

# SAIC Final Technical Report: Summary and Tables

## Urban Upgrading for Violence Prevention in South Africa: Does it Work? (107329)

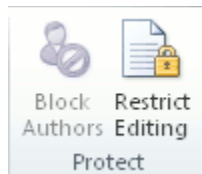
**Report Author(s):** Sam Lloyd; Richard Matzopoulos

Provide a narrative summary and complete the tables below. **Please submit all final outputs (reports, briefs, etc.) directly to Jennifer** Salahub at [jsalahub@idrc.ca](mailto:jsalahub@idrc.ca), or by post as necessary.

About the form: The places where you are able to edit this form have been restricted. Within the places you are able to edit, there are no restrictions on formatting or length. You may use bullets, draw tables, insert images, format text, etc., as you wish.

To open the task pane and have Word show you regions where you have permission to edit, do the following:

1. On the **Review** tab, in the **Protect** group, click **Restrict Editing**.



2. Click **Find Next Region I Can Edit** or **Show All Regions I Can Edit**.

### 1. Summary

- Discuss your project's progress, including what you set out to do and what you found out. **Revisit your original objectives** (as set out in your Memorandum of Grant Conditions) and comment on your achievements against those objectives.
- Discuss any measurable outcomes, impact, or influence (on research, policy, or practice) that your project has had.
- This is your opportunity to update IDRC on the progress of your research. The expectation is that you provide a longer narrative here than you will in answering the questions found in Survey Monkey.
- Approximately **five pages** would be appropriate.
- The project started out with the following objectives:
  - 
  - **Table 1: Research Objectives**

Objective	
Prim. / Second.	Description
General	The overarching aim of this research is to assess the effectiveness of urban upgrading interventions based on the participatory approach adopted by VPUU in

	reducing interpersonal violence and improving safety.
<b>PO1</b>	Assessing whether infrastructural interventions are effective in broadly reducing interpersonal violence in low-income communities
<b>PO2</b>	Assessing whether urban upgrading interventions are effective in reducing certain types of interpersonal violence and for particular groups at-risk
<b>PO3</b>	Assessing whether urban upgrading interventions are effective in reducing antecedents for interpersonal violence, such as access to alcohol, and supporting factors that improve safety including physical factors (such as street lighting and urban design features that increase visibility), environmental factors (e.g. access to social services and recreational facilities) and social and community factors as measured by school enrollment among youth, and voter turn-out as a measure of social capital and 'sense of community' as an individual-level indicator of community cohesiveness
<b>PO4</b>	Assessing whether investment in urban upgrading is associated with improved outcomes for other related and independent health outcomes, such as HIV/TB, diarrhea and mental health that also entrench poverty and inequality.
<b>SO1</b>	Reviewing the literature describing the impact of urban renewal and upgrading and other infrastructural measures as interpersonal violence prevention interventions on poverty reduction
<b>SO2</b>	Using interim research results to mobilise community and governmental stakeholders to undertake collaborative intervention efforts to reduce interpersonal violence
<b>SO3</b>	Informing collaborative intervention efforts to reduce interpersonal violence through a review of existing best practices
<b>SO4</b>	Documenting critical facilitating factors and barriers concerning community participation and ownership of a) urban upgrading and b) violence reduction efforts

Aside from objective S01, which has been completed through publication of the review by Cassidy et al (2014) *A Systematic Review of the Effects of Poverty Deconcentration and Urban Development on Youth Violence*, all the objectives remain active and on course to be achieved shortly through final completion of activities and final analysis of the data collected during the course of the project.

Current progress with activities is shown in Table 2 below:

## SAIC Final Technical Report: Summary and Tables

**Table 2: Progress on activities**

	Primary data collection				Secondary data analysis	Safety and security indicators	Urban upgrading indicators	Economic + Human Development indicators	Alcohol + other drugs indicators	
	Injury morbidity surveillance	Survey – 2013	Survey – 2014	Survey – 2015	Robbery data analysis	Security expenditure	Aerial photographs analysis	SAIMD analysis	Liquor outlet mapping	Alcohol seizures
Fieldwork / data acquisition	✓	✓	✓	✓	✓	✓	✓	Partial – 2001 only	✓	✓
Technical reports	✓	x	x	x	x	NA	X	x	✓	x
Presentations	✓	✓	✓	✓	x	NA	X	x	x	x
Preliminary analysis	✓	✓	✓	✓	✓	End 2016	End 2016	Awaiting confirmation of finalization from CASASP	✓	End 2016
Integration	Mid 2017	Mid 2017	Mid 2017	Mid 2017	Mid-2017	Mid 2017	Mid 2017	Mid 2017	Mid 2017	Mid 2017
Article	x	To be submitted next 2 months	x	x	x	X	X	x	x	x

## SAIC Final Technical Report: Summary and Tables

The two main categories of primary research activities conducted by the research team and its partners are a) injury morbidity surveillance study, and b) the annual community survey:

- a) Injury morbidity surveillance study: Led by the Health Systems Trust (HST), five phases of the series of six-monthly rapid assessments (RAs) with the aim of identifying high-risk population subgroups, high risk areas for injury, and monitoring trends over time have now been completed.
- b) Community survey: Three rounds of the annual community survey of 1200 households in Khayelitsha and 300 households in Gugulethu-Nyanga have been completed. Results from a descriptive analysis of the 2013 baseline community survey (BCS) are to be submitted for journal publication shortly. Partial analysis of the 2014 and 2015 survey completed, with further analysis currently underway.

Aside from providing the data on which our final analysis of the impact of VPUU's urban upgrading programme on violence, safety and other outcomes will be based, these two primary research activities have provided us with a number of interesting research insights, and directions for future research, as outlined in this and previous reports. Our findings so far confirm that the study community is characterised by high levels of interrelated and reinforcing burdens of interpersonal violence (with young males being the most represented demographic among both perpetrators and victims) and other crimes, alcohol misuse, multiple forms of material and social deprivation, and unexpectedly high levels of depression. While there has been some indication that levels of different categories of violent crime differ between VPUU intervention and control areas, with indications that levels of violence are lower in the VPUU intervention areas, further analysis on this is still required. The completion of this analysis is funding dependent, with an expected completion date of mid-2017.

Alongside our primary research activities, over the course of the project so far we have undertaken a series of secondary data collection and analysis exercises also. Many of these activities are incorporated under the overarching *indicator framework* development process: the process to develop indicators for the simultaneous measurement of multiple interventions, exposure variables, and known confounders and effect modifiers relating to four key domains: 1) Urban Upgrading; 2) Safety and security; 3) Economic and human development; 4) Alcohol and other drugs. Progress on each of these domains is as follows:

1. Urban upgrading: Through utilization of a mixed methods methodology incorporating scrutinization of financial and budget data, workshops, interviews and the application of GIS methods, we have neared completion of a new method for the measurement of VPUU's urban upgrading

infrastructural and social programmes – the key exposure variable in this project. Information is currently being sought from City of Cape Town and Western Cape Government officials relating to non-VPUU urban upgrading activities. In addition, work is underway to measure changes in infrastructure over time through the analysis of aerial photographs of the study area. For this, a basic analysis should be completed by the end of 2016, with final integration of the results into the overall analysis following from there, dependent on funding acquisition.

2. *Safety and security*: To measure policing and other security-related activities we will use policing staff allocations for each of the three Khayelitsha police stations as collated in the Khayelitsha Commission as an indicator of relative state security provision. This will be completed by the end-2016. We are still trying to access security spending by the City of Cape Town for each ward sub-council. This latter aspect is still being held up by a lack of response from the relevant officials.
3. *Economic and human development*: Through collaboration with the Human Sciences Research Council (HSRC) and their partners the Centre for the Analysis of South African Social Policy (CASASP) and the Southern African Social Policy Research Institute (SASPRI) we plan to utilize the South African Index of Multiple Deprivation (SAIMD) for 2011 as our primary set of indicators for this domain. In order to employ this data effectively, co-investigator Tatenda Makanga has developed a new model for aligning this data, which is organised around the spatial structure of the Census 2011, with the geographical area and sub-area boundaries delineated by VPUU. Development of the SAIMD for 2011 by SASPRI was unfortunately delayed due to issues relating to the revised census boundaries, but is expected to be completed shortly, though we have not yet received confirmation from CASASP on exact dates.
4. *Alcohol and other drugs*: Following an alcohol indicator workshop held early on in the project cycle we have collected data on a range of alcohol demand, supply, consumption, and harm indicators to supplement the data, and identified remaining data gaps and the appropriate methodologies to address these gaps.

The development of these indicators forms a key aspect of the research process. Extensive detail is provided in the chapter for the forthcoming SAIC book, but essentially the indicators will be used, through incorporation into one or more multivariate statistical models, to help determine whether any differences over time in violence, safety and other outcomes between the intervention and control areas are a result of the intervention itself, or whether these differences are in fact due to other factors (such as economic conditions, safety and security provision, or access to alcohol) that may be covariates with the intervention and outcome.

The current state-of-play in terms of the indicators we are using is shown in the Table 3 below:

## SAIC Final Technical Report: Summary and Tables

**Table 3: Indicators framework**

CONSTRUCT	INDICATOR	SOURCE	AVAILABILITY	INDICATOR LEVEL	SPATIAL RESOLUTION	LIMITATIONS
<b>OUTCOMES</b>						
Violence and crime	Household experience of violence	Community household survey (CHS)	3 Phases (2013-15) – further phases dependent on funding	Household / area	VPUU delineated small areas (VPUU)	a) Self-report
	Violent injuries	HST injury morbidity surveillance	6 phases (every 6 months since 2013)	Area	VPUU	a) Geocoded to small areas
	Homicide	FPS	July 2012	Area	GPS	a) Access complicated b) small caseload
Mental health / depression	CES-D 10 scale	CHS	3 Phases	Household / area	VPUU	a) Self-report b) Scale not validated in community or SA
	Experience of MH problems + treatment	CHS	2 Phases – 2014/5	Household / area	VPUU	a) Self report
<b>Economic and Human Development</b>						
Household economics	Household employment/ economic contribution + dependency	CHS	3 Phases	Household / area	VPUU	a) Lack of income figures

	ratio					
	Perception of relative income	CHS	3 Phases	Household / area	VPUU	a) Subjective self-report
Household wealth	Asset index	CHS	2 Phases – 2014/5	Household / area	VPUU	a) Index not validated
Housing quality	Wall material / floor level / rain water / garden / formal-informal area	CHS	3 Phases	Household / area	VPUU	
	Satisfaction with / perceptions of housing	CHS	3 Phases	Household / area	VPUU	a) Subjective self-report
Education	Education level	CHS	3 Phases	Individual/household / area	VPUU	a) Self-report
Neighbourhood deprivation	SAIMD	SASPRI	For 2001, 2007 and 2011	Area	Datazones (agglomeration of Census EAs)	a) At present only have data at the ward level.
	Poverty index	SASPRI	For 2011	Area		b) Same limitations as census data
	Perceptions of / satisfaction with neighbourhood (services etc.)	CHS	3 Phases	Household / area	VPUU	a) Self-report
	Formal-informal area	CHS	3 Phases	Area	VPUU	
Social capital (structural)	Group membership / community participation	CHS	3 Phases	Household / area	VPUU	a) Self-report
Social capital (cognitive)	Perceptions of trust / social	CHS	1 Phase - 2015	Household / household / area	VPUU	a) Self-report

	cohesion					
	Preference to continue living in area	CHS	3 Phases	Household / area	VPUU	a) Self-report
<b>Safety and Security</b>						
Police presence	Police salary data	Khayelitsha Commission (KC)	From 2012 to 2013	Area	Police Precinct	a) Data post-2013 not currently available b) Currently only have staff levels - need salary scales
<u>Gaps</u>						
Metro police and private security						
<b>Alcohol</b>						
Alcohol consumption	YA alcohol use	CHS	3 Phases	Individual / area (aggreg.)	VPUU	a) For YAs only
Alcohol abuse/dependency	AUDIT scale	CHS	3 Phases	Individual / area (aggreg.)	VPUU	a) For YAs only
Alcohol-related neighbourhood problems	Experience of alcohol-related problems	CHS	3 Phases	Individual / area (aggreg.)	VPUU	a) Self-report
Alcohol availability	Outlet data (number of outlets by type / outlet capacity / hours of sale / location)	Outlet mapping survey	Gunya – 2013/4 Khayel. – 2015	Area	VPUU	a) Hours of sale not verified (self-report) b) Only 2/3 of Khayelitsha surveyed in 2015 c) Limited no. of variables for Khay



						d) Gunya 2014 data poor quality
	Distance to outlets / opening hours of nearest outlet	CHS	3 Phases	Household / area	VPUU	a) Self-report – not objective
Alcohol and violence	Alcohol association with experience of crime and violence	CHS	3 Phases	Household / area	VPUU	a) Self-report
	Alcohol association with trauma cases	HST injury morbidity surveillance	6 phases (every 6 months since 2013)	Area	VPUU	Geocoded to small areas
	Perceptions of alcohol as RF for violence	CHS	3 Phases	Household / area	VPUU	a) Self-report
Alcohol policy perceptions	Perceptions of alcohol policy	CHS	3 Phases	Household / area	VPUU	a) Self-report
Enforcement of alcohol laws	Alcohol seizures	SAPS Provincial Liquor Control	For 2011	Area	PP – whole of WC	
	Perceptions of alcohol policy enforcement	CHS	3 Phases	Household / area (aggreg.)	VPUU	a) Subjective
<b>Urban Upgrading</b>						
VPUU Infrastructure development	Construction + maintenance expenditure / area of influence	Budgets / financial reports / VPUU staff	Since 2009	Area	VPUU	a) Figures may not completely accurate b) Lack of

						security expenditure as mostly comes from City of CT c) Areas of influence still being developed
VPUU social crime prevention	Expenditure across intervention areas	Budgets / financial reports / VPUU staff	2014-5	Area	VPUU	a) Currently have for latest financial year only
<u>Gaps</u>						
Non-VPUU infrastructure development + social programmes	Expenditure from City and Provincial government	Budgets / financial reports	Not currently available	Area	Ward	Information not forthcoming
	Changes in urban land use	Survey of aerial photographs	2006 - 2012	Area	VPUU	

## **SAIC Final Technical Report: Summary and Tables**

In terms of capacity building, our project team includes a number of graduate students pursuing and PhD and MPH degrees, with their theses situated within the project's overall research aims. As well as exposing these students to research process and the wealth of valuable skills that entails, training has been provided to these students in areas such as Geographic Information Systems (GIS). In addition, the research and other employment skills of individuals from our study communities have been developed through the employment and training of fieldworkers and supervisors, including training in the use of cellphone survey technology.

In tandem with our primary and secondary research activities we have conducted a wide range of information dissemination and community consultation activities also, with research findings, project activities and methodologies reported to a range of stakeholders via participation at a number of conferences, workshops and policy development initiatives, and the publication of journal articles. In addition, a number of collaborations with other researchers and organizations have been instigated or furthered, including in particular work with VPUU, the Western Cape Government and others to progress developments in relation to the Violence, Injury and Trauma Observatory (VITO) concept, which if realised will provide a sustainable platform to monitor changes in the violence and injury profile of selected communities over time and to evaluate the impact of interventions over the long term.

Emanating from the project are a number of methodological developments including:

- 1) The use of cellphone survey technology for our community surveys. This has led to enhanced efficiency of the data collection process and quality of the data collected, and will most likely be used for all future surveys of similar type, thus improving the quality of future research outputs;
- 2) Novel GIS methods relating to:
  - a. quantifying access to alcohol and exposure to the alcohol environment, which will not only enhance our ability in this project to control for the effect of access to alcohol on the impact between the intervention and outcomes, but also enable other researchers to utilise these methods in their own work, thus contributing to a greater understanding of the relationship between access to alcohol and numerous social, health and other outcomes; and
  - b. ways to merge data at different spatial levels, thus allowing us to examine a greater range of factors in the same models, while enhancing the analytical capacity of other researchers utilising spatial data ;
- 3) The aforementioned urban upgrading indicator process. This enables us to measure the impact of complex, multi-faceted urban upgrading programmes such as VPUU at the small-area level, and is a method that can be similarly utilised by other researchers in the field. This method better enables the

assessment of area-level interventions in complex environs where other projects likely to affect outcomes are simultaneously underway.

Analysis of robbery data from 2005 to 2014 led by researchers from the University of Witswatersrand is near completion. While providing further evidence of the impact of the intervention on the incidence of violence and safety, this analysis will also shed light on whether or not a crime displacement effect has occurred i.e. whether violence and crime has simply moved from the intervention areas to other areas of Khayelitsha. We expect this process to be complete by mid-2017, dependent on funding.

Finally, the project has made its presence felt among official policy circles in the following ways:

1) Violence Prevention Policy

The aims of the research project are reflective of those present in the Western Cape Provincial Government's Integrated Provincial Violence Prevention Policy Framework, with its emphasis on strategies to reduce access to and the harms associated with alcohol, and the close surveillance of injury cases presenting to health facilities.

The policy outlines six necessary actions to guide the development of an M&E system for violence prevention, which are directly addressed by the Project, thus supporting the long-term success of the Western Cape Government's objectives regarding violence prevention.

2) Michael Krause, Director VPUU presentations:

Michael Krause, Director of SUN Development/VPUU, presented as part of his meeting with Alderman JP Smith (member of the City of Cape Town's Mayoral Committee (Mayco) responsible for municipal government Safety and Security issues) analyses based on the Baseline Community Survey (BCS) comparing outcomes in VPUU-areas to control areas, and between VPUU areas. In addition, Mr. Krause attended the World Urban Forum in Medellin, Colombia from the 5<sup>th</sup> to 11<sup>th</sup> April 2014, at which he shared some of the preliminary results and discussed the project as a whole.

3) Department of the Premier Game Changer: Alcohol Abuse

Through involvement in the Department of the Premier's Game Changer: Alcohol Abuse initiative, we have been able to share our research and strengthen working relationships with a range of high-ranking government officials and other researchers in the field of alcohol policy. The preliminary results from the community survey and the health facility data collection have been instrumental in affecting a rethink as to how the province will address alcohol-related harm, such as a community-based initiative that will focus on high-risk areas including Gunya and will involve VPUU and several government departments.

In addition, we were able to provide our support for the need to limit the influence of the alcohol industry in the policy-making process, as well as the necessity of obtaining alcohol sales volumes data

from the industry. With regards to the latter, the Liquor Authority has agreed to undertake this task, with our assistance.

#### 4) Revision of the Western Cape Alcohol Policy

The research has contributed to the development of a longer-term initiative to revisit the provincial alcohol policy. Here, Cabinet approval has been obtained to move the Western Cape Liquor Authority from the Department of Economic Development and Tourism to the Department of Community Safety. Secondly, a Green Paper setting out a new alcohol policy for the Province has been drafted, with extensive contributions from Dr. Matzopoulos, which has alcohol harm reduction as the priority, rather than growing the alcohol economy.

#### **Further funding**

Further funding has been obtained from the Department of Community Safety for the period April to September 2016 to continue synthesizing and analysing the collected data (with a focus on perceptions of liquor outlets and alcohol law enforcement, and the links between access to alcohol and violence), and a further round of the liquor outlet mapping study. The Department of Health will fund some of the further analysis and integration of the research data from June 2016 to March 2019. We will also apply for further funding to repeat some of the other primary data collection activities in the project and other areas, although less frequently. Less frequent data collection, while not allowing us to analyse changes in as much detail as before, will still enable trends to be examined, albeit over a wider time frame, and afford us more time to focus our data synthesis and analysis methods.

## 2. High-level results statements:

Please provide your high-level research findings in plain language. These should be short statements explaining what your research found designed for a non-specialist audience. Bullet points are strongly encouraged.

Final results for the Project are still pending, following further required analysis. However, some preliminary results are included below:

### **Injury Morbidity Surveillance Results**

A full analysis of the injury morbidity surveillance study is detailed in the final report (see under Project Outputs below). A selection of these results are as follows:

#### **Violent injuries**

- Violence remains a predominant cause of injury in these communities, accounting for one fifth (20.8%) of all cases that presented to the Emergency Centres (ECs) within the healthcare facilities over the five survey periods
- Young males in particular bear a significant portion of this burden, notably those due to violence, with the overwhelming majority of violent injuries occurring in males (69.1%).
- With regard to the type of violence, interpersonal violence (34.5%) was the most common type overall followed by crime-related (32.4%) and gang-related (13.1%) violence.
- There were notable differences in patterns of violent injury by gender with regard to specific cause, relationship with and number of perpetrators. Among males, sharp force was the leading specific cause of violent injury. Among females, although sharp force was the leading specific cause overall, assault (push/kick/punch) was the second leading specific cause.
- Community members were reported to be the most common perpetrators among males; among females however, spouses and partners were the most common perpetrators. Females more commonly reported being injured by one perpetrator and males by either one or four or more perpetrators.
- The highest odds of presenting with a violent injury were found in the 15–24-year age group, where they were approximately eight times higher compared to those younger than 15 years (OR 8.01, 95%CI 6.05–10.60) i.e. we are 95% certain that those aged between 15-24 are 6 to 10.6 times as likely to suffer from a violent injury as those aged younger than 15 years.

#### **Association between alcohol use and injury**

- Over a third of all injuries were associated with reported or suspected alcohol use.
- The contribution of alcohol to the burden was found to be significant particularly for violent and transport-related injuries, emphasising the importance of ongoing efforts aimed at reducing alcohol availability and related harms.

- Here, the odds of presenting with a violent injury were over four times higher in those with reported or suspected alcohol use (OR 4.27, 95%CI 3.38–5.39) compared to those with no alcohol use.
- After adjusting for other factors, the relative risk of a transport-related injury was twice as high for those who reported alcohol use compared to those who did not (RRR 2.15, 95% CI 1.43–3.22).

### **Community Survey Preliminary results**

The final analysis of the three rounds of the community survey, which will allow us to answer the main research questions of the project, will be completed over the coming months. However, initial pertinent results include:

- From an analysis of the 2013 and 2014 rounds of the community survey comes evidence that the proportion of households experiencing forms of violence<sup>1</sup> is significantly lower over the two years in the Khayelitsha intervention areas compared to control areas (15% versus 23%). Furthermore, there is also evidence of a reduction in violence incidence between the two surveys, in all areas, with the proportion of households experiencing violence falling from 17% to 14% in the intervention areas, and from 27% to 19% in the control areas.
- Between 2013 and 2015 the proportion of individuals scoring 10 or more on the 10-item version of the Center for Epidemiological Studies Depression scale (CESD-10) (an indicator of significant depressive symptomatology) was consistently lower in the intervention areas compared to control areas (22% versus 27% for the three years overall). In addition, the proportions fell each year, from 30% to 14% in the Khayelitsha intervention areas, and from 44% to 17% in the control areas.
- Our results also highlight the importance of the appropriate selection of exposure and control areas for the analysis. For example, when sectors of Site B and Site C (sites of failed VPUU interventions) are included as part of the exposed areas, markedly different results are seen, with the percentage of households experiencing some kind of violence increasing in the intervention areas, and falling in the control areas, thereby diluting the apparent association between the intervention and the incidence of violence.

### **Robbery data – the displacement of crime and violence**

We conducted an initial analysis to ascertain the extent of crime specialisation in the VPUU focus areas (Harare, Khayelitsha and Lingeletu-West). This was done by calculating crime Location quotients (LQ); a measure of the share of a particular type of crime in a police district relative to the share of that same crime in a reference area (e.g. province or country). Using annual crime data (2005-2014) from SAPS, we found that the concentration of robberies (common robbery + robbery with aggravating circumstances) in each of the three VPUU areas were higher than the average concentration of

---

<sup>1</sup> Proportion of households experiencing one or more of: Robbery/home invasion; murder; assault with or without a weapon; domestic violence/abuse; rape; car hijacking; crimes targeting minorities; community justice

robberies regionally and nationally. This overrepresentation of robberies was consistent in the three VPUU areas over the years, with declines corresponding to VPUU intervention periods. Further analysis is in progress to unpack the trend and geographical patterns of crime specialisation.

For a more focused view of violence (as proxied by robberies), we have started work on an analysis of incident level police robbery data for the entire province. When this will be completed is dependent on funding, but is expected no later than mid-2017. For this, we have applied to the MRC for a small grant to purchase some researcher time.

The data covers the period from 2002 to 2012 and the analyses aims to answer three questions:

1. Was the incidence of robbery different in the intervention area before VPUU intervention?
2. Has there been a decrease in the VPUU areas relative to control areas?; and, if so,
3. How do the control areas compare to the rest of the province over time?

Weighted Displacement Quotient (WDQ) will be used to measure displacement or diffusion of robberies. To calculate a WDQ requires us to identify three areas: the target area (intervention area), a buffer zone (most likely location where crime would be displaced) and a control area (a comparison area). To facilitate the analysis, we have started with a process of: identifying and recording the overall timeline of intervention for each site in the VPUU area, identifying the possible displacement periods, and defining the displacement/ comparison areas.

Preliminary trend analysis [*with VPUU Sites (Site B, Site C; Kuyasa, Town 2, Harare and Monwabisi Park) and Non-VPUU Sites (Ilitha Park, Khaya, Makaya and Makhaza) and no control sites or displacement periods defined*] reveal that while the temporal patterns of robberies were generally similar for VPUU and non-VPUU sites, robbery incidents were consistently lower in the VPUU areas compared to the non-VPUU areas. The geographical patterns over the years also point to possible diffusion effect but these are yet to be quantified (to be completed mid-2017, as above).

### 3. Publications and other outputs:

Please **list all the outputs produced by your project**, even if you reported them earlier. Report on these types of outputs:

- Information sharing and dissemination (reports, journal articles, policy briefs, practitioner tools, workshops, conferences, seminars, radio programs, films, interviews, websites, CD-ROMs etc.)
- Knowledge creation (new knowledge embodied in forms other than publications or reports: new technologies, new methodologies, new curricula, new policies etc.)

Title and	Venue: journal	Link, if available online;	Focus on	Peer-	Contribution
-----------	----------------	----------------------------	----------	-------	--------------



Author(s)	name, book, series, etc	Please note if open source	effective strategies?	reviewed?	
<i>Working together for Urban Safety Toolkit, by E. Smith &amp; D. Jones</i>	<i>In-house publication</i>	<i>ourSAICproject.ca/tools; open source</i>	Yes	No	<i>Filled gap in interdisciplinary &amp; practice literature</i>
Cassidy, T.; Inglis, G.; Wiysonge, C.; Matzopoulos, R. 2014. <i>A Systematic Review of the Effects of Poverty Deconcentration &amp; Urban Development on Youth Violence</i>	Journal of Health and Place; 26: 78-87.	<a href="http://www.sciencedirect.com/science/article/pii/S1353829213001731">http://www.sciencedirect.com/science/article/pii/S1353829213001731</a>	Yes	Yes	Filled gap in knowledge on available evidence of effects of urban development programmes on youth violence
Matzopoulos, R. et al (Letter) "67 <sup>th</sup> WHA Resolution on violence prevention misses the mark"	The Lancet, Vol 384 September 6, 2014	<a href="http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)61487-2">http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)61487-2</a>	Yes	No	Added to gender analysis in policy debate
Matzopoulos, R. and Myers, J.E. (2014) "The Western Cape Government's new Integrated Provincial Violence Prevention Policy Framework: Successes and challenges"	Aggression and Violent Behavior, Vol. 19, pp. 649-654	<a href="http://www.sciencedirect.com/science/article/pii/S1359178914001050">http://www.sciencedirect.com/science/article/pii/S1359178914001050</a>	Yes	Yes	Added to effective violence prevention policy debate
Cassidy, T., Ntshingwa, M., Galuszka, J., & Matzopoulos, R.	<i>Stability: International Journal of Security and Development.</i>	<a href="http://www.stabilityjournal.org/articles/10.5334/sta.fi/">http://www.stabilityjournal.org/articles/10.5334/sta.fi/</a>	Yes	Yes	Traces the evolution of VPUU, an evidence-based

(2015). "Evaluation of a Cape Town Safety Intervention as a Model for Good Practice : A Partnership between Researchers , Community and Implementing Agency"	4(1): 27,1-12				approach to violence prevention in the Western Cape Province of South Africa
Mureithi, L., Africa, A., van Schaik, N., Naledi, T., Matzopoulos, R. and English, R. (2015) "Injury Morbidity Surveillance in Nyanga and Khayelitsha in the Western Cape"	Health Systems Trust (HST) technical report	NA	NO	NO	Details the trauma profile in Gunya and Khayelitsha, and the association between injury and alcohol
Jabar A, Barth D, Matzopoulos, R and Engel ME. (2015) "Is the introduction of violence and injury observatories associated with a reduction of violence in adult populations? rationale and protocol for a systematic review"	<i>BMJ Open</i> . 5(7):e007073 (in press).	NA	YES	YES	Review will fill gap in violence prevention knowledge
Bowman B, Stevens G, Eagle G, Matzopoulos R (2015) "Bridging risk and enactment: the role of psychology in leading psychosocial	<i>South African Journal of Psychology</i> . 45(3):279	<a href="http://sap.sagepub.com/content/early/2014/12/16/0081246314563948.abstract">http://sap.sagepub.com/content/early/2014/12/16/0081246314563948.abstract</a>	YES	YES	Advances understandings of the role of psychology in violence research

research to augment the public health approach to violence in South Africa.”					
Bowman, B., Stevens, G., Eagle, G., Langa, M., Kramer, S., Kiguwa, P., & Nduna, M. (2015). The second wave of violence scholarship: South African synergies with a global research agenda	<i>Social Science &amp; Medicine</i> . 146: 243-248	doi.org/10.1016/j.socscimed.2015.10.014	YES	YES	Advances discussions on the future of violence research
Oni T, Smit W, Matzopoulos R, Hunter Adams J, Rother A, Pentecost M, Albertyn Z, Behroozi F, Alaba O, Kaba M, Van der Westhuizen C, Shung King M, Parnell S, Levitt NS, Lambert EV. (in press). Urban health research in Africa: themes and priority research questions.	<i>Journal of Urban Health</i> .	NA	Yes	Yes	Addresses priority research questions and themes in future urban health research
Matzopoulos R, Bowman B. (in press). SDGs put violence prevention on the map.	<i>Journal of Public Health Policy</i>	NA	Yes	Yes	Situates violence prevention within wider policy and development goals
Schuurman N, Cinnamon J, Walker BB, Fawcett V, Nicol A, Hameed	<i>Global Health Action</i> (Published online 12 June 2015, 8: 2016	<a href="http://dx.doi.org/10.3402/gha.v8.27016">http://dx.doi.org/10.3402/gha.v8.27016</a> )	Yes	Yes	Provides the basis for evidence-based interventions to

SM, Matzopoulos R. (in press). Intentional injury and violence in Cape Town, South Africa: An epidemiological analysis of trauma admissions data.					reduce the incidence of intentional injury
---	--	--	--	--	--

Notes:

#### 4. Conference presentations

- List any new presentations during which your SAIC research was shared since you last reported.

Title and Author(s)	Date, location	Venue	Comments
Jones, T. and Smith, V. "Effective strategies to mitigating urban violence in Ottawa."	Sept 5, 2014 Ottawa	Annual conference of CASID	Under consideration for special issue of Cdn Jnl of Development Studies.
Matzopoulos R. "Evaluation of safety interventions in informal settlements in Cape Town as a model for good practice."	February 25 <sup>th</sup> – 27 <sup>th</sup> 2015, Cape Town	Dialogue on Safety and Security, Cape Town	
Matzopoulos R. "Violence and injury prevention perspectives from the School of Public Health and Family Medicine". Guest speaker	November 18 <sup>th</sup> , 2015, Groote Schuur Hospital, Cape Town	Acute Spinal Cord Injury Unit Graduation Ceremony	
Matzopoulos, R. "Urban upgrading for violence prevention in South Africa: Does it work?"	January 9 <sup>th</sup> 2016, Santiago, Chile		
Matzopoulos, R and Bloch, K , Salau S "Urban upgrading for violence prevention in South Africa: Does it work?"	March 8 <sup>th</sup> , 2016 Johannesburg	SAIC Regional Policy Engagement	
Matzopoulos, R "Urban upgrading for violence prevention in South Africa: Does it work?"	March 14 <sup>th</sup> , 2016 HSRC, Cape Town	Safe and Inclusive Cities: social cohesion and urban upgrading, mobilising resources for violence prevention	
Lloyd, S "The association between community participation and mental health in two low income communities in Cape Town, South	March 14 <sup>th</sup> , 2016 HSRC, Cape Town	Safe and Inclusive Cities: social cohesion and urban	

Africa”		<i>upgrading, mobilising resources for violence prevention</i>	
---------	--	--	--

Notes:

## 5. Other Outputs

- Report on new Training-type outputs since you last reported: short-term training, internships or fellowships, training seminars and workshops, thesis supervision etc.

Type and title	Date, location	Target Audience,	Number of participants	Key stakeholders/groups participating
<i>Training: “Urban Safety Toolkits in Practice”</i>	<i>Sept 5, 2014 Ottawa</i>	<i>Municipal staff, social workers, NGOs, Ottawa Police</i>	<i>24</i>	<i>Mayor’s Chief of Staff; Head of Urban Safety department</i>

Notes:

## 6. Dissemination activities

- Report on activities through which you shared your research findings and outputs since you last reported.

Type and title	Date, location	Target Audience,	Number of participants	Key stakeholders/groups participating
<i>Training: “Urban Safety Toolkits in Practice”</i>	<i>Sept 5, 2014 Ottawa</i>	<i>Municipal staff, social workers, NGOs,</i>	<i>24</i>	<i>Mayor’s Chief of Staff; Head of Urban Safety department</i>

		<i>Ottawa Police</i>		
Presentation: Matzopoulos, R. Overview of research activities in Gunya – Mayoral Urban Regeneration Programme Reference Group Meeting	September 15th 2015 Cape Town	MURP reference group members		Government, police, researchers, VPUU
Presentation: Matzopoulos, R. Overview of research activities in Gunya – Councillors’ Activity Day	October 15 <sup>th</sup> , 2015 Cape Town	Government		Councillors
Khayelitsha community report back meeting	March 14 <sup>th</sup> 2016	Community members / local NGOs / VPUU / HST / SJC / DoCS / local councillors	30 (Approx.)	Community members / local NGOs / HST / SJC / DoCS / local councillors
Infographic: Alcohol and Injuries 2014 - GUNYA	Included in VPUU newsletter  Distributed to local stakeholders	SNAC, MURP reference group		
Infographic: Alcohol and Injuries 2015 – Khayelitsha	March 14 <sup>th</sup> 2016 – Infographic shared at report back meeting  Included in VPUU newsletter  Distributed to additional stakeholders	Community members / local NGOs / HST / SJC / Department of Community Safety (DoCS) / local councilors (meeting)  DoCS), SJC, City of CT councilor, VPUU, SNAC, MURP reference group		Community members / local NGOs

Notes:

Mayoral Urban Regeneration Programme (MURP) reference group includes members from: e.g. City Health; City Parks; CPFs; DCAS; DEADP; DEDAT; DoA; DoCS; DoH; DoL; DotP; DRM; DSD; WCED; Econ Dev; Electrification; Fire Department; Gunya SNAC; SAPS; Local NGOs; VPUU; UCT

- Report on key policy and practice stakeholders with whom you shared each publication since you last reported.

Title of Output	Key Stakeholder, title, affiliation	Dissemination tool	Resulting changes/responses
<i>Final report</i>	<i>J. Watson, Mayor of Ottawa</i>	<i>Bilateral meeting, Sept 7, 2015</i>	<i>Requested team share findings with other departments.</i>
Mureithi, L., Africa, A., van Schaik, N., Naledi, T., Matzopoulos, R. and English, R. (2015) "Injury Morbidity Surveillance in Nyanga and Khayelitsha in the Western Cape"	Dr Anthony Hawkrige Director: Health Impact Assessment Unit Western Cape Department of Health	Report sent	
Infographic: Alcohol and Injuries 2015 – Khayelitsha	Stakeholders from MURP reference group, Khayelitsha report back meeting attendees (see above)	Infographic distributed	

Notes:

## 7. Citations of your work in other sources

- Provide complete bibliographic information for any documents that cite or otherwise reference your work since you last reported, including page references. These may include:
  - policy documents (including policies, strategies, program documents, speeches or statements by policymakers or researchers, [draft] legislation, etc.)
  - research documents (journal articles, reports, policy briefs, etc)
  - social documents (newspaper or magazine articles, op/eds, blog posts, social media posts, etc.)
- For speeches, public statements and the like, please provide the date, a link if available, the name of publication or policy document, or the occasion on which the speech was made.

Work cited (your work): author, title, etc	Cited in (other work): author, title, etc	Link, if available online; Please note if open source
Smith, E. and D. Jones. 2015. <i>Working together for Urban Safety Toolkit</i>	Cooper, B. 2015. <i>Assessing the usefulness of urban safety toolkits. Journal of Urban Violence Prevention 12.2: 15-27.</i>	<a href="http://jovp.org/cooper-2015.html">Jovp.org/cooper-2015.html</a> ; open source
Cassidy, T.; Inglis, G.,; Wiysonge, C.; Matzopoulos, R. 2014. <i>A Systematic Review of the Effects of Poverty Deconcentration &amp; Urban Development on Youth Violence</i> Journal of Health and Place; 26: 78-87.	Kumar, A.et al (2016) "Air quality mapping using GIS and economic evaluation of health impact for Mumbai city, India", Journal of the Air and Waste Management Association, DOI: 10.1080/10962247.2016.114388	<a href="http://www.tandfonline.com/doi/abs/10.1080/10962247.2016.1143887">http://www.tandfonline.com/doi/abs/10.1080/10962247.2016.1143887</a>
	USAID (2016) <i>What works in reducing community violence: A meta-review and field study for the Northern Triangle</i>	<a href="https://www.usaid.gov/sites/default/files/USAID-2016-What-Works-in-Reducing-Community-Violence-Final-Report.pdf">https://www.usaid.gov/sites/default/files/USAID-2016-What-Works-in-Reducing-Community-Violence-Final-Report.pdf</a>
Matzopoulos, R. and Myers, J.E. (2014) "The Western Cape Government's new Integrated Provincial Violence Prevention Policy Framework: Successes and challenges" <i>Aggression and Violent Behavior</i> , Vol. 19, pp. 649-	Prinsloo, M. et al (2016) "Validating homicide rates in the Western Cape Province, South Africa: Findings from the 2009 Injury Mortality Survey", SAMJ, 106(2)	<a href="http://dx.doi.org/10.7196/SAMJ.2016.V106I2.10211">http://dx.doi.org/10.7196/SAMJ.2016.V106I2.10211</a>



654		
Cassidy, T., Ntshingwa, M., Galuszka, J., & Matzopoulos, R. (2015). "Evaluation of a Cape Town Safety Intervention as a Model for Good Practice : A Partnership between Researchers , Community and Implementing Agency	Cooper, D. and De Lannoy (2016) "Youth health and well-being: Why it matters"	<a href="http://www.ci.org.za/depts/ci/pubs/pdf/general/gauge2015/Child_Gauge_2015-Health.pdf">http://www.ci.org.za/depts/ci/pubs/pdf/general/gauge2015/Child_Gauge_2015-Health.pdf</a> (open access)
Bowman B, Stevens G, Eagle G, Matzopoulos R (2015) "Bridging risk and enactment: the role of psychology in leading psychosocial research to augment the public health approach to violence in South Africa."	Bowman, B. et al (2015) "The second wave of violence scholarship: South African synergies with a global research agenda", Social Science and Medicine, Vol. 146 (December 2015), pp. 243-248	<a href="http://www.sciencedirect.com/science/article/pii/S0277953615301544">http://www.sciencedirect.com/science/article/pii/S0277953615301544</a>
Bowman, B., Stevens, G., Eagle, G., Langa, M., Kramer, S., Kiguwa, P., & Nduna, M. (2015). The second wave of violence scholarship: South African synergies with a global research agenda	Hamby, S. (2016) "Advancing survey science for intimate partner violence: The Partner Victimization Scale and other innovations", Psychology of Violence, 6(2): 352-359	<a href="http://dx.doi.org/10.1037/vio0000053">http://dx.doi.org/10.1037/vio0000053</a>
	Kiguwa, P. and Langa, M. (2015) "Editorial: Rethinking social cohesion and its relationship to exclusion", PINS, 49: 1-6	<a href="http://dx.doi.org/10.17159/2309-8708/2015/n49a1">http://dx.doi.org/10.17159/2309-8708/2015/n49a1</a>

<p>Schuurman N, Cinnamon J, Walker BB, Fawcett V, Nicol A, Hameed SM, Matzopoulos R. (in press). Intentional injury and violence in Cape Town, South Africa: An epidemiological analysis of trauma admissions data.</p>	<p>Bowman, B. et al (2015) “The second wave of violence scholarship: South African synergies with a global research agenda”, Social Science and Medicine, Vol. 146 (December 2015), pp. 243-248</p>	<p><a href="http://www-sciencedirect.com/science/article/pii/S0277953615301544">http://www-sciencedirect.com/science/article/pii/S0277953615301544</a></p>
	<p>Ravindranath, V. et al (2015) “Regional research priorities in brain and nervous system disorders”, Nature, S198–S206 (19 November 2015) doi:10.1038/nature16036</p>	<p><a href="http://www.nature.com/nature/journal/v527/n7578_supp_custom/full/nature16036.html">http://www.nature.com/nature/journal/v527/n7578_supp_custom/full/nature16036.html</a></p>
	<p>Taibo et al (2016) “Analysis of trauma admission data at an urban hospital in Maputo, Mozambique”, International Journal of Emergency Medicine, 9(6) DOI: 10.1186/s12245-016-0105-8</p>	<p><a href="http://intjem.springeropen.com/articles/10.1186/s12245-016-0105-8">http://intjem.springeropen.com/articles/10.1186/s12245-016-0105-8</a></p>

Notes:

## 8. Media coverage

- Report on any media coverage (radio, television, print media, online blogs, etc.) which your research activities or outputs received since you last reported.
- Attach a copy or provide a link to the source where possible.

Media format	Name of publication, network, etc.	Date	Reach (global, regional, national, local)	Focus of article or broadcast	Link (if available online)
Radio report	CBC-Ottawa (“Ottawa	June 7, 2014	Local	SAIC research in	<a href="http://www.cbc.ca/saic">www.cbc.ca/saic</a>

	<i>Morning")</i>			<i>Brazil/World Cup</i>	

Notes: