



# Landside Port & Air Cargo Terminal Charges Index

Methodology | 2026

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NineSquared is an economics, commercial advisory and strategy consulting firm founded in 2013. We apply economic frameworks and intelligent commercial thinking to help our clients make great, evidence-based decisions about their strategy, investments and projects.

Our principals and staff are experienced practitioners who have worked in and advised government and private sector clients about a range of commercial and economic issues. We have expertise in transport and regulatory economics; policy development and analysis; advising on commercial arrangements between government and the private sector; as well as arrangements between companies operating in regulated environments.

Our experience means that we are well placed to provide our clients with a deep understanding of both the public and private sectors and the interface between them.

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## **Acknowledgements**

NineSquared acknowledges the contribution of industry stakeholders to this report, including Container Transport Alliance Australia, the International Freight Forwarders and Customs Brokers Association of Australia, and the Freight and Trade Alliance. These organisations provided input and perspectives only and did not fund the preparation of this report.

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# The landside port charges index.

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The Landside Port Charges Index (LPCI) provides a comprehensive and up to date source of container freight charges. The index focuses on terminal access, booking and ancillary charges levied by container stevedores and booking fees for empty container parks. The LCPI provides information on Port Botany, Port of Melbourne, Port of Brisbane, Port of Fremantle and Port of Adelaide, see map below.

The LPCI includes landside port charges for each year from 2018. The LPCI will be regularly updated throughout the year, with an annual update report published each year presenting insights and explaining any changes to the index, including the addition of any new charges.

This document provides an overview of the index, the methodology used to construct it and data sources.



# Ports and stevedores.

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The LPCI tracks fees charged by container stevedores in each of the ports included in the index. The index does not currently include charges for mixed cargo terminals that handle containers and other types of freight. Stevedores provide services related to the loading and unloading of freight from ships at the port. The landside charges are charged by stevedores to (largely) to transport operators who pass them on to cargo owners.

Port	Stevedores
Port Botany	<ul style="list-style-type: none"><li>• DP World</li><li>• Hutchison</li><li>• Patrick Terminals</li></ul>
Port of Melbourne	<ul style="list-style-type: none"><li>• DP World</li><li>• Patrick Terminals</li><li>• Victoria International Container Terminal (VICT)</li></ul>
Port of Brisbane	<ul style="list-style-type: none"><li>• DP World</li><li>• Hutchison</li><li>• Patrick Terminals</li></ul>
Port of Fremantle	<ul style="list-style-type: none"><li>• DP World</li><li>• Patrick Terminals</li></ul>
Port of Adelaide	<ul style="list-style-type: none"><li>• Flinders Adelaide Container Terminal</li></ul>

# How the LPCI is constructed.

Landside container charges can be divided broadly into three categories:

- Access charges, that are applied to the majority of container movements including freight terminal access and booking fees
- Ancillary charges, that are applied to cover the cost of meeting unexpected vehicle or container characteristics.
- Penalty charges, that are applied to vehicles/ containers that do not meet booking requirements set by a stevedore, and

Fees charged by stevedores are allocated to an appropriate category as outlined below, and a separate index is constructed for each type of charge.

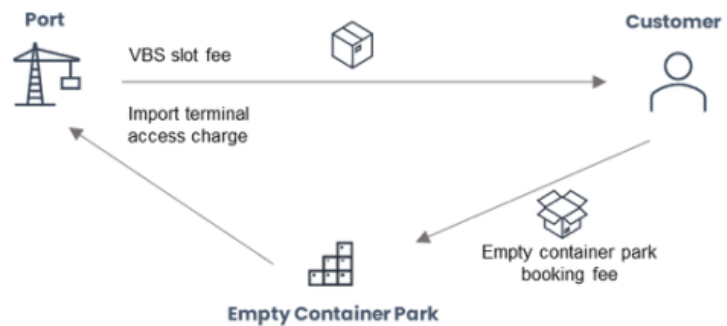
Charge type	Charge
Access charges	<ul style="list-style-type: none"> <li>• Stevedore Terminal Access Charges (Import Full)</li> <li>• Stevedore Terminal Access Charges (Export Full)</li> <li>• Vehicle Booking System Slot Fees (Electronic and Manual)</li> <li>• Direct Return of Empty Container Booking Fees (DREs)</li> <li>• Empty Container Park Booking Fees Energy Charge</li> <li>• Maritime Security Levy</li> <li>• Weighing Fee</li> </ul>
Ancillary charges	<ul style="list-style-type: none"> <li>• Overweight Fees</li> <li>• Side Loader Fees</li> <li>• Long Vehicle Fees</li> </ul>
Penalty charges	<ul style="list-style-type: none"> <li>• No Show Fees</li> <li>• Late Arrival / Wrong Timezone Fees</li> <li>• Weight Amendment Fees</li> <li>• Vehicle Misdeclaration Fee</li> <li>• Laden Stack Run Extension Fee</li> <li>• Laden Stack Run Shortfall Fee</li> </ul>

# The Access Charges Index Methodology.

The Access Charges Index uses a weighted average of charges levied across three different but typical container pathways (illustrated below). Data on how often a container takes a particular pathway which is the basis of the weighting is from the Bureau of Infrastructure, Transport Research Economics (BITRE) Waterline Reports. For simplicity we have assumed that 85% of empty import containers are returned to an empty container park, with 15% returned directly to a stevedore terminal. The index assumes that each individual stevedore's market share is equally divided by the number of stevedores operating in the port. Further information on assumptions is provided on the following page.

## Pathway 1:

Full import to customer and empty return via an empty container park



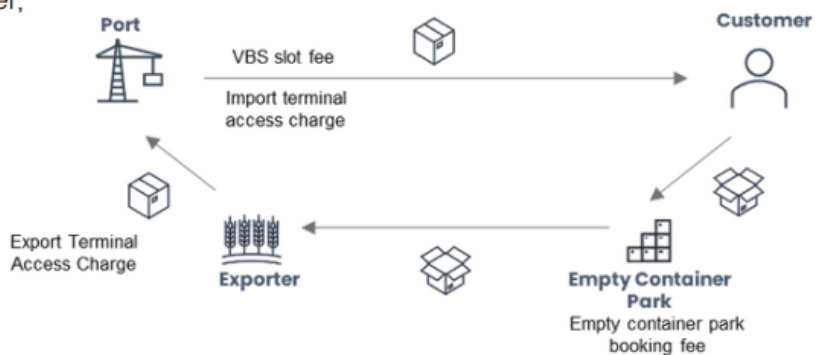
## Pathway 2:

Full import to customer and empty return directly to a stevedore (DRE)



## Pathway 3:

Full import to customer, empty return to an empty container park and re-use for export



# Key assumptions.

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- The LCPI has been developed based on desktop research and analysis of available information published on the websites of stevedores. Information on empty container park charges is sourced from Container Transport Alliance Australia (CTAA) and the Freight Trade Alliance (FTA). Advice was also provided by the International Forwarders and Customs Brokers Association of Australia (IFCBAA) and other contacts from industry and government. While NineSquared has used all reasonable endeavours to ensure the information in this report is as accurate as practicable, it is possible that some data is missing or incorrect.
- The base year for all indices is 2018, except for instances where none of the categorised charges are being levied in that year. In these instances, the base year is the first year that the charge has been levied in or been collected for.
- The indices focus on charges that are generally passed on to, and ultimately paid for, by cargo owners. Charges and fees that apply to other parties in the supply chain (e.g., fees associated with the management of empty containers inside empty container parks, or their return to stevedore terminals after dehire) are not included.
- Market share at all ports has been assumed to be equally distributed amongst the operating stevedores.
- Weightings for each pathway have been determined using historical throughput data at the five ports, along with an assumption on direct returns. The pathway methodology only applies to the Access Charges Index.
- It is assumed that 85% of empty import containers are returned to an empty container park, with 15% returned directly to a stevedore terminal. This assumption was informed by NineSquared research on empty containers, see NineSquared (2020) NSW Empty Container Supply Chain Study prepared for Transport for NSW. For simplicity, we have not included a pathway for import containers being unloaded and then transported directly to an exporter for reuse (triangulation).
- There is currently limited data-based evidence available for determining how often ancillary and penalty charges are applied to a container movement. For this reason, a separate index has been developed for both ancillary and penalty categories of charges. This involves calculating an index for each stevedore by comparing aggregate charges levied in each year with the base year. The individual stevedore indices are then used to calculate a mean index for each port

# Evolution of the methodology over time.

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The Landside Port Charges Index methodology has progressively evolved over time. This has included expanding the scope of charges captured, as well as refining the methodology to ensure the index provides a more representative measure of year-on-year growth in landside charges across the freight and logistics industry.

## **Access Charges**

Several stevedores have introduced new non-discretionary access charges. While these charges are not called terminal access charges, they are effectively applied in the same way i.e., on all containers entering the port. These include an 'Energy Charge' (DP World), 'Weighing Fee' (VICT and DP World) and 'Maritime Security Levy' (VICT). These charges have included in our access charge index to better reflect the true cost of access since 2022.

## **Ancillary Charges**

In our 2023 update, we revised our treatment of the weight-related charges levied by stevedores. These were formerly all treated as ancillary charges. For some stevedores, such as Patrick and VICT, the charge is implemented as a penalty for containers exceeding the declared weight limit. For other stevedores, such as Hutchison and DP World, the charges are levied in a way that is more akin to an ancillary charge. These charges were more accurately allocated between the penalty and ancillary charge indices.

## **Updated NSW Penalty Charges**

Prior to 2023 we collected penalty charges at Port Botany as published by Stevedores as well as those specified by the Port Botany Landside Improvement Strategy (PBLIS) mandatory standards. PBLIS regulates penalty charges levied by stevedores at Port Botany for late arrivals and no-shows. The 2022 version of the LPCI differentiated between PBLIS and Non-PBLIS charges. The 2023 penalty index was updated to treat PBLIS penalty charges as being equivalent to non-PBLIS penalties. Additionally, in 2026, two new penalty charges were introduced: Laden Stack Run Extension Fees and Laden Stack Run Shortfall Fees.

## **CPI**

In our dashboard, we use the CPI as a reference point for increases in our indices over time, as an indicator of how these increases compare to increases in other prices in the economy. To form projections of the growth of the CPI for 2023, we have used the latest available forecasts from the Reserve Bank of Australia.

## **Total Annual Access Charges**

This year in our insights piece, we presented an estimate of the total annual cost to landside operators of accessing Australian ports. The estimate was constructed with container throughput data from the ACCC's Stevedore Monitoring Report. Using charges collected for the LCPI and assumptions regarding container pathways, we estimated the total cost of access charges to landside parties.



# Cargo Terminal Operator Charges Index | Methodology.

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In 2026, the LPCI is being expanded with the addition of the Air Cargo Terminal Charges Index. This index tracks changes to document, handling and storage fees being levied by air freight handlers at Australian airports.

To construct the Cargo Terminal Operator Charges Index, an equally weighted average of the three major CTOs' (Dnata, Menzies and Qantas) indexes was taken.

To generate each CTO's index, 3 charges were included: document processing fees, terminal handling fees, and cargo storage fees. Stakeholder consultations suggested these charges were the most representative of the charges commonly levied on CTO customers.

**Document processing fees** were taken as:

- Imports: the per-AWB fee for processing and reporting of airway bill details to Australian customs
- Exports: the per-AWB fee for processing and reporting of airway bill details, assuming FWB data is pre-received.

**Terminal handling fees** for loose consigned cargo was used and taken as the higher of a) the charge on a per-kg basis for a 100kg consignment, or b) the minimum charge per-AWB.

**Storage fees** were also taken as the higher of a) the charge on a per-kg basis for a 100kg consignment, or b) the minimum charge per-AWB, and charged for an estimated 1 day beyond the free-of-charge period.

# Cargo Terminal Operator Charges Index | Methodology.

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An average of the three CTO's indices was taken to calculate the total CTO Export and Import Indices, as per the below schematic and assumptions:



## Key assumptions:

- All three CTOs have an equal market share.
- The average weight of a consignment is 100 kg.
- The average number of days spent in storage over the free storage period is 0.15. It is noted that storage fees are charged by full days, however stakeholder consultation suggests that consignments are rarely held in storage beyond the free-of-charge period. An assumption of 0.15 days allows for storage fees to be reflected in the index without being over-represented.



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