

# Our approach to assessing options

**Assessing the relative merits of different options is critical to making the right decisions for the communities East West Rail would serve. To help us do this, we have used Assessment Factors to appraise possible options, as set out in this factsheet.**

**The Assessment Factors enable the options to be compared against a design baseline or comparator. Each Assessment Factor includes a number of supporting considerations. They provide a consistent framework for decision making on design options and a robust basis for identifying preferred options.**

## Our approach

Throughout the design and option selection process we have also taken account of stakeholder feedback. The feedback received from all stakeholders, both from the 2021 non-statutory consultation and through more recent stakeholder engagement, has helped to shape the options considered and their appraisal during the Assessment Factors process.

The Assessment Factors have been agreed with the Department of Transport (DfT) and have been used throughout the development of the project. Where appropriate, the Assessment Factors and their supporting considerations have been updated and refined to reflect the stage of the project development. They give us a robust framework for comparing the relative performance of options.

The Assessment Factors have been consistently applied during design development and we will continue to use them to further assess and refine the proposals.

All fifteen factors are taken into account at each stage in design. Some may assist to a greater extent than others in deciding between options depending on the specific element of the project being considered.

## Example of how Assessment Factors have been used

When identifying the preferred design for the crossing through Chapel Hill, the Option 3 intermediate mined tunnel was chosen as the preferred solution. The factors which acted as the greatest differentiators between options were: cost and affordability; satisfying existing and future freight demand; operational performance; alignment with wider railway strategy/infrastructure; deliverability; and environmental impacts and opportunities.

The **Technical Report** published as part of this consultation provides more information about how the Assessment Factors have been applied in developing our proposals.



## The full list of fifteen Assessment Factors is:

Number	Assessment factors
<b>Business case and customers</b>	
<b>1</b>	<b>Transport user benefits</b> – Includes elements that drive generalised journey times, origin to destination journey times, access times to stations and number of interchanges. It also considers crowding and quality compared to current journeys and includes benefits of mode shift (i.e. decongestion and environmental benefits where people are attracted to rail rather than use of other modes due to shorter generalised journey times).
<b>2</b>	<b>Potential to unlock economic growth</b> – Considers potential for wider employment and productivity benefits of improved east-west connectivity and the opportunity for stations served by EWR to support housing growth within their catchment areas.
<b>3, 4 &amp; 5</b>	<b>Cost and affordability</b> – Considers cost to bring the project to full service, including land acquisition, construction and any adaptation and mitigation works, including risk. Also considers overall affordability based on potential income and other benefits identified in Assessment Factor 1 and Assessment Factor 2.
<b>Network capability</b>	
<b>6</b>	<b>Short distance connectivity to support commuting travel into key employment hubs (current and future)</b> – Considers journey time between housing centres and employment hubs.
<b>7</b>	<b>Short distance passenger services</b> – Considers impact on the interchange-to-interchange station journey times (sections of the route) and the journey times between intermediate stations across the EWR route as applicable (with Aylesbury excluded from scope).
<b>8</b>	<b>Rail passenger connectivity to existing main lines</b> – Considers ease of interchange, e.g. platform-to-platform distance, level change/accessibility, stopping frequency, timetable alignment.
<b>9</b>	<b>Long distance passenger services</b> – Strategic consideration of the extent to which EWR facilitates long distance passenger services beyond Oxford to Cambridge.
<b>10</b>	<b>Satisfying existing and future freight demand</b> – Considers the potential to meet freight demand, as anticipated by the freight industry, through active provision for freight paths.



Number	Assessment Factors
<b>Railway operations</b>	
<b>11</b>	<b>Performance and reliability</b> – Considers the ability of the railway to provide a service that meets or exceeds customer, stakeholder and industry expectations.
<b>12</b>	<b>Alignment with wider railway strategy/infrastructure</b> – Considers the extent to which the railway takes account of potential future changes.
<b>Deliverability</b>	
<b>13</b>	<b>Deliverability</b> – Considers the risk (likelihood and consequence) of harm to workforce and public during construction, operations and maintenance. Considers the complexity (sequence and interfaces) of the delivery programme or maintenance requirements on efficiently achieving the desired infrastructure state (commissioning or maintenance) whilst minimising disruption and efficiently achieving outcomes earlier.
<b>Environment and society</b>	
<b>14</b>	<b>Environmental impacts and opportunities</b> – Considers impacts on and opportunities to improve the local, national and global environment and local and regional socio-economic conditions not considered in other factors. Examples of considerations include noise, ecology, landscape and visual impacts.
<b>Local Plans</b>	
<b>15</b>	<b>Consistency with Local Plans (adopted and emerging)</b> – Considers impacts on and opportunities to support development allocations and consistency with development plans.