

# CREWE HUB

IMPROVING CAPACITY AND CONNECTIVITY FOR OUR CUSTOMERS

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2016

***Working for you***







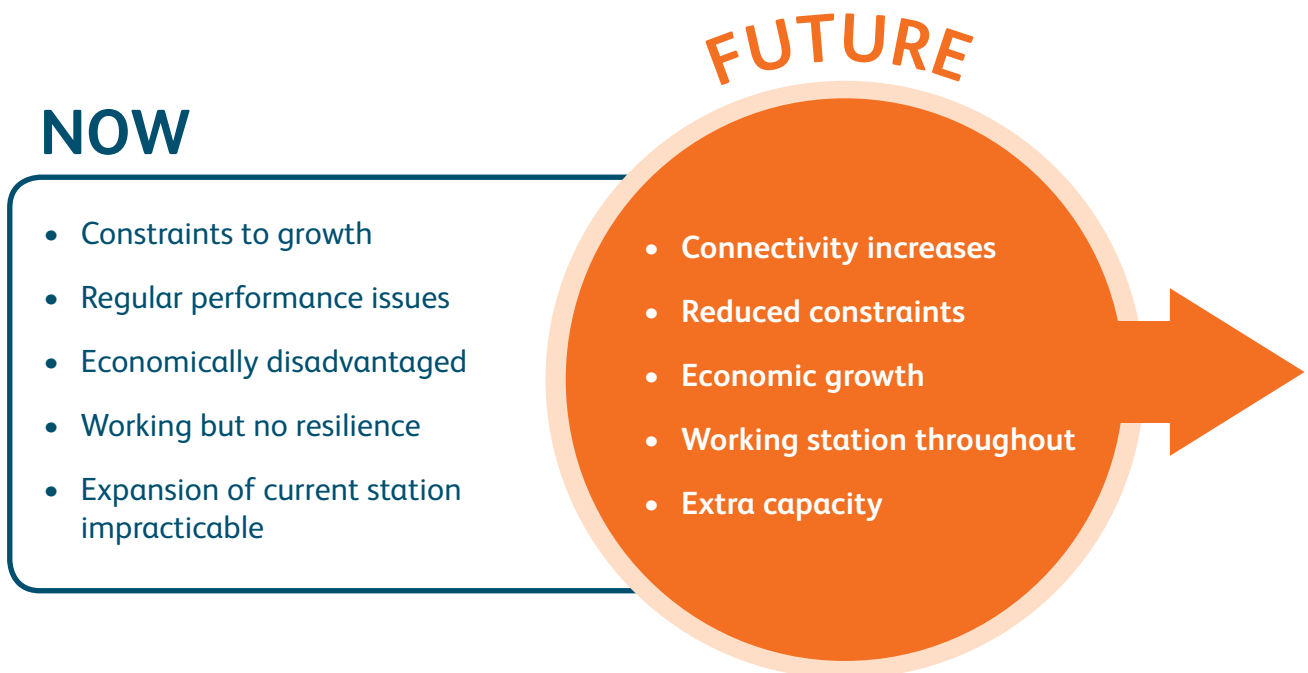
# Crewe Hub

An opportunity to increase capacity, transform connectivity and improve performance, while rejuvenating the wider economy.

Crewe is a key junction on the existing rail network and will provide strategically important connectivity to the HS2 network. As Sir David Higgins set out in his report 'Rebalancing Britain' there is an opportunity to enhance the connectivity, increase HS2 services and address the challenges of growth and train delays due to constrained infrastructure not fit to accommodate the changed service requirements or growing rail market.

Railways are important for economic growth, creating jobs and building sustainable communities. There is an opportunity to rejuvenate the economy by improving the train service available. Over the last 2 years Network Rail has been looking at what infrastructure and investment would be needed to provide more capacity, better connectivity, more resilience, improve access to facilities at the station and create a High Speed Hub at Crewe.

The benefit could be felt far beyond Crewe to all of the connecting routes and locations served.



# Why is Crewe important?

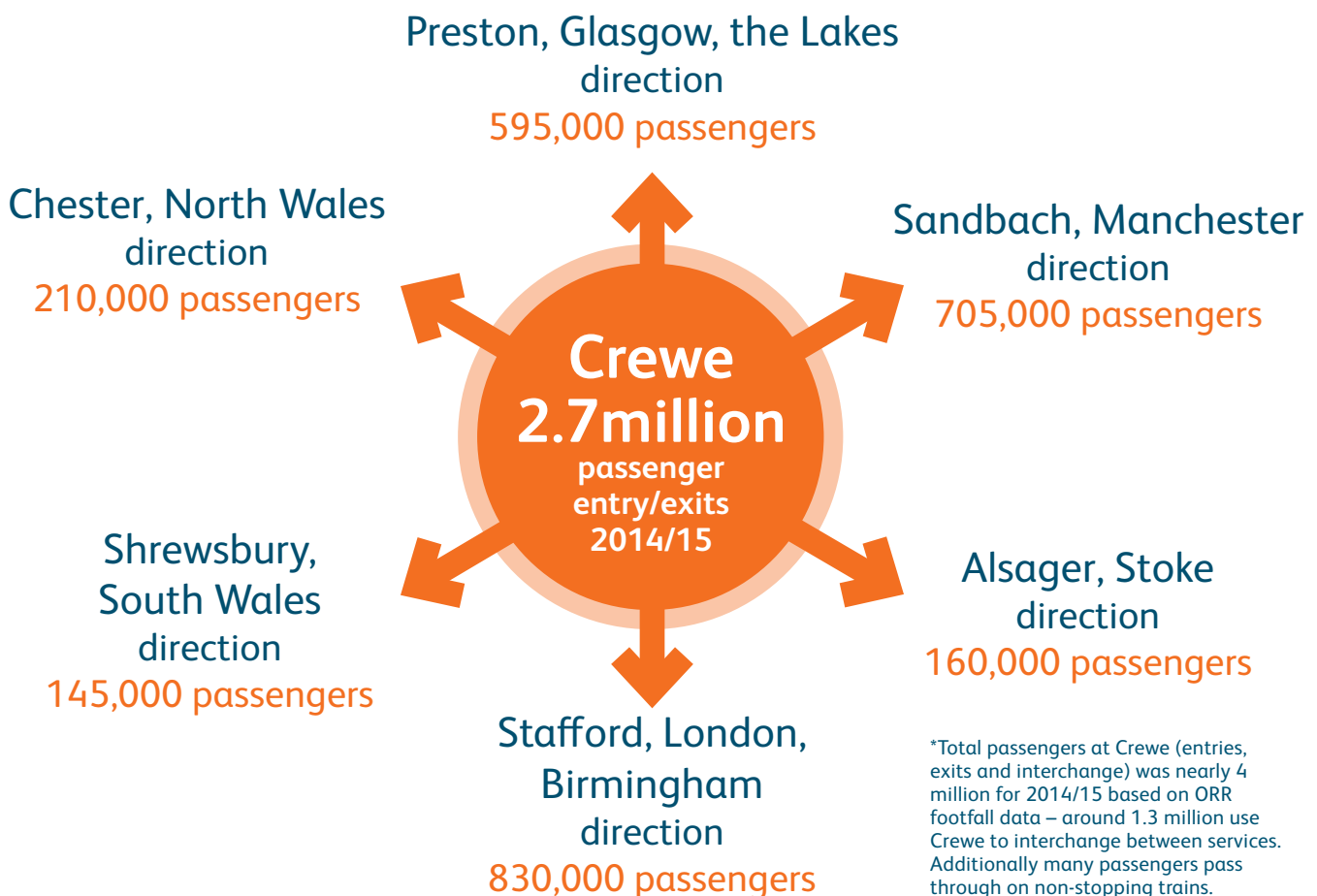
Crewe is a key **transport hub** in the north west of England where four regional lines converge with the West Coast Main Line (WCML). It provides long distance links to London and Glasgow and regional links to Shrewsbury, Chester, north Wales, Liverpool, Manchester, Stoke and the Trent Valley.

This connectivity makes Crewe strategically important to the railway, not only for passenger services but also for freight and engineering trains.

Crewe Station is also **well connected** to other transport infrastructure including the main airports in the north and the midlands, and junctions 16 and 17 of the M6 as well as regional roads. The town itself grew around the railway which provided jobs, housing and supplies – parts of the station are now Grade II listed preserving the heritage for future generations.

‘...the proposed north west hub should be at Crewe because that is the best way to serve the local region, but also provide services into the rest of the north west, north wales and Merseyside’

David Higgins, Rebalancing Britain, 2014.



# What's the challenge?

As Crewe serves multiple rail lines and train operators, there are competing demands on the infrastructure; services have to cross over and share the tracks. The Rail infrastructure was last re-modelled in the 1980's when railway use was lower and operations were different.

Crewe north and south junctions are busy and cannot fit any more crossing train movements – the timetable already fits as many services on the existing infrastructure as possible.

Increases to service frequency and future HS2 services cannot be accommodated on one route without impacting on another.

There is little room for expansion at the existing station needed to accommodate more services and passengers.

Limited growth is possible so potential new markets cannot be serviced.

There is a lack of operational flexibility and resilience so it is difficult to recover quickly after delays. No spare capacity leads to knock on impacts on all routes as Crewe acts as a congested bottleneck, causing delays and disruption to passengers and freight

- Flat junction
- Freight only
- Roads
- F** Fast line 80mph only
- S** Single line
- Platform Layout & Capacity

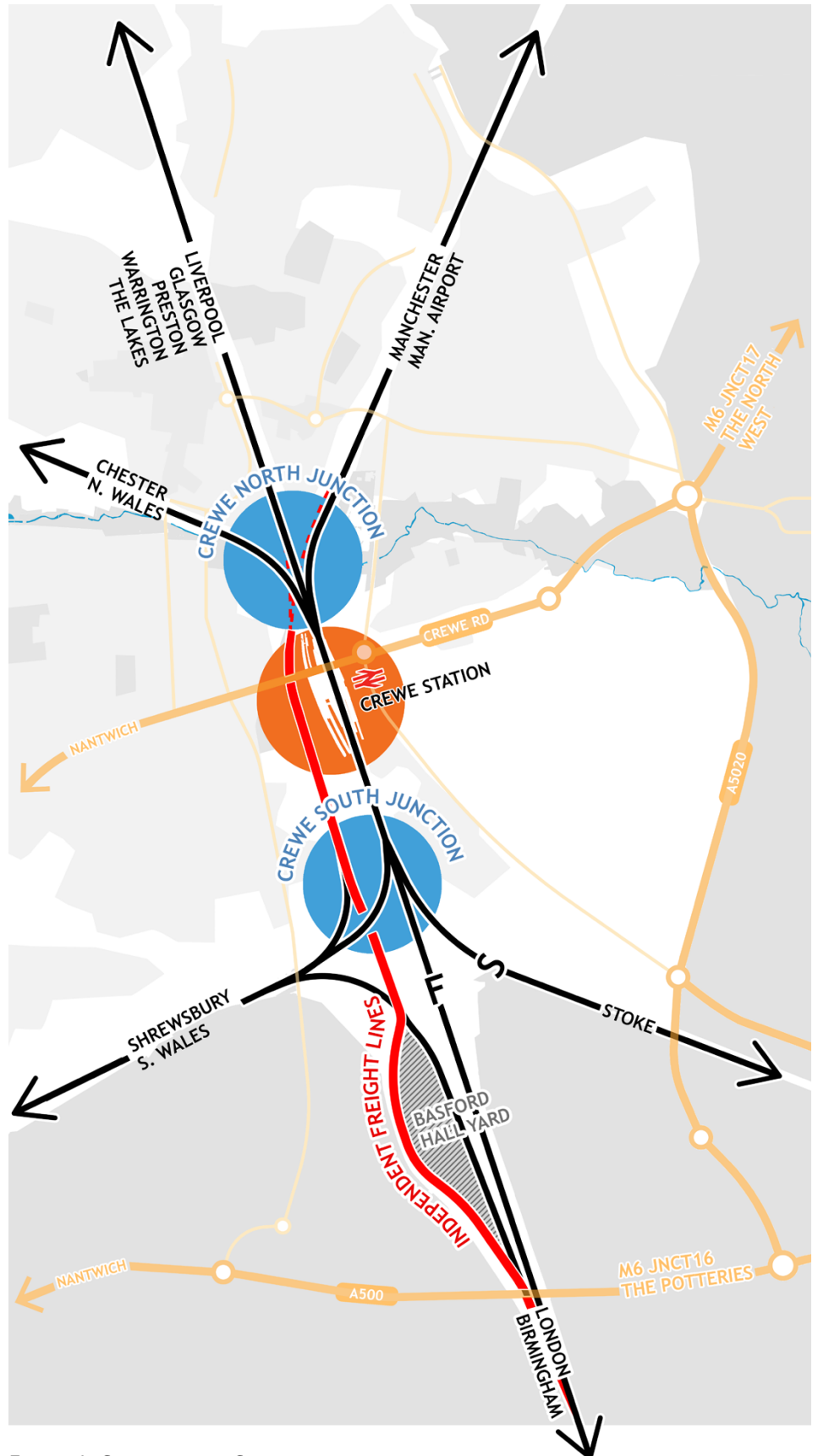


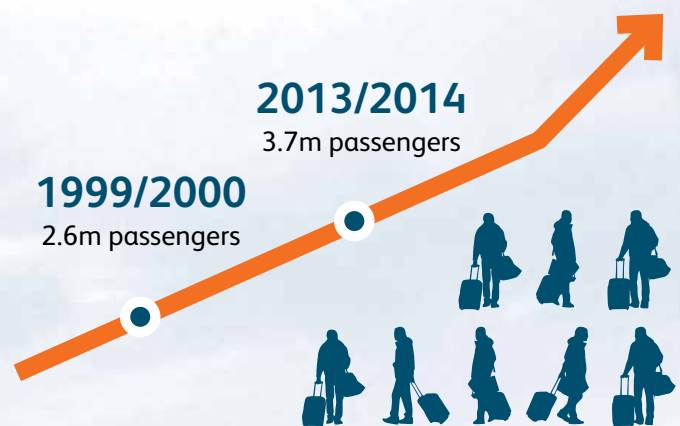
Figure 1. Constraints at Crewe

Crewe Station and its associated infrastructure are a major constraint on the national rail network. The town is further congested due to an extremely busy road network exacerbated by traffic travelling to the station.

## But passenger numbers are continuing to grow

Forecasts predict that passenger and freight numbers will continue to increase **even without changes to existing services**. With more services, including proposals to stop HS2 trains, this will become more challenging.

Crewe Station itself has recently been enhanced (with an eastern entrance and car park, ticket barriers and ticket office), but it is unlikely to be able to either accommodate proposed passenger growth or offer the level of associated facilities passengers expect without further investment in the future



## What's the opportunity?

If we can increase capacity, support an increase to HS2 services and resolve existing constraints through the Crewe Hub scheme, there is an opportunity to improve the service for our customers by:



There is also an opportunity to integrate with existing schemes to seek efficiencies for tax payers and to minimise disruption. There are already advanced plans to do the following work near Crewe Station:

- Network Rail has identified a need for re-signalling and track renewal work in the area in the next decade to replace life-expired assets
- Cheshire East Council will improve the road network in line with their local plan.
- HS2 Phase 1 is planned to stop at Crewe from 2026. Phase 2a and Phase 2b proposals would bring dedicated HS2 infrastructure to Crewe

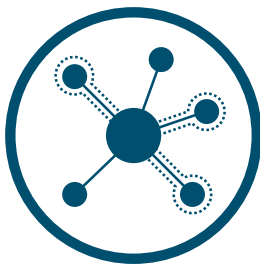


## By working together with stakeholders, key benefits could include



### REDUCING PASSENGER JOURNEY TIMES

Faster train journey times on some long distance services



### IMPROVING CONNECTIVITY AND CAPACITY

Potentially increasing the number and frequency of trains enabling more people to travel to more destinations.



### REGENERATION AND WIDER ECONOMIC BENEFITS

Improvements to residential and economic opportunities, facilitating growth and investment.



### REDUCING HIGHWAY AND ACCESS TIMES

Reducing home to station, car park to station, and within station transfer journey times.



### IMPROVING AMBIENCE

Better facilities, commercial benefits for residents and businesses.

If these can be achieved, early indications show there could be a positive economic case.





Figure 2. Two locations identified

Work concluded that two viable locations exist for a larger Crewe Hub station, either within the boundary of the existing station or just to the south at Basford Hall. There are positives and negatives for each location including:

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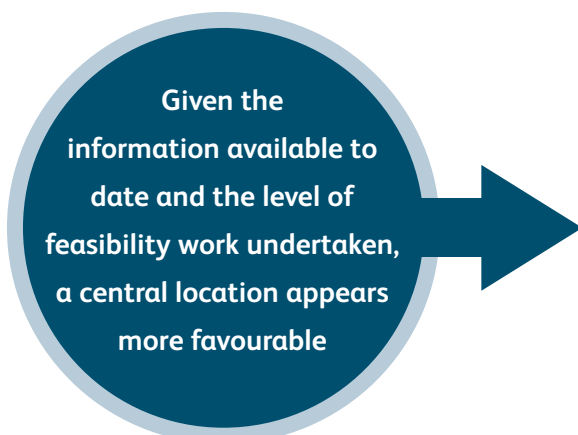
### Central location

Positive	Negative
It is easier to phase work in line with affordability restrictions	Highway infrastructure required to relieve congestion and accommodate new users.
Fewer infrastructure interventions required so fewer closures on subsidiary routes	Construction vehicles may need access via busy roads near existing residential and commercial properties.
Reduced/lesser impact on existing freight facilities	Closer to residential and commercial areas so noise, air and light impact may be more.
Supports the longer term vision for Crewe and local area	If applicable, phased working on active main line station would be challenging.
Alignment with existing local plan	
Potentially more access to and regeneration of existing brownfield sites	
Potentially quicker access for existing pedestrians and cyclists	

### Basford location

Positive	Negative
Less disruption to existing services as building work can be undertaken away from the operational station.	There is no easy approach to phasing should this be a requirement due to affordability restrictions.
Supports the longer term vision for Crewe and local area.	May be a need to stop services temporarily on subsidiary lines due to track realignment.
Overall delivery of works may be less disruptive on local communities.	Increased journey time on Cardiff-Manchester service (due to turnback)
Assets at and near main station will all be new and of uniform age aiding maintenance	Station would be further removed from the existing town centre
Improved access to regional road network.	More assets to maintain as DfT require some passenger services to call at existing station too
	Roads to connect to existing highway infrastructure would need to be built.
	A station with entrances to the east and the west is harder to achieve due to existing freight facilities to the west of Basford Hall yard, and the proposed as consulted HS2 maintenance depot.
	One additional platform required over that needed for a central location station.

\*Neither value for money nor cost have yet been assessed.





# The future

Today, the government has announced its continued support for a Crewe Hub Station and for HS2 Ltd. to proceed with taking the HS2 route to Crewe by 2027 (subject to hybrid Bill approval) and onwards towards Manchester and Leeds by 2033. Together with a Crewe Hub Station, HS2 services could help rejuvenate the local economy.

**‘Faster and more reliable HS2 services from Crewe will help support that region’s ambition of doubling the size of its regional economy to over £50bn and creating 70,000 new jobs.’**

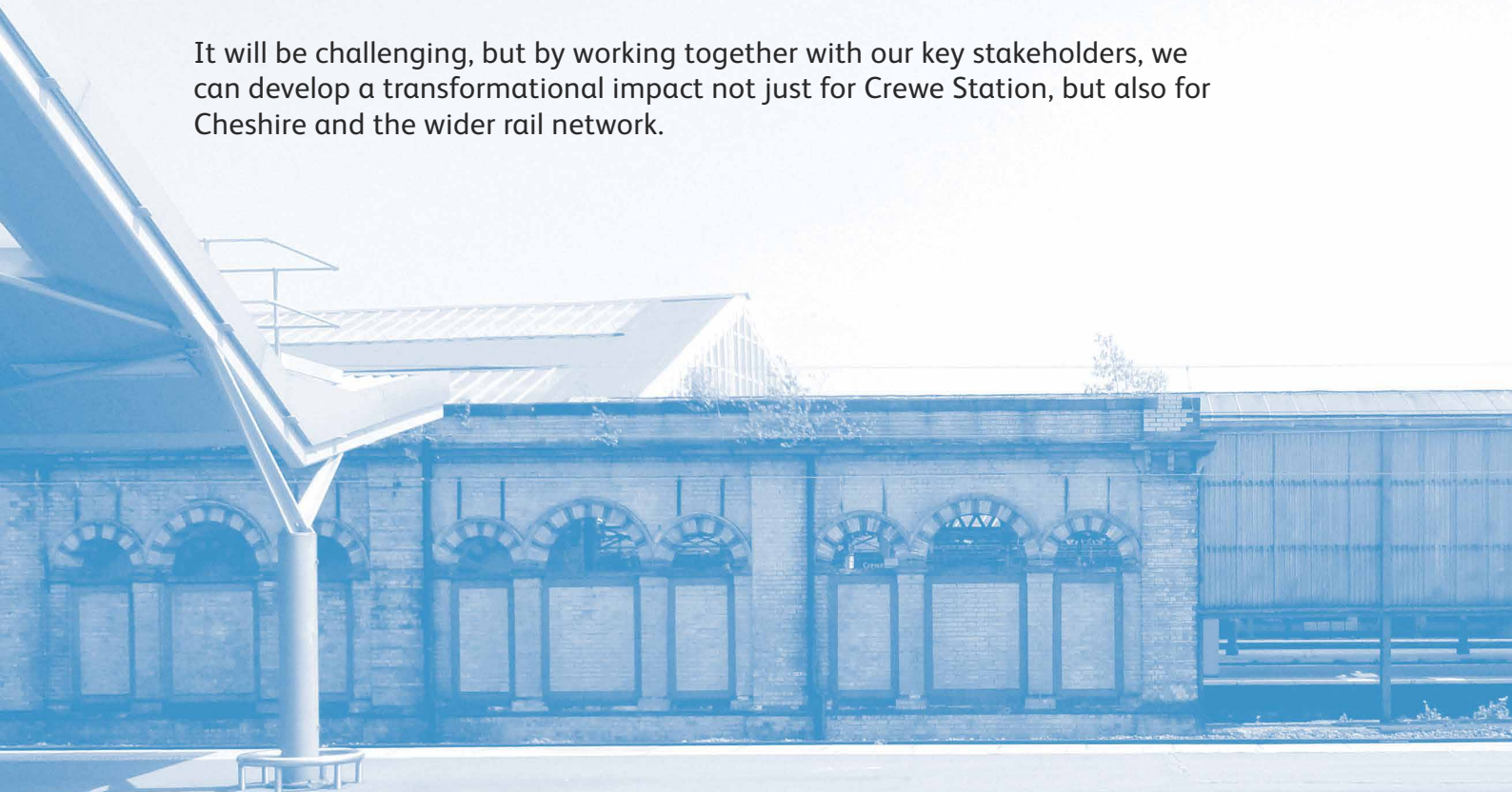
Changing Britain: HS2 taking root (2016)

With continued sponsorship from the Department for Transport, Network Rail will continue to develop options for a Crewe Hub around the current station area to:

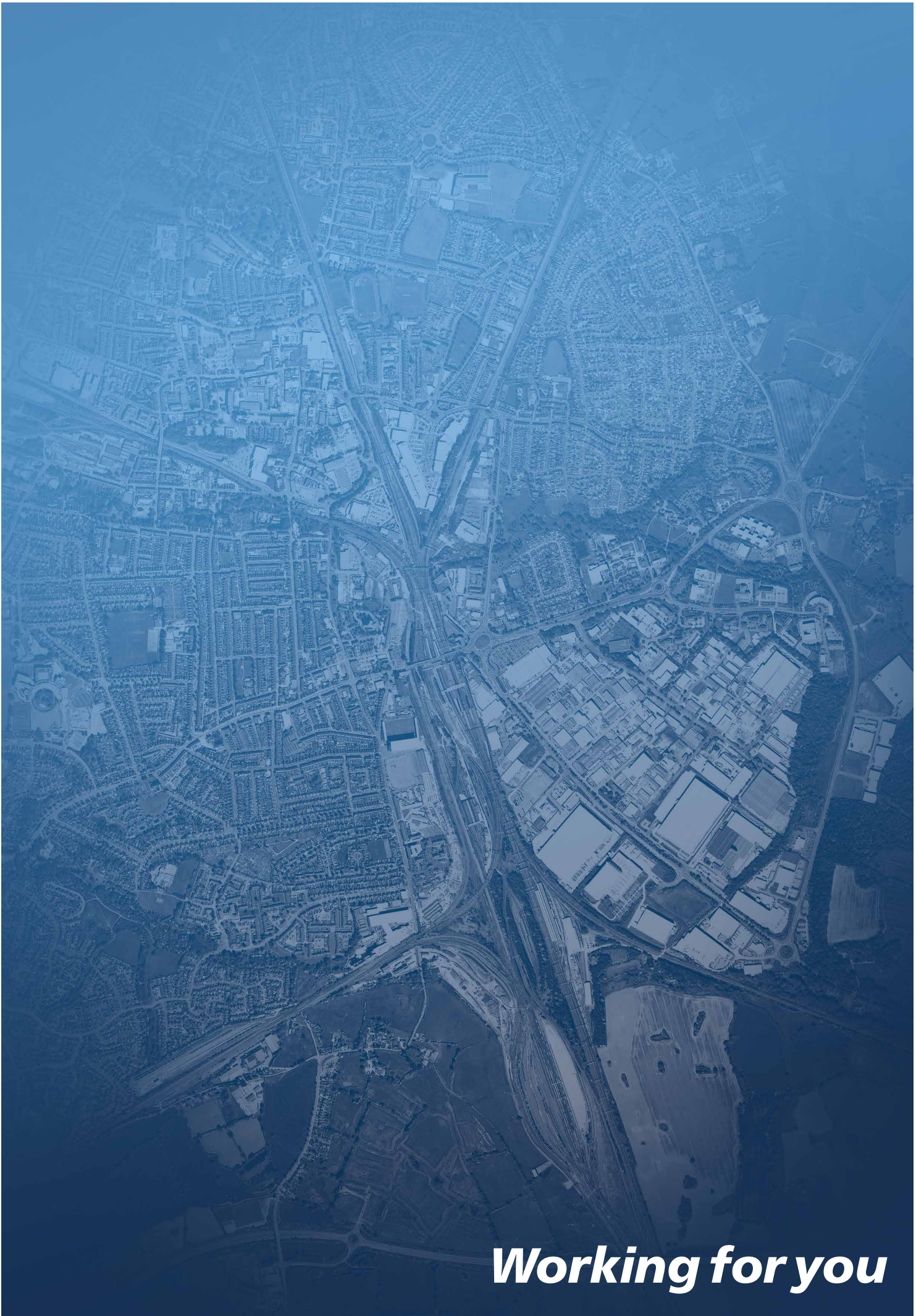
- Facilitate HS2 stopping services.
- Increase capacity and accommodate forecast demand for passenger and freight services.
- Improve connectivity.
- Encourage growth for the region.
- Resolve performance issues around the station.
- Keep the current station operational through construction.
- Develop an affordable and value for money solution.

We will integrate with our key stakeholders to maximise efficiencies and benefits including supporting Cheshire East Council’s development of a masterplan to rejuvenate the local economy.

It will be challenging, but by working together with our key stakeholders, we can develop a transformational impact not just for Crewe Station, but also for Cheshire and the wider rail network.







***Working for you***