Gambling Harm in the Northern Territory

An Atlas of Venue Catchments

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Gambling Harm in the Northern Territory: An Atlas of Venue Catchments

A report prepared for the Community Benefit Committee, Department of Business, Northern Territory Government

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PREFACE

The Productivity Commission (1999) brought the issue of problem gambling to national attention with its release of the first comprehensive report on Australia's gambling industries. The Commission estimated problem gamblers, those people who have trouble controlling their gambling, comprise 2.1% of the adult population. More recently, the Commission (2010) estimated the social costs of problem gambling, including suicide, depression, relationship breakdown, lowered work productivity, job loss, bankruptcy and crime, to be over $4.7 billion per year.

However, these national reports said little about the nature and extent of gambling and its social consequences in the Northern Territory (NT). To fill this gap, I led the *Northern Territory Gambling Prevalence Study* in 2005 (Young et al. 2006; Young et al. 2008). This study showed that while problem gamblers do make up a small relatively small proportion of the total population, they nonetheless account for over 30% of total gambling expenditure. We conservatively estimated that problem gamblers in the NT each spend, on average, over $30,000 per annum on gambling, with the true figure likely to be anywhere up to $60,000 per annum.

Furthermore, problem gambling is heavily associated with poker machines. Over 90% of problem gamblers in the Territory play the pokies. While casinos in Darwin and Alice Springs installed pokies during the early 1980s, they were not introduced into pubs and clubs until the 1st of January 1996. This move completely changed the NT gambling landscape. Pokies became far more accessible to the populations of the major urban centres of Darwin and Alice Springs as well as the smaller regional towns such as Katherine, Tenant Creek, and Nhulunbuy.

This spatial diffusion of gambling opportunities has occurred without a clear understanding of the social impacts associated with different gambling venues. Until now, we have not known the spatial extent of the service catchments of the various venues or the level of problem gambling within them. Certainly, such information is essential to evidence-based licensing decisions. To this end, we have spent the last several years specifically investigating poker-machine venues, their catchments (or trade-areas), and the level of problem gambling they produce. We have sought to identify the most dangerous venues and map the local areas most at risk.

In this atlas, we present a series of maps that describe a number of pokie venues in the NT, the spatial distribution of their clientele, and their associated level of problem gambling. Our aim has been to produce an explicitly visual document that communicates information in an easy-to-interpret format. We trust this atlas will be useful to the NT Government, the NT Licencing Commission, various social-service organisations, and the communities that actually host poker machine venues across the NT.

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1 BACKGROUND

1.1 PROJECT OVERVIEW

We set out to measure the local-level spatial relationships between electronic gaming machine (EGM) venues, their clientele, and gambling-related harm for all urban centres in the Northern Territory (NT). To do this we employed a two-stage process. In the first stage, we conducted a range of Geographic Information Systems (GIS) analyses to develop predictive spatial models of gambling-related harm for all EGM venues, including pubs, clubs, and casinos. These predictive models estimated venue catchments (or trade-areas) based on the size and location of venues relative to the distribution of the residential population (see Doran and Young 2010).

In the second stage, we tested these predictive models against real-world data. To this end, we conducted a large-scale postal survey of the urban centres of Darwin, Alice Springs, and Katherine (Figure 1). The survey measured the spatial extent of venue catchments, their social characteristics, and the level of problem gambling within them. We were subsequently able to determine the morphology of their respective trade areas, the social composition of these catchments, and the relative riskiness of individual EGM venues. In this context, we explicitly designed the project to provide an evidence-base for regulatory decision-making in the NT.
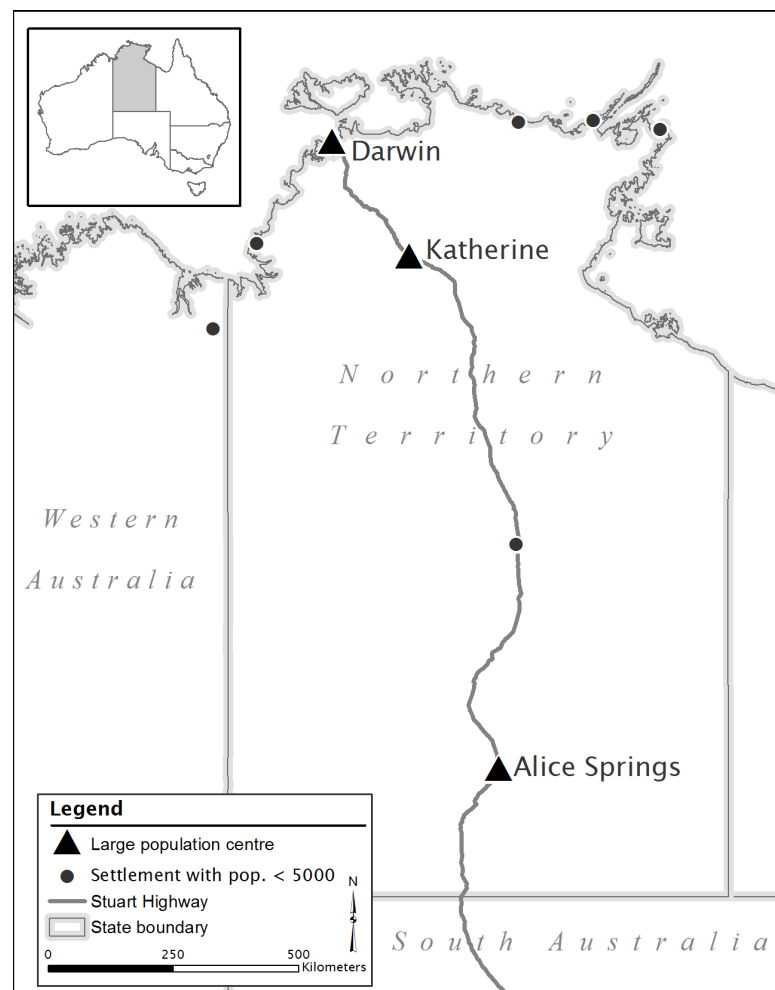

Figure 1: Metropolitan areas in the Northern Territory

1.2 MEASURING GAMBLING VENUE CATCHMENTS

This atlas extends our previous work on predictive spatial models of gambling venue catchments (see Doran and Young 2010). To develop spatial models for the NT we used residential geographic data available from the Australian Bureau of Statistics (ABS) and venue licensing data from the NT Department of Justice to predict the spatial extent and intensity of EGM venue catchments. We then combined these predicted venue catchments with ABS Socio-Economic Indexes for Areas (SEIFA) data to estimate levels of vulnerability to gambling-related harm within urban areas (see example Figure 2).
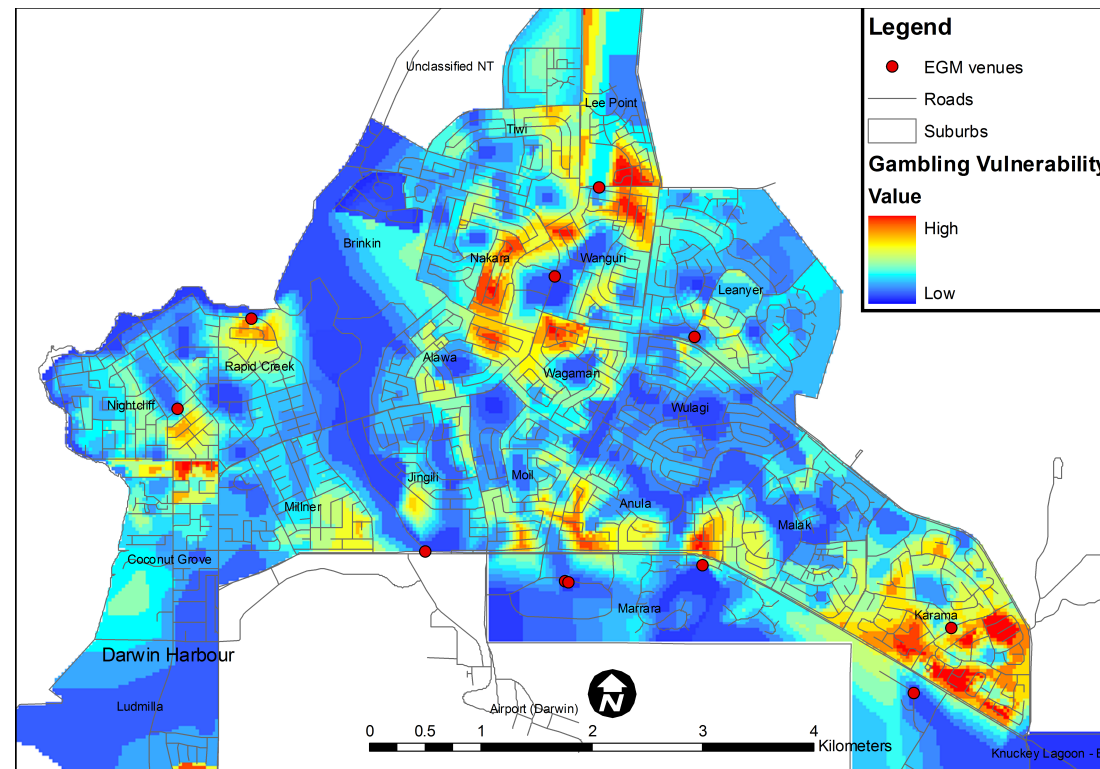
Figure 2: Gambling vulnerability surface for Northern Darwin.   **Source: Doran and Young (2009)**

Such *predictive* models are, however, based upon a number of assumptions, namely that venues are homogeneous (i.e. attract the same groups), Euclidean (straight line) distance is a valid means of representing origin-destination pairs, social groups are equally mobile, catchments are constant over time, and venue attractiveness is accurately measured by the number of EGMs.

Our task in preparing this atlas was to test the spatial predictions produced by this model against real-world data. To do this we needed to measure the actual venue catchments for a range of venues across the NT. To this end, we conducted a large postal survey of all NT households in the Geocoded National Address File (G-NAF) to which Australia Post deliver mail (*n* = 46,263). In addition, we hand-delivered 2,300 questionnaires to households in the peri-urban fringes of Darwin and Alice Springs that were located outside the standard mail delivery areas.

The survey collected information on venue choice and usage, gambling behaviour, demographics, and levels of problem gambling. Importantly, we geocoded the household addresses in advance to provide a spatial location for each returned questionnaire.

With this dataset we were able to:

1. Map gambling venue catchments based on actual visitor behaviour and compare this to the predictive spatial model developed by Doran and Young (2010).
2. Report on the demographic characteristics of patrons to each venue.
3. Measure the level of problem gambling associated with individual venues.

1.3 MEASURING PROBLEM GAMBLING

While 'problem gambling' may be defined in many ways, most definitions emphasise lack of control over gambling behaviour along with a range of consequent adverse personal, economic, and social impacts (Productivity Commission 1999). In 2005, the Ministerial Council on Gambling recommended a definition of problem gambling to be adopted at the national level:

> Problem gambling is characterized by difficulties in limiting money and/or time spent on gambling which leads to adverse consequences for the gambler, others, or for the community (Neal et al. 2005, i).

While it is useful to have a set national definition, of greater practical importance is the measurement tool used to categorise individuals as problem gamblers. In other words, the methods used to 'screen' problem gamblers from the rest of the population effectively define this group as a distinct entity. Problem gambling screens are lists of questions known to be correlated with problem gambling. Answers to these questions are used to classify people as problem gamblers. Different screens, because they comprise different questions, tend to categorise individuals in slightly different ways, resulting in different estimates of the prevalence of problem gambling in any given population. Therefore, the fundamental decision to be made when estimating the level of problem gambling concerns the choice of problem gambling screen.

We employed the Problem Gambling Severity Index (PGSI), a scale developed in a population (as opposed to a clinical) context for use at the national and regional scales (Ferris and Wynne 2001). The PGSI was recommended by the Ministerial Council on Gambling as the preferred gambling screen for measuring problem gambling in Australia (Neal et al. 2005) and is routinely used in Australia and overseas to estimate problem-gambling. In addition, the PGSI proved to be reliable in a previous application in the NT (Young and Stevens 2008).

The PGSI consists of a list of nine questions designed to measure the likelihood of someone being a problem gambler. The answer to each question is scored between 0 and 3. When aggregated the scores range on a scale from 0 to 27. Respondents are then classed as being at no risk (PGSI score 0), low risk (PGSI score 1-2), moderate risk (PGSI 3-7) or high-risk (PGSI 8 and above) (Ferris and Wynne 2001). The full list of PGSI questions is presented in Figure 11 (page 72).

1.4 PROBLEM GAMBLING WITHIN VENUE CATCHMENTS

We received 7,041 completed responses to our survey, an overall response rate of 14.5%. We were able to precisely geocode these responses using the latitude and longitude of each provided by the Geocoded National Address File (GNAF). The GNAF is an authoritative, geocoded address database produced by the Public Sector Mapping Agency (PSMA) (PSMA Australia 2010). A detailed account of the data collection process is presented in Section 4.1, page 70. A full tabulation of the sample characteristics is presented in Section 4.3, page 73.

Over two-thirds 71.1% (n = 4,857) of respondents had visited an EGM venue in the month preceding the survey. Of these venue-goers, 20.9% (n = 1,013) gambled on EGMs during their last visit, with a mean session time of 99 (sd = 97) minutes. The average distance by road between someone's most frequently visited gambling venue and their home was 5.1 km (sd = 5.5 km).

There was substantial variation between venues both in terms of the magnitude of visitation and the PGSI reported by visitors. For example, 5.5% of respondents who most frequently visited SKYCITY Darwin (n = 807) were classified as problem gamblers, compared to 0.4% of visitors to the Darwin Trailer Boat Club (n = 244). While we can be confident about problem gambling levels for the larger venues, due to sampling error the PGSI scores for venues with few reported visitors need to be treated with caution. Figure 3 presents the percentage of problem gamblers within each venue catchment along with 95% confidence intervals. The range of the estimate is very large for many of the venues. For example, while two of the thirteen respondents who visited Squires Tavern were classified as problem gamblers, this 15.4% problem gambling prevalence rate is likely to be an over-estimation. Figure 3 shows that we can be 95% confident that the true estimate is between 4% and 42%. Conversely, other venues with small sample sizes and very small problem gambling prevalence rates (e.g. The Fox Ale House, the Victoria Tavern, Top End Hotel) are likely to be under-estimated.

In addition, there were a number of venues we were unable to include in this atlas due to very low response rates (i.e. n < 10) for that venue. Fifteen of the 64 surveyed venues fell into this category. These are listed in section 4.5, page 75.

Due to the exclusion of respondents whose most frequently visited venue was associated with very few responses and the failure of some respondents to complete every question in the survey, readers of this atlas should not expect the sum of variables across all venues to match the totals presented here.

Figure 3: Proportion of problem gamblers by venue with 95% confidence intervals indicated by grey horizontal lines

2 HOW TO READ THIS ATLAS

2.1 PREDICTED CATCHMENTS

The predictive catchment map (e.g. Figure 4) displays the proportion of the residential population who are predicted to visit a particular EGM venue. The map is based on the spatial distribution of the residential population and the relative size (i.e. attractive power) of the venue compared to other competing venues. These predictive catchment maps were generated using the methods published by Doran and Young (2010). Warmer colours indicate a high proportion of residents visit this venue while cooler colours indicate the converse (see Figure 5 for colour gradings). Other EGM venues are indicated on the map for context and are scaled according to their size.
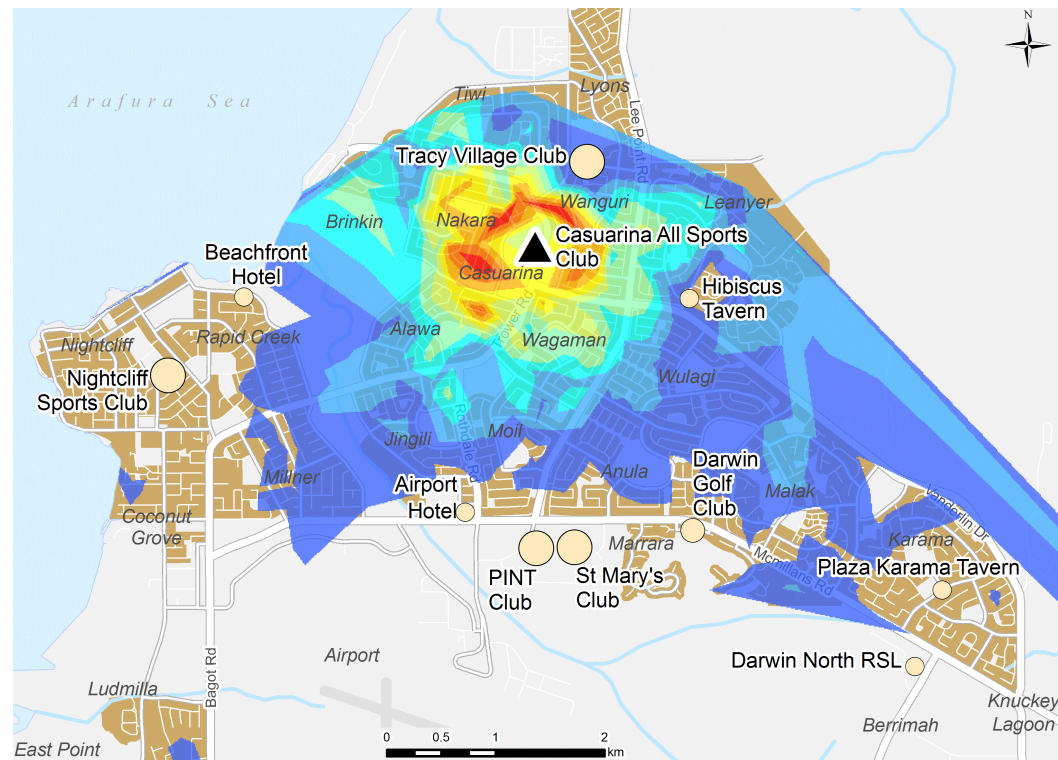

Figure 4: Example of a predicted catchment map for the Casuarina All Sports Club
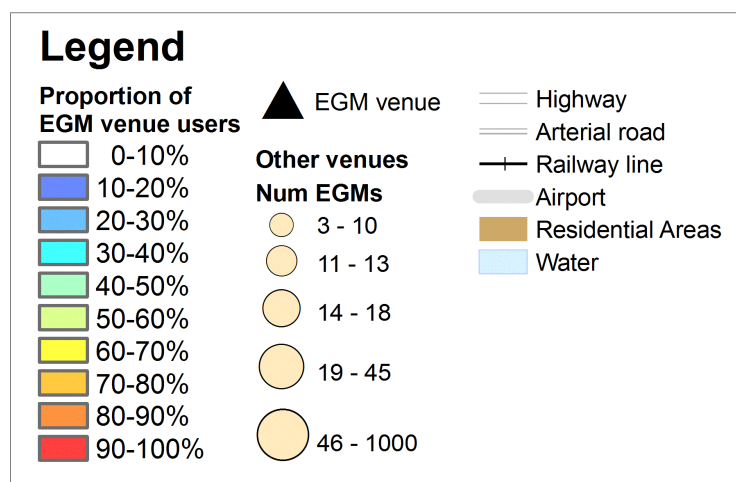

Figure 5: Predicted catchment legend

2.2 OBSERVED CATCHMENTS

The observed catchment map (e.g. Figure 6) presents the geographic distribution of the survey respondents who visited this venue most frequently (see sections 4.1 and 4.5 for details on the survey methodology and the analysis used to produce the observed catchment maps). Warmer colours indicate a higher density of survey respondents while cooler colours represent lower densities (see Figure 7 for colour gradings). Other EGM venues are indicated on the map for context, scaled according to their size.
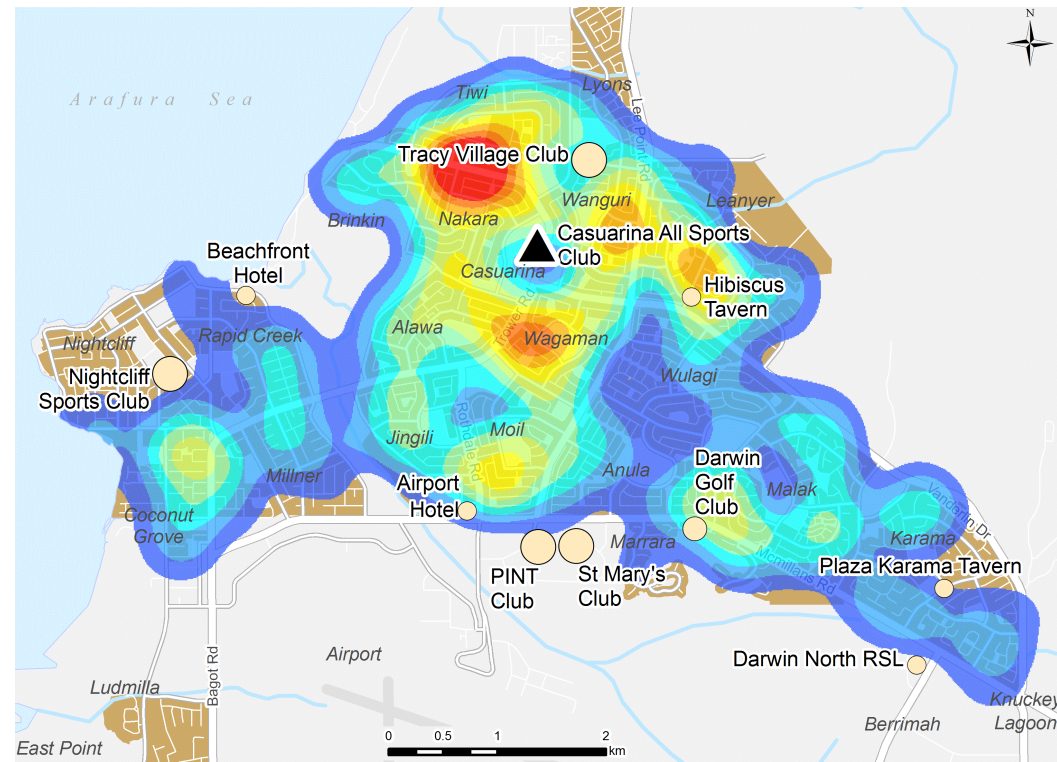

Figure 6: Example observed catchment map for the Casuarina All Sports Club
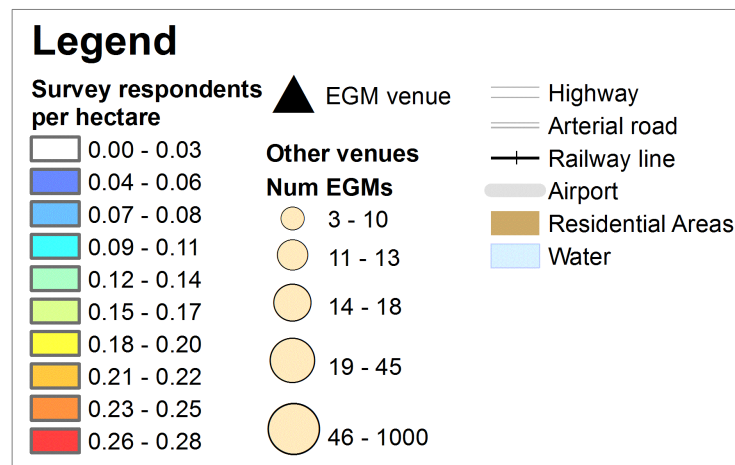

Figure 7: Observed catchment legend

2.3 NUMBER OF RESPONDENTS AND CATCHMENT SIZE

The *number of respondents* field displays the number of survey respondents who reported this specific venue as the one they visited most frequently (see Table 1). The *estimated catchment size* field displays our estimate of the number of people in the population who visit this venue most frequently. For our approach to population weighting see section 4.1 page 70.

n respondents:	283 persons
Estimated catchment size:	3,524 persons

Table 1: Example number of respondents and catchment size box

2.4 PROBLEM GAMBLING COMPARISON

The problem gambling comparison chart presents the percentage of survey respondents who were classed as problem gamblers on a venue-by-venue basis. The specific venue of interest is marked with a red dot on the chart and is labelled in the top right corner. The case below (Figure 8) presents the results for the Casuarina All Sports Club. The vertical (y-axis) of the chart measures the percentage of patrons who were problem gamblers (i.e. scored 8 or above on the PGSI). The horizontal (x-axis) indicates the number of patrons who reported this venue as the one they visited the most frequently. In the case of the Casuarina All Sports Club, 283 people (from the total survey sample of 7,041) reported it as their most frequently visited venue and 3.5% of these people were problem gamblers.

Because the number of problem gamblers at some venues is very small, problem gambling estimates for those venues are imprecise, making comparisons between venues difficult (and resulting in the very large confidence intervals shown in Figure 3). To mitigate this effect, we have included a measure of statistical significance for each venue-specific problem gambling estimate. This is represented by the two dashed curves on the graph. Venues that lie above the top dashed line have a level of problem gambling that is statistically significantly higher than the sample mean (or average). Conversely, those venues that are below the bottom dashed line have a level of problem gambling that is statistically significantly lower than the sample mean.

This approach allows for comparison of problem gambling estimates for each venue with the mean estimate for the entire sample (i.e. 2%). The mean for all respondents is represented by the horizontal dashed line. Those venues with a problem gambling rate significantly higher than the sample mean lie above the top curved line. As a case in point, the proportion of problem gamblers in the Casuarina All Sports Club is higher than the sample mean and this difference is statistically significant (Figure 8).
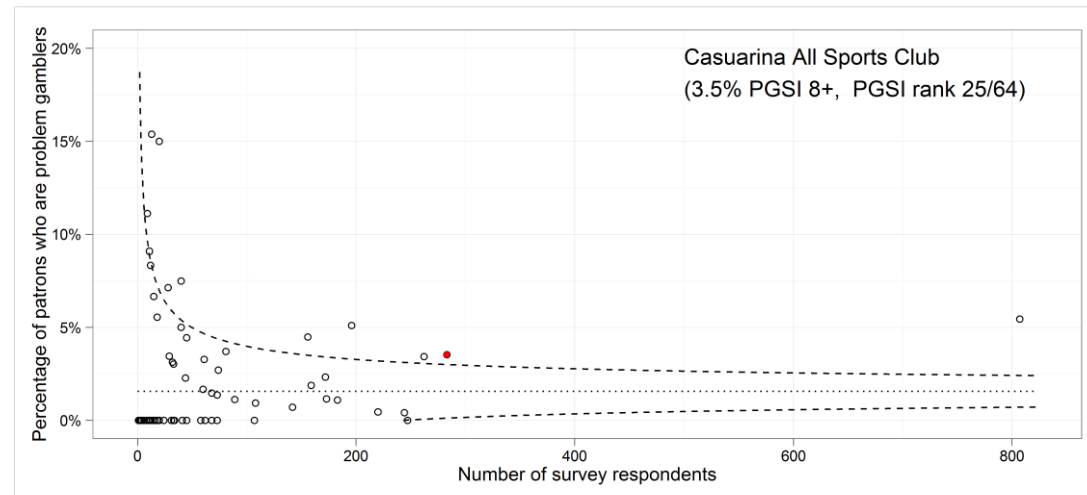
Figure 8: Example problem gambling comparison chart

2.5 PROBLEM GAMBLING RISK AND EGM GAMBLING PARTICIPATION

The problem gambling and EGM participation chart presents problem gambling levels for each venue disaggregated by risk category. The vertical (y-axis) of the chart presents risk categories of non-problem, low risk, moderate risk, and high risk gamblers. These were determined by specific scores on the PGSI (see section 4.2.2) and are not population weighted. The horizontal (x-axis) represents the percentage of patrons in each of the risk categories. All patrons are represented by blue circles while the subset of EGM gamblers are represented by brown triangles. For example, Figure 9 shows that 3.5% of visitors to this venue were problem gamblers and this proportion increased to 9.5% when only those who gambled on EGMs on their last visit were considered.
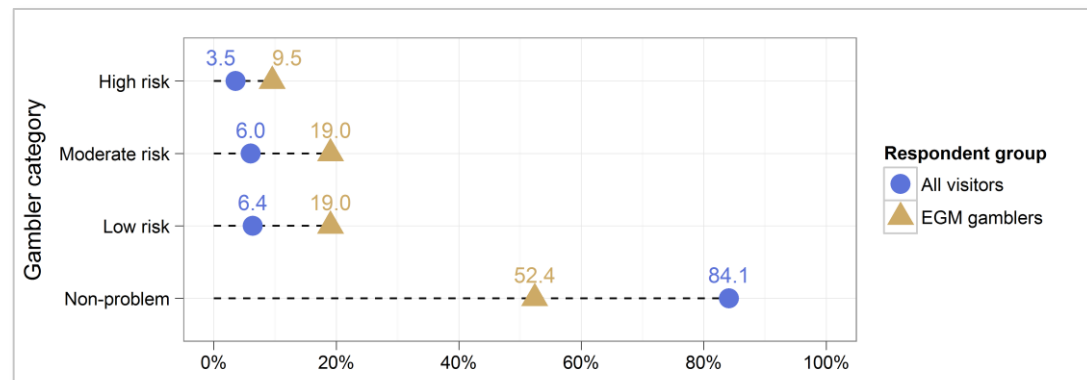

Figure 9: Example problem gambling and EGM gambling participation chart

2.6 DISTANCE PROFILE

The distance profile chart displays the distance between a respondent's home address and the venue they visited most frequently (Figure 10). Respondents are grouped on the horizontal (y-axis) according the distance between their residential address and preferred venue, with each group

spanning 500m. For example, Figure 10 shows that 48% of patrons lived within 1 kilometre (by the road network) of this venue. We have fitted a negative exponential trend line (superimposed above the histogram in brown) to show the distance decay associated with each venue. The distance profile has not been population weighted.
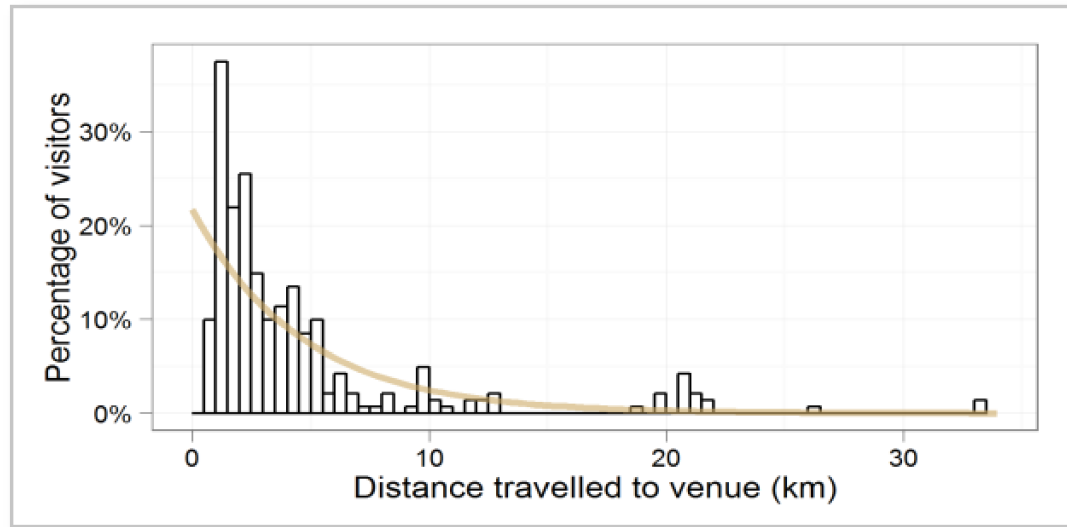

Figure 10: Example of a distance profile chart

2.7 ESTIMATED NUMBER OF PROBLEM GAMBLERS

The estimated number of problem gamblers Table 2 shows the population-weighted estimate of the number of people who prefer to visit that venue according to their problem gambling risk category. Problem gambling risk categories were defined as per the PGSI (see section 4.2.2). The population-weighted estimate refers to our estimate of the number of problem gamblers associated with this venue for the entire NT population (our approach to population weighting is described in section 4.1). To account for the considerable uncertainty involved in the sampling and population weighting process, 95% confidence intervals for the population counts are parenthetically indicated in grey. Reading Table 2, we estimate that there are 240 high-risk gamblers who prefer to visit this particular venue, although the true value is likely to fall within the range from 103 to 530 gamblers.

Table 2: Example estimated number of problem gamblers

Gambler category	Estimated number	
High risk	**240**	(103 – 539)
Moderate risk	**233**	(104 – 492)
Low risk	**271**	(160 – 453)
Non–problem	**2781**	(2476 – 3013)

2.8 PATRON CHARACTERISTICS

The patron characteristics table (see Table 3) presents the population-weighted characteristics of the observed catchments along with 95% confidence intervals in parentheses. To provide a comparison, we have also included the same characteristics for total visitors to all venues. This allows venue-specific patron characteristics to be more clearly distinguished.

Table 3: Example patron characteristics table

	Casuarina Club estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	46.9	(44.3 – 49.4)	41.2	(41.1 – 41.3)
Per cent female	49.4	(41.7 – 57.2)	48.5	(48.5 – 48.5)
Per cent university educated	45.1	(37.2 – 53.2)	46.9	(45.4 – 48.5)
Per cent < $149 weekly earnings	5.3	(3.1 – 8.6)	7.1	(6.3 – 8.0)
Per cent $150 – $599 weekly earnings	23.9	(17.5 – 31.3)	17.8	(16.7 – 19.0)
Per cent $600 – $1,599 weekly earnings	61.1	(53.4 – 68.5)	58.7	(57.1 – 60.2)
Per cent > $1,600 weekly earnings	9.6	(6.1 – 14.3)	16.4	(15.3 – 17.6)
Mean distance travelled to venue (km)	5.2	(4.3 – 6.2)	7.3	(6.9 – 7.7)
Per cent gambled on EGMs on last visit	21.8	(15.4 – 29.4)	14.1	(12.9 – 15.3)
Mean EGM session length (minutes)	74.2	(48.6 – 99.7)	88.2	(78.6 – 97.9)
Mean number of visits per month	2.8	(2.5 – 3.2)	3.4	(3.3 – 3.6)

2.9 CAVEATS AND LIMITATIONS

There are a number of limitations to our approach that need to be considered when interpreting the visualisations presented in this atlas.

2.9.1   Sample Frame Bias

Our use of GNAF to extract a sample frame missed some sections of the NT population. For example, we were unable to reach some households where Australia Post does not deliver mail directly. To counter this we conducted hand-deliveries to a sample of 2,300 residences in the peri-urban areas of Darwin and Alice Springs (see section 4.1). However, our sample frame did not include small urban settlements, Aboriginal communities, or town camps. To counter this we conducted a separate study of the Aboriginal catchment of the Alice Springs casino reported elsewhere (see Doran et al. 2013; Young and Doran 2011; Young et al. 2013). The sample frame also excluded people who do not live in residential households such as some mobile workers, members of the armed forces, and tourists.

In terms of the atlas, this limitation meant that we did not have enough data to produce observed maps for some small venues (e.g. the Crossways Hotel in Katherine) or ones that were in remote places outside of our sample frame (e.g. the Arnhem Club in Nhulunbuy). Of the 79 EGM venues in the NT at the time of the study, we were able to produce survey-based problem gambling estimates and observed catchment maps for 49 of these (see Figure 3).

2.9.2 Non-Response Bias

The majority of households who received a questionnaire (approx. 85%) did not return it. While this is an acceptable response rate for a mail-survey, it inevitably introduced bias into the sample. This means that groups of certain people, who share similar characteristics, may be more likely to respond than others. For example, our survey responses contained an overrepresentation of older women (see Table 5: Respondent characteristics). To adjust for this bias we conducted post-stratification of survey responses, stratifying by age bracket (15-30, 30-45, 45-60 and 65+), gender and survey region (Darwin urban, Darwin peri-urban, Katherine, Alice Springs urban, and Alice Springs peri-urban).

However, this weighting does not account for the situation where there are significant differences in gambling behaviour and outcomes between respondents and non-respondents. Non-response bias is potentially magnified for problem gamblers as they are a subset of the population who are relatively scarce. Extrapolation from this small sample translates into higher uncertainty in the estimate. Therefore, we have presented estimates of problem gambling levels in each catchment as a percentage of all visitors along with the 95% confidence interval for each estimate (see Figure 3). The confidence intervals indicate that if we replicated this study 20 times, in 19 cases we would expect to find a value that lies within the portrayed range. Note that the confidence intervals are very large for venues where we have few responses (e.g. Squires Tavern), indicating the imprecision of the point estimate, but relatively small for larger venues (e.g. Sky City Casino), indicating a more precise point estimate.

2.9.3 Representation Error

The spatial visualisations we present are projections of a dataset that give the impression of a continuous phenomenon (i.e. venue catchment density) across space. In reality, the underlying patterns are more fragmented and complex than the maps suggest. The images are smoothed representations designed to provide a visual guide to a social phenomenon (in much the same way as isolines are used to represent likely temperature gradients on a weather map). For example, we have averaged responses across space even for places where no people actually live. In addition, we specifically mapped the venues which respondents reported visiting most frequently in the month preceding the survey. As many people visit more than one venue the true catchment sizes are likely to be larger than portrayed for some venues. Therefore, the maps should not be regarded as identical with the social phenomena itself but a *relative* visual guide to differences in catchment extent and intensity between individual venues.

2.9.4 Under-Reporting of Problem Gambling

While we have used existing best-practice in our choice of gambling screen for the NT context (Stevens and Young 2008; Young and Stevens 2008), all gambling screens when administered to the general population tend to under-report the true extent of problem gambling largely due to the reluctance of problem gamblers to fully disclose sensitive personal information. For example, the Productivity Commission (1999), based on a study of 400 gamblers undergoing counselling, found that only 29% of these gamblers would have answered a gambling screen honestly. This means that our atlas is likely to under-report the true extent of problem gambling. However, our purpose has been to provide a comparison between venues, and assuming that problem gamblers under-report consistently across individual venue catchments, we can draw such direct comparisons.
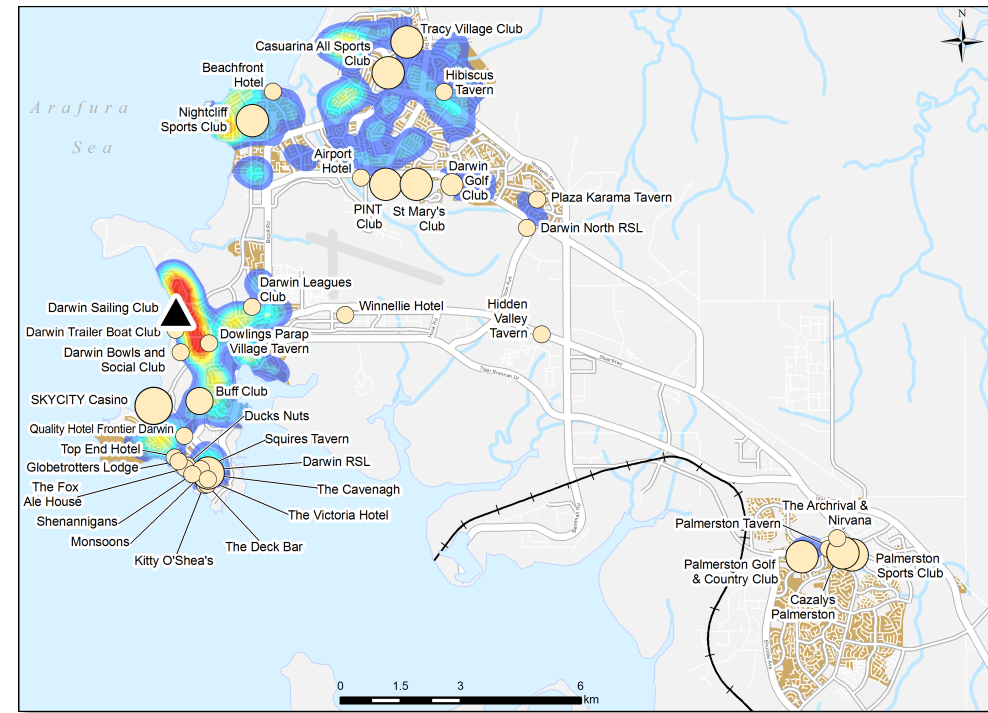
3 GAMBLING VENUES IN THE NORTHERN TERRITORY
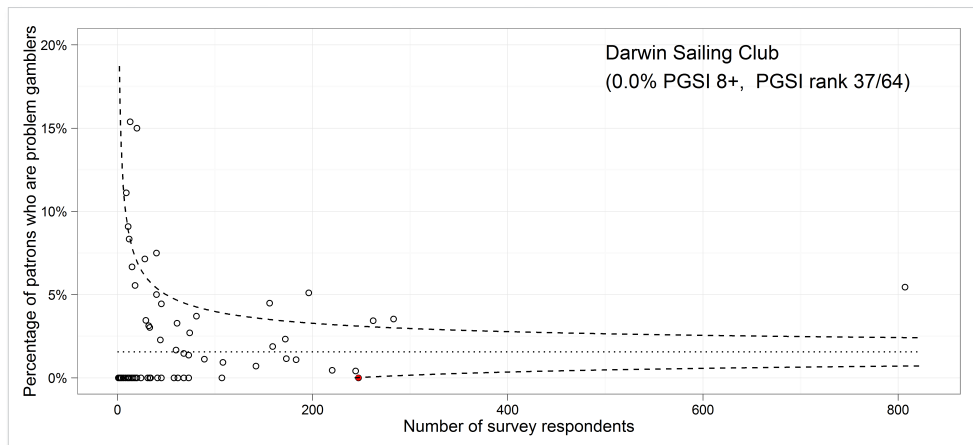
3.1 DARWIN-WIDE VENUES
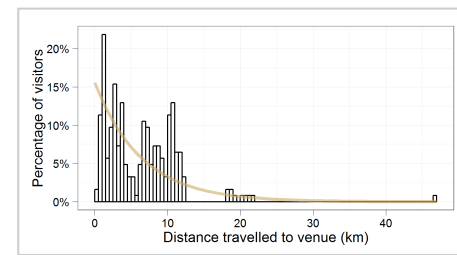
DARWIN SAILING CLUB
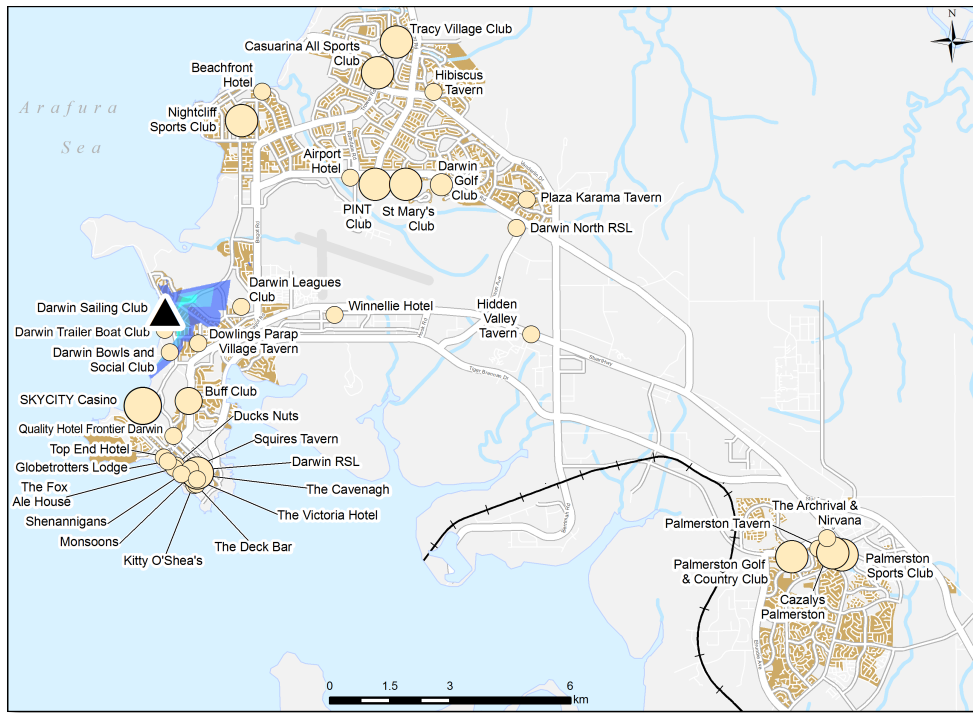
PREDICTED CATCHMENT

OBSERVED CATCHMENT

n respondents:	247 persons
Estimated catchment size:	3,105 persons

Darwin Sailing Club
(0.0% PGSI 8+, PGSI rank 37/64)

PROBLEM GAMBLING COMPARISON

DISTANCE PROFILE

Gambler type	Estimated number	
High risk	-	-
Moderate risk	**50**	(0, 111)
Low risk	**85**	(4, 165)
Non-problem	**2970**	(2870, 3070)

ESTIMATED NUMBER OF PROBLEM GAMBLERS
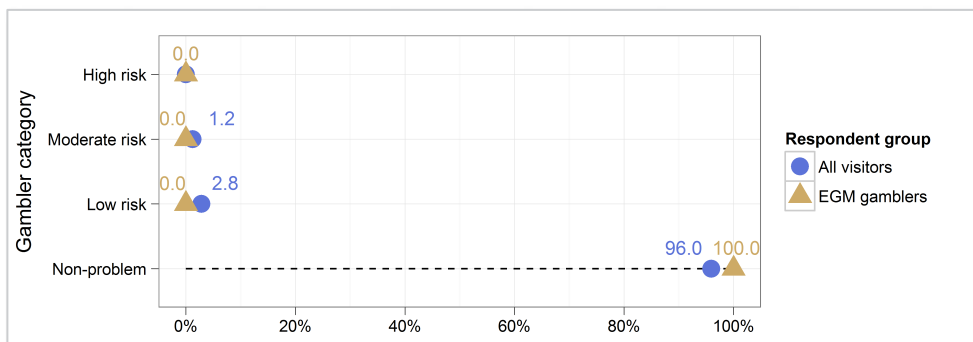
PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	Darwin Sailing Club estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**46.2**	(43.9, 48.6)	**41.2**	(41.1, 41.3)
Per cent female	**48.9**	(41.3, 56.5)	**48.5**	(48.5, 48.5)
Per cent university educated	**62.6**	(54.8, 69.8)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**7.2**	(3.9, 10.6)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**10.4**	(6.8, 13.9)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**51.2**	(43.6, 58.8)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**31.2**	(23.9, 38.5)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**6.4**	(5.7, 7.2)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**2.2**	(1.0, 4.6)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**33.2**	(16.5, 49.8)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**2.8**	(2.4, 3.2)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

DARWIN TRAILER BOAT CLUB
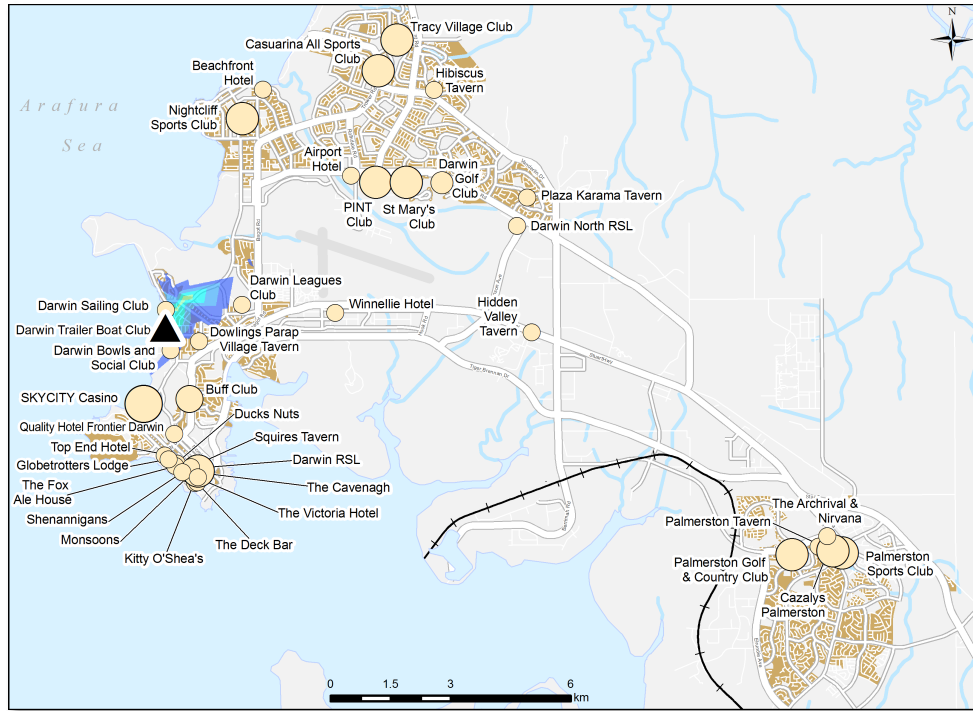
PREDICTED CATCHMENT
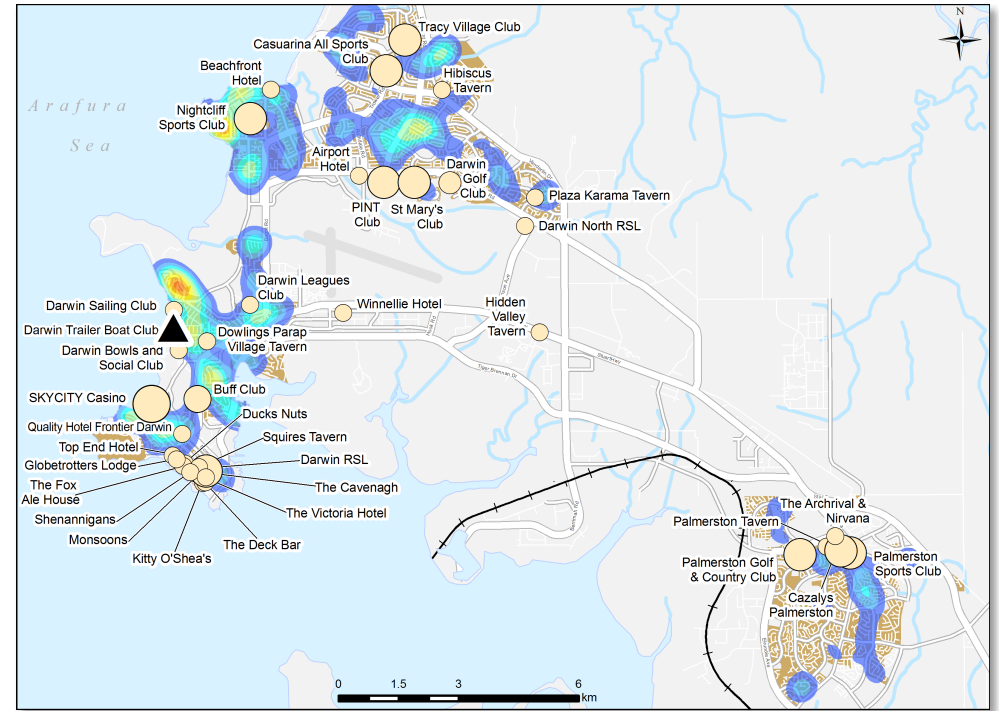
OBSERVED CATCHMENT

n respondents:	244 persons
Estimated catchment size:	3,174 persons
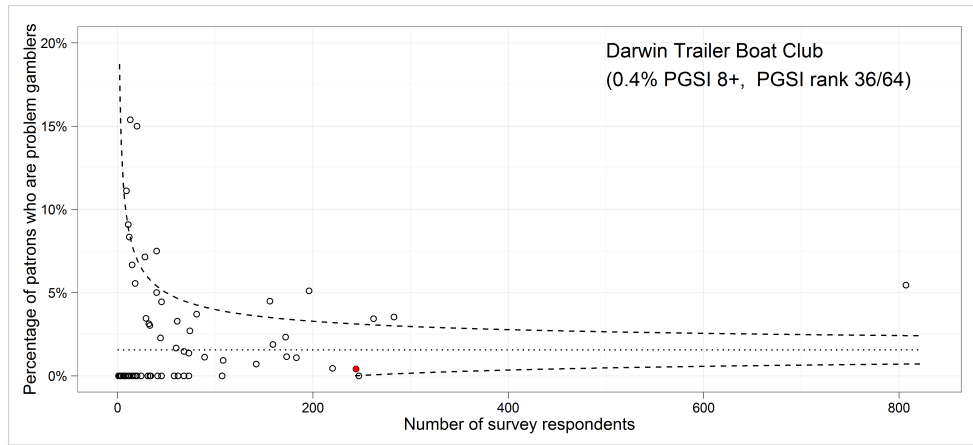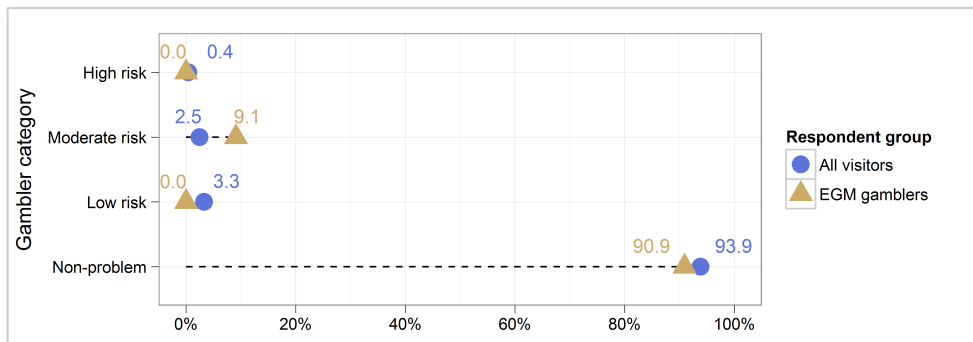
Darwin Trailer Boat Club
(0.4% PGSI 8+, PGSI rank 36/64)

PROBLEM GAMBLING COMPARISON

PROBLEM GAMBLING AND GAMBLING PARTICIPATION
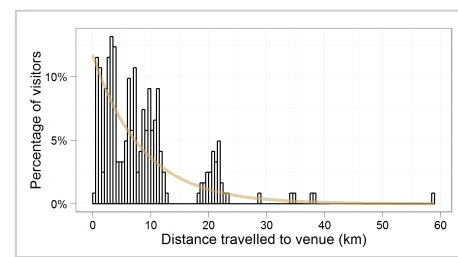
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**13**	(0, 37)
Moderate risk	**80**	(10, 150)
Low risk	**132**	(23, 242)
Non-problem	**2950**	(2820, 3079)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

	Darwin Trailer Boat Club estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**45.5**	(43.2, 47.9)	**41.2**	(41.1, 41.3)
Per cent female	**50.8**	(43.1, 58.5)	**48.5**	(48.5, 48.5)
Per cent university educated	**51.0**	(43.1, 58.9)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**8.7**	(2.7, 14.7)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**14.0**	(9.5, 18.5)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**56.4**	(48.6, 64.2)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**20.9**	(15.0, 26.8)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**9.1**	(7.9, 10.3)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**3.5**	(1.9, 6.5)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**27.6**	(18.4, 36.8)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**2.1**	(1.8, 2.3)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

SKYCITY CASINO
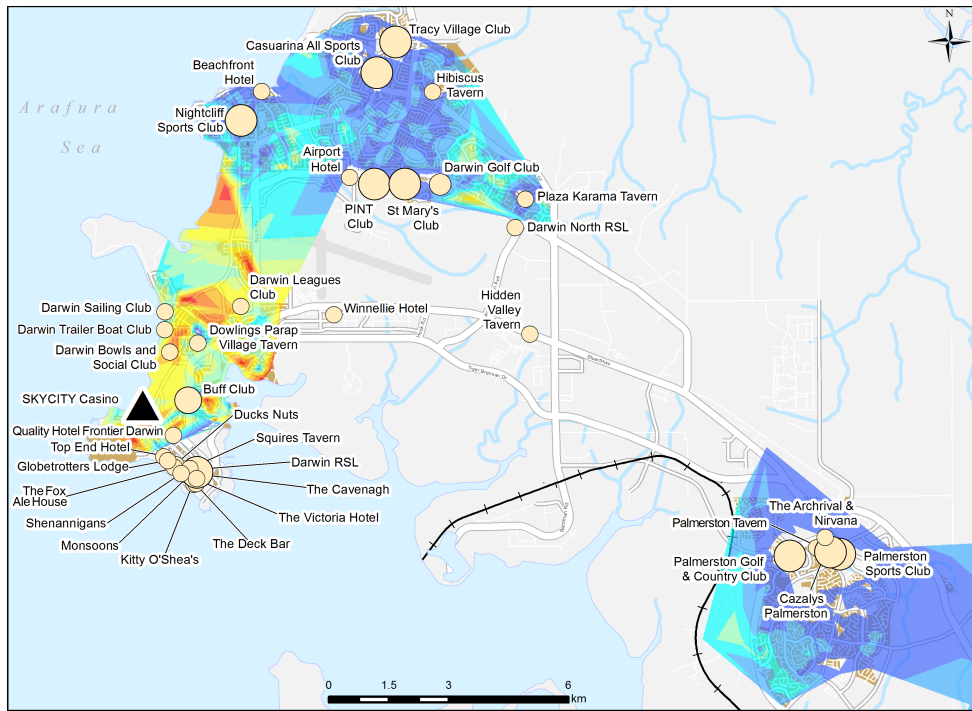
PREDICTED CATCHMENT
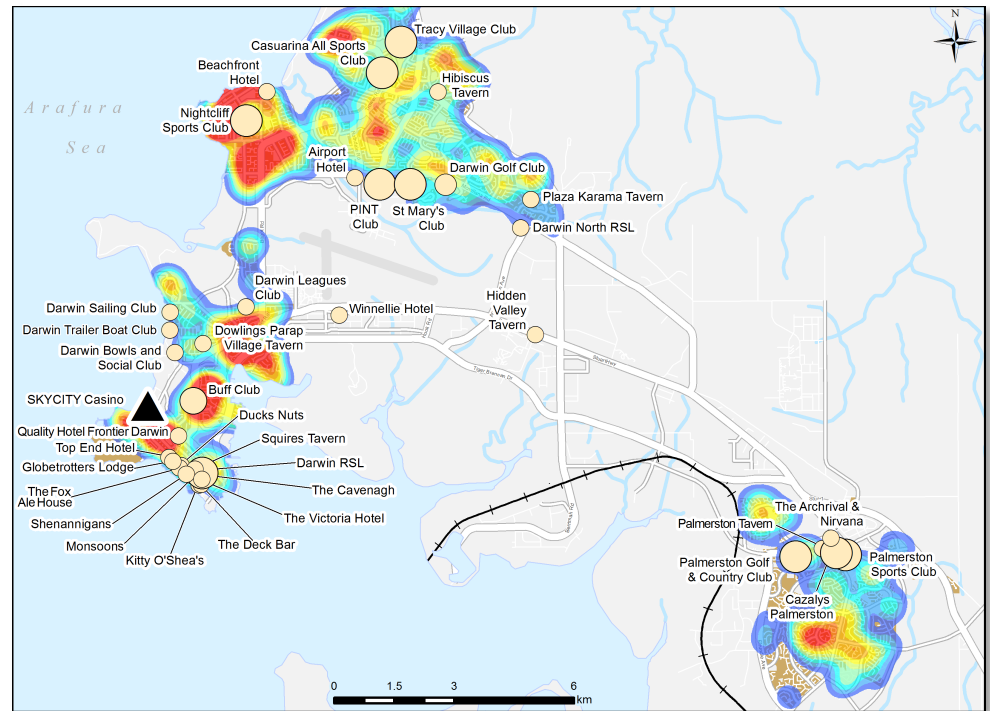
OBSERVED CATCHMENT

n respondents:	807 persons
Estimated catchment size:	12,328 persons

SKYCITY Darwin
(5.5% PGSI 8+, PGSI rank 11/64)

PROBLEM GAMBLING COMPARISON

PROBLEM GAMBLING AND GAMBLING PARTICIPATION
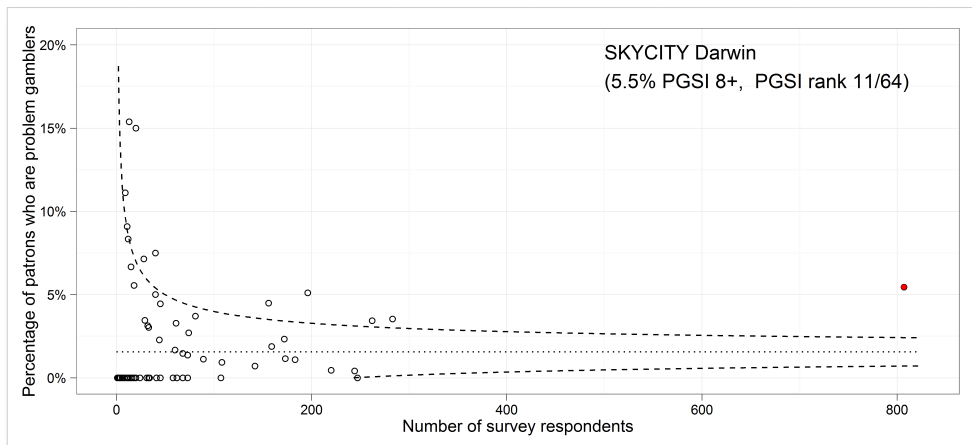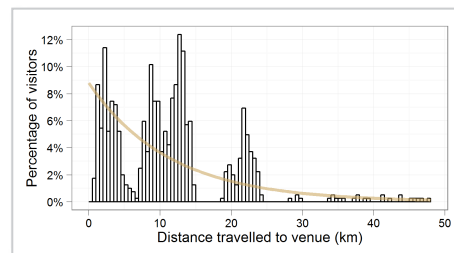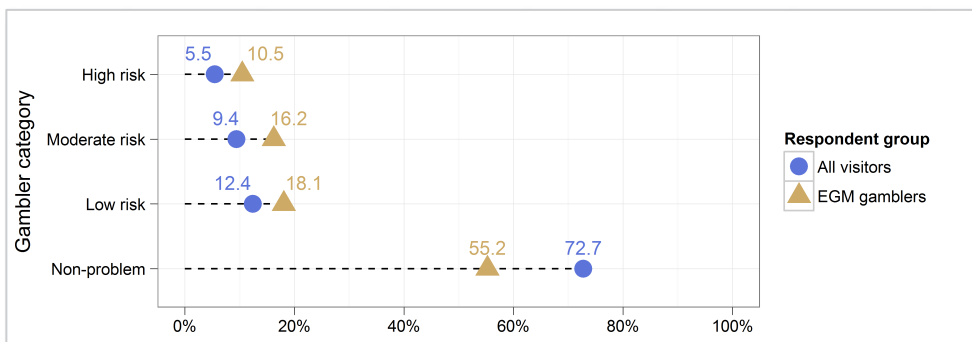
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**881**	(494, 1268)
Moderate risk	**1232**	(896, 1569)
Low risk	**1500**	(1139, 1862)
Non-problem	**8714**	(8176, 9252)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

|	Skycity Casino estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**41.0**	(39.7, 42.2)	**41.2**	(41.1, 41.3)
Per cent female	**53.5**	(49.1, 57.9)	**48.5**	(48.5, 48.5)
Per cent university educated	**52.5**	(48.0, 56.9)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**8.9**	(5.8, 12.0)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**18.5**	(15.2, 21.7)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**55.5**	(51.0, 60.0)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**17.1**	(13.8, 20.4)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**12.4**	(11.4, 13.3)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**42.7**	(38.3, 47.2)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**140.0**	(119.1, 160.9)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**2.7**	(2.3, 3.1)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS
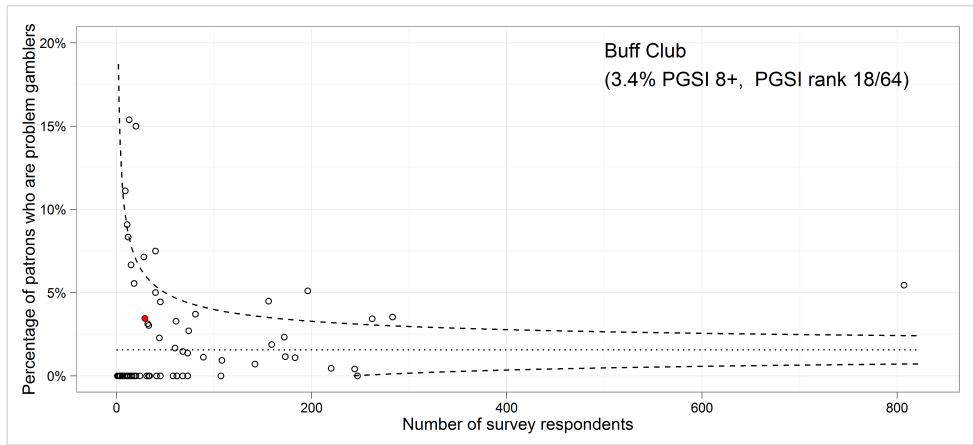
3.2 DARWIN CENTRAL BUSINESS DISTRICT VENUES
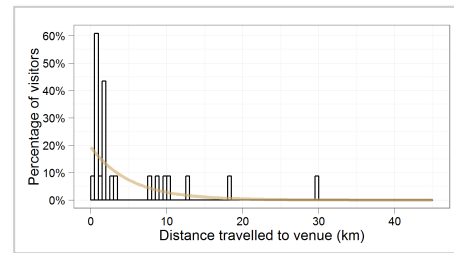
BUFF CLUB
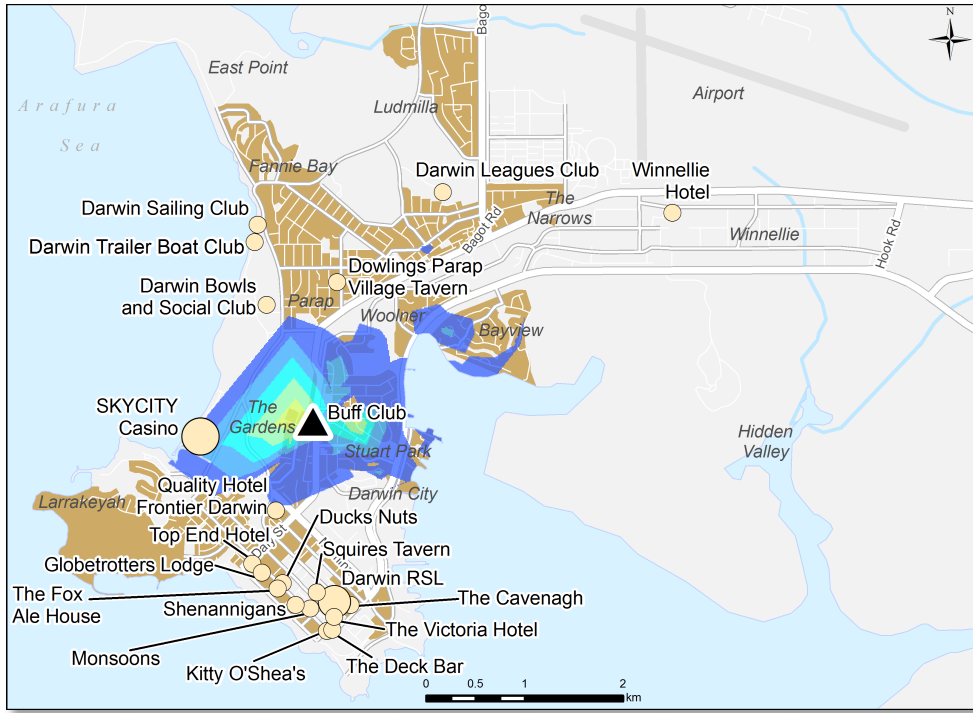
PREDICTED CATCHMENT
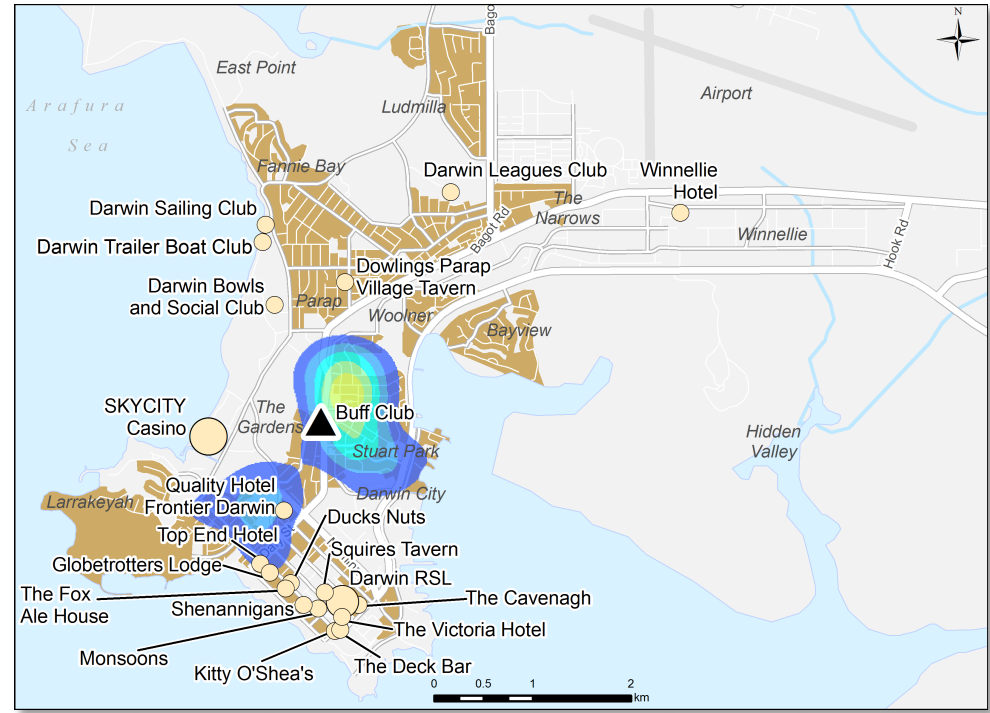
OBSERVED CATCHMENT

n respondents:	29 persons
Estimated catchment size:	403 persons

Buff Club
(3.4% PGSI 8+, PGSI rank 18/64)

PROBLEM GAMBLING COMPARISON
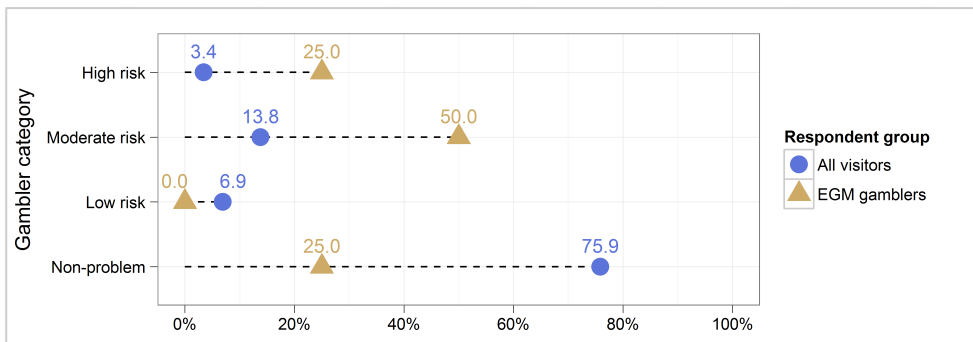
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**16**	(0, 45)
Moderate risk	**42**	(0, 85)
Low risk	**17**	(0, 42)
Non-problem	**327**	(269, 386)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	Buff Club estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**45.9**	(36.8, 54.9)	**41.2**	(41.1, 41.3)
Per cent female	**34.4**	(16.4, 58.3)	**48.5**	(48.5, 48.5)
Per cent university educated	**20.1**	(4.8, 35.5)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**4.9**	(0.0, 10.9)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**8.7**	(0.0, 17.4)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**78.2**	(63.4, 93.1)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**8.2**	(0.0, 17.3)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**5.9**	(2.6, 9.2)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**13.8**	(0.7, 27.0)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**68.9**	(23.2, 114.5)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**7.9**	(5.0, 10.7)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

DARWIN BOWLS AND SOCIAL CLUB
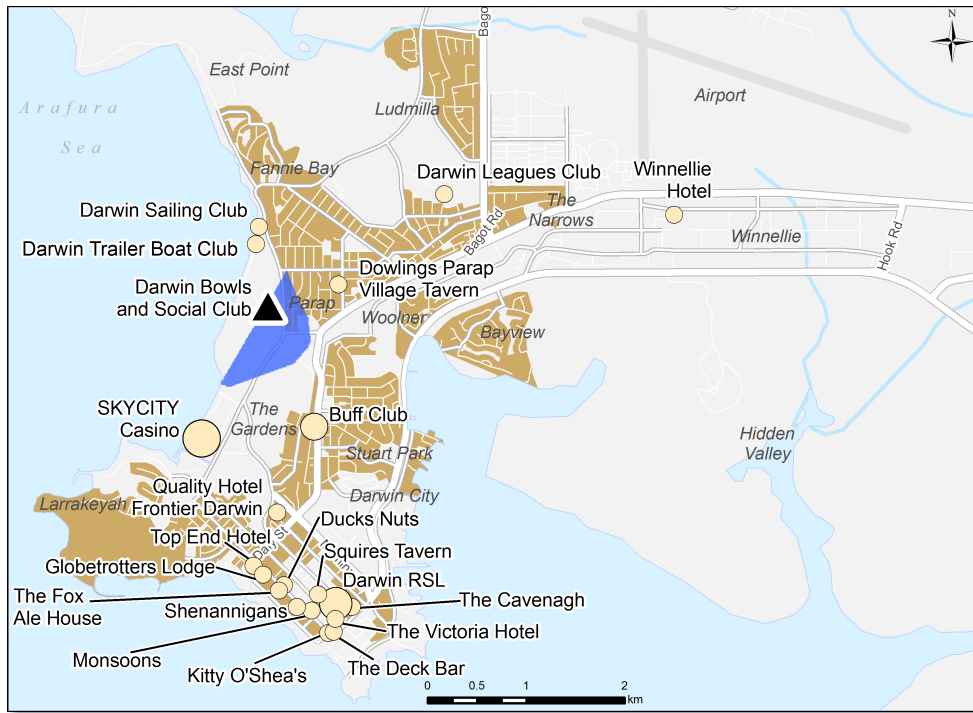
PREDICTED CATCHMENT
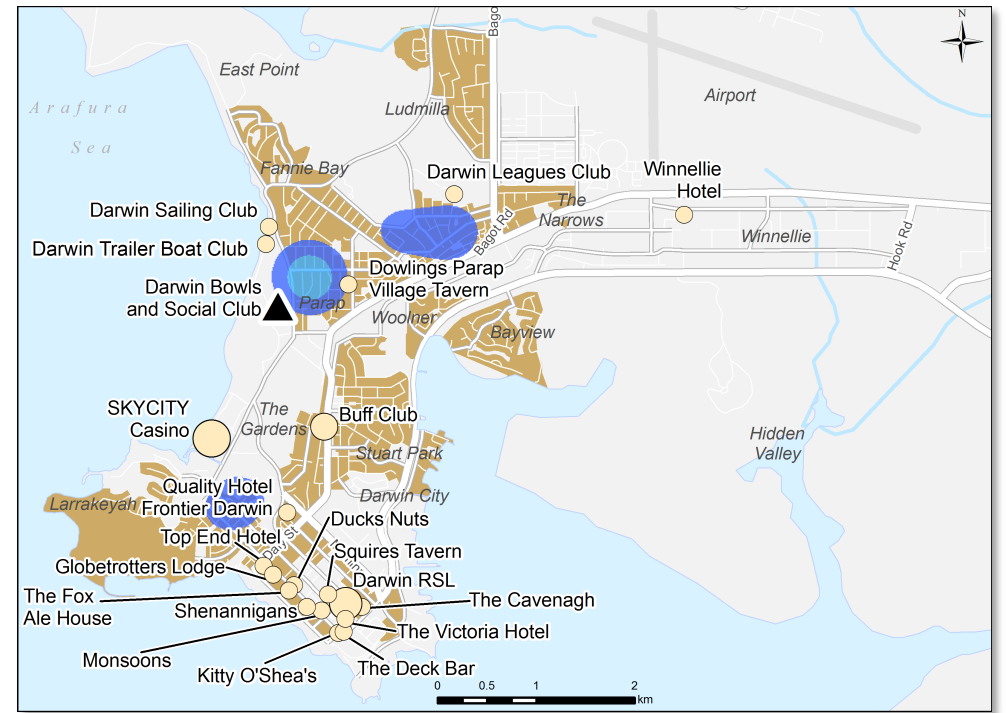
OBSERVED CATCHMENT

n respondents:	18 persons
Estimated catchment size:	214 persons
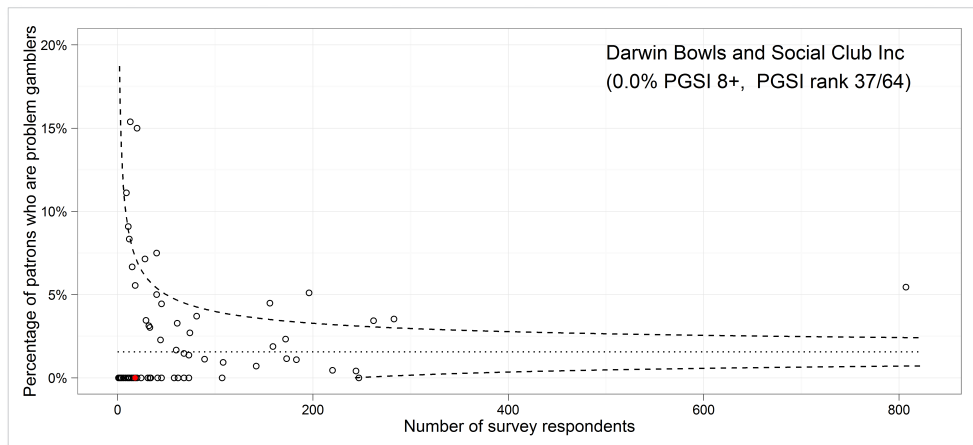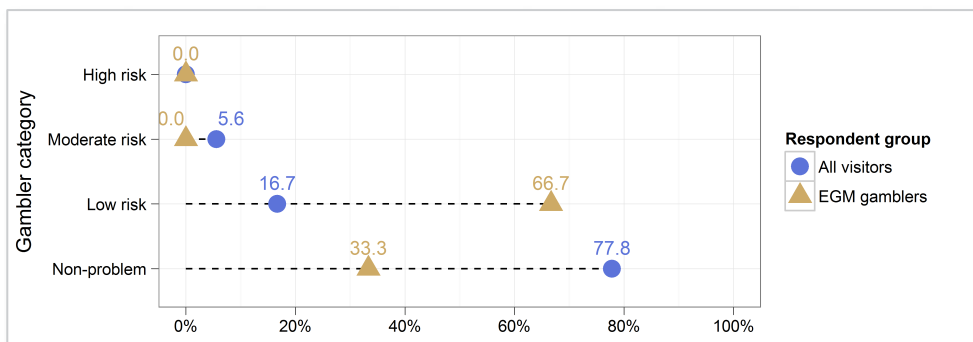
Darwin Bowls and Social Club Inc
(0.0% PGSI 8+, PGSI rank 37/64)

PROBLEM GAMBLING COMPARISON
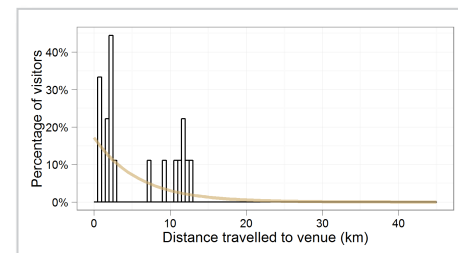
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	-	-
Moderate risk	**10**	(0, 28)
Low risk	**29**	(0, 62)
Non-problem	**175**	(139, 212)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	Darwin Bowls & Social Club estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**55.6**	(50.2, 61.0)	**41.2**	(41.1, 41.3)
Per cent female	**14.2**	(0.0, 29.9)	**48.5**	(48.5, 48.5)
Per cent university educated	**51.0**	(28.6, 73.1)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	-	-	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**20.2**	(2.8, 37.6)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**66.1**	(44.0, 88.1)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**13.8**	(0.0, 30.8)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**6.5**	(4.3, 8.8)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**13.5**	(0.0, 28.8)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**48.6**	(0.0, 108.1)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**6.8**	(4.1, 9.5)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

DARWIN RSL
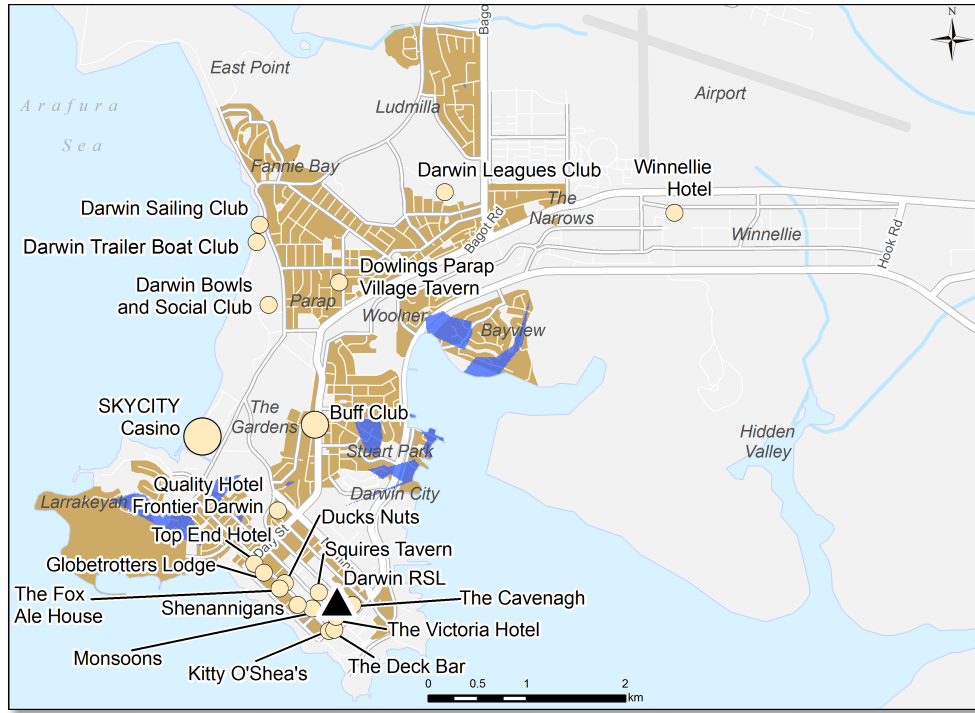
PREDICTED CATCHMENT
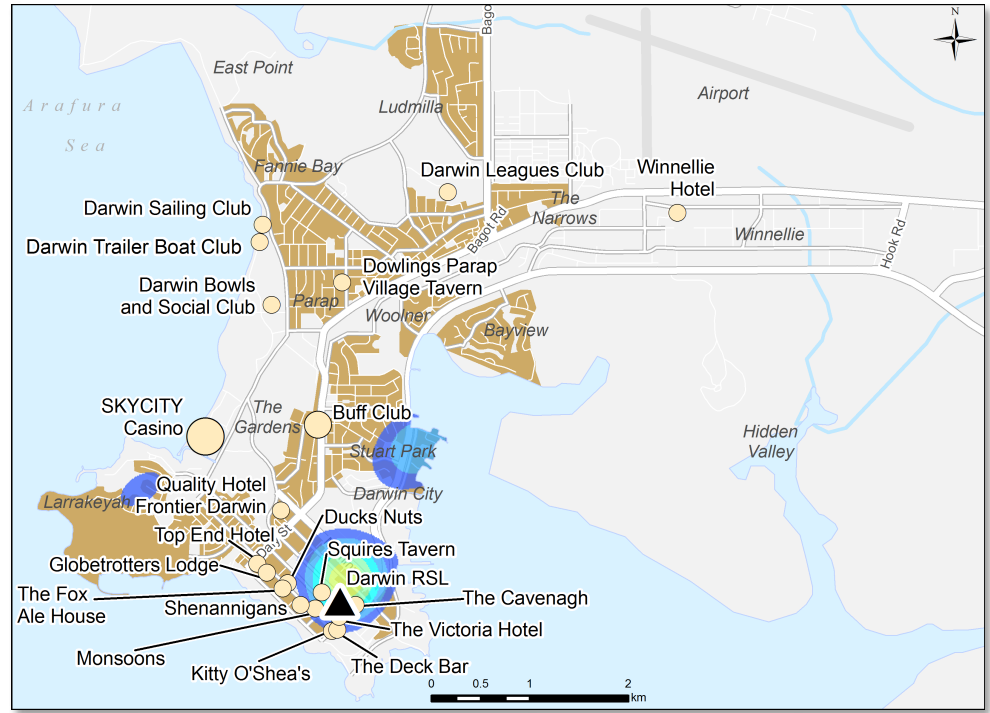
OBSERVED CATCHMENT

n respondents:	40 persons
Estimated catchment size:	498 persons
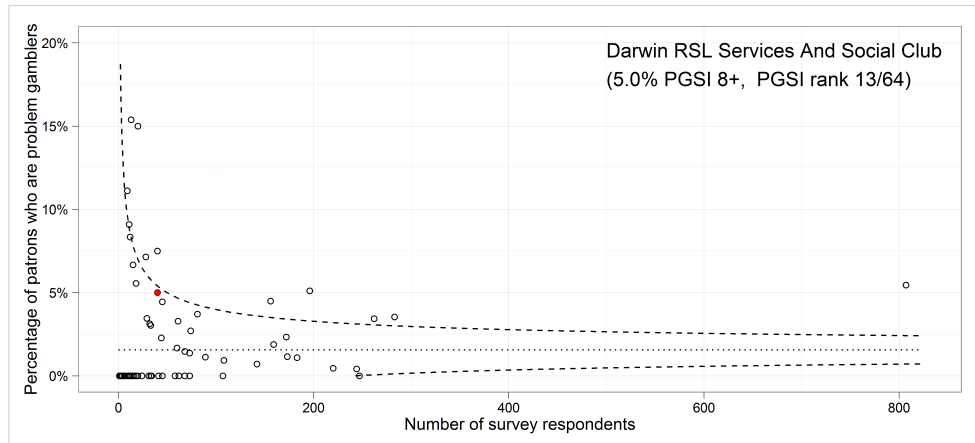
Darwin RSL Services And Social Club
(5.0% PGSI 8+, PGSI rank 13/64)

PROBLEM GAMBLING COMPARISON

PROBLEM GAMBLING AND GAMBLING PARTICIPATION
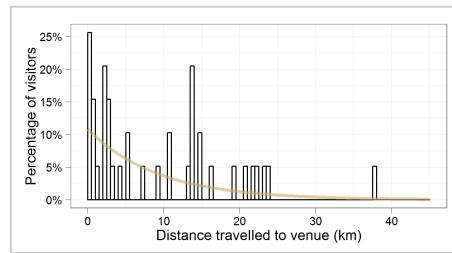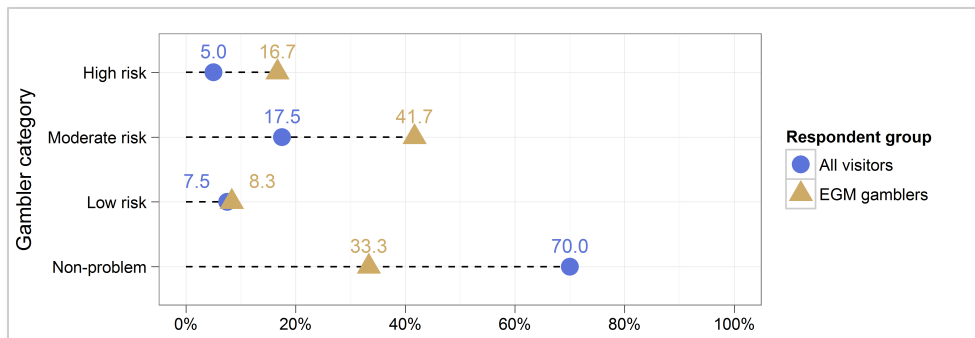
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**13**	(0, 31)
Moderate risk	**119**	(39, 199)
Low risk	**34**	(0, 71)
Non-problem	**332**	(250, 415)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

	Darwin RSL estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**51.0**	(44.6, 57.5)	**41.2**	(41.1, 41.3)
Per cent female	**30.7**	(16.1, 50.6)	**48.5**	(48.5, 48.5)
Per cent university educated	**26.2**	(11.0, 41.4)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**7.1**	(0.4, 13.9)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**25.6**	(12.3, 38.8)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**42.3**	(25.2, 59.4)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**25.0**	(9.6, 40.5)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**8.6**	(5.2, 12.1)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**33.4**	(19.2, 51.3)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**51.6**	(15.7, 87.6)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**6.1**	(4.2, 8.0)	**3.4**	(3.3, 3.6)

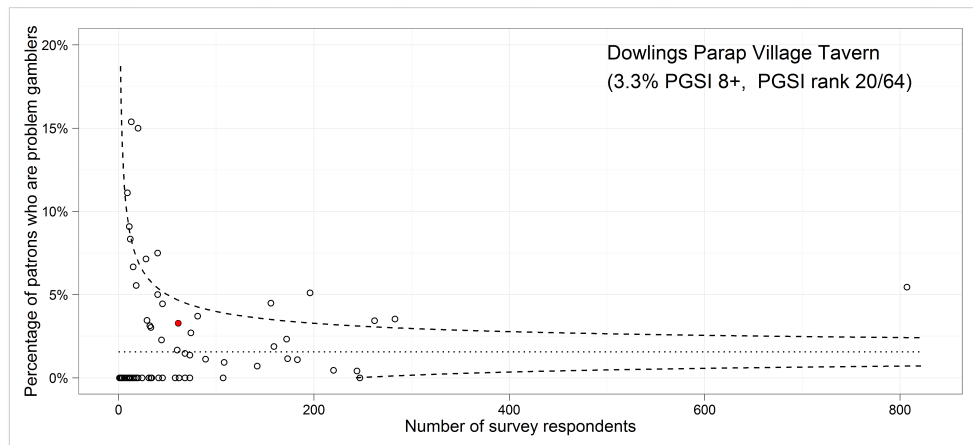**PATRON CHARACTERISTICS**

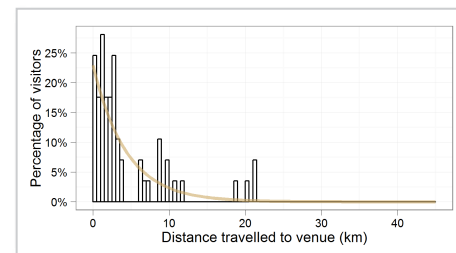# DOWLINGS PARAP VILLAGE TAVERN
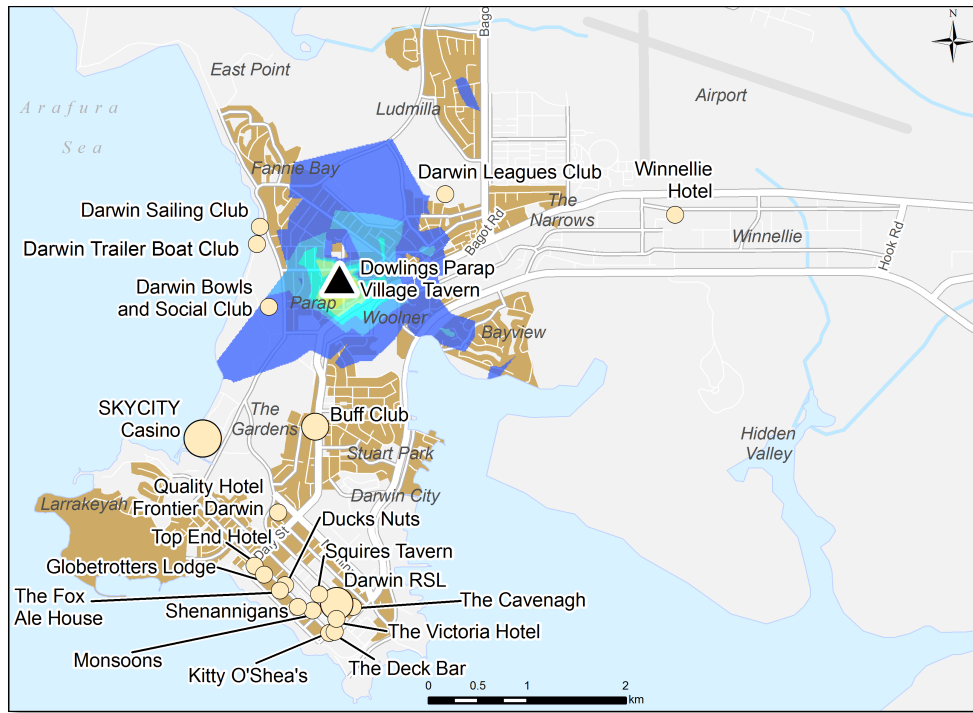
PREDICTED CATCHMENT
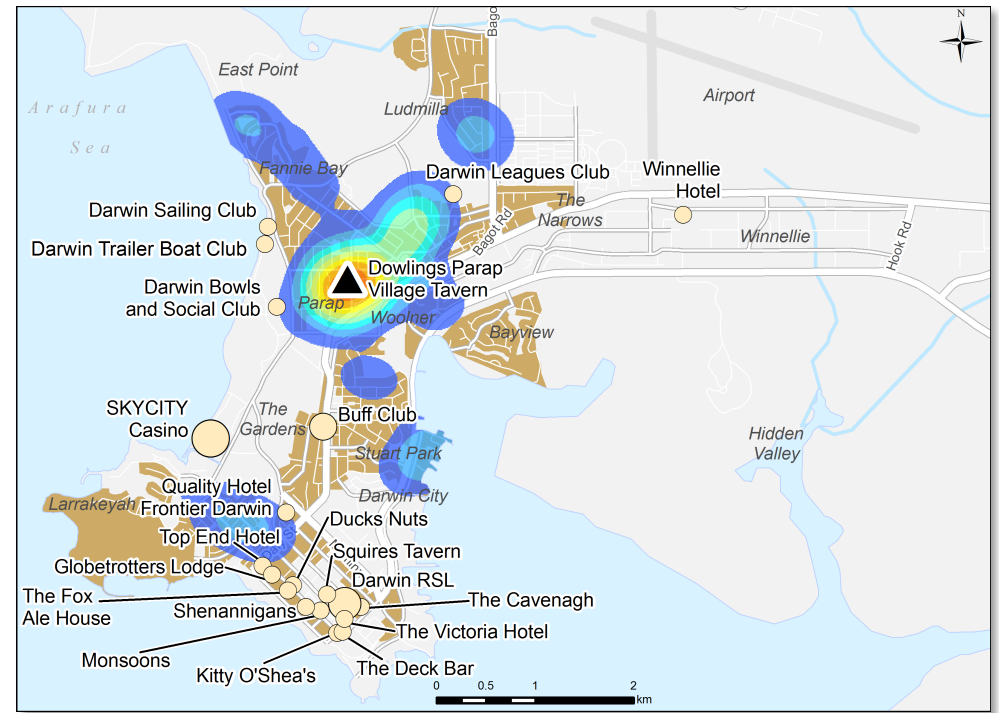
OBSERVED CATCHMENT

n respondents:	61 persons
Estimated catchment size:	1,068 persons

Dowlings Parap Village Tavern
(3.3% PGSI 8+, PGSI rank 20/64)

PROBLEM GAMBLING COMPARISON

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**240**	(103, 539)
Moderate risk	**233**	(104, 492)
Low risk	**271**	(160, 453)
Non-problem	**2781**	(2476, 3013)

ESTIMATED NUMBER OF PROBLEM GAMBLERS
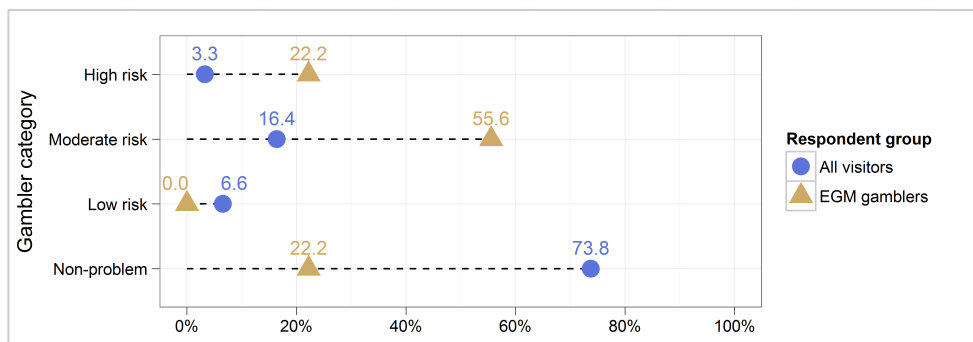
	Dowlings Parap Village Tavern estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**42.5**	(38.7, 46.4)	**41.2**	(41.1, 41.3)
Per cent female	**23.2**	(13.7, 36.4)	**48.5**	(48.5, 48.5)
Per cent university educated	**40.7**	(26.5, 56.7)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**2.5**	(0.0, 5.9)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**12.0**	(4.8, 19.3)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**56.3**	(40.2, 72.3)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**29.2**	(12.1, 46.4)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**5.3**	(2.6, 7.9)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**12.7**	(4.0, 21.4)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**61.7**	(29.5, 93.9)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**4.1**	(3.2, 4.9)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

DUCKS NUTS BAR AND GRILL
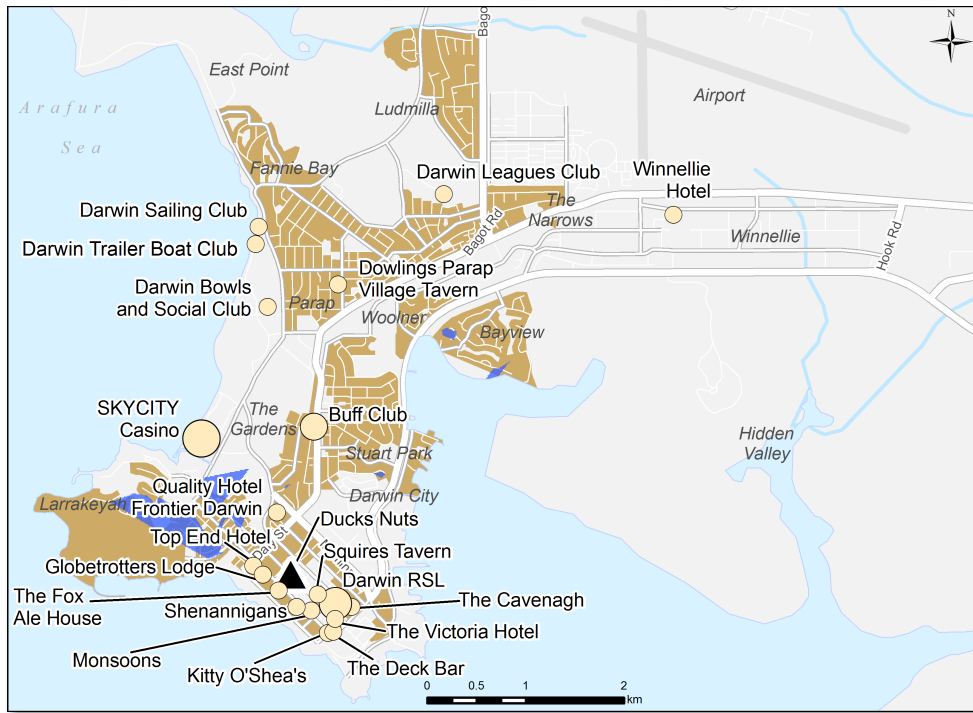
PREDICTED CATCHMENT
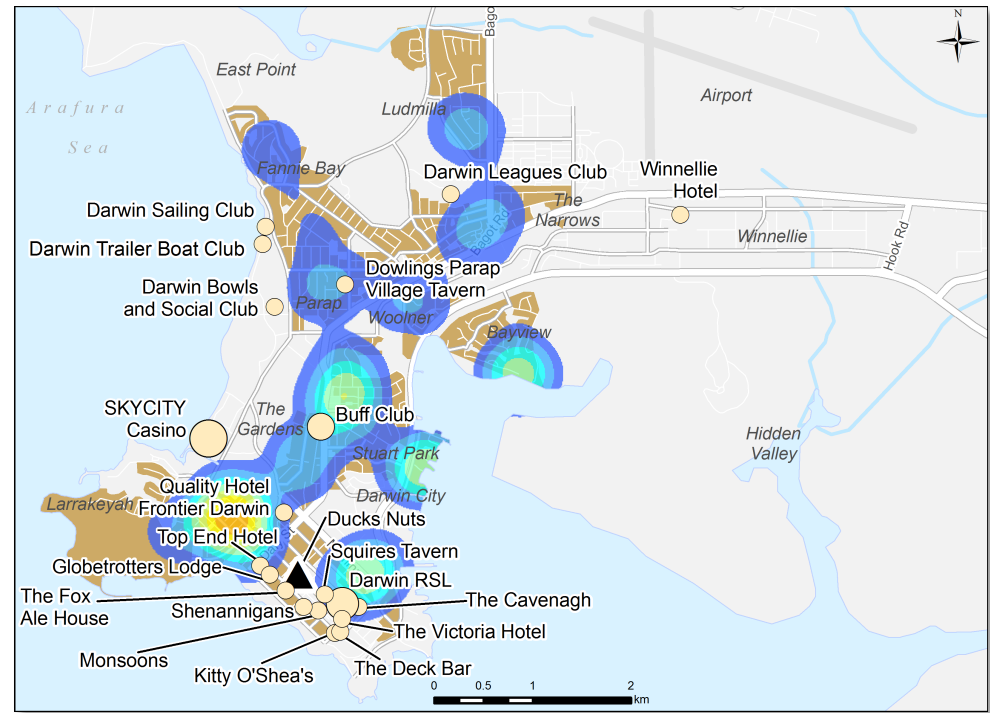
OBSERVED CATCHMENT

n respondents:	108 persons
Estimated catchment size:	2,272 persons

Ducks Nuts Bar & Grill
(0.9% PGSI 8+, PGSI rank 33/64)

PROBLEM GAMBLING COMPARISON
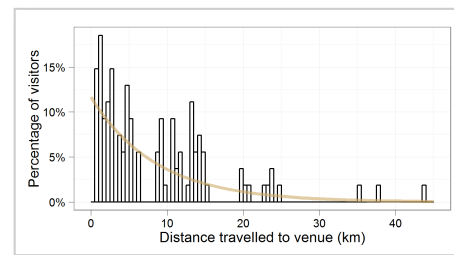
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**36**	(0, 104)
Moderate risk	-	-
Low risk	**221**	(76, 365)
Non-problem	**2015**	(1858, 2173)

ESTIMATED NUMBER OF PROBLEM GAMBLERS
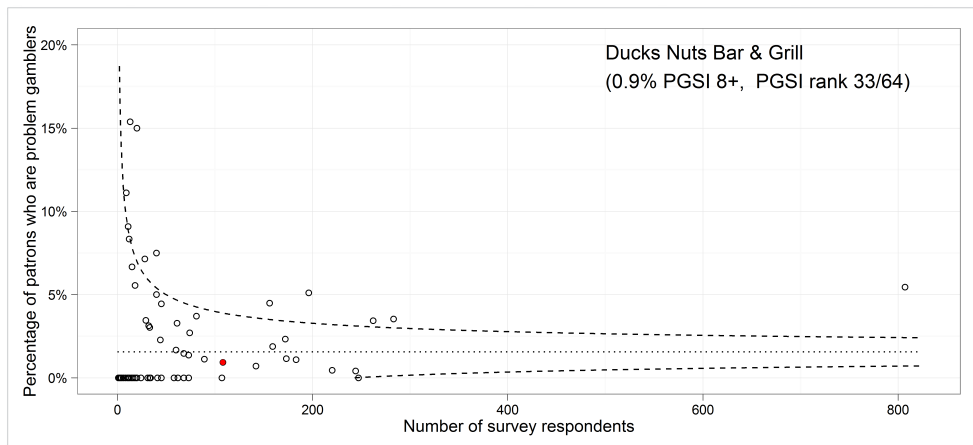
PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	Ducks Nuts Bar & Grill estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**33.1**	(31.1, 35.1)	**41.2**	(41.1, 41.3)
Per cent female	**61.7**	(48.7, 73.2)	**48.5**	(48.5, 48.5)
Per cent university educated	**69.1**	(57.6, 78.7)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**4.0**	(0.0, 8.3)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**15.7**	(6.6, 24.9)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**57.9**	(46.0, 69.8)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**22.4**	(12.2, 32.6)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**8.8**	(6.7, 10.8)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**1.2**	(0.3, 4.6)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**76.8**	(57.0, 96.6)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**4.1**	(2.9, 5.4)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

KITTY O'SHEA'S

PREDICTED CATCHMENT
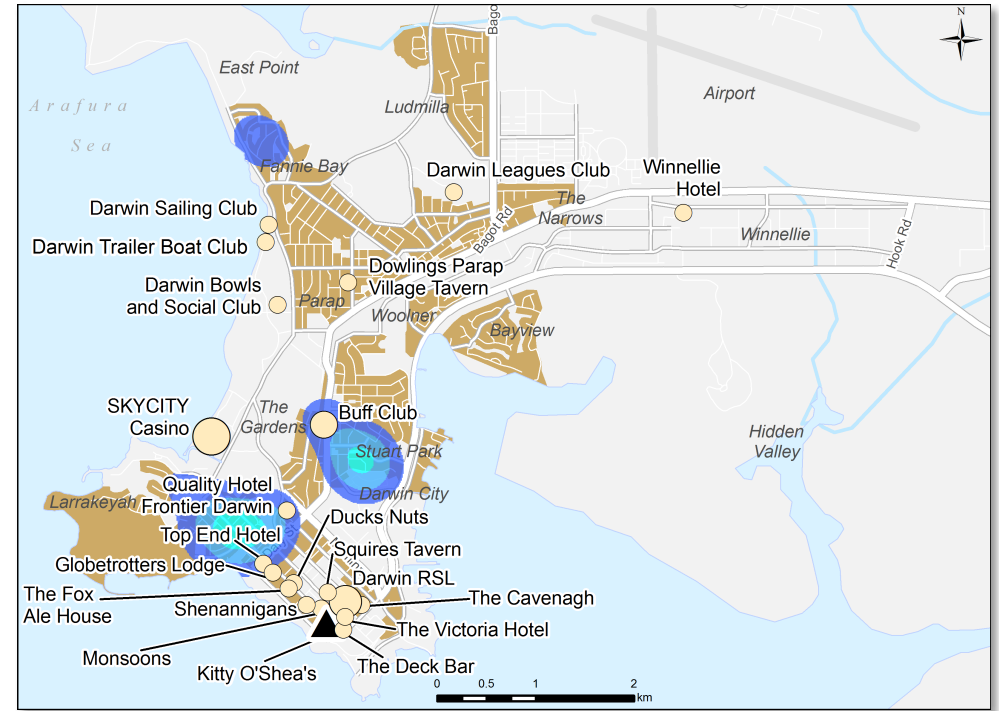
OBSERVED CATCHMENT

n respondents:	32 persons
Estimated catchment size:	776 persons
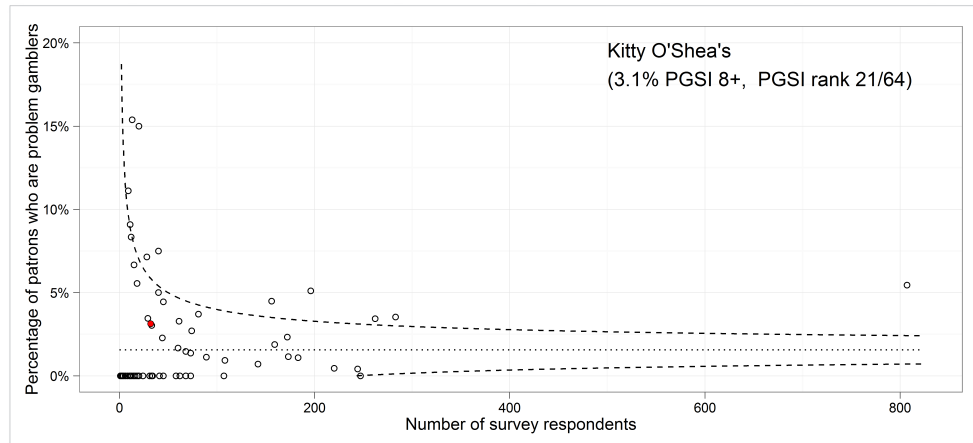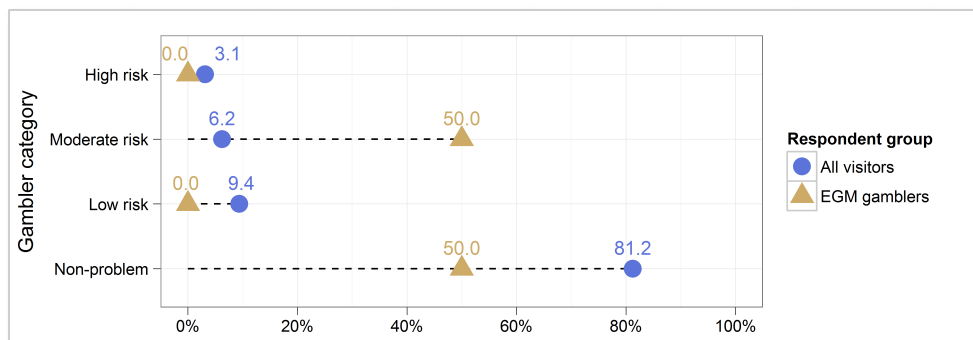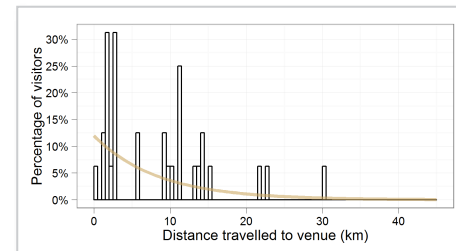
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**12**	(0, 35)
Moderate risk	**51**	(0, 124)
Low risk	**36**	(0, 77)
Non-problem	**676**	(590, 762)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

Kitty O'Shea's
(3.1% PGSI 8+, PGSI rank 21/64)

PROBLEM GAMBLING COMPARISON

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	Kitty O'Shea's estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**31.1**	(28.2, 34.0)	**41.2**	(41.1, 41.3)
Per cent female	**56.8**	(35.6, 75.8)	**48.5**	(48.5, 48.5)
Per cent university educated	**46.6**	(27.8, 66.3)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**0.6**	(0.0, 1.8)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**8.2**	(0.0, 18.0)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**80.9**	(67.1, 94.7)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**10.3**	(0.2, 20.4)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**8.0**	(4.5, 11.6)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**12.3**	(0.0, 30.4)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**26.5**	(11.9, 41.1)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**3.9**	(2.7, 5.1)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

MONSOONS
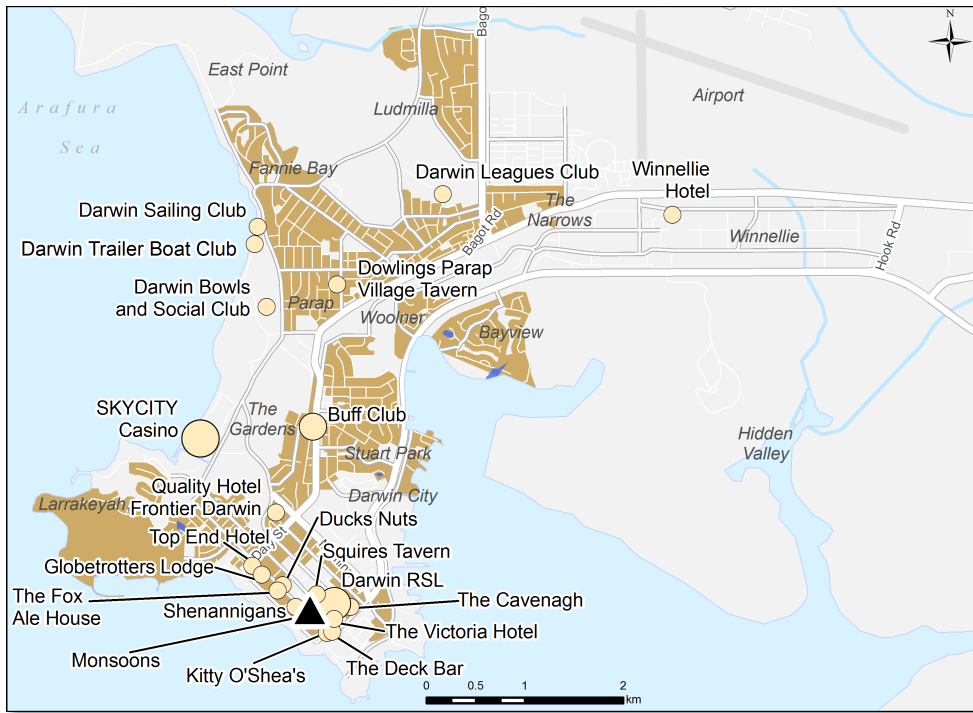
PREDICTED CATCHMENT
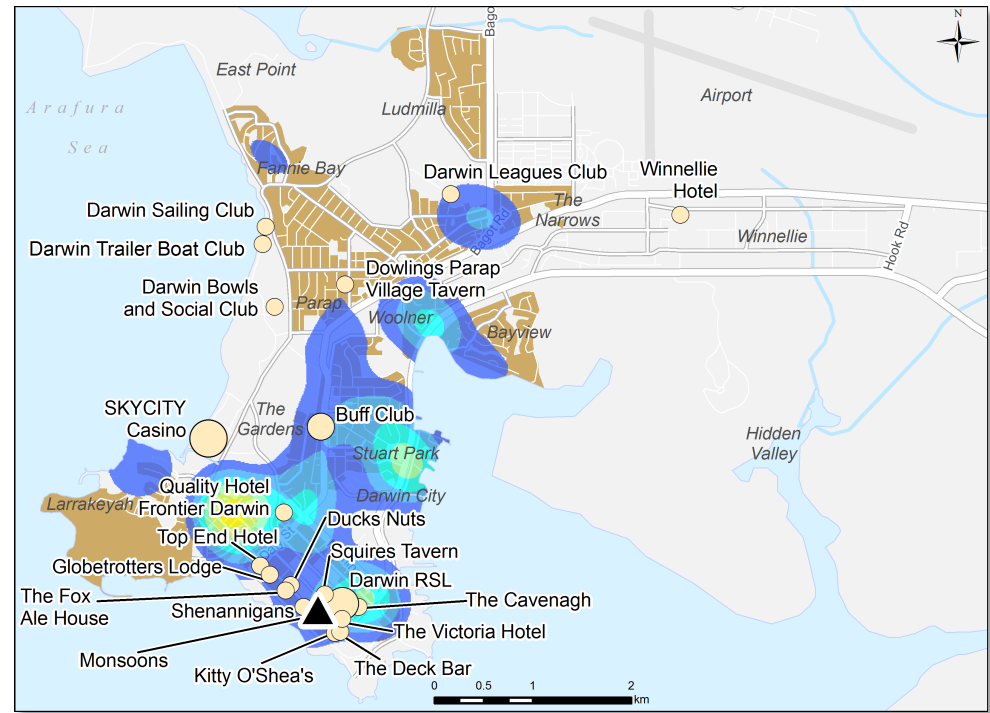
OBSERVED CATCHMENT

n respondents:	107 persons
Estimated catchment size:	2,850 persons

Monsoons
(0.0% PGSI 8+, PGSI rank 37/64)

PROBLEM GAMBLING COMPARISON

PROBLEM GAMBLING AND GAMBLING PARTICIPATION
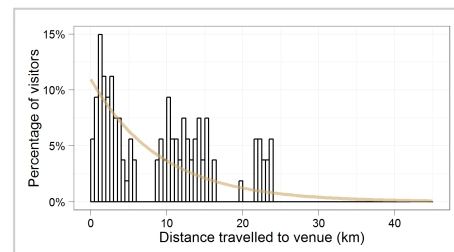
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	-	-
Moderate risk	**12**	(0, 36)
Low risk	**646**	(341, 952)
Non-problem	**2192**	(1886, 2497)

ESTIMATED NUMBER OF PROBLEM GAMBLERS
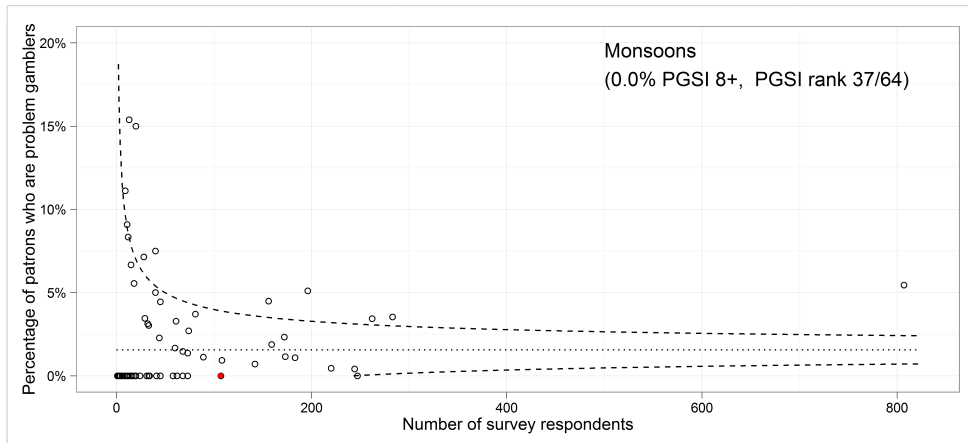
	Monsoons estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**29.5**	(28.0, 31.0)	**41.2**	(41.1, 41.3)
Per cent female	**55.0**	(42.8, 66.8)	**48.5**	(48.5, 48.5)
Per cent university educated	**53.7**	(42.0, 65.1)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**4.9**	(0.9, 8.8)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**13.3**	(6.0, 20.5)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**65.7**	(54.9, 76.5)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**16.2**	(7.5, 24.9)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**9.6**	(7.8, 11.4)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**7.0**	(0.0, 14.4)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**29.6**	(0.0, 60.5)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**3.3**	(2.5, 4.1)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

QUALITY HOTEL FRONTIER DARWIN

PREDICTED CATCHMENT
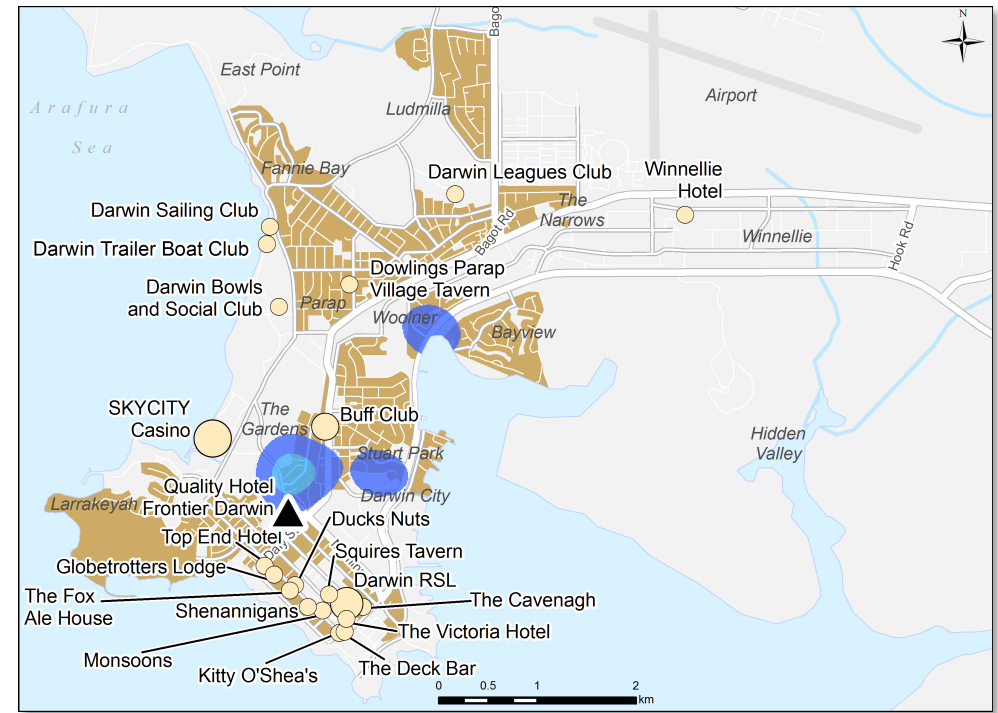
OBSERVED CATCHMENT

n respondents:	15 persons
Estimated catchment size:	364 persons
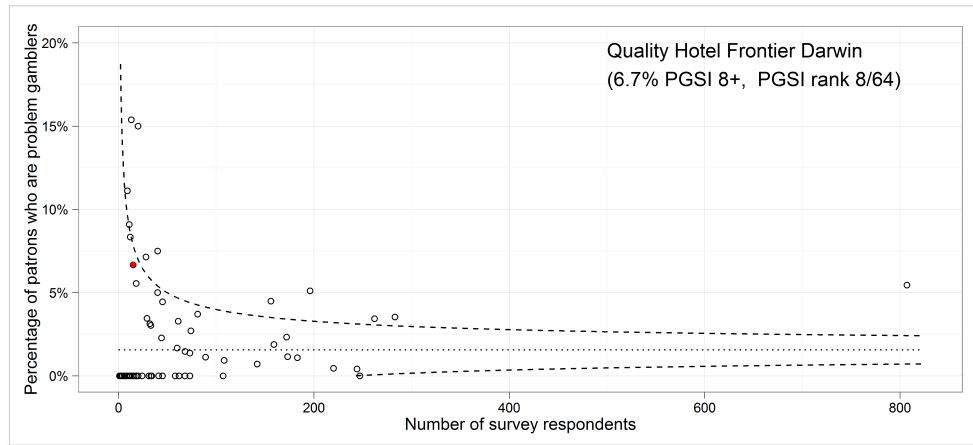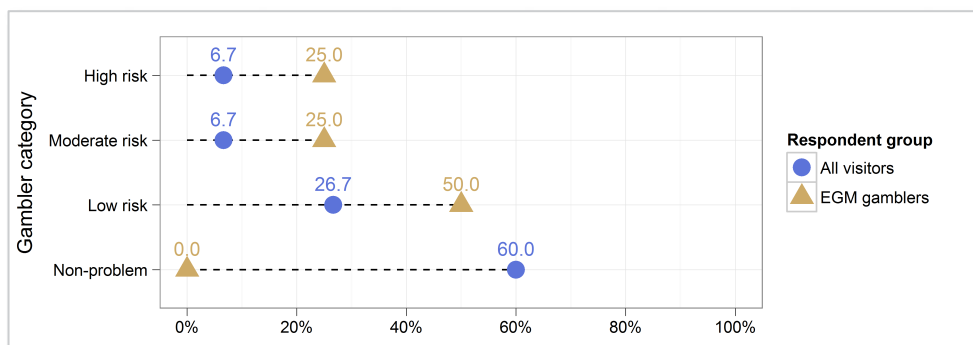
Quality Hotel Frontier Darwin
(6.7% PGSI 8+, PGSI rank 8/64)

PROBLEM GAMBLING COMPARISON
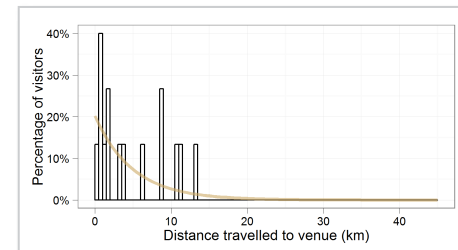
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**28**	(0, 80)
Moderate risk	**16**	(0, 48)
Low risk	**100**	(11, 190)
Non-problem	**219**	(116, 322)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	Quality Hotel Frontier Darwin estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**35.3**	(28.5, 42.1)	**41.2**	(41.1, 41.3)
Per cent female	**21.8**	(7.2, 50.1)	**48.5**	(48.5, 48.5)
Per cent university educated	**40.6**	(17.3, 69.2)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**-**	-	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**-**	-	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**97.0**	(91.3,100.0)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**3.0**	(0.0, 8.7)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**4.2**	(2.4, 6.1)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**24.4**	(1.6, 47.2)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**75.5**	(2.3, 148.6)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**5.0**	(2.1, 7.9)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

SHENANNIGANS IRISH PUB
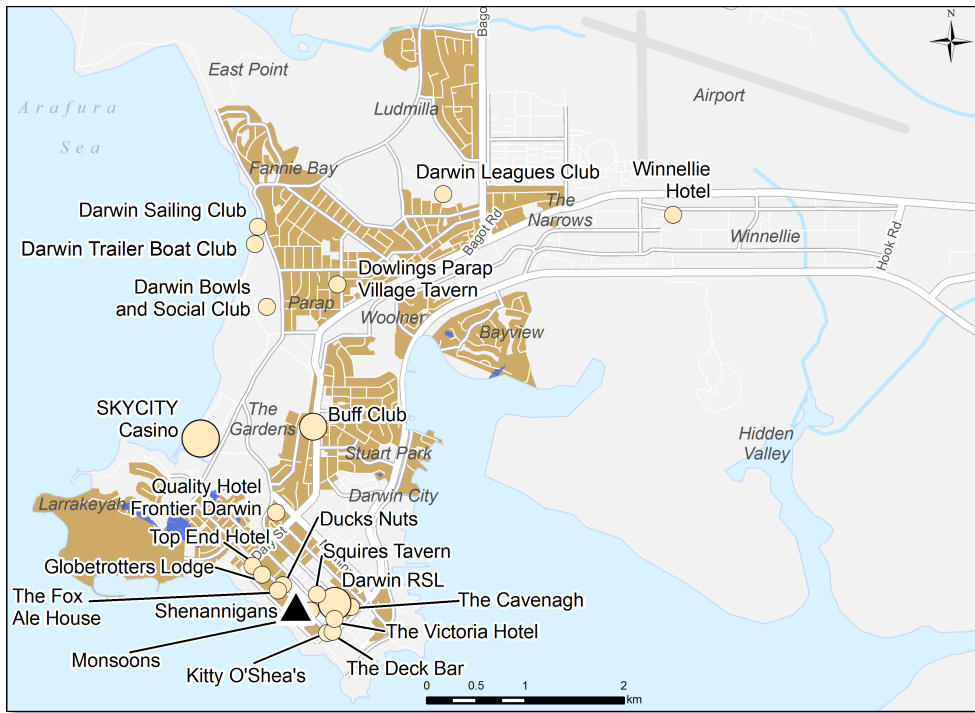
PREDICTED CATCHMENT
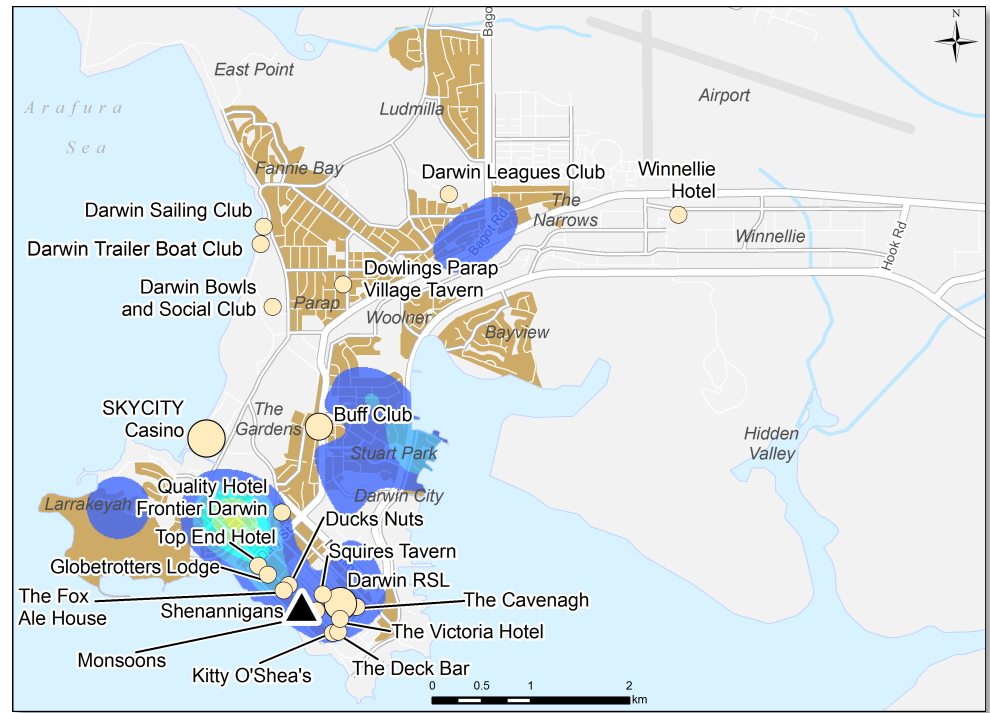
OBSERVED CATCHMENT

n respondents:	60 persons
Estimated catchment size:	1,280persons
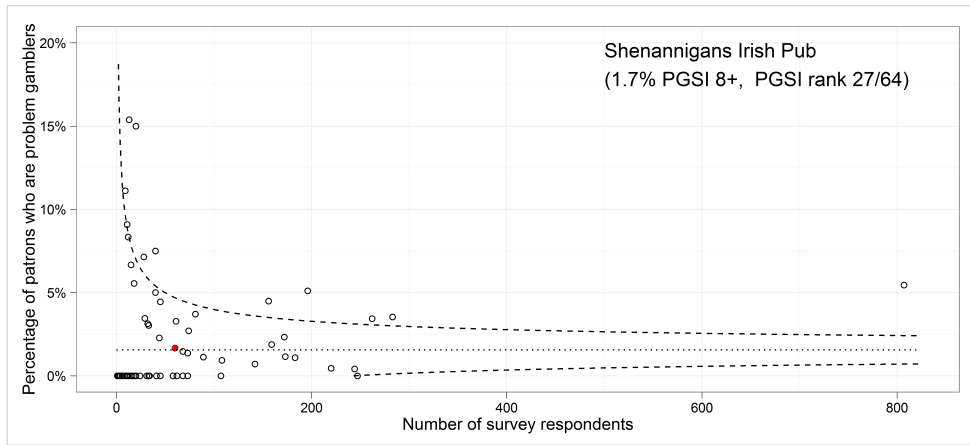
Shenannigans Irish Pub
(1.7% PGSI 8+, PGSI rank 27/64)

PROBLEM GAMBLING COMPARISON
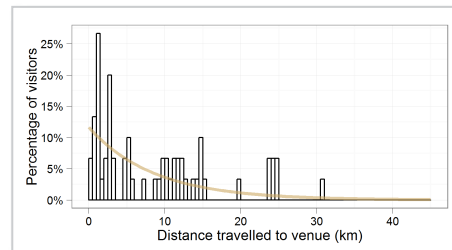
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**16**	(0, 45)
Moderate risk	**76**	(0, 163)
Low risk	**59**	(0, 134)
Non-problem	**1129**	(1014, 1245)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	Shenannigans Irish Pub estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**35.8**	(32.4, 39.1)	**41.2**	(41.1, 41.3)
Per cent female	**44.5**	(30.3, 59.6)	**48.5**	(48.5, 48.5)
Per cent university educated	**58.0**	(43.0, 71.7)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**2.3**	(0.0, 5.0)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**8.4**	(0.5, 16.3)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**58.3**	(43.2, 73.4)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**31.0**	(16.9, 45.2)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**7.7**	(5.4, 10.0)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**1.2**	(0.2 , 7.8)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**210.0**	(210.0, 210.0)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**2.8**	(2.3, 3.3)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS
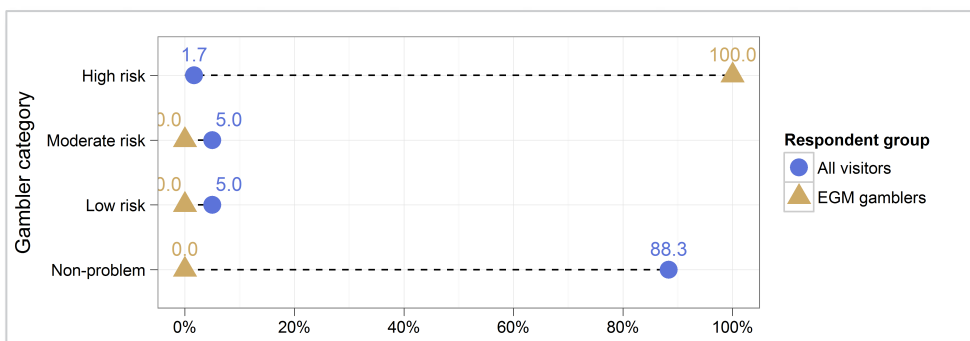
SQUIRES TAVERN
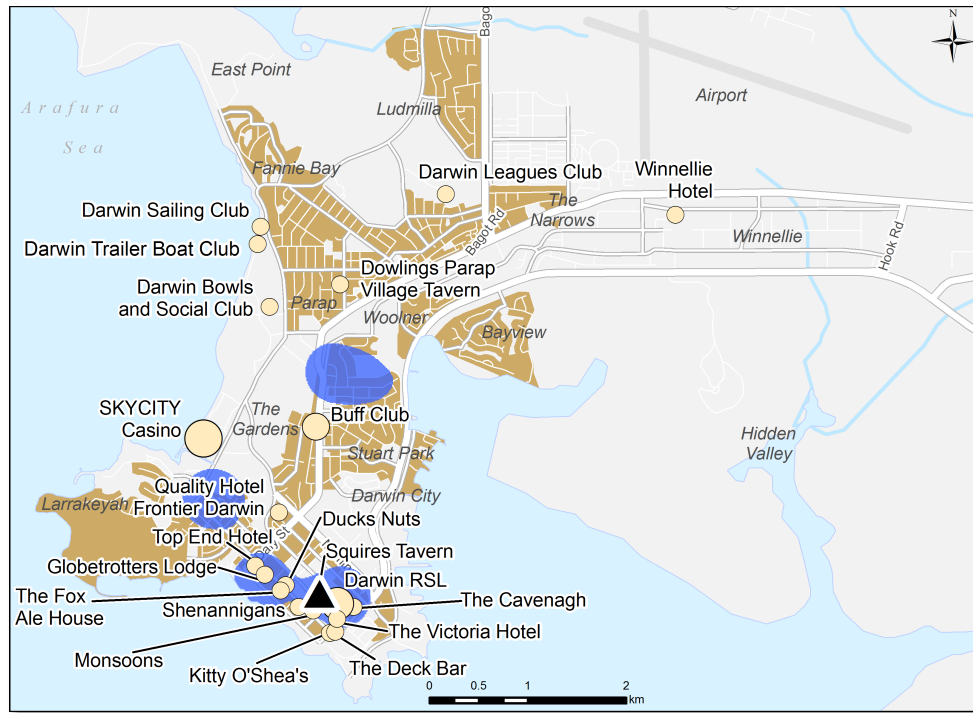
PREDICTED CATCHMENT
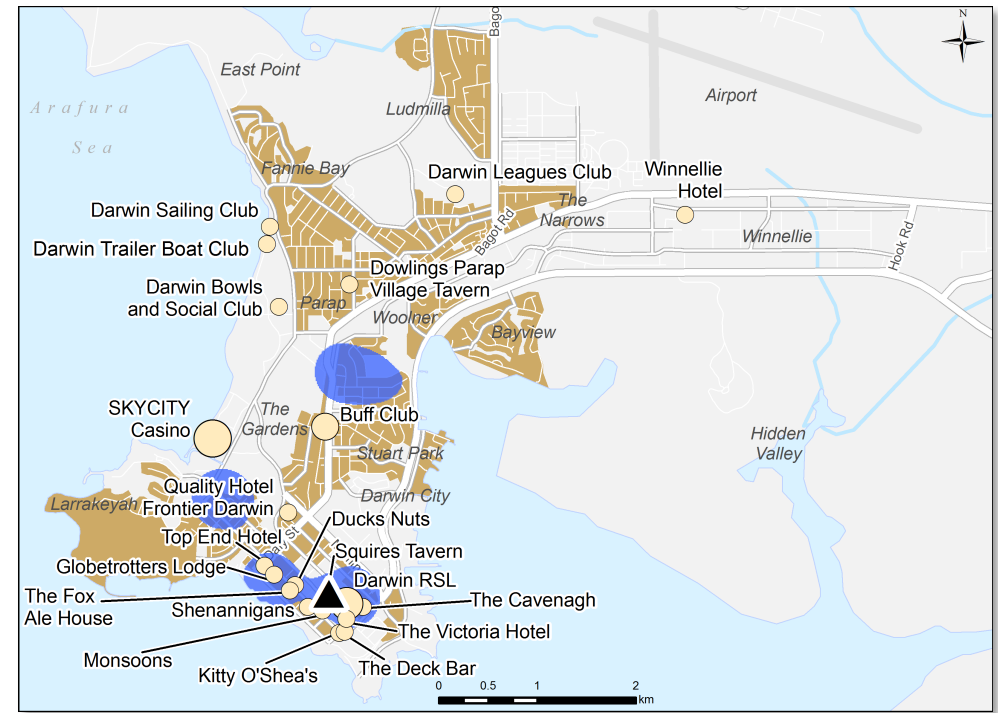
OBSERVED CATCHMENT

n respondents:	13 persons
Estimated catchment size:	307 persons
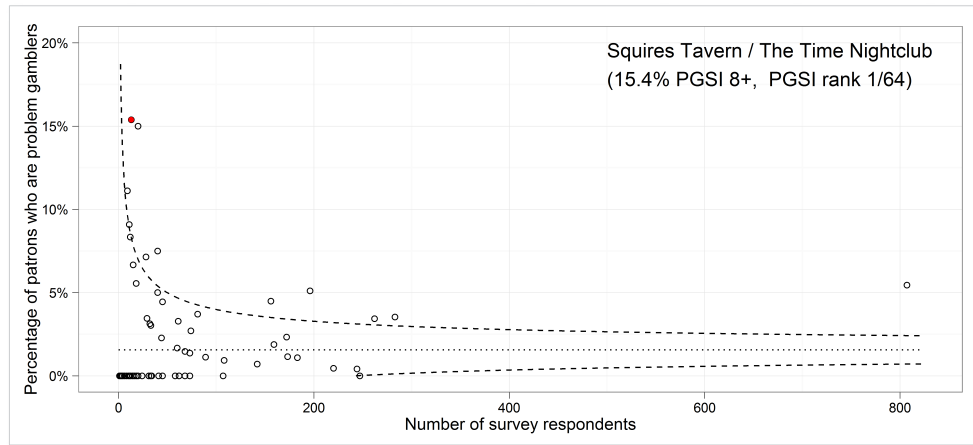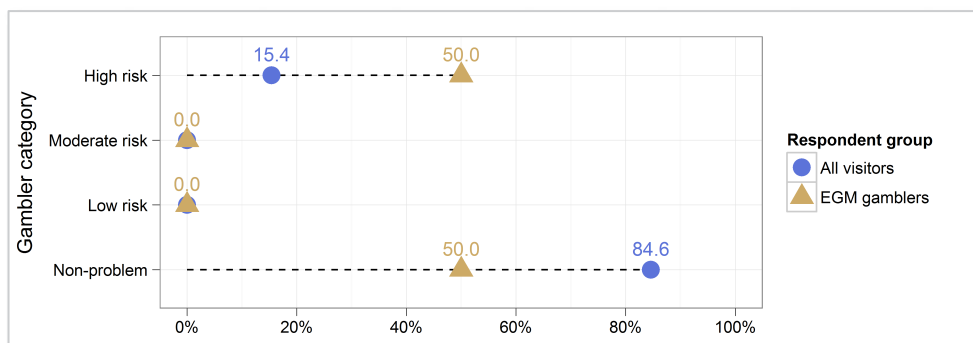
Squires Tavern / The Time Nightclub
(15.4% PGSI 8+, PGSI rank 1/64)

PROBLEM GAMBLING COMPARISON

PROBLEM GAMBLING AND GAMBLING PARTICIPATION
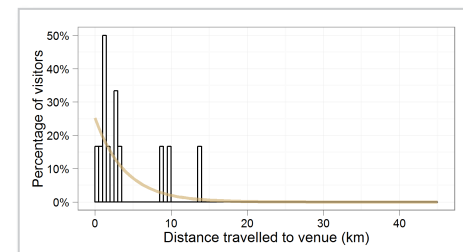
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**53**	(0, 118)
Moderate risk	**-**	-
Low risk	**-**	-
Non-problem	**254**	(189, 307)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

	Squires Tavern estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**33.6**	(28.5, 38.7)	**41.2**	(41.1, 41.3)
Per cent female	**26.1**	(0.0, 52.8)	**48.5**	(48.5, 48.5)
Per cent university educated	**22.9**	(0.8, 45.0)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**8.6**	(0.0, 24.3)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**54.8**	(27.2, 82.3)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**33.3**	(7.7, 58.8)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**3.3**	(0.0, 9.7)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**4.4**	(1.9, 6.9)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**17.3**	(0.0, 38.4)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**37.5**	(7.3, 67.7)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**2.6**	(1.8, 3.5)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

THE CAVENAGH
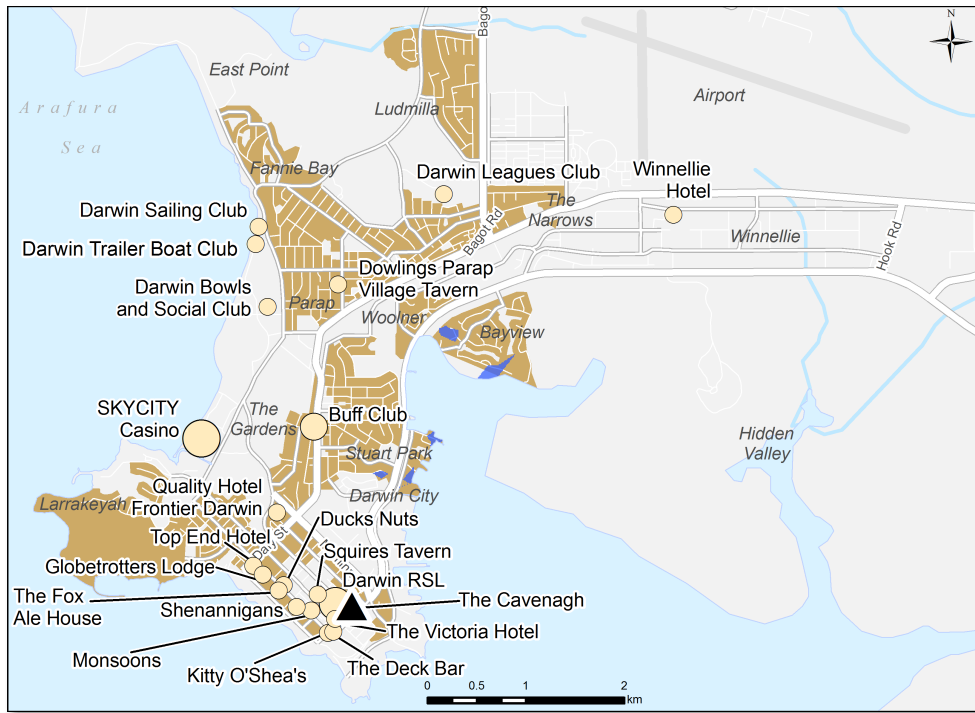
PREDICTED CATCHMENT
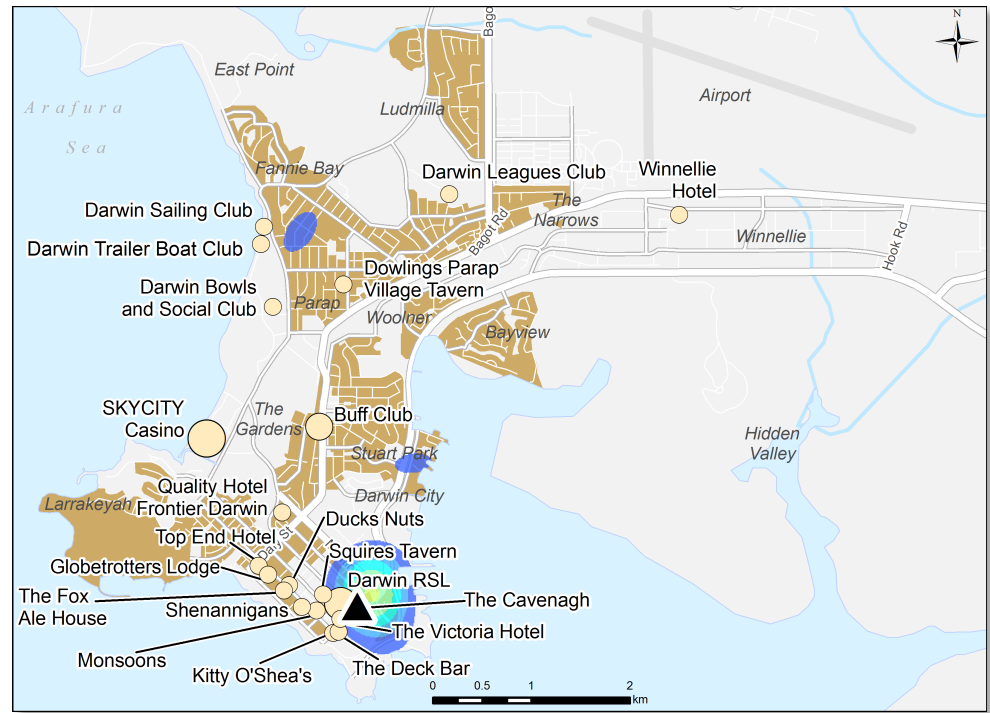
OBSERVED CATCHMENT

n respondents:	28 persons
Estimated catchment size:	645 persons

The Cavenagh
(7.1% PGSI 8+, PGSI rank 7/64)
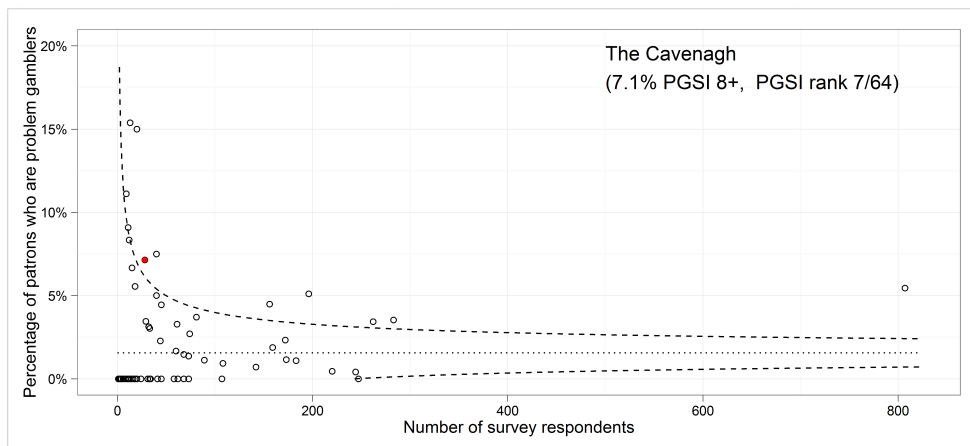
PROBLEM GAMBLING COMPARISON
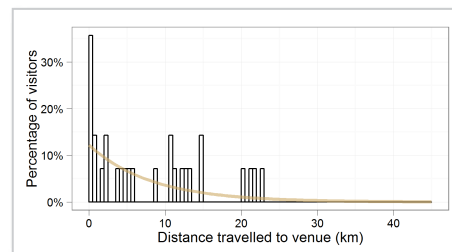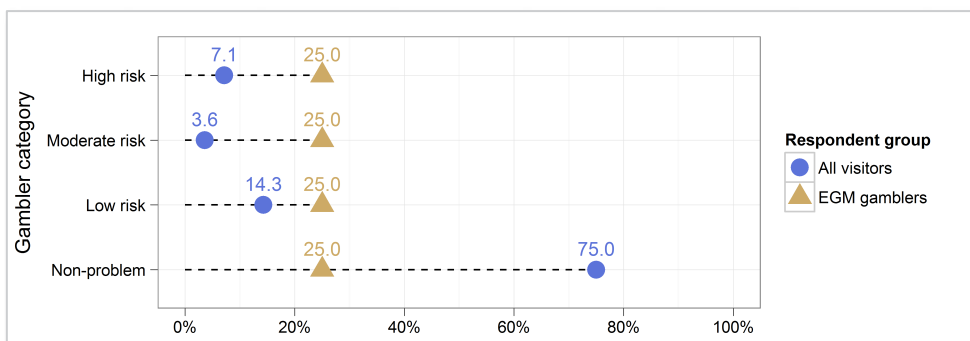
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**39**	(0, 95)
Moderate risk	**16**	(0, 46)
Low risk	**185**	(18, 352)
Non-problem	**405**	(245, 565)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	The Cavenagh estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**33.7**	(30.2, 37.1)	**41.2**	(41.1, 41.3)
Per cent female	**44.4**	(24.6, 66.1)	**48.5**	(48.5, 48.5)
Per cent university educated	**55.5**	(32.9, 76.0)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**-**	-	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**24.6**	(2.2, 47.0)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**56.9**	(32.8, 80.9)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**18.6**	(0.0, 40.0)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**9.0**	(4.9, 13.2)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**19.3**	(0.0, 40.8)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**54.0**	(0.0, 116.5)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**3.8**	(2.7, 5.0)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

THE DECK BAR
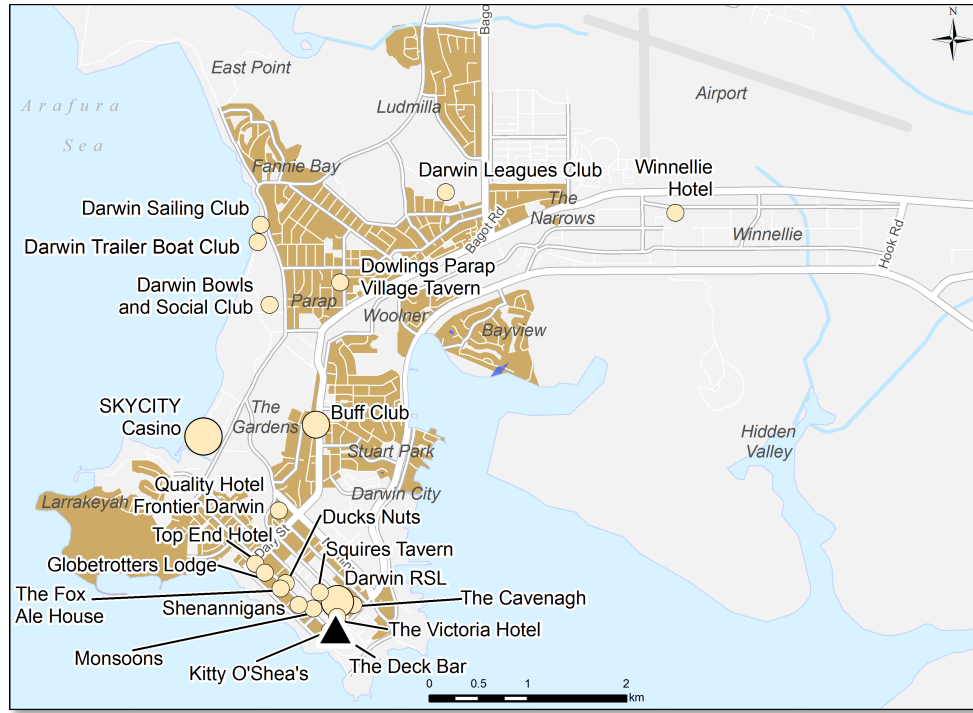
PREDICTED CATCHMENT
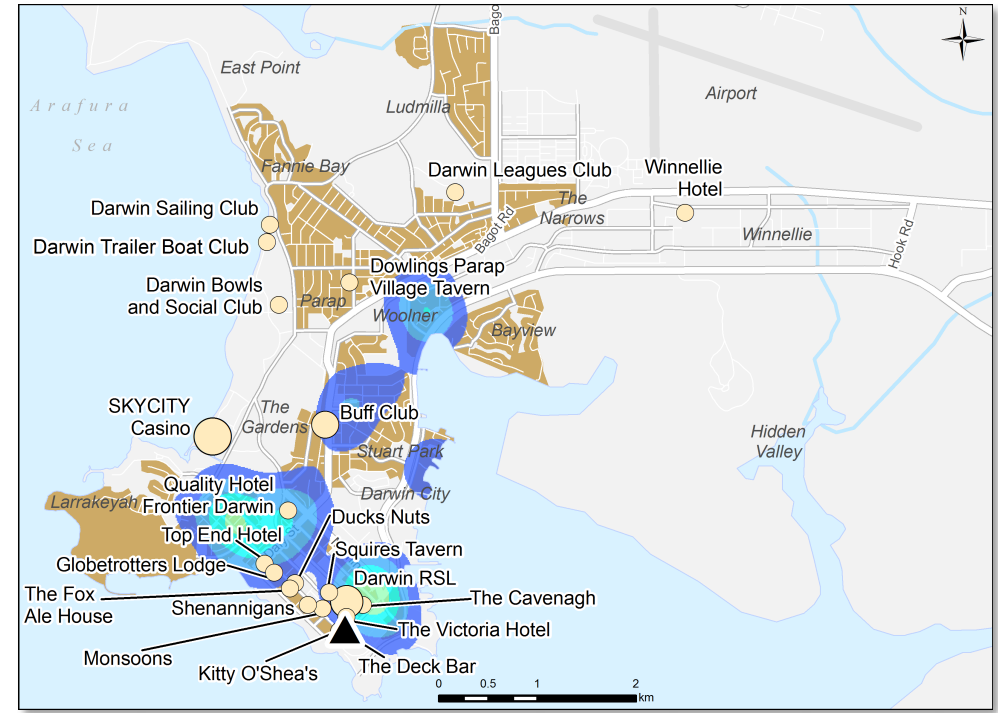
OBSERVED CATCHMENT

n respondents:	73 persons
Estimated catchment size:	1,899 persons
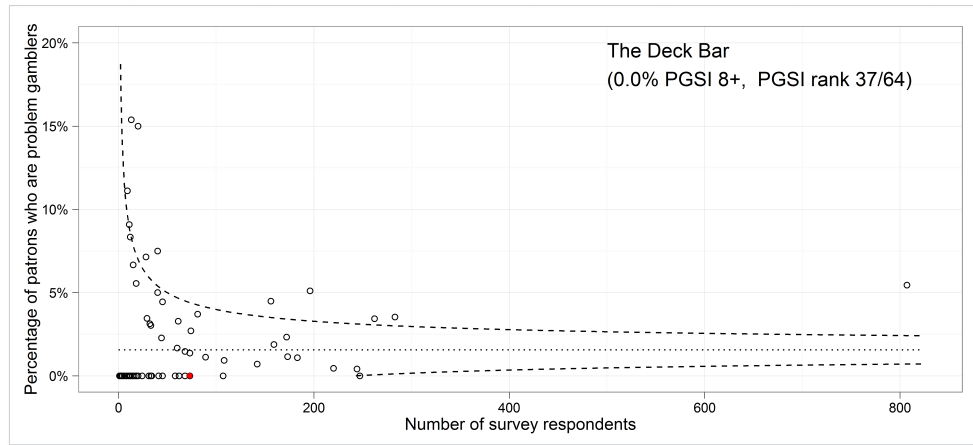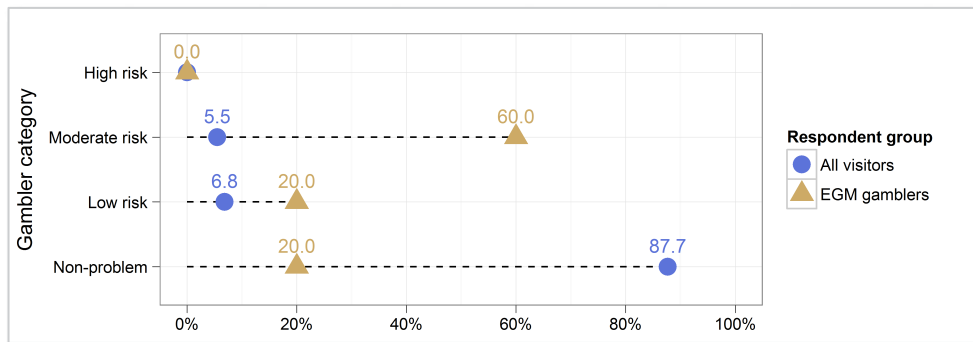
The Deck Bar
(0.0% PGSI 8+, PGSI rank 37/64)

PROBLEM GAMBLING COMPARISON
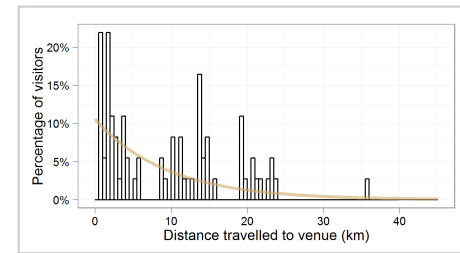
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	-	-
Moderate risk	**162**	(0, 333)
Low risk	**100**	(4, 196)
Non-problem	**1636**	(1446, 1826)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	The Deck Bar estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**31.8**	(29.6, 34.0)	**41.2**	(41.1, 41.3)
Per cent female	**46.7**	(33.3, 60.7)	**48.5**	(48.5, 48.5)
Per cent university educated	**50.7**	(36.7, 64.6)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**1.3**	(0.0, 3.1)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**5.9**	(1.2, 10.7)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**81.3**	(72.9, 89.7)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**11.4**	(4.8, 18.1)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**8.3**	(5.8, 10.8)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**7.0**	(0.8, 13.3)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**40.5**	(16.5, 64.5)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**2.5**	(2.1, 2.9)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

THE FOX ALE HOUSE
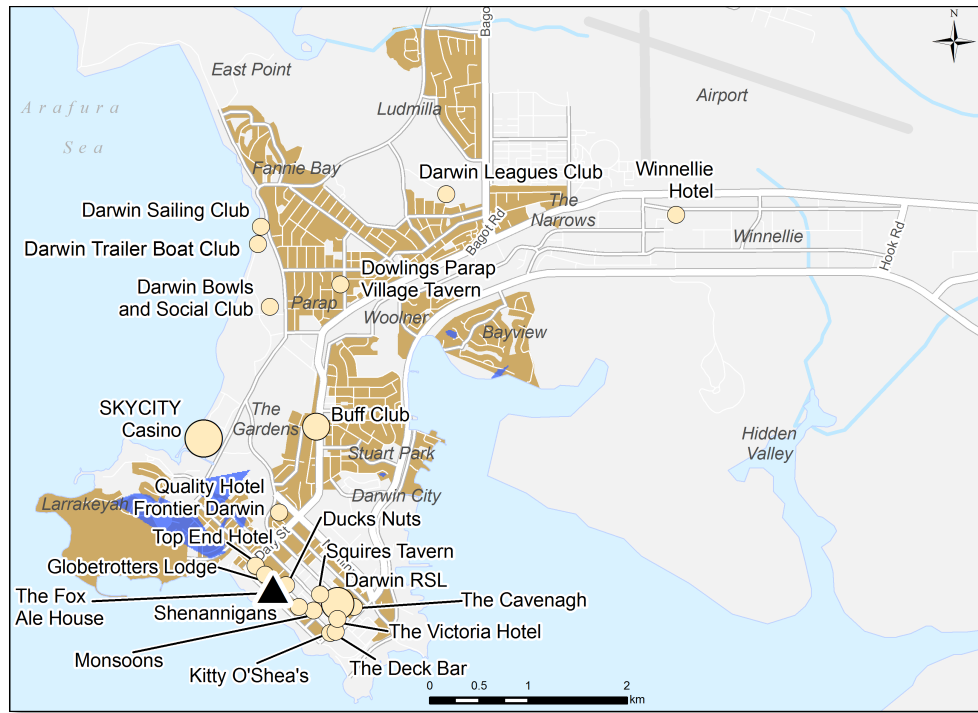
PREDICTED CATCHMENT
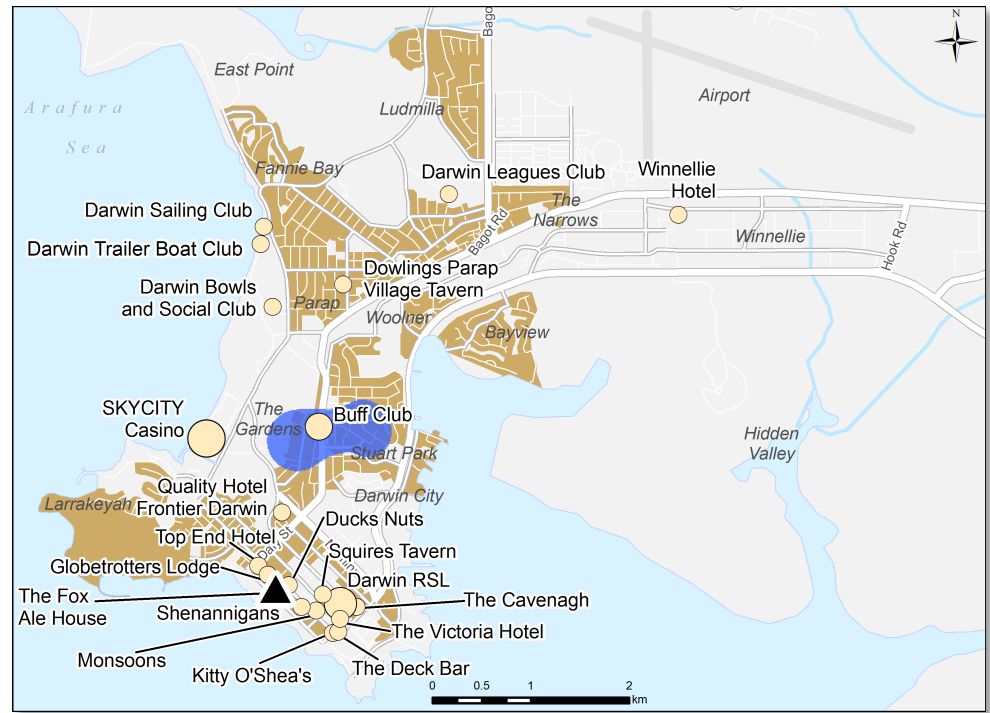
OBSERVED CATCHMENT

n respondents:	12 persons
Estimated catchment size:	149 persons
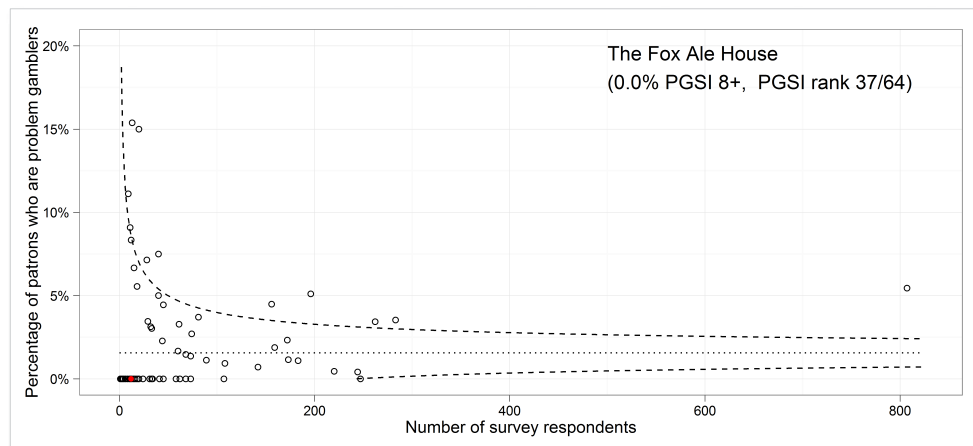
PROBLEM GAMBLING COMPARISON

The Fox Ale House
(0.0% PGSI 8+, PGSI rank 37/64)
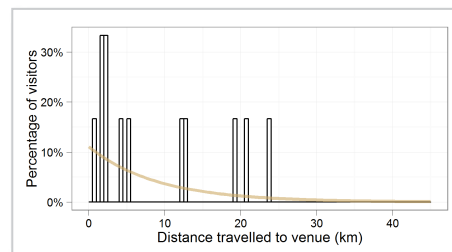
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	-	-
Moderate risk	-	-
Low risk	15	(160, 453)
Non-problem	133	(2476, 3013)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	The Fox Ale House estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**42.0**	(33.2, 50.9)	**41.2**	(41.1, 41.3)
Per cent female	**62.4**	(31.2, 85.9)	**48.5**	(48.5, 48.5)
Per cent university educated	**24.9**	(8.2, 55.0)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**6.8**	(0.0, 19.6)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**15.0**	(0.0, 35.4)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**68.0**	(39.7, 96.3)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**10.3**	(0.3, 28.9)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**9.8**	(6.0, 13.6)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**18.3**	(0.0, 41.4)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**25.6**	(19.0, 32.2)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**1.9**	(1.3, 2.5)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

THE VICTORIA HOTEL

PREDICTED CATCHMENT
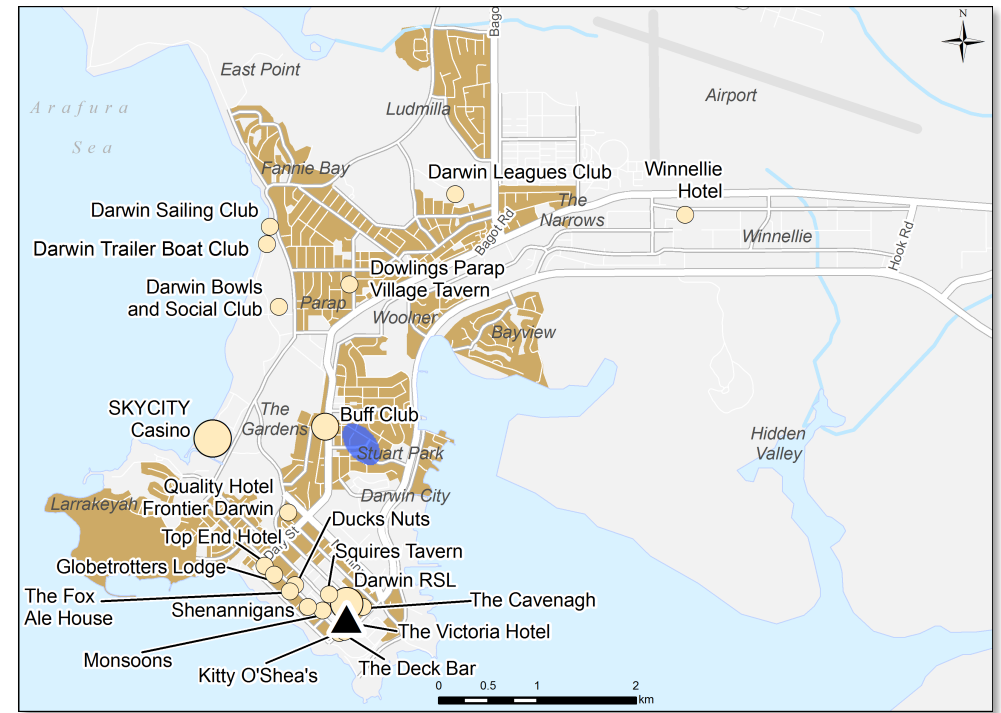
OBSERVED CATCHMENT

n respondents:	14 persons
Estimated catchment size:	352 persons
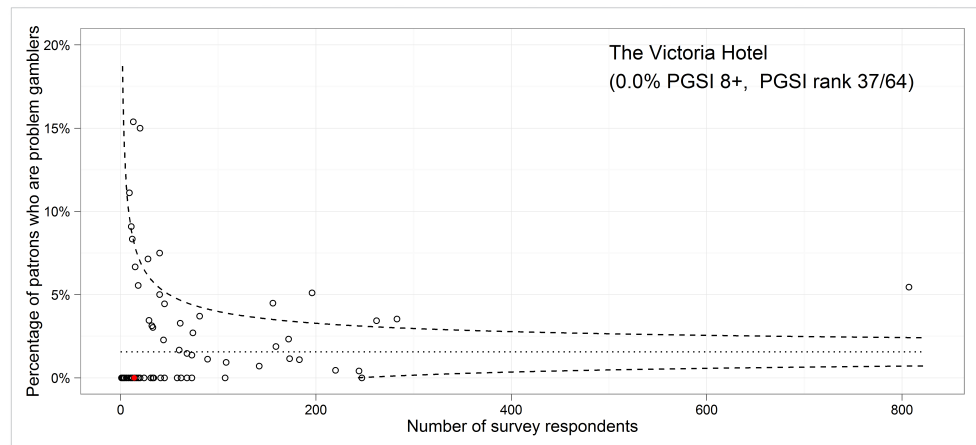
PROBLEM GAMBLING COMPARISON
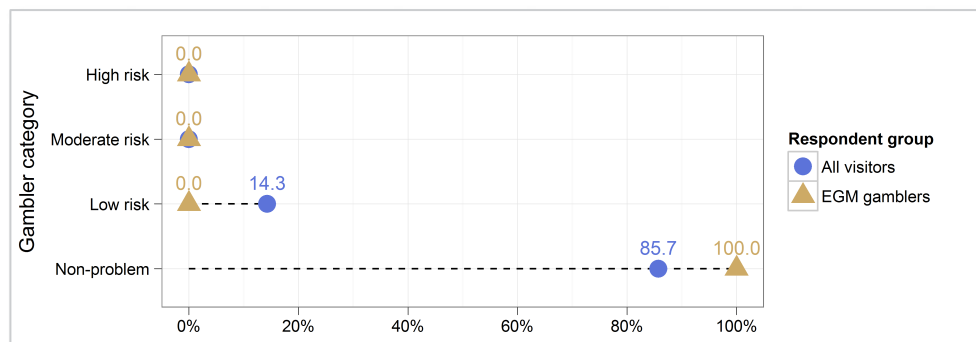
The Victoria Hotel
(0.0% PGSI 8+, PGSI rank 37/64)
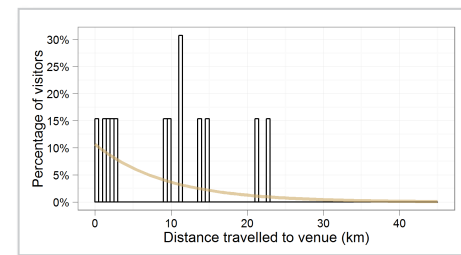
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	-	-
Moderate risk	-	-
Low risk	72	(0, 159)
Non-problem	280	(193, 352)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	The Victoria Hotel estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**33.0**	(26.8, 39.2)	**41.2**	(41.1, 41.3)
Per cent female	**46.9**	(20.2, 75.6)	**48.5**	(48.5, 48.5)
Per cent university educated	**11.8**	(0.0, 27.8)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**2.0**	(0.0, 5.9)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**27.7**	(1.5, 53.9)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**51.4**	(20.1, 82.7)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**18.9**	(0.0, 40.4)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**8.7**	(5.1, 12.3)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**4.3**	(0.0, 12.7)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**11.5**	(8.7, 14.3)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**3.1**	(1.9, 4.3)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

TOP END HOTEL
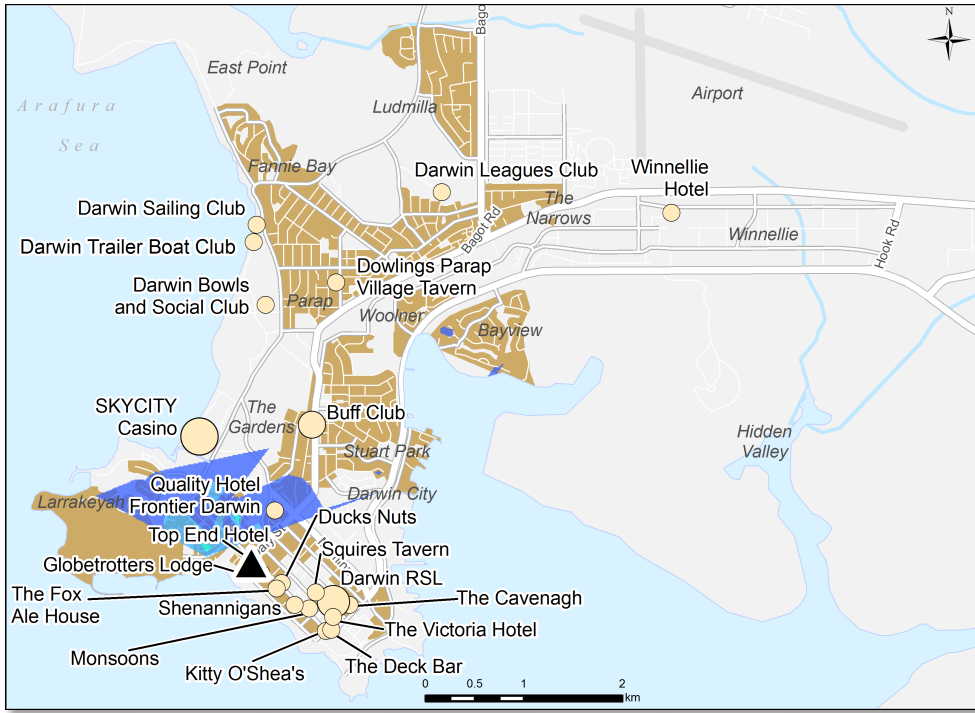
PREDICTED CATCHMENT
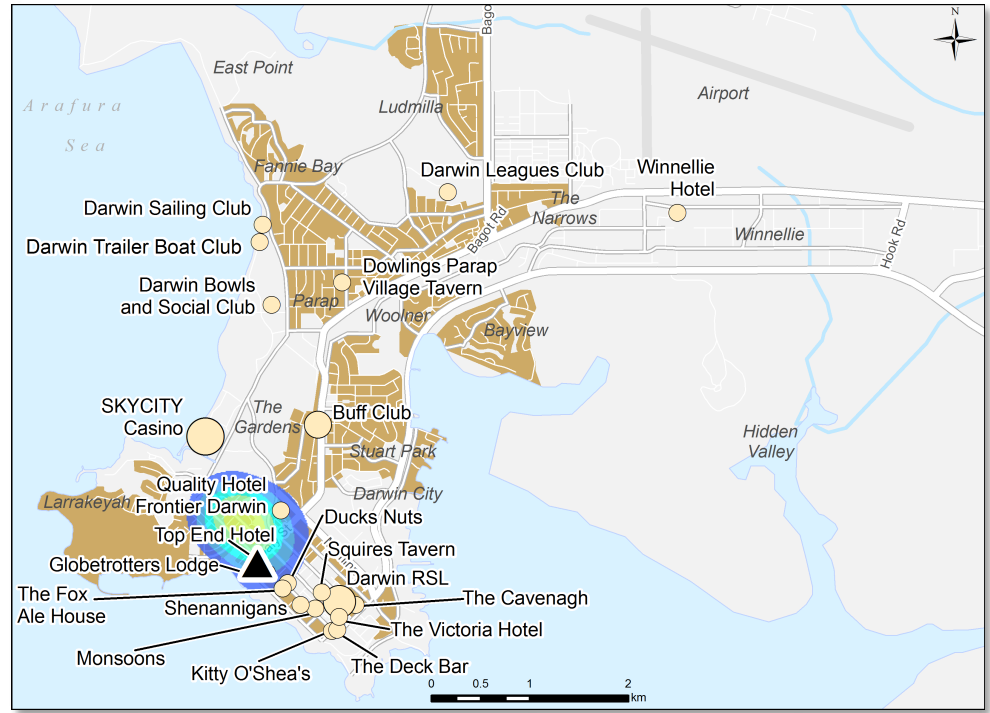
OBSERVED CATCHMENT

n respondents:	16 persons
Estimated catchment size:	511 persons
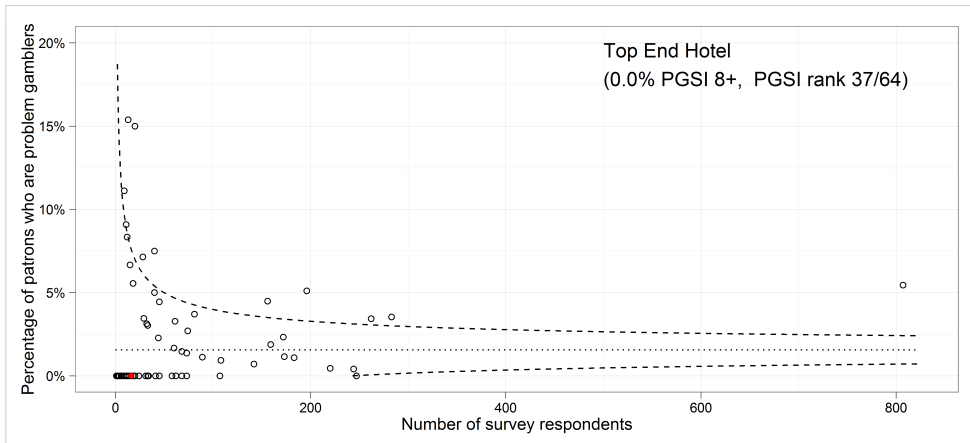
Top End Hotel
(0.0% PGSI 8+, PGSI rank 37/64)

PROBLEM GAMBLING COMPARISON
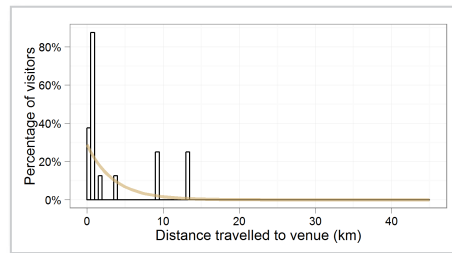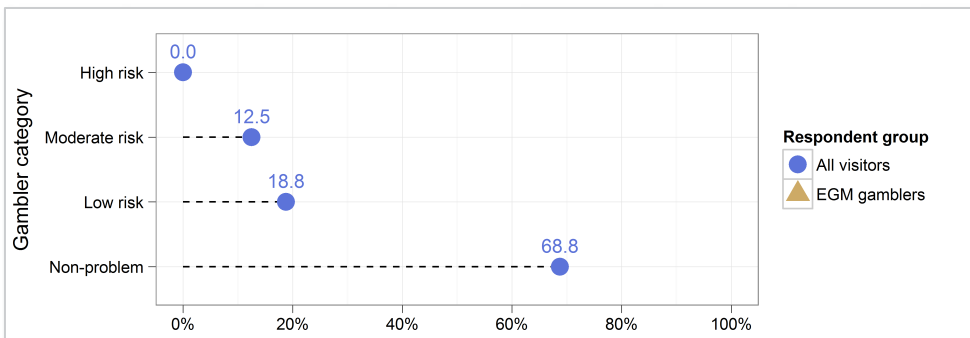
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	-	-
Moderate risk	**34**	(0, 82)
Low risk	**135**	(0, 285)
Non-problem	**342**	(189, 494)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	Top End Hotel estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**32.9**	(27.0, 38.8)	**41.2**	(41.1, 41.3)
Per cent female	**15.2**	(4.6, 39.9)	**48.5**	(48.5, 48.5)
Per cent university educated	**75.8**	(50.1, 90.7)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	-	-	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	-	-	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**51.0**	(19.1, 82.9)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**49.0**	(17.1, 81.0)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**4.1**	(1.1, 7.0)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	-	-	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	-	-	**88.2**	(78.6, 97.9)
Mean number of visits per month	**4.2**	(2.6, 5.8)	**3.4**	(3.3, 3.6)

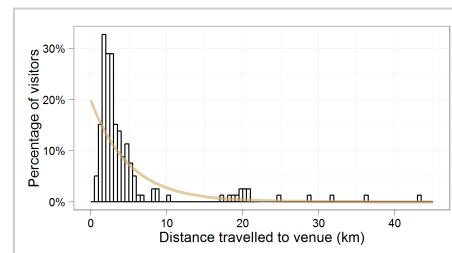PATRON CHARACTERISTICS

3.3 NORTHERN DARWIN VENUES

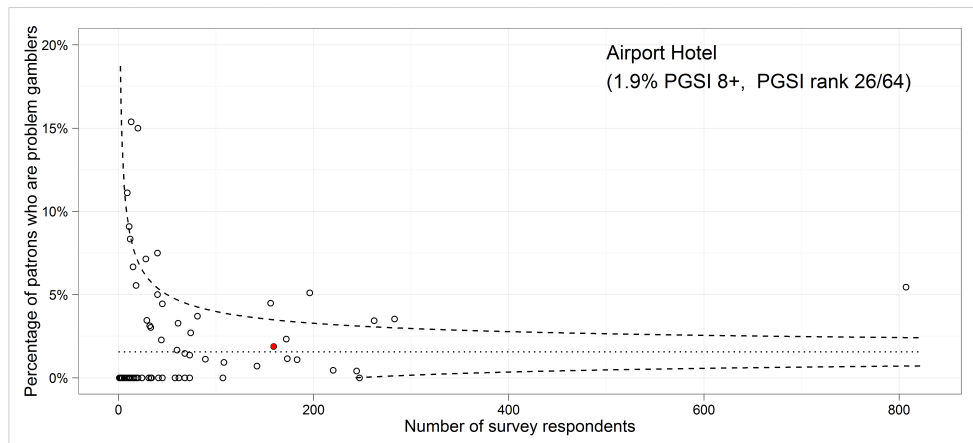# AIRPORT HOTEL
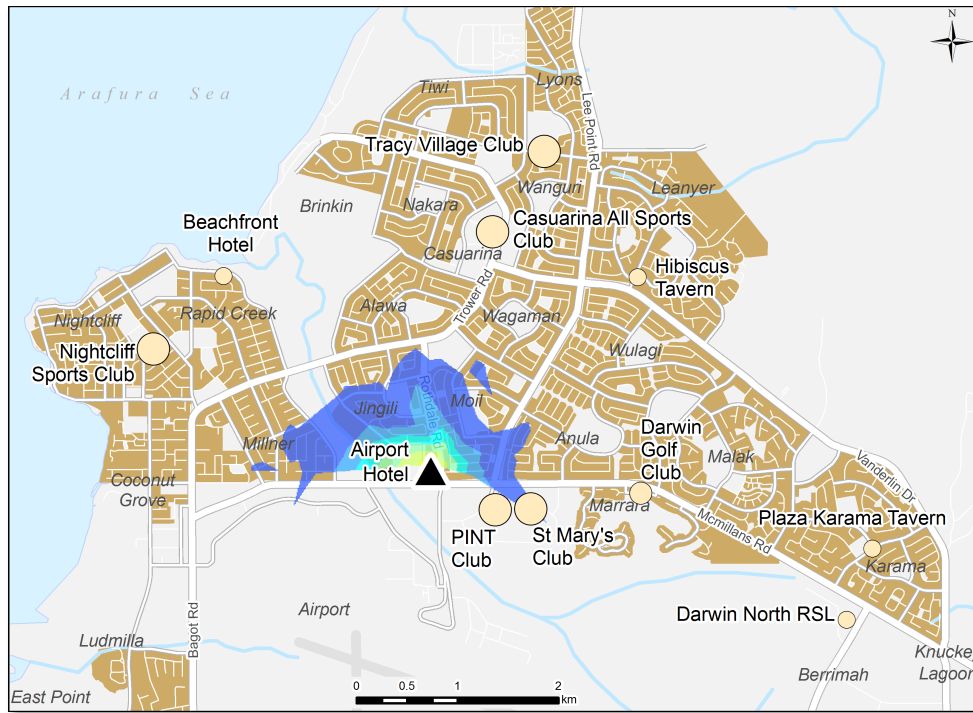
PREDICTED CATCHMENT
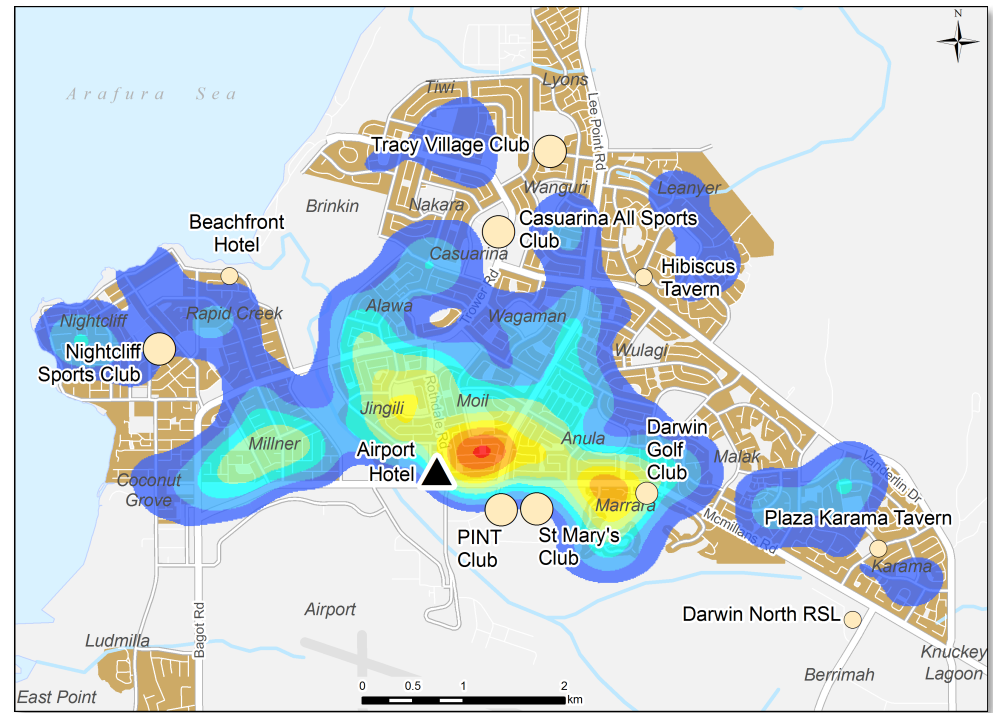
OBSERVED CATCHMENT

n respondents:	159 persons
Estimated catchment size:	2,459 persons

Airport Hotel
(1.9% PGSI 8+, PGSI rank 26/64)

PROBLEM GAMBLING COMPARISON

PROBLEM GAMBLING AND GAMBLING PARTICIPATION

DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**120**	(0, 277)
Moderate risk	**67**	(9, 125)
Low risk	**220**	(98, 343)
Non-problem	**2051**	(1859, 2244)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

	Airport Hotel estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**41.5**	(38.9, 44.2)	**41.2**	(41.1, 41.3)
Per cent female	**46.6**	(37.3, 56.1)	**48.5**	(48.5, 48.5)
Per cent university educated	**46.2**	(36.8, 55.9)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**3.7**	(1.4, 6.1)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**11.9**	(6.4, 17.3)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**66.7**	(57.7, 75.6)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**17.8**	(9.9, 25.6)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**5.3**	(4.2, 6.5)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**9.5**	(2.6, 16.5)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**106.6**	(60.9, 152.2)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**3.3**	(2.5, 4.1)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

BEACHFRONT HOTEL

PREDICTED CATCHMENT
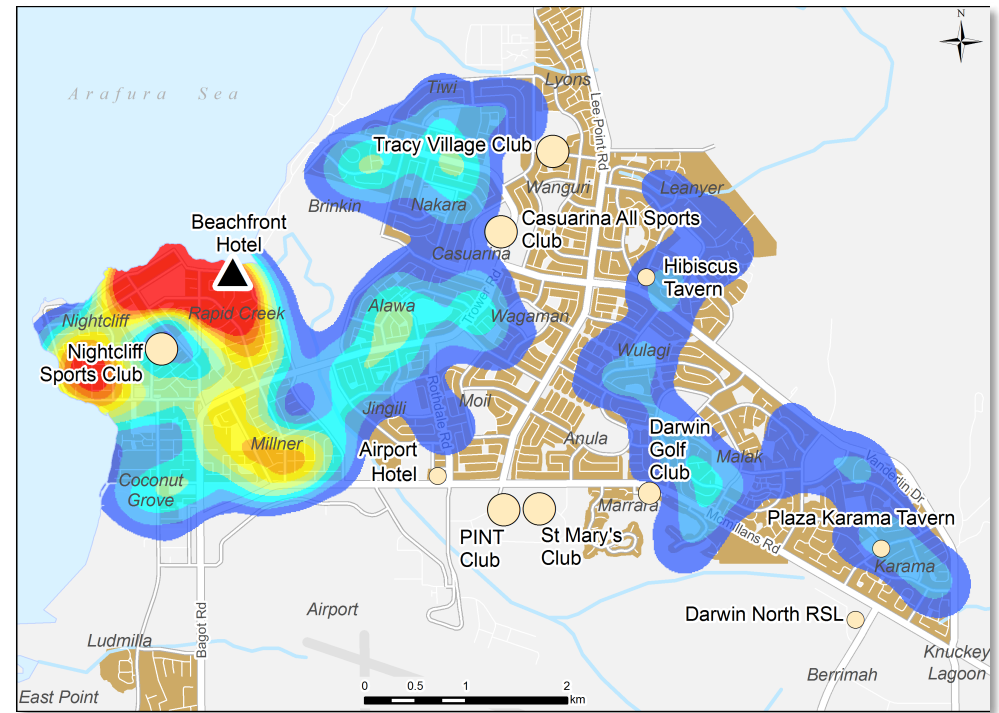
OBSERVED CATCHMENT

n respondents:	220 persons
Estimated catchment size:	5,855 persons
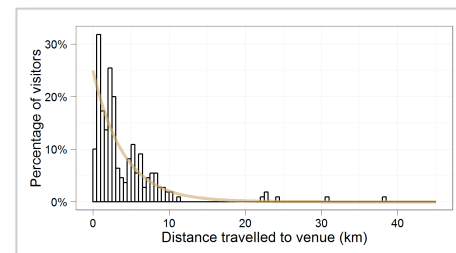
Beachfront Hotel
(0.5% PGSI 8+, PGSI rank 35/64)

PROBLEM GAMBLING COMPARISON

DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**240**	(103, 539)
Moderate risk	**233**	(104, 492)
Low risk	**271**	(160, 453)
Non-problem	**2781**	(2476, 3013)

ESTIMATED NUMBER OF PROBLEM GAMBLERS
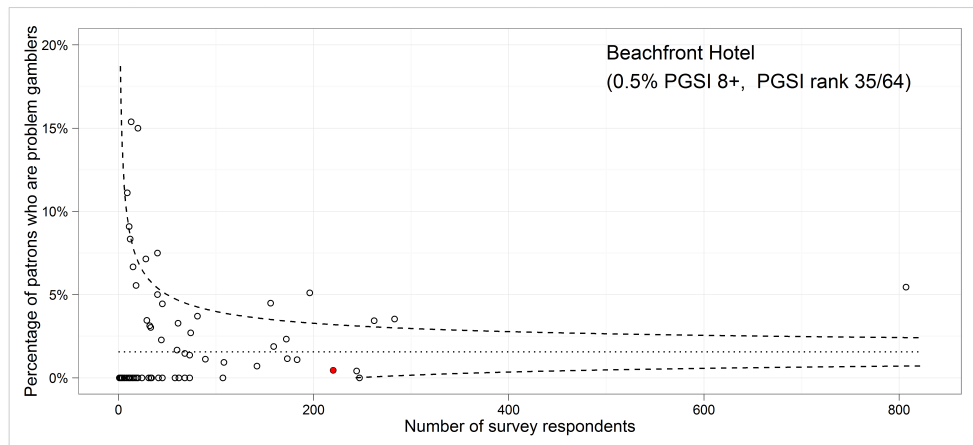
PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	Beachfront Hotel estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**31.8**	(30.4, 33.1)	**41.2**	(41.1, 41.3)
Per cent female	**46.8**	(38.7, 55.2)	**48.5**	(48.5, 48.5)
Per cent university educated	**57.4**	(48.7, 65.6)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**2.0**	(0.5, 3.6)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**13.1**	(7.1, 19.1)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**71.0**	(63.5, 78.5)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**13.9**	(8.7, 19.0)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**4.9**	(3.5, 6.4)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**6.7**	(3.6, 12.2)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**37.8**	(21.9, 53.8)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**3.3**	(2.8, 3.8)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS
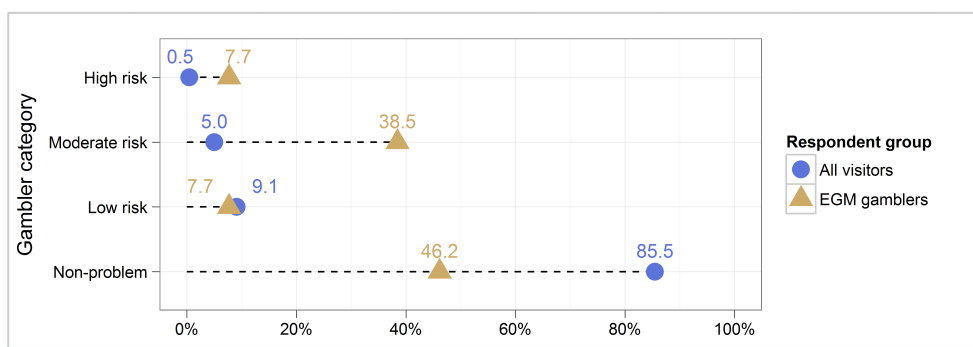
CASUARINA ALL SPORTS CLUB
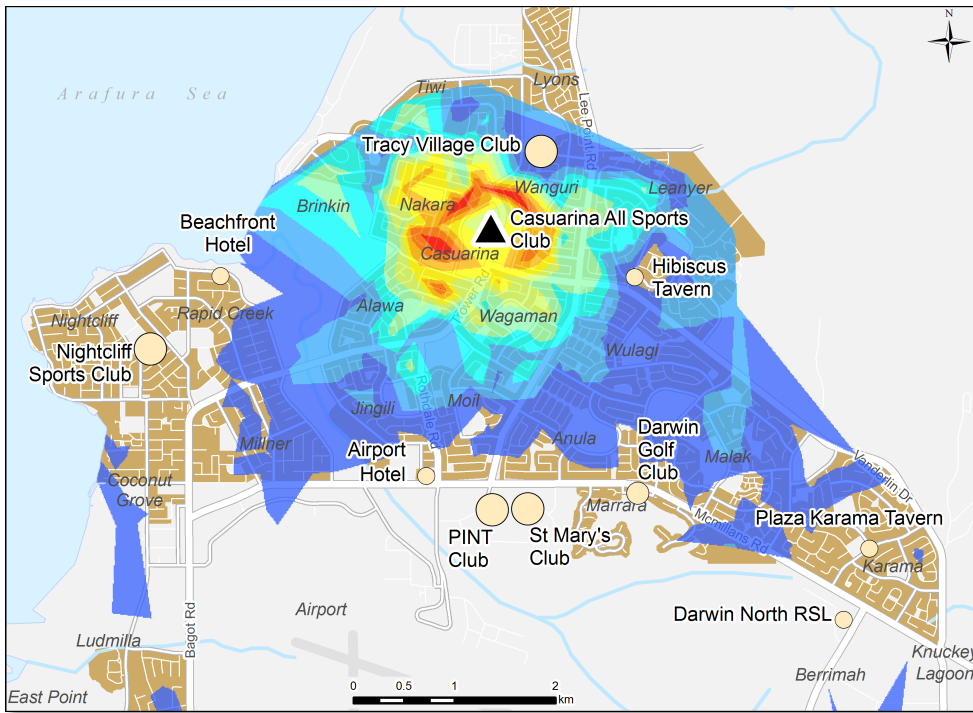
PREDICTED CATCHMENT
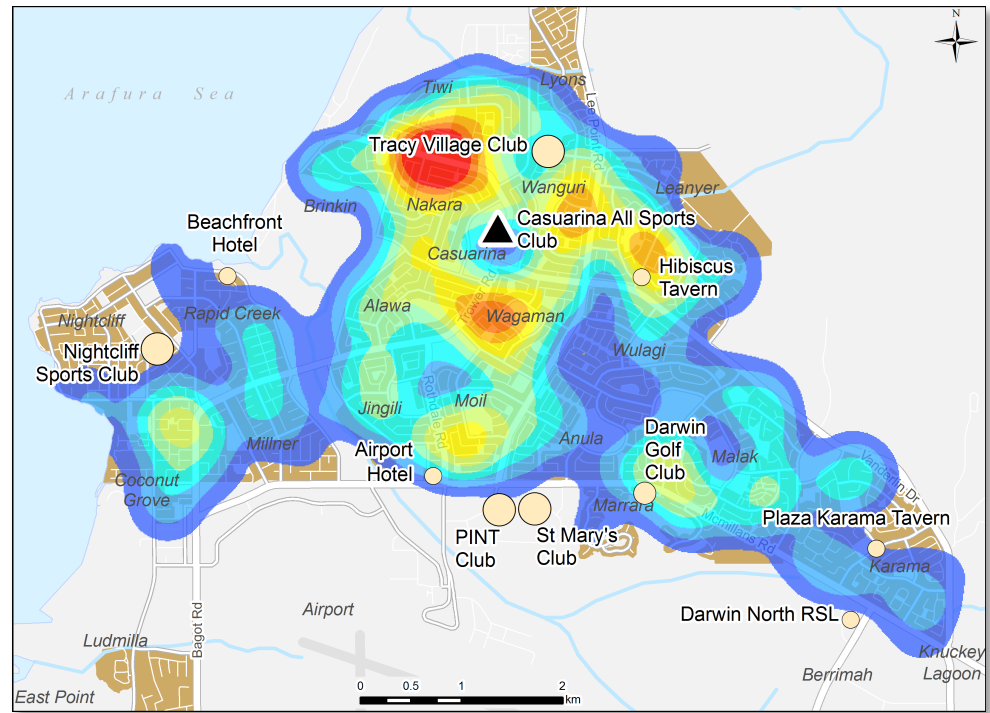
OBSERVED CATCHMENT

n respondents:	283 persons
Estimated catchment size:	3,568 persons

Casuarina All Sports Club
(3.5% PGSI 8+, PGSI rank 17/64)

PROBLEM GAMBLING COMPARISON

PROBLEM GAMBLING AND GAMBLING PARTICIPATION
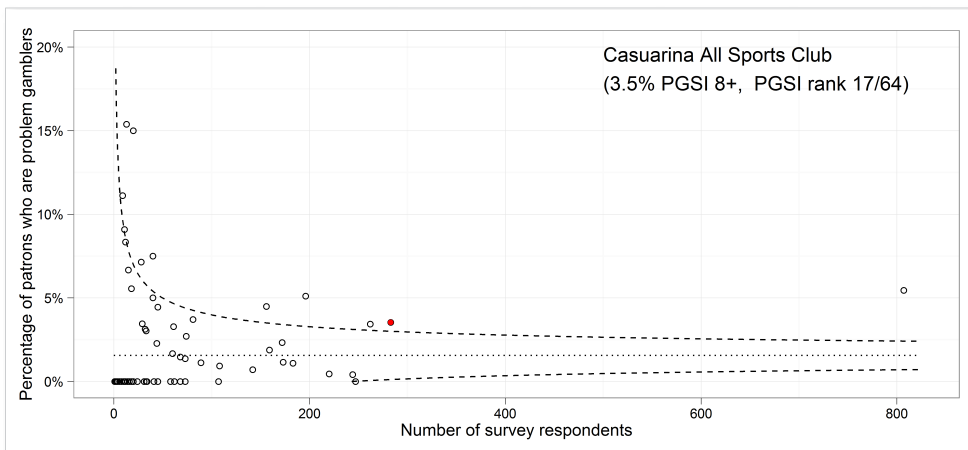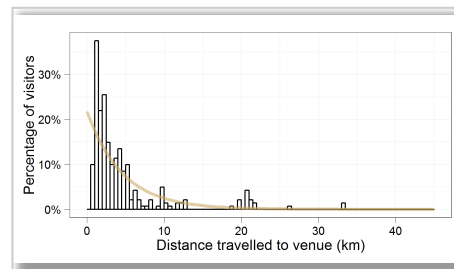
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**236**	(52, 421)
Moderate risk	**242**	(75, 410)
Low risk	**265**	(130, 400)
Non-problem	**2824**	(2573, 3075)

ESTIMATED NUMBER OF PROBLEM GAMBLERS

	Casuarina Club estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**46.9**	(44.5, 49.3)	**41.2**	(41.1, 41.3)
Per cent female	**49.3**	(42.1, 56.5)	**48.5**	(48.5, 48.5)
Per cent university educated	**42.6**	(35.5, 50.0)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**5.6**	(3.0, 8.2)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**24.5**	(18.3, 30.9)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**59.8**	(52.9, 66.8)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**10.1**	(6.2, 14.0)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**5.2**	(4.3, 6.1)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**21.6**	(16.0, 28.5)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**74.3**	(49.7, 99.0)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**2.8**	(2.5, 3.1)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS

DARWIN GOLF CLUB

PREDICTED CATCHMENT
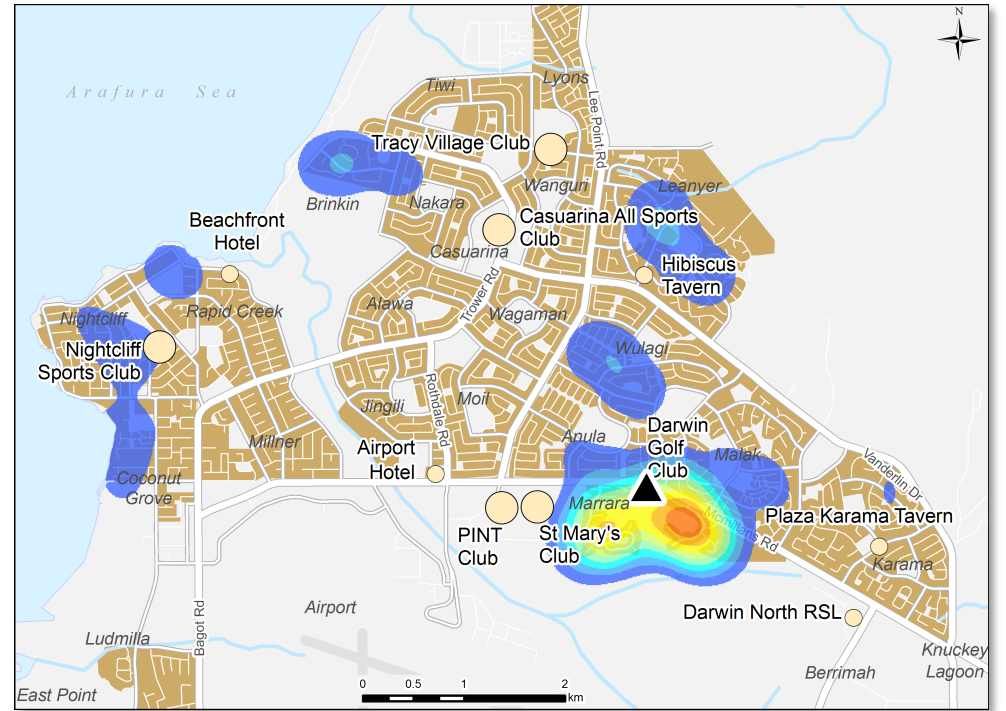
OBSERVED CATCHMENT

n respondents:	68 persons
Estimated catchment size:	741 persons

Darwin Golf Club Inc
(0.0% PGSI 8+, PGSI rank 37/64)

PROBLEM GAMBLING COMPARISON
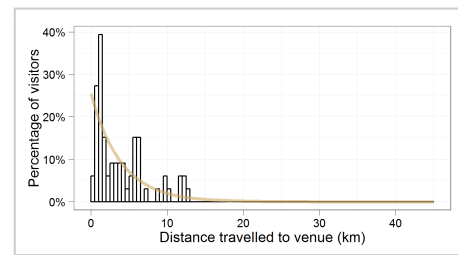
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	-	-
Moderate risk	**21**	(0, 49)
Low risk	**56**	(0, 115)
Non-problem	**664**	(600, 729)

ESTIMATED NUMBER OF PROBLEM GAMBLERS
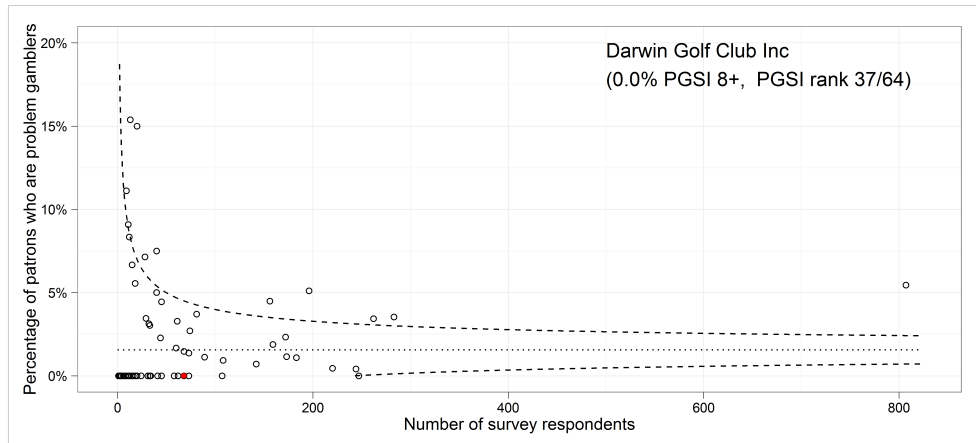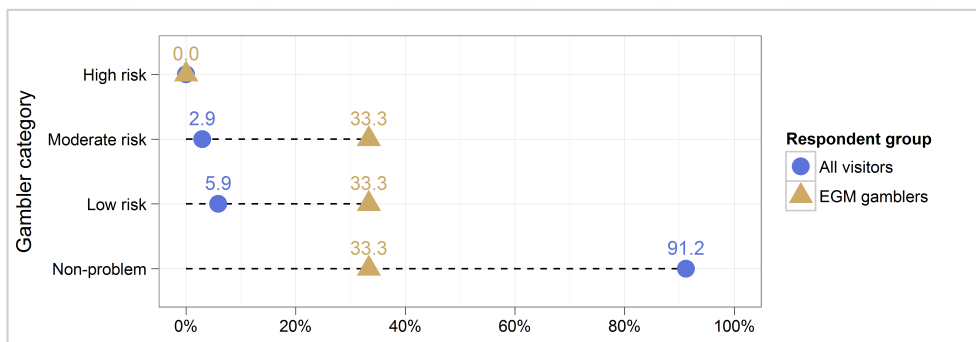
PROBLEM GAMBLING AND GAMBLING PARTICIPATION

	Darwin Golf Club estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**53.9**	(50.6, 57.2)	**41.2**	(41.1, 41.3)
Per cent female	**29.8**	(20.3, 41.5)	**48.5**	(48.5, 48.5)
Per cent university educated	**58.0**	(45.1, 70.0)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**4.0**	(0.4, 7.7)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**12.5**	(5.3, 19.8)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**51.5**	(38.4, 64.6)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**31.9**	(18.5, 45.3)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**3.6**	(2.8, 4.4)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**4.3**	(0.0, 9.3)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**26.9**	(21.1, 32.7)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**7.3**	(5.9, 8.8)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS
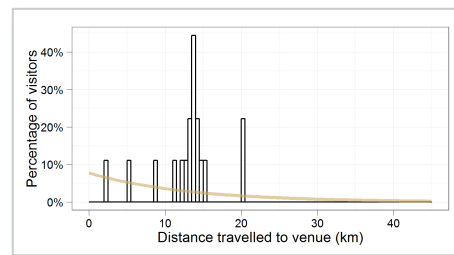
DARWIN NORTH RSL
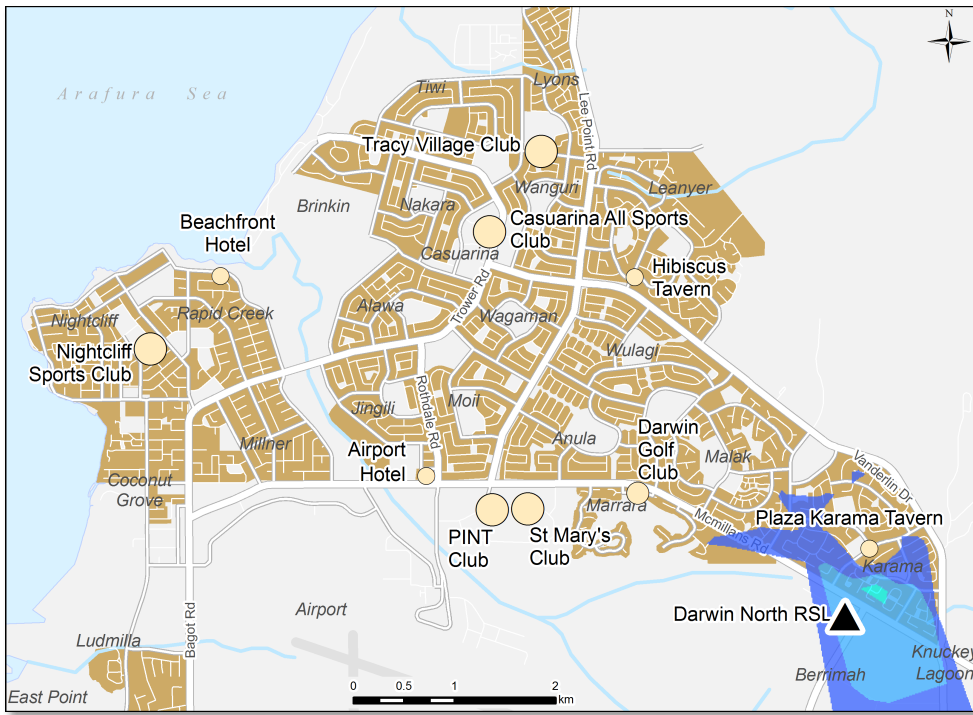
PREDICTED CATCHMENT
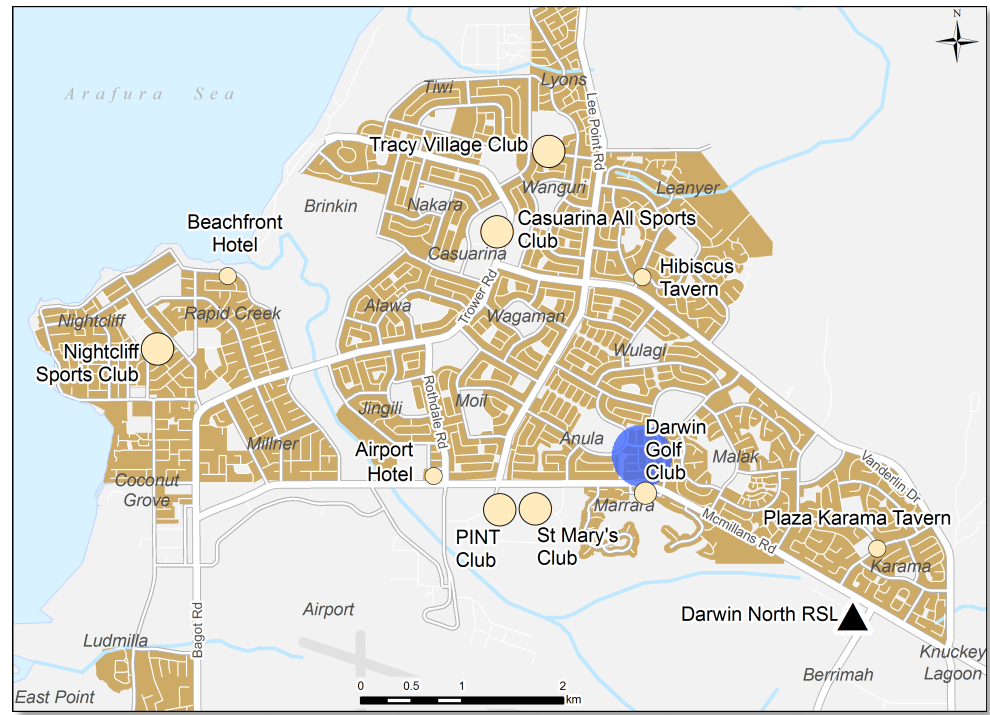
OBSERVED CATCHMENT

n respondents:	18 persons
Estimated catchment size:	223 persons

Darwin North RSL Services Club
(5.6% PGSI 8+, PGSI rank 9/64)

PROBLEM GAMBLING COMPARISON

PROBLEM GAMBLING AND GAMBLING PARTICIPATION
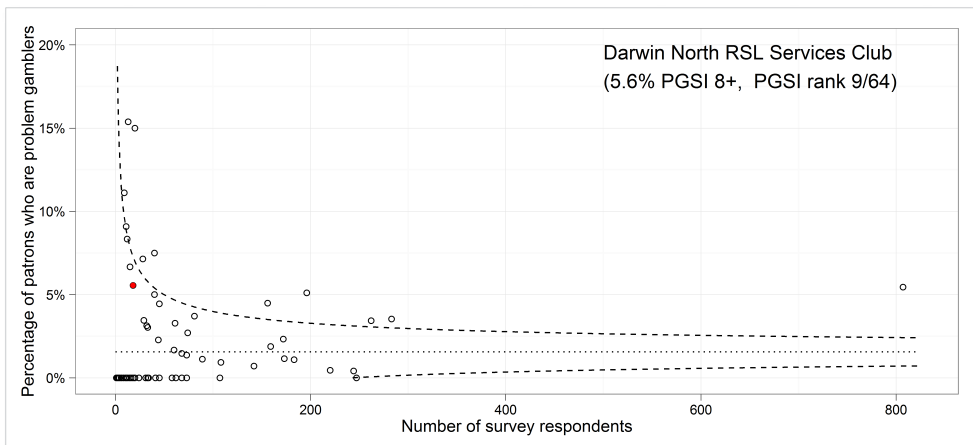
DISTANCE PROFILE

Gambler type	Estimated number	
High risk	**26**	(0, 71)
Moderate risk	**22**	(0, 53)
Low risk	**7**	(0, 20)
Non-problem	**168**	(118, 219)

ESTIMATED NUMBER OF PROBLEM GAMBLERS
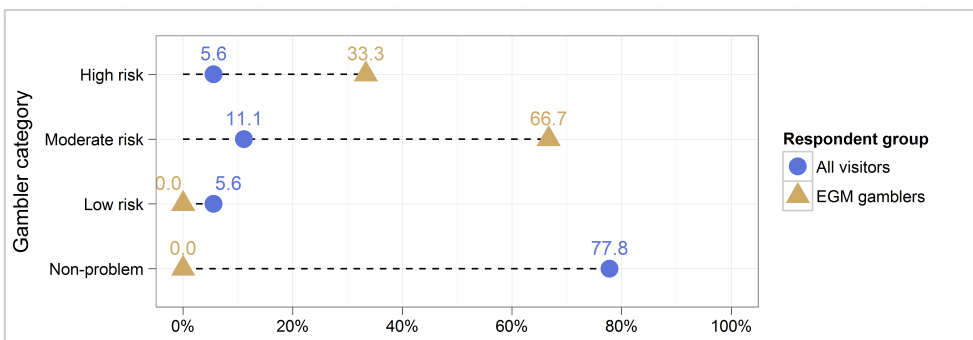
	Darwin North RSL estimate (95% c.i.)		All venue estimate (95% c.i.)	
Mean age	**54.6**	(48.4, 60.8)	**41.2**	(41.1, 41.3)
Per cent female	**11.4**	(0.2, 22.6)	**48.5**	(48.5, 48.5)
Per cent university educated	**47.1**	(24.8, 70.6)	**46.9**	(45.4, 48.5)
Per cent < $149 weekly income	**11.0**	(0.0, 23.5)	**7.1**	(6.3, 8.0)
Per cent $150 - $599 weekly income	**15.8**	(0.0, 32.3)	**17.8**	(16.7, 19.0)
Per cent $600 - $1,599 weekly income	**63.3**	(40.8, 85.8)	**58.7**	(57.1, 60.2)
Per cent > $1,600 weekly income	**9.9**	(0.0, 23.5)	**16.4**	(15.3, 17.6)
Mean distance travelled to venue (km)	**13.1**	(11.1, 15.1)	**7.3**	(6.9, 7.7)
Per cent gambled on EGMs on last visit	**21.5**	(0.0, 44.0)	**14.1**	(12.9, 15.3)
Mean EGM session length (minutes)	**84.1**	(41.9, 126.3)	**88.2**	(78.6, 97.9)
Mean number of visits per month	**4.7**	(2.2, 7.1)	**3.4**	(3.3, 3.6)

PATRON CHARACTERISTICS