



Emerging JCS Transport Strategy

The emerging strategy is supported by a wide-ranging evidence base and technical highway modelling outputs. The list of schemes included in the strategy will be refined using the updated 2013 Central Severn Vale SATURN model once this becomes available later in the year.

It should therefore be considered as an emerging strategy.

JCS Transport Strategy Context

The transport network will enable the scale of residential and employment growth outlined in the JCS by adding new, and managing existing, transport capacity to accommodate increased travel demand. It is essential this is delivered in the context of helping to protect the distinctive character and environment covered by the Joint Core Strategy.

The improvements summarised in this emerging strategy will enhance local and strengthen regional connectivity between key economic hubs in and around the JCS area, and improve the desirability of the JCS area as a destination for people.

An underpinning reason for allocating development in association with existing urban centres is the potential for enhanced transport connectivity. Not only are these sites closer to strategic and public transport networks, they also offer greater opportunities for people to make more trips – particularly local trips – on foot or by cycle.

The transference of more of these local trips to walking and cycling (active travel modes) will be instrumental in creating high quality, vibrant and successful communities, and in ensuring the whole transport network operates efficiently and optimally.

The existing transport network is already very busy during the morning and evening rush hours. The JCS Transport Strategy will not solve the existing pressures on the network and the delays experienced today are likely to get worse over the next 15 years as new developments are built and greater numbers of people want to travel within our urban centres. However this strategy identifies opportunities to safeguard and improve the quality of place for people by providing alternative routes for local and through traffic. Whilst trips into Cheltenham and Gloucester will be possible by all modes of transport, urban permeability will vary depending on the mode of transport chosen.

Planned highway capacity improvements will separate local and through traffic to ensure it can move with fewer journey delays and without undermining high quality passenger transport networks. Car travel along radial routes into the centres of Cheltenham and Gloucester will be managed to restrict unnecessary cross-town movements; orbital movements will be prioritised over radial routes to reduce impacts on the urban centres. Car travel will not be restricted; however it

will not receive priority at pinch points along key bus corridors. In addition, the network will be complemented by attractive pedestrian and cycle infrastructure to enable sustainable travel choice. A key focus of the JCS Transport strategy is to create the opportunity and environment to enable real change in behaviours and modal shift.

JCS Transport Strategy Six Point Plan to Managing the Transport Network

1. Provide an efficient, safe and resilient transport network which enables the delivery of residential and employment growth by minimising the impacts on the transport network
2. Deliver new and enhance existing sections of highway, where required across the whole of the JCS area, to improve the quality of place, reduce community severance, facilitate the principle of orbital vehicle movements by separating local and 'through' traffic and enable economic growth. Improvements to the highway network include:
 - Gloucester – junction improvements to A40 and South West Bypass
 - Cheltenham – new western relief road
 - Tewkesbury and Ashchurch – new A46 off-line improvement
3. Remove pinch points on the local highway network prioritising those on radial routes served by key bus corridors including the 10, 41/42, 94, 97/98 bus services
4. Encourage public transport providers (bus and rail) to increase service frequencies along strategic corridors and review service coverage where there are gaps serving development sites
5. a) Provide coherent cycle and pedestrian linkages which connect development sites to adjacent land uses through permeable site layouts and the provision of new infrastructure;

b) Identify and safeguard nearby quietly trafficked lanes and public footpaths to establish softly engineered, intuitive active travel networks alongside and between new development sites to confer advantage to non-motorised trips for shorter journeys
6. Optimise the smart operation of the highway network and delivery of multi-modal travel information

JCS Transport Strategy Objectives

The National Planning Policy Framework (NPPF) sets out how it expects the government's planning policies for England to be applied. It outlines the role of planning to achieve sustainable development. Achieving this balance is the primary challenge of the JCS Transport Strategy. The scale of growth outlined within the JCS will result in a significant increase in travel demand. How these additional trips can be accommodated by the transport network, whilst still enabling it to function, requires a balancing act between affordability, new infrastructure and travel choice.

Access to transport networks is a key determinant of the quality of place for people to live and work.

The NPPF states that the transport system needs to be balanced in favour of sustainable transport (walking, cycling, bus and rail) modes, giving people a real choice about how they travel. Some successful outcomes of this approach will be the reduced need for long-term major transport

infrastructure (outside the plan period), reduced travel derived greenhouse gas emissions and less congestion through greater use of alternatives to the car, leading to better social, economic and environmental conditions.

To guide the JCS Transport strategy the following objectives have been identified:

- New developments, as a minimum, will be required to be supported by transport infrastructure measures which offset any unacceptable impacts.
- The prioritisation of investment in transport infrastructure to reduce the cumulative impact of new developments where this impacts the safe and expeditious movement of traffic on the local and strategic highway networks.
- The promotion of sustainable travel choice (walking, cycling, bus and rail) where these are realistic and safe to provide, and ensuring new developments enjoy multi-modal connectivity with existing communities, employment, services and transport infrastructure. The identification, protection and enhancement of strategic and local quiet lanes, public rights of way and green corridors to reinforce walk and cycle desire lines within and between existing settlements, new development sites and key trip attractants
- To limit the negative externalities of the transport strategy on air quality and noise pollution
- To ensure transport schemes are designed to minimise their visual impact on the environment

JCS Transport Strategy Schemes

It should be noted that the schemes identified as part of the JCS Transport Strategy form part of an area-wide strategy which will be phased and delivered during the JCS plan period. It is unrealistic to assume that monies accrued through developer contributions will be able to fund all improvements identified and delivery will be dependant on a range of funding sources including:

- Developer contributions
- Local Growth Fund
- Highways England's Road Investment Strategy
- Passenger Transport operators
- Ad-hoc funding opportunities

Appendix A includes a full list of schemes which form the emerging strategy.

JCS Transport Strategy Outcomes

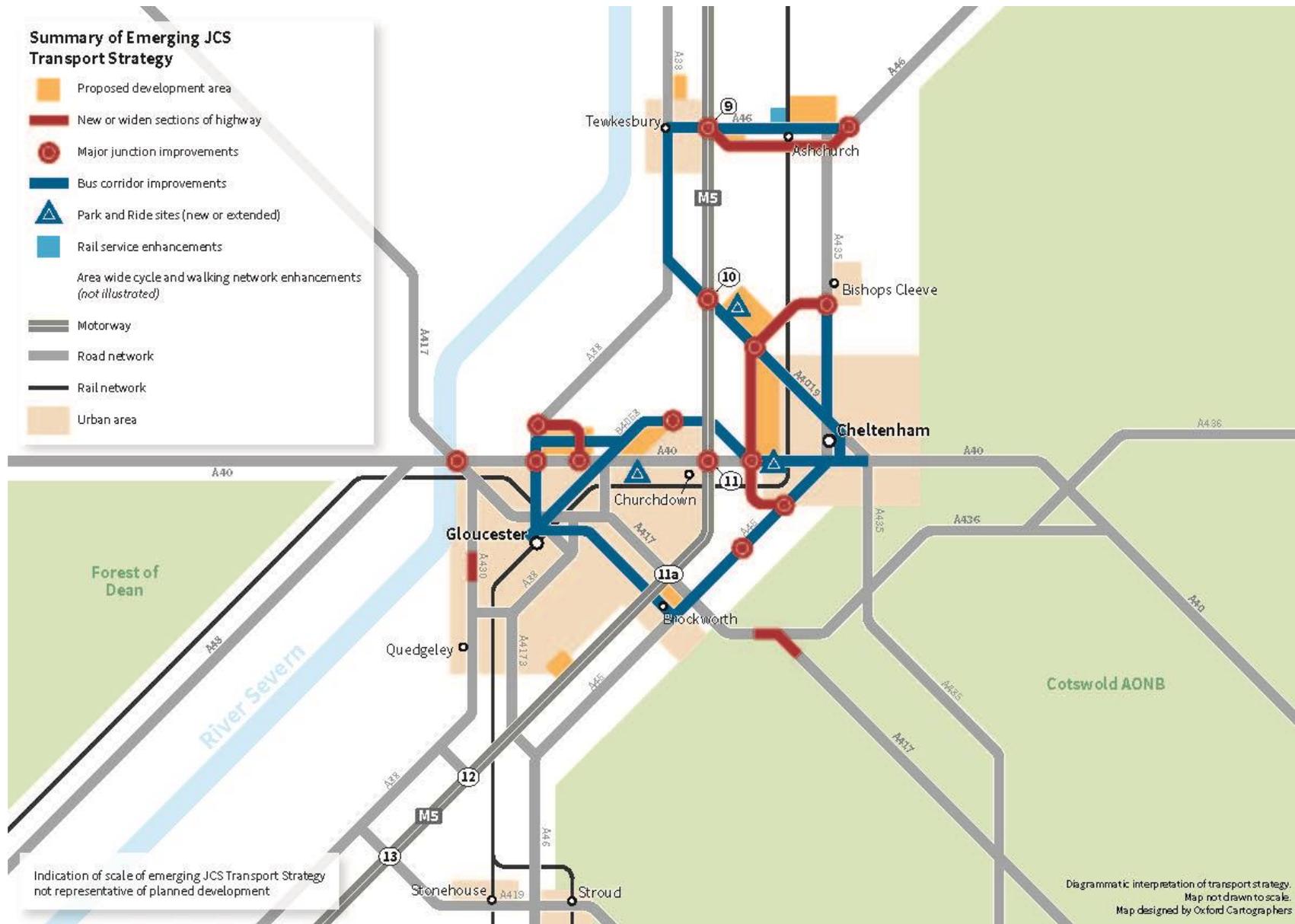
- Managed vehicle movements on strategic highway corridors to improve access and journey time reliability between Gloucester, Cheltenham and Tewkesbury
- Improved multi-modal travel access to Gloucester, Cheltenham and Tewkesbury urban centres and proposed development areas
- The move to a low carbon transport network where individuals are encouraged to walk or cycle for appropriate short distance trips or use passenger transport for some longer distance trips

Finalising the JCS Transport Strategy

When the 2013 Central Severn Vale SATURN model is available later in the year it will be used to refine the list of schemes outlined in the emerging strategy. Only once this work has been completed will the strategic and local highway authorities be able to fully consider the transport impacts of the JCS and its supporting Transport Strategy and to determine if their respective policy requirements are likely to be satisfied.

Gloucestershire County Council's Local Transport Plan (LTP) covers the period 2015 to 2031. It is a living document which will be updated to reflect the adoption of local plans. Once the JCS is adopted by the JCS authorities those elements of the JCS Transport Strategy which are compliant with the policies outlined with the LTP will be incorporated into the Central Severn Vale and Tewkesbury Connecting Places Strategies. The process of integrating the JCS strategy into the LTP is outlined within section 6 of the LTP's Overarching Strategy Document.

Summary of emerging JCS Transport Strategy – October 2016



JCS Transport Strategy Six Point Plan to Managing the Transport Network

1. Provide an efficient, safe and resilient transport network which enables the delivery of residential and employment growth by minimising the impacts on the transport network

Aims to support the following objectives:

- New developments, as a minimum, will be required to be supported by transport infrastructure measures which offset any unacceptable impacts.
- The prioritisation of investment in transport infrastructure to reduce the cumulative impact of new developments where this impacts the safe and expeditious movement of traffic on the local and strategic highway networks.
- To ensure transport schemes are designed to minimise their visual impact on the environment

Aims to deliver the following outcomes:

- Managed vehicle movements on strategic highway corridors to improve access and journey time reliability between Gloucester, Cheltenham and Tewkesbury
- Improved multi-modal travel access to Gloucester, Cheltenham and Tewkesbury urban centres and proposed development areas

Schemes assumed to be in place by 2031:

- A419 Stonehouse to M5 route improvements*
- A40 Over Roundabout and Linton Lodge improvements*
- Staverton Bridge Junction*
- A417 Missing Link scheme*

Schemes identified within existing JCS Strategy include:

- M5 J9 - Widen existing motorway north facing slip roads
- M5 J9 - Widen existing junction structure to accommodate 3 lanes on the circulatory sections
- M5 J9 - Provision of a 'free flow left turn slip' from A46 (west) to M5 south
- M5 J10 - Signalising the junction of the M5 Southbound off-slip with the A4019
- M5 J11 -Signalising the junction of the M5 Southbound off-slip and widen the M5 Northbound off-slip
- A40 Longford Roundabout – junction improvement
- Junction of A38 Tewkesbury Road/ Kingsholm Road and A417 – Increased roundabout capacity
- New link road linking new Access road from A40 to A38 Tewkesbury Road
- New link road linking new Access road from A40 to Innsworth Lane
- B4063 / B4634 Staverton Crossroads – junction improvement
- B4063 / New Access Junction –junction improvement.
- B4063 / Innsworth Lane (Hare & Hounds) – junction improvement
- B4063 / Pirton Lane junction improvement
- A46 / Badgeworth Lane Junction Signalisation – Improved access to/from Badgeworth Lane

* Scheme not dependant on JCS

JCS Transport Strategy Six Point Plan to Managing the Transport Network

- A46 – dual carriageway from Alexandra Way to Aston Cross – upgrade of existing highway
 - Down Hatherley Lane – highway improvements
 - Frog Furlong Lane – highway improvements
 - Junction improvement at Barrow Hill and Brockworth Road
 - Pirton Lane Traffic management this won't really create quiet lane
 - Parton Road Traffic management ditto
 - The Grange, Northway Traffic management
 - B4079 Pamington Lane (between A46 and A435) - Traffic management
 - Innsworth Lane, Brooklands Park, Paygrove Lane and Oxstalls Lane - Traffic management
- 2. Deliver new and enhance existing sections of highway, where required across the whole of the JCS area, to improve the quality of place, reduce community severance, facilitate the principle of orbital vehicle movements by separating local and 'through' traffic and enable economic growth.**

Aims to support the following objectives:

- The prioritisation of investment in transport infrastructure to reduce the cumulative impact of new developments where this impacts the safe and expeditious movement of traffic on the local and strategic highway networks.
- To limit the negative externalities of the transport strategy on air quality and noise pollution
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Schemes assumed to be in place by 2031:

- M5 Junction 10 all movements*

Schemes identified within existing JCS Strategy include:

- M5 – Junction 12 – junction improvement
- A40 Elmbridge Transport Scheme-
- A40 Over Roundabout full signalisation
- New access onto the A40, between Elmbridge Roundabout and A38 Longford Roundabout, to access new development site
- Elmbridge Roundabout - Signalise B4063
- C&G roundabout – junction improvement
- Full signalisation of A38 Cross Keys roundabout

* Scheme not dependant on JCS

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- Upgrade of A38 St. Barnabas roundabout
 - Gloucester SW Bypass (Llanthony Rd Section) road widening
 - New grade separated junction on A40 to the west of Arle Court
 - New dual carriageway linking A40 to A4019 – new access to West of Cheltenham development
 - New link road from new grade separated junction on A40 to Grovefield Way
 - New grade separated junction on A4019 to the west of Homecroft Drive
 - Upgrade of Grovefield Way and Up Hatherley Way
 - Upgraded Up Hatherley Way junction on A46 Shurdington Road
 - New link road linking A4019 to Hyde Lane – upgrade of existing route to A435 Evesham Road
 - Upgrade junction on Hyde Lane
 - A46 Teddington Hands Roundabout - Increase Roundabout capacity
 - New A46 link road linking Teddington Hands roundabout to M5 J9
 - Extended junction 9 on M5 linked to new A46 link road
 - A438 – Improvements to Shannon Way junction – junction widening to provide longer dedicated left hand lane onto A438,
 - A438 – widening of A438 from Shannon Way to junction 9, linked to Shannon Way improvements
 - Northern Tewkesbury Bypass
 - New feeder route linking Mitton development site with Shannon Way
 - Zoons Roundabout – junction enhancement
 - Brockworth Bypass - Signalising westbound and eastbound A417 Brockworth Bypass ‘Off-slips’
- 3. Remove pinch points on the local highway network prioritising those on radial routes served by key bus corridors including the 10, 41/42, 94, 97/98 bus services**

Aims to support the following objectives:

- The prioritisation of investment in transport infrastructure to reduce the cumulative impact of new developments where this impacts the safe and expeditious movement of traffic on the local and strategic highway networks.
- The promotion of sustainable travel choice (walking, cycling, bus and rail) where these are realistic and safe to provide, and ensuring new developments enjoy multi-modal connectivity with existing communities, employment, services and transport infrastructure The identification, protection and enhancement of strategic and local quiet lanes, public rights of way and green corridors to reinforce walk and cycle desire lines within and between existing settlements, new development sites and key trip attractants

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- Managed vehicle movements on strategic highway corridors to improve access and journey time reliability between Gloucester, Cheltenham and Tewkesbury
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Schemes identified within existing JCS Strategy:

Upgrade of routes served by high priority services. This would include signal priorities, RTPI, bus stop upgrade. Focus of improvements along the following routes:

- A4019 – Tewkesbury Road – serves 41 / 42
- A46 – Shurdington Road – serves 10
- A40 – Gloucester Road / Lansdown Road – serves 94
- A435 – Evesham Road – serves D
- B4063 – Cheltenham Road – serves 94
- A38 – Barnwood Road / Hucclecote Way – serves 10

JCS bus services

Bus Route 94

- Staverton Bridge Junction*
- A40 Corridor Bus Priority*
- A40 Arle Court to Westall Green (Cheltenham) – Bus priority
- B4063 corridor improvements
- Innsworth Lane and Oxstalls Lane – provide bus priority measures – signal improvements along corridor

Bus Route 41/42

- A4019 corridor improvements
- Lower High Street (Cheltenham) – bus only routes inbound, reallocation of existing highway space for inbound bus lane
- A438 corridor improvements

Bus Route 10

- Upgrade of A38 St. Barnabus roundabout
- A46 corridor improvements
- Junction improvement at Barrow Hill and Brockworth Road

Non JCS bus services

Bus Route 8

- Metz Way*, Gloucester bus priority scheme

Bus route 12

- Southgate Street to St Ann's Way (Gloucester) – MOVA signals with bus priority
- Full signalisation of A38 Cross Keys roundabout

* Scheme not dependant on JCS

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4. Encourage public transport providers (bus and rail) to increase service frequencies along strategic corridors and review service coverage where there are gaps serving development sites

Aims to support the following objectives:

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Schemes identified within existing JCS Strategy include:

- Gloucester Transport Hub/Kings Quarter Bus Station*
- Cheltenham Spa Railway Station *
- Park and Ride – New site at Uckington
- A40 Elmbridge Transport Scheme*
- Park and Ride expansion – Arle Court –
- Park and Ride expansion – Cheltenham Race Course
- Improved rail service frequency / stopping pattern for passenger services at Ashchurch railway station – ensuring an hourly service
- Improved frequency and review service coverage of 41/42 and review of existing services
- Improved bus service frequency on Gloucester – Cheltenham Service Route 97/ 98 via Churchdown
- New radial service in Cheltenham

* Scheme not dependant on JCS

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5. A) Provide coherent cycle and pedestrian linkages which connect development sites to adjacent land uses with the existing network and main destinations through permeable site layouts and , the provision of new infrastructure;
5. B) Identification and safeguarding of nearby quietly trafficked lanes and public footpaths to establish softly engineered, intuitive active travel networks alongside and between new development sites to confer advantage to non-motorised trips for shorter journeys more rigid walk and cycle infrastructure

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- The prioritisation of investment in transport infrastructure to reduce the cumulative impact of new developments where this impacts the safe and expeditious movement of traffic on the local and strategic highway networks.
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- Improved multi-modal travel access to Gloucester, Cheltenham and Tewkesbury urban centres and proposed development areas
- The move to a low carbon transport network where individuals are encouraged to walk or cycle for appropriate short distance trips or use passenger transport for some longer distance trips

Schemes identified within existing JCS Strategy include:

- Completing gaps in existing cycle networks within the Cheltenham and Gloucester urban areas and ensuring linkages into new strategic development sites – comprising a package of small cycle improvements designed to complete any gaps in the existing network
- Improved cycle parking – at key destinations
- Cheltenham to Bishops Cleeve Cycle Path
- St Barnabas Roundabout*
- M5 J9 - New pedestrian and cyclist bridge crossing over M5, linking Industrial Estates either side
- New pedestrian/cycle/bus only route through MOD Ashchurch Strategic Allocation Site A8, utilising existing road infrastructure on Grange Road and linking with existing railway level crossing
- Ramped footbridge over railway (Grange Road) – Retaining existing level crossing with Grange Road as a key Bus Route.
- Mode Shift Point – built into local centres across the JCS area to provide park and ride (including cycle park) facilities. Enhanced public transport facilities – upgraded bus stop at

* Scheme not dependant on JCS

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local community destinations which provide bike parking / RTP1 / car parking – encouraging modal shift onto bus for part of the journey

- Cheltenham/ Gloucester A40 corridor cycle route improvement proposals
- Dog Bark Lane upgrade (LSTF)
- Sustrans National Cycle Network (NCN) through JCS area (Honeybourne Line north of Cheltenham as part of improvements within A435 Bishop's Cleeve corridor– NCN 41) (Route through Tewkesbury and Ashchurch – to be incorporated in JCS sites – NCN 45)
- Traffic calming/ restriction measures advised in association with quiet lanes serving JCS sites (see appendix detail). I.e. all sites should be served by both highways for all traffic, and coherent active travel or 'green corridors'.

6. Optimise the smart operation of the highway network and delivery of multi-modal travel information

Aims to support the following objective:

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Schemes identified within existing JCS Strategy include:

- Countywide branding of travel information and travel awareness
- School Travel Planning – Support for schools to encourage modal shift
- Personalised Travel Planning – For new developments – tailored support to inform travel choices before established travel behaviour is established
- Business Travel Planning – Support for employers to encourage modal shift
- Bike training for children and adults through the travel plan process
- Public transport SMART Card technology roll-out – Multi-operator bus ticket
- Improved cycle information / route finding – Improved signage and promotional materials within the JCS area

* Scheme not dependant on JCS