

INFRASTRUCTURE

JUST-IN-TIME INFRASTRUCTURE AND PRODUCTIVITY

Any modern manufacturing site is highly dependent on quality infrastructure to operate at maximum efficiency and capacity. Raw materials need to arrive at the site efficiently and finished product must be moved to market quickly. People need to arrive for shift-based work on time and be able to travel home again easily. No amount of internal efficiency can compensate for raw inputs or operators failing to arrive on time. As manufacturing operations become more productive through 'just-in-time' processes, reliable energy and transport networks for people and goods become ever more important.

Quality infrastructure is also among the most important dimensions of the inward investment case for the UK. A large port

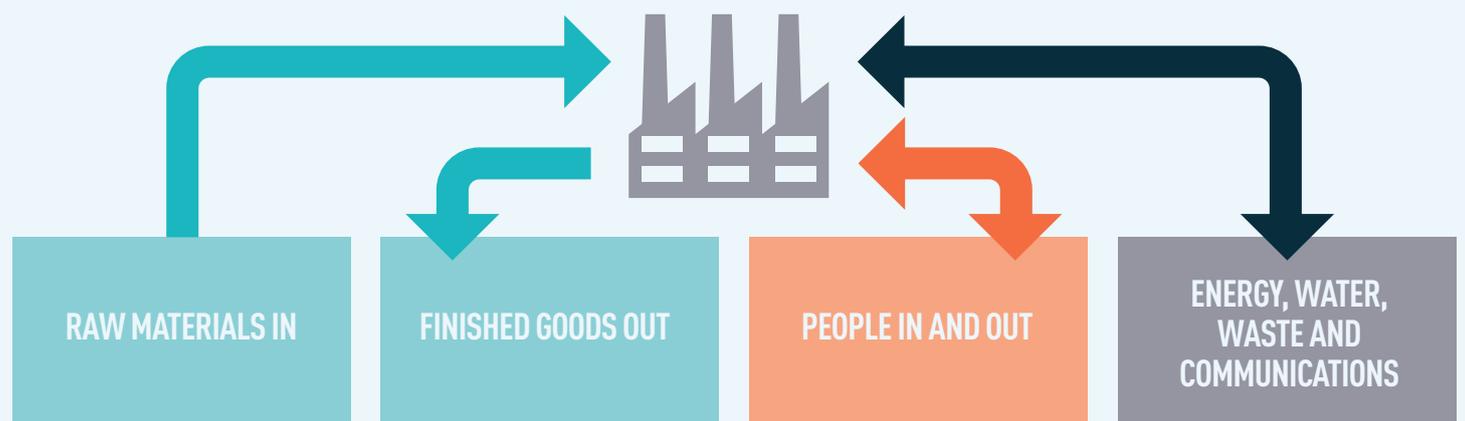
network with global connections and good onward links to the European continental market all make the UK attractive. Other aspects of infrastructure investment can contribute materially to inward investment business cases, for example protecting sites from flooding or weather damage, or improving sustainability performance through on-site energy generation.

Moving goods around the UK by road and rail is a constantly evolving challenge, requiring consistent investment. The World Economic Forum ranks the UK 27th globally for infrastructure quality. This baseline can be further eroded by disruptions in international supply chains, for example the Channel Tunnel closures in 2015.

Geographically distributed manufacturing sites across the North of England mean reliable transport for people is crucial for workforce planning, and consequently for productivity. Nestlé sites such as Tutbury are fortunate to have a large and able workforce on their doorstep, while others draw in people from further afield. The more efficient transport networks are, the wider this pool of employees, and the greater their flexibility in choosing where to live.

Ambitions for a 'Northern Powerhouse', built around integrated travel-to-work areas, could potentially play an important role in rebalancing growth across the UK. The concept is dependent on quality infrastructure, and should be a key factor in prioritising stretched transport budgets.

FOUR INFRASTRUCTURE FOUNDATIONS OF HIGH-EFFICIENCY MANUFACTURING



Nestlé sites input large volumes of raw materials sourced locally and globally and generally delivered by road, often via ports such as Liverpool.

Product from Nestlé sites is moved quickly to market both in the UK and for export via the UK rail and road network.

Large numbers of Nestlé employees need to arrive at precise times for shift-based work – and be able to get home again easily and quickly.

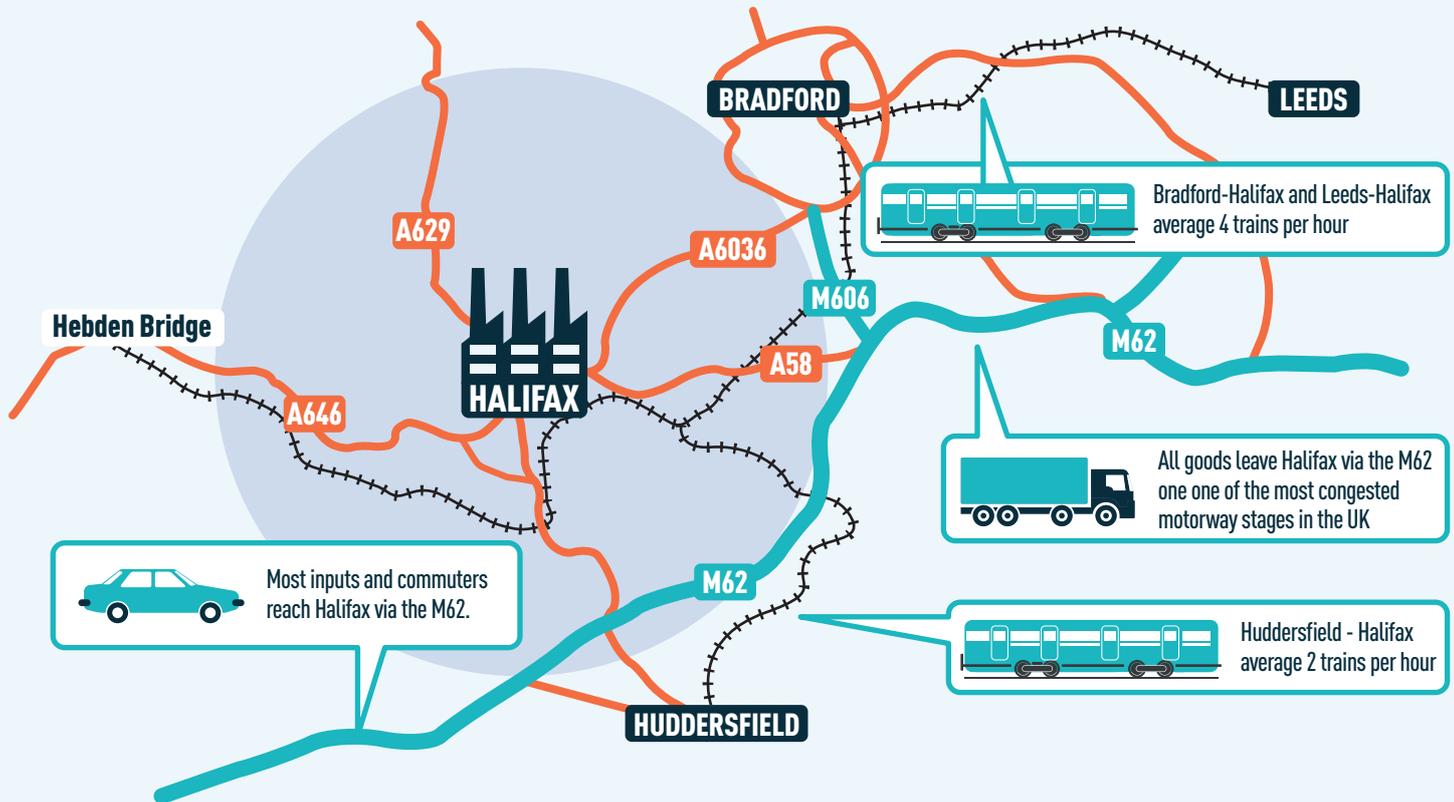
All Nestlé sites rely on efficient water, energy, waste and telecoms infrastructure, alongside efforts for self-sufficiency in energy generation from renewables.

NESTLÉ HALIFAX - DEPENDENT ON RELIABLE INFRASTRUCTURE

Nestlé's site in Halifax produces well-known confectionery brands such as Quality Street and After Eight. Improvements in infrastructure will be essential for future growth but experience also shows the complexity of infrastructure needs and how vulnerable a site can be to deterioration. The factory relies heavily on good infrastructure for raw materials and to get over 1000 staff

to work on time, a large majority of whom commute from elsewhere in Yorkshire.

It also relies on road and rail infrastructure to get its goods to market quickly – over 33% of Halifax's production is exported to the EU, the United States and the wider world via Nestlé's distribution centre at Bardon in Leicestershire.



LEARNING FROM THE NESTLÉ EXPERIENCE



Local Enterprise Partnerships can be important forums for feeding back to national agencies the priorities for local areas – whether flood defences, road capacity or train frequency. However, they do not yet have universal coverage and may not be able to influence infrastructure choices outside their own region, on which local firms may still be dependent.



The importance of travel-to-work areas should be the key productivity-related metric for rail infrastructure consultations once the current review of Network Rail has completed.



A renewed attempt to develop a National Infrastructure Commission that can plan across political timetables could enable manufacturers in the North of England to plan for the long term, but only if agreed plans are implemented and incorporate genuine opportunities for businesses to shape priorities.