



# **BIG Programme – A338 Spur Road**

## **End of Project Report**

### **April 2017**

## **Bournemouth International Growth (BIG) Programme Summary**

The BIG Programme is a major economic growth plan focused on improving connectivity, easing congestion, protecting existing jobs and creating new jobs in and around Bournemouth Airport and Wessex Fields.

£45.2m has been secured by Dorset Local Enterprise Partnership as part of the Dorset Growth Deal to fund a series of transport and infrastructure investments along the A338, B3073 and A348 corridors aimed at facilitating better access into and around Bournemouth Airport as well as unlocking employment land at Aviation Business Park and at Wessex Fields.

### **What is the BIG programme going to do?**

From 2015 to 2021 the BIG Programme will:

- Transform accessibility to and around Bournemouth Airport and Wessex Fields through extensive transport improvements
- Release up to 60 hectares of prime, flexible employment land for high-quality new business premises at [Aviation Business Park](#) and 6 hectares at Wessex Fields
- Provide the single largest employment opportunity in the south-east Dorset conurbation with the potential to create up to 10,000 new highly skilled jobs over the next decade
- Generate up to £500 million of GVA into the area
- Deliver around 350 new homes of which up to 50 per cent are affordable
- Deliver increased broadband capacity to Bournemouth Airport and Aviation Business Park
- Develop a new approach to improve skills and employee development, better tailoring it to the needs of key business sectors (aerospace, aviation, advanced manufacturing, digital media, marine, defence and financial services)

### **Why is it needed?**

Bournemouth Airport is a significant economic asset to Dorset. Alongside the opportunity to unlock employment land at Aviation Business Park and Wessex Fields, an exciting economic growth opportunity exists for the region.

However, existing key link roads and transport networks are congested, inadequate and are acting as a barrier to growth. They are in vital need of reconstruction. In addition, poor infrastructure and lack of housing are hindering growth and need to be transformed if Bournemouth Airport, Aviation Business Park and Wessex Fields are able to reach their full economic potential.



Boosting the economy by improving roads, easing congestion and protecting & creating jobs in and around Bournemouth Airport and Wessex Fields.

2015 - 2021

**TRANSPORT IMPROVEMENTS**

1. A338 reconstruction – completed May 2016
2. Chapel Gate roundabout
- 3a. Blackwater – B3073 junctions
- 3e. Blackwater – A338 slip roads
4. Hurn roundabout
5. Parley Eastern link road
6. Wessex Fields
7. A338 widening
8. Longham mini-roundabouts
9. Cycle links
10. Bus enhancements

**SITE IMPROVEMENT**

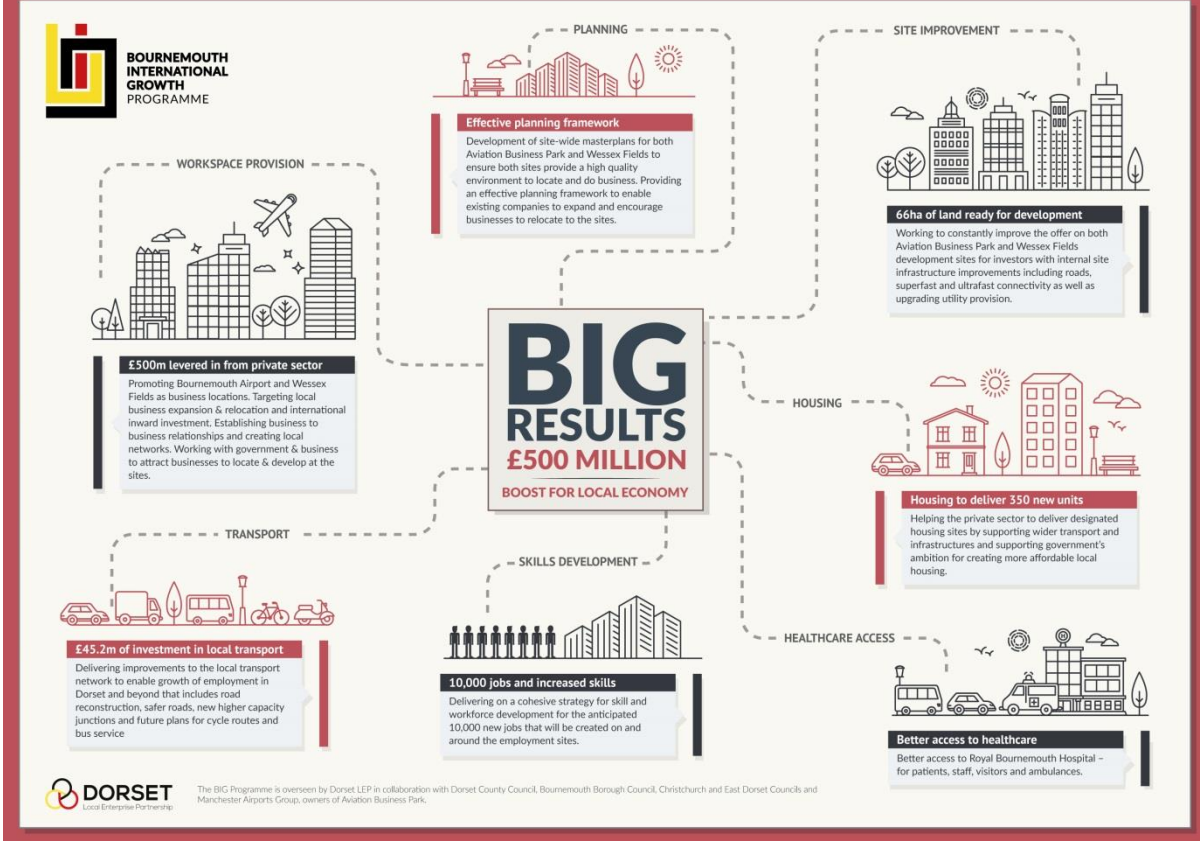
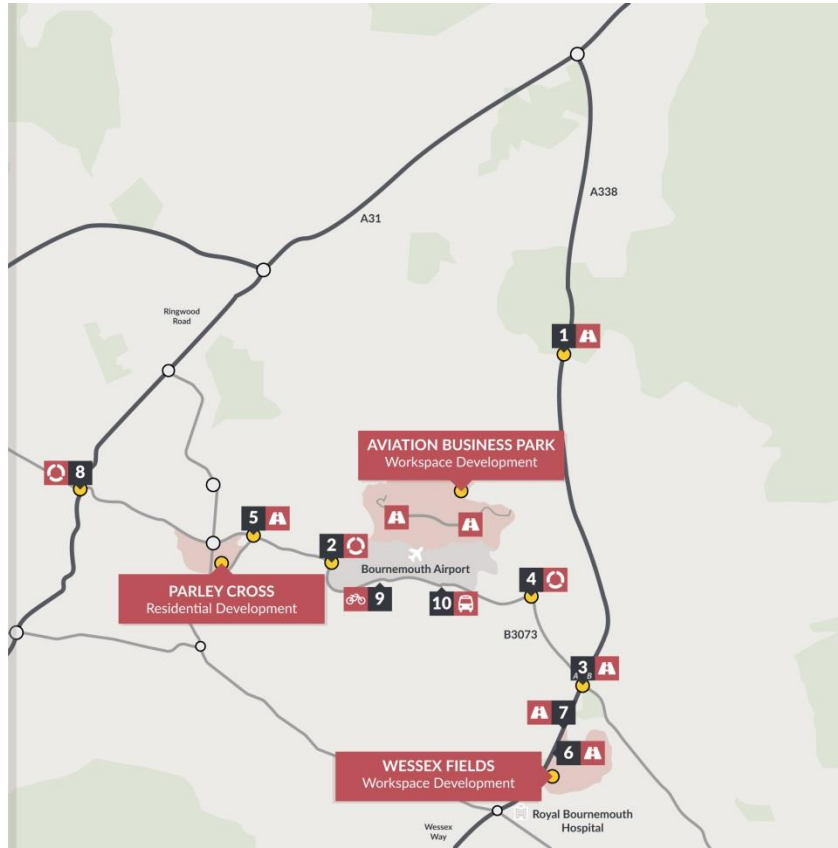
- Surrounding airport area and Aviation Business Park.
- Wessex Fields – new link road serving employment area, plus providing a second access route to hospital.

**WORKSPACE PROVISION**

- Aviation Business Park – 60 ha of business and manufacturing land.
  - Wessex Fields – 6 ha of business and office employment land.
- Together both areas provide potential for the creation of 10,000 jobs locally.

**HOUSING**

- Parley Cross residential development 350 homes by 2028.



The first scheme to be developed as part of the programme was the renewal of the A338 Spur Road, between Ashley Heath and Blackwater, the key link road to Bournemouth. The £22m investment (£19.8m of Dorset Growth Deal investment and £2.2m of local contribution from Dorset County Council) covered:

- treating failed carriageway construction;
- replacing safety barrier;
- maintenance to structures and protection to bridge piers;
- improving failed drainage systems and culverts to solve flood problems associated with the road;
- renewing road signs;
- environmental factors; and
- traffic management and disruption.

## **Governance**

The BIG Programme Steering Group (PSG) was established in September 2014 to ensure that the various elements of the BIG Programme are delivered on time and to budget. As well as ensuring the benefits of the investment including jobs, growth and GVA are realised. BIG Programme Steering Group reports to Dorset LEP Board on a bi-monthly basis through the programme management updates.

In September 2015, the Operations Group was set up to ensure smooth running of the projects within the BIG Programme. The operational group reports to the BIG Programme Steering Group on a bi-monthly basis. More information about the governance and the terms of reference is available on Dorset LEP's [website](#).

For the A338 Spur Road project another level of governance took place within Dorset County Council. A number of working groups reported to a steering group:

- Member Update Group: set up to keep key members informed and involved in the progress of the project. The A338 Spur Road project impacted on a wide area and many local authorities, and all of these were represented.
- Stakeholder Update Group: to keep key stakeholders such as the media, business associations, emergency services, bus companies and so on informed and to address any concerns in a timely manner.
- Traffic management update meeting.
- Work streams (design phase)/Site meetings (construction phase): there was a subtle change in the governance structure to reflect the design and construction phases. The main difference is that during the design phase there were many technical work streams such as geometric design, drainage, pavement, contract etc. that needed to be coordinated and fed back to the monthly Steering Group. During the construction phase, these work streams were replaced by weekly site meetings and the Steering Group was renamed the progress meeting.

## Review of Business Case

An initial business case was produced by WSP: Parsons Brinckerhoff for the A338 Spur Road in February 2013 and an independent assessment of the business case was carried out by Mouchel in June 2015. The business case set out the need for this essential scheme of reconstruction of nine kilometres of the A338 between A31 at Ashley Heath interchange and Blackwater junction. This is Dorset's most heavily trafficked road and the key access to the South East Dorset conurbation and is essential to its economic viability and growth.

The A338 Spur Road was built in the late 1960s and the structure of the road was failing due to its age and the volume of traffic it carries (59,000 vehicles/day; including 2,200 HGVs). Dorset County Council has undertaken major maintenance work on limited sections of the northbound carriageway during the past 12 years, but these have only provided a short term solution to a longer term problem. The road was deteriorating faster than it could be maintained. Its foundations were crumbling, causing the surface to fail and making it very noisy. Resurfacing wasn't an option; it needed to be rebuilt.



This was before the announcement of the Growth Deal and the business case did not take into account the economic benefits of the scheme. Therefore, whilst the scheme represented good value for money (BCR 2) as transport maintenance scheme, there was a stronger case to be made as an economic growth scheme. In November 2015, BEIS confirmed that a Treasury Green Book Appraisal would be a suitable method of assessing benefits and value for money for transport schemes funded under the Growth Deal, as opposed to WebTag.

Dorset County Council produced an enhanced business case for the A338 Spur Road scheme to reflect this and to meet LEP Assurance Framework requirements and other changes to the scheme since the original business case was written. This has been independently assessed by the Dorset LEP's Technical Advisor for transport schemes and showed that the scheme delivered a BCR of 7. Full business case gained final approval through the PSG and Dorset LEP Board.



## Planned Outputs and Outcomes

The planned outputs for the A338 Spur Road were:

- Full depth reconstruction of 9km dual carriageway ensuring reduced long term maintenance costs;
- Bringing the carriageway widths up to current standards. It varied between 7.1 metres and 7.4 metres but is now a consistent 9.3 metres including adding a one metre hard strip to give extra space for cars to move over for emergency vehicles or in case of breakdowns;
- Replacing and upgrading the central safety barrier to concrete, making the road safer and reducing the risk of vehicles involved in accidents crossing into the opposing carriageway;
- Improving drainage to solve flooding and 'ponding' problems;
- Addressing ecological issues, including protected species translocation and migration;
- Bridge maintenance;
- Renewing road signs, cats eyes and markings.

## Achievement of Outputs

The stretch of the A338 Spur Road was rebuilt, work completed on time in May 2016, the road now boasts:

- A new lower noise surface layer
- 1 metre hard strip for emergency use
- Improved drainage to reduce flooding and ponding
- New concrete central reserve safety barrier to reduce maintenance and likelihood of crossover accidents
- New road signs, cats' eyes and road markings



## Outcomes

A338 Spur Road scheme has contributed to the outcomes of the BIG Programme. The following outcomes have been achieved from 2015-16.

Outcome	Number
Jobs	847
Leverage	£143.8m
Land Unlocked (Ha)	3.2

Outcomes continue to be monitored on a quarterly basis and reported through LOGASnet to BEIS. Further analysis of these outcomes and benefits will feed into future reporting and case studies.

## Benefits Realised to date

The A338 Spur Road was delivered with a saving of £1.45m. This is due to affective management of the budget, value engineering and working with the contractor to reduce costs where possible. This included the recycling of 70,000 tonnes of material from the old road. By producing the material at the site compound this has reduced the need to transport materials from a quarry, reducing carbon emissions by 582 tonnes. This saving has enabled some works to take place at Parley Cross, a scheme that has not received funding through Dorset Growth Deal, but is essential to the overall BIG Programme.

The A338 Spur Road runs through multiple areas of protected heathland; this heathland vegetation in turn supports a range of specialised animals, such as invertebrates, birds and reptiles, many of which are rare and highly protected by UK and EU legislation. Organisations must usually apply for a licence from Natural England before beginning lengthy work to install reptile fencing and move the creatures by hand. Ecologists at Dorset County Council worked closely with Natural England to agree a new method of working – making the verges unattractive as habitat while enhancing other areas nearby to encourage the reptiles to move home. Natural England is now reviewing its licencing procedures nationally with a view to a method statement being the preferred approach for many cases. It resulted in 30ha of heathland restoration and the creation of 113 sand patches for sand lizard egg laying.



The area surrounding the A338 Spur Road is also home to otters, which are protected by UK and European law; there has been a number of deaths along the road and a strategy was drawn up to provide a safe crossing point. 20 otter holes, over a distance of approximately

2km, were installed into the solid concrete barrier, this method saved more than £50,000 as it avoided the need for costly tunnels and associated fencing. The design will be promoted by the Environment Agency and Dorset County Council as an acceptable alternative and will help enable development projects to take place where other underpasses would be difficult to install.



In 2011, the Government published its Construction Strategy where it announced its intention to require collaborative Building Information Management (BIM) on all its projects by 2016. BIM requires all project and asset information, documentation and data to be electronic to drive efficiency at all stages of a project's lifecycle. The A338 Spur Road project built on Hanson's iPave platform, to improve the flow of safety information between the site and office, with leading project management technology, scheme specific information and additional tools, allowing the A338 Spur Road to become the first local authority road scheme to be managed to BIM level two standards.

The development of a proactive stakeholder engagement and communications programme was central to the A338 Spur Road project, to ensure that stakeholders, local residents and road-users would understand the link between the disruption caused by the road works and the benefits the road improvements would bring on completion. A variety of platforms were used to communicate with the public, twitter, facebook, a designated website and a blog. The blog proved to be a highly effective way of communicating with local people and had between 14,000 and 16,000 visitors a month.



## Review of Project Objectives

RAG Review of Objectives	Status	Comments
<b>Time</b>		<p>The A338 is the main trunk road into the Bournemouth, Christchurch and Poole conurbations from the east, with no suitable diversion alternatives. As a result, public perception and traffic management were key risks for Dorset County Council. Programming the work to minimise disruption was essential and a September start date, meant that the summer holiday season could be avoided.</p> <p>The project completed on time in May 2016, with additional corrective works taking place at night or with minimal lane closures.</p>
<b>Cost</b>		<p>The A338 Spur Road was delivered with a saving of £1.45m. This is due to effective management of the budget, value engineering and working with the contractor to reduce costs where possible.</p> <p>This saving has enabled funding to be reinvested within the programme; the funding has been earmarked for works at Parley Cross, a scheme that has not received funding through Dorset Growth Deal, but is essential to the overall BIG Programme.</p>
<b>Quality</b>		<p>The project delivered all outputs described in the business case, as well enhancing the surrounding environment.</p> <p>Following completion at the end of May 2016, the A338 Spur Road was shortlisted in the major projects category of the 2016 Highways Magazine Excellence Awards and the MPA's Health and Safety Awards 2016.</p>
<b>Scope</b>		The project stayed within scope.
<b>Benefits</b>		The benefits realised to date have exceeded expectations at this stage.
<b>Risk</b>		There are no significant risks outstanding. Risks were effectively managed through the Dorset County Council working group and BIG Programme governance mechanisms.

## Lessons learned

1. Beneficial for projects like this to be thought of as a programme, so that value for money on schemes are sought to reinvest into other areas of the programme that were not originally funded.
2. The proactive communications and stakeholder engagement meant that people were aware of developments on the road, which they viewed positively. The blog offered the public the opportunity to ask questions and get a response and was very successful. The communications plan is something that will be replicated for other BIG Programme schemes.

## Conclusion

Growth Deal Funding has enabled Dorset County Council to deliver the enhanced A338 Spur Road which has already improved traffic flow and reduced congestion in the area.

Gordon Page, chairman of Dorset Local Enterprise Partnership said "We're delighted that the major investment in the A338, an economy-boosting infrastructure project, has been completed on schedule. Our road networks drive Dorset's economy and play a crucial role in supporting jobs and growth. Dorset Local Enterprise Partnership was successful in a competitive bid to secure £22 million through the Dorset Growth Deal to ensure the future viability of the A338, the key link road to Bournemouth Airport, one of our county's prime business assets. The new improved major trunk road means more reliable journey times, and improved road user safety for years to come."

Councillor Peter Finney, Deputy Leader of Dorset County Council and Cabinet Member for Environment, Infrastructure and Highways said "The reconstruction of the Spur Road was long overdue and I'm pleased Dorset Highways have been able to work with our partners Hanson Contracting UK and WSP Parsons Brinckerhoff to make it one of the greenest road maintenance projects in the country. Not only is the recycling rate exceptional, but we have enhanced twenty-three hectares of nearby heathland and created new habitat for reptiles. These last nine months have felt like a lifetime for drivers and businesses, I'd like to thank you for your patience."

Debbie Ward, Chief Executive, Dorset County Council said: "The A338 Bournemouth Spur Road reconstruction scheme has demonstrated what high quality partnership working can accomplish. From the start of the project there was real collaboration between engineer, conservationist and our unique environment, alongside a commitment to getting the road rebuilt to help achieve economic growth with new homes and jobs in and around the airport. Not only was the project delivered on time and within budget, but it has achieved so much more – it is the largest recycled maintenance scheme in the UK to date, our new approaches to ecology management have been adopted by Natural England as a national exemplar, and working with our partners Hanson we've made savings and efficiencies in excess of £1.45 million. It is a job well done, a project to be proud of and a scheme to inspire others to innovate within construction."

John Stobart, Planning and Conservation Lead Advisor at Natural England, said: "Natural England is delighted with the progress and scale of the works to enhance rare reptile habitat along the A338 road scheme, which will help link up internationally important heathland habitats. The approach adopted is delivering a major road scheme at reduced cost, is protecting reptiles from harm while delivering a significant nature conservation project. It is hoped that the lessons learnt will be used elsewhere for the benefit wildlife and road users alike."

Anne Warner, Head of Membership, Dorset Chamber of Commerce and Industry said "Just to say 'thank you' for the updates throughout the works. DCCI and our members really appreciate it. I arrived 30 minutes early for my appointment this morning – the road looks fantastic!"

Cllr S M Spittle, Councillor for St Catherine's and Hurn Ward said "As a councillor whose ward adjoins the A338, I found the meetings extremely interesting and beneficial throughout. Not only did it provide me with an insight of the immense planning beforehand and amount of

work, including publicity, involved, it gave us all an opportunity to express any concerns. In view of the success of the member group, may I request that a similar group be formed whenever major work is planned?"

**Dorset LEP**

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<http://dorsetlep.co.uk/local-delivery/local-delivery-the-growth-deal/bournemouth-international-growth-programme/>

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More information about the A338 is available here: <https://www.dorsetforyou.gov.uk/412615>

More information about the BIG Programme schemes, previous and current is available here: <https://news.dorsetforyou.gov.uk/big-road-schemes/>