CapEx Range Finder Video Walkthrough – Transcript

Better Value Rail has developed the Capital Expenditure Range Finder tool to help rail industry stakeholders understand infrastructure costs based on a selection of historic Network Rail projects. It can be used to support further planning discussions and in the early stages of developing a strategic outline business case. The Range Finder tool provides users with a high-level, indicative price range for new proposals, which is useful during early development stages.

There are two methods of assessment. Level 1, Project Type Selection, conducts a highlevel viability assessment based on project type, and is aimed at Proposers with limited knowledge of the railway infrastructure or who are uncertain regarding the scope of work required to meet their needs. Level 2, Primary Asset Type Selection, conducts a more detailed viability assessment based on a chosen asset type, requiring users to have deeper knowledge of the railway and specifically the work that is anticipated to be needed. Both methods of assessment provide an early indication of the potential range of cost for the infrastructure work, and it's important to note that this price must be validated by a suitable National or Regional representative within Network Rail before it is formally submitted as part of a business case.

Let's firstly run through the key features common to all the dashboards in the Range Finder tool, using a Level 1 assessment as an example. Example projects can be filtered using the dropdown menus and sliders found throughout the dashboard, allowing you to filter the projects that are used for benchmarking and ensure they're relevant to your new proposal. You can also pull up the Project on a Page view for any project displayed in the tool by hovering over it, to see an overview of the project details. All filters can be cleared using the Reset button at the top of the page. There is also an information button, which takes you to the Capital Expenditure Range Finder FAQs. Users can navigate back to the homepage by clicking on the Home button.

We will begin by looking at Level 1 – Project Type Selection, looking at a viability assessment for a new station project. The indicative range of potential costs are shown in the top right box, and shows the upper quartile, lower quartile and median for the projects in the database. Falling within the lower and upper quartile will ensure that outliers are excluded, giving a more refined range of potential costs. This does of course assume that the proposal does not have attributes that will themselves qualify the proposal as an outlier.

Every effort should be made to understand the potential cost drivers within a proposal and match these to projects within the tool. There is also a Data Glossary that defines key terms used throughout the Capital Expenditure Range Finder tool. Station Projects can be filtered by size (based on the Department for Transport station type classification) then users are able to select an example project to look at in more detail including the region where the work was carried out, a description of works done, and a list of attributes. Users can also adjust the planned Year of Construction for their new station project. Changing

the Year of Construction will change the given indicative range of potential cost, which has now been escalated to account for inflation.

Let's return to the homepage and look at an indicative range of potential costs based on different project types. This dashboard shows users what they can get for their money, through using the slider that adjusts cost range. Here, benchmarking projects can be filtered down at several stages. First, the user must select the relevant scheme type. Then, users can choose whether or not to set project parameters, which filter the projects by Region, and Completion Date. As with Level 1, users can also select the Year of Construction, to factor inflation into the indicative potential cost range figure. The historic Project final Costs are shown in a box and whisker plot, and users can look at the details of included projects to understand what was delivered for that given cost. Users can also use this slider to limit projects shown within a cost range, pull up a data glossary by clicking on the help button, and manually remove outliers. All filters can be cleared using the reset button at the top of the page.

Next, we will look at a Level 2 Viability Assessment, which is based on Primary Asset. Users can click one of these buttons to select their Primary Asset Type, for example Corridor Formation, and the donut graph on the right shows how many relevant projects there are in the tool for that Primary Asset Type. From here, users can view either the Potential Cost Range, or the Project Compendium.

Let's look first at the Potential Cost Range for Corridor Formation projects. A Potential Cost Range at Level 2 is similar to Level 1, but is more detailed as it relies on users having a deeper knowledge of the railway and specifically the work that is anticipated to be needed within their proposal together with an ability to translate this into the railway's standard cost breakdown structure. Upon selecting a Primary Asset Type, users can increase the relevance of projects displayed through setting project parameters. These filter projects by Region, and by Completion Date. There are also several advanced filters, which include PACE stage, Asset Proportions, and Location. As with Level 1, users can adjust the Year of Construction of their upcoming project to account for inflation.

Let's return to the Asset Type Selection page by clicking on the return button to look at the Project Compendium. The Project Compendium within the tool provides a selection of historic Network Rail schemes used for comparison and based on your chosen Primary Asset Type. This page can be filtered by region, scheme type, and cost. The Project Compendium provides users with a map view of selected projects, and a project preview. Let's return to the homepage.

The Better Value Rail Capital Expenditure Range Finder tool provides users with a highlevel indicative range of costs for different types of rail projects, driven by analysis of historical cost data. It will help rail industry stakeholders understand infrastructure costs, aiding planning discussions and enhancing the early stages of developing Strategic Economic business cases. For more information on the Range Finder Tool, please see the Range Finder FAQs and Glossary documents, which can be found on the Better Value Rail website.