

R2 ASAS 2014

OUR AIRPORT SURFACE ACCESS STRATEGY FOR A SECOND RUNWAY

YOUR LONDON AIRPORT
Gatwick

YOUR LONDON AIRPORT
Gatwick



OUR VISION FOR GATWICK

Our aim is to make Gatwick the best airport in the UK.

The best for our customers and the best for the communities we serve.

For our customers this means excellent transport from the moment they leave their front gate until they arrive at the departure gate: certainty, convenience, comfort and speed are our watchwords.

For our region and our local towns, it is about providing a superb new transport hub that will enhance the quality of life and support a vibrant economy and jobs.

Our aim is to improve the public transport experience radically – to achieve 60% of our passengers, and 50% of our staff, using public transport to the airport.

This will be tough, but our experience of working with our partners shows what can be achieved. Now, with three times the capacity on the trains, new trains running to over 1,000 destinations on more routes, more buses, more coaches and a brand new transport hub we are confident that we can deliver an airport that's the best bar none.



JOURNEYS IN 2030



ABOVE: The Toureen concept bus embraces innovation, ecology, safety, quality, strength and accessibility. Toureen features large glass windows and a sliding panoramic roof, providing more interactivity between the passenger and the environment. It also features a ramp that adjusts according to desired height for users with special needs. In addition, the concept includes electric motors within the wheels, thereby increasing the space inside the vehicle, reducing noise pollution and eliminating the emission of greenhouse gases.



LEFT: Cloud Vision glasses enhance the user's reality by projecting an overlay image on the inside of the glasses (similar to a head-up-display). Data transfer is bi-directional as sensor data, as well as camera images, from the glasses is sent to the user's smart phone in their pocket via bluetooth. The smart phone combines that information with additional data from the cloud and sends back the overlay image. Made from toughened lightweight materials, these could be used as intelligent safety glasses alerting the user to any health and safety issues within view.



BOTTOM: Nissan's Pivo 3 EV concept has one seat in the front and two in the back. The Pivo 3 features Nissan's Automated Valet Parking (AVP), which allows the car to park itself and recharge itself while parked, at specially-equipped parking lots. Also the system can find a parking space, physically park the car and remember where it is. The Pivo 3 can also be remotely controlled with a smartphone.

The world around us is continually changing and developing. Technology is one of the key drivers of this change and is improving how people can plan, book and undertake their journeys. It is also changing and improving the type of vehicles and infrastructure which are used.

As we scan the horizon to 2030, we have challenged ourselves to look forward to the future, embracing improvement, innovation and changes as a core element of our Strategy. Fundamental to this was the surface transport Vision Workshop held in April 2012.

Gatwick, along with 80 of the top UK transport professionals and key local stakeholders, created a view of what a number of journeys to the Airport may look like in 2030.

These journeys, along with emerging and future technologies, paint an exciting picture of future travel. Some future concepts are featured here, and on other pages throughout this report.

At Gatwick, we aim to be at the heart of this change, with innovation and partnerships helping to transform travel to the airport.



ABOVE: This Robo-taxi concept is a computer operated vehicle. The taxis can seat two passengers with hand luggage and are ideally suited for short journeys within congested areas. It can travel at speeds up to 90 km/h and run for 20 hours using two electric motors.

LEFT: The ZEFIRO high speed train from Bombardier redefines rail travel and sets the standard for sustainable mobility. It ranges from a 250 kph sleeper to one of the world's fastest series-production trains at 380 kph. The innovative ECO4 technologies have reduced overall energy consumption by up to 50%.



WHY R2 ASAS?

It's all for the benefit of our passengers.

We have ambitious plans to expand the airport: to serve more destinations, more easily, more frequently and at less cost than other airports. We recognize that the only way to do this is to put our passengers, our customers, at the heart of all we do. This means giving them excellent travel to, from and within the airport. It's about giving them an airport quality experience from the moment they leave their front door.

With our partners, we have developed this transport plan. The plan aims to achieve a step-change in the quantity and quality of transport to the airport for passengers. This embraces:

- near tripling the capacity of the rail system between 2012 and 2030, by the near doubling the frequency of trains and extending the reach of the rail network to serve over 1,000 stations
- providing airport quality public transport: new trains, longer trains, better stations and a new regional transport hub – The Gatwick Gateway
- doubling the capacity of key road junctions to access the airport
- increasing the number of new bus and coach services serving more destinations and more frequently
- delivering seamless interchange between the airport and surface access
- further innovations in customer service and information
- reconnecting local communities and improving their transport options.

Ultimately it is about providing for our customers and the community: more transport, more jobs and a better more sustainable quality of life.





INTRODUCTION

Gatwick already has excellent surface access connections from all points of the compass, and we are working with our partners to improve them further. For a second runway we will build on the current Airport Surface Access Strategy (ASAS), make best use of existing road and rail links, support the committed improvements, and provide new infrastructure where needed.

We have set ourselves high targets for public transport use and believe these are realistic and achievable. By 2040 we aim for 60% of passengers to travel to or from the airport by public transport and for 50% of staff to travel to work by sustainable modes.

We have a strong and clear vision for delivery of a new interchange at Gatwick to serve the airport, our region and our local communities, as the centrepiece of our Runway 2 Airport Surface Access Strategy (R2 ASAS). We will work with our partners to deliver an integrated inclusive solution that achieves widespread benefits and enhances Gatwick's position as the Transport Hub for the South East.

Our Strategy is credible and deliverable. It does not require complex and time-consuming approvals or justification for large public sector investment in new infrastructure above that is already committed or planned. It is endorsed by key stakeholders and supported by detailed analysis that demonstrates conclusively that it provides the road and rail capacity required for both airport related and regional growth.

It will create wider regional benefits, unlike other proposals which focus solely on airport related access, potentially at the expense of congestion for other transport users.

Our strategy will help to bring forward committed and planned improvements and make them much better value for money and will positively contribute to reducing the tax payer burden. It will provide enough capacity for airport and regional growth and create regional benefits. More particularly the outstanding public transport from along the South coast and from London mean that the jobs created during construction and operation can impact positively on some of the most deprived communities in the UK.

We have developed our strategy through collaborative engagement with key stakeholders including:

- Our Local Authorities - West Sussex County Council, Surrey County Council, Kent County Council, East Sussex County Council, Crawley Borough Council, Brighton and Hove District Council,
- Network Rail
- Highways Agency
- Transport for London
- Public transport operators and advisory bodies
- Confederation of Passenger Transport
- Sustrans
- Rail Commuter groups such as East Sussex Rail Alliance
- Freight Transport Association
- British Vehicle Rental and Leasing Association
- Coast to Capital LEP
- Gatwick Transport Forum
- Gatwick's Passenger Advisory Group.

This recognises the wide variety of organisations that are responsible for or have an interest in surface access to airports. We have an agreed approach with both Network Rail and the Highways Agency and will now be working with them on the details of our proposals. Working together is essential and we will continue to listen closely to the views of our partners and stakeholders. Our Gatwick Transport Forum Steering Group will be actively engaged in working with us to develop this Strategy.



OUR R2 ASAS OBJECTIVES

We have developed our R2 ASAS objectives through consultation with our stakeholders with a focus on connectivity, best value and sustainable development to support economic growth and access to employment. Our R2 ASAS objectives are:

- continue to be the best connected and accessible UK airport, delivering integrated surface transport with a choice of sustainable modes suited to the customers' needs
- make best use of existing and committed infrastructure (and only then consider new provision, whilst demonstrating value for money) to deliver the capacity required to allow safe, efficient and reliable journey times for all users of the transport network
- meet the wider strategic objectives/goals of sustainable development whilst maximising the economic potential of surface access through collaboration with key stakeholders and communities in the wider region
- continue to lead the way for best practice in surface access strategies, delivering efficiency for passengers with innovation at its core.

The R2 ASAS puts the passenger experience first. The transport infrastructure and services are considered within the context of Gatwick as both a destination and as a key interchange. The needs of passengers will be met through the provision of sufficient capacity to allow unconstrained access at a level of quality and convenience that meets their expectations.

In all aspects of the R2 ASAS we will work to improve passenger satisfaction, monitoring what our passengers think through Quality Service Monitor (QSM) surveys. We aim for high ratings of customer experience across all aspects of surface access, to consistently achieve a 4.5 quality score (1 lowest - 5 highest).

THE GATWICK GATEWAY



We have a clear vision for a new interchange at Gatwick to serve the airport and the region and our local communities – **the Gatwick Gateway**. The Gatwick Gateway is focussed around the airport's main surface transport facilities. It welds together the rail and road network, and supports bus, coach, car, taxi, cycle and pedestrian movements.

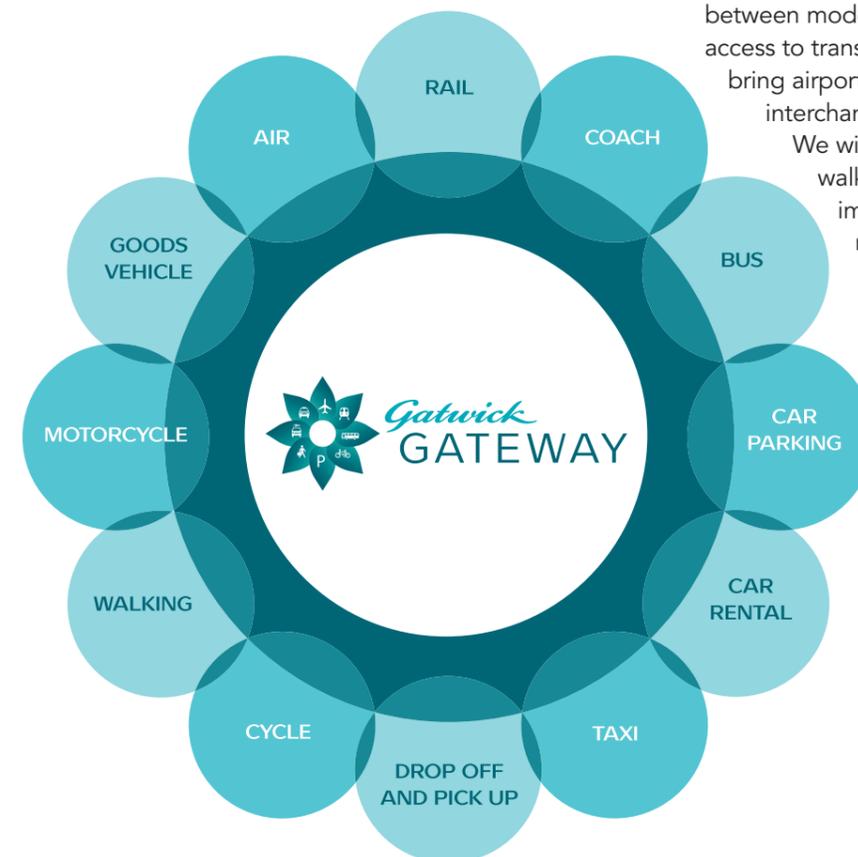
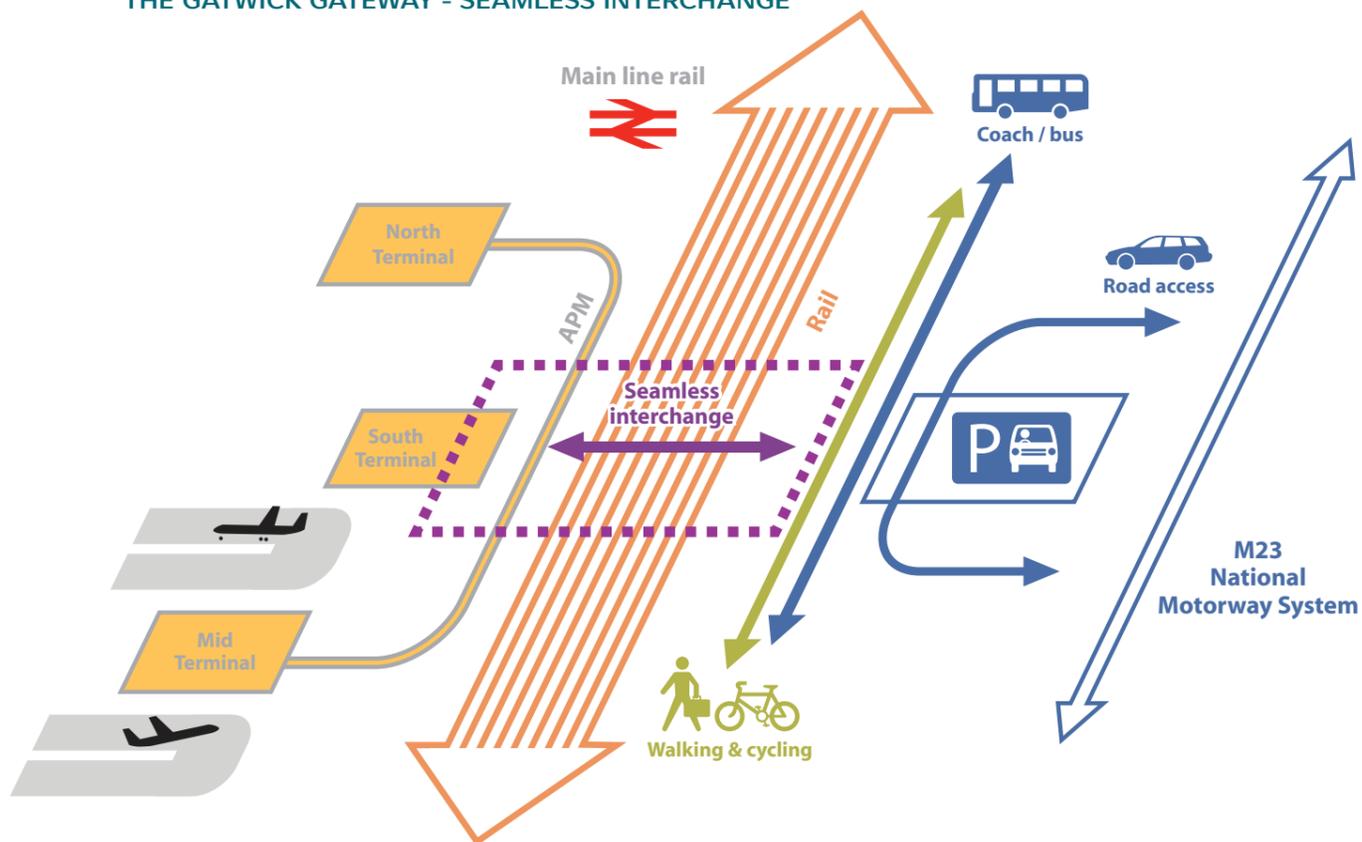
The Gatwick Gateway is a priority for Gatwick. Our railway station is by far the busiest of any airport rail station in the UK and one of the busiest in Europe. More station concourse capacity and better access to platforms is needed to improve levels of service and to support economic growth.

Government has promised £50m to help develop the railway station concourse, which is a key element of the Gatwick Gateway. This work should be complete by 2020. Many more people will be travelling through the station with a second runway and we will ensure that the new concourse has the space we need for growth. However, for the R2 ASAS we would go further and create a new integrated transport facility. We would develop an interchange around the station and make it easy for local people to access transport.

The Gatwick Gateway will be highly inclusive and designed around people. It will allow connections between modes of transport and will increase access to transport options and services. It will bring airport quality passenger facilities to an interchange available to the whole region. We will integrate bus and coach services, walking and cycling routes, and improve access to the airport and the railway station giving a high quality passenger experience.

All our terminals will be less than 2 1/2 minutes from the platforms.

THE GATWICK GATEWAY - SEAMLESS INTERCHANGE





DEVELOPING OUR R2 ASAS

We have identified a number of fundamental factors, which will help us shape and develop the Gatwick Gateway and the R2 ASAS. These factors are:

- **Connected** – to provide the range, type and quality of connections valued by airlines and passengers and to share these benefits with the community
- **Knowledgeable** – to know who, where, when, how and why people will want to travel and to allocate resources and information effectively
- **Well governed** – building on existing governance structures and bringing together key partners to work collaboratively
- **Sustainable** – to reduce our carbon footprint, offer sustainable choices and meet the requirements of future travel
- **Safe** – to ensure staff and travellers undertake their journey safely
- **A place of work** – to meet the needs of staff working on-airport, to work with others to share the benefits with commuters, and to support the logistics of an operational airport
- **Innovative** – to set challenging targets to understand how we are performing and to be continually looking forward to shape and embrace the next change.



ABOVE: Augmented reality and near field (RFD) devices will be commonplace on all devices and in clothing. The user will have the ability to choose what they want to see, in what language - even within live TV channels - and will have to pay to avoid a plethora of incentive and retail offers.



RAIL



Gatwick is London's best connected airport by rail. It currently has direct services to 129 rail stations, trains calling 24 hours a day, seven days a week and upto 15 trains an hour to a range of London destinations. In the future we will be directly connected to 175 rail stations and over 1,000 with one change. 50% of our air passengers currently use rail – of which about half use the Gatwick Express. 97% of our business passengers going to London use rail. Currently there are also more than one million non-airport rail passengers from our local community using the station. Included in the list of directly connected stations are many important interchanges which provide onward connections to all of the UK's main rail line network.

Not only is Gatwick well connected actual transit times to key destinations are short and better than other airports: Victoria and London Bridge in 30 minutes, Farringdon, St Pancras and King's Cross in under 40 minutes, and Canary Wharf and Waterloo in 40 minutes.

Gatwick makes a positive contribution to cost efficiency in the rail industry by filling off-peak trains and providing demand in the contra-peak direction, these 8,000 passengers per hour reduce the burden to the taxpayer. When we achieve an extra 25m passengers per annum using our rail services this will generate an extra £300m per annum for the Government – equivalent to a total sum of £3bn.

Our analysis also shows that Gatwick Express is essential to Gatwick for ensuring there is sufficient space for commuters and air passengers alike.

However, we recognise that there are improvements that could be made in order to meet the high level of quality and service demanded by our customers and that we aspire to deliver. Our ambition is to provide world-class facilities and service so we are working with Network Rail and our other industry partners on initiatives to improve the following:

- cut crowding on trains in the high peak hour through the Thameslink and other programmes
- improving the quality of the station environment through the station upgrade and, with R2, the Gateway
- improved ticket sales mechanisms, including Oyster coming this year
- enhancements to the rolling stock for Gatwick Express.

DIRECT CONNECTION FROM GATWICK TO KEY INTERCHANGE STATIONS

STATION	DIRECT TRAINS TO KEY STATIONS (DEC 2012 TIMETABLE)		
	PER DAY	PEAK PERIOD (0700-1000)	HIGH PEAK HOUR (0800-0900)
London Victoria	180	28	10
East Croydon	192	30	12
Clapham Junction	98	13	5
London Bridge	50	7	1
Farringdon	62	10	3
St Pancras	62	9	2
Redhill	95	18	5
Brighton	92	16	6
Reading	16	3	1

SOURCE ARUP ANALYSIS OF NETWORK RAIL DECEMBER 2012 TIMETABLE



RAIL



The £6.5bn Thameslink programme is key. All rail users will benefit from committed and planned capacity improvements along the Brighton Main Line, delivered by Government and Network Rail before 2025. These include more frequent and longer trains, with more carriages on peak services into London Bridge, double the number of direct trains between Brighton and London Bridge and 50% more trains to St Pancras and beyond. There will also be more direct connections to Gatwick including new destinations North of London. In total there will be a trebling of overall capacity on the rail system since 2012.

Network Rail has a series of committed improvements that will improve capacity on the Brighton Main Line, and other services to Gatwick which include:

- new platforms and track at Redhill and Gatwick Airport to enhance capacity
- strengthening of Redhill-London Victoria services with longer trains and an additional path
- a second train per hour – Reading to Gatwick Airport on the North Downs Line utilising capacity at Redhill
- Thameslink Key Output 2 with 12-car operation and additional through services via London Bridge and Farringdon, connecting Gatwick to Cambridge, Peterborough and King's Lynn.

In the future there will be a train every 2 1/2 minutes to London from Gatwick, with three times the capacity of today.

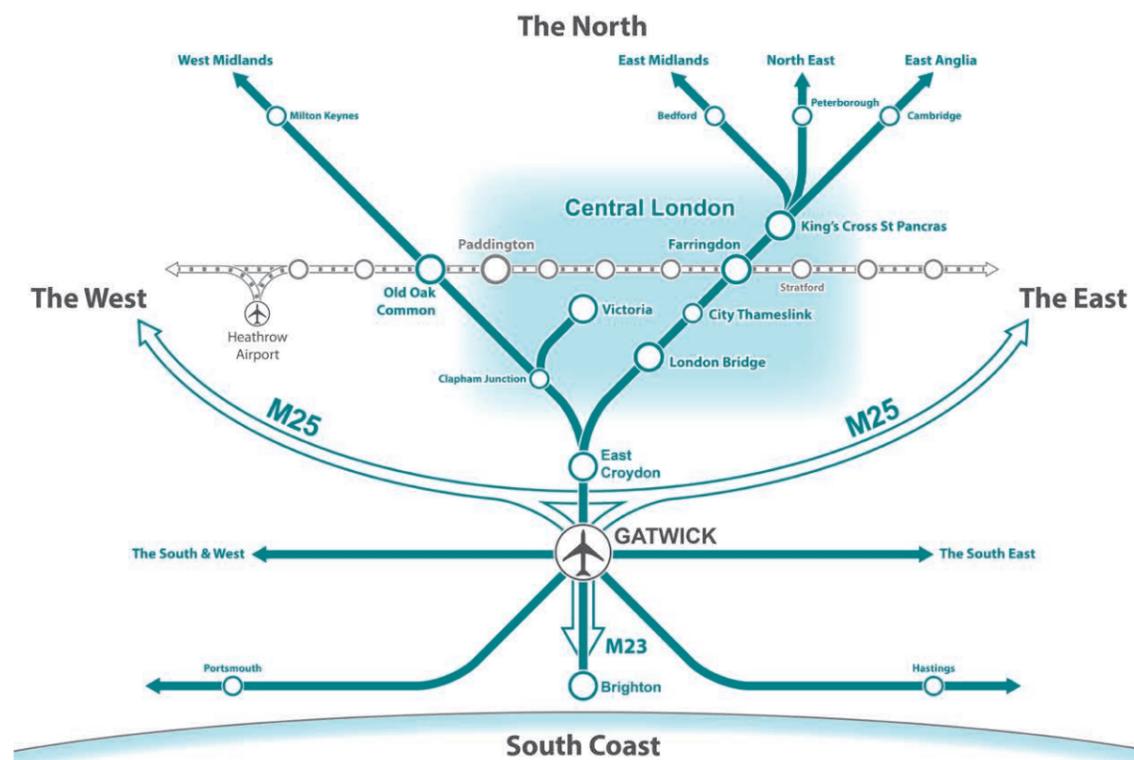


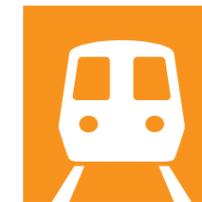
These committed schemes will relieve peak crowding and give wider travel options throughout the day. Gatwick contributes only a small amount of total peak demand into London, less than 4% today and less than 5% with a second runway in 2040. Because the airport is busy throughout the day passengers help fill trains in both directions off peak and in the opposite direction to commuters in the peaks. Rail passenger demand to and from Gatwick thus helps the rail industry to deliver improvements that are value for money. Our studies, agreed with Network Rail, show that increases in both commuter and air passenger rail trips up to 2040 can be accommodated with better performance and less crowded peak hour trains than today.

These schemes will help us to increase our public transport mode share to 60%. However, we will continue to support Network Rail and Government to go further to deliver long term capacity for beyond 2040. This will be part of plans for future spending between 2025 and 2040 and will meet wider network objectives.

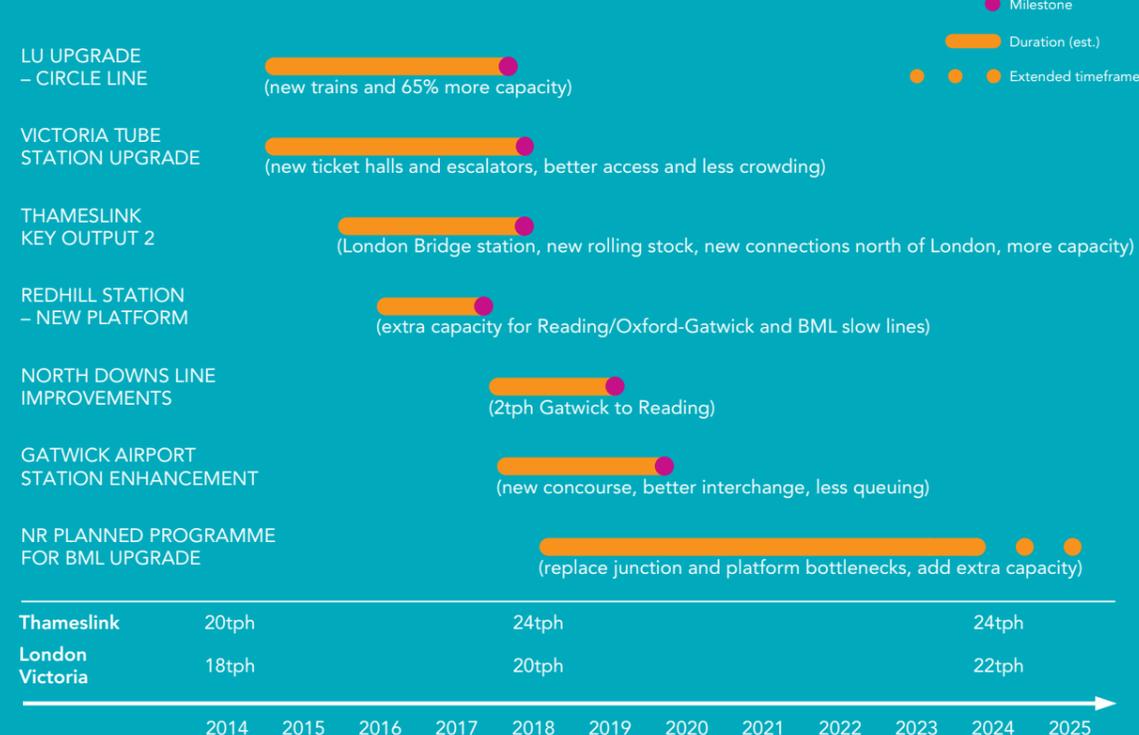
GATWICK'S CONNECTIONS TO LONDON

UNLIKE HEATHROW'S EAST-WEST SINGLE CONNECTION, GATWICK HAS MULTIPLE FAST CONNECTIONS TO AND THROUGH LONDON - AND TO ALL POINTS OF THE COMPASS

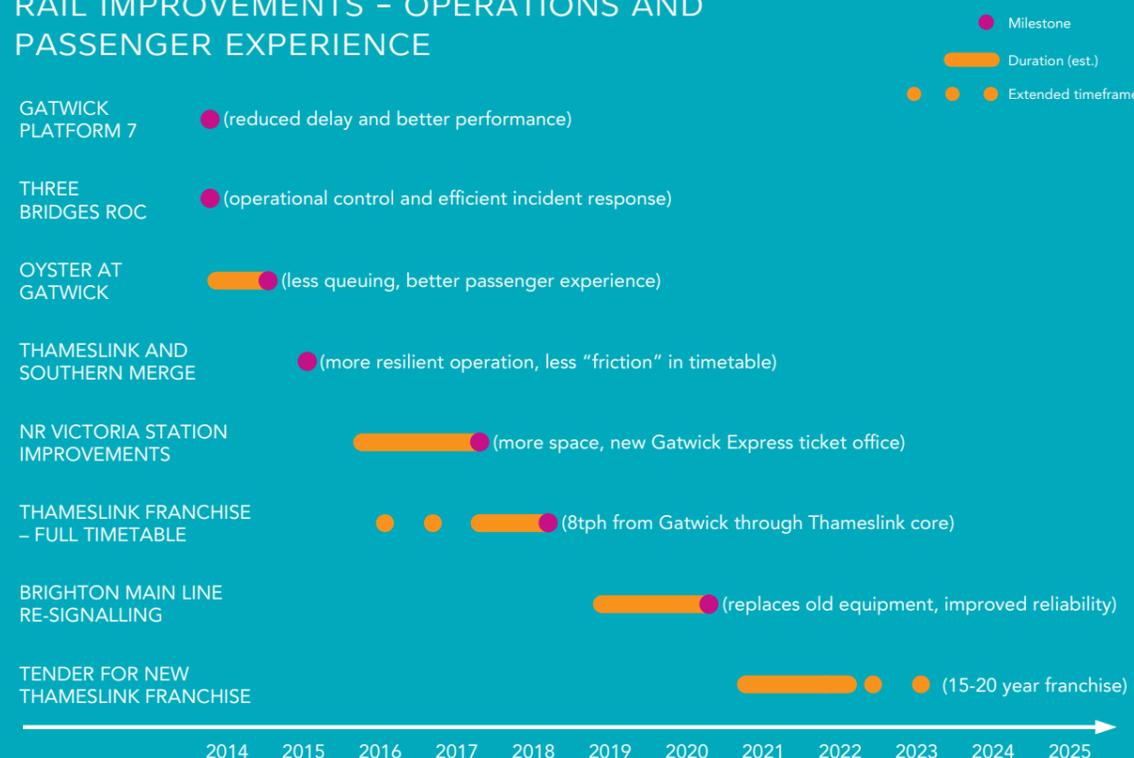




RAIL IMPROVEMENTS - CAPACITY



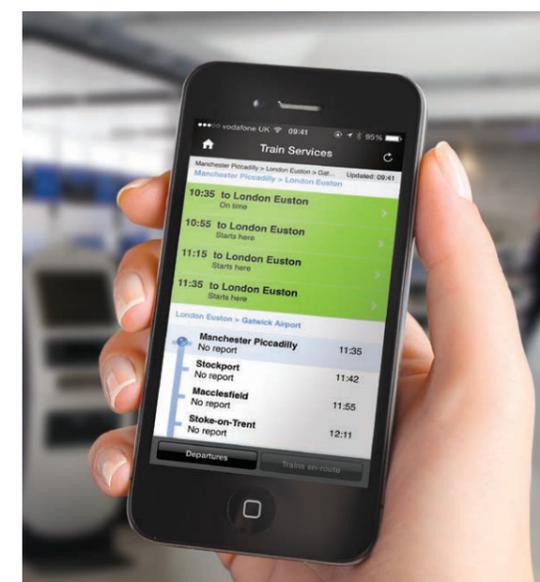
RAIL IMPROVEMENTS - OPERATIONS AND PASSENGER EXPERIENCE



Further planned investment for 2019-2024 will enhance capacity and add resilience. Gatwick is working closely with the rail industry to support the business case for these improvements and to secure the earliest possible delivery of benefits to the wider community. Planned measures include the following:

- additional capacity at London Victoria station for Sussex Routes (Platform 8)
- grade separation and capacity enhancement at Windmill Bridge Junction
- additional track and station enhancement at East Croydon
- grade separation at Stoats Nest Junction
- capacity enhancement at Keymer Junction.

It is expected that these schemes would deliver 2-3 additional peak hour services into London Victoria which would further relieve congestion at key interchanges. These schemes will also help Gatwick to increase public transport mode share to 60%.



Our vision for rail connectivity in the R2 ASAS includes working with our partners to bring forward and deliver the following:

- the new combined Thameslink Southern Great Northern franchise from September this year creates the opportunity for services to Peterborough, Cambridge and King's Lynn, with better access to key London stations such as London Bridge for business passengers
- an improved Gatwick – Guildford – Reading service via Redhill should result in extending one of the two hourly services to start at Oxford and improving journey times
- extension of the current hourly Milton Keynes Central to South Croydon service to Gatwick and the South Coast, with the potential for a direct connection to the High Speed Rail station at Old Oak Common from 2026
- support of long term development of the Brighton Main Line and improved connections to the South Coast
- development of a major improvement scheme at Clapham Junction to deliver additional capacity and interchange opportunities
- support for the Crossrail 2 scheme providing greater cross-London capacity and connectivity
- joint marketing and promotion of rail as the mode of choice to Gatwick.

Once the committed Thameslink Programme is completed in 2018, Gatwick will have direct services to 175 stations, over 1,000 stations with just one change, and will be served by a train into London every three minutes on average. We also aim to have better integration between air and rail ticketing and journey planning, promoting rail as the access mode of choice at Gatwick.



RAIL



The move to having a single operator through the new combined Thameslink Franchise will deliver operational efficiency benefits, which will provide further benefits, including the opportunity to run even more trains, and to improve punctuality and performance. There will be an opportunity to refine the timetable through a more integrated approach, including how the management of operating different services (for example the slow, stopping trains and express services that stop less frequently) can be improved to provided added benefits.

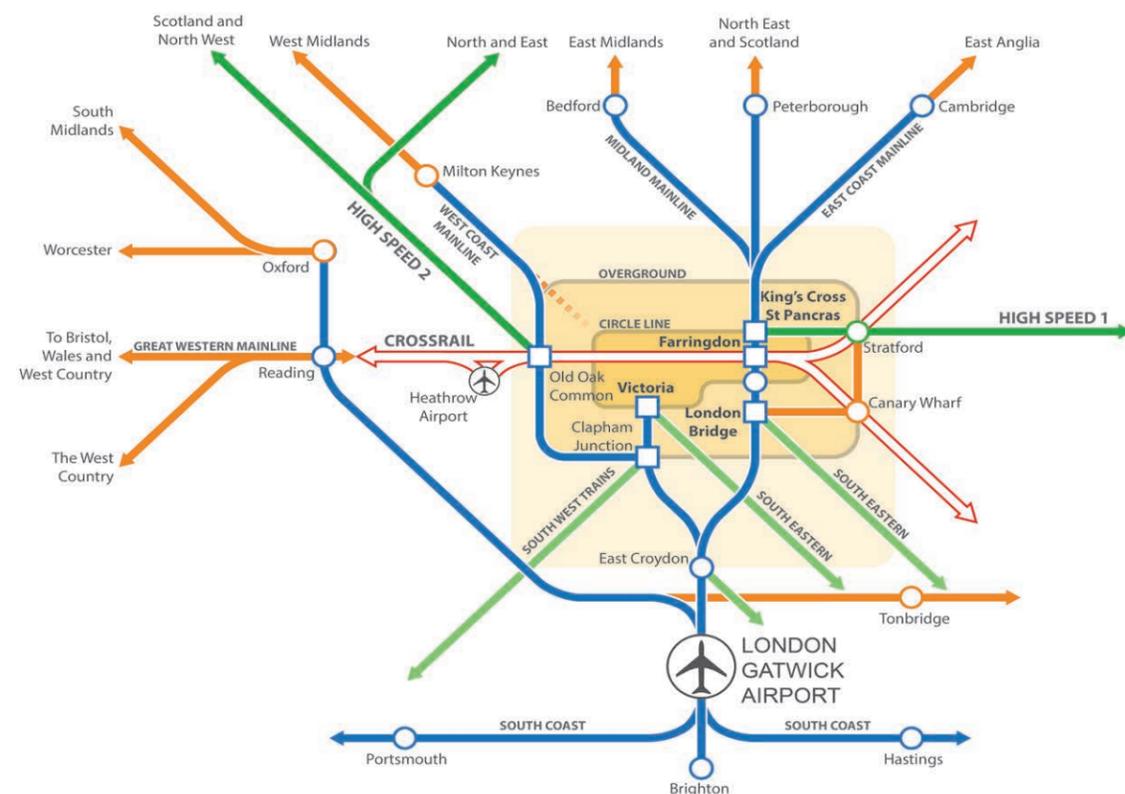
The preferred bidder for the new franchise will be announced in June 2014. To date we have engaged with all of the bidders to discuss our aspirations and to see how Gatwick can help deliver efficient services and this will continue with the preferred bidder. Gatwick has been working with Network Rail to develop Brighton Main Line Strategy Group a forum for continuing to develop this important route.

A high quality Gatwick Express is essential for our future growth. We have worked with the Department for Transport to make sure that the new Thameslink franchise operator will keep our frequent, four trains per hour service non-stop to London Victoria. There are aspects of the current Gatwick Express service that we would like to

improve, such as making the trains themselves more user friendly and accessible, running them for more hours in the day and having all trains (including in the morning and evening peaks) starting or ending at Gatwick. These have been discussed with the companies bidding to be the new operator and they have come up with a range of possible improvements. We will continue to work with the successful bidder, and with the DfT, to progressively improve Gatwick Express.

To summarise, we believe that rail will attract a higher mode share than it does now, to as much as 50%, if the measures in our strategy are implemented. We could achieve this because the new connections and connectivity we propose don't require building any new track and because improvements are already underway. Planned investment by Network Rail for 2019-2024 will add further capacity and resilience, and we are working with our partners to improve our response to incidents so that the station and services are kept open, and on time, more of the time. In overall terms there is enough rail capacity in 2040 to serve both airport users and commuters. Gatwick air passenger trips will also make rail services more efficient by filling off-peak trains and generating £300m pa.

GATWICK'S CONNECTIONS IN 2018 (DIRECT AND VIA ONE CHANGE)



OUR PRIORITIES FOR RAIL

- Gatwick Gateway and station improvements (*committed and planned*)
- Near trebling of rail capacity through committed and planned rail improvements (*committed and planned*)
- Dedicated non-stop Gatwick Express to London Victoria (*committed*)
- Direct Services with new and better connections to :
 - Thameslink services to Gatwick for Cambridge and Peterborough (*committed*)
 - Guildford, Reading and Oxford service via Redhill (*committed and planned*)
 - South Coast connections, with more direct services (*planned*)
 - Milton Keynes and connecting to HS2 at Old Oak Common (*proposed*)
 - Crossrail 2 and connections at Clapham Junction (*proposed*)
- Improved resilience on the Brighton Main Line (*planned*)
- Masterplan development for Clapham Junction and improvements at East Croydon (*planned*)
- Improved passenger experience with new ticketing, fare payment and information
- Commitment to work with the railway industry on long term rail development

TARGET

50% rail mode share for air passengers and 20% rail mode share for staff by 2040.



BUS AND COACH



We want more passengers and staff to travel by bus and coach as well as rail. On average over 500 coaches arrive and depart from Gatwick each day along with eight different local bus services calling over 400 times a day, direct to our terminals.

Current mode shares for bus and coach are 8% for air passengers and 12% for airport staff. Gatwick invests in bus services through its Passenger Transport Levy, alongside operators and West Sussex County Council, supporting local bus services and routes, and helped to fund the successful Fastway priority network.

Our bus and coach strategy has three key strands:

- support and promote new and existing services
- improve the passenger experience and facilities with enhanced and expand infrastructure provision
- embrace innovation to support measures that improve the accessibility and quality of information, ticketing and passenger facilities.

We invest in local buses through our **Passenger Transport Levy**, the proceeds of which are used to support services and routes, and help to fund the successful **Fastway** network. We work with Metrobus to ensure that areas where most airport employees live are well served, with buses linking the airport with Crawley, Horley, Horsham and East Grinstead. Staff receive discounts on National Express and Metrobus with smart card and mobile ticketing technology on local buses.



National Express and other coach operators are driving forward improvements to their services and enhancing passenger experience and quality. Changes at both terminals have been completed in the last two years to improve direct access to forecourts with priority stand allocation. To remain competitive and attractive buses require measures that reduce delay and allow reliable journey times. We will therefore work with our bus and coach partners, to expand the network of fast routes to and from Gatwick.

Gatwick and National Express have committed to work together on developing new routes for air passengers, including:

- Kent and the Sussex Coast
- London and South East London
- Services to Essex and Suffolk
- Bath, Swindon, Reading, Slough, Cheltenham Gloucester and Exeter.



BUS AND COACH



In the short term new express coach services to Kent and East London/Stratford appear to be the most viable for new routes. For existing services increasing the use of the South London stops on Central London express coach services and better connections to the Sussex coastal towns are priorities.

Bus and coach services will also benefit from new facilities at the Gatwick Gateway. The new area for buses and coaches would mean simpler journeys and better connections, with a comfortable, enclosed waiting areas on two levels.

In summary, we will help make buses and coaches more attractive and accessible by supporting operators investing in passenger information, smart ticketing and other new technology. We will also work with operators to enhance local bus services as demand increases and make sure there is good bus access at all times for staff working around the airport. We will continue support new initiatives, via the 'Fastway 2 and 3' concept funded with a contribution from the Passenger Transport Levy. National Express has already committed to work with us to develop new coach routes.



Our analysis shows that bus and coach mode share can exceed 10% for air passengers and that operators will develop new commercial services to meet increased demand with our support. Along with the activities to promote sustainable transport, the measures identified for bus and coach could contribute to our mode share objectives to enable the airport reach its public transport mode share target of 60% for air passengers and 50% for staff by 2040.



OUR PRIORITIES FOR BUS AND COACH

- New and better bus and coach services to Kent, Essex, Suffolk, South and East London, the Sussex Coast and Southwest England *(planned)*
- 'Fastway 2 or 3' local services with bus priorities to achieve reliable journey times *(planned)*
- 24/7 "Access All Hours" *(planned)*
- Gatwick Gateway high quality facilities for bus and coach services *(planned)*
- Staff Travel Plan initiatives to get more people to work by bus *(planned)*
- Ticketing, fare payment and information innovations *(planned)*
- Integration with flight information and fares *(planned)*

TARGET

To deliver over 10% bus and coach mode share for air passengers and 20% bus and coach mode share for airport staff by 2040.



ROAD



Gatwick has direct access to the national strategic road network via the A23, M23 and M25. A large area of potential employment and economic growth is thus within easy reach of Gatwick. The new runway will bring with it the need to adjust and improve the local road network. These proposed improvements will double the existing capacity of the M23 Junction 9 and provide extra resilience in the overall road network and at the same time we aim to segregate, as much as possible, local from airport traffic. In overall terms, the planned Highways Agency upgrades and improvements funded by Gatwick e.g. junction 9 will provide enough road capacity for all users – air passengers and commuters through to 2050.

A bigger airport is likely to increase trunk road traffic, even with efforts to increase public transport use, and we aim to minimise this impact. However, growth in background traffic (not related to the airport) will be much greater than the growth in traffic that would be caused by a second runway so our improvements will help make sure all users benefit.

Most of the airport traffic, uses the M23 to travel to or from the airport so does not use the local roads. By the time traffic reaches the M25 airport traffic accounts for less than 10% of total traffic at peak times. On all local roads beyond 3km from the airport boundary less than 15% of all traffic (excluding the M23 and A23 south of Crawley) is associated with Gatwick.

Growth in background traffic is the most important factor affecting capacity for accommodating additional airport-related traffic on the strategic road network and is common across the whole of the M25 and suburban London networks. We have therefore worked with the DfT and the Highways Agency (HA) to model the road network and understand how their planned interventions address the general increase in traffic and where, e.g. Junction 9, additional interventions are necessary. The fundamental joint conclusion of this work is that there will be enough road space to support the minor increase in road traffic from a second runway.

An even longer term HA Route Based Study and plan is underway for the M23 Junctions 8-10 and M25 Junctions 1-10 in order to manage further forecast increase in traffic. Without this further mitigation, and a strategy for implementation over the next 12 years, Gatwick's contribution to the UK economy would be reduced and access between the M25 and Sussex and the South Coast would be constrained.



The Highways Agency is delivering a significant tranche of motorway improvements and we estimate that over £350 million has been committed by the Government to this programme. The programme includes:

- M25 Dartford Free Flow crossing, eliminating toll booth queues (2014)
- M25 Smart Motorway between junctions 5-7, to increase capacity (2014)
- M25 controlled motorway between junctions 7-8, to improve traffic flow (2019)
- M23 Smart Motorway between junctions 8-10, to increase capacity (2021)
- A23 Handcross to Warninglid carriageway widening, to improve safety (2014)

We have identified further improvements for the main roads carrying airport traffic. Our plans allow capacity for both airport trips and for other journeys, particularly for local traffic. We have tested the impact of these, and our plans, and this indicates that with these improvements journey times will be shorter in 2040 with a second runway and new road capacity than with the existing network in 2025 and with no second runway at Gatwick.

Improvements focus on providing safe, reliable journeys and predictable journey times, and add local improvements to the committed investment in the strategic highway network.

M23 Access to Gatwick

We would improve Junction 9 of the M23 to nearly double its capacity, effectively providing two junctions.

This means adding a new free flowing slip road over the existing roundabout. This would allow for better access between the M23 and the A23 south towards Crawley. It would also increase capacity and resilience for airport access and provides for separate routes to the North Terminal (and Horley) and South Terminal (and Crawley). This would benefit both Gatwick and other traffic. It would also provide an alternative route to Crawley from the M23. This is important

as it not only provides peak capacity but also resilience and flexibility to provide alternative routes to manage traffic when incidents affect individual links.

Planned extra capacity on both the M23 and the M25, achieved by using the hard shoulder as an additional lane, will be needed to support background growth before 2025. These extra improvements at M23 Junction 9 have been analysed to predict what impact they will have. The analysis shows that the proposed junction arrangement works with the amount of traffic generated by background growth and the new runway and provides wider benefits by improving access to Horley and Crawley.

Local roads and access to Gatwick

The second runway development would require local road improvements. These would balance capacity for airport access with connectivity for local communities, particularly users of the A23.

A23 diversion – Part of the new runway would lie over the current A23. Diversion of the A23 would improve access for local traffic, by separating it from airport traffic. The preferred route for the A23 is to move it east of the railway to go around the new operational area of the airport. It would return to the current alignment close to the junction with Fleming Way.

The detailed route depends on the runway option and will be finalised once all views on alternatives have been considered. Some existing junctions will be re-provided, to ensure access remains for Manor Royal but the emphasis is on having fewer junctions and reliable journey times with better links between the A23 and M23.

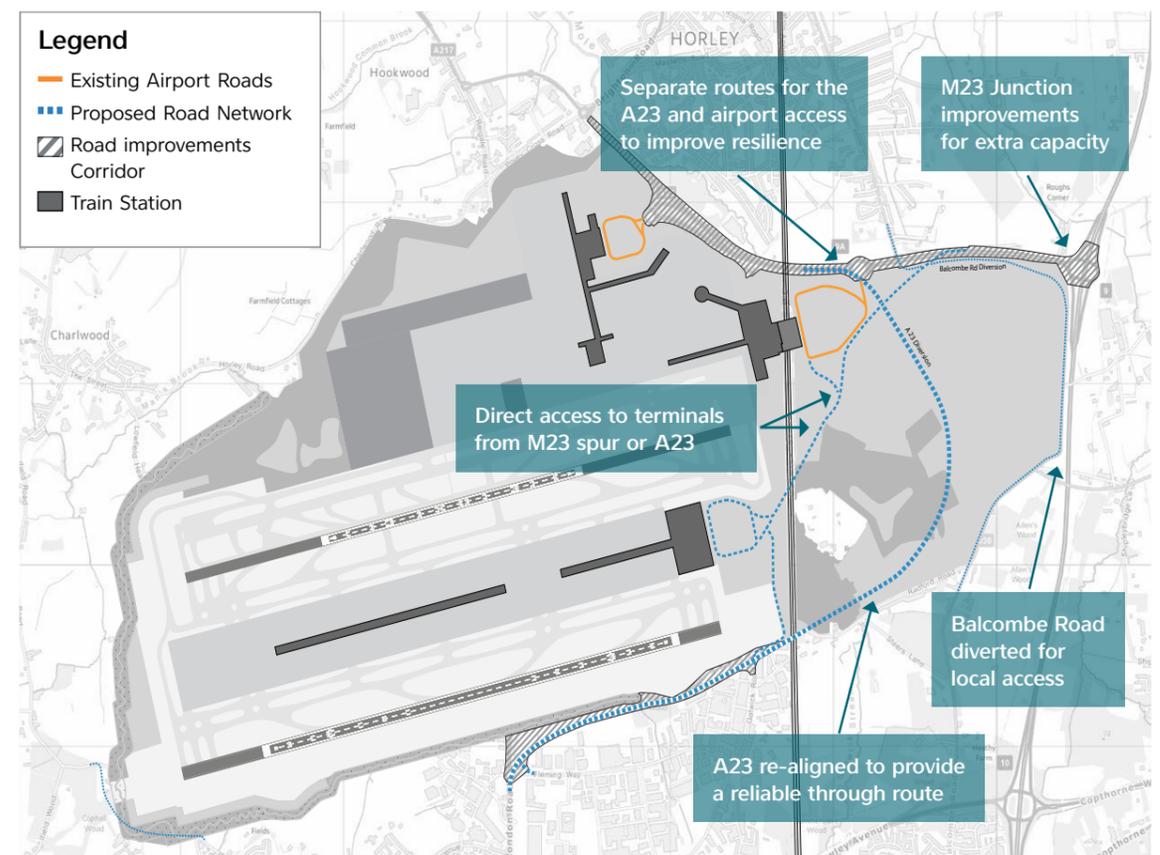
A new junction would connect the main airport access road from M23 Junction 9 and it would be possible to travel between the A23 and M23 Junction 9 in all directions without the need to pass through an airport junction. Access from the A23 and M23 to the new terminal would follow the same route as for the South Terminal. A segregated cycle lane and footpath would run alongside the whole of this section of the A23.

Balcombe Road diversion – We would also divert Balcombe Road, between its junction with Radford Road and where it passes under the M23 spur road. Balcombe Road carries more traffic than it was designed for, some of which could use the new A23. We want to keep it as a local road and so we think it better to make sure Balcombe Road's capacity is low enough to prevent too much traffic entering this area. Therefore, we propose to keep it as a single carriageway road, creating enough width for cyclists to use the route safely. It will still provide a connection to Antlands Lane crossing over the M23.

Lowfield Heath Road/Charlwood Road – The new southern and western airport boundary would affect Lowfield Heath Road/Charlwood Road. This route would be lost and there would be no access onto Bonnetts Lane from Lowfield Heath Road. Traffic would be able to divert onto Ifield Road or to the A23. We believe this will mean there will be no increase in traffic through Charlwood as a result of airport growth.

Ifield Road diversion – A short diversion of Ifield Road is needed, close to where it crosses the River Mole. The proposed diversion of the River Mole around the southwest corner of the airport would define the change in alignment of Ifield Road.

RUNWAY 2 ROADS STRATEGY





ROAD



Local Highway Development Fund

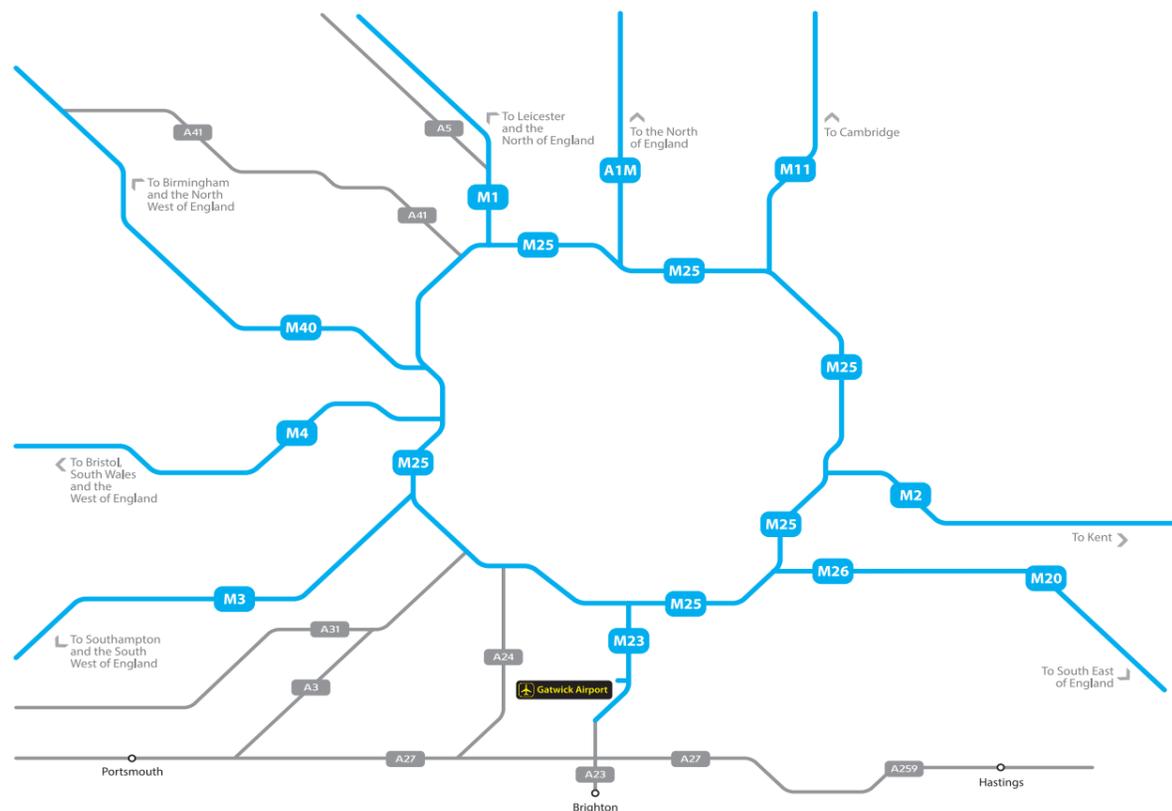
We already support public transport via the Passenger Transport Levy. We also commit to supporting further road improvements through the introduction of a Local Highway Development Fund as part of the R2 ASAS. Local authorities would use the Local Highway Development Fund to help improve the local road network where Gatwick is one of a number of contributors to traffic. We will work with our local authorities to agree how the fund should be set up and organised, where and how much to spend on individual locations.

Our plans for road improvements aim to increase the value and efficiency of the local network for the benefit of local communities. We will continue to work to reduce car use, including improving public transport options for staff and passengers. This brings environmental and economic benefits from a reduction in private car traffic growth. The public transport improvements proposed in our strategy and our plans to reduce car use suggest we can reduce the share of air passenger trips by private car by 15% by 2040. Traffic would increase on some routes but the impact would be focused on the main roads, where extra capacity would be provided as a result of planned and committed projects.



ABOVE: Robotic parking allows hundreds to thousands of cars to park in half the space of a conventional parking garage. Minimizing the impact of parking creates more space for design and development that can be used for additional revenue, green space, common areas or other uses that benefit the airport as a whole.

MOTORWAY AND ROAD CONNECTIVITY



OUR PRIORITIES FOR ROADS

- M23 Smart Motorway with hard shoulder running (*committed*)
- Dartford Crossing Free Flow Tolling (*committed*)
- M25 Jn 5-7 Smart Motorway (*committed*)
- Doubling the capacity at M23 Junction 9 and better links to the A23 (*planned*)
- Extra junction capacity at the airport terminals (*planned*)
- Provide safe, reliable and simple routes, with intuitive wayfinding (*planned*)
- Divert the A23 to the east of the airport (*planned*)
- Close Lowfield Heath Road and prevent an increase in traffic through Charlwood (*planned*)
- Divert Balcombe Road as a local road with connection to Antlands Lane/Shipleigh Bridge (*planned*)
- Support TfL's Roads Task Force Strategy for the A23 into London (*planned*)
- Support the Highways Agency Route Based Strategies for the M25, M23 and A27 (*planned*)
- Develop a Local Highway Development Fund

TARGET

To deliver a 15% reduction in mode share for air passenger private car journeys and 10% mode share reduction in single occupancy car journeys by staff by 2040.



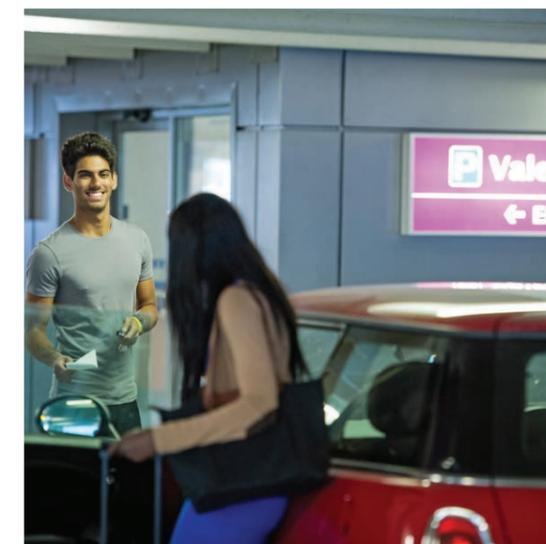
CAR PARKING



Car parking is an essential part of the R2 ASAS for people who choose or must drive to the Airport. More public transport use and initiatives to manage car parking will however reduce the ratio of spaces to passengers and staff.

For those who do park at the airport the experience would be efficient, reliable and straightforward. We would keep all new car parking spaces on the airport: these car parks will add to the Passenger Transport Levy which funds public transport improvements and sustainable travel choices.

Forecast passenger demand for long stay car parking requires between 16,800 and 30,900 more spaces depending on the runway option selected. Long stay car parking would be moved to an area close to the M23, with easier access and shorter connection times to terminals. Consolidating long stay parking into one general area will also allow for more efficient management of spaces and will reduce the time passengers spend finding a space. We will use our parking strategy to help reduce the number of passengers being dropped off and picked up at the terminal, supporting objectives for reducing congestion and lowering carbon emissions.



Our R2 Staff Travel Plan has an objective to reduce the number of parking spaces for driver-only journeys to work. A range of Travel Plan initiatives already support car sharing or the use of electric or low emission vehicles if staff need to travel by car. Staff parking would also be relocated to the area east of the railway, with between 700 and 2,100 additional spaces for the increased workforce at the airport. Locating all staff parking in this location (rather than providing a spread of spaces close to terminals and workplaces) will also encourage the take up of sustainable travel initiatives.

OUR PRIORITIES FOR PARKING

- Always achieve a 4.5 quality rating for customer experience – 1 lowest to 5 highest *(planned)*
 - Accommodate all new airport-related car parking on-airport *(planned)*
 - Reduce the number of spaces per million passengers to meet R2 ASAS objectives *(planned)*
 - Increase the choice of parking products to manage demand *(planned)*
 - Apply technology to enhance the passenger experience *(planned)*
 - Provide more electric car charging points and priority spaces for staff who car share or use low emission vehicles
 - Consolidate staff parking to a single area within the airport boundary
 - Consider the application of good practice from other car park operations
-



CYCLING AND WALKING

We have reviewed all existing cycling facilities and connections to identify areas for improvement. We have identified 9km more cycling and walking routes and incorporated these into our Airport Masterplan. 2% of staff at the airport regularly cycle to work and we will endeavour to increase this.

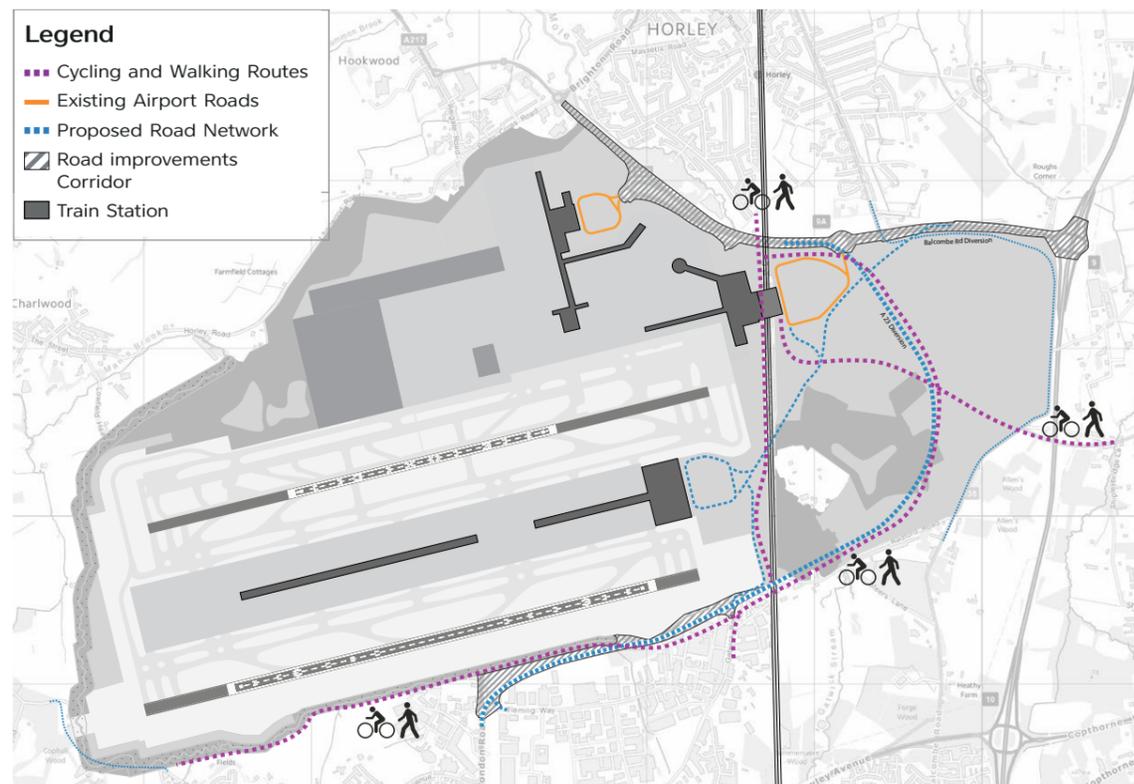
Pedestrian access is important for the local community and for airport employees. Our plans therefore include an integrated and clearly signposted network of pedestrian routes to replace the disconnected paths that will be lost under the boundary changes. Our plans in essence replace footpaths that have no specific destination with a properly integrated network of routes. The focus is on providing convenient access to terminals and workplaces around the airport as well as providing attractive recreational routes for walkers.

A linear park will be created south of the airport with footpaths overlooking the proposed river diversion from Cawter's Brook to the River Mole. The river corridor would link to National Cycle Route 21 and would provide a safe and attractive pedestrian route alongside the A23, connecting to Balcombe Road, Antlands Lane and the Gatwick Gateway.

Cycling to work is already supported by the current Staff Travel Plan and new one will be introduced with a second runway. The R2 ASAS strategy includes:

- upgrading existing routes and parking facilities
- providing 9km of new off-road cycle routes and parking facilities
- building a new National Cycle Route 21 between Horley and Crawley following the diverted A23
- delivering a new cycle hub for staff and passengers at the Gatwick Gateway
- providing a direct cycle route from Antlands Lane and Balcombe Road to the Gatwick Gateway
- creating a new linear park south of the airport
- providing 9km of new walking routes
- continuing to support cycling through Staff Travel Plan initiatives

RUNWAY 2 CYCLING AND WALKING STRATEGY



OUR PRIORITIES FOR CYCLING AND WALKING

- Provide 9km of new walking and cycling routes (*planned*)
- New NCN21 following diverted A23 (*planned*)
- A new linear park south of the airport with cycling and walking routes
- Improve existing cycle routes
- New Cycle Hub at Gatwick Gateway (*planned*)
- Provide direct pedestrian and cycle routes to workplaces (*planned*)
- Continue Staff Travel Plan initiatives (*planned*)



TAXI



Gatwick has a dedicated on-airport taxi operator providing a tailored service for passengers with excellent knowledge of the airport access routes. The current service provider is a local, Horley-based company, which demonstrates our support for local supply chain opportunities.

We aim to have taxis waiting on the rank at all times, so customers don't have to wait. We will support the taxi operator to improve customer experience through innovation and use of technology at the Gatwick Gateway.



LEFT: The Ford Transit Connect Taxi, already being delivered within the US, will deliver 30-percent better fuel mileage than conventional full-sized, car-based taxis. With a high roof, dual sliding passenger doors, and generous interior room for its relatively small footprint, the Transit Connect makes a logical choice for taxi use. The driver will get an in-dash computer, running Microsoft Auto software, which is linked to the internet and offers traffic, weather, and navigation information and help.

OUR PRIORITIES FOR TAXIS

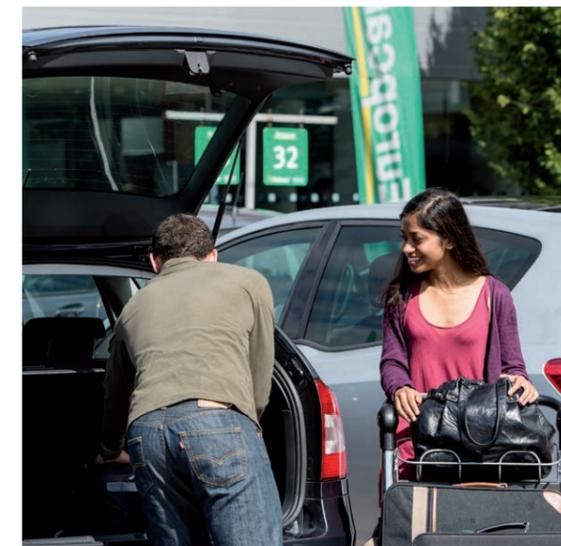
- Always achieve a 4.5 quality rating for customer experience – 1 lowest to 5 highest *(planned)*
- Have taxis waiting on the rank at all times *(planned)*
- Apply technology to enhance the passenger experience *(planned)*
- Support the operators in the adoption of zero or low emission fleets *(planned)*



CAR RENTAL



Car rental services provide a convenient alternative for passengers without access to a car to travel onward with flexibility. Over two thirds of car rental users at Gatwick are non-UK visitors and business travellers. Our competitive advantage over other airports is that we don't have to transfer passengers by bus to access their rental cars. This is especially important for business passengers. We are working closely with the Business Vehicle Rental Leasing Association (BVRLA) to improve still further the efficiency of the car rental operation at Gatwick. Gatwick Gateway would incorporate a central consolidated car rental facility that would improve operations and passenger experience. We will develop the design of the facility in association with the BVRLA.



RIGHT: Designed as an all-electric four-wheel ultra-small vehicle (USV) for two passengers, each wheel is independently digitally controlled, with its own wheel motor, and allows a 0-degree turn radius, enabling it to perform sideways motions for parallel parking. The Hiriko Fold, as its name suggests, can reduce its length to only 1.5m

OUR PRIORITIES FOR CAR RENTAL

- Always achieve a 4.5 quality rating for customer experience – 1 lowest to 5 highest *(planned)*
- Provide a consolidated car rental centre at the Gatwick Gateway *(planned)*
- Apply technology to enhance the passenger experience *(planned)*
- Support the operators in the adoption of zero or low emission fleets *(planned)*



EMPLOYEE TRAVEL

Encouraging employee travel by sustainable modes is an important part of our surface access strategy. Nearly half of our current 21,000 staff from 230 different companies commute less than 10 miles. The average journey distance, which each employee travels over 200 times a year, is 25 miles and takes less than 40 minutes.

We published a new Staff Travel Plan for Gatwick in 2013, which has new initiatives to support travel by public transport and sustainable modes such as car sharing. Gatwick Commuter is the airport's dedicated brand promoting sustainable travel to all on-airport staff.

In 2050 we would expect there to be 40,000 staff working directly at the airport. We will publish a new Staff Travel Plan for a second runway and embed it into the R2 ASAS. This will be for both construction and permanent staff members. As better public transport connections are developed we anticipate staff travelling from further away, with a wide range of jobs being taken up by workers from deprived communities where employment is difficult to find. We will support mobility and access to jobs with initiatives to support apprenticeships and make sure that access to public transport and sustainable travel removes any barrier to work.

We will work with local bus operators to develop another new series of Fastway initiatives

("Fastway 2 and 3"). This will follow the successful approach and funding used to develop the original Fastway network. We will pump-prime services through the Passenger Transport Levy and continue to increase the number of services available for staff on early shifts, working into the evening and at weekends. Existing staff travel discounts will be maintained or increased. Future rail improvements, including connections to more stations, will make rail even more attractive for Gatwick staff commuting.

We will continue to promote car sharing to build on the increased take up already achieved. We are developing new incentives for car sharing and would continue to promote the use of zero or low emission vehicles. Electric car charging points will be placed in priority spaces in staff car parks. We would invest in a new cycle hub at the Gatwick Gateway to increase cycling to work.

Our target is for 50% of staff travelling to work by sustainable modes by 2040 with a second runway.

We would publish a new staff travel plan for a second runway and are confident of meeting a target for employees that reduces single occupancy car trips and achieves a 50% sustainable mode share target for staff with a second runway by 2040. Allowing for growth in airport employment, meeting this target would lead to nearly 4 million fewer car journeys per year to and from the airport.

We are committed to supporting local employment and will work with business to deliver training and apprenticeships. As with all staff, apprentices will benefit from discounted travel.

OUR PRIORITIES FOR EMPLOYEE TRAVEL

- Publish a new construction workers travel plan and an Airport wide new Staff Travel Plan
- Integrate staff discount scheme for public transport with a Gatwick Travel Card
- Deliver new cycle hub at the Gatwick Gateway
- Relocate staff parking to a single site east of the railway
- Promote car sharing and the use of zero/low emission vehicles
- Act as a focal point for staff travel planning with local businesses



LOGISTICS



Gatwick handled 101,000 tonnes of cargo in 2012. We forecast that cargo volumes will grow as Gatwick increases long haul flights where cargo volumes are typically higher. We have a logistics strategy which focuses on delivering efficiency, reducing carbon and meeting sustainability objectives.

Our plans for the second runway development consolidate all cargo in a single location to reduce onward transport impacts, in particular minimising goods traffic travelling on the local road network in peak periods. This has led to airport goods traffic representing less than 2% of peak traffic on local roads around Gatwick. We would ensure our central facility has the capacity to cope with growth in cargo traffic. We would also maximise the use of rail freight, particularly during construction of a second runway. We are discussing with Network Rail the best solution for doing this but there is local capacity that could be used if agreements can be reached.



LEFT: The Chameleon Truck Concept for Cargo Transport. Designed by Haishan Deng, The Chameleon is an innovative concept truck that has a segmented body which enables the truck to adjust its size to fit the container. The resilient soft tarpaulin shelled body is strong enough to protect its cargo but also absorbs impacts in case of accidents. As an added benefit fuel savings abound since the truck's weight is slashed in half.

OUR PRIORITIES FOR LOGISTICS

- Develop and expand our current logistics facility - Gatwick Direct - for last mile and onward logistics management
- Rail freight strategy for construction – maximising its use
- Promote sustainable logistics strategies with suppliers



WORKING IN PARTNERSHIP

Gatwick Airport is an important UK gateway and integral to the economic development of the South East. We have a responsibility to conduct the business of a major international airport with conscious support for policy and institutional arrangements whilst meeting the needs of our customers and our stakeholders. Access to employment opportunities at Gatwick is important for our customers and regional stakeholders.

Gatwick works through the Transport Forum, local travel associations and using the Passenger Transport Levy to support enterprises and activities for sustainable commuting. The development of the highly successful Fastway bus services is a prime example of what can be achieved when Gatwick, airport employers, bus companies, local business associations and local authorities work together. Gatwick has good links to local commuter travel groups ensuring co-ordinated support for improvements in public transport that benefit local and regional communities as well as airport passengers and staff.

We support the focus on jobs and access to work contained in the Coast to Capital Local Enterprise Partnership's Draft Strategic Economic Plan.

Working together in collaboration and maintaining our consultation strategy are core activities and Gatwick listens closely to the views of its partners and stakeholders. Members of our Gatwick Transport Forum Steering Group, which acts as an executive committee of the Airport Transport Forum, have worked together to guide and develop this R2 ASAS and will continue to do so in the future.

The Gatwick Airport Transport Forum was set up in 1998 to ensure a partnership approach in which surface access to and from the Airport and the surrounding area could be improved. It now involves representatives from over 70 organisations, looking at transport issues area-wide, to develop an integrated approach that benefits the whole community. As an example of working together, Gatwick will set aside a Local Highway Development Fund to deliver road schemes that secure local safety and capacity benefits.

We are committed to the continuation of the Gatwick Transport Forum, the Airport Surface Access Strategy, the Staff Travel Plan and the Passenger Transport Levy to promote sustainable transport. We will invest in the Gatwick Gateway and initiate the Local Highway Development Fund and we will meet our mode share targets.



OUR PRIORITIES FOR WORKING IN PARTNERSHIP

- Publish a new R2 ASAS
- Continuation of the Passenger Transport Levy
- Deliver the Gatwick Gateway
- Introduce the Local Highway Development Fund
- Publish a new Staff Travel Plan
- Develop a specific travel plan for construction workers



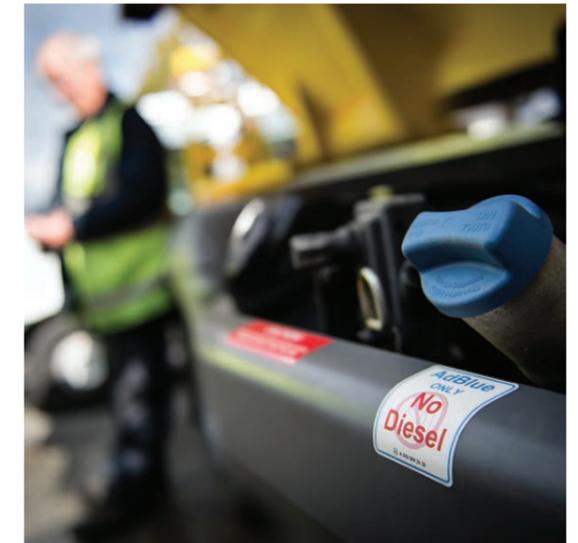
SAFE, SUSTAINABLE & INCLUSIVE



Gatwick places great emphasis on maintaining safe operations and on reducing the environmental impacts that result from the airport's activities, and rightly so. Similarly we are committed to being an exemplar of inclusiveness in both design and operation. Gatwick is proud of its achievements and adherence to our objectives set out in our 'Decade of Change' plan. One of the key strategic priorities for being London's airport of choice is building a strong environmental, health and safety culture.

The R2 ASAS supports the airport's carbon reduction programme and air quality objectives by encouraging passengers and staff to use more sustainable public transport modes and choose zero or low emission vehicles if they have to use a private car. A key feature of our strategy is investment in public transport and supporting the improvements in local bus, express coach and rail being delivered by our partners.

Our focus on safety in surface transport covers both protection from accident or incident and maintaining security. We observe and "emotionally own" the statutory regulations and security requirements affecting our surface transport areas such as forecourts, access roads and car parks.



SUMMARY



Gatwick's Surface Access Strategy which has been developed with our key stakeholders – represents best practise. It also meets with the requirements contained in the Airports Commission's objectives.

We have set a new benchmark for the use of sustainable modes for both air passengers and staff to access the airport and have illustrated how Gatwick can provide the facilities necessary to be a regional transport hub in its own right.

Our R2 ASAS is outward looking, has been developed in collaboration and consultation with a wide range of stakeholders and delivers significant benefits to the region, local business and residential communities. We have identified measures that support Gatwick's economic contribution and add value to its location on national road and rail networks.

The proposals for the Gatwick Gateway, staff travel planning and support for a high public transport mode share will deliver best practice in the UK in terms of sustainable surface access. We will continue to take a long term approach to delivering benefits to those who access the airport and the communities around the airport and embracing innovation and technology to deliver a high customer experience.

