South West Hertfordshire Growth and Transport Plan Objectives Paper

December 2016



Prepared for:

Hertfordshire County Council

Prepared by: Barry Wickenden

Verfiied by: Amanda Tobin

Approved by: Simon Willison

Date: December 2016 Updated June 2018

AECOM Limited AECOM House 63-77 Victoria Street St Albans Hertfordshire AL1 3ER UK

T: +44(0)1727 535000 aecom.com

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1. Introduction – why are objectives needed?

A set of objectives have been developed to provide the strategic framework for identifying and appraising schemes and actions developed as part of the South West Hertfordshire Growth and Transport Plan (GTP). Schemes and actions will only be taken forward if it can be demonstrated that they have the potential to contribute towards achieving one or more of these objectives.

The objectives are unique and tailored to the current and future growth and transport challenges which are most relevant to South West Hertfordshire. While many of South West Hertfordshire's challenges will be experienced in other parts of the county, these objectives reflect the distinct characteristics of the settlements and local transport network within South West Hertfordshire.

Section 2 of this paper sets out the South West Hertfordshire GTP objectives. Section 3 provides further detail on why these objectives have been selected.

The objectives are aligned with local transport and development policy, including the County's Local Transport Plan, the District's/Borough's Local Plans and Hertfordshire Local Enterprise Partnership's Strategic Economic Plan. This will help to promote a joined-up and cohesive approach to delivering positive change on the County's transport network. Section 4 of this paper discusses the alignment of the GTP's objectives with these key policy documents.

2. GTP Objectives

A set of seven objectives have been developed for the South West Hertfordshire GTP. The GTP objectives have been devised in discussion with County, District and Borough elected members and officers. They are intended to help steer the development of appropriate and sustainable packages of transport schemes and actions targeted to the specific growth and transport challenges of South West Hertfordshire.

South	West Hertfordshire Growth and Transport Plan Objectives
A	Support sustainable economic growth and regeneration within South West Hertfordshire by improving connectivity, primarily for walking, cycling and public transport.
В	Ensure new infrastructure and streets are resilient to changing environmental conditions.
С	Improve accessibility and network resilience, and achieve a shift to more efficient modes of travel by providing a greater choice of attractive, integrated alternatives to the private car.
D	Improve public health and quality of life, through encouraging and enabling active travel and reducing transport-generated air and noise pollution.
E	Encourage vibrant communities by integrating streets and enhancing walking and cycling networks, and improving the natural and built environment.
F	Improve safety and perception of safety and security risks by providing high quality and safe facilities for walking, cycling and public transport users.
G	Seek to reduce transport related emissions by embracing new technologies and encouraging sustainable travel modes.

3. How have the objectives been determined?

Each objective is supported by a range of evidence which justifies why an objective is important and relevant to South West Hertfordshire. Also, each objective has a spatial focus: by no means is this intended to suggest that an objective will only be addressed in a particular geographical area, but given that it may not be feasible for the GTP to address all challenges across the entire South West Hertfordshire area, the spatial focus is where it is considered the most benefit should arise.

Objective A

Objective	Support sustainable economic growth and regeneration within South West Hertfordshire by improving connectivity, primarily for walking, cycling and public transport.
Spatial Focus	Growth locations within South West Herts, including:
	Watford and Hemel Hempstead town centres
	Maylands Business Park
	Croxley Green Business Park
	Hertfordshire Enviro-Tech Enterprise Zone
	Watford Junction
	Two Waters, Hemel Hempstead

Congestion on Hertfordshire's highway network limits economic growth and has significant negative health impacts. Average morning peak hour speeds on A roads in Hertfordshire were under 30 mph in 2015, and decreased in relation to 2014 (Table CGN0206, DfT). Radial routes into the main towns of Watford, Hemel Hempstead and St Albans are particularly congested, with current average morning peak speeds of less than 20mph on most routes (Hertfordshire Traffic and Transport Data Report, 2016).

The impacts of road traffic congestion are a loss of productive time, reduced air quality, and urban centres which are less attractive to visitors and investors. South West Hertfordshire is particularly susceptible to traffic congestion due to its polycentric settlement plan, leading to high levels of commuting between urban areas. The proportion of the economically active population living and working locally is only 37% for Watford and 47% for Dacorum. Therefore, the majority of the working population commute outside of their local area. Furthermore, the majority of commuters travel by car: approximately 58% of commuters resident in South West Herts drive a car or van to work (Census 2011).

Walking, cycling and public transport are more space-efficient means of moving people compared against the private car, allowing more efficient use to be made of the transport

network in particular within constrained urban areas. However, there is a lack of public transport and active travel routes to serve this need, in particular for east-west journeys (which is also relevant to the County as a whole). Improving links for these modes is expected to lead to reduced congestion.

The need for efficient transport connections between the urban areas of South West Hertfordshire, most notably Hemel Hempstead-Watford, Watford-St Albans and St Albans-Hemel Hempstead, in addition to connections towards London, is expected to increase over the next fifteen years in line with current travel patterns, and population and employment growth. Watford in particular is a growing regional employment centre. The Maylands industrial area of Hemel Hempstead is also a focus of employment growth. Therefore, the Growth and Transport Plan seeks to increase connectivity across South West Hertfordshire by more efficient and sustainable means than the private car. This may involve the reprioritisation of existing routes to make journeys by non-car modes more attractive and viable than they are currently perceived to be. It may also involve the creation of new routes for non-car modes or indeed for general traffic if there is an opportunity to provide relief to inner urban areas.

Releasing the constraint that highway congestion places on economic growth will allow South West Hertfordshire to reach its full competitive potential. Significant additional benefits relating to health, social cohesion and environment are also within reach, and these are detailed more specifically in subsequent objectives.

Objective B

Objective	Ensure new infrastructure and streets are resilient to changing environmental conditions.
Spatial Focus	Routes to key destinations including:
	Employment
	Education
	Shopping
	Healthcare

The frequency of severe weather events has increased over the last century, and is expected to increase further as the greenhouse gas emissions result in long term impacts on climate. An extreme temperature day now occurs around once in every 200 days, whereas around 100 years ago it was roughly once in every 1,000 days (Fischer and Knutti, Anthropogenic contribution to global occurrence of heavy-precipitation and high-temperature extremes, Nature, 2015).

Resilience to these events means ensuring drainage systems are able to cope with increased rainfall and highway, walking and cycling surfaces are able to withstand increased extremes of temperature while minimising maintenance requirements. The results of insufficiently resilient networks are congestion due to flooding causing unreliability, more accidents due to potholes and increased maintenance costs.

Objective C

Objective	Improve accessibility and network resilience, and achieve a shift to more efficient modes of travel by providing a greater choice of attractive, integrated alternatives to the private car.
Spatial Focus	This objective focuses on movements within and between urban centres of up to twelve miles, in particular along the following routes:
	Hemel Hempstead-Watford
	Watford-St Albans
	Rickmansworth-Watford
	Watford-Bushey-South Oxhey-Carpenders Park

More than one in six households in Hertfordshire do not have access to a car or van (Census 2011; Hertfordshire Traffic and Transport Data Report 2016).

Inter-urban public transport services in South West Hertfordshire are often perceived as being slow and indirect on some corridors, in particular for east-west routes not served by rail such as Hemel Hempstead-St Albans, and Bushey Heath-Watford, and via key employment centres on the edges of towns including Maylands.

In areas where public transport and active travel networks are well developed, there are often several routes and modes by which the same trip could be made. This provides alternatives for when there are network problems, or if a traveller does not have access to a car.

By developing public transport and active travel networks, travellers in South West Hertfordshire can be empowered to choose the best option for their journey depending on the journey purpose and network conditions.

Objective D

Objective	Improve public health and quality of life, through encouraging and enabling active travel and reducing transport-generated air and noise pollution.
Spatial Focus	Neighbourhoods and town centres, in particular around designated Air Quality Management Areas (AQMAs).

Research has highlighted the health impacts of a sedentary lifestyle, and points to active travel as the key pathway to achieving a broad uptake of physical activity in the general public (Start Active Stay Active, Chief Medical Officers, 2011).

Regular physical activity reduces the risk of many common health conditions including Alzheimer's disease, colon cancer and type 2 diabetes (Improving the Health of Londoners: Transport Action Plan, TfL, 2014). The monetary value of the health impact of increased physical activity can be appraised using the World Health Organisation's Health Economic Assessment Tool (HEAT). Encouraging and enabling active travel can have a direct impact on public health, and reduce the burden on local health services.

Air quality presents a further health challenge connecting transport and health. Motor vehicles are a primary source of harmful emissions, which contribute to air pollution. A total of 5.8% of deaths in Hertfordshire can be attributed to the long-term impacts of air pollution, rising to 6.3% in Watford Borough (Estimating local mortality burdens associated with particulate air pollution, Public Health England, 2014).

Transport networks also have an important role to play in promoting good mental health by ensuring access to services, reducing noise and pollution, and providing opportunities to walk in public spaces (A Transport Journey to a Healthier Life, CIHT, 2016). A number of cross-disciplinary public programmes recognise the vital role of transport in public health, such as Healthy New Towns (NHS) and the Healthy People, Healthy Places programme (Public Health England).

Objective E

Objective	Encourage vibrant communities by integrating streets, enhancing walking and cycling networks, and improving the natural and built environment.
Spatial Focus	Neighbourhoods and town centres

In line with leading initiatives such as TfL's Healthy Streets programme, the Growth and Transport Plan takes a holistic approach to the benefits of improving public realm. Health is the key driver for public realm improvement. Well-designed public realm improvements have the potential to attract pedestrians from all walks of life, encourage physical activity through active travel, improve air quality and reduce noise, reduce severance and provide shade, shelter and places to stop (Improving the Health of Londoners: Transport Action Plan, TfL, 2014).

Public realm improvements also have the potential to increase the economic value of land as areas become more attractive. Meaningful consultation and inclusive decision making is essential to ensure that the benefits of public realm schemes are aligned with local people's needs and aspirations.

Objective F

Objective	Improve safety and perception of safety and security risks by providing high quality and safe facilities for walking, cycling and public transport users.
Spatial Focus	Routes to key destinations including:
	Employment
	Education
	Shopping
	Healthcare

Crime and road traffic accidents have a direct impact on the population, and the GTP seeks to mitigate this impact as far as possible within the scope of the plan. In this respect, the key levers for road safety are to encourage modal shift away from private motor vehicles and reduce vehicle speeds through highway design.

Design and management of the transport network can influence users' perceptions of personal security. People can feel less secure in more isolated locations and at places which are poorly lit or secluded from the main network such as subways which can increase fears of entrapment ('People's Perceptions of Personal Security and their Concerns about Crime on Public Transport', Crime Concern, DfT, 2004). Security on transport networks is improved where facilities are well-maintained and well-designed, and through passive surveillance as networks are busier with pedestrians and cyclists throughout the day.

Fear of crime and road traffic accidents can mean travellers choose to drive rather than walk, cycle or take public transport. This has a number of secondary effects including increased congestion, reduced physical activity and the associated health impacts, and increased severance where the movement function for motor vehicles is dominant over the place function of the street. Therefore, improving safety, security, and the perception of safety and security is an essential supporting element for the other objectives.

Objective G

Objective	Seek to reduce transport related emissions by embracing new technologies and encouraging sustainable travel modes.
Spatial Focus	Congested urban areas.

Transport-related emissions have both a local and global impact. Combustion of fossil fuels emits gases such as sulphur dioxide, nitrogen oxides, and small particles. At the local level, emissions of fine particles from combustion engines have the most significant impact on public health. Diesel engines emit more fine particles than petrol engines, especially if pollution control systems are removed or poorly maintained.

Two key ways to reduce this impact are to encourage walking and cycling and the more widespread use of electric and hybrid vehicles. Walking and cycling result in negligible air pollution, and come with positive health and social benefits. In addition, advances in electric propulsion provide a way to reduce air pollution generated at street level, and a wide range of electric and hybrid vehicles are already on the market. Streets and infrastructure should be designed to accommodate electric charging to support the uptake of these vehicles.

Transport accounts for around a quarter of greenhouse gas emissions in the UK (DfT). Electric vehicles have the potential to be carbon neutral if their manufacture and operation is powered by renewable energy sources. Walking and cycling have negligible CO2 emissions, and the energy required for manufacturing a bicycle is far less than that required to produce a car.

Watford Borough Council's Climate Change Strategy recognises that the town's size and its role as a regional centre means that transport has a significant impact on the town's environment. The strategy recognises the need to introduce infrastructure solutions which curb the growth of traffic related emissions alongside development within Watford.

4. Policy Alignment

The GTP is a daughter document of the County's Local Transport Plan (LTP). At the time of writing, the County is developing a new Local Transport Plan 4 (LTP4), which is expected to be finalised in 2017 and will replace the current Local Transport Plan 3 (LTP3). It is important therefore that the GTP objectives are robust and flexible enough to align with both the current LTP3, and upcoming LTP4.

LTP3 sets out five goals regarding transport in Hertfordshire. These are:

- Support economic development and planned dwelling growth
- Improve transport opportunities for all and achieve behavioural change in mode choice
- Enhance quality of life, health and the natural, built and historic environment for all Hertfordshire residents
- Improve the safety and security of residents and other road users
- Reduce transport's contribution to greenhouse gas emissions and improve its resilience.

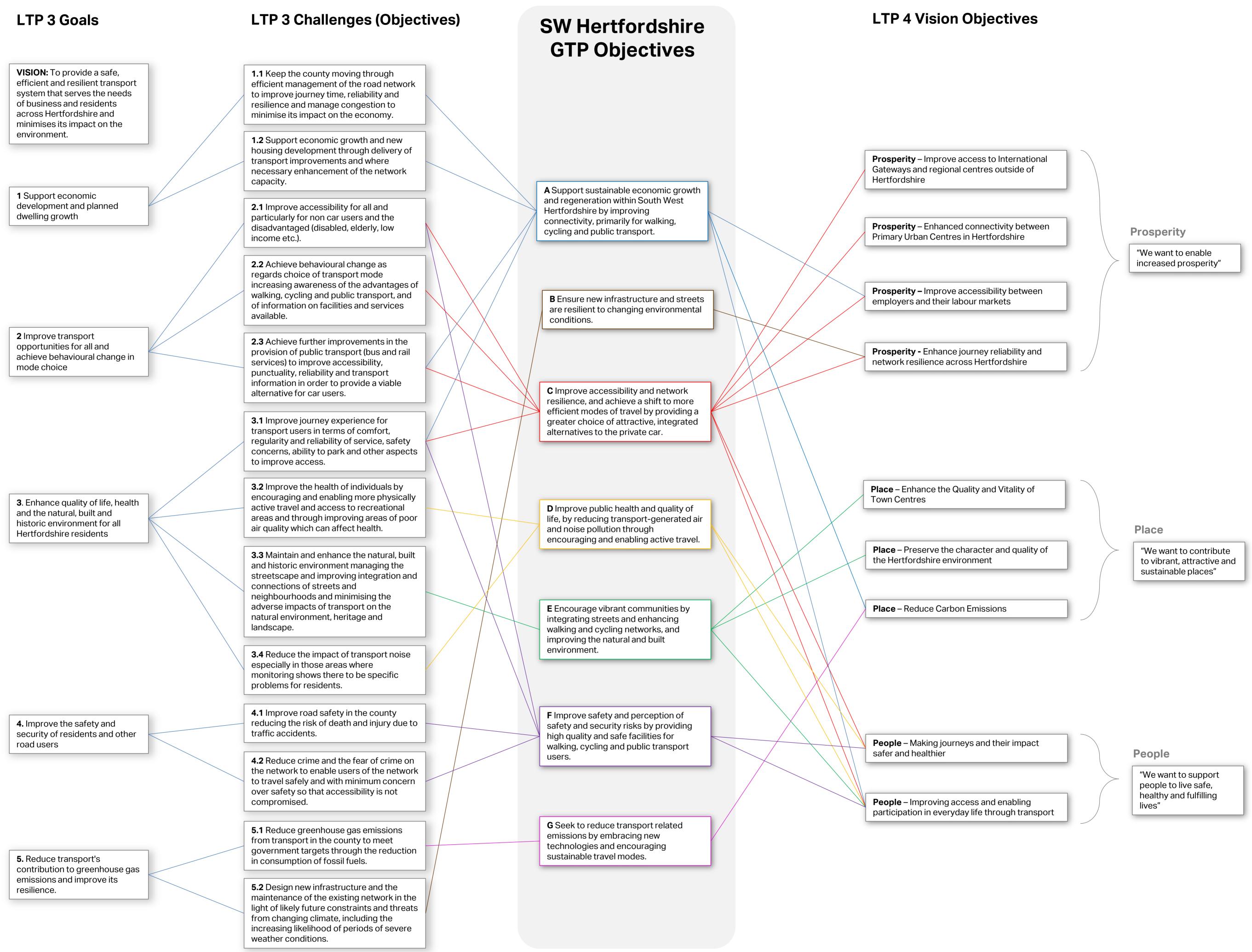
These goals will be taken up by the Growth and Transport Plans. However, they may be updated in the future to reflect changes in higher level policy.

The South West Hertfordshire Growth and Transport Plan objectives align fully with the LTP3 goals. This alignment, as well as the relationship to Local Plan policies, is illustrated by the diagrams included in Appendix A.

Appendix

Comparison of South West Hertfordshire Growth and Transport Plan Objectives with LTP3 and Local Plan Priorities

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Watford Borough Council Local Plan Core Strategy Policies

SPA1 Town Centre SPA2 Watford Junction SPA3 Health Campus SPA4 Lower High Street SPA5 Dome Roundabout SPA6 Western Gateway IP1 Croxley Rail Link IP2 The Abbey Flyer IP3 Watford Junction Station SD1 Sustainable Design SD3 Climate Change **TLC1** Retail & Commercial Leisure Development TLC2 Neighbourhood Centres

EMP1 Economic Development

T1 Regional Transport Node

T3 improving Accessibility

UD1 Delivering High Quality Design



SW Hertfordshire GTP Objectives

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CS13 Quality

CS27 Quality of

CS28 Carbon

CS31 Water M

CS32 Air, Soil a

CS33 Hemel H

CS34 Mayland

Three Rivers District Council Core Strategy Policies

PSP1 Developr PSP2 Develop

PSP3 Develop Centres

CP1 Overarchin Development

CP6 Employme Development

CP7 Town Cen

CP8 Infrastruct Obligations

CP9 Green Infr

CP10 Transpor

Dacorum Borough Council Core **Strategy Policies**

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of Neighbourhood Design
of Site Design
of Public Realm
of Historic Environment
Emission Reductions
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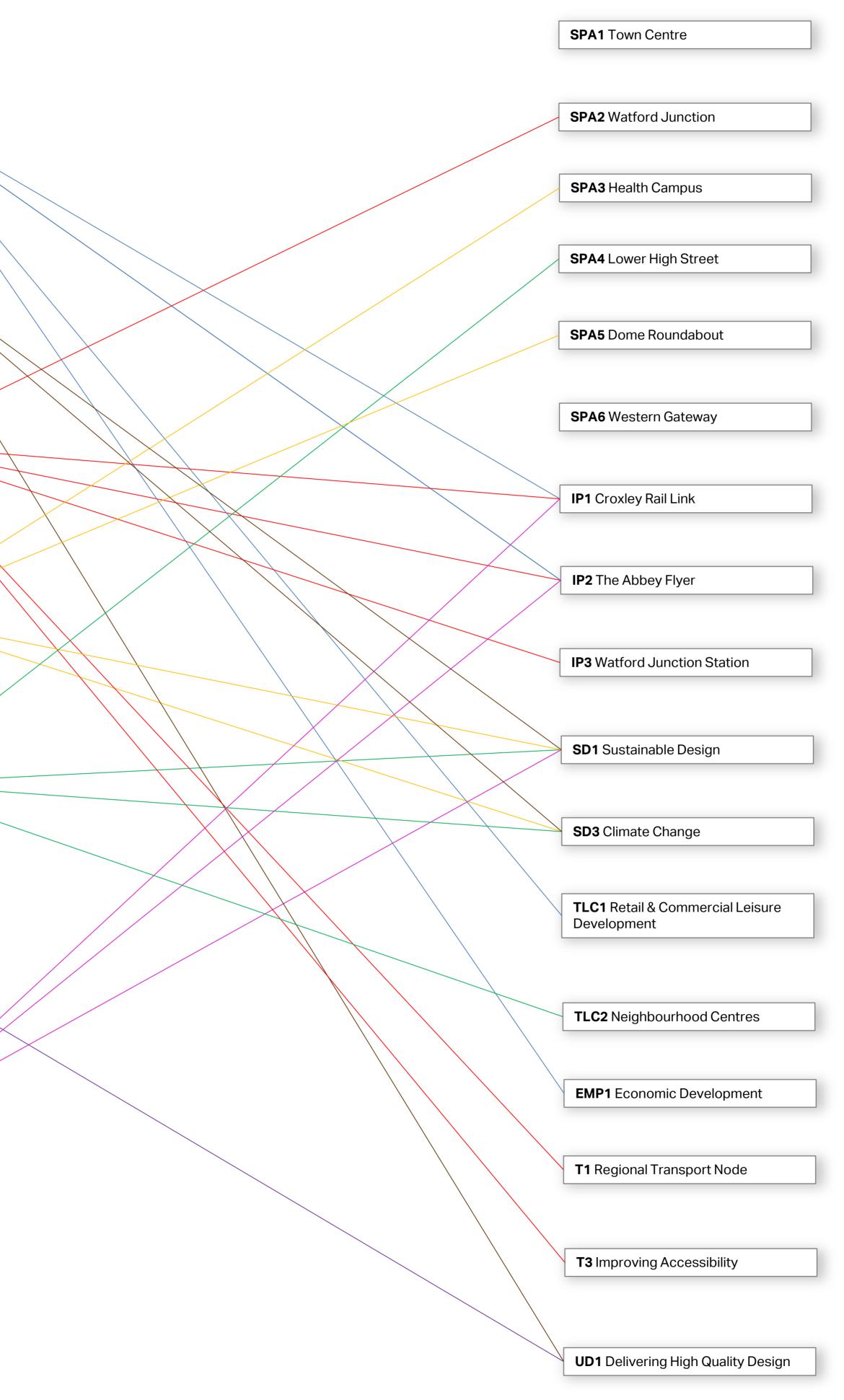
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Watford Borough Council Local **Plan Core Strategy Policies**



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Dacorum Borough Council Core Strategy Policies



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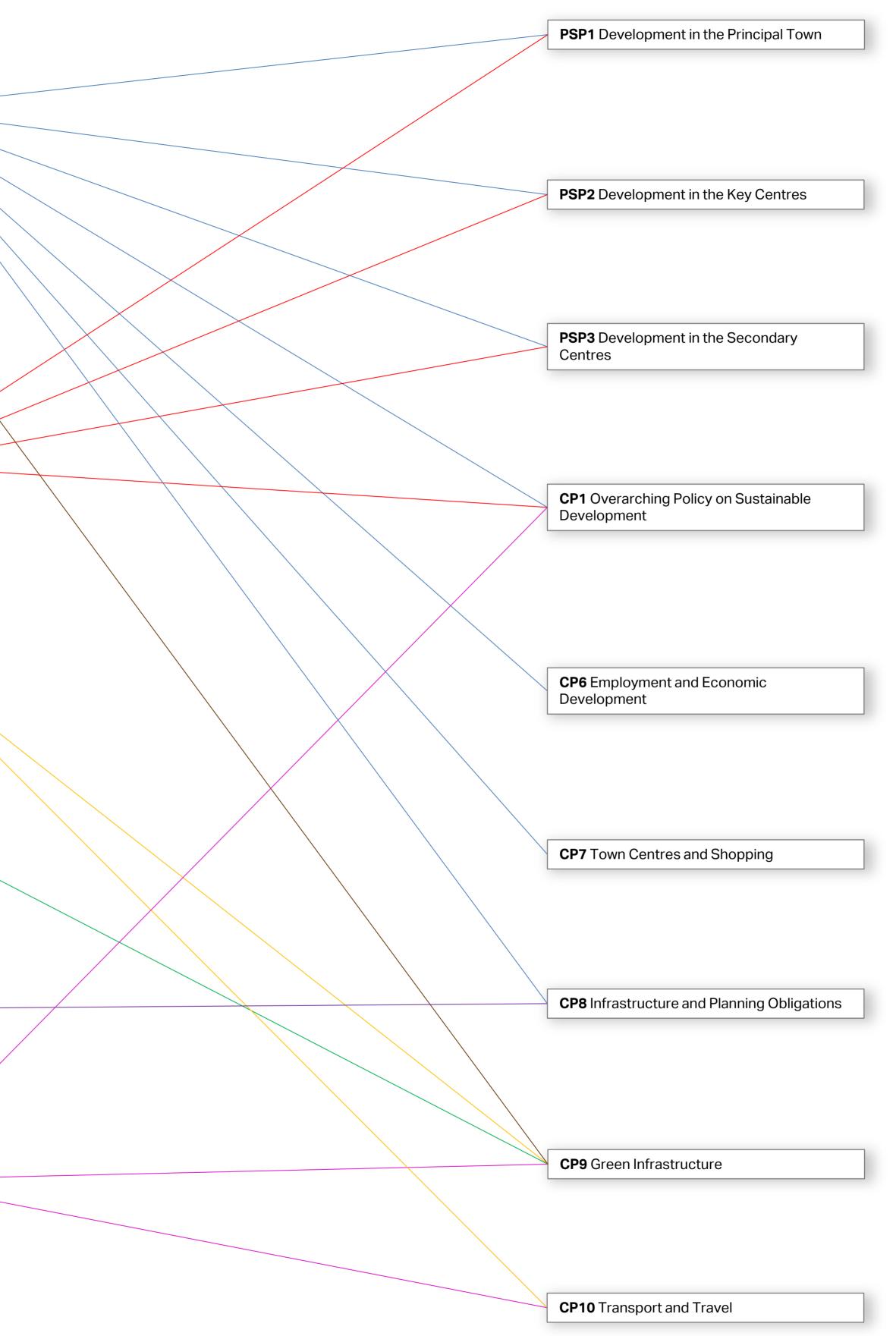
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Three Rivers District Council Core Strategy Policies



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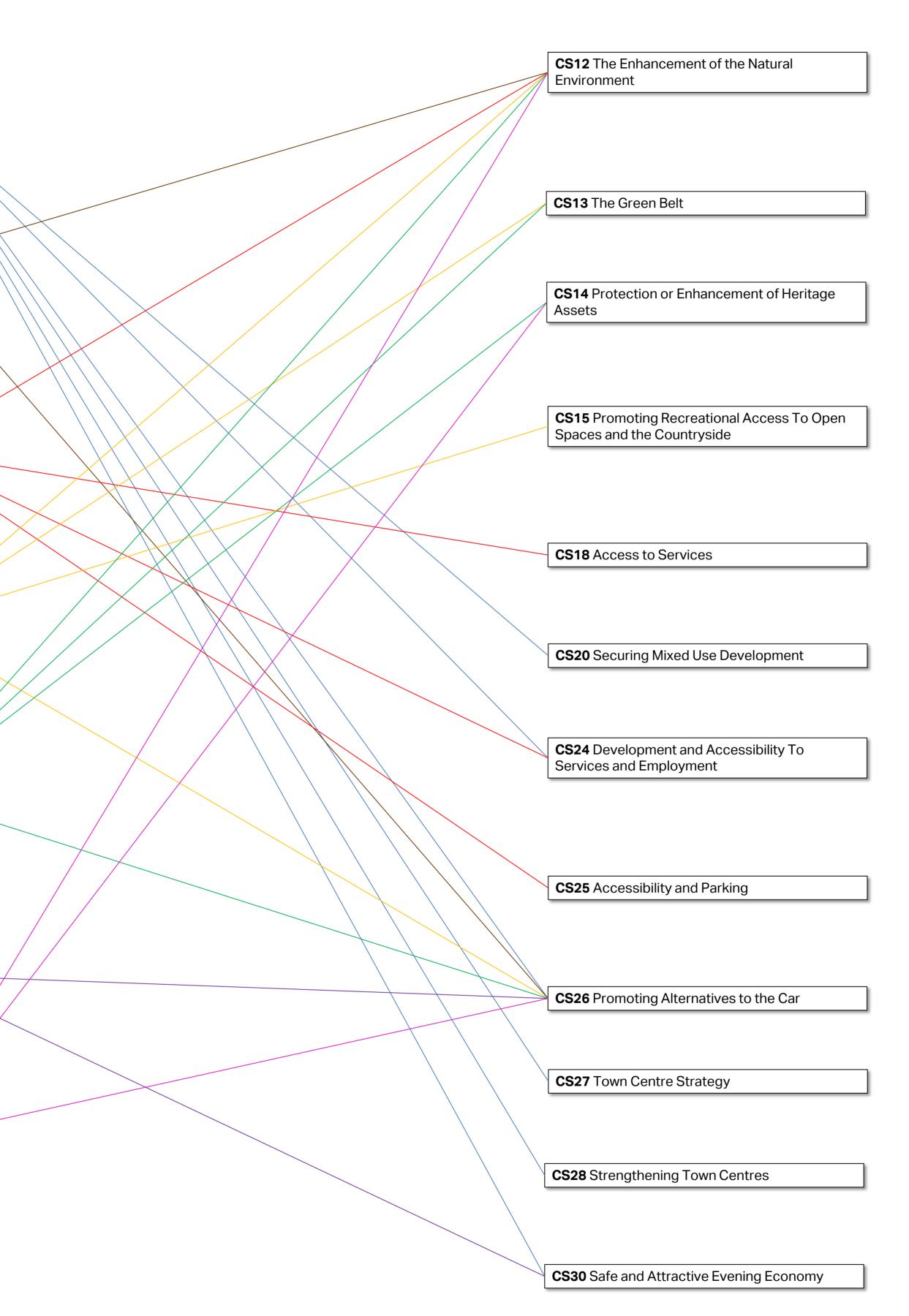
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Hertsmere Borough Council **Core Strategy Policies**



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St Albans Draft Strategic Local **Plan Policies**

