RapidRail
3D Visualisation for the Digital Railway

From continental interoperability to higher running speeds, lower carbon emissions, and the call for a tenfold increase in the speed of the European Rail Transport Management System (ERTMS) rollout, it is clear that rail is on the cusp of major change.

The question is, however, what does all this change actually look like to those in the "hot seat"? What are the potential impacts on drivers and signallers? How will proposed changes to the rail infrastructure be tested for driving viability? How will new schemes be selected and optimised? How will new operating processes be validated, and risks mitigated?

Introducing RapidRail

RapidRail is a fully customisable solution for augmenting new and existing simulations with realistic 3D visuals. It replicates the view from the cab. It puts the driver's experience at the heart of efficient and safe rail services, enabling drivers to experience new ways of working and new infrastructure early in the project lifecycle; generating early feedback and actionable insights on planned changes.

RapidRail integrates into your existing workflows. RapidRail can read data from design tools describing a proposed scheme design. New routes and new designs can be visualised, options compared and informed feedback collected earlier in the project lifecycle.

Ultimately, RapidRail provides a user-friendly solution for visualising and validating proposed changes, collecting feedback early in the lifecycle and optimising designs earlier, saving time and money. As part of a training simulation, RapidRail 3D Visuals can also provide the Cab-View visuals needed to enable drivers to familiarize with new routes, infrastructure or processes.

Designed to easily integrate with any rail simulation, the **RapidRail Cab View** reads:
– scheme asset design information, i.e. location of marker boards, balises, etc.
– train speed and position
– railway asset states (e.g. current states of all points and signals)
– weather, time of day and information such as numbers of passengers on platforms,
as required from your train simulation at runtime. This enables the RapidRail Cab View to present a view out of the window that replicates exactly what the driver would see, based on the live state of your simulation.

Using our RapidRail tools, we can quickly and efficiently create and supply geo-typical or geo-specific 3D virtual environments to work with the RapidRail 3D viewer, enabling you to conduct research, understand change and provide training experiences.

However, if you want the power to create and modify your own 3D railway environments for use with the RapidRail Cab View, the **RapidRail Environment Editor** is what you need. The RapidRail Environment Editor enables you to create new Virtual 3D rail environments based on GIS or existing network data. Whether you are creating a simulation for driver familiarisation, or trying our different infrastructure configurations, the RapidRail Environment Editor gives you the power to do what you need. In combination with the RapidRail Cab View, it provides a complete solution for generating and visualising railway environments.

For more information on how Agility3's RapidRail 3D Visuals can help you simulate the railway, de-risk major infrastructure projects and provide immersive training, contact the team today.

T: +44 (0)1438 488066
E: info@agility3.co.uk
agility3.co.uk