



CASE STUDY

How **TRU West** was able to make better decisions

during a mega project using
Nodes & Links

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ABOUT TRU WEST

Transpennine Route Upgrade (TRU) West is an alliance across a range of stakeholders, composed of BAM Nutall, Network Rail, Arup, Amey, D2Rail and Siemens, actively working towards a multi-billion-pound rail programme. As part of the alliance, the team is motivated in creating a one-team culture by democratising data and insights, and leveraging them to deliver this complex programme rail improvement programme between Manchester and Leeds on time, to rigorous quality standards and within budget.

CHALLENGE

Upgrading existing railway systems is a daunting task that involves balancing live traffic with carefully orchestrated closures to ensure minimal disruption to the daily commute of thousands of people. Railway upgrades are necessary to ensure that the increasing demand for low-carbon commutes is met.

In an industry of intense competition, delivering railway upgrades carries significant risk. Missed deadlines can trigger a range of negative effects, from lost revenue for the operators to damaged reputation for the contractor, subsequently impacting their ability to secure future work. Such delays also impact the overall carbon footprint of public commute, since rail is three times greener than other alternative means of transport. In the case of the TRU West project, a single day in delay can mean an additional 2.3 tonnes of carbon is added to the environment.



TRU West was facing a challenging task, coordinating several line closures during the upgrade of over 76 miles of track, 25 stations, and a total of almost 300 bridges, viaducts, and tunnels. The project's span made it an even more challenging task, with work across several sites over the UK.

This resulted in a schedule composed of over 26,000 activities, broken down into 4 interconnected parts and spanning over 10 years. The complex nature of the dependencies - typical in any large engineering project - crystalised the challenges of the team early on.



“We wanted to get things **done better and faster so that we could **identify slips and proactively manage them**. The scale and complexity of the project was challenging our ability to do so in a scalable way.”**

Jeancarlo Duran, Digital Planning & Reporting Manager at TRU West

With this scale of a challenge, the team needed to be able to track project progress in an easy and transparent way that could unlock proactive risk management in ways that could promote collaboration. Detailed tracking was as important for the team as tracking progress at a WBS level, in order to help decision-makers across various levels to make decisions and direct their resources in a way to ensure everything was on track.

The TRU West team wanted the capability to quickly turn information into actionable insights without losing days in processing data in spreadsheets, which could limit their ability to mitigate risk before it occurs.

SOLUTION

TRU West chose Nodes & Links to enable their team to spend more time improving the predictability of the project by having more time to concentrate on spotting issues that have not yet happened, and managing them. All the team had to do was to securely log in to Nodes & Links from anywhere, in a secure way. The team then had immediate access to the same information and insights, making sure that everyone was making decisions based on a shared understanding.

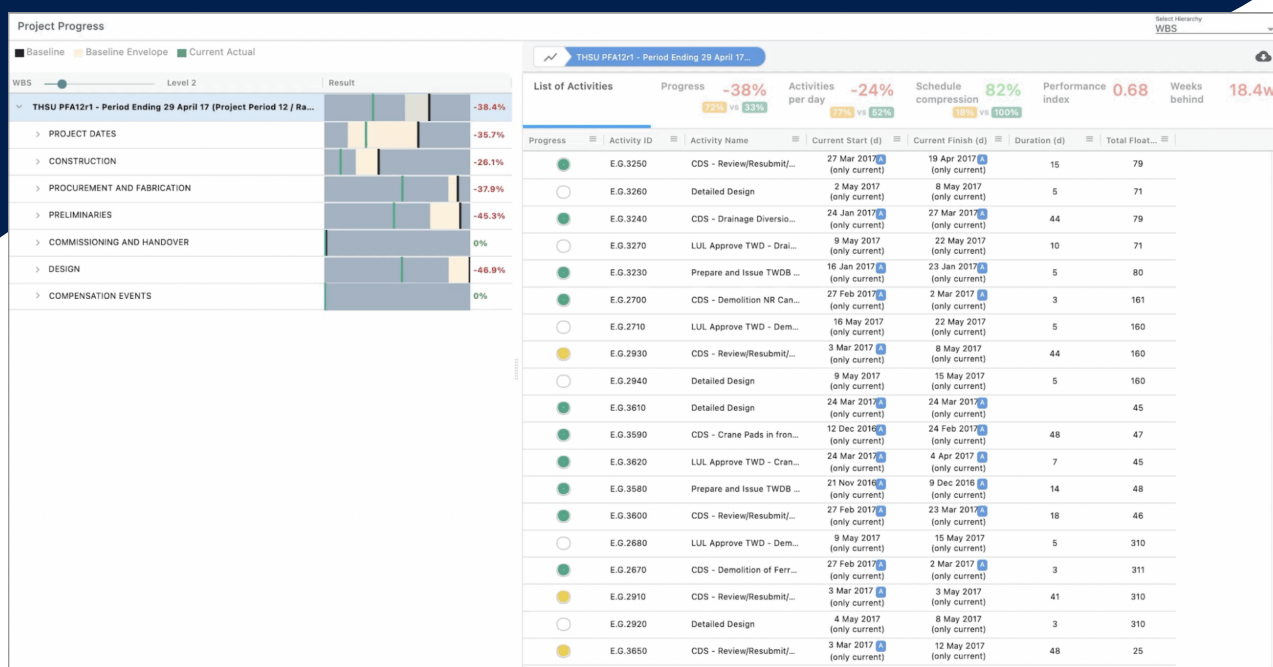
The team was able to access a range of analytics and predictive insights, from productivity analytics to sophisticated schedule insights. All, with just one click and understood by everyone in the planning team.



“It enables us to bring in **efficiency in how we use our own resources, along with **reinforcing the data-driven component of how we make decisions**.”**

Jeancarlo Duran, Digital Planning & Reporting Manager at TRU West

Planners were able to instantly get productivity analytics like the number of active tasks per day, and share them with the broader team easily. The interactive nature of Nodes & Links enabled the team to drill down into the details, isolating and tracking progress at a WBS or even at an activity level. The resulting trends were then used to assess the likelihood of completing parts of the project on time, directing resources where needed to ensure delays were addressed as early as possible.



Data shown in the platform is not live project data.

The team was also able to extract critical and near-critical paths for any activity, whether it was a tricky task with a risky deliverable or a big delivery milestone. All the team had to do was to jump on Nodes & Links, select the activity they care about, and instantly get the top five most critical paths. Combined with Nodes & Links proprietary criticality scores, the team was able to synthesise information fast and easily.

With the TRU West team already running at capacity, the ease in which they were able to get insights from Nodes & Links made sure that planners and project control professionals were able to access this critical information. Thanks to the intuitive interface of the platform, everyone was able to get immediately and securely on the platform, generating insights in a matter of minutes.



“Using artificial intelligence on TRU West has proved to be an excellent investment. Nodes and Links are showing how the construction industry can benefit from **smart technology to improve project efficiency and effectiveness**. We will continue to partner with Nodes and Links to exploit further opportunities in planning, quality, and sustainability.”

Paul Marsden, Head of Quality inc Business Continuity



RESULT

The TRU West team continues to work with its partners in using Nodes & Links to modernise the way they deliver projects, from making complex analysis accessible and easy to use for everyone to unlock new and previously unattainable insights.

Nodes & Links is obsessively working with its partners across the globe towards a single objective - to the broader project management community with simple tools that just work, leveraging award-winning AI to bring **#ProjTech** to everyone.

BY THE NUMBERS

360

hours saved
monthly

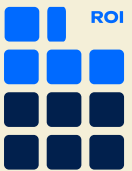
5x

more
insights

480x

faster

73% **ROI**
+
100%



CONTACT NODES & LINKS

The best project teams understand and proactively manage their plan

Nodes & Links is built for every member of your team to track, analyse and prioritise work to make great decisions.

Find out more by contacting greg@nodeslinks.com or stephen.rennick@nodeslinks.com