

The Value of Station Investment



The Value of Station Investment - Final Report

Prepared by:

Steer
28-32 Upper Ground
London SE1 9PD

+44 20 7910 5000
www.steergroup.com

Prepared for:

Rail Delivery Group & Network Rail
200 Aldersgate Street
London EC1A 4HD

Client ref:
Our ref: 23729401

Contents

Executive Summary	i
1 Introduction.....	1
This Commission.....	1
The Value of Station Investment	1
Delivering Station Investment.....	4
The Role of Station Investment in Economic Recovery from the COVID-19 Pandemic	4
2 Methodology and Approach	6
Phase 1: Collation of Evidence and Case Study Selection	7
Phase 2: Stakeholder Engagement and Case Study Development	5
3 Case Study Findings and Results	10
Introduction.....	10
Case Study 1 - Nottingham	10
Case Study 2 – Chelmsford.....	16
Case Study 3 – Strood.....	23
Case Study 4 – Burnley Manchester Road.....	29
4 Delivering Station Investment – Lessons Learnt and Critical Success Factors	35
Introduction.....	35
Overview of Station Investment Process	35
Common Challenges and Lessons Learnt	37
Case Studies: Scheme Delivery, Lessons Learnt and Critical Success Factors	39
5 Conclusions, Recommendations and Next Steps.....	46
Conclusions.....	46
Recommendations.....	47
Next Steps.....	47

Figures

Figure 1.1: Steer Social Value Framework	3
Figure 2.1 Research methodology	6
Figure 2.2: Case study selection process	7
Figure 2.3: Liverpool Lime Street station.....	13
Figure 2.4: Manchester Victoria station historic frontage	13
Figure 2.5: Bognor Regis station	2
Figure 2.6: Dundee station redevelopment and SleeperZ Hotel	2
Figure 2.7: Refurbished Ellesmere Port station	3
Figure 2.8: Harrogate station: refurbished concourse	3
Figure 2.9: Cambridge station: pedestrianisation & taxi area	4
Figure 2.10: Hebden Bridge station lift.....	4
Figure 2.11: Station Evaluation: logic mapping methodology.....	9
Figure 3.1: Nottingham station's location within the city.	10
Figure 3.2: Nottingham station concourse pre-investment	11
Figure 3.3: Nottingham station pedestrianised concourse post-investment.....	12
Figure 3.4: Number of developments within 1 mile of Nottingham station 2010-2020.....	14
Figure 3.5: Nottingham station building's refurbished frontage.....	15
Figure 3.6: Evaluation of Nottingham station investment: inputs, outputs and outcomes.....	15
Figure 3.7: Chelmsford station's location within the city.....	16
Figure 3.8: Chelmsford station prior to redevelopment	16
Figure 3.9: Redeveloped Duke Street with improved surfacing, layout and lighting (outside Chelmsford station)	18
Figure 3.10: Chelmsford station: refurbished concourse with improved retail offer	18
Figure 3.11: Chelmsford Station: Mill Yard tunnel/underpass before and after investment improvement works	18
Figure 3.12: Number of developments within 1 mile of Chelmsford station 2010-2020.	20
Figure 3.13: Evaluation of Chelmsford Station investment: inputs, outputs and outcomes	22
Figure 3.14: Strood station's location within the town.	23
Figure 3.15: Strood station prior to investment	24
Figure 3.16: Strood station after investment	24
Figure 3.17: Strood station underpass before and after investment	25
Figure 3.18: Number of developments within 1 mile of Strood station 2010-2020.	27

Figure 3.19: Evaluation of Strood Station investment: inputs, outputs and outcomes	28
Figure 3.20: Burnley Manchester Road station’s location within the town.....	29
Figure 3.21: Burnley Manchester Road station prior to investment (disused Dairy buildings pictured, prior to demolition).....	30
Figure 3.22: Burnley Manchester Road station post investment.....	30
Figure 3.23: Number of developments within 1 mile of Burnley Manchester Road station 2010-2020.	32
Figure 3.24: Evaluation of Burnley Manchester Road Station investment: inputs, outputs and outcomes	34

Tables

Table 2.1: Initial station sifting criteria.....	7
Table 2.2: Station shortlisting criteria	8
Table 2.3: Social Value Framework – metrics.....	9
Table 2.4: Shortlisted and counterfactual stations	10
Table 2.5: Proposed alternative data sources	12
Table 2.6: Stakeholder engagement.....	6
Table 3.1: Breakdown of improvement works at and around Chelmsford station.....	17

Appendices

- A Case Study Longlist and Shortlist of Stations**
- B Case Study Station Maps**

Executive Summary

Steer was appointed by the Rail Delivery Group (RDG) and Network Rail to undertake research to explore the value of investing in UK railway stations, by examining the evidence for how investing in a station (and its immediate environment) can have wide-ranging positive impacts for station users and the local and wider community. 180 examples of station investment were considered, from which 4 case studies were chosen using selection criteria and in collaboration with RDG, Network Rail and members of the RDG Station Strategy Group.

A Social Value Framework was developed to guide the assessment of the numerous areas that can be positively impacted by station investments from the point of view of potential third-party contributors and the local communities which they represent. This framework was utilised throughout the study to categorise the outcomes of successful schemes, clearly demonstrating the wide range of positive impacts that can be delivered by station investments and how these can be aligned with local needs and priorities.

This research provides strong evidence that station investment can have positive material outcomes for many of the different aspects comprising Social Value, delivering transport, economic and wider benefits for station users and the station's local communities.

We identified significant increases in station footfall and passenger satisfaction scores following investment in stations, and a correlation between station investment and substantial increases in house prices, tertiary employment, enterprise units and new developments close to the station.

The 4 case studies provide compelling narratives on how investment in stations has contributed to local regeneration, sustainability, civic identity and arguably community and personal well-being, further demonstrating the positive outcomes for their local areas. They also identify that there are further elements of Social Value where opportunities for increased contribution from stations and investments may lie, which is particularly relevant in the context of the emerging economic recovery from the COVID-19 shock, as priority areas such as active travel and net-zero carbon commitments rise further up the political agenda.

Delivering station improvement schemes can be challenging, but findings from our case study stakeholder engagement have highlighted good practice guidance for how partnership schemes can minimise risks and maximise success when developing and delivering these investments. Our research identifies that successful station investment has been enabled by very strong partnerships formed between third parties (such as local authorities) and the rail industry. These partnerships employed **collaborative working** approaches, had **complementary goals and visions** and **maintained equal buy-in** from their organisations in order to deliver these station investments so successfully. These enablers can assist in overcoming common barriers encountered during station investment projects, leading to positive outcomes for all parties contributing funding and the passengers and local communities that they represent.

Whilst the case study findings provide strong evidence for the positive impacts of station investment, the research found that it remains a challenge to fully demonstrate and quantify some of these impacts. The case for investment will be stronger still if:

- consistent **quantified pre and post investment analysis** is undertaken to provide clear 'before' and 'after' understanding of the station's characteristics, issues and impacts; and

- a **consistent record-keeping approach** is adopted to accurately record emerging outcomes and key information about station investment projects across the railway estate.

Findings from our research highlight how important it is that organisations involved in developing and delivering future station investment projects adopt the enablers of success that are described in this report, such as establish **key points of contact** at each organisation, **treating investigatory work with importance** and working in **collaboration to navigate the rail industry's processes and procedures** in order to effectively deliver successful station investments.

The conclusions and recommendations of this study are particularly timely as economies seek to rebuild and recover after the immediate shock of the 2020 COVID-19 pandemic. Investment can be a valuable stimulus for economic growth and investment in rail has often aligned with wider goals, such as providing more housing, levelling up the economy and meeting net-zero carbon commitments. Station investments that can facilitate better access to jobs, contribute to economic regeneration and positively impact many aspects of Social Value will have a significant role to play in the emerging economic recovery as local decision-makers seek to maximise the positive outcomes of future investments and rebuild their local economies with long-term sustainable growth in mind.

The findings from this research should be shared more widely, both within and outside the rail industry and the enablers of success that are highlighted should be supported and prioritised to facilitate successful delivery of future station investment schemes.

1 Introduction

This Commission

The study aim was to examine the evidence for how investing in a railway station (and its immediate environment) can have wide-ranging positive impacts for its local and wider community.

- 1.1 Steer was commissioned by the Rail Delivery Group (RDG) and Network Rail to deliver a study on **'The Value of Station Investment'**. The study aim was to examine the evidence for how investing in a railway station (and its immediate environment) can have wide-ranging positive impacts for its local and wider community and can justify funding from multiple sources.
- 1.2 The study considered the aspects of stations which draw investment, and why, and the funders who contribute. We looked at the vast array of benefits delivered by investment in stations, both for rail passengers and the local and wider community and identified a framework against which to evaluate and quantify the benefits.
- 1.3 Over the last 10 years, over 200 stations have benefitted from investment, and we assessed 180 of them to identify which were most likely to enable us to find quantifiable evidence of the benefits of that investment. This process of shortlisting these stations and selecting case studies is described in Chapter 2.
- 1.4 The case studies in Chapter 3 show how the rail industry has worked with other funders to deliver successful investment in stations, which has generated a wide range of benefits.
- 1.5 Anecdotally the rail industry has sometimes been considered a challenging environment for third party investors to engage with, however Chapter 4 demonstrates that successful partnerships can be formed, and collaborative goals achieved. We describe a typical process for station investment (noting that every station investment scheme is individual with bespoke objectives) and some common challenges experienced, before focusing on the delivery of the case study station investments and, based on stakeholder feedback, highlight where it worked particularly well and lessons that should be learnt for future investment.

The Value of Station Investment

- 1.6 The main purpose of a railway station is to serve the local community's need to travel for work and leisure. This connectivity is relied upon for many people's livelihoods and their access to education and leisure opportunities.
- 1.7 In some cases, the station provides amenity and service to the local community whether they use it to access transport or not. From lunchtime dining for city workers to social and economic enterprises housed at the station, the station estate's beneficiaries are not just today's passengers.

- 1.8 Stations also symbolise a location and can give powerful first and last impressions of a place – sometimes for negative as well as positive reasons. Being able to demonstrate the value attributed to station upgrade schemes is of critical importance for gaining local buy-in from the public, the local authority and the rail industry.

What is station investment?

- 1.9 Station investments can come in many different sizes and forms depending on the specific needs of the station and its passengers. Often the improvements will be driven by a problem statement e.g. ‘passengers are dissatisfied with the retail provision at the station’ with evidence based on metrics such as passenger satisfaction surveys (e.g. the National Rail Passenger Survey, NRPS¹). Improvements can be grouped into the following broad categories:
- **Operational improvements:** typically involving removing constraints on passenger volumes or reconfiguring platforms to accommodate new or more frequent train services.
 - For example, the transformation of Liverpool Lime Street station in 2018.
 - **Facilities improvements:** typically involving upgrading the provision of passenger-facing facilities such as retail, ticket offices or toilets to improve the passenger experience.
 - For example, the upgrade of Bognor Regis station in 2018.
 - **Experience improvements:** typically involving lighting, ambiance, safety and way-finding improvements to increase passenger satisfaction.
 - For example, the refurbishment of Ellesmere Port station in 2014.
 - **Access improvements:** typically involving public realm, pedestrianisation and accessibility improvements at the station or in the immediate vicinity.
 - For example, the redevelopment of Cambridge station which was completed in 2017.
- 1.10 In this study the focus has been the investment in station facilities, passenger experience and access improvements, all of which contribute to economic, social and environmental benefits.
- 1.11 The study does not consider investment in operational improvements to the railway (for example investments that facilitate a higher frequency of train service at the station, or improved train performance), as these generate a different type of benefit (based on journey time and connectivity improvements). The terms of reference for the study also excluded consideration of new stations, as it would be difficult to measure before and after the investment and isolate the benefits of the station investment alone (as opposed to the travel and journey time improvements).

Multi-faceted value

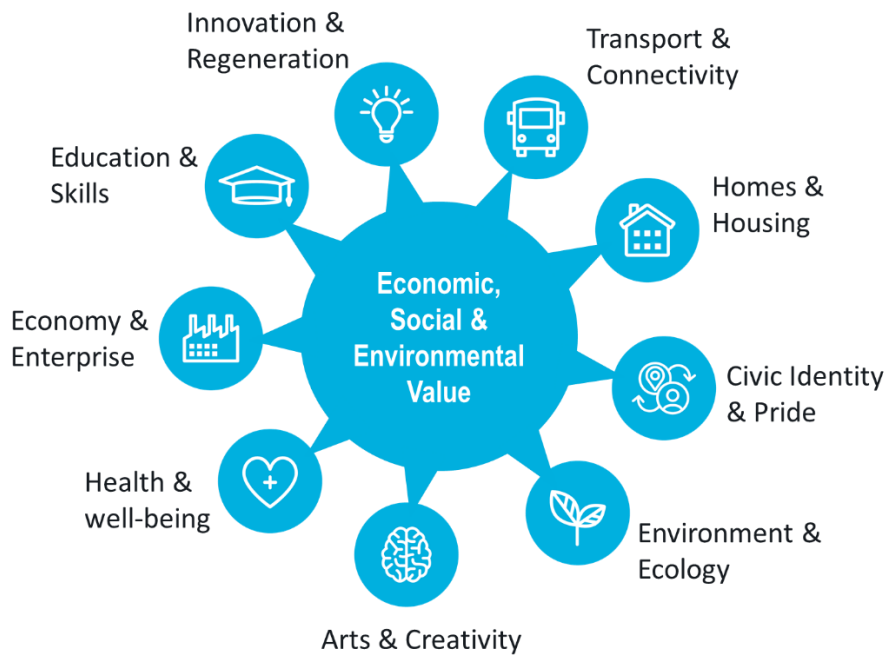
- 1.12 Investment in stations can contribute to many different areas of priority for relevant organisations. This can range from easing passenger congestion or providing high quality ticket halls and waiting facilities, to providing improved interchange with other transport modes or more cycle storage capacity. It can also include improving station facades and forecourts, which provide a welcoming entrance to the station more in keeping with the local area.
- 1.13 Station investment often increases station footfall and the number of passengers travelling by rail, which can align with other wider policy goals, such as net-zero carbon targets, by contributing to modal shift to less carbon-intensive modes. Other wider goals, such as making the railway fully accessible for all passengers, can be met at a station level by successful

¹ The National Rail Passenger Survey is conducted twice a year by Transport Focus giving a network-wide picture of passengers’ satisfaction with rail travel.

investments which can have tangible positive outcomes for members of the local community who may otherwise have struggled to make their journey by rail.²

- 1.14 We have developed a ‘Social Value Framework’ (Figure 1.1) to guide our assessment of the areas station investments can contribute to. This is based on the “Public Services (Social Value) Act 2012” which requires public authority procurers to consider how they could improve the social, economic and environmental well-being of the relevant area.^{3,4}

Figure 1.1: Steer Social Value Framework



- 1.15 The Framework shows the wide range of areas which station investment can influence and deliver benefits in. Potential funders of station investment (e.g. Local and Combined Authorities and LEPs) will have a multitude of policy objectives to achieve with their funding. Using the Framework allows them to influence the scope of the investment in order to best meet their objectives. A number of these objectives are straightforward, for example:

- illustrating enhanced connectivity and wider access to services for the local community (*Transport and Connectivity*);
- promoting more active and sustainable modes of transport (*Environment & Ecology*).

- 1.16 But other potential benefits of investment in stations will contribute to meeting other objectives:

- acting as a landmark, contributing to civic identity and pride or a symbol of regeneration, change, innovation and development;

² *Action Stations* (2020) – Urban Transport Group

³ Whilst the Act relates to the services covered by the “Public Contracts Regulations (2015)” the advice from Government is “To drive more value through every pound spent, it can be appropriate to apply the principles of the SVA in procurements not covered in its scope (e.g. in construction contracts).”

⁴ DCMS – “The Public Services (Social Value) Act 2012 – An introductory guide to commissioners and policymakers”

- operating as a civic amenity with useful functionality for the local community such as for art exhibitions or hiring out space for educational purposes;
- delivering a space for economic and enterprising activity (including the immediate surroundings);
- reducing crime, anti-social behaviour and deprivation in the immediate area; and,
- supporting current and planned residential and economic growth.

Delivering Station Investment

- 1.17 Investment in station improvements has been sustained and numerous in recent years. Between 2014-2019 over 180 stations benefitted from contributions to funding from the National Stations Improvement Program (NSIP⁵).
- 1.18 The sheer scale of volume of station investments completed in recent years shows that it is possible to form strong partnerships to successfully invest in stations, and indeed this is encouraged and valued by the rail industry.
- 1.19 The investments in these stations have different stories, with some improvements focused on facilities upgrades and others aimed at improving customer experiences. The scale of investment was also hugely varied, ranging from small schemes (such as refurbishing toilets or new waiting shelters) with NSIP contributions of a few thousand pounds, to much larger projects (such as new station buildings or concourses) with NSIP contributions in excess of one million pounds.
- 1.20 Despite the diverse range of schemes and the large variety of scope, size, geography and funding partners, the typical process for investing in stations can be summarised into 3 main areas.
1. *Identification of need & project development*
 2. *Funding and financing*
 3. *Procurement and delivery*
- 1.21 This process is described in detail in Chapter 4, where we also discuss common challenges experienced by parties who have invested in stations, and highlight, with reference to successful examples, how they can be successfully overcome by following good practice and implementing enablers of success.

The Role of Station Investment in Economic Recovery from the COVID-19 Pandemic

- 1.22 This research was undertaken prior to the COVID-19 pandemic and the country-wide lockdown that led to a precipitous fall in the use of the national rail network, along with the use of other public transport modes. Before the lockdown the national rail network had experienced over a quarter of a century of growing passenger numbers, to the extent that in 2019 it carried more passengers than any time in its history. In itself this created a need for investment to increase the capacity of the network to cater for current and forecast demand. In addition, rail was seen as vital in the Government's wider agenda of delivering more housing, levelling up the national economy through supporting and facilitating economic growth, including in the Midlands and the North, and as integral to the Government's strategy to meet its net zero

⁵ NSIP was the National Stations Improvement Program which required Train Operating Companies (TOCs) to work with Network Rail in Local Delivery Groups to deliver station improvements. It was present in Control Periods 4 & 5 (2009 – 2019).

carbon commitments. On top of this, there is a long-standing commitment to make the rail network accessible to all, as well as to increase the Social Value the rail network brings.

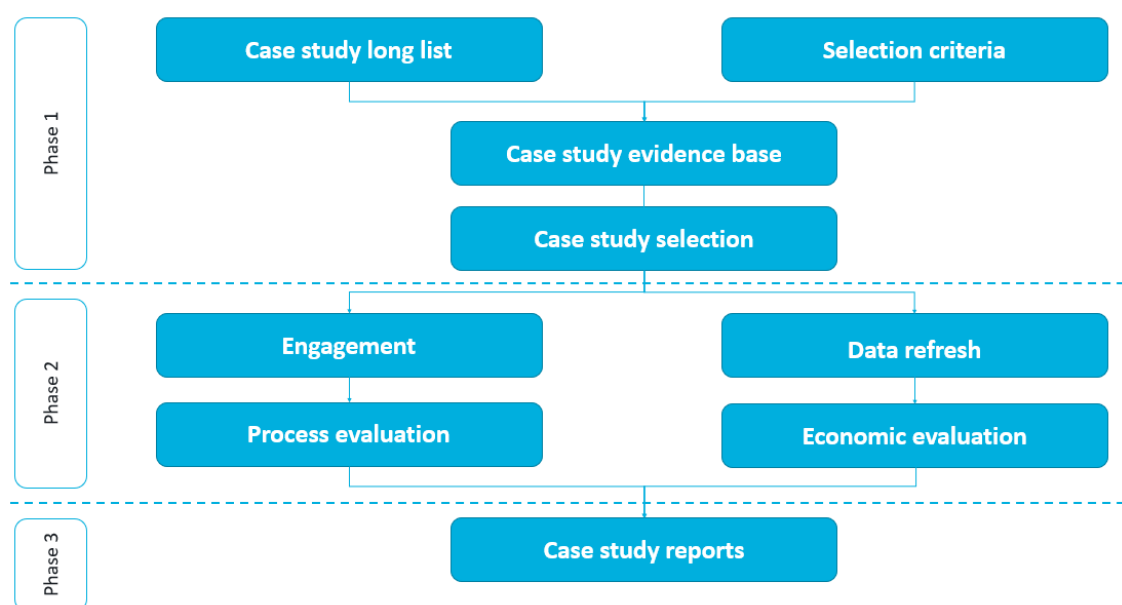
- 1.23 As the UK exits from the immediate COVID-19 shock it faces a deep economic recession. There remains much uncertainty about its depth and duration. Nonetheless, the pre-COVID policy imperatives remain. The focus is turning to how investment in infrastructure can help to kick-start and rebuild the economy (to “Build Back Better”) and create the foundation for long term sustainable growth.⁶
- 1.24 It is clear that in the light of the COVID-19 pandemic, people’s behaviour and attitudes will change (particularly in a transport context), with home-working and more flexible working arrangements rising significantly, plus a marked shift towards active travel modes like cycling and walking where social distancing is more achievable. Policy and investment decisions will need to reflect these changing priorities and future station investments should consider how to promote active travel to/from the station, which can generate other related benefits such as lower emissions and better air quality in the immediate vicinity whilst also aligning with net-zero carbon goals.
- 1.25 As the entry and exit points to the rail network, stations are integral to meeting the emerging policy goals: stations can support the delivery of new housing, be cornerstones for area-wide redevelopment and regeneration and be attractive gateways to the areas and communities they serve. They are the places where the connectivity offered by the rail network can be integrated with local walking, cycling and public transport, and through the provision of parking and drop-off, road networks too. They are integral to promoting lower per mile carbon emissions. This is why, pre-pandemic, local authorities and other developers were coming forward with proposals to redevelop existing stations, build new stations or reinstate stations on re-opened lines.
- 1.26 The strategic rationale for the station investments remains strong. Rail has a key role to play in supporting the nation’s economic and social recovery from the COVID-19 shock and station investments that can facilitate better access to jobs, contribute to the economic regeneration of an area and positively impact other components of Social Value will be of significant interest and importance to local decision-makers. This only amplifies the relevance of this research in the context of a recovering economy.

⁶ <https://www.buildbackbetteruk.org/>

2 Methodology and Approach

- 2.1 Many stations in the UK have undergone improvements in recent years, and our research considered 180 such stations, implementing a selection process to determine a subset of stations which were reviewed in detail to investigate the outcomes of their investment, alongside capturing the viewpoints of 18 key stakeholders in an engagement phase.
- 2.2 Whilst we came across many success stories where investment in stations had delivered benefits across the Social Value Framework, it was necessary to focus our research on a subset of stations to enable us to find robust empirical evidence which could demonstrate that investment in stations delivers value to funders. This link has been explored in previous studies^{7,8} but remains challenging to fully demonstrate. Examples of other stations where investment has been notable in its success in delivering benefits are included midway through this Chapter.
- 2.3 Our research comprised three main Phases:
- **Phase 1:** collation of evidence and case study selection
 - **Phase 2:** stakeholder engagement and case study development
 - **Phase 3:** assimilation of findings and reporting

Figure 2.1 Research methodology



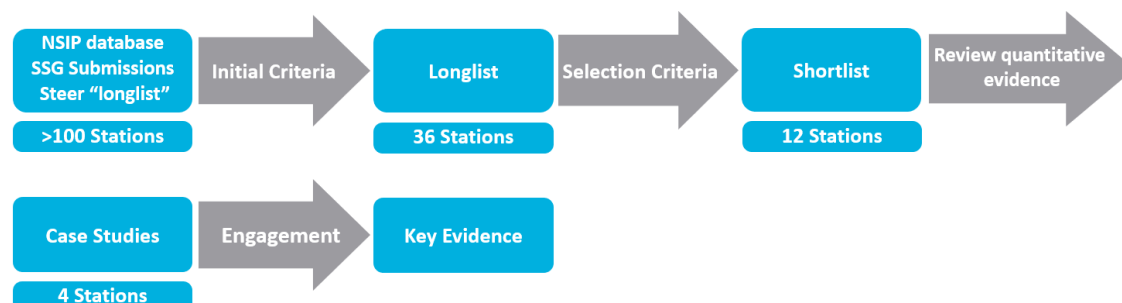
⁷ *The Value of Station Investment* (2011) – Steer Davies Gleave (for Network Rail)

⁸ *Local Economic Benefits of Station Investment* (2018) – Steer Davies Gleave (for RDG)

Phase 1: Collation of Evidence and Case Study Selection

Our research commenced with a data search to collate a list of stations which had received investment within the last decade. Figure 2.2 demonstrates the sequential steps used to develop this longlist of stations into the four key case studies upon which this study focussed.

Figure 2.2: Case study selection process



Longlisting

2.4 The key data sources used were:

- a database of NSIP projects in CP4 and CP5 (provided by Network Rail);
- submissions and suggestions from the RDG Station Strategy Group (SSG); and,
- a database of station improvement projects compiled by the Steer project team.

2.5 Through this research we identified investment schemes in 180 stations within the last decade but appreciate that this is unlikely to be an exhaustive list of investments given the multiple interventions from renewals to non-railway enhancements around stations.

2.6 We then defined a set of criteria to sift these 180 stations into a “long list”. The criteria (shown in Table 2.1) were defined to according to the terms of reference of our commission (the provision of new stations was excluded), and also to identify stations where the value of the station investment was most likely to be identifiable (small investments such as improved toilets or those part of a joint package of investment in the station and the train operations were excluded).

Table 2.1: Initial station sifting criteria.

Initial Criterion	Description
Station vicinity	The investment was in the station/immediate area i.e. not just signalling/track improvements with negligible changes to the station building.
Significant	The improvement was of a substantial nature i.e. not just toilets or a waiting shelter.
Social Value	The investment/improvements might have contributed to addressing the needs of the local area and wider community.
Timescale	The investment/improvement was recent enough to be relevant for this work.
Isolatable	Ideally the improvement was independent of a whole line upgrade or major timetable recast.
Existing	The improvement works were not undertaken on a brand-new station.

2.7 This sifting resulted in a longlist of 36 stations to consider as potential case studies, which are listed in Appendix A.

- 2.8 Some excellent (and high-profile) station investments were excluded from the research at this stage, as they did not meet some of the criteria in Table 2.1. Major upgrades such as those at London Bridge were not suitable because the station investment works were not 'isolatable', as they were intrinsically linked to timetable upgrades. Other station investments such as those at Langley and Hungerford, where additional seating and shelters were added, did not meet the 'significant' criterion, as the scale of investment was too small to be able to reliably quantify its benefits.

Shortlisting

- 2.9 The longlisted stations were subsequently assessed against more stringent selection criteria which are shown in Table 2.2 below. Some of these criteria were largely repetitions of those in Table 2.1 above (re-assessed in the context of the 36 station longlist) whilst others were new such as 'Third Party', which was important to ensure the case studies were those which had been (at least) partly funded from outside the rail industry – which was the emphasis of this study.

Table 2.2: Station shortlisting criteria

Selection Criterion	Description
Substantial	There must have been significant investment in the station/immediate area.
Completed	The station enhancement must be finished, ideally between 2013 and 2016 in order to identify the outcomes.
Third Party	The funding package must have included contributions from third parties.
New Study	This station improvement has not been written about in detail in previous station investment value studies. ⁹
Social Value	The investment/improvements contributed to addressing the needs of the local area and wider community.
Discrete Change	Ideally, the improvements are separate from major timetable and service changes and significant unrelated developments in the immediate local area.

- 2.10 Applying these criteria generated a shortlist of 12 potential case study stations, which are listed in Appendix A.
- 2.11 Again, at this stage there were some excellent station investments that were discarded as potential case studies as they failed to meet one or more of these criteria. For example, the transformational works at Birmingham New Street had already been written about in detail in the 2011 *Value of Station Investment* report¹⁰, and so failed the 'New Study' criterion, which was included because the rail industry needs to expand and update its evidence base for how station works deliver wider benefits.
- 2.12 The station investment at Cambridge fulfilled all the selection criteria except for 'Discrete Change' as it would have been impossible to disentangle the benefits of the station investment itself from those associated with the redevelopment of the station square area (including new office, housing and leisure opportunities) and the increased connectivity

⁹ E.g. *The Value of Station Investment* (2011) – Steer Davies Gleave (for Network Rail); *Regenerating Britain's railway stations* (2016) – RDG

¹⁰ *The Value of Station Investment* (2011) – Steer Davies Gleave (for Network Rail)

delivered by the completion of the Thameslink programme, thereby weakening the integrity of the outcomes at this station.

Case study selection

- 2.13 The criteria for selecting the four stations which would form the case studies reflected the Social Value Framework. At this stage of the research it was crucial that we identified the stations where initial research into the empirical evidence showed that we would find quantifiable evidence that the investment in the station (and its immediate environment) had delivered multiple positive impacts for its local and wider community.

We used the datasets described in Table 2.3 to assess the quantitative evidence for each station in the shortlist. Most of these datasets are self-explanatory in terms of how they could measure the impact of station investment. One of the data sources we used to measure the impact on “*Economy and Enterprise*” was counts of enterprise units, where these reflect the overall number of businesses in the area¹¹, with changes to these numbers over time indicating the trends in economic activity of the area. Rateable value (used in the study to indicate the impact of the station investment on regeneration) is the value ascribed to a (non-domestic) building based on factors such as floorspace, location and age which is used to determine the business rates payable. Increases in the rateable values within an area can signify regeneration of that area, as it becomes a more desirable location to operate a business.

- 2.14 There were no consistent and readily available sources of quantitative data to measure some framework areas such as Arts & Creativity and Civic Identity & Pride, so we used qualitative data sources such as local news articles to investigate how the station investments may have contributed to improvements in these areas.

Table 2.3: Social Value Framework – metrics

Social Value Framework Area	Example Data
Homes & Housing	House prices, property sales
Economy & Enterprise	Employment counts, enterprise units
Innovation & Regeneration	Rateable value
Transport & Connectivity	Station usage, current services
Education & Skills	Jobs by industry
Health & Well-being	Indices of multiple deprivation, crime
Civic Identity & Pride	Qualitative data sources e.g. local news articles
Environment & Ecology	Mode-share, cycling
Arts & Creativity	Qualitative data sources e.g. local news articles

- 2.15 Using this methodology, the performance of the 12 shortlisted stations against 27 data sources was used to recommend the stations which should be used for the case studies.
- 2.16 To add confidence in the selection of the case studies, we also tested the performance (against the criteria) of a counterfactual station for each of the 12 shortlisted stations. The counterfactual stations were selected on the basis of having similar travel markets, train

¹¹ defined as the smallest combination of legal units (generally based on VAT and/or PAYE records) that has a certain degree of autonomy within an enterprise group.

services and local developments to the short-listed station, whilst being geographically similar, but without having undergone significant recent station improvements. In some cases, it was challenging to fulfil all these criteria, for example Colchester might have been a more natural counterfactual for Chelmsford but in fact has only half the amount of passenger footfall and longer journey times into London. Based on these criteria, Guildford was a more suitable counterfactual for Chelmsford, despite its location in a different county. These counterfactual stations, together with the rationale for their selection as counterfactuals, are shown in Table 2.4 below.¹²

- 2.17 If the counterfactual station performed similarly well against the criteria as the shortlisted station it indicated that the positive outcomes at the shortlisted station were unlikely to be due to investment in the station, and it would therefore not be a suitable candidate for a case study. For example, Ainsdale station (which had received investment in 2018) showed lower growth in rateable value, deprivation and house prices than its counterfactual station (Freshfield), rendering it unsuitable as a case study station in this research.

Table 2.4: Shortlisted and counterfactual stations

Shortlist Station	Counterfactual Station	Rationale for selection as counterfactual
Ainsdale	Freshfield	Next stop on the line - same services and a comparable catchment served
Bognor Regis	Littlehampton	Similar in nature - coastal towns served by branch lines with services to London
Burnley Manchester Road	Accrington ¹³	Similar geographically, similar sized town and comparable services to nearby cities
Chelmsford	Guildford	Similar sized urban areas just outside London. Both major stations on main lines to London with similar footfall
Dartford	Orpington	Similar sized towns located on the edges of London but within the oyster fare boundaries, with similar services and footfall
Dundee	Perth	Closest match in town size, geography and nature - similar number of services to Edinburgh and Glasgow
Hebden Bridge	Todmorden	Similar sized towns adjacent to each other with similar services
Lincoln Central	Newark North Gate	Similar sized town in the same geographic area with a similar number of services
Nottingham	Derby ¹⁴	Similar sized city in the East Midlands with similar services

¹² The comparisons with counterfactual stations were used as sense checks to improve confidence in the case study selections, contextualising their quantitative outcomes and not intended as full “scientific controls”.

¹³ Accrington station was redeveloped into an eco-station in 2010, but this was long enough before the development at Burnley Manchester Road (2014) for Accrington to still be an effective counterfactual.

¹⁴ Derby underwent a significant resignalling project in 2018, but this consisted of signal and track improvements, as opposed to station building and facilities upgrades, and occurred significantly after the investment at Nottingham (2014).

Port Talbot Parkway	Neath	Next stop on the GWR line - same services stop at both stations and serve similar sized towns
Strood	Maidstone West	Similar station location (edge of town centre) in Kent town, but away from the investment in the Medway Valley
Whitton	Ashford (Surrey)	On the same line with a similar service - 4tph into Waterloo and similar travel market served

- 2.18 The 12 shortlisted stations were ranked according to how much improvement could be seen for key metrics. We then considered the comparison with the counterfactual station and narrowed down the possible case studies to seven or eight stations. The final selection of case studies from these sought to achieve a geographical spread of stations and some variety in size of station and scope of investment.
- 2.19 These stations were: **Nottingham, Chelmsford, Strood and Burnley Manchester Road**. We selected Whitton as a back-up station in case one of the four case studies was found to be unsuitable (either in terms of access to stakeholders or because the next stage of data interrogation found it to be wanting). The four stations selected performed extremely well against the selection criteria in Table 2.2 and showed significant improvements in several of the metrics in Table 2.3. In agreement with the client team and the wider SSG they were taken forwards as the 4 key case study stations for this study.
- 2.20 This case-study selection required judgement and a degree of selection based upon the purpose of the commission, as some station investments with excellent narratives did not perform well when assessed against the metrics in Table 2.3, which we discuss in more detail in the Reflections section in 2.36.
- 2.21 Whilst the scope of the study only allowed for four stations to be investigated in full detail, we found many examples of successful station investment, and whilst they were not sufficiently strong to be selected during the case study selection process, they are worthy of mention, and are described in section 2.26.

Evidence gap review

- 2.22 When identifying and collating the data sources used in the selection of the case studies, it confirmed that there were gaps in the evidence base, which made it challenging to demonstrate the value of station investment in terms of some aspects of Social Value. We therefore undertook an evidence gap review to assess these gaps and suggest potential options for how they might be filled.
- 2.23 We identified the gaps by grouping the 27 data sources into four themes (which were an aggregation of the Social Value Framework). The reason for a lack of suitable data was typically for one of three reasons:
- data was completely unavailable (e.g. for civic identity and pride),
 - data was not sufficiently geographically disaggregated to reflect the likely area of influence of the station (e.g. tourism figures) or
 - data was not available as time series (e.g. census data).
- 2.24 Alternative data sources, which had the potential to address these reasons and supplement the existing evidence base for each theme, were then identified, as shown in Table 2.5:

Table 2.5: Proposed alternative data sources

Theme	Alternative data sources
Station usage and function	Mobile phone or WiFi tracking data – footfall, dwell time etc
Economy and business	Mastercard spending data in/around station and purchase type
Housing and property	Past developments and future planning opportunities within station catchment
Social, health and environment	Likely to be obtained through local stakeholder engagement and more quantitative in nature

- 2.25 Quotes for these datasets confirmed that some (such as credit card spending data and footfall data) were prohibitively expensive for obtaining within the scope of this study, although these could potentially provide a very powerful resource for demonstrating the value of station investment if procured and explored across the rail industry. However, planning and development data (supplied by Glenigan Ltd) for the case study stations was procured to further support the evidence base in this commission.

Other Station Investment Success stories

- 2.26 Our research has identified multiple success stories where station investment schemes across Great Britain have unlocked economic, social and environmental benefits.
- 2.27 Whilst we could only focus on four key stations in detail for our case studies, there were many other commendable schemes that would also have been excellent examples to use. We outline a few of these examples in the section below.
- 2.28 The 2011 *Value of Station Investment* report¹⁵ told the success stories of high-profile improvement works at **Sheffield**, **Manchester Piccadilly** and **Birmingham New Street** stations which delivered increases in metrics such as rateable value and developments in the station catchment. In the past decade there have been several more major station redevelopments such as those at **London Bridge**, **Kings Cross** and **Manchester Victoria**.
- 2.29 For **London Bridge** and **Kings Cross** these mega-projects involved total transformation of the station estate and the immediate surroundings. At **London Bridge**, the redevelopment included 92,000 square feet of new retail plus improvements to make the whole station fully accessible.¹⁶ **Kings Cross** station's redevelopment was instrumental in the development of nearby land, providing 2,000 new homes and 5,000,000 square feet of offices and new roads, transforming the area into a vibrant place to live, work and spend leisure time.¹⁷ These developments also contributed to wider benefits such as improving health and well-being by transforming derelict areas (with commonplace antisocial behaviour) into safer, cleaner and brighter environments.
- 2.30 These mega-projects delivered numerous benefits across many areas of the Social Value Framework (Figure 1.1), but weren't suitable for selection as case studies because these benefits are intrinsically linked to the vast improvements in services and connectivity due to the Thameslink Programme and the significant level of other nearby developments. However,

¹⁵ *The Value of Station Investment* (2011) – Steer Davies Gleave (for Network Rail)

¹⁶ <https://www.thameslinkprogramme.co.uk/learning-legacy/better-stations/london-bridge/>

¹⁷ <https://www.camden.gov.uk/kings-cross-central>

there are many other recent examples of station investment schemes which have contributed to the economic development of their local areas, as we discuss in the next section (where the stations are grouped by the broad categories of station investment outlined in 1.9).

Operational improvements

- 2.31 Station investment schemes can focus on operational improvements to constraints such as platforms and signalling.

This was the case at **Liverpool Lime Street** in 2018 where £140m was spent improving the track, signalling and platforms at this historic station. The aims of the investment were to facilitate an increase in train services, to allow longer trains to use the station and to improve the reliability of train services which would support the anticipated increase in passengers and the planned economic growth in the area.¹⁸



Figure 2.3: Liverpool Lime Street station

Social Value Framework areas:



Transport & Connectivity

Economy & Enterprise

Manchester Victoria station was improved in 2015 when investment delivered a new roof, several new platforms and tracks and other minor non-operational improvements costing a total of £44m. The increase in rail capacity in the North of England was required to facilitate forecasted economic growth and development in the region.¹⁹



Figure 2.4: Manchester Victoria station historic frontage

Social Value Framework areas:



Transport & Connectivity

Innovation & Regeneration

¹⁸ <https://www.globalrailwayreview.com/news/74300/liverpool-lime-street-improvements/>

¹⁹ <https://www.manchestereveningnews.co.uk/news/greater-manchester-news/manchester-victoria-station-reopens-roof-10201716>

Facilities improvements

- 2.32 Station investment schemes can also revitalise outdated or run-down passenger-facing facilities such as ticket offices and retail units.

The facilities at **Bognor Regis** were greatly improved in 2018 when the station underwent a £2.65m makeover comprising a new ticket office, café, taxi office, newsagents and waiting room amongst other small improvements and refurbishments. The heritage of the old station was maintained whilst tying into the revitalisation of the town.²⁰



Figure 2.5: Bognor Regis station

Social Value Framework areas:



Innovation & Regeneration



Civic Identity & Pride

Dundee station was transformed in 2018 when investment delivered a new concourse with improved ticketing, food and retail facilities. The new station building also included a new hotel in the 3 floors above the passenger concourse. The station's redevelopment was a core element of the £1bn Dundee Waterfront masterplan which is transforming the city into a totally regenerated destination for living, working and visiting.²¹



Figure 2.6: Dundee station redevelopment and SleeperZ Hotel

Social Value Framework areas:



Innovation & Regeneration



Economy & Enterprise

²⁰ *Transformational Partnerships* (2018) – Rail Delivery Group

²¹ <https://www.railway-technology.com/projects/dundee-station-redevelopment-scotland/>

Experience improvements

- 2.33 Another broad category of station improvement schemes are those which seek to improve passenger satisfaction with the station by improving experiential factors such as lighting, ambiance, safety or way-finding.

Ellesmere Port station was improved in 2014 when £490k was used to refurbish the station interior, improve windows, install access ramps, restore stonework and bring community use to disused rooms. The Council, British Legion and Veterans Association all gave high praise to the aesthetics and utility of the station works, demonstrating the positive community response to the investment.²²



Figure 2.7: Refurbished Ellesmere Port station

Social Value Framework areas:



Health & Well-being



Environment & Ecology

Harrogate station was improved in 2016 with £1.2m spent on improving safety and security at the station by installing new lighting, CCTV and Customer Information Screens alongside a refurbishment of the main concourse, waiting rooms and toilets.²³ The increase in passenger satisfaction is evidenced by the station winning the 'Medium Station of the Year' award in 2017.²⁴



Figure 2.8: Harrogate station: refurbished concourse

Social Value Framework areas:



Health & Well-being



Civic Identity & Pride

²² Source: Merseyrail

²³ *Transformational Partnerships* (2018) – Rail Delivery Group

²⁴ <https://www.railmagazine.com/news/network/national-rail-awards-2017-harrogate-wins-medium-station-of-the-year>

Access improvements

- 2.34 The final broad category of station improvement schemes that we outlined in 1.9 are those that focus on the station's accessibility and the public realm in its immediate vicinity.

The reconfigured layout at the front of **Cambridge** station was completed in 2017 comprising areas for buses, taxis, pedestrians, cyclists (including a 3,000-space cycle hub) and motorists at a cost of £4m. The internal station works included a refurbishment and expansion of the ticket hall, extended gatelines and other facilities upgrades. The renovated station district facilitated the economic development of the local area (and wider Cambridge) and the scheme has won several accolades such as 'Large Station of the Year' in 2017.²⁵



Figure 2.9: Cambridge station: pedestrianisation & taxi area

Social Value Framework areas:



Environment & Ecology



Civic Identity & Pride



Innovation & Regeneration

Hebden Bridge station was improved in 2019 with accessibility at the station transformed by new lifts, step-free access throughout the station and extended platforms. These improvements have enhanced this historic and community-focused station for passengers and other station users.²⁶

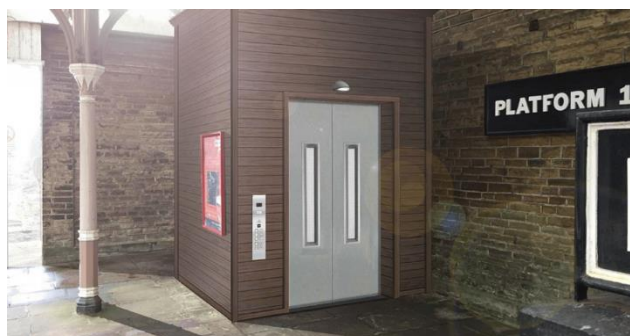


Figure 2.10: Hebden Bridge station lift (©Network Rail)

Social Value Framework areas:



Health & Well-being



Civic Identity & Pride

- 2.35 The variety of recent station investments that have delivered social, economic and environmental benefits is demonstrated by the examples above and further evidenced by the 4 case study station schemes which we discuss in detail in Chapter 3.

²⁵ <https://www.greateranglia.co.uk/about-us/news-desk/news-articles/further-accolade-cambridge-rail-station-redevelopment>

²⁶ <https://www.networkrail.co.uk/running-the-railway/railway-upgrade-plan/key-projects/transpennine-route-upgrade/calder-valley/hebden-bridge-station-improvements/>

Reflections

- 2.36 It is worth noting that some stations which had experienced reasonably high-profile or publicly acclaimed investments did not show the improvements in metrics that might have been expected. An example is Dartford, which underwent a c. £7m redevelopment (completed in 2014). This station performed well against our initial sifting criteria but having analysed the metrics for the station it showed no particular uplift in rateable value, a lower growth in enterprise units than its counterfactual and an increase in deprivation. This was a challenge, because the acclaimed station investments that had best fit our earlier selection criteria did not necessarily provide the quantitative evidence required to be a suitable case study in this research, thus somewhat narrowing our selection pool.
- 2.37 Another challenge faced was extracting accurate information such as the timeline of the station improvement works and accurate final cost breakdowns (and the contributions from each party). The tendency of media articles was to report the projected investment costs when the investment projects were launched or when funding was agreed, but not to have updated costings upon the completion of the projects. This was compounded by business cases also being ‘forward-looking’ and having been written prior to the start of the station works.
- 2.38 Whilst we engaged with stakeholders for our case study stations to determine accurate information, the lack of publicly available information about reasonably high-profile projects was disappointing and can easily be rectified in the future by more rigorous ‘record-keeping’ by the organisations involved in delivering the station investment. An ideal scenario would be a (publicly available) industry-wide database of completed station investment projects with accurate details of scope, cost and timeline, with a requirement of any scheme receiving Department for Transport (DfT) or Network Rail funding to submit an entry upon scheme completion, similar to the NSIP database maintained by Network Rail.
- 2.39 Selecting case study stations that demonstrated the value of the station investment alone and without links to other developments of the local area was a significant challenge, which is unsurprising, as many station investment schemes are coupled with track, signal, timetable or service enhancements. This is unlikely to change, but investors should ensure that they commission pre and post investment analysis that seeks to determine the impact of the station investment alone, such as the NSIP station satisfaction surveys which were required for projects receiving this funding. However, this should be expanded to analyse wider impacts such as economic, housing and environmental improvements in the vicinity of the station, as well as passenger satisfaction with the building and its environs.

Phase 2: Stakeholder Engagement and Case Study Development

- 2.40 Phase 1 of the study was a desk-based exercise to select the excellent case study stations, but it was imperative if we were to fully examine the evidence for the value of the station investments that we engaged with the stakeholders for each of the case study stations.
- 2.41 Where possible (3 of the 4 stations), we combined this engagement with a site-visit, where stakeholders showed us around the station and highlighted several features that would not have been obvious from desktop research. For example, how the station investments had endured since the scheme’s completion and the linkages between the station and its immediate surroundings. This perspective also enabled us to experience the “visual gateway” that the stations provide to their localities, which many of the stakeholders heralded as a key outcome for the station investments.

Engagement

- 2.42 To support and supplement the quantitative evidence base gathered for the case study stations in Phase 1, we engaged with key stakeholders for each case study, who represented the organisations that funded and delivered each scheme. Their perspectives of the station investment and its outcomes pointed us to investigate further certain aspects of the investment, the nuances of what had been delivered and where the benefits would be most evident.
- 2.43 Engaging with investors from both inside the rail industry, such as TOCs and Network Rail, and outside the industry, such as representatives of City Councils and Local Enterprise Partnerships (LEPs), also provided a rich source of information. In particular, we gained an understanding of the process that they had deployed from inception to delivery of the investment, lessons learnt along the way and powerful descriptions (supported by anecdotal evidence) of the impact that their funding in the station had delivered for the local area. The interviews enriched the research completed in Phase 1 of the study by supplementing the evidence base with further anecdotal evidence in more qualitative areas such as the *Civic Identity & Pride* aspect of the Social Value Framework used throughout the study.
- 2.44 This engagement was unaffected by the COVID-19 outbreak and subsequent UK lockdown in March 2020 as all the site visits and the 6 stakeholder meetings in person had been completed. In total we spoke with 18 stakeholders (shown in Table 2.6) who, with the exception of East Midlands Development Agency (which was abolished in 2012, before the Nottingham scheme's completion) and the European Regional Development Fund, represented the major funders for each of the case study station investments.
- 2.45 All of those who we approached enthusiastically contributed to our research and were generous with their time, demonstrating the pride in their investment, sometimes 5 years after it was completed.

Table 2.6: Stakeholder engagement

Contact	Role	Company
Nottingham		
Mark Lambert	Property Portfolio Manager	East Midlands Railway
Lawrence Bowman	Deputy Managing Director	West Midlands Trains (formerly of East Midlands Railway)
Kevin Newman	Senior Route Freight Manager	Network Rail
Richard Mallender	Transport Planner	Nottingham City Council
Chelmsford		
Joanna O'Donnell	Head of Development & Planning	Greater Anglia
Stuart Graham	Economic Development and Implementation Services Manager	Chelmsford City Council
Howard Davies	Capital Programme Officer	South East LEP
Rhiannon Mort	Capital Programme Manager	South East LEP
Chris Harvey	Project Manager	Ringway-Jacobs
Strood		

Peter Stapleton	Head of Estates & Facilities	Southeastern
Steve Cross	Project Manager	Southeastern
Robbie Lough	Commercial Scheme Sponsor	Network Rail
Joanne Cable	Medway Council	Strategy, Economic Development and LGF Manager
<i>Burnley Manchester Road</i>		
Patrick Cox	Project Manager	Northern Rail
Marcus Barnes	Senior Commercial Schemes Sponsor	Network Rail
Kate Ingram	Head of Regeneration & Planning Policy	Burnley Borough Council
Richard Watts	Chair	Community Rail Lancashire (formerly of Lancashire County Council)
<i>General</i>		
Jon Ratcliffe	Programme Sponsor (Access for All)	Network Rail

- 2.46 The only challenge faced in this phase of the study was identifying who in the organisation was the most appropriate person to speak to, as over the years since granting funding, a number of the people who were heavily involved in the investment had changed roles or organisations. However, with the assistance of members of RDG's Station Strategy Group we were able to find contact details for the appropriate representative of all key stakeholders.

Data refresh

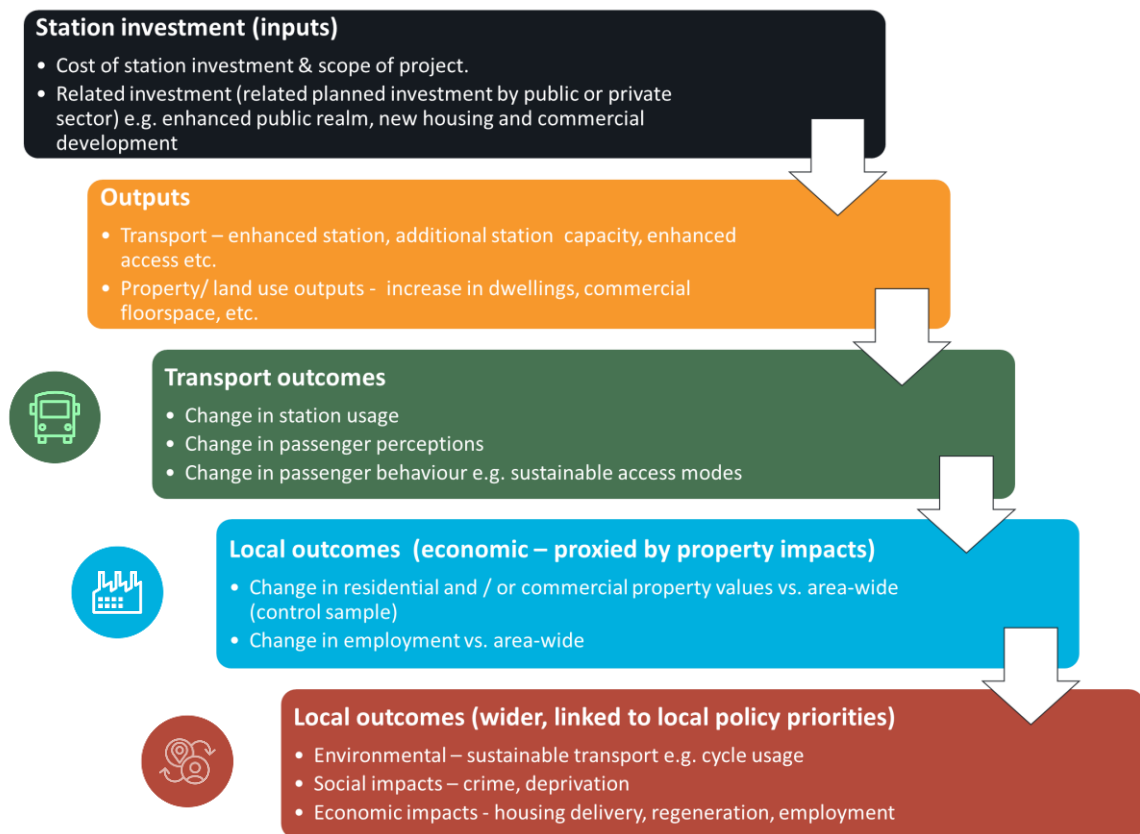
- 2.47 Following engagement with stakeholders, we revisited the case study evidence base that had been compiled in Phase 1 of the research. This was a key stage of our research where we pursued some further avenues to obtain quantitative evidence suggested by our stakeholders (and client team) which are summarised below.
- 2.48 Stakeholders provided passenger satisfaction data for their stations (where available), which was very helpful for assessing the perception of the station investment. This was supplemented by Wavelength data, provided by RDG. Wavelength is a recent initiative (launched in September 2019 for the majority of stations) by the rail industry to gather regular information about rail customer satisfaction and feelings throughout their journey. This enabled us to assess the current level of satisfaction with the case study stations and how that compared to satisfaction figures immediately after the investments were completed.
- 2.49 Wavelength data is categorised by statements of 'journey interaction' which respondents then rate their agreement out of 10. We separated out 10-13 of these journey interaction statements which best represented the factors affected by the investment at each station, e.g. "The station feels like a nice environment" and "There was good availability of amenities / shops / food & drink". We excluded from our analysis statements that were not relevant for this research e.g. "My train arrives on time" where these were not influenced by the station investment schemes.
- 2.50 We also analysed the data supplied by Glenigan Ltd (described in 2.25), which contained information about historic and future developments within 1 mile of each station. In this case, 'developments' refers to development projects such as housing, retail, commercial and

industrial developments based on planning application data and Glenigan's records of non-planning application developments. This data enabled us to evaluate the extent that the station investment may have facilitated other developments in the local area for each station. The results of this analysis for our case study stations are discussed in Chapter 3.

Economic evaluation

- 2.51 Once we had assimilated information about the inputs, outputs and outcomes of the case study schemes from the evidence base in Phase 1 and the stakeholder engagement in Phase 2, we could apply a 'logic mapping' exercise to fully evaluate the impact of the station investments.
- 2.52 This approach complements our Social Value Framework which together enable us to systematically assess the value of station investment from many different angles, which align to the differing priorities of potential stakeholders and funders.
- 2.53 This approach is set out in Figure 2.11. The development of this logic map shows linkages between **key inputs** (the investment), the **key outputs** (what is delivered on the ground) and the **outcomes** that are delivered. For this study we consider three sets of inter-related outcomes:
- Firstly, **transport outcomes**. These are the measurable effects that the investment has had on passenger usage, perception and behaviour.
 - Secondly, **economic and property-related outcomes** whereby the station (and associated) investment can support an increase in the scale and value of economic activity in the area – where the change in property values provide evidence of change in local value of activity.
 - Thirdly, **wider outcomes**, whereby the transport and economic outcomes at a local level (in and around the station) in turn support wider policy transport, social, economic and environmental objectives and outcomes.
- 2.54 This logic-mapping evaluation of station investment is a useful tool for potential funders, helping them to structure the development of the case for investment and support their governance process. Clearly defining the scope of works, the desired outcomes and the outputs of the investment assists funders in identifying what other beneficial outcomes could be delivered by the scheme.

Figure 2.11: Station Evaluation: logic mapping methodology



Reflections

- 2.55 As was discussed in 2.46, the case for investment is significantly easier to demonstrate if key documentation is kept live through to the end of the delivery of the scheme (and subsequently made available). The stakeholder engagement for this study showed that this documentation needs to include contact names and contact details for representatives of key stakeholders who are best able to confirm specific details about the schemes. Original business case and completion report documents were not always available and sometimes reported conflicting information in terms of costings and timescales. There is an obvious gap in the documentation here to reconcile changes to planned budget and timescales as projects are delivered, which the industry should aim to better manage in future investment projects.
- 2.56 A related challenge is that stakeholder anecdotal evidence in areas such as social and environmental improvements related to the station investment couldn't be substantiated by quantitative evidence. Whilst qualitative anecdotal evidence is valuable, the case is more compelling if empirical evidence can be drawn upon. Our research concluded that post scheme delivery evaluation is either not undertaken, or if it is, is weakened by stakeholders not considering how they will undertake it in advance of the investment taking place, so "before" data is not gathered. This data collection ought to take place right at the start, at the "identification of need" stage of the investment process.

3 Case Study Findings and Results

Introduction

- 3.1 This chapter provides the story of investment in four UK rail stations and describes the substantial evidence that demonstrates the value of this investment. This evidence reflects in-depth research into available data, the analysis of numerous data sources and the invaluable contributions from stakeholders.
- 3.2 A map for each case study station (sourced from National Rail Enquiries) is included in Appendix B to give a sense of their layouts and footprints.

Case Study 1 - Nottingham

Introduction

- 3.3 Nottingham is a vibrant city located in the East Midlands region of Britain with an estimated population of 351,102.²⁷ Since 2005, there has been significant development in and around the city centre to support a growing economy and attract further investment.²⁸ This has included the city council's vision for developing the city centre southwards (where the railway station is located) and also significant expansion of the Nottingham Express Transit (NET) tram network to improve connectivity across the city.
- 3.4 Nottingham station is a large and historic building which serves commuter, leisure and business travellers on local, inter-urban and intercity train services. The station provides a key interchange with other transport modes such as buses and the NET.

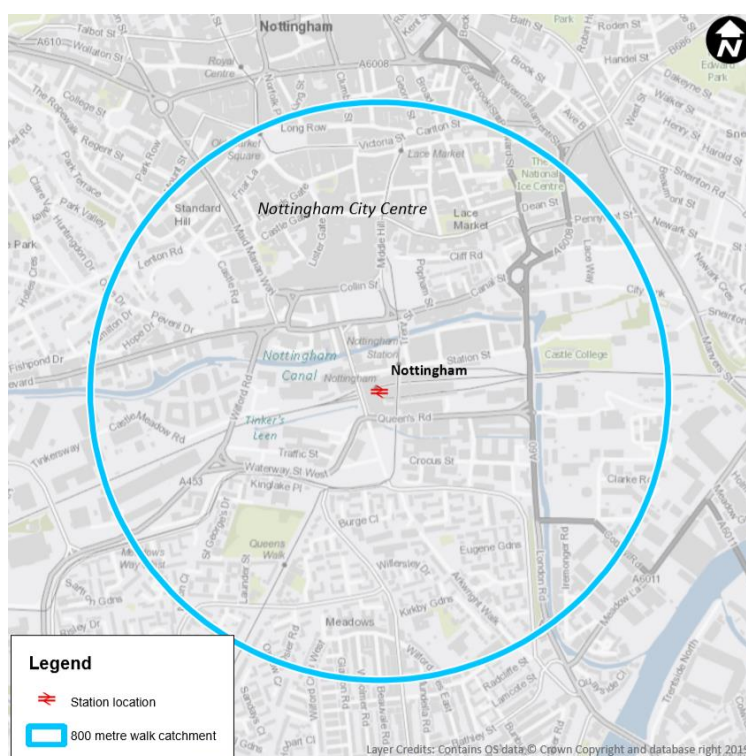


Figure 3.1: Nottingham station's location within the city.

²⁷ ONS Mid-Year Population Estimates 2018 (overall station catchment)

²⁸ Nottingham City Centre Masterplan 2005 – 2015 (<https://www.nottinghaminsight.org.uk/d/95611>)

- 3.5 Prior to investment, Nottingham station was in a poor condition, with a dingy, dirty and polluted environment arising from taxis using the station forecourt for pick-up, drop-off and waiting. The station was seen as an unpleasant place where “people didn’t choose to spend their time” and found it confusing to navigate.²⁹ The area immediately around the station suffered from urban dereliction, “prevalent antisocial behaviour and a low-quality retail offer” both inside and outside the station itself. The station and its environs certainly didn’t match the expectations of passengers or residents of the city and gave a poor first impression to visitors to the city. The Nottingham Hub project was designed to solve these issues in conjunction with the council’s wider vision for the area, bringing about benefits for passengers, local residents and the rail industry.



Figure 3.2: Nottingham station concourse pre-investment

- 3.6 With the multitude of rail connections and nearby bus and tram stops, the city council hoped to transform the area around the station into a ‘transport hub’. This concept was seen as a key contributor to the intended economic redevelopment of the local and wider area and the aspirations for the future image of Nottingham. The scheme was developed into several major projects including the station improvements that we focus on in this study.

Scope of works

- 3.7 The Nottingham Hub project was one of four phases of works at Nottingham station:
- Phase 0: A new multi-storey car park containing 950 spaces (2012)
 - Phase 1: The station Hub works (2012-2014)
 - Phase 2: Tram bridge extension (2012-2015)
 - Phase 3: Track and resignalling works (2013)
- 3.8 Phase 1, the station Hub works (which is the focus of this case study) was a joint project between East Midlands Trains and Nottingham City Council who contracted Network Rail to deliver the scheme. The project was funded by Nottingham City Council, Network Rail and East Midlands Trains with a total cost of approximately £60m split between the three organisations.
- 3.9 The station Hub project was completed in November 2014, although the terracotta facing on the main station building was also refurbished in 2016 which completed the makeover of the historic station.
- 3.10 The other phases were delivered in parallel to the station works and the benefits resulting from phases 1-3 are intrinsically linked. These works were complementary and an excellent example of minimising the disruption to passengers by delivering several major projects simultaneously.

²⁹ This and all the following quotations come from our stakeholder engagement process described in 2.42

3.11 In terms of the station Hub works, the main concourse was transformed by pedestrianisation (as can be seen in Figure 3.3) with the taxi rank being relocated to the north of the station. The works delivered a new ticket office, better retail provision throughout the station, a new cycle hub and café and waiting lounge improvements at the platform level.



Figure 3.3: Nottingham station pedestrianised concourse post-investment

3.12 A new southern concourse was also constructed which directly linked to the new car park and tram bridge extension above the station. The whole station estate was modernised and has become much more welcoming and user-friendly, with improvements to accessibility such as new ramps and lifts.

3.13 Phase 3 of the works delivered a new island platform which allows for greater platform flexibility and capacity at the station.

Desired outputs

3.14 Whilst Network Rail, East Midlands Trains and Nottingham City Council all made significant contributions to the £60m budget, they each had slightly differing priorities for the outcomes of the scheme and the specific issues they hoped to address.

3.15 **For the city:** to improve intermodal connectivity and encourage a shift towards sustainable transport modes, together with rejuvenating the southern part of the city centre by creating an iconic station which attracts new businesses and private investment. This all contributed to the aim of creating an improved gateway to the city with a much more welcoming environment.

3.16 **For the railway:** to attract more passengers to choose to travel by rail, generating higher ticket sales and retail revenue whilst facilitating performance improvements and improving regional connectivity within the East Midlands. Another goal was to bring the station “into the 21st century” and make it a place to be proud of for the TOC, boosting passenger satisfaction and staff morale.




Outcomes

3.17 The following evidence shows that the investment in Nottingham station delivered significant value in terms of economic, social and environmental benefits. This evidence is categorised according to the structure of the Station Evaluation Framework (Figure 2.11) and the Social Value Framework (Figure 1.1) and supported by comments from stakeholders. We have used statistics for Derby (the study’s counterfactual station for Nottingham), the wider Nottingham area and the Midlands Region to demonstrate the impact of the investment and to isolate the benefits of the station improvement itself from those of other investment in the general area (as far as is possible).




“The station is a cornerstone for rejuvenating that area of Nottingham”
and “Nottingham is now a destination station with much improved retail
and connectivity”

Kevin Newman – Network Rail

Transport outcomes

- Since the investment in 2014, **passenger footfall** numbers have increased by **5.6%** per annum.³⁰ This is markedly higher than growth at Derby (2.2% per annum) and across the whole East Midlands region (3.6% per annum).³¹ 
- **Passenger satisfaction** at the station has also increased since the investment, from **62%** in 2013 to **78%** in 2015.³² This high level of satisfaction at the station has been sustained, with station metrics in Wavelength (as described in 2.49) scoring an average of **77%** in 2019/20. 
- The repositioning of the bus stops and tram line alongside creating an integrated network of walkways and cycleways has “increased the proportion of users accessing the station by **sustainable modes** of transport”, according to Nottingham City Council. 

Local outcomes (economic)

- Since the investment in 2014, **house prices** in areas close³³ to Nottingham station increased by **7.6%** per annum, compared to the wider Nottingham travel to work area (5.4%) and Derby (3.9%).³⁴ 
- **Employment** in nearby areas to Nottingham station (where data was available) experienced a **3.7%** increase per annum between 2015 and 2018. This is greater than the wider Nottingham travel to work area (-1.1% fall per annum) and Derby city centre (1.2% growth per annum) over the same period.³⁵ 
- The number of **tertiary jobs** in the immediate area of the station increased by **5.5%** between 2015 and 2018, compared to a fall of 8.2% across the wider Nottingham station catchment.^{36,37} 

³⁰ Throughout this document, ‘per annum’ refers to the compound annual growth rate (CAGR), which is a smoothed growth rate per year: https://en.wikipedia.org/wiki/Compound_annual_growth_rate

³¹ Source: ORR Estimates of Station Usage

³² Source: NRPS

³³ Within approximately 1km

³⁴ Source: ONS Median house prices by lower layer super output area

³⁵ Source: ONS Business register and employment survey

³⁶ Within approximately 10km

³⁷ Source: ONS Workforce jobs by industry

- **Developments** (as discussed in 2.50) within 1 mile of Nottingham station have increased from an average of **10** per year (2011-2013) to **133** per year (2014-2016) as can be seen in Figure 3.4 where the red dotted line indicates the year the station investment was completed. The value and floorspace of developments have also increased substantially since 2014 (total floorspace increased from approximately 10,900m² per year (2011-2013) to 30,500m² per year (2014-2016)).³⁸

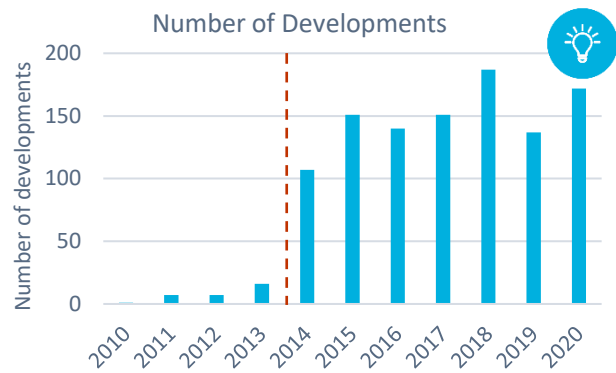






Figure 3.4: Number of developments within 1 mile of Nottingham station 2010-2020. Source: Glenigan Ltd.

Local outcomes (wider)

- There has been a decrease in overall **deprivation** since the investment, with the immediate area around Nottingham station being ranked in the **12th** most deprived percentile in the UK in 2010 but improving to being in the **22nd** most deprived percentile in 2019.³⁹ 
- The improved cycle facilities at the upgraded station have played a part in facilitating the wider uptake of **cycling** within the city, which increased by **44%** between 2015 and 2018, compared to an increase of only 2% across the East Midlands.⁴⁰ 
- The immediate vicinity of Nottingham station is now home to a new HMRC regional Headquarters, a new county court, a consolidated city council building and new student accommodation. These **new developments** have been attracted to the area by the “regeneration and enhanced connectivity offered by the upgraded station” according to Network Rail and Nottingham City Council. 
- The station redevelopment has supported **local tourism** with Nottingham Castle and the Robin Hood experience being key attractions within walking distance from the station. Directions and information about these attractions are clearly displayed in the station forecourt to aid visitors and tourists. 

³⁸ Source: Glenigan Ltd.

³⁹ Source: English indices of multiple deprivation

⁴⁰ Source: DfT Walking and cycling statistics

- The station's **identity** and **heritage** were retained and enhanced by restoring the Edwardian terracotta exterior of the station (Figure 3.5).
- Relocating the taxi rank, extending pavements, pedestrianisation and making Carrington Street buses only have all contributed to **reducing pollution** and **congestion** in the local area, whilst contributing to further traffic-free plans for much of the city centre.
- The ongoing redevelopment of Broadmarsh shopping centre and the repositioning of the coach station will create a more direct **pedestrian route** between the station and city centre, unlocking further development opportunities.



Figure 3.5: Nottingham station building's refurbished frontage

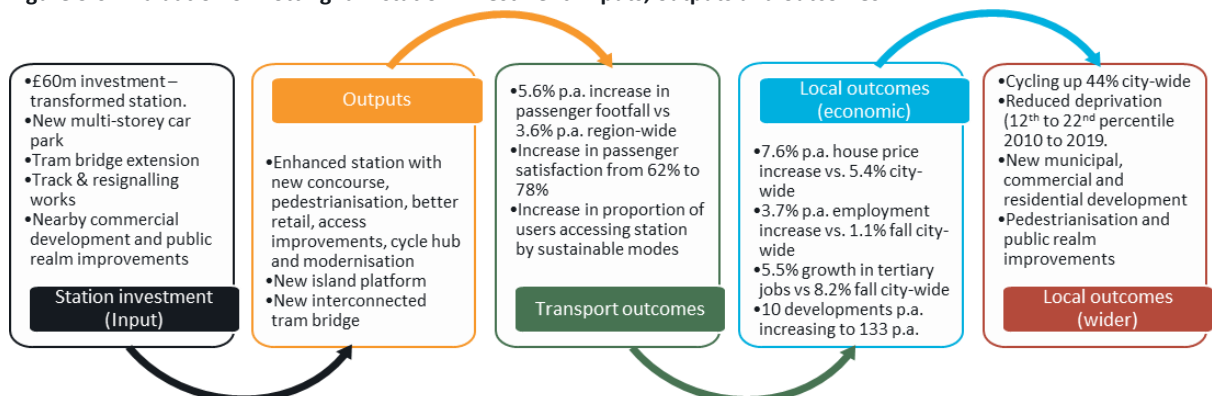
“The station presents a much more welcoming environment for passengers and provides a better image of the city”

Richard Mallender – Nottingham City Council

Evaluation of station investment

3.18 Figure 3.6 summarises how the investment in Nottingham station has delivered the outputs intended, resulting in benefits to rail passengers and wider economic, social and environmental value. This value is also demonstrable across the different categories of the Social Value Framework indicated by the icons above, which further signifies the impact of this scheme across the different policy areas that the various funders were aiming to address by developing and delivering this scheme. For example, the rejuvenation of this area of Nottingham, desired by the city council, has been achieved as evidenced by the increases in house prices, employment and developments.

Figure 3.6: Evaluation of Nottingham station investment: inputs, outputs and outcomes



Case Study 2 – Chelmsford

Introduction

- 3.19 Chelmsford, the county town of Essex, gained its city status in 2012, reflecting the growth and development of the area. Recent and planned developments in the city (which has an estimated population of 158,400.⁴¹) support the Essex County Council's ambitions of delivering sustained growth to their strong economy, which already provides over 83,000 jobs.⁴²

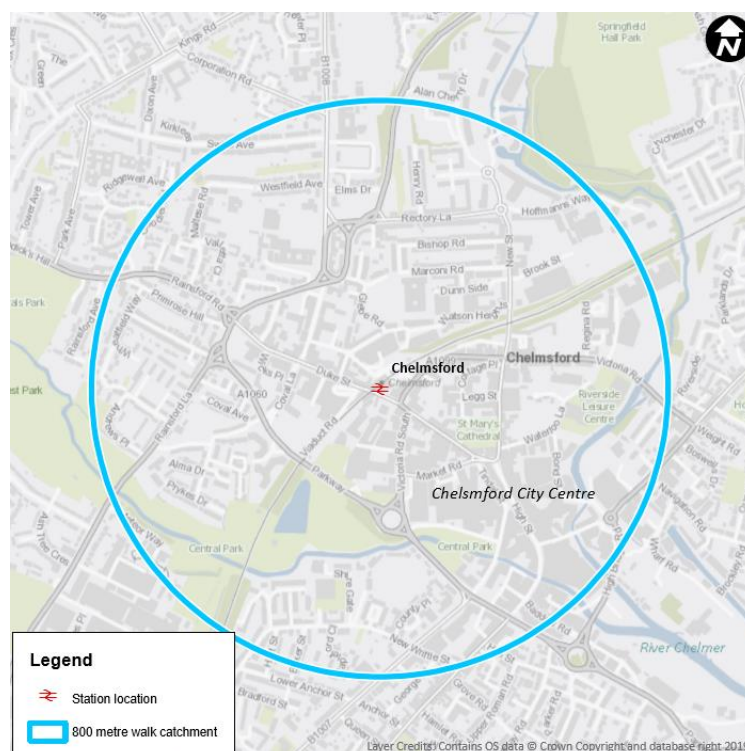


Figure 3.7: Chelmsford station's location within the city.

Station background & context

- 3.20 Chelmsford station is a predominantly commuter station located in the centre of the city. It serves the commuter market to/from London, where many local residents work, and also supports those passengers who commute from elsewhere in the region into Chelmsford for work and business. There are regular services to London (Liverpool Street), and elsewhere in the East of England such as Norwich, Ipswich and Colchester.
- 3.21 Before the investment in the station and its environs, the area around the station was unappealing for cyclists and pedestrians, with indirect, unattractive access routes to adjacent areas and poor perceptions of personal security. For example, the main pedestrian route north of the station was via a "narrow, dark tunnel and an unattractive path around a multi-storey car park". The station itself was suffering from significant passenger congestion and outdated facilities, such as cramped ticket office facilities, a small passenger concourse and a constricted



Figure 3.8: Chelmsford station prior to redevelopment

⁴¹ Source: ONS Mid-Year Population Estimates by LSOA 2018 (overall station catchment – within approx. 15km)

⁴² Delivering Economic Growth in Chelmsford to 2036
<https://www.chelmsford.gov.uk/EasySiteWeb/GatewayLink.aspx?allid=1124107>

gateline. All these issues contributed to high levels of crowding and congestion at the station, especially during peak hours, and the passenger experience was further worsened by a low-quality retail offer and difficult interchange between transport modes.⁴³

- 3.22 The three phases of the station area improvement works were developed to address these issues by improving the public realm in the station area, upgrading the station itself and improving access to and around the station, particularly for pedestrians and cyclists. The goal was to encourage more people to consider active and public transport modes for their whole journey whilst also facilitating the increase in rail demand from recent and planned economic and residential developments in the city.

Scope of works

- 3.23 There were 3 main phases of works in and around Chelmsford station as part of the overall portfolio of station investment:

- Phase 1: Station Square redevelopment
- Phase 2: Station building improvements
- Phase 3: Mill Yard redevelopment

Table 3.1 shows the organisation who led each phase of work, the sources of funding obtained and the completion date of the work.

Table 3.1: Breakdown of improvement works at and around Chelmsford station

Phase of works	Phase led by	Funding source	Cost	Completion date
Phase 1 (Station Square redevelopment)	Chelmsford City Council	Section 106 ⁴⁴	£1.4m	2015
Phase 2 (Station building improvements)	Abellio Greater Anglia	NSIP fund and Network Rail Discretionary fund	£3.2m	2016
Phase 3 (Mill Yard redevelopment)	Chelmsford City Council	Local Growth Fund, Section 106 and Community Infrastructure Levy	£4.1m	2019

⁴³ SE LEP Business Case – Chelmsford City Centre: Chelmsford City integrated transport package: Chelmsford Station / Station Square / Mill Yard (2015)

⁴⁴ Section 106 is a legal agreement between developers and local authorities, used to mitigate the impact of new homes on the local community and infrastructure.

3.24 **Phase 1** consisted of improvement works to the area immediately outside Chelmsford station (**Station Square**) with pedestrian, cycling, access and public realm improvements. Works included widening pavements and extending public space, new high-quality granite paving and carriageway resurfacing, bus bay realignments and new bus shelters and tidying of traffic signs, road lines and wayfinding information. The scheme created a welcoming arrival and interchange space for the city's transport hub, which is easy to navigate, safe and well-connected to all areas of the city.

3.25 **Phase 2** focused on improving the **station building**, reconstructing the concourse and booking hall, providing an extended gate-line, improved ticketing and retail facilities and a new station entrance. There were refurbishments to toilets and staff rooms, improved CCTV and customer information as well as layout improvements inside the station. The improved station building was much brighter, more spacious and modern which has helped to ease congestion and enhance the passenger experience.

3.26 **Phase 3** of the works was part of the **Mill Yard** redevelopment, which included replacing the pedestrian access tunnel (avoided by pedestrians where possible) with a well-lit underpass with clear sight-lines, creating a much improved pedestrian and cycle route between the station, the new mixed-use Marconi development and the university quarter in the north of the city centre. Other public realm improvements on the northside of the station comprised better emergency, taxi and private vehicle access and circulation and improved cycling and pedestrian facilities.

Desired outputs

3.27 **For the city:** to create a transport hub which is a welcoming arrival and interchange space with clear pedestrian and cycling connections to all areas of the city, including new developments such as City Park West and the Marconi Evolution. These enhanced connections and improved accessibility in and around the station would encourage residents to choose active and public transport modes for their journeys. The investment was also intended to improve (perceptions of) crime and antisocial behaviour near the station, enhancing the safety of pedestrians and cyclists, especially at night.



Figure 3.9: Redeveloped Duke Street with improved surfacing, layout and lighting (outside Chelmsford station)



Figure 3.10: Chelmsford station: refurbished concourse with improved retail offer



Figure 3.11: Chelmsford Station: Mill Yard tunnel/underpass before and after investment

- 3.28 **For the railway:** to improve capacity and congestion ensuring the busiest two-platform railway station outside of London can cope with the increase in passenger demand from recent and planned residential and economic development in Chelmsford, whilst also modernising and rejuvenating the station. This would also enhance passengers' experience when travelling by rail to/from the station and improve the quality of their journey.




Outcomes

- 3.29 The following evidence demonstrates that the phases of improvement works at Chelmsford station have delivered social, economic and environmental benefits. The evidence is categorised according to the structure of the Station Evaluation Framework (Figure 2.11) and the Social Value Framework (Figure 1.1) and supported by comments from stakeholders. We have used statistics for Guildford, which was selected as the counterfactual station for Chelmsford, as both are major stations on main lines serving similar sized towns just outside of Greater London with similar passenger footfall.

"The works have made the station capable of functioning as the busiest two platform station outside London"





Stuart Graham – Chelmsford City Council

Transport outcomes

- The investment in Chelmsford station was in response to growing **passenger footfall (3.4% growth per annum in the 5 years preceding the investment)**. Since 2015, passenger numbers have increased by **1.6% per annum** compared to a fall of 1.9% at Guildford over the same period. This sustained growth has been facilitated by the station investment works.⁴⁵ 
- The station works have improved **accessibility** and eased **congestion** during peak hours and enhanced the passenger experience at this busy commuter station. Passenger satisfaction metrics (in Wavelength) for the station scored **72%** in 2019/20. 
- Improved **intermodal connectivity** (delivered by Phases 1 & 3 of the improvement works by reconfiguring the bus, road and pedestrianisation layouts immediately outside the station) has enabled easier interchange between the rail and bus stations and the new **cycling hub**, which has 960 spaces, and has attracted residents to cycle to the station. The provision of bike storage metric in Wavelength scored **75%** (2019/20). 

⁴⁵ Source: ORR Estimates of Station Usage

Local outcomes (economic)

- Since the investment in 2015, **house prices** in areas within walking distance from Chelmsford station⁴⁶ increased by **6.7%** per annum. The same area pre-investment experienced growth of 4.3% per annum. Since 2015, Guildford has experienced a 3.9% growth in house prices per annum.⁴⁷ 
- There has been **4.3%** growth per annum in **enterprise units** in the areas close to the station since 2014, compared to 2.6% growth per annum in the same area pre-investment. This reflects inward investment being attracted to the area in response to the commencement of the high-profile portfolio of investment in the area, reflecting confidence in the benefits to the area that the investment would bring when complete. Since 2014, Guildford has experienced 3.2% growth per annum in enterprise units.⁴⁸ 
- The number of **tertiary jobs** in the areas near the station⁴⁹ increased by **8.3%** between 2015 and 2018, marginally higher than the wider Chelmsford station catchment⁵⁰ which experienced a 7.5% increase.⁵¹ 
- **Developments** within 1 mile of Chelmsford station have increased from an average of **15** per year (2010-2014) to **68** per year (2015-2019) as can be seen in Figure 3.12 where the red dotted box indicates the period of successive phases of station investments.⁵² Figure 3.12 clearly shows the development in Chelmsford city centre over recent years in which the station investment has played a key part. 

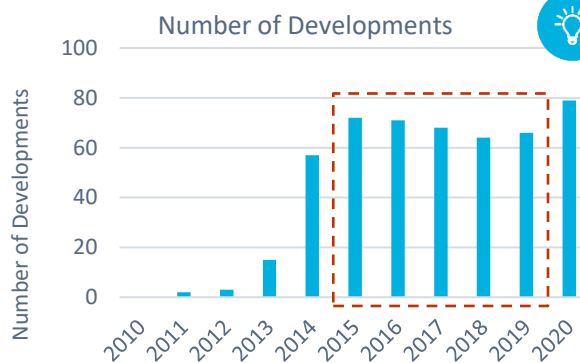


Figure 3.12: Number of developments within 1 mile of Chelmsford station 2010-2020. Source: Glenigan Ltd.

⁴⁶ Within approximately 1km

⁴⁷ Source: ONS Median house prices by lower layer super output area

⁴⁸ Source: ONS Business register and employment survey






⁴⁹ Within approximately 6km

⁵⁰ Within approximately 15km

⁵¹ Source: ONS Workforce jobs by industry

⁵² Source: Glenigan Ltd.

Local outcomes (wider)

- There has been a **12%** reduction in **crime** in the immediate area of the station in 2019 (when the Mill Yard tunnel was completed) compared to 2018, whereas across nearby areas crime increased by 4% over the same period.⁵³ According to SE LEP “the old, dark tunnel was an enabler of crime and antisocial behaviour” and there has been the “perception that crime has reduced”. Chelmsford City Council agreed, stating “antisocial behaviour has decreased in the old yard with lower crime and less litter”. 
- Restricting car access on a cut-through to the East of the station and also on Duke Street has improved **air quality** and **safety** immediately outside the station. The restricted car access has contributed to “lower emissions and better air quality” according to SE LEP. The station safety metric in Wavelength scored **71%** in 2019/20. 
- The Station Square redevelopment has facilitated the development of **City Park West** which delivered 500 homes and 21,000m² of commercial floorspace with 500 jobs.⁵⁴ 
- The Mill Yard redevelopment has facilitated the growth of **Anglia Ruskin University** and the development of **Marconi Evolution** which delivered 400 homes and 8,500m² of commercial floor space with 500 jobs.⁵⁵ It has also increased connectivity between the historic town centre and new developments north of the station with “better access to the university and city centre” according to SE LEP. 
- The improvements to the Mill Yard area included removing rubbish and rats in the old yard, translocating slow-worms (which are a protected species) and the removal of Japanese knotweed (which is an invasive species). This all contributed to a much-enhanced **environment** immediately around the station and between the car parks. 

“The station works supported the economic and physical growth of Chelmsford and improved the quality of the nearby environment.”

Rhiannon Mort & Howard Davies – South East Local Enterprise Partnership

⁵³ Source: Police UK open data

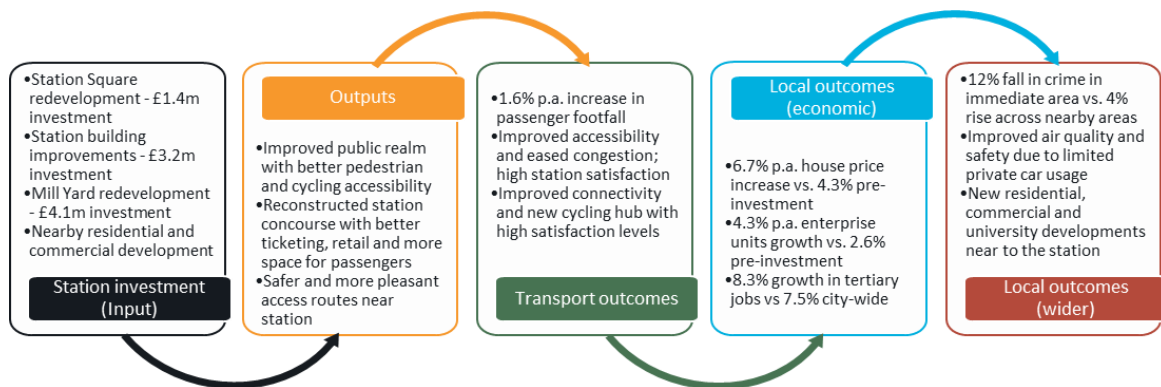
⁵⁴ SE LEP Business Case – Chelmsford City Centre: Chelmsford City integrated transport package: Chelmsford Station / Station Square / Mill Yard (2015)

⁵⁵ SE LEP Business Case – Chelmsford City Centre: Chelmsford City integrated transport package: Chelmsford Station / Station Square / Mill Yard (2015)

Evaluation of station investment

- 3.30 Figure 3.13 summarises the inputs, outputs and outcomes of the investment in Chelmsford station and its immediate surroundings. The mapping indicates how the three phases of works have together resulted in benefits to rail passengers and wider economic, social and environmental value. The icons used above demonstrate the numerous aspects of the Social Value Framework that have been positively impacted by the station investment at Chelmsford. For example, the reduction in crime and antisocial behaviour, which was a desired outcome of the city council, has been achieved, (as evidenced by the reduction in crime levels between 2018 and 2019 and supported by stakeholder contributions) which is a positive outcome under the *Health & Well-being* area of the Social Value Framework.

Figure 3.13: Evaluation of Chelmsford Station investment: inputs, outputs and outcomes



Case Study 3 – Strood

Introduction

- 3.31 Strood, a large town located in the Medway area of Kent has experienced significant growth in the 21st century due to its proximity to London and more affordable house prices attracting commuters to the area. The town's population in 2018 was estimated to be 69,923⁵⁶, up 9% from 2010 levels with recent major developments focusing on improvements in the town centre and regenerating the Waterfront area.⁵⁷ These developments have enhanced the town and are facilitating the economic growth in the local and wider area.

Station background & context

- 3.32 Strood station is located close to the town centre, just off the banks of the River Medway in the Waterfront area and predominantly serves the commuter market to/from London and passengers travelling to other destinations in Kent. The train service at Strood has vastly improved in recent years due to the introduction of HS1 services in 2009 which significantly reduced the journey time to London and Thameslink services from Rainham to Luton (via Strood), which commenced in May 2018. Strood is also the terminus of the Medway Valley line which links the Medway towns to Maidstone and beyond to Tonbridge.



Figure 3.14: Strood station's location within the town.

⁵⁶ Source: ONS Mid-Year Population Estimates by LSOA 2018 (overall station catchment)

⁵⁷ https://www.medway.gov.uk/info/200177/regeneration/462/regeneration_in_strood/

3.33 Prior to investment, the station was dilapidated and cramped and in stark contrast to the vision for the local area as a key location for residential growth and economic development. The passenger experience was poor and as the gateway into a priority development area was in great need of updating and improving. The main issues at the station were: a cramped booking hall, poor passenger waiting facilities, insufficient and poor-quality retail and toilet facilities and access issues both outside and inside the station.⁵⁸ Also, the station subway was “very inhospitable and suffered from water ingress”⁵⁹.



Figure 3.15: Strood station prior to investment

3.34 The station improvements were included in the wider business case for regenerating Strood town centre and unlocking the potential of the town as a centre for residential and economic development, with the works being described as “a key driver for bringing in regeneration and growth to the town”.⁶⁰

Scope of works

3.35 The station works were delivered by Southeastern, with funding almost equally split between NSIP funding (obtained via Southeastern) and Local Growth Funding (obtained from SE LEP via Medway Council). The total investment in the station was £2.6m and the works were completed in December 2017.

3.36 The Strood station improvement involved the demolition of the old station building and construction of an attractive new building with a better layout, significantly improved ticket office and waiting facilities and a more spacious forecourt. There were also new customer information screens, an expanded gate-line, CCTV, staff office and welfare facilities (for platform staff and train crew) and a cycle hub (with 40 spaces). The retail concession (a coffee and confectionary shop) saw much improved premises, whilst maintaining the original tenant which aided continuity in the sense of community at the station.



Figure 3.16: Strood station after investment

⁵⁸ Business Case for Strood Town Centre Local Growth Fund – Medway Council (2015)

⁵⁹ NSIP Completion Report – Strood (2019)

⁶⁰ Business Case for Strood Town Centre Local Growth Fund – Medway Council (2015)

- 3.37 The investment also provided access improvements to and within the station in the form of a refurbished subway (being cleaned, cladded and given better lighting as can be seen in Figure 3.17), DDA-compliant⁶¹ ramps outside the station and the relocation of three disabled parking bays much closer to the station entrance. These complemented the new lifts and footbridge which had been installed in 2014.



Figure 3.17: Strood station underpass before and after investment

Desired outputs

- 3.38 **For the town:** to support further investment in the local area, enabling regeneration of the town and to match the future rail passenger demand and passenger expectations from current and future residents. The council was aware that improving the quality of the gateway to Strood (i.e. the railway station) and supporting passenger growth was a “key driver for bringing in regeneration and growth to the town”.⁶²
- 3.39 **For the railway:** to reconstruct an outdated station building to reflect the much-improved connectivity and associated passenger numbers (from HS1 and Thameslink services), which also improves the passenger experience, provides better staff facilities and acts as a flagship project for future station investment projects in the region.

Outcomes

- 3.40 The following evidence demonstrates how the improvement works at and around Strood station have delivered value in terms of social, economic and environmental benefits. We have used statistics for Maidstone West (the counterfactual station), the wider Medway region and certain nearby stations to Strood (to compare footfall figures) to aid the isolation of benefits solely from the station works (as far as is possible).




“The project is a success story which showcases the benefits of putting the passengers first. It is an exemplar project for demonstrating how to collaborate with third parties and a local supply chain whilst maximising outcomes from a limited budget”

Peter Stapleton & Steve Cross – Southeastern





⁶¹ Disability Discrimination Act 2005

⁶² Business case for Strood Town Centre Local Growth Fund – Medway Council

Transport outcomes

- Since the investment in 2017, **passenger footfall** numbers have increased by **2.7%** per annum. This is markedly higher than growth at nearby Chatham (-0.2% per annum) and Gillingham (0.3% per annum).⁶³ 
- **Passenger satisfaction** at the station has also increased across all station metrics since the investment, increasing from an average score of **55%** in 2015 to **76%** in 2018.⁶⁴ 
 - For example, satisfaction with retail and ticket facilities at the station increased from **48%** to **78%**.
This high level of satisfaction has been maintained, with station metrics in Wavelength scoring an average of **77%** in 2019/20.
- The project was delivered under budget, which allowed for some further improvements including a new **cycle hub** with **40** spaces. The provision of bike storage metric in Wavelength scored **82%** in 2019/20. 

Local outcomes (economic)

- Since the investment in 2017, **house prices** in residential areas in walking distance from Strood station⁶⁵ increased by **5.6%** per annum, compared to 3.4% per annum across Medway and a fall of 1.5% per annum in Maidstone West.⁶⁶ 
- There has been growth of **6.3%** per annum in **enterprise units** in Strood town centre (near to the station) since the investment in 2017, compared to 0.4% growth per annum across Medway and 1.98% growth per annum for Maidstone West.⁶⁷ 
- **Rateable value** in the areas close to the station⁶⁸ has increased by **5.0%** per annum since the station investment in 2017, compared to a 2.2% increase per annum across Medway and a fall of -0.3% per annum for Maidstone West.⁶⁹ 
- The number of **tertiary jobs** in the immediate area increased by **13.6%** between 2015 and 2018, compared to an increase of 5.5% across Medway.⁷⁰ 

⁶³ Source: ORR Estimates of Station Usage

⁶⁴ Source: TSP passenger interview surveys

⁶⁵ Within approximately 1km

⁶⁶ Source: ONS Median house prices by lower layer super output area

⁶⁷ Source: ONS Business register and employment survey

⁶⁸ Within approximately 2km

⁶⁹ Source: Valuation Office Agency Non-domestic rating

⁷⁰ Source: ONS Workforce jobs by industry

- **Developments** within 1 mile of Strood station have increased from an average of **26** per year (2013-2016) to **41** per year (2017-2020) as can be seen in Figure 3.18 where the red dotted line indicates the year the station investment was completed.⁷¹ The station investment has supported the regeneration and redevelopment of Strood in recent years, reflected in the continued growth in developments which started in 2013.

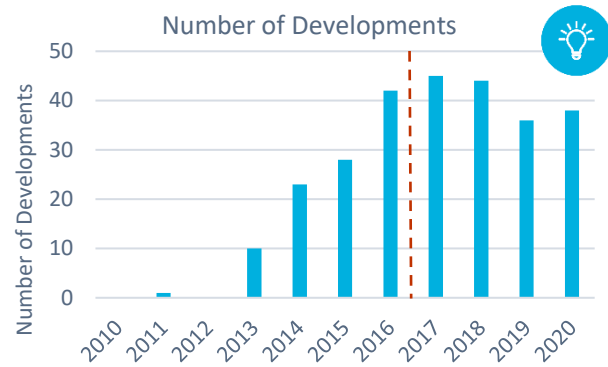







Figure 3.18: Number of developments within 1 mile of Strood station 2010-2020. Source: Glenigan Ltd.

Local outcomes (wider)

- **Crime** in the immediate area rose by **8%** between 2015 and 2019, compared to a **43%** increase across nearby areas over the same time.⁷² This may be linked to the safety and security enhancements at and around the station such as improved CCTV and the installation of two-way glass inside the station, which have contributed to an “improved sense of safety for station users” according to Southeastern. 
- The new station building was built to be **durable** and **resilient** (unlike its 1960s predecessor), maximising the use of natural light and minimising energy consumption, which has been recognised by its nomination for a RICS⁷³ **sustainability award**. 
- The investment has supported other developments in the area, including the transformation of nearby derelict land into 1,200 new homes as part of the **Strood Riverside** scheme and the Strood Former Civic Centre redevelopment 
- The station sits within Medway Council’s wider scheme which aims to reduce congestion, improve pedestrian and cycling infrastructure and transform the **public realm** in Strood. 
- Locally sourced **Kentish ragstone** was used to clad the new station building which acts as a symbol of **civic identity** and “local pride and identity” according to Southeastern. 

⁷¹ Source: Glenigan Ltd.

⁷² Source: Police UK open data

⁷³ Royal Institute of Chartered Surveyors

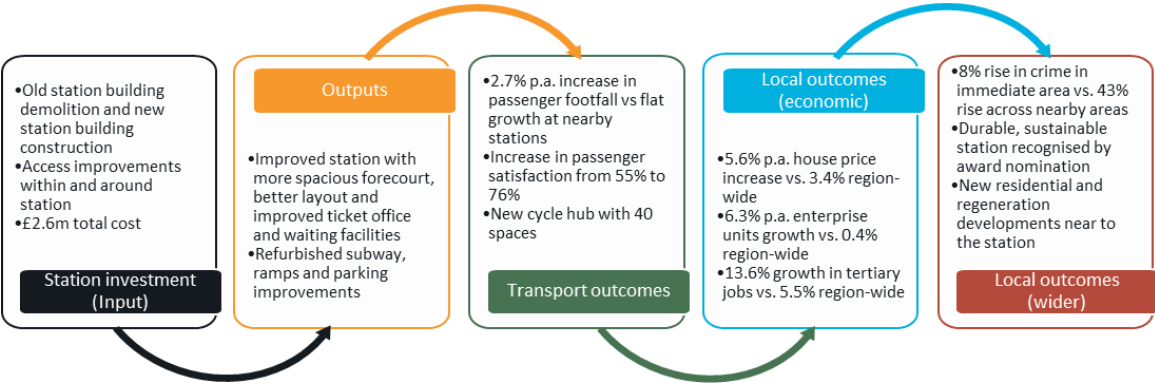
“The renovations to Strood railway station complement the regeneration of Strood, which is becoming an increasingly popular area for residents and businesses and is a fantastic place to live, work, learn and visit”

Cllr Alan Jarrett - Leader of Medway Council

Evaluation of station investment

Figure 3.19 summarises how the investment in Strood station and its immediate surroundings has brought about the outputs desired by the parties involved in delivering the scheme. The positive outcomes for rail passengers and the wider community span the different categories of the Social Value Framework, as indicated by the icons above. These align with the goals of the different parties within the partnership, for example, the regeneration and growth of the town, desired by the city council, has been achieved as evidenced by the large increases in house prices, enterprise units and tertiary jobs in Strood compared to the wider Medway region and Maidstone West counterfactual station.

Figure 3.19: Evaluation of Strood Station investment: inputs, outputs and outcomes



Case Study 4 – Burnley Manchester Road

Introduction

- 3.41 Burnley is a town in Lancashire north of Manchester with a rich industrial heritage and a 2018 estimated population of 65,074.⁷⁴ The population of the town declined during the 20th century, due to the shrinking of the manufacturing industry in the UK, which had employed many people in Burnley. Burnley has been heralded as a forward-thinking town, winning the ‘Most Enterprising Area in the UK’ title in 2013 for its “ongoing commitment to support small and medium businesses”.⁷⁵

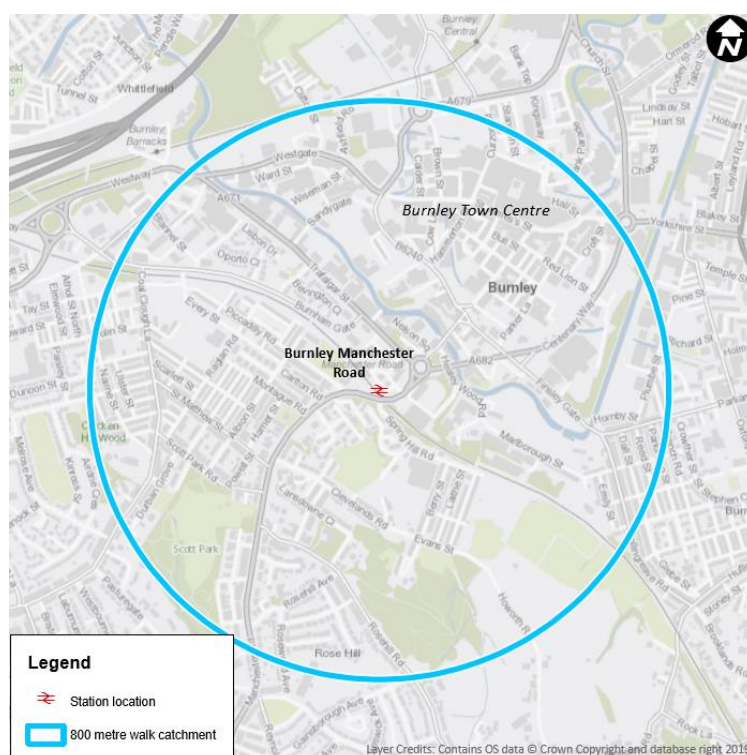


Figure 3.20: Burnley Manchester Road station's location within the town.

Station background & context

- 3.42 Burnley Manchester Road is one of three railway stations serving the town of Burnley (the others being Burnley Central and Burnley Barracks) and is considered the ‘principal’ station in Burnley due to its connectivity and higher passenger footfall.
- 3.43 For many years, locals had been campaigning for the Todmorden Curve to be reopened, allowing a direct Burnley Manchester Road to Manchester train service to be reinstated (in addition to the existing services to Leeds and Blackpool) and in 2011 the scheme was granted finance under the Regional Growth Fund. This new service and the station improvement works were intrinsically linked, with the forecast increase in footfall at Burnley Manchester Road, resulting from the new service, necessitating an upgraded station.

⁷⁴ ONS Mid-Year Population Estimates 2018 (overall station catchment)

⁷⁵ <https://www.gov.uk/government/news/burnley-named-most-enterprising-place-in-britain>

- 3.44 Before the station investment, Burnley Manchester Road station was unstaffed with dated waiting shelters and parking spaces for only 8 cars. The quality of the station buildings was poor and passenger satisfaction scores were low. The station is located in a cutting which means it was invisible from the main Manchester Road (located to the left of the photos), discouraging patronage. These issues were intended to be solved by the station improvements, which would also support the increased passenger footfall when the new Todmorden Curve services started.



Figure 3.21: Burnley Manchester Road station prior to investment (disused Dairy buildings pictured, prior to demolition)

Scope of works

- 3.45 The Burnley Manchester Road station improvement works consisted of a redevelopment of an old dairy adjacent to the existing station building. The new building included a staffed ticket office, waiting room, a community rail room, CCTV, improved toilets and better customer information and staff facilities. The whole station gained a modern and spacious feel and a new car park with 50 spaces was also constructed. The new building was given an eye-catching blue 'fin' to create an iconic symbol for the gateway to Burnley and to increase visibility from the main road above.



Figure 3.22: Burnley Manchester Road station post investment

- 3.46 The station reopened in **November 2014** with the works having cost a total of **£2.3m**. Half the funding was obtained from the European Regional Development Fund, with the rest provided by Burnley Borough Council and Lancashire County Council, supplemented by a small NSIP contribution (via Northern Rail) and supported by East Lancashire Community Rail Partnership.

Desired outputs

- 3.47 **For the town:** to create an iconic visual gateway to the town which symbolises the rejuvenation of Burnley, attracting new businesses and residents and demonstrating successful investment in more deprived areas. Also, to allow for greater connectivity between Burnley and the rest of the county and its opportunities.
- 3.48 **For the railway:** to improve the passenger experience and satisfaction at this station, encouraging more people to choose to travel by rail. Also, to match the historic and future growth in passenger demand (enabling the introduction of the Todmorden Curve services) and to create an excellent station with state-of-the-art facilities.




Outcomes

- 3.49 The evidence in this section demonstrates the social, economic and environmental benefits delivered by the investment in Burnley Manchester Road station in 2014. We have used statistics for Accrington (the study's counterfactual station for Burnley Manchester Road) and the wider Burnley area to show the impact of the investment. We have been careful to distinguish between the benefits of the station works and the new Todmorden Curve service (in 2015) where possible, although as the station works enabled the introduction of the new service (and vice versa), the resulting outcomes for Burnley are intrinsically linked.

“The station now acts as an iconic gateway to the town for visitors” and
 “The station is now fitting of serving a town the size of Burnley, whereas before the improvements it was totally inadequate”

Richard Watts – Community Rail Lancashire (formerly of Lancashire County Council)

Transport outcomes

- Since the investment in 2014, **passenger footfall** numbers have increased by **11.5%** per annum. 
 - There was an increase of **12%** in the first year after the investment was completed, which was before the new Todmorden Curve services commenced (which have further increased passenger numbers).
 - Since 2014, passenger numbers have fallen by 9.5% per annum at Burnley Central and 6.2% per annum at Burnley Barracks, further indicating that Burnley Manchester Road is considered the principal station in the town with the most appealing train service and station experience.⁷⁶
- **Passenger satisfaction** at the station has also increased across all station metrics since the investment, increasing from an average score of **54%** in 2012 to **75%** in 2015.⁷⁷ 
 - The ‘overall appearance’ category increased from **53%** in 2012 to **81%** in 2015
 - The ‘car parking area’ category increased from **52%** in 2012 to **80%** in 2015
 - This high level of satisfaction has been maintained, with station metrics in Wavelength scoring an average of **82%** in 2019/20
- The increase in **car parking** from **5** to **50** spaces has resulted in a mode shift to rail, with people no longer completing their journeys solely by car. The car park improvements have “attracted people to drive to the station and complete their journey to Manchester by train” according to Burnley Borough Council. 
 - The provision of car parking metric in Wavelength scored **87%** in 2019/20.
 - A second phase of work is currently underway to further increase car parking capacity to 70 spaces.

⁷⁶ Source: ORR Estimates of Station Usage

⁷⁷ Source: Eden Business Analysis (2015): <https://www.communityraillancashire.co.uk/wp-content/uploads/2014/06/Burnley-Manchester-Road-Research-Findings.pdf>

Local outcomes (economic)

- Since the investment in 2014, **house prices** in residential areas in walking distance from Burnley Manchester Road station⁷⁸ increased by **9.7%** per annum, compared to a rise of 5.1% per annum across Burnley and a rise of 3.4% per annum for Accrington (counterfactual station).⁷⁹
 - There was a significant jump (of **21.0%**) in house prices within approx. 1km of Burnley Manchester Road station between March 2014 and March 2015 (which was after the completion of the station works, but before the Todmorden Curve services commenced).
- There has been growth of **3.5%** per annum in **enterprise units** near the station and the town centre since the investment in 2014, compared to a decline of 0.4% per annum for the same area pre-investment and a lower growth rate of 2.5% per annum in Accrington.⁸⁰
- The number of **tertiary jobs** in the immediate area increased by **3.7%** between 2015 and 2018, compared to a fall of 2.8% across Burnley.⁸¹



- **Developments** within 1 mile of Burnley Manchester Road station have been increasing over the last 10 years, with a notable jump between 2013 and 2014 (the year the station improvement works were completed). The number of developments has continued to rise since 2014, likely supported by the new Todmorden Curve service in 2015. Developments have increased from an average of **3** per year (2011-2013) to **39** per year (2014-2016) as can be seen in Figure 3.23 where the red dotted line indicates the year the station investment was completed. The value of developments also increased post-investment.⁸²

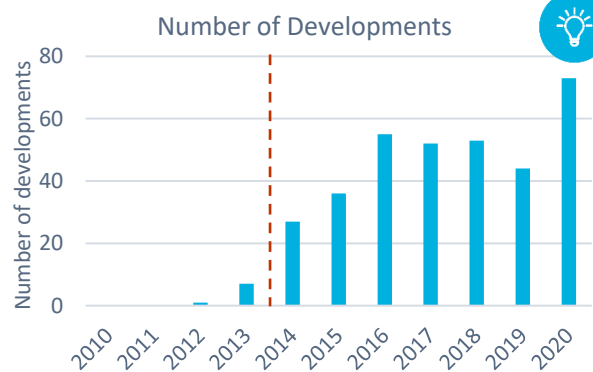


Figure 3.23: Number of developments within 1 mile of Burnley Manchester Road station 2010-2020. Source: Glenigan Ltd.

⁷⁸ Within approximately 1km





⁷⁹ Source: ONS Median house prices by lower layer super output area

⁸⁰ Source: ONS Business register and employment survey

⁸¹ Source: ONS Workforce jobs by industry

⁸² Source: Glenigan Ltd.

Local outcomes (wider)

- **Antisocial behaviour** in the immediate area of the station has reduced by **22%** compared to 2012 levels, which may be linked to the improved CCTV and safety at the improved station.⁸³ According to stakeholders the new “safe waiting facilities attract more users to the station”.⁸⁴ 
- The **community rail room** delivered by the station improvement works hosts **apprenticeship** training, activities and events for school children and skills training for people of all ages. It is administrated by Community Rail Lancashire. 
- The **landscaping** improvements included in the station investment included removing Japanese knotweed and creating community open space. The station also incorporated low maintenance and energy efficient features such as LED lighting and low-flush toilets which aid the durability and sustainability of the station. 
- The improved connectivity and accessibility at the station has facilitated the growth of the **University of Central Lancashire's** second campus (located in Burnley) and enabled easier travel for students, increasing their opportunities. According to Burnley Borough Council “the new station and improved train service attracted the University to build (and wish to expand) their second campus in Burnley due to the easy links with the main campus in Preston”. 

“The station includes state of the art facilities which have transformed the customer experience and enabled people to travel”

Pat Cox – Northern Rail

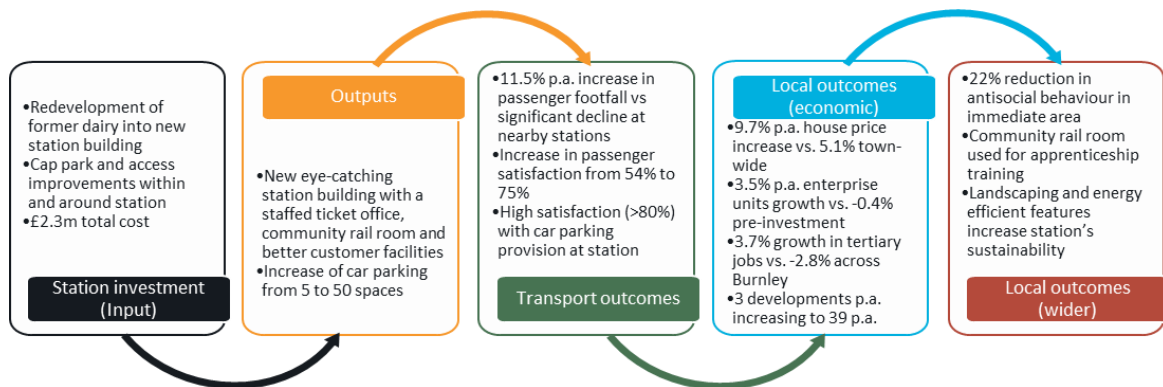
⁸³ Source: Police UK open data

⁸⁴ Richard Watts – Community Rail Lancashire (formerly Lancashire County Council)

Evaluation of station investment

- 3.50 The inputs, outputs and outcomes of the station investment at Burnley Manchester Road are summarised in Figure 3.24. The new station and its improved car park have delivered the outputs intended by different organisations involved in the delivery of the scheme, with the positive transport, economic and wider outcomes contributing to many of the aspects of the Social Value Framework. For example, the regeneration and growth of Burnley attracting new residents and businesses, desired by Burnley Borough and Lancashire County Councils, has been achieved as evidenced by the larger increases in house prices, enterprise units, tertiary jobs and developments near to the station compared to the wider area and to Accrington (the counterfactual station).

Figure 3.24: Evaluation of Burnley Manchester Road Station investment: inputs, outputs and outcomes



4 Delivering Station Investment – Lessons Learnt and Critical Success Factors

Introduction

- 4.1 As the case studies in Chapter 3 have demonstrated, investment in stations is delivered by a variety of stakeholders, and schemes vary significantly in terms of scope and complexity. The rail industry is a safety critical environment providing nationally important services through a complex organisational structure. Anecdotally (“Network Rail’s processes can be very complicated which makes it difficult for non-rail stakeholders to navigate” – Lancashire County Council), this can lead to the rail industry being a challenge to engage with, which can discourage potential funders.
- 4.2 The stakeholders for our case study stations were keen to highlight factors which had contributed to the success of achieving and delivering the investments, but also difficulties that were encountered, where they felt that lessons could be learnt to encourage potential funders of future station improvements and to make the process clearer and more efficient.
- 4.3 This chapter provides a description of a typical process for delivering a station investment scheme (noting that every station investment scheme is individual with bespoke objectives) and explains some common challenges encountered. We then outline how the case study station investments were delivered and describe some specific lessons learnt and enablers of success that were highlighted by the stakeholders.

Overview of Station Investment Process

- 4.4 The typical process for station investment can be summarised into three key stages:
 - 1. *Identification of need & project development*
 - 2. *Funding and financing*
 - 3. *Procurement and delivery*
- 4.5 *Identification of need* is where the issue(s) that the investment is aimed at addressing are explored by the parties involved, which will vary depending on what the issue is and where it occurs. These needs are often identified as a result of industry planning, local authority development planning or via community engagement and feedback. Occasionally the private sector (developers, landowners or franchised operators) will bring forward proposals as well.
- 4.6 The involvement of these different organisation can vary depending on the specific need, for example, access or interchange issues will naturally attract more Local Authority involvement; external experience/appearance issues may be more likely to involve local landowners/the private sector; and for internal facilities or experience issues, interest may be limited to train operators and Network Rail. Common issues can be station capacity constraints, outdated

facilities (such as ticketing, passenger information), station/platform access barriers or modal interchange issues. The different options for addressing the issue(s) should be thoroughly explored to determine which scheme is the most appropriate, recognising the different priorities and appetites of the parties involved.

- 4.7 *In the Project development stage*, the promoters of the scheme obtain appropriate information about key areas such as who owns and operates the station, the potential impact of the improvements on the operational railway and station access (and how the investment can be delivered whilst minimising these impacts) and whether there are any larger-scale goals for this station or route (e.g. at a national level) that complement or conflict with the proposed works. The relevant powers and permissions must be obtained, which can include obtaining planning permission, land acquisition and railway processes such as Station Change. Design best practice is followed to produce a cost-effective design that fulfils the requirements of the scheme and this information is then all collated to help build up the business case for the proposed scheme which can be used when engaging with other parties such as Network Rail, TOCs and Local Authorities.
- 4.8 This case can be formulated in different ways (dependent on the requirements for the funding bodies involved), such as a full 5-case TAG⁸⁵ compliant businesses case (required for central government funding and some local government funding), which demonstrates the overall impact on society, or a more straightforward case for investment that focuses on the priorities for each organisation. For example, a TOC or Station Facility Owner (SFO) needs to know that the additional income generated from the station enhancements (e.g. car parking revenue, ticket commissions) will exceed the costs associated with the station investment (e.g. an increase in the Long Term Charge by Network Rail, the asset owner) and a private developer needs to ensure that its development gain (e.g. increase in sales price or rentals) pays back its investment. In short, the value for money and affordability of the proposed scheme should be demonstrated for all the parties involved.
- 4.9 In the *Funding and financing* stage the (successful) business case for the station improvement works is used to leverage contributions from industry sources (such as the National Stations Improvement Fund, Access for All funding and TOCs⁸⁶) and Local Authority contributions (such as Section 106 and CIL contributions⁸⁷ from developers) to populate the funding package required to deliver the improvement works. Partnership schemes (i.e. with multiple funding sources) have been prevalent in recent years and successful schemes often have rail industry funding matched by local authority contributions. The rail industry funding is now much harder to achieve, as the ceasing of the NSIP scheme means there is no ringfenced funding for general station improvements – something which was highlighted in the stakeholder engagement as a significant barrier for future station investments.
- 4.10 *Procurement and delivery* involves appointing contractors for detailed design, carrying out the improvement works and project managing the scheme on a day to day basis in accordance

⁸⁵ TAG is the UK Government's Transport Appraisal Guidance located at <https://www.gov.uk/guidance/transport-analysis-guidance-webtag>

⁸⁶ AfA is the Access for All programme launched in 2006 to address the issues faced by disabled passengers and passengers facing mobility restraints when using railway stations in Great Britain.

⁸⁷ In current regulation, contributions from developers are required to mitigate the new developments' impacts on current infrastructure.

with rail industry technical and safety standards to ensure the specification of works are carried out efficiently, fulfilling the intended outcomes for the project.

- 4.11 There are common challenges that occur during each of these three stages of station investment which have been identified through our stakeholder engagement and published literature in this subject area. In the following sections we discuss these challenges and outline potential examples of how they can be overcome or of lessons learnt that can be applied to future schemes.

Common Challenges and Lessons Learnt

Identification of need & project development – common challenges

- 4.12 One challenge commonly faced during early phases of developing station improvement projects is **conflicting roles for the different parties who are involved**. Some schemes (such as Burnley Manchester Road) are initiated by the Local Authority bodies, whereas others are generated from within the rail industry (such as Strood). This can sometimes pose conflicts in terms of how much involvement each party has at each stage. Clear articulation of each organisation's role and responsibilities within the partnership throughout the project avoids these conflicts and improves the efficiency of the team.
- 4.13 Another challenge during the project development phase can be **difficulties faced with the complexities of planning processes**. This can discourage non-rail industry developers from pursuing investments within the confines of the station and likewise put off rail industry organisations from developing outside of the immediate station building. Key to navigating these complex processes is engagement with Local Authorities and local developers who better understand the priorities and constraints of the area. This also links to a key enabler of success which is integrating planning and development of the scheme with other local development. This can help achieve local "buy-in" and should increase the likelihood of planning permission being granted more easily.
- 4.14 **Conflict between commercial and rail/transport usage of land for developments** was highlighted by some stakeholders as a challenge at this stage in the process. The ideal situation is when developing railway land can deliver commercial and transport benefits, but sometimes there can be a trade-off between the two. Innovative thinking and collaborative working with commercial developers should be prioritised to find design solutions where all parties benefit from the scheme, such as embedding commercial development within or above the station where possible like the hotel developed above Dundee station mentioned in 2.32.

Funding & financing – common challenges

- 4.15 **Differing priorities for the different organisations involved** can cause problems at all stages of the process, but especially the funding and financing stage. Each party involved in a partnership scheme is likely to have a slightly different mix of priorities for why the scheme is important to them and the relative significance of the different aspects within the scope of works. It is paramount that all organisations do "buy in" to the overall scheme's successful delivery as this drives all parties to work collaboratively towards a common goal. This sets a good foundation for collective decision making about how best to descope some of the works if some funding does fall away (which occurred in the Nottingham case when the East Midlands Development Agency was abolished).

- 4.16 Stakeholders noted that it is important that **realistic expectations are set for what the scheme will deliver**, and this is in part related to the previous point. It can be tempting to overemphasise certain benefits of the scheme in order to help convince parties to pledge their support, but this should not be encouraged. A TAG-compliant business case can be a key source of information and this should help to avoid any hyperbolic statements being issued. Being realistic about what the scheme is aiming to address and what will and won't be achieved is key to managing the expectations of both the stakeholders involved and the wider public. This can be compounded by the **benefits of the station investment being difficult to quantify and isolate** which may increase uncertainty about the value of the investment in certain areas. Comprehensive pre and post investment analysis must be undertaken to quantify the before and after situations, enabling benefits to be identified and captured as accurately as possible.
- 4.17 Railway station improvement projects (and the rail industry in general) can be very complex, and the rail industry does not currently have access to much discrete funding to deliver significant investment in stations without external support. This complexity means that such projects often pose greater risks than other development projects that Local Authority bodies may be considering. This means that **it can be hard for the industry to obtain funding commitments from third parties**. Developing funding packages that contain sufficient contingency for foreseeable increases in costs and unforeseen circumstances whilst employing 'match-funding' where possible should help to give confidence to third parties evaluating the scheme.

Procurement & delivery – common challenges

- 4.18 It is important to **secure community buy-in to the station investment** and this can be tested most noticeably in the delivery stage, when station improvement works can involve significant disruption to existing station users, which can be hard to justify, especially if timescales are delayed (which is reasonably common for this type of project). Clear communication of the benefits of the scheme (plus any visuals of the future improved station) can help alleviate the public dissatisfaction with potential disruption. Ensuring Local Authorities and community groups have been consulted during the planning process also increases the likelihood of community buy-in. Addressing the specific needs of the local community as part of the scheme can even open alternative funding channels (such as the EU regional development funding for Burnley Manchester Road station) which further incentivises developers to engage with the community throughout the project.
- 4.19 In the delivery stage barriers to progress and **funding gaps can emerge**. Unfortunately, station improvement projects can encounter unexpected issues such as asbestos in old buildings, protected species and increases in the cost of the scheme, resulting in a funding gap. Building contingency into the original funding package and clearly allocating which organisations own the risks is extremely important but doesn't necessarily guarantee a perfect solution. One way to mitigate this risk (suggested in the stakeholder engagement) was "treating investigatory work and surveys with importance" which increases the likelihood of identifying these unexpected issues much earlier in the project timeline, allowing them to be dealt with (and priced) accordingly. Maintaining stakeholder participation throughout the project and the collaborative working we have already mentioned are key to dealing with the emerging issues in a cooperative and effective way.

Case Studies: Scheme Delivery, Lessons Learnt and Critical Success Factors

Nottingham

Funders and scheme delivery

- 4.20 The station improvement works at Nottingham were a joint project between East Midlands Trains and Nottingham City Council who contracted Network Rail to deliver the scheme. The initial cost estimates were completed by Gledes Consultancy supporting Nottingham City Council who led on the planning and design of the scheme. The design and funding had been agreed by 2012, when construction began. Network Rail procured Taylor Woodrow / VINCI as constructors for the scheme via a fixed price contract.
- 4.21 The station investment works were funded by Nottingham City Council, Network Rail (via RAB funding⁸⁸) and East Midlands Trains with a total cost of approximately £60m split between the three organisations (NCC's share was c. £11m) and the works were delivered in 2014. It also attracted a small grant from the Rail Heritage Trust (£0.5m) and a larger one from the East Midlands Development Agency (£7.0m), however this latter organisation was abolished before the project was delivered and the funding fell away (leading to the project having to be slightly "de-scoped"). The project also benefitted from a commercial property land sale of approximately £1.0m and Network Rail renewals worth approximately £2.0m.
- 4.22 Whilst the main station works were completed in 2014 (alongside the track and resignalling works delivered in parallel by Network Rail at a cost of approximately £90m and the tram bridge extension delivered by VINCI), the final station enhancement, restoring the terracotta pieces on the façade around the top of the station, was completed in 2016.

Enablers of success and lessons learnt

"Nottingham City Council maintained strong client involvement – they wanted to be involved in the decision-making throughout the project which maintained a high level of stakeholder buy-in"

Kevin Newman – Network Rail

- 4.23 When discussing what had made the delivery of the Nottingham station investment successful, Network Rail attributed this to the "good relationship between the three major parties involved" (Network Rail, East Midlands Trains and Nottingham City Council) which was key to tackling emerging issues during the project. They also mentioned that everyone worked towards a "shared goal" that enabled efficient delivery of the project.
- 4.24 Network Rail also praised Nottingham City Council for their "strong client involvement – they wanted to be involved in the decision-making throughout the project which maintained a high level of stakeholder buy-in". The council's involvement was also extremely useful in contacting the town planners and traffic staff who were required for developing traffic diversions during the works.

⁸⁸ RAB is the Regulated Asset Base for Network Rail. Works are carried out, then Network Rail agrees to place the works on the RAB and to charge the operator an enhanced fee (e.g. station access charge) which enabled the works to be paid for over a period of time (typically 30 years) through lease charges.

- 4.25 This project was described as a “passenger led output” by TOC representatives which was achieved by initiating the planning and development from a “passenger point of view”. This enhanced the deeply collaborative aspect of the project because all organisations could buy in to this concept completely, and the project is remembered as a success story by all the organisations involved.
- 4.26 A strong governance structure for collaborative working, with “single points of contact at each organisation (working full time on the project)” was also a critical factor in the success of the project according to Network Rail. There was also a project board formed of representatives from Network Rail, EMT, NCC and the contractors. Payments were to be claimed at project milestones which were clearly set out in the master schedule. These good practices were really important for delivering this complex project successfully and efficiently.
- 4.27 The single point of contact at each organisation was also lauded by representatives from East Midlands Trains who also attributed the project’s success to having “senior level buy-in at the TOC”. This enabled resources and expertise from property and customer service team members to be utilised effectively and also helped with quick decision-making and sign-off. Involving station staff throughout the development and delivery of the project can be very valuable as their local knowledge can be captured to help enable the scheme to fully deliver its desired outcomes, for example by highlighting local perspectives or identifying potential delivery risks that may otherwise not be immediately apparent.
- 4.28 There were several development projects happening at similar times at Nottingham station: the station works, the resignalling programme and the extension of the tram bridge. Network Rail pointed to the fact that these phases were well-timed and co-ordinated, with the resignalling project taking advantage of the station closures. They recommended “aligning station and track improvements wherever possible in the future”, as this can increase the amount of benefits experienced by the passengers for the same period of disruption.

Chelmsford

Funders and scheme delivery

- 4.29 The works at and around Chelmsford station are split into 3 distinct phases which together make up the overall project of improvements:
- Phase 1 – Station Square redevelopment (2015)
 - Phase 2 – Station building improvements (2016)
 - Phase 3 – Mill Yard redevelopment (2019)
- 4.30 These 3 complementary phases went through different procurement and funding mechanisms and were led by different parties.
- 4.31 Phase 1 (the Station Square redevelopment) was led in terms of planning and delivery by Chelmsford City Council, using contractors sourced via the Eastern Highways Alliance procurement framework under the supervision of Essex County Council as the Highway Authority.⁸⁹ The improvements were funded by Chelmsford City Council through Section 106 contributions⁹⁰ of £1.4m and were fully completed in 2015.

⁸⁹ *Chelmsford City Integrated Transport Package Business Case (SE LEP).*

⁹⁰ Section 106 is a legal agreement between developers and local authorities, used to mitigate the impact of new homes on the local community and infrastructure.

- 4.32 Phase 2 (the station building improvements) was led by Abellio Greater Anglia, who inherited the original outline plans from Network Rail. They developed these plans and procured contractors to complete the design and works. Initial funding was obtained via the NSIP fund and Network Rail Discretionary fund⁹¹ to a cost of £3.2m and the improvements were delivered in 2016.⁹²
- 4.33 Phase 3 (the Mill Yard redevelopment) was led by Chelmsford City Council who procured Jacobs to project manage the scheme. The planning and design was led by Chelmsford City Council who contracted Mott MacDonald to undertake the initial feasibility study and scheme design with planning permission being granted in 2016. Funding of £3m was obtained from the Local Growth Fund (administered by the South East Local Enterprise Partnership), Section 106 contributions and the Community Infrastructure Levy. The City Council entered into contract with Dyer and Butler to deliver the works. The total cost was £4.1m and the scheme was delivered in April 2019.

Enablers of success and lessons learnt

“[The scheme] was a coming together of organisations with different funding sources and different needs, but a **common goal”**

Stuart Graham – Chelmsford City Council

- 4.34 The stakeholder interviews highlighted that all parties involved understood the significance of the project and were working towards a common goal. The local authorities felt the need to keep up with the residential and university growth in Chelmsford whilst promoting more sustainable modes of transport and the rail industry were aiming to improve the passenger experience thereby encouraging more people to choose rail and increasing station footfall and ticket revenues. This collaborative approach mitigates a common barrier which is poor (or a lack of) communication between the different parties in partnership schemes.
- 4.35 SE LEP encouraged “common buy-in” as a lesson learnt for successful projects – all parties need to understand the goals and importance of the project and how it fits within a wider vision in order to successfully deliver complex schemes such as station investments.
- 4.36 Greater Anglia suggested that a barrier can be that initial plans are sometimes “over-ambitious” about what can be delivered within the funding. This can necessitate re-working or de-scoping, but it is the good relationships with the rest of the parties involved that help to overcome these challenges.
- 4.37 They also recommended “working really closely with the local authority from design through to completion” as a key enabler to success and that “using 3D visuals outside the station during construction works is a great way to get the public on board with the scheme” during the short-term disruption to their travel.

⁹¹ This fund is for small schemes for which funding is not available elsewhere and that have a positive whole-industry business case (not stations specific). It is primarily aimed at schemes that will result in an increase in the capacity or capability of the network.

⁹² *Chelmsford City Integrated Transport Package Business Case (SE LEP).*

- 4.38 Chelmsford City Council reiterated that common goals and visions create a “win-win” situation for the rail industry and local authorities – using railway land for a common benefit is the ideal situation. They noted that a barrier to success can be experienced when unexpected costs or delays are encountered under a fixed price contract, and that excellent working relationships and good negotiation skills are the tools required for overcoming these challenges. The importance of having a “mixture of funding when delivering complex schemes such as this one” was also highlighted.

Strood

Funders and scheme delivery

- 4.39 The initial early feasibility work for the project was jointly undertaken by Network Rail and Southeastern. From the point of funding being secured, Southeastern subsequently led the project in terms of design and build. The Local Delivery Group (LDG)⁹³ for the station agreed that Southeastern would be best positioned to take the lead on the Strood station scheme due to the small anticipated impacts and risks of the scheme on the operational railway and track/signalling etc.
- 4.40 The project was a natural follow-on from the 2014 Access-For-All project which had made the station step-free. Southeastern procured WPB Contractors Ltd (who were based locally in Ashford, Kent) via a competitive tender process to deliver the new station building on an NEC3 Priced Contract with Activity Schedule.
- 4.41 The works cost £2.6m in total with an almost equal split between NSIP funding (via Southeastern) and Local Growth Fund funding (via Medway Council). The station was closed between February and November 2017 for demolition and rebuilding and was then reopened in December 2017. The original scope was delivered under budget, leaving £0.3m left over which was subsequently used for further enhancements to the station.

Enablers of success and lessons learnt

“We built a close relationship with Medway Council who had the wider vision for the area and were keen to contribute”

Peter Stapleton & Steve Cross – Southeastern

- 4.42 Southeastern highlighted numerous enablers to success that contributed to the successful delivery of this project. They recommended:
- utilising a “local supply chain and housing contractors (as opposed to a framework partner)” for smaller station schemes such as this one, as they have the local knowledge and pride to focus on the detail;
 - building a “close relationship with Medway Council who had the wider vision for the area and were keen to contribute” – this can be achieved by “attending tender interviews together” and arranging regular site visits during construction;
 - “treating investigatory work and surveys with importance”, as a common barrier to delivering station projects within budget and timescales can be the discovery of

⁹³ The LDG is a joint group between Network Rail and local TOCs (in this case Southeastern) with the purpose to develop and discuss local station development priorities and plans to enhance the local station environment.

unexpected complications e.g. asbestos, protected species etc – if these are identified early on, then they can be included in the original scoping; and

- developing “common goals and visions” with the other parties involved so everyone can work in a collaborative manner and solve problems together.

- 4.43 In terms of funding, Southeastern lauded the NSIP scheme, since “the biggest jeopardy to attracting more third-party contributions is not having the initial seed from the rail industry”. “Local authorities are much more likely to match funding” than be the sole source. A similar scheme or funding mechanism is crucial for delivering future station investments that build on the successes and experience accrued during the NSIP scheme.
- 4.44 Southeastern also recommended that TOCs prioritise having an employee or team who work with local stakeholders and funders across a number of schemes to be the key point of contact for jointly developing funding bids so that expertise can be captured, and the chances of successful bids are maximised.
- 4.45 Southeastern advised that Network Rail’s detailed processes can sometimes be a barrier for small projects (such as the Strood station investment), since they can be difficult to navigate and are “not always relevant to small-scale schemes”. Utilising the local supply chain and smaller companies where appropriate can be an effective approach to successful delivery of smaller schemes. Network Rail agreed with this recommendation in principle; as an organisation they know they are better suited to delivering larger scale projects and would always advise open communications between all parties to ensure the most appropriate arrangements were in place for each scheme.
- 4.46 Network Rail noted that most projects encounter small delays of some kind, so it is prudent to give publicised completion dates of months or seasons (as opposed to committing to a specific date) in order to minimise passenger disappointment over small delays.
- 4.47 Network Rail also echoed the importance of “keeping the local authority in the loop” with regular updates and always making sure you “value the funder”. Indeed, regular meetings between all parties are paramount to successful schemes.

Burnley Manchester Road

Funders and scheme delivery

- 4.48 The idea of an enhanced station at Burnley Manchester Road first emerged in 2005-06, with Stazla Bright Seed Architects (SBS) commissioned in 2011 to develop a station Masterplan. This was part-funded by the East Lancashire Community Rail Partnership (CRP) through a grant from the Designated Line Community Rail Development Fund. SBS were subsequently commissioned by Burnley Borough Council to develop the detailed design for the station.
- 4.49 The funding package was agreed in 2012, when planning permission was also granted. Burnley Borough Council took on the management of the contract and led the purchase of nearby land (owned by Arla Dairy) containing a disused dairy which would be the site of the new station building. This was transferred to Lancashire County Council following the completion of the project, who now lease the site to Northern Rail. Burnley Borough Council led the design, tendering and project management of the station building and car park development.
- 4.50 The funding package came to a total of £2.3m, with half coming from Lancashire County Council’s successful bid to achieve European Regional Development funding (via the EU’s Interreg IVb Citizens’ Rail project) and the other half coming from Burnley Borough Council

and Lancashire County Council with a small NSIP contribution (via Northern Rail). East Lancashire CRP's involvement in the project was key to obtaining the Citizens' Rail funding with the community aspect of the station being very important. The new station was opened in November 2014.

Enablers of success and lessons learnt

"If a council is ambitious and takes on the initiative of delivering a grand project, other parties which will directly benefit will get on board"

Kate Ingram – Burnley Borough Council

- 4.51 It was encouraging to find that all the Burnley Manchester Road stakeholders that we engaged with praised the collaborative aspect of the partnership. This was key to driving the project forwards and all the parties supported each other throughout the various stages.
- 4.52 Burnley Borough Council acknowledged that all councils are facing severe funding challenges but that if the local authority can provide the initial push and "get the ball rolling on projects such as this one, they can be successfully delivered". A local authority that demonstrates leadership and proactivity is "key to securing the additional funding" and turning excellent development ideas into reality.
- 4.53 They also highlighted that this can sometimes involve bearing the "sunk costs" required in scoping out the initial ideas of the project and so requires the local authority to take on that risk. This demonstrates strong commitment to getting the scheme delivered which can increase confidence in other parties to pledge their support.
- 4.54 Network Rail explained that they understand their internal processes and procedures can sometimes be overly detailed for smaller schemes such as this one, and that therefore the local authorities involved took on the land acquisition and subsequent ownership of the new building in this scheme. This is a creative way of maintaining NR's expert involvement without the final asset needing to be under their jurisdiction. This was also very important for keeping the timeline within that agreed for the EU Interreg funding – "undergoing all of NR's assurances would have extended the timescales" so was not a feasible option in this case.
- 4.55 Lancashire County Council stated that a key enabler was the EU funding – this meant that the remainder required was of a magnitude "more reasonable for the local authorities to cover". The community aspect of the station (and the involvement of the East Lancashire Community Rail Partnership) was "central in obtaining this EU funding". Exploring similar additional funding avenues should be prioritised in future schemes, so that the design of the works can reflect the particular requirements sometimes stipulated by the funding source. This will be more challenging as the UK will no longer have access to EU funding, so other sources will need to be made available to enable similar investments to Burnley Manchester Road to be delivered.
- 4.56 The local authorities did agree that Network Rail's complexities were sometimes "difficult for non-rail stakeholders to navigate" and that their detailed procedures were not always relevant to this scheme. This did pose some challenges around the interface between the building and existing platform but having good working relationships with Network Rail enabled these complexities to be worked through collaboratively.

- 4.57 Northern Rail echoed the praise of the partnership, heralding the stakeholder engagement at the local authorities as “excellent”. They pointed to the “passion and pride” of the people involved at all the organisations as the key enabler to the success of the scheme and that having “almost daily contact and regular meetings” drove the project to be completed efficiently to such a high standard.

5 Conclusions, Recommendations and Next Steps

Conclusions

- 5.1 This research has demonstrated that there is plentiful experience of successful investment in UK railway stations in recent years, delivering positive transport, economic and wider outcomes for their local communities. These investments can have significant positive impacts across many of the areas that constitute Social Value, even when some of those impacts are serendipitous.
- 5.2 Certain components of Social Value are positively impacted by station investments more easily than others. Benefits to innovation, regeneration and the economy are more easily delivered and demonstrated than areas such as arts and creativity, where more needs to be done to develop the evidence base against which to measure uplifts. The four case studies described in detail in this report demonstrate that station investment delivers benefits across a wide range of metrics including house prices, tertiary employment and station footfall. Prioritising and showcasing improvements to cycling facilities and pedestrian access has encouraged more rail passengers to access stations via active travel modes – an increasingly important area as net-zero carbon and air quality goals continue to rise up the political agenda. These modes also facilitate social distancing which heightens their relevance in the current post-COVID-19 pandemic “initial shock” environment.
- 5.3 The positive outcomes that station investments can deliver across the Social Value Framework are particularly relevant in the context of an emerging economic recovery from the COVID-19 initial shock. Investment in the rail network has often been an enabler for delivering more housing, levelling up the national economy through supporting and facilitating economic growth and meeting net-zero carbon commitments and will continue to support these wider goals during the economic recovery. Station investment schemes that can have multiple positive outcomes in priority policy areas for local authorities will have significant importance, as decision-makers seek to invest and rebuild in a sustainable and impactful way, stimulating long-term economic growth and development in their local areas.
- 5.4 The four case studies are excellent success stories of station investment, which have been enabled by the strong partnerships between third parties (such as local authorities) and the rail industry. These partnerships employed collaborative working approaches, had complementary goals and visions and maintained equal buy-in from their organisations in order to deliver these station investments so successfully. These enablers can assist in overcoming common barriers encountered during station investment projects, leading to success stories for all parties contributing funding and the passengers and local communities that they represent.

Recommendations

- 5.5 Whilst the case study findings in this research provide good evidence for the impacts of station investment, it remains a challenge to fully demonstrate and quantify some of these impacts. The case for investment will be stronger still if quantified pre and post investment analysis is undertaken to provide clear 'before' and 'after' understandings, which can be used to assess the impact of the station investment, especially in those areas where consistent, quantitative data is less readily available.
- 5.6 There is more that can be done by the rail industry to achieve consistent 'record-keeping' for station investment projects, accurately recording emerging outcomes and detailing any changes to timescales, budget and scope during the delivery phase of the investment. This information should be made available for stakeholders, as it is important for developing the case for and the scope of future investments.
- 5.7 Our stakeholder engagement has identified some important enablers of success which have underpinned successful station investment schemes. Some of these enablers apply across the partnership organisations delivering station investment, such as collaborative working and allocating single points of contact at each organisation. This can enable almost daily contact between the organisations involved throughout the investment process, allowing emerging issues and challenges to be dealt with swiftly and effectively in a true partnership.
- 5.8 Some enablers are most relevant for the rail industry, such as:
- aligning track and station works to minimise passenger disruption whilst maximising output; and
 - giving full consideration to any investigatory work during the development of a station investment scheme. This increases the chance of identifying emerging issues early in the project, which can be key to delivering projects within agreed timescales and budgets.
- 5.9 Effective working relationships and open communication with Network Rail and other industry bodies is crucial to navigating rail industry processes effectively and forming solutions that are tailored to the needs of each individual scheme. Stakeholders both inside and outside the rail industry explained that rail industry processes and procedures can sometimes be overly detailed for smaller local schemes and that this can bring about challenges when engaging or working in partnership with the rail industry.
- 5.10 Demonstrating excellent leadership and commitment is key to securing the funding required to deliver station investments. Our research showed that success was more likely if local government is proactive and ambitious in their plans for station and local area developments.
- 5.11 The NSIP scheme was lauded as a success by all stakeholders and its ceasing has been highlighted as a key barrier for future station investment projects, as obtaining the initial seed funding from the rail industry now presents more of a challenge. A similar scheme to NSIP should be advocated for, in order to build on the success and industry expertise in delivering station investments which continue to generate positive transport and wider outcomes.

Next Steps

- 5.12 The findings from this research should be shared more widely, both inside and outside the rail industry, as they provide a compelling narrative for the value of investing in stations and will be a useful tool in engaging with potential funders for future schemes. The enablers of success

highlighted in this research should be supported and prioritised by all parties involved in order to help deliver future successful station investments.

- 5.13 The rail industry should consider all aspects of Social Value in their future station investment plans, determining how potential schemes and designs can deliver the most significant impacts across the Social Value Framework and what analysis will be required to demonstrate these impacts.
- 5.14 Maintaining a consistent reporting structure for capturing station investments and their outcomes will further strengthen the case for investment in UK rail stations by providing additional examples of where station investments have had multiple positive impacts for their local communities and fulfilled the wider goals of all the parties involved.
- 5.15 Local decision-makers who are seeking to maximise positive outcomes of their future investments and rebuild their local economies in the emerging recovery from the initial shock of the COVID-19 pandemic should consider supporting future station investment schemes. These investments can facilitate better access to jobs, contribute to economic regeneration and sustainable growth and positively impact many aspects of Social Value for their local communities.

Appendices

A Case Study Longlist and Shortlist of Stations

Table A.1: Longlisted stations

	Longlisted Station		Longlisted Station
1.	Birmingham New Street	19.	Eastbourne
2.	King's Cross	20.	Dartford
3.	Cambridge	21.	Penzance
4.	Wolverhampton	22.	Southampton Central
5.	Cardiff Central	23.	Lincoln Central
6.	Dundee	24.	Nottingham
7.	Glasgow Queen Street	25.	St. Albans City
8.	Liverpool Lime Street	26.	Halifax
9.	Chelmsford	27.	Rhyl
10.	Hebden Bridge	28.	Port Talbot Parkway
11.	Harrogate	29.	Finsbury Park
12.	Whitton	30.	Burnham-on-Crouch
13.	Manchester Victoria	31.	Wakefield Westgate
14.	Bognor Regis	32.	Ainsdale
15.	Burnley Manchester Road	33.	Ellesmere Port
16.	Strood	34.	Cheltenham Spa
17.	Rochester	35.	St. Erth
18.	Chatham	36.	Plymouth

Table A.2: Shortlisted stations

	Shortlisted Station		Shortlisted Station
1.	Dundee	7.	Strood
2.	Chelmsford	8.	Dartford
3.	Hebden Bridge	9.	Lincoln Central
4.	Whitton	10.	Nottingham
5.	Bognor Regis	11.	Port Talbot Parkway
6.	Burnley Manchester Road	12.	Ainsdale

B Case Study Station Maps

NOTTINGHAM STATION MAP



Figure B.1: Nottingham Station Map (© National Rail)



Figure B.2: Chelmsford Station Map (© National Rail)

This map predates the station improvements works at Chelmsford station, but still gives a reasonable sense of the layout of the station.

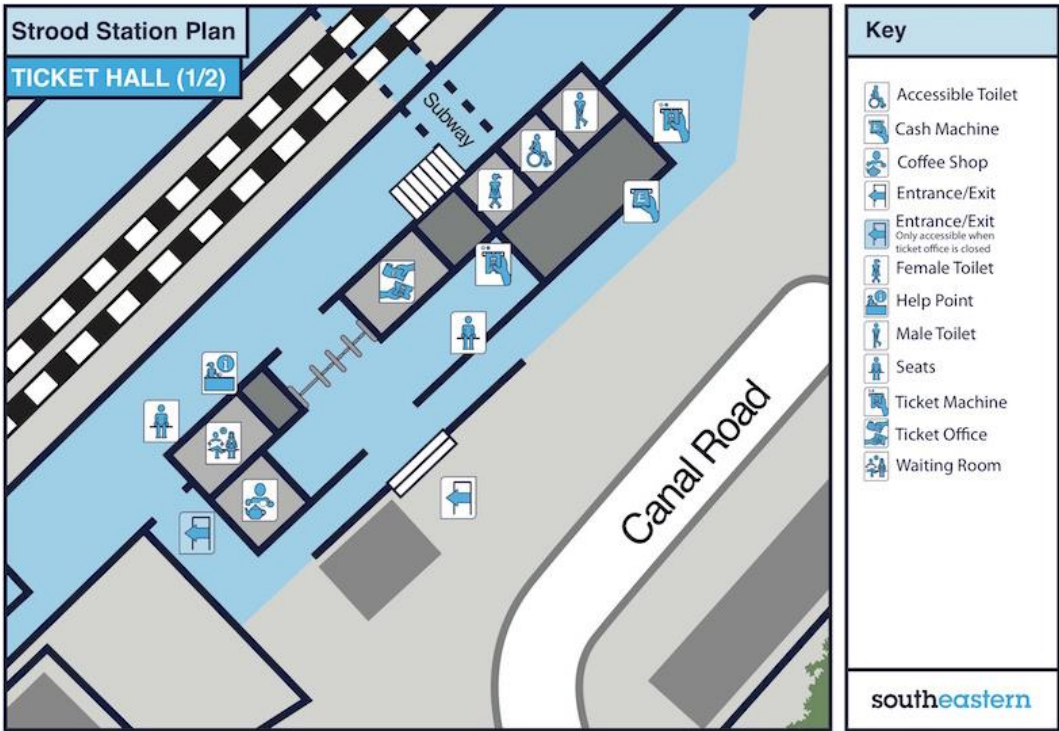


Figure B.3: Strood Station Map (© Southeastern)

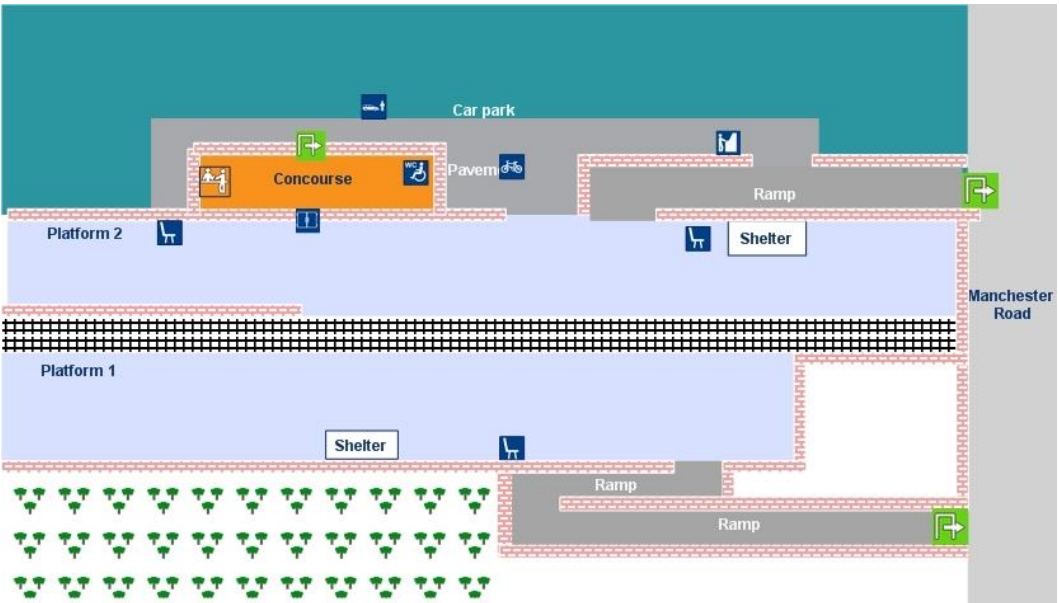


Figure B.4: Burnley Manchester Road Station Map (© National Rail)

Control Information

Prepared by

Steer
28-32 Upper Ground
London SE1 9PD
+44 20 7910 5000
www.steergroup.com

Prepared for

Rail Delivery Group & Network Rail
200 Aldersgate Street
London EC1A 4HD

Steer project/proposal number

23729401

Client contract/project number

Author/originator

Adam Stevens

Reviewer/approver

Tessa Wordsworth
Mike Goggin

Other contributors

Distribution

Client:

Steer:

Version control/issue number

2.0

Date

28/08/2020

