

## Introduction

Given the severity of alcohol-related problems both nationally and globally, the Australian Ministerial Council on Drug Strategy has supported the development of an initiative to ensure that alcohol policy, prevention and interventions are informed by the best available data on levels and patterns of consumption. Such information can be provided by alcohol sales data. This initiative has led to the development of the National Alcohol Sales Data Project (NASDP) at the National Drug Research Institute (NDRI) at Curtin University in Perth. In 2014, the NASDP was in its fourth funding year (Stage 4) having completed Stages 1, 2 and 3 in 2009, 2011 and 2012.

The overall objective of the NASDP is to construct an ongoing, regularly updated, national database of standardised alcohol sales data, which includes all Australian states/territories.

Information about volumes of alcohol sold is a basic requirement for estimating how much alcohol is consumed within a region, within a community or per person. Adjusted for population size (per capita consumption), alcohol sales data allow comparisons of consumption levels between regions and are top-level indicators for monitoring and evaluating policy changes and interventions.

This Bulletin reports volumes of alcohol sold and per capita consumption (pcc) for regions in the Northern Territory and Western Australia for the financial years 2005/06 to 2010/11 and in Queensland for 2007/08 to 2010/11. Alcohol sales data were made available to the NASDP for the first time by ACT Health for the financial year 2012/13, which was the first year of collection.

Per capita alcohol consumption is calculated by dividing volumes of pure alcohol by the number of people aged 15 and over in a given population. In Stages 3 and 4 of the NASDP the population measure for Queensland and Western Australia was an Estimated Service Population (ESP) which was calculated for the project from the ABS Estimated Resident Population (ERP) (ABS, 2010). The ESP accounted for absent residents, Australian visitors and international tourists (ABS, 2010). This was the first time that an alcohol consumption service population estimate had been developed for Australian regional areas. In the NASDP Stage 2 it was found that at a state level the differences between consumption based on ERP and ESP were minimal, but larger differences were found in some regional areas. These differences suggested that ESP was likely to be more accurate for the NASDP than estimates based on ERP (Loxley et al., 2011).

In the Northern Territory, alcohol consumption is estimated for the Territory as a whole only, at the request of the NT Department of Justice, using estimates derived from ERP to

which tourist numbers, supplied by the Northern Territory, have been added.

Alcohol sales data were made available to the NASDP by the NT Department of Business, the Queensland Office of Liquor and Gaming Regulation and the WA Drug and Alcohol Office. Alcohol sales volumes were aggregated and pure alcohol content by volumes were calculated using standardised alcohol conversion factors (ABS, 2010). Volumes and consumption estimates were mapped onto shape files downloaded from the ABS. The Northern Territory was regionalised according to NT Department of Justice requirements, in Queensland and WA Statistical Subdivisions as defined by the ABS were used.

Full methods and results can be found in the NASDP Stage 4 final report (Loxley et al., 2014).

## Volumes of alcohol sold and per capita consumption

Volumes of alcohol sold and per capita consumption were estimated for the ACT, NT, Queensland and WA. Estimations for the ACT were found to be substantially lower than could reasonably be expected and have not been included in this Bulletin.

### *NT volumes of alcohol and pure alcohol sold*

In the NT, volumes of alcohol sold and pure alcohol were estimated for Urban Centres and NT Balance as defined by the NT and can be seen in Table 1.

Per capita consumption was estimated for the Territory and has not been calculated for regions at the request of the NT Department of Business. Table 2 shows volumes of alcohol and pure alcohol sold and estimated per capita consumption for the NT for the 6 years for which the NASDP has data.

### *Queensland and WA volumes of alcohol and pure alcohol sold and pcc*

Examination of Queensland alcohol sales data suggested that returns did not completely reflect alcohol consumption in Queensland for the financial year 2010/11. After discussion with the relevant Queensland agency, apparent estimates of volumes of pure alcohol sold and per capita consumption in Queensland as a whole were developed using data from 2010/11 and selected data from 2009/10 to estimate shortfalls. Estimates at SSD level have not been calculated using these assumptions. Volumes of pure alcohol and estimated per capita consumption for Queensland and WA are shown in Tables 3 and 4 and Figures 1 and 2.

**Citation:** Loxley, W., Gilmore, W., Catalano, P., Chikritzhs, T. (2016). The National Alcohol Sales Data Project - Stage 4.

**Table 1:** Volumes (litres) of alcohol and pure alcohol sold in Urban Centres and Northern Territory Balance, and NT *per capita* consumption, 2010/11

<b>Region</b>	<b>All alcohol</b>	<b>All pure alcohol</b>	<b>pcc</b>
Alice Springs	7,082,123	450,802	
Darwin	17,399,859	1,149,079	
Katherine	3,649,463	203,252	
Nhulunbuy	1,122,647	66,825	
Palmerston	5,455,332	321,938	
Tennant Creek	1,180,652	68,497	
NT Balance	7,921,345	421,763	
<b>Total</b>	<b>43,811,421</b>	<b>2,682,155</b>	<b>13.3</b>

**Table 2:** Volumes (litres) of alcohol sold, pure alcohol and *per capita* consumption in the Northern Territory, 2005/06 to 2010/11

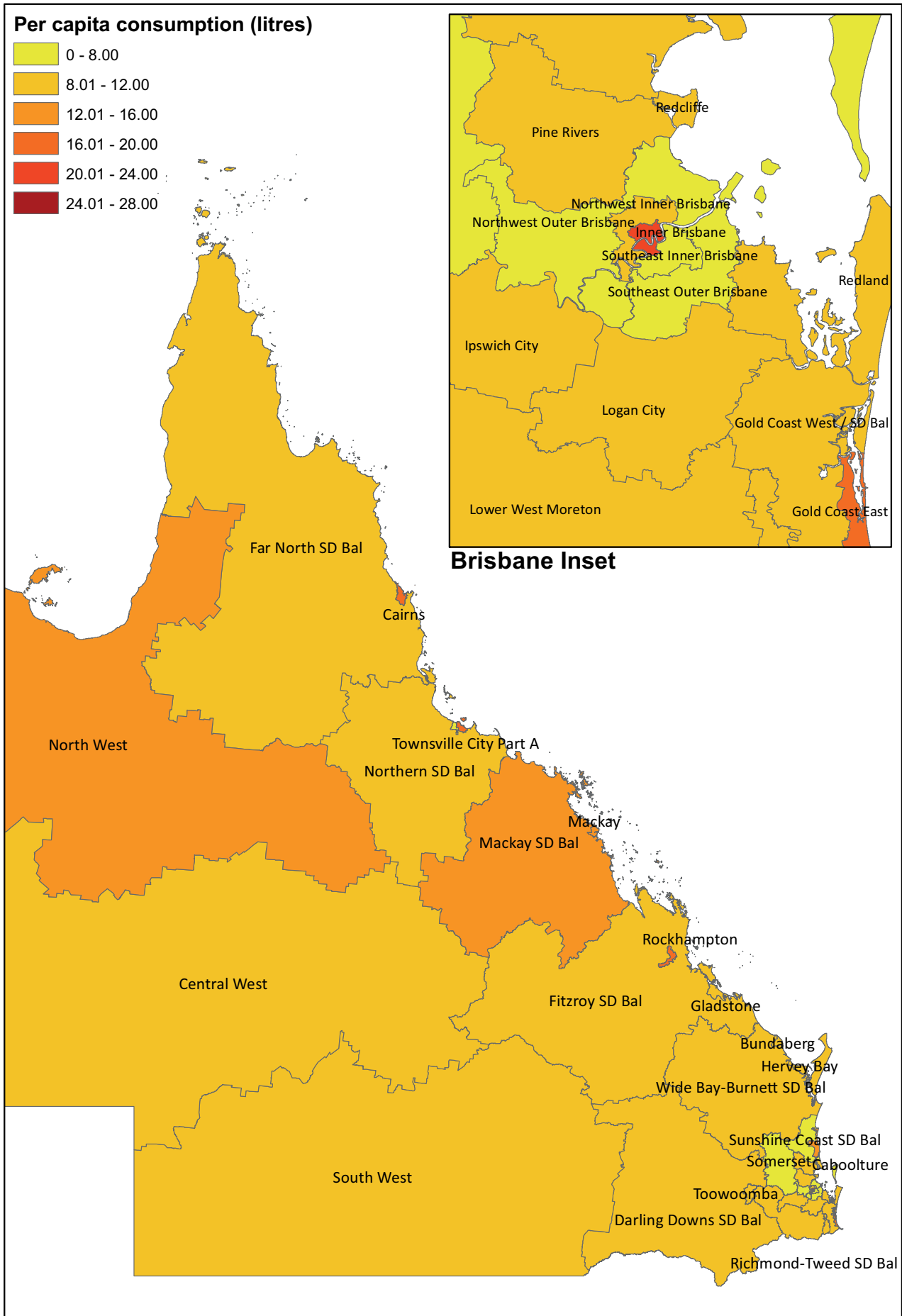
<b>Year</b>	<b>All alcohol</b>	<b>All pure alcohol</b>	<b>pcc</b>
2005/06	43,034,522	2,696,090	15.03
2006/07	44,117,617	2,699,391	14.43
2007/08	45,368,131	2,748,347	14.65
2008/09	44,946,250	2,719,986	13.99
2009/10	45,435,274	2,746,757	13.6
2010/11	43,811,421	2,682,155	13.3

**Table 3:** Volumes (litres) of alcohol sold, pure alcohol and *per capita* consumption/ Estimated Service Population in Queensland 2007/08 to 2010/11

<b>Year</b>	<b>All alcohol</b>	<b>All pure alcohol</b>	<b>pcc/ESP</b>
2007/08	572,712,362	37,955,769	11.34
2008/09	608,015,309	37,817,375	10.98
2009/10	591,927,984	38,760,678	11.03
2010/11	627,889,515	38,295,916	10.91

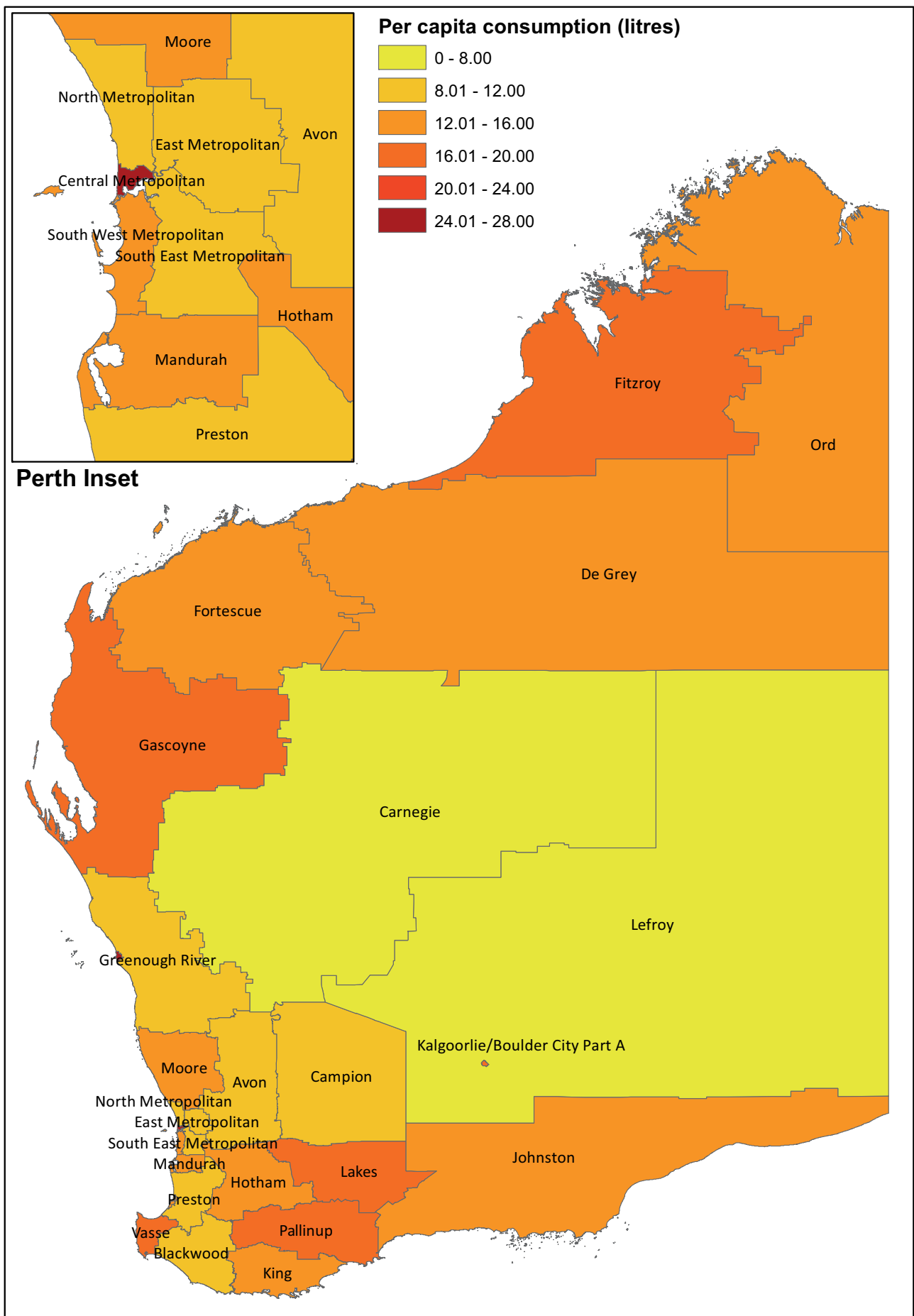
**Table 4:** Volumes (litres) of alcohol sold, pure alcohol and *per capita* consumption/ Estimated Service Population in Western Australia, 2005/06 to 2010/11

<b>Year</b>	<b>All alcohol</b>	<b>All pure alcohol</b>	<b>pcc/ESP</b>
2005/06	267,580,968	17,797,940	11.23
2006/07	277,198,931	18,006,305	11.1
2007/08	360,128,241	21,312,499	12.72
2008/09	304,878,355	20,245,103	11.69
2009/10	331,885,604	21,959,374	12.37
2010/11	361,159,751	23,965,481	13.24



**Figure 1:** Estimated pcc/ESP (litres of absolute alcohol), Statistical Subdivisions, and metropolitan (inset), Queensland, 2009/10<sup>1</sup>

<sup>1</sup> Regionalised estimates are not available for Queensland for 2010/11



**Figure 2:** Estimated pcc/ESP (litres of absolute alcohol), Statistical Subdivisions and metropolitan (inset), Western Australia, 2010/11

## Trends in alcohol consumption

Tables 1 to 3 and Figure 3 show that beverage consumption patterns were similar in the Northern Territory and Queensland. In the Northern Territory the clear trend has been decreasing alcohol consumption over six years. In Queensland there appears to be a less marked decreasing trend.

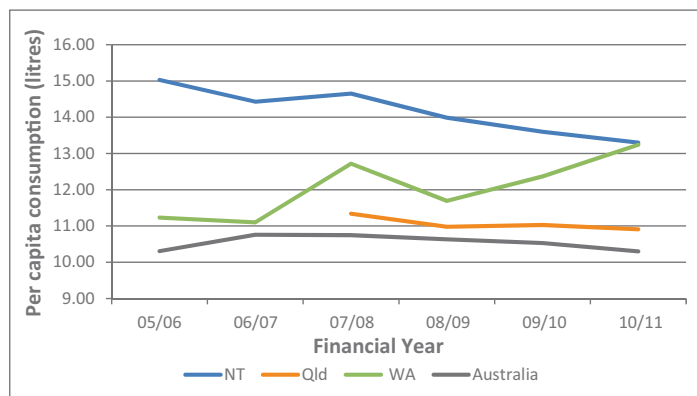
The pattern in Western Australia was different. In Western Australia consumption increased in 2007/08 and has been increasing again since 2008/09. Nationally, alcohol consumption has been decreasing since 2007/08<sup>2</sup>.

Alcohol sales and consumption figures for the Northern Territory and Western Australia, where 6 years of data are available, demonstrate that trends in alcohol sales are not necessarily related to changes in population. In the Northern Territory, population plus tourism figures, as supplied by the Department of Business, increased until 2009/10 after which there was a small reduction. In Western Australia the ESP steadily increased over the series.

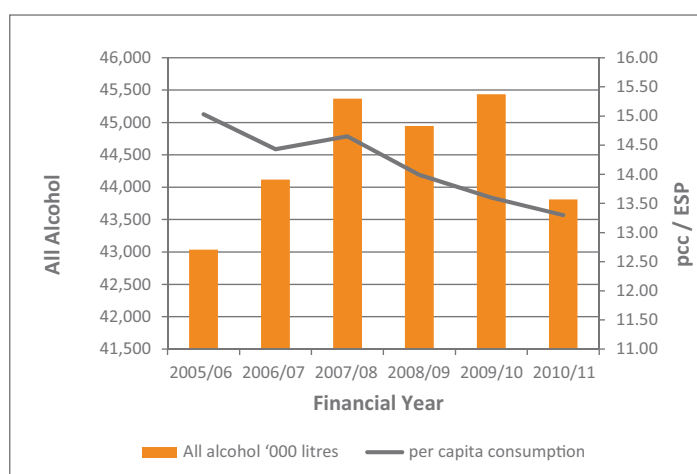
Figure 4 shows that in the Northern Territory, alcohol sales decreased in 2008/09 and 2010/11 despite growth in the population and there was an apparent steady decline in per capita consumption.

Alcohol sales and consumption in Western Australia show a different pattern as seen in Figure 5.

Western Australia alcohol sales generally increased between 2006/07 and 2010/11 and were highest in 2007/08 and 2010/11. Per capita consumption figures which factor in population size also increased over time but with a notable spike in 2007/08.



**Figure 3:** Per capita consumption in jurisdictions and nationally from 05/06 to 10/11

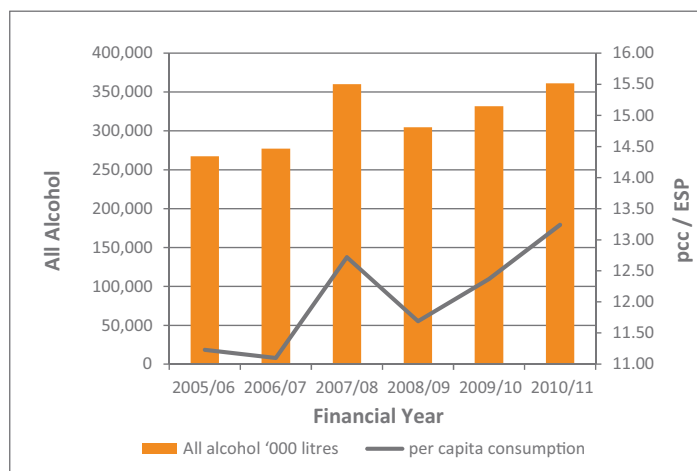


**Figure 4:** Northern Territory all alcohol volumes and pcc/ESP, 2005/06 to 2010/11

**Acknowledgements:** This project was funded by the Australian Government Department of Health as recommended by the Ministerial Council on Drug Strategy. The National Drug Research Institute at Curtin University is supported by funding from the Australian Government, under the Substance Misuse Prevention and Service Improvement Grants Fund.

## References

1. Australian Bureau of Statistics. (2010, 5 August 2010). "4307.0.55.001 - Apparent consumption of alcohol, Australia, 2008 - 09." Retrieved 2 November, 2010, from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4307.0.55.0012008-09?OpenDocument>
2. Loxley, W., T. Chikritzhs, et al. (2011). National Alcohol Sales Data Project Stage Two Report 2011 Perth, Drug and Alcohol Office WA, and National Drug Research Institute, Curtin University of Technology
3. Loxley, W., Gilmore, W., Catalano, P. & Chikritzhs, T. (2014) National Alcohol Sales Data Project Stage Four Final Report Perth, National Drug Research Institute, Curtin University.



**Figure 5:** Western Australia all alcohol volumes and pcc/ESP, 2005/06 to 2010/11

<sup>2</sup> Australia trend sourced from Australian Bureau of Statistics, 2014.