

Guildford Gyratory, Guildford

**Highways Matters** 

For

Guildford Vision Group





# **Document Control Sheet**

Guildford Gyratory
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Guildford Vision Group

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#### 1.0 Introduction

- 1.1 Motion has been instructed by Guildford Vision Group (GVG) to consider the highways and transportation matters associated with their proposed Masterplan for Guildford town centre, referred to as the GVG Masterplan.
- 1.2 Motion is a local transport planning and infrastructure specialist. Motion's head office is located in Guildford town centre and Motion have extensive experience in the local area and highway network.
- 1.3 This report considers the key highways matters associated with the GVG Masterplan, relating them to the submission draft Local Plan. In particular, Motion considers the benefits provided by the GVG Masterplan in comparison with the existing highway network and gyratory system within Guildford town centre. This report considers the benefits that the GVG Masterplan provides for vehicle movements through the town centre, as well as enhancements provided for sustainable transport infrastructure for pedestrians, cyclists and public transport users.
- 1.4 Due to its constrained nature, making the Guildford town centre road network, even in modified form, carry more traffic is not desirable. GVGs aim has been to masterplan and make traffic flow better through the town centre with the aim of reducing accidents, easing pollution and congestion and to build capacity for other modes of transport as an alternative to car use, a radical approach to plan making with a holistic approach to rail, cycle, pedestrian and bus use can increase town centre resilience whilst delivering major environmental benefits.
- 1.5 Following this introduction, the remainder of this report is structured as follows:
  - Section 2 considers the proposed changes to the highway layout and effect on vehicle movements through the town centre;
  - Section 3 details the enhancements to cycle infrastructure delivered as part of the GVG Masterplan;
  - Section 4 details the enhancements to pedestrian infrastructure and public realm that would be delivered as part of the GVG Masterplan;
  - ▶ Section 5 details how the GVG Masterplan improves public transport facilities and services;
  - Section 6 details how the GVG Masterplan facilities the delivery of a Sustainable Movement Corridor for the town; and
  - Section 7 provides a summary and conclusion.



### 2.0 Highway layout and Vehicle Movements

- 2.1 At present, and as noted in the submission Local Plan Evidence Base, Guildford town centre is dominated by a gyratory system across the river bridges, comprising Onslow Street and Bridge Street, located between the railway station and the primary retail high street. The gyratory system suffers from traffic congestion during peak periods and is a source of conflict points between vehicle and pedestrian movements, as well as other road users.
- 2.2 The gyratory has multiple junctions with relatively little vehicle capacity between each, leading to exacerbation of congestion, modal conflict and poor air quality.
- 2.3 The GVG Masterplan will deliver a new vehicle corridor across the river, north of the town centre. This has the benefit of diverting vehicle movements away from the town centre where there are greater conflicts with other vehicle and pedestrian movements. The proposed new vehicle route is indicated at Figure 2.1 below.

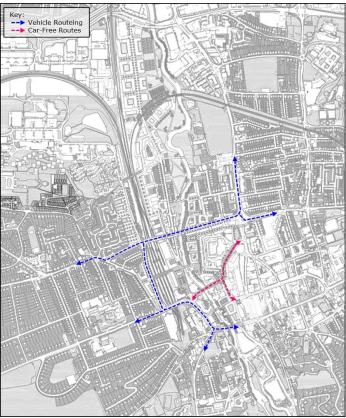


Figure 2.1 - GVG Masterplan Traffic Movements

- 2.4 The new vehicle corridor would be designed with consideration of emergency vehicle access to the town centre as well as maintaining access for servicing and deliveries, access to parking areas and access for people with disabilities.
- 2.5 The diversion of traffic movements away from the town centre on the new GVG vehicle corridor provides the opportunity for improved pedestrian, cycle and public transport infrastructure around the town centre as well enhancements to public realm.
- 2.6 Delay on a journey is predominantly as a result of conflict points between vehicle movements at junctions and interchanges. The current highway network through Guildford town centre and the gyratory is complex with multiple points of conflict between both vehicle movements, pedestrians and other road users.



- 2.7 At present a vehicle routing from A246, east of the town centre to Farnham Road, west of the town centre, is required to pass through six junctions. Each providing the potential for delay to a journey and congestion. Under the GVG Masterplan, the road network through the town centre would be rationalised and a vehicle undertaking the same east-west route would only be required to pass through three junctions.
- 2.8 The Table below summaries the number of junctions that a vehicle would need to pass through based on the current gyratory versus the GVG vehicle corridor:

From	То	Current Gyratory	GVG Vehicle Corridor
A322 Woodbridge Road	A281 Shalford Road	4	4
A322 Woodbridge Road	A3100 Portsmouth	5	4
A322 Woodbridge Road	A31 Farnham Road	7 *	3
A322 Woodbridge Road	Guildford Park Road	7	2
A322 Woodbridge Road	Guildford Station	8	3
A246 York Road	A281 Shalford Road	4	4
A246 York Road	A3100 Portsmouth	5	4
A246 York Road	A31 Farnham Road	7 *	3
A246 York Road	Guildford Park Road	7	2
A246 York Road	Guildford Station	8	3
A281 Shalford Road	A3100 Portsmouth	2	1
A281 Shalford Road	A31 Farnham Road	4 *	2
A281 Shalford Road	Guildford Park Road	4	3
A281 Shalford Road	Guildford Station	3	2
A281 Shalford Road	A322 Woodbridge Road	6	4
A281 Shalford Road	A246 York Road	6	4
A3100 Portsmouth Road	A31 Farnham Road	2 *	2
A3100 Portsmouth Road	Guildford Park Road	3	2
A3100 Portsmouth Road	Guildford Station	2	2
A3100 Portsmouth Road	A322 Woodbridge Road	5	4
A3100 Portsmouth Road	A246 York Road	5	4
A3100 Portsmouth Road	A281 Shalford Road	4	1
A31 Farnham Road	Guildford Park Road	1	2
A31 Farnham Road	Guildford Station	2	1



A31 Farnham Road	A322 Woodbridge Road	4	3
A31 Farnham Road	A246 York Road	4	3
A31 Farnham Road	A281 Shalford Road	3	2
A31 Farnham Road	A3100 Portsmouth	4	2
Guildford Park Road	Guildford Station	2	1
Guildford Park Road	A322 Woodbridge Road	5	2
Guildford Park Road	A246 York Road	5	2
Guildford Park Road	A281 Shalford Road	4	3
Guildford Park Road	A3100 Portsmouth	5	3
Guildford Park Road	A31 Farnham Road	1	2
Guildford Station	A322 Woodbridge Road	4	2
Guildford Station	A246 York Road	4	2
Totals		156	93

Table 2.1 – Comparison of Junctions Passed Through

Note - \* including Guildford Park Road

- 2.9 The GVG Masterplan delivers a substantial reduction in the aggregate number of junctions per vehicle journey of 63 (40%)
- 2.10 The rationalisation of the town centre highway layout and the creation of the new vehicle corridor will deliver significant benefits in diverting traffic movements away from the town centre, reducing the number of conflict points between vehicles, pedestrians and other road users and provide an alternative route in the town centre when the Farnham Road bridge needs replacing and provide a flood free east-west town centre crossing.



### 3.0 Cycle Infrastructure

- 3.1 The promotion of cycling as a sustainable mode of travel is a key part of the submission Local Plan and the overall spatial development strategy for the borough. The submission Local Plan states:
  - "Our spatial development strategy addresses the development needs of the borough and where that development should be focused, actively managing patterns of growth to make the fullest possible use of public transport, walking and cycling, and focusing significant development in locations which are or can be made sustainable. Achieving sustainable transport has been a key consideration in setting the spatial development strategy"
- 3.2 The GVG Masterplan provides a significant enhancement to the cycle infrastructure within the town centre and provides improved cycle connections across the town centre between key destinations. Figure 3.1 below highways the new cycle routes that would be created through the town centre as part of the GVG Masterplan.

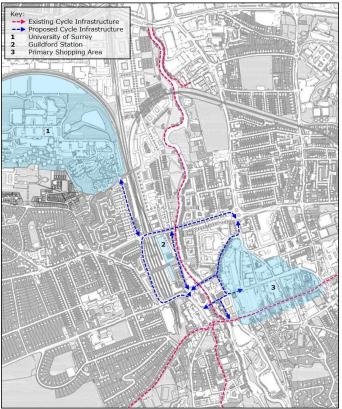


Figure 3.1 – GVG Masterplan Cycle Infrastructure

- 3.3 Figure 3.1 demonstrates that the GVG Masterplan would provide new dedicated traffic-free cycle routes alongside the new river crossing and along the new Station Road. In addition, cycle friendly routes would be provided through the town centre both in an east-west direction connecting across Bridge Street and Onslow Street bridges and in a north-south direction connecting Onslow Street to Millbrook.
- 3.4 The new cycle routes delivered as part of the GVG Masterplan provide a significant enhancement to the cycle infrastructure through the town centre. The new routes provide a traffic-free connection across the river and provide cycle friendly connections from the train station to the town centre. In addition, the new cycle routes would link with the wider delivery of a Sustainable Movement Corridor enhancing cycle connectively to existing area of the town and major new developments.



#### 4.0 Pedestrian Infrastructure

- 4.1 The submission Local Plan emphasises the need to encourage pedestrian movements and promote permeability for pedestrians to development sites, in and around the town centre.
- 4.2 The GVG Masterplan provides a new vehicle corridor across the river, north of the town centre. This has the benefit of diverting vehicle movements away from the town centre where there are currently greater conflicts with pedestrian movements. The creation of the new vehicle corridor and diversion of traffic away from the town centre provides opportunity for the creation of traffic-free routes with enhanced public realm around the town centre, as highlighted on Figure 4.1 below.

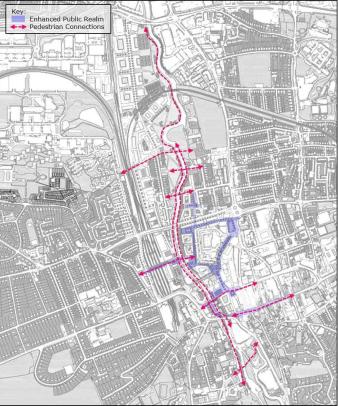


Figure 4.1 – GVG Masterplan Pedestrian Infrastructure & Public Realm

- 4.3 The GVG Masterplan would deliver traffic free routes on both Bridge Street and Onslow Street, removing conflict between pedestrians and vehicles both along Bridge Street and at the junction of Bridge Street and Onslow Street.
- 4.4 The removal of this conflict between pedestrian and vehicular provides the opportunity for significant enhancements to the public realm around the town centre and delivers greatly improved pedestrian connectivity between the town centre, Guildford railway station and other key destinations.
- To this extent it is evident that the GVG Masterplan would deliver a betterment to pedestrian infrastructure, connectivity and public realm in and around Guildford town centre.



### 5.0 Public Transport

- As set out previously the submission Local Plan identifies that making the fullest use of sustainable travel opportunities, such as public transport is a key aspect of the spatial strategy and managing the patterns of growth.
- 5.2 Policy A6 of the submission Local Plan relates to the redevelopment of the North Street site in Guildford town centre for a major mixed use, retail, residential and leisure development. Policy A6 highlights the need to relocate Guildford bus station as part of the delivery of this redevelopment and states that
  - "Bus interchange facilities presently provided at Guildford bus station on the site are to be provided in a suitable alternative arrangement to be located either partly or wholly on or off site"
- 5.3 The GVG Masterplan provides the opportunity for improvements to public transport facilities around the town centre, including new public transport interchange facilities at both Onslow Street and Station Road West. Figure 5.1 below shows the opportunity for improvements to bus routes and public transport interchanges as part of the GVG Masterplan.

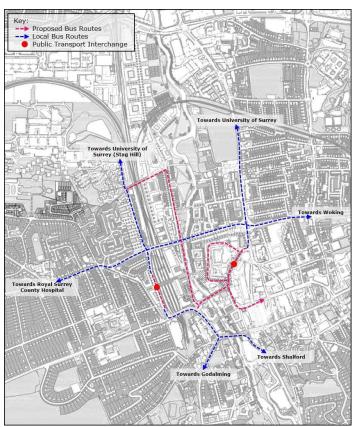


Figure 5.1 - GVG Masterplan Public Transport Improvements

As demonstrated above, the GVG Masterplan would deliver a new public transport interchange on Onslow Street, facilitating the redevelopment of the North Street site and a new public transport interchange adjacent to the railway station, delivering improved connectivity between rail and bus modes. Whilst the GVG Masterplan proposes a new public transport interchange on Onslow Street, the layout also provides greater flexibility for alternative locations for a public transport interchange than currently available.



#### 6.0 Sustainable Movement Corridor

- 6.1 The creation of a Sustainable Movement Corridor is a key part of the spatial vision for the borough as set out in the submission Local Plan. The submission Local Plan states that:
  - "The Sustainable Movement Corridor will provide a priority pathway through the urban area of Guildford for buses, pedestrians and cyclists, serving the new communities at Blackwell Farm, SARP and Gosden Hill Farm including the new Park and Ride site, the new Guildford West (Park Barn) and Guildford East (Merrow) rail stations, the Onslow Park and Ride, both of the University of Surrey's campuses, the town centre and Guildford rail station. The aim is for journeys to be rapid and reliable by bus and safe and direct on foot and by bike. The Sustainable Movement Corridor will be implemented in sections during the plan period, largely on existing roads and with the urban extensions at Blackwell Farm, SARP and Gosden Hill Farm, and some sites in the town centre, required to make provision for the corridor"
- 6.2 Within the town centre the Sustainable Movement Corridor would seek to create a priority route for sustainable modes of transport through the town centre, between Guildford railway station and the Friary Centre/ North Street development site.
- 6.3 The GVG Masterplan would facilitate the delivery of the Sustainable Movement Corridor, in particular providing car-free routes along both Bridge Street and Onslow Street. This would create connections between Guildford rail station and the town centre, free from conflicts between vehicles and pedestrian and cycle movements. Bus access could be allowed to a traffic-free route and this would create a priority route for pedestrians, cyclist and public transport between Guildford railway station and the Friary Centre/ North Street development site.
- To this extent it is evident that the GVG Masterplan assists in the delivery of one of the key elements of the spatial vision for the town centre and the borough as set out submission Local Plan.



### 7.0 Summary

- 7.1 Motion has been instructed by Guildford Vision Group (GVG) to consider the highways and transportation matters associated with their proposed Masterplan for Guildford Town Centre, referred to as the GVG Masterplan.
- 7.2 This report considers the key highways matters associated with the GVG Masterplan and, in particular demonstrates that the GVG Masterplan would create a new vehicle movement corridor and can deliver major environmental, safety, pollution and transport benefits as well as adding considerable resilience to the system. The new vehicle movement corridor would divert traffic away from the town centre and this has the benefit of reducing conflict between vehicles, pedestrians and other road users and facilitates the delivery of enhancements to pedestrian, cycle and public transport infrastructure around the town centre.
- As noted in the submission Local Plan Evidence Base, Guildford town centre is dominated by a gyratory system across the river bridges, comprising Onslow Street and Bridge Street, located between the railway station and the primary retail high street. The gyratory system suffers from traffic congestion during peak periods and is a source of conflict points between vehicle and pedestrian movements, as well as other road users.
- 7.4 The diversion of traffic movements away from the town centre on the new GVG vehicle corridor provides the opportunity for improved pedestrian, cycle and public transport infrastructure around the town centre as well enhancements to public realm.
- 7.5 The aggregate number of junctions for vehicle movements in the GVG Masterplan versus the current gyratory is 93 versus 156, a reduction of 40%.
- 7.6 The promotion of cycling as a sustainable mode of travel is a key part of the submission Local Plan and the overall spatial development strategy for the borough.
- 7.7 The new cycle routes delivered as part of the GVG Masterplan provide a significant enhancement to the cycle infrastructure through the town centre. The new routes provide a traffic-free connection across the river and provide cycle friendly connections from the train station to the town centre. In addition, the new cycle routes would link with the wider delivery of a Sustainable Movement Corridor enhancing cycle connectively to existing area of the town and major new developments.
- 7.8 The submission Local Plan emphasises the need to encourage pedestrian movements and promote permeability for pedestrians to development sites, in and around the town centre.
- 7.9 The submission Local Plan identifies that making the fullest use of sustainable travel opportunities, such as public transport is a key aspect of the spatial strategy and managing the patterns of growth.
- 7.10 The GVG Masterplan would deliver a new public transport interchange on Onslow Street, facilitating the redevelopment of the North Street site and a new public transport interchange adjacent to the railway station, delivering improved connectivity between rail and bus modes.
- 7.11 The creation of a Sustainable Movement Corridor is a key part of the spatial vision for the borough as set out in the submission Local Plan.
- 7.12 The GVG Masterplan assists in the delivery of one of the key elements of the spatial vision for the town centre and the borough as set out submission Local Plan.
- 7.13 On all these aspects of the submission Local Plan Motion finds that the GVG plan improves in the delivery of key elements and substantially improves the town centre for pedestrians, cyclists and buses, whilst improving car journeys and separating modes to greatly facilitate modal shift.