

# Townsville400 2012 Findings and Recommendations

Dr Murray Prideaux, Assoc Prof John Hamilton, Dr SingWhat Tee, Dr Riccardo Welters.  
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## Critique by Mike Shearer

From the Introduction:

James Cook University (JCU), School of Business, collected data at the SucrogenTownsville400 V8 Supercar Race (the event) on behalf of V8 Supercars Australia Ltd, Townsville City Council (TCC) and Townsville Enterprise Ltd (TEL) in July 2012. Similar data collection has been conducted by JCU at each race since racing commenced in 2009. This report presents an analysis of the data collected in 2012 and provides comparisons of some with previous year's results.

This paper considers only the claim made in several places in the report, including as the first of its Key Findings, that:

The economic impact of the Townsville400 event is estimated to be 32.4 million dollars.

**The report does not substantiate that claim with any supporting data.**

Appendix 1 on pages 53-57 describes the *Methodology: Estimating the economic impact of the TSV400 event on the city of Townsville*. It outlines three steps:

Step 1 Estimate per person attributable expenditure.

Step 2 Estimate the direct economic impact of the Event on the city of Townsville.

Step 3 Estimate the total economic impact, by allowing for expenditure to re-circulate among local businesses, derived by multiplying the result from step 2 by a "multiplier", as is standard in this sort of economic analysis.

For each of the steps there is a diagram showing the relationships between factors used and steps followed in calculating the impact. But there are no values given for any of the factors, and no preceding tables for the expenditures on which the calculations depend.

The aim of the research given above does not specifically include estimating the economic impact. The Introduction includes (my emphasis):

The aim of the research is to provide an independent in depth analysis of the event and provide recommendations to event organisers and the Townsville community to **enhance the return** to organisers and the community.

Note that there is no specific mention of economic benefits or costs, only a suggestion as to "enhance the return." The information in pages 10 through 52 concerns only the demographics and expectations of the spectators. However, under "Improved data collection methods" in the *Economic Impact section* of the report (p9) is stated (my emphasis)

Two factors have contributed to improved data collection. First, a 17% increase in the number of questionnaires was achieved, due to the excellent work of the survey team. Second, survey questions were re-ordered and in some cases shortened, and the length of the survey instrument reduced to three pages. Each of these factors combined to increase the share of attempted



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questionnaires that were actually completed (*i.e.* **all questions relevant to the impact statement calculation were completed**). Both factors have contributed towards a significant increase in the number of responses from spectators. Hence, **broadened the fundament on which the impact statement is based and subsequently made the outcome more precise and robust.**

In the 2009 report the methodology for concluding that "the wider economic impact of the Townsville 400 is approximately \$26m (our conservative estimate is \$20.7m and our upper-bound estimate is \$30.4m)" is given on pages 6-12.

The steps followed as in the 2012 report were:

1. ask spectators how much money was spent on tickets and at the Event, and how much of that would have been spent by locals at local businesses if they had not gone to the Event.

It was estimated that locals spent about \$110 per person per day, and visitors about \$135. No equivalent information is given in the 2012 report.

2. ask locals on what they would have spent their \$110 *in Townsville* if they had not gone to the Event.

It was calculated that 47% of local ticket and souvenir expenditure, or \$4.4m, would have been spent in Townsville, so that is money drained out of the local economy. It is not clear how that result was got; using the data given I calculate the amount as \$3.2m, or 34%. There is no information given in the 2012 report that allows an equivalent calculation.

3. estimate how much visitors spent while in Townsville other than on and at the Event.

The daily expenditure is given in Table 5 for 13 items (accommodation 15%, fuel 12%, food 43% etc) for an average \$205 per person. The 2012 report's figure 14 shows that 18.1% of the visitors attended the races for only one day. Their expenditure would be quite different to the 51.3% who attended for all three days. Has that been taken into account - we don't know.

4. estimate how much visitors' spending could validly be attributed to the V8 Event and how much to other purposes such as medical appointments.

The estimate was "approximately \$16.5m (average daily expenditure times days in [Townsville] times proportion of expenditure directly attributable to the Event). The number of visitors was estimated as approximately 32,000.

The *proportion of expenditure* attributed to the Event isn't given, and isn't actually needed. All that is required is the number of visitors to Townsville, multiplied by the average number of days they spent at Reid Park, multiplied by their average daily expenditure. The number of visitors was estimated as the ticket sales divided by the average days at the track, that is  $81,200 / 2.5$ , which is 32,480. The estimated impact was therefore  $81,200 / 2.5 * 2.5 * \$204.88 = \$16.64m$ , given as \$16.5m

5. Allow for expenditure to be circulated within the Townsville business community, by applying an economists' multiplier, to get the full economic impact.

The impact was derived as the \$16.5m from step 4 minus the \$4.4m from step 2 multiplied by the multiplier 2.13, or \$26m. No data is given that allows for an equivalent calculation for the 2012 Event.

The only equivalent data given in the 2012 report is:

- the number of usable surveys (1242 - p6) and the number of spectators (152161- p7).
- Figure 10 on proportion of locals and visitors
- Figure 14 on the race day attendance, from which it is determined that the average attendance of locals was 2.21 days and of visitors 2.33 days

From data given in figures 10, 12, 13 and 14 it can be calculated that on Friday about 1150



visitors, on Saturday about 1500 visitors and on Sunday about 1350 visitors drove less than 4 hours to attend the Event, and presumably many of them would have returned home overnight. Their contribution to the Townsville economy would be different to the other 8,500 visitors. This is speculation because data isn't available allowing correlations between, say, visitor home locations and other factors such as accommodation and expenditure. It is because of considerations like this that simple averages of individual factors without any qualifications reduce confidence in the study's economic impact conclusion.

One factor which can be accepted with confidence is the sample size for determining the resident/visitor split. From the number of tickets sold, the number of usable survey returns and data in Figure 14 it is possible to determine the number of visitors in the sample and the number of tickets sold to them. The reliability of the samples as representative of the race attendees can be calculated from standard statistical techniques, and for a confidence level of 95% the margin of error is less than 5%. But that is *provided that the population is homogenous and the sample was randomly selected.*

The question as to what made the 2012 data more "robust" than earlier data is still open.

Steps 1, 2 and 3 rely on spectators' estimates. Just how reliable were they? How much were the estimates consistent over the 1242 surveys,; what variation was there? How consistent have they been over the four Events? What have been the values in each year?

Step 4 depends only on the estimation of the average daily expenditure of the visitors and the number of days they actually spent at the track, despite the discussion of what that was as a proportion of their total expenditure [in Townsville].

Therefore no evidence is given for why the claimed 2012 economic impact should be trusted any more than the 2009, 2010 and 2011 impacts.

The quantum of the impact does not add information to any of the analyses and recommendations made in the main part of the 2012 report. It has probably been given simply to justify, or even put pressure on, the State Government and the Townsville City Council to extend their subsidies to the Event beyond 2013, when the previous subsidy agreements expired. It is also perhaps offered as a justification for the Events to the residents of Townsville who question their value..

Reasons for questioning the claimed \$32.4 million benefit are:

1. **no expenditure data supporting the estimated \$32.4 million is given.** The amount could simply have been "pulled out of a hat".
2. **the claimed benefit is considerably higher than the estimates for the 2009 (\$26m), 2010 (\$22m) and 2011 (\$18m) Events, despite attendances being much the same each year.**
3. **there is no definition of "local" or "visitor".**

When the question was asked as to who was a local and who was a visitor at a meeting at JCU on 15th June 2010(2) no answer was given but Dr Welters referred to an economic analysis conducted by him for the Army(3) that he said would be a fair indicator of the approach that was taken for the V8 Events research. In that study the "local" area was taken as the Townsville Statistical District, which excludes all of the northern beach suburbs of Townsville. Given the emphasis given in the 2012 report on the spending by non-locals at the Event it is important that who is included in that category is clearly defined. The higher the proportion of spectators who are visitors the greater will be the claimed \$\$s input into the Townsville economy.



4. there is no mention of a multiplier having been applied to the estimated benefit.

It is not stated whether a multiplier was used for the 2012 report, but it is safe to assume that the same multiplier was used as for the 2009 report, since the same methodology has been followed. **If that is the case then the actual economic benefit derived from the questionnaire data was \$15.2 million, which was then inflated to \$32.4 million** to allow for assumed flow-on effects of the money circulating within the Townsville economy.

The 2009 estimate "*used input-output analysis, and estimate that the TOTAL (direct and indirect) economic impact ... is 2.13 times bigger than the direct (\$12.1m) expenditure*". That is, the \$12.1m was multiplied by 2.13 to get the "final" estimate of \$26m.

When the value of that multiplier was questioned reference was again made to the Army report for the explanation - which isn't given in that report. On page 57 of the 2012 report it is stated:

We used a Townsville input-output model, which is equipped to capture that indirect expenditure resulting from direct economic expenditure to calculate the total (direct plus indirect) economic impact of the Townsville400 event on the city of Townsville.

What Townsville input-output model? No details have ever been made available. The value of the multiplier is critical to the credibility of the estimated economic benefit.

5. the economic benefit is entirely based on expenditure by locals and visitors. No account is taken of any other costs.

Step 2 of the methodology as shown on page 55 shows that the "direct economic impact" depends on the number of visitors and locals and the number of days they attended the races, and what they spent, or would have but didn't spend, because of the races. All other costs are ignored, such as the erection and dismantling of the track barriers and grandstands, etc. and the costs of the traffic disruptions. No provision is made for the residents who leave town for the duration of the Event.

Even if the assumptions and calculations on which the \$32.4 million benefit is based are reasonable, it measures only *some* of the economic *activity* associated with the Event. It makes no attempt to indicate who in the Townsville community actually benefits economically from the Event. It cannot do so because all of its source data is just 1242 questionnaire responses. No other relevant data has been used.

6. the 2012 study was commissioned by three bodies which have a vested interest in the V8 Events continuing indefinitely.

The estimates of the economic benefits of the races since 2009 have been used to justify the subsidies from the State Government, and the Townsville City Council of \$1 million for each race day. The JCU reports have never been made public; summaries of some of the statistical data have been made available, but none of the economic arguments have ever been published such that they can be independently verified. A State Govt report commissioned for the 2009 race has been barred from FoI access.

Why the secrecy? Is it because of fear that if the economics were scrutinised by independent experts who have no interest whatsoever in the final analysis and conclusions, the Events would be shown to be a net cost to the community?

## Conclusion

**The report fails to justify its claim that the economic impact of the Townsville400 event is estimated to be \$32.4 million.**



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## References

1. The wider economic impact and service quality issues of the Dunlop Townsville 400 V8 Supercars race on the City of Townsville. Murray Prideaux, Riccardo Welters and Natalie Stoeckl. School of Business, James Cook University, Townsville. 20 September 2009. 63p.

*This report is not in the public domain. For a short time and in error it was available on the website of the Townsville Chamber of Commerce, from which a copy was made and is held by Mike Shearer.*

2. Meeting report: Re JCU studies on V8 Supercars 2009. 15th June, 2010, at the School of Business, Prof Craig Littler, Head of School, *Chair*. Also present *Dr Murray Prideaux, Lecturer, Discipline of Management, Dr Riccardo Welters, Senior Lecturer, Discipline of Economics, Madonna Simmons, Townsville Chamber of Commerce, John Boucher Townsville resident, Mike Shearer*

*Meeting report by Mike Shearer, copies can be supplied.*

3. ADO Townsville Socio-Economic Impact Report. A holistic analysis of the socio-economic impact of the Australian Defence Organisation and its interaction with the city of Townsville. Riccardo Welters and Aurelie Delisle, Discipline of Economics, School of Business, James Cook University, Townsville. not dated ca 2009, 38p

[http://www.jcu.edu.au/business/public/groups/everyone/documents/event\\_description/jcuprd\\_052402.pdf](http://www.jcu.edu.au/business/public/groups/everyone/documents/event_description/jcuprd_052402.pdf)  
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