SOUTH OF ASHFORD GARDEN COMMUNITY SUSTAINABLE TRANSPORT STRATEGY AND ACTION PLAN

Introduction

OVERVIEW

WSP has been commissioned jointly by Kent County Council (KCC) and Ashford Borough Council (ABC) to develop a Sustainable Transport Strategy for the emerging South of Ashford Garden Community (SAGC).

SAGC will be a community comprised of three key neighbourhoods; Chilmington Green, Court Lodge and Kingsnorth Green, with 7,250 new homes planned to be developed over the next 20 years together with associated development (parkland, community facilities and employment areas). Some of the residential units have already become occupied (c200 units) but with negligible sustainable travel options available to them at present. A key challenge of the strategy will be to establish sustainable travel behaviours from the onset as residents move in, against a backdrop of negligible current provision, and some of the residential units now becoming occupied (c200 units).

The Sustainable Transport Strategy (STS) has been informed by a combination of desktop and site based review and associated analysis, as well as input from local stakeholders.

The STS sets out a vision and objectives to provide the framework for the strategy, as well as an Action Plan which sets out a prioritised set of interventions to be implemented to best address the challenges.

Figure 1 sets out the remaining chapter structure for the STS.

Figure 1: Chapter structure

Chapter 2: Strategic Context Chapter 3: Challenges, Issues and Opportunities

Chapter 4: Vision, Objectives and Strategy Themes

Chapter 5: Action Plan

specific documents to ascertain the policy framework for the Strategy, and developer commitments

Analysis of the evidence base to identify the key challenges, issues and including;

- Stakeholder feedback

Establishment of a vision and objectives for SAGC, as well as the strategy themes which set out how to address the

Development of a prioritised action plan the strategy objectives. Consideration of targets and a funding roadmap.





OVERVIEW

This section presents the key findings of a document review undertaken in the initial stages of the study.

The purpose of the review is to set out the strategic framework for the Sustainable Transport Strategy, to understand which schemes the developers are committing to, and to establish the case for any mode share targets for SAGC.

The key policy themes from these documents have also been used to inform the measures included in the Action Plan.

Figure 2 outlines the documents that have been reviewed, and whether they are county, local or site specific.



Figure 2: Documents reviewed to inform the strategy



KEY FINDINGS

This section sets out a summary of the key take-aways from the county, local and site specific documents. For further details on each of these please refer to **Appendix A**. The key points from these documents is as follows:

- Local Transport Plan 4 (LTP4): Delivering growth without gridlock 2016-2031 - Levels of congestion on the road and rail network are a key challenge, with Ashford town centre noted as being a particular concern. The SAGC strategy needs to address this front and centre. Several of the LTP4 outcomes have been used to inform the Action Plan.
- Kent Active Travel Strategy The document sets out the importance and high priority of active travel schemes for Kent. When such schemes are developed they should tackle the main barriers. The strategy sets out a framework of active travel actions which have provided a useful framework for appraising schemes. This strategy also set outs targets for active travel which should be translated into this sustainable transport strategy.
- Kent Walking and Cycling Ambition This document reinforces the high priority active travel has in Kent. There are a number of commitments and principals referenced which should inform this strategy, including improving north-south cycling routes, improving the network of shorter distance walking and cycling routes, improving cycle infrastructure along main routes, and improve the connectivity between existing routes.
- Kent and Medway Energy and Low Emission Strategy

 The priorities of the Strategy support and add weight
 to sustainable transport objectives for SAGC. The
 strategy aims to make a transition to zero and low
 emission transport modes to mitigate climate change to
 avoid the harmful effects on health of localised air
 pollution.
- Kent Environment Strategy The priorities of the Kent Environment Strategy support and add weight to sustainable transport objectives for SAGC. From these priorities, we can develop measurable objectives to appraise schemes in the MCAF, particularly supporting sustainable access for businesses and communities.

- Ashford Cycling and Walking Strategy 2019-2029 -The overall aim of the Cycling and Walking Strategy is to encourage walking and cycling as the natural choices for shorter journeys in Ashford Borough – or as part of a longer journey – regardless of age, gender, fitness level or income. There are a number of embedded principles.
- Providing and improving the cycling and walking network.
- Cycle parking/storage will be provided in all developments.
- The Borough Council will work with its partners to ensure the regular maintenance of all cycle tracks and pedestrian routes within the Borough.
- The Borough Council will ensure that the safety of cyclists is considered as a priority in the provision of new routes and the adaptation and re-configuration of existing routes.
- Ensure cycleways and pedestrian routes are fully advertised and appropriately signposted and cycling and walking mapping is available for all routes. Including promoting walking and cycling schemes that contribute to the overall tourism offer.
- Ashford Local Cycling and Walking Infrastructure Plan 2019 – 2029. This report presents the underlying analysis undertaken for the Ashford Local Walking and Cycling Infrastructure Plan, and provides a narrative which supports the identified improvements.
 Specifically this includes a network plan for walking and cycling routes which identified preferred routes and core zones for focussing the improvements, and a prioritised programme of infrastructure improvements for future investment. The document presents a vision for Ashford:

"We envisage delivering a network of routes, through provision of quality infrastructure, to enable a greater uptake of cycling and walking across the borough".

KEY FINDINGS - CONTINUED

The document then outlines the proposed approach to deliver this transformative change is:

- Provide a network of primary, neighbourhood and strategic greenway cycle and walking corridors to act as core routes for the highest volumes of journeys
- Improve journeys into the Town Centre for pedestrians and cyclists
- Create networks of quieter streets where children play out, neighbours catch up, air pollution is lower, and cycling and walking are the natural choice for everyday journeys
- Increase the proportion of active travel journeys in the borough, easing congestion, supporting the council's carbon neutrality agenda and to improve health.
- Ashford 2030 Local Plan- This Local Plan establishes a policy and delivery framework that provides clear and firm guidance for the Council's aims for the Borough relating to land use and planning. It covers the period 2011 – 2030. Several of the strategic objectives and policies presented in this document support sustainable transport objectives
- Ashford to zero plan- The report outlines
 Ashford Borough Council's aim to reach net zero
 carbon by 2030. The Ashford to Zero Plan shows
 that the transport sector contributes to almost
 half of all carbon emissions locally, and the
 pathway to delivering the reduction needs to be
 captured in the SAGC strategy. Priority 4 is of
 most relevance to the SAGC (Priority 4:
 Encourage and enable a shift towards cleaner
 modes of transport and reduce car dependency).

- Ashford Cycling Network Sustrans. This document presents the key findings of an in depth survey of the Ashford Cycle Network (ACN). The documents presents detailed findings of each route reviewed. This includes maps supported by photos which help visualise the barriers to cycling in each area, as well as recommendations to improve the cycling experience such as traffic free routes.
- This document contains some very specific recommendations to improve the cycle network in Ashford and specifically in areas immediately adjacent to the SAGC.
- These recommendations have been used to inform the Action Plan.
- Sets out the need to ensure a continuous cycle network for residents, particularly to facilitate journeys into Ashford Town Centre and to Ashford Railway Station.
- Chilmington Appended Transport and Connectivity Plans - This document maps out the pedestrian routes (e.g. footpaths) and the cycle routes in the Chilmington Green area. The document also outlines the sustainability strategy. The masterplan for the strategy has been designed to encourage sustainable patterns of living, including:
 - Provision of a District Centre and two Local Centres with a range of facilities to minimise off-site trips
 - Incorporation of an accessible public transport strategy
- Provision of a well-connected network of footpaths and cycle routes within the site and the wider network.

KEY FINDINGS - CONTINUED

- Vision and Strategy for the South of Ashford Garden **Community 2021 – 2025 -** This document presents Ashford's overarching vision for the South of Ashford Garden Community, followed by an action plan for implementation. The overarching vision is: The South of Ashford Garden Community (SAGC) will be the thread which fastens together a series of distinct neighbourhoods emerging amongst the existing communities to the South of Ashford over the next thirty years and beyond. By providing clear governance and a commitment to long-term stewardship, the SAGC will guide decision making on sustainable transport networks, green corridors, high quality landscaping and community facilities for the benefit of both new and existing residents. Priority will be given to pedestrian friendly spaces, inclusive venues and carbon neutral living using sustainable technologies where possible, whilst promoting healthy lifestyles and community leadership.
- The five key objectives presented as part of the Draft Vision and Strategy for the SAGC, particularly Objective 3 (well-connected at every level), provide useful indicators that can be assessed in the MCAF
- The Design and Access Statement for Chilmington Green – mentions the principles of good connectivity
 - Provide good connections both within the new development and to important destinations outside to facilitate access to jobs, schools, health and other important services
 - Consider the differing needs of pedestrians, cyclists, public transport users and car owners, with a focus on the creation of attractive streets rather than efficient highways
- Retain existing rural lanes where possible encouraging pedestrian, cycle and equestrian use through providing new routes better suited to vehicles

- Design and Access Statement for Kingsnorth
 Green This document provides a series of maps
 which outline the existing footpaths and national
 trail as well as the proposed housing and structural
 developments
- The document also maps out the existing green spaces as well as the areas in which the proposed new green spaces and allotments/sports pitches will be located
- Design and Access Statement for Court Lodge -This document outlines the travel options to the site, by mode, with maps showing the existing pedestrian routes as well as proposed cycle routes and a potential extension of bus routes onto the site. These elements will inform the development of the scheme long-list.
- **Chilmington Green Area Action Plan** This document, from 2013, details the policy and delivery framework to ensure that the council's aims for Chilmington Green are achieved. It outlines opportunities for the following improvements to the strategic network:
- A28 corridor improvements to reduce peaktime congestion and support growth; new roundabouts necessary to service Chilmington Green; additional signal-controlled junctions.
- Rural road network interventions to encourage use of the major road network (the A28) to avoid congestion on rural roads
- Great Chart Village interventions to prevent Great Chart Village being used as a 'rat-run'
- Chilmington Green Road to be downgraded to a minor, local distributor road that is attractive for pedestrians, with development of other routes to serve more strategic functions
- Connection to Brisley Farm a new highway link from Brisley farm residential development to Chilmington Green

KEY FINDINGS - CONTINUED

- The aim is to achieve 20% of trips from the site by public transport. A new high quality bus service is therefore proposed between Chilmington Green and the town centre / railway station. The service should operate with at least a 10-minute frequency in the peak hours, and 20-minutes frequencies for the remainder. The potential of a Demand Responsive Transit service to/from the station aligned with train departures could also be explored.
- The documents highlights several existing walking and cycling routes that pass through the development site, including the Greensand Way and National Cycle Route 18. The document suggests that these strategic links should be complemented with a finer grain of local pedestrian and cycleways that provide permeability within and between development parcels. The document also highlights the need for links between the District Centre, the countryside to the south and Discovery Park to the east. These links would provide recreational opportunities for the residents of the new development.
- Chilmington Green Design Code This document highlights the design code for the SAGC, and includes specific elements relating to public transport, walking and cycling that will provide a useful framework for the emerging scheme long-list.
- Chilmington Green Main AAP Phase One Access Management Strategy. This document, which focuses on the provision of walking and cycling routes, as well as greenspace areas, in the proposed SAGC provides several maps outlining existing and proposed routes. These will be used to inform the development of the scheme long-list.

- **Chilmington Green Residential Travel Plan** -This document outlines the Residential Travel Plan for the Chilmington Green development, which intends to support the delivery of a sustainable community by promoting a wide range of low carbon travel and transport options to residents and their visitors.
- The overarching aim of the Travel Plan for the site as a whole is to **reduce single occupancy car travel and to increase travel by sustainable modes.** Additionally, the travel plan aims to present a tool for the provision of appropriate measures to encourage and incentivise residents and visitors of the first phase of the Chilmington Green development to switch to lower carbon transport options. It encompasses a Travel Plan Coordinator (TPC), community management company, travel plan steering group, providing travel information, measures to promote walking/cycling and public transport and measures to encourage more efficient use of cars.

End of phase mode share targets are:

Mode	Baseline	Phase1	Phase 2	Phase 3	Phase 4	Site-Wide Target
Car Driver	75%	72%	70%	68%	66%	65%
Passenger	5%	5%	5%	5%	5%	5%
Bus	3%	5%	6%	7%	8%	9%
Train	9%	9%	9%	9%	9%	9%
Walk	4%	5%	5%	6%	6%	6%
Cycle	2%	3%	4%	4%	5%	5%
Other (motorcycle, taxis, etc)	1%	1%	1%	1%	1%	1%
Total		100%	100%	100%	100%	100%

KEY FINDINGS – CONTINUED

Chilmington Green Transport Assessment- A transport assessment was undertaken to determine the trip generation impacts and mitigation requirements

- The proposed KCC strategic A28 highway improvement scheme will include informal pedestrian crossing facilities provided at the northern site access roundabout to include drop kerbs and tactile paving. The reduction in size of the northern roundabout from a diameter of 60 metres to 40 metres will reduce pedestrian severance.
- Mitigation measures which will be delivered as part of the Proposed Development comprise traffic calming in Great Chart and along Magpie Hall Road, and provision of informal pedestrian crossing facilities at the proposed northern Site access junction.
 Footways will also be provided along the existing Chilmington Green Road which will cross the Proposed Development.
- The proposed Great Chart traffic calming scheme will include road narrowing (with cycle bypasses incorporated) and upgraded village gateway features such as increased signage and coloured tarmac.
- The proposed Magpie Hall Road scheme will also include upgraded gateway features as well as the provision of speed limit roundels.
- The proposed improvements to the A28 will deliver sufficient increased capacity to accommodate the traffic associated with the proposed development. These improvements include reducing the size of the northern roundabout, amending the size and design of other roundabouts and introducing a priority junction. There is also the proposal for a pedestrian route to run alongside this road.

- The bus strategy associated with the proposed development has been developed through discussions with KCC and Stagecoach, the local bus operator and a route has been identified that would serve each phase of the development as it progresses.
- Should the traffic grow faster than anticipated and the reason for this high level of growth is due to traffic associated with the proposed development, then funding for additional traffic calming measures will be made available.
 Permanent loop counters will be placed within the carriageway of the agreed locally identified sensitive roads to allow for traffic flows to be monitored as the development is implemented.
- As a result of changes and mitigation measures it is anticipated that 50-60% of (A28) traffic would assign via the northern roundabout, with the remaining 40-50% of site traffic assigning via the A28 via the southern roundabout and the priority junction. A robust sensitivity test has been undertaken which assesses a 65% distribution of traffic in terms of assignment onto the A28 via the northern roundabout, with a further 35% of traffic assigned via the southern roundabout.
- The principles of a mitigation scheme for Moat Cottages have been developed and discussed in detail with the cottage owners. This is due to one of the main impacts of the increased vehicles from the new housing – headlight glare. The proposed mitigation strategy is to provide yew hedges, planted in front of the properties. The advantages of a hedge are that it would be in keeping with the existing nature of the cottages and could be flexibly maintained in terms of ensuring no impact on the existing light into the cottages while providing mitigation to headlight glare
- Figure 3 overleaf summarises the developer commitments for SAGC. These have been considered in the Action Plan.

Table 7.1 – Proportionate Traffic Impact at the Off-Site A28 Junctions – AM Peak Hour S00 Dwellings

Junction/Link	Development Flows (All Movements)	2013 Base Flows (All Movements)	% Impact	2031 Base Flows (All Movements)	% Impact
Tank Roundabout	111	2938	4%	4061	3%
Louden Way	125	2634	5%	3641	3%
Matalan Roundabout	154	2784	6%	3848	4%
A28 Railway Bridge	125	2411	5%	3333	496

Table 7.2 – Proportionate Traffic Impact at the Off-Site A28 Junctions – AM Peak Hour 2,500 Dwellings

Junction/Link	Development Flows (All Movements)	2013 Base Flows (All Movements)	% Impact	2031 Base Flows (All Movements)	% Impact
Tank Roundabout	557	2938	19%	4061	14%
Louden Way	627	2634	24%	3641	17%
Matalan Roundabout	770	2784	28%	3848	20%
A28 Railway Bridge	627	2411	26%	3333	19%

Table 9.4: Chilmington Green Trip Generation

	Trip Numbers						
Туре	AM (08:	00-09:00)	PM (17:00 - 18:00)				
	Arrival	Departure	Arrival	Departure			
Dwellings	1050	2030	1890	1120			
Employment	160	60	60	170			
Retail	82	88	81	89			
Education / Community	73	46	0	7			
TOTAL	1365	2224	2031	1386			

Table 9.5: Scenario 2 Vehicle Trip Distribution at Chilmington Green

	Trip Type	AM Peak	PM Peak
Total Origin	Internal - Internal	234	209
	Internal – External	1990	1177
Total Destination	Internal - Internal	234	209
	Internal - External	1131	1822

Source: Jacobs' June 2011 Chilmington Green VISSIM Model Scenario 2 Report



Figure 3: Summary of Developer Committed Schemes

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WSP

KEY FINDINGS

Throughout the document review several key themes have emerged amongst the findings. In summary:

- Many of the documents point out that levels of congestion on the road and rail network are a key challenge, with Ashford town centre noted as being a particular concern. Therefore, there is a need for the SAGC strategy to address this front and centre.
- Active travel is a key theme throughout the documents and it is stated that the development of active travel schemes is high priority for Kent, and when they are developed they should tackle the main barriers. This is because active travel will be incorporated into Planning and will look to be sustainable and well maintained in order to support communities. It is clear from the documents that the targets for active travel need to be clearly pointed out in the SAGC strategy. Key issues the SAGC strategy needs to note include - improving north-south cycling routes, improving the network of shorter distance walking and cycling routes, improving cycle infrastructure along main routes, and improving the connectivity between existing routes.
- The priorities detailed in the Kent and Medway energy and low emission strategy, the Ashford 2030 Local Plan and the Kent environment strategy, among other documents, add weight to sustainable transport objectives for SAGC. These are also crucial documents that can be used to show measurable objectives to inform the Action Plan. The LCWIP is also of great importance as several of the routes identified have relevance for the new SAGC development. For example, cycling routes 6, 7 and 8, and walking route 3 could be extended towards SAGC.

- The Ashford to Zero Plan shows that the transport sector contributes to almost half of all carbon emissions locally, and the pathway to delivering the reduction needs to be captured in the SAGC strategy. A key priority outlined in this document is the need for modal shift and a reduction in private car dependency.
- The five key objectives presented as part of the Draft Vision and Strategy for the SAGC, particularly Objective 3, provide useful indicators that can be assessed in the MCAF. This is because the SAGC will deliver upgrades to transport infrastructure with a renewed focus on active and sustainable transport using a mobility hub approach.
- Throughout the documents there is an expressed need to make best use of the preexisting green space and pedestrian/cycle routes. The maps provided by several key documents provide a clear indication on where exactly upgrades and improvements need to be made.
- A summary of the developer commitments for SAGC is shown in Figure 3



CHAPTER 3 Challenges, Issues and Opportunities

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Population Analysis

POPULATION DENSITY

Figure 4 shows the population density (dwellings per hectare) in the SAGC and the wider Ashford area. The figure shows that in the already developed area there is a **(low) population density** of less than 20 dwellings per hectare.

In order to preserve green space and walking/cycling routes, ideally this pattern would continue across the site when completed.

The majority of the area also follows this trend despite there being a more densely populated area (20-40dph) to the north of the site which borders the edge and slightly merges into the site itself. The central areas of Ashford have a population density of (20-60dph) and this is a key area which will be linked to the site via transport connections.

Westwein Westwein Generation Pulscher Norther Generation Pulscher Hothington Book Bebersden Generation Generation Bebersden</td

MOSAIC PROFILES

Figure 5 shows the demographics of the SAGC and wider Ashford area according to the Experian MOSAIC profiles. This is important as the characteristics of the population have different considerations for transport (among other things). The data shows that for the developed parts of SAGC, the 'Country Living' profile is the most prominent population segment. This is mostly due to the (current) rural location of the site. **High car ownership is a common trait for those in the Country Living segment which could be a key challenge** for this strategy. The strategy and action plan should therefore providing the alternatives to discourage car use as much as possible.

There are also a few examples of other segments within SAGC including Aspiring Homemakers, Transient Renters and Rural Reality. Affordable and good public transport and active travel links are essential for improving the experience for these groups. The areas on the outskirts of SAGC, leading towards central Ashford, are composed of several clusters with prominent segments including: Family Basics, Aspiring Homemakers and Transient Renters.

Figure 5: MOSAIC profiles

Figure 4: Population density



Site Analysis

OVERVIEW

On Wednesday 22nd September, a site visit to the early phases of the SAGC development took place to enable a more in-depth understanding of the challenges and opportunities at the site as they appear on the ground. The following sites were visited specifically, alongside a ride around the site to provide a higher level site overview:

- The first housing parcel in Chilmington Rise (Chilmington Crescent/Green Mews/Woodland Rise),
- The Jarvis development site at Bartletts Lane/Chilmington Green Lane,
- Discovery Drive,
- Mock Lane (including Chilmington Green Primary School),
- Ashford Road (Ashford Road/Church Hill and Ashford Road/Magpie Hall Road),
- The National Cycle Network (NCN) into Ashford Town Centre and Ashford Railway Station.

In this section the key findings from the site visit are categorised and summarised across the following pages, and are also presented in a Challenges and Opportunities Map' overleaf.

CHILMINGTON GATE WHICH COMPRISES; CHILMINGTON CRESCENT AND WOODLAND RISE

The following was noted at the housing parcel in Chilmington Gate (Chilmington Crescent/Green Mews/Woodland Rise):

- The area currently has poor public realm provision, including issues such as raised ironwork (e.g. drainage covers), a lack of dropped kerbs, and poor road surface (Issue 1). These create accessibility concerns as are not suited to users with accessibility requirements.
- Currently there is only one access to and from the site; the main entrance at the roundabout with the A28 (Issue 2). There is no pedestrian footpath or cycle route from this junction (Issue 3), creating a hostile environment that forces residents to drive.
- The site is surrounded by temporary fencing which blocks the access to adjacent footpaths that could otherwise be used to support sustainable travel (Issue 4).
- Similarly the new road built through the site, linking with Mock Lane and onto Chilmington Green Road, is currently blocked with temporary fencing to prevent conflicts with construction vehicles (Issue 5). This restricts access, particularly to the community cabin and Chilmington Green Primary School on Mock Lane.

Figure 6: Poor public realm provision



Figure 7: Site surrounded by temporary fencing



Figure 8: Accessibility issues caused by a lack of dropped kerbs and raised ironwork



DISCOVERY DRIVE

Discovery Drive is adjacent to existing residential areas and infrastructure. As such residents can access that existing infrastructure including local bus stops. Additionally, there is access from Discovery Drive to several shared use paths that can provide access to other areas of the site (Opportunity 1).

However, Discovery Drive is adjacent to areas identified in future development phases, as well as the proposed Discovery Park. These will place additional pressures on the transport infrastructure that should be accommodated for.

MOCK LANE AND CHILMINGTON GREEN PRIMARY SCHOOL

The need for safe and sustainable access to Chilmington Green Primary School was identified as an urgent priority. Teaching has now moved from the temporary site to the permanent building on Mock Lane.

In the current condition, Mock Lane is not considered suitable for a bus route to service the new school (**Issue 6**). Furthermore, the road lacks any footpaths or cycle routes, making it unsuitable for pedestrian or cycle journeys (**Issue 7**). Vehicle speeds, visibility (particularly around bends), and a lack of adequate street lighting are all additional concerns.

There is a network of several public rights of way that could provide sustainable access to the school. However these are not currently in a suitable condition, and would require a more frequent maintenance schedule to reasonably support daily journeys (**Opportunity 2**).

Reflecting the lack of sustainable options, the school has a large, designated drop-off sweep to support pick-up and drop-off, although this does create congestion and traffic management concerns, particularly for peak times. In the longer term, however, there may be opportunities to upgrade the sweep to support sustainable modes (**Opportunity 3**).

ASHFORD ROAD

Two junctions of Ashford Road were identified as a cause for concern (**Issue 8**):

- The staggered and sweeping nature of the Ashford Road/Church Hill junction creates visibility concerns and therefore a high accident history. This junction has been identified for signalisation in Section 106 agreements, to reduce accidents, support pedestrian journeys, and accommodate the new developments (Opportunity 4).
- Similar concerns were noted at the Ashford Road/Magpie Hall Road junction, there are plans to remove the Magpie Hall Road arm of the junction northbound by approximately 30metres

NATIONAL CYCLE NETWORK 18

The National Cycle Network (NCN) Route 18 provides reasonable access through the Centre of Chilmington Green onto Ashford Town Centre.

It is noted that this route passes through Victoria Park and other wooded areas, so may not be suitable for all users, particularly at night time, despite the street lighting.

Substantial proportions of the route are reliant on shared use paths, the widths of which are not compliant with LTN1/20 requirements. In addition, KCC may wish to consider upgrading the several uncontrolled crossings, and removing some of the barriers along the route (such as chicanes).

Figure 9: NCN18 in woodland areas



Figure 10: Chicanes on the NCN18



Figure 11: NCN18 is reliant on shared use paths that are not compliant with LTN1/20





Figure 12 Issues and Opportunities Identified During Site Visit

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Public Transport Analysis

PUBLIC TRANSPORT OVERVIEW

Figure 13 presents an overview of the public transport provision in the SAGC and the wider Ashford area, specifically bus routes and the location of Ashford Railway Station. The figure indicates that there is **relatively good bus provision throughout the Ashford area**, many of which link the outer areas into the town centre and to the railway station.

However, there is **currently limited service within the SAGC**. It is noted that several bus routes serve the outskirts of the SAGC, so **there is scope to extend or alter these routes in order to connect the SAGC with Ashford Town Centre, Ashford Railway Station and beyond.**

Figure 13: Public Transport Overview



Figure 14: Bus Frequency (AM)

BUS FREQUENCY MORNING PEAK

Figure 14 shows the morning (AM) bus service frequency in the SAGC and the wider Ashford area. As shown, several routes immediately adjacent to the SAGC, or running along the outskirts of the site, are relatively frequent with services at least every 15 minutes. As such, there is scope to extend or alter these routes across the SAGC at the same frequency, in order to provide residents with links into Ashford Town Centre and to Ashford Railway Station, thereby supporting onward journeys.



Public Transport Analysis

LOCAL PUBLIC TRANSPORT ACCESSIBILITY

Figure 15 shows the local public transport accessibility from SAGC in terms of travel time. **As shown, the vast majority of areas within the site can be reached within 10 minutes of one another**, apart from a small area in the south-west corner. Short travel times like this are crucial in helping the site achieve its aims of discouraging car use and encouraging public transport use, and support local living and "15-minute neighbourhood" ideals.

Public transport accessibility beyond the site is more limited, with some areas of Ashford Town Centre falling into the 20-30 minutes category. Such slow journey times can deter the use of public transport and encourage the use of single occupancy vehicles, particularly in cases with onward travel, such as commuting journeys into Ashford Railway Station. As such, public transport improvements are necessary in order to support sustainable and public transport use, and the avoidance of single occupancy vehicles.

REGIONAL PUBLIC TRANSPORT ACCESSIBILITY

Figure 16 shows the regional public transport accessibility from the SAGC in terms of travel time. The figure indicates **that regional public transport is very limited from SAGC**, with journeys to the majority of urban centres such Maidstone, Canterbury and Dartford taking two hours and above. Folkestone, for example, is located roughly 20km from the site but can only be reached with journey times of two hours. Journey times as long as this can discourage **the use of public transport over private cars**. Improvements to the public transport time is therefore required in order to the support the sustainable transport goals of the community.

Figure 15: Local Public Transport Accessibility



Figure 16: Regional Public Transport Accessibility



Figure 17: Local Public Transport Accessibility

Public Transport Analysis

PUBLIC TRANSPORT ACCESS LEVEL

Figure 17 shows the local public transport accessibility level (PTAL) around the SAGC. PTAL is Transport for London's measurement of connectivity by public transport, which identifies how well a place is connected to public transport services. A location will have a higher PTAL if it is at a short walking distance to the nearest stations or stops, if waiting times at the nearest stations or stops are short, or if more services pass at the nearest stations or stops, for example.

The dataset has been extended and plotted in the local area surrounding the SAGC. As shown, the **vast majority of the SAGC site is lies within the 1a classification, or is unclassified**. PTAL improves slightly closer to Ashford Town Centre, but only reaching the 4 classification. **This indicates that access to public transport is limited across the entire area, and even more so at the SAGC site**.



DEVELOPER COMMITMENTS

Figure 18 summarises the bus service commitments that the developers are required to provide. There is a developer commitment to initially provide a service every 30 minutes for the Chilmington Green site. The developer is then committed to providing a service every twenty minutes and then to every 15 minutes as the development progresses as per the existing Section 106 Agreement.

Reviewing these plans, the proposed bus routes seems to have been developed in isolation from one another, as each proposed route serves each development site separately. What is therefore missing from these proposals is a cohesive network which seamlessly connects these different sites together. East-west connectivity should therefore become a medium/long term priority for bus services as development phases come forward. This should be considered holistically with the wider bus network in Ashford.

It should be noted that circular bus routes, such as those shown proposed for Chilmington Green, are not typically favoured by passengers, given the lengthy journey times that arise.

Finally, no specific details have been proposed for much of the Kingsnorth Green site.

Figure 18: Developer Committed Bus Service Provision



EXISTING CYCLE NETWORK

The SAGC is bisected by National Cycle Network (NCN) route 18; a long-distance cycle route managed by Sustrans which links Cantebury with Tunbridge Wells. **Figure 19** shows how this route is the main existing cycle connection from the proposed SAGC to central Ashford. This connection is segregated from traffic, comprising mainly of shared space and painted cycleway on the footway. The route features unprotected junctions and crossings, although the majority of the route is offroad, passing alongside Singleton Lake and through Victoria Park. Across the study area and to the west, the route is on-road predominantly following country lanes.

There are also two local cycle routes shown on **Figure 19** that are part of the Ashford Cycle Network (ACN) and link the northern edge of the study area with NCN 18. The western route follows quiet residential streets through Beaver Green before crossing Brookfield Road via toucan crossing and connecting to NCN 18 through painted cycleway on the footway. The eastern route follows off-road alignment again adjacent to the footway, before re-joining the carriageway at Kingsnorth Road which has no cycling facilities. The route then follows quieter residential streets in Beaver Green before crossing Beaver Lane via an uncontrolled crossing. It then joins Jemmett Road where it links to NCN18 and to the town centre over a bridge with shared space.

Figure 20 shows that the existing cycle network linking central Ashford to the SAGC is predominantly off-road. Much of this comprises of painted cycleway on the footway similar to the image shown in **Figure 21**.



Figure 19: Existing Cycle Network



Figure 20: Existing Cycle Network by Type



Public Rights of Way

WALKING

The existing network of Public Rights of Way (PROW) across the SAGC site is disjointed and does not provide continuous connectivity. There are a number of north/south footpaths and two parallel east/west paths to the north of the site. Other stretches of PROW are short and disconnected from the rest of the network. Bicycles are prohibited from using the vast majority of these routes.

The existing network is poorly maintained in places, with vegetation overgrowth reducing the usable width of the path, and poor surfacing reducing accessibility. Regular maintenance, vegetation clearance, footpath widening and introduction of a tarmac surface would improve the level of service provided by the existing PROW network.

Cycle traffic should be permitted to use the PROW network where possible through the introduction of shared use paths. These paths should be wide enough to meet LTN 1/20 standards and well surfaced to ensure cycling is comfortable. Barriers, chicanes and other access restrictions should not be used on the PROW network, and should be removed where present. This ensures the network would be accessible to non-standard cycles, mobility scooters and wheelchairs.

Consideration should be given to how PROW network can be extended to enhance connectivity across the SAGC site. Priority should be given to connecting the gaps between existing routes and considering a new east/west route to the south of the site, where there is a lack of pedestrian / cycle connectivity.



LCWIP Cycling Network

Ashford Borough Council developed a Local Cycling Walking Infrastructure Plan (LCWIP) in 2019. It presents a vision for greater uptake of cycling across the borough and outlines a network of cycle corridors where improvements could be focused. **Figure 22** is a cycle network plan from the LCWIP, with several of the identified routes providing potential connections to the SAGC.

Route 8 provides access to the town centre via the bus gate on Beaver Road and shared use pavements alongside Elwick Road. The LCWIP suggests improving this route by reducing speed limits to 20mph and introducing segregated cycling facilities, with improvements to the route ranked as the highest priority. This route could be extended further south to provide connections to the northern edge of the SAGC, making use of some existing cycling infrastructure.

Route 7 follows Jemmett and Woolreeds Road, with the LCWIP proposing the addition of a toucan crossing at the Woolreeds Road/Beaver Lane junction and also in the town centre. If this route were to be extended further south towards the SAGC, additional cycling facilities would be required for the local route on Kingsnorth Road.

Route 6 follows the NCN 18 alignment through Victoria Park, with the LCWIP proposing footpath widening and improved cycleway segregation for this section. This route already extends south to the SAGC, but further improvements such as signalised crossings and improved segregation on this segment could be considered.

KEY TAKEAWAYS

Several of the routes identified in this LCWIP have relevance for the new SAGC development. For example, cycling routes 6, 7 and 8.

Figure 22 : LCWIP Cycle Network Plan



LCWIP Walking Network

The LCWIP undertaken by Ashford Borough Council in 2019 provides a vision for more journeys to be made by foot, audits a network of walking routes and outlines suggested improvements to the quality of these routes.

Figure 23 shows the plan of walking routes audited as part of the LCWIP. Of these routes, route 3 has the greatest potential to be connected with the SAGC. It provides access to the town centre via both Beaver Road and Jemmett Road and loops around Beaver Green. Improvements suggested in the LCWIP include maintenance, resurfacing, improved crossing facilities, guardrail removal, continuous footways and tree planting.

This route could be extended further south to the northern edge of the SAGC, and could follow some of the existing off-road cycling facilities, with any improvements benefiting pedestrians as well as cyclists.

Figure 23 : LCWIP Walking Network Plan



DEMAND FOR CYCLING- PCT ANALYSIS

The Propensity to Cycle Tool (PCT) uses origindestination data to model commuter cycling flows at area, desire line, route and network levels. **Figures 24 and 25** present PCT outputs for a 'Go Dutch' scenario which explores cycling flows between census MSOAs (Middle layer Super Output Area) if English people had the same propensity to cycle as the Dutch.

The PCT cycling demand forecast shown in **Figure 24**, projects a demand of 171 between the town centre and the MSOA of the SAGC under the 'Go Dutch' scenario, although it is important to note this projection does not consider future development.

Figure 25 shows that most cycling demand is to the west of Ashford town centre and to the south to Beaver Green, which could be connected to the SAGC. Jemmett Road emerges as one of the most heavily utilised southern segments, with a projected demand of 860 cycle commuters. Jemmett Road directly connects to Ashford town centre by a shared space cycle bridge which crosses Victoria Road and the railway. Providing a cycle connection from the SAGC to this link will be important to provide easy cycle access to Ashford town centre.

Kingsnorth Road also emerges as a link with significant cycling demand under the 'Go Dutch' scenario, with a forecast demand of 688 cycle commuters. This could be linked to the northern edge of the SACG, although the existing road has limited cycling infrastructure, and would require further improvements.

Figure 24 : PCT Tool Outputs – Go Dutch Straight Line Analysis



Figure 25 : PCT Tool Outputs – Go Dutch Links



DEMAND FOR CYCLING - RAPID CYCLEWAY PRIORITISATION TOOL ANALYSIS

The Rapid Cycleway Prioritisation Tool (RCPT) uses the PCT to identify roads with high cycling potential and searches for links with spare space (two or more lanes in one direction) to accommodate cycling infrastructure. It also suggests a 'cohesive network' that connects roads with high cycling potential and includes sections where roads might be narrower.

Figure 26 shows the RCPT output for Ashford, and identifies two 'top ranked new cycleways' on A28 Canterbury Road to the north and A292 Mace Lane to the west. It also highlights that the width of the A2042 ring road and A292 Elwick Road could accommodate cycleways.

The A2042 Romney Marsh Lane is identified as part of the cohesive cycleway network, and could link with the northern edge of the SAGC, although cycle flows would require full segregation, as it is a highspeed trunk road with hostile junctions. Jemmett Road is identified as providing alternative cycle access to Ashford from the South, and this could make use of some existing cycle facilities. Linking this southern route to a cycleway on Canterbury Road in the north, would provide north-south connectivity.

Figure 26: RCPT Outputs



DEMAND FOR CYCLING- NETWORK DEMAND PLAN

Figure 27 shows an output from a bespoke model developed to understand potential cycle demand with the addition of 7,250 homes in the SAGC under a 'Go Dutch' scenario, and mapping it to the network. Trip origins and possible destinations were fed into the model to provide the spatial distribution of trips.

Beaver Road emerges from the model as the most heavily utilised route from the south, with Kingsnorth Road and Millbank Road forming a route from the SAGC to this segment. The existing off-road cycle route from Pound Lane to Millbank Road was not well utilised in the model. An alternative route connecting SAGC to the Beaver Road segment originated further west and utilised residential streets through Beaver Green to connect to Beaver Lane and subsequently Beaver Road. From Beaver Road, both these routes utilise the A2042 bridge to connect to the town centre.

To the west the Great Chart Bypass is a heavily utilised route to the town centre from the SAGC in the model, with it proving more popular than the existing NCN 18 route through Victoria Park, although this still had significant usage. To the East the A2042 trunk road emerges as an alternative route to Beaver Road from Kingsnorth. Knoll Lane also is a popular route from the SAGC, utilising residential back streets to bypass Victoria Park and connect to the town centre.

The four roads passing through the SAGC all recorded significant demand, however this is likely to be somewhat dispersed amongst the interior road network once this is developed.

Figure 27 : Cycling Demand



DEMAND FOR WALKING - NETWORK DEMAND PLAN

Figure 28 shows an output from a bespoke model developed to understand potential walking demand with the addition of 7,250 homes in the SAGC under Trip origins and possible destinations were fed into the model to provide the spatial distribution of walking trips.

The most heavily utilised segment of the network stretches from the SAGC to Singleton, where a number of key destinations and services such as the local shopping parade, health centre, village hall and schools are clustered. This route follows Running Foxes Lane and Wesley School Road into Singleton. An alternative albeit less popular route to Singleton from the SAGC follows Bucksford Lane and Singleton Hill.

The Stanhope Road Loop also sees significant walking demand in the model, with multiple destinations located on the route, including a parade of shops, a parish hall and local health centre.

The walking route most heavily utilised heading towards Ashford is Kingsnorth Road/Beaver Road, which provides a direct connection to the town centre via the A2042 bridge over the railway. Also notable is the popularity of the Great Chart bypass from Singleton for walking access to the western side of the town centre. This route saw greater demand than the NCN18 route via Victoria Park.

Figure 28 : Walking Demand



Emerging Area of Focus

CYCLING

Analysis of the outputs from the model identified key routes with significant cycling potential, and these are mapped onto the existing network in **Figure 29** allowing gaps in the network to be identified.

The Kingsnorth / Beaver Road north-south route emerged from the modelling exercise as the route with most potential cycling demand, and was also identified by the PCT tool and the 2019 LCWIP as a high priority route. The existing network hugs parallel residential streets and offroad paths, although this reduces the directness of the route and consequently the potential cycling demand. Therefore, interventions that reallocate space to cycling on Kingsnorth and Beaver Road should be considered to provide a continuous and high quality cycle connection to Ashford town centre from the SAGC. In the town centre, the A2042 bridge was identified by the RCT as having available space and potential cycling demand to justify road space reallocation, and this should be considered to continue the link into the town centre.

Further east, the A2042 trunk road was identified by both the model and the PCT as having significant cycling potential, and would provide access from the eastern edge of the SAGC / Kingsnorth to Ashford town centre. This fills a gap in the existing network, with no existing cycling provision at this location.

The Great Chart Bypass was identified as having significant potential demand for cycling, but is also not featured in the existing network. Although NCN18 provides a similar link, it is less direct and off-road, which presents a safety concern at night making the route less appealing to potential cyclists. However, NCN18 was still identified as having potential cycling demand, so improvements to this link should also be considered.

Another identified key route provides an alternative to NCN18 in Victoria Park, bypassing the park via residential streets, and improvements to this route should be considered to facilitate cycling at night.

To compliment the identified networks above, an eastwest cycle route has been created to connect the proposed pedestrian and cycle spine with the key cycling routes. This will support cycle trips across the development and residents and visitors wishing to use the existing NCN.

Figure 29 : Draft Cycle Network



Emerging Area of Focus

WALKING

Analysis of the outputs from the model identified key routes with significant walking potential, and these are mapped onto the existing network in **Figure 30** allowing gaps in the network to be identified.

A key corridor for improvements runs between the SAGC and the Singleton district centre, where potential walking demand is highest. The existing PROW network will be key in linking this route to the SAGC, providing access to Cuckoo Lane where the route starts. The route running on Singleton Hill would also link in with the proposed pedestrian and cycle spine.

Kingsnorth Road and Beaver Road is identified as having significant potential demand. This route would connect to Ashford town centre and to the proposed pedestrian and cycle spine in the development at Long Length.

Two east-west walking routes are also identified as having significant potential demand, on Beaver Lane and Stanhope Road. These routes would link up the two north-south spines creating a cohesive walking network in south Ashford.

Pound Lane is also identified as a key route as it provides access to Kingsnorth CofE Primary school and when linked with the PROW and proposed pedestrian and cycle spine would provide a continuous walking route along the northern edge of the SAGC.

A east-west connection has been identified to connect the existing PRoW, planned key walking routes and proposed walking and cycle connections through the development. This east-west link will support a cohesive active travel and help increased walking trips amongst visitors and residents.

Figure 30 : Draft Walking Network



Chapter 3: Challenges, Issues and Opportunities

Highway Network Analysis

ROAD CLASSIFICATION

Figure 31 highlights motorways, primary roads, and A and B roads in the SAGC and the wider Ashford area. As shown, the closest road to the site is an A road running along the western edge of the site. This road provides good connections to central Ashford as well as connections to the motorway which is located in good proximity to the site. It is essential that there is good connections to this road from throughout the site. As well as this, there is also a Primary road running to the East of the site which also provides links to Ashford, many other villages and the motorway. Yet again it is essential all residents can easily access this road.

Figure 31: Road Classification



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Highway Network Analysis

LOCAL DRIVETIME

Figure 32 shows the local drive time from the SAGC in terms of travel times estimated at 8.30 am. The figure suggests that travel time by car is very efficient in the local area, with all locations within at least 4km (in some cases as high as 8km) in any direction being reached in less than 10 minutes. This is particularly striking in comparison to the local public transport accessibility map, which highlighted that some journeys into central Ashford can take up to 30 minutes. This can therefore encourage users to chose private vehicles over public transport, and as such public transport improvements are required in order to support the sustainable transport ambitions of the community.

Figure 32: Local Drivetime



REGIONAL DRIVETIMES

Figure 33 shows the local drive time from the SAGC in terms of travel times estimated at 8.30 am. The figure shows that location within 20km of the site can be reached in 30 minutes or less via car. When compared to the regional public transport accessibility, this map highlights some of the weaknesses of the public transport as areas such as Folkestone, Staplehurst, Dover and Maidstone can largely be reached within 30 minutes by car, compared to within 120 minutes by public transport. This therefore emphasises key routes which need to be improved in order to encourage residents to make the modal shift.

Figure 33: Regional Drivetime



User-centric analysis for SAGC

The national and sub-regional policy context, particularly the National Transport Decarbonisation Plan and the Transport for South East Draft Transport Strategy, highlights increasing calls for a move away from planning for vehicles towards planning for people and places. This is echoed by the Healthy Streets Transport Assessment guidance issued by Transport for London, whereby the 'Transport Planning for People' chapter sets out a requirement for assessments to include in-depth analysis of the users of proposed developments and all the types of travel that can arise (beyond simply peak travel hours). This contrasts with Transport Assessment approach (which have been undertaken for SAGC developments), which considers the traditional transport impact of development across all transport modes. The TA provides the evidence base and design provisions to support the SAGC development. This traditional approach provides confidence that the appropriate infrastructure has been future-proofed should certain demand thresholds be met. However such an approach also provides a window of opportunity to design and test a more progressive set of user-centric mobility interventions.

An understanding of the needs, wants and experiences of users is crucial in informing how mobility services are designed, planned and implemented. This is particularly important in lieu of the changing nature of the transport sector brought about by the digitisation of society. Progressive mobility interventions brought about by connected and automated technologies, zero emission vehicles, shared service models and new forms of access are disrupting how people, goods and services move and have potential to facilitate a shift towards sustainable travel at SAGC if implemented appropriately.

This strategy has therefore been informed by user-centric analysis, which in turn has been informed by a residents' travel survey undertaken in September and October 2021 to understand which options they may be more receptive to. 105 responses were received to the travel survey, representing 334 household members (noting multiple household members).

Figure 36 – No. of residents in each property type by age group



ABOUT THE RESIDENTS

Figure 36 summarises the number of residents in each property type by age group.

The age group that accounts for the highest proportion of respondees are those aged 36 to 45 years old (20%). This pattern is seen for residents living in detached houses. The age bracket is slightly lower for residents in semi-detached houses, with a high proportion of these residents being aged 26-35.

Residents who live in flats or farms seem to be older, with around 60% of flat residents being aged between 56 and 65 years old, and 50% of farm residents being aged 66 and above.



No. of residents in each age group



WHERE DO THEY LIVE?

Figure 37 summarises where which neighbourhood. The respondees live in. The neighbourhood with the most respondents is Chilmington Green, where 42% of respondents live, followed by Kingsnorth Village (20%) and Singleton (13%).

Figure 37 – No. of respondents in each neighbourhood



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User-Centric Analysis

APPROACH

Core to embedding future mobility principles within a development is to adopt a people-centric assessment. Recognising who the residents of the SAGC might be means user needs, wants and experiences can be identified from the start, informing efforts to embed sustainable travel behaviour within the development.

METHODOLOGY

1. Who might live in the SAGC?

The starting point is informed by the proposed development mix shown as shown in Figure 38. This helps to understand who might be moving to the development.

2. How do they travel and how might that change?

Existing and future travel behaviour was captured through a travel survey which was disseminated in the local area, including amongst occupiers of the early development phases.

3. Weighting of survey responses

Survey responses were then weighted to reflect the proposed housing mix and totals. This makes the assumption that responses to the travel survey are representative of future occupiers.

4. How mobility could best meet future travel needs

The findings from the travel survey have then been used to inform a strategy that considers the needs and expectations of the different users of the development.

5. User-centric mobility planning

Bringing all these steps together allows new mobility interventions that are tailored to development occupiers to be embedded in the options long-list.

Figure 38 – Proposed housing mix for SAGC



■1 bed flat ■2 bed flat ■2 bed house ■3 bed house ■4 bed house ■5 bed house

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User-Centric Analysis

Figure 39 – No of cars by property type

CAR OWNERSHIP

Survey responses have been weighted to match the development mix of the SAGC. This data shows that average car ownership amongst respondents shown in Table 1 is estimated to be 1.67. This is significantly greater than the UK average of 1.21 (DfT, 2019).

There is significant variation in car ownership by property type, with car ownership in 1 bed flats at 1.45 compared to residents in 5 bedroom houses at 2.06. However across all property types car ownership is greater than 1 car per household.

Figure 39 shows the estimated composition of car ownership by property type. This shows the significant majority (>95%) of flats have less than 2 cars. However, flats will only comprise 7% of the development. A significant portion of 2+ bed houses in the area are each estimated to own 3 or more cars. Around 30% of 2 and 5 bedroom houses are estimated to own 3 or more cars.

These figures suggest that development occupiers will have high levels of car ownership, increasing the need to embed sustainable travel behaviour. Sustainable modes will have to be competitive with journeys by car, as households are likely to have access to multiple vehicles.

Figure 40 shows that current estimated electric vehicle (EV) ownership amongst development occupiers is 3.5%. This is higher than the UK average of 1.38% (EAFO, 2020). EV ownership is highest in 1 bedroom flats and 4 bedroom houses, where it exceeds 4%. Figures are broadly comparable for other property types.

The development will have to accommodate this high level of EV ownership through charging infrastructure, but the already high uptake also suggest investment to encourage sustainable travel might be best directed elsewhere where behaviour is not already embedded. The development will also need to reflect the growing demand for such infrastructure with the phasing out of combustion engine by 2030 and hybrid cars by 2035.



Car ownership

Table 1 – Average no. of cars by property type

1 bed flat	2 bed flat	2 bed house	3 bed house	4 bed house	5 bed house	Total
1.45	1.73	1.91	1.76	1.26	2.06	1.67

Figure 40 – Electric Vehicle adoption by property type



User-Centric Analysis

Figure 41 – Cycle ownership by property type

CYCLE OWNERSHIP

Figure 41 shows cycle ownership by property type based on the results from the travel survey. It finds that those in 1 bedroom flats are least likely to own a cycle, with over 60% without access to a bike. This is likely a consequence of the smaller footprint of the property and difficulty storing a bike. This highlights the importance of providing enough safe and accessible cycle parking for flats to facilitate cycle ownership.

Three bedroom houses were most likely to own a bike, with only 7% reporting no cycle ownership. Cycle ownership was otherwise broadly similar across property types, with around 30% not owning a bike.

3, 4 and 5 bedroom houses were more likely to own multiple bikes, with 40-50% owning 4 bikes. This underscores the importance of providing sufficient storage space for cycles in larger properties.



Bicycle Ownership
NUMBER OF CARS

Table 2 shows the number of cars expected within the development based on the number of units and the survey responses.

Three bedroom units have the biggest share of cars, with 4350, whilst 1 bedroom flats have the smallest at 143.

These figures could be used to identify a need for and support any application for parking within the development.

The existing parking allocation from the Chilmington Green Transport Assessment is shown in Table 4, which proposed 2 spaces per unit for the majority of units to accord with local standards at the time. Analysis of Table 3 shows that although some households would be expected to exceed this allocation, the vast majority could be accommodated within 2 spaces.

Table 4 – Parking standards from Chilmington Green TA (2011)

Table 3.2 Suburban Parking Standards

Type of dwelling	Standard	Form
1 bedroom flat	1 space per flat	Can be allocated but unallocated is preferred
2 bedroom flat	1.5 spaces per flat	1 space may be allocated but unallocated is preferred
1 bedroom house	1 space per house	Can be allocated but unallocated is preferred
2 bedroom house	2 spaces per house	One or both spaces can be allocated although one unallocated space is preferred
3 bedroom dwellings	2 spaces per dwelling	Allocated
4+ bedroom house	2 spaces per house	Allocated

Note: Tandem dwelling is accepted where two spaces per dwelling are required, but this require an additional 0.5 spaces towards unallocated flexible on-street parking

Table 2 – Number of cars by property type

Number of cars	1 bed flat	2 bed flat	2 bed house	3 bed house	4 bed house	5 bed house	TOTAL
1	62	163	333	1056	900	298	2811
2	71	551	911	2471	1562	504	6070
3	9	0	1063	494	0	756	2322
4	0	0	202	329	0	0	532
TOTAL	143	713	2509	4350	2462	1558	11735

Table 3 – Number of households by car ownership

Number of cars	1 bed flat	2 bed flat	2 bed house	3 bed house	4 bed house	5 bed house	TOTAL
1	62	163	333	1056	900	298	2811
2	36	275	456	1236	781	252	3035
3	3	0	354	165	0	252	774
4	0	0	51	82	0	0	133
TOTAL	101	438	1193	2538	1681	802	6753

MODE SHARES

Figure 42 shows the mode shares for travel survey respondees for different journey purposes. Notably journeys to shopping destinations have very high levels of car usage, at 96%. No respondents reported cycling or using public transport to access the shops. This presents a significant opportunity to shift travel to more sustainable modes for this type of journey purpose. Existing shopping destinations are poorly served by public transport and are often too far to be accessed by active modes. Incorporating mixed use development within the SAGC could also reduce the (current) need to drive for shopping, whilst improved public transport connections could better serve existing destinations.

Leisure journeys saw the highest usage of active modes at 34%, with 12% cycling or scooting and 22% walking. Ensuring greenways, bridleways and other local leisure routes are fully accessible to residents will be important to maintain this high figure, including to new parklands such as Discovery Park. Improving the quality of local amenities would also further reduce the need to drive for leisure purposes.

Education (including school pick up/drop off) has a 'sustainable' mode share of 39%. There are therefore opportunities to further increase this through provision of active travel routes to schools, behaviour change initiatives, and public transport services.

Figure 43 provides further analysis of commuting travel behaviour by property type. It shows overall, the sustainable mode share is 27%, with 73% of respondees driving to work. Car sharing is very low for this journey purpose with <1% reporting travelling as a car passenger. Car usage was highest amongst 2 bedroom flats and 5 bedroom houses at 100% of journeys. The sustainable mode share is highest for 4 bedroom houses at 44%.

Figure 42 – Mode share for different journey purposes







CONSUMER CONSIDERATIONS

The travel survey also recorded consumer considerations for both mode choice and journey planning application (app) choice. Respondents scored each option by its importance on a scale of 1 to 5. Figures 44 and 45 show the share of the total score for each option.

When deciding which mode to use, both convenience and speed score highly, with a combined 39%. These are usually considered attributes of driving, so to compete, sustainable options have to be both convenient and fast. Reliability also score highly, at 19%. Journey time reliability should be emphasised when promoting active travel and should be a key priority when operating public transport services.

Environmental responsibility scores low as a consideration at only 7% of the total score. This suggests that efforts to encourage or promote sustainable travel should not focus on environmental or societal benefits, rather benefits for the individual.

Digital connectivity and status score very low, so is perhaps a less important consideration when developing the strategy.

Therefore when evaluating the options to include in the Action Plan, it is recommended that convenience, speed and reliability feature prominently alongside strategic goals.

When deciding which journey planning app to use, accurate real-time information and multi-modal advice score a combined 33%. Integrated payments were not a key consideration for many scoring 14%. Whilst an app that suited respondees regular journey scored 18%, suggesting for some users there is limited scope for apps to change travel behaviour. These findings can be used to prioritise investment and establish development priorities if building an app.

Figure 44 – Consideration in mode choice - scoring



Figure 45 – Consideration in app choice - scoring



Accurate realtime information Suits my regular journey
 Multimodal advice
 Additional features
 Integrate Payment
 Community

Figure 46 – Location and frequency of deliveries

DELIVERIES

The travel survey identified most development occupiers receive frequent deliveries to their home address. 27% reported that they received deliveries daily, with 80% reporting they receive them at least weekly. This delivery activity would generate a significant number of trips, causing significant negative impacts.

The survey also identified that utilisation of parcel lockers is very low, with only 7% reporting that they used them at least monthly. This compares with much higher utilisation of click and collect services, with 50% using them at least monthly. This is partly reflective of a lack of provision at present.

Parcel lockers therefore have significant potential to consolidate deliveries currently being made to multiple home addresses. If utilisation was similar to that of click and collect services (which cannot be used for deliveries from many online-only retailers) a significant reduction in delivery vehicle miles and numbers could be achieved. Given the current low level of utilisation of parcel lockers, investing in their provision within the SAGC could be considered an quick-win to establish more sustainable delivery patterns.



KEY FINDINGS

Amongst those with a profile of the development occupiers:

- Existing levels of car ownership are high, and this will ultimately translate into higher car usage as the development progresses.
- Sustainable modes make up the minority of most trip types, however there is significant scope to increase the proportion and quantum of these trips to be made by active travel and public transport. There is scope in particular to influence shopping and commuting trips.
- Electric vehicle uptake is already higher than the national average, which suggests that new residents in SAGC are considering switching to using zero-fuel as a consequence of making a large lifestyle change such as moving home. Albeit this still doesn't address the issues of single occupancy car use.
- Mode choice is informed strongly by both convenience and speed, very weakly by environmental responsibility
- Home deliveries made to SAGC are very frequent but the current utilisation of delivery consolidation services is low. This suggests there is a lack of such provision, so the strategy should address that balance, particularly as the SAGC population is growing and there is a greater trend towards home shopping.

HOW MOBILITY COULD BEST MEET FUTURE TRAVEL NEEDS

These findings demonstrate both that existing travel behaviour relies heavily upon unsustainable modes, and that there is significant scope and potential to embed sustainable travel behaviours.

Interventions in the Action Plan must attempt to match the convenience and speed offered by driving in order to garner widespread appeal. This will likely favour an approach that combines both a carrot and a stick, of incentivising and facilitating sustainable behaviours, whilst penalising and restricting unsustainable behaviours.

Looking at future travel trends more generally, it's clear that digital alternatives to making journeys have surged in popularity. In particular online deliveries are supplanting many trips to brick and mortar stores. Therefore, any mobility strategy must also tackle the current reliance on home delivery amongst online retail. Whilst click and collect options are popular, convenient and local parcel locker options are likely to prove part of the solution. Existing low levels of utilisation could be addressed by embedding delivery consolidation within the new development.





SAGC Sustainable Transport Strategy

INTRODUCTION

The previous chapters have drawn together evidence and analysis from the policy and document review, analysis of the transport network, and findings from site visit. In addition, undertaking user-centric analysis has helped to articulate further insights by placing the needs of the transport users.

It is evident that an ambitious transport strategy is needed for SAGC to address existing and projected transport challenges, which at present favour non-sustainable modes. For an effective strategy to address a large shift towards sustainable modes and behaviours, a number of interlinked approaches will be needed which:

- Creates capacity for safe, sustainable and healthy travel modes such as cycling, walking and public transport.
- Creates capacity for emerging 'future' mobility modes and digital connectivity
- Reduces the dominance of traffic including freight on the local community in SAGC by making it a 'people focused' rather than a 'vehicle' focused place.
- Maximises and reinforces the desired mode choices through effective behaviour change.

VISION

Drawing upon the wider strategic context as well as the very local aspirations, we propose that the transport vision is:

"For new residents, employees and visitors of SAGC to make sustainable travel choices from the start to bring about health, environmental and economic benefits to all"

OBJECTIVES

- 1. To create a safe and active neighbourhood in SAGC, by making walking and cycling the natural choice for short journeys, and as integral components of longer journeys.
- 2. To increase the take up and mode share of public transport, to make rail and bus the regular choice for journeys.
- 3. To reduce the impact of traffic, including single occupancy car journeys and freight movements within and around SAGC.
- 4. To take advantage of emerging future mobility modes and technologies to broaden carbon-free travel choices for the community.

STRATEGY THEMES

A number of strategy themes have been identified to frame the strategy and the options in the action plan. These cut across the objectives. Figure 47 shows how the themes address the objectives

- Public transport
- Active travel
- Future mobility and digital connectivity
- Demand management
- Freight and servicing
- Behaviour change
- Highway network.

STRATEGY THEMES

Figure 47 – Alignment of strategy themes with the Objectives

Strategy Theme	To create a safe and active neighbourhood in SAGC, by making walking and cycling the natural choice for short journeys, and as integral components of longer journeys	To increase the take up and mode share of public transport, to make rail and bus the regular choice for longer journeys	To reduce the impact of traffic, including single occupancy car journeys and freight movements in SAGC	To take advantage of emerging future mobility modes and technologies to broaden carbon-free travel choices for the community
Public transport	\checkmark	$\checkmark\checkmark$	\checkmark	√
Active travel	$\checkmark\checkmark$	\checkmark	\checkmark	\checkmark
Future mobility and digital connectivity	✓	✓	✓	$\checkmark\checkmark$
Demand management	\checkmark	\checkmark	$\checkmark\checkmark$	\checkmark
Freight and servicing	\checkmark		\checkmark	\checkmark
Behaviour change	\checkmark	\checkmark	$\checkmark\checkmark$	
Highway Network	\checkmark			

✓ Some alignment✓ ✓ Strong alignment

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CHAPTER 5 Action Plan

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Action Plan

OPTION DEVELOPMENT

Public Transport Options:

A number of public transport options have been considered in the development of a long-list. These are based on some of the consistent themes identified within the policy context; that adequate public transport can improve accessibility, reduce congestion and reduce harmful carbon and pollutant emissions.

The long list of public transport measures include demand responsive transit, the proposed bus routes and route extensions that the developers are committed to, as well as additional measures to further boost public transport in the community. These include consideration of fare structures, ticketing and bus priority measures. More generally PTALs (Public Transport Accessibility Levels) are low across Ashford, so increasing frequencies of existing and developer committed routes could be a further consideration.

Active Travel Route Options:

An analysis into the existing and future active travel network was undertaken to identify key walking and cycling routes within the SAGC and onwards to Ashford Town Centre and beyond.

A review of the existing infrastructure and local policy documents and plans including Borough's LCWIP document was undertaken to identify a base network.

Analysis has been undertaken to identify priority locations for new cycleways and walking routes.

As such, five key cycling links and four walking routes have been identified and included in the scheme long list. These range from as small a scale as junction or crossing improvements, to as large a scale as entire proposed routes, all intended to improve the walking and cycling connectivity to, from and within the SAGC for all users.

In addition, active travel options to improve walking and cycling permeability within SAGC are also included.

Future Mobility and Digital Connectivity

Future Mobility options are those which align wth the Six Key Changes identified in the DfTs Future of Mobility Urban Strategy. These are:

- Cleaner Transport,
- Data & Connectivity,
- New Modes,
- Changing Attitudes,
- Automation,
- New Business Models.

As such, the development of options includes future mobility measures include such as: Mobility Hubs, Shared mobility modes like bike hire and car clubs, demand responsive transport, electric vehicle charging points, and Mobility-as-a-Service solutions.

Behaviour Change Options

Behaviour change measures are those intended to nudge residents transport behaviours to support the Transport Strategy's objectives. These are typically options which promote and incentivise particular modes, those that build users' confidence and skills in using sustainable travel. They are noninfrastructure measures (typically non-capital). Therefore, these include measures such as residential travel plans, promotional events, and training.

Changing behaviours is difficult to achieve, but doing this at a time which coincides with life events such as residents moving to the new development in SAGC, there is an opportunity to embed desired travel behaviours from the outset. When behaviour change measures are combined with the introduction of sustainable transport infrastructure and demand management measures, these are most effective.

Highway Options

A number of highway solutions have been identified and included in the options long list. These include some of the most substantial measures that developers have a commitment to deliver, such as highway capacity enhancements of the A28, as well as some of the lightest touch measures such as managing traffic speeds on all residential streets within SAGC.

Demand Management Options

Demand management measures are those which look to influence the demand for travel by managing the supply such as limiting parking spaces, and limiting the number of vehicles using certain streets or areas and/or at specific times. These are typically done through pricing or charging in order to reduce the negative impacts, or shift demand temporarily in order to avoid the traditional morning and evening peaks.

Freight and Servicing Options

Freight and servicing measures are those intended to limit the effect of freight and servicing movements on the transport network. This is an issue that has become increasingly challenging in recent years with the rise in online shopping, and further catalysed by the onset of Covid-19. Options include consolidated delivery points and construction lorry routes.

Action Plan

OPTION APPRAISAL

A long-list of options has been developed and appraised to help inform this Action Plan

A Multi-Criteria Analysis Framework has been used to qualitatively appraise the initial long list of options.

This approach provides a consistent and transparent scoring of each scheme to enable difficult but transparent decisions on which of the identified options should be prioritised for further detailed development, refinement and delivery.

Each option was therefore ranked to have a clear understanding of:

- The recommended package of schemes that should be prioritised for further development, refinement and delivery;
- Which options should not be progressed at this time.

An initial sift was undertaken to rule out options which are known to be undeliverable, such as those which would require substantial change to policy or technological advancement.

The appraisal framework has then been used to help identify those that should be prioritised for inclusion in the SAGC Action Plan. This looked at each option in turn as to whether:

- Key local objectives will be achieved (derived from the policy review); and

- The option is deliverable (specifically looking at scheme cost, stakeholder acceptability, political acceptability and complexity of delivery).

OPTION PACKAGES

From this analysis, options have been ranked and packaged into the following packages:

Package 1 – Early 'quick wins' which improve the existing movement network making it more accessible and viable for pedestrian and active travel within, to and from the garden community. **Delivery in the next 2 years**.

Package 2 - Opportunities to lower the carbon impact of the developments, both in terms of ongoing construction vehicle activity and the increasing vehicle activity of new residents. **Delivery in the next 5 years**

Package 3 - Long-term infrastructure projects which can greatly incentivise sustainable travel within, to and from the garden community. **Delivery in the next ten years**

Short-Term Actions (delivery in the next 2 years)



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Short-Term Actions (delivery in the next 2 years)*

Action					
ref	Option Type	Option description	Strategy Theme	Lead	Indicative Cost
S1	Bus route	As per the Chilmington Green Section 106 Legal Agreement, a new bus route serving Chilmington Green to be implemented, including temporary bus stop displaying real time travel information, between the site and the town centre at least every 30 minutes.	Public transport	Hodson Developments	High (>£100k)
S2	Active Travel within SAGC – Pedestrian and Cycle spine	Provision of active travel infrastructure within Chilmington Green where key linkages can be identified and delivered by Developers with KCC support in the short-term. Where resource and funds cannot deliver in the short-term, these should be considered no later than within the mid-term actions list.	Active travel	Developer Consortium, KCC and ABC	High (>£100k)
S3	Review developer proposed active travel network across SAGC	Active travel network review to ensure seamless connectivity between the three areas of SAGC by foot and cycle. This will address inconsistency/ lack of detail with and between developer proposals. In addition opportunities to provide connections to and within Discovery Park for active travel users, including equestrians will be explored.	Active Travel	KCC and ABC	Medium (£10k- 100k)
S4	Chilmington Green School Travel Plan and Measures	Monitor and adjust School Travel Plan for Chilmington Green Primary School as travel behaviours evolve. Travel plan should commit to various activities such as Park and Stride and a walking school bus. Cycle proficiency training should also be promoted among Parents through the School's communications.	Behaviour change	Chilmington Green Primary School and KCC	Low (<£10k)
S5	School Street / Car-free zones	Identify potential for car-free zones within the developments. The newly opened Chilmington Green Primary School is currently located in an isolated location on a rural lane but could be considered as a future potential School Street. E.g. modal filter	Active travel	ксс	Low (<£10k)
S6	Improve pedestrian / cycle access to Chilmington Green School	Continue work to improve and maintain direct pedestrian and cycle access to the new Chilmington Green Primary school, which opened in November 2021. The addition of signage and crossing points should be part of these improvements.	Active travel	Hodson Developments	Medium (£10k- 100k)
S7	Review potential for Demand Responsive Transit	Explore options for an alternative to bus service provision for new residents	Public transport	Developer Consortium and KCC	Medium (£10k- 100k)
S8	Implement effective traffic management for HGV Construction routes.	Implement traffic management plan for HGVs through SAGC so that construction routes are directed away from residential areas and unsuitable rural lanes.	Freight and servicing	Hodson Developments and ABC	Low (<£10k)
S9	Superfast broadband delivered by developer/telecoms.	Provision of high-speed broadband and house design to enable home working	Future mobility & digital connectivity	Developer Consortium	Low (<£10k)

*A number of these actions can be considered as ongoing actions for the medium and long term as appropriate, reflecting the phasing of the development (such as Action S11 and S15), or to reflect that some actions could be repeated annually (such as Actions S12 and S17). Some actions focussed on feasibility studies or reviews (such as S3 and S4) can result in implementation in the medium or longer term

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Short-Term Actions: (delivery in the next 2 years)*

Action					
ref	Option Type	Option description	Strategy Theme	Lead	Indicative Cost
S10	Chilmington Green Residential travel plan	Developer to implement the Chilmington Green Travel Plan as per its commitments. Various measures to be implemented at different stages to strongly influence travel behaviours by new residents	Behaviour change	Hodson Developments	Low (<£10k)
S11	Implement cycle training for residents and pupils	Cycle training for local residents to improve confidence in using bicycles	Behaviour change	КСС	Low (<£10k)
S12	Developer to provide travel information to residents	 Developer to discuss sustainable travel options available on site with prospective and new residents as part of sales pitch/ induction to new residents Preparation of a travel pack to be issued to all new residents. Containing information of travel options, timetables and what new schemes are in the pipeline Direction to sustainable travel websites 	Behaviour change	Developer Consortium	Low (<£10k)
S13	Promote sustainable travel promotional events	Support local organisations and groups interested in sustainable travel	Behaviour change	ксс	Low (<£10k)
S14	Develop sustainable travel incentives with partners (e.g. Bus vouchers)	Development of travel incentives - Cheaper fares, trial discounts or a points based benefits system such as Better points (which is being used in Ebbsfleet) Bus vouchers - could help introduce residents to the new bus services once they commence.	Behaviour change	Developer Consortium and Bus provider	Low (<£10k)
S15	Expand and promote Kent car share scheme to residents	Expand and promote the existing Kent Liftshare scheme to new residents of SAGC	Future mobility & digital connectivity	ксс	Low (<£10k)

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*A number of these actions can be considered as ongoing actions for the medium and long term as appropriate, reflecting the phasing of the development (such as Action S11 and S15), or to reflect that some actions could be repeated annually (such as Actions S12 and S17). Some actions focussed on feasibility studies or reviews (such as S3 and S4) can result in implementation in the medium or longer term



- M23: Workplace Travel Plans to be delivered
- M24: Work with bus operators to explore flat bus fares

Action					
ref	Option Type	Option description	Strategy Theme	Lead	Indicative Cost
M1	A28 Upgrade Explore potential for active travel provision on the A28	A28 to be upgraded to dual carriageway with 400 occupants Opportunity to tie in A28 with proposed Cycle Route 2 to ensure active travel modes are considered. There is currently no footpath so this should also be considered.	Public transport	Hodson Developments and KCC	High (>£100k)
M2	Footpath upgrades	Proposed footpath upgrades as part of Kingsnorth Green plans. Church Hill and Pound Lane footpath upgrade and resurfacing -as committed by developer	Active travel	Jarvis/Pentland Developers and KCC	Medium (£10k-100k)
МЗ	Bond Lane repurposed for active travel	Bond Lane closure (Kingsnorth) - repurpose for active travel	Active travel	Jarvis/Pentland Developers and KCC	Low (<£10k)
M4	Bus routes	New bus route serving Kingsnorth Green to be implemented. Improvements to the bus service between Kingsnorth Green and Ashford Town Centre. Implementation of new phase 1 and phase 2 bus routes serving Court Lodge	Public transport	Jarvis/Pentland/Halla m Developments and KCC	Medium (£10k-100k)
M5	Feasibility of Mobility Hubs	Feasibility of mobility hub components – such as car clubs, bike share, freight/ delivery consolidation, commercial, remote working and social facilities. Phased implementation	Future mobility & digital connectivity	Developer Consortium	High (>£100k)
M6	Cycle Route 1 Feasibility	Cycle Route 1 - Chilmington Green to Ashford Town Centre via Victoria Park. Segregated cycleway, crossings, path widening, barrier removal	Active travel	ксс	High (>£100k)
M7	Cycle Route 2 Feasibility	Cycle Route 2 - Singleton to Ashford via A28. Segregated cycleway, shared use path, path widening, crossings	Active travel	ксс	High (>£100k)
M8	Cycle Route 3 Feasibility	Cycle Route 3 - SAGC to Jemmett Road where it connects via Route 1 to Ashford Town Centre. Light cycle lane segregation, crossings, speed limit reductions, modal filter	Active travel	ксс	Medium (£10k-100k)
M9	Walking Route 1 Feasibility	Walking Route 1 - Mock Lane to Ashford via Singleton. Footway provision, crossings, path widening, barrier removal	Active travel	ксс	Medium (£10k-100k)
M10	Walking Route 2 Feasibility	Walking Route 2 - Coulter Road/ Cuckoo Lane to Singleton and Stanhope. Footway provision, continuous footway treatment, guardrail removal, crossings	Active travel	ксс	High (>£100k)

*See Appendix 1 for more detailed plans of Actions M6 to M11 A number of these actions can be considered as ongoing actions for the longer term as appropriate, reflecting whether some schemes progress from feasibility stages to implementation (such as M5 and M6 to M11), as the development progresses

Action	Option Type	Ontion description	Stratogy Thoma	Load	Indicativo Cost
M11	Walking Route 3 Feasibility	Walking Route 3 - Chart Road/ Milbank Road to Ashford. Footway provision, vegetation management, footpath widening, continuous footway provision	Active travel	KCC	Medium (£10k-100k)
M12	Junction Upgrades	Magpie Hall Road junction improvement Kingsnorth. Church Hill / Pound Lane junction signalisation Kingsnorth. Forestall Meadow Roundabout Kingsnorth. Malcolm Sargent Roundabout Kingsnorth. Britannia Lane crossing improvement- as committed by developer.	Highway network	Developer Consortium	High (>£100k)
M13	Active travel infrastructure as committed in developer plans (Kingsnorth Green and Court Lodge)	Active travel infrastructure within Kingsnorth / Court Lodge site - as committed in developer plans	Active travel	Developer Consortium	High (>£100k)
M14	Develop and implement Cycling and Pedestrian Wayfinding	Implement appropriate signage of pedestrian / cycle routes. Adopt system to show walking / cycle distances. Helps to reinforce the fact that walking/ cycling can be an option and informs route choice.	Active travel	ксс	Medium (£10k-100k)
M15	Feasibility of 20mph zones, low traffic neighbourhoods and Controlled Parking Zones as per the Chilmington Green Area Action Plan	As the development areas in SAGC come forward in Chilmington Green, Kingsnorth and Court Lodge introduce modal filters where appropriate to discourage through traffic from the area. Step 1 - Define Liveable Neighbourhood areas that are bounded by the key routes through the development Step 2 - Engage with local community to explore what is acceptable. First principal of 20mph zones for all new residential streets. Focussed speed limit around the new Chilmington Green school (Mock Lane) Minimise parking on street in the new development by non- residents through introduction of CPZs.	Active travel	Developer Consortium and KCC	; Medium (£10k-100k)
M16	Review and establish equestrian network	There are some existing sections of Bridleways in the area albeit quite fragmented. Potential opportunity to create new bridleway provision in the area - linked to the new Discovery Park?	Active travel	ксс	High (>£100k)
M17	Electric Vehicle Charge Points	At key origin/destinations in SAGC. Understand if what is planned will be sufficient to support future demand for electric vehicle charging	Future mobility & digital connectivity	Developer Consortium and KCC	High (>£100k)
M18	Implement cycle parking at destinations in SAGC (developer and non developer commitments)	Chilmington Green Transport Assessment: 125 commercial cycle parking spaces. 45 of these retail, 79 office. Spaces will be located within 125m of destination. The consortium is responsible for funding this.	Active travel	Hodson Developments	Medium (£10k-100k)

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*See Appendix 1 for more detailed plans of Actions M6 to M11 A number of these actions can be considered as ongoing actions for the longer term as appropriate, reflecting whether some schemes progress from feasibility stages to implementation (such as M5 and M6 to M11), as the development progresses.

Action					
ref	Option Type	Option description	Strategy Theme	Lead	Indicative Cost
M19	Work with freight industry to develop and implement micro-consolidation of deliveries	Engage delivery companies (e.g. Royal Mail, DPD) to explore the potential for local deliveries to be undertaken by smaller and electric vehicles	Freight and servicing	Local authorities/ Freight companies	High (>£100k)
M20	Work with bus operators to upgrade bus fleet to zero-emission	New bus routes to use bus fleets powered by renewable fuels.	Public transport	Bus operators and KCC	High (>£100k)
M21	Developer to implement Kingsnorth Green Travel Plan, including travel plan measures such as personalised travel planning	Developer to implement the Kingsnorth Green Travel Plan, as part of its commitments including monitoring. Various measures to be implemented at different stages to influence travel behaviours by new residents. Typically these schemes are not that effective. Electronic based journey planning is already available through multiple platforms (Citymapper, Google etc). Door to door journey planning very labour intensive and expensive to deliver	Behaviour change	Jarvis/Pentland Developers	Low (<£10k)
M22	Developer to implement Court Lodge Travel Plan including travel plan measures such as personalised travel planning	Developer to implement the Kingsnorth Green Travel Plan, as part of its commitments including monitoring. Various measures to be implemented at different stages to influence travel behaviours by new residents. Typically these schemes are not that effective. Electronic based journey planning is already available through multiple platforms (Citymapper, Google etc). Door to door journey planning very labour intensive and expensive to deliver	Behaviour change	Hallam Developments	Low (<£10k)
M23	Workplace Travel Plans to be delivered	Applicable for employers/ business parks once they go live (linked to the committed Travel Plans)	Behaviour change	Developer Consortium	Low (<£10k)
M24	Work with bus operators to explore flat bus fares	Would need to be considered as a Borough or County wide strategy. But could be considered in response to Governments' Bus Back Better strategy	Public transport	КСС	Medium (£10k-100k)
M25	New E/W Cycle Route	Using the findings from the review of E/W pedestrian and cycle connectivity, explore feasibility of establishing a new E/W cycle route	Active Travel	Hodson Developments and KCC	High (>£100k)
M26	Review developer proposed bus provision across SAGC	To address deficiencies with the current developer committed routes (the ack of strategic east-west movement through all three sites, and the likely ineffectiveness of a circular route from a passenger perspective)	Public transport	KCC and ABC	Medium (£10k- 100k)
M27	New E/W Bus Route	Using the findings from the review of planned bus provision,	Public Transport	Bus Operator, Hodson Developments and KCC	High (>£100k)

*See Appendix 1 for more detailed plans of Actions M6 to M11 A number of these actions can be considered as ongoing actions for the longer term as appropriate, reflecting whether some schemes progress from feasibility stages to implementation (such as M5 and M6 to M11), as the development progresses.

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Long-Term Actions Plan (delivery in the next 10 years)*



Long-Term Actions Plan (delivery in the next 10 years)*

Action ref	Option Type	Option description	Strategy Theme	Lead	Indicative Cost
11	Cycle Route 4 Ecosibility	Cycle Route 4 - SAGC to Ashford Town Centre via Beaver Road and Kingsnorth Road. Light cycle lane segregation, crossings, segregated cycleway, segregated junction, speed limit reduction, quardrail removal	Active travel	KCC	
L2	Cvcle Route 5 Feasibility	Cycle Route 5 - A2042 from Kingsnorth to South Ashford. Segregated cycleway/shared use path, crossings	Active travel	KCC	High (>£100k)
L3	Walking Route 4 Feasibility	Walking Route 4 - Ashford Lane/ Pound Lane/ Church Hill. Footway provision, street lighting, crossings, footpath widening	Active travel	KCC	High (>£100k)
L4	Feasibility and roll out of 2nd tranche of mobility hubs	Feasibility of mobility hub components – such as car clubs, bike share, freight/ delivery consolidation, commercial, remote working and social facilities. Phased implementation	Future mobility & digital connectivity	Developer Consortium	High (>£100k)
L5	Feasibility of bus rapid transit as long term solution	Explore opportunities to build on the success of the existing bus transit schemes in the county such as the Kent fastrack network. Www.go-fastrack.co.uk.	Public transport	KCC	High (>£100k)
L6	Feasibility and roll out of Automated last mile delivery	Engage deliver companies to explore the potential for automated last mile delivery	Freight and servicing	KCC and ABC	High (>£100k)
L7	Integrated public transport ticketing	Would need to be considered as a Borough or County wide strategy. But could be considered in response to Governments' Bus Back Better strategy	Public transport	Bus operators and KCC	High (>£100k)
L8	Development and implementation of Mobility as a service (MAAS), including digital public services	Would need to be considered as a Borough or County wide strategy. But could be considered to provide better information to new residents	Future mobility & digital connectivity	ксс	High (>£100k)

*See Appendix 1 for more detailed plans of Actions L1 to L3. The feasibility stages of L1 to L3 could be undertaken sooner with a focus on implementation in the longer term as the development progresses

Next Steps

This study has developed a transport strategy and action plan for the South of Ashford Garden Community in response to a number of challenges facing the area, not least the lack of non-car transport modes that new residents of the development are currently faced with.

The action plan establishes a roadmap of proposals which will ensure that residents of the Garden Community have the breadth and depth of sustainable travel choices at their disposal, as the development builds out over the next 20 years or so.

The developers should take a lead on funding much of this as is required through the planning conditions. However there are gaps where further investment could bring about further benefits to residents and to address the emerging policy framework such as the Governments' decarbonisation strategy and the Ashford to Zero plan.

The Action Plan therefore sets out proposals which are currently unfunded and as such a key next step should be to identify potential funding sources. Thereafter the delivery of the short term actions over the next two years should therefore be a priority.

Appendices

Appendix 1 sets out further details of the proposed cycling and walking routes from the Action Plan.

Appendix 2 sets out three illustrative scenarios which aim to bring the Action Plan to life should all the proposals go ahead. Scenario 1 shows how a resident can move within the Garden Community, scenario 2 exemplifies how local residents can lead healthy and active lifestyles and scenario 3 sets out how residents can travel to areas outside of the Garden Community.



ROUTE 1 (ACTION REF M6

Route 1 runs from Chilmington Green to Ashford Town Centre via Victoria Park. Much of the route follows the existing NCN18 route alignment. Quick wins on this route include replacing uncontrolled crossings with signalised/parallel crossings, removal of barriers, wayfinding and path widening. More ambitious proposals would include extending the segregated cycleway southwards to the SAGC and segregating the cycleway from the footway. Although this route is largely separated from traffic, it is not inclusive or accessible, as it runs through Victoria Park which poses safety concerns at night. Therefore it is important to develop on-street alternatives.



Route 2 runs from Singleton to Ashford Town Centre from the west via the A28 Great Chart bypass. For most of its length the Great Chart Bypass does not have any existing cycle or pedestrian facilities, although there is ample space either space of the carriageway to introduce segregated facilities that are LTN 1/20 compliant. From Goddington, the route follows shared space paths. For this segment quick wins include replacing uncontrolled crossings with signalised crossings and establishing cycleway priority over side roads. More ambitious proposals would include segregating the cycleway from the footway where it is not LTN 1/20 compliant.

ROUTE 2 ACTION REF M7



Route 3 runs from the SAGC to Jemmett Road where it connects via Route 1 to Ashford Town Centre. This route follows two paths reflecting the demand profile captured by the modelling exercise. The route on Knoll Lane currently has no cycling infrastructure, yet has the space for it to be introduced. The continuation of the route northwards provides an alternative routing for cyclists seeking to avoid Victoria Park at night. The other route follows residential streets in Beaver Green, with the opportunity to create a low traffic environment through the introduction of modal filters. Other quick wins include speed limit reductions, wayfinding and crossing improvements.

ROUTE 3 ACTION REF M8



Route 4 runs from the SAGC to Ashford Town Centre via Beaver Road and Kingsnorth Road. The low traffic environment created by the Beaver Road Bus Gate could be linked to Ashford Town Centre via the A2042 bridge, where there is ample carriageway for road space reallocation to segregated cycle facilities. Junctions either side of the bridge would need upgrading to connect this facility to the network. To the south Kingsnorth Road also lacks cycling facilities, and space could be gained through the removal of on-street parking. To link this route to the SAGC improvements to Chart Road that reduce vehicle flows and speeds would need to be considered, as it is not currently amenable to cycling.

ROUTE 4 ACTION REF L1



Route 5 follows the A2042 from Kingsnorth to South Ashford, where it connects with Route 4 to Ashford Town Centre. The existing A2042 trunk road lacks cycling facilities for most of its length, although there is some scope for footpath widening to allow them to be introduced. Cycle movements at junctions would require fully segregating from motor traffic through signalised crossings. This route would also improve connections from the SAGC to the Tesco superstore on the route, enabling shopping trips to be fulfilled by active travel.

ROUTE 5 ACTION REF L2



ROUTE 1 ACTION REF M9



ROUTE 2 ACTION REF M10



ROUTE 3 ACTION REF M11



ROUTE 4 ACTION REF L3



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Costing and Appraisal

An initial BCR has been calculated using The Department for Transport's Active Mode Appraisal Toolkit (AMAT) which ensures that the calculation of a schemes benefits is in accordance with Department for Transport guidance and its value for money can be consistently compared against other proposed schemes. The AMAT calculates impacts linked to an increase in cycle and walking use based upon scheme-specific variables (e.g. scheme length and forecast users). The AMAT also includes a number of default assumptions which, for the purposes of this study, were retained.

Costing estimates for cycling have been provided using the DfT's Typical Costings for Ambitious Cycle Schemes, each corridor was categorised as a 'mixed strategic cycle route', this was measured and costed based on £0.48m per km.

For walking routes, a cost of £0.26 per km was applied accounting for footway widening and kerbing, this is based on work previously undertaken in an area of similar characteristics, these rates include design construction and supervision.

Costings identified for each potential corridor should be treated as indicative only, for the purposes of illustrating the nature of the benefits that could be achieved with this level of investment. Should any of these potential schemes proceed to the next stage of development, a route specific detailed costing exercised will need to be undertaken.

Table 1 shows the indicative cost based on the above assumptions, increase in trips and initial BCR.

Table 1: Active Travel Appraisal

SCHEME	Indicative Cost*	No of trips without the scheme	No of trips with the scheme	Route length one way (km)	BCR
Cycle Route 1	£ 2,438,000.00	462	557	5.3	0.42
Cycle Route 2	£ 1,380,000.00	288	342	3	1.46
Cycle Route 3	£ 2,516,200.00	240	338	5.47	0.42
Cycle Route 4	£ 2,474,800.00	288	384	5.38	0.83
Cycle Route 5	£ 1,922,800.00	174	249	4.18	1.21
Walking Route 1	£1,440,400.00	4672	4831	5.54	1.06
Walking Route 2	£ 852,800.00	1856	1950	3.28	0.76
Walking Route 3	£ 1,092,000.00	2944	3065	4.2	1.99
Walking Route 4	£ 793,000.00	3936	4024	3.05	3.21

*costs have been estimated using DfT's Typical Costings for Ambitious Cycle Schemes:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/742451/typical-costings-for-ambitious cycling-schemes.pdf

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APPENDIX 2 Scenarios

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Moving within the garden community

COMMUTING TO WORK



The Garden Community provides plenty of opportunities to work locally, allowing residents to walk or cycle to their destination. Remote workers have the option of working from home, utilising the superfast broadband connectivity and the workspace provided within their home or by using one of the flexible workspace hubs provided nearby. Facilitating more people to work this way reduces demand on the transport network.

Additionally the Garden Community has been set up to provide employment opportunities within a walking or cycling distance of the home, reducing the need to drive.

TRAVELLING TO SCHOOL



Schools have been integrated into the Garden Community so that residents have schools within a walking or cycling distance of their home, reducing the need to travel further afield.

SHOPPING

Grocery shops are provided at local centres within the Garden Community, allowing residents to make frequent grocery shopping trips by walking or cycling, without the need to travel further afield by car.

Mobility hubs in the Garden Community incorporate micro-consolidation / delivery locker facilities, minimising the impact of delivery vehicles on residents in the Garden Community.

PRIMARY SERVICES



Important services such as health and education are provided remotely via superfast broadband, limiting the need to travel further afield by car. Some facilities such as local health centres are located close by, allowing most needs to be met locally.



The Garden community provides walking, cycling and equestrian access to Discovery Park.

Active and Healthy Lifestyle

Scenario 2

COMMUTING TO WORK



The Garden Community is well connected to a network of cycle routes that span between local employment centres and provide easy access to Ashford Town Centre. These routes include segregated, low-traffic and traffic free elements to ensure they have wide appeal amongst most of the residents working nearby.

TRAVELLING TO SCHOOL



Cycle routes also connect to local schools to ensure journeys can be made there by bike. The use of segregated provision on busier roads means the routes are suitable for all ages to ensure they can be used for travelling to and from school. Safe cycle parking facilities are provided at schools to remove barriers to cycling.

SHOPPING

Multiple grocery stores are provided locally, to facilitate small and frequent grocery shops by bike. Secure bike parking is provided at shops to remove barriers to cycling. Cycle routes also connect to more major shopping destinations such as Ashford Town Centre, to make cycling a viable and natural option for shopping trips.

PRIMARY SERVICES

Important services such as Health and Education are well connected by cycle routes and incorporate

secure bicycle storage to make cycling to these destinations a viable option.



The Garden Community provides walking, cycling and equestrian access to Discovery Park.

Travel to other towns and villages

Scenario 3

COMMUTING TO WORK



The Garden Community is well connected to the public transport network via a reliable and frequent bus service. This service allows users to make onward connections to other rail or bus services and travel further afield to their workplaces without the need for a car.

TRAVELLING TO SCHOOL



A reliable and frequent bus service provides residents with access to onward public transport connections to schools in other towns and villages. This ensures children can travel independently to school without the need for a parent to drive them.

SHOPPING

The bus service to Ashford Town Centre is reliable and frequent allowing residents to use it for larger grocery or retail shopping. Onward public transport connections also allow travel to other towns and villages without the need for a car.

PRIMARY SERVICES

The bus service also serves key public services such as health and education reducing the need to drive to these destinations.

Micro-mobility options available at the mobility hubs within the garden community also enable last mile connectivity where public transport does not stop without the need for a car.


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