land needed, reducing impacts on buildings, environmentally sensitive areas and farmland. However, to reduce the impacts on local communities, the new road has been routed away from population centres as much as possible. This means it would have an unavoidable impact on the surrounding countryside, including green belt and agricultural land. Tree planting to reduce the environmental impact would typically use immature trees, as transplanting larger and</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing	Our response
Environment	
	<p>more established trees tends to be less successful. Our assessment recognises that such planting takes time to establish, which is why it considers the design after 15 years. At sensitive locations, more mature trees would be considered if the assessment shows that this would help to significantly reduce impacts. The project's Environmental Masterplan and outline Landscape and Ecology Management Plan (oLEMP), which will form part of our DCO application, will include more details about the planting proposals. A draft oLEMP was published at the community impacts consultation.</p> <p>When relocating wildlife or habitats, all required protected species licenses would be in place before any construction works start in areas where protected species are present. Licences are issued by bodies such as Natural England and the Environment Agency. Any draft licensing commitments would be included as part of our DCO application and would be monitored for a number of years after the project is complete, to comply with protected species licensing. This would ensure relocations are successful and that populations of the protected species are maintaining a favourable conservation status, as required to comply with the protected species licensing.</p> <p>Throughout the development of the project, we have listened to feedback about ensuring there is appropriate mitigation for wildlife and habitat creation. For example, at the community impacts consultation we set out our proposal for permanent habitat creation for water voles in the Mardyke Valley. This replaced the previously proposed habitat creation to the west of Colehouse Fort, which was deemed to be at risk of tidal flooding. We developed this revised proposal through engagement with the Environment Agency and Natural England. In addition since the community impacts consultation, we have added an extra ditch parallel to the Mardyke, which would improve connectivity and help water voles reach the new habitat. We have also provided direct links from the new ditch to the water vole habitat so they avoid crossing dry land.</p>

Summary of the most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing	Our response
Local community	
<ul style="list-style-type: none"> ■ Comments that operating the crossing could have a negative impact on local communities through adverse health and wellbeing, and could potentially divide communities. Some consultees say that there are no benefits to local communities and that the negative effects cannot be mitigated against. 	<p>Wherever possible, the new road has been designed to avoid and reduce impacts and effects on population and human health. Examples of actions we have taken include reducing land take from private properties and community assets, providing replacement land, and the creation of a series of green bridges along the route.</p> <p>The project is also designed to provide benefits for local communities, for example by creating green bridges to maintain and enhance connectivity, reducing existing Public Rights of Way severance and, where practical, improving existing access. The project set out to generate a positive legacy of green infrastructure and identified an opportunity to improve access to semi-natural open spaces, such as the proposals for Chalk Park and Tilbury Fields. Following our community impacts consultation, we are proposing updates to Tilbury Fields and additional publicly accessible green space linked to the east of Chalk Park. Information about these changes will be described in our local refinement consultation.</p> <p>We intend to provide opportunities for local people to work on the construction of the route, and are helping local businesses to become part of our supply chain to build the route. In the Ward impact summaries, we presented information that showed predicted changes in access to jobs as a result of improved connectivity and journey times as a result of the project. For instance, north of the river in the Little Thurrock Blackshots and Little Thurrock Rectory ward, our modelling results enabled us to predict that the project would provide access to 598,000 jobs within a 60-minute drive. South of the river, in the Shorne, Cobham and Luddesdown ward, our modelling results enabled us to predict that the project would provide access to 485,000 jobs within a 60-minute drive. Information for other wards can be found in the Ward impact summaries.</p>

Summary of the most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing	Our response
Traffic	
<ul style="list-style-type: none"> ■ Comments about the increased traffic generated by the crossing and that this would not be sufficiently mitigated against. ■ That operating the crossing would lead to an increase in traffic and congestion in specific areas north of the river, including the Orsett Cock junction, the A1089, Chadwell St. Mary and Thurrock, and specific areas south of the river, including the M2, the A2, LTC junction with the A2, the A228 and the A229/M2 junction 3. 	<p>The Lower Thames Crossing, by relieving the congested Dartford Crossing and approach roads, would address a significant area of congestion, providing both a localised and regional benefit. In doing so, the traffic flows across the region are predicted to change.</p> <p>We presented traffic modelling results at the community impacts consultation within the Ward impact summaries. These showed some predicted increases and decreases in traffic flows once the new road is open.</p> <p>As well as providing relief at the Dartford Crossing, the project would have an impact on other parts of the strategic road network and local roads.</p> <p>There would be local increases in traffic flows on the A13 to the east of the project and on short sections of the A1089 as drivers take advantage of the new crossing. In addition, there would be increases in traffic on other local roads as drivers re-route following changes in the connections at the A13/A1089 junction. At our community impacts consultation, we proposed a modification to the junction, comprising an extra lane on the link road extending from where the road passes Baker Street through to the Orsett Cock junction. Following feedback from the community impacts consultation, we are proposing a change to one of the connections at the A13 junction. The revised proposal will be described in the local refinement consultation.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about proposed mitigation for the operational impacts of the Lower Thames Crossing	Our response
Traffic	
	<p>The proposed route south of the river is predicted to attract more traffic to the M2 corridor as traffic changes route to use the new crossing, however the route is predicted to remain free flowing. The A2 in the vicinity of the junction with the LTC would be upgraded to provide additional capacity by separating some traffic movements. Whilst the A2 would be reduced to two lanes as it passes through the proposed junction with the LTC, our traffic modelling has shown that this would be sufficient to accommodate predicted traffic flows far into the future. The A228 (M2 junction 2) and A229 (M2 junction 3) are forecast to see increases in traffic during morning and evening peak hours and the inter-peak period. Kent County Council is currently progressing improvements on the A229 Blue Bell Hill to increase journey time reliability, reduce delays and enhance road safety on the route.</p> <p>Whilst the project is expected to provide wide-reaching benefits to the road network, it is recognised that some of the junctions and links that are predicted to experience increased traffic flows may not have sufficient capacity.</p> <p>In response to this, we consulted on the draft WNIMMP during the community impacts consultation. This document provided further information about the proposed traffic monitoring once the road is open. It also outlined some areas where the predicted increased traffic flows would create conditions that could be suitable for interventions. Where appropriate, National Highways would work with the relevant authority to support engagement with the DfT to seek funding for further highway works.</p> <p>Once the project is operational, traffic impacts on the affected road network would be monitored, including local roads. An updated version of the WNIMMP, which accounts for feedback received during consultation, will be presented as part of our DCO application.</p>

Changes since the design refinement consultation

In the community impacts consultation, we presented a series of changes made to the project following continued engagement with our stakeholders, ongoing design work and a greater understanding of technical constraints. These changes were presented in detail in the Operations update and were also referred to in the You said, we did document and the Ward impact summaries.

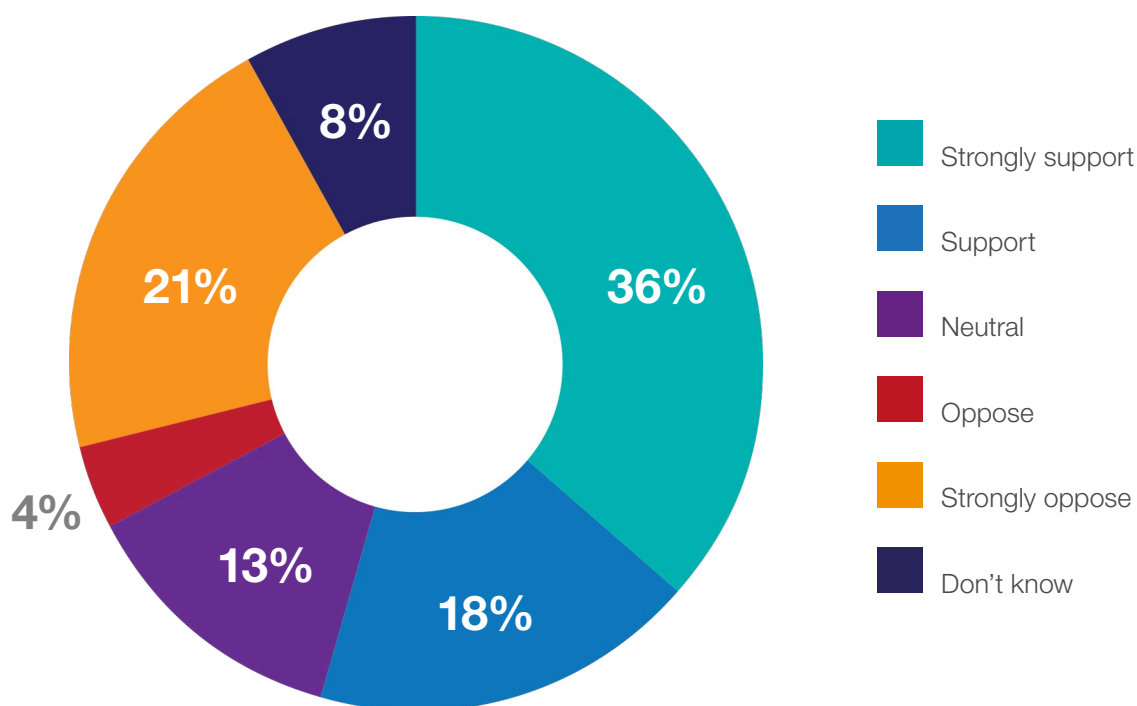
Changes south of the river included:

- diverting a gas pipeline underneath Brewers Road and Park Pale instead of the land next to the A2
- revising a gas pipeline diversion so it avoids two crossings of the existing National Grid gas feeder pipeline
- relocating the Shorne Woods utility switching station from Thong Lane to the A226
- refinements to the route of underground electricity cables to avoid works within the Cyclopark
- the inclusion of three arable fields within the Order Limits for temporary environmental use during construction

To read about all changes proposed in the community impacts consultation, refer to chapter 3 of the Operations update.

Within this question, respondents commented more broadly rather than naming specific changes. There were fewer comments about specific changes and these will be reported in the Consultation report, part of our DCO application.

We asked: do you support or oppose the proposed changes south of the river?



54%

supported the proposed changes south of the river

- **2,519** consultees answered this question
- **2,425** respondents were members of the public and other non-statutory organisations
- **89** respondents were people with an interest in land
- **5** respondents were statutory bodies and local authorities
- **1,367** (54%) respondents supported or strongly supported the proposed changes south of the river
- **721** (25%) respondents opposed or strongly opposed the proposed changes south of the river

The most common positive feedback about the proposed changes south of the river included:

- general comments supporting the proposed route as it seems reasonable, sensible, well-planned and makes the best use of the existing road network
- support for proposed utility infrastructure routes
- the changes address previous concerns raised and show a willingness to adapt to feedback

The table on the next page summarises the most common concerns about the proposed changes south of the river.

Table 5: Most common concerns raised about the proposed changes south of the river

Summary of the most common concerns raised about the proposed changes south of the river	Our response
Traffic	
<p>Comments about increased traffic and worsening congestion in a number of areas including:</p> <ul style="list-style-type: none"> ■ The A2 and the A2/M2 junction with the LTC. This included concerns that the A2/M2 corridor is already over capacity, and lacks capacity for the additional traffic migrating from the M20. ■ The M2 and the impact this would have on local journeys. There were also comments about worsening congestion around junctions 3 and 5 due to channel port traffic and the M2. ■ Increased traffic from the proposed London Resort theme park. 	<p>The Ward impact summaries, presented during the community impacts consultation, set out predictions for how roads in the vicinity of the project would be affected during construction and once in operation.</p> <p>On many roads to the west of the project, including parts of the A2 and the Dartford Crossing, the number of vehicles is expected to fall when the LTC opens. However, roads on the approach to the new crossing (including the M2, A228, A229, some roads to the east such as the A13, parts of the A2 and some sections of the M25) are predicted to experience an increase in traffic levels as travelling across the river becomes easier and more reliable.</p> <p>The proposed route south of the river is predicted to attract more traffic to the M2 corridor as traffic changes route to use the new crossing, however the route is predicted to remain free flowing. The A2 in the vicinity of the junction with the LTC would be upgraded to provide additional capacity by separating some traffic movements. Whilst the A2 would be reduced to two through lanes as it passes through the proposed junction with the LTC, our traffic modelling has shown that this would be sufficient to accommodate predicted traffic flows far into the future.</p> <p>The A229 (M2 junction 3) is forecast to see increases in traffic during morning and evening peak hours and the inter-peak period. The A249 (M2 junction 5) is expected, depending on the time of day and direction of travel, to see either a decrease in traffic as a result of the project, or a small increase of up to 50 passenger car units an hour.</p> <p>There is the potential that on some stretches of road, at some times of day, there would be increases in traffic flows resulting from both the LTC and the London Resort.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about the proposed changes south of the river	Our response
Traffic	
<p>Comments about increased traffic and worsening congestion in a number of areas including:</p> <ul style="list-style-type: none"> ■ Local areas, such as Shorne, Chalk, Gravesham, Gravesend, Cobham, Cuxton, Meopham, Dartford, Medway, Riverview, Instead Rise, Bush Road, Shorne Ifield Road, Thong Lane, Marling Way, Cobhambury Road, Warren Road, Valley Drive, Brewers Road, Pear Tree Lane, Jeskyns Road, Henhurst Road and Beechcroft Avenue. ■ The A229, where traffic would increase because vehicles from the M20 would use the road to access the LTC. Some consultees highlighted that Blue Bell Hill (the A229) would require improvements to cope with more traffic. 	<p>Information about the predicted changes to traffic flows on the road network will be available as part of our DCO application. Following the withdrawal of the London Resort DCO application we will continue to monitor the progress of that project.</p> <p>Whilst the project is expected to provide wide-reaching benefits to the road network, it is recognised that some of the junctions and links that are predicted to experience increased traffic flows may not have sufficient capacity to cater for this additional traffic.</p> <p>In response to this, we consulted on the draft WNIMMP during the community impacts consultation. This document provided further information about the proposed traffic monitoring once the road is open. It also outlined some areas where the predicted increased traffic flows would create conditions that could be suitable for interventions. Where appropriate, National Highways would work with the relevant authority to support engagement with the DfT to seek funding for further highway works.</p> <p>An updated version of the WNIMMP, which accounts for feedback received during consultation, will be presented as part of our DCO application.</p> <p>Once the project is operational, traffic impacts on the affected road network would be monitored, including local roads.</p> <p>Kent County Council is currently progressing improvements on the A229 Blue Bell Hill to increase journey time reliability, reduce delays and enhance road safety on the route.</p>

Summary of the most common concerns raised about the proposed changes south of the river	Our response
Local community	
<ul style="list-style-type: none"> Comments that the proposed route south of the river could damage the local economy and residents' quality of life including their health and wellbeing. Concerns were also raised about the loss of amenities. 	<p>Road users in Kent who travel along parts of the A2, M25 and M20, and who use the Dartford Crossing and its approach roads, are forecast to experience quicker journeys and reduced congestion as a result of the project. The improved connections would increase the productivity of local businesses by making it easier for them to interact with customers and suppliers and to retain and attract workers. These business benefits would boost employment and economic growth, with significant long-term gains.</p> <p>The project has been designed to avoid and reduce its effects on local people and their health. This includes reducing the land taken from private property owners and communities, providing replacement land, as well as creating a series of green bridges and new routes for walkers, cyclists and horse riders.</p> <p>During construction, appropriate phasing of works, noise screening and low-noise equipment would be used. Impacts would be mitigated through good practice construction measures relating to dust emissions, working hours, visual screening, traffic management measures and community engagement. We would be legally required to implement these measures, as set out in the CoCP and REAC.</p> <p>In addition, at our community impacts consultation, we proposed a package of measures for existing open space and recreational facilities affected by our plans.</p>

Summary of the most common concerns raised about the proposed changes south of the river	Our response
Environment	
<ul style="list-style-type: none"> ■ Comments that the proposed route south of the River Thames would harm the landscape and visual amenity of the area. Concerns were also raised about the potential loss of green belt, agricultural land and ancient woodland, as well as general concerns about the impact the route would have on the environment. ■ That the proposed route south of the River Thames could increase air pollution and affect human health. ■ That there would be potential loss of wildlife and habitat as a consequence of the proposed route south of the River Thames, with a few consultees questioning the viability of plans to relocate wildlife or habitat. ■ General comments that the proposed route south of the River Thames would have an impact on the environment. 	<p>Reducing the effect of the Lower Thames Crossing on the environment is one of the project’s main aims and, as such, mitigation measures have been developed in consultation with stakeholders and would be committed through embedded project design as shown on the Environmental Masterplan and detailed in the oLEMP, protected species licensing, environmental permits and the project’s Register of Environmental Actions and Commitments.</p> <p>The project has been designed to minimise the amount of land needed, reducing impacts on buildings, environmentally sensitive areas and farmland. However, to lessen its impacts on local communities, the new road has been routed away from population centres as much as possible. This means that it would have an unavoidable impact on the surrounding countryside, including green belt land. However, ground conditions south of the Thames have allowed the road to be designed in a tunnel or cutting all the way to the proposed M2/A2 junction, reducing its impact on the surrounding landscape and nearby communities.</p> <p>Following our community impacts consultation, we are proposing refinements to woodland planting around Shorne Ifield Road and additional publicly accessible green space near Chalk Park to further mitigate landscape and visual impacts. These changes will be covered in our local refinement consultation.</p> <p>We provided information about the predicted impact of the new road once open on air quality during the community impacts consultation. This was presented on a project level within the Operations update and ward level within the Ward impact summaries.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about the proposed changes south of the river	Our response
Environment	
	<p>The project has been designed to reduce impacts on air quality wherever practical, such as by ensuring the road largely avoids built-up areas (where the existing air quality tends to be worse) and by providing enough capacity to allow for free-flowing journeys, avoiding congestion.</p> <p>Once the road is open, air quality is predicted to improve in some areas but worsen in others due to changes in traffic flows across the region. These effects have been considered across hundreds of miles of road network, using a detailed air quality model. The model accounts for predicted changes in air quality in response to improvements in emissions from vehicles, as cleaner vehicles enter the fleet (including the increased adoption of electric vehicles), based on the latest vehicle emission factors issued by Government. However policies that are likely to accelerate the adoption of electric vehicles such as the Transport decarbonisation plan are not currently incorporated into the emission factors used in the assessment.</p> <p>During the community impacts consultation, we also presented information about the predicted impacts of the new road on wildlife, along with proposed mitigation. These include creating new habitats, building green bridges and introducing landscaping measures. We would be legally required to implement these measures, as set out in the Design principles, oLEMP, Environmental Masterplan and REAC (which forms part of the Code of Construction Practice).</p> <p>All required Protected Species Licences are to be put in place before construction begins, to allow for the careful relocation of wildlife and natural habitats in areas where protected species are known. These licences are issued by statutory bodies, such as Natural England and the Environment Agency. To guarantee the successful relocation and conservation status of the protected species, both during and beyond the project, the draft licensing commitments are to be included in our DCO application and monitored for several years after the project is complete.</p>

Summary of the most common concerns raised about the proposed changes south of the river	Our response
Revised changes	
<ul style="list-style-type: none"> ■ Comments that the revised proposals lack impact or provide inadequate mitigation for the effects of the project south of the River Thames. Some respondents said they could not identify any changes in the documents since the previous consultation. 	<p>The changes proposed in the community impacts consultation were designed to improve the project and provide further mitigation for its impacts. They were developed as a result of continued engagement with our stakeholders, ongoing design work and a greater understanding of technical constraints. Some of the changes were also developed to respond to concerns raised by stakeholders and reduce impacts, for example relocating the Shorne Woods switching station from Thong Lane to the A226 would reduce the visual impact by removing approximately 2.8 km of the existing overhead electricity network.</p> <p>The information about changes was clearly set out in a standalone chapter of the Guide, which included maps and visuals. Changes to the project south of the River Thames included various revisions to utility diversions to reduce impacts and remove land from the Order Limits and open space provision which included Chalk Park. All changes were also described in the Operations update and Ward impact summaries presented at the community impacts consultation.</p> <p>The Ward impact summaries described how construction and operation of the project would affect each local authority ward area. The summaries also described the mitigation measures we would adopt in each area to manage the effects of construction. They also set out the predicted impacts once the project is built and how we would mitigate these.</p>

Changes north of the river included:

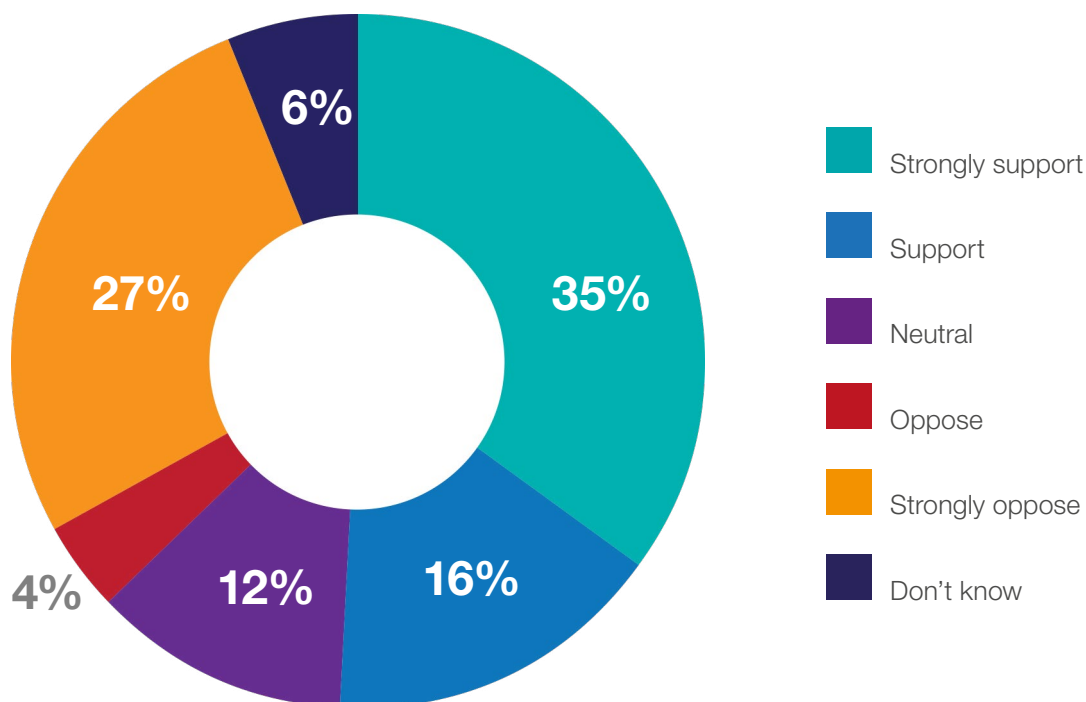
- extending the Order Limits into the land to the south of Substation Road, which allows for a new powerline to be placed underground
- removing the East Tilbury Jetty to the east of the Port of Tilbury as any deliveries are expected through the Port of Tilbury or other established port/dockside facilities
- a modification to the A13 junction, comprising an extra lane on the link road extending from where the road passes Baker Street through to the Orsett Cock roundabout to provide additional capacity
- refining the area to the north of the A13 between Rectory Road and Orsett Cock roundabout, to divert a high-pressure gas pipeline, which reduced the impact on Orsett Showground and land being used for football pitches
- refining the Order Limits around Ockendon Road/Pea Lane to avoid impacting existing vegetation
- amending the landscape design associated with the Mardyke Crossing to provide a suitable ditch network and habitat for water voles
- changes to the woodland planting and environmental mitigation in the area north of the M25 junction 29 and around Folkes Lane Woodland
- removing access from Moor Lane east and Laburnham Gardens due to the introduction of access directly from the new junction 29 road

To read about all changes proposed in the community impacts consultation, refer to chapter 3 of the Operations update.

The most common positive feedback about the proposed changes north of the river included:

- general support as the changes are seen as reasonable, positive or to demonstrate better mitigation. They also address previous concerns raised and show a willingness to adapt to feedback
- comments encouraging work to start as soon as possible
- general support as traffic flow and congestion levels north of the River Thames and throughout Essex would be improved
- support in relation to the M25, with a belief that traffic flows would improve and the location of the M25 junction with the project would ease pressure on the A13

We asked: do you support or oppose the proposed changes north of the river?



- **2,540** consultees answered this question
- **2,449** respondents were members of the public and other non-statutory organisations
- **84** respondents were people with an interest in land
- **7** respondents were statutory bodies and local authorities
- **1,300** (51%) respondents supported or strongly supported the proposed changes north of the river
- **824** (31%) respondents opposed or strongly opposed the proposed changes north of the river

51%

supported the proposed changes north of the river

The table on the next page summarises the most common concerns about the proposed changes north of the river.

Within this question, respondents commented more broadly rather than naming specific changes. There were fewer comments about specific changes and these will be reported in the Consultation report, part of our DCO application.

Table 6: Most common concerns raised about the proposed changes north of the river

Summary of the most common concerns raised about changes north of the river	Our response
Local community	
<ul style="list-style-type: none"> ■ Comments about the impact of the proposed route north of the River Thames on the local community, as well as the disruption caused by the proposed route negatively impacting residents' health and wellbeing. 	<p>Road users who travel along parts of the A13, A127 and M25, and who use the Dartford Crossing and its approach roads, are forecast to experience quicker journeys and less congestion as a result of the LTC. The project has been designed to avoid and reduce impacts and effects on the local population and human health by embedding mitigation within its design. Examples include reducing land take from private properties and community assets, providing replacement land, and the creation of a series of green bridges and new routes for walkers, cyclists and horse riders along the route.</p> <p>During construction, appropriate phasing of works, noise screening and low-noise equipment would be used. In addition, at our community impacts consultation, we proposed a package of measures for existing open space and recreational facilities affected by our plans.</p> <p>As a result of feedback, we are proposing revisions to Tilbury Fields and additional publicly accessible green space linked to the east of Chalk Park, which will be included in the local refinement consultation.</p>

Summary of the most common concerns raised about changes north of the river	Our response
Traffic	
<ul style="list-style-type: none"> ■ Comments about traffic in areas including Orsett, Ockendon, Chadwell St. Mary, Tilbury and Stanford-le-Hope. Consultees expressed further concerns about how construction would impact traffic on the local community, including inconvenience to residents, emergency service access issues and detriment to local businesses. ■ Concerns about the impact of the proposed changes on traffic in the local area and on safety, congestion and connectivity. ■ That the proposed changes could impact the traffic and congestion on the A13, alongside criticism of the design linking the project and A13 to the Orsett Cock junction. ■ That the proposed changes would cause traffic queues and bottlenecks on the M25 northbound as well as safety issues and congestion at junction 29. 	<p>The Ward impact summaries, presented during the community impacts consultation, set out the impacts of the project on traffic during construction and once in operation on a ward by ward basis. During operation, the traffic modelling results predicted that there would be some increases and decreases in traffic flows on the surrounding road network.</p> <p>Draft construction traffic management proposals included temporary lane and road closures, and additional traffic signals proposed only where they would be necessary to maintain safety.</p> <p>The draft Outline Traffic Management Plan for Construction (oTMPfC) set out our approach to carrying out temporary traffic management for the safe construction of the project. It also explained management measures available to our contractors to reduce the impact on the local community (including access and safety). The oTMPfC was produced following our work with the relevant local authorities. Our engagement has continued with these authorities, as well as with businesses, statutory bodies and emergency services. The oTMPfC will form part of our DCO application. Our appointed contractors would carry out a programme of communications that would ensure planned disruptions are publicised at the appropriate time.</p> <p>In our local refinement consultation, we will be presenting a number of changes that would have the effect of reducing the traffic management measures to deliver the project.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about changes north of the river	Our response
Traffic	
	<p>Once the new road opens, there would be local increases in traffic flow on the A13 to the east of the project and on short sections of the A1089 as drivers take advantage of the new crossing. In addition, there would be increases in traffic on other local roads as drivers re-route following changes in the connections at the A13/A1089 junction. As a result of new developments within the area, there was a need for increased capacity on the roads linking the LTC to the A13 eastbound and Orsett Cock junction.</p> <p>On many roads to the west of the new route, such as the A13, the Dartford Crossing and the M25 in Thurrock, the number of vehicles is expected to fall when the LTC opens. However, some roads to the east, such as the A13, and some sections of the M25, are predicted to experience an increase in traffic levels as travelling across the river becomes easier and more reliable.</p> <p>Following feedback from the community impacts consultation, we have made a change to the A13 westbound connection to the A1089 southbound. The revised proposal will be included in our local refinement consultation.</p> <p>Once the project is operational, traffic impacts on the affected road network would be monitored, including on local roads. Where appropriate, National Highways would work with the relevant authority to support engagement with the DfT to seek funding for further highway works.</p>

Summary of the most common concerns raised about changes north of the river	Our response
Environment	
<p>Comments that the proposed route would:</p> <ul style="list-style-type: none"> ■ have a negative impact on air quality, including the cumulative impact of the project when considered alongside existing schemes ■ have a negative impact on air quality in specific locations, including Tilbury, Chadwell St. Mary, Gravesend, Ockendon and Orsett ■ lead to a loss of green space, ancient woodland and/or agricultural land ■ lead to an increase in noise pollution and vibration, in specific locations such as East Tilbury, Upminster and Chadwell St. Mary ■ lead to a loss of habitat that would have a negative impact on wildlife, including specific animal species. Doubts were also expressed about the viability of the relocation process and the safety of the proposed green bridges 	<p>Mitigating the effect of the LTC on the environment is one of the project's main aims. The project has been designed to minimise the amount of land needed, reducing impacts on buildings, environmentally sensitive areas and farmland. However, to minimise the effects on local communities, the project has been routed away from population centres as much as possible. This means it would have an unavoidable impact on the surrounding countryside, including green space. We recognise the irreplaceable nature of ancient woodland and have reduced the project's impacts on these areas wherever practical. Where impacts on land containing ancient woodland cannot be avoided to build and operate the new road, compensatory woodland planting would help to offset the impacts.</p> <p>We provided information about the predicted impact of the new road once open on air quality during the community impacts consultation. This was presented on a project level within the Operations update and at a ward level within the Ward impact summaries.</p> <p>The project has been designed to reduce impacts on air quality wherever practical, such as by ensuring the road largely avoids built-up areas (where the existing air quality tends to be worse) and by providing enough capacity to allow for free-flowing journeys, avoiding congestion. Once the road is open, air quality is predicted to improve in some areas but worsen in others due to changes in traffic flows across the region. These effects have been considered across hundreds of miles of road network, using a detailed air quality model. The model accounts for predicted changes in air quality in response to improvements in emissions from vehicles, as cleaner vehicles enter the fleet (including the increased adoption of electric vehicles), based on the latest vehicle emission factors issued by Government. However policies that are likely to accelerate the uptake of electric vehicles such as the Transport decarbonisation plan are not currently incorporated into the emission factors used in the assessment.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about changes north of the river	Our response
Environment	
	<p>Air quality is assessed across the whole project, taking into account the improvement and reduction in air quality. Our assessments, which we presented during the community impacts consultation, concluded that there would be no significant effects associated with air quality impacts on human health.</p> <p>During the community impacts consultation, we also presented information about the predicted noise impacts of the new road along with proposed mitigation. This showed that there would be increases and decreases in noise due to traffic. In some locations we have proposed noise barriers, and we would also use low-noise road surfacing to reduce traffic noise once the road is in use.</p> <p>Based on the assessments we have undertaken, we do not anticipate a need to carry out operational monitoring for air quality and noise. Monitoring would only be required if our assessments identified a significant effect.</p> <p>At the community impacts consultation, we also outlined the impacts on wildlife and habitats presented at our previous consultations, along with the proposed mitigation measures. These include creating new habitats, building green bridges and introducing landscaping measures. We would be legally required to implement these measures, as set out in the Design principles, oLEMP, Environmental Masterplan and REAC (which forms part of the Code of Construction Practice).</p> <p>Continued on next page...</p>

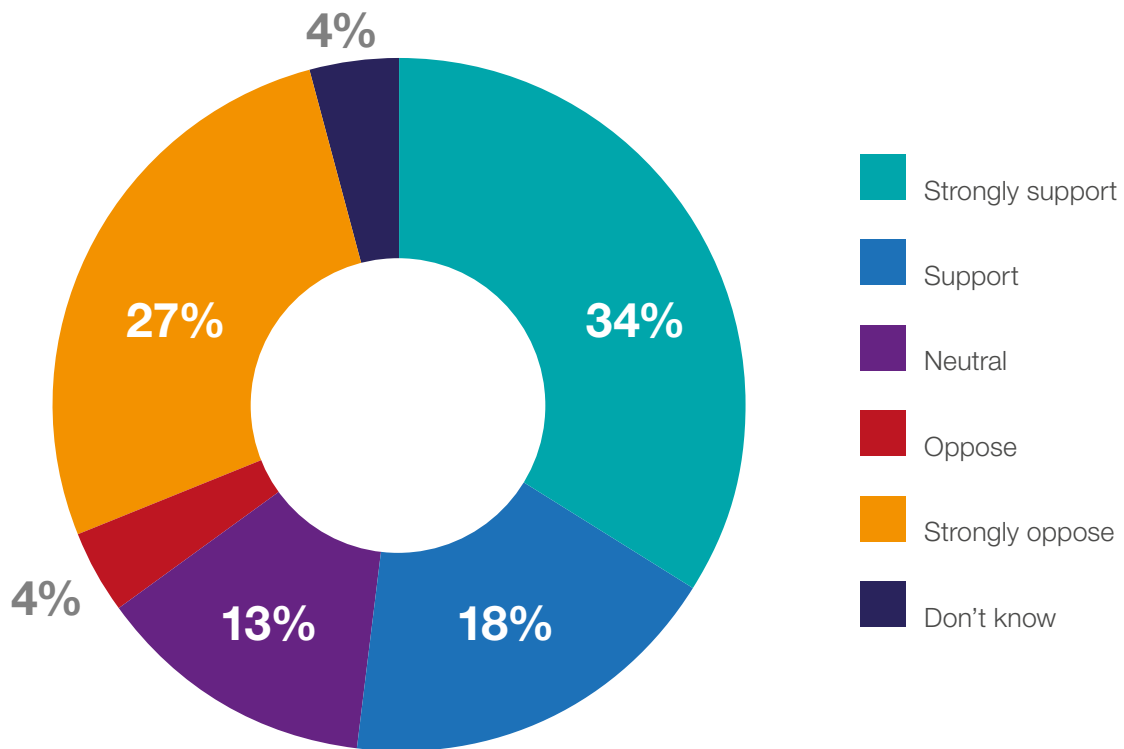
Summary of the most common concerns raised about changes north of the river	Our response
Environment	
	<p>Throughout the development of the project, we have listened to feedback about ensuring there is appropriate mitigation for wildlife and habitat creation. For example, at the community impacts consultation we set out our proposal for permanent habitat creation for water voles in the Mardyke Valley. This replaced the previously proposed habitat creation to the west of Colehouse Fort, which was deemed to be at risk of tidal flooding. We developed this revised proposal through engagement with the Environment Agency and Natural England. In addition since the community impacts consultation, we have added an extra ditch parallel to the Mardyke, which would improve connectivity and help water voles reach the new habitat. We have also provided direct links from the new ditch into the water vole habitat so they can avoid crossing dry land.</p> <p>When relocating wildlife or habitats, all required protected species licences would be in place before any construction work starts in areas where protected species are presented. Licences are issued by statutory bodies such as Natural England and the Environment Agency. Any draft licensing commitments would be included as part of our DCO application and would be monitored for a number of years after the project is complete, to comply with protected species licensing. This would ensure relocations are successful and that populations of the protected species are maintaining a favourable conservation status, as required to comply with the protected species licensing.</p> <p>All bridges would be designed in accordance with design standards.</p>

Summary of the most common concerns raised about changes north of the river	Our response
Revised changes	
<ul style="list-style-type: none"> ■ Comments that the proposed changes are insufficient or ineffective, or do not go far enough to mitigate the disruption to the local community and the environment, with some consultees stating the project is not fit for purpose. 	<p>The project has been designed to avoid and reduce impacts and effects on the local population and human health by embedding mitigation within its design. Examples include reducing land take from private properties and community assets, providing replacement land, and the creation of a series of green bridges and new routes for walkers, cyclists and horse riders. Construction activities would be carried out in phases to minimise impacts and disruption. Noise screening would be implemented and low-noise equipment used.</p> <p>One of the key objectives of this scheme – agreed between National Highways and the DfT – is to relieve congestion at the Dartford Crossing and its approach roads. The Lower Thames Crossing proposals have been carefully assessed and are considered the best means of meeting this important objective.</p>

Order Limits

Following the design refinement consultation, the Order Limits for the project were reduced by 3% from 22.9 square kilometres to 22.2 square kilometres. At the community impacts consultation, we presented changes to the Order Limits and special category land, and proposals for two new open spaces, Tilbury Fields and Chalk Park. We also asked for feedback on a preferred height of the landform at Tilbury Fields. Information on these changes were presented in chapter 3 of the Operations update.

We asked: do you support or oppose the changes to the proposed area of land that would be needed to build the Lower Thames Crossing?



- **2,558** consultees answered this question
- **2,454** respondents were members of the public and other non-statutory organisations
- **98** respondents were people with an interest in land
- **6** respondents were statutory bodies and local authorities
- **1,335** (52%) respondents supported or strongly supported the changes to the proposed area of land that would be needed to build the Lower Thames Crossing
- **783** (31%) respondents opposed or strongly opposed the changes to the proposed area of land that would be needed to build the Lower Thames Crossing

52%

supported the changes to the proposed area of land that would be needed to build the Lower Thames Crossing

The most common positive feedback about the changes to the proposed area of land that would be needed to build the Lower Thames Crossing included:

- the revised proposals are an improvement on previous plans
- the revised proposals reduce land take of ancient woodland, green spaces and agricultural land, and provide extra woodland, which are all considered to benefit the natural landscape
- that the overall benefits are seen to outweigh the negatives. Some comments highlighted that there are negatives to any project, but these are justifiable due to the long-term gains
- support for the improved mitigation that benefits the local community, specifically the provision of open space sites for local recreational purposes

The table below summarises the most common concerns about the changes to the proposed area of land that would be needed to build the Lower Thames Crossing.

Table 7: Most common concerns raised about the changes to the proposed area of land needed to build the Lower Thames Crossing

Summary of the most common concerns raised about the changes to the proposed area of land needed to build the Lower Thames Crossing	Our response
Environment	
<ul style="list-style-type: none"> ■ Comments that the proposed land requirements would result in changes to the view of the countryside and landscape, including the loss of agricultural and green belt land, and ancient woodland. Specific locations of concern include Ashenbank Woods and Shorne Woods Country Park. 	<p>During the community impacts consultation, we presented information about the predicted impacts of the new road on visual amenity and landscape. We outlined how we have sought to reduce these through good design and measures such as landscaping, planting and false cuttings to screen views of the new road and traffic. Areas used temporarily for construction would be restored to their former use. The visual impacts of the project would be controlled through the good practice measures set out in the CoCP and REAC.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about the changes to the proposed area of land needed to build the Lower Thames Crossing	Our response
Environment	
	<p>Following our community impacts consultation, we will be proposing additional landscaping at various locations where the LTC would join the A13. Information about these refinements will be presented within our local refinement consultation.</p> <p>To reduce the impacts on local communities, the new road has been routed away from population centres as much as possible. This means it would have an unavoidable impact on the surrounding countryside, including green belt land.</p> <p>We recognise the irreplaceable nature of ancient woodland and have reduced the project's impacts on these areas wherever practical. Where impacts on land containing ancient woodland cannot be avoided to build and operate the new road, compensatory woodland planting would help offset the impacts.</p> <p>New woodland would be designed to strengthen connectivity between existing retained woodland, particularly around Shorne and Ashenbank Woods Site of Special Scientific Interest (SSSI), Claylane Wood, Great Crabbles Wood SSSI and Jeskyns Community Woodland to the south of the A2.</p>
<ul style="list-style-type: none"> ■ That the proposed land requirements needed for the project would increase the damage to natural habitats and wildlife native to the area. ■ That the proposed land requirements would damage the environment. Some consultees say that this damage would be significant. 	<p>The project has been designed to reduce the effects on habitats within the area as far as possible. We have tried to avoid designated sites, irreplaceable habitats and areas of semi-natural habitats such as woodland and marshland. However, it is recognised that avoiding such impacts while meeting the engineering and safety requirements of the project has not been possible in every case, and some of these habitats are affected.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about the changes to the proposed area of land needed to build the Lower Thames Crossing	Our response
Environment	
	<p>To offset these adverse effects, the ecological mitigation and landscape design focuses on providing habitats of greater biodiversity value than those that would be affected. The design also links up newly created habitats with established and retained habitats, such as the areas of ancient woodland in both Essex and Kent.</p> <p>During the community impacts consultation, we also presented information about the predicted impacts of the new road on wildlife, along with proposed mitigation. This includes creating new habitats, building green bridges and introducing landscaping measures. We would be legally required to implement these measures, as set out in the Design principles, oLEMP, Environmental Masterplan and REAC (which forms part of the Code of Construction Practice).</p> <p>Throughout the development of the project, we have listened to feedback about ensuring there is appropriate mitigation for wildlife and habitat creation. For example, at the community impacts consultation we set out our proposal for permanent habitat creation for water voles in the Mardyke Valley. This replaced the previously proposed habitat creation to the west of Coalhouse Fort, which was deemed to be at risk of tidal flooding. We developed this revised proposal through engagement with the Environment Agency and Natural England. In addition since the community impacts consultation, we have added an extra ditch parallel to the Mardyke, which would improve connectivity and help water voles reach the new habitat. We have provided direct links from the new ditch to the water vole habitat, so they would avoid crossing dry land.</p> <p>We will be presenting further proposals for compensatory habitats which would result in changes to the Order Limits. Information on this change will be presented within our local refinement consultation.</p>

Summary of the most common concerns raised about the changes to the proposed area of land needed to build the Lower Thames Crossing	Our response
Local community	
<ul style="list-style-type: none"> ■ Comments about the potential negative impact that the proposed permanent and temporary land acquisition would have on local communities. ■ That the proposed land requirements needed for the project would have negative impacts on property within the local community, including concerns about the proximity to local homes, the risk of losing homes to the project, the impact on property value and the risk of land being sold off for future housing development. 	<p>We have set out to minimise the land impacted by, or required for, the project, while ensuring there is sufficient land to build and operate the road. Throughout the development of the LTC, the Order Limits have been amended to reflect changes to our proposals. We have also looked to minimise the number of properties potentially affected or that would require demolition.</p> <p>Since the preferred route announcement in 2017, owner-occupiers of residential properties within the Order Limits have been able to ask us to purchase their properties by serving a Blight Notice under the Town and Country Planning Act 1990 (as amended). We have received some blight notices and, as a result, have purchased a number of properties.</p> <p>We have also written to residents near the route regarding compensation that may be available to them due to the effects on their property from the new road once it is opened and has been in operation for a year.</p> <p>Further information about the compensation offered to those affected by the project can be found in the following National Highways documents:</p> <ul style="list-style-type: none"> ■ Your Property and Compulsory Purchase ■ Your Property and Blight ■ Your Property and Discretionary Purchase and How to claim for the effects on your property of a new or altered road (Part 1 Compensation) <p>Continued on next page...</p>

Summary of the most common concerns raised about the changes to the proposed area of land needed to build the Lower Thames Crossing	Our response
Local community	
	<p>All land included in the Order Limits is required to construct, operate and maintain the LTC. A Statement of Reasons, setting out why compulsory acquisition powers are necessary in relation to each individual parcel of land, will be submitted in support of our DCO application for development consent. Any land to be permanently acquired by National Highways is necessary for the project.</p> <p>Following the community impacts consultation, we are proposing changes to the project that would result in amendments to the Order Limits. However, there is no change to the number of residential properties in the Order Limits. The revised Order Limits will be presented in the local refinement consultation</p>

Summary of the most common concerns raised about the changes to the proposed area of land needed to build the Lower Thames Crossing	Our response
Proposal	
<ul style="list-style-type: none"> ■ Comments about the revised proposals for the land needed within the Order Limits, with concerns expressed that the reduction in the amount of land needed is not significant, that the area remains too large or that reduced land take in one area means more land would be needed in other areas. ■ Opposition to the proposed land requirements needed for the project. Many consultees state that no land should be taken or changed. 	<p>We have set out to minimise the land impacted by, or required for, the LTC, while ensuring there is sufficient land to build and operate it. Throughout the development of the new road, the Order Limits have been amended in line with our proposals. We have also looked to minimise the number of properties potentially affected or that would require demolition.</p> <p>Following statutory consultation, we developed a more detailed understanding of the diversion routes utility companies would need to divert their assets. We also further developed our environmental mitigation proposals. This led to an expansion of the Order Limits presented at supplementary consultation (26.3 square kilometres), which was 24% larger than that presented at statutory consultation (20 square kilometres).</p> <p>Following further design development coupled with the findings from site investigations and stakeholder feedback, we were able to amend the design of utility diversions. Overall, these changes meant the Order Limits were reduced by 15% and presented during design refinement consultation (22.9 square kilometres).</p> <p>At the community impacts consultation we reduced the extent of land within the Order Limits by 3% (22.2 square kilometres). We were also able to reduce the amount of land within the Order Limits over which we are seeking permanent rights. This means there is a higher proportion of land that would be required temporarily compared with previous consultations.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about the changes to the proposed area of land needed to build the Lower Thames Crossing	Our response
Proposal	
	<p>We are proposing changes to the project which would result in further amendments to the Order Limits. This includes the proposed addition of further compensatory habitats. However, there is no change to the number of residential properties in the Order Limits as detailed in the community impacts consultation. Information about the proposed compensatory habitats and the revised Order Limits will be presented in the local refinement consultation.</p>

Summary of the most common concerns raised about the changes to the proposed area of land needed to build the Lower Thames Crossing	Our response
Proposal	
<ul style="list-style-type: none"> ■ That the changes to the proposed Order Limits are minimal and do not address previous issues raised. Some consultees said that the proposals do not make up for lost land while others say that Chalk Park and Tilbury Fields do not mitigate for land that is being lost. 	<p>During the community impacts consultation, we presented information about the changes to the proposed area of land needed to build the new road, along with proposed mitigation. The Order Limits have been refined throughout the development of the project. We have worked closely with landowners and stakeholders to address issues raised and our proposals have evolved as a result.</p> <p>The changes proposed during the community impacts consultation included refinements to utility works, the provision of open space sites for local recreational purposes and amendments to reduce the amount of land required to build and operate the project.</p> <p>In a number of instances, we have identified and would provide replacement land for existing open space that would be affected by the project. We have also set out to create a positive legacy of green infrastructure and have identified an opportunity to improve access to semi-natural open spaces, such as the proposals for Chalk Park and Tilbury Fields. We are proposing to formally designate both areas as open space, to ensure further opportunities for public recreation are legally secured once the new road is open.</p> <p>Following the community impacts consultation, we are proposing changes to the project that include the provision of additional woodland habitat compensation. There are also some revisions to our proposals for special category land and private recreational facilities, and we are proposing additional publicly accessible green space linked to the east of Chalk Park. These would result in amendments to the Order Limits and these will be included in the local refinement consultation.</p>

Summary of the most common concerns raised about the changes to the proposed area of land needed to build the Lower Thames Crossing	Our response
Proposal	
<ul style="list-style-type: none"> ■ That the creation of open space sites at Tilbury Fields and Chalk Park occurs on existing open space, with suggestions that labelling these as new open space sites would be incorrect, or that the land should be left in its current form. 	<p>National Highways is committed to creating a positive green legacy, so Tilbury Fields and Chalk Park were developed to provide additional benefits to the community. It is correct to label these sites as new open space sites.</p> <p>The areas of land where Tilbury Fields and Chalk Park are situated may currently be ‘open’ in nature, but they are not formally designated as ‘open space’. Where land is designated as such, it would be accessible to the public for recreational purposes (such as dog walking or running). We are proposing to formally designate both areas as open space, to ensure further opportunities for public recreation are legally secured once the new road is open.</p> <p>Following the community impacts consultation, there are some revisions to our proposals for special category land at Tilbury Green, Tilbury Fields and Thames Chase Community Forest. We are also proposing further proposals for planting and additional publicly accessible green space linked to the east of Chalk Park. These will be set out in our local refinement consultation.</p>
<ul style="list-style-type: none"> ■ Comments that National Highways does not have the ability to fulfil the commitments set out in the proposals, with some consultees unsure that the project would keep its commitment to create open space sites. 	<p>All our proposals for open space sites will be included in our DCO application. If approved, the delivery of these sites would be a legally binding requirement of the DCO application.</p>

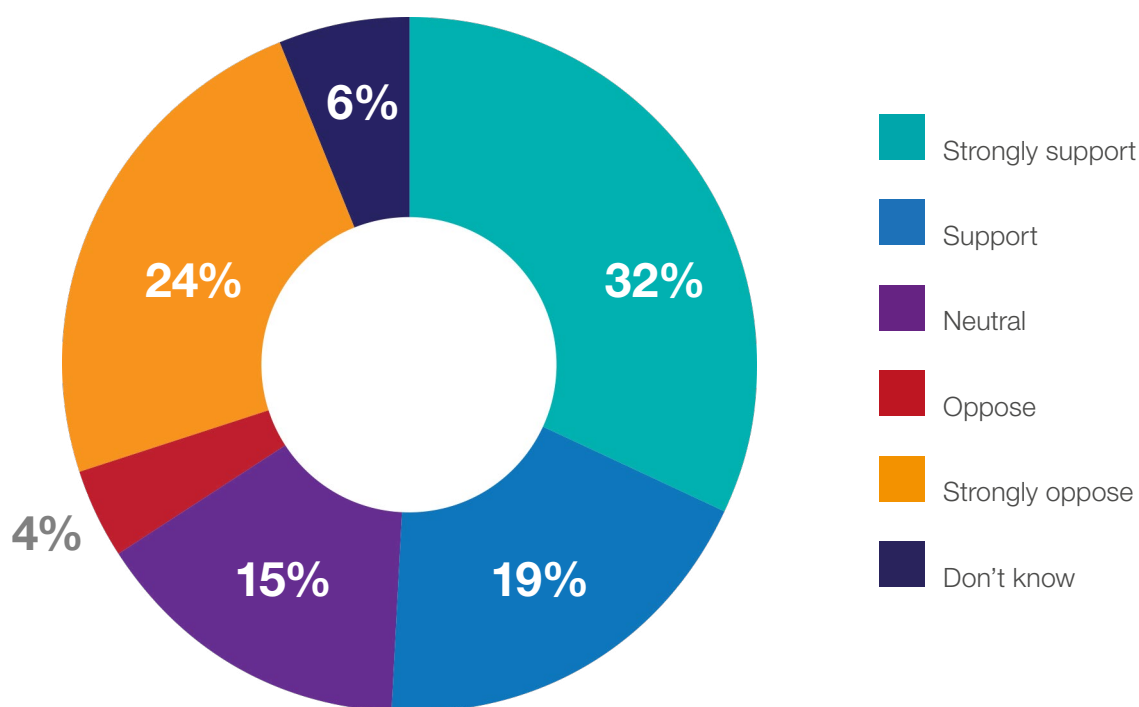
The following changes to special category land and private recreational facilities were presented in the community impacts consultation:

- **Shorne Woods Country Park** – acquiring replacement land for the affected area, which would be to the east of Brewers Wood.
- **Cyclopark** – temporary access to install a power cable underneath, or underground next to, the existing footpath. Permanent rights would be acquired to maintain the cable, however the use of the land would be unaffected. We reduced the width of the corridor to construct the works to the north of the A2.
- **Ron Evans Memorial Field** – acquiring two areas of replacement land to the south and west of the existing site.
- **Orsett Fen** – amended our proposal for replacement common land to be to the north and south of the existing common land.
- **Thames Chase Community Forest** – reduced the amount of replacement open space land, removing a previously proposed area of land on the eastern side of the M25. All proposed replacement land would be on the western side of the M25.
- **Gravesend Golf Centre** – potential proposal to replace the golf facility on land within the site of the Cascades Leisure Centre which is currently used as football pitches. If this is taken forward, we would provide football pitches on land to the south-east of the Cascades Leisure Centre.
- **Linford Allotments** – land would be required for the temporary construction and for permanent operation in relation to an existing overhead electricity cable and a new corridor for several utilities. The required rights would not affect use of the site as an allotment.
- **Orsett Park Royals Football Club pitches** – proposed to divert a gas pipeline to the south and east of the pitches.

The most common positive feedback about the changes proposed regarding special category land and private recreational facilities included:

- support on the basis that previous concerns have been addressed and the proposed mitigations are reasonable and sufficient
- general support due to the provision of additional recreational amenities and the benefits for the local community
- comments that prior concerns about the loss of other areas have been addressed and the proposals provide suitable replacement open spaces and woodland

We asked: do you support or oppose the changes proposed regarding special category land and private recreational facilities?



- **2,521** consultees answered this question
- **2,427** respondents were members of the public and other non-statutory organisations
- **88** respondents were people with an interest in land
- **6** respondents were statutory bodies and local authorities
- **1,278** (51%) respondents supported or strongly supported the changes proposed regarding special category land and private recreational facilities
- **783** (28%) respondents opposed or strongly opposed the changes proposed regarding special category land and private recreational facilities

The table on the next page summarises the most common concerns about the changes proposed regarding special category land and private recreational facilities.

51%

supported the changes proposed regarding special category land and private recreational facilities

Table 8: Most common concerns raised about the changes proposed regarding special category land and private recreational facilities

<p>Summary of the most common concerns raised about changes proposed regarding special category land and private recreational facilities</p>	<p>Our response</p>
<p>Environment</p>	
<ul style="list-style-type: none"> ■ The amount of special category land needed is too high and would negatively impact the visual landscape, including the loss of greenbelt, agricultural land and recreational amenities, as well as ancient woodland. Consultees say that building a road does not justify these losses and they cannot be recreated or replaced. ■ Comments about the environmental impact the project would have on special category land. Some say that the proposed changes would not mitigate against the impacts, with some consultees urging National Highways to do more for the environment. 	<p>The project has sought to avoid existing special category land while meeting design and engineering requirements. However, in some locations the project would impact existing areas of special category land, as set out in the Operations update in the community impacts consultation. Impacts vary from site to site depending on the works required in that area. Where we refer to special category land, we are using the definition from the Acquisition of Land Act 1981, which refers to common land, fuel or field allotment and open space.</p> <p>Where special category land is being temporarily impacted as a result of the construction of the project, this would not prevent the existing use of the land following the completion of works. The use of special category land during construction would be controlled in line with the measures set out in the CoCP and the land would be reinstated following completion of works, in accordance with the DCO.</p> <p>Where permanent rights are required over special category land for the operation and maintenance of utilities, we have worked with statutory undertakers to reduce any impacts on the land. In most cases, the rights required would not prejudice the existing use of the special category land.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about changes proposed regarding special category land and private recreational facilities	Our response
Environment	
	<p>In the few instances we are permanently impacting the use and nature of existing special category land, we are legally required to provide replacement land that is no less in area and no less advantageous to the public and to the people entitled to rights over the land acquired. When identifying replacement land, we have taken into consideration the size, quality and useability of our proposed replacement land.</p> <p>Replacement special category land has been designed to be sensitive to the surrounding area and would be landscaped in accordance with the Design principles and oLEMP, so that it effectively integrates into its surroundings and delivers long lasting benefits for the community and environment.</p> <p>The environmental impact assessment carried out for the project has considered the impacts of our special category land proposals. Where necessary, mitigation measures will be reported in the topic-specific chapters of the Environmental Statement. This will be submitted in support of the application for development consent.</p> <p>National Highways is committed to creating a positive green legacy. Tilbury Fields and Chalk Park were developed to provide additional benefits to the community. We are proposing to formally designate both areas as open space, to ensure further opportunities for public recreation are legally secured once the new road is open. Where land is designated as such, it would be accessible to the public for recreational purposes (such as dog walking or running).</p> <p>Following the community impacts consultation, we have refined our design proposals affecting special category land at Tilbury Green, Walton Common and Parsonage Common, and Thames Chase Community Forest. These will be presented in the local refinement consultation.</p>

Summary of the most common concerns raised about changes proposed regarding special category land and private recreational facilities

Our response

Environment

- The changes to special category land would negatively impact wildlife and their habitats. Some consultees question the suitability of relocating habitats to areas near the proposed road, which may pose risks to wildlife.

In our community impacts consultation, we set out the impacts to biodiversity (including wildlife) during construction and operation within the Ward impact summaries, including measures to reduce impacts. We also described impacts on special category land including our proposals for replacement land (where applicable).

The project has been designed to avoid designated sites, irreplaceable habitats and areas of semi-natural habitats such as woodland and marshland where possible. However, the proposed design will impact some habitats.

To offset any adverse effects, the proposed ecological mitigation and the landscape design has sought to provide habitats of greater biodiversity value than those that would be affected. The design also joins up these areas of newly created habitat as well as linking to areas of established and retained habitats such as the areas of ancient woodland in both Essex and Kent.

In developing our proposals for special category replacement land, we have selected land that would support and enhance wildlife integration. Our proposals at Thames Chase Community Forest and Shorne Woods Country Park demonstrate this. In both instances we have proposed replacement land that would be next to the affected site to provide connectivity for existing wildlife, with planting, landscaping and Public Rights of Way designed to integrate the new land into the existing site.

Continued on next page...

Summary of the most common concerns raised about changes proposed regarding special category land and private recreational facilities	Our response
Environment	
	<p>When relocating wildlife or habitat, all required protected species licenses would be in place before any construction work starts in areas where protected species are presented. Licences are issued by statutory bodies such as Natural England and the Environment Agency. Any draft licensing commitments would be included as part of our DCO application and would be monitored for a number of years after the project is complete, to comply with protected species licensing. This would ensure relocations are successful and that populations of the protected species are maintaining a favourable conservation status, as required to comply with the protected species licensing.</p>
<ul style="list-style-type: none"> ■ Comments about the air quality in areas close to special category land, including replacement land and its potential health impacts on those that use the areas. Some consultees question the usability of the areas due to their proximity to the proposed road. 	<p>Wherever possible, we have tried to make sure that any replacement land is connected to existing land (that is impacted by the project) to allow proper connectivity and to ensure communities are not losing local spaces.</p> <p>Although there would be some increases and decreases in air quality along the length of the LTC route, including where it is crossed by special category land, the assessments we presented at the community impacts consultation show that overall air quality impacts on human health is not considered to be significant.</p> <p>During the community impacts consultation, we presented information about the predicted air quality impacts of the project. This was presented on a project level within the Operations update and at a ward level within the Ward impact summaries.</p>

Summary of the most common concerns raised about changes proposed regarding special category land and private recreational facilities	Our response
Local community	
<ul style="list-style-type: none"> ■ Comments that the changes to special category land would negatively affect the local community, including concerns about the impacts on their quality of life. ■ That the local community would be negatively impacted by the projects impact on private recreational facilities. Consultees express concern that these would not be replaced and say that the amenities are important for the health and wellbeing of the local community. 	<p>The project has been designed to avoid impacts on special category land and private recreational facilities where possible. Where impacts are unavoidable, mitigation has been included in the design to reduce them. Our proposals relating to special category land and private recreational facilities were set out in the community impacts consultation.</p> <p>Where we are permanently impacting the use and nature of existing special category land, we are legally required to provide replacement land that is no less in area and no less advantageous to the public and to the people entitled to rights over the land acquired. When identifying replacement land, we have taken into consideration the size, quality and usability of our proposed replacement land.</p> <p>The project would also impact on some private recreational facilities that are not special category land. Most of these impacts are temporary as a result of the construction of the project. We have worked closely with businesses to seek to reduce the impacts on them during construction and would reinstate existing land uses following the completion of works wherever possible.</p> <p>Where businesses would be unable to continue operating as a result of the project, appropriate compensation may be payable, in accordance with the Compensation Code.</p> <p>A full assessment of our effects on special category land and private recreational facilities has been carried out and will be reported in the Environmental Statement and Planning Statement submitted in support of the application for development consent.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about changes proposed regarding special category land and private recreational facilities	Our response
Local community	
	<p>Creating a positive green legacy sits at the heart of our project. Following our community impacts consultation, we have found opportunities to improve access to the proposed new open spaces, Tilbury Fields and Chalk Park. These proposals will be shared in our local refinement consultation.</p> <p>Following the community impacts consultation, we have refined our design proposals affecting some areas of special category land and private recreational facilities. These will be presented in the local refinement consultation.</p>

Summary of the most common concerns raised about changes proposed regarding special category land and private recreational facilities	Our response
Proposals for special category land	
<ul style="list-style-type: none"> ■ Comments that the proposals for special category land provide insufficient mitigation against the negative impacts of the project on the environment. ■ That the proposals for special category land are a distraction and ‘greenwashing’. ■ Opposition to the proposals for special category land. 	<p>More than half of those who responded to this question, supported or strongly supported our proposals for special category land.</p> <p>In some locations, the project is impacting existing areas of special category land, as set out in our community impacts consultation. Our proposals include replacement land for some of the special category land, that we propose to acquire through compulsory purchase. Where replacement land is being provided, we are legally required to provide land which is no less in area and no less advantageous to the public and to the people entitled to rights over the land to be acquired.</p> <p>Where we have proposed replacement land, our aim has been to provide opportunities for recreation and habitat creation. Our proposals at Thames Chase Community Forest and Shorne Woods Country Park demonstrate this. In both instances, we have proposed replacement land, which would be next to the affected site, with planting, landscaping and Public Rights of Way designed to integrate the new land into the existing site.</p> <p>To make sure the most effective and appropriate mitigation strategy is followed, we have an extensive, ongoing programme of engagement with relevant statutory bodies such as the Environment Agency, Natural England and Historic England.</p> <p>Following our community impacts consultation, we are planning changes to the project that would require amendments to some of our proposals for special category land. Information about these changes will be described in our local refinement consultation.</p>

Summary of the most common concerns raised about changes proposed regarding special category land and private recreational facilities

Our response

Thames Chase Community Forest

- Comments about the impact of the changes to Thames Chase Community Forest, including high land take resulting in the loss of the natural environment and recreational space. Consultees say that replacement land would not mitigate for this loss, with some concern about how the forest would be accessed.

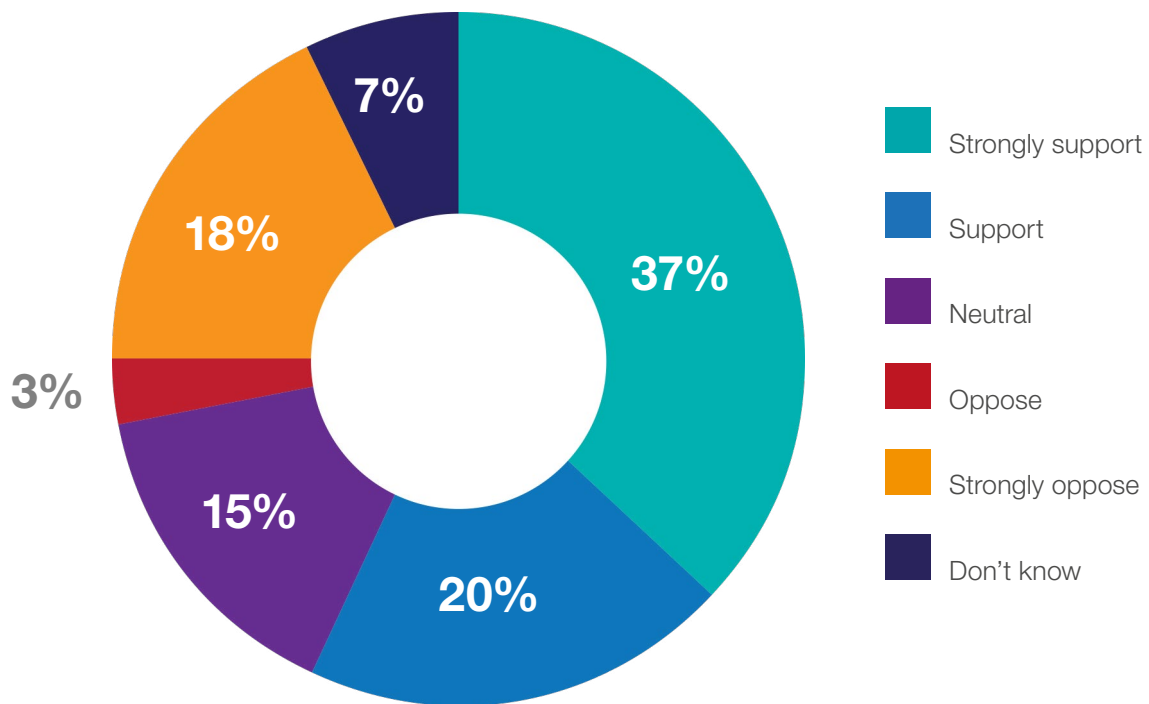
We have engaged with the Thames Chase Trust and other stakeholders to develop the proposals and minimise any adverse effects including the extent of land required. To compensate for the loss of part of the site, our design includes replacement land to the north and south of the Thames Chase Forest Centre, which would be similar to, or better than, the existing land.

We have proposed an expansion of the walking, cycling and horse riding networks, with a new bridge over the M25 at Thames Chase Community Forest. We would also maintain, upgrade and, in certain locations, improve the wider walking, cycling and horse riding networks in the areas close to the new road. In addition, we would provide overpasses to maintain road connectivity between communities on either side of the route. For example, the new footbridge over the M25 would provide access from Ockendon Road and Clay Tye Road, reconnecting the Thames Chase Community Forest to the Land of the Fanns project and wider environment.

During the community impacts consultation, we explained that we had reduced the amount of replacement open space land, removing a previously proposed area of land on the eastern side of the M25. It was proposed to move the replacement open space land to the western side of the M25, situated north and south of the existing Thames Chase Community Forest.

Following the community impacts consultation and further engagement, we have developed our utilities proposals to reduce land take in this location. We would now use more of the existing utilities infrastructure. This change will be presented in our local refinement consultation.

We asked: do you support or oppose our proposals for the inclusion of a new open space site, Tilbury Fields?



- **2,503** consultees answered this question
- **2,409** respondents were members of the public and other non-statutory organisations
- **88** respondents were people with an interest in land
- **6** respondents were statutory bodies and local authorities
- **1,432** (57%) respondents supported or strongly supported the proposals for the inclusion of a new open space site, Tilbury Fields
- **528** (21%) respondents opposed or strongly opposed the proposals for the inclusion of a new open space site, Tilbury Fields

57%

supported the proposals for the inclusion of a new open space site, Tilbury Fields

Tilbury Fields

In the community impacts consultation, we proposed a new open space site of around 45 hectares, Tilbury Fields. The area would be publicly accessible and allow users to explore interesting landforms and raised areas. We also consulted on two options for the height of the landform, 16.5 metres and 22.5 metres.

Tilbury Fields would form a key part of the Port of Tilbury growth plans and its Freeport proposal. Working with the Port of Tilbury and Thurrock Council, we have made a change to the land use in this area and will be consulting on a revised proposal for Tilbury Fields in the local refinement consultation.

Following that consultation, it became clear that part of the land previously proposed for

The most common positive feedback about the proposal for the inclusion of a new open space site, Tilbury Fields, included:

- support on the basis that it offers an improvement on previous proposals and has addressed concerns, and shows consideration for local needs
- support as it would benefit the local community and improve the health and wellbeing of local residents

The table on the next page summarises the most common concerns about the proposals for the inclusion of a new open space site, Tilbury Fields.

Table 9: Most common concerns raised about the proposals for the inclusion of a new open space site, Tilbury Fields

Summary of the most common concerns raised about Tilbury Fields	Our response
Proposal	
<ul style="list-style-type: none"> ■ Comments that the proposed open space site does not sufficiently mitigate the long-term damage caused by the project, with consultees concerned that the perceived negative impacts outweigh the benefits of the open space site. ■ The proposed open space site is unnecessary, with some consultees claiming the area is already open space used for recreation purposes and questioning why the land could not be left as it is. ■ The perceived negative impact on local communities the proposed open space site would have, as well as that it will bring no benefits. 	<p>As well as mitigating the direct impact of the road’s construction and operation, the project has set out to create a positive legacy of green infrastructure for local communities and the environment. We have identified opportunities to improve access to semi-natural open spaces, such as the proposal for Tilbury Fields.</p> <p>At the community impacts consultation, we proposed a new park of around 45 hectares, Tilbury Fields, on the northern banks of the River Thames, just west of the northern tunnel entrance. This land, next to the site of the former Tilbury Power Station, is going through a phase of restoration and improvement.</p> <p>Over the past 10 years, many of the major infrastructure projects in London have contributed clean material to raise the ground level and restore it to farmland. We are likely to be the last remaining project to work here and plan to create the area known as Tilbury Fields.</p> <p>The new open space site at Tilbury Fields would create habitats, help to connect existing habitat areas, and provide a new park with accessible footpaths and viewpoints for the local community and visitors. There would be far-reaching views of the Thames Estuary and surrounding historical features such as Coalhouse Fort, Cliffe Fort and Shornemead Fort. The park could be reached via the Two Forts Way and accessible routes would connect it to local footpaths in the north, improving access to the riverfront and providing recreational loops.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about Tilbury Fields	Our response
Proposal	
	<p>The areas of land where Tilbury Fields would be situated may be 'open' in nature, but they are not formally designated as 'open space'. Where land is designated as 'open space', it would be accessible to the public for recreational purposes (such as dog walking or running). We are proposing formally to designate Tilbury Fields as open space, to ensure further opportunities for public recreation would be legally secured once the new road is open.</p> <p>In the community impacts consultation, of the consultees who responded, 57% supported or strongly supported the inclusion of the new open space site. We are proposing further refinements to Tilbury Fields, which will be presented in the local refinement consultation.</p>

Summary of the most common concerns raised about Tilbury Fields	Our response
Excavated material	
<ul style="list-style-type: none"> ■ Comments saying that the proposed open space site is intended to ‘greenwash’ the project and serves the purpose of cutting costs on waste disposal. ■ The use of excavated material for the proposed open space site is purely for convenience. ■ The Tilbury area could be used as a ‘dumping ground’, with comments asking whether the excavated material would be suitable for use and free from contaminants. 	<p>In line with feedback received during statutory consultation, we would use excavated material to create landforms and habitats near the tunnel entrances, such as at Tilbury Fields. The proposals would create new habitats at this location, helping to connect existing nature reserves, and provide a new park with accessible footpaths and viewpoints for the local community and visitors.</p> <p>Moving excavated materials off-site would increase costs, increase the impacts on the local transport networks, and increase pressure on the local waste management infrastructure. Our proposals do deliver better value for money, and also reduce the impacts associated with the delivery of the project.</p> <p>Excavated materials from the tunnels would be treated and then used in land forming. Reusing the excavated material in this way allows for the development of the new public space, while reducing HGV movements associated with taking the excavated material off site.</p> <p>We provided further information during our community impacts consultation via the Outline Site Waste Management Plan. This set out the key principles and procedures for managing waste during the construction of the LTC, and how mitigation and commitments would be secured within the DCO application, including the required environmental permits for the treatment and reuse of excavated material. The finalised plan will be submitted as part of our DCO application.</p> <p>During the community impacts consultation, we provided information on the potential risk of contamination from East Tilbury landfill and other nearby sites, and how we have assessed and would mitigate this risk. This information was set out in the Ward impact summaries. The overall impact from these contamination sources is considered to be low, given the mitigation proposed.</p> <p>Continued on next page...</p>

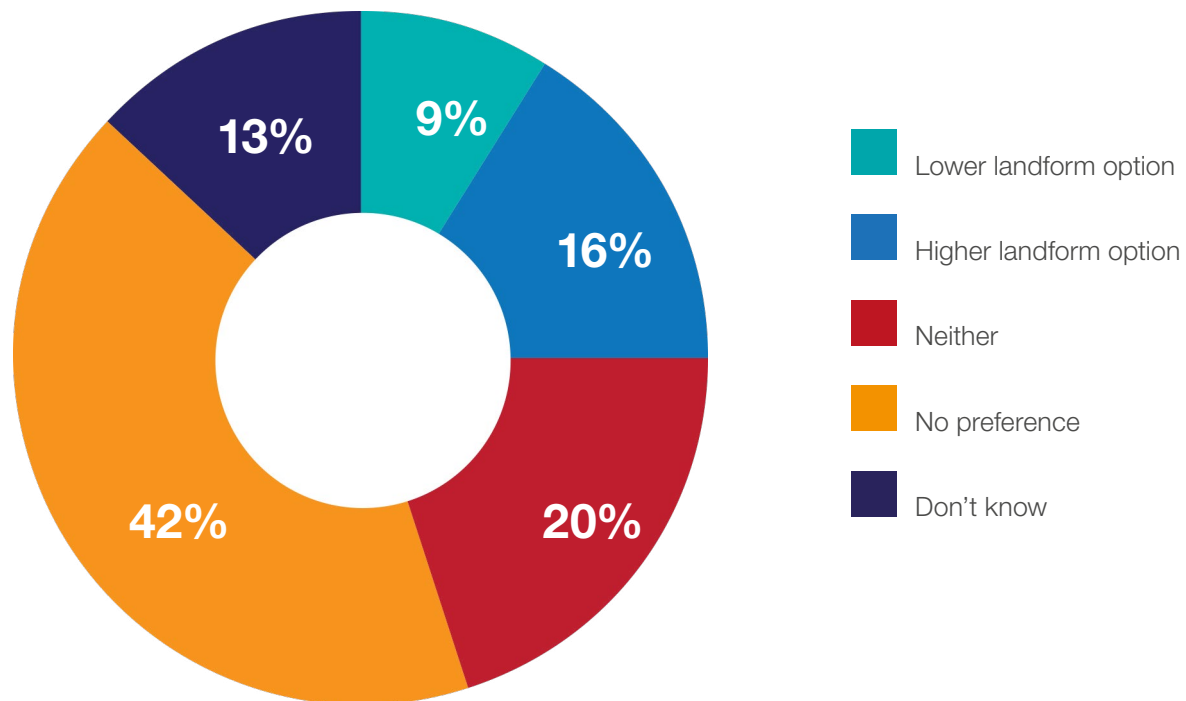
Summary of the most common concerns raised about Tilbury Fields	Our response
Excavated material	
	<p>Following engagement with Thurrock Council and the Port of Tilbury on the land required for the development of the Thames Freeport, a revised proposal for Tilbury Fields has been prepared and will be set out in the local refinement consultation. The revised proposals maintain the use of excavated materials to create ecological mitigation and landforms.</p> <p>We are also proposing additional design and landscaping changes to the project, which would minimise the quantities of excavated material that require off-site disposal and the associated pressures on local waste management infrastructure. This would further considerably reduce truck movements from the local road network during the construction period (compared with the proposals at the community impacts consultation). Changes to the design and landscaping proposals will be presented in our local refinement consultation.</p>

Summary of the most common concerns raised about Tilbury Fields	Our response
Flooding	
<ul style="list-style-type: none"> ■ Comments that the proposed open space site would be built at the expense of the existing flood plains, putting the area at greater risk of flooding, which could be exacerbated by the project and the use of excavated material. 	<p>It is a policy requirement to ensure that flood risk is not increased as a result of constructing or operating the project. A site-specific flood risk assessment that demonstrates how this requirement will be met is included in the project's Environmental Statement (ES). These documents will be submitted as part of our application for development consent later in 2022.</p> <p>Tilbury Fields is at risk from flooding due to its low-lying nature and proximity to the River Thames. The principal flood risks in Tilbury Fields are fluvial flooding and flooding due to tidal surges. These risks will be exacerbated over time due to the effects of climate change.</p> <p>To ensure that flood risk in Tilbury Fields would not increase during construction or operation, the project includes the provision of flood alleviation measures. The measures we have incorporated include the provision of a compensatory flood storage area (CFSA) and alterations to the channel of a main river (West Tilbury Main). A CFSA is an area that is set aside to accommodate flood water displaced by the project. Alterations to the West Tilbury Main channel will improve its hydraulic performance and regulate its flow during flood events. The alterations will comprise removal of constrictions and establishing flow control measures.</p> <p>The design of flood measures must include allowances to offset the impact of climate change. Climate change allowances are predictions of anticipated change for peak river flow, peak rainfall intensity and sea level rise. For Tilbury Fields, the alleviation measures include allowances for projected climate change predictions for 2130 (i.e. 100 years after the opening date of the project). During the construction period, flood alleviation measures will include allowances for projected climate change predictions for 2030 (i.e. construction completion year).</p>

Summary of the most common concerns raised about Tilbury Fields	Our response
Management and maintenance	
<ul style="list-style-type: none"> ■ Comments about the management and maintenance of the proposed open space site at Tilbury Fields, with questions whether Thurrock Council would manage the new site, and the potential for antisocial behaviour. 	<p>The proposed new park would be implemented and maintained in association with the relevant local stakeholders to ensure the area is managed appropriately for the benefit of local communities.</p> <p>We will continue to work with the relevant parties, including the police and other emergency services, to identify areas of concern such as antisocial behaviour and agree appropriate mitigation.</p>
Air quality	
<ul style="list-style-type: none"> ■ The potential health impacts of poor air quality for users of the proposed open space site, particularly due to its proximity to the proposed new road. 	<p>During the community impacts consultation we provided information in the Ward impact summaries about the predicted impact on air quality once the road was open, and how we would mitigate this.</p> <p>Our air quality modelling for the area around Tilbury Fields showed a minimal increase in pollutants as a result of project-related predicted changes in traffic flows and the new road. Although there would be some worsening in air quality where the route is immediately next to the proposed Tilbury Fields site, it would comply with air quality standards. These assessed air quality impacts would therefore not trigger the need for additional monitoring or other mitigation measures once the road is open.</p>

Summary of the most common concerns raised about Tilbury Fields	Our response
Environment	
<ul style="list-style-type: none"> ■ Comments about the impact of the proposed open space site on the local environment, including concerns about the potential negative impact on existing wildlife and habitats, such as Tilbury Marshland. Examples given include rare newts, water voles, bats, badgers, birds and invertebrates. 	<p>The proposed landscape design for Tilbury Fields would provide habitats suitable for amphibians, reptiles, birds, bees and other insects to increase the biodiversity value of the area from its previous use as arable farmland. This area of habitat creation would provide a green link to other new habitats, largely associated with historic and currently active landfill sites. This would create an east-west connection to the east at Mucking Flats and Marshes landfill restoration and the Thameside Nature Reserve, and to the area of mitigation created to the west. It would also provide a north-south link to local wildlife sites and further areas of proposed habitat creation in Linford to the north.</p> <p>During the community impacts consultation we provided information on how we have assessed and would mitigate the impacts of construction and operation on existing wildlife and habitats at this location, including the Thames Estuary and Marshes Special Protection Area and Ramsar, and the Mucking Flats and Marshes SSSI. This information was set out in the Ward impact summaries. We also consulted on the CoCP and the REAC, which set out the range of bespoke and good practice mitigation measures that would control these impacts on wildlife and habitats.</p>

We asked: of the two options presented for the height of the landform at Tilbury Fields, do you prefer the lower landform option or higher landform option?



- **2,481** consultees answered this question
- **2,389** respondents were members of the public and other non-statutory organisations
- **86** respondents were people with an interest in land
- **6** respondents were from statutory bodies and local authorities
- **226** (9%) respondents were in favour of the lower landform
- **387** (16%) respondents were in favour of the higher landform
- **501** (20%) respondents were in favour of neither landform
- **1,051** (42%) respondents had no preference

42%

had no preference of either the higher or lower landform

Landform height at Tilbury Fields

In the community impacts consultation, we consulted on two options for the height of the landform at Tilbury Fields, 16.5 metres and 22.5 metres. The number and location of the landforms has been amended to respond

to future development at Thames Freeport. The revised proposal for the landform and Tilbury Fields will be described in the local refinement consultation.

The most common positive feedback about the presented heights of the landform at Tilbury Fields included:

- general comments supporting the proposal
- support for the higher option as:
 - it would provide a better visual landscape and a superior viewpoint
 - it reduces the need to move waste material longer distances
 - there would be less risk of the land flooding, particularly in the context of climate change and potential rising sea levels
- support for the lower option as it would have less visual impact on the landscape and be less intrusive

The table on the next page summarises the most common concerns about the presented heights of the landform at Tilbury Fields.

Table 10: Most common concerns raised about the height of the landform at Tilbury Fields

Summary of the most common concerns raised about the height of the landform at Tilbury Fields	Our response
Proposal	
<ul style="list-style-type: none"> ■ General comments about the landform proposals for Tilbury Fields, including that it acts as a distraction from the project’s larger environmental issues. ■ The impact of either landform option on the local community, including that it could limit pedestrian access to open spaces in the area, might not be pleasant to visit and might not provide sufficient mitigation for the project as a whole. 	<p>As well as mitigating the direct impact of the road’s construction and operation, the project has set out to create a positive legacy of green infrastructure for local communities and the environment. We have identified opportunities to improve access to semi-natural open spaces, such as the proposal for Tilbury Fields.</p> <p>The new open space site at Tilbury Fields would create habitats, help to connect existing habitat areas, and provide a new park with accessible footpaths and viewpoints for the local community and visitors. There would be far-reaching views of the Thames Estuary and surrounding historical features such as Coalhouse Fort, Cliffe Fort and Shornemead Fort. The park could be reached via the Two Forts Way and accessible routes would connect it to local footpaths in the north, improving access to the riverfront and providing recreational loops.</p> <p>Following feedback to the consultation and ongoing stakeholder engagement, we have revised our proposals for Tilbury Fields which will be presented in the local refinement consultation.</p>
Excavated material	
<ul style="list-style-type: none"> ■ The use of excavated material to create either landform option, including that the proposal is just a means to dispose of excavated material and concerns that it may be unsafe or contaminated. 	<p>In line with feedback received during statutory consultation, we would use excavated material to create landforms and habitats near the tunnel entrances, such as at Tilbury Fields. The proposals would create new habitats at this location, helping to connect existing nature reserves, and provide a new park with accessible footpaths and viewpoints for the local community and visitors.</p> <p>Continued on next page...</p>

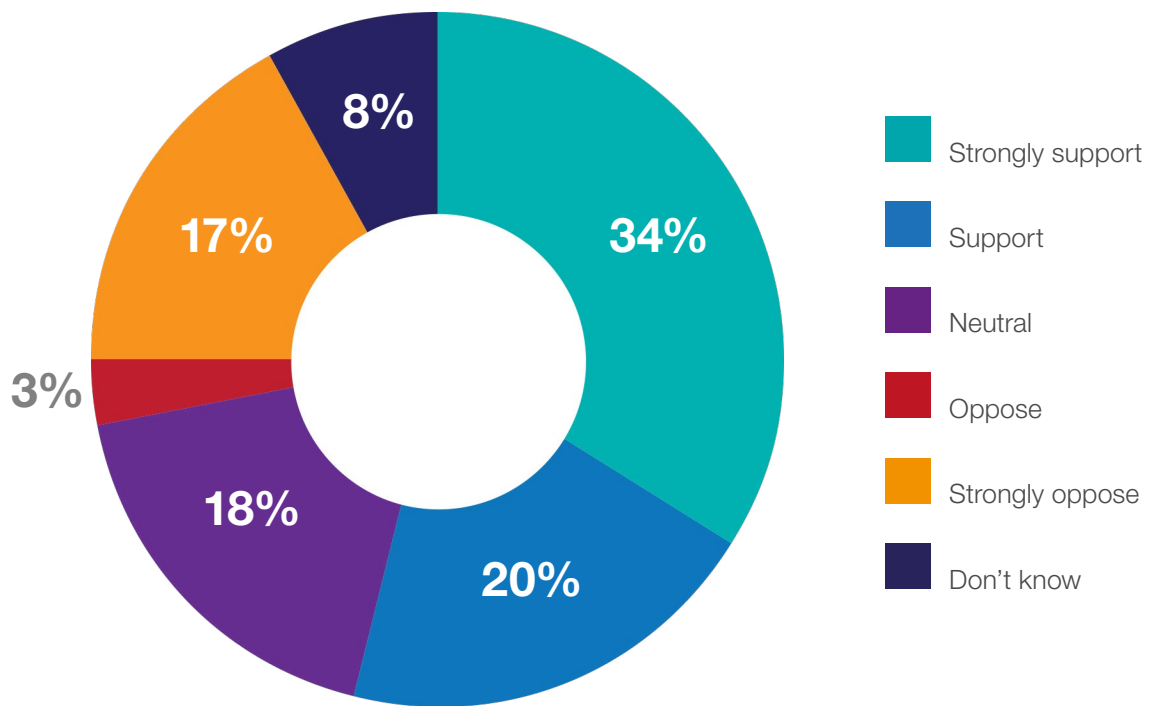
Summary of the most common concerns raised about the height of the landform at Tilbury Fields	Our response
Excavated material	
	<p>Moving excavated materials off-site would increase costs, increase the impacts on the local transport networks, and increase pressure on the local waste management infrastructure. Our proposals do deliver better value for money, and also reduce the impacts associated with the delivery of the project.</p> <p>Excavated materials from the tunnels would be treated and then used in land forming. Reusing the excavated material in this way allows for the development of the new public space, while reducing HGV movements associated with taking the excavated material off site.</p> <p>We provided further information during our community impacts consultation via the Outline Site Waste Management Plan. This set out the key principles and procedures for managing waste during the construction of the LTC, and how mitigation and commitments would be secured within the DCO application, including the required environmental permits for the treatment and reuse of excavated material. The finalised plan will be submitted as part of our application.</p> <p>During the community impacts consultation we provided information on the potential risk of contamination from East Tilbury landfill and other nearby sites, and how we have assessed and would mitigate this risk. This information was set out in the Ward impact summaries. The overall impact from these contamination sources is considered to be low, given the mitigation proposed.</p> <p>Following feedback on the land required for the development of Thames Freeport, a revised proposal for Tilbury Fields has been prepared and will be set out in the local refinement consultation. The revised proposal maintains the use of excavated materials to create ecological mitigation and landforms.</p>

Summary of the most common concerns raised about the height of the landform at Tilbury Fields	Our response
Flooding	
<ul style="list-style-type: none"> ■ Comments about the potential of an increased risk of flooding due to the construction of the proposed open space site on existing flood plains. Consultees suggested that a Flood Risk Assessment is needed prior to the construction of the landform. 	<p>We have described the measures we have taken when designing the proposed site for Tilbury Fields earlier on page 80.</p> <p>It is a policy requirement to ensure that flood risk is not increased as a result of constructing or operating the project. A site-specific flood risk assessment that demonstrates how this requirement has been met will be included in the project's ES. These documents will be submitted as part of our DCO application.</p>
Visual impact and landscape	
<ul style="list-style-type: none"> ■ The impact of either landform option on the visual landscape, with comments that the landform would be too high, would fail to blend in with the current low-level landscape, could be visually unattractive or could negatively impact existing views. ■ The impact of the higher landform option on the visual landscape, with some consultees believing up to 22.5 metres would be too high. ■ Concerns were raised about the accuracy of the visuals provided as part of the consultation, and that it could be difficult to visualise what 22.5 metres would look like. 	<p>We consulted on the height and visual impacts of our Tilbury Fields proposals during the community impacts consultation.</p> <p>A key component of the design was a landform offering far-reaching views of the Thames Estuary and a line of sight between Tilbury and Coalhouse Forts on the northern side of the river.</p> <p>Of the consultees who responded to the options for the height of Tilbury Fields, 42% had no preference.</p> <p>We are proposing changes to our design for Tilbury Fields, which will be presented in the local refinement consultation.</p>

Summary of the most common concerns raised about the height of the landform at Tilbury Fields	Our response
Air quality	
<ul style="list-style-type: none"> <li data-bbox="172 510 571 667">■ The health impacts of poor air quality for users of the park due to its proximity to the proposed road. <li data-bbox="172 723 571 880">■ The landform options would be ineffective in mitigating the air quality problems in the area. 	<p data-bbox="611 510 1401 622">During the community impacts consultation we provided information in the Ward impact summaries about the predicted impact on air quality once the road was open, and how we would mitigate this.</p> <p data-bbox="611 678 1425 1014">Our air quality modelling for the area around Tilbury Fields showed a minimal increase in pollutants as a result of project-related changes in traffic flows and the new road. Although there would be some worsening in air quality where the route is immediately next to the proposed Tilbury Fields site, it would comply with air quality standards. These assessed air quality impacts would therefore not trigger the need for additional monitoring or other mitigation measures once the road is open.</p>

Summary of the most common concerns raised about the height of the landform at Tilbury Fields	Our response
Environment	
<ul style="list-style-type: none"> ■ Comments about the potential negative impact of either landform option on existing wildlife and habitats, as well as the implications for ecosystems, biodiversity and ancient woodland. 	<p>The proposed landscape design for Tilbury Fields would provide habitats suitable for amphibians, reptiles, birds, bees and other insects to increase the biodiversity value of the area from its previous use as arable farmland. This area of habitat creation would provide a green link to other new habitats, largely associated with historic and currently active landfill sites. This would create an east-west connection to the east at Mucking Flats and Marshes landfill restoration and the Thameside Nature Reserve, and to the area of mitigation created to the west. It would also provide a north-south link to local wildlife sites and further areas of proposed habitat creation in Linford to the north.</p> <p>During the community impacts consultation we provided information on how we have assessed and would mitigate the impacts of construction and operation on existing wildlife and habitats at this location, including the Thames Estuary and Marshes Special Protection Area and Ramsar, and the Mucking Flats and Marshes SSSI. This information was set out in the Ward impact summaries. We also consulted on the CoCP and the REAC, which set out the range of bespoke and good practice mitigation measures that would control these impacts on wildlife and habitats.</p> <p>We are proposing changes to our design for Tilbury Fields, which will be presented in the local refinement consultation. This will include information about the environmental opportunities that would be created by the revised proposal.</p>

We asked: do you support our proposals for the inclusion of a new open space site, Chalk Park



- **2,508** consultees answered this question
- **2,410** respondents were members of the public and other non-statutory organisations
- **92** respondents were people with an interest in land
- **6** respondents were from statutory bodies and local authorities
- **1,353** (54%) respondents supported or strongly supported the proposals for the inclusion of a new open space site, Chalk Park
- **497** (20%) respondents opposed or strongly opposed the proposals for the inclusion of a new open space site, Chalk Park

54%

supported the proposals for the inclusion of a new open space site, Chalk Park

Additional publicly accessible space

Following further engagement with the landowner and additional design development, we are consulting on a proposal to acquire the remaining 8 hectares area of Southern

Valley Golf Club. This would provide additional publicly accessible space to the east of Chalk Park. This proposal will be presented in our local refinement consultation.

The most common positive feedback about the proposal for the inclusion of the new Chalk Park open space site included:

- general support and comments that any new open space is welcome
- feedback saying it would offer significant benefits to the local community as a place for recreation
- comments requesting that the proposal and the project are implemented as soon as possible

The table on the next page summarises the most common concerns about the proposal for the inclusion of a new open space site, Chalk Park.

Table 11: Most common concerns raised about the proposal for the inclusion of a new open space site, Chalk Park

Summary of the most common concerns raised about Chalk Park	Our response
Proposal	
<ul style="list-style-type: none"> ■ Comments that the open space site could have a negative impact on the mental and physical wellbeing of the local community, particularly during the building phase. ■ The open space site provides insufficient mitigation for the negative impacts of the project, including the loss of wildlife and woodland. ■ The proposal is a ‘tick-box’ or PR exercise to distract from the negative environmental impacts of the project, with comments that the site would provide no real benefit to local residents, or that the proposal would not be implemented as proposed. ■ The open space site proposal is unnecessary, with comments that there is already open space and questions about the relevance of the proposal to the project. 	<p>As well as mitigating the direct impact of the road’s construction and operation, the project has set out to create a positive legacy of green infrastructure for local communities and the environment. We have identified opportunities to improve access to semi-natural open spaces, such as the proposal for Chalk Park.</p> <p>Chalk Park would provide a recreational area for the local community and create a desirable separation between the southern tunnel entrance and the eastern edge of Gravesend. It would be on part of the Southern Valley Golf Club site, which would be permanently acquired.</p> <p>Within the new area, recreational routes are proposed that would connect with existing Public Rights of Way. The proposed recreational area would have open views to the Kent Downs Area of Outstanding Natural Beauty and the River Thames, with woodland planting to integrate with the existing landscape.</p> <p>The land would be designed to reflect the existing landscape character of rolling chalk grassland and would retain views up to the wooded hilltops within Shorne Woods and the setting to Kent Downs Area of Outstanding Natural Beauty.</p> <p>The existing height of this land would be retained, and the planting would include species that provide a rich chalk grassland habitat and woodland groups that are reflective of the local area. The land would provide additional biodiversity benefits as well as enhancing the visual experience of local footpath users.</p> <p>Continued on next page...</p>

Summary of the most common concerns raised about Chalk Park	Our response
Proposal	
	<p>The areas of land where Chalk Park would be situated may be ‘open’ in nature, but they are not formally designated as ‘open space’.</p> <p>Where land is designated as ‘open space’, it would be accessible to the public for recreational purposes (such as dog walking or running). We are proposing to formally designate Chalk Park as open space, to ensure further opportunities for public recreation would be legally secured once the new road is open.</p> <p>Following feedback received during the community impacts consultation, we are proposing additional publicly accessible green space linked to the east of Chalk Park, which will be presented in the local refinement consultation.</p> <p>All our proposals for open space sites will be included in our DCO application. If approved, the delivery of these sites would be a legally binding requirement of the DCO application.</p>

Summary of the most common concerns raised about Chalk Park	Our response
Excavated material	
<ul style="list-style-type: none"> ■ That the open space site is being proposed as a means of disposing of excavated material, without consideration of the suitability of the excavated material. 	<p>In line with feedback received during statutory consultation, we would use excavated material to create landforms and habitats near the tunnel entrances. One of these would be Chalk Park, which would provide a recreational area for the local community and rich, chalk grassland habitats and woodland groups that are reflective of the local area.</p> <p>Moving excavated materials off-site would increase costs, increase the impacts on the local transport networks, and increase pressure on the local waste management infrastructure. Our proposals do deliver better value for money, and also reduce the impacts associated with the delivery of the project.</p> <p>Excavated materials from the tunnels would be treated and then used in land forming. Reusing the excavated material in this way allows for the development of the new public space, while reducing HGV movements associated with taking the excavated material off site.</p> <p>We provided further information during our community impacts consultation via the Outline Site Waste Management Plan. This set out the key principles and procedures for managing waste during the construction of the LTC, and how mitigation and commitments would be secured within the DCO application, including the required environmental permits for the treatment and reuse of excavated material. The finalised plan will be submitted as part of our DCO application.</p>

Summary of the most common concerns raised about Chalk Park	Our response
Management and maintenance	
<ul style="list-style-type: none"> ■ Concerns that the site could lead to increased traffic and antisocial behaviour in the area. 	<p>Chalk Park is designed to be a new open space for the benefit of the local community. Access would primarily be via new or existing footpaths and Public Rights of Way, so would not lead to any significant increase in traffic.</p> <p>The proposed new park would be implemented and maintained in association with the relevant local stakeholders to ensure the area is managed appropriately for the benefit of local communities.</p> <p>We will continue to work with the relevant parties, including the police and other emergency services, to identify areas of concern such as antisocial behaviour and agree appropriate mitigation.</p>

Summary of the most common concerns raised about Chalk Park	Our response
Air quality and noise	
<ul style="list-style-type: none"> ■ Comments about the impact on health of poor air quality for users of the open space, due to the proximity of the proposed road. ■ Concerns about the impact of noise levels on the open space site and its usability, due to the proximity of the proposed road. 	<p>We provided information about the predicted impact of the operational project on air quality and noise during the community impacts consultation, and how we would mitigate this. This was presented on a project wide level within the Operations update and at a ward level within the Ward impact summaries.</p> <p>Our modelling for the area around Chalk Park showed that there would be a minimal increase in pollutants and noise as a result of project-related changes in traffic flows and the new road. Although there would be some drop in air quality and noise where the route is immediately adjacent to the proposed site for Chalk Park, the levels in these areas would still comply with air quality and noise standards. These assessed impacts would therefore not trigger the need for additional monitoring or other mitigation measures once the road is open.</p> <p>In some locations we have proposed noise barriers, and we would also use low-noise road surfacing to reduce traffic noise once the road is in use.</p>

Summary of the most common concerns raised about Chalk Park	Our response
Environment	
<ul style="list-style-type: none"> ■ Comments about the negative visual impact of the site and the loss of ancient woodland, greenbelt land and agricultural land. ■ Concerns about the loss of wildlife habitats and biodiversity as a result of the proposed open space, and that the proposed mitigations would be insufficient to replace existing habitats. 	<p>During the community impacts consultation, we consulted on the visual impacts of the project's construction and our proposed mitigation measures including our plans for Chalk Park.</p> <p>The park would be landscaped to reflect the wider area with rich grassland/woodland planting that sits around the southern tunnel entrance area, providing additional biodiversity and enhancing the visual experience for local people.</p> <p>No ancient woodland would be lost in the area proposed for Chalk Park, and the land would continue to qualify as greenbelt. The proposals would result in a loss of some agricultural land. Compensatory planting is being proposed elsewhere to help offset impacts to the Shorne and Ashenbank Woods SSSI and ancient woodland (including Claylane Wood) by linking areas of woodland to provide greater resilience, as well as providing a buffer to these protected areas from future development.</p> <p>This approach has been developed in response to a request from stakeholders, such as Natural England, to help link up areas of ancient and SSSI woodlands in this area to improve connectivity for both plants and wildlife. This landscape-scale approach considers the environmental, social and economic benefits across the area rather than at individual sites.</p> <p>Mitigation measures for wildlife are incorporated into the landscape and planting design. This would replace habitats with a lower biodiversity value (for example, arable fields) with species-rich grassland and hedgerows, as well as scrub and tree planting, and wetland areas for amphibians and reptiles.</p>

You said, we did

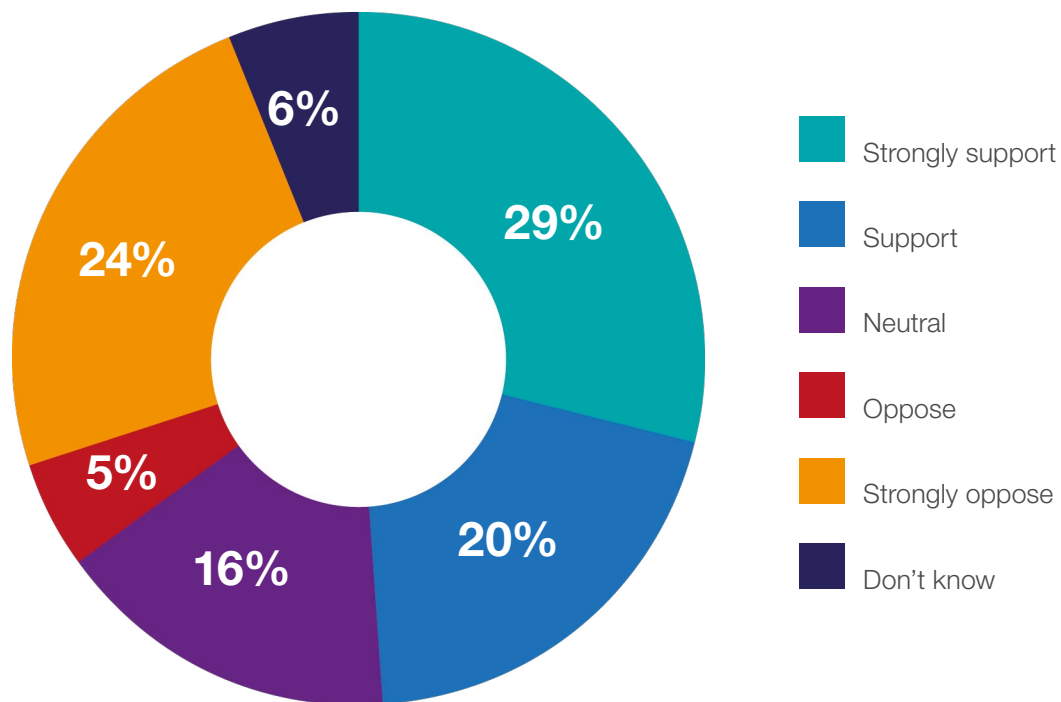
We produced a 'You said, we did' document to provide a summary of the feedback from the statutory, supplementary and design refinement consultations. Each consultation was discussed in a separate chapter, together with the most common feedback, the 25 most common suggestions and our responses to issues raised. It also set out what we have done in response to your comments.

The most common positive feedback on how issues and suggestions about the Lower Thames Crossing have been addressed after earlier rounds of public consultation included:

- support for how issues raised during previous consultations have been considered and addressed, and the increased engagement and information shared with consultees
- comments that feedback had been taken onboard and were reflected in changes to the design of the project
- support for the changes made and requests that work starts as soon as possible

The table on the following pages summarises the most common concerns about how issues and suggestions about the Lower Thames Crossing have been addressed following earlier rounds of public consultation.

We asked: do you support or oppose how issues and suggestions about the Lower Thames Crossing have been addressed following earlier rounds of public consultation?



- **2,562** consultees answered this question
- **2,457** respondents were members of the public and other non-statutory organisations
- **98** respondents were people with an interest in land
- **7** respondents were from statutory bodies and local authorities
- **1,244** (49%) respondents supported or strongly supported how issues and suggestions about the Lower Thames Crossing have been addressed following earlier rounds of public consultation
- **739** (29%) respondents opposed or strongly opposed how issues and suggestions about the Lower Thames Crossing have been addressed following earlier rounds of public consultation

49%

supported how issues and suggestions about the Lower Thames Crossing have been addressed following earlier rounds of public consultation

Table 12: Most common concerns about how issues and suggestions about the LTC have been addressed following earlier rounds of public consultation

<p>Summary of the most common concerns raised about how issues and suggestions have been addressed following earlier rounds of public consultation</p>	<p>Our response</p>
<p>Feedback not being addressed</p>	
<ul style="list-style-type: none"> ■ Comments that feedback and opinions on the project have previously been ignored. Consultees say that some issues remain unresolved, including requests for further information about aspects of the project, potential damage to the environment and the impact on local communities. ■ Concerns that responses to a previous consultation were categorised as ‘campaign’ and therefore not given the same weight as other responses. 	<p>Almost 50% of consultees who answered this question, supported or strongly supported how issues and suggestions about the Lower Thames Crossing have been addressed following earlier rounds of public consultation.</p> <p>We have carried out a comprehensive programme of consultation since our statutory consultation in 2018. We have considered all feedback and paid attention to responses commenting on local and environmental impacts and benefits. Following feedback to our previous consultations, we have made a number of changes to the proposals in response to issues raised. Some examples include moving the southern tunnel entrance, widening the two Thong Lane green bridges, adding a more direct route from the Gravesend East junction to the M2 eastbound, changes to slip roads at the A13/ A1089 junction, removal of the road side facility and maintenance depot and the addition of three green bridges north of the river.</p> <p>These were described in the ‘You said, we did’ document produced for the community impacts consultation. In that document we summarised the total responses received for the statutory, supplementary and design refinement consultations. These included responses received that were identified as part of campaigns.</p> <p>Following the community impacts consultation, we are proposing a limited number of changes, which we will be consulting on in the local refinement consultation. We have also made other minor design changes to our proposals, developed through our ongoing engagement with stakeholders and landowners which will be presented in the Landowner engagement and minor refinements document, which will be available when we launch the local refinement consultation.</p>

<p>Summary of the most common concerns raised about how issues and suggestions have been addressed following earlier rounds of public consultation</p>	<p>Our response</p>
<p>Distraction/greenwashing</p>	
<ul style="list-style-type: none"> ■ Comments saying that the changes made following earlier rounds of public consultation are intended to ‘greenwash’ the project and distract from larger environmental impact issues. Some consultees suggest that the outcome of the consultation is already decided. ■ That even with changes made following earlier rounds of public consultation, the current proposal is still going to negatively impact the environment. 	<p>Minimising adverse impacts on the environment is one of the project’s objectives. Our proposals have been designed to balance the need to reduce environmental impacts during construction and operation, and fulfil the other project aims, including the need to reduce congestion at the Dartford Crossing.</p> <p>Comments received in previous consultations have influenced our plans, leading to a number of changes to the route proposals and our approach to other aspects of the project, such as environmental mitigation, which we then consulted on. We are proposing a limited number of changes in our local refinement consultation, some of which are as a result of feedback to the community impacts consultation. We have also made some minor refinements as a result of ongoing engagement with affected landowners and stakeholders which are set out at the end of this document.</p>

Summary of the most common concerns raised about how issues and suggestions have been addressed following earlier rounds of public consultation

Our response

Insufficient/ineffective changes

- Comments saying that the changes made following earlier rounds of public consultation are insufficient or ineffective, with inadequate mitigation for the project’s impact on the environment, wildlife and the local community.
- Suggestions that the project still needs further adjustments to safety, security and sustainability measures, and to the road network, to address traffic concerns.

We have made a number of changes to further develop our proposals in response to issues raised following earlier rounds of consultation. Feedback has helped to shape a project that will maximise benefits and minimise its impacts.

We have developed a project that is safe, secure and sustainable. Our contractors would carry out works in accordance with health and safety, engineering and construction requirements, as well as relevant technical standards and guidance. We have considered sustainability in all aspects of our design. Some examples include removing or reducing the size of structures or junctions of the proposed route, upgrades and improvements to the walking, cycling and horse riding network close to the project, the use of low carbon concrete and reuse of material on site.

Improving safety is one of the project’s objectives. Not only would the new tunnel and roads be designed and built to the highest safety standards recommended, but we will continue to adapt our plans in line with new guidance. The new road’s safety features would include vehicle detection, emergency areas, variable mandatory speed limits and lane closure signals in the event of an incident, such as a vehicle breakdown or collision.

Some examples of measures to reduce greenhouse gas emissions when the new road opens include procuring electricity from renewable suppliers and using low-energy light sources to reduce consumption. During construction, materials and products would be selected that are more resilient to the future effects of climate change. In addition, we will produce a Sustainability Statement as part of our DCO application, which will set out our approach to sustainability.

Continued on next page...

Summary of the most common concerns raised about how issues and suggestions have been addressed following earlier rounds of public consultation	Our response
Insufficient/ineffective changes	
	<p>With regards to comments about traffic on the road network, we consulted on the Wider Network Impacts Management and Monitoring Plan during the community impacts consultation, which provided further information about the proposed traffic monitoring once the new road opens. An updated version of the WNIMMP, which accounts for feedback received during consultation, will be presented as part of our DCO application.</p>

Summary of the most common concerns raised about how issues and suggestions have been addressed following earlier rounds of public consultation	Our response
Environment	
<ul style="list-style-type: none"> ■ That the changes made following earlier rounds of public consultation are not enough to mitigate the project's negative impact on air quality. 	<p>We provided information about the predicted impact on air quality once the new road is open during the community impacts consultation. This was presented on a project-wide level within the Operations update and ward level within the Ward impact summaries.</p> <p>The project has been designed to reduce impacts on air quality wherever practical, such as by ensuring the road largely avoids built-up areas (where the existing air quality tends to be worse) and by providing enough capacity to allow for free-flowing journeys, avoiding congestion.</p> <p>Once the road is open, air quality is predicted to improve in some areas but worsen in others due to changes in traffic flows across the region. These effects have been considered across hundreds of miles of road network, using a detailed air quality model. The model accounts for predicted changes in air quality in response to improvements in emissions from vehicles, as cleaner vehicles enter the fleet (including the increased adoption of electric vehicles), based on the latest vehicle emission factors issued by Government. However policies that are likely to accelerate the adoption of electric vehicles such as the Transport decarbonisation plan are not currently incorporated into the emission factors used in the assessment.</p> <p>Based on the assessments we have undertaken, we do not anticipate a need to carry out operational monitoring for air quality. Monitoring would only be required if our assessment identified a significant effect.</p>

Summary of the most common concerns raised about how issues and suggestions have been addressed following earlier rounds of public consultation	Our response
General opposition	
<ul style="list-style-type: none"> ■ Opposition to the entire project, regardless of the proposed changes. 	<p>The Dartford Crossing is operating significantly above its intended capacity. It is designed to take 135,000 vehicles a day but on a busy day it can see over 180,000 vehicles cross. This often results in long delays, particularly at peak times, and is a significant factor in why roads and motorways on both sides of this crossing experience frequent congestion.</p> <p>The Dartford Crossing also regularly closes as a result of vehicle collisions, high winds and other circumstances such as oversized lorries and dangerous goods being escorted through the tunnels. The project would provide free-flowing capacity across the River Thames and give road users a choice of routes, providing resilience in the event of network incidents, particularly the closure of the Dartford Crossing.</p> <p>The overriding priority has been to develop a new road that balances the need for improved road capacity across the Thames with the need to limit negative impacts on local communities and the environment, and provide value for money. We have continued to refine our proposals and amendments will be included in the local refinement consultation.</p>

Minor refinements

Some of the minor refinements we have made as a result of our ongoing engagement with affected landowners and stakeholders are set out below. The items below are included here to provide examples where we have listened to feedback and made changes to address concerns raised.

Project wide

Rendezvous points

Following engagement with the LTC Emergency Services & Safety Partners Co-ordination Group, we have further refined the location of the rendezvous points, which are located near the tunnel entrances. These are designated meeting locations that allow controlled access for emergency services in the event of an incident.

Gravesham

Removal of acoustic and visual barrier near Park Pale bridge

We previously proposed mitigation in the form of an acoustic and visual barrier near Park Pale bridge. However, following feedback from Kent Downs Area of Outstanding Natural Beauty (AONB) Unit about the visual impact of the barrier, we have removed it to allow more of the existing vegetation to be retained and enable additional planting to help visually screen the road. In addition, the low-noise surfacing that we proposed at the community impacts consultation, would be effective at reducing the sound of traffic from the A2 at this location.

Widening of the bridge at Thong Lane over the M2/A2

We are widening the replacement green bridge at Thong Lane over the M2/A2 by a further 10 metres. This change responds to feedback from Natural England, Kent Downs AONB, Kent County Council and Gravesham Borough Council about improving habitats and connectivity for wildlife, increasing landscape planting and providing additional screening of the M2/A2 junction.

Relocation of environmental mitigation

We have changed the amount of land required for ecological mitigation, located at the north-western corner of the field south of HS1, northwest of Twenty Acre Wood. This provides a curved rather than stepped edge to the area of proposed ecological habitat creation. This responds to concerns raised by the landowner about the impact of the former mitigation proposals on their ability to farm the land, while still providing a suitable area of ecological mitigation.

Thurrock

Station Road realignment of utility diversions

We have realigned the utility diversions near Station Road to avoid an impact on great crested newts. This change has been developed based on engagement with utility companies and addresses concerns about the environmental impact of construction works.

Removal of the utility works near Hornsby Lane, Gowers Lane and Farm Road

Following further engagement with UK Power Networks, we have revised our proposals and no longer need to carry out utility works in this area. By retaining the existing infrastructure, we don't need to construct a proposed substation or associated cable routes. This has resulted in a reduction in the Order Limits in this area.

Removal of Barking Power Station pipeline diversion

We have worked with the pipeline owners and determined that the pipeline has no future use, so we no longer need to divert it as part of our proposals. This removes 20 hectares of land from the area we need to build the project and reduces disruption and impacts that would have been caused by these works.

Havering

Relocation of the M25 compound

We received feedback from the London Borough of Havering and the landowner about the location of the M25 compound presented in the community impacts consultation. The London Borough of Havering was concerned because the location of the compound impacts a Site of Importance for Nature Conservation (SINC). We are therefore proposing to move and consolidate the M25 compound to an area of land to the west of its previous location.

This would significantly reduce the impact on the SINC and would enable the removal a parcel of land from the Order Limits to the west of the M25 previously required permanently for environmental mitigation.

Reduction in Order Limits west of M25 near Jer mains Wood

We received feedback from the London Borough of Havering that the Order Limits in this location would impact a Site of Importance for Nature Conservation (SINC). This land was included for potential gantry replacement works, however following further design development this land is no longer required, therefore we are able to reduce the Order Limits by removing a strip of land off the western side of the M25.

Brentwood

Relocation of Warley Street construction compound

Following engagement with Cadent Gas, we have designed a solution that avoids the need to divert a high-pressure gas pipeline to the south-east of M25 junction 29. As a result of this, we have moved the Warley Street construction compound to the east of where it was proposed at the community impacts consultation. This is the same location as the previously proposed Warley Street Utility Logistics Hub, which would no longer be required. The change responds to feedback from stakeholders and the landowner regarding the works associated with the high-pressure gas pipeline. In addition, the change would reduce disruption to the proposed Brentwood Enterprise Park.

More information

A full list of changes and other minor refinements, including maps will be published in the Landowner engagement and minor refinements document, which will be available when we launch the local refinement consultation. This includes a number of changes we are engaging with affected landowners and others with an interest in land alongside proposals in the consultation.

Next steps

We are drafting responses to all the issues raised at our community impacts consultation, which will form a chapter of the Consultation report within our DCO application.

It is vital we get all aspects of the design right to ensure we maximise the benefits of the Lower Thames Crossing while also minimising its affects on communities and the environment. We continue to work with stakeholders to shape the design and understand the impact on local communities.

Find out more

If you're interested in reading about the proposals in our local refinement consultation, visit ltcconsultation2022.nationalhighways.co.uk from Thursday 12 May 2022. The consultation ends on 20 June 2022.

Glossary of terms

Term	Explanation
Acquisition of Land Act 1981	An Act of Parliament, which concerns English land law and compulsory purchase.
Area of Outstanding Natural Beauty (AONB)	Statutory designation intended to conserve and enhance the ecology, natural heritage, and landscape value of an area of countryside.
Blight Notice	A notice served by an eligible property owner within the Order Limits on an acquiring authority, requesting the authority purchase the property because its value has been affected by the acquiring authority's proposals.
Compensation Code	The principles used for assessing compensation for compulsory purchase.
Compensatory woodland/habitat	New woodlands or habitats created to compensate for the loss of, and/or mitigate adverse environmental impacts on woodland or natural habitats that have occurred as a result of a development.
Compulsory Purchase	A legal mechanism by which certain bodies (known as 'acquiring authorities') can acquire land without the consent of the owner. Compulsory purchase powers can support the delivery of a range of development, regeneration, and infrastructure projects in the public interest.
Consultation	The process of seeking or obtaining feedback or views on project proposals.
Cutting	When a road is to go below existing ground the soil or rock is removed, either altogether or to form landscape embankments on each side.
Development Consent Order (DCO)	Means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP) under the Planning Act 2008.
Department for Transport (DFT)	The government department responsible for the English transport network and a limited number of transport matters in Scotland, Wales and Northern Ireland that have not been devolved.

Term	Explanation
Discretionary Purchase	Where a property owner outside of the Order Limits needs to sell but is unable to do so, except at a significant loss, as a result of a proposed scheme. While there is no obligation to purchase these properties, National Highways has the ability to purchase properties outside of the Order Limits using discretionary powers provided owners meet certain criteria.
Green belt land	A policy and land use zone designation used in land use planning to retain areas of undeveloped land surrounding urban areas.
Green Infrastructure	A network of multi-functional green spaces including parks, woodlands and playing fields connecting different areas to enhance communities and wildlife.
HGV	Heavy Goods Vehicle.
Impacts	Marked effects or influences.
LTC	Lower Thames Crossing: a proposed new crossing of the Thames estuary linking Kent with Essex, east of the existing Dartford Crossing.
Mitigation	The action of reducing the severity or seriousness of something.
National Highways	A government-owned company charged with operating, maintaining and improving motorways and major A roads in England.
Order Limits	The outermost edges of the Lower Thames Crossing project, also known as the development boundary.
Pathfinder Project	A National Highways project that explores carbon neutral construction.
Passenger Car Units (PCU)	This is a metric to allow different vehicle types within traffic flows to be assessed consistently in a traffic model.
Planning Inspectorate (PINS)	An executive agency of the Department for Levelling Up, Housing and Communities. The Planning Inspectorate deals with planning appeals, national infrastructure planning applications, examinations of local plans and other planning-related and specialist casework in England and Wales.
Public Rights of Way	A right possessed by the public, to pass along routes over land at all times. Although the land may be owned by a private individual, the public may still gain access across that land along a specific route.

Term	Explanation
Ramsar	A wetland of international importance, designated under the Ramsar convention.
Receptors	A component of the natural or built environment (such as a human being, water, air, a building or a plant) that is affected by an impact of construction works and/or the operation of a proposed development.
Site of Importance for Nature Conservation (SINC)	Locally designated nature site protected through the planning system.
SMEs	Small and medium-sized enterprises.
Special Category Land	Land identified as forming part of a common, open space, or fuel or field allotment in the book of reference and on the land plans.
SSSI	Site of Special Scientific Interest: A conservation designation denoting an area of particular ecological or geological importance.
Strategic Road Network (SRN)	The core road network, managed in England by National Highways.
Town and Country Planning Act 1990	An Act of Parliament regulating the development of land in England and Wales.
Trunk road	An important main road used for long-distance travel, which form part of Strategic Road Network.
Utility works	Work undertaken to protect supplies and enable maintenance to existing utilities, including overhead power lines, high-pressure gas pipelines, electric cables and substations, gas mains, water pipes, sewers and fibre-optic and telecoms cables.
Vehicle emissions	Air pollutants (such as nitrogen oxides and particulate matter) and greenhouse gases emitted by road vehicles.
Visual amenity	Overall enjoyment of a particular area, surroundings, or views in terms of people's activities – living, recreating, travelling through, visiting, or working.
Ward	An administrative division of a city or borough.

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