# WOOLWELL TO THE GEORGE TRANSPORT IMPROVEMENT SCHEME





Part I Report

#### 1.0 Background

- 1.1. The Woolwell To The George (WTTG) Transport Improvements Scheme will alleviate congestion at the notorious pinch-point between Woolwell and The George junction, on the A386 Tavistock Road. More than 30,000 vehicles use this section of road each day and there are regularly queues and delays at peak times, caused by traffic having to merge over very short distances. The impact of this congestion extends far beyond the immediate Woolwell area, affecting the A386 Tavistock Road as far south as Manadon Roundabout and also disrupts the reliability of the bus network. The route also has poor provision for pedestrian and cyclists and crossing the A386 in particular is very difficult in busy periods.
- 1.2. The problems faced along this section of the transport network are well documented and included as far back as the late 1970's. The 1979 Devon County Council (DCC) adopted Devon Structure Plan identified the need to dual from Derriford Roundabout to Roborough.
- 1.3. Widening along the A386 between Woolwell and The George Junction featured annually within Devon County Council's Transport Policies and Programme (TPP) submission for many years during 1980s and early 1990s.
- 1.4. DCC consulted on a Scheme for between Woolwell and The George and secured some plots of land via a widening line within the Scheme area and further to the south as well.
- 1.5. In 1980 DCC held a consultation which considered the A386 route in three sections:
  - Derriford Roundabout to The George;
  - The George to Woolwell; and
  - Woolwell to Roborough
- 1.6. DCC, the then Highway Authority, made the decision to build the Roborough Bypass first to provide a new dual carriageway between Woolwell and Roborough which opened in 1992 to serve northern Plymouth as well as the Woolwell estate.
- 1.7. The rest of the A386, Derriford to Woolwell was also split into 3 phases;
  - 2a Signal controlled junction at The George,
  - 2b Dual George to Woolwell and
  - 2c Dual Derriford Roundabout to The George.
- 1.8. In 1995, DCC held a further consultation asking for opinions on the order in which Schemes should be constructed. 2a Signalisation of George Junction came out on top and it was the implementation of that Scheme which Plymouth City Council (PCC) inherited in 1998 when Plymouth became a Unitary Authority and was delivered in the early 2000's. The other two Schemes remain to be implemented and explains therefore why the WTTG Scheme continues to be required to this day.
- 1.9. More recently, the Council's Third Local Transport Plan 2011-2016, expressly identifies that highway improvements are required between Woolwell and The George.
- 1.10. The problems identified in this document have continued and have subsequently led to their inclusion in the Plymouth and South West Devon Joint Local Plan (JLP), including an Infrastructure Needs Assessment, which was consulted upon in 2017 and adopted in 2019. The inclusion of the Scheme in the City's key spatial planning documents is in

recognition of the wider benefits that the Scheme will deliver to local communities and to the city.

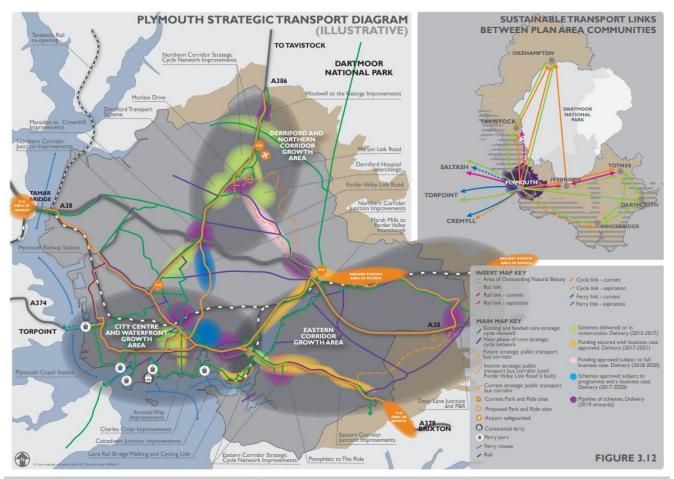


Figure | Plymouth's Strategic Transport Diagram

1.11. With significant growth planned for the north of the city and traffic forecast to increase along this route, it is vital to provide improvements that will encourage more walking, cycling and bus travel, as well as minimise congestion and delays for general traffic. With future growth that is allocated to the Northern Corridor, the performance of the network is forecast to deteriorate further, with worsening journey times and reliability.

#### 2.0 Scheme Objectives

- 2.1. Reduce congestion for all users, thereby improving journey times on the A386 corridor and improving access to Derriford from the east;
- 2.2. Support economic development and planned growth in the Northern Corridor Growth Area:
- 2.3. Promote public transport use by providing a second direct route for buses from both the south and east of the city, thereby improving public transport connectivity; and
- 2.4. Encourage use of sustainable travel modes, particularly bus, cycling and walking.

#### 3.0 Planning Context

3.1. The <u>Plymouth and South West Devon Joint Local Plan 2014-2034</u> (JLP) identifies the Northern Corridor as one of three priority growth areas because of its potential to deliver a regionally significant number of new jobs and homes. 4,235 new homes have

been identified for the Derriford and Northern Corridor Growth Area. 2,000 of these new homes are to be delivered by the Woolwell Urban Extension (WUE).

- 3.2. The scheme directly supports the following JLP policies:
  - Policy SPT8 Strategic connectivity;
  - Policy SPT9 Strategic principles for transport planning and strategy;
  - Policy SPT10 Balanced transport strategy for growth and healthy sustainable communities;
  - Policy SPT12 Strategic infrastructure measures to deliver the spatial strategy;
  - Policy PLY47 Strategic infrastructure measures for the Derriford and Northern Corridor Growth Area.
- 3.3. The evidence base supporting the development identified in the Joint Local Plan shows that improvements to the transport network, for both highway capacity and sustainable transport links are required to allow the WUE development to come forward.
- 3.4. The JLP sets ambitious but achievable targets for increasing public transport use, cycling and walking activity to deliver sustainable developments. Amongst the core measures to enable this increase in bus, cycle and foot traffic is a focus on key movement corridors linking residential estates and major employment sites, to public transport interchanges and Plymouth Strategic Cycle Network. It is clear that significant further investment in the sustainable transport network alongside focused improvements to the highway network are required to enable the planned future development and this is further highlighted in Plymouth's Local Cycling and Walking Infrastructure Plan (LCWIP).
- 3.5. Policy PLY44 specifically relates to the Woolwell sustainable urban extension and identifies land at Woolwell allocated for comprehensive residential led mixed-use development to provide a sustainable urban extension and a defined edge to the north of the city. It is explicitly stated that there "should be no occupation of new homes until the A386 Woolwell to the George Junction Transport Scheme has been implemented, with the exception of where this can be accommodated without resulting in a severe impact on the operation of the local road network".
- 3.6. There is clear evidence demonstrating that improvements to the sustainable transport and highways networks are essential in the delivery of development on the Northern Corridor and particularly the WUE development. The Plan is clear that without such investment, congestion around the growth areas will substantially worsen and growth and productivity will be constrained.

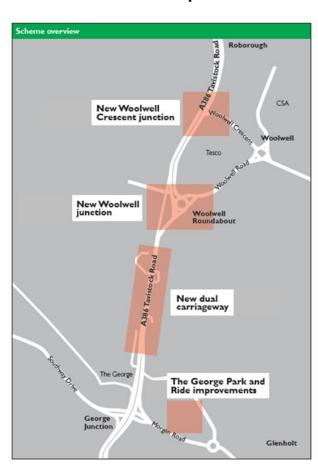
#### 4.0 Climate Emergency

- 4.1. Tackling climate change is one of the Council's top priorities. In March 2019 Plymouth City Council unanimously adopted a 'Climate Emergency' declaration, pledging to achieve zero net carbon by 2030. The Climate Emergency Action Plan (CEAP) sets out the need to decarbonise mobility, without restricting access, as a core theme; it identifies actions that the Council are taking, as well as other partners in the Plymouth Net Zero Partnership, to reduce emissions across the city.
- 4.2. Tackling climate change is a key priority for the Council and represents a major challenge for the delivery of future growth and operation of the transport network. Providing significant walking and cycling infrastructure on Plymouth's northern corridor as part of the Woolwell to the George scheme is a specific action within the CEAP.

- 4.3. The Government's ambitious plan for cycling launched in July 2020, recognises that cycling will have to play a far bigger part in the nations transport system from now on with significant increases in cycling in our cities and towns.
- 4.4. Now more so than ever, the provision of high quality walking and cycling facilities is of paramount importance to widen the available choice of transport modes for journeys in Plymouth and reduce car dependency. Equally, providing facilities to encourage more walking and cycling is included in the Council's adopted Climate Emergency Action Plans to reach Net Zero by 2030.
- 4.5. Carbon emissions from transport now account for approximately 30% of Plymouth's carbon footprint. Plymouth's Climate Emergency Action Plan sets out the urgent need to decarbonise mobility and reduce emissions, without restricting access, as a core theme of achieving zero net carbon by 2030.
- 4.6. Without delivery of the scheme, the performance of the transport network on the Northern Corridor will further deteriorate across all modes. Currently, the George Park and Ride site is at capacity, meaning further growth in sustainable transport travel to the City Centre from the George Park and Ride is not possible.
- 4.7. The scheme provides a significant improvement in walking and cycling facilities on a key section of Plymouth's Strategic Cycle Network and will provide a direct link to the new development at WUE. Without this, the Council's aspirations for increased travel by active modes on this corridor which are central to the JLP and Plymouth's Transport Strategy will be difficult to achieve.

#### 5.0 Woolwell To The George Transport Improvements Scheme Description

- 5.1. The scheme will deliver:
- Dedicated walking and cycling facilities, linking the George Park and Ride site with the existing Woolwell community and 2,000 new houses at the WUE development, and improving access to the Park and Ride site from Plymouth's Strategic Cycle Network (SCN).
- Woolwell Roundabout upgraded to a signalised junction, increasing capacity and improving pedestrian and cycle crossings.
- Improved capacity on the A386 Tavistock Road by providing dual carriageway from Woolwell Roundabout to the George Park and Ride site, enhancing accessibility to the George Park and Ride site by vehicles travelling in from Northern Plymouth and beyond.
- Increase parking capacity at the George Park and Ride site (350- 500 additional spaces); including 100 spaces with Electric Vehicle charge points.



- 5.2. A public consultation was carried out in 2017 on improvements to this section of the northern corridor and since this time the scheme has been refined to lead to the development of the proposed preferred option.
- 5.3. A second public consultation was undertaken in August and September 2021 to feedback to the public and identify the preferred option to be taken forward.

#### **6.0 Scheme Benefits**

6.1. The proposed scheme will provide significant improvements to the performance of the transport network on the Northern Corridor. The traffic modelling work that has been carried out using the Plymouth Highway Assignment Model shows the benefits of the scheme in reducing journey times and congestion on the A386, as shown in the table below:

	A386 North Bound (Manadon to Roborough)	A386 South Bound (Roborough to Manadon)	A386 North Bound (Manadon to Roborough)	A386 South Bound (Roborough to Manadon)
	AM F	PEAK	PM F	PEAK
2028 Do Nothing	622	774	1038	781
2028 WTTG Scheme	582	554	802	590
Journey Time Saving (s)	-40	-220	-236	-191
Journey Time Saving (%)	-6.4%	-28.4%	-22.7%	-24.5%
2043 Do Nothing	686	762	1071	855
2043 WTTG scheme	631	564	829	637
Journey time Saving (seconds)	-55	-198	-242	-218
Journey Time Saving (%)	-8.0%	-26.0%	-22.6%	-25.5%

- 6.2. The above evidence shows that the scheme would significantly reduce journey times on the A386 route between the A38 Manadon Interchange and Roborough on the northern edge of the City. The corridor is busiest in the southbound direction in the AM Peak, and northbound in the PM Peak, with people travelling into and out of Plymouth to work. The scheme is forecast to reduce journey times by approximately 4mins in a southbound in the AM Peak (26%) and similar in a northbound direction in the PM peak (~25%).
- 6.3. A dependent development assessment has been carried out; this assessed the performance of the transport network with the WUE development in place, and with and without the proposed scheme. The assessment clearly demonstrates that if the WUE development was to come forward without the proposed scheme, the impact on the transport network would be severe, with extensive queuing on the northern corridor network and traffic having difficulty exiting the WUE development site. The assessment with the proposed scheme shows that the network is forecast to operate much more effectively, with the

- Woolwell junction operating within capacity. This clearly demonstrates the improvement the scheme would provide, and that it would directly unlock the WUE development site.
- 6.4. This is consistent with the position that is set out in the Plymouth and South West Devon Joint Local Plan which clearly states in Policy PLY44 that 'Provision is made for in the order of 2,000 new homes (about 1,880 of which are anticipated to come forward within the plan period), with none occupied until the A386 Woolwell to the George Junction Transport Scheme has been implemented.'

### 7.0 Alternative Options Considered and Rejected

- 7.1. In reaching the preferred option as presented in this report, a number of options have been developed before ultimately being dismissed for a variety of reasons.
- Do Nothing. This was rejected as this section on the A386 is a notorious congestion hot spot and without intervention will mean that the planned development identified in the Plymouth and South West Devon Joint Local Plan will not be able to come forward.
- Lengthen the existing north and south bound merges. This option was rejected as although some improvements resulted, it did not provide the scale of intervention required to remove existing congestion and to allow the future growth of the north of Plymouth.
- Widen to support one additional tidal flow lane. This option was rejected as although some improvements resulted, it did not provide the scale of intervention required to remove existing congestion and to allow the future growth of the north of Plymouth.
- Reduce cycle provision. This was rejected as, although this would have reduced the width of the scheme, the inclusion of walking and cycling facilities are as integral to the scheme as providing additional road capacity for buses, cars, HGV's and motorcyclists. It would also not be consistent with local policy contained in the JLP or national policy and guidance to encourage a move towards more active travel and away from car based trips.
- Retain Woolwell Roundabout with northbound pre-signal and extended merge lengths. This was dismissed as although it presented some improvements for the southbound traffic particularly, additional northbound delays were incurred and with southbound traffic flowing better, this resulted in even greater difficulty for vehicles to exit Woolwell Road onto the roundabout.
- Provision of additional Bus lanes. This was rejected as providing bus lanes on their own meant that buses were still held up in queues away from the scheme areas meaning they could not reach the bus lanes to gain the benefit and providing bus lanes in addition to widening for general traffic meant that buses would not gain priority over queuing traffic as the queue had dissipated.
- Queue Relocation. This option provided new traffic signals to the north of Woolwell Roundabout in an attempt to slowly release traffic towards Woolwell Roundabout to keep it freer flowing. This was dismissed as it produced a major deterioration in the whole network.
- George Park and Ride Exit Right Turn Ban. This was dismissed as all northbound traffic would have to leave via the southern exit and onto Morgan Road. This was found to add significant pressure to the Morgan Road arm of the junction and resulted in a worsening of the performance of the George Junction.
- 7.2. The consideration of alternative options have ultimately led to the preferred option being developed with many aspects of good performing areas of other options being brought in the preferred option to optimise the scheme.

#### 8.0 Planning Permission

- 8.1. It is anticipated that the scheme will be able to be delivered through the Council's Permitted Development rights as the Local Highway Authority.
- 8.2. Class A, Part 9, Schedule 2 of the Town and Country Planning (General Permitted Development) (England) Order 2015, permits the carrying out by a local Highway Authority of works required for or incidental to the maintenance or improvement of highway on land outside but adjoining the boundary of an existing highway or on land within the boundaries of a road that would involve development by virtue of section 55(2)(b) of the Act.
- 8.3. The appropriateness of the Council's Permitted Development rights will be confirmed in the next scheme development stage following an EIA Screening Assessment to determine if the scheme is EIA development and therefore if Permitted Development rights would or would not apply.

#### 9.0 Financial Implications

9.1. The total cost for the WTTG project, including land acquisition, demolition and environmental mitigation now stands at £41,841,475, as shown in Table 4. This figure includes an allowance for disturbance and compensation costs associated with the acquisition of third party land and is calculated from the total of the three phases of the scheme shown below in Tables 1 to 3.

Phase 1: Woolwell Crescent and Walking and cycle elements (£5,000,000)

	Previous Spend (2016-21)	2021/22	2022/23	2023/24	2024/25	2025/26	Overall Total (Incl. previous Spend)
Local Authority Corporate Borrowing	£0	£0	£0	£0	£0	£0	£0
DfT Transforming Cities Fund (TCF) (Secured)	£0	£851,000	£4,149,000	£0	£0	£0	£5,000,000
Phase I Total	£0	£851,000	£4,400,854	£0	£0	£0	£5,000,000

Table I WTTG Phase: Woolwell Crescent Funding

# Phase 2: George Park and Ride extension (£11,188,067)

9.2. This is proposed to be entirely funded through the Government's Levelling Up Fund. The successful outcome of this bid was announced on 27<sup>th</sup> October. If, however, the funding is not secured for any reason then this phase of the scheme will be separated from the WTTG project for the time being whilst alternative funding options are explored.

Previous Spend (2016-21)	2021/22	2022/23	2023/24	2024/25	2025/26	Overall Total (Incl. previous Spend)
--------------------------------	---------	---------	---------	---------	---------	--------------------------------------

Local Authority Corporate Borrowing	£0	£0	£0	£0	£0	£0	£0
DfT LUF (Unsecured)	£0	£230,426	£6,682,670	£4,274,971	£0	£0	£11,188,067
Phase 2 Total	£0	£23,426	£6,682,670	£4,274,971	£0	£0	£11,188,067

Table 2 WTTG Phase 2 P&R Extension Funding

## Phase 3: Tavistock Road A386 / Woolwell Road (£25,653,408)

- 9.3. Phase 3 is funded by a number of different sources:
- £3,340,000 Local Authority Corporate Borrowing has already been allocated to developing the Scheme to date and placed on the capital programme between 2016/17 and 2021/22;
- £7,270,565 is to be funded through Local Authority Corporate Borrowing / Ring-fenced Land Receipts;
- £5,000,000 Developer Contributions has been identified as being the minimum required for the Scheme;
- £552,000 is to be allocated to the Scheme from PCC's Integrated Transport Grant funding;
- £755,000 has been estimated that upon completion, residual land and property no longer required for the Scheme can be resold; and
- £8,735,843 was requested in the bid submission to the Government's "Levelling Up Fund towards Phase 3 of the Scheme. If this funding is not secured for any reason then this is to be underwritten by Local Authority Corporate Borrowing.

	Previous Spend (2016-21)	2021/22	2022/23	2023/24	2024/25	2025/26	Overall Total (Incl. previous Spend)
Local Authority Corporate Borrowing (Secured)	£2,514,981	£825,019					£3,340,000
Local Authority Corporate Borrowing / Ring-fenced Land Receipts					£7,270,565		£7,270,565
DfT LUF (underwritten by Local Authority Corporate Borrowing)		£249,886	£1,800,854	£6,685,103			£8,735,843
S106 (Underwritten by Local Authority Corporate Borrowing)			£2,048,000	£2,150,00	£802,000		£5,000,000
PCC Integrated Block			£552,000				£552,000

PCC Capital Receipts income from Residual Land (after completion)						£755,000	£755,000
<b>D</b> :	62.514.001	(1.074.005	64 400 0F4	(0.035.103	(0.072.5/5	(755.000	(25 (52 400
Project Funding Total	£2,514,981	£1,074,905	£4,400,854	£8,835,103	£8,072,565	£755,000	£25,653,408

Table 3 WTTG Phase 3 Funding Breakdown (not including TCF phase I or P&R Extension)

# 9.4. The funding breakdown for the full project package is as follows:

	Previous Spend (2016-21)	2021/22	2022/23	2023/24	2024/25	2025/26	Overall Total (Incl. previous Spend)
Local Authority Corporate Borrowing	£2,514,981	£825,019					£3,340,000
(Secured)							
Local Authority Corporate Borrowing / Ring-fenced Land Receipts					£7,270,565		£7,270,565
S106 (Underwritten by Local Authority Corporate Borrowing)			£2,048,000	£2,150,00	£802,000		£5,000,000
PCC Integrated Block			£552,000				£552,000
PCC Capital Receipts from Residual Land (after completion)						£755,000	£755,000
DfT Transforming Cities Fund (TCF)	£0	£851,000	£4,149,000	£0	£0	£0	£5,000,000
(Secured)		4000 40 :	44 400 455	4407407	1.0	100	444 444 444
DfT LUF (Unsecured)	£0	£230,426	£6,682,670	£4,274,971	£0	£0	£11,188,067
DfT LUF		£249,886	£1,800,854	£6,685,103			£8,735,843

Project Funding Total	£2,514,981	£2,156,331	£15,232,524	£13,110,074	£8,072,565	£755,000	£41,841,475
(underwritten by Local Authority Corporate Borrowing)							

Table 4 WTTG Full Package Funding Breakdown

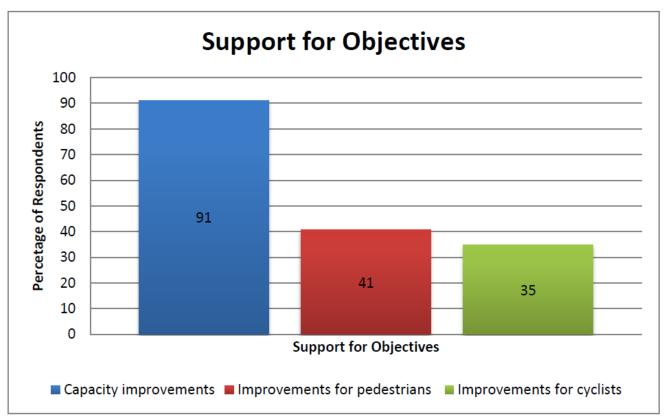
9.5. The Council will continue to work with partners and neighbours to seek any other available forms of funding that could be drawn upon to support the scheme.

# 10.0 Working With Nature

- 10.1. The scheme will work with, rather than against nature. Ensuring any natural environment loss is more than compensated for is a key factor in the scheme design.
- 10.2. The WTTG scheme will not only facilitate growth in housing, employment and retail in the north of the city but will also seek to achieve a net increase of biodiversity of 10% for the project relative to before works started.
- 10.3. The scheme will have a qualified environmental team who will be on hand during construction to safeguard wildlife and protected species during the site preparation works and to monitor as the scheme progresses through to completion.

#### 11.0 Stakeholder Support

- 11.1. The scheme is included within the JLP, which has been through a full consultation process. Early public consultation was undertaken on the scheme in 2017.
- 11.2. The scheme is recognised as being essential by Highways England, due to the relief the scheme would provide to the A38 and key junctions through Plymouth.
- II.3. Letters of support for the scheme have been received from local MPs, Heart of the South West Local Enterprise Partnership, Homes England and public transport providers.
- 11.4. A public consultation was carried out in October/November 2017 on improvements to this section of the northern corridor. In total 9,000 letters were sent to residents and businesses in the local area and a total of 591 responses were received, equating to a 6% response rate. During the first two weeks of the consultation, three separate exhibition events were held close to the scheme area. 82% of respondents reported that they travel through the scheme area most days. The consultation received overwhelming support for the proposed dual carriageway with 80% of respondents in favour of the proposal. 42% of respondents were in preferred the signal junction while 58% preferred the roundabout to be maintained. 48% of respondents supported a lower speed limit with 52% did not.



- 11.5. Since the 2017 consultation, the scheme has been refined leading to the development of the proposed preferred option. This preferred option includes the popular dual carriageway and also the signalised junction which performs better than a roundabout at this location
- 11.6. A second public consultation was undertaken in August and September 2021 to feedback to the public and identify the preferred option to be taken forward.
- 11.7. Further community and stakeholder engagement events took place in August/September 2021 and will continue throughout the project.