

in the hands of DfT, which will decide whether or not the wires are extended in CP6.

CP7 ONWARDS

The ORCS study is currently at an early stage. It aims to answer the questions:

- What is required from the rail network in order to deliver planned growth to 2031?
- How can the rail network influence the location and scale of additional development?

In addition, defining the needs of the rail freight industry is being undertaken in parallel, to ensure provision is made for existing and future freight flows.

As a first step ORCS is setting up a demand model, with 2018 as the baseline and then looking at forecast demand for rail services in 2023, 2028, 2033, 2038 and 2050. It is apparent from the early work that population growth will be concentrated on existing urban areas (Oxford, Bicester, Banbury and Didcot), with less growth elsewhere. Employment growth is expected to follow the Bicester – Oxford – Didcot corridor, with most growth likely at the two extremities, where major new developments ('Didcot Garden Town' and 'North of Oxford Garden Village') are planned.

Entries and exits data for Oxford and Bicester Village stations for 2016-18 bear this out, increasing from 6.5 to 8 million annually at Oxford in the year after Chiltern services arrived. Bicester Village increased from 1.3 to 2 million. Marylebone data remained static in the same period, suggesting the increases in passenger numbers were at the western end of the route.

The planned introduction of Intercity Express Trains to replace the few remaining Class 166 DMUs between Oxford and Paddington in December is likely to further increase passenger numbers on the GWR route. Today's Class 166 trains are often overcrowded and competing coach services offer an attractive service; despite some recent cutbacks, coaches to London are still operating at 12-minute headways.

GROWTH DEAL

The 'Growth Deal 2031' for new housing and economic development agreed by Oxfordshire County Council with central government in 2017 provides the base data for much of the ORCS

forecasting. The county agreed to the construction of 100,000 new homes by 2031 and infrastructure funding (including road and rail) of £150 million was agreed by government as part of this.

Deciding the impact of the growth predicted on travel patterns and demand for rail services, plus translating them into practical options and potential investment projects, will be the second key output of the ORCS study. Rail demand will be mapped across the time period down to individual station level and origin/destination journey flows.

RAIL FREIGHT CAPACITY

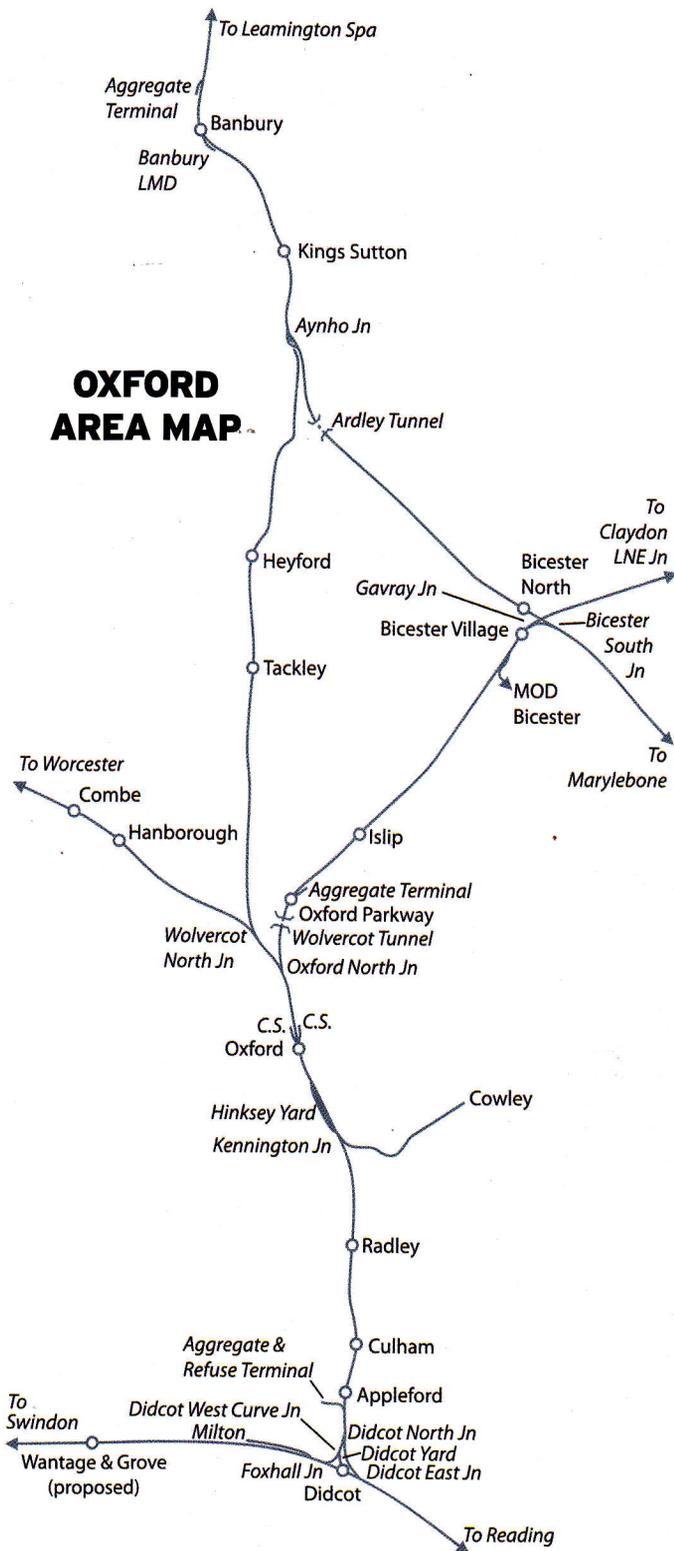
Infrastructure requirements for rail freight in the county are included in the ORCS study, looking at future forecast demand (including that driven by major projects like HS2) to inform infrastructure decisions.

Currently traffic originates at both Cowley (the BMW car factory) and Bicester (Ministry of Defence), whilst aggregates traffic is handled at several locations both for construction and for Network Rail use. Transit flows across Oxfordshire represent a significant proportion of rail freight in the county (currently primarily intermodal between Southampton and the Midlands, plus aggregates from the Mendips to south eastern England and steel from South Wales).

OPTIONS

Whilst the output of the traffic forecasting is not yet complete, some options for adding capacity on the key Didcot – Oxford – Bicester corridor are emerging. These include four-tracking Oxford to Didcot, either in its entirety (10.7 miles) or just between Oxford and Radley. There were four tracks between Oxford and Kennington Junction during World War 2 and structures on this stretch would accommodate extra tracks; limiting the extent of the work to Radley would avoid any need to rebuild Grade II-listed Culham and Appleford stations and add a wider or extra bridge over the Thames north of Culham.

The Cowley freight branch is the stub of the former Wycombe Railway through line to Princes Risborough / Maidenhead that has served the former Morris, now BMW, factory at Cowley since the through line shut in 1968. Introducing passenger services on the branch has been prioritised



by the ORCS team and is now being evaluated at GRIP 1 level. A major business/science park development now exists in Cowley as well as the car factory.

A new line from Oxford station as far as Kennington Junction would likely be needed to accommodate a new service, plus the proposed new through platforms on the up side at Oxford. One option being considered is extending East West Rail trains that otherwise would terminate at Oxford to Cowley.

In another initiative for CP7, the Oxfordshire Growth Board supports the introduction of a new hourly stopping service connecting Oxford with Bristol. In 2018 it published proposals for this and a new station at Wantage & Grove (plus new stations at Royal Wootton Bassett and Corsham in Wiltshire). Such a service, which could be a western extension of East West Rail services, is forecast to attract one million passengers annually (91% new to rail) within five years of launch.