

Evaluation of the Take Kare Safe Space Program

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ACKNOWLEDGEMENT OF COUNTRY

We acknowledge the Traditional Owners of the land across Australia on which we work and live. We pay our respects to Aboriginal and Torres Strait Islander Elders past, present, and future, and we value Aboriginal and Torres Strait Islander histories, cultures, and knowledge.

DECLARATIONS

This evaluation was approved by the UNSW Human Research Ethics Committee (HC17509), The NSW Police Force Research Coordination Unit (approval letter dated 17/1/2018) and the St Vincent's Hospital Human Research Ethics Committee (LNR/18/SVH/255). The authors of this report have no financial interest in the organisations, subject matter or materials discussed in this report.

The University of New South Wales has a standing Memorandum of Understanding (MOU) with the Thomas Kelly Youth Foundation (now Stay Kind) for the period March 2016-2021.

This project was supported by an advisory group that met quarterly for the life of the project. The advisory group provided advice only and all decisions relating to the conduct of this research project were made independently by the research team, including:

1. Project Evaluation Team: Chris Doran (Chair– Central Queensland University), Anthony Shakeshaft (UNSW) and Phillip Wadds (UNSW)
2. Stay Kind (Ralph Kelly and Natalie Zelinsky)
3. NSW Department of Justice (Giles Felgate)
4. NSW Treasury (Claudia Solomon and Bek Abdullaev)
5. St. Vincent's Hospital Accident and Emergency (Gordian Fulde and Paul Preisz)
6. University of Technology Sydney (Herve Harvard and Sophie Ritchie)
7. City of Sydney Council (Rebecca Martin)
8. NSW Police (Michael Fitzgerald and Paul Dunstan)
9. NSW Ambulance (Darren Eller)

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EXECUTIVE SUMMARY

The Take Kare Safe Space (TKSS) program is one of the functions of Stay Kind (formally, the Thomas Kelly Youth Foundation) established in response to concerns about the safety of young people at night. The program commenced operations at Town Hall in December 2014, Kings Cross in July 2015, and Darling Harbour in February 2017. It operates year-round from 10pm to 4am on Friday and Saturday nights. Recent funding cuts have forced the closure of the Darling Harbour Site and restricted operation of the Kings Cross Safe Space to Saturday nights.¹

The NSW Government's Department of Justice provided funding to conduct an evaluation of the TKSS program. The evaluation was informed by the NSW Government's Program Evaluation Guidelines and included process, outcome and economic indicators. The evaluation relied on internal program-level data, routinely collected data; and, interview and survey data.

Until recently, internal program level data was collected by TKSS ambassadors using pen and paper. Recent changes have seen the development of an app (through in-kind support from the University of Technology, Sydney), that will streamline the collection of data, improve the time lag for the reporting process as well as support a richer source of data collection. This analysis, however, relies on historical data collected using pen and paper. Over the period of interest, December 2014 – April 2019 (inclusive), records indicate that 66,455 people had been supported by the TKSS program with 62% of users being males and 66% aged between 18-25 years. Most users were perceived by the TKSS ambassadors to have a high level of intoxication (46%) with 8% perceived to be under the influence of drugs. Most users (66%) spent time at the safe space and 19% were supported in other ways (defined as incidents). The type of incidents recorded by ambassadors include minimising the risk of physical assault, sexual assault, theft or injury. Over the period of interest, ambassadors intervened to avert the risk of serious harm in 735 cases from a total of 3,633 incidents, 20% of all incidents.

Routinely collected data sources used in this analysis included: crime, emergency department (ED) and ambulance data. Generalised linear models for time series counts were used to specify segmented regressions for data extracted over the period 2009-2018. The two main segments modelled were the introduction of the Liquor Amendment Act (LAA) and the start of the TKSS program. Given that TKSS and the introduction of LAA were implemented within 2 years (at most) of each other, the attributed effect to each intervention on rates of offences is difficult to discern since these interventions are combined with complex interactions over time and with dynamic population movements. For ED admissions, the results were unclear about the true effect of the TKSS program on either head-injury related admission or alcohol-related admissions. For the ambulance data analysis, similarly to the crime analysis data, the results

¹ Details presented in this report are accurate as of submission of the final report to the Department of Justice on 30/11/2019. Due to COVID-19, the TKSS program was temporarily suspended until such time as it is appropriate to re-open the service again. Prior to COVID-19, Kings Cross remained closed due to significantly decreased demand for services, whilst Darling Harbour was re-opened in December 2019 through the support of funding partners. TKSS Safe Spaces operate responsively on the basis of funds availability and local area/site requirements of the service.

were unable to discern a statistically significant reduction in assault-related or drug and alcohol-related ambulance dispatches. Reasons identified included low monthly counts, background noise and the relatively short time between LAA and TKSS. In summary, the analysis of routinely collected data sources was not able to disentangle the potential attribution of the TKSS program in reducing crime or ED admissions. Nevertheless, and although this analysis is only a retrospective observational study, Figure 11 shows assaults started to increase again from 2015 but not related Emergency Department presentations or related Ambulance call-outs, which might reflect the important point that a key function of TKSS program is the prevention of relatively serious harms (those that require emergency services) as opposed to preventing the occurrence of crimes *per se*.

A questionnaire was developed to explore clients use and satisfaction with the Safe Spaces. Of the 157 participants, 61% were male, the average age was 23 years; 42% had completed tertiary education and 38% were employed full time. Ninety-four percent of participants consumed alcohol at hazardous levels and 23% had been professionally diagnosed with a mental health condition. Over a half of the participants accessed a Safe Space by themselves with the majority using the service to receive water, to sober up or charge their phones. Ninety percent of participants were extremely satisfied with the service and would recommend it to friends.

Semi-structured interviews were conducted with stakeholders, including staff from NSW Police and Ambulance, St Vincent's, City of Sydney, licensed venues and clients of the program. All interviews were recorded (in audio or written form) with consent, transcribed and subjected to a thematic analysis which identified and explored salient themes within and across the data. The identified strengths of the TKSS program were various and routinely shared across stakeholder groups, serving to reinforce the validity of findings. The most salient strengths identified across the interview dataset were the program's role in filling a service gap in nightlife settings; improving efficiency and effectiveness of emergency services and other stakeholders operating in nightlife settings; and, the ambassadors' ability to de-escalate conflict and provide welfare services through the performance of early, proactive and non-judgmental, interventions. Perceived weaknesses of the TKSS program included: a lack of public awareness around the program; the ability of the program to service its current localities given staff and volunteer levels; and misunderstandings regarding the scope and function of the TKSS program by some stakeholders. Stakeholders, while noting the above challenges were universally satisfied with the performance of the program and felt that it was meeting its stated objectives.

A benefit-cost analysis of the TKSS program was undertaken by comparing benefits and costs. Benefits included the value of serious harm averted and the social (community) value attached to lives saved through ambassador interventions. Costs included operating expenses and the market value of volunteer time. Several sensitivity analyses tested the robustness of results to changes in assumptions. Over the period December 2014 – April 2019 (inclusive), the benefits of the TKSS program are estimated at \$7.46 million and operating costs at \$2.79 million with a benefit-cost ratio of 2.67, suggesting that a \$1 investment in the program results in \$2.67 of benefits. When the TKSS program was fully operational in three sites (i.e., in 2016-17), the benefit-cost ratio increased to 3.83, suggesting that a \$1 investment in the program results in \$3.83 of benefits. These results are conservative and the return on investment is likely to be much higher given that the analysis does not quantify the full spectrum of benefits associated

with the TKSS program such as: improved public safety and amenity; more efficient resource allocation for service providers; improved partnership, communication and resourcing to manage Sydney nightlife; and, the flow on effects for tourism and investment.

The TKSS program has withstood several significant challenges since opening including sporadic funding, a variation to the modus operandi and, significant capital works within the boundaries of the program. Despite these challenges, the TKSS program has met its objective to provide a harm reduction service where vulnerable young people can access support and a safe place or a safe passage home. The benefits that could be quantified outweigh the cost of delivering the program suggesting that Safe Spaces are a good economic investment that should be supported with appropriate funding.

INTRODUCTION

The Take Kare Safe Space (TKSS) program is one of the functions of Stay Kind (formally, the Thomas Kelly Youth Foundation) established in response to concerns about the safety of young people at night, specifically to get kids home safely. The program is designed to: improve the safety and amenity of the public domain; provide a harm reduction service where vulnerable young people can access support and a safe place; reduce the risk of crime, specifically to prevent intoxicated young people from becoming the victims or perpetrators of crime; collaborate with key stakeholders to establish a governance model that can enhance the night time environment; and, support organisations that operate in the city at night (e.g. venue security staff, NSW Police and Ambulance). The program commenced operations at Town Hall in December 2014, Kings Cross in July 2015 and Darling Harbour in February 2017. TKSS operates year-round from 10pm to 4am on Friday and Saturday nights... Small teams of ambassadors and volunteers patrol each precinct looking for vulnerable and alcohol affected young people.

The City of Sydney Council conducted an evaluation of the pilot TKSS program in the City's Central Business District (CBD) from 5th December 2014 - 21st February 2015⁽¹⁾. The purpose of the pilot evaluation was to evaluate both the operating model and the outcomes of the program. Data from the three-month pilot evaluation found that over 1,800 people were assisted, with the program providing safe outcomes for intoxicated and drug affected young people, the majority of whom were in the 18-25 age group. The data collected identified four key categories where young people were most at risk: i) vulnerability to assault, ii) vulnerability to sexual assault, iii) vulnerability to theft, and iv) vulnerability to traffic injury. The TKSS program provided a timely intervention to protect young people from these negative outcomes. Based on these findings, Stay Kind received interim funding to continue the TKSS program.

Raw program data supported the effectiveness and impact of the TKSS program to date, however, to determine the cost benefits for the TKSS program, the NSW Government's Department of Justice provided funding to conduct a formal evaluation. The methodology underpinning the evaluation was guided by the NSW Government's Program Evaluation Guidelines⁽²⁾ to examine process, outcome and economic indicators. The evaluation relies on three sources of data: i) routinely collected data sources such as crime, emergency department (ED) admissions and ambulance dispatches; ii) internal program-level data collected by the TKSS ambassadors; and iii) qualitative data collected from clients and stakeholders. A mixed method approach has been embedded into the evaluation framework combining both qualitative and quantitative methods. Process indicators assess uptake of the program; client characteristics including age, gender and intoxication levels; time and duration of contact; services and/or referrals provided. Outcome indicators assess ambassador intervention that seek to prevent harm; and, reductions in demand for acute services (e.g. police incidents, ambulatory care and emergency department (ED) presentations). Economic indicators enable an assessment of whether the economic benefits of the TKSS program outweigh its costs. The evaluation framework is provided in Appendix A. The time frame of the evaluation spans the period December 2014 – April 2019 (inclusive).

PROCESS EVALUATION

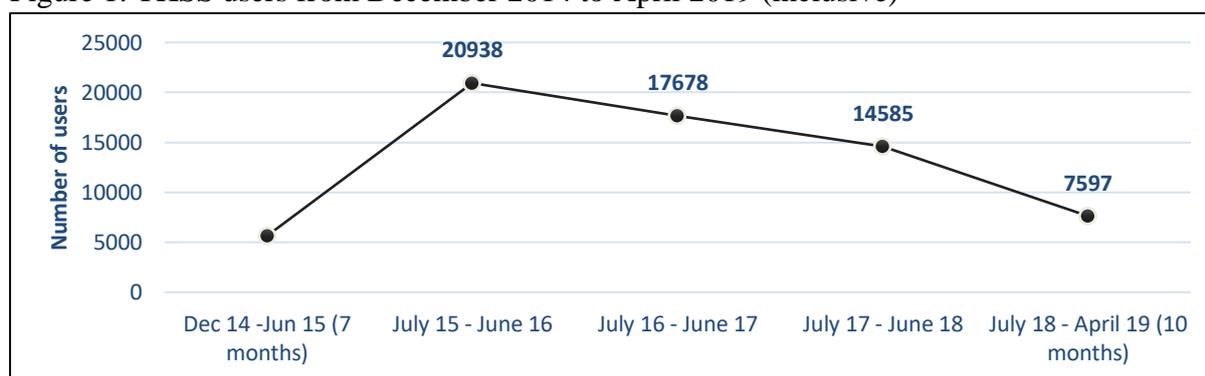
Utilisation of the TKSS program

Each Friday and Saturday night between 10pm and 4am, TKSS ambassadors record a range of information relating to client interaction including age, gender, perceived levels of intoxication, services provided, referrals to the service and referrals to other providers. This information is recorded on an incident form and until previously is entered manually into a database. Recently, the service has moved to an app-based data entry tool that should streamline the process associated with data recording and management. It is important to note that as of March 2018 Kings Cross Safe Space ceased operating on a Friday Night due to change of demographics and reduced demand on the service that did not justify the resource allocation. The Kings Cross Safe Space also closes around 3am on a Saturday due to the rapidly escalated violence around 3am being too unsafe for the teams.

Number of users

Figure 1 provides an overview of TKSS users by calendar year. Cumulatively, from December 2014 to April 2019 (inclusive), 66,455 people have been supported by the TKSS program. The number of assists peaked between July 2015 and June 2016. The visual decline after June 2016 can be directly attributed to the introduction of the “lockout laws” in the Kings Cross and CBD precincts². The lockout laws were introduced by the NSW Government in February 2014 with the objective to reduce alcohol-fueled violence. The legislation requires 1.30am lockouts and 3am cessation of service at bars, pubs and clubs in the Sydney CBD entertainment precinct. The legislation was well publicized and there was a period where Safe Space Assistance peaked post the legislation, noting also the first Safe Space came online 4 months after the legislation. Darling Harbour is located outside of the CBD precinct and is exempt from the lockout laws. It is important to note that users to the Darling Harbour TKSS service has increased steadily since commencement at that site in February 2017 (not shown). At the time of writing, Darling Harbour TKSS had ceased due to funding.

Figure 1: TKSS users from December 2014 to April 2019 (inclusive)



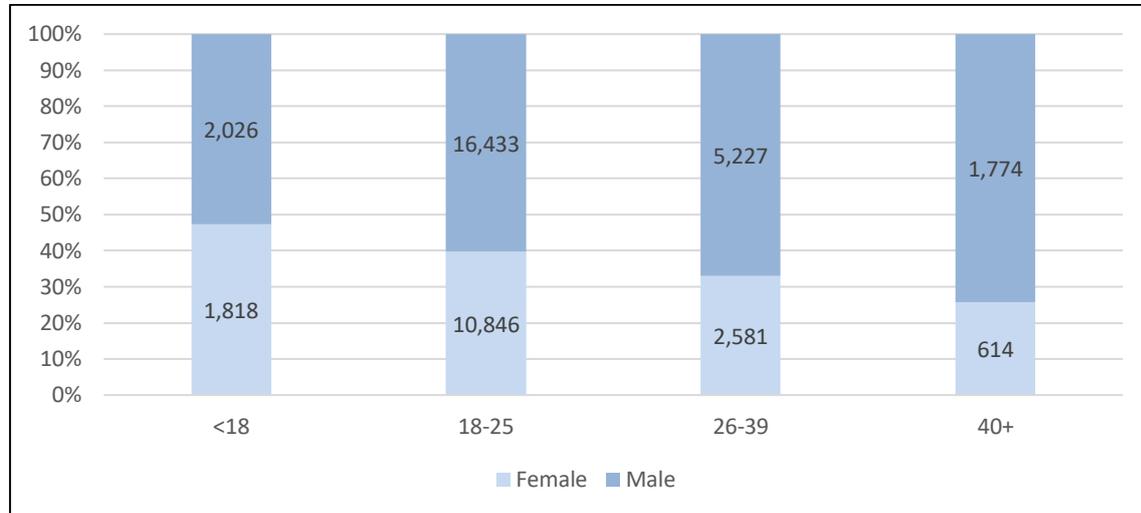
Profile of users

Figure 2 provides an overview of TKSS users by age and gender for those where details were recorded (n=41,395). Sixty-two percent (n=25,460) of users were males and 38% (n=15,859)

² On 30 January 2014 the Liquor Amendment Bill 2014 and the Crimes and Other Legislation Amendment (Assault and Intoxication) Bill 2014 were passed through Parliament. The Liquor Amendment Bill 2014 was aimed at strengthening the Government’s risk-based approach to managing liquor licensing.

were females. The largest demographic was the 18-25 age bracket accounting for 66% (n=27,279) of the sample, followed by those aged 26-39 (n=7,808 or 19%) and those aged less than 18 years of age (n=3,844 or 9%).

Figure 2: TKSS users by age and gender



Perceived levels of intoxication

TKSS Ambassadors rated the perceived intoxication level of the person/people receiving support. Of the 8,872 assessment for level of intoxication, 46% (n=4,061) were perceived to have had a high level of intoxication, 36% (n=3,190) with a mild level of intoxication, 11% (n=955) were perceived as sober and 8% (n=666) were perceived to be under the influence of drugs.

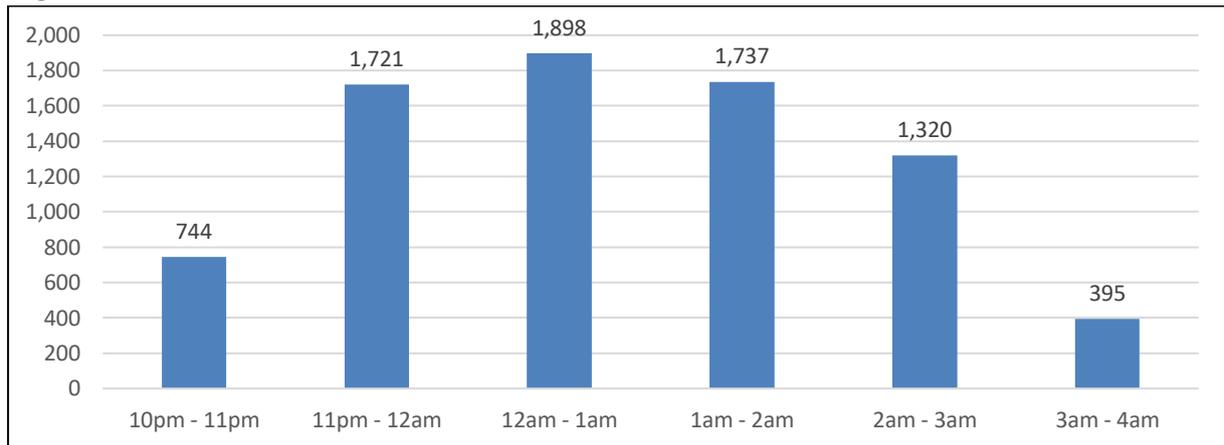
Type of support provided

Most users (66% or n=41,396) spent time at the Safe Space, 19% (n=12,645) were supported in other ways (defined as incidents) and 18.7% (n=12,414) request directions, primarily related to transport. The type of incidents recorded by TKSS staff and volunteers include minimising the risk of physical assault, sexual assault, the risk of theft, or injury (see below for further detail). If required, ambassadors also provide first aid support, reconnect via phone or provide escort to accommodation, transport, or friends/ family. The first aid response usually involves an initial assessment, such as checking responsiveness, other symptoms, and asking the person if/how much they have been drinking, the provision of bottled water for rehydration, providing a vomit bag if required, and generally ensuring that people are stable, safe and either in the company of friends or at a Safe Space under the supervision of ambassadors.

Time of user contact

Figure 3 provides an overview of time of contact. The periods between 11pm and 2am were the busiest times in terms of user contact with 69% of all contact (n=5,356) occurring within this time frame.

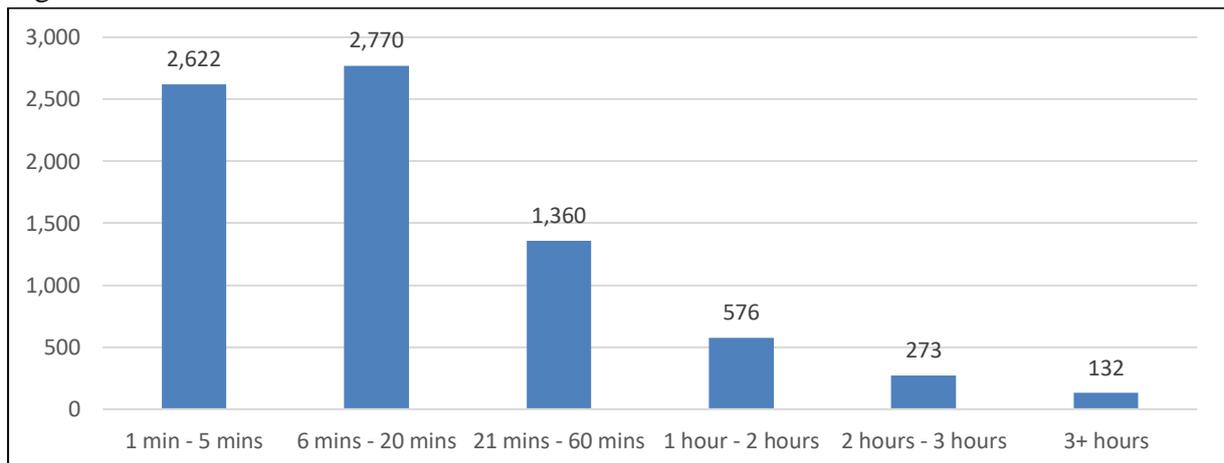
Figure 3: Time of user contact



Duration of user contact

Figure 4 provides an overview of duration of engagement at the TKSS site or with TKSS ambassadors. Seventy percent (n=5,392) of users are in contact with the service for between 1 and 20 minutes. Thirteen percent (n=981) of all users are in contact for greater than one hour.

Figure 4: Duration of user contact



Referrals to TKSS

Integral to the TKSS program is its interaction with other agencies and partners to ensure the maximum benefit to those who are vulnerable and in need of assistance. Other agencies and partners include City Rangers, licensed premises, venue security, police, CCTV and transport staff. Of the ‘incidents’ referred to and responded by ambassadors from December 2014 to April 2019, 69% (n=6,991) were instigated by ambassadors, followed by friend (15%, n=1,502), venue security (5%, n=534) and the general public (n=371)

Referrals from TKSS

Where the support required exceeds the program's scope and capacity, ambassadors refer the incident to the appropriate emergency service including: 29% (n=511) referrals to ambulance, 29% (n=498) referrals to police and 26% (n=458) of referrals to the City of Sydney or Darling Harbour Foreshore CCTV control rooms.

OUTCOME EVALUATION

Analysis of TKSS internal data

Ambassador interventions that averted serious risk of harm

Given it is uncertain whether an assault, theft or injury would have occurred if the intervention did not happen, ambassadors used their understanding and experience in the city at night to identify those incidents that were of serious risk of occurring. Table 1 provides an overview of all the interventions provided by Take Kare ambassadors and the subset of those interventions that the ambassadors classified as being at serious risk of occurring. For theft, the category “passed out – valuables visible” is included. For risk of injury, only road related traffic injuries are considered with a further assumption made that only a fraction of these injuries would be classified as major (derived using the average of major assaults and sexual assaults averted). Appendix B provides a detailed breakdown of interventions by ambassadors by severity. Over the period December 2014 – April 2019 (inclusive), ambassadors’ interventions averted an estimated 735 incidents that were of serious risk of occurring, out of a total of 3,633 interventions.

Error! Reference source not found.: Interventions that averted serious risk of harm (Dec 2014 – April 2019)

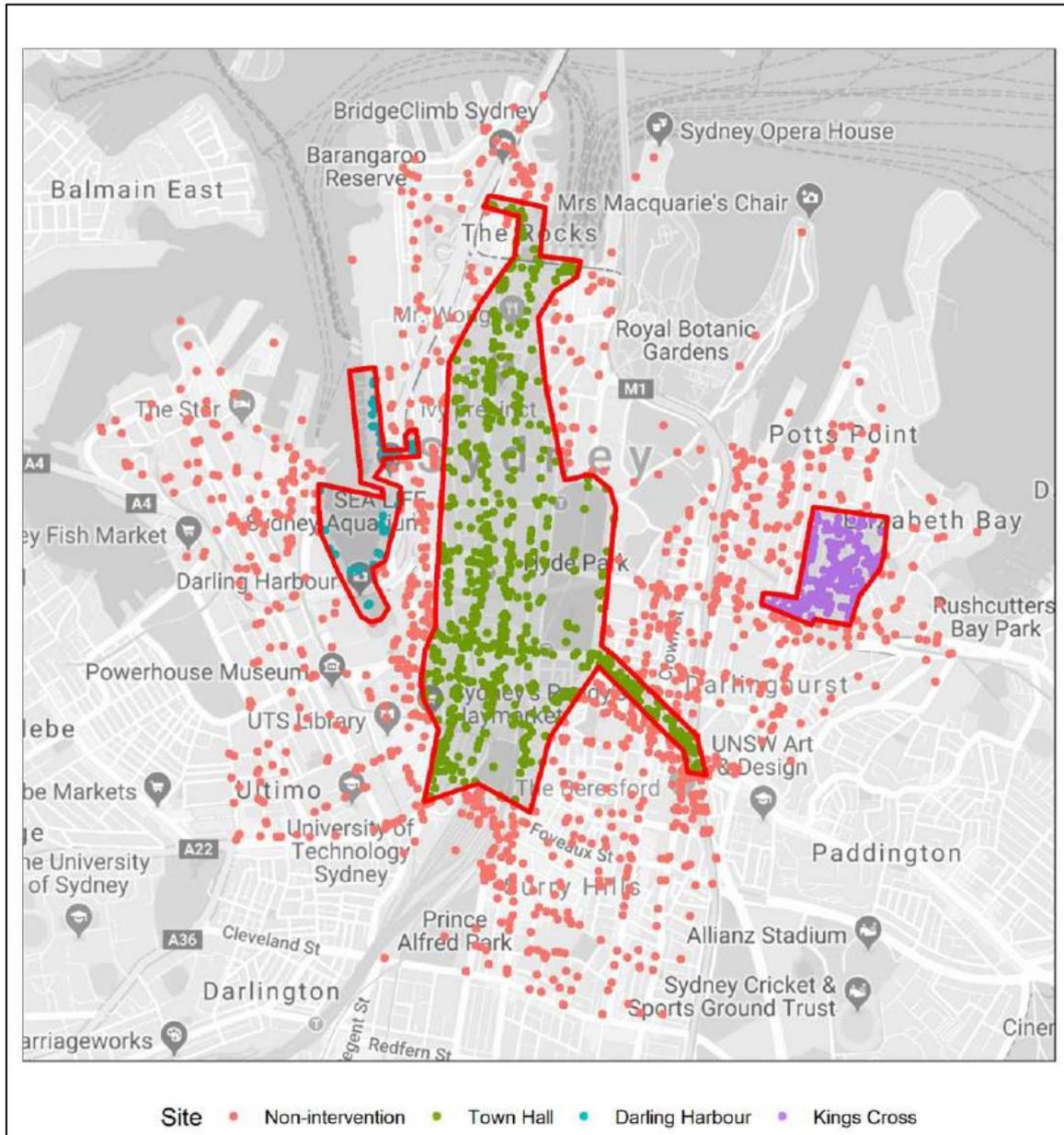
Intervention	All ambassador interventions (Dec 14-April 19)	Interventions classified as serious risk of occurring	Proportion of interventions
Minimised the risk of assault	1,357	235	17%
Minimised the risk of sexual assault	664	50	8%
Minimised the risk of theft	904	362	40%
Minimised the risk of road traffic accidents	708	88	12%
Total	3,633	735	20%

Analyses of crime data

Description of crime data

Criminal incident data were obtained from the NSW Bureau of Crime Statistics and Research. The incidents dataset was used for this analysis as these data contains information including; incident number, longitude, latitude, postcode, suburb, sub offence category, alcohol-related indicator and a domestic violence relative indicator. Site specific boundaries were derived with ambassadors for Town Hall, Kings Cross and Darling Harbour. The non-intervention site was classified as lying outside of the TKSS site boundaries. Figure 5 provides an overview of boundaries by site.

Figure 5: TKSS site boundaries



Segmented regression analysis related to crime data analyses

Although crime data was available for the period January 2005 to December 2018 (inclusive), preliminary analyses suggested that the time series approach to analysis (discussed below) was sensitive to the time segment length. As a result, the analyses were limited to the period January 2009 – December 2018.

Generalised linear models for time series counts were used to specify segmented regression. Estimation were conducted using a quasi-likelihood approach based on the Poisson likelihood for the negative binomial distribution. These models were implemented using the R package `tscount`⁽³⁾. The outcomes for the models were the total number of non-domestic incidents each month within TKSS operating hours. Seasonality was adjusted using three broad methods: 1) autoregressive monthly and yearly lags; 2) monthly factors (January to December); and, 3) a cosine and sine term. To best understand how the data reacts to different seasonal adjustments a combination of seasonal adjustment was tested with the best model presented in the analysis.

A total of 16 models were tested with the monthly and year lags tested in separate combinations since it is plausible that a monthly and yearly seasonality occur independently (Appendix C).

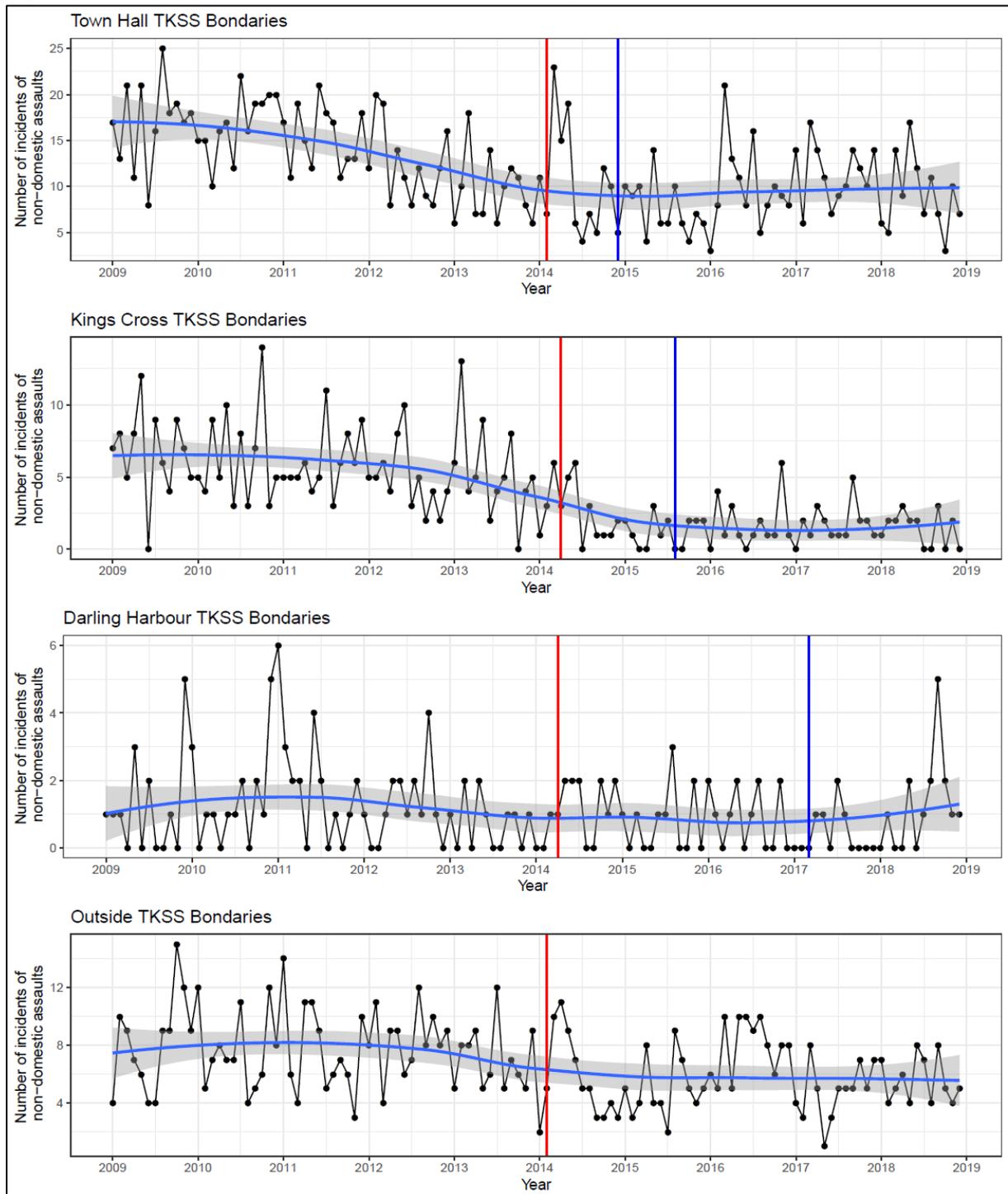
The two main events of interest were; the start date of the TKSS programs and the introduction of The Liquor Amendment Act 2014 (lock out laws). Models were specified to account for these segments, by allowing a pre-lock-out law trend, a shift in level caused by the lock-out laws and a change in trend caused by lock out laws. This was replicated to allow for a shift in level caused by the TKSS intervention and a change in trend cause by TKSS intervention.

The model parameter estimates are multiplicative to the underlying rate assault, where an estimate greater than one suggests a multiplicative increase i.e. 1.05 suggest a 5% increase per month, conversely, an estimate less than 1 suggested a multiplicative reduction, i.e. 0.95 suggest a 5% reduction in the rate of assaults per month.

Results of crime data analysis

Figure 6 shows the number of non-domestic related assaults between January 2009 and December 2018. To be conservative, we only included non-domestic related assaults that occurred during the operating times of the Safe Spaces, defined as between 2200 to 0400 Friday night to Saturday morning and Saturday night to Sunday morning. Although this excludes any harms averted by the presence of the Safe Spaces that would have occurred outside these times (e.g. theft from, or assault of, a vulnerable person left asleep or unconscious in a public place), we wanted to be as conservative as possible in estimating the benefits of the Safe Spaces. The red line (on the left) indicates the start of the LAA and the blue line (to the right) shows the respective start of the TKSS program. Town Hall and Kings cross show the higher number of assaults of the three sites, where Darling Harbour has more zero monthly of assaults. Town Hall shows a gradual decrease over the period prior to the introduction of LAA, where TKSS started at the bottom of the trend. A similar shape is observed in the Kings Cross data. The Darling Harbour trend is much closer to zero, meaning that the effect of LAA and TKSS is much harder to see. The underlying trend of the data outside of TKSS boundaries has a much flatter shape showing that the effects of LAA may not affect all areas of Sydney in the same way. While these results suggest either an increasing trend compared to a segment of time when TKSS was not operating, it should be noted that this analysis has not accounted for any blunting or delay effects that might be associated with the introduction of the LAA). Moreover, TKSS and the introduction of LAA were implemented within 2 years (at most) of each other, and the attributed effects to each intervention are not possible to discern since these interventions are combined with complex interactions over time and with dynamic population movements.

Figure 6: Number of non-domestic related assaults, by site over time



Analysis of ambulance data

Description of ambulance data

Data from the NSW Ambulance Service was obtained for the period January 2009 – December 2018 on the monthly number of ambulances dispatched to the Sydney CBD during TKSS operating times. Each observation contains; case identifier, age of patient, time and day of ambulance response, a listed problem for dispatch, and pick-up location including postcode and geo-location. The number of monthly counts stratified by each site was assessed as being too small, creating spurious conclusions. As a result, the data was analysed as the collective monthly number of dispatched to geo-locations within the TKSS boundaries.

Segmented regression analysis related to ambulance data analyses

Generalised linear models for time series counts were used to specify segmented regression. Estimation we done using a quasi-likelihood approach based on the Poisson likelihood for the negative binomial distribution. These models were implemented using the R package *tscount*⁽³⁾. The outcomes for the models were the number of drug and alcohol-related and assault-related dispatches in each month. Seasonality was addressed by adjusting for monthly and yearly lags, factor terms for the months of the year and cyclical (cos and sin terms). A total of 16 combinations of the seasonality adjustments were considered and the report presents the best fitting models, assessed by AIC. The time series segments allow for shocks and changes in trend and shift in level caused by exogenous events. As for the crime analysis, the two main events of interest were the start date of the TKSS programs and the introduction of the LAA. Models were specified to account for these segments, by allowing a pre-lock-out law trend, a shift in level caused by the lock-out laws and a change in trend caused by lock out-laws. This was replicated to allow for a shift in level caused by the TKSS intervention and a change in trend cause by TKSS intervention.

The model parameter estimates are multiplicative to the underlying rate assault, where an estimate greater than one suggests a multiplicative increase i.e. 1.05 suggest a 5% increase per month, conversely, an estimate less than 1 suggested a multiplicative reduction, i.e. 0.95 suggest a 5% reduction in the rate of emergency admission per month.

Results of ambulance data analysis

Figure 7 shows the number of assault related ambulance dispatches between January 2009 and December 2018. The results of the segmented time-series models suggest that for assault-related dispatches there was a relative increase of 2.5 percentage points (1.025, 95%CI: 0.930, 1.130, $p=0.617$) in the monthly number of dispatches after the start of the TKSS program. Prior to the start of the program, it was estimated the trend of monthly dispatches was decreasing at a rate of 3.34% per month, this trend increased to -0.84% per month after the start of the TKSS program. These findings were not statistically significant.

Figure 7: Assault related ambulance dispatched to TKSS sites within TKSS operating times

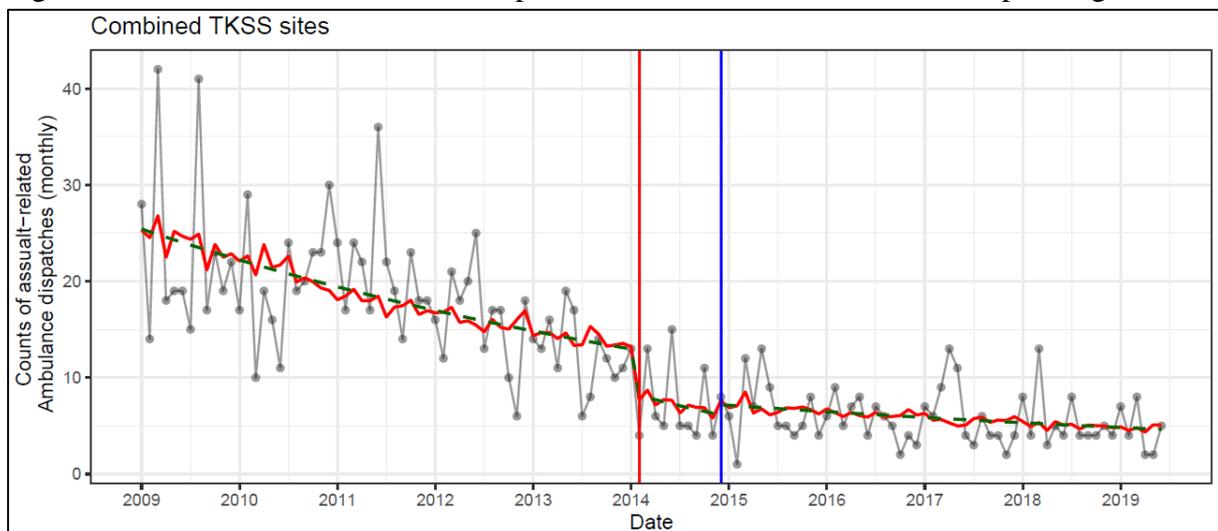
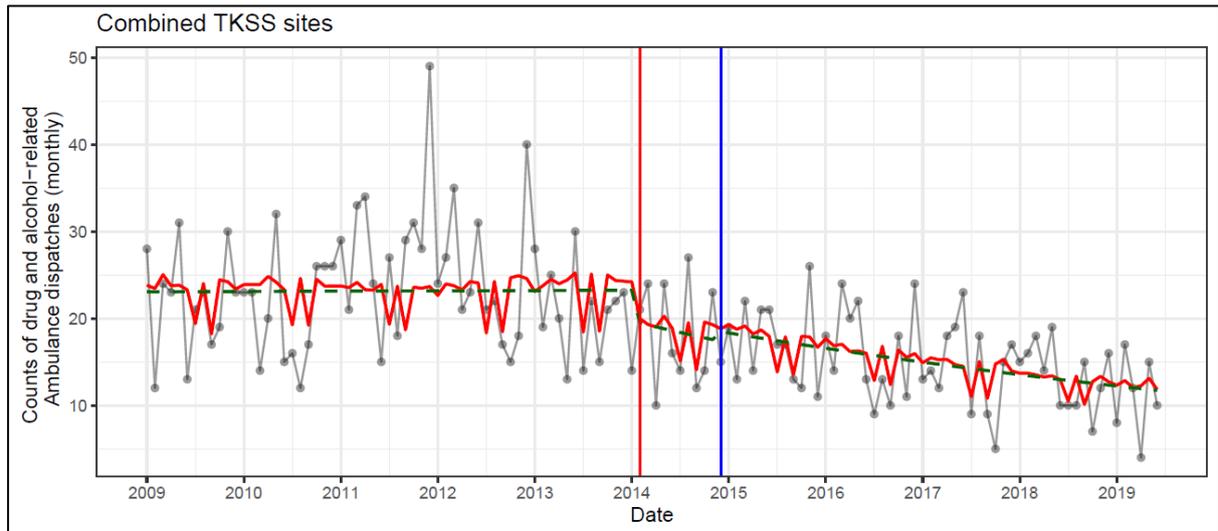


Figure 8 shows the number of drug and alcohol-related ambulance dispatches between January 2009 and December 2018. The model for the segmented time-series model for drug and alcohol-related dispatches suggests that after the start of the TKSS program there was a relative decrease of 0.52 percentage points (0.995, 95%CI: 0.932, 1.062, $p=0.876$) in the trend of dispatches. Prior to the start of the program, it was estimated that there was a downward trend of monthly dispatches of -0.40% per month, this decreased to -0.92% per month after the start of TKSS. These findings were not statistically significant.

Figure 8: Drug & alcohol-related ambulance dispatched to TKSS sites within TKSS operating times



Both results from the segmented time-series models failed to suggest a statistically significant reduction in NSW ambulance data when considering the monthly count of assault-related or drug and alcohol-related dispatched.

Analysis of emergency data

Description of emergency department data

Emergency department (ED) admissions data was obtained from St Vincent's Hospital, the major trauma hospital in Sydney, for the period January 2009 – December 2018. Each record contained information on arrival time and date, discharge time and date, age, triage, gender, postcode, complaint, diagnosis, ICD 10 Code and disposition. The primary outcome for this analysis is the monthly number of admissions to the ED, by diagnosis of interest; head injuries and alcohol related.

Segmented regression analysis related to emergency data analyses

Generalised linear models for time series counts were used to specify segmented regression. Estimation we done using a quasi-likelihood approach based on the Poisson likelihood for the negative binomial distribution. These models were implemented using the R package `tscount`⁽³⁾. The outcomes for the models were the number of either alcohol-related and head injury admissions in each month. Seasonality was addressed by adjusting for monthly and yearly lags, factor terms for the months of the year and cyclical (cos and sin terms). A total of 16 combinations of the seasonality adjustments were considered and the report presents the best fitting models, assessed by AIC.

The time series segments allow for shocks and changes in trend and shift in level caused by exogenous events. As for the crime and ambulance data analysis, the two main events of interest were the start date of the TKSS programs and the introduction of the LAA. Models were specified to account for these segments, by allowing a pre-lock-out law trend, a shift in level caused by the lock-out laws and a change in trend caused by lock out-laws. This was replicated to allow for a shift in level caused by the TKSS intervention and a change in trend cause by TKSS intervention.

The model parameter estimates are multiplicative to the underlying rate assault, where an estimate greater than one suggests a multiplicative increase i.e. 1.05 suggest a 5% increase per month, conversely, an estimate less than 1 suggested a multiplicative reduction, i.e. 0.95 suggest a 5% reduction in the rate of emergency admission per month.

Results of emergency data analysis

Figure 9 shows the number of head injury-related ED admissions between January 2009 and December 2018. The results of head injury-related ED reduced by 1.92 percentage points (0.982,95%CI: 0.924, 1.044, p=0.561) after the introduction of the TKSS program. The trend prior to the start of TKSS was an increase of 1.11% per month to a reduction of 0.81%. This effect was not statistically significant.

Figure 9: Head injury-related ED admissions within TKSS operating times

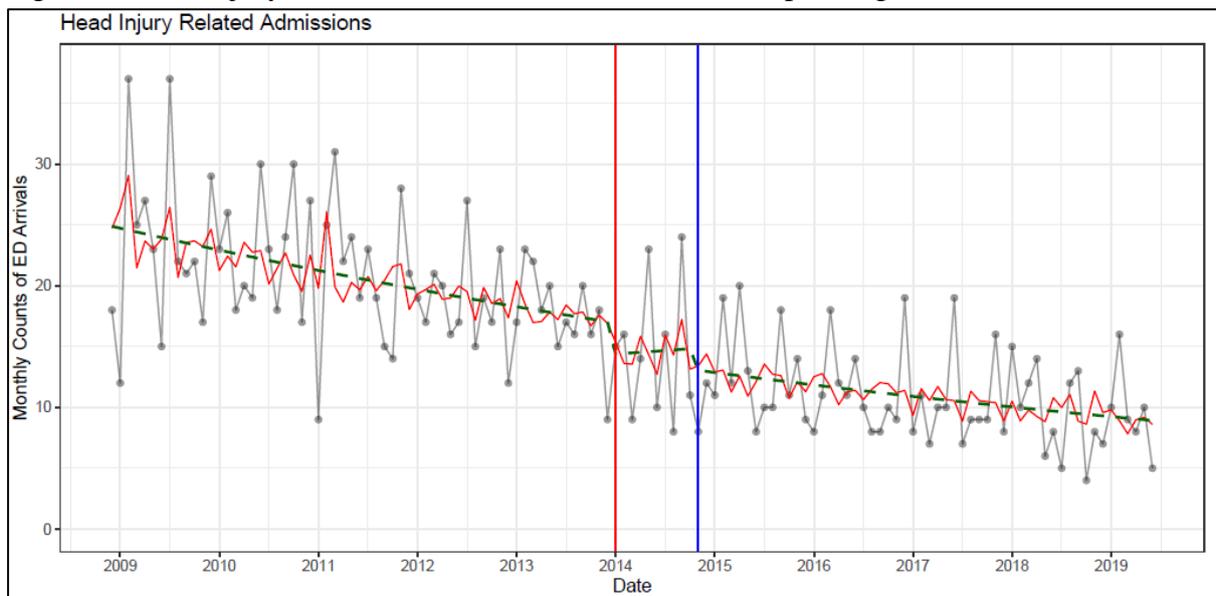
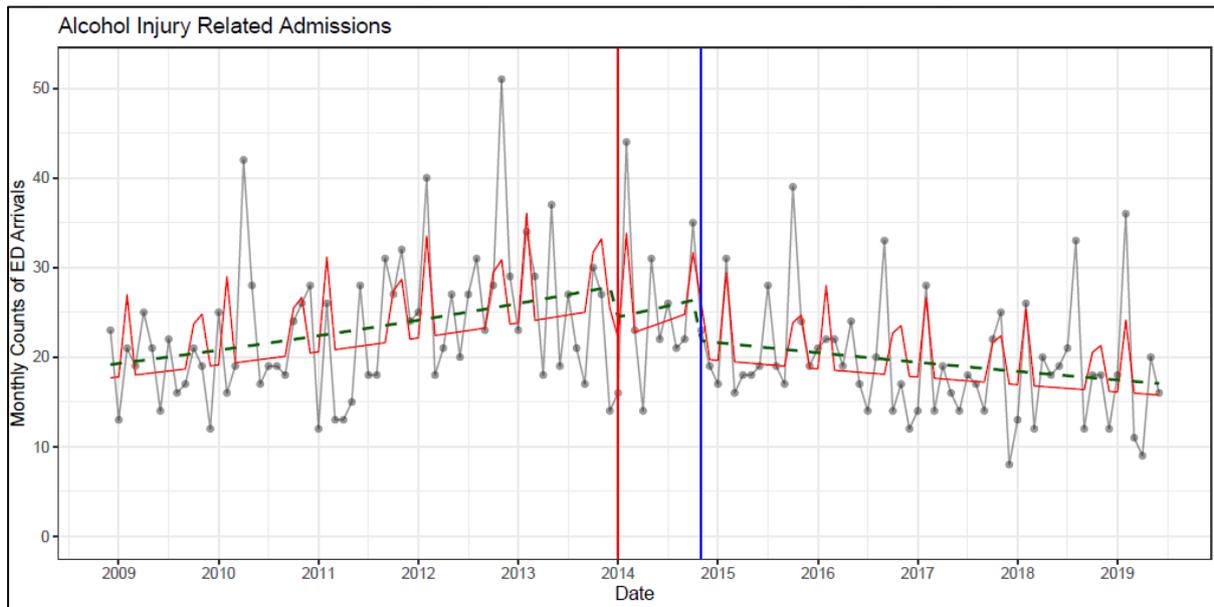


Figure 10 shows the number of alcohol -related ED admissions between January 2009 and December 2018. The results of the alcohol-related admissions suggest that after the start of TKSS the trend in alcohol admissions was reduced by 1.80 percentages points (0.982, 95%CI: 0.924, 1.044, p=0.561) compared to the rate of admissions prior to the start of TKSS. Before the start of the program, it was estimated that the trend of admissions was increasing by 1.41% per month and after the start of the program it was expected that the trend in admissions was reducing by -3.9% per month. This effect not statistically significant.

Figure 10: Alcohol-related emergency admissions within TKSS operating times

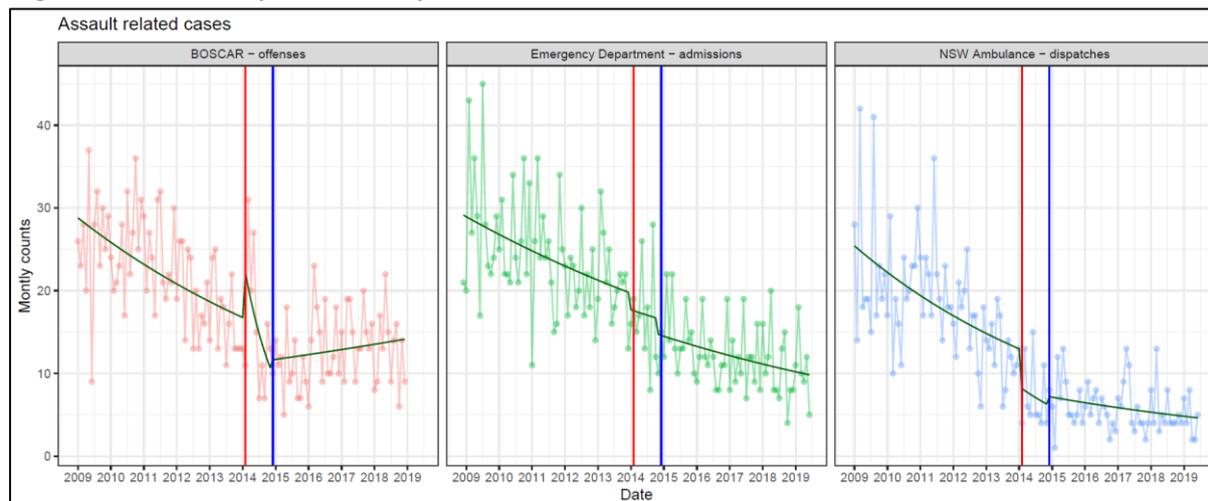


The results from the segmented time-series models suggest that a clear relationship between the TKSS program on either head-injury related ED admission or alcohol-related ED admissions cannot be identified.

Summary of routinely collected data analyses

Figure 11 shows consistency in the pattern of alcohol-related assaults (crime), alcohol-related ED presentations and alcohol-related ambulance callouts: an overall decline in incidents since 2009, both pre and post the introduction of the lock out laws' legislation and the Safe Spaces. There may be some suggestion that assaults are trending back up, but ED presentations and ambulance call outs have remained flat post Safe Spaces. Although the trends pre and post the lockout laws and Safe Spaces are not significant, if they were to continue as they are then one possible interpretation may be that Safe Spaces have a dampening effect on ED presentations and ambulance calls outs (i.e. they keep the demand for ED and ambulance services constant) but not the occurrence of assaults. That would be consistent with previous research on community-based responses to alcohol harms, which showed that alcohol harms can be less in communities with community action responses (compared to communities who do not have those responses), but sustaining reductions in alcohol harms over time is likely to need more targeted and restrictive legislation to control the availability of alcohol, especially at high-risk times⁽⁴⁾. To be conservative (because we can't be statistically certain about the trends and the attribution to Safe Spaces), this potential dampening impact of Safe Spaces on ED presentations and ambulance call outs are not included in the cost-benefit analysis of Safe Spaces.

Figure 11: Summary of routinely collected data: assault-related cases



Client surveys

A questionnaire was developed (Appendix D) that asked clients about their use of, and satisfaction with, TKSS. The questionnaire had four parts: demographic information including age, gender, education, employment; reasons for using TKSS; drinking frequency and quantity; and, willingness to participate in a more in-depth interview. Table 2 provides an overview of results from the 157 participants. The average age of the respondents was 23 years old with 61% (n=96) being male. More than half (n=82; 52%) obtained high school certificate (year 12) and 42% (n=66) had tertiary education. More than a third of the participants (n=60; 38%) were in full time employment and 34% (n=54) worked in a casual or part-time capacity. More than half of the respondents accessed TKSS by themselves (n=85; 57%) and 22% (n=32) of participants were escorted to the site by the TKSS staff. The majority participants attended TKSS to receive water (n=66; 44%), sober up (n=53; 36%) or charge their phones (n=48; 32%). Nearly all the participants were extremely satisfied with TKSS (n=132, 89%) and would recommend TKSS to friends (n=146; 99%). Of the 157 participants, 145 answered the questions about alcohol. The average AUDIT-C Score among 145 clients was 6.4 with 94% (n=146) of participants consuming alcohol at hazardous drinking. Nearly a quarter of participants had pre-existing mental health problem (n=34; 23%).

Table 2: Profile of TKSS users completing client survey

Variable	Mean (SD) / N (%)
Age	23.0 (6.0)
Gender	
Female	57 (36.3%)
Male	96 (61.2%)
Other	4 (2.5%)
Education	
School Certificate (Year 10)	9 (5.7%)
High School Certificate (Year 12)	82 (52.2%)
Tertiary Qualification (TAFE, University).	66 (42.0%)
Employment	
No	40 (25.5%)

Yes – Casual / Part time	54 (34.4%)
Yes - Full-time	60 (38.2%)
Yes - Did not specify	3 (1.9%)
<i>How did you get to the Take Kare Safe Space site?</i>	
Escorted by Take Kare Staff	32 (21.5%)
Friend	23 (15.4%)
On my own	85 (57.0%)
Other (please specify)	9 (6.1%)
<i>Reason for attending the Take Kare Safe Space</i>	
Receive water	66 (44.3%)
Sober up	53 (35.6%)
Charge phone	48 (32.2%)
Receive basic first aid	19 (12.8%)
Ask directions	19 (12.8%)
Reconnect with friends/family	16 (10.7%)
Transport	18 (12.0%)
Other	33 (22.1%)
<i>Satisfaction with Take Kare Safe Space</i>	
Extremely / slightly dissatisfied	6 (4.1%)
Slightly / moderately satisfied	10 (6.8%)
Extremely satisfied	132 (89.2%)
<i>Would recommend Take Kare Safe Space to friends</i>	
Yes	146 (99.3%)
No	0 (0.0%)
Don't know	1 (0.7%)
<i>AUDIT-C Score</i>	6.4 (2.2)
<i>AUDIT-C Hazardous Drinking</i>	
Yes	136 (93.8%)
No	9 (6.2%)
<i>Professionally diagnosed with mental health condition</i>	
Yes	34 (23.0%)
No	114 (77.0%)

Stakeholder and client interviews

Semi-structured interviews were conducted with 38 program stakeholders, including staff from NSW Police (n=4), NSW Ambulance (n=4), St Vincent’s Accident and Emergency (A&E Staff) (n=4), City of Sydney Council (n=2), the Darling Harbour Foreshore Authority (‘Rangers’) (n=2), St John Ambulance (NSW) / the TKSS program (n=4), licensed venues and other nightlife service providers (n=4), and with clients of the program (n=14). For the purposes of this report, ‘key stakeholders’ is used to refer to all of the above groups excluding program clients, while ‘clients’ is used to refer to those who have directly used the service.

All interviews were recorded (in audio or written form) with consent, transcribed and subjected to a thematic analysis which identified and explored salient themes within and across the data⁽⁵⁾. These experiential accounts revealed how each stakeholder perceived the TKSS program, including discussion of the extent to which the program has achieved its stated objectives, the

program's strengths and weaknesses, which program activities or components contributed to the observed outcomes, what extraneous factors have influenced the program's service provision, what improvements could be made to the program, and the observed benefits of the program to the interviewees and/or work they do. The following sections break down the analysis by key themes emerging from the data.

Identified strengths of the Take Kare Safe Space Program

The identified strengths of the TKSS program were various and routinely shared across stakeholder groups, serving to reinforce the validity of findings. The most salient strengths identified across the interview dataset were:

1. The program's role in filling a service gap in nightlife settings
2. Improving efficiency and effectiveness of emergency services and other stakeholders operating in nightlife settings
3. The ambassadors' ability to de-escalate conflict and provide welfare services through the performance of early, proactive and non-judgmental, interventions

Filling a service 'gap' and improving relationships between nightlife service providers

All stakeholder groups interviewed regarded the TKSS program as beneficial and as contributing to improved nightlife safety, with many expressing that they felt that TKSS had filled a long-existing service 'gap' in the night-time economy. The TKSS program was said to offer a unique addition to the services and facilities already offered by well-established stakeholders such as licensees, police, and emergency health services, and was claimed to have contributed to the provision of a more complete suite of resources to manage Sydney nightlife.

'For me, the program fills a gap, and that gap is: you don't need the police, you don't need an ambulance, you just need someone to help you if you're drug, alcohol affected or whatever' (**City of Sydney Staff #2**)

'I think there is a real absence of services in the night-time economy providing support to people who are in the public domain. I think this is a service that is attempting to fill multiple service gaps' (**St John Ambulance #3**)

'I think the strengths are it fills a gap in service provision in the public domain at night for sure, big time' (**City of Sydney #1**)

Key nightlife stakeholders regularly referenced a 'gap' relating to welfare provision for vulnerable revelers in the city at night and claimed that the approach adopted by TKSS staff and volunteers was not only a unique offering in Sydney's urban night-time economy, but also was a key strength of the program. For example, one service gap highlighted in multiple interviews related to the lack of appropriate care for those in public spaces who were heavily intoxicated. It was commonly noted that routine experiences, including the overserving of alcohol and the ejection of heavily intoxicated patrons from licensed venues, placed those in nightlife settings at increased risk of harm. Further, it was stated that appropriate care had not, until the introduction of the TKSS program, been available to service this domain and population. Almost all program clients interviewed discussed irresponsible service of alcohol

practices³, or, in the few cases where client intoxication was based on pre-drinking prior to arrival in the city, an inadequate level of care for intoxicated people in nightlife settings by ‘appropriate’ services. It was the capacity of the TKSS Program to service this population, and provide care for those in vulnerable situations, that was consistently highlighted by all stakeholder groups:

‘Security and the venues don’t care. Security kick people out when they can barely stand up and just expect them to get home safely. They don’t think about the fact that they are splitting up your group, or that your phone is dead, or that you are too drunk to do anything but pass out in a corner somewhere...I guess we are just lucky that there is a service out there now that can look after you when this happens because I’ve been there and I know heaps of mates who have too’ **(TKSS Client #1)**

‘There is just no one out there who is really well equipped to deal with heavily intoxicated people. Like, we do it all the time, but are we really the best people to be doing this? Most of the time they end up with us simply because there is no one else to take care of them...The Take Kare program is providing options that are much more appropriate for the level of care needed in most cases’ **(NSW Ambulance #4)**

As noted above, increasing levels of pre-drinking was also highlighted by interviewees as creating a greater need for welfare services operating in the *public domain*. Stakeholders and clients noted that many who arrive into urban nightlife settings, but who are subsequently refused entry into licensed venues, often find themselves with limited options to seek assistance, and, in such circumstances, the TKSS program provided a crucial service.

‘One of the biggest issues we have is when people come to the venue already drunk or intoxicated. Like, we have seen a massive rise in pre-drinking over the last five to ten years and it puts us in a tough spot... We can’t let them in, but we also know there often isn’t anywhere for them to go. The great thing about the Take Kare team is that if we get someone who is really drunk and needs help, we can just call them up and get them to come and collect them. This really helps us out, because we would like to care for these people, but it is tough when we can’t let them inside or when they haven’t already been in the venue. If police see them with us, we can get fined, so having another service who can provide that care is a win-win’ **(Licensee #3)**

‘I don’t go out much. The last time I went out was in September last year [2018]. I don’t have a lot of friends, so they were work friends and we were drinking in the hotel room prior to heading out into the city. Unfortunately for myself, I had a bit too much, I went a little overboard, and in the Uber I was feeling a bit intoxicated an all, and then when we got to the club, we were waiting in line and I stumbled over a pot plant and the guard

³ There is longstanding research from around the world that highlights the importance of responsible service of alcohol (RSA) and staff training in reducing levels of intoxication, alcohol-related harm and violence (Holder et al, 2000; Stockwell, 2001; Wallin et al, 2002; 2003; 2005; Graham et al, 2004; Treno et al, 2007). However, while noting the importance of RSA, research in Australia has consistently found poor compliance with RSA standards (Miller et al, 2013; 2015) and this was remarked upon by both clients and other stakeholders interviewed.

saw me and was like “is he with you?” and they said “yes”, and they were like, “well he can’t come in”, so they ended up going in and I found my way to the Safe Space.’
(TKSS Client #2)

‘I think a lot more people are pre-drinking, pre-gaming before they go out now... like when I was in contact with them, I hadn’t even been in a club, I had just been drinking at a house party. It’s too expensive to drink in the city and is a long way from my house... You know, you don’t want to lose your buzz, you take drinks on the train, and by the time you get into Town Hall you are drunk....I was pretty drunk and a bit out of it and I didn’t get let in with my friends, so it was good that there was a safe place where I could wait and recover a bit. Getting back on the train probably would have been bad, as a small woman, like I would have fallen asleep or passed out, vomited or been mugged or something. Who knows?’ **(TKSS Client #3)**

Many program clients highlighted how reassuring it felt to have the TKSS program in operation in the city at night. Women interviewed for this evaluation highlighted how the knowledge that the roving Ambassadors were operating around sites of potential risk made them feel much safer and acted as a ‘beacon of hope’ when things went wrong.

‘The city’s a big place and I don’t really know my way around in the best of times, never mind being intoxicated. I think it would be quite scary doing that by myself. But knowing that they’re there, I think would be really, like, hopeful for some people as well. Because even if I felt like – even if I wasn’t intoxicated, they would be good people just to go to if, say, someone was following me or if I felt unsafe, they were just kind of like a beacon of hope almost.’ **(TKSS Client #12)**

‘It just gives me kind of peace of mind that there are people out there for that because, obviously, the city is the kind of place people get intoxicated pretty much every night and there are, obviously, a lot of people who do drugs as well and it is very dangerous.’
(TKSS Client #4)

‘It makes me feel safer just in general knowing that they’re there and also, I think it’s nicer because, like, obviously, they’re helping people, but they’re also getting maybe people who are intoxicated or have drugs in their system get help, so they don’t then, you know, conflict with other people.’ **(TKSS Client #5)**

‘It’s kind of like a safety net.’ **(TKSS Client #4)**

Improving the efficiency and effectiveness of emergency services and other stakeholders operating in nightlife settings

As noted throughout many of the above quotes, stakeholders regularly asserted that the TKSS program has been valuable in acting as an intermediary between service providers, often functioning as a preliminary, but critical, triage for serious incidents. The TKSS program was praised by emergency medical professionals and police for its ability to manage ‘at risk’ individuals and escalate the incident with emergency services as or if necessary. In providing this service, police, ambulance and A&E staff identified the TKSS program as a service that

ultimately allowed them to better manage their own resources, by referring individuals who could be taken care of by the program without need for escalation to a more serious and resource intensive intervention. Here, volunteers from the program were said to act on referrals from licensees, Rangers, or CCTV operators to help determine whether further formal support was necessary from NSW Police or ambulance services. It was suggested that this has had a positive impact on the deployment of government resources in the Sydney CBD and surrounds, ultimately making many services more efficient.

‘If they identify an issue, they can generally take care of, it just frees rangers or police up for us to then go on to the next job or to something that's probably going to need somebody with more authority ... We have multiple issues down here. We also infringe people for, say, jumping in Cockle Bay, so if we're dealing with a first aid and it was only a minor issue, and someone jumped in the water, we'd have to leave that person and go to the more prioritised job. Whereas with Take Kare there, we're able to leave them with the intox person or the person who requires some welfare and, in that respect, we've found that it's helped us immensely with just lightening our load up as well for our work, not having to remain in one area with one person. You can get an intox female and you can be remaining with her for two hours until her mother comes or until you work out whether you're going to get an ambulance or whether her friends come and collect her’ **(Ranger #1)**

‘I think they’re my eyes and ears on the ground and it’s great to have them there... I’ve got an extra 50 police on the street every night. For me that’s fantastic in terms of tasking and resource allocation here.’ **(NSW Police #2)**

‘If Safe Space had intercepted this person and said, “Mate, it’s all right, just have a seat. You don’t need to be frustrated because you can’t get a cab or you can’t get a train, we’ll look after you. It’s all right.” That may not have happened [an arrest and assault], may not have eventuated. I don’t know how you’d equate the amount of hours involved in that but you’d probably have to break down, okay, an investigation on the ground is four hours and then you’re going to interview someone and charge them is another two, three, four hours potentially and then your court time on top of that with adjournments.’ **(NSW Police #1)**

‘It’s definitely assisted police I believe with taking some of the workload off the police who can be doing other things, dealing with other matters. For all police I think young persons are high care, no doubt about that, especially if they’re intoxicated, all that sort of thing, and it takes hours and hours and hours of police time to get that person home safely.’ **(NSW Police #4)**

‘If we can’t deal with it, you know, within 15 minutes or so generally our port of call is to try and guide them down to the Take Kare people and they accept them with willing arms, so they’re pretty good. If they’re in a bad way then they obviously call the ambulance and stuff. It lets us get back on the road quite quickly to deal with problems, hot spots. It’s a pretty big benefit.’ **(NSW Police #3)**

Clients and stakeholders noted that without the presence of the TKSS Ambassadors, many more intoxicated revelers would end up in ‘risky’ and vulnerable situations, in hospital beds or in police stations simply because they didn’t have anywhere else to go for appropriate care. Police noted that the provision of this ‘intermediate’ level care freed them up to be more proactive in their duties, while A&E staff noted the decreased number of beds taken up by people simply ‘sleeping off a big night’.

Yeah we do tend to see a lot of people who are intoxicated, bystanders seeing them on the street maybe lying down or staggering and call the ambulance or call the police and they get brought here and, you know, they don’t always take up a vast amount of work because it’s reasonably easy to identify that they’re just intoxicated so we put them on a bed and wait for them to wake up. I mean they could just as easily do that I would think within the care of a safe space. **(A&E Staff #2)**

‘...nine times out of 10 solely alcohol-affected young people don’t actually need any expert medical attention so to speak. They just need a safe place to either spend some time while the alcohol starts to wear off or a safe means to get themselves home or to a friend’s house or with another responsible adult. I think typically in an emergency department for a solely alcohol- affected young person they actually don’t do a lot of intervention. They typically have them in a recliner chair or in a bed and really just wait it out. Like I said, there isn’t a great deal the emergency department actually does for an alcohol-affected young person. I think those sorts of services would be really beneficial and they would probably reduce the pressure on ambulance services which is important because – I don’t think the general public knows this, but on a Friday or Saturday night we have the same amount of ambulances on the road as any other night of the week, but our call volume is substantially higher.’ **(NSW Ambulance #3)**

The efficiencies noted in the above interview excerpts were extended by discussions regarding the improved quality of work that emergency services could perform when free from the workload of dealing with high volumes of purely alcohol intoxicated nightlife revelers (which were seen as populations who could be more efficiently and as effectively managed by TKSS). A&E and NSW Ambulance staff discussed how the reduction in treatment of purely intoxicated patrons allowed the practice of ‘good medicine’ **(A&E Staff #3)** as well as highlighting how it reduced overall stress and workload pressure which ultimately improved the quality of their performance.

Our ward is – well, we used to call it “vomitorium” and we would put just buckets and chairs around and people were just there sleeping it off and then go home. Is that good medicine? No, it’s not good medicine, that’s what we had at that time.’ **(A&E #3)**

‘It takes a lot of resources, it takes a lot of toll on the staff. It is a major source of not just financial but...a major source of distresses and difficulties of running a good facility is that this is a terrible thing to be managing.’ **(A&E #1)**

‘There was a time 10 years ago where our night shift was 14 hours long and then about 10 years ago they changed it to become 12 hours long to mitigate our fatigue. Typically,

the inner city staff do either a 6pm to 6am shift or a 7pm to 7am shift. Whilst we're by law entitled to have breaks as all employees are, there's also a clause in our award that says that our breaks can be either pushed back or interrupted for patients who are considered urgent which is the vast majority... In pre-lockout laws, Saturday night you might have – in a 12-hour shift you might have 15 patients and you just don't stop from the moment you sign on for the evening until the morning again when your shift has finished. I think to have a harm reduction service by Take Kare would probably reduce the patients who don't essentially need the hospital but need somewhere to go. It would take those patients off our hands and allow someone else to look after them so that we can sort of spend our time and attention with patients who really, really, really need our help be it if they're drug or alcohol-affected or just generally other patients.' (NSW Ambulance #3)

The final quote was part of an extended discussion about the toll of servicing the city on weekends for NSW Ambulance staff and included incredible discussion of the high attrition and burn-out that plagues city-based stations. Here, the lack of often any breaks over a 12 hours shift was said to significantly and negatively affect performance, while also producing ongoing challenges in terms of staff wellbeing, high levels of sick leave, and, ultimately, the operational capacity and availability of ambulance staff to service the ever-busy city regions. It was in this context that those interviewed from NSW Ambulance strongly endorsed the TKSS program as a service that has and could continue to reduce the workload burden involving purely intoxicated nightlife patrons during the busiest times for city-based ambulance call-outs- Friday and Saturday nights.

The nature of the TKSS program and its interaction with other stakeholders in Sydney's night-time economy led many interviewees to view the service as a 'hub', acting as a conduit between different agencies operating in nightlife settings. Stakeholders felt that the presence of the TKSS program had been significant in developing relationships between organisations that previously had minimal or less established levels of communication, creating a cooperative eco-system of service providers that better meets the needs of its users. Here, coordination and collaboration with other service providers operating in Sydney's key nightlife precincts was seen as a real strength of the program and something that ultimately improved safety in the city at night. The program's role in linking together licensees, emergency services, the City of Sydney CCTV control room and other welfare services not only has the capacity to improve the efficiency and effectiveness with which each of these services function, but also to foster more productive working relationships between groups that have not always worked closely together or viewed each other positively. That licensed venues, for example, are actively promoting use of the TKSS Program, and directed intoxicated patrons to it, is seen by other stakeholders as a positive development:

I think it is great that venues are directing people to the Safe Spaces. Like, before, venues use to just kick people out and hope for the best. This created really unsafe situations and we saw it go wrong a lot in Kings Cross. People would pass out, get caught in bad situations. There are a lot of people out there who prey on these people, and so having a space and service where people can go is a really good thing. (NSW Police #3)

‘From the point of view of looking at better communication and coordination between stakeholders in the city at night. So the program coming on board was an opportunity to go, "Okay. These guys are conduit."... I mean, they're not coordinators but they're sort of a conduit to sort of bring it all together’ **(City of Sydney Staff #1)**

Look, we haven’t always had a great working relationship with the police, for many reasons and I think because of that we haven’t always wanted to contact the police, and some people don’t want to involve an ambulance if they are just drunk, or feeling off. What having the TKSS program has meant is that we have someone else to turn to, and when police come by, they see that we are working to get a good outcome for our clients, and I think they are less suspicious of us. **(Licensee #3)**

The identified benefits of multi-stakeholder cooperation in nightlife settings listed throughout this section mirror those produced in a range of local and international research, mainly and further support the strong need for effective partnership in managing the night-time economy and those who engage in it^(6, 7).

The ability to de-escalate conflict and provide welfare services through the performance of early, proactive and non-judgmental, interventions

There was universal acknowledgement among TKSS clients and stakeholders interviewed that a key strength of the program was the provision of a non-judgmental and non-confrontational service. The attitude and approach taken by TKSS Ambassadors was identified as a major factor in reducing harm in nightlife settings. Clients, in particular, highlighted a willingness to speak to TKSS staff in situations where they would usually be reluctant to divulge information that could see them ‘get in trouble’.

‘I felt like I could open up to them and kind of be like, “Yeah, I’m not feeling too good,” or, “Yeah, I’m feeling this,” or, “I’m feeling really anxious,” and they were very understanding and I didn’t feel intimidated at all, like I probably would with police.’ **(TKSS Client #1)**

Almost all clients said that they would much rather speak with TKSS Ambassadors than police, particularly in instances where they were drug or alcohol affected. These findings mirror those of other research projects that have highlighted how drug-affected young people often actively avoid police for fear of arrest, or engage in more harmful consumption practices to avoid contact/detection by them^(8, 9).

‘It’s not illegal to be drinking, but I know there's probably people in the city who might have been doing drugs and it would be like – I think it would be a lot more peace of mind to have someone who wasn’t the police to help you and you’d be more open to them and listen to them and probably admit more things. So, if they're like - you know, if a policeman comes up to you, like, “Oh, are you feeling okay,” you might just pretend you were fine because what you were doing was illegal.’ **(TKSS Client #4)**

‘Police scare me because you see, particularly in the city, because you see the police being aggressive and like arresting people that are in fights and becoming part of the fight, things like that, so police kind of turn into like “Oh, I want to stay away from them because I don’t want to get in trouble. They don’t seem like they’re in a good mood or something like that...I’ve been with have been on drugs and things like that and they go, “Oh, no, I’m going to get in too much trouble if I go near police.”, the same with paramedics. I think people see being taken off in an ambulance as embarrassing or as kind of something that shouldn’t happen on a night out or ruining my night or something like that.’ (TKSS Client #9)

But with the Take Kare, you might be more open, might be more honest and they might – with their information – be able to help you a lot more. (TKSS Client #6)

There was a clear preference among those interviewed to deal with peer groups who they felt were less likely to judge them negatively, and who were able to help them feel at ease during often distressing and potentially dangerous situations. While the calming effect of the Ambassadors was almost universally remarked upon, one client interview really underscored the important function that this approach can play in reducing harms in nightlife spaces. Here, the client described a potentially life-threatening situation where a friend was in-and-out of consciousness following heavy poly-drug use. While initially reluctant to contact an ambulance due to both his own drug intoxication, the intoxication of his friend, and a general fear of ‘getting in trouble with Police’, conversations with the TKSS Ambassadors convinced both clients to seek emergency medical help:

‘We were freaking out a bit because I had drugs in my system and my friend was passing out and also had drugs in her system. I really didn’t know what to do. The people in the service really calmed me down and we eventually agreed that we both needed to go to hospital.’ (TKSS Client #5)

This finding is significant as it speaks to the crucial harm reduction role that TKSS plays in sites of high-level risk for alcohol and other drug-related harm. The avoidance of such services in instances of heavy intoxication can be fatal, and so the role of TKSS is of critical importance in getting clients the help they need:

‘they definitely felt very approachable, easy to talk to and easy to kind of – well, most, like, confess. To be like, you know, “A bit too much to drink?” I’d be like, “Yes, I have.” I think it’s really important that they’re so easy to talk to for those people who have been doing illicit drugs to be able to – so they can give them the information they need to help them.’ (TKSS Client #2)

Program clients also highlighted the role of this emotional support in reducing tension in situations of extreme stress and agitation. Many clients described episodes where their own intoxication was causing them to behave erratically and aggressively towards others, often due to embarrassment over their own intoxication, or stress at being separated from friends:

So, I was – when I got there I was like, stumbling around, I was like, really upset and quite visibly, like, drunk off my face and I was, you know, slurring my words. When I

sat down with them, they gave me some water, they gave me some lollies, they asked me where my friends were and all of that. It just made me feel really comfortable and they gave me some time to sober up and while I was there, they were constantly, like, engaging with me, asking me if I needed anything, they were there to help me out with that. And I think – well, the embarrassment comes in with just the lack of my motor skills and things like that. For them to kind of just turn a blind eye to it and, I guess, they knew what was coming, so there's that, you know, just look past that and just see me like someone who could, you know, use some help. And, again, it was really nice. **(TKSS Client # 6)**

‘We were quite stressed out and I think what struck me was at first the emotional support. They really kept us calm and they told us that everything was going to be okay. We were really stressed. They were very professional, very calm, and then they wrapped a silver blanket around my friend and then they asked if she suffered from other medical conditions which she did. She had a blood clotting issue. So, they stayed with us and they advised that we call the ambulance which we did and they stayed with us until the ambulance got there.’ **(TKSS Client #7)**

Stakeholders also identified the ability of the TKSS program to recognise, access and support vulnerable individuals as its primary function and greatest value-generating activity. The roving teams and static sites generate a series of positive outcomes which were reiterated by stakeholders, including a reduction in stress for government and emergency services (as detailed in the previous section and including potential medical costs for individuals who may have experienced more significant harm without intervention), the identification of individuals who may have limited control due to alcohol or illicit substance use, the de-escalation of potentially violent incidents, the identification of individuals who are at risk of sexual assault, and the referral of escalating incidents to NSW Police or ambulance services. Stakeholders highlighted that the process of proactively engaging vulnerable individuals was a major component to this value, and most stated that they thought the efforts of the TKSS program had prevented the escalation of high-risk incidents. This early intervention was perceived to be a necessary component in the suite of tools used to manage Sydney’s urban nightlife, with stakeholders indicating that they believed it would be detrimental to city safety to lose this service:

‘I think again that's unique is the ambassadors sort of roving around the city. I guess it's something about not just waiting for people to come to you, but being really proactive and going out looking in the dark alleys where crimes might often happen. Or looking yeah, in the gutter or on a side street where someone might be vomiting or vulnerable. I think that's where a lot of our incidences really actually come from’ **(TKSS Volunteer #2)**

Due to the large geographic size and high patronage of the Sydney CBD, Kings Cross, and Darling Harbour precincts, NSW Police and council/private security services are limited in their capacity to proactively identify and respond to instances where individuals may be vulnerable. In response to this limited capacity, stakeholders frequently maintained that the ‘extra eyes and ears’ (NSW Police) provided by the TKSS program at ground level was a much needed resource to improve health and safety outcomes for those going out in the city at night.

This proactive approach and capacity was seen as a critical TKSS function that is central to their role in de-escalating conflict in nightlife spaces.

‘I just think it's wonderful that they're walking around looking for people that are in trouble. And assisting them in whatever they can. Because if someone's collapsed on the footpath, if someone doesn't attend to them, they could be robbed or whatever, or hit by a bus. And you know what, they may not always be drunk or on drugs, either. They could have had a medical episode and, yeah, no, I think they're very important and they're doing a fantastic job’ **(Transport Services #1)**

Stakeholders identified the TKSS program to be an attractive non-confrontational option that fills a gap in identifying and offering early intervention to individuals who may be at risk of harm. A&E and NSW Ambulance staff, in particular, stated that the TKSS program regularly serviced vulnerable individuals, and that their interventions resulted in a substantial reduction in the potential harm they may have experienced.

‘If a patient is sent to the emergency department by the [TKSS] team when they call an ambulance, we will be receiving a patient that is intoxicated, drugged, call it whatever you want, but there is a chance that we would have received that patient later for doing something silly or being hit by a car or getting involved in a fight. So, that’s a main impact that we see, that we might see that patient intoxicated because it’s not safe to be in the street but that [major incident] didn’t happen. If no one called the ambulance, we would be seeing a different patient hours later.’ **(A&E Staff Member #3)**

‘That’s the nature of prevention, we don’t know what would have happened, but I can tell you from my experience that intervening and treating someone early when they are at a low risk of serious harm is the best way to prevent serious harms later. We see many patients who, if stopped earlier in the night, would not have been in our department’ **(A&E Staff #1)**

‘I'm much happier for them to end up here sooner rather than later and here rather than somewhere else.’ **(A&E Staff Member #4)**

‘I can’t tell you how beneficial early intervention is. The sooner we can attend a critical emergency, the higher likelihood of a positive outcome. We are talking seconds, seconds can make all the difference between someone having a good outcome and someone having a really bad outcome so in that sense any service that can improve response times, or help direct emergency services, be they ambulance or police or whoever, is ultimately going to play a major role in reducing potential harms.’ **(NSW Ambulance #4)**

Program interventions also perform a significant role de-escalating potentially harmful situations, resulting in positive safety outcomes for those utilising Sydney’s night time economy. Particular reference was drawn to the non-judgmental and non-confrontational approach taken by TKSS Ambassadors when dealing with volatile situations:

‘They go in, they’re calm, they’re nurturing. Police sometimes have more of an authoritarian stance but these ones they appear to listen, comfort and engage. If someone is at a high level of emotion, just been thrown out of a pub and their friends are all back in there and they’ve got the shits and they want to fight on, just having that calming influence there often will de-escalate the situation and again their presence.’
(NSW Police #1)

‘The approach that the guys take really helps soften the areas in which they work. We have really noticed that under the bridge where they are set up in Darling Harbour. That used to be a hot-spot for trouble because of the public toilets and because lots of intoxicated people used to walk through there, but since they have set up we have a lot less trouble... I think that is all down to their approach, they approach softly and people don’t see them as a threat... We see a lot of issues being resolved because they go about their work in that way’ **(City Ranger #1)**

Similarly, NSW Police, City of Sydney Council and Darling Harbour Foreshore Authority staff stated that TKSS volunteers were a useful tool in expanding the reach of their service as they can offer a street level account of any escalating incidents, and, if unable to intervene themselves, they can request further assistance. This not only functions to dispatch more timely responses to escalating incidents, but supports the early intervention of instances involving vulnerable individuals before they become party to an escalating incident. While the identification of, and provision of support to, individuals who are under the influence of alcohol or illicit substances and have minimal control of their situation is an intended function of the TKSS program, TKSS volunteers have provided wide-ranging support, from giving directions to tourists, to referring individuals experiencing suicidal ideation or homelessness to the appropriate services.

‘We’re all about prevention. Now, having the Take Kare Ambassadors out on the street assists us by having more eyes and more ears on the streets to prevent things from occurring, because no doubt you know, and no doubt we all know, that when you go out with a group of people and you’ve had a few too many beers, we do tend to get a bit loud or messy, and having someone intervene, and that’s the important thing, is intervene before things escalate, is a wonderful, wonderful thing’ **(City of Sydney Staff #2)**

‘Our main focus down here is obviously public safety, but we’ve also got to look after asset protection and we’ve got a large area to patrol, so our rangers would have a designated area they need to patrol, so if we’re stuck in one area for two hours it means other areas become vulnerable.’ **(Ranger #2)**

Ultimately, stakeholders feel that the TKSS program offers an unquantifiable benefit in the prevention of harm to vulnerable individuals and the intervention and de-escalation of risk-prone behaviour or violent incidents. The early identification and support of vulnerable individuals significantly improves city safety and was identified by stakeholders to be of significant value to Sydney’s night time economy.

‘I think one of the strongest outcomes for the program is that it provides eyes and ears on the street and a bunch of places where police just haven't got the resources to be stationed all the time. But the calling through to police of aggressive, dangerous situations is a really big benefit, in my opinion, a big benefit to the safety of the city, to police being able to do their job effectively and efficiently’ **(TKSS Staff #3)**

Much of this positive effect was attributed to the approach and delivery of program services by TKSS staff and volunteers who were universally regarded by stakeholders as effective teams who have been central to the successes of the program in meeting its intended objectives. Team culture was highlighted as a key driver of positive interactions with the public, with many stakeholders regularly remarking on the ‘friendly’ and ‘inviting’ approach taken by staff even in the face of challenging or difficult situations

‘I have a great relationship with them. Every time I see them, I thank them for what it is they're doing. I see people around, I tell them that these guys are just the greatest. To me, they are the untold heroes of Sydney. They're out there doing voluntary work, helping out the shit end of Sydney. You see these people and you just think, "Fuck that, wouldn't do that if you paid me." These guys are out there trying to help these people. I think they're absolutely amazing’ **(Licensee #1)**

Staff and volunteers of the program, and a number of other key stakeholders who work closely with them at ground level, noted that the limited level of authority that program staff possess was a double-edged sword, being both a perceived strength and weakness of the program, particularly in circumstances where intoxicated or vulnerable revellers were resistant to help offered, or generally problematic.

‘I think the way we act, as a non-authoritarian, non-aggressive, non-confrontational kind of, it's help if you want it. That is our biggest strength. But it is also not, [because] we don't have any authority. We can't make people stay. We offer help. I think that is our biggest differentiator of all the other services in the city’ **(TKSS Staff #2)**

‘Intoxicated people generally tend to be hostile towards us. They see us as being threatening. When we can divert them off away from us to someone who's there to also care for them but aren't police it removes that level of aggression out of that person and they become more agreeable, they're easier to deal with and they communicate a lot more freely.’ **(NSW Police #1)**

‘Several incidents of violence that I believe would have escalated if one of our team members or myself didn't call it in to CCTV. We have radios, as you know, and we can call in things quickly, then we can call 000. I will call in to the CCTV cameras, and then they will throw it straight to the police, where a policeman is sitting in front of a screen and going to dispatch these people right now.’ **(TKSS Staff #5)**

In the above quotes, NSW Police and City Rangers, in particular, identified that the TKSS program not only allowed them to more efficiently use their resources, but also acted as a tool for de-escalation and harm minimisation due its welfare approach. Stakeholders articulated that

the way in which the public perceived the program and its staff and volunteers (as non-authoritative) was integral to the benefits of the TKSS program. However, as can be seen from the above quotes, while the non-authoritarian approach often served to ‘soften’ interactions with some problem revellers, it also resulted in limited respect from others.

‘There have been some issues with safety of team members. People get aggressive towards us, sometimes, but we just back away, because we don’t have authority. We don’t have, we just back away’ **(TKSS Staff #6)**

‘But sometimes they even get abused too, you know, trying to help somebody and they turn on them, and, yeah. I don’t think that stops because people know they’re not in authority, know what I mean? They’re not a police officer or a security guard’ **(Transport Service Staff #1)**

The relationship between NSW Police and the TKSS program was discussed as significant to managing the potential risks associated with the operation of the program. One issue that was raised by stakeholders, including NSW Police and City of Sydney staff, related to ‘interference’ caused by large groups of unsupervised youth who had been disrupting the program, including causing a shut-down of the Town Hall static site for an extended period of time. In response to this issue, it was suggested by several stakeholders that novel approaches would be needed to overcome this challenge as stakeholders were concerned some static sites were being used as a ‘meeting point’ for youth who were set on ‘running amok’ in the city at night.

‘I think it was that initial place where people began to see it as a drop-in point. “Here we can go just go there and hang out.” Kids living in Blacktown, “Mum and Dad I’m going in but don’t worry. I’m only going to the safe space place where there’s all those ambassadors standing around.” The parents are thinking, “My kids are going to be safe.”, and then we ring them and say, “No.”’ **(NSW Police #3)**

This ‘interference’ was, however, framed by police to be an opportunity to increase the development of relationships between the TKSS program and NSW Police, particularly in linking vulnerable youth with appropriate support services. While perhaps originally an unintentional consequence, the presence of the TKSS program has facilitated the provision of increased and enhanced support to at-risk individuals who may not have taken the initiative to seek out support or been identified by other organisations. It was also claimed by police that working through these problems has ultimately resulted in an improved service, a stronger working relationship between NSW Police and the TKSS program, staff and volunteers, and ultimately, a significant reduction in police incidents involving youth:

‘I started picking up on it [the problem of youth interference] when a lot of the young persons were coming into the city and hanging out there so they’d contact us to go down and move them on or if there had been a bit of a drama and stuff like that. Then realised there was a great opportunity there for us to do more in that space of kids and risk identification, risk removal and risk referral, get them out more so to find out there was an organisation such as the cops. We can do more in the new space as opposed to just being a vehicle for them to get home, so it’s more about the engagement and continual

follow-up stuff, so Take Kare have been really good in that sense that if they speak to some of their ambassadors, identify someone will speak to them and go yeah, this is fairly risky this one or presents a risk. They'll contact us. We'll go down. We'll engage and then we've got our steps and processes of what we do after that. Just by way of the last 12 months we've seen probably an 80% reduction in the same continual kids coming to the city on Friday and Saturday nights **(NSW Police #1)**

Interviewees ultimately felt that the TKSS program had been successful in developing a series of strong relationships with various stakeholders operating in Sydney's urban night-time economy, and while all stakeholders perceived there to be challenges with the inter-organisational relationships in this space, all were overall supportive of the program and indicated that significant value would be lost without its presence.

Perceived weaknesses of the TKSS program

Stakeholders revealed several perceived weaknesses of the TKSS program. While some of the perceived weaknesses have already been discussed as inherently linked with perceived strengths, interviewees also identified the following:

1. A lack of public awareness around the program;
2. The ability of the program to service its current localities given staff and volunteer levels; and
3. Misunderstandings regarding the scope and function of the TKSS program by some stakeholders.

However, it should be noted that the majority were hesitant or cautious in doing so, regularly framing these 'weaknesses' as 'challenges' or 'areas for improvement'.

A lack of public awareness around the program

The most consistently identified weaknesses of the program across stakeholder groups related to a lack of public awareness of the program and its role. Here, messages regularly noted that most people out in nightlife precincts simply didn't know that TKSS existed or, if they did, they weren't sure what service it provided. Many clients, for example, said that they were not aware of the Program before their initial contact with the Ambassadors:

'Like before that first night when I ended up back at the tent, I had no idea they even existed. I would say that is the biggest challenge for them- like it's such a good service but not everyone knows about them' **(TKSS Client #1)**

'I had no idea they existed, so I think it would be good if that was more known, just to give people that kind of sense of a bit of security. Like, I don't want it to encourage people to get, you know, more drunk just because they know that someone's there but I think it would be good to advertise there's like a safe space, even for people who aren't drinking, so to speak.' **(TKSS Client #8- Parent)**

'I guess the biggest question I would have is do enough people know about the program and what it does?...A program like Take Kare is probably limited in its impact because enough young people just don't know about it... young people who need help still

might not know it is there and that means they are not as effective as they might be if more people knew where they could go for help.’(NSW Ambulance #4)

I think it is just about getting the word out about them, and helping build that awareness that they are there, they offer water, you can charge your phone there, they will look after you. I think if they could build that awareness then the benefits will grow.’ (NSW Police #4)

Here, it was suggested that a lack of public visibility and awareness of the program meant that many revellers and service providers were not familiar with the program’s purpose or functional capacity. Stakeholders felt that an understanding of the program was not widespread in the broader community, reducing its effectiveness and benefit. In response, many stakeholders and clients recommended increased advertising in licensed venues and at major nightlife hubs like public transport hubs/ stations.

The ability of the program to service its current localities given staff and volunteer levels

It was asserted by both internal and external stakeholders that the size of the locations the TKSS program services is a major challenge given the staff and volunteer resources available to the program, ultimately limiting the impact that the program can have. This was noted as critical given the proactive nature (and noted benefits detailed above) of the roving teams, with stakeholders stipulating that either an expansion of the program or a re-evaluation of its geographical reach was necessary. These operational issues were of particular concern to stakeholders working within the TKSS program.

‘Operationally what could be improved? I think that it should be reconsidered around the footprint of the CBD site, what kind of area they’re looking to cover. I think it’s too big, in my opinion. Trying to survey a range from as far north as The Rocks, to as far south as Central Train Station, and to as far east as Taylor Square, and Oxford Street...it’s just too big’ (TKSS Staff #1)

‘I think again what’s unique is the ambassadors sort of roving around the city. I guess it’s something about not just waiting for people to come to you, but being really proactive and going out looking in the dark alleys where crimes might often happen. Or looking yeah, in the gutter or on a side street where someone might be vomiting or vulnerable. I think that’s where a lot of our incidences really actually come from. Like if you stay in the one spot you don’t see that much, but when you are roving you do ... I think we’ve noticed it sometimes in King’s Cross or in the city where we haven’t had enough teams to rove in every direction.’ (TKSS Staff #3)

It was similarly identified by some stakeholders that staffing challenges had limited the full potential of the TKSS program, with NSW Police, City Rangers, TKSS and City of Sydney staff, clients and City of Sydney Staff, in particular, citing that more Ambassadors would benefit the operation of the program.

‘They need more staff. Sometimes you go down there and they are just flat chat. It’s like a day care centre, it’s insane. They do a really good job, but yeah if they had more staff they could do a lot more’ **(NSW Police #4)**

‘Darling Harbour is a massive site, and some times they get pulled off in all directions. They can’t be in all places at all times, but I think if they had a few more teams strategically deployed throughout the sites, maybe responsible for smaller areas, then they would be able to get to more incidents’ **(Ranger #2)**

Misunderstandings regarding the scope and function of the TKSS program by some stakeholders

A few stakeholders and some clients (including parents) identified concerns regarding the sometimes misplaced enthusiasm of TKSS staff and volunteers in situations that required more formal service responses.

‘“No, that's not an appropriate call for us. You should be calling 000. My sense at the moment is that TK will respond, because they want to demonstrate how useful the program is. We'd packed up the last time I was out, 4 A.M. We'd done the debrief, and they got a call... the CCTV folk should know what time TK finishes, and that we'd be packing up. But, out of goodwill and I think a real desire to let people see that TK can be there and intervene; these guys went out.’ **(TKSS Staff #5)**

‘Like I said before, I think occasionally they may use TK as the primary intervention for things that may be a little bit more, I'll use the word intense. TK will respond, because they feel that it's an obligation as part of our objective. Sometimes I think with the lesser experienced teams, that could potentially put them into a difficult situation. To say, alright how does a younger TK member recognise that that's not a call that they should be attending; when there is that goodwill. That sense of wanting to be there, to get TK out there. To say, yeah, these are the sorts of the things we can deal with’ **(TKSS Staff #3)**

‘Look, I’m a nurse. I haven’t worked for a long time, so I've been out of practice for, you know, 20 years, but I kind of knew – I took on board what they were saying to me and I kind of was very happy that they were caring for her and she was with responsible people that had her best interests at heart. That’s what I was very appreciative of, but I kind of overruled their decision with – he was kind of happy for her to go home and sleep it off, but he was only young himself and I said, “Look, she’s got a really large whack on her head and I think we need [to go to the hospital]...” and she [the daughter/client] wasn’t making any sense. There was obviously – either she was that under the influence or the head injury was causing confusion.’ **(Client #8- Parent)**

In some cases, it was perceived that TKSS staff had attended incidents where emergency health services should have been engaged immediately. Some stakeholders suggested that this issue may be the product of a misunderstanding of the role and scope of the TKSS program amongst other services and organisations, resulting in either the overuse or underuse of the program. While the limited authority the volunteers hold makes them more approachable to revellers, it

also has the potential to place them at risk when referred to an incident they may not be equipped to handle. Likewise, it was indicated that some stakeholders may not have a complete understanding of the resources that the TKSS program has access to, and that this lack of knowledge has the potential to promote negative outcomes for users of the program.

‘Maybe there's like a misunderstanding of our role by different stakeholders. Like I know we've been called in situations where there's like a first aid situation where really an ambulance should've been called straight away. And it's kind of ... Well that, five, 10 minutes between when you called and got there, like they could've been an ambulance’ (TKSS Staff #1)

It was identified by some stakeholders that due to the nature of the program, TKSS staff and volunteers were at a greater risk of harm, which has the potential to be exacerbated by attendance at incidents that require a response from emergency services. Police officers, in particular, identified an increased risk to TKSS staff and volunteers due to their lack of authority to escalate incidents, however it was stipulated that strong relationships between the NSW Police force and the program facilitated the minimisation of these risks. Concerns were acknowledged about the safety of TKSS staff and volunteers, though it was stipulated that procedures are in place to manage these risks.

‘The down side I guess is the risk that we see as an organisation or command to the ambassadors in terms of victims of violence, get taken advantage of. Basically, that's really it, so getting involved in something. They can be managed effectively and we've got steps in place to look at how we best manage that in training and education for the volunteers.’ (NSW Police #4)

Stakeholders, while noting the above challenges regarding program delivery and effectiveness were universally satisfied with the performance of the program and felt that it was meeting its stated objectives.

ECONOMIC EVALUATION

TKSS operating costs

TKSS operating cost over the period December 2014 – April 2019 (inclusive) is estimated at \$2,792,349, including program costs of \$1,983,198 and the market value of volunteer time at \$809,152. The largest driver of program costs is wages and salaries accounting for close to 50% of total operating costs. Operating costs vary over time and site depending upon need, capacity, funding and volunteers. Over the time period of interest, volunteers contributed an estimate 24,198 hours of their time on Friday and Saturday nights to assist with the TKSS. The value of one hour of volunteer time is calculated using Australian Bureau of Statistics data on average weekly earnings and adjusting for a 35 hour working week⁽¹⁰⁾.

Valuing averting harm

Ambassador interventions

In order to quantify the potential value of averted injury, theft and assault, it is necessary to quantify the cost per incident. Several attempts have been made to cost alcohol related

incidents. The City of Sydney used estimates from the Australian Institute of Criminology in formulating their costings^(1, 11). The NSW Treasury evaluation used a range of data sources and adopted a method used by Byrnes et al (2012) in costing assault^(12, 13). Byrnes used a four-stage probability analysis to estimate alcohol-related costs regarding the criminal act, police involvement, prosecution in criminal courts and incarceration⁽¹²⁾. Byrnes et al (2012) present costs in two categories: crimes either reported or not reported to the police⁽¹²⁾. Crimes reported to the police are more expensive given the higher probability of subsequent engagement with the criminal (in resultant formal criminal justice processes or responses). For alcohol-related injuries, the NSW Treasury evaluation based their cost estimate according to the use of ambulance, emergency department and hospital resources⁽¹³⁾. For the current analysis, we have relied on the cost estimates derived by Byrne et al (2012) for assault and sexual assault (reported crime)⁽¹²⁾, and the Australian Institute of Criminology for theft (reported crime)⁽¹⁰⁾. The cost of a road traffic injury is valued using estimates from the Bureau of Infrastructure, Transport and Regional Economics⁽¹⁴⁾. All estimates have been adjusted to 2018 dollars using consumer price index information from the Australian Bureau of Statistics⁽¹⁵⁾. Cost per assault is estimated at \$18,933; cost per sexual assault at \$30,495; cost per theft at \$434; and cost per road traffic injury at \$5,745.

Table 3 provides an estimate of the value of serious harm averted due to ambassador interventions. Over the period December 2014 – April 2019 (inclusive), serious risk of harm was averted in 735 cases from a total of 3,633 interventions equivalent to a cost of \$6.64 million.

Table 3: The value of averted serious risk of harm (Dec 2014 – April 2019)

Intervention	Serious risk of harm averted	Cost per incident	Costs averted
Minimised the risk of assault	235	\$18,933	\$4,449,355
Minimised the risk of sexual assault	50	\$30,495	\$1,524,743
Minimised the risk of theft	362	\$434	\$156,973
Minimised the risk of road traffic accidents	88	\$5,745	\$505,323
Total	735		\$6,636,393

Community value

The primary method used in this report to estimate community value of the program is the willingness to pay (WTP) method used in the NSW Treasury evaluation of the Sydney CBD Entertainment Precinct Plan of Management⁽¹³⁾. A WTP approach can be used to calculate the social cost of death or injury and does this by establishing how much society is willing to pay

to reduce the risk (or avoid) fatality or serious injury. This method is preferred to other traditional approaches, such as a human capital approach, as it provides a more representative value of costs to individuals as it takes into consideration other general wellbeing factors, not just earnings and productivity. The value of a statistical life year saved is estimated as \$196,484 (in 2018 dollars) and represents the value that society places on preventing one premature death each year⁴⁽¹⁶⁾.

While the Treasury analysis applied the value of a statistical life year to the reduction in number of severe and critical injuries avoided (due to the lockout laws), this analysis takes a more conservative approach by attaching the value to potential deaths averted due to severe and critical road traffic injuries prevented. Data from the NSW Government Centre for Road Safety show that, in 2018 (latest year available), there were 1,351 hospital admissions for pedestrian related road traffic accidents in NSW⁽¹⁷⁾. The three year rolling average of pedestrian related road traffic fatalities in NSW is estimated at 65 per annum.⁽¹⁸⁾ For every one serious pedestrian related injury there were 0.048 deaths ($65 / 1,351 = 4.8\%$). WTP estimates are derived using the ratio of fatality to injury (4.8%) combined with the value of a statistical life year (\$196,484) multiplied by the number of major road traffic accidents avoided. Using data reported in Table 3, an estimated 88 serious road traffic injuries were avoided over the period December 2014 – April 2019 (inclusive), equivalent to a potential social benefit of \$825,417 ($4.2 \times \$196,484$ per year).

Cost-benefit analysis

The methodology for conducting the cost-benefit follows the NSW Government guidelines for conducting cost-benefit analysis⁽²⁾. On the cost side of the equation (

Figure 12), information on TKSS operating costs is combined with the value of volunteer time. The value of benefits, including major incidents averted because of ambassador interventions is derived using estimates of incidents averted together with cost estimates for each incident. Added to these benefits are willingness to pay estimates of the social (community) value attached to averted major road traffic injuries. The outcome of the benefit-cost analysis is reported as a net social benefit (benefits – costs); and as a benefit-cost ratio (benefits / costs). Two additional sensitivity analyses are conducted to explore the robustness of results to changes in assumptions. Sensitivity analysis 1 examines changes in the attribution of serious risk of injury diverted from 100% (baseline) to 75%. Sensitivity analysis 2 examines the benefit cost ratio for the year 2016-17 when the TKSS program was fully operational in three sites – Town Hall, Kings Cross and Darling Harbour.

Figure 12: Overview of benefit-cost analysis

⁴ The human capital approach calculates present and future production costs. The value of a productive year is equivalent to average annual earnings.

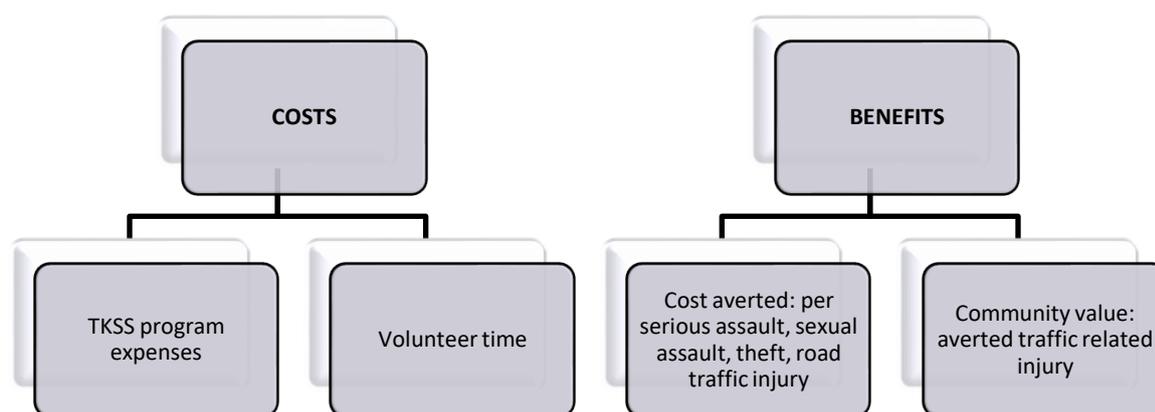


Table 4 provides an overview of total estimated costs and benefits of the TKSS program over the period December 2014 April 2019. The benefit-cost ratio is estimated at 2.67, suggesting that a \$1 investment results in \$2.67 in benefits. The benefit-cost ratio ranges from a low of 2.00 with a 75% attribution rate to a high of 3.83 when the TKSS is fully operational suggesting a range of benefits for every \$1 invested of between \$2.00 and \$3.83.

Table 4: Benefit – cost analysis of TKSS program December 2014 – April 2019 (inclusive)

	Baseline	Sensitivity analysis 1 (75% attribution)	Sensitivity analysis 2 (fully operational TKSS)
Cost			
Cost of TKSS program	\$1,983,198	\$1,983,198	\$470,687
Cost of volunteer time	\$809,152	\$809,152	\$189,168
Total cost	\$2,792,349	\$2,792,349	\$659,855
Benefits			
Cost averted	\$6,636,393	\$4,977,295	\$2,211,956
Community value	\$825,417	\$619,063	\$317,666
Total benefit	\$7,461,810	\$5,596,358	\$2,529,621
Total benefit - total costs	\$4,669,461	\$2,804,008	\$1,869,766
Benefit cost ratio	2.67	2.00	3.83

DISCUSSION

The TKSS program aims to improve the safety and amenity of the public domain by providing a harm reduction service where vulnerable young people can access support and a safe place. The results of the evaluation of the TKSS program demonstrate that Safe Spaces are extensively utilised and appreciated by young intoxicated people; that Safe Space ambassadors play a key role in de-escalating conflict and averting the risk of serious harm; and, the TKSS program is appreciated by key stakeholders in making the night-time environment safer.

One of the key goals of the Safe Spaces is to prevent intoxicated young people from becoming the victims or perpetrators of crime. It potentially does this in two ways. First, by reducing the number of recorded incidents as captured by routinely collected ED, ambulance and crime data. These harms are relatively severe because they were attended to by police, hospital or ambulance staff. Second, it avoids the escalation of harms into relatively severe incidents.

There is an established body of literature showing that most alcohol harms are not recorded because they do not come to the attention of relevant authorities (ambulance, hospitals and police), meaning that focusing only on alcohol harms captured in routinely collected data sets will under-estimate the impact of services. This analysis has attempted to estimate the benefits of Safe Spaces using both routinely collected data sets (to estimate any impacts on recorded incidents) and the internal data collected by Safe Space ambassadors (to estimate any impacts on alcohol harms that are not recorded in routinely collected data sets).

The analysis of routinely collected data shows consistency in the pattern of alcohol-related assaults (crime), alcohol-related ED presentations and alcohol-related ambulance dispatches. Since 2009 there has been an overall decline in incidents, both pre and post the introduction of the lock out laws' legislation and the Safe Spaces. Although there may be some suggestion that assaults are trending back up, ED presentations and ambulance call outs have remained flat post Safe Spaces. Although the trends pre and post the lockout laws and Safe Spaces are not significant, if they were to continue as they are then one possible interpretation may be that Safe Spaces have a dampening effect on ED presentations and ambulance calls outs (i.e. they keep the demand for ED and ambulance services constant) but not the occurrence of assaults. That would be consistent with previous research on community-based responses to alcohol harms, which showed that alcohol harms can be less in communities with community action responses (compared to communities who do not have those responses), but sustaining reductions in alcohol harms over time is likely to need more targeted and restrictive legislation to control the availability of alcohol, especially at high-risk times⁽⁴⁾. To be conservative (because we can't be statistically certain about the trends and the attribution to Safe Spaces), this potential dampening impact of Safe Spaces on ED presentations and ambulance call outs are not included in the cost-benefit analysis of Safe Spaces.

In undertaking the benefit-cost analysis a range of data sources were used including the subjective data collected by ambassadors and their rating of interventions that may have prevented harm. While it is uncertain whether an assault, theft or injury would have occurred if the intervention did not happen, ambassadors use their judgement based on their understanding and exposure to the city at night. In the formal benefit-cost analysis, we have adopted a conservative approach by including only those interventions that averted serious risk of harm. This represents 20% (n=735) of all interventions (n= 3,633). When compared with TKSS program costs, the benefit-cost ratio is conservatively estimated at 2.67, suggesting that a \$1 investment results in \$2.67 in benefits. A separate sensitivity analysis found a benefit-cost ratio of 3.83 when the TKSS was fully operational (i.e., 2016-17) at three sites.

The return on investment is conservative as it the analysis does not quantify the full spectrum of benefits associated with the TKSS program. The stakeholder interviews with police, ambulance and A&E staff acknowledged that the TKSS program allowed them to better

manage their own resources, ultimately making many services more efficient. The program was perceived as a conduit that enabled better partnership, communication and a more complete suite of resources to manage Sydney nightlife thereby keeping both vulnerable youth and the general public safe. There are likely to be significant flow on effects of a safer night time environment for tourism and investment. Users of the service appreciate the non-judgmental and non-confrontational service and acknowledge the emotional support provided by the TKSS staff in reducing tension in situations of extreme stress and agitation. Linking vulnerable youth with appropriate support services.

Over the period of interest, December 2014 to April 2019 (inclusive), TKSS has withstood several significant challenges. First, funding has been sporadic that impacts on the ability of operational capacity of manning a Safe Space. As well as the closure of the Kings Cross Safe Space on Friday nights, recent funding cuts have forced the closure of the Darling Harbour TKSS site. Second, the responsibilities of operating the Safe Spaces has recently transitioned from an external organisation, St John Ambulance, to Stay Kind. This transition has resulted in additional financial burdens associated with operating the TKSS program. Previously Stay Kind operated from offices provided pro bono with one paid staff member. Bringing the program inhouse required establishing a range of additional systems and processes for running the program including directly employing the team leaders, inhouse management of staff, training and induction of volunteers as well as leasing an office and acquiring vehicles within the constraints of reduced and sporadic funding. Stay Kind directly funded some of the Safe Space operations until July 2019 from a 2018 capacity building fund raiser and some indirect sponsorship of the program whilst actively and concurrently seeking funding for Darling Harbour and Kings Cross. The reach and potential of the program has been impacted by the temporary closures of safe space sites pending successful funding bids. Third, ambassadors have historically completed incident forms using paper and pen, a time-consuming process that is duplicated when data are manually entered in a data management repository. Recent changes to data collection have seen the development of an app, with the support of the University of Technology Sydney, that allows automatic data entry using an iPhone or iPad. This app will streamline the collection of data, improve the time lag for the reporting process as well as support a richer source of data collection. Stay Kind has been impacted by this transition in the implementation of the Take Kare App as well as resolving data output requirements for reporting. Fourth, the City of Sydney Central Business District has been undergoing significant capital works that has impacted on the mobility of ambassadors and capacity to operate efficiently. Together with the introduction of the lock out laws, the TKSS program has faced significant operating challenges in working within the CBD precinct.

Despite these challenges, the TKSS program has met its objective to provide a harm reduction service where vulnerable young people can access support and a safe place or a safe passage home. The benefits of the TKSS program that could be quantified outweigh the cost of delivering the program suggesting that Safe Spaces are a good economic investment that should continue to be supported.

REFERENCES

1. City of Sydney. Safe Space and Take Kare Ambassador Pilot Program. Sydney: City of Sydney; 2015.
2. Department of Premier and Cabinet. NSW Government Program Evaluation Guidelines. Retrieved January 9, 2018, from [http://www.dpc.nsw.gov.au/_data/assets/pdf_file/0009/155844/NSW Government Program Evaluation Guidelines.pdf](http://www.dpc.nsw.gov.au/_data/assets/pdf_file/0009/155844/NSW_Government_Program_Evaluation_Guidelines.pdf). Sydney NSW Government; 2016.
3. Liboschik T, Fokianos K, Fried R. tscount: An R Package for Analysis of Count Time Series Following Generalized Linear Models. *Journal of Statistical Software*. 2017;82(5):1-51.

4. Shakeshaft A, Doran CM, Petrie DP, Breen C, Havard A, Abudeen A, et al. The effect of community-action in reducing risky alcohol consumption and harm: a cluster randomised controlled trial. *PLoS Med* 2014;11(3):e1001617.
5. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006;3(2):77-101.
6. Warpenius K, Holmila M, Mustonen H. Effects of a community intervention to reduce the serving of alcohol to intoxicated patrons. *Addiction*. 2010;105(6):1032-40.
7. Wallin E, Gripenberg J, Andréasson S. Overserving at licensed premises in Stockholm: effects of a community action program. *Journal of Studies on Alcohol*. 2005;66(6):806-14.
8. Hughes C, Moxham-Hall V, Ritter A, Weatherburn D, MacCoun R. The deterrent effects of Australian street-level drug law enforcement on illicit drug offending at outdoor music festivals. *Journal of Drug Policy*. 2017;41:91-100.
9. Fileborn B, Wadds P, Tomsen S. 'Safety and Sexual Violence at Australian Music Festivals: Final Report.. Available at: https://www.academia.edu/39795192/Safety_sexual_harassment_and_assault_at_Australian_music_festivals_final_report. Sydney: UNSW; 2019.
10. Australian Bureau of Statistics. 6302.0 Average Weekly Earnings, Australia. Canberra: ABS; 2019.
11. Smith RG, Jorna P, Sweeney J, Fuller G. Counting the costs of crime in Australia: A 2011 estimate. Research and Public Policy Series 129. Canberra: Australian Institute of Criminology,; 2014.
12. Byrnes JM, Doran CM, Shakeshaft AP. Cost per incident of alcohol-related crime in New South Wales. *Drug and Alcohol Review*. 2012;31(7):854-60.
13. Treasury N. Evaluation of the Sydney CBD Entertainment Precinct Plan of Management. Sydney NSW Government; 2016.
14. Risbey T, Cregan M, De Silva H. Social Cost of Road Crashes. https://www.bitre.gov.au/publications/2010/files/sp_003_Risbey_Cregan_deSilva.pdf. Canberra: Australasian Transport Research Forum; 2010.
15. Australian Bureau of Statistics. 6401.0 Consumer Price Index, Australia. Canberra: ABS; 2019.
16. Office of Best Practice Regulation (OBPR). Office of Best Practice Regulation (OBPR). (2014). Best practice regulation guidance note: Value of a statistical life. Retrieved January 20, 2018 from https://www.dpmc.gov.au/sites/default/files/publications/Value_of_Statistical_Life_guidance_note.pdf. 2014.
17. NSW Government Centre for Road Safety. Serious Injuries in NSW 2005 to 2015: Reporting on methodology and results. <http://roadsafety.transport.nsw.gov.au/downloads/dynamic/nsw-road-toll-daily.pdf>. Sydney: NSW Government 2019.
18. NSW Government Centre for Road Safety. NSW Road Toll Statistics <http://roadsafety.transport.nsw.gov.au/downloads/dynamic/nsw-road-toll-daily.pdf>. Sydney: NSW Government; 2019.

APPENDIX A: EVALUATION FRAMEWORK

Background

The Take Kare Safe Space (TKSS) program is one of the functions of Stay Kind (formally, the Thomas Kelly Youth Foundation) established in response to concerns about the safety of young people at night. There are several objectives of the program including: to improve the safety and amenity of the public domain; to provide a harm reduction service where vulnerable young people can access support and a safe place; to reduce the risk of crime, specifically to prevent intoxicated young people from becoming the victims or perpetrators of crime; to collaborate with key stakeholders to establish a governance model that can enhance the night time environment; and, to support organisations that operate in the City at night (e.g. venue security staff, NSW Police and Ambulance). In addition to these objectives' the Take Kare Ambassadors play a key role in enhancing the experiences of domestic and international visitors by creating a friendly environment and providing assistance such as directions and local information.

Up until June 30 2017 TKSS was serviced by the Salvation Army. From July 1 2017 to June 30 2018 TKSS was serviced by St John Ambulance. The trial project was launched on 5th December 2014 has been expanded to continue for 3 years until 30th June 2018. TKSS operates year-round from 10pm to 4am on Friday and Saturday nights in the Sydney City CBD, Kings Cross and at that time, trial arrangements were in place at Darling Harbour.

Data from the three-month pilot evaluation found that over the period 5th December 2014 till 21st February 2015, over 1800 people were assisted with the program providing safe outcomes for intoxicated and drug affected young people, the majority of whom were in the 18-25 age group. The data collected identified four key categories where young people were most at risk: i) vulnerability to assault, ii) vulnerability to sexual assault, iii) vulnerability to theft, and iv) vulnerability to traffic injury. The TKSS program provided a timely intervention to protect young people from these negative outcomes. Extrapolating findings over a year suggests that TKSS has operating costs close to \$540,000 (\$115,061 actual expenses for 12 weeks x 4.33 (52 weeks / 12 weeks)) and cost-savings of \$4,744,428 (\$1,094,868 estimated savings x 4.33 (52 weeks / 12 weeks)), which represents a potential return on investment of over 9:1. This would mean that for every dollar invested, the TKSS program results in a benefit of \$9.

Although findings from the pilot evaluation concluded that the operating model is viable, with its operations and procedures working effectively, a more rigorous evaluation was suggested to validate the economic benefit. In early 2017, the NSW Department of Justice provided funding for a more rigorous evaluation of the TKSS program. This document articulates the proposed evaluation methodology for that evaluation.

Evaluation method

Given that the evaluation framework for the TKSS program is guided by the NSW *Government's Program Evaluation Guidelines*, it will comprise a process, outcome and economic evaluation:

- *The process evaluation* will assess the extent to which the TKSS program is accessed by clients, the extent to which it meets the needs of clients and key stakeholders, and the level of satisfaction with the service.
- *The outcome evaluation* will measure a range of direct benefits of the TKSS program including reductions in demand for both acute services (e.g. police incidents, ambulatory care and hospital presentations) and longer-term services (e.g. court appearance costs, health care and rehabilitation costs from assaults and injuries, financial and lifestyle impact on carers of victims and the altered earning capacity of victims and carers).
- *The economic evaluation* will use cost-benefit analysis to assess whether the economic benefits of the TKSS program outweigh its costs. This evaluation requires obtaining three sets of data, each of which would be converted into monetary terms:
 - i. The cost of providing the TKSS program;
 - ii. The direct benefits of the TKSS program; and
 - iii. The value that the community places on having Take Kare Safe Space and Take Kare Ambassadors programs available.

Data sets

The evaluation will obtain three sources of data: i) external data sets; ii) internal program-level data; and iii) interview and survey data.

External data sets

The external data sets to be accessed include crime statistics by incident type and location (requested from the NSW Bureau of Crime Statistics and Research); accident and emergency admissions (requested from St Vincent's Hospital); police call out data, and ambulance call out data (requested from NSW Government and/or St John's Ambulance Service). The interviews with key stakeholders will, in part, be used to identify any other benefits that we could measure using external data sets.

Internal program level data

These data will include information that is recorded by the TKSS Ambassadors (pertaining to client information, risk profile, referrals, services provided). These data will be collected using an app being developed by UTS. Data will also be obtained in relation to TKSS financial and administrative records (to quantify operating costs).

Interview and survey data

These data will include interviews with clients and stakeholders (such as Take Kare Ambassadors, Police, CCTV control room staff, ambulance drivers, City Rangers, SJA Take Kare staff, Emergency Department staff, City of Sydney, Department of Justice, Thomas Kelly Youth Foundation personnel, volunteers) and a community-level survey to examine community attitudes and quantify the perceived value of the program.

Data analysis plan

A mixed method approach will be used, which combines both qualitative and quantitative methods, to answer the key evaluation questions (process, outcomes and economic).

The qualitative analysis will comprise semi-structured interviews and will apply standard thematic analysis techniques to the responses. Interviews will be undertaken with a range of key stakeholders to ensure a wide range of potential program benefits are captured. This qualitative evaluation will also complement and add a deeper level of understanding to the findings of the quantitative component of this project. This form of data ‘triangulation’ is an important strategy for improving the validity of research findings as well as serving to locate critical themes in research.

The quantitative analysis will comprise several elements. First, it will determine the number of people who use a TKSS program in different locations, based on a count of service episodes provided. Second, it will rate the level of satisfaction with services received by embedding a standard satisfaction question (based on a five-point Likert scale from very satisfied to very unsatisfied) into the routine data collection process of the TKSS program staff. Third, it will quantify the benefits of the program in terms of its impact on routinely collected data sets, such as police incidents. As noted in the NSW Treasury evaluation, a reliable evaluation technique is required to be able to differentiate the specific impact of the TKSS program from the range of other activities implemented in the Sydney CBD with as much confidence as possible. Given the TKSS program has commenced on different dates in different locations, it is possible to take advantage of this staggered commencement by using a multiple baseline evaluation to quantify the program benefits. This design acknowledges that there are a range of factors that may impact on an outcome, but if a change in the outcome variable (e.g. police incidents) occurs in different locations at different points in time following the commencement of the TKSS program, then it provides good quality evidence that it is the program that is causing the effect, independently of the impact of other factors in each different setting. The data analysis will use an interrupted times series approach to quantify the program benefit on data aggregated quarterly across the study period. Specifically, it will fit a separate model for each location and include variables for time, pre/post status and a pre-post interaction to assess the extent to which the intercept and/or slope vary after implementation of the intervention. The models will adjust for seasonality and autocorrelation using appropriate time series methods.

Fourth, in addition to direct benefits, the intangible benefits of the TKSS program will be estimated using a contingent valuation (CV) method, such as discrete choice experiments. CV measures the value that the community places on having safe space programs available. For efficiency, it is most likely that these data would be collected on-line among members of a commercial panel, stratifying by age and gender to obtain societal representation. Fifth, the cost to deliver the TKSS program will be estimated. Finally, the estimates of the tangible (direct) and intangible (indirect) benefits of the TKSS program and the cost to provide it will be combined in a cost-benefit analysis (economic evaluation). Cost-benefit analysis is considered the gold standard in economic evaluation as it provides an estimate of the value of resources used by each program or initiative compared to the value of resources the initiative/program might save or create (i.e. the benefits). It enables the calculation of a cost-benefit ratio to support potential return on investment. Where possible we will also include benefits to program participants and staff in terms of reduced out of pocket expenses and/or improved efficiency.

The results and findings of the qualitative and quantitative analysis will be combined to provide an overview of the process, outcome and economic indicators of the TKSS program. The outcome of the cost-benefit analysis will be reported as a Net Social Benefit, which is the sum of the Benefits - Costs + Savings, estimated relative to the counterfactual (i.e.: relative to what would have happened in the absence of the TKSS program). Extensive sensitivity and uncertainty analysis will be conducted to test the validity of the results to variations in key parameters and/or assumptions.

It is anticipated that this evaluation will form the basis of a business case submission for the NSW government to continue to fund TKSS beyond June 2018.

Defining the program

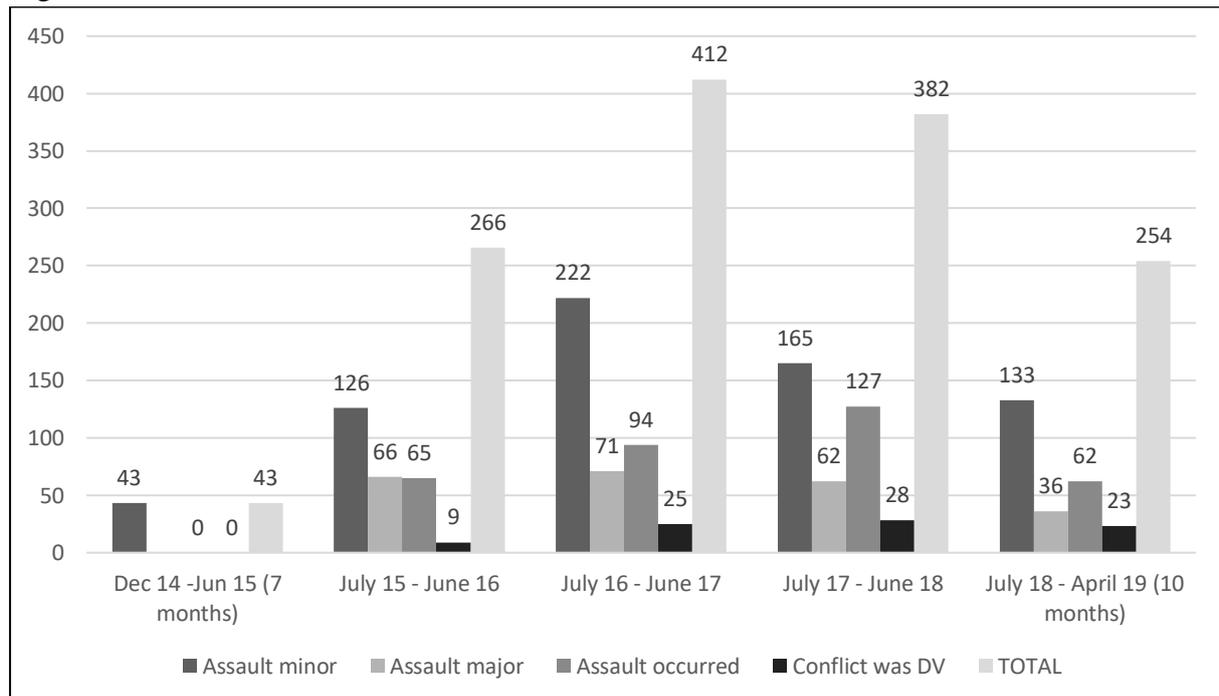
Another component of the evaluation will be to define the TKSS program using an innovative technique that will allow it to be tailored to the resources and needs of different locations or communities, whilst at the same time ensuring a standardized risk and harm minimization model, implementation of the critical success factors, which will help to ensure that the cost-beneficial program can be replicated. Resolving this tension between the need for a standardised program (so communities are confident that they are implementing an evidence-based program) and the need to adjust to different locations (so communities are comfortable that it is targeting their specific concerns) has been a difficult public health problem, but the evaluation team has devised a solution that we will apply to the TKSS program. This will make the program easier to replicate elsewhere, once we have demonstrated its benefits and costs. This will also promote 'buy-in' from key stakeholders in different communities who will have to work together with the Thomas Kelly Youth Foundation in implementing the program to meet their local needs whilst maintaining the critical success factors of the program. The success of the TKSS is a result of many factors: the requirement for strong and capable leadership; cost control management; attracting and maintaining highly motivated volunteers; standards of induction, training and operating procedures, are just a few. Compromising any of the critical success factors can have a negative impact on the program, and consequently the cost benefit outcome.

APPENDIX B: INTERVENTIONS BY AMBASSADORS BY SEVERITY

Interventions that minimised the risk of assault

Figure 13 provides an overview of interventions that minimised the risk of assault (n=1,357). The largest number of TKSS interventions take place for minor assault (n=689), followed by assault occurred (n=348), major assault (n=235) and domestic/intimate partner violence related (N=85).

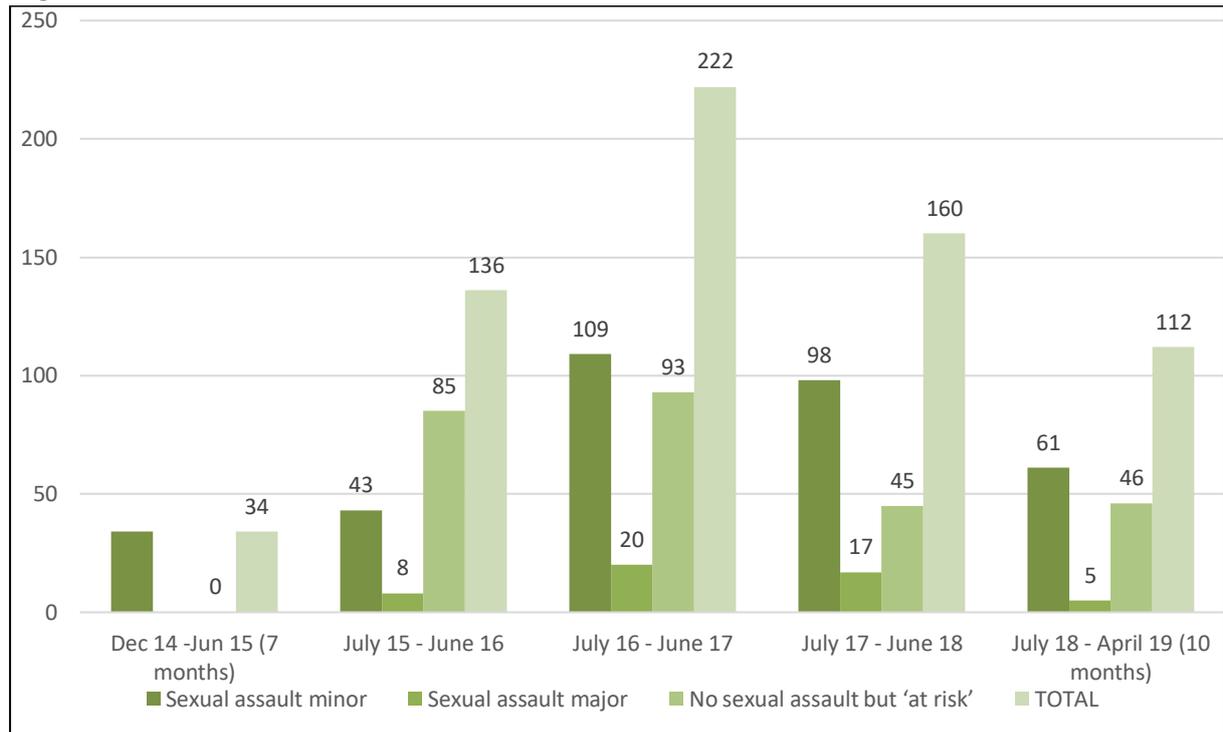
Figure 13: Interventions that minimise risk of assault



Interventions that minimised the risk of sexual assault

Figure 14 provides an overview of interventions that minimised the risk of sexual assault (n=664). The largest number of TKSS interventions take place for minor risk (n=345), followed by no assault occurred but at risk (n=269) and major risk (n=50).

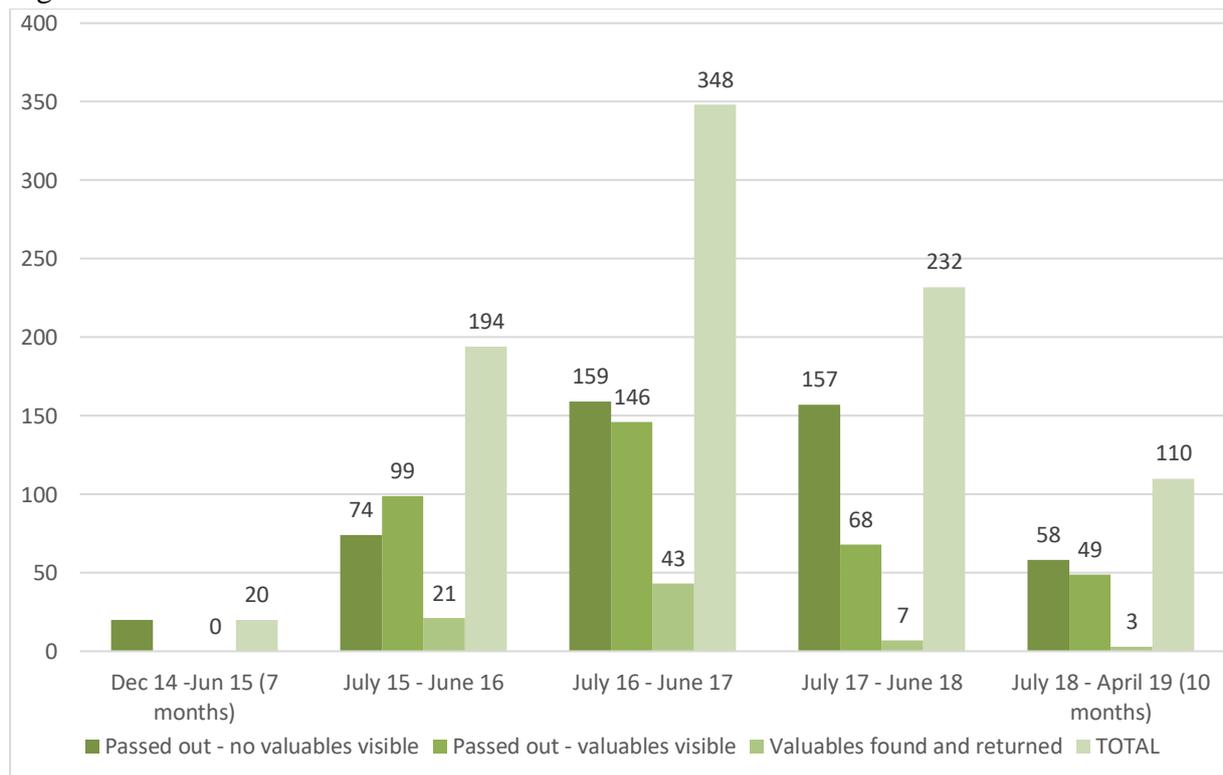
Figure 14: Interventions that minimised risk of sexual assault



Interventions that minimised the risk of theft

Figure 15 provides an overview of interventions that minimised the risk of theft (n=904). The largest number of TKSS interventions take place for a person passed out with no valuables visible (n=468), a person passed out with valuables visible (n=362) and valuables found and returned (n=74).

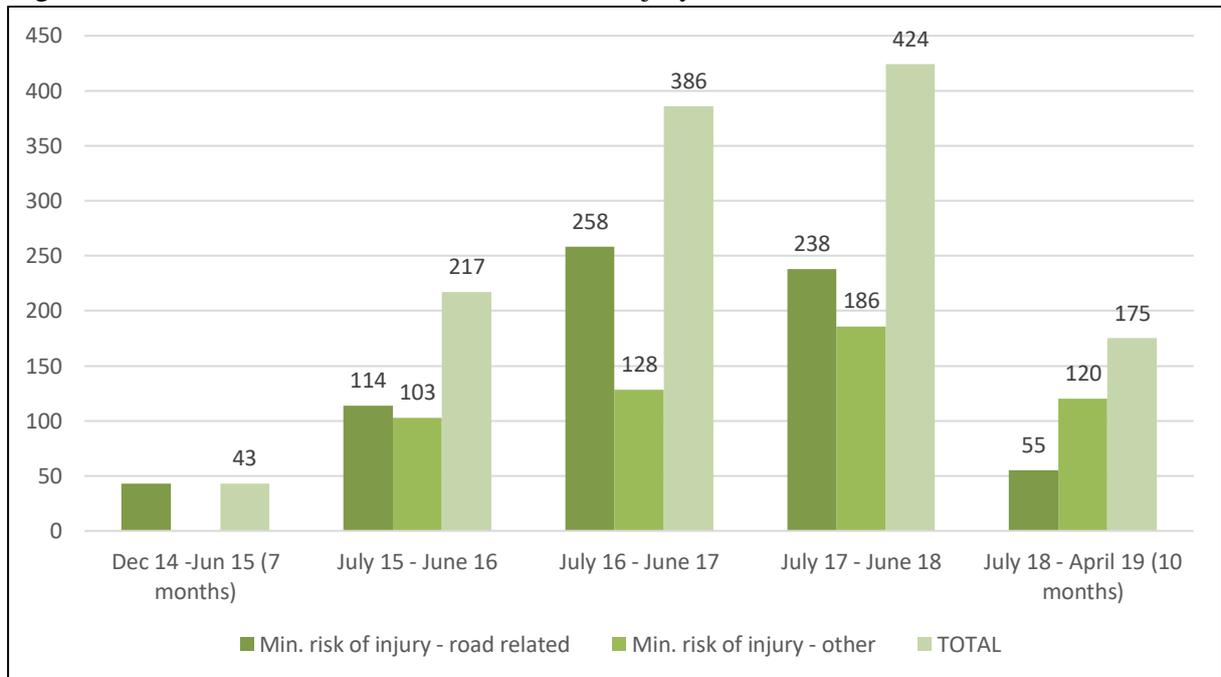
Figure 15: Interventions that minimised risk of theft



Interventions that minimised the risk of injury

Figure 16 provides an overview of interventions that minimised the risk of injuries (n=1,245). There was a total of 708 incidents related to road related injury and 537 incidents related to other injury. It is important to note that this period coincided with a range of capital works associated with light rail and Metro construction that impacted on road conditions, volume of traffic and pedestrian access.

Figure 16: Interventions that minimised risk of injury



APPENDIX C: MODEL SPECIFICATIONS

Model run	Monthly Lag	Yearly Lag	Month Factors	Cosine and Sine
1	1	1	1	1
2	1	1	1	
3	1	1		1
4	1	1		
5		1	1	1
6		1	1	
7		1		1
8		1		
9	1		1	1
10	1		1	
11	1			1
12	1			
13			1	1
14			1	
15				1
16				

APPENDIX D: CLIENT SURVEY

1. Gender
 - Male
 - Female
 - Transgender male
 - Transgender female
 - Gender variant/non-conforming/non-binary
 - Other _____
 - Prefer not to answer

2. What is the highest level of education you have completed?
 - School Certificate
 - HSC
 - Tertiary qualification (TAFE, University, other external training)
 - Prefer not to answer

3. Are you currently employed?
 - Yes
 - No
 - Prefer not to answer

4. What is the nature of your employment?
 - Casual
 - Part-time
 - Full-time
 - Prefer not to answer

5. Please estimate your average gross (before tax) annual income
 - \$20,000 or lower
 - \$20,001 to \$35,000
 - \$35,001 to \$50,000
 - \$50,001 to \$65,000
 - \$65,001 to \$80,000
 - \$80,001, to \$100,000
 - More than \$100,000
 - Prefer not to answer

6. What is your age? (enter numerical value)

7. Have you ever been professionally diagnosed with a mental health condition?
(Multi-choice pick list)
 - No
 - Anxiety
 - Depression

- Mania
- Manic depression/Bipolar disorder
- Phobias
- Panic
- OCD
- Paranoia
- Any personality disorders
- Schizophrenia
- Drug-induced psychosis
- Other psychosis
- Post-traumatic stress disorder A t
- Other (please specify)
- Prefer not to answer

8. What was your main reason for attending the Take Kare Safe Space site?

- Spend time at Safe Space
- Charge phone
- Receive basic First Aid
- Ask directions
- Other:

Please specify: _____

9. How satisfied are you with the TKSS program?

- Not at all satisfied
- Satisfied
- Very satisfied

10. Would you recommend TKSS to friends?

- No
- Yes
- Don't know

11. How often do you have a drink containing alcohol?

- Never
- 2-4 times per month
- 2-3 times per week
- 4+ times per week

12. How many standard drinks of alcohol do you drink in a typical session when you are drinking?

- None
- 1-2
- 3-4
- 5-6

- 7-9
- 10+

13. How often do you have 5 or more drinks on one occasion?

- Never
- Less than monthly
- Monthly
- Weekly
- Daily or almost daily

14. Are you willing to participate in a more in-depth interview about your experiences with the Take Kare Safe Space Program?

- Yes: please provide a contact number for a member of the research team to reach you on _____
- No
- Unsure / please send more information. Please provide email contact.