Number: WG36453



Welsh Government

Consultation – summary of responses

### A494 River Dee Bridge Improvement Scheme

September 2019

Mae'r ddogfen yma hefyd ar gael yn Gymraeg. This document is also available in Welsh.



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#### 1. Introduction

- 1.1 The A494 River Dee Bridge, which was constructed in 1960, provides a vital connection between North Wales and the North West of England. The crossing carries approximately 61,000 vehicles per day connecting people, communities and businesses.
- 1.2 Due to the age of the bridge, there is evidence of deterioration to key structural features which would be difficult to repair whilst keeping the bridge open to traffic.
- 1.3 Moving North Wales Forward published in March 2017 identified that the provision of a new bridge across the River Dee was required which would allow and upgrade of the existing bridge which is in poor structural condition.
- 1.4 The A494/A55/A548 Flintshire Corridor Improvements (Red Route) continues to be progressed and are unaffected by this improvement which is required to address the deterioration of the existing A494 River Dee Bridge.
- 1.5 This study was undertaken in accordance with the Welsh Transport Planning Appraisal Guidance 2017 (WelTAG) procedure which is guidance produced by the Welsh Government for use in the development, appraisal and evaluation of any proposed transport intervention. WelTAG 2017 was developed to reflect the Wellbeing of Future Generations Act where the environment, social, economic and cultural impacts of options need to be assessed.
- 1.6 WelTAG also aims to ensure that public sector transport proposals demonstrate the following criteria:
  - A positive contribution to objectives of transport
  - Good value for money
  - Overall economic, social and environmental benefits
  - Maximum benefits and minimal impact
  - To enable the most beneficial scheme to be identified
  - To allow the comparison of schemes on a like-for-like basis.
- 1.7 This document summarises the consultation responses which took place between 12 November 2018 and 4 February 2019. Further work has been carried out to assess the feasibility of addressing stakeholders concern and this is described further in Section 5.

#### 2. Development and Appraisal of Options

- 2.1 The main issues raised by this study were:
  - The A494 is important locally, nationally and internationally. It provides the main economic artery for North Wales and links to the A55 which forms part of the Euro 22 on the Trans European Road network. This route links Ireland, through the UK, to the European continent.
  - The current levels of traffic are beyond the capacity of a two lane, dual carriageway
  - The bridge has no hard shoulder facility. A vehicle breakdown can result in long delays causing queues on the approach to the bridge
  - When congestion occurs, emergency services struggle to cross the bridge
  - The bridge's concrete deck is in a poor condition which results in an uneven surface and may in the future affect the crossing's weight carrying capacity. The abutments which support the bridge are also in a poor state of repair
  - If nothing is done, these structural issues will continue to deteriorate and weight restrictions and/or lane closures may need to be introduced to maintain the crossing of the River Dee
  - Replacing the deteriorated parts would require the closure of the A494 for significantly long periods, resulting in severe disruption and delays to journeys both for bridge users and for those travelling on the local road network. Replacement of parts would also be a temporary solution as it would not fully address the structural issues in the long term
  - The central reserve and parapets are substandard.
  - It is considered that the best solution is to replace the bridge to improve safety, provide greater resilience and enhance journey time reliability.
  - On the A494 westbound approach to the bridge, at Drome Corner, the carriageway reduces from three lanes to two lanes which results in regular congestion.
  - Resilience of the route is low during incidents due to substandard carriageway width, poor local diversion routes and being significantly over capacity at peak times
  - Vehicle emissions, particularly during periods of congestion, worsen air quality in the area surrounding the bridge.
- 2.2 To address the problems raised, and in line with strategic network objectives, the following six Transport Planning Objectives (TPOs) were developed in consultation with stakeholders. The options considered have been appraised against these TPOs.
  - Objective 1: Maintain the function of the A494 River Dee crossing by addressing the

- life expired bridge.
- Objective 2: Improve the resilience of the A494 route to make journey times more reliable whilst providing capacity for future growth.
- Objective 3: Minimise adverse impacts on the environment and the local community, to improve the health and wellbeing of local residents.
- Objective 4: Minimise the impact of construction on local residents, businesses and road users.
- Objective 5: Ensure the scheme conforms to safety and design standards which are appropriate for a strategic road.
- Objective 6: Connect communities by supporting access for non-motorised users.
- 2.3 Through understanding the current issues and future challenges, potential options were identified which aim to deliver the scheme objectives. These options were assessed using WelTAG and through a process of design and engineering, transport and environmental appraisal these options were assessed to identify a short list of four options. These options were:

#### Option A:

- New river crossing (partly reuse existing);
- Three lanes and hard shoulder up to the NR bridge by widening existing A494;
- NR bridge remains with reduced lane widths;
- Limited pedestrian and cyclist provision;
- Major disruption during construction;
- Cheapest.

#### **Option B:**

- New river crossing (partly reuse existing);
- Three lanes and hard shoulder up to the Queensferry junction by widening existing A494:
- NR bridge replaced with wider structure;
- Limited pedestrian and cyclist provision;
- Major disruption during construction;
- More expensive.

#### **Option C (Preferred):**

- New river crossing (partly reuse existing);
- Three lanes and hard shoulder to Queensferry junction;
- New offline carriageway for westbound traffic with a new NR bridge;
- Full pedestrian and cyclist provision;
- Minimal disruption;
- More expensive.

#### **Option D:**

- Offline new river crossing three lanes and hard shoulder to Queensferry junction:
- New offline carriageway for westbound traffic with a new NR bridge;
- Full pedestrian and cyclist provision;
- Minimal disruption;
- Most expensive.
- 2.4 Through further refinement of the short list and consultation with stakeholders, a Proposed Option was selected which best delivers the scheme objectives.
- 2.5 Option C was selected as it offers significantly less construction phase traffic impact by comparison to Options A and B. Option D would provide similar construction stage traffic mitigation to Option C, however, Option D is more expensive without delivering any justifiable additional benefits. Option C offers better overall air quality and noise performance on the other options, by positioning traffic further away from local receptors. Overall the WelTAG appraisal concluded that Option C was the best performing option against the scheme's Transport Planning Objectives and was the best option to resolve the problems associated with the existing A494 River Dee Bridge. Option C was therefore identified as the Proposed Option and only option to be consulted upon.
- 2.6 Figure 2.1 below shows an overview of Proposed Option C.

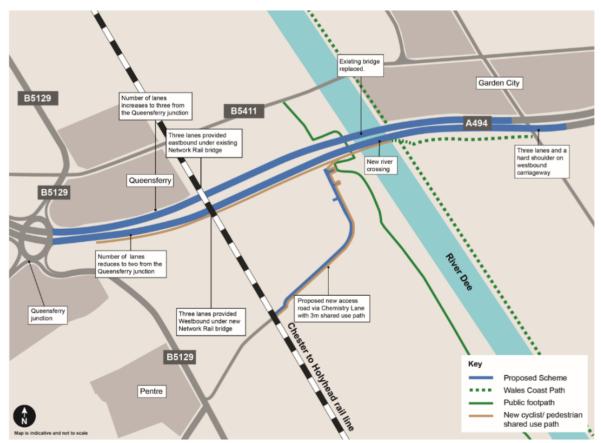


Figure 2.1: Overview of Option C

#### 3. Public Consultation

- 3.1 A public consultation on the proposed scheme began on 12 November 2018 and closed on 4 February 2019. The consultation invited members of the public and other interested parties to comment on the Proposed Option outlined above. A copy of the consultation document is attached in Annex A.
- 3.2 Two public consultation events were also held to support efforts to engage the local population and provide people with an opportunity to meet the project team and view the proposals. The details for these events are set out below:

| Tuesday 20 November 2018<br>14:00-20:00  | St Andrews Church, 61 Sealand<br>Avenue, Garden City, Deeside, CH5<br>2HN |
|--|---|
| Saturday 24 November 2018<br>10:00-16:00 | St Andrews Church, 61 Sealand<br>Avenue, Garden City, Deeside, CH5<br>2HN |

3.3 Members of the public and interested parties were able to respond to the questionnaire online, by completing a questionnaire by hand or by sending a letter/email to the project team directly. In total 221 responses were received to the consultation with 70% responding by post, 27% by online questionnaire and the remaining 3% by other methods.

#### 4. Analysis of Responses

#### 4.1 Question 1 – What is your postcode?

4.1.1 The consultation document asked consultees to provide their postcode. With the exception of those individuals and organisations that did not provide a postcode, we have taken this data and produced the following map to show where the majority of consultees live. As the map shows, the majority of those people or organisations responding to the consultation live relatively close by to the scheme proposal.

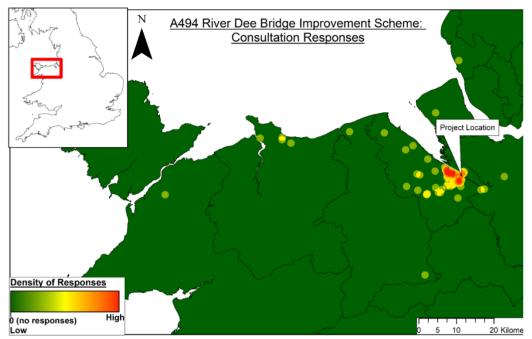


Figure 4.1: Map view of response postcodes

#### 4.2 Question 2 – Are you an affected landholder?

- 4.2.1 This question asked whether the consultee was an affected landholder although it was left to consultees to determine whether they identified as such. The chart below provides a profile of those who responded to the consultation as affected landholders.
- 4.2.2 Just under 10% (9.9%) of consultees identified themselves as affected landholders while the overwhelming majority (87.8%) did not identify themselves as affected landholders. 2.3% of respondents either did not answer or were unsure.

# 4.3 Question 3 – Do you have any comments on our proposal for replacing the A494 River Dee Bridge?

4.3.1 Question 3 invited consultees to respond to the proposals described in the consultation document. This was a free text response box and captured a variety

of feedback and suggestions on the proposal. The chart outlines the responses which came up most frequently.

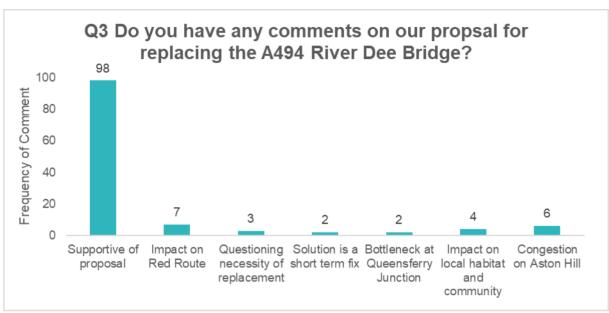


Figure 4.2: Summary of comments on proposal

4.3.2 Ninety-eight consultees responding to this question indicated their support for the scheme although some consultees (7) flagged concerns about the replacement of the bridge and the impact it would have on the Deeside corridor "Red Route" proposals. Other concerns raised include possible congestion at Aston Hill (6) and the impact of the proposed additional traffic lanes on the local habitat and community (4).

## 4.4 Question 4 – Do you have any comments relating to the construction of the scheme?

- 4.4.1 Question 4 was a free text response box asking consultees for feedback relating to the construction of the scheme. The most topical response to this question were concerns about the length of time it would take to construct and concerns about possible associated disruption for road users and traffic congestion (9). This is why many consultees asked for lane closures to be kept to a minimum as the new scheme is built (5).
- 4.4.2 A number of consultees were supportive of the proposed construction management plans (6). Other issues which attracted multiple comments included the financial viability of the contractor selected to build the scheme (3) and the construction methods proposed (3).
- 4.4.3 Although not directly relevant to the question, two respondents reiterated their support for the 'Red Route' on the Deeside Corridor improvement instead of the proposed scheme.

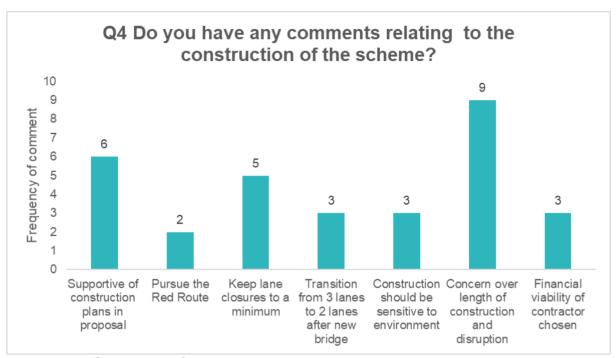


Figure 4.3: Summary of comments on construction

## Question 5 – Do you have any comments relating to the proposed pedestrian and cyclist facilities?

- 4.4.4 Question 5 was a free text response box which invited consultees to respond to proposed pedestrian and cyclist facilities including the shared use pathway.
- 4.4.5 The most frequent response was one of support for the new shared use pathway (39). However, there were some concerns and questions relating to the effectiveness of safety barriers also proposed on the new pathway. Seventeen respondents asked whether there would be barriers between cyclists and pedestrians on the pathway while four responses asked whether there would be a physical barrier between the shared use pathway and the main road.
- 4.4.6 Adequacy of lighting was raised five times while two consultees asked whether an additional pathway could be provided on the northside of the route. Other consultees (3) contended that the new shared use pathway was not required.

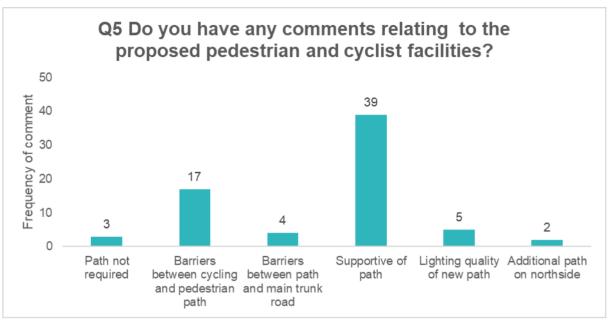


Figure 4.4: Summary of comments on proposed pedestrian and cyclist facilities

## 4.5 Question 6 – Do you have any further comments you would like to make about the proposed scheme?

- 4.5.1 Question 6 was a free text response box for consultees to raise any comments or questions about the scheme that had not been covered by the previous questions.
- 4.5.2 The most frequent response was one of support for the scheme with many consultees (29) simply reiterating their desire for the scheme to proceed to construction. The second most frequent response related to the impact of this scheme on the 'Red Route' which proposes to divert traffic along another route. Throughout the consultation consultees regularly asked questions about how the proposal to replace the bridge interacts with the Deeside corridor plans and the announcement of the preferred 'Red Route'.
- 4.5.3 Three consultees highlighted the importance of minimising disruption during the scheme construction period whilst two respondents stated that enhancing road capacity does not encourage freight to be transferred from road to rail.

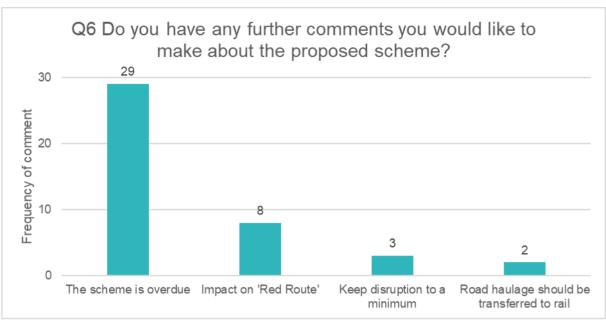


Figure 4.5: Summary of further comments on the scheme

#### **County and Community Council Views**

- 4.5.4 **Flintshire County Council** stated that the bridge replacement is overdue, and that they looked forward to the work beginning in 2020. The Council stated that it is vital the new river bridge has three running lanes in both East and West directions, a hard shoulder in each direction and Active Travel facilities for pedestrians and cyclists as defined by the Active Travel (Wales) Act 2013.
- 4.5.5 The Council highlighted the importance of minimising disruption to the existing road network during construction. The Council also requested traffic management plans to be agreed with the authority's Streetworks Manager before construction starts. To avoid congestion during the construction period, the Council suggested that two lanes in each direction should remain open and any additional lane closures or lane reductions should be completed at "off peak" times or at night.
- 4.5.6 The Council also recommended that any new route or access point be well sign posted. They cautioned that local traffic might prefer to use Chemistry Lane as access and recommend installation of traffic signals on Chemistry Lane as it has a low bridge, is poorly sign posted from the main road and has a blind 90-degree bend on the north side.
- 4.5.7 The Council pointed out that the River Dee pathway (NCN 568/WCP) is well-used by pedestrians and cyclists. Hence, they would like advance notice of any building works involving this pathway to plan suitable mitigation measures, such as a scaffold tunnel, so the pathway is kept open and closures or diversions are kept to a minimum.

- 4.5.8 The Council also requested:
  - Extension and widening of the proposed shared use pathway from the existing bridge/footpath 7 between the Toyota garage and the MoD Army Reserve Centre to Station Road (B5441).
  - Upgrading of the shared use pathway between the River Dee pathway and Claremont Avenue (North side of existing bridge).
  - The 'Link road' facility from Factory Road, down Chemistry Lane connects to the existing shared use pathway on Chester Road East (B5129).
  - All Active Travel infrastructure involving cyclists and pedestrians to be developed in accordance with the Welsh Government Design Guidance and the Interim Advice Note (IAN) 195/16 Cycle Traffic and the Strategic Road Network.
  - The shared use pathway from the proposed new bridge to the River Dee pathway (NCN568/WCP) be made as direct as possible.
- 4.5.9 **Northop Community Council** stated that the replacement of the A494 River Dee bridge is long overdue and were positive about the proposed inclusion of a new shared use pathway at Chemistry Lane. However, the Council pointed out that the proposed scheme does not appear to improve westbound journey times or address any air quality problems at Aston Hill and beyond. The Council does not expect improvement to westbound journey times as it anticipates congestion at the foot of Aston Hill where three lanes converge into two. The Council states that it believes that the resultant queue of vehicles will also cause more air pollution.
- 4.5.10 The Council also drew attention to the Emissions Reduction Zone to the east of the river crossing at Garden City where the speed limit is 50mph and would like this factored into traffic planning. In its view, the proposed scheme is an isolated replacement of a bridge rather than an opportunity to develop a meaningful scheme for improved road capacity and air quality along the A494 and A55 at Ewloe and along the North Wales coast.
- 4.5.11 The Council has sought more information on the proposed road layout specifically converging lanes on an existing congested route as well as environmental and economic benefits of the scheme.

#### Other Organisations

4.5.12 **Highways England** acknowledged the strategic importance of the A494 Dee Valley Bridge route crossing for both the Welsh and English road network and looks forward to continued dialogue with stakeholders as the scheme progresses. As the proposed scheme provides for an increase in road traffic capacity over the River Dee, Highways England would welcome the opportunity to work with NMWTRA and the Welsh Government to understand the impact of this additional capacity upon its own Strategic Road Network and that appropriate mitigation measures are proposed.

- 4.5.13 Highways England requested NMWTRA, as part of the scheme development and construction phase, work in partnership with their Network Occupancy team to minimise the construction impact of the scheme to the public and to minimise planned network capacity reductions.
- 4.5.14 The Institute for Civil Engineers (ICE) Wales appreciated the opportunity to comment on the proposals and recognised the need to replace the bridge. In assessing the options, ICE Wales recognised that while the preferred option put forward is relatively costly, it appeared to offer the least disruption to traffic. This is important as the bridge serves as a 'gateway' to North Wales.
- 4.5.15 There is support for the Active Travel facilities and the shared use pathway which offers an opportunity to reduce community severance. In terms of construction, ICE Wales stated that close cooperation will be required to align the works with Network Rail and Transport for Wales.
- 4.5.16 Finally, ICE Wales suggested that the construction work on the bridge replacement should be completed before a start is made on the new 'Red Route', as part of the Deeside Corridor upgrade
- 4.5.17 **Sustrans** called for all Active Travel infrastructure to be developed in accordance with the Welsh Government Design Guidance and 'IAN 195-16 cycle traffic and the strategic road network', which they advised has higher standards than the Welsh Government document. Sustrans noted the Active Travel infrastructure being put forward and recommended that it should be extended in the following locations:
  - Extend link to Station Road (B5441) from existing bridge/Footpath 7 between Toyota garage and MoD Army Reserve Centre, widen path to connect to facility on Station Road.
  - Upgrade link between River Dee Path and Claremont Avenue (North side of existing bridge).
  - Extend 'link road' facility from Factory Road, down Chemistry Lane to connect to existing shared use pathway on Chester Road East (B5129). Sustrans advised that this could be improved footways with the cyclists on the road.
- 4.5.18 Sustrans advocated that, during the replacement of the existing bridge, the River Dee Path (NCN 568 and the Wales Coast Path) below the bridge is upgraded to Active Travel standards.
- 4.5.19 Finally, Sustrans noted that during construction one of the impacts will be to divert cyclists and pedestrians away from the works. The organisation advised that they would like to see closures and diversions kept to an absolute minimum and, where diversions or closures are necessary, that suitable mitigation measures are put in place.
- 4.5.20 **Cycling UK** support the scheme in principle and agree that the preferred route is the best solution. The organisation is pleased that the objectives for this scheme include connecting communities by supporting access for non-motorised users

- (NMUs). The organisation also appreciated an invitation to join a Scheme Working Group for NMUs and hoped this will become the standard for all new major road schemes
- 4.5.21 The organisation recommended that all cycling facilities are designed to the standards set out in the Welsh Government Design Guidance or, wherever possible, even higher standards. The following concerns are raised:
  - The new shared use pathway on the south side of the new carriageway would have to pass through a very unpleasant chicane next to the main carriageway to negotiate the new North Wales Main Line railway bridge.
  - The existing sub-standard pathway on the north side of the existing bridge should be upgraded and fully integrated with the existing pathway network at both ends.
  - The proposed new shared use pathway beside Chemistry Lane could be extended to Chester Road East to join the existing network. Cycling UK were unclear as to how this pathway would terminate at the river end and questioned some of the design details that were presented at the exhibition (e.g. junction crossings). Cycling UK were also not clear exactly what is proposed for NMUs on the south bank of the Dee.
  - The existing Wales Coast Path and National Cycle Network (WCP/NCN) should be improved under both of the proposed bridges as part of the scheme.
  - Cycling UK did not consider the junction between the new shared use pathway
    on the south side of the new carriageway and the WCP/NCN (the north east
    side of the new bridge) to be acceptable. Cycling UK advised on the need for an
    elegant flowing design at this location to enable a smooth transition by bicycle
    from the new shared use pathway to the existing NCN. Due to the height
    difference this may require a slightly larger land-take than previously proposed
    on the north east side of the new bridge.
  - Cycling UK requested that pathway closures for NMUs be kept to an absolute minimum during the work.
- 4.5.22 The organisation stated that the next important step is the production of the 1:2500 draft plans with which they would like to be consulted.
- 4.5.23 **The Design Commission for Wales** agreed with the need for a new bridge but advised that the need for increasing the number of traffic lanes should be clearly justified and evidence in the context of the Wellbeing of Future Generations and Active Travel legislation.
- 4.5.24 The organisation advised against the use of a 'standard' type bridge and recommended that a structures architect should be part of the design team aiming to design a bespoke solution. The organisation recommended that the design process includes a thorough analysis of the local environment and considers how the proposed bridges sit against the landscape.
- 4.5.25 The organisation suggested that the value of the scheme must extend beyond

accommodating increased vehicular traffic and look to the health and wellbeing of the local community. As the shared use pathway is adjacent to three lanes of traffic the organisation recommends a well thought out design to ensure ease of use.

- 4.5.26 The organisation also recommended early engagement through their design review service and provided an online link to the same.
- 4.5.27 **Severn Trent Water** stated it has clean water apparatus located in the area and requested submission of detailed plans with a diversion application.

#### 5. Outcomes

- 5.1 The public consultation process was considered to be effective in terms of attendance at exhibitions and the number of returned questionnaires and written responses. The heat map of responses demonstrates that stakeholders living close to the proposed option engaged with the proposals.
- 5.2 The consultation did generate a number of supportive comments for the scheme and expressions of support for the proposal were the most frequent responses to questions 3 and 6.
- 5.3 The free text responses enabled the project team to capture the wide variety of suggestions, questions and concerns that interested parties and local stakeholders hold. By conducting a thematic analysis, we have produced a consolidated list of summary questions and responses to seek to clarify the suggestions, questions and concerns raised. A copy of these questions and responses is attached in Annex B.

#### 6. Actions following public consultation

To address issues raised during the consultation, meetings were held with the project's Active Travel Working Group. This Working Group consists of representatives of Sustrans, Cycling UK, Ramblers Association, Flintshire Council and Welsh Government. Following further discussion of the consultation responses relating to Active Travel the following updates have been made to the preliminary design proposals:

- a. The alignment of the shared use path adjacent to the westbound carriageway has been reviewed to accommodate as smooth as possible transition for the path as it approaches and goes through the new railway underpass.
- b. Further clarification included to illustrate that the shared use path on both banks of the river will be improved where they pass under the new bridge structures.
- c. Agreement that further consideration will be given to extending the NMU provisions along Chemistry Lane as an on-road facility.
- d. Realignment of the junction where the shared use path diverges on the western side of the river bridge.

- e. Re-design of the connection of the shared use path to the existing paths on the eastern side of the river bridge, including the provision of an additional return ramp.
- f. Improving the existing path to Station Road on the western side of the river bridge, from the existing bridge / footpath 7 between the Toyota garage and the MoD Army Reserve Centre to Station Road (B5441). Proposals include new lighting, widening and re-surfacing of the existing path.
- g. Proposal for access stairs included to provide a direct route between the two paths on the western side of the river bridge.
- h. Resurfacing and improving the access path from Claremont Avenue to the Wales Coastal Path.

#### 7. Minister for Economy and Transport Decision

- 7.1 Having taken into account the technical, social, economic and environmental aspects of the scheme along with the positive comments received during the public consultation, the Minister for Economy and Transport had decided to:
  - Adopt Option C as the Preferred Option to address the problems with the existing A494 River Dee Bridge.

#### 8. What happens next?

- 8.1 We are in the process of completing the preliminary design, Environmental Statement and WelTAG Stage 3 report and plan to be in a position to publish the draft Orders (Highways Act 1980, Acquisition of Land Act 1981) during winter 2019/20. The draft Orders comprise the powers to establish a line, modify and stop up side roads, purchase land and establish any other rights needed to deliver the scheme.
- 8.2 Along with the draft Orders, the Environmental Statement and Non-Technical Summary, and the Statement to Inform the Appropriate Assessment (SIAA) will be published and made available both electronically and also in hardcopy at agreed local locations for the public to view.
- 8.3 There will then be a period for those interested in, or that might be affected by, the proposals to comment, support or object to the draft Orders. During this time there will also be an Orders Exhibition held at a local venue, where the proposals will be available, and the project team in attendance to discuss the scheme with anyone affected / interested in the scheme. If objections are received during this period and depending on the nature and weight of the objection, a Public Inquiry may be needed to determine whether the scheme may proceed. At this Inquiry an independent Inspector would hear and consider the evidence for and against the scheme and make a recommendation for the Minister for Economy and Transport on the case for the scheme. The Minister would then consider this recommendation and decide whether the Orders should be confirmed and the scheme progressing through the

land acquisition process and onto construction.

8.4 As the scheme progresses, we intend to continue to engage and keep the public informed. Further public information events will be held, and updates / information will be provided via the project website <a href="https://gov.wales/a494-river-dee-bridge">https://gov.wales/a494-river-dee-bridge</a>

#### **Annex A: Public Consultation Document**

https://gov.wales/sites/default/files/consultations/2018-11/consultation-document.pdf

#### **Annex B: Summary Questions and Responses**

#### 1. Q: Why is the scheme required?

A: The scheme is required due to the condition of the existing bridge. There is evidence of deterioration to key structural features which would be difficult to repair whilst keeping the bridge open to traffic. The bridge's concrete deck is in a poor condition which results in an uneven surface and may in the future affect the crossing's weight-carrying capacity. The abutments which support the bridge are also in a poor state of repair. If nothing is done, these structural issues will continue to deteriorate, and weight restrictions and/or lane closures may need to be introduced to maintain the crossing of the River Dee. Repairing the current bridge, which would involve reconstructing key elements, is not possible without causing significant traffic impact and disruption, with the crossing carrying approximately 61,000 vehicles per day connecting people, communities and businesses.

#### 2. Q: Have alternative options been considered?

A: In arriving at the preferred option for the scheme a number of alternative options were assessed in accordance with the Welsh Government's WelTAG 2017 Guidance and aligned with the Well-being of Future Generations Act (Wales) 2015. Options explored included:

- Replacing the existing bridge;
- Providing new river bridges for both the westbound and eastbound carriageways;
- Different variations on two and three lane highway configurations and arrangements to the railway underbridge.

The options were each assessed against the Five Business Case Model (Strategic, Transport, Management, Financial and Commercial) and scored against pre-determined project objectives. The preferred option was selected on the basis that the function and resilience of the A494 is addressed, it will provide greater economic benefits and will have less adverse construction impacts in contrast to the alternatives.

# 3. Q: Does the construction of this scheme affect Welsh Government's proposals for the A55/A494/A548 Flintshire Corridor Improvement (Red Route) scheme?

A: No, this scheme is required to address the problem posed by the deterioration of the existing A494 River Dee Bridge and the need to construct a replacement to maintain the existing level of connectivity across the region. The proposals for the Flintshire Corridor Improvement (Red Route) scheme are unaffected by this scheme.

#### 4. Q: How much will the scheme cost?

A: The scheme construction cost is estimated to be £80m - £90m.

## 5. Q: What impact is the scheme expected to have on nature and the local environment?

A: A detailed Environmental Impact Assessment (EIA) has been conducted to understand the impact of the scheme on the environment. The project surroundings and design have been assessed in accordance with the EIA Regulations and Regulation 61 of the Conservation of Habitats and Species Regulations 2017 (the "Habitats Regulations"). These assessments consider possible effects on the environment and on sites designated under the Habitats Regulations. The result of the work and studies that have been underway since spring 2018 are presented in the Environmental Statement for the Scheme and in the Statement to Inform an Appropriate Assessment under the Habitats Regulations. These documents will be published with the draft Orders and will be available for the public to view and comment.

## 6. Q: What environmental protection and enhancement will be provided as part of the scheme?

A: The scheme design includes noise barriers at three locations to manage noise. New tree and shrub planting, with areas of wildflower grassland and other habitats, will be provided where space permits and connect to existing wildlife corridors. Where possible, the existing Queensferry Drain culvert has been re-routed as an open channel with grassy banks. New pedestrian and cycle connections (see Q-8) will be provided to encourage non-car travel. An Outline Construction Environmental Management Plan has been prepared, and the contractor (the organisation who will build the bridge) will develop this plan in more detail to set out how they will manage the environmental effects of their work (e.g. to control dust and noise, minimise resource use and manage waste).

#### 7. Q: What consideration has been given to visual aesthetics of the scheme?

A: The project team has prepared the Environmental Master Plans to show where new landscape works should be implemented to improve screening or enhance the road corridor. Landscape design has been integrated with ecological design, following the principles of the Welsh Government's 'Green Corridors' programme. The finishes of hard surfaces such as walls and bridges will be designed to reflect the materials of the nearby built environment to integrate the scheme with the surroundings and character of the area.

#### 8. Q: What provisions will there be for pedestrians and cyclists?

A: Provision for cyclists and pedestrians or 'Active Travel' is a key part of the design. The project team have been liaising with cycling and walking groups such as Sustrans, Cycling UK and the Ramblers Association as well as the local authority and Welsh Government Active Travel project officers. The scheme will deliver significant improvements with new routes and improvements to existing routes proposed. This includes a new offline 3m wide shared use path running adjacent to the new A494

westbound carriageway. This shared use path will connect to a new route under the bridge, to Station Road on the western side of the river and will also continue over the new river bridge and connect to the Wales Coast Path on the eastern side of the river. The path will be segregated from the westbound carriageway by a fence immediately adjacent to the path itself with additional protection provided by vehicle restraint systems to the carriageway. Lighting has also been designed to illuminate the new path.

## 9. Q: Why are the roads being widened to three lanes with a hard shoulder for the scheme?

A: The A494, together with the A55 and the A550, forms a primary East-West corridor between North Wales and North West England. The A494 River Dee Bridge is a fundamental part of the corridor and carries approximately 61,000 vehicles per day.

Maintaining the existing layout would lead to significant congestion and delays during the construction work. By providing a three lane plus hard shoulder arrangement it allows for two lanes of traffic to be maintained in each direction during the construction works, reducing the impact on the immediate area and other major routes in the area as a whole.

A three lane and hard shoulder arrangement also provides increased resilience in the future for any major maintenance works or traffic incidents, with two lanes running in each direction being able to be maintained in contraflow should there be a need to temporarily close one of the carriageways in the event of an incident.

# 10. Q: Why does the western extent of the scheme only extend to the Queensferry Interchange? Will this move the current bottleneck where three lanes reduce to two on the eastern side of the bridge to here?

A: The scheme has been designed to conform with national design standards using traffic flow forecasts for 2022, when the scheme opens, and the design year, 2037 (15 years after opening). Our modelling show that the proposed scheme provides an appropriate level of capacity and that a further extension to the west of the Queensferry Interchange would be overprovision. The proposed scheme also removes the bottleneck to the east of the existing bridge and provides an extended area for traffic leaving the A494 at Queensferry and traffic joining the A494 at Sealand Road to move into the correct lane, which is an improvement on the existing situation.

#### 11. Q: What affect will the scheme have on the traffic on local roads in the area?

A: The traffic modelling work undertaken to support the scheme shows that in comparison with traffic conditions under the existing bridge layout, the proposed scheme should have a negligible impact on traffic conditions on the local road network. By contrast, failing to address the structural problems in the existing bridge could result in lane closures or the bridge closing. This would have an incredibly detrimental impact on the local road network.

#### 12. Q: Can some of the existing river bridge be retained and re-used?

A: Re-use of elements of the existing bridge has been considered during the design development. Unfortunately, it is not possible to re-use the river bridge deck due to the deck being in a poor state of repair and also not being wide enough for the three lane plus hard shoulder arrangement. However, it is the intention to retain the two existing river support piers following a preliminary assessment. In order to ensure their longevity some concrete repair works are required. In addition, there will be a requirement on the contractor to re-use as much as possible of the demolished concrete elements as fill within the scheme and the steel elements will be recycled off site.

#### 13. Q: Why is a new railway underbridge being constructed?

A: Options have been considered which involved retaining the existing railway underbridge and directing all traffic through this structure. However, it would not be possible to maintain three lanes of traffic and hard shoulder in each direction. It would introduce a safety issue at the bridge. In addition, concerns were raised in relation to the risk to the railway structure itself from vehicle impact, particularly as the headroom to the structure is limited. Providing a new structure not only addresses resilience and safety issues at this location but also significantly reduces traffic impacts on the route with two lanes of traffic being able to be maintained whilst the scheme is constructed.

# 14. Q: What will happen to the current access on to the A494 immediately west of the existing bridge?

A: This access will be closed permanently. A new access route for residents and businesses will be constructed that will join onto Factory Road near the Chemistry Lane junction.

#### 15. Q: Will utilities need to be moved for scheme?

A: A number of public utilities will require diverting as part of the scheme and include a high voltage overhead electricity power line and pylon and also rising main sewer pipes. Advanced discussions are underway with the utility providers, so that this process can be managed as effectively as possible.

## 16. Q: Will the current 50mph speed limit remain following completion of the scheme?

A: Currently there are issues relating to air quality close at this location of the A494, consequently in June 2018 a new 50 mph speed limit was applied to both directions from the St David's Park Interchange to the Deeside Park Interchange. The aim of the lower speed limit is to reduce vehicle emissions and improve air quality, aiding compliance with limits for Nitrogen Dioxide (NO<sub>2</sub>). The new road has been designed for

a 70mph speed limit and the current 50mph limit will remain under review and any decision to re-instate the national speed limit would not be affected by this scheme.

#### 17. Q: To what design standards will the scheme be designed to?

A: The scheme will be designed to national road standards used by Welsh Government for all their road schemes. The standards are contained in a series of documents call the 'Design Manual for Roads and Bridges'. The various elements of the scheme for example the street lighting and the vehicle restraint system (the safety barriers) are all designed to the current standards contained within these documents.

## 18. Q: Will I receive any compensation should my property be affected by the scheme?

A: Dependant on how your property is affected, you may be entitled to compensation. Further details of the various forms of possible compensation can be found at: <a href="https://gov.wales/compensation-road-affects-propertys-value">https://gov.wales/compensation-road-affects-propertys-value</a>

#### 19. Q: How soon will it be built and how long will construction take?

A: It is expected that the draft Orders for the scheme will be published during the winter of 2019/20 and public will have an opportunity to review and object if they wish. The construction start date will then be depend on whether a Public Inquiry is required based on comments and objections received. Both eventualities have been considered and it is expected that works on the new westbound carriageway will commence in 2021.

Construction works are expected to take around two and a half years to complete. Traffic flows will be unchanged from the current arrangement whilst the westbound carriageway is being constructed. It is expected that westbound construction will be complete, and the traffic temporarily switched into contraflow to allow for the reconstruction of the existing A494 river bridge in Autumn 2022 and the scheme as a whole completed in 2023.

#### 20. Q: Will the construction work involve 24hour working?

A: Some 24hour working is expected for key construction activities such as the bridge lifting work and the railway bridge construction. This will be required in order to reduce disruption on the road and railway network and is only expected for short term isolated activities. Generally, construction is expected to be undertaken during normal daytime working construction times.

#### 21. Q: What disruption can be expected to traffic whilst the scheme is being built?

A: The construction programme for the scheme has been planned to minimise disruption to traffic across the two-and-a-half-year construction period. In the first half

of the construction period, whilst the new westbound carriageway is constructed, disruption to traffic should be limited.

In the second half of the construction period, traffic will be switched from the existing bridge onto the new westbound carriageway and will run in a contraflow arrangement. Two lanes of traffic for both directions will be retained during this period, matching the provision of the existing A494 carriageway. However, for safety reasons, a temporary reduced speed limit will be required during this period and also the temporary closure of the eastbound joining slip road at the Queensferry Interchange. These traffic management measures may cause some disruption to traffic, with increased journey times on the A494 through the works but are required for the safety of the public and construction workers. The works will be advertised in advance to notify local residents and road users of what to expect.

#### 22. Q: Will there be disruption to public footpaths and cycleways during the work?

A: All endeavours will be made to keep closures and diversions to public footpaths to a minimum Due to the nature of the work required some closures and diversions to the Wales Coastal Path and the public footpaths, where the paths travel under the existing and proposed bridges, are expected during the works for safety reasons.

We will continue to liaise closely with user groups including Sustrans, Cycling UK and Ramblers Association, as well as Flintshire Council regarding the planning of any temporary closures and diversions, and ensure that adequate notices and signage is provided to users.

#### 23. Q: How will noise during and after construction affect residents?

A: When the scheme is completed and the road is open, the predicted change in traffic noise at residential properties would generally be regarded as negligible or minor. Where noise increases have been determined as more significant, mitigation in the form of noise barriers are proposed.

During construction there will inevitably be some noise, and the chosen contractor will be required to plan the works in consultation with Flintshire Council's Public Protection team to minimise the volume and duration of the nosiest activities. Local residents will be given as much notice as possible, and a Liaison Officer will be available to help with any individual concerns and issues. Some night-time work is envisaged for some key construction activities such as the bridge lifting work and the railway bridge construction. However, generally construction is expected to be undertaken during normal daytime working construction times.