

Strategic Rail Planning



Background

Few things are certain when planning for the long term. The only certainty is that we don't know what the future will hold. Sound long-term planning which takes account of the impact of alternative scenarios is vital in order to access investment and funding. The development of a clear long-term vision is the basis for efficient planning, robust investment decisions and a sustainable railway for future generations.

The Challenge

The challenge is to anticipate what the rail network will be required to deliver in the future. The significant potential for rail to enhance economic prosperity and improve transport efficiency needs to be achieved hand in hand with increased value for money.

In some countries this could be against a backdrop of declining patronage or declining freight tonnage resulting from increased modal competition and reduced railway funding.

Elsewhere, there may be a need to accommodate anticipated growth in patronage and the desire to facilitate economic growth through increased infrastructure investment.

How We Can Help

The sound long term planning of Britain's railway infrastructure is one of our core responsibilities. This remit spans developing a 30 year vision for key routes, through to procurement, delivery, operation and maintenance.

This is a complex challenge; especially against the backdrop of tough economic times burgeoning passenger growth and a live and heavily used railway. We have successfully worked with government agencies and our stakeholders to develop and secure funding for a sustained programme of investment in the network to the tune of over £11 billion between 2014 and 2019.

Our specialists have a wealth of experience in understanding future passenger and freight trends, the key requirements of rail users, rail industry funders and the network operator and liaising with government officials. We can act as client and development manager for projects to transform to the capability of the rail network and develop route specifications to meet future requirements'.

Our specific skills include:

- ▶ Demand forecasting
- ▶ Capacity and capability analysis
- ▶ Timetable development
- ▶ Economic and financial appraisal
- ▶ Project management and option development
- ▶ Negotiation with customers and rail industry funders
- ▶ Public relations activities.



New Lines Programme

The New Lines Programme was aimed at understanding whether the best value for money intervention in the long run will be to build new lines, once all the known and next generation methods to enhance rail capacity were exhausted. The programme established a compelling case for new high speed lines which influenced Government's thinking. HS2 Ltd was set up by the Government to develop and build the next high speed line in Britain.

Electrification Strategy

Only 40 % of the total British rail network is electrified. A very high proportion of passenger, cross country and freight operates over non electrified routes. Network Rail developed the national electrification strategy and established the:

- ▶ operational and environmental benefits
- ▶ potential to reduce the operating costs

- ▶ potential to reduce journey time and improve the performance.

The strategy proposed a rolling programme of electrification of key routes as well as infill electrification. This was backed by stakeholders and industry partners. The Government has announced its decision to electrify Great Western, Midland Main Line and Transpennine routes, and asked Network Rail to develop and deliver these schemes.

Route Utilisation Strategies

Route Utilisation Strategies (RUSs) seek to balance supply and demand and set out our longer term vision for improvements across the network. They do this by considering existing capacity, infrastructure capability and train operations, followed by forecasting future demand and providing recommendations as to how this should best be accommodated.

Route Utilisation Strategies consider the requirements of passengers, train operators, rail freight, industry funders and other stakeholders. They are based on a whole-industry approach, with interventions considered such as timetable optimisation, rolling stock changes and running more trains. These are supported by infrastructure enhancements options where necessary.

Achieving value for money is a key element, with all recommendations backed up by a robust economic case.

Network Rail has produced 18 RUSs in conjunction with our rail industry partners and wider stakeholders.