

A CONNECTED SOUTHAMPTON CITY REGION

Southampton City Council & Hampshire County Council bid
to DfT Transforming Cities Fund

January 2019





Transforming Cities Fund Application Form – Capital Schemes for Tranche 1 (under £10m)

Applications may be made for grants of up to £10m per city region for multiple schemes. **One application form must be completed per scheme.** Please include all relevant information with your completed application form.

Applicant Information

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SECTION A – Scheme description and Corridor name

A1. Scheme name and location (please provide maps in an annex where necessary):

Southampton City Region TCF Tranche 1.

See **Annex B** for location maps.

A2. Scheme description

Our package delivers the completion of three of the Southampton Cycle Network's transformative cycle freeways, and starts a step change in bus priority with innovative application of C-ITS¹ and enhanced interchanges. This will be implemented across four economically vital corridors addressing constraints to economic growth better connecting the City Region's main economic drivers, providing high quality travel options which improves access for people in deprived areas, reducing congestion, and boosting productivity.

The Tranche 1 package will:

1. Complete the three Cycle Freeway corridors of the Southampton Cycle Network (SCN) between Southampton, the New Forest, Chandlers Ford and towards Bursledon, and SCN Cycleway links between the employment hubs of Southampton Airport, University of Southampton, Hospital and Adanac Park;
2. Deliver supporting infrastructure and interchange improvements to enhance the new Adanac Park Park & Ride serving the regionally important Southampton General Hospital (opening early 2019);
3. Provide dynamic bus priority through application of C-ITS on the corridors;

¹ C-ITS – Cooperative Intelligent Transport Systems

4. Improve the bus passenger experience and service reliability through innovative on-bus improvements; and
5. Start to develop the Bitterne Local Mobility Hub.

The Tranche 1 package delivers the transformation of the SCN and the springboard to the transformative TCF ambition for Tranche 2 for the Southampton Mass Transit System.

SECTION B – The Business Case

B1. Background (“What are the scheme objectives?”)

The five objectives of the Southampton City Region TCF Tranche 1 package are:

Scheme Objective	Evidence of how issue was identified
1. Boost productivity by improving connectivity and access to our vital economic drivers	<ul style="list-style-type: none"> • Economy is worth £9.5bn² but productivity is constrained - 4.6% below the South East; increasing to 16.6% below³ in Southampton City, and weekly wages for Southampton residents working in the city are £60 lower than for non-residents working there; • 8.5% of economically active population are unemployed, with 7.6% of 16-17s classed as NEETs – higher than the SE average⁴; • Bold and ambitious growth plans with 42,600 new homes and 472,000m² of employment space generating 274,000 additional network trips by 2036⁵ increasing congestion potential; • The Port of Southampton - UK’s third largest and busiest for non-EU markets worth £36bn, handles 39mt of cargo and over 1.8m cruise passengers annually⁶ supporting 10,000+ jobs, with plans to double cargo and cruise patronage by 2035⁷, all accessed from M271-A33-A35 corridor - which suffers from congestion; and • Southampton General Hospital, Southampton Airport and University of Southampton are all key economic drivers within the City Region whose location, in addition to a congested road network, constrains potential further growth is accessed solely by car.
2. Reduce reliance on the car for people’s journeys to work through high quality active travel corridors	<ul style="list-style-type: none"> • Coastal geography and M27 constrains travel into Southampton from wider area – doesn’t have 360° access due to barriers of rivers and sea; • Journey times in the Solent are 32% slower than average⁸, forecast to get slower with A33 seeing journey time increase of 127% by 2026, and congestion already costs economy £100m pa⁹; • 65% of all trips to work in City Region are by car with 8.8% using public transport and 3.9%¹⁰ cycling; and • In Southampton City, 62.6% of residents and 34.9% of Year 6 children are classed as obese/overweight¹¹.
3. More reliable and integrated public transport network to drive continued patronage growth	<ul style="list-style-type: none"> • With sustained operator investment bus patronage is growing in Southampton, up 16% on 2011/12, with 21.4m bus passengers making 84.1 journeys/head¹² (the 6th best authority for journeys/head), but congestion is challenging for service reliability; • On rail 12.1m journeys¹³ made through the 17 stations but disconnected multi-modal interchange at Southampton Central; • Traffic conditions affects buses by extending journey times – one cross-city service linking deprived areas has increased by 9 minutes since 2009; and • Frequent bus services on radial network but cross city travel is difficult involving long travel times (65-71mins). There are gaps in service to

² ONS Regional GVA by LA 2016

³ ONS Regional GVA by LA 2016

⁴ 16-17 yr olds Not in Education, Employment or Training (NEET) data by LA, DfE, 2017

⁵ PUSH Spatial Statement 2016

⁶ DfT Port & Shipping Statistics 2017

⁷ ABP Draft Port of Southampton Masterplan 2017

⁸ Connected Southampton Transport Strategy Issues & Options, 2016

⁹ Oxford Economics 2014

¹⁰ Census 2011 – Nomis ED703EW – Method of Travel to Work

¹¹ Public Health England LA Profiles – Southampton, Eastleigh – Obese & Overweight, 2016

¹² DfT Bus Patronage 2017/18

¹³ ORR Station Entries & Exits 2017/18

	some peripheral residential and employment areas creating dependency on driving ¹⁴ .
4. Reduce inequalities from transport barriers to employment, health and poor air quality	<ul style="list-style-type: none"> • Pockets of deprivation with areas of the City Region among top 10% most deprived in England, where up to 42% of households have no access to a car, hampering access to employment opportunities; • Health inequalities between Southampton and Eastleigh with a gap of 4.6yrs in healthy life expectancy¹⁵; • Eighth most polluted UK city with an estimated 110 preventable deaths annually attributed to poor air quality - road traffic is a significant source of NOx (at M271-A33 Redbridge Roundabout it contributes 65.8% of emissions¹⁶); and designated as area to establish a Clean Air Zone by end of 2019.

B2. Strategic Case - Scheme Rationale (“What does this scheme contribute to the programme objectives?”)

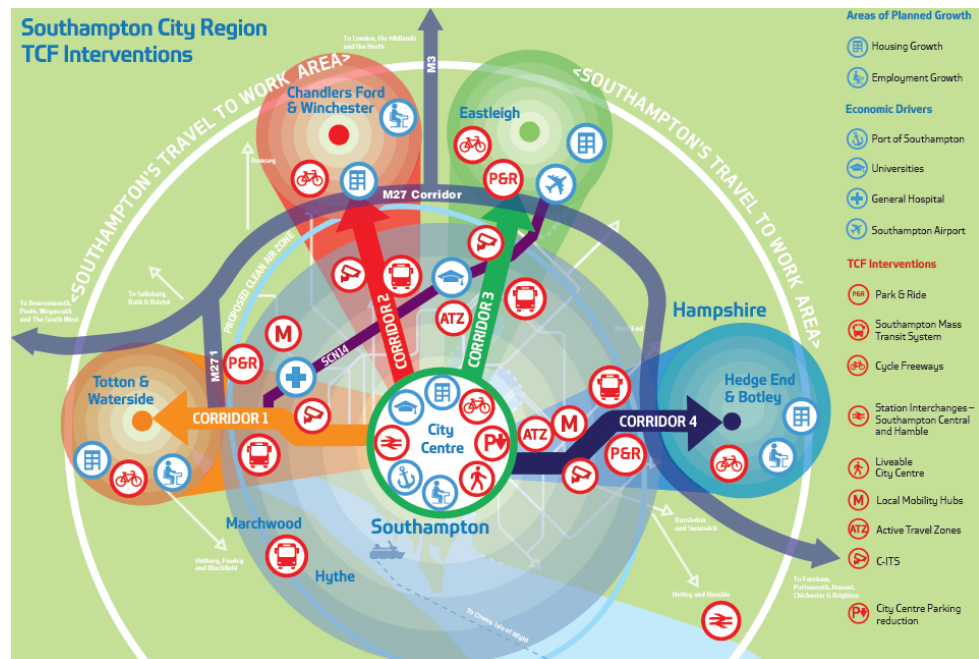
Objective	Impacts, outcomes and outputs
<i>Introductory context to scheme</i>	<p>The overarching outcomes sought through the overall Southampton City Region TCF programme (Tranche 1 & 2) are:</p> <ul style="list-style-type: none"> • A Southampton City Region that is a productive, vibrant and successful place, where GVA levels reach and exceed parity with the South East average; • A more connected and liveable place where people want to live, work and visit; • A more efficient commute with a Mass Transit System linking suburbs and main employment hubs; • Healthy and active lifestyles for journeys to work, education and leisure, supported by a high quality Cycle Network making getting to school and work easy; • A region at the forefront of innovation embracing new technology and mobility options; and • Supporting clean and sustainable growth that benefits all residents. <p>The Tranche 1 package will begin this transformation of transport connectivity in the Southampton City Region so it can sustainably connect people with jobs and opportunities with high quality alternatives to car travel. This package will improve connectivity to jobs and cut carbon emissions to create a more successful, productive, competitive and sustainable City Region.</p> <p>The Tranche 1 package, implemented from March 2019, will:</p> <ol style="list-style-type: none"> 1. Complete the three Cycle Freeway corridors of the Southampton Cycle Network (SCN) between Southampton, the New Forest, Chandlers Ford and towards Bursledon, and SCN Cycleway links between the employment hubs of Southampton Airport, University of Southampton, Hospital and Adanac Park; 2. Deliver supporting infrastructure and interchange improvements to enhance the new Adanac Park Park & Ride serving the regionally important Southampton General Hospital (opening early 2019); 3. Provide dynamic bus priority through application of C-ITS on the corridors; 4. Improve the bus passenger experience and service reliability through innovative on-bus improvements; and 5. Start to develop the Bitterne Local Mobility Hub. <p>The Tranche 1 investment is being targeted on four economically vital corridors (shown in Map 1 below) that connect Southampton with its suburbs and surrounding Hampshire towns of Totton, Chandlers Ford, Eastleigh, Hedge End</p>

¹⁴ University of Southampton Science Park promote sustainable travel but still has high car dependency

¹⁵ SCC Health & Wellbeing Strategy 2017-2025

¹⁶ SCC Clean Air Strategy 2016

and Bursledon-Hamble, as a link to important employment areas at the Port, the Hospital, Universities, Airport and in Eastleigh, Chandlers Ford and Hedge End.



Map 1 – Southampton City Region and TCF Corridors – Tranches 1 & 2

These are the foundations for the Tranche 2 project to build upon, which will then focus on the continued transformation of the SCN, physical bus priority corridors, City Centre transformation and new multi-modal interchanges.

TCF objectives met - 1. How the scheme is investing in new local transport infrastructure to boost productivity

Productivity levels in the Southampton City Region are 4.6% lower than the South East average, with this gap rising to 16.6% in Southampton City itself. Congestion is seen as one of the primary causes of this gap, costing the economy over £100m a year. To boost productivity, our Tranche 1 package will invest in new Cycle Freeways and support new and existing public transport services to major employment hubs such as the Port, Universities, Southampton General Hospital and Adanac Park.

Boosting Productivity: Public transport infrastructure to support growing employment sites to improve efficiency and reduce congestion

The Problem

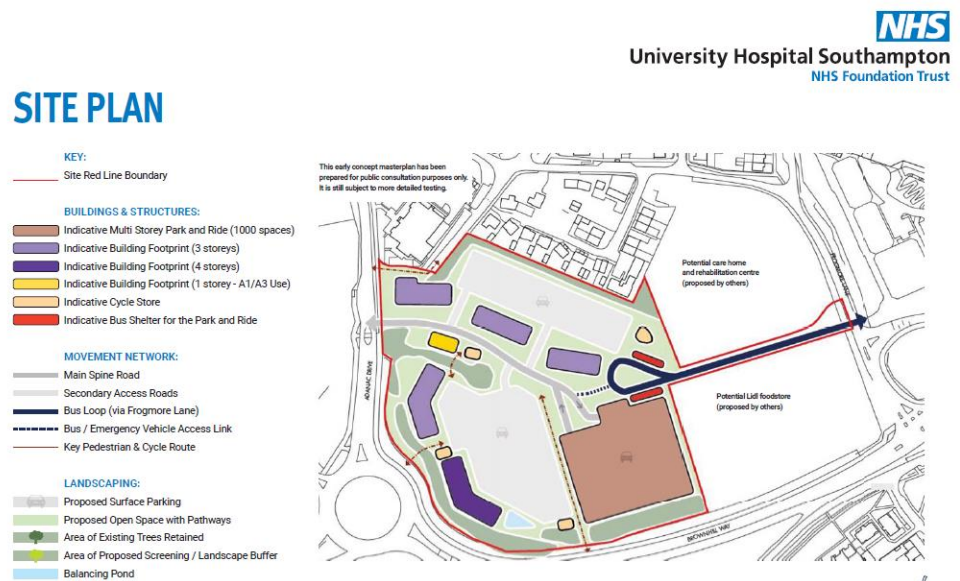
Southampton General Hospital is a major regional and teaching hospital serving a wide catchment population of 1.9m across South Hampshire, and providing more specialist services to 3.7m in central southern England. University Hospital Southampton (UHS) NHS Trust currently employs over 11,500 staff, and is embarking on a long-term investment plan in its clinical and estates offer to intensify operations on a constrained campus located in a suburban residential area. The UHS Trust has committed plans for a £22m General Intensive Care Unit (GICU) and a new £5m Maggie’s Centre charitable house for children with cancer¹⁷. Parking for staff, patients and visitors on site is limited both by a planning condition and by space. Additionally, land used for parking is inefficient and unproductive from a clinical service delivery perspective.

During peak times, the current Hospital campus experiences congestion and access problems which affects emergency services, staff, patients, visitors and public transport users. This includes patients missing appointments due to poor accessibility by public transport or lack of parking, which has a cost to the

¹⁷ <http://www.uhs.nhs.uk/Ourhospitals/SGH/Transforming-your-hospital/Improving-your-hospital.aspx>

Hospital. As the Hospital grows and develops in order to achieve its' clinical and world-leading research aspirations, traffic modelling from the SRTM¹⁸ forecasts that roads around the site will see traffic volume exceed capacity at a number of key junctions at peak times with impacts on congestion and parking. To ensure that the network around the Hospital does not impact negatively on users there is a need to reduce congestion from trips by Hospital staff to the site.

The UHS Trust has aspirations for developing a new Health Campus (providing clinical and care facilities, training and administrative space) at Adanac Park (see Map 2), to respond to the changing needs of a growing and aging population. This will also include a Park & Ride (P&R) facility primarily for staff use to access the main Hospital campus, and potentially expanding for use by the public. Local bus services have recently been extended to provide connections between Adanac Park, Lordshill, the Hospital, Shirley and the City Centre.



Map 2 - Future Hospital Health Campus adjacent to Adanac Park (UHS Trust)

A first phase of the Heath Campus development has been the construction of the new P&R site, located at Adanac Park adjacent to M271 J1. This has planning approval currently to 2023 and become operational in January 2019 – initially by Hospital staff. A 5-10min bus frequency to Lordshill and the Hospital is being provided by both public and dedicated services.

The bus service will also benefit people travelling from Southampton to the UK Headquarters of Ordnance Survey at Adanac Park (1,000+ employees, 90% car based trips), the development of the Health Campus, employment areas in Nursling, and the recent £55m Lidl Distribution Centre, as well as future development of the Adanac Park site (outline permission for over 80,000m² of employment space and when fully built out will provide up to 4,000 jobs).

The Solution - Tranche 1 Investment

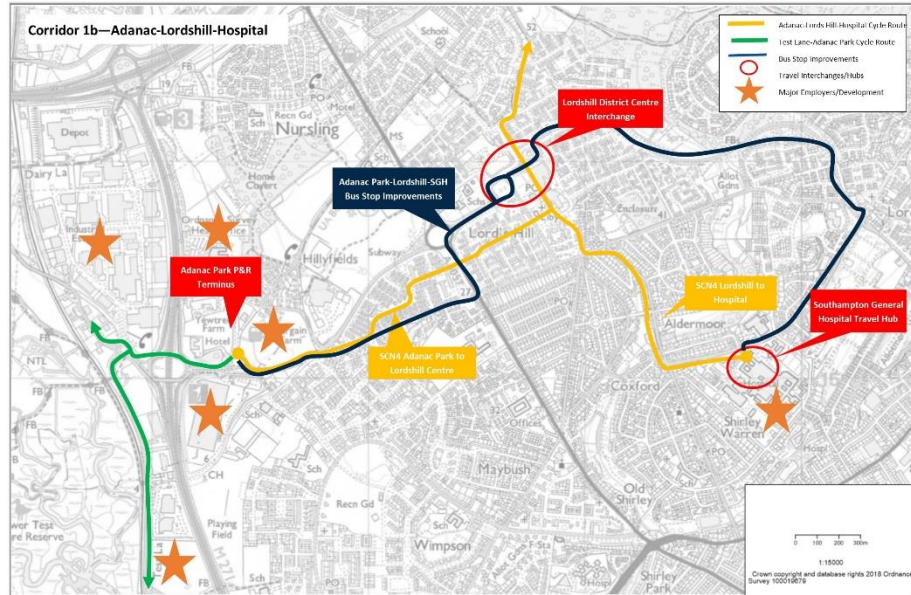
Priority was given to schemes that improved public transport and active travel access between Adanac Park, Lordshill and the Hospital campus. This will accommodate the planned growth in the UHS Trust's Estates Masterplan

The TCF Tranche 1 investment would enhance the current basic P&R provision to provide enhanced facilities at the P&R site and on route (see Map 3):

- Better access control;
- Direct walking route to an expanded P&R bus stop facility with shelter, Real Time Information (RTI) on Adanac Drive;
- Other mobility options (e.g. e-bikes);

¹⁸ SRTM – Solent Sub-Regional Transport Model - <http://www.solent-transport.com/srtm>

- Bus stop improvements including RTI between Adanac Park, Lordshill District Centre and the Hospital;
- Interchange improvements and bus priority at Lordshill Centre; and
- Bus interchange and access improvements at Southampton General Hospital providing additional and better quality stops, RTI and waiting facilities for the 19 buses/hr that serve the Hospital.



Map 3 – Adanac Park-Lordshill-Hospital Trance 1 Measures

These TCF Tranche 1 scheme improvements on the Adanac Park to Hospital corridor will improve inbound journeys to the Hospital for staff, and improve accessibility and essential parking availability at the Hospital. It will also improve public transport access from within Southampton to Adanac Park, to the growing number of jobs at employers including Lidl and Ordnance Survey. This will improve the ability of these employers to create jobs and recruit to them, by increasing the accessibility of the location. The P&R and associated improvements will also reduce delay for all bus users, thereby boosting productivity, and will also assist in reducing staff turnover and increase job satisfaction. This supports the Tranche 2 plans to invest in future enhancements to the P&R and bus corridors to support a public P&R to serve Southampton.

Boosting Productivity: Making Cycling Attractive by Completing of 3 Southampton Cycle Network (SCN) Cycle Freeways

The Problem

The most deprived areas of the city have some of the lowest levels of car owning households – 42% of households in the top decile of deprived LSOAs¹⁹ have no access to a car. In addition, low skilled employment often involves working shift patterns that don't allow for using public transport, even when routes are available. For these trips cycling is a viable alternative, however, 53% of residents feel that the current cycle network doesn't provide a safe route to cycle where they want to go²⁰.

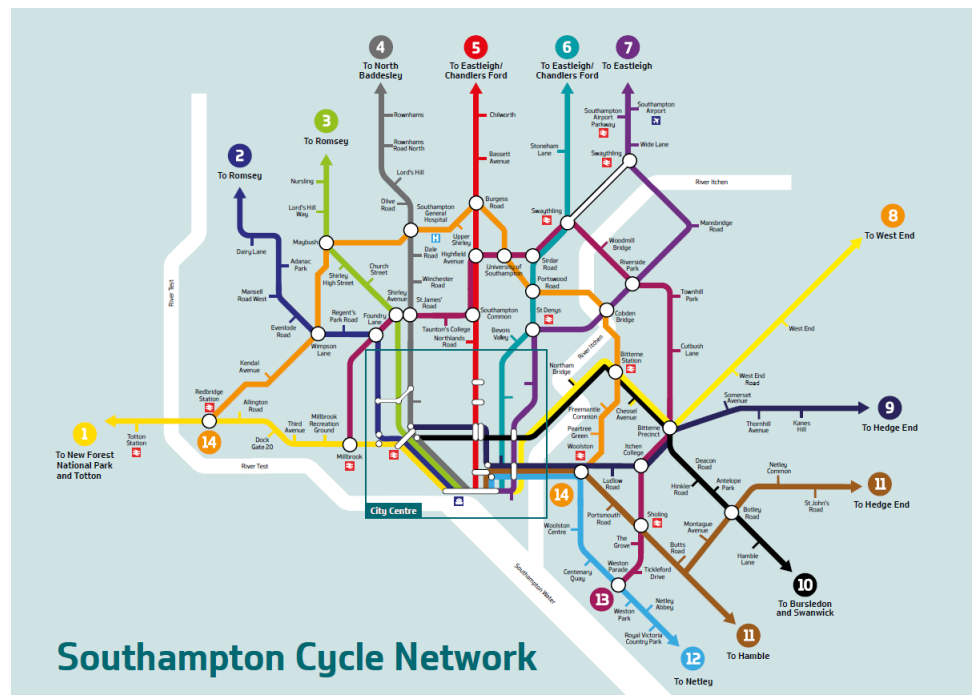
¹⁹ LSOA – Lower Super Output Areas -

²⁰ Cycling Southampton Cycle Strategy 2017-27

The Southampton City Region has an identified strategic cycle network as shown by the Southampton²¹ and Hampshire²² Cycle Strategies (see Map 4). The Southampton Cycle Network (SCN) is a proposed network of 14 safe, connected, attractive cycle corridors that link residential suburbs to employment areas and continue into surrounding neighbouring towns in Hampshire. The SCN comprises continuous, segregated Cycle Freeways, Cityways, and Quietway on-street routes through quieter residential neighbourhoods, with clear signage and measures to calm traffic.

The network currently provides a good level of service for certain commuter flows, but is discontinuous, disjointed and is not of sufficient quality or consistency of provision to provide direct, legible and safe cycle journeys between key trip generators and attractors in the City Region including Southampton, Totton, Eastleigh, Chandlers Ford and Bursledon. Significant development is proposed in these areas and to ensure sustainable growth a high quality active travel connection between these developments and the employment hubs is required.

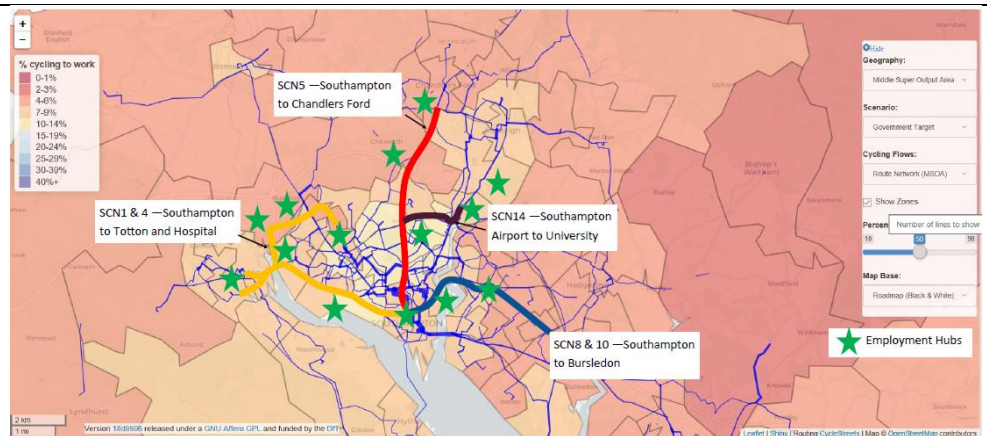
The TCF investment (from Tranches 1 and 2) will enable the delivery of the planned SCN to be accelerated, providing infrastructure which complements existing DfT Access Fund promotional initiatives and activities (such as working with key employers to encourage cycle commuting). SCC and HCC are already actively working with the Universities, Port, and Ageas and Aviva (both at Hampshire Corporate Park) on workplace travel planning. The enhanced cycle connectivity provided by TCF is marketed to potential users in key locations, generating new cycle trips.



Map 4 – Southampton Cycle Network Strategic Corridors

²¹ Cycling Southampton – 10 Year Cycle Strategy 2017-2027 - <http://www.southampton.gov.uk/roads-parking/transport-policy/cycling-strategy.aspx>

²² Hampshire Cycling Strategy September 2015 - <http://documents.hants.gov.uk/transport-strategy-documents/HampshireCyclingStrategy.pdf>



The Solution - Tranche 1 investment

Tranche 1 will focus on three SCN corridors (1, 5 and 8 + 10 on map 3) to upgrade them to Cycle Freeway standard. These connect employment hubs in the City Centre, the Port, the Universities, Hampshire Corporate Park, and Wide Lane-Southampton Airport, with the major residential growth areas such as Totton, Chandlers Ford and Eastleigh. These are some of the main cycle routes and currently see over 3,200 people cycling on them daily, and through Cycle to Propensity Tool analysis (see Map 5), they are forecast to have excellent potential for growth, particularly for short intra-City Region trips. Tranche 1 will support current investment by SCC and HCC on these corridors and will accelerate the completion of them.

To support the growth in cycling envisaged in the Cycle Strategies Tranche 1 as journeys by bike will be made easier and safer (for example, by reducing HGV-cycle conflict around the Port or in Totton, and by providing an off-road segregated cycle route adjacent to an unlit, high speed road between Chilworth and Chandlers Ford), making cycling to work over longer distances a much more 'marketable' proposition to workers.

The Tranche 1 investment on the Cycle Freeways, see Annex B, will provide:

- SCN1 – completion of 7km route from Southampton City Centre and Southampton Central Station to Totton, New Forest National Park, and towards Waterside to Cycle Freeway standard with traffic segregated sections at Third Avenue, Redbridge Roundabout (with Highways England), Commercial Road Totton and on A35 Totton Bypass;
- SCN5 – completion of 6.8km route from Southampton City Centre to University of Southampton, Hampshire Corporate Park, Southampton Science Park and Chandlers Ford to Cycle Freeway standard with traffic segregated facilities on The Avenue, Bassett Avenue and Winchester Road; and
- SCN8 & 10 – completion of 6.4km route from Southampton City Centre to St Mary's Stadium, Itchen Riverside, Bitterne District Centre, suburbs of Thornhill and Sholing, to Bursledon, with Quietway sections between Bitterne Road West and Bitterne District Centre and Cycle Freeway standard on Bursledon Road.

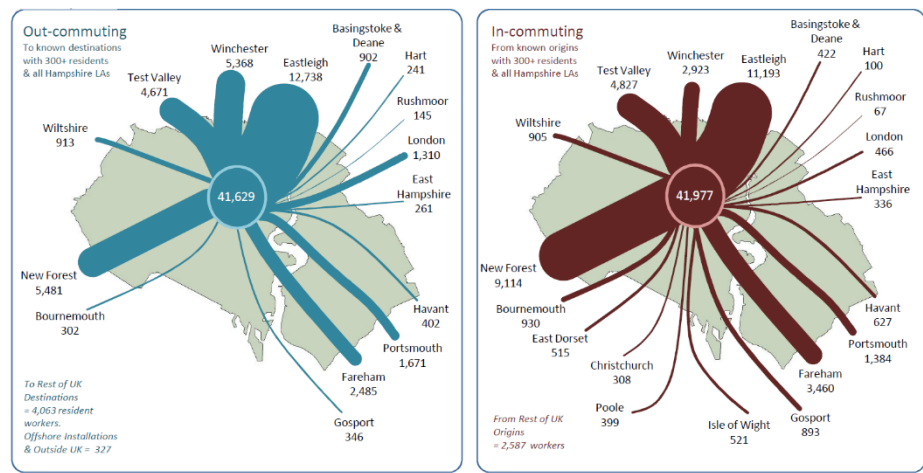
Providing safe, continuous high quality cycle corridors will improve connectivity to these key employment hubs for cycling, which will deliver modal shift releasing space on the congested highway network for trips which require reliable access, such as freight access to the Port. Enhanced connectivity to the employment hubs from residential areas will enable employers based along these corridors to recruit staff who may not have access to a car, reduce travelling costs for staff who switch from commuting by car to by bike, improving staff attendance, and improving business competitiveness.

In Tranche 2 cycle facilities on the other identified TCF corridors will then be completed to Cycle Freeway standard.

TCF objectives met - 2. How the scheme improves public and sustainable transport connectivity to Employment Hubs

The urban development of the Southampton City Region over the past 30-40 years has seen a dispersal of employment opportunities away from the centres of Southampton and Eastleigh and towards sites close to the Strategic Road Network (M27, M3, and M271). This de-centralised urban form creates a wide variety of accessibility and connectivity issues which has resulted in high levels of car commuting, with 65% of journeys to work being made by car²³.

This dispersed employment geography is demonstrated in the strong commuting flows both into and out of Southampton, particularly between Southampton and Eastleigh which has the highest two-way commuting flows in the Solent at over 23,000/ day (see Map 6). The number of these trips is set to increase with the development proposed in Eastleigh Borough, such as the Strategic Growth Option northeast of Fair Oak (5,600 new homes)²⁴. A significant number of these commuter trips to and from Southampton use the heavily congested M3 and M27 for short junction to junction trips. Additional, many trips which do not use the SRN must still cross it, often via congested junctions between the SRN and local network.



Map 6 – In and Out Commuting from Southampton, SCC 2016

The location of disconnected employment hubs close to the M3 and M27 fosters a reliance on the car, and while there has been a growth in the number of people cycling and using public transport in Southampton City Region, only 3.9% of journeys to work are currently by cycle and 8.8% are by public transport²⁵.

Improving the active and sustainable travel connections to these sites will reduce car dependency and improves productivity, health and air quality for people in the City Region.

Connecting Employment Hubs: Better Active Travel Connections

The Problem

There is already some cycling infrastructure connecting residential suburban areas with local services in District Centres, the City Centre and some of the main employment hubs, but it is not continuous and needs to be significantly improved. Concerns about the quality of infrastructure and concerns about the safety of cycling are a barrier to getting more people cycling – of 1,400 respondents to a

²³ Census 2011 – Nomis ED703EW – Method of Travel to Work – workday population
²⁴ Eastleigh Local Plan 2016-2036
²⁵ Census 2011 – Nomis ED703EW – Method of Travel to Work – workday population

2017 survey 49% rated the quality of cycling infrastructure as 'poor'²⁶ – and only 14% rated it as 'good'.²⁷

Currently the SCN doesn't serve these employment hubs with the high quality, safe, and continuous routes users expect. For example, Ordnance Survey promote active travel to their edge of city UK headquarters at Adanac Park, but the poor cycle connections from parts of City Region mean that 90% of employees still drive. Delivering of the SCN to these sites, will foster a mode shift from the private car to cycling and help to address the high levels of physical inactivity of residents.

The Solution - Tranche 1 investment

Tranche 1 will focus on the 3 SCN Cycle Freeways (see TCF Objective 1) and provide 3 additional links to major employment hubs from transport nodes (see Map 4). This will open up a number of new journey opportunities and possibilities for cycling to work and education for people living along the TCF corridors. As the comprehensive and joined up SCN is delivered, this will help to change current perceptions about cycle safety and quality of infrastructure.

The Tranche 1 investment will provide:

- New 3km segregated Cityway cycle facility on SCN4 between Adanac Park (Ordnance Survey and P&R), Lordshill District Centre and Southampton General Hospital.
- This will also link up with a new 1.75km spur from SCN1 at Redbridge Station along Test Lane providing a continuous link from Totton, Redbridge, Nursling to this area; and
- New 1.8km Cityway route along SCN14 from Swaythling Station and existing SCN7 route from Southampton Airport Parkway to University of Southampton.

Once the cycle facilities in Tranche 1, and in Tranche 2, have been completed, we will work to increase the numbers of people of all abilities cycling on the SCN, through Access Fund programme measures. Our award-winning My Journey behaviour change team will work with partners including Sustrans, British Cycling and local Community Cycle Clubs and schools on the four corridors to provide more adults with cycling skills and confidence through training, led-rides and with through workplace initiatives such as cycle challenges.

The Southampton City Region is also a BikeLife city, in partnership with Sustrans. This will use evidence and data to monitor progress made in delivering new cycle infrastructure over the next 4 years as SCN corridors are completed and any changes in the perception of residents about the quality of the cycle network as it becomes more comprehensive. This will be used as a method of measuring changes in perception and usage during the TCF investment period.

Tranche 2 will provide additional transformative cycle connections to provide high quality facilities for local cycle journeys across the City Region.

Connecting Employment Hubs: Better Bus Reliability through Priority:

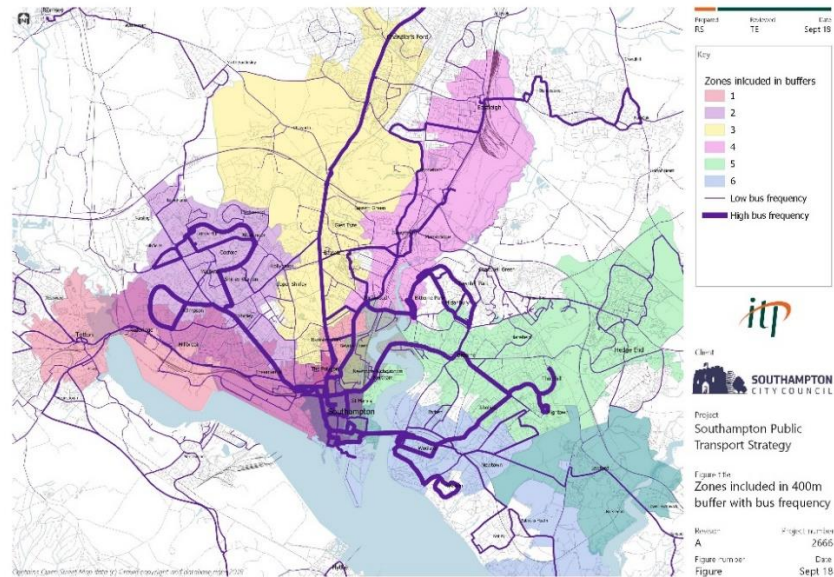
The Problem

Use of the bus network in the City Region is bucking the national trend and is growing strongly with annual increases in bus patronage. Sustained investment by bus operators in new vehicles, new ticketing products, and in customer service in a highly competitive market has helped to drive the growth in bus patronage. Rail growth has seen demand at all stations in the City Region increase.

²⁶ Cycling Southampton Cycle Strategy 2017-2027 – Southampton City only

²⁷ NHT Public Satisfaction Survey 2014 – Hampshire Cycling Strategy 2016

While the bus network has high frequency services (Map 7) to some employment hubs such as Southampton City Centre, Southampton General Hospital, the Port, Eastleigh Town Centre, and University of Southampton; some peripheral employment sites have poor bus connections. For example despite the University of Southampton Science Park in Chilworth promoting sustainable travel to its 1,200 employees, the poor public transport connections mean that over 90% commute by car.



Map 7 – Southampton Public Transport Network Service Frequency

While the on-board passenger experience has been improved recently with operator investment in cleaner, greener and comfortable vehicles (with Euro 6 Clean Air Zone compliance, Wi-Fi, USB charging and next-stop announcements). Increased congestion on the highway network is affecting punctuality and reliability, threatening to undermine this investment, affect future patronage growth and bus service innovations.

Currently bus services on the four TCF corridors suffer from delays at signalised junctions, adding time onto journeys (e.g. one cross-city service now takes 9 minutes longer per journey than a decade ago) and others experience in excess of 30 minute delays on a short congested section and creating poor reliability.

The Solution - Tranche 1 investment

In addition to the Adanac Park public transport measures described in Objective 1, Tranche 1 will deliver:

- Cooperative-ITS (C-ITS) bus priority at signalised junctions on each of the corridors and on-board vehicles including roll out of innovative technology (e.g. GLOSA²⁸) to improve journey time reliability and reduce CO₂ and NO_x emissions on the three corridors; and
- Innovative measures targeted towards improving the on-board customer experience and journey time reliability. This will be developed through an ‘innovation fund’ administered by SCC to which bus operators in the City Region can apply on a competitive basis.

Tranche 2 will see this technology led bus priority evolve across all corridors along with physical measures to develop the Southampton Mass Transit System.

TCF objectives met – 3.
Improving access to employment

The Southampton City Region has bold and ambitious plans for growth over the next two decades with over 42,600 homes and 427,000m² of employment space planned. Half of the total planned development will be in Southampton City, with the majority being focused in the City Centre itself - 24,000 jobs are expected to

²⁸ GLOSA – Green Light Optimised Speed Advisory system

sites, development sites and growth/employment opportunities within Southampton City Region

be delivered here. Aspirations in the draft Eastleigh, New Forest and Test Valley Local Plans all see growth in housing and employment across a wide range of locations. The area around Hedge End and Botley will be a major growth point for housing in particular. These new areas of housing will require high quality sustainable travel connections to the City Region’s employment hubs, to avoid becoming largely car-dependent. Reliable, strong non-car connectivity to Southampton City Centre as the central employment, education and leisure node for the City Region will be particularly critical.

The Solent LEP wish to achieve an annual growth in GVA of 2% by 2020. To generate this growth sustainably we need to ensure that both the new and existing developments are well connected by high quality active and sustainable travel routes that transform people’s travel habits.



Supporting sustainable economic growth in Southampton City Region

The Problem:

Development surrounding Southampton will intensify and to ensure sustainable growth, high quality active travel connectivity between these developments and the employment hubs is required. In Eastleigh Borough, the submitted Local Plan 2036 proposes the creation of new residential areas in Fair Oak – 5,500 new homes in a new Strategic Growth Option, and around Hedge End and Botley. New Forest District will see Totton and the Waterside continue as a key focus for development, with 3,000+ homes allocated through the regeneration of Fawley Power Station and new communities around Totton and Marchwood²⁹. The Southern section of Test Valley District will see 3,490 new homes by 2029, with a focus on development around the edge of Southampton in Chilworth and Nursling³⁰.

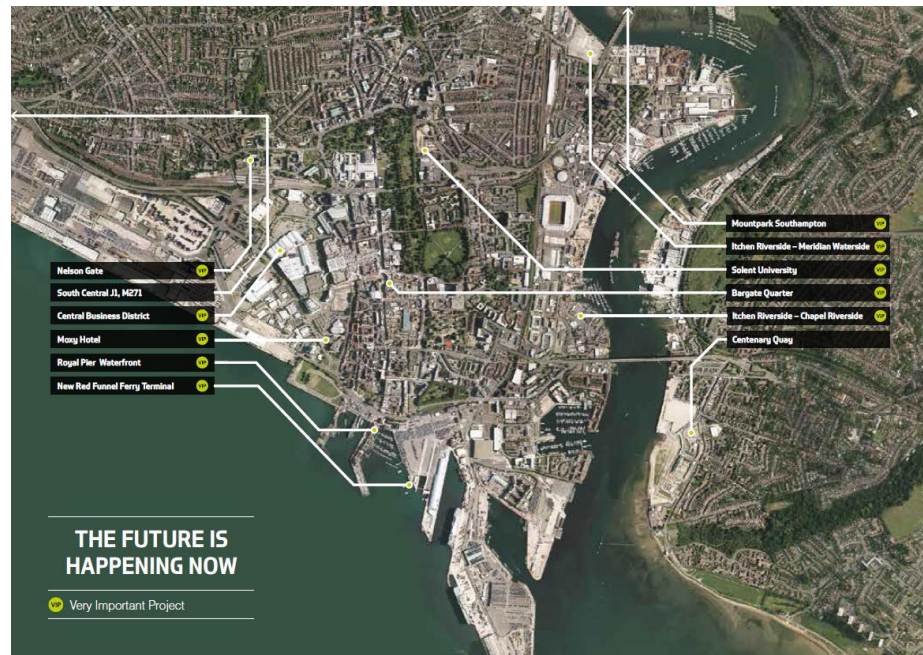
A large proportion of commercial development delivered over the past 30-40 years in the City Region area has been in peripheral ‘edge of town’ locations, such as at Nursling, Chandlers Ford and Hedge End. As a result, this has led to a de-centralisation and dispersal of office based employment activity away from Southampton and Eastleigh town centres (which are both very accessible by public transport) to more business park accommodation in the vicinity of the M27 corridor (which are difficult to serve well by public transport, as they are often in isolated locations). As a result these edge of urban employment locations and premises are primarily accessed by car and often have poor public transport access.

Southampton City has some bold and ambitious plans for growth with £3bn of development outlined in the City Centre Action Plan (2015) making the City Centre the focus for future sustainable growth. By 2026 it will deliver 5,450 homes and 110,000m² of employment space across the Central Business District (Mayflower Quarter south of Southampton Central Station), Itchen Riverside, Royal Pier, Bargate & LeisureWorld sites creating 24,000 jobs (see Map 8). The completion of these developments in the City Centre will see a 13% increase in

²⁹ New Forest Local Plan Review 2016-2036, Submission Document, NFDC, 2018

³⁰ Test Valley Borough Revised Local Plan 2011-2029, TVBC, 2016

the number of trips made³¹, which has the potential to increase congestion, air pollution and constrain productivity.



Map 8 – Southampton City Centre VIP Sites

Also over the last few decades, Southampton City Centre has grown to become the sub-region retail hub with 16.9m people visiting WestQuay shopping centre annually. However, parts of the City Centre have been developed (e.g. Ikea and West Quay Retail Park) as low density high car trip generators with poor access by walking, cycling or public transport. This has resulted in an environment which is dominated by infrastructure to enable car access and is subject to congestion at peak periods – particularly around A33 West Quay Road which is a primary access to WestQuay.

The Port of Southampton is adjacent to the City Centre and stretches towards Totton and across Southampton Water, is the UK's busiest for exports to non-EU markets (worth £36bn) and northern Europe's premier cruise Port (1.8m a year)³². The Port is also a gateway to the Isle of Wight with 3.5m people crossing the Solent annually. It requires reliable access to continue contributing towards the UK economy with the primary highway route is the A33 from M27-M271. The Port continues to grow and expand, proposing to double its cargo and cruise throughput to 2035³³. Congestion on the A33 corridor, including West Quay Road, will affect the ability for the Port to function efficiently. Providing improved cycle and public transport connections into the City Centre from the City Region for all purposes will enable the A33 can perform its strategic function.

Poor air quality is a major concern as the City Region grows, currently it is estimated that approximately 110 preventable deaths a year can be attributed to air pollution. Southampton and part of New Forest District is already acknowledged as one of the UK cities unlikely to meet legal limits on NO₂ by 2020. Source apportionment assessment work at known air-quality problem hotspots indicates that the largest contributor is road transport (approximately 70%)³⁴. Future growth in road based transport will increase this unless the alternatives are improved.

³¹ CCAP Transport Background Paper, SCC, 2013

³² DfT Shipping Statistics, 2017

³³ Draft ABP Port of Southampton Masterplan 2035, 2016

³⁴ Southampton Clean Air Strategy 2016-2025

	<p><u>The Solution - Tranche 1 investment</u></p> <p>With the scale of development across the City Region being proposed having good high quality access into Southampton City Centre is essential, and it will be a challenge to encourage and support a shift in travel behaviour away from the private car.³⁵ The TCF investment will be focused on corridors which connect the areas of highest growth in Southampton, with the new residential developments and the dispersed employment locations in the City Region.</p> <p>The TCF Tranche 1 investment in cycling and bus infrastructure will support access to these new residential and employment developments with the City Centre. By connecting several of the main employment areas in the city via high quality cycle routes with residential areas along the four TCF corridors, this Tranche 1 investment will provide commuters with a safe attractive alternative to the private car. The Tranche 1 schemes will also improve connections for the growing City Centre population to the employment hubs across the City Region, enhancing the attractiveness of the City Centre as a place to live.</p> <p>Tranche 1 funding will allow:</p> <ul style="list-style-type: none"> • Delivery of 27km of the SCN in Southampton and Hampshire connecting residential areas with the City Centre; • Support the bus network coming into Southampton with innovative measures targeted towards improving the on-board customer experience and journey time reliability; and • Support greater uptake of Electric Vehicles with expansion of Southampton’s charging point network. <p>The Tranche 1 investment will support the long-term strategy for City Region is to foster Liveable places³⁶ with high quality transformative sustainable connections to the suburbs and town centres of the City Region. Within Southampton City Centre this will be achieved through an ambitious new Local Transport Plan and Movement and Access Strategy. It will set out a clear plan for giving priority for people walking, cycling and on public transport, access for those who require it, and creating quality public spaces to deliver an attractive, high quality people focused development, drawing on best practice.</p> <p>Tranche 2 will take forward several of the ambitious measures for the SCN, high quality public realm, enhanced multi-modal interchanges and public transport network set out in these Strategies.</p>
<p><i>Geographic corridor targeted</i></p>	<p>The geographical focus is on four economically vital corridors within the Southampton City Region (shown on the corridor maps in Annex B) that follow the city’s distinct geography. They extend from Southampton into surrounding districts of Hampshire, but are limited by the coastal, estuary and river natural environment, with one crossing of the River Itchen connecting to the eastern suburbs of Southampton towards Hedge End.</p> <p>These four corridors currently have frequent bus public transport services and some (albeit not continuous) cycling infrastructure. However, to accommodate the future growth and demand for travel they need to be significantly improved, with continuous, segregated “Cycle Freeways” and a step change in bus priority. This is essential as without these changes to enable mode shift from private car to active and sustainable modes, increased congestion and delays will continue to constrain productivity.</p> <p>Corridor 1 – Western – Southampton to Nursling, Totton and the Waterside and Southampton General Hospital</p> <p><u>Rationale for selection of corridor:</u></p>

³⁵ City Centre Action Plan, SCC, 2015

³⁶ Connected Southampton Transport Strategy 2040 & City Centre Movement & Access Plan 2019

- Linking areas of growth in Totton, the Waterside, Fawley, and Millbrook/Maybush estates regeneration – ~3,800 new homes;
- Has good public transport connections with up to 12 buses per hour and train connections, but constrained by a single crossing of the River Test;
- Passes through some of the most deprived LSOAs in Southampton with 8,700 living in the top 10% most deprived areas in England;
- Serves three large employment hubs providing over 17,000 jobs including the Port of Southampton, Southampton General Hospital, and Ordnance Survey HQ at Adanac Park;
- A33-A35 AQMAs have the highest concentration of NOx in City Region;
- Continued expansion of Southampton General Hospital and New Health Campus planned at Adanac Park (see Annex B);
- Future aspirations for Waterside public transport connections; and
- Opportunity to connect to New Forest National Park, Adanac Park and Lordshill by bus and bike.

Summary of Tranche 1 investment planned:

- Completion of SCN1 Cycle Freeway between Southampton and the New Forest -
 - Totton Cycle Routes (Commercial Road),
 - Totton Cycle Routes (A35 Totton By-Pass),
 - Redbridge Roundabout and Old Redbridge Road,
 - Test Lane, and
 - Third Avenue;
- SCN2 & 4 – Cityway cycle routes between Adanac Park, Lordshill and Southampton General Hospital;
- Supporting the Adanac Park Park & Ride –
 - Improved passenger facilities at Adanac Park P&R Site,
 - Bus priority, bus stop and RTI improvements along the route via Lordshill District Centre, and
 - New public transport bus interchanges and access at Southampton General Hospital;
- C-ITS enhancements to support bus priority and traffic signal operations on A35-A33 and A3057 Shirley High Street.

Corridor 2 – Northern – Southampton to Chandlers Ford

Rationale for selection of corridor:

- Linking to areas of growth in Chandlers Ford and Chilworth – 5,000 new homes and 6,000m² employment at University of Southampton Science Park;
- Good frequency of buses (up to 14/hr) but congestion, accessibility and reliability are barriers;
- Passes through some deprived LSOAs in Southampton with 1,500 people living in living in the top 10% most deprived areas in England;
- Serves large employment hubs with over 14,000 jobs including Hampshire Corporate Park and the University of Southampton with 25,000 students and investing £300m in facilities and Southampton Science Park; and
- Offers an opportunity to connect SCN with Chandlers Ford and Chilworth.

Summary of Tranche 1 investment planned:

- Completion of SCN5 Cycle Freeway between Southampton and Chandlers Ford -
 - A33 Dorset Street,
 - A33 The Avenue (at Southampton Common),
 - A33 Bassett Avenue,
 - A27/A33 Chilworth Roundabout, and
 - Winchester Road (Hutt Hill);

- C-ITS enhancements to support bus priority and traffic signal operations on A33 The Avenue and London Road.

Corridor 3 – North Eastern – Southampton to Eastleigh

Rationale for selection of corridor:

- Linking to significant growth in Eastleigh Borough with 7,800 new homes proposed across Stoneham Park, Horton Heath and Bishopstoke/Fair Oak;
- Good frequency of buses (up to 18/hr) and the main rail corridor but congestion, pinch point accessibility and reliability issues – some bus journey times extended by 30mins in peak periods;
- Large employment hubs with over 3,000 jobs including Southampton Airport and Mountpark Wide Lane;
- Areas of social deprivation around Swaythling; and
- Opportunity to connect the SCN with Eastleigh Town Centre and Southampton Airport.

Summary of Tranche 1 investment planned:

- Upgrade traffic signal technology and cycle facilities at A335 Stoneham Way/A27 Wide Lane/Wessex Lane junctions;
- SCN 14 Cityway cycle route from Wide Lane to University via Honeysuckle Road; and
- C-ITS enhancements to support bus priority and traffic signal operations on A3035 St Denys Road.

Corridor 4 – Eastern – Southampton to Hedge End, Botley & Hamble

Rationale for selection of corridor:

- Linking significant growth in Itchen Riverside, Thornhill estate regeneration, Bursledon, Hedge End, Botley and Boorley Green with over 5,800 homes;
- Excellent frequency of buses (up to 25/hr) and some rail connections but congestion has led to journey times increasing by 9 minutes;
- Passes through some of the most deprived LSOAs in Southampton with 10,800 people living in the top 10% areas in England;
- Employment hubs that are focuses of intensification with over 6,000 jobs including Itchen Riverside and Hamble (GE facility); and
- Sections of A3024 Bitterne Road West and A3025 Hamble Lane are in AQMAs.

Summary of Tranche 1 investment planned:

- Completion of SCN8 + 10 Cycle Freeway between Southampton and Bursledon -
 - SCN8 Quayside Road to Bitterne Village, and
 - SCN10 Bursledon Road;
- C-ITS enhancements to support bus priority and traffic signal operations on A3024 Bitterne Road West-Bursledon Road, and
- Supporting clean travel with Electric Vehicle Charging Points as part of Bitterne Local Mobility Hub.

Across the City Region we will develop innovate measures targeted towards improving the on-board customer experience and journey time reliability for bus users. This will be administered by SCC as an 'innovation fund' for local bus operators to apply for support in delivering innovative solutions to making travel by bus a mode of choice for more people.

<p><i>Primary user segment(s) targeted</i></p>	<p>The Tranche 1 bus and cycle infrastructure measures will largely be targeted at existing commuters, who will have better range of active and sustainable travel options available to them. The cycle facilities will also benefit leisure and education trips as they will be designed to cater for all users.</p> <p>It is estimated that benefits to prospective workers with new travel to work options will vary by corridor. Benefits are expected to be strongest on Corridors 1 and 4, where, jobseekers from the top decile of deprived LSOAs in Thornhill, Redbridge and Millbrook will benefit from improved cycle access and reliable public transport to employment opportunities in Totton and Nursling to the west and northwest and in the Northam and Itchen Riverside east of the city centre.</p> <p>Businesses located in the major business parks or industrial estates along these corridors – Millbrook, University of Southampton Science, and Hampshire Corporate, as well as the UHS Trust, both Universities, the Port, SCC, HCC, and Ordnance Survey, will benefit from enhance productivity through a healthier and fitter workforce with reduced absenteeism from ill health and stress.</p>
<p><i>Other benefits (environmental, social etc.)</i></p>	<p><u>Environmental</u> – deliver benefits in air quality within five AQMAs. Modal shift delivering a reduction in congestion and delay on the four corridors will help to reduce carbon dioxide, nitrogen oxides and particulate matter emissions. This will help to contribute towards achieving Southampton Clean Air Zone and Southampton and New Forest Clean Air Strategy targets.</p> <p><u>Social</u> – As well as for commuting, the improved bus and cycling connectivity will provide considerable benefits to students at the University of Southampton, medical students working placements at Southampton General Hospital, pupils accessing schools along the four corridors and residents wanting to visit the hospital, undertake shopping trips or leisure trips, who will be able to cycle or take the bus rather than drive.</p> <p><u>Health, Wellbeing and Physical Activity</u> - Increased walking or cycling using SCN infrastructure would help increase levels of physical activity, which will deliver health and wellbeing benefits and reduce the costs of treatment of conditions related to physical inactivity by the NHS. The increases in active travel will help contribute towards achieving Health and Wellbeing Strategy targets.</p>

B3. Economic Case – Value for Money

For the active travel elements of the package an appraisal has been carried out using the Active Mode Appraisal Toolkit (AMAT), see **Annex C**, and this provides an indicative benefit-cost ratio (BCR) of **6.18**. The Present Value Benefits of the cycle element is £29.4m against a Present Value Cost of £4.76m. This is primarily made up of journey quality benefits (73% of total) from the creation of network of cycle routes that are segregated from traffic and people walking. The health benefits and mode shift make up the remaining benefits. A BCR for the public transport and ITS elements has not been calculated but these are expected to deliver positive benefits with **good** value for money. The qualitative benefits are expanded on in Table 1.

A) Identifying Expected Economic Impacts

The existing economic issues that the TCF Tranche 1 package is designed to address have been identified through a number of existing sources – SCC & HCC Economic Strategies, Connected Southampton Transport Strategy 2040, Hampshire LTP3, Solent LEP Transport Investment Plan, and individual modal strategies (Southampton & Hampshire Cycle Strategies, draft Southampton Public Transport Strategy). Data has come from existing sources including bus patronage, DfT statistics, SCC & HCC traffic and cycle data, modelling using microsimulation or junction modelling.

Expected Positive economic impacts:

- Support the delivery of 47,000 homes and 214,000m² of employment space across the City Region in particularly supporting development in Test Lane (19,000m² of B1/B8 employment space at South Central – a new John Lewis Distribution Centre) and around Adanac Park;

- Improve physical activity rates in some of the most deprived areas of Southampton and reduce accident severity with segregated cycle facilities;
- Improve journey time reliability for buses on services between Adanac Park, Lordshill and Southampton General Hospital and on the main corridors;
- Reduction in queuing by 50% resulting from completion of the A335 Stoneham Way junction improvements assisting bus journey time and reliability; with a 53% reduction in journey time delay and associated vehicle operating cost reductions at Stoneham Way/Wide Lane;
- Improved journey quality for people cycling worth £22m of PVB (73% of total PVB);
- Slight benefit in air quality against background improvements through Clean Air initiatives;
- Providing increased access to labour supply by improving the agglomeration effect from improved transport connections - assisting economically inactive workers to enter the workforce due to an increase in the net return of employment. Completing the cycle corridors will connect deprived neighbourhoods, where around 33% of households do not own a vehicle, with employment hubs such as the Port, City Centre or Adanac Park; and
- Narrowing the productivity differential between Southampton and the remainder of the City Region reducing car dominance and providing better access to higher paid jobs in locations such as Hampshire Business Park, City Centre and University of Southampton Science Park.

Potential Negative economic impacts:

- Minor adverse impact on noise due to potential additional bus journeys through the SGH campus;
- Minor adverse impact on landscape with removal of some vegetation (trees and shrubs) close to junctions on Bursledon Road where widening of footway to convert to off-road segregated cycle facility is proposed
- Minor adverse impact on vehicle delays on A33 The Avenue due to reallocation of roadspace to cycles and buses, this is expected to increase some queue lengths but is outweighed by health and de-congestion benefits of increase in number of people cycling and taking public transport.

Optioneering and Prioritisation

To arrive at the preferred TCF Tranche 1 package, an appraisal of the main transport corridors between Southampton and the surrounding towns was carried out. The chosen corridors carry the highest number of people, have the best potential for modal shift, and are most important for intra-city region connectivity and access to growth and employment hubs. Schemes on the corridors for the package were identified from a long list of potential interventions assessed on deliverability, fit with two main TCF criteria (productivity and encouraging active travel modes), the wider six cross-cutting TCF priorities (access to work, new mobility systems, tackling air pollution, delivering homes and apprenticeships) and local criteria including fit with identified SCN and bus priority corridors.

How these schemes fit into a wider transformation of the city region.

Addressing these deficiencies in transport connectivity through the Tranche 1 scheme cycle links and Adanac Park to Hospital corridor bus improvements would help reduce unemployment and improve productivity.

B) Identification of the Welfare Effects of Economic Impacts

We consider that the welfare effects of the economic impacts of the Southampton TCF Tranche 1 scheme are fully captured by the quantification of user benefits.

The completion of SCNs 1 (Totton-Southampton city centre via A35/A33), 5 (Chandlers Ford-Southampton city centre via A33 The Avenue) and 8 + 10 (Bursledon-Southampton) will help encourage more commuting by cycle. This and greater utilisation of Park and Ride by hospital staff during peak hours will both contribute to a modest reduction in car commuter trips on key radial routes to the city centre and to the hospital from the M271, thereby helping to achieve journey time savings.

As the measures planned for delivery comprise completion of 3 Cycle Freeways and bus infrastructure measures to support the introduction of Park and Ride for hospital staff, these are not expected to generate Wider Economic Impacts (WEIs) – either in the form of output change in imperfectly competitive markets, labour supply impacts and static clustering (Level 2 impacts) or dynamic clustering and the move to more/less productive jobs (Level 3 impacts).

Table 1 – Summary of impacts of Southampton TCF Tranche 1

Project Element	Economic	Environmental	Social / Distributional
Corridor 1 - SCN 1 – Southampton-Totton	<p>Medium VfM category (BCR of 1.51). Congestion savings worth £55,000 and reduced absenteeism benefits worth £303,000. These improvements along with the improvements in the performance of the highway network on the A35 Redbridge Road-A33 Millbrook Road corridors will make journeys by bicycle more attractive - encouraging modal shift.</p>	<p>Will lead to greenhouse gas improvements worth £2,000 and support cleaner air within the A35 Redbridge Road and A33 Millbrook Road AQMAs.</p>	<p>Will lead to journey ambience improvements worth £1.6m and road safety benefits (through reduced risk of premature death) worth £1.05m. Improved cycle links to and from the New Forest, via Eling and Marchwood will benefit residents of Redbridge and Millbrook area.</p>
Corridor 1b - Adanac Park P&R Enhancements and Hospital & Lordshill Interchanges	<p>Will lead to travel time savings for road users due to the mode shift from car onto P&R buses, which will reduce congestion on key routes around SGH, providing a quicker journey time. Reducing the number of 'Did Not Attend' patient appointments Travel times to the Hospital and other key employment sites (Adanac Park, Nursling & Lordshill District Centre) will also improve.</p>	<p>The reduced congestion levels expected to result from the P&R bus improvements and the modal shift is likely to see improvements in air quality - reduction in CO² and NO² emissions within 2 AQMAs (Romsey Road and Winchester Road) near Hospital.</p>	<p>Reduced levels of all-day commuter parking in suburban residential streets in vicinity of hospital. Improved Journey quality Improvements to bus waiting facilities (with RTI) at Hospital and P&R site and on corridor between the two. Reduced staff turnover from better staff retention.</p>
Corridor 1b – SCN4 Adanac Park-Lordshill-Hospital Cycle Route	<p>Represents very good VfM when considered as part of the wider cycling package. As result of new route lead to congestion savings for new cyclists, these improvements along with the improvements in the performance of the highway network on Brownhill Way and Lordshill Way/ Aldermoor Road corridors will make journeys by bicycle more attractive - encouraging modal shift.</p>	<p>Improving cycle links to the Hospital from Lordshill will help to improve air quality within two AQMAs (Romsey Road and Winchester Road) in the vicinity of the Hospital.</p>	<p>Improved cycle links to Lordshill District Centre will help improve access to local services (supermarkets, GP surgeries, library), particularly for the 44% of households in Lordshill without access to a car.</p>

Corridor 2 - SCN 5 – Southampton- Chandlers Ford	High VfM category (BCR of 2.16). Will lead to congestion savings worth £85,000 and reduced absenteeism benefits worth £627,600. These improvements along with the improvements in the performance of the highway network on A33 The Avenue corridor will make journeys by bicycle more attractive - encouraging modal shift.	Will lead to greenhouse gas improvements worth £4,400.	Will lead to journey ambience improvements worth £2.34m and road safety benefits (through reduced risk of premature death) worth £2.2m.
Corridor 3 - SCN 14 University – Airport and C-ITS junction improvement A335 Stoneham Way/ A27 Wide Lane junction	Represents very good VfM when considered as part of the wider package. Junction improvement will deliver reliability improvements resulting in consistent journey times on A335 Stoneham Way corridor.	Improving cycle links to the University from Swaythling & Wide Lane area will help to improve air quality on the A35 Burgess Road corridor.	Will lead to road safety benefits and journey ambience improvements.
Corridor 4 - SCN 8 & 10 Bitterne Manor-Bitterne-Sholing	Represents very good VfM when considered as part of the wider package. Will lead to congestion savings worth £4,760 and reduced absenteeism benefits worth £35,000. These improvements along with the improvements in the performance of the highway network on A3024 Bitterne Road West & Bursledon Road corridor will make journeys by bicycle more attractive - encouraging modal shift.	Will lead to greenhouse gas improvements and support cleaner air within the A3024 Bitterne Road West AQMA.	Will lead to journey ambience improvements worth £426,000 and road safety benefits (through reduced risk of premature death) worth £121,000.
Corridor 5 – Bitterne Mobility Hub	Better availability of charging points will help to encourage more households to buy electric vehicles.	Greater take up of low emission vehicles will lead to greenhouse gas improvements.	Cost of electric vehicle ownership is set to reduce, making this option affordable and open to more households.

B4. Financial Case – Scheme Costs		
	2019 Real Prices	2010 Market Prices
Total Scheme Costs	£10,644,000	£7,810,000

TCF Funding Contribution	£8,105,000	£5,947,000
Public Sector Contribution	£1,012,000	£742,000
Private Sector Contribution	£1,527,000	£1,120,000

Table 2 – Scheme Costs

Local public sector contribution is coming from SCC LTP allocations in 2018/19.

Private sector contribution is from Developer Contributions in Southampton, Test Valley and Eastleigh for site specific transport schemes, and the £1m value of the construction of the Adanac Park P&R site by the UHS Trust.

	2018/19	2019/20	Total
Corridor 1	£1,628,000	£3,261,000	£4,889,000
Corridor 2	£462,000	£2,125,000	£2,587,000
Corridor 3	£335,000	£781,000	£1,116,000
Corridor 4	£523,000	£728,000	£1,251,000
City Wide	£0	£800,000	£800,000
	£2,937,000	£7,591,000	£10,644,000

Table 3 – Funding Profile

B5. Management Case – Delivery and Risk Management

The delivery programme for the Southampton TCF Tranche 1 scheme is set out in **Annex D**. This programme provides details of the key milestones for delivery and highlights for each corridor is set out below.

Corridor	Start of Works	Completion of Works
Corridor 1 Western	March 2019	December 2019
Corridor 1b Adanac	January 2019	September 2019
Corridor 2- Northern	March 2019	December 2019
Corridor 3 – North Eastern	March 2019	September 2019
Corridor 4 – Eastern	February 2019	August 2019
Bus Innovation & C-ITS	April 2019	October 2019

A detailed risk register is in **Annex E**. The top five risks that have been identified and strategy for managing them are set out below.

Risk	Score	Description	Mitigation
Timely approval of bid	16	DfT decision on bid is delayed and local governance is delayed	Project plans make allowance for relevant approval processes
Budget Estimates	16	Insufficient budget allocated for schemes	An optimism bias of 45% and project management allocation of 10% is applied to projects
Network Management	16	Impact during construction and competing projects in City Region	SCC & HCC regularly liaise on major projects and both are part of a Solent Network Management Group with Highways England to discuss and manage major projects.
Structures	16	Some schemes are adjacent to large structures or require work to structures over SRN to make pinch points	Early identification of major structures and in case of pinch points alternative scheme or routes will be created.
Land	15	Land acquisition for works outside Highway Land e.g. third party, Common Land	Where possible use of Common Land on SCN5 & 10 will be avoided. Legal negotiations for land on SCN5 in Chandlers Ford ongoing if no resolution then pinch point would remain. Land at Adanac Park under lease to UHS Trust.

Table 2 – Risk Management Scores

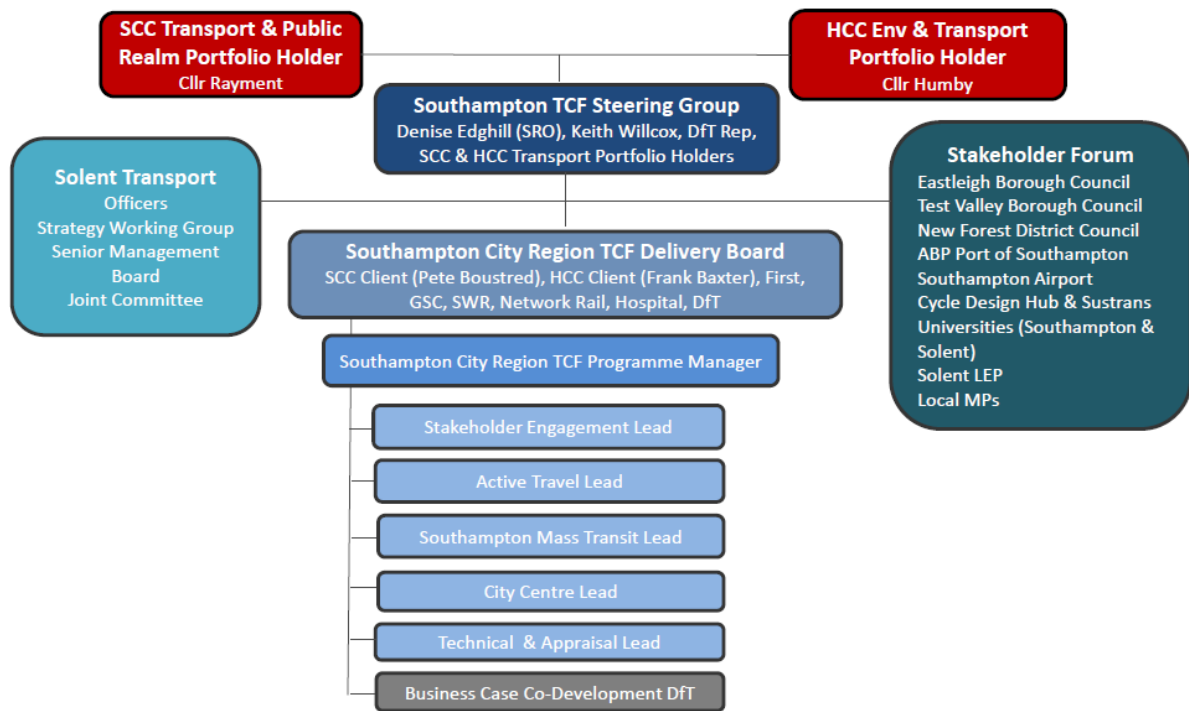
All infrastructure works are within the highway boundary or land controlled by SCC, HCC or UHS Trust at Southampton General Hospital and Adanac Park. No changes are planned to the carriageway extents. Works can be implemented under the statutory powers of the two Highways Authorities (SCC & HCC).

B6. Management Case – Governance

Do you have governance processes in place to deliver the scheme?

Yes No

Please provide the name and position of the Senior Responsible Owner:
 An organogram for the Southampton City Region TCF programme is below, with Denise Edghill, Interim Service Director of Growth at Southampton City Council named as the SRO. The Steering Group will consist of the Portfolio Holders Cllr Rayment (SCC) and Cllr Humby (HCC), Senior Officers from both authorities and a representative from the Department for Transport.



B7. Commercial Case

SCC will be the responsible authority for the Southampton City Region TCF programme working closely with HCC on the delivery of schemes to time and budget using the Governance arrangements set out in B6.

SCC will be the client for the works in Southampton itself and schemes will be delivered through the Council's Strategic Highways Service Partner – Balfour Beatty Living Places (BBLP). In 2010, SCC entered into a ten year multi-million pound Highways Strategic Partnership (HSP) with BBLP through an OJEU process, this was extended in 2018 for a further five years. The contract provides all the design and construction services needed for the Southampton TCF schemes. Relevant features of the scheme include the use of Targeted Costing, shared risk management, and minimisation of environmental impacts.

For schemes in Hampshire, HCC will be the client for works and will be delivered through one of two frameworks that provide a route to market for schemes up to value of £2m. The first is Gen 3-1 Framework aimed at delivering small to medium sized highway schemes that are straight forward with value up to £450,000. The second is Gen 3-2 Framework that aimed at delivering complex

highway infrastructure works with values of £50,000 to £10m. Both frameworks use the NEC3 Framework Contract with all call-off contracts using the Engineering and Construction contract and short contract. All package of works are procured through a mini competition which significantly shortens timescales. Six contractors are on the Gen 3-1 Framework and 10 on Gen 3-2 Framework, both frameworks following a stringent procurement process.

The programme (Annex D) has been designed to commence in March 2019 for completion in Q3 19/20 and the Authorities and partners are resourced and ready to commence as the projects are all in the process of being designed, costed and approved.

In the last 5 years, SCC and HCC has successfully delivered large capital transport works totalling £30m on time and on budget, these include the Platform for Prosperity highway improvements (£12m), Station Quarter North public transport interchange & realm (£8m), Millbrook Roundabout major maintenance (£8m), and Clean Air Zone Early Measures for cycling infrastructure (£2.7m). Jointly SCC and HCC have worked previously on the Better South Hampshire LSTF and Better Bus Area (BBAF) projects, and are currently working jointly on an area wide £3.1m Access Fund sustainable travel activity programme that covers the City Region geography. These were delivered through the HSP with BBLP and other service providers.

Through these projects we have learnt that they are best delivered through a partnership based approach, with multi-agency project teams co-located in shared offices to deal with issues quickly and meet the critical success criteria. Establishing project boards is essential for the effective management of the projects which involve key stakeholders. Key aspects such as Early Contractor Involvement, a clear governance framework and appropriate placement of project risk are vital to ensure successful project delivery. Each project has benefited from a clear communication strategy and close liaison with network management in both Authorities to ensure major works can be coordinated effectively across the City Region. Both SCC and HCC have defined project management systems that follow the principles of PRINCE2 and use a stage gateway system of approvals – this will continue for the TCF projects.

We will build on the successes and experiences of our project delivery over the last 5 years in major transport schemes to ensure that the TCF Tranche 1 projects are a success.

B8. Equality Analysis

Has any Equality Analysis been undertaken in line with the Equality Duty?

Yes – **Annex G** No

SECTION C – Monitoring, Evaluation and Benefits Realisation

C1. Monitoring

An **Annual Monitoring Report (AMR)** should be prepared following the completion of each year of the project. This will report on the outputs achieved each year for each individual project contained in the full package, including:

- Project update
- Financial spend
- Outputs achieved from each element of the project
- Reporting of any changes to the format of the project, and update on the risk register
- Overall summary of project progress

The AMR will be prepared by September of each year, reporting on the preceding financial year's activity. Hence, the first AMR would be prepared in September 2019 reporting on 2018/19.

Do you agree to undertake this monitoring?

Yes No

C2. Evaluation

Each scheme over £5m should be evaluated in line with the DfT's Monitoring and Evaluation Framework (2012). This requires the preparation of a monitoring and evaluation plan, to be signed off

by the Department, as well as 1-year and 5-year post-completion evaluation reports. The evaluation should aim to identify to what extent schemes achieved their main objectives, and what value for money was achieved. In cases of innovative, complex or controversial projects, the evaluation should also explore what challenges the scheme implementation encountered and how it dealt with these challenges.

Do you agree to undertake this evaluation?

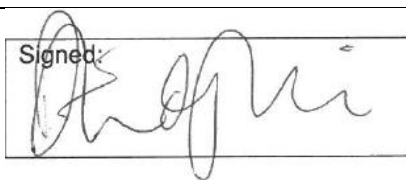
Yes No

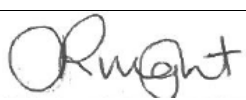
C3. Cross-area evaluation

The Department will lead on a cross-area evaluation, aimed at answering questions about the success of the Fund as a whole. This will involve case studies on identified topics of interest. Do you agree to take part in case study interviews and data collection if your area should be selected?

Yes No

SECTION D - Declarations

D1. Senior Responsible Owner Declaration	
As Senior Responsible Owner for Southampton City Region TCF Tranche 1 I hereby submit this request for approval to DfT on behalf of Southampton City Council and confirm that I have the necessary authority to do so.	
I confirm that Southampton City Council will have all the necessary statutory powers in place to ensure the planned timescales in the application can be realised.	
Name: Denise Edgehill	Signed: 
Position: Interim Director, Growth, Southampton City Council	

D2. Section 151 Officer Declaration	
As Section 151 Officer for Southampton City Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Southampton City Council and Hampshire County Council.	
<ul style="list-style-type: none"> • has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution; • accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties; • accepts responsibility for meeting any ongoing revenue and capital requirements in relation to the scheme; • accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested and that no DfT funding will be provided after 2022/23; • Confirms that the authority has the necessary governance and assurance arrangements in place and the authority can provide, if required, evidence of a stakeholder analysis and communications plan in place. 	
Name: Jo Knight, Service Lead Finance Business Partnering (Deputy S151), Southampton City Council	Signed: 

Submission of Bids
 The deadline for bids is: **6pm on Friday, 4 January 2019.**

An electronic copy (including supporting material) should be submitted to tcfproposals@dft.gov.uk

However, if you must send hard copies of papers, please provide three copies to:

Charles Small
Head of English Devolution Team
Transforming Cities Fund Business Cases
Department for Transport
2/19, Great Minster House
33 Horseferry Road
London
SW1P 4DR

Annex A: Summary of Data Assumptions – example template

Please note the below list of key assumptions and data inputs is not exhaustive – if you are capturing other factors then these should also be included.

Topic	Issue	Figure Used	Data Source / Evidence
General	Appraisal Period	20 years	Assumption from Sustrans and WebTAG
	Decay Rate	0.00%	Assumption from WebTAG illustration
	Number of Days	220	Assumption from WebTAG illustration
	Percentage of journeys that are return journeys	90%	Assumption from WebTAG illustration
Walking	Number of walking journeys in do nothing scenario/without project	2687	SCC Pedestrian Counts (The Ave only)
	Number of walking journeys in the do something scenario/with project	2687	No change
	Average length of walking journey	1km	National Travel Survey Data 2016
	Average walk speed	5kph	National Travel Survey Data 2016
	% of new pedestrians that would otherwise use a car	11%	Assumed to be the same as cycling diversion factors
	Cycling	Number of cycling journeys in do nothing scenario/without project	3224
Number of cycling journeys in the do something scenario/with project		4191	Based on Sustrans modelling for uptake of new traffic segregated cycle schemes
Average length cycling journey		6.4km	Southampton Cycle Survey 2011
Average cycle speed		15kph	National Travel Survey Data 2016
% of new cyclists that would otherwise use a car		11%	Literature Review carried out by RAND Europe/Systra for DfT
Bus		Number of bus journeys in do nothing scenario/without project	21,400,000
	Number of bus journeys in the do something scenario/with project	23,110,000	Increase of 8% based on average annual increase over 3yrs 14/15-16/17 in Southampton
	Average length bus journey	5.65 miles	Data from GoSouth Coast and First Bus in Southampton
	Average bus speed	8 mph	Southampton LTP3
	% of new bus users that would otherwise use a car	11%	Literature Review carried out by RAND Europe/Systra for DfT