

Active Design



CREATING ACTIVE ENVIRONMENTS
THROUGH PLANNING AND DESIGN

CASE STUDY

Nottingham – active travel transformation

Supported by



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Fact File

Name: **Nottingham**Location (town, county):
Nottingham, NottinghamshireLocal planning authority:
Nottingham City CouncilDate of planning consent/
construction/completion:
**Strategy published 2016, Canal
Street transformation 2020,
programme ongoing**Case study type: **City-wide
active travel infrastructure
transformation programme**

Nottingham is engaged in an ongoing programme, transforming the city's streets for active travel. This includes the provision of an extensive network of new segregated on-street cycle routes that will connect all parts of the city, local networks, junction improvements, and radical changes to the city centre and its public realm, removing private vehicles from key streets.

In June 2020, Nottingham and Derby City Councils received £161m financial backing for a significant programme of transport improvements, funded through the Department for Transport's (DfT's) Transforming Cities Fund. This success followed a process of developing plans, building support and creating deliverable schemes. A number of schemes have already been delivered, and many more are in the pipeline as part of a rolling programme of investment.

The active travel improvements are integrated with extensive public transport upgrades, including bus priority measures, real-time information provision and expansion of the tram network.



ACTIVE DESIGN PRINCIPLES IN ACTION:



How it happened

- Cycling infrastructure was recognised as offering multiple benefits for the city and a good overall return on investment. This fed into a political ambition to make Nottingham cycle-friendly.
- A strategic network design was created as part of the Local Plan to identify key corridors and prioritise them based on deliverability and local benefits, particularly in areas with higher levels of deprivation. Supporting infrastructure design standards for new cycleways and junction design were produced.
- Using the DfT's Active Mode Appraisal Toolkit, overall costs and benefits were assessed. An assessment by Active Travel England of Nottingham's capacity to deliver and effectiveness of the proposed schemes underpinned the success of the bid to the Transforming Cities Fund.
- Ongoing scheme delivery is now underway, with complete corridors, junction improvements and several new active travel-only bridges delivered.
- Continuous public engagement has created wide support for the transformation, along with evidence of delivery success and improvements to quality of life, particularly in the city centre.
- Development sites that connect to, or form part of, the strategic network have a clear basis for design and masterplanning.

Why is it successful?

- Successful early delivery of schemes, backed by clear design standards, has helped build a basis for central government funding of the city-wide transformation and wider rollout of further interventions.
- Continuous corridors, connecting key destinations, are delivered along with junction improvements which together encourage usage instead of piecemeal improvements that do not join up.
- Improvements to the cycling network are married with improvements to the city centre public realm and quality of environment, removing private vehicles from key streets and creating new spaces for socialising, outdoor activity and recreation.
- The clarity of the strategic cycle route scheme enables site-level design to proceed with certainty on what is needed and how policy will be applied to determination.

Lessons Learned

- Political ambition and support are essential to speed up delivery.
- A clear underlying strategic plan of active travel routes can align public and private development aims.
- Early delivery of schemes with visible benefits can build confidence in outputs and their deliverability.
- Detailed work, public engagement and exploration of options, along with consideration of the positives and negatives of junction redesigns can deliver better schemes that work for all.



Applying the principles



Principle 1: Activity for all

The city's cycling infrastructure design sets out universal cycling standards that cover a wide range of different types of cycles, beyond typical two-wheeled bicycles, ensuring the network is inclusive.

Junction design, where multiple different modes could come into conflict, is undertaken in detail, considering pedestrians and cyclists, then public transport and finally private vehicles. Universal design principles ensure that those with physical or sensory disabilities can safely navigate junctions.

Delivery of the strategic cycling network has been phased to prioritise more deprived neighbourhoods and districts within the city. This network phasing also prioritises links to destinations where a large proportion of users are likely to use active travel, such as universities, hospitals and major employment locations that are a distance from the city centre.



Principle 3: Providing connected active travel routes

Underpinning the transformation is a recognition of the importance of a fully connected strategic network, giving good coverage and direct routes into the city centre and between key destinations.

The routes take a variety of forms. Typically they are segregated 3–4m two-way tracks on main roads, separated by a kerb or upstand from vehicle traffic, and given priority at side road junctions. Where the route takes a residential street, cycles share the carriageway with vehicles, but only if vehicle traffic is restricted through a modal filter so it only provides access to homes on the street. Reorientation of give way priority markings has been undertaken to ensure cyclists on the route have priority.

At busy junctions with a significant amount of vehicle traffic, cycle routes are continuous and obvious, and do not conflict with pedestrian traffic. Designs for cycle routes adopt low-impact approaches which rely on cyclists giving way and slowing at junctions, rather than relying on complex, engineered solutions.

Below: Segregated, two-way cycle routes with priority at side road junctions to encourage cycling through the city





Principle 5: Network of multifunctional open space

The cycling networks link and create new open spaces throughout the city. Most notably, several city centre streets have had cars removed from them to create civic spaces, and a new green open space created on Middle Hill as part of a combined active travel upgrade and tram bridge.

Links to and through parks and along the River Trent form part of the network, and wider green infrastructure assets in the Trent Valley are connected, such as Attenborough Nature Reserve.

The cycling network connects to locations such as Queens Drive Park & Ride, where a BMX track has been created, connecting to a wider woodland leisure cycling network and routes along the River Trent.



Principle 6: High quality streets and spaces

The city centre has seen a number of street changes, including at Canal Street, where private motor vehicles have been removed through modal filters, and only buses, cyclists and pedestrians can use it. This removes a significant barrier between the city centre and the rail station and canalside. Smaller city streets, such as Carrington Street, have had vehicles removed completely with high quality paving replacing tarmac carriageways, to create a pedestrian and cyclist only zone. These interventions are planned as part of wider works to connect key destinations, and integrated with building redevelopment.

Separated cycling infrastructure is provided on routes with lots of vehicle traffic, transitioning to on-street on quieter residential streets, with appropriate modal filters to prevent vehicle cut-throughs.

Side road junction design is consistent across the city, with a prominent green paint colour (the city's corporate colour) painted where cycleways cross side roads. This makes cycling priority visible and easy to understand for vehicle users and cyclists.



Principle 7: Providing Activity Infrastructure

New active travel bridges have been, or will be, provided at key points where they can connect routes together. In the west of the city a new bridge now connects the tram stop with the Boots employment site, which will be a centre for regeneration and development in the coming years. A further bridge over the River Trent is planned for the Trent Basin area, connecting to a riverside park and large sporting facilities.



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Left above: Cycling track at Victoria Embankment allows children to practice cycling in a safe space

Left below: Pump track provided next to mobility hub with access to off-road networks through woodland and along river

