

Tees Valley Combined Authority  
**Darlington Station Upgrade**  
Transport Scoping Report

271076-ARP-REP-TRA-000001

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This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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# 1 Introduction

## 1.1 Report Purpose

Arup has been commissioned by Tees Valley Combined Authority (TVCA) to provide transport planning support relating to proposals to upgrade railway and passenger facilities at Darlington Station. The location of the station is shown in Figure 1.

**Figure 1 Darlington Station Location**



This scoping document has been produced to provide Darlington Borough Council (DBC), the local planning and highway authority, details of the proposed development to determine what the Council will require, from a transport perspective, as part of the future planning application.

Decision points throughout the document are provided in a text box.

## 1.2 Development History

Darlington Station is situated on the East Coast Mainline (ECML) and provides regional and national services on multiple operators including LNER, Arriva Cross Country, Transpennine Express and Northern Rail. Darlington Station is an

important regional and sub-regional transport hub which is used by individuals from the wider locality including, residents from Darlington, the Tees Valley sub region, North East England and the wider UK.

To accommodate growing rail demand, a new station is to be constructed on the eastern side of the existing station. This will serve local rail services and free up capacity on the ECML. The changes require the construction of two new platforms and a footbridge to link the new platforms to the existing station.

Proposals to upgrade Darlington Station are outlined in the masterplan document - 'TVCA Darlington 2025- A modern rail hub for a modern economy'<sup>1</sup>. The key aims of the redevelopment are:

- Improved railway speeds and reduction in journey times;
- Increase railway capacity including that at Darlington South Junction;
- More reliable national and local rail services;
- Remove restrictions within the current rail network; and
- Offer significant commercial development and investment.

In addition, the station redevelopment is set to bring wider benefits including:

- Better walking and cycling links with the town centre;
- Improvements to the west side of the station by improving the existing portico, improving bus stops and providing public realm enhancements; and
- Improvements to the east side of the station with a new public transport interchange, a new bridge into Darlington Station, improved parking provision, improved shopping and leisure in the station, new footbridge to Central Park and opportunities for commercial and residential development.

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<sup>1</sup> TVCA, Darlington 2025- A Modern Rail Hub for a Modern Economy. [https://intranet.teesvalley-ca.gov.uk/wp-content/uploads/2019/02/D5193\\_BROCHURE-8PP-S5-Final-Low-Res.pdf](https://intranet.teesvalley-ca.gov.uk/wp-content/uploads/2019/02/D5193_BROCHURE-8PP-S5-Final-Low-Res.pdf).

## 2 Development Proposals

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### 2.1 Description of the Development

The proposed redevelopment of the station will provide new platforms on the eastern side of the existing station to serve local rail connections (between Bishop Auckland and Saltburn). This will release capacity on the ECML by providing a route for local trains from Darlington in the direction of Saltburn which does not cross over the ECML. A new footbridge will be provided to link the new platforms to the existing station.

In addition to increasing rail capacity, the station upgrade provides the opportunity to improve the wider station area and improve passenger experience. Alterations are proposed to the station gateways at the western entrance, and the creation of a new gateway entrance to the east.

### 2.2 Walking and Cycling Access

Pedestrian access will continue to be provided from the east (Neasham Road), west (Park Lane) and north (B6280 Parkgate). However, both the east and western gateways are to be upgraded to improve the public realm and promote connections between the station and the surrounding areas.

The TA will outline the walking routes in all directions and ensure adequate infrastructure is proposed to provide safe connections from the station to nearby locations.

Cycle parking will be provided on both the east and west sides of the station and the TA will outline the proposed level of cycle parking based on projected demand, ensuring the provision is future proofed to accommodate growth. Staff cycling parking will also be provided.

### 2.3 Public Transport Provision

Bus stops will be maintained on Parkgate to the north, Neasham Road to the east and Victoria Road/Park Lane to the west. The eastern side improvements will incorporate a bus stop area should bus operators wish to provide direct access into the station in future (an aspiration of the 2025 masterplan).

Coach drop-off provision will also be incorporated into the eastern side improvements with sufficient space to accommodate coach services when rail replacement services are required.

### 2.4 Vehicular Access

The main vehicle access for passengers will be located on the eastern side of the station as this will provide access to a proposed multi-storey car park. Access and egress from the car park will be via Garbutt Square which connects to Neasham Road. It is possible that the access junction will need to be redesigned as the

project evolves. A new drop off-facility and bus stops will also be incorporated into the eastern side upgrades.

Vehicle access into the station portico on the western side will be restricted, with the internal space, currently used as a car park, pedestrianised. A revised drop-off facility will be provided. Disabled car parking will be provided but no other passenger car parking will be provided on the western side of the station.

## 2.5 Car Parking

One of the key transport related aspects of the proposed development is the provision of a multi-storey car park. The redevelopment of the station will require new station structures to be constructed on the east side of the station which is the location of the existing long-stay car park operated by Network Rail. The car park currently provides 382 long-stay spaces. These spaces will be replaced in the multi-story car park which is expected to provide up to 850 spaces. The multi-storey car park will be constructed prior to the station structures to ensure long-stay car parking provision is maintained throughout the redevelopment.

## 2.6 Summary

This section seeks agreement that the proposed access arrangements are suitable and that the proposed car and cycle parking provisions are acceptable.

## 3 Existing Transport Conditions

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The scope of the transport report will include a full audit of available transport modes following the methodology outlined in this section.

### 3.1 Walking, Cycling and Public Transport

A desktop audit of existing facilities and routes will be supplemented and validated by site visits. The scope of the audit will be in accordance with accepted industry isochrones (e.g. 400m, or a 5-minute walk, for bus stops).

Information such as routes, destinations and example journey times will be provided. For scheduled services, information such as frequencies and service times will be included.

### 3.2 Highway Network

Darlington Station is bounded by Neasham Road to the east and Park Lane to the west. Vehicular access into the station is also provided via an access road located off the B6280 Parkgate to the north of the station.

The transport report will provide a commentary of the vehicular routes surrounding the station. If required, a traffic survey specification will be developed and agreed to obtain data for the roads serving the development.

Collision data for the study area will be obtained for the last five years to ascertain if there are any existing road safety concerns.

The transport report will seek details of any committed infrastructure proposals that could alter the transport conditions when the multi-storey car park is operational (expected to be 2025).

### 3.3 Summary

This section seeks agreement that:

- The scope of the baseline walking, cycling and public transport audit is acceptable; and
- Road safety analysis should be reviewed within the study area.

## 4 Trip Generation

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### 4.1 Existing Trip Generation

In producing the masterplan and the Business Case for the station redevelopment, data has been collected on how passengers currently travel to the station. This baseline information will be presented.

### 4.2 Future Passenger Forecasts

To determine the number of trips that the station could add to the transport networks in the future, rail passenger forecasts will be derived from work undertaken to develop the masterplan and the Business Case. This information will be presented and reviewed to ascertain trip generation, by mode, for both the morning and evening peak periods when the first aspect of the development, the station car park, is operational in 2025.

### 4.3 Other Trips to the Station

Other trips to the station, such as employee trips and trips to non-rail services (such as new retail outlets), will be considered and the data quantified to include in the assessment.

The station redevelopment will also alter passenger drop-off patterns as the main drop-off facility will be incorporated into the eastern side improvements. The effect of this on the highway network will be presented and future trips redistributed accordingly.

### 4.4 Vehicle Trip Distribution

Additional traffic generated by the proposed development will be assigned onto the highway network based on existing turning proportions recorded by the traffic surveys. As noted above in Section 4.3, consideration will also need to be given to how vehicular access will change in the future as the provision of drop-off facilities on the eastern side of the station will alter the distribution of taxi and drop-off trips.

### 4.5 Traffic Growth

To inform future year assessments, background traffic growth will be considered in parallel with committed developments. If required, growth factors for the period 2020-2025 will be extracted from the TEMPRO database and applied to background traffic growth.

### 4.6 Committed Developments

Darlington Borough Council to advise if there are any committed developments which should be considered in the assessment. The TA will subsequently consider



if any identified developments will add traffic onto the future network between the time of application and 2025.

## 4.7 Summary

This scoping report seeks agreement that:

- The proposed trip generation methodology is acceptable;
- The proposed traffic assignment approach is acceptable; and
- DBC to provide details of any committed developments that should be considered.

## 5 Impact Assessment

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### 5.1 Walking and Cycling

The TA will present an overview of future walking and cycling facilities. Using the passenger demand forecasts, the assessment will outline how many people will walk and cycle to the station when it is redeveloped.

It is not expected that pedestrian modelling will be required. It is suggested that future design provisions, such as improving the gateway entrances, will ensure that all walking and cycling trips to and from the station can be adequately accommodated on the future networks.

### 5.2 Public Transport

The assessment will forecast how many people are envisaged to arrive and depart the station via public transport and the key origins and destinations.

The masterplan identified that improvements to public transport services will be required to accommodate future passenger growth and encourage sustainable travel to the station. This information will be reviewed, and recommendations made on when additional bus services are likely to be viable.

### 5.3 Highway

Additional trips associated with the proposed development and any committed developments will be added to the highway network. Additional trips will be distributed taking into account existing junction turning proportions but also the changes to station drop-off locations and car parking provision.

It is proposed that two local junction assessments are undertaken:

- An ARCADY assessment of the B6280 Parkgate/Neasham Road/Yarm Road junction; and
- A PICADY assessment of Neasham Road/Garbutt Square priority junction. As the project develops, it may be identified that this junction needs to be upgraded to a signalised junction and a LINSIG model developed.

The highway impact assessment will present the results for the base year (2020), future year with committed development and background growth (if applicable), and the proposed development and future year (2025).

## 5.4 Summary

This section of the scoping report seeks agreement that:

- No pedestrian modelling is required; and
- The geographical scope of the junction modelling is acceptable.

## 6 Conclusions and Next Steps

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This report seeks agreement on the scope of the Transport Assessment for the proposal to redevelop Darlington Station.

Arup would be grateful if Darlington Borough Council could respond in writing to confirm that the methodology proposed in this report is acceptable.

Should there be any significant issues with regards to the scope, a meeting is requested at DBC's earliest convenience.