Monthly Regional Tourism Estimates (MRTE) Release Questions & Answers

Background to the latest release of MRTEs

The Monthly Regional Tourism Estimates (MRTEs) provide estimates of regional monthly expenditure that indicate tourism's contribution to the national and regional economies. The MRTEs are based on tourism electronics card transaction data, tourism satellite account data, and international visitor survey data. The original series of MRTEs ran from 2016 - 2020. It was discontinued as information used to scale the data to national totals was disrupted by the COVID pandemic. An interim series called Tourism Electronic Card Transactions (TECTs) was appointed to temporarily understand tourism spending in New Zealand. With the reopening of the border and the information supporting the weighting methodology restored, the MRTEs are able to resume. In July 2023, Stats NZ (Data Ventures) was selected to supply the MRTEs. MBIE is going to provide MRTEs starting with provisional September 2023 data in November 2023, and October 2023 data in December 2023. We will also provide historical MRTE data from January 2019 onward. The revision of the MRTEs includes some methodological changes because Data Ventures is using some different input data sources.

The methodology is publicly available to promote transparency and trust. The new data has undergone a quality assessment process and over time further improvements in methodology and the inclusion of additional features will be considered.

Questions and Answers

What is methodology for MRTEs?

In broad terms, the MRTEs aim to apportion estimates of national tourism expenditure to a product and regional level at monthly resolution. This is achieved through a combination of various datasets that each provide a part of the picture, and then applying various weightings to the data such that the overall totals for key combinations align with the accepted national totals.

When and where will the MRTEs be available again?

The revised MRTEs will be available from 23 November 2023. They will be available in the same format as before – downloadable Microsoft Excel files with pivot tables, and interactive visualisations, all on MBIEs Tourism Evidence and Insight Centre [TEIC].

Why has the MRTE series started and stopped, and what's changed?

The supplier of MRTEs has changed, and there has been changes in the methodology. The output will be familiar to those who have used the TECTs, but its more the 'behind-the-scenes' methodology that has changed. All the detailed steps of the methodology are available in the methodology document.

Will the revised MRTE dataset have a backseries?

Yes – the new dataset will begin from January 2019.

What are the methodology changes?

The changes in source data forced some changes in the methodology regarding how a card holders' home location is determined. Home location is an important input to determining what spending is domestic tourism, versus what spending is local spending.

The next largest methodology change is with regards to the totals the MRTE estimates are scaled too. Estimates are scaled to Tourism Satellite Account (TSA) and International Visitor Survey (IVS) totals, which have to be forecasted forward to match the time periods MRTEs report on (TSA has a longer lag in reporting). This was previously forecasted using a form of linear forecasting with a seasonal adjustment. The new methodology uses a technique based on recent electronic card data, so it can account for 'black swan events' such as COVID because it draws on recent information instead of a forecast based on the past.

All other methodological decisions are detailed in the [methodology document](#).

How are the MRTEs different from the TECTs?

The TECTs were delivered as a temporary solution. The figures presented in them were an aggregation of the tourism spending, which was not scaled to national totals. The revised MRTEs, by contrast, largely replicate the methodology of the original MRTEs and the numbers presented within them are scaled to national totals (sourced from the Tourism Satellite Accounts, and International Visitor Survey).

Can we expect any improvements?

In consulting on the MRTE2.0 methodology, we heard that there is lots of interest for improvements. These include:

- Repackaging/disaggregating the product category aggregations to better represent tourism firms.
- A desire for more granular geographic detail (e.g., TA monthly or smaller), and more regular and timely data.
- A desire for more intelligence on pre-travel spend, online, and non-card spend (remember that scaling crudely accounts for this).
- Repackaging of the data to be itinerary or product category centric, also understanding total spend per person.
- Consideration for disentangling tricky data problems, e.g.: splitting out business activity, identifying when tourism occurs in commuter locations, when an event is sold via another centre, when a foreign cardholder lives in NZ.

Work on any of these improvements will begin in 2024, with the priority being the product repackaging/disaggregation.

How can we be certain about the data quality of the MRTEs?

Each data release undergoes a quality assurance process, which includes independent external quality assessment.

What are the limitations or caveats of the MRTEs?
The MRTEs are estimates only. As it is not possible to procure data on every monetary transaction that occurs in New Zealand, certain methodological assumptions must be made to enable both the granular detail for regional and product level insights, and the attribution to national totals. The major assumption is that the ECT data is a reasonable sample for all types of spending. This assumption is challenged when portions of tourists use cash or online spending in a different pattern to the ECT sample. For example, some parts of rural New Zealand may use more cash and have different domestic tourism behaviour.

There are also several other more minor limitations such as centralised merchant accounts (e.g., a car rental head office in Auckland with branches around the country), and multi-currency cards. Further details about caveats and limitations are outlined in [the methodology](#).

Can we add domestic and international spend to become total spend?
For the TECTs, there was a known issue which meant that domestic and international figures could not be added to equal the total. This is not the case for the revised MRTEs and so domestic totals can be added to the international totals for a grand total.

Why is there only one electronic card data supplier in the MRTEs currently?
In the redevelopment of MRTEs, data from one provider was not producing the expected results. The decision was made to initially exclude this providers data. The current data published relies on one ECT providers data which represents 70% of the market of in-person transactions. Analysis for the second ECT providers data is ongoing, with the expectation that it will be reintegrated into the MRTEs in early 2024. When it is reintegrated, a full back-series starting January 2019 will be produced.

What is the reason for rows with negative spend values?
Negative values are scaled refunds. Some small segments can have negative spend in a month. For example, domestic tourism spend in Timaru District from Gisborne region, in Other passenger transport product is a small category and will have only a few transactions per month. In some months this spend can have a negative value if someone (or a few tourists) cancels an activity and gets a refund and this refund is larger than the sum of positive spend (if any) in this category. For certain months in certain geographic area, product combinations, the value of scaled refunds may be greater than spending. These anomalies are created when a consumer spends on a specific tourism product in Month A, then receives a refund for their spending in Month B. The spending in Month A is recorded as tourism spending in Month A, but then recorded as a refund (negative spending) in Month B.

With only one electronic card data supplier in the MRTEs, can we trust the data?
Yes. The remaining electronic card data represents a very large portion of the in-person card transactions, and we are confident in the MRTE results.

What if I have further questions?

We are happy to take questions. Please contact TR_SharedMailbox@mbie.govt.nz.