

Appendix 2 Public Transport Strategy

Northampton Gateway Strategic Rail Freight Interchange Public Transport Strategy

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Produced by:



For:



Contact:

Tim Edwards

Integrated Transport Planning Ltd.
Cornwall Buildings
45 Newhall Street
Birmingham, B3 3QR
UNITED KINGDOM

T 0121 213 4725
edwards@itpworld.net
www.itpworld.net

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| Project Director | Jamie Wheway |
| Project Manager | Tim Edwards |
| Quality Manager | Jon Parker |
| Additional Team Members | Stephanie Norris, Rachel Tate, Emma Taylor |
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Table of Acronyms and Abbreviations

| | |
|-----|------------------------------------|
| DfT | Department for Transport |
| ITP | Integrated Transport Planning Ltd. |
| NCC | Northamptonshire County Council |

| | |
|--------|--|
| NGSRFI | Northampton Gateway Strategic Rail Freight Interchange |
| SRFI | Strategic Rail Freight Interchange |
| TPC | Travel Plan Coordinator |
| UTPC | Unit Travel Plan Coordinator |

1. Introduction

- 1.1 This report sets out the proposed Public Transport Strategy to support the development of the Northampton Gateway Strategic Rail Freight Interchange (NGSRFI).
- 1.2 At the heart of the development is the aim to be sustainable; economically, environmentally and socially - public transport has a key role to play in this, helping to create high quality and sustainable employment opportunities. This document outlines the principles that will govern the Public Transport Strategy and provides a framework for the future development of the public transport network serving the site, maximising the potential for buses to draw users away from the private car.
- 1.3 The strategy focuses specifically on local bus access, but is closely linked to the Transport Assessment and Framework Travel Plan which, when combined, fully consider the travel and transport implications of the development.

Background to the Strategy

- 1.4 The strategy has been developed in several stages, and considers:
 - The proposed development, its character and potential travel demands (chapter 2)
 - Relevant local and national policy that will guide the core principles of the strategy (chapter 3)
 - Current public transport provision in the area, assessing the network and its strengths and weaknesses (chapter 4)
 - An assessment of potential travel demands using geographic and socio-demographic assessment of future employees (chapter 5)
 - The development of options for the site, through stakeholder engagement (chapter 6)
 - The development of a preferred strategy (chapter 7) and its expected impacts (chapter 8)

2. Proposed Development

- 2.1 Northampton Gateway is a large scale SRFI located south of Northampton, to the south-west of Junction 15 of the M1. The application is for 468,000 sqm of B8 warehousing for storage or distribution. The site is located on land south-west of the M1, bordered on the west by the Northampton Loop railway, and to the east by the A508, as shown in Figure 2.1.

Figure 2-1: NGSRFI site location



- 2.2 The site currently comprises agricultural land, the proposed development will consist of:
- An intermodal freight terminal including container storage and HGV parking, with new rail sidings within the site to serve individual warehouses;
 - Capability to provide a 'rapid rail freight' facility as part of the intermodal freight terminal; and
 - Up to 468,000 sqm of B8 warehousing (with a mezzanine of 155,000sqm providing additional floor space)

- 2.3 Figure 2.2 shows the proposed site masterplan. Access to the development by vehicles will be from one key entrance, along the A508, via a new roundabout. Pedestrian and cycle access will be available at this point, as well as via the Right of Way to the north of the site, utilising the existing M1 pedestrian crossing.
- 2.4 Additional large-scale development works associated with the site include:
- New road infrastructure and works to the existing road network, including provision of a new bypass to the village of Roade, and substantial improvements to Junction 15 of the M1;
 - Strategic landscaping and tree planting, including diverted public rights of way;
 - Earthworks and demolition of existing structures on-site; and
 - Minor improvement works to junctions surrounding the site, including to Junction 15a of the M1.

Opening Year

- 2.5 The proposed opening year of the development is 2021, with an anticipated build out period of five years (roughly 100,000 sqm per year).

Workers and Shift Type

- 2.6 There will likely be in the region of 7,500¹ full time equivalent employees associated with the final development, with a further 90 required to operate the rail terminal and rapid rail freight facility.
- 2.7 In line with other similar rail freight interchanges it is assumed that the final development will operate predominantly on a three shifts basis, 7 days a week, as follows:
- 06:00 – 14:00
 - 14:00 – 22:00
 - 22:00 – 06:00
- 2.8 In addition to this, the site will also include office and administration employment which will operate more traditionally between 09:00 – 17:30. Ninety-five percent of the site development will be for warehousing, with five percent allotted for offices. It is expected that in the first 2 years of development, the shift patterns will be 24/7,

¹ based on 1 employee per 77sqm, there will be 7,457 full time equivalent employees

working three shifts over a 24hour period on a Monday-Saturday, with limited Sunday access.

- 2.9 A phased approach to developing the public transport network around the site will be important, with flexibility to allow for the most appropriate public transport solution at each stage of the build.

Figure 2-2: NGSRFI Masterplan layout



3. Relevant Policy and Plans

- 3.1 Both local and national policy recognises the importance of promoting sustainable transport to new developments. This strategy has been developed to be consistent with these policies, guided by the principles and priorities set out in Northamptonshire's Transportation Plan and daughter documents.

The National Policy Statement for National Network

- 3.2 The National Policy Statement for National Network (NPSNN) provides planning guidance for promoters of nationally significant infrastructure projects on the road and rail networks – and will be used by the Secretary of State as the primary basis for making decisions on development consent applications for Nationally Significant Infrastructure Projects (NSIPs) in England.
- 3.3 In line with other Government policies, NPSNN seeks to encourage sustainable transport modes including public transport, cycling and walking. Specifically, regarding SRFI's, it states:

...Where appropriate, the applicant should prepare a travel plan including management measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport and sustainable modes where relevant, to reduce the need for any parking associated with the proposal and to mitigate transport impacts...

National Planning Policy Framework

- 3.4 One of the key planning principles set out in The National Planning Policy Framework (NPPF) states that planning should actively manage patterns of growth to make the fullest possible use of public transport. The NPPF promotes sustainable transport and states that plans should protect and exploit opportunities for the use of sustainable transport modes. Paragraph 35 specifically states:

...developments should be located and designed where practical to ... give priority to pedestrian and cycle movements, and have access to high quality public transport facilities.

- 3.5 NGSRFI helps to meet the policy objectives set out both in the NPSNN and NPPF by assessing and linking, where possible, with the current bus network and making best use of existing transport facilities. In addition to this, it presents options for new services and enhancements that, in the longer term, will be delivered commercially. This will ensure that employees have good access to sustainable travel modes, and will bring additional benefits to the communities that the improved services travel through.

Northamptonshire Transportation Plan

- 3.6 The Northamptonshire's Transportation Plan is the overarching strategy that sets out the County Council's strategic transportation aims and goals for the county. One of these goals is to 'ensure that all new developments are well connected by public transport' and supports more people to use public transport as part of their daily journeys (Strategic Policy 3).

It is envisaged that effective and attractive travel options will help to achieve the council's target of 20% reduction in single occupancy car journeys to work from new development (Strategic Policy 2).

- 3.7 One of the challenges identified in Strategic Policy 4 is limiting continuing congestion and journey time issues throughout the County. The Council envisage that this can be addressed by improving the operational efficiency of the transport system, and through encouraging people to change their travel behaviour.
- 3.8 NGSRFI assists in meeting the goal and challenges outlined above by proposing a strategic and tailored bus network to the development site. This will encourage employees travelling to the site to use public transport as part of their daily journey.
- 3.9 A series of separate daughter documents have been developed to support Northamptonshire's Transportation Plan. These include more detailed thematic strategies and plans for specific modes and areas. In this context the following daughter documents are relevant to the Public Transport Strategy:
- Northamptonshire Bus Strategy
 - Northamptonshire Smarter Travel Choices Strategy

Northamptonshire Bus Strategy

- 3.10 The Bus Strategy aims to 'increase the attractiveness of bus travel' by providing high quality bus services to encourage modal shift and lower car dependency, reduce traffic

on the network and associated emissions. One of the catalysts identified to increase patronage is to deliver attractive, reliable and punctual bus services.

- 3.11 Fundamentally, the Strategy states that new developments should provide a high-quality bus service from first occupation. The Bus Strategy states that:

...in line with the 20% mode-shift target, but having regard to a minimum 10 passengers needed to make a journey reasonably viable, a threshold of 50 employees starting or finishing work within a 15-minute window will be that which requires the funding of a journey to the nearest town centre, where an existing journey is not available within 30 minutes before the start of shift, or within 30 minutes of the end of shift. Experience has shown that such services have proven to become highly popular

- 3.12 The NGSRFI is required to mitigate the impact of their own proposals, and is expected to fund any new bus-related infrastructure required to improve access to the development. This can take the form of new services, service diversions, extensions or additional frequencies until the service is commercially sustainable. In addition to this road layouts within the new development must be suitable for accommodating larger vehicles (Policy BUS 20). The majority of the development is required to be within a safe 400m walk route of a bus stop regularly serving nearby centres. To achieve an increase in patronage Policy BUS 19 recommends that bus stops are within a 250m walk distance. The council's specific expectations are outlined in Appendix A.

Northamptonshire Smarter Travel Choices Strategy

- 3.13 The Smarter Travel Choices Strategy outlines soft measures which seek to encourage people to choose sustainable travel and plays an integral role within Northamptonshire's Transportation Plan, complementing the hard policies and infrastructure improvements outlined.
- 3.14 The policies set out in the Bus Strategy are supported by Smarter Travel Choices Policies 8 & 9 and seek to promote promotion and ticketing options. A toolkit of measures for delivering smarter travel choices in new developments will also incorporate personalised travel planning (Smarter Travel Choices Policy 6).
- 3.15 The strategy has been developed to be consistent and complementary to the principles and priorities highlighted above

4. Current Public Transport Provision

- 4.1 Figure 4.1 and 4.3 summarise the existing public transport provision near the proposed development site. The services highlighted in blue are those which currently pass immediately in front of the proposed NGSRFI access junction; table 4.2 provides example fare prices for these services to the closest relevant fare zone.

Figure 4-1: Current bus services surrounding the NGSRFI²

| Bus Service | Bus Operator | Route | Day Time Frequency | | |
|-------------|---------------------|---|--------------------|------------------|------------|
| | | | Mon - Fri | Sat | Sun |
| 7 | Stagecoach Midlands | Grange Park - Wootton - London Road - Town Centre - Northampton College - Churchill Avenue - Moulton Park | 30 mins | 30 mins | 60 mins |
| 86 | Uno Buses | Towcester - Roade - Northampton | 2 hours | 2 hours | No service |
| 88 | Stagecoach Midlands | Northampton – Swan Valley - Towcester | 60 mins | 60 mins | 90 mins |
| 89 | Stagecoach Midlands | Northampton - Bilsworth - Towcester - deanshanger - Milton Keynes | 6 services a day | 6 services a day | No service |
| 33A / 33 | Z & S Transport | Northampton - Hartwell - Hanslope - Woverton - Central Milton Keynes | 60 mins | 60 mins | No service |
| x4 | Stagecoach Midlands | Peterborough - Oundle - Corby - Kettering - Wellingborough - Earls Barton - Northampton - Milton Keynes | 60 mins | 60 mins | 2 hours |
| X7 | Stagecoach Midlands | Milton Keynes - Northampton - Brixworth - Market Harborough - Leicester | 60 mins | 60 mins | 2 hours |
| X89 | Stagecoach Midlands | Milton Keynes - Deanshanger - Towcester - Bilsworth - Northampton | 60 mins | 60 mins | no service |

² CORRECT AS OF FEB 2018

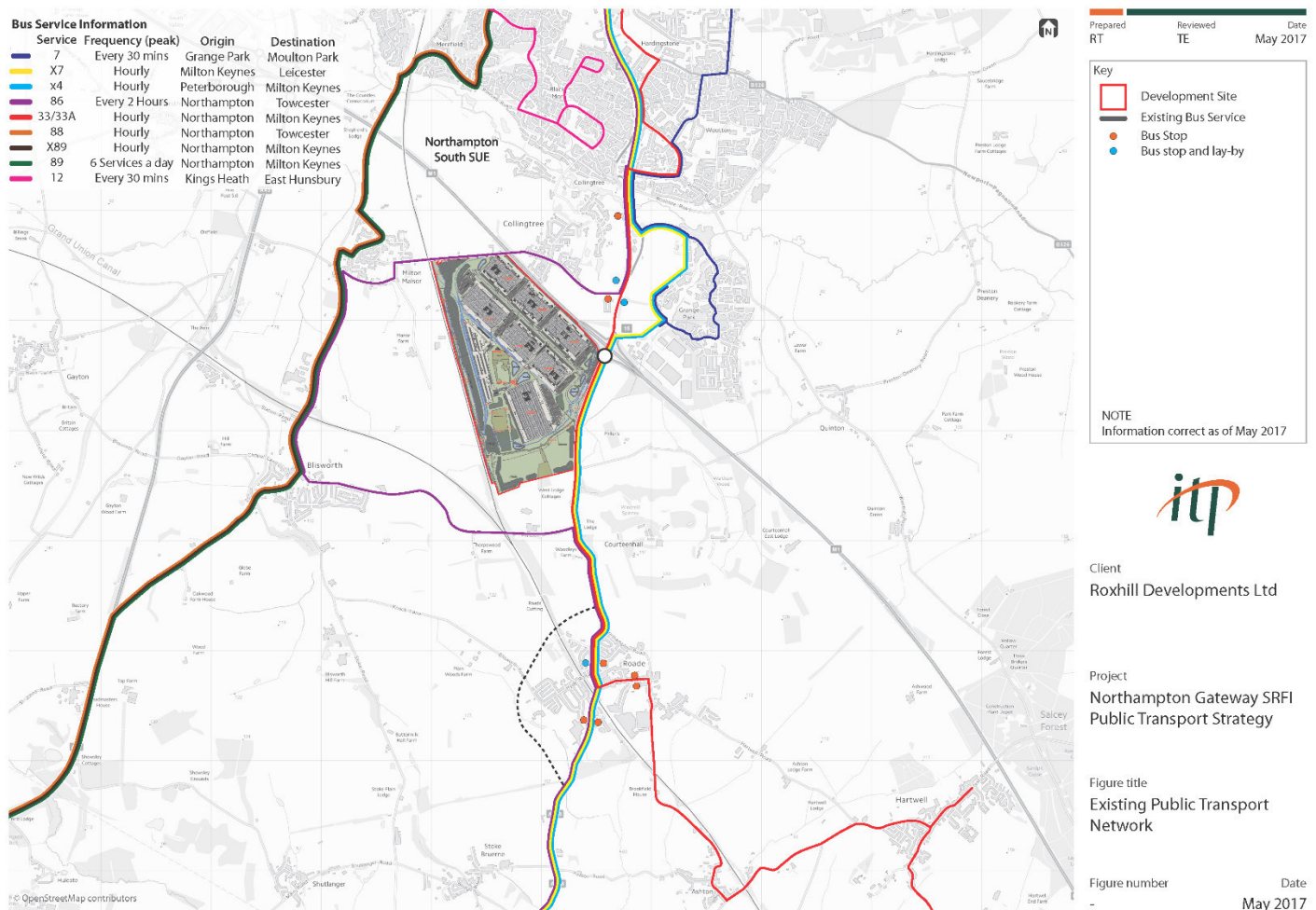
Figure 4-2: Example fares on main buses around the NGSRFI

| Service | Operator | From | To | Single | Return |
|---------|------------|---------------|----------------------------|--------|--------|
| X7 | Stagecoach | Northampton | Northampton Road, Roade | £ 3.80 | £ 6.40 |
| | | Milton Keynes | | £ 4.30 | £ 7.25 |
| X4 | Stagecoach | Northampton | Northampton Road, Roade | £ 3.80 | £ 6.40 |
| | | Milton Keynes | | £ 4.30 | £ 7.25 |

CORRECT AS OF FEB 18

- 4.2 At present, the site has limited accessibility by bus, with service 33/33a, X4 and X7 operating along the A508 and by the proposed site entrance. The X4 and X7 are both express limited-stop services, with a combined 30minute frequency; the nearest stop to the site is north of Roade - they begin operation just after 0630 and finish before 2100. The 33/33A is a frequent stop service that runs hourly (combined) between 0900 and 1800, serving stops to the south of the site by Courteenhall Road.
- 4.3 This means that there are no services operating by the site at 0600 and 2200; likely shift change times for the new development. Accessibility is better during the day and travel time less than 30min to Northampton Town Centre but, in line with the Northampton Bus Strategy requirements, an hourly service will not be adequate to meet the needs of employees and make public transport an attractive alternative to the private car.
- 4.4 In terms of ticketing, the site location falls outside of the Buzzcard Multi-Operator Ticket boundary. The site currently sits within Stagecoach's dayrider and megarider 'plus' zones.

Figure 4-3: Current public transport provision surrounding the NGSRFI



Access by Rail

- 4.5 Northampton Rail station sits just over 5 miles to the North of the development site; on the Northampton Loop of the West Coast Main Line - offering direct trains to both Birmingham and London.
- 4.6 Direct trains to local stations such as Long Buckley, Rugby and Milton Keynes are available from 0600 until after 2300 on weekdays. The rail station is within 30 minutes cycle time of the NGSRFI, with good access to the local cycle network.

5. Potential Travel Demand

- 5.1 As we develop the Public Transport Strategy, it is vital that we consider where potential employees are likely to travel from, and how. As the development site is currently agricultural land a comparator site, with similar characteristics to the proposed NGSRFI, has been considered.
- 5.2 Swan Valley in Northamptonshire has been used as a comparator site for the purposes of both the Transport Assessment, Public Transport Strategy and Framework Travel Plan because:
- The site is located on the A43 adjacent to M1 Junction 15a and is therefore similar to the proposed Northampton Gateway SRFI site in terms of location
 - Daily survey data is available for October 2007, which pre-dated the economic recession
 - It includes several large scale warehouses, which at the time of the survey comprised nearly 1.5 million sqft GFA. It is the largest site locally for which survey data is available, and has a similar percentage of ancillary office space to that proposed at NGSRFI
 - It has an employee density of 1 employee per 77sqm, which matches the 2010 Prologis survey of typical B8 users, as supported by the HCA data for regional distribution centres
 - The majority of units at the site operate a three-shift system (6 – 2 – 10).

Comparator site – Swan Valley

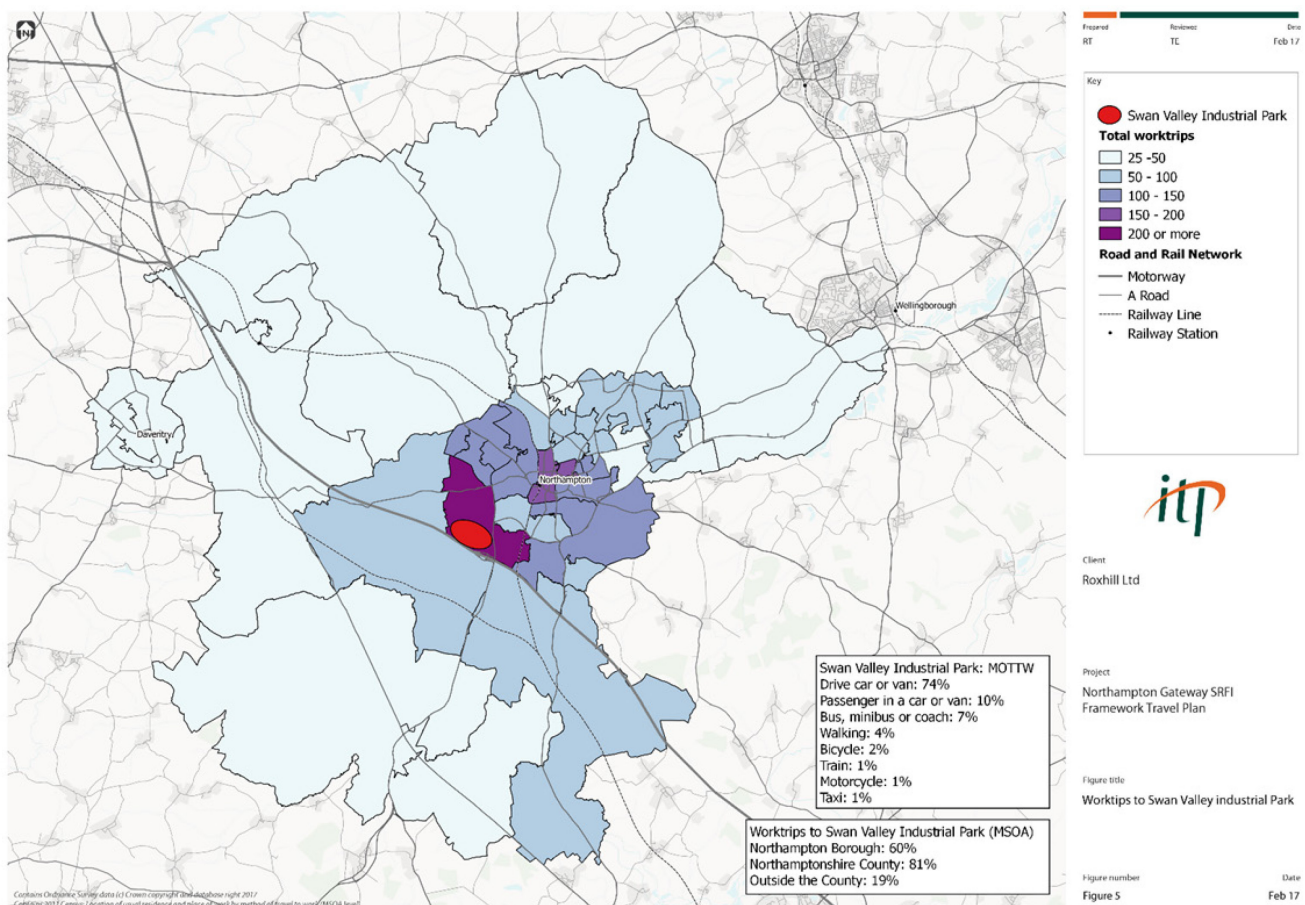
2007 Daily Survey

- 5.3 Daily survey data collected in 2007 for Swan Valley, at a time when the site had no bus service and low pedestrian and cycle usage, indicated that 92% of users travelled by single occupancy vehicle, with car passenger modal share being 5%.
- 5.4 In the absence of site-specific baseline travel data for the NGSRFI, proxy mode split targets have been taken from Swan Valley; a SOV rate of 92% has been assumed for the opening year of the development, with the aim that this should reduce by 20% (to 73.6%) by the end of the investment period, as required by NCC's Transportation Plan.

Travel to Work, Census 2011

- 5.5 Drawing upon additional evidence from Swan Valley, the Census 2011 data for ‘method of travel to work’ has been analysed to understand the mode split for the site four years after first occupation. This analysis (Figure 4) showed that 74% of people travel by SOV, 10% by car share, 7% by bus or coach, 4% by foot, 2% by cycle, 1% by train, 1% by motorbike and 1% by taxi. This change in behaviour is a positive indication that with the right measures, employee travel patterns can be shifted to more sustainable modes.
- 5.6 The census data also shows that 60% of those travelling to Swan Valley for employment came from Northampton Borough, and 81% of employee trips originated within the County. This data suggests that the majority of the work force will be drawn from Northampton itself, and so the strategy should look to improve accessibility to the town centre as the main priority.

Figure 5-1: Worktrips to Swan Valley comparator site



Developing Modal Shift Targets

- 5.7 It is important to note that within the Transport Assessment a worst-case scenario has been modelled, that assumes virtually no public transport use. Whilst this provides a robust position for assessment of the highway capacity, it is not representative of likely public transport mode share based on the evidence of similar sites in Northampton, such as Swan Valley, and from Stakeholder comments (see next chapter).
- 5.8 Based on the review of Swan Valley Census data, modal shift targets have been developed for NGSRFI, and are detailed within the Framework Travel Plan. As the development site is slightly further from the Town Centre, we recognise that there is likely to be less walking and cycling than is occurring at Swan Valley, and that travel by bus and car-share will be more prominent. For the Public Transport Strategy, we have set a target of **10%** of staff to arrive by bus.

Figure 5-2: Modal shift targets for the NGSRFI

| | Swan Valley 2007 (baseline SOV for NGSRFI) | Swan Valley 2011 (MSOA) | NGSRFI Target Modal Split |
|-----------------------------|--|----------------------------|------------------------------|
| Single Occupancy Vehicle | 92% | 74% | 74% |
| Car passenger | 5% | 10% | 12% |
| Bus | 0% | 7% | 10% |
| Walking | 3% | 4% | 4% |
| Cycling | | 2% | |

6. The Development of Options (Stakeholder Consultation)

- 6.1 In developing the Public Transport Strategy, we have met, or discussed with, several stakeholders including Northamptonshire County Council (Northamptonshire Highways officers) along with the main local bus operator (Stagecoach). We also provided regular updates on the emerging Public Transport Strategy at the NGSRFI transport-working group (which includes representatives from the County Council and Highways England).
- 6.2 Initial discussions with both the Council and operator took place at an early stage in the development of the strategy, with the aim of understanding the local public transport network, its strengths and weaknesses and what opportunities there were in relation to the proposed development. Through these meetings high-level proposals were considered including:
- Diverting X4 and X7 to serve the site, extending the hours of operation
 - New bespoke bus service for core shift change times: from the town centre, possibly traveling through local housing estates on route to the site
 - Extend existing Service 7 – to provide a 30 minute frequent in the daytime (nominally 0630 to 1930 hours) Monday to Saturday service, and hourly Sunday service
 - New bus stops on the A508 for the X4 and X7 Services
- 6.3 Subsequent meetings with both sets of stakeholders sought to refine and define an appropriate and robust approach to planning the future public transport network and establishing key principles.
- 6.4 Some of the key points to come from the discussions that have helped guide the development of the strategy include:
- To divert the X4 and X7 into the site would require additional headway, which the services currently don't have. They are also 'express' services, entering the site would defeat their purpose
 - The strategy needs to be meet the expectations set out in the Northamptonshire Bus Strategy (see Appendix A)
 - All bus stops need infrastructure in line with County guidance (see Appendix A)
 - Experience has shown that direct services, aimed at shift change-over times, have proven to become highly popular and can quickly become commercial. A slower service that travels through the housing estates of south Northampton would be

less attractive. A direct service from the town centre, with a maximum travel time of 30mins is likely to be the most viable.

- Bus services can be contracted through Service Level Agreements or more formal contract arrangements, either privately or through the County, depending on which best suits the needs of the development. Where there are contracts, it is important that the County are included in discussions, even if they are not directly administering the contract.
- The end occupier's requirements, in terms of staffing levels and shift patterns, are unknown at present so a phased and flexible approach to developing public transport to the site is important
- Public transport is most attractive when it is direct and with a regular timetable
- For public transport to be attractive, provision needs to be in place at first occupation
- Where a journey has been provided to get employees to work for the start of the shift, there needs to be a return journey available at end of shift
- ***Flexibility in the strategy is important due the rapidly changing landscape of the area***
- The development will need to focus on maximising bus use and car sharing to be sustainable. However, walking and cycling still have an important part to play in the sustainable transport offer, if the links are good enough.
- There has been success in the past linking with companies like LiftShare, who do consider and promote public transport as part of their wider offer. ***A partnership approach to the transport delivery would hold many benefits***
- There is often high congestion around junction 15 of the M1 at peak times, which will have an adverse effect on bus punctuality. Although in the longer term the M1 junction 15 improvements should alleviate this issue – there is the need to build in sufficient time within the bus timetable to keep to schedule
- Swan Valley has seen further public transport growth since the 2011 census, and it is estimated that bus mode share is now higher than 10%; there are three double decker buses serving the site before 0600 each morning – all are running commercially
- ***It is critical that there is a strong relationship with tenants; this is the key to understanding user needs and designing the transport network accordingly. The travel plan co-ordinator has an important part to play in the delivery of both the Public Transport Strategy and the Framework Travel Plan***
- It is important to offer meaningful incentives to staff – bulk buying tickets has proven to be popular in the past
- Where possible, branding raises awareness and improves the image of the bus service
- Shelters and RTI will need to be owned and maintained by the developer

- The site falls outside Stagecoach's main town zone, as well as the Buzz-card zone. Given the proximity to the current ticketing boundary, there may be opportunity to extend the current Buzz-card zone but this would need agreement with all operators who administer the Multi-Operator Ticket
- Fares need to be kept low, and similar to other industrial estates to be competitive and attractive

7. The Development of a Preferred Strategy

Overarching Aims and Principles

- 7.1 The overarching aim of the strategy is to ensure that:
- **The NGSRFI is well serviced by public transport so that employees have a reasonable alternative to the private car for their journey to work, when walking and cycling are not appropriate modes.**
- 7.2 Secondary to this; the provision to the site should be commercially **sustainable**, operating in the long term without subsidy to ensure that public transport continues to be a reasonable alternative to the private car beyond developer investment.
- 7.3 At its core, the strategy will be **responsive** to local needs, **evolving** the public transport offer as necessary. To achieve this, the strategy will work on the basis of **partnership** with the site Travel Plan co-ordinator working with tenants, councils, operators and other local businesses to ensure that public transport is co-ordinated appropriately.

Core Objectives

- 7.4 Guided by stakeholder discussion several key objectives have been defined to support the main aims:
- Public transport should be accessible within 400m walking distance maximum, preferably 250m
 - Access to public transport should be safe and comfortable – at all times of the day
 - Public transport should be accessible to all, including those with limited mobility
 - Public transport should be available at key times, reliable and of high quality
 - Public transport should have the capacity required at suitable times of day
 - Employees should have access to high quality and accurate public transport information to allow informed travel choices (through occupiers and their responsibilities through the Travel Plan)
 - Public transport should be relatively affordable and fares easy to understand

- Travel times should not be prohibitive to public transport use (as an alternative to the private car).
- 7.5 The main target associated with the aims and objectives is:
- 10% of staff working at the NGSRFI should use the bus as their primary mode of transport to and from the site, within 5 years of the site being fully open**
- 7.6 The aims and objectives of the strategy shall be met with the following measures.

Public Transport Strategy Measures

- 7.7 The Public Transport Strategy seeks to introduce a new bus service specifically for the NGSRFI, as well as providing additional infrastructure to link the site to the existing local bus network and measures to promote the use of public transport.
- 7.8 The main focus of the strategy will be as follows:
- 1) The development of a new express service from the NGSRFI to Northampton town centre and associated infrastructure
 - 2) New bus stops on the A508 connecting the site to the 33/33a, X4 and X7 Services
- 7.9 In addition to this a Sustainable Transport Working Group will be developed for the site. Led by the area-wide Travel Plan co-ordinator, and formed of key stakeholders (including NCC, public transport operators, car share providers, Highways England, Unit Travel Plan Coordinators etc.) the group will oversee the delivery of the Travel Plan and Public Transport Strategy.

Development of an Express Service

- 7.10 At the heart of the strategy is the development of a new bus service to serve the site. The service would offer direct access from the site to Northampton Town Centre. The most direct route would see the service following the A508/A45/A508 to The Drapery (or North Gate Bus Station). As well as serving the town centre, the service could also serve stops on London Road (A508). On site, the service would utilise the main site entrance on the A508, penetrate the site serving the proposed bus stops on the spine road and utilising the turning circle at the westerly end of the site. Given the proposed improvements at junction 15 of the M1, and associated travel time reductions, journey time from the site to the town centre is likely to be 20mins in the off-peak and 25minutes in the peak.

Developing the Service

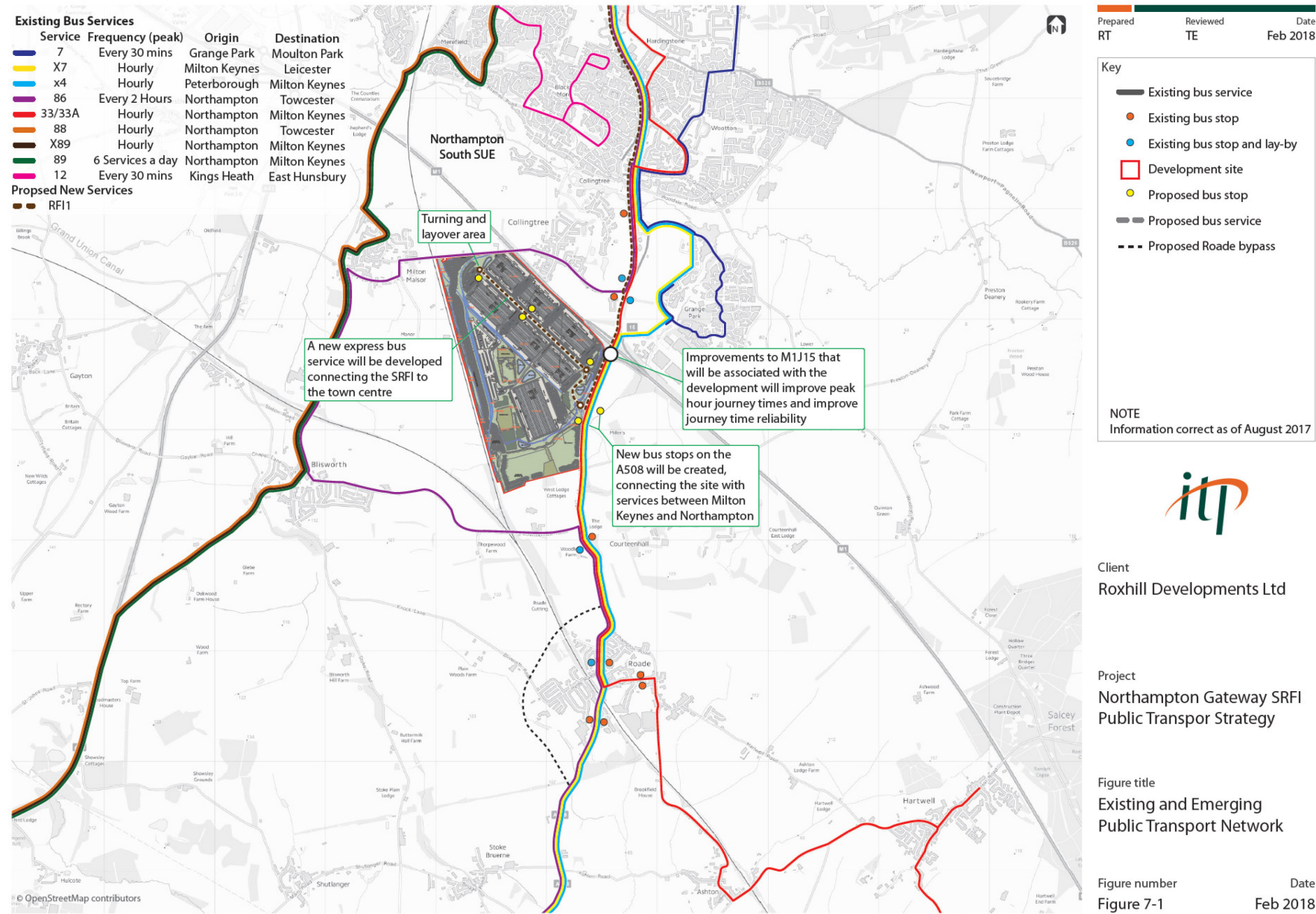
- 7.11 The bus service will be developed in line with Northamptonshire County Council's adopted Bus Strategy, with regard to the 10% mode target for bus outlined above. Given this, the trigger for providing a bus journey to the site is defined below, based on NCC guidelines:

A bus journey will be provided between the site and Northampton Town Centre when 100 employees or more start or finish work within a 15minute window (unless an existing journey is available within 30 minutes before the start of shift, or within 30 minutes of the end of shift)

- 7.12 The end occupiers shift patterns, employee numbers and site requirements are unknown at the planning stage, so the strategy needs to be flexible to actual need. Using this trigger ensures that the Public Transport Strategy can be responsive and can develop a bus network that is built around actual demand.
- 7.13 The Sustainable Transport Working Group should also seek to be pragmatic and proactive as the Public Transport Strategy is implemented, seeking opportunities to further develop the bus service wherever feasible. For example, the group could investigate opportunities to develop service frequencies in-between peaks or triggered journeys, to provide a more consistent and regular service throughout the day, when this can be provided at marginal short-term cost, or commercially.
- 7.14 Chapter 8 provides an indicative example of how the strategy could work, based on the predicted daily personal trip profile (as set out in technical note ADC1475 TN2v 4 Trip generation and included in Appendix D).

Connecting to the Existing Network

New bus stops and laybys will be created on the A508 either side of the new site entrance roundabout, providing access to the 33/33a, X4 and X7 Services (see figure 7.1). Appropriate signalised pedestrian-crossing points will be provided to allow safe walking access to the site.



Bus stop Infrastructure

- 7.15 As detailed in Figure 7.2, it is proposed that there are six new bus stops created as part of the development. Four are proposed within the site (numbered 1-4 on Figure 7.2) and two on the A508 adjacent and opposite the site entrance, for the 33/33A,X4 and X7 services (number 5-6 on Figure 7.2).
- 7.16 In line with the County Council guidance, these stops will have:
- A safe, paved waiting and alighting area incorporating a raised boarder of at least 4m to facilitate disabled and pushchair step-free access to the bus
 - A paved connection no less than 1.8m wide to an existing footway, or a dropped kerb crossing to a footway on the opposite carriageway
 - A “Trueform” Post and flag, with integral banner timetable case
- 7.17 It is proposed that stops 1, 4, 5 and 6 have shelters, these will be:
- of typical roof dimensions no less than 2m x 4m
 - in keeping with other local shelters, both in style and colour
 - have Real Time Information display - standard 3 line display
 - include additional street furniture and bins
 - include additional street lighting
- 7.18 These stops will also have dedicated laybys for buses.

Figure 7-1: Proposed internal bus stop placement



Accessing bus stops

- 7.19 Shared pavement runs along the length of the spine road, through to the main entrance. Each building has its own access road, which includes pedestrian footways. Although there are no signalised crossing points along the spine road, there are dropped kerb crossings at each exit/entrance to each unit to create safe pedestrian crossing points. Each unit is within 400m of a bus stop, with the majority within 250m.
- 7.20 To the north of the main entrance, along the A508, new signalised pedestrian crossings are proposed which would give safe access from the proposed south-bound bus stop and layby on the A508 (bus stop 5 on figure 7.2). These stops would mean that

employees working at Unit 7 (the sites largest unit) would be within 400m of existing services to and from Northampton and Milton Keynes between 0700 and 2000 Monday to Saturday.

Information / Promotion / Ticketing

7.21 In support of the proposed public transport developments, a Framework Travel Plan has been prepared which offers the following incentives to encourage the uptake of local public transport services.

- Taster bus ticket promotions.
- Promotion of area wide bus events / challenges.
- Appointment of a Travel Plan Coordinator
- Active dissemination of public transport information by Travel Plan Coordinator.
- Provision of a transport “Bulletin Board” at each employment unit within the site.
- Establishment of a Travel Plan Web Site for the SRFI, which will provide information on travel. Information on each mode will be up-dated by the Travel Plan Co-ordinator on a regular basis.
- Provision of travel information ‘Welcome Packs’ to all new businesses (and their employees).
- Regular newsletter to be distributed to all businesses at the site for first 10 years of development (from first occupation).
- Involvement in national travel related events (e.g. promotion of national liftshare week, bike week).
- High impact marketing campaign (in collaboration with the council).

7.22 Where routes are enabled with real time passenger information, this will be displayed at key bus stops. In addition, each of the individual units on site will offer information within their main reception areas, showing the departure times of the next services to leave the site, enabling them to plan their departure accordingly.

7.23 Daily, weekly, monthly and annual tickets will be available in accordance with current provision from operators, and the cost savings associated with the available options will be promoted to employees. There is an aspiration that the site will be included within the Buzzcard ticket zone, and Stagecoach’s Northampton Town Zone (if relevant) – however, this will depend on public transport usage over the first 3 years of the development and discussions between the Travel Plan co-ordinator and relevant parties.

Delivery / Management

- 7.24 The funding for public transport improvements set out within this strategy will be secured through the Development Consent Order. Delivery of the Public Transport Strategy will be managed by the site's Travel Plan co-ordinator, whose role on public transport will be:
- To administer the public transport actions within the travel plan, and report progress to local stakeholders via an annual report and regular working groups
 - To liaise with local bus operators, and ensure the network evolves to meet the on-going needs of NGSRFI.
 - To attend and contribute to local forums and partnership groups, seeking to develop public transport improvements and promotions which benefit NGSRFI, other local employers and the local community.
- 7.25 We would propose that, as it is a new service being created, the County Council would be best placed to procure the service and manage the contract. The detail of the contract, length and type should be decided by the Sustainable Transport Working Group under the guidance from the Bus and Rail team at NCC.
- 7.26 In line with NCC's adopted Bus Strategy, the NGSRFI Public Transport Strategy will be supported for a period of 5 years following completion of the site.

Development of a Sustainable Transport Working Group

- 7.27 It is recognised that the development of the site needs to be sustainable; economically, environmentally and socially. It is also recognised that the Travel Plan and supporting strategies need to be responsive to local need and flexible to future priorities and conditions.
- 7.28 A Sustainable Transport Working Group will be set up for the site, led by the area-wide Travel Plan co-ordinator, and formed of key stakeholders(i.e. NCC, public transport operators, car share providers, Highways England etc.) and potentially Unit Travel Plan Coordinators.
- 7.29 The Group will oversee the delivery of both the Public Transport Strategy and the Travel Plan. Meeting on a bi-annually basis, they would seek to understand usage, trends and future requirements and develop the public transport network to the site in

accordance with the Public Transport Strategy. The group would need to be pro-active, looking ahead at requirements and also reactive, refining the network when timings and routes need to be changed. The Group could develop ad hoc working groups where specific needs arise at certain times.

8. Expected Impacts

- 8.1 The end occupiers shift patterns, employee numbers and site requirements are unknown at the planning stage, so the strategy needs to be flexible to actual need.
- 8.2 This chapter provides an indicative example of how the new bus service could be developed, based on the predicted daily personal trip profile (as set out in ADC1475 TN2v 4 Trip generation, provided in Appendix D) and the agreed trigger of 100 people starting work within a 15 minute window outlined in Chapter 7.

Likely Trip Generation and Service Requirements

- 8.3 Tables 8.1 and 8.2 below (and in Appendix B), show the likely personal trips generated by the development site from first build, assuming a build-out rate of 20% per year.
- 8.4 The generated trips underpinning the Transport Assessment are provided as hourly totals. For the Public Transport Strategy, we must consider movements within a 15minute window. Evidence from traffic counts undertaken at Swan Valley in 2007 (the comparator site for the NGSRFI) show that for the most part trips are spread relatively equally across the hour, apart from when there is a key shift change when there is a spike in arrivals the 15minutes preceding the start of the shift, and departures following the end of shifts. To recognise that travel is not uniform across the day, the following assumptions have been made for the trip data:
- Before key shift change times (0600-1400-2200) all arrival trips will take place in one 15 minute window before the change in shift, rather than averaged over an hour.
 - After key shift change times (0600-1400-2200) all departure trips will take place in one 15 minute window after the change in shift, rather than averaged over an hour.
 - At all other times the hourly trips generated have been spread equally over the 15minute windows (25% of the hourly total each 15minutes)
- 8.5 Given the trigger that a bus journey will be provided between the site and Northampton Town Centre when 100 employees or more start or finish work within a 15minute window, at full occupation, it is likely that journeys will be required (on weekdays) to/from the site from:
- 0500 until 0900 and 1300 until 1900

- 8.6 It is unlikely that journeys will be triggered between 20:00 and 05:00, however there will be a need to provide journeys around 2200 shift change.

Figure 8-1: total development person trip arrivals per 15 minutes

| Arrivals | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|
| Timeband | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| 00:00-00:14 | 3 | 6 | 10 | 13 | 16 |
| 00:15-00:29 | 3 | 6 | 10 | 13 | 16 |
| 00:30-00:44 | 3 | 6 | 10 | 13 | 16 |
| 00:45-00:59 | 3 | 6 | 10 | 13 | 16 |
| 01:00-01:14 | 2 | 4 | 6 | 8 | 10 |
| 01:15-01:29 | 2 | 4 | 6 | 8 | 10 |
| 01:30-01:44 | 2 | 4 | 6 | 8 | 10 |
| 01:45-01:59 | 2 | 4 | 6 | 8 | 10 |
| 02:00-02:14 | 1 | 3 | 4 | 5 | 7 |
| 02:15-02:29 | 1 | 3 | 4 | 5 | 7 |
| 02:30-02:44 | 1 | 3 | 4 | 5 | 7 |
| 02:45-02:59 | 1 | 3 | 4 | 5 | 7 |
| 03:00-03:14 | 2 | 5 | 7 | 9 | 12 |
| 03:15-03:29 | 2 | 5 | 7 | 9 | 12 |
| 03:30-03:44 | 2 | 5 | 7 | 9 | 12 |
| 03:45-03:59 | 2 | 5 | 7 | 9 | 12 |
| 04:00-04:14 | 7 | 15 | 22 | 29 | 37 |
| 04:15-04:29 | 7 | 15 | 22 | 29 | 37 |
| 04:30-04:44 | 7 | 15 | 22 | 29 | 37 |
| 04:45-04:59 | 7 | 15 | 22 | 29 | 37 |
| 05:00-05:14 | 0 | 0 | 0 | 0 | 0 |
| 05:15-05:29 | 0 | 0 | 0 | 0 | 0 |
| 05:30-05:44 | 0 | 0 | 0 | 0 | 0 |
| 05:45-05:59 | 210 | 421 | 631 | 842 | 1,052 |
| 06:00-06:14 | 24 | 49 | 73 | 97 | 122 |
| 06:15-06:29 | 24 | 49 | 73 | 97 | 122 |
| 06:30-06:44 | 24 | 49 | 73 | 97 | 122 |
| 06:45-06:59 | 24 | 49 | 73 | 97 | 122 |
| 07:00-07:14 | 28 | 56 | 84 | 112 | 140 |
| 07:15-07:29 | 28 | 56 | 84 | 112 | 140 |
| 07:30-07:44 | 28 | 56 | 84 | 112 | 140 |
| 07:45-07:59 | 28 | 56 | 84 | 112 | 140 |
| 08:00-08:14 | 38 | 76 | 114 | 152 | 190 |
| 08:15-08:29 | 38 | 76 | 114 | 152 | 190 |
| 08:30-08:44 | 38 | 76 | 114 | 152 | 190 |
| 08:45-08:59 | 38 | 76 | 114 | 152 | 190 |
| 09:00-09:14 | 18 | 36 | 55 | 73 | 91 |
| 09:15-09:29 | 18 | 36 | 55 | 73 | 91 |
| 09:30-09:44 | 18 | 36 | 55 | 73 | 91 |
| 09:45-09:59 | 18 | 36 | 55 | 73 | 91 |
| 10:00-10:14 | 14 | 28 | 42 | 56 | 71 |
| 10:15-10:29 | 14 | 28 | 42 | 56 | 71 |
| 10:30-10:44 | 14 | 28 | 42 | 56 | 71 |
| 10:45-10:59 | 14 | 28 | 42 | 56 | 71 |
| 11:00-11:14 | 11 | 21 | 32 | 43 | 54 |
| 11:15-11:29 | 11 | 21 | 32 | 43 | 54 |
| 11:30-11:44 | 11 | 21 | 32 | 43 | 54 |
| 11:45-11:59 | 11 | 21 | 32 | 43 | 54 |
| <i>Green denotes times when the 100 person trigger has been met</i> | | | | | |

| Arrivals | | | | | |
|-----------------|---------------|---------------|---------------|---------------|---------------|
| Timeband | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| 12:00-12:14 | 16 | 31 | 47 | 62 | 78 |
| 12:15-12:29 | 16 | 31 | 47 | 62 | 78 |
| 12:30-12:44 | 16 | 31 | 47 | 62 | 78 |
| 12:45-12:59 | 16 | 31 | 47 | 62 | 78 |
| 13:00-13:14 | 0 | 0 | 0 | 0 | 0 |
| 13:15-13:29 | 0 | 0 | 0 | 0 | 0 |
| 13:30-13:44 | 0 | 0 | 0 | 0 | 0 |
| 13:45-13:59 | 107 | 215 | 322 | 430 | 537 |
| 14:00-14:14 | 12 | 25 | 37 | 49 | 62 |
| 14:15-14:29 | 12 | 25 | 37 | 49 | 62 |
| 14:30-14:44 | 12 | 25 | 37 | 49 | 62 |
| 14:45-14:59 | 12 | 25 | 37 | 49 | 62 |
| 15:00-15:14 | 7 | 14 | 21 | 28 | 35 |
| 15:15-15:29 | 7 | 14 | 21 | 28 | 35 |
| 15:30-15:44 | 7 | 14 | 21 | 28 | 35 |
| 15:45-15:59 | 7 | 14 | 21 | 28 | 35 |
| 16:00-16:14 | 9 | 18 | 27 | 36 | 46 |
| 16:15-16:29 | 9 | 18 | 27 | 36 | 46 |
| 16:30-16:44 | 9 | 18 | 27 | 36 | 46 |
| 16:45-16:59 | 9 | 18 | 27 | 36 | 46 |
| 17:00-17:14 | 13 | 25 | 38 | 50 | 63 |
| 17:15-17:29 | 13 | 25 | 38 | 50 | 63 |
| 17:30-17:44 | 13 | 25 | 38 | 50 | 63 |
| 17:45-17:59 | 13 | 25 | 38 | 50 | 63 |
| 18:00-18:14 | 28 | 56 | 84 | 112 | 140 |
| 18:15-18:29 | 28 | 56 | 84 | 112 | 140 |
| 18:30-18:44 | 28 | 56 | 84 | 112 | 140 |
| 18:45-18:59 | 28 | 56 | 84 | 112 | 140 |
| 19:00-19:14 | 4 | 8 | 12 | 16 | 21 |
| 19:15-19:29 | 4 | 8 | 12 | 16 | 21 |
| 19:30-19:44 | 4 | 8 | 12 | 16 | 21 |
| 19:45-19:59 | 4 | 8 | 12 | 16 | 21 |
| 20:00-20:14 | 5 | 10 | 14 | 19 | 24 |
| 20:15-20:29 | 5 | 10 | 14 | 19 | 24 |
| 20:30-20:44 | 5 | 10 | 14 | 19 | 24 |
| 20:45-20:59 | 5 | 10 | 14 | 19 | 24 |
| 21:00-21:14 | 0 | 0 | 0 | 0 | 0 |
| 21:15-21:29 | 0 | 0 | 0 | 0 | 0 |
| 21:30-21:44 | 0 | 0 | 0 | 0 | 0 |
| 21:45-21:59 | 50 | 100 | 150 | 200 | 250 |
| 22:00-22:14 | 1 | 2 | 3 | 4 | 5 |
| 22:15-22:29 | 1 | 2 | 3 | 4 | 5 |
| 22:30-22:44 | 1 | 2 | 3 | 4 | 5 |
| 22:45-22:59 | 1 | 2 | 3 | 4 | 5 |
| 23:00-23:14 | 1 | 1 | 2 | 3 | 4 |
| 23:15-23:29 | 1 | 1 | 2 | 3 | 4 |
| 23:30-23:44 | 1 | 1 | 2 | 3 | 4 |
| 23:45-23:59 | 1 | 1 | 2 | 3 | 4 |

Green denotes times when the 100 person trigger has been met

Figure 8-2: Total development person trip departures per 15minutes

| Departures | | | | | |
|-------------|--------|--------|--------|--------|--------|
| Timeband | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| 00:00-00:14 | 5 | 10 | 15 | 21 | 26 |
| 00:15-00:29 | 5 | 10 | 15 | 21 | 26 |
| 00:30-00:44 | 5 | 10 | 15 | 21 | 26 |
| 00:45-00:59 | 5 | 10 | 15 | 21 | 26 |
| 01:00-01:14 | 1 | 1 | 2 | 3 | 4 |
| 01:15-01:29 | 1 | 1 | 2 | 3 | 4 |
| 01:30-01:44 | 1 | 1 | 2 | 3 | 4 |
| 01:45-01:59 | 1 | 1 | 2 | 3 | 4 |
| 02:00-02:14 | 5 | 11 | 16 | 21 | 26 |
| 02:15-02:29 | 5 | 11 | 16 | 21 | 26 |
| 02:30-02:44 | 5 | 11 | 16 | 21 | 26 |
| 02:45-02:59 | 5 | 11 | 16 | 21 | 26 |
| 03:00-03:14 | 3 | 6 | 9 | 12 | 15 |
| 03:15-03:29 | 3 | 6 | 9 | 12 | 15 |
| 03:30-03:44 | 3 | 6 | 9 | 12 | 15 |
| 03:45-03:59 | 3 | 6 | 9 | 12 | 15 |
| 04:00-04:14 | 3 | 7 | 10 | 14 | 17 |
| 04:15-04:29 | 3 | 7 | 10 | 14 | 17 |
| 04:30-04:44 | 3 | 7 | 10 | 14 | 17 |
| 04:45-04:59 | 3 | 7 | 10 | 14 | 17 |
| 05:00-05:14 | 25 | 49 | 74 | 98 | 123 |
| 05:15-05:29 | 25 | 49 | 74 | 98 | 123 |
| 05:30-05:44 | 25 | 49 | 74 | 98 | 123 |
| 05:45-05:59 | 25 | 49 | 74 | 98 | 123 |
| 06:00-06:14 | 78 | 156 | 235 | 313 | 391 |
| 06:15-06:29 | 0 | 0 | 0 | 0 | 0 |
| 06:30-06:44 | 0 | 0 | 0 | 0 | 0 |
| 06:45-06:59 | 0 | 0 | 0 | 0 | 0 |
| 07:00-07:14 | 9 | 18 | 27 | 36 | 45 |
| 07:15-07:29 | 9 | 18 | 27 | 36 | 45 |
| 07:30-07:44 | 9 | 18 | 27 | 36 | 45 |
| 07:45-07:59 | 9 | 18 | 27 | 36 | 45 |
| 08:00-08:14 | 4 | 8 | 12 | 16 | 21 |
| 08:15-08:29 | 4 | 8 | 12 | 16 | 21 |
| 08:30-08:44 | 4 | 8 | 12 | 16 | 21 |
| 08:45-08:59 | 4 | 8 | 12 | 16 | 21 |
| 09:00-09:14 | 6 | 11 | 17 | 23 | 29 |
| 09:15-09:29 | 6 | 11 | 17 | 23 | 29 |
| 09:30-09:44 | 6 | 11 | 17 | 23 | 29 |
| 09:45-09:59 | 6 | 11 | 17 | 23 | 29 |
| 10:00-10:14 | 9 | 17 | 26 | 35 | 43 |
| 10:15-10:29 | 9 | 17 | 26 | 35 | 43 |
| 10:30-10:44 | 9 | 17 | 26 | 35 | 43 |
| 10:45-10:59 | 9 | 17 | 26 | 35 | 43 |
| 11:00-11:14 | 8 | 16 | 24 | 32 | 40 |
| 11:15-11:29 | 8 | 16 | 24 | 32 | 40 |
| 11:30-11:44 | 8 | 16 | 24 | 32 | 40 |
| 11:45-11:59 | 8 | 16 | 24 | 32 | 40 |

Green denotes times when the 100 person trigger has been met

| Departures | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|
| Timeband | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| 12:00-12:14 | 17 | 35 | 52 | 69 | 87 |
| 12:15-12:29 | 17 | 35 | 52 | 69 | 87 |
| 12:30-12:44 | 17 | 35 | 52 | 69 | 87 |
| 12:45-12:59 | 17 | 35 | 52 | 69 | 87 |
| 13:00-13:14 | 18 | 36 | 55 | 73 | 91 |
| 13:15-13:29 | 18 | 36 | 55 | 73 | 91 |
| 13:30-13:44 | 18 | 36 | 55 | 73 | 91 |
| 13:45-13:59 | 18 | 36 | 55 | 73 | 91 |
| 14:00-14:14 | 117 | 235 | 352 | 470 | 587 |
| 14:15-14:29 | 0 | 0 | 0 | 0 | 0 |
| 14:30-14:44 | 0 | 0 | 0 | 0 | 0 |
| 14:45-14:59 | 0 | 0 | 0 | 0 | 0 |
| 15:00-15:14 | 35 | 70 | 105 | 140 | 175 |
| 15:15-15:29 | 35 | 70 | 105 | 140 | 175 |
| 15:30-15:44 | 35 | 70 | 105 | 140 | 175 |
| 15:45-15:59 | 35 | 70 | 105 | 140 | 175 |
| 16:00-16:14 | 34 | 68 | 102 | 136 | 170 |
| 16:15-16:29 | 34 | 68 | 102 | 136 | 170 |
| 16:30-16:44 | 34 | 68 | 102 | 136 | 170 |
| 16:45-16:59 | 34 | 68 | 102 | 136 | 170 |
| 17:00-17:14 | 44 | 87 | 131 | 175 | 219 |
| 17:15-17:29 | 44 | 87 | 131 | 175 | 219 |
| 17:30-17:44 | 44 | 87 | 131 | 175 | 219 |
| 17:45-17:59 | 44 | 87 | 131 | 175 | 219 |
| 18:00-18:14 | 28 | 56 | 83 | 111 | 139 |
| 18:15-18:29 | 28 | 56 | 83 | 111 | 139 |
| 18:30-18:44 | 28 | 56 | 83 | 111 | 139 |
| 18:45-18:59 | 28 | 56 | 83 | 111 | 139 |
| 19:00-19:14 | 10 | 21 | 31 | 42 | 52 |
| 19:15-19:29 | 10 | 21 | 31 | 42 | 52 |
| 19:30-19:44 | 10 | 21 | 31 | 42 | 52 |
| 19:45-19:59 | 10 | 21 | 31 | 42 | 52 |
| 20:00-20:14 | 5 | 11 | 16 | 22 | 27 |
| 20:15-20:29 | 5 | 11 | 16 | 22 | 27 |
| 20:30-20:44 | 5 | 11 | 16 | 22 | 27 |
| 20:45-20:59 | 5 | 11 | 16 | 22 | 27 |
| 21:00-21:14 | 4 | 8 | 12 | 16 | 21 |
| 21:15-21:29 | 4 | 8 | 12 | 16 | 21 |
| 21:30-21:44 | 4 | 8 | 12 | 16 | 21 |
| 21:45-21:59 | 4 | 8 | 12 | 16 | 21 |
| 22:00-22:14 | 37 | 74 | 112 | 149 | 186 |
| 22:15-22:29 | 0 | 0 | 0 | 0 | 0 |
| 22:30-22:44 | 0 | 0 | 0 | 0 | 0 |
| 22:45-22:59 | 0 | 0 | 0 | 0 | 0 |
| 23:00-23:14 | 3 | 5 | 8 | 10 | 13 |
| 23:15-23:29 | 3 | 5 | 8 | 10 | 13 |
| 23:30-23:44 | 3 | 5 | 8 | 10 | 13 |
| 23:45-23:59 | 3 | 5 | 8 | 10 | 13 |

Green denotes times when the 100 person trigger has been met

Phased Approach to Developing the Timetable

- 8.7 Based on the expected trip generations over the 5 year site build, three phases to developing the bus service would be proposed, enabling the network to adapt to demand that arises as new occupiers arrive on site.
- Phase 1: Introduction of the new service at key shift time start/finishes from occupation of the first warehouse unit on the site. Built around the 0600-1400-2200 shift change public transport would be in place from first occupation to make it an attractive and realistic alternative to the private car. The timetable would likely reflect 'example timetable 1' below – dwelling at the site between shift changes, however there can be flexibility in how this could be provided.

Figure 8-3: Example timetable 1

| | Bus 1 |
|-------------------------------|-------|
| The Drapery (depart) | XX25 |
| London Rd, Delapre Park Gates | XX35 |
| Northampton Gateway (arrive) | XX45 |
| Northampton Gateway (depart) | XX15 |
| London Rd, Delapre Park Gates | XX25 |
| The Drapery (arrive) | XX35 |

- Phase 2a: Development of the service through the day. Looking at the predicted trip generation, it is likely that additional journeys will be required between 0800 and 0900 and from 1500 to 1800 from the third year of development. Given that these services fall at peak times there will be a requirement to add a new bus to the network in Northampton. Rather than provide buses just at these times, the Sustainable Transport Working Group could investigate the opportunity of continuing the bus service in between peaks, potentially at marginal costs, therefore beginning to develop a regular service for users throughout the day.
- Phase 2b: as the site develops, there will be the need to extend the operating times of the service from 0700-0900 and 1400 until 1900.
- Phase 3: when required, in line with the agreed trigger, increase the service frequency from hourly to half hourly – as demand grows during the peak time, a

second bus will likely need to be added to the timetable to offer half hourly frequency at certain times. Again, if this second vehicle is introduced at peak time the Sustainable Transport Working Group should seek to opportunities expand the service over the day at marginal costs. The timetable is more likely to resemble Example Timetable 2, in figure 8.4, with the dwell time in Northampton Town Centre.

Figure 8-4: Example timetable 2 – dwell time in Northampton

| | Bus 1 | Bus 2 |
|-------------------------------|-------|-------|
| The Drapery (depart) | XX25 | XX55 |
| London Rd, Delapre Park Gates | XX35 | XX05 |
| Northampton Gateway (arrive) | XX45 | XX15 |
| Northampton Gateway (depart) | XX45 | XX15 |
| London Rd, Delapre Park Gates | XX55 | XX25 |
| The Drapery (arrive) | XX05 | XX35 |

- Phase 3b: development of Saturday and Sunday services in line employee numbers, need and the defined trigger set-out in chapter 7
- 8.8 Appendix C contains an example timetable for services from full occupation. As well as offering a half-hour frequency at key times, with regard to the agreed trigger point, it shows how the buses could be utilised in-between peak times to offer regular hourly service to the site through the daytime.
- 8.9 Whilst in the early stages of the development, it is likely that there will only be a service available linked to key shift time changes, it should be noted that the new bus stops on the A508 provide access to services 33/33A, X7 and X4 which offer direct access to Northampton and Milton Keynes from 0700 until 200 with around 3 buses per hour in each direction.
- 8.10 In reality, the end occupiers shift patterns, employee numbers and site requirements will dictate how the bus network is developed. A key focus throughout the delivery of the strategy will be achieving services which are financially sustainable in the long term (without subsidy).

9. Conclusions

- 9.1 This report has set out the basis on which the NGSRFI will be served by public transport. It is built on a consultative approach, and making the best use of existing service provision, in accordance with the principles of sustainable development as set out in the National Policy Statement for National Network and the National Planning Policy Framework.
- 9.2 The strategy focuses on the creation of a new, express bus service built around demand and need. At an early stage of the site development, new infrastructure will be provided to allow for better links to existing services on the A508, including the X7 and X4. Supporting measures are provided in the Travel Plan (reported separately) which will proactively promote local bus services to employers and employees. The delivery of the strategy will be managed by the Travel Plan coordinator, through the Sustainable Transport Working Group.

Appendix A: Northampton County Council Bus Strategy

Expectations: Developer-funded bus services

Guidelines for Bus Service Frequency in New Developments

- Provide a high quality bus service from first occupation
- The general principles for service provision identified above for residential development also applies to employment and commercial developments.
- Shift operations are difficult to predict, therefore in line with the 20% mode-shift target, but having regard to a minimum 10 passengers needed to make a journey reasonably viable, a threshold of 50 employees starting or finishing work within a 15-minute window will be that which requires the funding of a journey to the nearest town centre, where an existing journey is not available within 30 minutes before the start of shift, or within 30 minutes of the end of shift. Experience has shown that such services have proven to become highly popular.

Bus Services

- Policy BUS 19: Developers will be expected to demonstrate that the great majority of their development is within 400m reasonable and safe walking route of bus stops served by regular services to the nearest major facilities and centres. Where this is not the case, new stops and/or service diversions shall be provided by the developer. To achieve higher levels of modal shift, it is recommended that the majority of occupiers are within 250m of stops, through careful consideration of urban design and density.
- Policy BUS 20: developers will be expected to ensure that where bus service is planned to run through a new development, the road layout is suitable for accommodating larger vehicles. Developers are also expected to fund to meet the gap between revenue and costs for new, divert or enhanced services where necessary to ensure a high level of sustainable travel behaviour can be achieved.
- New bus stops should conform with the County Council standards:
 - Bus stop within 400m from any part of the development.
 - Internal development layout should have full regard to the location of existing bus stops, and clearly signal where new stops are to be provided.
 - Consult local affected parties for new proposed bus stops in existing neighbourhoods
 - A safe, paved waiting and alighting area incorporating a raised boarder of at least 4m to facilitate disabled and pushchair step-free access to the bus
 - A paved connection no less than 1.8m wide to an existing footway, or failing that to a dropped kerb crossing to a footway on the opposite carriageway
 - A “Trueform” Post and flag, with integral banner timetable case

*

- Where appropriate and feasible, a shelter, of typical roof dimensions no less than 2m x 4m. The Council will generally require developers to seek adoption of shelters by a third party, generally the Parish Council. Alternatively a commuted sum to provide for maintenance will be required.

Guidance on Designing Development for Bus Services

- Bus circulation through developments should be as direct as possible, with minimal use of hard traffic calming features.
- Roads to be used by bus services shall be a minimum of 6.5m wide, and avoid any priority displacement.
- Development design should assume 12.8m x 2.55m full-size vehicles when designing for bus circulation.
- Developers are expected to ensure development phasing and traffic management affords sufficiently early bus access before building occupation of the relevant phase
- Reduce walking distance to the bus stop and ensure site stops are placed at nodes on major pedestrian routes.
- Bus stops should be closer to main entrances of major facilities than parking spaces.
