THE WAREHOUSE OF THE FUTURE
IN ASSOCIATION WITH
THE UK LOGISTICS FUND AND GAZELEY
The Warehouse of the Future
INTRODUCTION

In 1993 Fuller Peiser, which would later become BNP Paribas Real Estate, published a piece of research examining what occupiers needed from their logistics and distribution property.

The dramatic results pre-empted the explosion in large scale distribution parks which are now commonplace today.

The results of the 1990s survey stated the maximum eaves height required was 8.5m and that rail connectivity was the least important factor when considering new warehouse accommodation.

With the speculative development market non existent during 2010, this seemed the ideal time to revisit what occupiers’ needs and requirements are as the market recovers and speculative development returns in 2011 and 2012.

The research examines the results of a survey conducted by BNP Paribas Real Estate throughout 2010 covering a cross section of operational logistics and real estate professionals.

We are grateful to our partners The UK Logistics Fund and Gazeley, who comment on the results from an investor’s and developer’s perspective respectively.

METHODOLOGY

BNP Paribas Real Estate utilised a number of research methods to complete this survey.

The key aim of this research has been to track the opinions of the end users of logistics property in the UK.

In order to achieve this, BNP Paribas Real Estate was a key sponsor of the Retail Week Supply Chain Summit in 2010. This allowed us unprecedented access to an audience of key logistics professionals from major retailers, manufacturers along with logistics companies and 3PLs. Many delegates took the opportunity to complete a survey, the results of which make up this report.

BNP Paribas Real Estate also utilised key client contacts across the logistics and property industry to add further responses to the survey.

In total around 80 responses were received providing quality information on the trends currently on the agenda in the supply chain that will effect the warehouses to be built in the future.

SAMPLE

The research has attracted responses from key stakeholders in the logistics property market across all sectors.

Figure 1 demonstrates that the respondents to the survey are from a wide background of key occupiers within the logistics property market, including nearly half from the retail sector alone. The remainder of respondents are made up of transport companies and 3PLs along with other interested parties such as consultants and representatives of industry bodies.
SURVEY RESULTS

Sustainability
Much has been made in both the logistics and property press on the perceived importance of sustainability to occupiers and how this will affect future warehouse design. Moreover, questions have also been raised in relation to how important sustainability remains in the midst of a severe economic downturn.

Given that most survey respondents are from large corporations, with CSR policies, it is perhaps unsurprising that 86% of respondents either agreed or strongly agreed with the statement that “sustainable initiatives are important to our future warehouse requirements”.

More interesting, however, is the fact that 69% of respondents stated that they would be prepared to pay a rental premium for sustainable initiatives that saved on operational cost. It could be argued that this sentiment has yet to translate into deals and the rents achievable for current warehousing stock.

A key factor effecting occupiers at the moment is the raising cost of energy and the upcoming impact of the Carbon Reduction Commitment (CRC). With this in mind 76% of respondents stated that they would look favourably on warehousing that was powered by some form of sustainable energy such as wind, solar, biomass or energy from waste.

Figure 2: Sustainable initiatives are important to our future warehouse requirements (%)

Figure 3: We would pay a rental premium for green initiatives if they saved operational cost (%)

Figure 4: We would look more favourably on a warehouse powered from sustainable energy (%)
Warehouse Design

Aside from sustainable initiatives that affect the operational efficiencies of future buildings, it is also important to consider the physical attributes that will affect height, site coverage and building shape in the future.

A resounding 83% of respondents stated that future eaves height should be at least 12m with 43% suggesting that high bay facilities will be required for future operations, as detailed in figure 5.

This is however in juxtaposition with the fact that a huge majority of respondents, 83%, agreed or strongly agreed that cross-docked facilities were important to future operational requirements.

This has the potential to have a radical impact on future warehouse design as cross-docked units generally are rectangular in shape, must have yard access on opposite elevations and require many more dock level access doors. The emphasis for operators in this case is to hold stock for a shorter amount of time and therefore reduce the amount of inventory within the warehouse.

Lastly, a key issue within the supply chain at the moment is the potential for collaboration. There are many examples of retailers working in partnership with their suppliers to share vehicles and therefore reduce the rate of vehicles running empty. A key part of the Warehouse of the Future survey is to see if this collaboration has the potential to extend to the property sector.

Almost 80% of respondents either agreed or strongly agreed with the statement “We would consider sharing space if it saved us money”. Once again, should this sentiment be replicated in future warehouse requirements the potential for design change is vast.

Flexible, shared user facilities could require elongated units with the potential for sub division, split yards and pose issues relating to vehicle access. These would just be the design implications, consideration would also have to be given to issues such as valuation and lease structures.
Warehouse location

From an investor and developer perspective it is increasingly important to understand the flow of goods into the UK along with the future multi-modal transport operations that will become more prevalent.

With the potential advent of road charging in the UK, operators are starting to examine alternative methods for the carriage of goods for future distribution.

Of those questioned 61% stated that rail operations were set to become more important in the future. Furthermore, 83% of respondents stated port-centric operations were set to increase in importance over the years to come. The only negative sentiment was displayed towards the increased use of air freight with 37% of respondents either disagreeing or strongly disagreeing that air freight would increase in the future.

In terms of the future flow of goods into the UK the results of the survey are particularly interesting, with a majority of respondents stating that the East Coast ports will increase in importance in the coming years.

When asked about the future importance of the East Coast ports of South East England 70% of respondents saw this increasing in importance, combined with 53% of respondents responding in the positive regarding the ports of North East England.

Whilst the majority of respondents were not overwhelmingly positive towards the North West the results are also not particularly negative with 46% of respondents feeling “neutral”. This should ensure that the North West retains its place as one of the core logistics regions of the UK. Once again, air freight was on balance deemed likely to reduce in importance.

![Figure 8: The importance of multi-modal transport (%)](image)

![Figure 9: Which entry points to the UK will become more important? (%)](image)
Property Issues

During the economic downturn, and coupled with the over supply of both new and second hand warehousing, occupiers have been particularly savvy in the deals they have been able to achieve. Evidence from transactions also points to the fact that leases have been getting progressively shorter.

The aim of the following questions is to establish the incentives that occupiers are more favourable to and also how much warehousing space is viewed as strategic as opposed to requirements for short term flexible space.

As figure 10 demonstrates, the incentive which received the most favourable response was rent free periods with 83% of respondents either agreeing or strongly agreeing.

Capital contributions and a basic level of fit out also received positive sentiment, which could be put down to occupiers being averse to capital expenditure in the current economic climate.

In terms of future warehouse leases, it seems the trend of shorter leases will continue as a significant majority of respondents pointed to an increased requirement for short term flexible space as figure 11 demonstrates.

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**Figure 10:** Which of the following landlord incentives do you prefer? (%)

<table>
<thead>
<tr>
<th>Incentive</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<tr>
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<td>40</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Heating/ Lighting/sprinklers</td>
<td>30</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>0</td>
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<td>Capital contributions</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

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**Figure 11:** Is your organisation looking for long term strategic sites or short term flexible space? (weighted average response)
Upon initial examination the results of our Warehouse of the Future research are not a surprise especially the positive sentiment towards sustainability.

In recent times, occupier requirements have increasingly stated that sustainable features are important but this has not resulted in any premium being paid for the benefit of such features. There are two reasons for this: the first is that leading developers such as Gazeley and ProLogis were already building product to BREEAM ‘Very good’ or ‘Excellent’ ratings and incorporating features such as rainwater harvesting, extra roof lights etc. The second factor has more to do with the economic environment where the priority was to survive and maintain cash flow by driving a harder financial deal rather than focusing on the benefits of sustainable initiatives. As sentiment is moving away from survival towards growth, it is encouraging to see sustainability back in focus.

As the cost of fuel continues to rise we are seeing more interest in rail particularly where occupiers are looking to move large amounts of freight. Recent significant deals to M& S and Tesco in the Midlands reinforce this point. The waste sector is also keen to maximise rail usage and we see this sector continuing to grow.

We were somewhat surprised by the need for higher buildings particularly moving above 15m. From my experience only a small percentage of the market is able to justify such height and those committing to higher units have tended to have very bespoke long term requirements. The cost of MHE, sprinkler systems, loss of heat etc usually cancels out the benefits of operational efficiencies for the majority of users. If, as the research has shown so far, there is a genuine desire to take 15m plus buildings then maybe it is time to for another industry discussion on cubic rents on larger distribution buildings? In practice the extra cost has simply been factored into the overall package or an appropriate gearing. Obtaining planning consent for such buildings has been an issue for a while and will not be helped by the Localism Bill.

We have noted the increased importance of cross-docked facilities over the past few years. I have worked with a number of occupier clients who view such buildings as key strategic assets and are generally reluctant to let them go due to the lack of market supply and the high costs of acquiring replacement buildings. The high land take up can typically add 40-50% to the rent. Despite the increased rents, we see demand continuing for this type of property as occupiers seek to reduce holding periods and customers continue to expect quicker delivery times.

Collaboration is also moving up the agenda as occupiers seek to reduce their carbon footprint and to maximise efficiencies in the supply chain. In design terms, longer narrower cross-docked buildings are potentially easier to divide and this is another reason why they are favoured by many of those who contributed to the research. Cross-docked facilities are easier to justify in difficult market conditions when land is cheaper but can become an issue in a buoyant market as land values increase and developers/investors seek to maximise densities.

For the type of unit the research identifies as being important in the future we can certainly see rental premiums attached due to the current lack of supply of buildings that match the criteria.

Again this additional value should translate to port-centric operations where land supply is at a premium. However it should be noted that port centric is not just port side and hinterland locations with good multimodal port access should have the ability to benefit from this trend.

The requirements and market take up we have recorded over the last three years are certainly an indicator of how the logistics industry is reacting to changes in the supply chain. With almost a third of all take up in 2010 in the Midlands we are seeing that entry points to the UK, multimodal connectivity and future fuel cost increases are having increased importance.

The core logistics regions of the UK will maintain their importance but peripheral regions will find it hard to compete on property issues alone.
THE DEVELOPER’S PERSPECTIVE

By Jonathan Fenton Jones, Global Procurement and Sustainability Director, Gazeley

As a developer of cost-effective and sustainable buildings our success hinges on supporting our customers by delivering quality buildings on sites which are strategically well located for logisticians. Customers who we have worked with include Tesco, Wal*Mart and Procter & Gamble. In line with the expectations of our customers, we are constantly looking ahead and are not afraid to think big in order to pioneer and innovate.

We have an ethos of continuous innovation in customer service and product delivery. A decade ago we commissioned a research programme, called Eco-Template, to study the construction and redesign of warehouses from an environmental perspective. We realised back then, just as we do now that we needed to work in partnership with our customers to deliver superior environmental performance through buildings that were both cheaper to operate and maintain and, crucially, had a positive impact on the environment.

We decided we could make a greater contribution by openly sharing our findings with our customers and competitors alike. We deliver commercially competitive distribution buildings that exceed all relevant legal and regulatory requirements, whilst demonstrating high levels of environmental responsibility.

The Warehouse of the Future report, commissioned by BNP Paribas forms part of our ongoing commitment, and it is enormously encouraging that two thirds of respondents appears to be willing to pay additional rent for technologies what will reduce operating costs by a greater amount.

It was important that the report also highlighted some key findings from an occupiers’ point of view. Issues such as multimodal links, rail-connected buildings and sites all ranked highly on their list of concerns, as did warehouse features, such as the height of buildings. These views underpin the decisions we make at Gazeley when acquiring and developing sites. In addition it is clear that our investors aspire to buy quality buildings to future-proof long term investment value.

A pragmatic view of sustainability driven by business common sense, not idealism, is one we share with our customers and key partners such as B&Q, Tesco and Stanley Black & Decker. Our Eco – Template set out a road map to incremental improvement on a route and pace aligned with commercial realism. Being a profitable business, protecting the environment and making a difference in the communities in which we operate are more than compatible, they are intrinsically linked. The goals we have set ourselves – all developments to be carbon positive; to send zero construction waste to landfill; to use materials that do not degrade human or ecosystem health; to reuse all development storm water, and to achieve a net gain in biodiversity - are challenging, but behaving responsibly is an imperative if we are to optimise use of the finite resources available to us.

In short, sustainability makes good business sense.
Warehousing is affected by global trends and changes in the market far more swiftly than some other property market sectors. This research is valuable because it gives us a clear heads up on what occupiers are looking for and so, in turn, as landlords what kinds of asset we should be holding or developing.

It was interesting to note, that though warehousing and logistics are often associated with poor environmental credentials, the survey suggests that warehouse occupiers might be amongst the first movers or early adopters of green technology. This throws up several interesting issues for a property investor – firstly will occupiers be willing to pay more for a higher specification warehouse? With price sensitive operators an investor/developer would have to be careful that their asset hit all the requirements of the occupier in terms of energy cost savings. Where the operators are used to paying less in terms of rent, this might be more difficult to achieve. The other major factor is obsolescence and depreciation. A lot of these green technologies are relatively new to the market, so questions around maintenance and how fast they might be replaced have yet to be comprehensively answered.

The interest of occupiers in cross-docked facilities suggests for us increasing speed to delivery, with possibly more value-add activities. It could also suggest that different operators might be used to service different stages of transportation. As investors, we need to be sure we own assets precisely where occupiers will need the space – and with the projected increase in e-commerce, edge of town e-fulfilment centres, with cross-docking facilities look like a very interesting option. Cross-docking is also an interesting trend for consolidation centres, providing the opportunity for logistics operators to combine loads from different clients – something they are coming under more and more pressure to do, to keep costs down.

It is no surprise that port centric facilities are expected to become more important, with an increasing volume of goods imported into the UK. Of course the ascendancy of port operations has been in the press a while and we’re watching with interest the development of the east coast ports in particularly. Port linked for us however, doesn’t necessarily mean ‘port side’; we’re really interested in the potential for inland hubs, rail linked of course wherever possible.

We were very interested in the results of the question about eave heights. The trend to require higher eaves is likely to run contrary to planning preferences, particularly after the localism bill has been fully introduced. Planning restrictions regarding either design of warehousing or location for higher bay warehouses will certainly push up the price of development and this will translate into rental increases. It might have greater impact in the South of the UK, where warehousing development is often difficult due to the lack of suitable land.

We see a number of important trends reflected in the Warehouse of the Future work and we’re happy to be on the front foot with regard to the latest industry knowledge and research.
CONCLUSIONS

The main aim of this report has been to develop a narrative on what the key issues in the operational supply chain are and to encourage debate as to how the property industry should react.

The key trends highlighted are that:

• Sustainability is a key driver that will affect requirements for future warehouse units
• The industry is examining ideas that will save operational cost such as:
  • Sharing space
  • Co-location with energy producers
• Transportation by road is not the only consideration for goods movement. Both rail connected and port centric operations have a place in the modern supply chain
• The East Coast ports will have an increasing role to play as key entry points into the UK
• Building height is set to increase further, but this is contrasted by the positive sentiment towards cross-docked facilities
• Increased operational flexibility is seen as important as occupiers look for more short term flexible space.

With the next development cycle, the property industry must embrace what the user of the warehouse of the future requires. For some occupiers this is a unit which is: rail connected, multi-user, within striking distance of the East Coast Ports, in proximity to sustainable energy and high bay or cross-docked.

For other users, however, traditional distribution models will remain in place but it will be the trailblazers of today that influence the supply chain of the future, which in turn will change what we currently understand to be prime logistics property.

We are grateful to our partners in this research The UK Logistics Fund and Gazeley who are at the forefront of future UK warehouse development as their insightful commentary demonstrates.