

OFFICIAL

Western Parkland
City Authority



Airfreight Interface Concept Insights Report

Supplementary Information

June 2022

wpc.a.sydne.y



OFFICIAL

Acknowledgement of Country

The Western Parkland City Authority (WPCA) acknowledges more than 60,000 years of continuous Aboriginal connection to the land that makes up NSW.

Since time immemorial, Aboriginal people have managed, cultivated and cared for the landscape where Sydney was established and continues to grow. Aboriginal people hold profound knowledge, understanding, obligation and custodianship of the landscape.

The WPCA acknowledges the Traditional Owners of the lands that include the Western Parkland City and the living culture of the Traditional Custodians of these lands.

Disclaimer

With regard to research supporting the related Request for Information process (RFI) and/or this supporting information report, the WPCA:

- makes this available on the understanding that users exercise their own skill and care with respect to its use
- gives no warranty and makes no representation whether expressed or implied, that the information contained in research is error free
- confirms that it is not an endorsed position of the NSW Government.

Before relying on the research released and/or information contained in the report in any important matter, users should carefully evaluate the information for their purposes and should obtain appropriate professional advice relevant to their circumstances.

Front cover: image is an impression only.

Contents

About this report	3
Insight 1: An ancillary AFI Concept servicing Western Sydney International Airport is strongly supported because it will ramp up trade	5
Insight 2: Streamlined regulatory border controls and operations are an essential enabler.....	9
Insight 3: Airport proximity and 24/7 operations are key	12
Insight 4: Public and private collaboration is vital.....	17

About this report

This report complements the *'Airfreight Interface Concept Insights Report'*, available at <https://wpcasidney.com/integrated-logistics-hub-airfreight-interface-concept/#downloads>

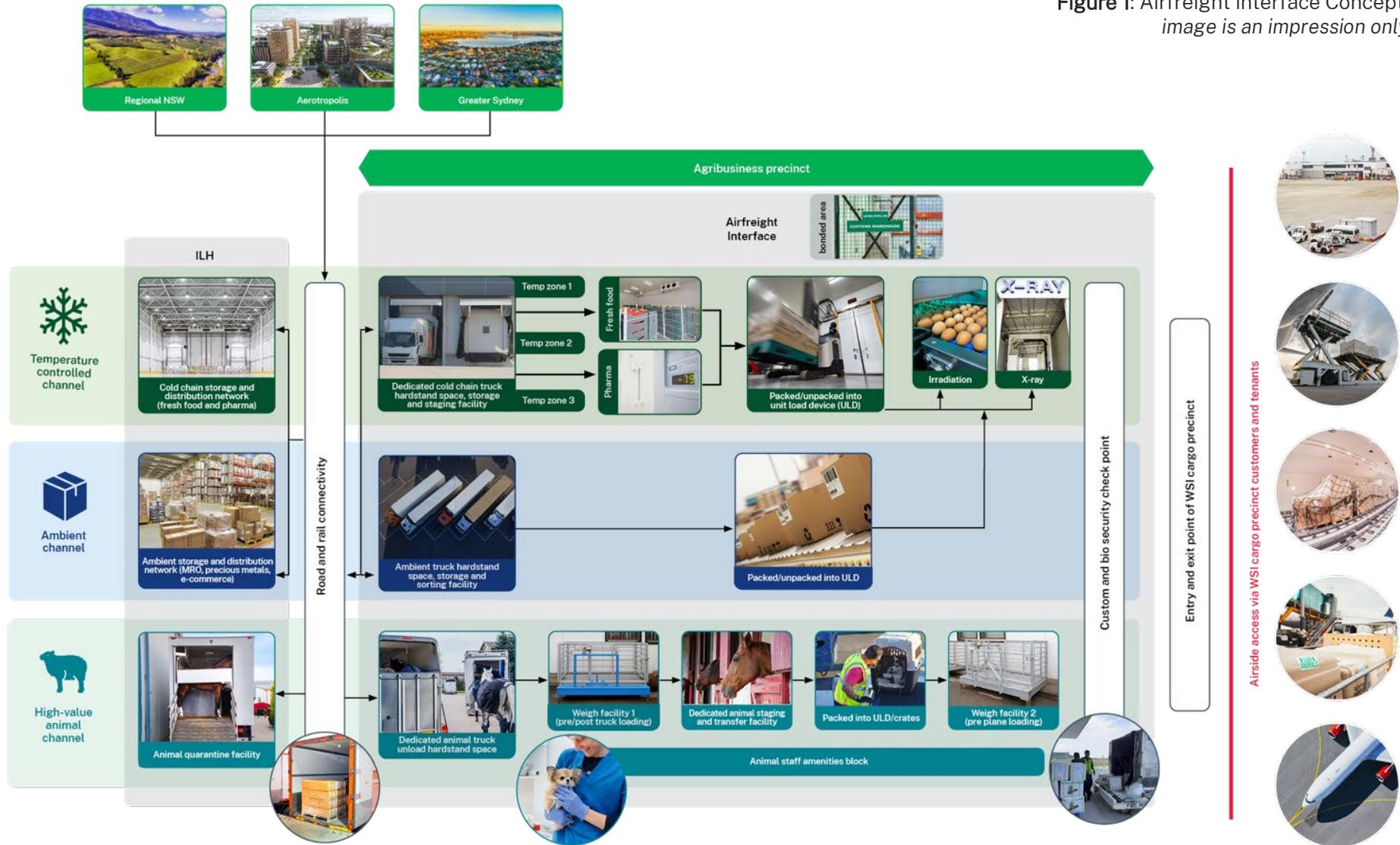
It provides supplementary information to the four insights presented in the report by drawing in valuable information received from respondents and participants in the Request for Information (RFI) process, as well as other related plans, initiatives and research the WPCA is aware of.

Together, these reports deliver on the WPCA's commitment to openly share the insights and outcomes from the RFI initiative to assist all participants and the wider community in benefiting from the process.

List of acronyms

- WPCA** Western Parkland City Authority
- RFI** Request for Information
- KSA** Kingsford Smith Airport
- WSI** Western Sydney International Airport
- NSW** New South Wales
- NETM** New Education and Training Model

Figure 1: Airfreight Interface Concept. *image is an impression only*



Insight 1:

An ancillary AFI Concept servicing Western Sydney International Airport is strongly supported because it will ramp up trade

Many New South Wales (NSW) exporters currently face constraints in exporting from NSW by air (Integrated Logistics Hub Scoping Study, Deloitte July 2020). To address some of these constraints to NSW export competitiveness by air, the Concept envisages curfew-free 24/7 operations as one of the key enablers of speed-to-market connectivity to global markets for NSW producers and manufacturers, including enabling agribusiness export opportunities for high growth sectors, like fresh and value-added food, to meet projected volume growth and changing consumer trends over future decades.

International airfreight export volumes via Western Sydney International Airport (WSI) are forecast to reach 232,000 tonnes in 2050, based on passenger aircraft capacity alone i.e. excluding direct freighters (Integrated Logistics Hub Scoping Study, Deloitte July 2020). This sets the context of opportunity in terms of the increasing scale of supply servicing capability, and when this is coupled with demand opportunities, we have heard from respondents how it becomes a powerful value proposition.

When forecasted 24/7 airfreight supply capacity is connected in 2026 to the strong and ever-increasing demand for Australian fresh produce, especially from a growing Asian middle-class, along with WSI's proximity advantage to service this market versus other further away countries, there was no doubt from all respondents of the significant value this greenfield opportunity could present for both Western Sydney and NSW in terms of generating economic growth, jobs and productivity improvements.

Industry strongly supports the concept of specialised shared-use airfreight facilities that can target high growth export sectors.

One of the purposes of the RFI process was to confirm whether the 24/7 functionality of the concept would help industries such as time-sensitive products in the food and drink category to generate growth opportunities and critical mass in the freight and logistics network supporting WSI, Western Sydney Aerotropolis and NSW more broadly.

Feedback indicates this blank canvas presents an opportunity to get the concept right from the outset, and that early planning and collaboration can overcome potential bottlenecks and constraints, seen as an issue at KSA. One transport and logistics respondent noted that "The operational edge WSI can offer industry over KSA is ease of use and efficiency."

Respondents broadly support the proposed dedicated channels and specialist infrastructure that can provide for high-growth, time-sensitive industries that face airfreight export challenges, and that have specialisation relative to the other east coast airports, such as fresh meat and produce, medical supplies and high-value animals (which in some instances due to current NSW limitations transit via Melbourne or Brisbane airports).

A respondent from the chilled channel saw "great potential for the concept to unlock significant efficiencies and connectivity to new and existing markets for red meat". Transport and logistics, and chilled channel respondents support a single shared perishable facility that offers multiple temperature zones and embedded export enabling infrastructure and systems. This would streamline customs clearance and provide manageable and secure direct access to airside, if operated by a neutral party.

A chilled channel respondent sees such as facility as a game-changer for the pharmaceutical and nutraceutical sector, whilst this respondent as well as others from the chilled channel, live channel and transport and logistics sector cite positive experiences with similar world-leading operations overseas. A transport and logistics sector respondent said the chilled channel is the intervention that will bring the most value given that "food and associated cold-chain high-value time-sensitive airfreight products account for 85% of export volume through KSA".

Export opportunities via the chilled channel

The safe and efficient cold chain transportation of fresh produce and other temperature and time sensitive products like pharmaceuticals ensures product integrity throughout the supply chain from place of production to the end user or consumer.

Sydney Fish Market currently trades around \$155 million of seafood annually, including \$67 million from NSW and would benefit from a location other than its CBD operation as it sees an opportunity to significantly increase this. They suggest and have interest in exploring a leasehold model that could potentially see specialist shared-use facilities made available to other fresh produce supply chain companies as well as other partners such as Sydney Markets Limited.

Sydney Markets Limited provides enabling services and infrastructure to more than 2,000 traders at Flemington, of which Sydney Markets Limited's exporting businesses trade equates to around 60,000 tonnes of fresh produce annually, accounting for around two-thirds of fresh produce exports from NSW. They have interest in exploring further a potential fresh produce distribution centre in Western Sydney operating as an owned and operated model, with shared facilities and partners such as the fish market or others in the pharmaceuticals sector.

Respondents believe treatment facilities must be capable of handling pallet-sized consignments within proximity of WSI Cargo Precinct's entry and exit points. This could create opportunities for local and regional production to meet technical export requirements and streamline customs clearance.

Transport and logistics sector and chilled channel respondents, as well as landowners and developers, note the need for large-scale irradiation and x-ray trade enabling infrastructure. While fundamental, these require a significant upfront capital, time and planning, in addition to ongoing operating costs. These respondents noted government involvement in the planning and provision of this and similar large-scale enabling infrastructure is required to encourage private sector investment to ensure it is operational by 2026.

Technology solutions, chilled channel, landowner and developer sector respondents believe this kind of core infrastructure is best optimised with shared, user-pays platforms to support best practice freight systems and collaborative research, development, innovation and education initiatives.

Infrastructure services and chilled channel respondents note that without a large-scale irradiation treatment facility, export opportunities for NSW fresh produce will continue to be limited and note some NSW produce is being currently exported from other states as a result. Locating such functionality and capability at a potential airfreight interface would offer, according to a chilled channel respondent, "a huge uplift to the capability for fresh produce exports" that requires early "clarity and understanding of where facilities will be located, how they will integrate with [export and import processes] and their scale of operations."

Several chilled and live animal channel, transport and logistics, and landowner and developer respondents support the idea of public-private working groups for each of the dedicated channels to consider the last mile process flows, required efficiencies and potential locations for shared-user facilities for each of the high-value and time-sensitive products it handles.

Some of the larger multinational transport and logistics respondents do not seek to be involved in the provision of shared facilities at scale citing competitiveness reasons, yet an agribusiness services respondent suggested larger facilities at scale may be needed, to support the expected growth in these identified sectors. This is backed up by a chilled channel respondent who notes fresh food exports could "quickly exceed the total handling capacity of WSI's planned 220,000MT per annum".

In general, chilled channel respondents believe specialist and shared use facilities would reduce cost, increase competitiveness, and provide for increased export growth.

Export opportunities via the live animal channel

First Point Animal Services, operates an innovative 24/7 bonded non-airport precinct animal staging, transfer and clearance facility that directly adjoins the boundary of Melbourne Airport allowing for the safe, secure and seamless movement of high value animals through the border, significantly improving animal welfare and husbandry outcomes. The operation, and its innovative design and service delivery model, has won a Department of Agriculture Biosecurity excellence award and a Melbourne Airport Excellence award. It also offers additional services like biosecurity approved cleaning of animal crates.

The company notes that there is a need to cater for high-value animals given expected growth (in this case, they measure the value of product rather than volumes; for example, more than \$500 million of horses were exported from KSA in December 2021) and that “if there are main deck freighters servicing the WSI, then there will be an immediate need to accommodate horses and other animals, and this will need to be operational when the airport opens”.

First Point Animal Services notes that any future non-airport precinct animal staging and transfer facility needs to border the airport precinct and models may range from an ‘airport owned’ facility managed by a third party or as a leasehold, as is the case for their Melbourne operation. In Western Sydney, such a facility could handle around 2,500 horses a year both import and export plus other livestock and would likely be at a scale of 2,500 to 3,000 sqm. Importantly, 24/7 operations are essential to achieving optimal animal welfare outcomes.

LiveAir represents organisations in the live animal sector. The sector is averaging airfreight volumes of 6,000 tonne per annum and growth could be around 40% by the time WSI opens, “predicated by the location of special live animal facilities at WSI, that are operated by a specialist Cargo Terminal Operator”. Along with 24/7 operations, LiveAir identify the following requirements as ‘mandatory’:

- Easy B Double access considering both height and length restrictions. 4.6 meters of height at a minimum and at least 60 meters (preferably 75) to manoeuvre, with double unloading ramps to unload 2 trucks at once and walkways either side of trucks for safety (either fixed or portable walkways), and the ability to unload both top and bottom decks at once. Toilet and rest facilities for drivers.
- Hoists: At least one (preferably 2) hoists to deliver crates to and away from the truck. The hoists to have side movement as well as at least 3 meters of elevation from ground level. 2 meters elevation if the hoists are already elevated. The hoists to have “point of load” weighing capability and have a good braking system.
- Enough rolling stock on dollies so crates can be sorted and loaded in the correct order, designed for effective flow of crates to be ready to load and space for them to be tied down once loaded and an ability to rotate the crates, either on the hoist or on the delivery system to the hoists
- The loading area to be under cover and to be able to be secured from air side and other operating areas. An area where high rise racking could be installed to hold returnable crates. An undercover area for loaded crates, with under cover storage to hold up to 50 livestock crates pre-loading. A sick bay discrete area to put animal if needed.
- A grassed area to be able to be approved as a quarantine holding area should livestock be required to be unloaded in the event of an aircraft breakdown or other unforeseen circumstance with ramps in that area to facilitate truck loading and/or unloading, and an ability to load from the quarantine area directly into aircraft crates without the need to use trucks
- Digital tracking of booking, product movement and integration with each system, integration with transport links, fast track pathways, 24-hour operations, integration of other businesses within the precinct for the facility to generate economies of scale via - for example - book aircraft / allocations, road / rail logistics services, and efficient access to external bodies including customs.

Export growth underpins economic development and job creation

We heard from a chilled channel respondent that the concept could “set the foundations for Australia to become a competitive supplier and the first choice for these export markets”. Generally, all respondents see potential in the concept to support export growth for high value and time sensitive exports, supported by a sound approach to align the interface between airport operations and the surrounding last mile infrastructure, systems and processes. Several organisations seek to be either co-located within the concept or nearby.

The opportunity firmly is economic and employment growth through increased exports and productivity improvements across the airfreight supply chain. Some respondents from the chilled channel sector predict growth in airfreight exports from NSW in the range of between 30-100% or more, owing to WSI’s curfew-free operations and increased airfreight cargo handling capacity.

The NSW Trade Statement

Today, exports from NSW are valued at \$96 billion and make up 15% of our state economy. Exports also support 1 in 5 jobs across Australia. Despite the challenges of the past few years and COVID-19’s impact on global trade patterns, the demand for NSW products and services continues to grow. Boosting our exports is an important part of NSW’s economic recovery strategy and future prosperity.

NSW’s first Trade Statement sets out a vision for economic growth and prosperity through international trade. It outlines support for NSW businesses in the pursuit of new opportunities overseas and to sell to new international customers - creating jobs for our communities, developing our industries, and strengthening our economy. The Statement sets an ambitious target to double the value of NSW’s exports from \$96 billion to \$200 billion by 2031 and outlines the state’s plan to expand the existing NSW export profile, by focusing on two key goals:

- Increasing exports as a percentage of NSW’s economy.
- Grow and diversify NSW’s exports.

The Statement outlines five strategies to increase the value of NSW’s exports:

- Facilitate new export growth opportunities
- Help small to medium enterprise to compete internationally
- Promote NSW as a world-leading knowledge economy
- Harness NSW’s competitive advantages
- Strengthen international partnerships at all levels

Each strategy is in direct response to a particular challenge impacting NSW’s international trade, and outlines actions that the NSW Government is taking or will take to support businesses overcome the challenges of exporting. Relevant actions include delivering sector specific strategies to grow emerging priority industries particularly for agriculture and agtech, and food and beverage. These sectors will benefit enormously from the development of export enabling infrastructure and improved links with export markets that will arise from investment in the aerotropolis, including the Airfreight Interface Concept.

The Trade Statement signals the NSW Government’s intention and commitment to promote export-led growth as part of the state’s economic recovery by creating jobs and supporting sustainable industries.

For further detail on the NSW Trade Statement visit <https://www.investment.nsw.gov.au/living-working-and-business/nsw-trade-statement/>

The concept should be operational by the time WSI operations commence in 2026

Given the potential scale of the infrastructure, and the development time necessary to put it in place, staging the concept is supported. Some organisations have commenced planning and recommended the concept be operational by 2025. Any staged process should ensure necessary elements are in place given that, according to a technology provider respondent, “expectations are to have a fully operational, modern, and digital airport ready by the official opening date”.

Some respondents from transport and logistics, and chilled and live animal channels indicate interest in being located in or near to concept, depending on a range of factors that are yet to be determined. For example, a transport and logistics respondent noted the need for “firm commitments from airlines, terminal cargo handlers, and road infrastructure.”

Landholders and developers see merit in incorporating the concept within their development plans. A landowner/developer consortium cited the opportunity to create a “new and enduring benchmark far beyond best practice supply chain globally”. The concept is seen as a key link between WSI and broader potential freight and logistics development opportunities. Some respondents used the RFI process to demonstrate how their landholdings could accommodate the concept and its 3 high-value channels and supporting infrastructure.

Insight 2: Streamlined regulatory border controls and operations are an essential enabler

The concept envisaged streamlining air cargo consignments ‘through the border’ from truck to tarmac, or in other words from the concept to being loaded on-board the aircraft, by integrating border regulatory practices, systems and enabling infrastructure with WSI as the port of loading. World-class examples enable consignments to move ‘through the border’ in less than 60 minutes.

This feature of the concept was unanimously supported as being essential to the overall success of the concept, and to achieve best-in-class performance levels. Export pre-clearance was highlighted as being an imperative service offering for all channels envisaged by the concept, with several of the concept’s functionalities required to be simultaneously operational to enable such. Broadly, export pre-clearance was cited by all respondents as being one of the 20% of interventions that would deliver 80% of the benefit.

Given the Commonwealth Government has border regulatory control oversight, it will play a significant role in the concept’s progression and is a necessary pre-cursor to any future private investment.

Common user platform and services for physical and digital cross-docking

Several industry respondents cited strong interest in collaboration with government to streamline border regulatory practices, protocols and operations, including the likes of ‘fast-track green lanes’ through pre-clearance pathways and embedded 24/7 services like inspection services, authorising officers and certificate of origin place of issuance.

Considerations raised by respondents from the chilled channel suggested “regulatory clearance at a range of locations to prevent bottlenecks”. An education and research respondent considered the opportunity being a greenfield development and noted the need to engage “key players, regulatory bodies such as biosecurity inspections, laboratory testing capability and needs, and import/export clearance processes” to build a world-leader in the export and import of airfreight from the ground up.

Transport and logistics sector, chilled channel, technology solutions and agribusiness respondents alike cite Changi and Schiphol airports as exemplars of collaboration between government and industry whereby government provides the overarching vision of a shared user platform, including for digital infrastructure, and work with industry to implement and operationalise it through a process of continuous improvement.

Specifically, the Netherlands was suggested as a global benchmark upon which to model the design with the opportunity being for the progression of the Concept to utilise this as an additional case study. A preliminary analysis has since been undertaken by the WPCA with the key findings highlighted in the breakout box below.

Innovative regulatory border integrations: Amsterdam Airport Schipol's world-leading cargo facilities

Amsterdam Airport Schipol includes:

- 5 main runways with plentiful parking and handling for the largest of freighters
- 400,000 sqm of cargo warehouses (60% with direct airside access)
- 2 livestock handling centres
- extensive temperature-controlled handling facilities
- a community cargo management system
- a Joint Inspection Centre
- choice of 5 cargo handling agents

Innovative airport and non-airport integrations, facilities, systems and services include:

Schiphol SmartGate Cargo, a first in public-private cooperative ventures in the air cargo sector this joint initiative between the Dutch Customs Authority, Amsterdam Airport Schiphol, KLM Cargo and Air Cargo Netherlands, offers an integrated government inspection solutions basis comprehensive pre-arrival and pre-departure information to enable intelligent risk-based selection and inspections.

Smart Cargo Mainport Programme and digital pre-notifications for export cargo, optimises air cargo process across the supply chain and enables virtual non-airport precinct pre-clearance of shipments prior to goods arriving at the entry and exit points of the airport to accelerate customs clearance processes and reduce bottlenecks, congestion and costs.

Joint Inspection Center, centrally monitors Unit Load Device scans and clearance to make freight handling safer and more efficient by enabling different enforcement and inspection authorities to carry out airfreight checks together. Air cargo companies can operate their own X-ray machine and integrate it to the Joint Inspection Centre, scanning with a Customs analyst monitoring remotely in real time.

Optimal landside logistics and European Green Fast Lane, that reduces waiting hours of hauliers, acquire insight from landside for ground handling agents and smooths out peak movements using an app to coordinate the movement of cargo to the Cargo Terminal Operators underpinned by an acceptance policy that states if the cargo is not on time, it cannot be accepted by the Ground Handling Agent (GHA).

An integrated, performance-based approach to assure compliance with necessary border regulatory and biosecurity requirements is also considered imperative. Awareness and understanding of the importance of good biosecurity practices must be sustained throughout the supply chain to facilitate speed to market. One chilled channel respondent suggested capitalising “on the fact that major export establishments are known consignor and trusted traders, and this should help with more efficient customs and export clearances and procedures”.

Transport and logistics sector, chilled and live animal channel, and technology solutions providers alike believe this must be a joint public-private initiative to prevent disease incursion. Several stakeholder segments sought clarity on partnership opportunities with the Commonwealth and NSW Government around matters such as biosecurity, cyber security and certification to enable joint development of efficient and secure solutions that do not delay or impede the speed to market. They highlighted such solutions must be available to all users including small to medium enterprises, emphasising again the value of shared use export enabling infrastructure, practices, and systems at scale.

Freight moving along the import/export supply chain is reliant on multiple parties to ensure its most efficient transit. Along with the physical movement of goods and the logistics systems that enable it, there is documentary evidence that must accompany the goods to prove provenance and safety.

Most respondents noted the need for digitisation and automation of key processes in the systems and compliance components for imports and exports. A common platform as part of the key trade enabling infrastructure is essential, with a chilled channel respondent stating, “the concept must ensure digital technology is enabled”.

In relation to high-value temperature-sensitive products, respondents from the chilled channel note the need for real-time documentary evidence with any digital systems ideally integrating “the digital data flow [to support] rapid regulatory processing” and that “whilst a physical presence by the regulatory service providers may not be significant, the regulatory requirements they manage need to be designed into the airfreight interface system”.

Multiple stakeholder segments support a joint government and industry group to review digital requirements and implementation to achieve cost-effective and efficient compliance. There was also perceived value in a public and private sector working group with key supply chain participants to define critical operating procedures and protocols to assist digital integration.

The CSIRO’s Trusted Agrifood Exports Mission

An example of a joint initiative is the CSIRO Trusted Agrifood Exports Mission, which “aims to boost the global export earnings of Australian grown food by \$10 billion by 2030 through tools and technologies that verify quality, safety and provenance. It aims to introduce practical and effective science-based trade protocols that reduce market access risk and export compliance costs by digitising export compliance rules and embedding these into supply chain systems”.

The Mission is a partnership between CSIRO, the Department of Agriculture, Water and the Environment, and Meat & Livestock Australia. Collaborative activities led by CSIRO include working (i) through Meat & Livestock Australia to develop a sustainability credentialing framework for meat products to support trade and market access to countries that are sensitive to animal welfare and climate requirements; and (ii) with Hort Innovation to develop new horticultural market access protocols that manage high-risk pests, are acceptable both to regulators and industry, and are adaptable to emerging technologies and the potential loss of individual treatments.

CSIRO is also partnering with Realta Logic to digitise and host food export regulations, which can empower digital supply chain systems to check compliance and provide export certification in real-time; creating a continuous assurance system with advanced trust analytics, under design with Safe Food Queensland, that analyses live-stream sensor data from food processing plants to support compliance and transition away from face-to-face audits.

The Mission is also working on the development of a national provenance infrastructure, reliant on the intrinsic characteristics of agriproducts, to provide assurance and verification of supply chain information. For the concept, CSIRO proposes the Mission activities could help develop export protocols that utilise data to support improved market access options, embed continuous assurance platforms that limit the need for manual inspections or face-to-face audits, and ensure products are exported with enough data on its intrinsic characteristics so that their place and process of production can be independently validated from anywhere around the globe.

All industry segments believe there are opportunities to replace the current costly and lengthy paper-based systems with a digital airport platform from day one. A technology solutions respondent suggests tracking and traceability technology could create a digital supply chain 'pre-clearance' pathway from the place of production or packaging to the port of export to certify importing country requirements.

Similarly, a chilled channel respondent says, “digital systems that acknowledge trusted partners and systems is the highest value intervention”, and another saw the highest value intervention being to ensure digital

systems are integrated into the concept “a partnership with the Commonwealth Government on the Simplified Trade System Implementation Taskforce”. Another industry respondents said the Commonwealth Government’s Inter-Governmental Ledger (IGL) initiative and Trust Bridge concept should be refocused as a WSI pilot for the Asia Pacific, citing the initiative demonstrates the value in government and industry contributing to the future digital supply chain.

The need for a single, community-based system to coordinate and optimise freight traffic movements to reduce congestion, cost and enhance connectivity to market, is highlighted as one of the 20% of interventions to get right to deliver 80% of the benefits. A respondent from the education and research sector notes that any digital system will need to be “embedded in the development of the concept from the start, so that all parties have access to the same system”.

Transport for NSW’s Freight Community System

A potential NSW Freight Community System could enable businesses to rapidly and securely exchange information with other businesses, augmenting other current operating systems.

It would be a neutral and open digitised platform enabling freight supply chain participants to automate and manage logistics processes, by providing visibility of data across freight supply chains. It would incorporate air, road, rail and sea supply chain networks, increasing productivity and efficiency across multiple intermodal points.

Transport for NSW completed a Strategic Business Case for a Freight Community System in December 2021 which was informed by a large range of Stakeholders across the supply chain. It is currently progressing through the assurance process to assess risks and to ensure the delivery of public value.

If you would like more information, please visit the [project webpage](#) or if you wish to speak to the project team please email freight@transport.nsw.gov.au.

Insight 3: Airport proximity and 24/7 operations are key

The RFI sought to understand how the connectivity between the airport and non-airport airfreight supply chain might augment the last mile transit of time-high value sensitive exports such as fresh food, high-value animal exports or medical/pharmaceutical products, including 24/7 operations and connectivity, and specialist industry-specific infrastructure.

A 24/7 airfreight hub of activity in and around the Agribusiness Precinct able to airfreight high value and time sensitive fresh produce into key Asian markets within close proximity, means produce can get onto the shelves faster and stay fresh for longer.

Respondents say 24/7 operations is the highest-ranking priority of the concept and broadly concur that its optimal location is that which is closest to the entry and exit point of WSI Cargo Precinct. One education and research respondent say that planning landside activities now will avoid congestion, thus saving costs and boosting productivity in the supply chain. A chilled channel respondent believes major roads and transport networks are essential to the seamless integration between the broader logistics network, the concept, WSI and even KSA.

Proximity to WSI

Around 60% of respondents indicate the concept should be within 3 km of the WSI Cargo Precinct entry and exit points; around 20% indicate 3-5 km, 15% 5-10 km and 5% greater than 10 km. Respondents generally agree the closest possible proximity will limit risk of issues like transit delays and protect the integrity of the cargo.

Industry respondents generally highlighted the link between the concept and the WSI Cargo Precinct entry and exit points as being essential to the efficient movement of airfreight through the last and first mile of the supply chain. Once perishable goods and live animals are processed, any delay between processing and boarding an airplane can be extremely detrimental to the integrity, value and welfare of the cargo.

For example, a live channel respondent notes proximity is the key 20% intervention that would deliver 80% of the benefit: “For fresh and live produce, closer the better”. Several chilled channel respondents see the value in minimising the physical handling of cargo “owing to the perishable nature of fresh produce and flowers, its critical for the Airfreight Interface Concept to be located within the closest proximity possible to the WSI Cargo Precinct”.

Global benchmarks of ancillary airfreight logistics services

We looked at the 15 examples from the Integrated Logistics Hub Scoping Study and found all are within 3 km of the entry/exit point of their international airport and all have direct road connectivity.

We considered **ancillary transport services** (any stevedoring/port services, lashing and securing services, cargo inspection services, services relating to preparation and processing of goods for export or import including customs documentation, container/unit load device handling services, and services relating to the storage and safe keeping of transported goods) and **ancillary logistics services** - basically almost all non-transportation business such as freight forwarding, shipping agency, warehousing and customs clearance.

Name and location

1. CargoCity (north & south), Frankfurt International Airport, Germany
2. HKIA Cargo, Hong Kong International Airport
3. Serco Logistics Park East Midlands Gateway, East Midlands International Airport, UK
4. Schiphol, SADC, Fokker & Green Mountain Logistics Parks, Amsterdam Airport Schipol, Netherlands
5. Westport Logistics, Texas, Dallas Fort Worth International Airport, USA
6. Plaza (Platform Logistica), Zaragoza International Airport, Spain
7. Coolport@changi, Changi International Airport, Singapore
8. Export Park, Australia Trade Coast, Brisbane International Airport, Australia
9. Southland Park, Louisville International Airport, USA
10. LAX Logistics Center, Los Angeles International Airport, USA
11. South Florida Logistics Center, Miami International Airport, USA
12. JFK Aircargo Precinct & JFK Logistics Center, JFK International Airport, USA
13. Dube TradePort, King Shaka International Airport, South Africa
14. Flexport, Leige Airport, Brussels
15. Incheon International Logistics Center, Incheon International Airport, Korea

Landholder responses received

Through their submissions four landholders and/or consortiums of landholders, industrial developers and master planners have proposed five potential locations for the concept. Complementary high-level concepts and considerations relevant to their submissions were also submitted.

Three landowners have holdings either wholly or partially in the Agribusiness Precinct; the other has 2 holdings, one in the Northern Gateway in the Aerotropolis and the other outside the Aerotropolis boundary to the south.

For avoidance of doubt the RFI initiative did not seek to nor intend on identifying a site/s preferred or otherwise for the concept, but instead the focus of the RFI was to seek ideas and interest in the concept itself.

Landowner 1

Landholding immediately north of WSI at Badgerys Creek within the Aerotropolis under single ownership is anticipated to have around 100 ha of developable land. It has access to key arterial roads being either side of the M12 and north of Elizabeth Drive. Landholding southwest of the Aerotropolis is approximately 466 ha under single ownership and 5 km from the WSI Cargo Precinct entry and exit point.

Landowner 2

Landholding to the centre north of the WSI at Luddenham. Anticipated to have around 300 ha of developable land within the Aerotropolis Agribusiness Precinct boundary consisting of 10 landowners, of which the largest represents around 30% of the overall area. It has existing access to Northern Road via Adams Road and a 5 km frontage adjoining the WSI boundary.

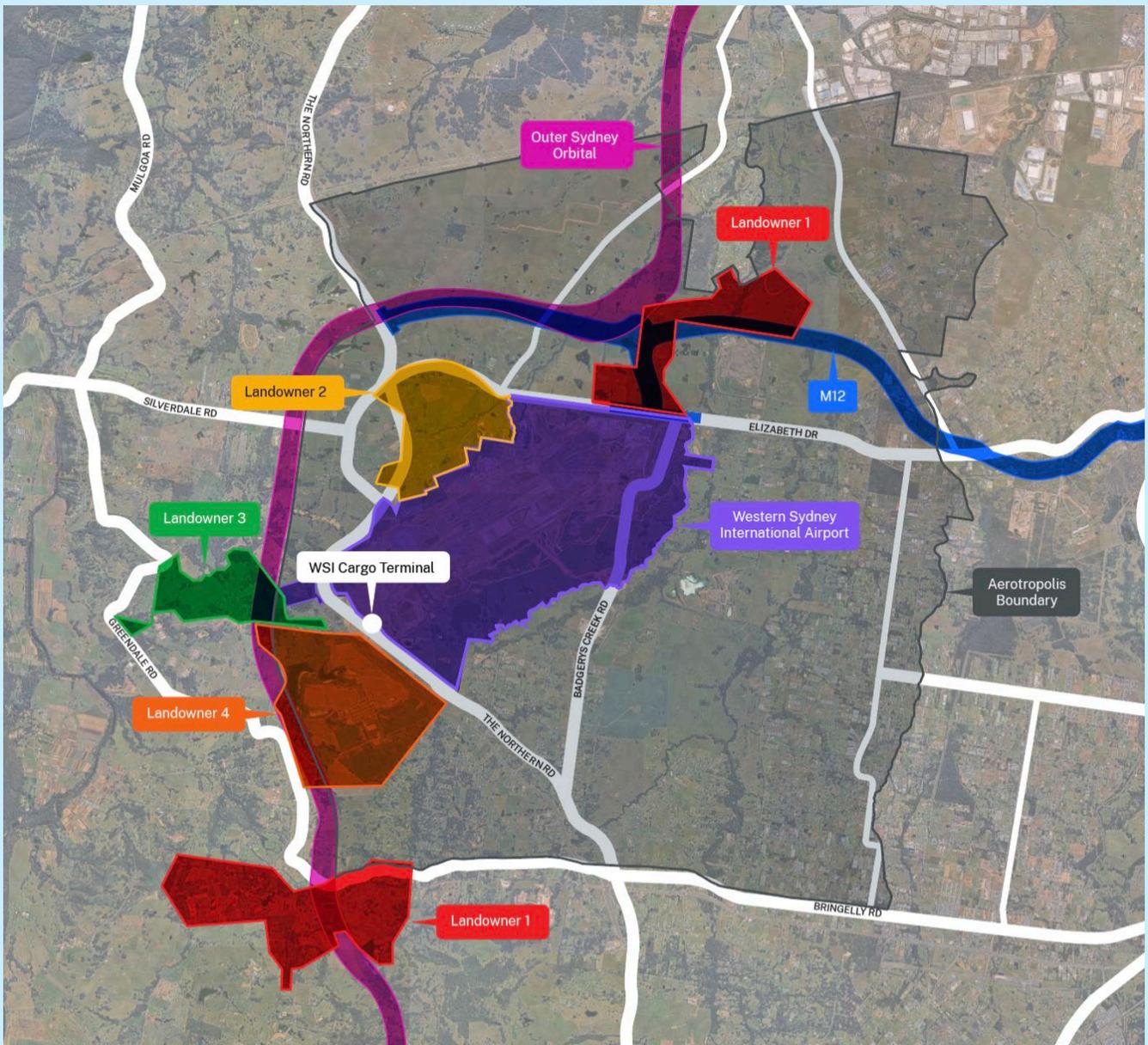
Landowner 3

233 ha landholding under single ownership to the west of the Western Sydney International Airport at Luddenham and Greendale. Approximately 20 ha is located within the Aerotropolis Agribusiness Precinct boundary with the remainder of the land located outside the Aerotropolis boundary. A section of the landholding is located adjacent to the Northern Road with frontage adjoining the WSI boundary.

Landowner 4

520 ha landholding under single ownership to the west of the WSI at Bringelly. Anticipated to have around 350 ha of developable land within the Aerotropolis Agribusiness Precinct boundary, with sections of the land impacted by airport safety controls given its location under the landing/take-off path. Adjoins the Northern Road, WSI boundary and the planned WSI Cargo Precinct entry and exit point.

Figure 2: Landowners responding to the RFI



Note: The Authority has not intended to identify a preferred site or location through the RFI process but rather

Respondents rank 24/7 curfew free operations as most important to the concept’s success, with feedback indicating the planning framework must enable, protect and future proof the 24/7 operations of the concept and WSI. Respondents agree that protection and futureproofing is a key Commonwealth and NSW government responsibility.

The operational bottlenecks and curfews at KSA can exacerbate mechanical or weather delays. A transport and logistics sector respondent notes “the operational edge WSI can offer industry over KSA is ease of use and efficiency”.

Several respondents believe this is where the 20% of focus should be placed to achieve 80% of value, including longer term planning to futureproof WSI from urban sprawl. An education and research respondent notes the opportunity of starting “with a clean canvas and a 24/7 freight distribution capability to ensure better freight consolidation (including road and rail access)”.

Preservation of 24/7 operations and restrictions on activities within key zones around WSI will be important considering the nature of high-value, time-sensitive fresh, live or ambient products. An education and research sector respondent notes the need to avoid poor first and last mile interconnectivity and landside congestion.

Respondents suggest various ways to protect curfew-free movements, including appropriate land zoning; government acquiring land; or long-term leaseholds over critical expansion areas, which are then offered at discounted rates for short-term use (3-7 years) as enabling infrastructure to match the staged rollout.

The final Aerotropolis Precinct Plan

The Aerotropolis Precinct Plan has been finalised by the NSW Government Department of Planning and Environment and was published on 24 March 2022. This will enable development to commence across the initial precincts of the Aerotropolis and realise the benefits and opportunities that a new international airport in Western Sydney brings. The Precinct Plan sets the strategic vision, proposed land uses, approach to infrastructure and water management for the initial precincts of the Aerotropolis.

The Agribusiness Precinct is one of five initial precincts in the Aerotropolis located on the western edge of the Western Sydney Airport and framed by the proposed Outer Sydney Orbital. The Agribusiness Precinct offers key access points to WSI Cargo Precinct, allowing the development of agribusiness uses which could include integrated logistics, air freight, integrated intensive production, food innovation, fresh product and value-added food – pharmaceuticals.

The activation of the Agribusiness Precinct under the new plan will be driven by private sector investment, catalysed by the new infrastructure in the Aerotropolis.

Connections to arterial roads and digital networks

In considering which elements will have compounding benefits for end users and/or customers, respondents from the transport and logistics sector see road infrastructure as “a pivotal component in this sequencing” with “efficient truck access inbound and outbound paramount”, and the need for “road infrastructure to be in place before commissioning warehouse developments”.

Several respondents strongly believe the time to best plan connecting infrastructure is now. Some transport and logistics sector and chilled channel respondents believe a sequencing of commitments from influential stakeholders and key anchor tenants will increase the commitment from future users. Other common responses include multiple lane entry and exit points into the concept and WSI Cargo Precinct, futureproofing infrastructure for emerging technologies and building in flexibility to allow for future innovation like automated vehicles.

Other transport and logistics respondents believe the value and efficiency advantages of proximity can only be maximised by arterial road and digital network connections. Again, a key opportunity cited by this sector and others like the live animal and chilled channels is the ability to overcome constraints within existing airport precincts, particularly regarding physical connectivity.

Several respondents from the live animal and chilled channel sectors believe the concept should be considered as one component of a broader system. One notes that the concept’s integration with arterial road linkages and transport nodes” will be key; another cites the importance of “ensuring the concept operates seamlessly with other aspects of the supply chain – including transport in and out, holding facilities and digital tracing of products”.

Connections to regional NSW, specifically the Great Western Highway, and with the Western Sydney Freight Line should be key locational considerations. The lowest ranked component of importance in terms of an optimal concept is its connectivity to KSA.

Ground transport network planning and delivery updates

The final stage of the Northern Road upgrade between Littlefield's Road and Glenmore Parkway as part of the \$1.6 billion Northern Road Upgrade between Narellan and South Penrith, has officially been opened by Transport for NSW. This will be a critical road connection point between broader logistics network to the entry and exit points of the WSI Cargo Precinct.

WSI continues to collaborate with WPCA, Transport for NSW and the Commonwealth to ensure transport connections including the freight network is delivered in a timely manner in parallel with the airport, enabling the airport's role as a catalyst for the Western Parklands City and to provide for critical jobs and industries. WSI continue to work with these agencies to reflect the most up-to-date planning direction for ground transport network interfaces.

Insight 4: Public and private collaboration is vital

We sought feedback on public and private sector collaboration, and public sector interventions. There is broad consensus that a collaborative public and private sector approach is needed to determine scope and scale, and successfully deliver the concept. All interested parties across all sectors see value in a collaborative public and private sector approach, especially in high-impact interventions critical to the establishment of an optimal solution.

All respondents agreed to be on a shared register to make connections with other registered interested parties as each party sees fit. All respondents also asked to be kept informed about WSI Cargo Precinct developments and openly participate in 'match-making' related initiatives, noting coordination with WSI and relevant government agencies is critical to success, and industry must be informed about airline, cargo and enabling infrastructure commitments to expedite investment decisions.

In order to help progress the concept, the following collaborative measures were put forward by respondents:

- potential partnership agreements
- coordination across multiple levels of Government
- joint planning and co-design initiatives
- streamlined approvals
- business cases

Several industry respondent's view a collaborative public private sector approach would benefit two high-impact interventions as key next steps to progress the concept as being:

- supply chain mapping to optimise the physical movement of air cargo through the concept, and
- demand analysis and planning to determine the staging, scope and scale of the channels and enabling infrastructure within the concept.

Landowners and developers see the key opportunity and intervention as being the ability to collaborate and plan now, with a clean canvas centred on progressing the concept.

Early planning and collaboration

Several transport and logistics sector respondents see this as an opportunity to foster a collaborative approach between supply chain stakeholders within government and industry to progress the concept and generate productivity improvements across the sector, citing industry collaboration can be a limiting factor prohibiting productivity growth in the Australian freight and logistics industry.

This opportunity could ensure more efficient airfreight consolidation and distribution by planning early non-airport activities to integrate with airport operations to avoid congestion and constraints like those suffered at other airports.

However, a representative of the chilled channel and a landowner note the need to avoid design and implementation decisions being taken too early and that the open, fair and transparent collaboration process underway in the design of the concept's value proposition should continue.

A live animal channel respondent sees value in the early design of a future non-airport animal transfer facility nearby to the airport's access points and close to where freighters park, given animal welfare requirements in a hot environment like Western Sydney. Similarly, early planning for waste to sewerage and biosecurity waste disposal, good access for livestock and horse trucks, and good connectivity to the regions are opportunities.

A transport and logistics respondent noted any location decision would require "greater clarity and dialogue with carrier and terminal operator to understand how they will manage a two airport city" and that for "an investment case to pivot our airfreight focus to WSI, we would need to forecast and substantiate a case for double digit growth year on year".

Another transport and logistics respondent said "airport infrastructure must match the physical handling requirements of its clients. At this stage, our main consideration is to find clarity on airfreight capacity and ensuring good operational flows into and out of the cargo handling areas of WSI".

These comments specifically demonstrate both the significance of the opportunity, and the value and need for collaboration and coordination between all interested parties, including WSI.

Landowners and developers cite the key opportunity as being the ability to start collaborations and planning with a clean canvas centred on the 24/7 airfreight distribution capability. This segment also encourages early collaboration between landowners, industry, education and government.

Supply chain mapping

End-to-end supply chain mapping to optimise the physical movement and flow of products is ranked highly in terms of its importance to progressing the concept design, scope, scale and location. Many believe there needs to be consultation and collaboration across industry, landowners, developers and investors, and with government, to further clarify the flow and processes along the airfreight supply chain.

A representative from the chilled channel notes "this includes where specific infrastructure such as x-ray and phytosanitary treatment facilities [...] will be located" to ensure the concept seamlessly integrates with other components of the supply chain. Further, it was noted some NSW-based operations managed by authorised operators already have dedicated export enabling treatment facilities onsite that could be complementary to the concept. In some instances, these operations can enable fast-tracked clearance via bypass lanes through to the airside operations of cargo terminal operators. Early collaboration could explore if there is value in these existing operations being integrated with the concept.

Landowners and developers highlight the need to map the capabilities required for a state-of-the-art airfreight interface, including automation through the full transaction chain from freight receipt (from land-side activity) to processing, tracking set up, clearance and on-boarding to the aircraft and the reverse process for inbound freight.

Several respondents from the transport and logistics sector, chilled channel and landholder and developers encourage early engagement with expert groups, including representatives of the wider supply and value chain investors and beneficiaries.

Multiple respondents in the chilled channel, landholder and developer sectors propose a business case process as an optimal intervention and logical process to progress the concept, its viability and to articulate the value for industry to invest. Those respondents welcome the opportunity to participate and contribute to the business case process.

Scope and scale

All respondents broadly support the scope of facilities in the concept and reinforce that each proposed channel will need its own specific scope requirements. The scope of the design should ensure flow through each sequential step, regardless of channel, to allow maximum processing speed to the entry and exit point of WSI Cargo Precinct. A transport and logistics sector respondent notes the importance of “receipt of chilled cargo into cold-rooms with quick scanning, fumigation and irradiation options to make the product ready for export in the shortest possible time.”

Some transport and logistics respondents highlight challenges in determining an optimal scale for the concept due to its shared facility nature, while a chilled channel respondent notes “the scale will be dependent on the process flow and which components are located where”.

This could be clarified through a supply chain mapping and demand planning and analysis exercise involving public and private sector collaboration. A transport and logistics respondent sees value in collaboration to clarify “the nature, scale and location of import/export facilities [...] and how these facilities will integrate into existing or new supply chain process flows.”

In general, respondents from multiple industry sectors believe clarity on a range of elements is required before more reliable scale and scope predictions could be made. This could include where key components of the cold supply chain will be offered, what process flows will be followed, what fast-track/green lane pathways into the WSI Cargo Precinct will be available and where regulatory components will sit in the supply chain.

Several transport and logistics sector respondents note the WSI’s Cargo Precinct market sounding will provide more insights and certainty into airport precinct operations. These respondents see the lack of certainty regarding WSI Cargo Precinct tenants and customers as a limiting factor in the private sector’s ability to plan, make firm commitments or transact in the short term. However, the WSI Cargo Precinct co-design process is welcomed, and time taken to finalise it accepted.

There is confidence that large-scale warehousing as part of the concept will be required from an airfreight handling, consolidation, and de-consolidation process perspective. Some of the indicative scale projections provided across each of the channels include:

- A temperature-controlled respondent notes “this will be heavily dependent on linkages to other transport infrastructure as holding all product at the concept will be inefficient. As a broad indicator our current operational area covers around 2,000 square metres - incorporating a mixture of chilled, freezer and sorting areas, with the majority of this product moved off site within 24 hours of receipt.”
- A chilled channel respondent notes “shared areas would be advantageous including loading docks and offices” and cited “5 hectares as an automated supply chain hub as ideal.”
- An ambient channel respondent cites that “whilst location and size are difficult to estimate whilst carrier information and flight scheduling is still crystallising”, their comparable airfreight depot is ~ 6,000 sqm.”
- A live animal respondent notes a facility able to handle “around 2,500 horses a year both import and export plus other livestock, would require approximately 2,500 to 3,000 sqm”.

Labour and skills

The upskilling and attraction of industry talent is considered important to any business. Many industry respondents cite the need to bring together agribusiness, freight and logistics players and education and training providers to develop a workforce strategy.

Industry respondents note the need for assistance in terms of labour and skills shortages that impact supply chain operations across the entire freight and logistics sector, with several respondents citing the need for a cross-sectoral training strategy. Technological advances will require upskilling of the labour force and will appeal to a whole new generation of skilled workers with different skill sets.

Further, multiple respondents note existing progress and programs in terms of education, skills and training initiatives and are keen to collaborate to advance these initiatives beyond the work to date. Importantly, the shared sentiment among respondents is that they welcome the opportunity to collaborate and assist further in the development of sector wide programs.

Landowners and developers link the creation of attractive liveable places and amenity in the Aerotropolis to attracting executives from industry and academia alike and note the importance of facilitating high-quality skilled jobs growth in agribusiness, freight and logistics more broadly across the Aerotropolis and Western Parkland City.

Industry respondents see value in NSW Government assistance, along with the inclusion of universities and TAFE, to help support and enable the roll out of appropriate programs. Suggestions range from an ambassador type marketing program targeting careers days, schools and universities to government incentives through training rebates, tax deductions and subsidised public transport costs for business operating in the Western Parkland City, to government support for current industry training and educational courses.

NTEM – an opportunity to make a difference

The WPCA's New Education and Training Model (NETM) sees industry partners and education providers co-designing, co-developing and co-delivering freight and logistics micro-credentials.

NETM micro-credentials will enable learners to stack multiple micro-credentials to support their career goals, while being flexible enough for existing workers, new workers and students to participate in training.

The NETM is open to supporting the identification and development of critical emerging workforce skills for the future success of the freight and logistics industry.

Master planning and other interventions

The WPCA has statutory powers to prepare master plans in its area of operations. We asked respondents if there is value in us openly leading or participating in a master planning process partnership with landowners.

Landholders and developers hold mixed views on the WPCA's master planning role, if any, from facilitating conversation and dialogue with interested investors at one end to land pooling and land registration/lease agreements at the other. Some landholder and developer respondents noted they require limited assistance to progress master planning. Irrespective of the need for assistance, one developer respondent indicated there is a clear end goal for master planning to provide "longer term confidence of consistency for landowners and users, and from minimising impediments from incompatible neighbours and land uses."

Further, it was stated by a developer respondent that achieving efficient transport links with adequate capacity for fully developed scenarios "requires master planning with vision, foresight and adequate strength

of will resist short-term expediencies” that signals “government intentions to attract the right investment in this precinct at the right time”.

A landholder respondent believes the WPCA could facilitate a competitive environment between landowners to help achieve the overall vision through a collaborative approach. Without this role, “landowners and end users could move to their own program without proper guidance or direction” which could risk the economic benefits and employment growth of the WSI and significant infrastructure.

Other developer respondents see the WPCA’s role in strategic planning and delivery of timely infrastructure, and in ensuring cross government communication. Specifically, a respondent consortium of landholders, industrial developers and master planners believe “access to WSI Cargo Precinct airside planning and assistance with WSI would be best facilitated by WPCA” and “coordinating government agencies to achieve optimal land use planning, connectivity and servicing infrastructure” is another important intervention.

OFFICIAL

Western Parkland City Authority

T: (02) 9228 5512
E: rfi_agri@wpcasidney
W: wpcasidney



OFFICIAL