

Resources

Understanding Port Congestion

Get a better understanding of waiting times at anchorages/ports; a major cost to the shipping industry.





What is Port Congestion?

Port congestion is the bane of operators, logisticians and shippers, alike. Having your vessel, or the vessel carrying your cargo, sat at anchorage until a berth becomes available is an all too common reality across shipping. When the demand for berths exceeds supply, the only result is that the traffic starts to back up.

Time passes slowly when you are waiting at anchorage. Hours feel like days, and weeks like months – often with no idea of how long it will be before things start moving again. If you are the one paying the bills, you know that it's not just time that is slipping away, but money – and lots of it.

A vessel waiting at anchorage sees escalating bills for disbursements and port services; opportunities to take contracts for your next cargo are missed, and the reduced capacity available in the market has the knock-on effect of increasing charter prices.

In an ideal world, a combination of just-in-time shipping and improved visibility right across the supply chain would reduce waiting times to an absolute minimum. We believe that a step toward this goal is the development of a system that makes metrics on port congestion more easily accessible. Using past behaviour to forecast future is far from a new concept, however, having metrics on congestion for the major ports in the world hasn't been widely available - until now.

Calculating Port Congestion

Ten years ago, MarineTraffic began the process of mapping the operating boundaries of major shipping ports across the world, and quickly amassed an extensive database of records showing how vessels were interacting with these geofenced areas.

We are able to capture four major operational milestones, relating to a vessel calling at a port. Triggered by interaction with our geofenced areas, for each call, we record:

1. **Arrival at anchorage**
2. **Departure from anchorage**
3. **Arrival at port**
4. **Departure from port**



Using these four events as a base, we derive time spent at anchorage, time spent at port, and the overall turnaround time - which includes the first two measures, plus time spent transiting from anchorage to berth.

Specifically, we provide information on:

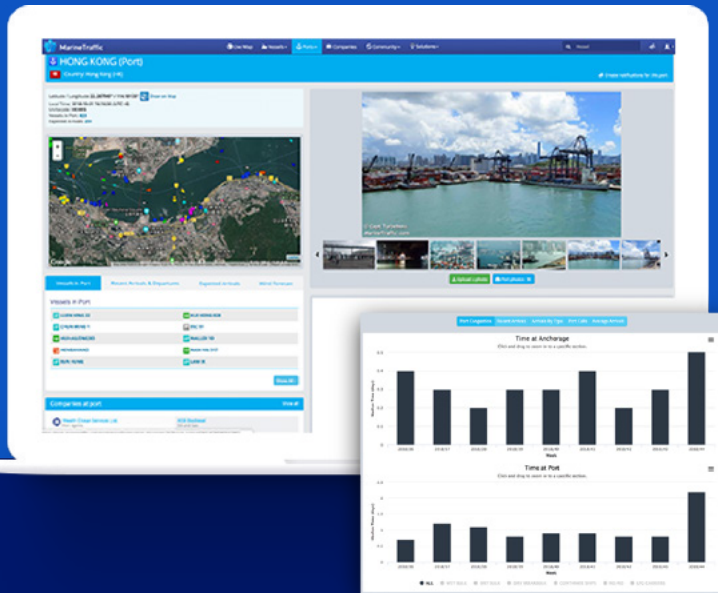
- **Median time at anchorage:**
The median time vessels calling at this port spent at anchorage.
- **Median time at port:**
The median time vessels calling at this port spent at the port.

Median tip!

We use the median rather than an average value, as it is not so easily skewed by an outlying large or small value. This is particularly useful in ports that have low volumes of calls, where the behaviour of one vessel could impact the data for the whole port.

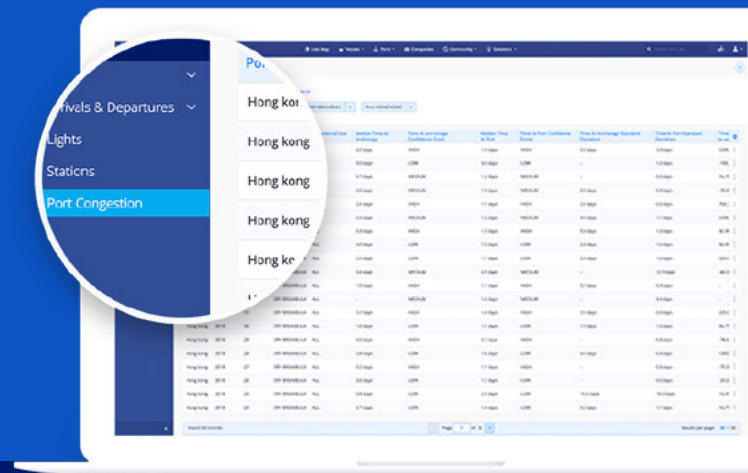
Being able to understand the whole lifecycle of a vessel's visits at a port, and then see this data aggregated over multiple calls, allows maritime professionals to monitor how congestion levels evolve over time and enables them to make informed estimations on future performance.

Finding port congestion information on MarineTraffic



Just by registering with MarineTraffic, you can have access to detailed, reliable and actionable port congestion data for every major commercial port. Visiting any port page, you can see aggregated port congestion metrics for both **time at port** and **time at anchorage** in graph form.

With the **Port Congestion Service**, you can dig deeper into this information by choosing specific markets (*vessel types*) and seeing a breakdown by commercial size (*vessels' size class based on cargo capacity*). Having the Port Congestion Service also opens up the Port Congestion data in the **Data Exploration Tool**, so you can really start understanding the bigger picture.



Port congestion information can be used by ship operators to improve planning and scheduling, informing clauses and pricing for charter party agreements, comparing ports, and even as a starting point for streamlining improvements by port operators themselves.

Want to have a better understanding of waiting times at port?

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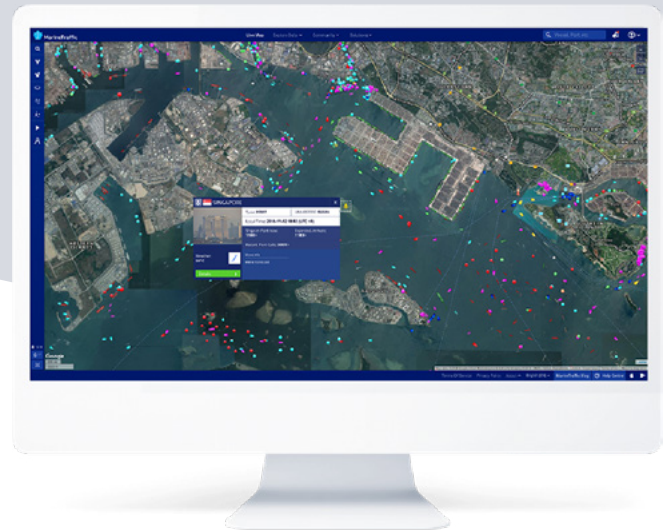
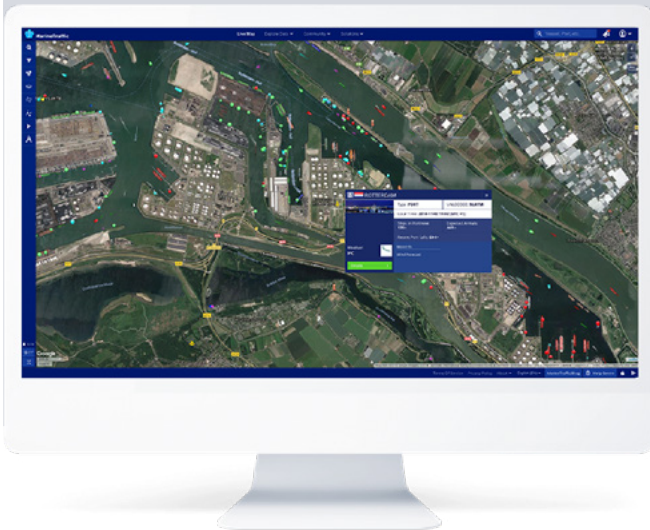
Use Cases

Operators

By reviewing time in **Rotterdam** port/anchorage for bulk carriers, Operators get a sense of expected delays at the port and make decisions relating to the voyage plan, such as choosing to reduce speed to save fuel.

Brokers

By reviewing significant variations in times in **Singapore** port/anchorage for bulk carriers, brokers can validate market talk on rising port congestion in specific ports either due to high demand or port operation issues, which they then use to assess the impact on supply in a market.



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