Measuring recovery through mobility

TCorp's Sydney Parking Index is an innovative, real-time activity measure that helps gauge the strength of the city's economic rebound after COVID-19 lockdowns. While its focus is the Central Business District (CBD), it also allows us to corroborate results with other economic indicators and draw inferences on economic performance across NSW.

Unlike many other data sources currently available, the Index tracks commuter patterns instantaneously, generating valuable insights on behavioural changes that could persist post-pandemic and impact the pace of growth.

> *"the Index shows a significant rebound in CBD activity this year, demonstrating resilience in the face of multiple disruptions. Commuter activity strengthened quickly, following a significant drop around the end of 2021 when the Omicron wave hit. …"*

A real-time view of mobility

Leveraging open data from Transport for NSW, the Index measures capacity use at major commuter stations. It provides a picture of activity now and compares this week-on-week, before the Omicron variant, and pre-pandemic.

The Index is constructed by using regular, intraday snapshots of capacity use at major Park&Ride commuter stations around Sydney (for example Kellyville, Kogarah and Manly Vale). A total of 10 stations are tracked, and a weighted average is compiled. TCorp then looks at time-of-day capacity use, to consider key issues such as how quickly the car parks at these stations reach their maximum daily capacity, and the pace at which they empty. We also analyse average total capacity for Tuesday to Thursday of a given week, to capture mobility trends week-to-week, and month-to-month.

Each week, the Index is run and shared with a pilot group of TCorp stakeholders, to corroborate other indicators and analysis on the NSW economy. This indicator is in its early stages of development and will evolve over time.
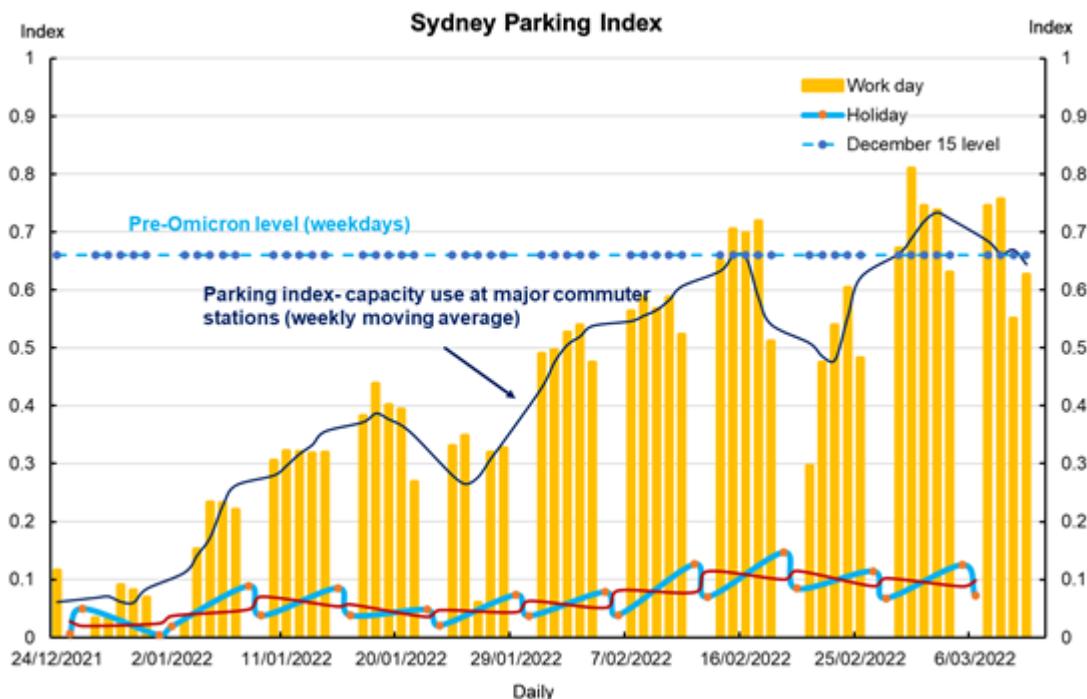
What has it revealed so far?

As illustrated in Chart 1, the Index shows a significant rebound in CBD activity this year, demonstrating resilience in the face of multiple disruptions. Commuter activity strengthened quickly over January, following a significant drop around the end of 2021 when the Omicron wave hit. Intraday activity at the stations included in the Index reached more than 70% of total capacity in February – above the levels seen at end November. Before last year's lockdowns, this level was holding at around 90%.

In March to date, the Index shows activity has turned down. Heavy rainfall, historic flooding, disrupted transport networks and instructions to avoid unnecessary travel have impacted mobility, as expected.

Nonetheless, commuter activity appears resilient, holding around 67% - levels also seen immediately before Omicron. This data suggests that motivations to return to the CBD, and to face-to-face working, seem solid.

Chart 1 – Sydney Parking Index

Source: TCorp, TfNSW as at 11 March 2022

The Index is generally moving higher and this is consistent with the underlying trend in other measures, and points to quick improvement in economic activity for NSW through the remainder of March.

Still, behavioural changes from the protracted pandemic including preferences for working at home, could also introduce a ceiling to the Index and change the make-up of activity in NSW. This could mean the return to the CBD may improve more gradually from here, with stronger activity in the suburbs and regions.

The Index will continue to evolve and provide more information on how the recovery is unfolding. It will be an important tool in understanding what the "new normal" could look like for NSW.

Notes

The Sydney Parking Index is based on Transport for NSW open data. TCorp scrapes, aggregates and analyses the data with our proprietary methodology. As part of our method, we track intraday capacity at the stations, which is unique. Because of this feature, we can see any changes also in how people are commuting, for example heading into the city earlier, and leaving earlier, or other changes in behaviour.

The data derives from the TfNSW's OpenData Car Park API. The data is used under the Creative Commons Attribution 4.0 International (CC BY 4.0) license where the sharing of the data is permitted.

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