

ABSTRACT

There are several challenges to the implementation of crime prevention policies for effective and efficient crime prevention programs for a long term sustainable solution to the threats posed by crime. Situational crime prevention (SCP) strategy is an innovative method of preventing crime and has received a stronger empirical support than any other strategy in recent years. It has been recognised as a sustainable response to crime issues, but has not been adapted in Iran until now.

Rapid and uncontrolled urbanisation in many developing countries, including Iran, is having a fundamental social and environmental consequence in development of the cities. Tehran has about one third of its population below 15 years of age. Such a high proportion of youth coupled with chaotic urbanisation and socio-economic conditions causes the city to become an urban community with a high propensity for the occurrence of vandalism and graffiti. This situation can pose a threat to the face of the city, its use, prosperity and reputation of the urban areas, thus leading to its stability and development.

This study explores the teenager students' perception of safety in relation to non-political graffiti vandalism, with reference to outdoor lighting levels in urban areas of Tehran. It also assesses the related SCP variables that are known to impact on vandalism and graffiti occurrence, as well as to evaluate the environmental variables that correlate with the high degree of non-political graffiti vandalism damages.

A questionnaire survey was completed by 518 respondents in April and May 2009 in three selected areas of Tehran namely Elahie, Piroozi and Nazi Abad region and a SCP assessment was conducted in 160 vandalised properties in the above three areas of Tehran by 50 students in Architecture from Soureh University. The areas were selected

based on the socioeconomic status of residents. SPSS and Mintab software are used to compute statistics to identify trends, relationships and differences in qualitative and quantitative data.

Situational crime prevention theory is supported by the findings of this research . This research leads to the conclusion that occurrence of three common types of vandalism damages namely damages to vehicles, damages to public properties and damages to landscape and green areas in neighbourhood affect respondents' perception of safety in urban areas of Tehran. Six variables are identified to be correlated with high degree of graffiti vandalism damages in urban areas of Tehran from the related situational crime prevention variables studied in this research. Graffiti vandalism is less likely to occur in well-lit places., Also, there is no correlation between studied urban environmental variables and degree of graffiti vandalism damages.

The study adds on to the body of knowlege amongst criminologists, academicians, urban planners and architects to implement the most effective SCP variables to combat non political graffiti vandalism in urban areas of Tehran. This research also provides a useful guidance to authorities and policy makers to formulate SCP initiatives in line with other crime prevention programs to tackle graffiti vandalism.

ABSTRAK

Perlaksanaan polisi pencegahan jenayah menghadapi berbagai cabaran dalam pencegahan program-program jenayah yang berkesan dan cekap yang boleh menggalakkan satu penyelesaian jangka panjang yang mampan kepada ancaman yang dihadapi oleh jenayah. Strategi pencegahan jenayah situasi (SCP) adalah satu kaedah yang inovatif untuk mencegah jenayah yang telah menerima sokongan empirikal yang kuat berbanding daripada mana-mana strategi pencegahan yang lain sejak tahun-tahun kebelakangan ini. Ini telah diiktiraf sebagai stragegi tindak balas yang mampan untuk isu-isu jenayah tetapi tidak diadaptasikan di Iran sehingga kini.

Pembangunan perbandaran yang pesat yang tidak terkawal di kebanyakan negara membangun, termasuk Iran, mempunyai masalah asas sosial dan alam sekitar dalam pembangunan bandar-bandar. Hampir satu pertiga daripada penduduk di bandar Tehran adalah di bawah umur 15 tahun. Peratus belia yang tinggi dan pembangunan bandar yang kucar kacir serta keadaan sosio-ekonomi menyebabkan bandar ini mempunyai kadar yang tinggi untuk vandalisme dan grafiti. Ini boleh menimbulkan ancaman kepada status bandar, kegunaan, kemakmuran dan reputasi kawasan bandar yang akan membawa kepada kestabilan dan pembangunan bandar.

Kajian ini bertujuan untuk menyelidik persepsi remaja tentang keselamatan berhubungan dengan vandalisme grafiti bukan politik dengan merujuk kepada tahap pencahayaan luar di kawasan bandar Tehran, Iran. Ia juga adalah untuk menilai pembolehubah berkaitan SCP yang diketahui yang mempunyai kesan ke atas vandalisme dan kejadian grafiti, serta untuk menilai pembolehubah persekitaran yang berkadaran dengan tahap tinggi kerosakan vandalisme grafiti bukan politik.

Borang soal selidik yang lengkap diisi oleh 518 responden pada bulan April dan Mei 2009 di tiga kawasan terpilih Tehran terutamanya di Elahie, Piroozi dan Nazi Abad dan SCP penilaian yang dijalankan oleh 50 orang pelajar dalam bidang seni bina di tiga kawasan di Tehran terhadap 160 hartanah yang dirosakkan. Kawasan-kawasan ini dipilih berdasarkan status sosio-ekonomi penduduk. Perisian SPSS dan Mintab telah digunakan untuk mengira statistik untuk mengenal pasti trend, hubungan dan perbezaan dalam data kuantitatif dan kualitatif untuk mencapai matlamat kajian ini.

Teori pencegahan jenayah situasi (SCP), disokong oleh hasil kajian ini. Kajian ini telah mengenalpasti enam pembolehubah yang berkadaran dengan tahap yang tinggi kerosakan graffiti vandalisme di kawasan bandar Tehran. Kajian ini telah memberi kesimpulan bahawa tiga daripada kejadian kerosakan vandalisme khususnya kerosakan kepada kenderaan, kerosakan kepada harta umum dan kerosakan kepada kawasan landskap dan kawasan hijau di kawasan jiran mempengaruhi persepsi responden mengenai keselamatan di kawasan bandar ini. Vandalisme graffiti kurang berlaku pada kawasan yang mempunyai tahap pencahayaan yang baik. Lagipun tiada korelasi terhadap pembolehubah kawasan alam sekitar dan tahap kerosakan vandalisme graffiti.

Hasil kajian ini akan memperkayakan pengetahuan semasa di kalangan kriminologis, ahli akademik, perancang bandar dan jurubina untuk melaksanakan pembolehubah SCP yang paling berkesan untuk memerangi vandalisme graffiti bukan politik di kawasan bandar Tehran. Kajian ini juga menyediakan panduan berguna bagi pihak berkuasa dan perangka dasar polisi untuk merangka inisiatif SCP selaras dengan program-program pencegahan jenayah lain untuk menangani vandalisme graffiti dan untuk memperbaiki persepsi awam tentang keselamatan di kawasan bandar Tehran.

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TABLE OF CONTENTS

Abstract	i
Acknowledgment	v
Table of Contents	vi
List of Figures	ix
List of Tables	xii
Abbreviations	xvii
Glossary	xix

CHAPTER ONE: INTRODUCTION

1.1	Introduction	1
1.2	Background Studies	6
1.3	Overviews of Crime Prevention and Environmental Strategies in Tehran- Iran	10
1.4	Aims, objectives and outcome of the research	12
1.5	Research Question and hypothesis	13
1.6	Research scopes and limitations	14
1.7	Research Methodology	16
1.8	The Structure of the Thesis	19

CHAPTER TWO: VANDALISM AND GRAFFITI

2.1	Introduction	21
2.2	Vandalism and Graffiti: The Overall Perspective	21
2.2.1	Public perceptions on vandalism and graffiti	29
2.2.2	Cost Implications	30
2.3	Vandalism and graffiti: responsibilities and causes	32
2.4	Measures to Tackle Vandalism and Graffiti	37
2.5	Vandalism and graffiti in Tehran	57
2.5.1	The scale and cost of vandalism and graffiti in Tehran	57
2.5.2	Anti vandalism policies in Tehran	60
2.6	Summary	62

CHAPTER THREE: ENVIRONMENTAL VARIABLES

3.1	Introduction	64
3.2	Outdoor Lighting	65
3.2.1	Outdoor Lighting in Urban Environment	66
3.2.1.1	Outdoor Lighting Design Issues and constraints	69
3.2.1.2	Outdoor Lighting Design Principles	79
3.3	The Effects of Improved Street Lighting on Crimes	81
3.3.1	The analytic review on the effects of street lighting on crimes	87
3.3.2	The effects of improved lighting on Fear of Crime	95
3.4	Lighting and vandalism Prevention: Theories	101
3.4.1	Knowledge gaps	103
3.5	Tehran: Environmental characteristics	104
3.5.1	Tehran: General Perspective	104
3.5.1.1	Tehran: Block Layout	107
3.5.1.2	Tehran: Street Design	110
3.5.1.3	Tehran: Building Design	115
3.5.1.4	Tehran: Outdoor Lighting	119
3.6	Tehran: Individual Characteristics	122
3.6.1	Tehran: Demography	123
3.7	Summary	126

CHAPTER FOUR: PLANNING THE RESEARCH STUDY

4.1	Introduction	128
4.2	Overview of Research Methodology: Survey	129
4.2.1	Sampling technique	129
4.2.2	The instrument	131
4.2.3	Demographic Characteristics of Respondents and Response Rate	139
4.2.4	Survey Procedure	141
4.2.5	Survey: Questionnaire Reliability Check	141
4.3	Overview of Research Methodology : Situational Crime Prevention Assessment	143
4.3.1	Target areas and time period	143
4.3.2	SCP Assessment: Reliability check	165
4.4	Summary	170

CHAPTER FIVE : FINDINGS AND ANALYSIS

5.1	Introduction	171
5.2	Discussions of the Findings	171
5.2.1	Graffiti Vandalism and Lighting Level	171
5.2.2	Graffiti Vandalism, Urban Environmental Variables and SCP Variables	183
5.2.3	Vandalism and Graffiti: Causes and Consequences	198
5.3	Summary	206

CHAPTER SIX: CONCLUSIONS

6.1	Introduction	207
6.2	Conclusions	207
6.3	Outcome of the research	212
6.4	Research Overview	213
6.5	Significant contribution to knowledge	214
6.6	suggestions for future studies	215

REFERENCES

APPENDIX

A	Twenty Five Techniques of Situational Prevention by Clark (1993)	235
B	The effects of lighting on crime: American and British evaluations	237
C	Lighting equipments	242
D	Population density of Tehran	247
E	Questionnaire Survey (Persian and English version)	249
F	Observation survey: photos	258

PUBLICATIONS

LIST OF FIGURES

		page
Figure 1.1	Research Process Chart	18
Figure 2.1	Graffiti on the walls – tags	24
Figure 2.2	Graffiti on the walls – Throw-Ups	25
Figure 2.3	Graffiti on the walls – Stencil	25
Figure 2.4	Graffiti on the walls – Pieces	25
Figure 2.5	Graffiti on the walls – Etching	26
Figure 2.6	Graffiti on the walls – Stickers	26
Figure 2.7	Graffiti on the walls – Dripping / Running	26
Figure 2.8	Racist motivation of vandalism can cause fear and heartache	27
Figure 2.9	Graffiti on the walls in Tehran	28
Figure 2.10	Controlled Graffiti by Municipality for Aesthetic reasons in Tehran	28
Figure 2.11	Vandalism in Tehran	59
Figure 3.1	Light Pollution in Hong Kong obscures the view of the stars and planets in the night sky.	75
Figure 3.2	Light Pollution : Glare	76
Figure 3.3	Sky glow	77
Figure 3.4	Light Pollution	78
Figure 3.5	Light Pollution	78
Figure 3.6	Old structures in the city with high density of population	107
Figure 3.7	Southern and Northern lots in Tehran	108
Figure 3.8	Views of southern lots in Tehran	109
Figure 3.9	Views of Northern lots in Tehran	109

LIST OF FIGURES

	Page	
Figure 3.10	Inappropriate façade design (use of materials vulnerable to vandalism) can give vandals more opportunity to vandalise	109
Figure 3.11	Appropriate Design of the boundary walls helps to prevent vandalism and graffiti	110
Figure 3.12	Inappropriate and inadequate parking lots in the city	111
Figure 3.13	Inappropriate Designing of Streets and Thoroughfares	112
Figure 3.14	Facades vulnerable to vandalism	112
Figure 3.15	The hidden spaces made during the reconstruction of old buildings can give vandals the opportunity to vandalise without being seen	113
Figure 3.16	Facades vulnerable to vandalism	114
Figure 3.17	Inappropriate and inadequate parking lots in the city	114
Figure 3.18	Buildings designed without any consideration to their context	115
Figure 3.19	A view of the city – North of Tehran	116
Figure 3.20	High-Rise Monuments in Tehran	117
Figure 3.21	Detached buildings in Tehran	118
Figure 3.22	Row buildings in Tehran	118
Figure 3.23	Old style poles are seen extensively in old structure of the city	120
Figure 3.24	Inappropriate placement of lighting poles in narrow streets	120
Figure 3.25	Inappropriate pole height can cause safety problems	121
Figure 3.26	Overhead street wires affect efficiency and aesthetics of the city	122
Figure 4.1	Three selected areas where the survey conducted in	130
Figure 4.2	Three selected areas where SCP Assessment conducted in	143
Figure 4.3	Three selected areas where SCP assessment conducted in	144
Figure 4.4	Assessment of the materials on the basis of their glossiness	149

LIST OF FIGURES

		Page
Figure 4.5	Assessment of the materials on the basis of the lightness of the colours	151
Figure 4.6	Assessment of the size of vandalised facades	152
Figure 4.7	Assessment the level of visibility of the vandalised facade to people	156
Figure 4.8	Assessment the maintenance level of the property	158
Figure 4.9	Assessment of the construction quality level of a property	159
Figure 4.10	Assessment of the construction quality level of a property	160
Figure 4.11	Assessment of the design quality of a property and the harmony with the environment	162
Figure 4.12	Assessment of the design quality of a property and the harmony with the environment	163
Figure 4.13	Assessment of degree of graffiti damages	164
Figure 5.1	The pictures were taken under the condition of different lighting levels (Lit, Dimly Lit, and Dark) from the same property	182
Figure 5.2	Number of graffiti vandalism incidents (%) assessed base on the building types in 3 selected areas of Tehran	185
Figure 5.3	Different Types of streets in Urban areas of Tehran	187
Figure 5.4	The vandalised properties from Tehran neighbourhoods	200
Figure 5.5	how vandalism is rated as a crime by respondents	204

LIST OF TABLES

	page	
Table 3.1	Decision-making by house burglars: offenders' perspectives	87
Table 3.2	Meta analysis of four American studies + three British studies specify the degree of lighting improvement	91
Table 3.3	Meta analysis of American street lighting evaluations	92
Table 3.4	Meta analysis of British street lighting evaluations	92
Table 3.5	The effects of improve lighting on different types of crime (American evaluations)	93
Table 3.6	The effects of improve lighting on different types of crime (British evaluations)	94
Table 3.7	The effects of lighting on vandalism prevention	102
Table 3.8	The effects of lighting on vandalism prevention	103
Table 3.9	Annual Rate of Population Growth (%)	124
Table 3.10	Population of age group (S)	125
Table 3.11	Tehran Population Age structure (2006)	125
Table 4.1	Number of students surveyed in each area (sex)	131
Table 4.2	Response Rate by Sex	140
Table 4.3	Response Rate for 3 selected each Areas by Family Income Level	140
Table 4.4	Response Rate for 3 selected each Areas by Age	140
Table 4.5	The computed alpha (in case of excluding the question)	141
Table 4.6	Sample Size	142
Table 4.7	Number of vandalised properties assessed in 3 selected areas	145
Table 4.8	SCP Assessment	147
Table 4.9	Light level Assessment	148
Table 4.10	Assessment of the materials on the basis of their glossiness	148

LIST OF TABLES

		Page
Table 4.11	Assessment of the materials on the basis of the lightness of the colours	150
Table 4.12	Assessment of the size of vandalised facades	150
Table 4.13	Assessment of the level of informal surveillance in vandalised location	153
Table 4.14	Assessment of the visibility of the vandalised property to people	154
Table 4.15	Assessment of the level of formal surveillance (presence of the police)	155
Table 4.16	Assessment of the width of streets	155
Table 4.17	Assessment of the maintenance level of the property	157
Table 4.18	Assessment of the evidences of vandalism more than once on the same property	157
Table 4.19	Assessment of the construction quality level of a property	159
Table 4.20	Assessment of the design quality of a property and the harmony with the environment	161
Table 4.21	Assessment of the degree of graffiti damages	162
Table 4.22	The computed alpha (in case of excluding the question)	166
Table 4.23	SCP Assessment: Factor analysis	169
Table 5.1	The likely time of vandalism and graffiti occurrences	172
Table 5.2	Friedman rank Test (Vandalism & graffiti / Likely Time of occurrence)	172
Table 5.3	Test Statistics (Friedman Test) (Vandalism & graffiti / Likely Time of Occurrence)	172
Table 5.4	Ranks (Perception of safety)	173
Table 5.5	Test Statistics (Mann Whitney U test)/ Perception of safety	174
Table 5.6	Friedman rank Test (Perception of Safety & Lighting Level)	174
Table 5.7	Test Statistics (Friedman Test) (Perception of Safety & Lighting Level)	174

LIST OF TABLES

	Page
Table 5.8	Ranks (Perception of Safety & Lighting Level/ Sex) 175
Table 5.9	Test Statistics (Mann Whitney U test) (Perception of Safety & Lighting Level/ Sex) 175
Table 5.10	Friedman rank Test (perception of safety in lit places/ Causes) 176
Table 5.11	Test Statistics (Friedman Test) (perception of safety in lit places/ Causes) 176
Table 5.12	Degree of association between perception of safety and five other variables suggested by SCP to increase Perception of Safety from the view of teenager students in Tehran 178
Table 5.13	Friedman rank Test (Vandalism Occurrence/ Lighting Level) 178
Table 5.14	Test Statistics (Friedman Test) (Vandalism Occurrence/ Lighting Level) 179
Table 5.15	Friedman rank Test (Vandalism/Likely Places of Occurrence) 179
Table 5.16	Test Statistics (Friedman Test) (Vandalism/Likely Places of Occurrence) 180
Table 5.17	Friedman rank Test (Occurrence of vandalism & graffiti / Lighting Level/ Informal surveillance) 180
Table 5.18	Test Statistics (Friedman Test) (Occurrence of vandalism & graffiti / Lighting Level/ Informal surveillance) 180
Table 5.19	Responses from teenager students: How graffiti vandalism is likely to happen in 3 pictures (%) 181
Table 5.20	Friedman rank Test (Graffiti Occurrence/ Lighting Level) 183
Table 5.21	Test Statistics (Friedman Test) (Graffiti Occurrence/ Lighting Level) 183
Table 5.22	Number of graffiti vandalism occurrences assessed in 3 selected urban areas of Tehran 183
Table 5.23	Number of properties targeted by graffiti writers in 3 areas on the basis of degree of Damages 184
Table 5.24	Number of graffiti vandalism incidents assessed base on the building types in 3 selected areas of Tehran 185
Table 5.25	Chi-Square Test (the degree of damages & Type of buildings) 185
Table 5.26	Number of graffiti vandalism incidents base on the Land Use of the property in 3 selected areas of Tehran 186
Table 5.27	Chi-Square Test (Degree of damages & land use of the buildings) 186
Table 5.28	Number of graffiti incidents based on different types of streets in 3 selected areas of Tehran 186

LIST OF TABLES

	Page	
Table 5.29	Chi-Square Test (the degree of damages & Type of streets)	187
Table 5.30	Number of graffiti vandalism occurrences based on the lighting level in three selected areas.	189
Table 5.31	Number of graffiti vandalism incidents based on different glossiness level of the surfaces	189
Table 5.32	Number of graffiti occurrences based on the broadness of the surface	190
Table 5.33	Number of graffiti vandalism damages on the basis of lightness level of the colours	190
Table 5.34	Number of graffiti vandalism damages on the basis of level of informal surveillance provided by presence of people at day time	191
Table 5.35	Number of graffiti vandalism damages on the basis of level of informal surveillance provided by presence of people at night time	191
Table 5.36	Number of graffiti vandalism damages on the basis of level of informal surveillance provided by cars' Traffic at day time	192
Table 5.37	Number of graffiti vandalism damages on the basis of level of informal surveillance provided by cars' Traffic at night time	192
Table 5.38	Number of graffiti vandalism damages on the basis of level of visibility of vandalised property to people	192
Table 5.39	Number of graffiti vandalism damages on the basis of level of informal surveillance	193
Table 5.40	Number of graffiti vandalism damages based on width of street	193
Table 5.41	Number of graffiti vandalism damages based on maintenance level of properties	194
Table 5.42	Number of graffiti vandalism damages based on evidences of vandalism on targeted properties	194
Table 5.43	Number of graffiti vandalism damages on the basis of quality of the building (construction)	195
Table 5.44	Number of graffiti vandalism damages on the basis of architecture design and harmony with the environment	195
Table 5.45	Degree of association between the degree of damages and studied SCP variables	196
Table 5.46	Friedman rank Test (Types of vandalism/ respondents' Concern)	199
Table 5.47	Test Statistics (Friedman Test) (Types of vandalism/ respondents' Concern)	199
Table 5.48	Degree of association between the types of vandalism and perception of safety	200

LIST OF TABLES

	Page	
Table 5.49	How do you concern your safety in the area shown in figure 5.4	201
Table 5.50	respondents' concern of safety	201
Table 5.51	Friedman rank Test (Causes of Vandalism)	202
Table 5.52	Test Statistics (Friedman Test) (Causes of Vandalism)	202
Table 5.53	Friedman rank Test (Causes of Vandalism/Male students)	202
Table 5.54	Test Statistics (Friedman Test) (Causes of Vandalism/Male students)	202
Table 5.55	Friedman rank Test (Causes of Vandalism/Female students)	203
Table 5.56	Test Statistics (Friedman Test) (Causes of Vandalism/Female students)	203
Table 5.57	Friedman rank Test (Vandalism Prevention)	203
Table 5.58	Test Statistics (Friedman Test) (Vandalism Prevention)	203
Table 5.59	Friedman rank Test (Vandalism/ Deterrent Factors)	205
Table 5.60	Test Statistics (Friedman Test) (Vandalism/ Deterrent Factors)	205

ABBREVIATIONS

ALG	Advanced Lighting Guidelines
ASSIST	Alliance for Solid State Illumination System and Technologies
BCS	British Crime Survey
CCTV	Closed-circuit television
CIE	Commission Internationale de l'éclairage (International Commission on Illumination)
CJS	Criminal Justice System
CPTED	Crime Prevention through Environmental Design
ECMT	European Conference of Minister of Transport
GDP	Gross Domestic Product
HID	High Intensity Discharge
HPS	High Pressure Sodium
IDS	International Dark-Sky
IDSA	International Dark-Sky Association
IEE	Intelligent Energy Europe
IESNA	Illuminating Engineering Society of North America
ILE	Institution of Lighting Engineers
LEAA	Low Enforcement Assistance Agency
LPS	Low Pressure Sodium
LRL	Longitudinal Roadway Lines
MV	Mercury Vapour
NCPC	National Crime Prevention Council
NCPI	National Crime Prevention Institute
NLB	National Lighting Bureau
NYSERDA	New York state energy research and development authority
OCJS	The Offending, Crime and Justice Survey
PPS	Project for Public Spaces
PPH	Person Per Hectare
QVE	Quality of the Visual Environment

ABBREVIATIONS

SCI	Statistical Centre of Iran
SCP	Situational Crime Prevention
SPSS	Statistical Package for the Social Sciences
SUDAS	State-wide Urban Design and Specifications
TGIC	Tehran Geographical information centre
TRL	Transverse Roadway Lines
UN	United Nations
UNCJIN	United Nations Crime and Justice Information Network
UNHSP	United Nation Human Settlements Programs
UNODC	United Nations Office on Drug and Crime
WMRO	West Midland Regional Observatory

GLOSSARY

(CPTED) Crime prevention through environmental design	An approach to crime prevention that takes into account the relationship between the physical environment and the users of that environment
Efficiency	The efficiency of a light source is simply the fraction of electrical energy converted to light, i.e. watts of visible light produced for each watt of electrical power with no concern about the wavelength where the energy is being radiated.
Glare	Direct glare is caused by light coming directly to the eye from a light source. Indirect glare is light reflected from a surface in the direction of the eye. Both can harm vision and cause visual discomfort or disability
Graffiti	Graffiti consists of any drawing, inscription, figure, or mark upon any wall or other public or private surface
Lamp	A light source such as an incandescent, halogen, or fluorescent lamp. A lamp is sometimes called a "light bulb" or simply a "bulb"
Lamp-life	The number of hours at which half of the test lamps fail
Light	Radiant energy that can be sensed or seen by the human eye. Visible light is measured in lumens
Light Fixture	A complete lighting unit consisting of a lamp (light bulb) or lamps, a housing, and a connection to the source of electrical power
Light Pollution	Light that is directed to areas where it is not needed, and thereby interferes with some visual act. Light pollution directed or reflected into the sky creates a "dome" of wasted light and makes it difficult to see stars above cities

GLOSSARY

Light Trespass	Light that is not aimed properly or shielded effectively can spill out at into areas that don't want it: it can be directed towards drivers, pedestrians or neighbours. It is distracting and annoying and can sometimes be disabling
Lumen	A unit of light flow, or luminous flux. The lumen rating of a lamp is a measure of the total light output of the lamp.
Luminaire	A complete lighting unit consisting of a lamp (or lamps), ballast (or ballasts) as required together with the parts designed to distribute the light, position and protect the lamps and connect them to the power supply. A luminaire is often referred to as a fixture
Lux (lx)	A unit of illuminance or light falling onto a surface. One lux is equal to one lumen per square meter. Ten lux approximately equals one footcandle.
Situational Crime Prevention (SCP)	Situational crime prevention aims to change the physical and environmental conditions that generate crime and fear of crime through improved urban design and planning. The assumption is that offending behaviour is opportunistic and therefore situational features can be more easily manipulated than the behaviour of offenders to inhibit crime. Consequently the focus is on the environmental setting in which crimes occur not the criminal act itself.
Vandalism	Wilful or malicious destruction or defacement of any public or private property without the consent of the owner or persons having control