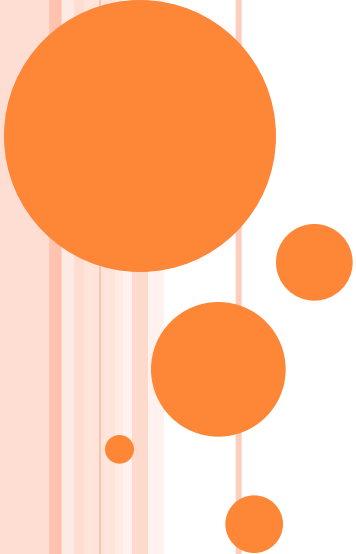




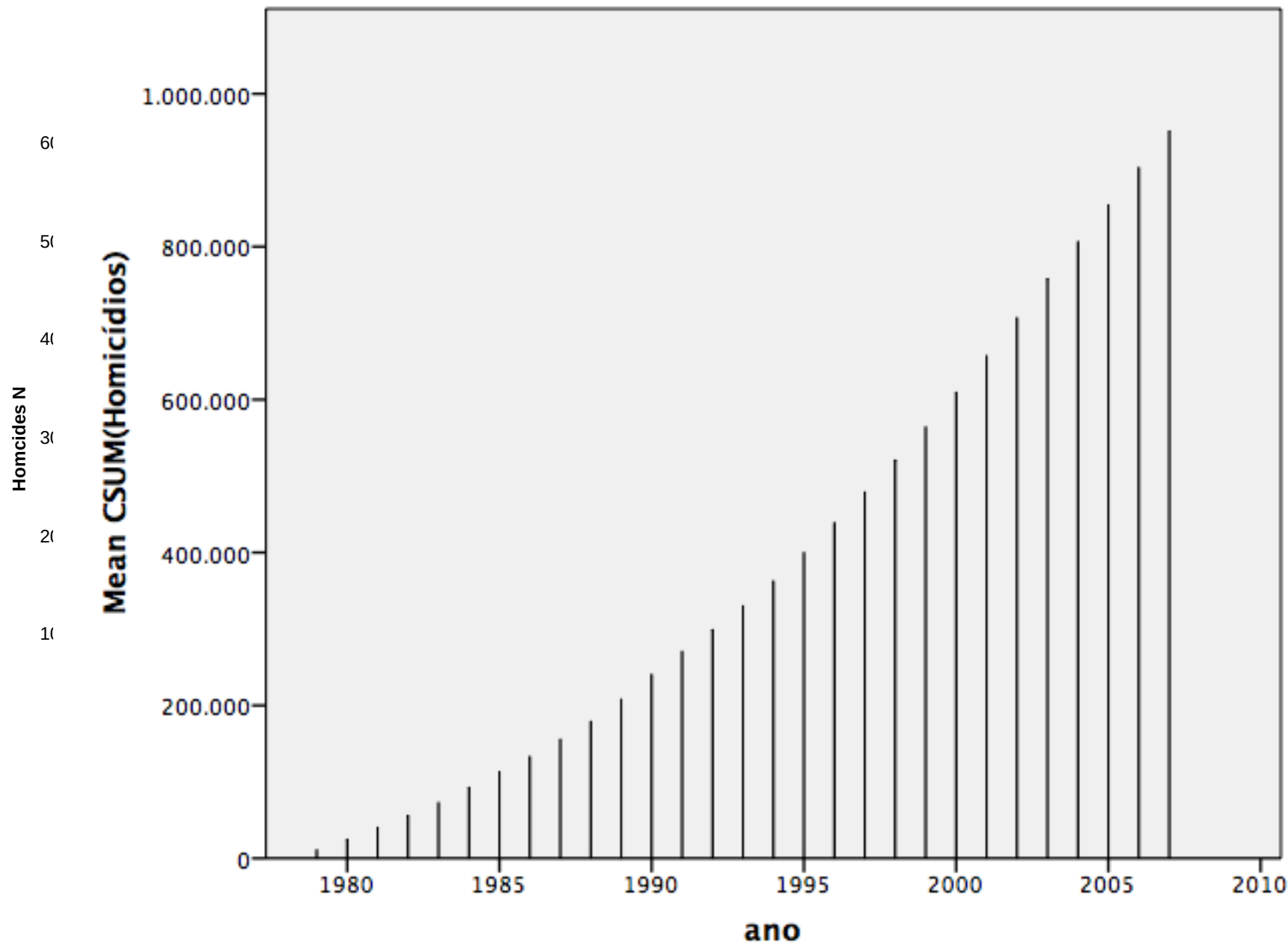
CRIME E CIDADES

Claudio Beato

Lemann Visiting Scholar

David Rockefeller Center for Latin American Studies

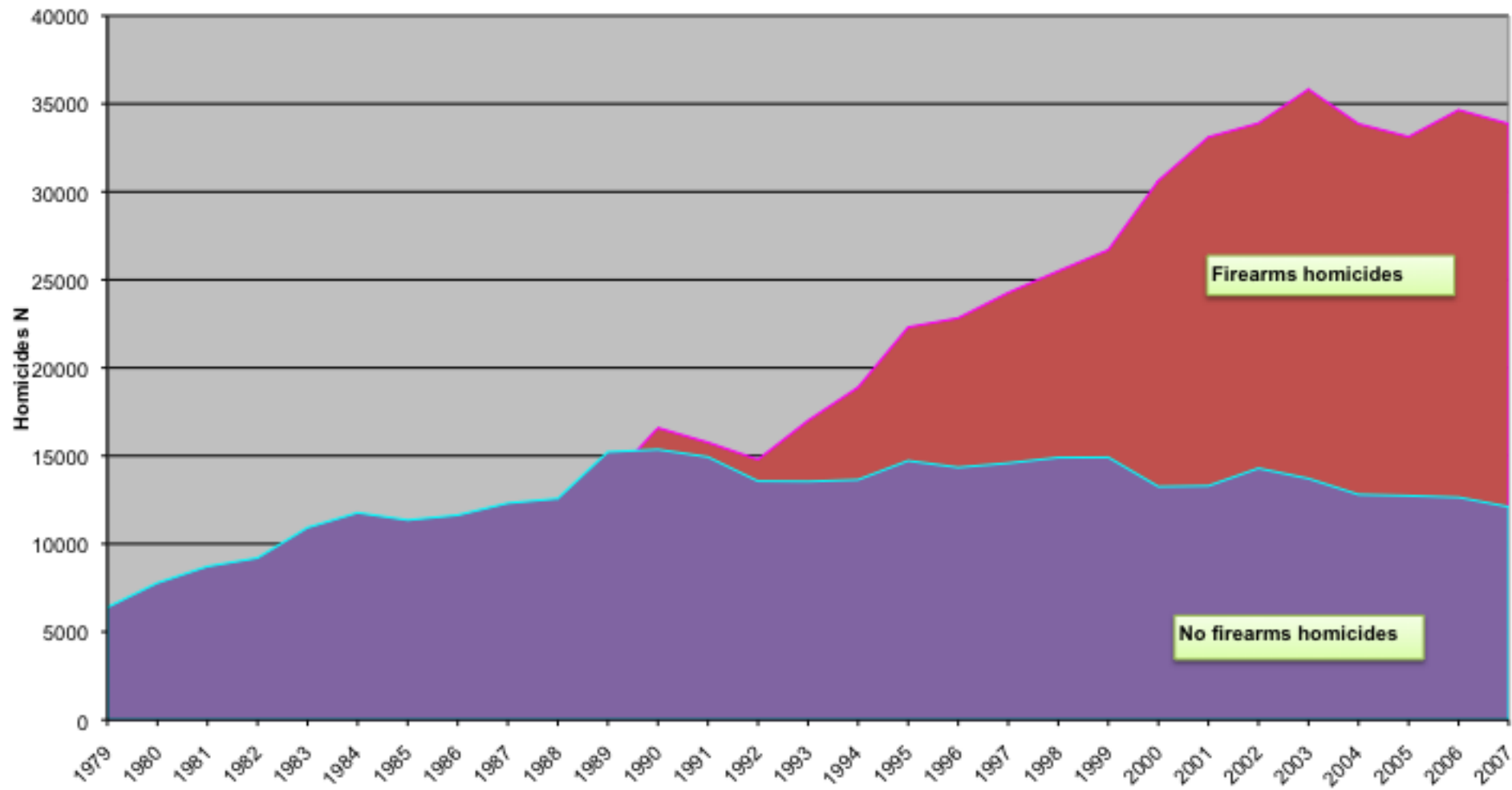
Harvard University



WHAT ARE THE CHARACTERISTICS OF BRAZILIAN HOMICIDES?

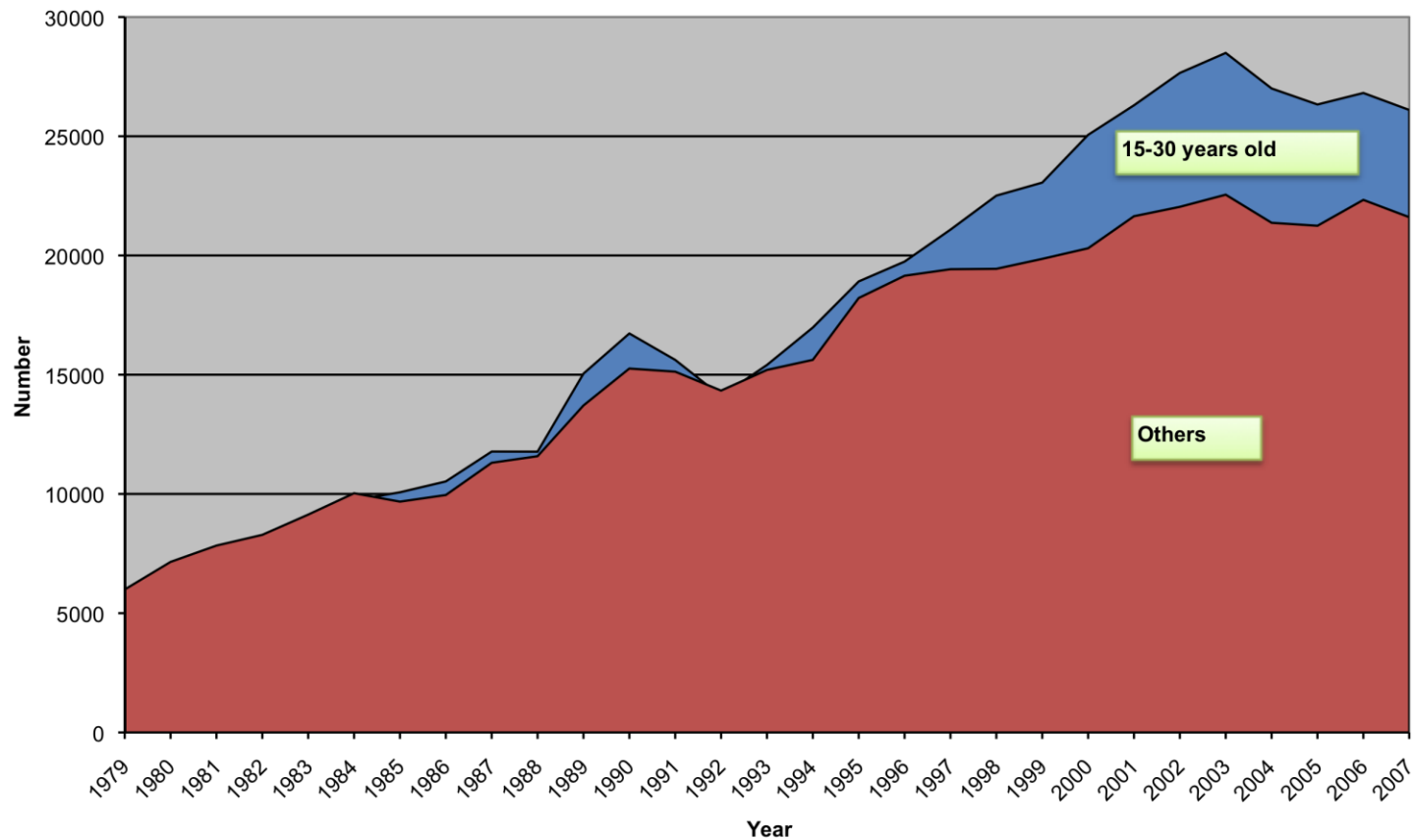
Firearms

Homicides Brazil 1979 2007



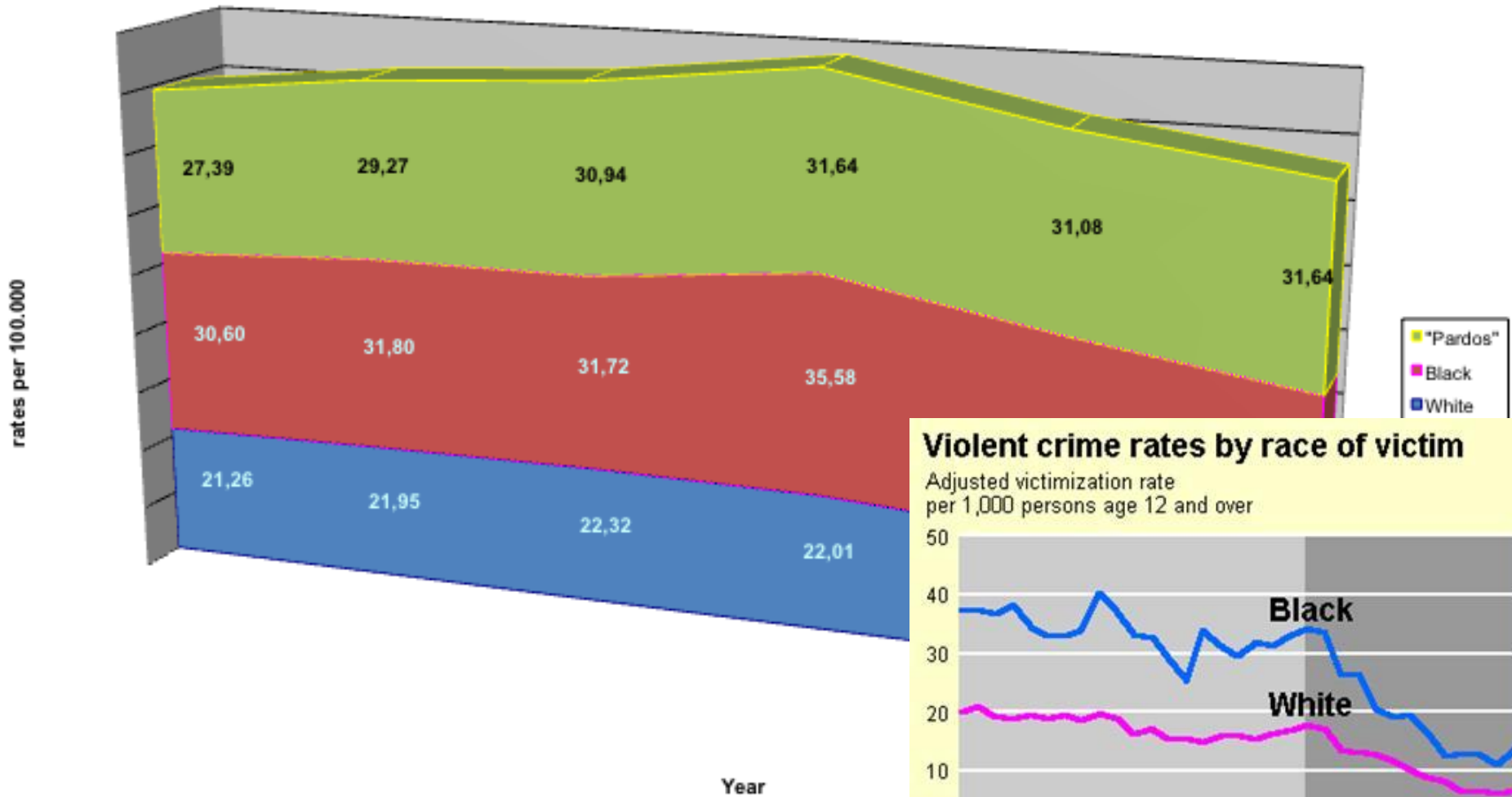
MORE YOUNG PEOPLE DYING

Homicides by age



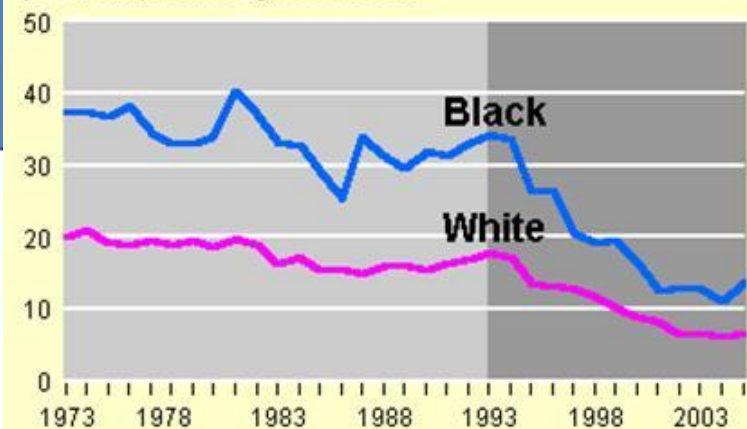
WHAT ABOUT RACE?

Homicides by race



Violent crime rates by race of victim

Adjusted victimization rate
per 1,000 persons age 12 and over



FEAR AND VICTIMIZATION

Country	Percentage of respondents who think it likely they will become victims of violence in the next year	Percentage of respondents who had actually been violently attacked or threatened in a violent way in the last five years	Percentage of respondents with a household member who had been violently attacked or threatened in the last five years
Brazil	75	20	27
Thailand	50	7	7
South Africa	48	15	24
France	33	12	16
Turkey	30	8	9
United States	17	12	12
Canadá	16	13	14
Japan	14	1	4
Rússia	13	15	16
Índia	10	1	1
All countries	22	11	12

Fonte: Human Security Centre, 2005



II - WHAT IS HAPPENING?

- Spatial and Temporal Dynamics of the increase



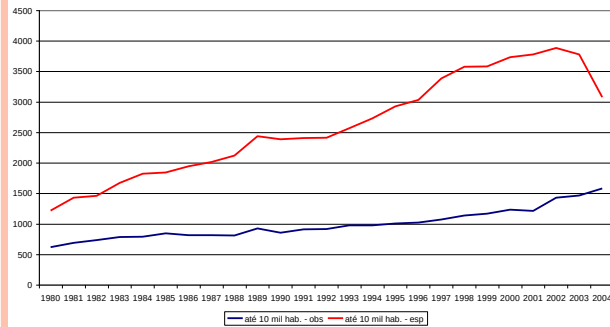
WHERE?

- This increase is in some parts of the country

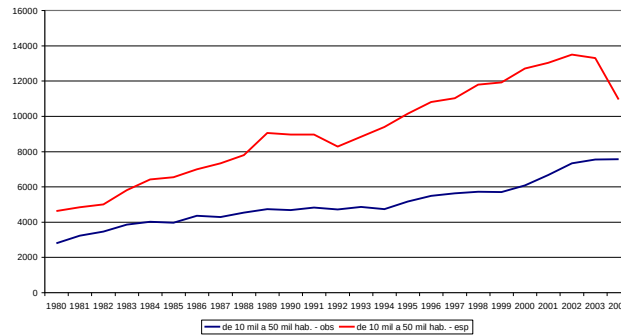


2 Constrangimentos estruturais e institucionais

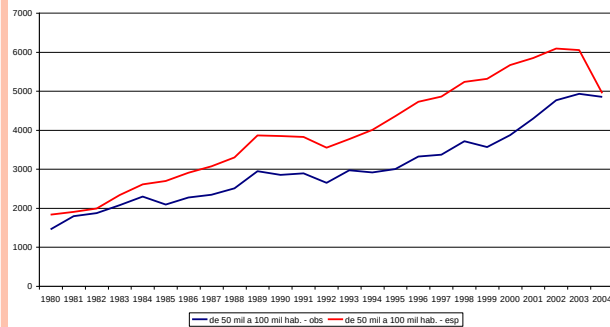
Municípios até 10 mil habitantes



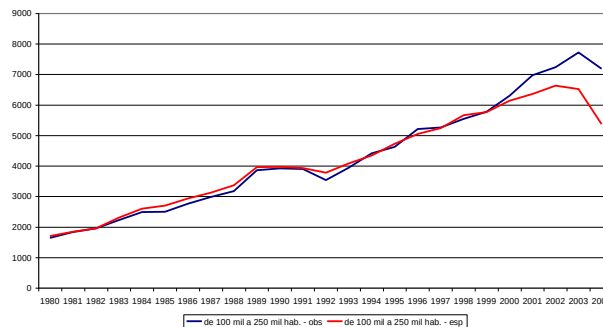
Municípios de 10 mil a 50 mil habitantes



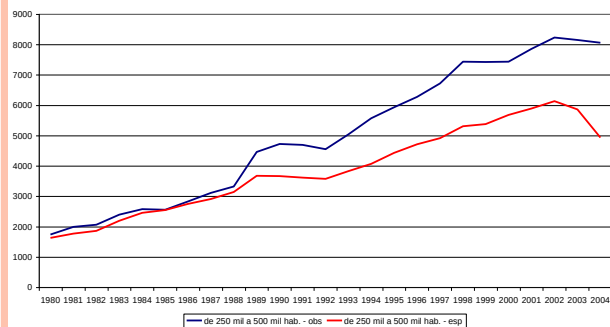
Municípios de 50 mil a 100 mil habitantes



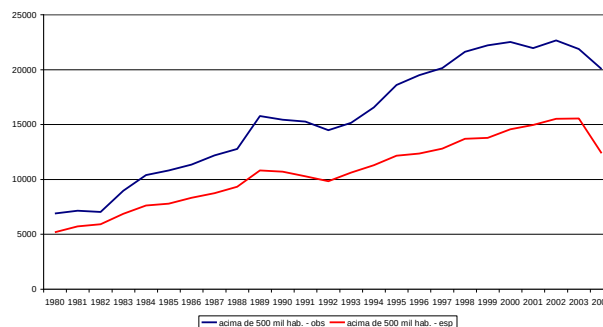
Municípios de 100 mil a 250 mil habitantes



Municípios de 250 mil a 500 mil habitantes



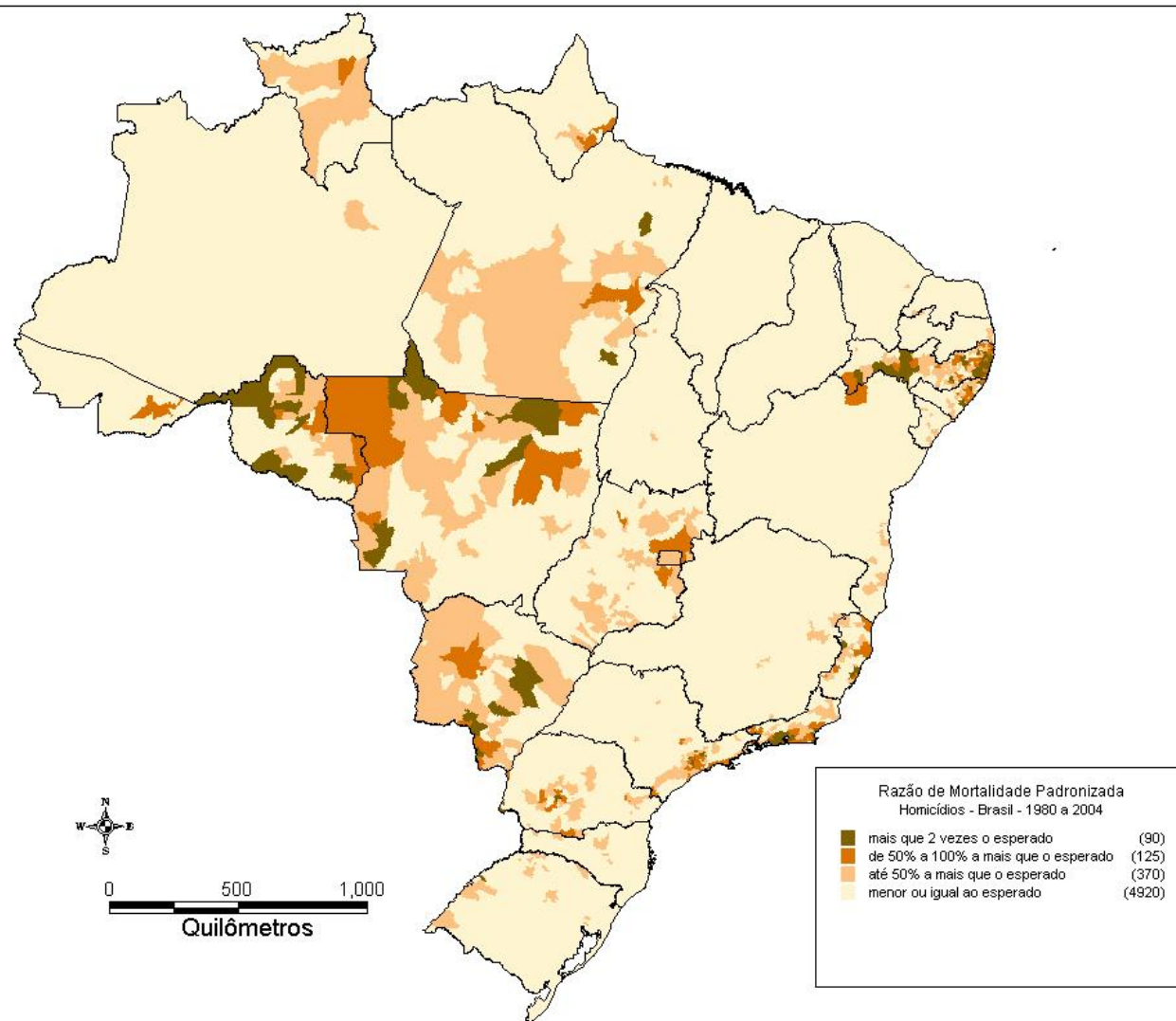
Municípios com mais de 500 mil habitantes



CRESCIMENTO POR TAMANHO DE CIDADE (SMR)



INCREASE RATES – 1979 2006

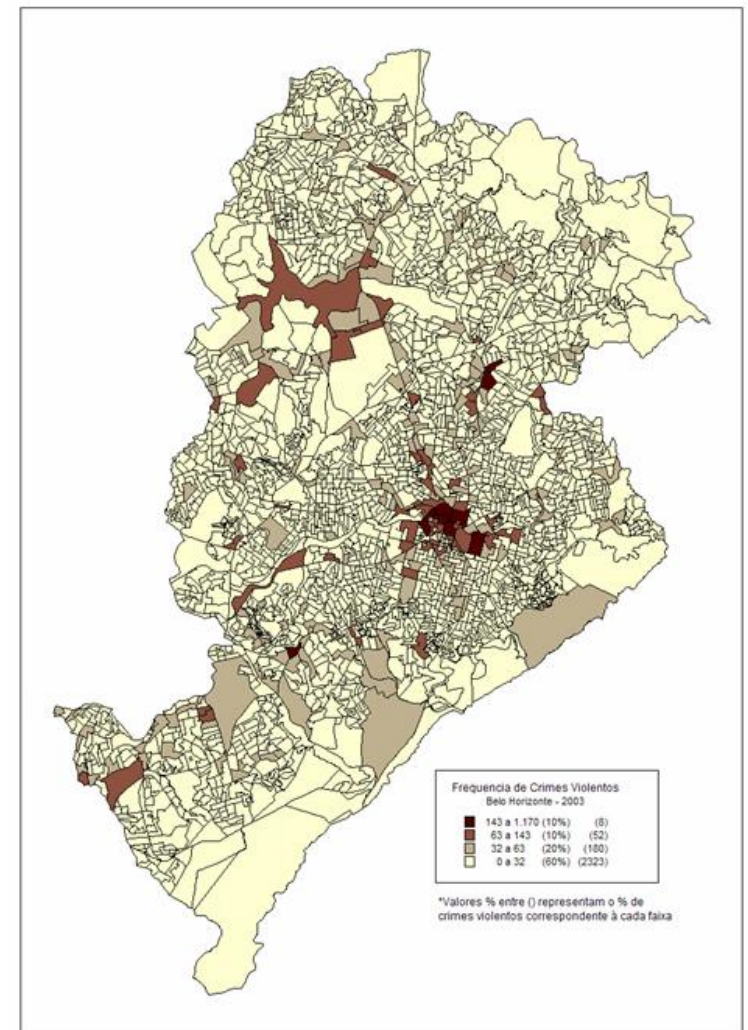
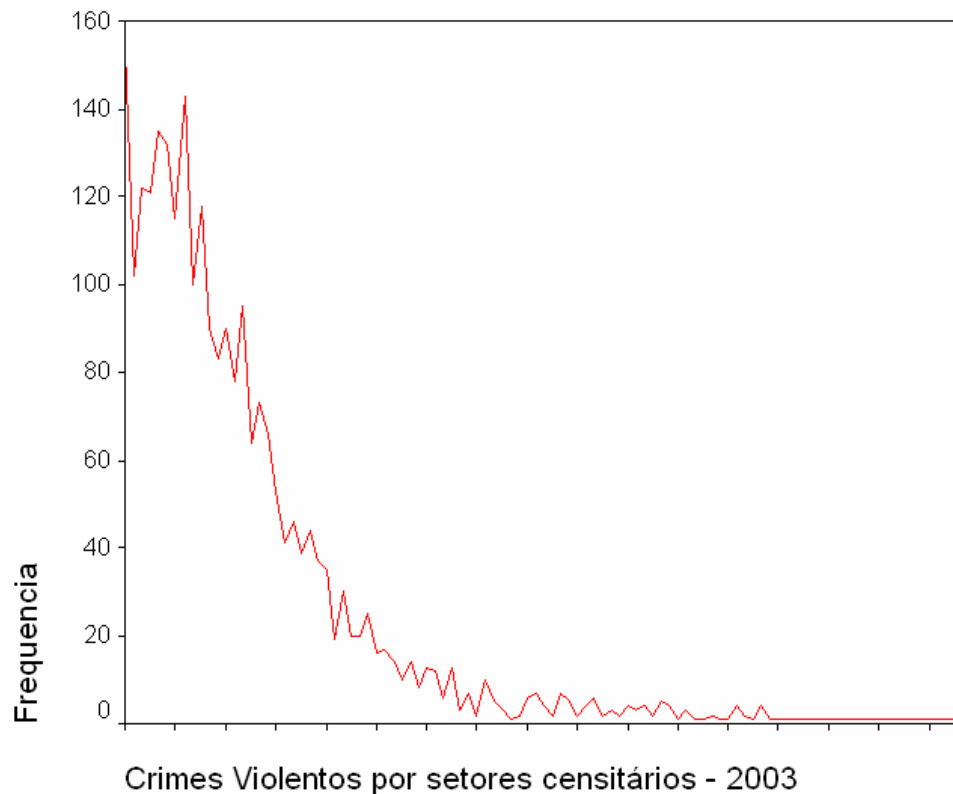


Modelo	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	9.343	2.292		4.076	.000
Índice de estrutura domiciliar (renda baixa, água encanada, carro, energia elétrica, tv, coleta lixo)	1.972	.203	.157	9.729	.000
(log_cadol) diferença percentual adolescentes com filhos	-.938	.306	-.044	-3.069	.002
(c_idhren) diferença percentual idh renda	-.090	.024	-.055	-3.796	.000
(c_mort1) diferença percentual taxa mortalidade até 1 ano	.023	.013	.027	1.861	.063
Variável para agregar os municípios segundo os tamanhos populacionais em 2005	3.995	.230	.270	17.344	.000
(Logdist) Distância da capital	-7.329	.542	-.202	-13.514	.000
Índice de Gini, 2000	34.500	3.590	.157	9.609	.000

III - WHAT IS HAPPENINGS IN URBAN CENTERS?



ZIP LAW OF VIOLENT CRIMES IN BELO HORIZONTE



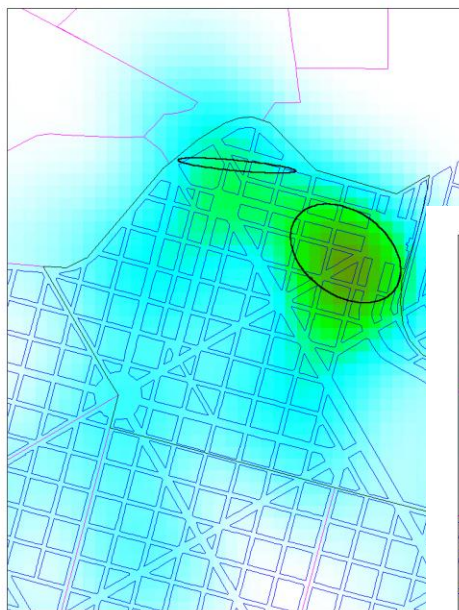
KERNEL DENSITY BY HOUR IN DOWNTOWN



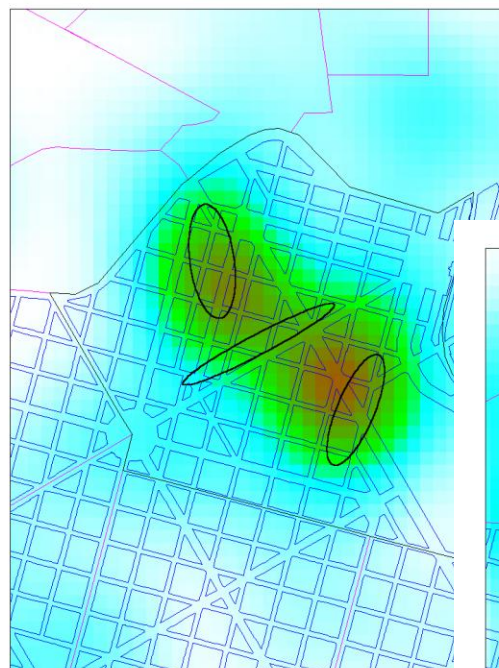
Kernel Density by hour in downtown



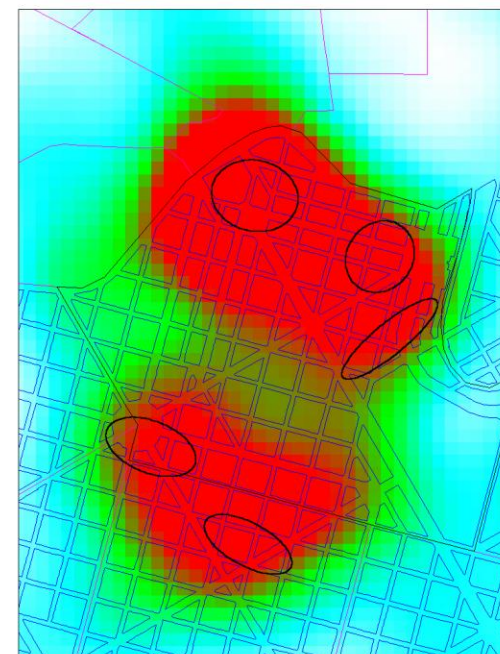
6 AM



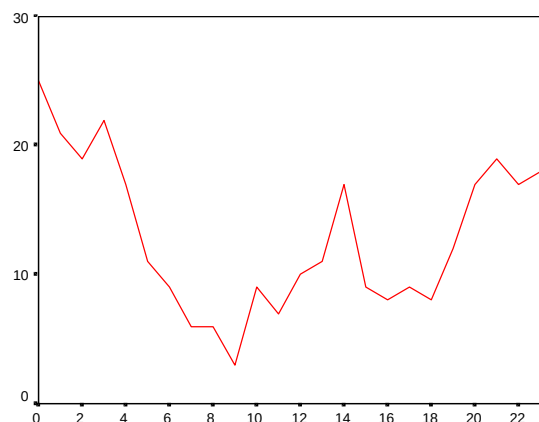
12 PM



6 PM



10 PM



HORA

Hotspots Images



SPATIAL SEGREGATION IN BRAZILIAN CITIES

- Vitória

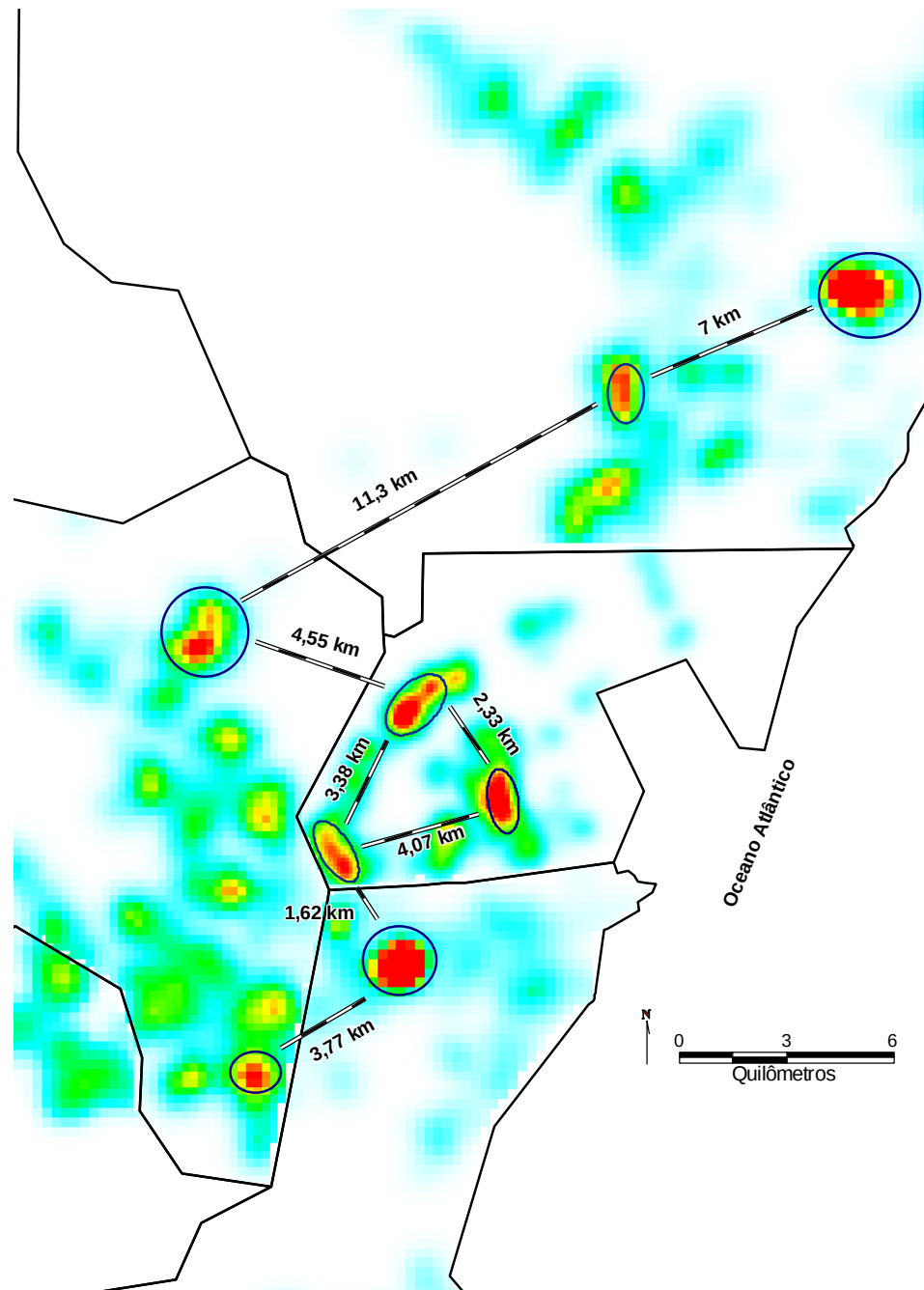
“Atlas da Violência na Região Metropolitana da Grande Vitória”, CRISP – Centro de Estudos em Criminalidade e Segurança Pública da UFMG

- São Paulo

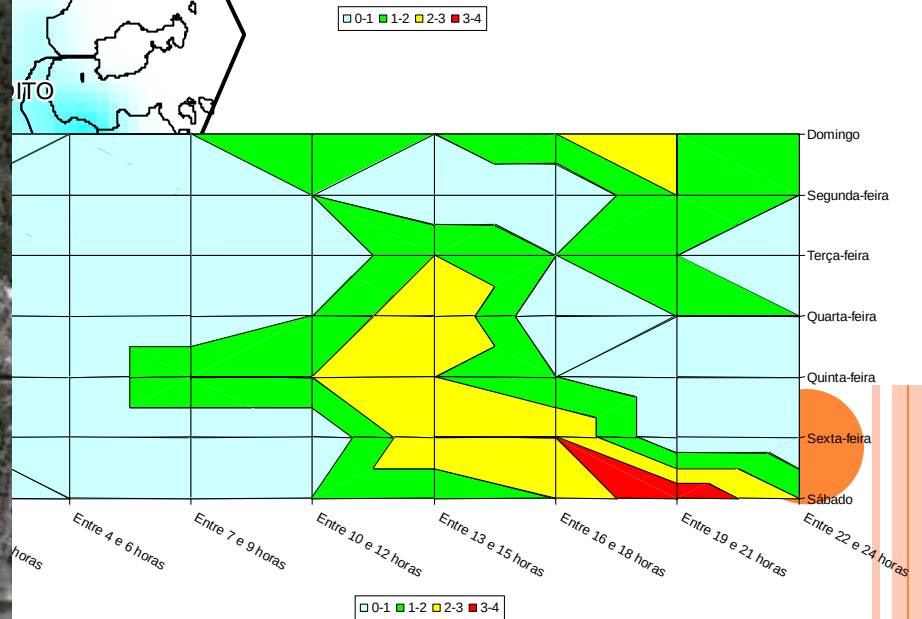
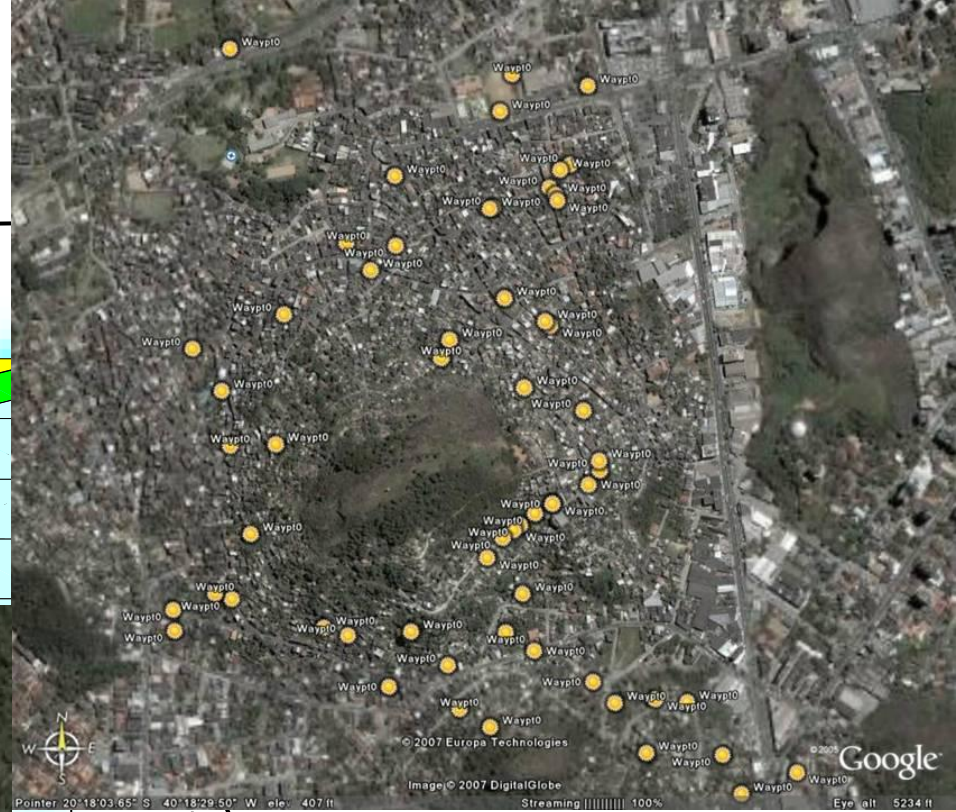
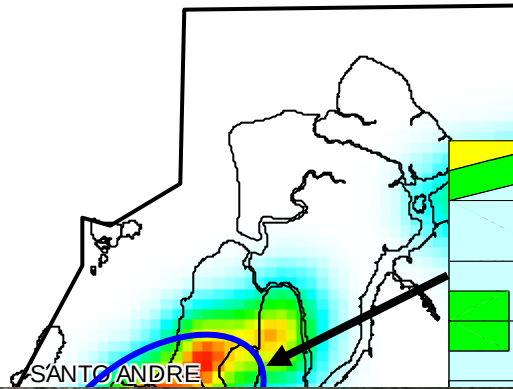
“Territory, Inequalities and Violence”, Frederico Roman Ramos and Antônio Miguel Vieira Monteiro

- Belo Horizonte



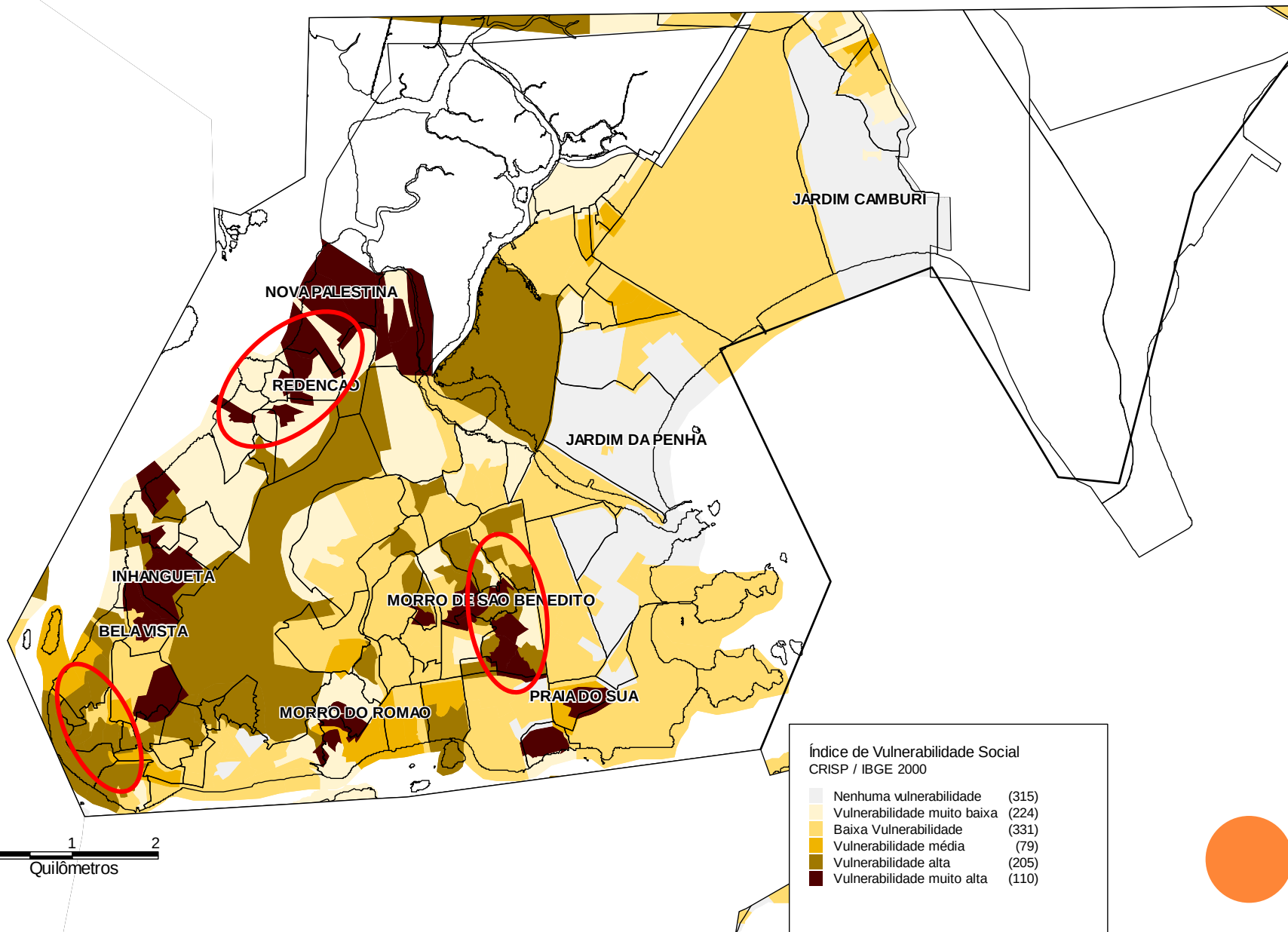


Spatial concentration of





0 1 2
Quilômetros

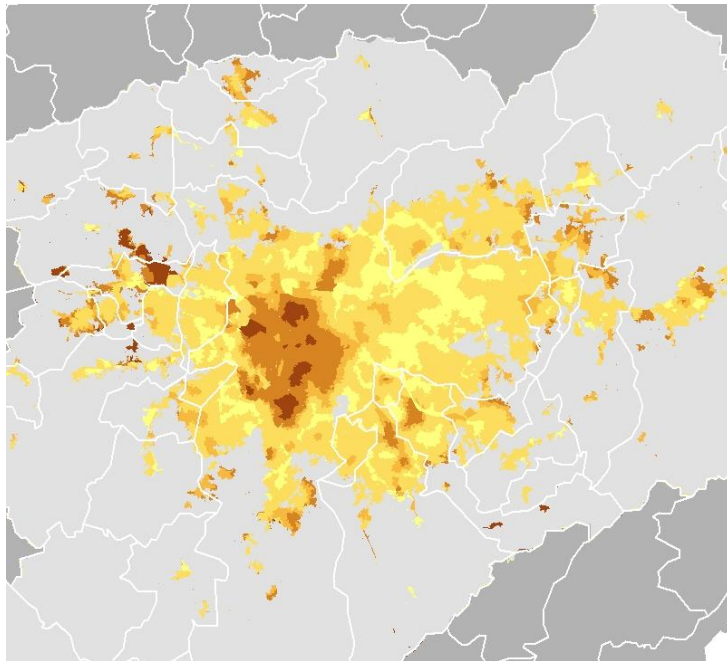


SÃO PAULO

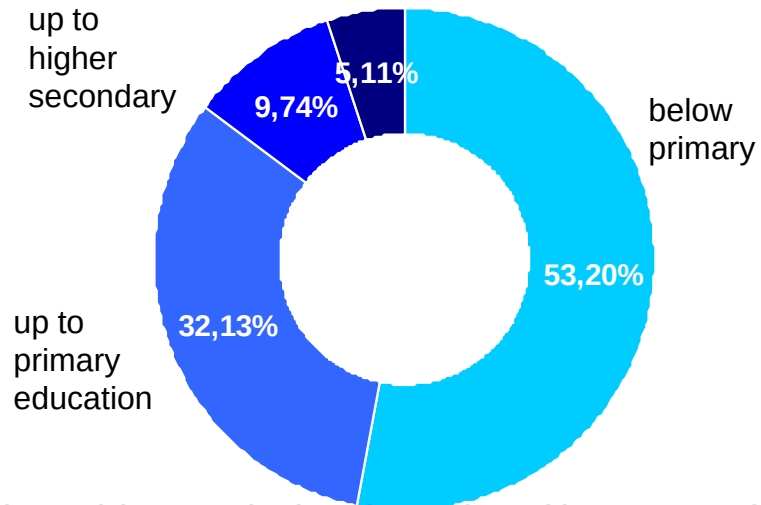
- What are the socio and economic factors that explain spatial differences?



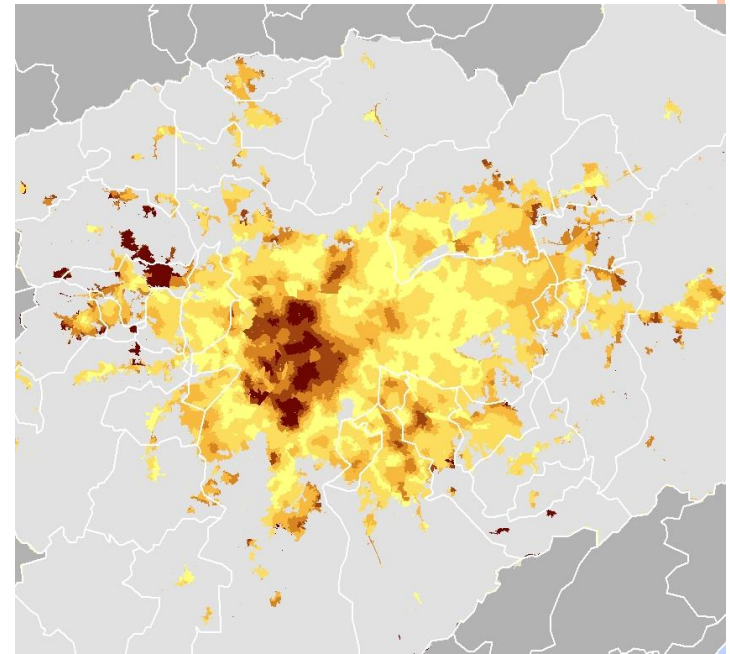
Educational



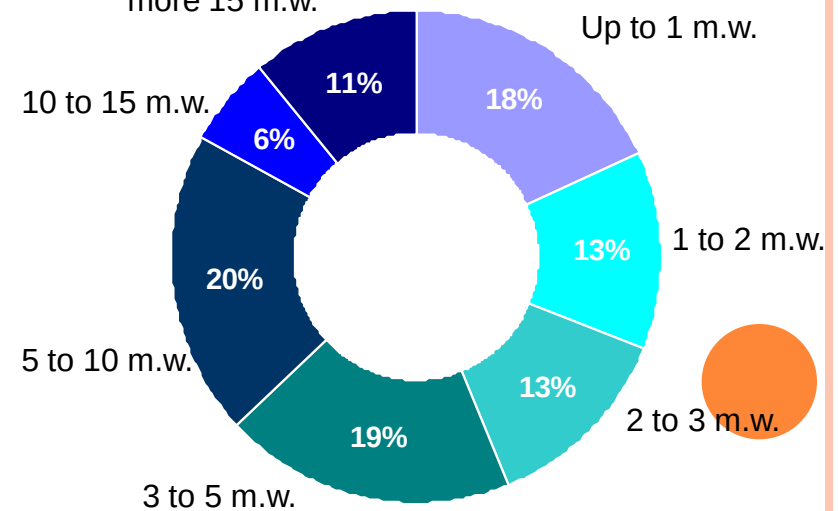
graduated



Income Level



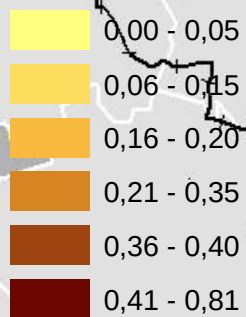
more 15 m.w.



DISSIMILARITY – TRANSPORTATION INFRA-STRUCTURE

Income Level

**Local
Dissimilarity
Index**



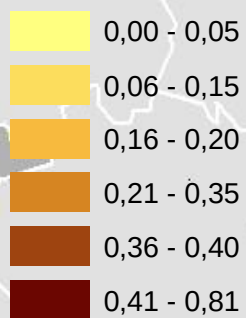
**Transport
Infra-structure**



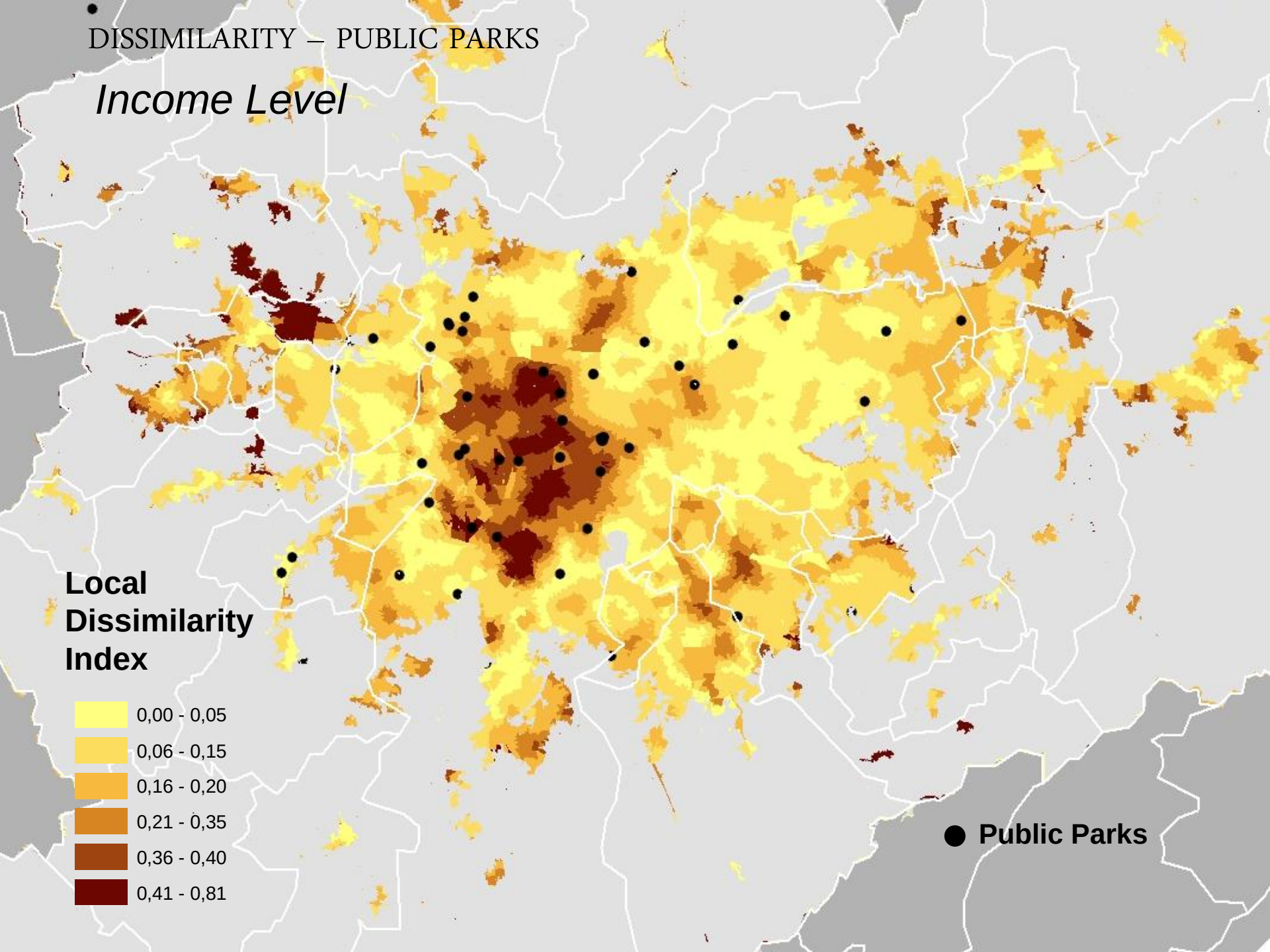
DISSIMILARITY – PUBLIC PARKS

Income Level

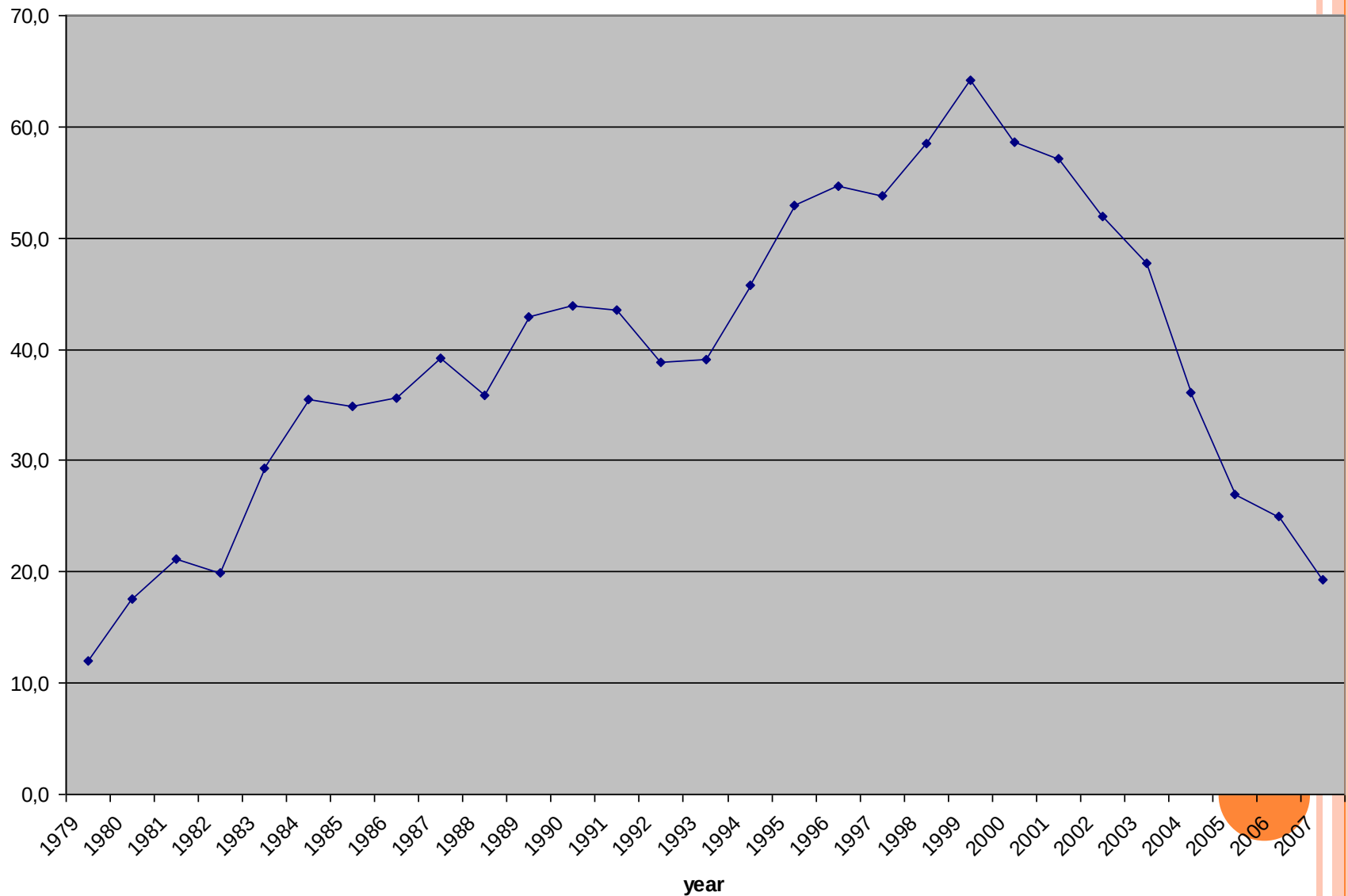
**Local
Dissimilarity
Index**



● Public Parks

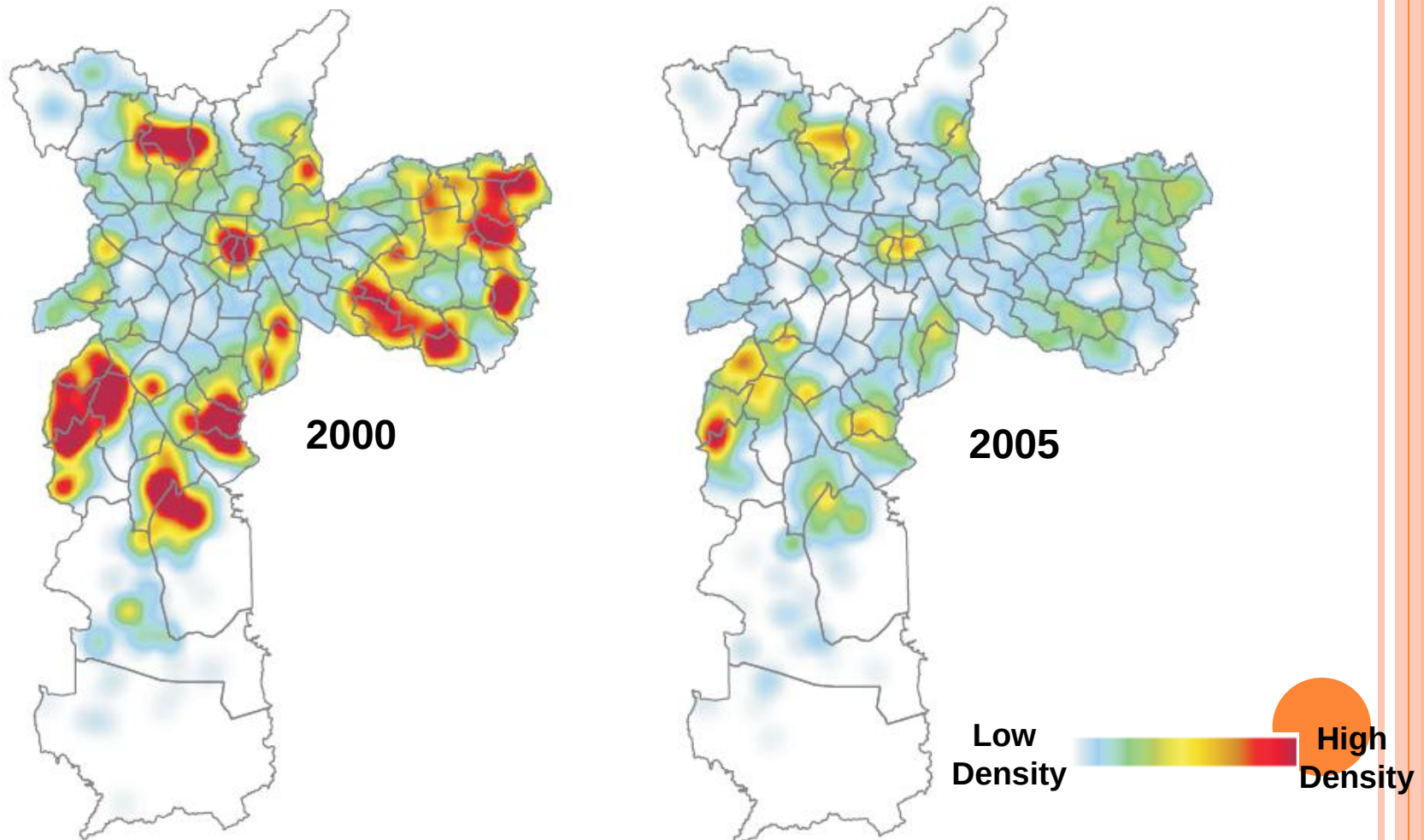


Homicide rates SP 1979 2007



Contextualization – Homicides Distribution

Even with a clear decrease of homicide rates in the RMSP, the spatial concentration pattern persists

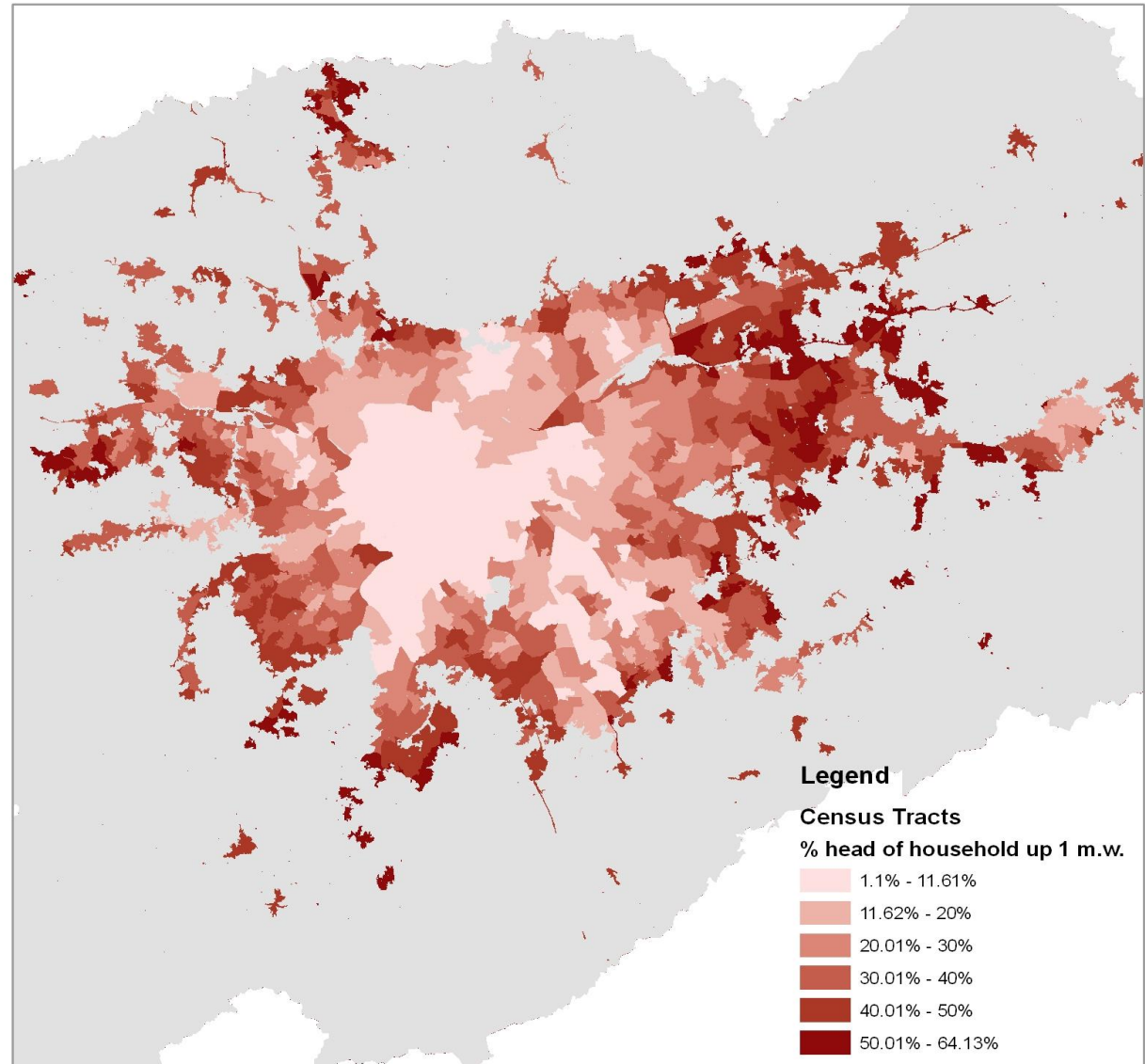
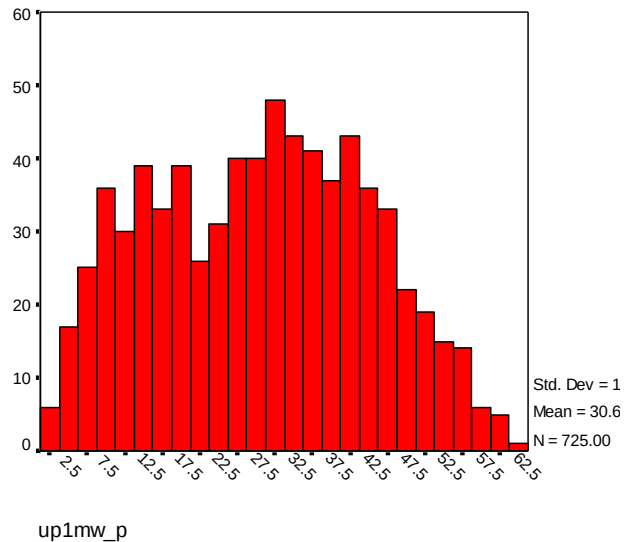


Source: Nery, M.B. Homicídios Dolosos: Indicador de um fenômeno complexo, 2007

Datasets

Socio-economic Index: *A Proxy for Poverty*

Percentage of the Head
of Household earning up
to 1 minimum wage
(CENSUS, 2000)



GWR

The GWR technique uses an extended traditional regression framework by allowing **local rather than global** parameters to be estimated.

$$y_i = \beta_0(u_i, v_i) + \sum_k \beta_k(u_i, v_i) x_{ik} + \xi_i$$

Where (u_i, v_i) are the coordinates of the i th point in space

Through a *spatial Kernel Function* a weight matrix **W** is estimated. This matrix allows the estimation of the **beta** parameters in each location.



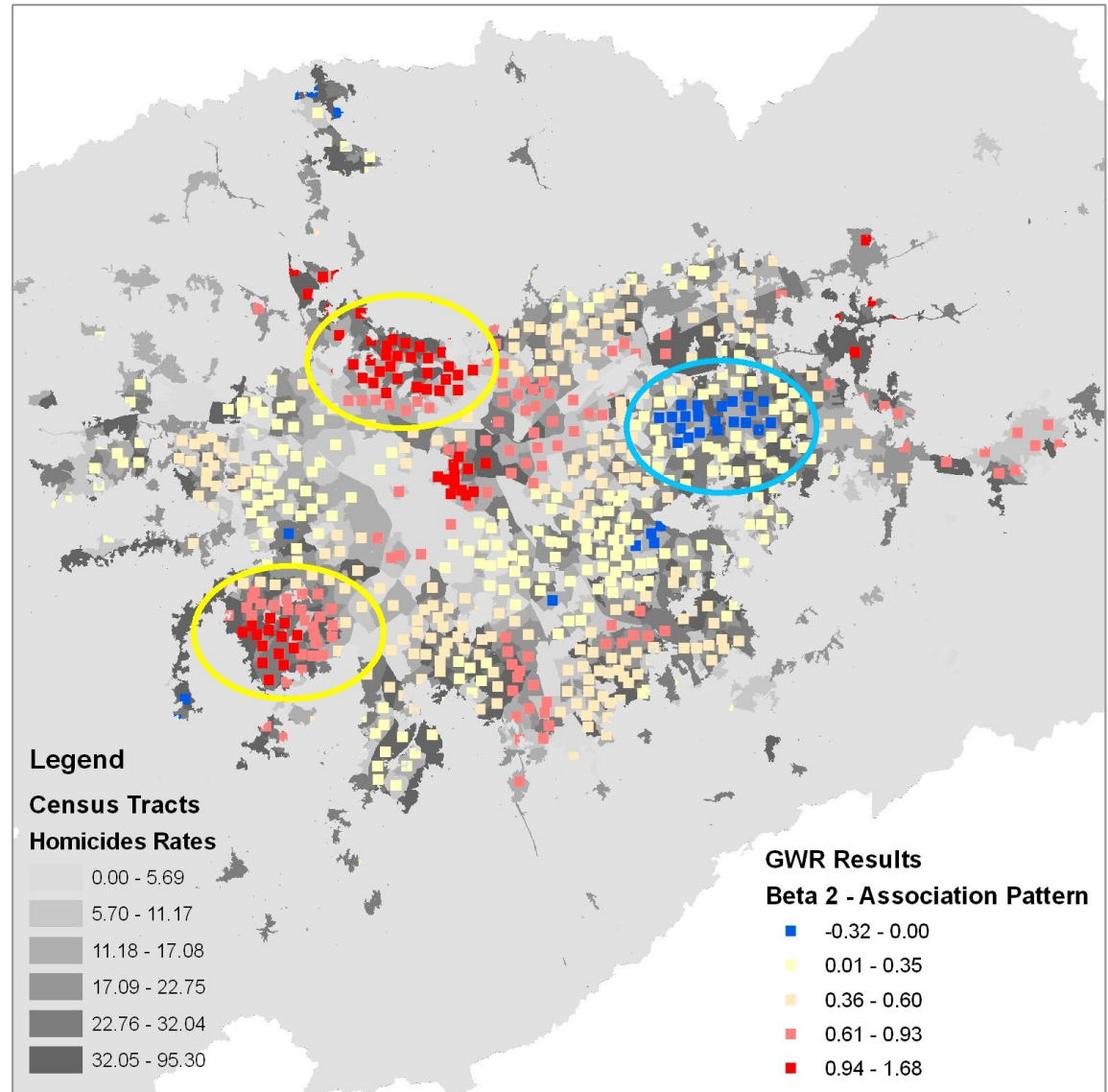
$$\longrightarrow W(i) = \begin{bmatrix} w_{i1} & 0 & .. & 0 \\ 0 & w_{i2} & .. & 0 \\ .. & .. & .. & .. \\ 0 & 0 & 0 & w_{in} \end{bmatrix}$$

The analysis of the spatial distribution of the beta parameter and its statistical significance can inform us about the **magnitude, direction and significance of the association in each local of the space.**

Results – GWR

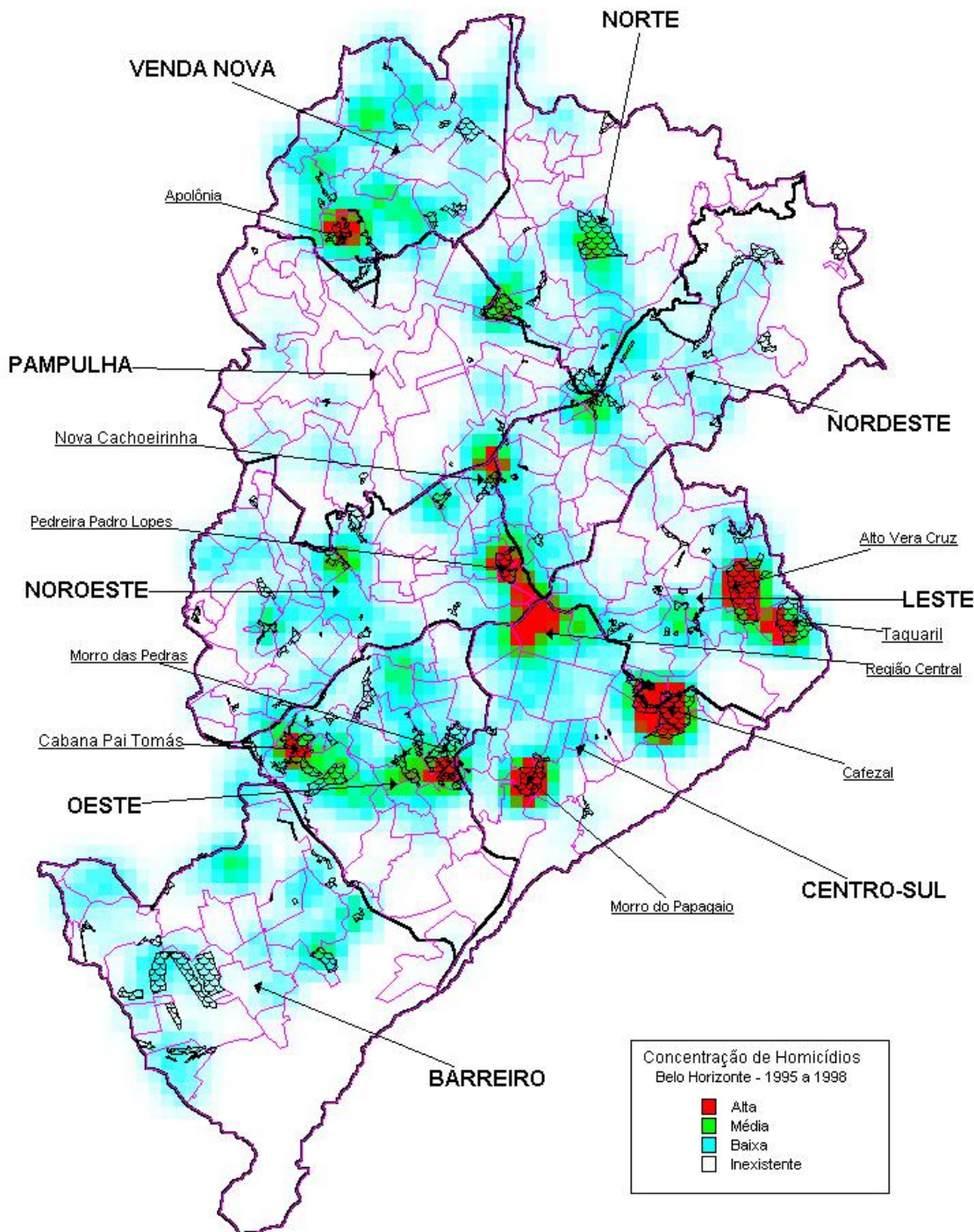
Coefficient of Determination
0.44

With the analysis of the spatial distribution of the **beta parameters** it is possible to observe that the magnitude and the direction of the association between the *homicide rate* and the *poverty indicator variable* are different when we move around in the city.



MORUMBI / PARAISÓPOLIS



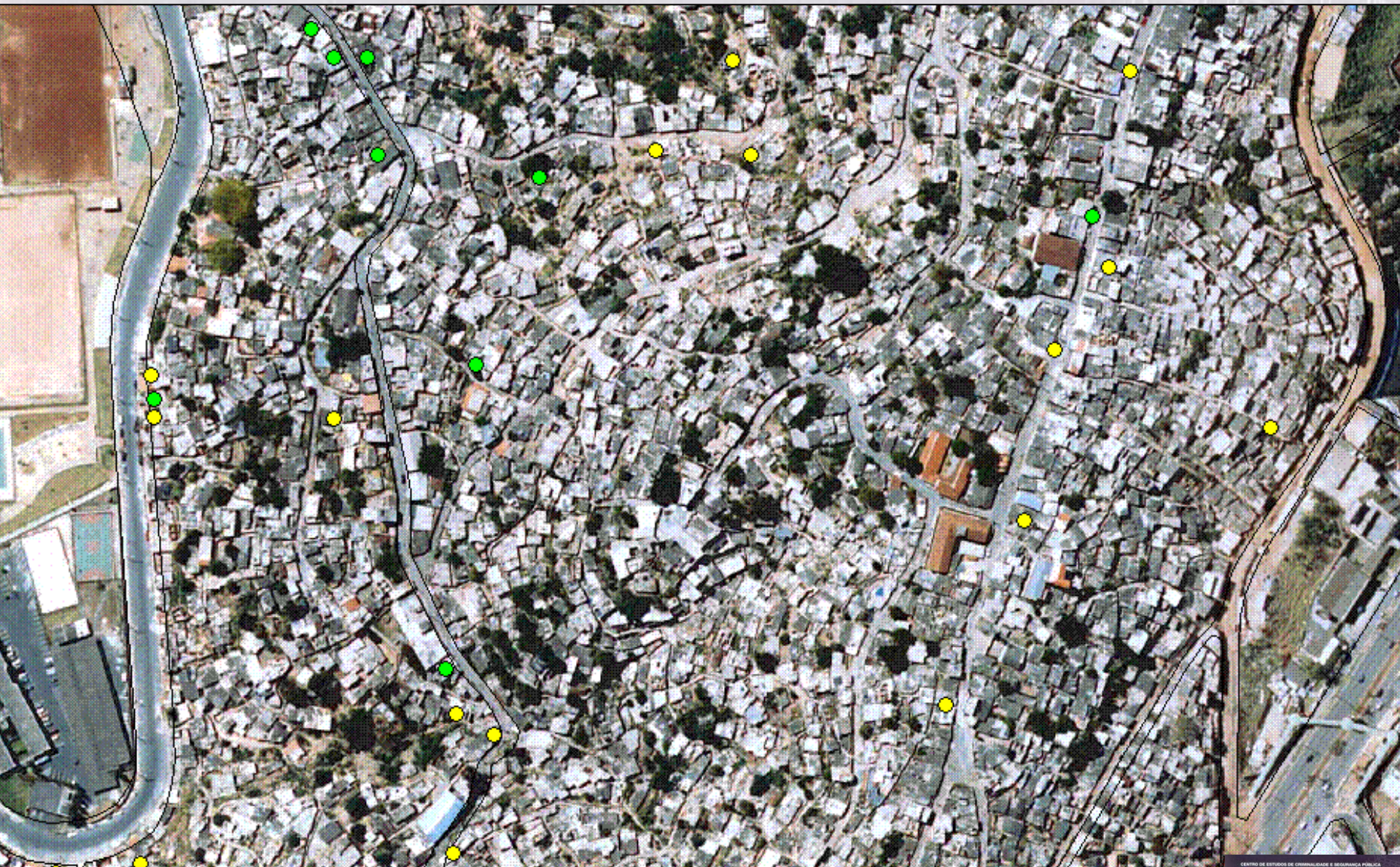


As favelas mais violentas foram definidas em função da concentração de homicídios registrados pela Polícia Civil. Assim, temos 6 conglomerados urbanos com elevadas taxas de mortes por homicídio na cidade de Belo Horizonte.

	Existence of homicide clusters	N	Average	Standard deviation	Sig.
<i>Residential finishing</i>	No	75	6,59	3,96	,001
	Yes	6	0,77	0,84	
	Total	81	6,17	4,11	
<i>Years of schooling</i>	No	75	8,51	2,57	,006
	Yes	6	5,53	0,61	
	Total	81	8,29	2,60	
<i>Age</i>	No	75	28,96	3,71	,010
	Yes	6	24,92	1,41	
	Total	81	28,66	3,74	
<i>Formal/informal occupation rate</i>	No	75	3,39	1,10	,021
	Yes	6	2,32	,36	
	Total	81	3,31	1,10	
<i>Childhood mortality</i>	No	75	,28	,13	,035
	Yes	6	,40	6,000E-02	
	Total	81	,29	,13	
<i>Illiteracy rate</i>	No	75	11,80	6,83	,000
	Yes	6	23,04	6,06	
	Total	81	12,63	7,36	
<i>Urban infrastructure index</i>	No	75	-,24	,66	,003
	Yes	6	-1,10	,72	
	Total	81	-,30	,70	
<i>Social protection offer rate</i>	No	75	,23	,49	,003
	Yes	6	,91	,84	
	Total	81	,28	,54	



HOMICIDES IN A FAVELA

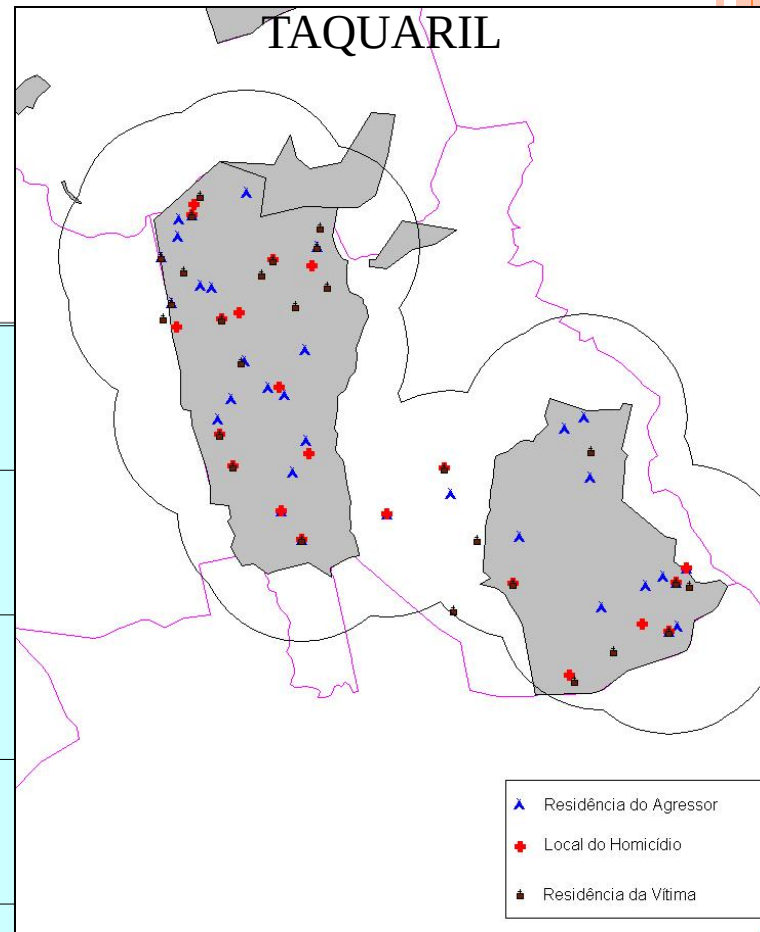
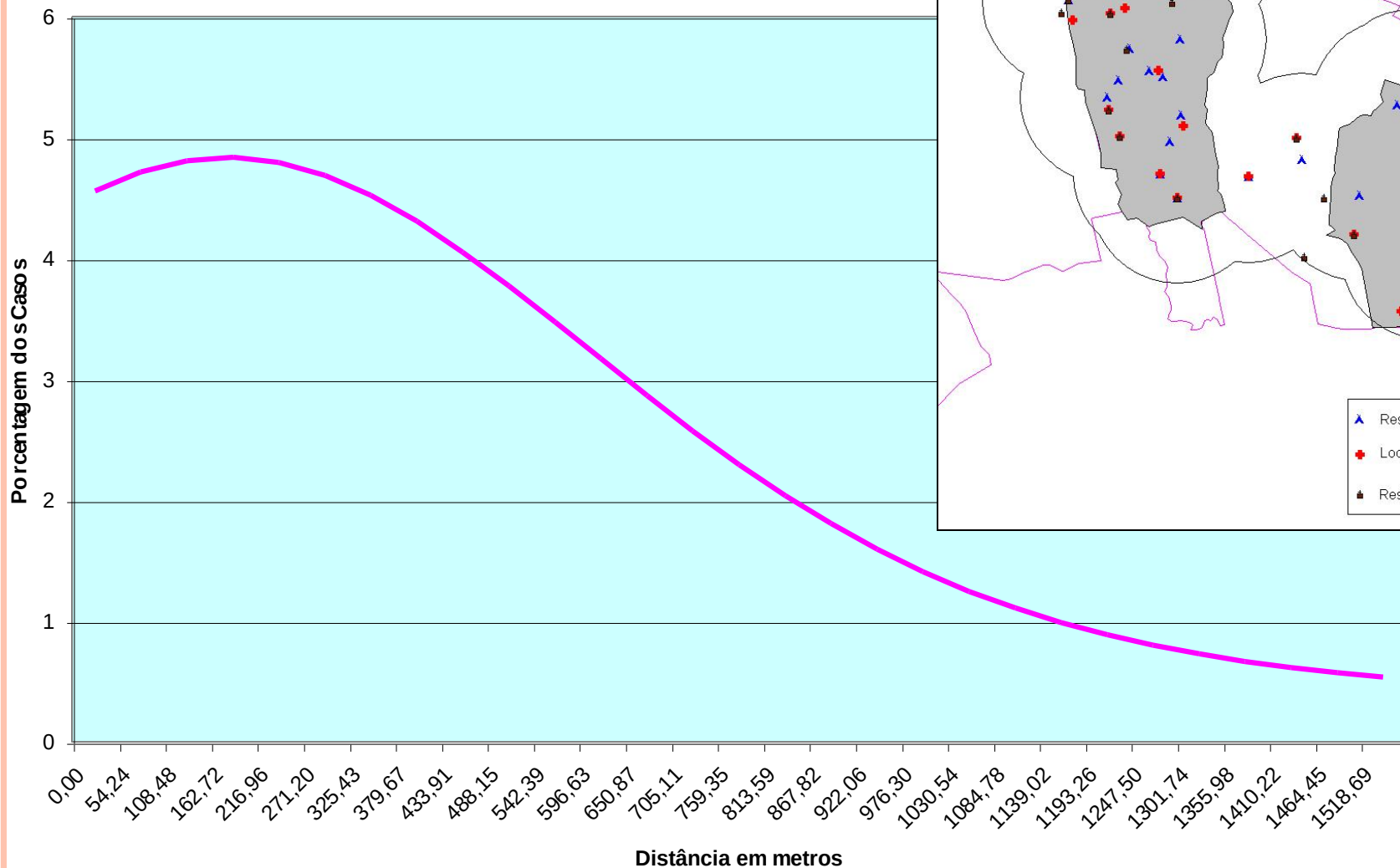


POLICE IN FAVELAS - RIO DE JANEIRO

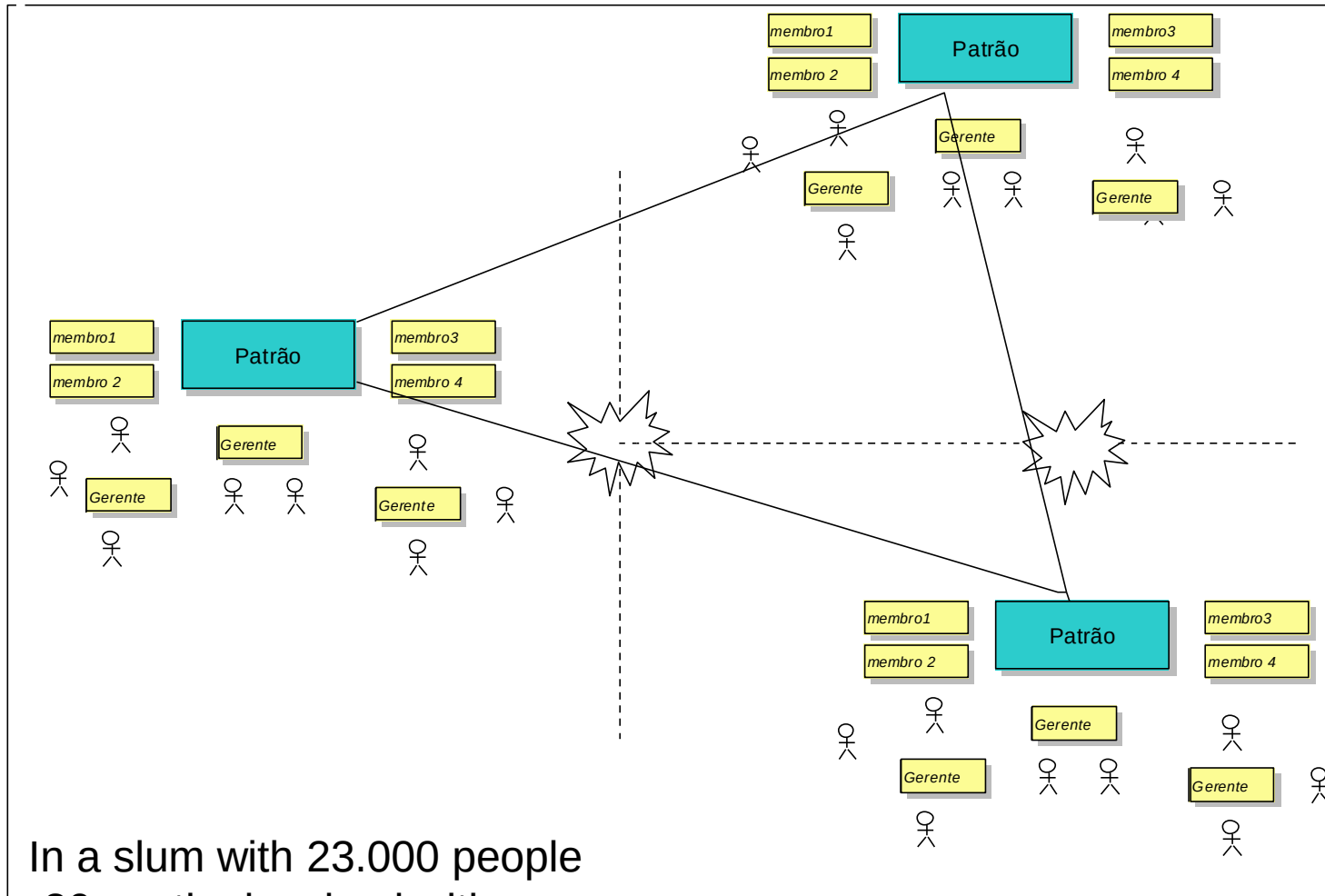


Journey to crime

Violence implosion



Distribuidor 1
Armas
Drogas



In a slum with 23.000 people

- 80 youths involved with gangs and drug dealing
- This means less than 0,5% of local population and 2% of youth aged between 15 and 24 years old

Distribuidor 2
Armas
Drogas



YOUTHS AND CRIME

- Gangs and the structure of criminal activities



Structuration of criminal activities

Crucial
turning points

Lógica econômica

Processo seletivo,
mercado e
organizações
difusas

**IV-Crime
organizado
globalizado**

Societal logic

Condicionantes
sociais
propiciam o
surgimento de
quadrilhas e
gângues de
base territorial
(lógica
societária)

**I-Gangues
territoriais e
grupos expressivos**

- violência espontânea
- ausência poder público
- violência policial
- Conflitos grupos

**II-Non organized
groups in process
of structuration**

- Community leaders and violent offenders
- Massive use of firearms
- Many conflicts and deaths
- The role of prisional system
- Police corruption

**III-
Organizando-se em bases
políticas**

Focalized violence
Territorial domination
Market of services and protection
Business oriented

INSTITUTIONAL ASPECTS

The impact of Criminal Justice Organizations



What can be done?

1. Fica Vivo
2. IGESP

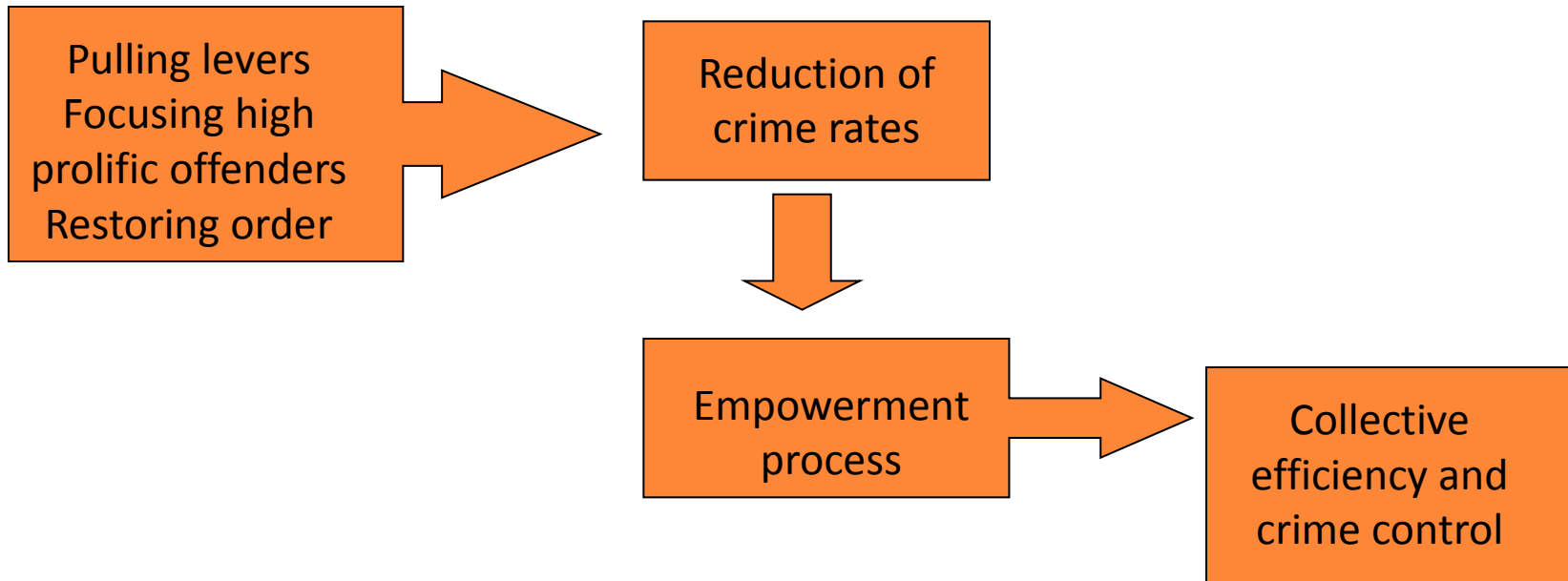


What can be done?

**FICA
VIVO!**



PREVENTION PROGRAMS



“Weed and Seed”

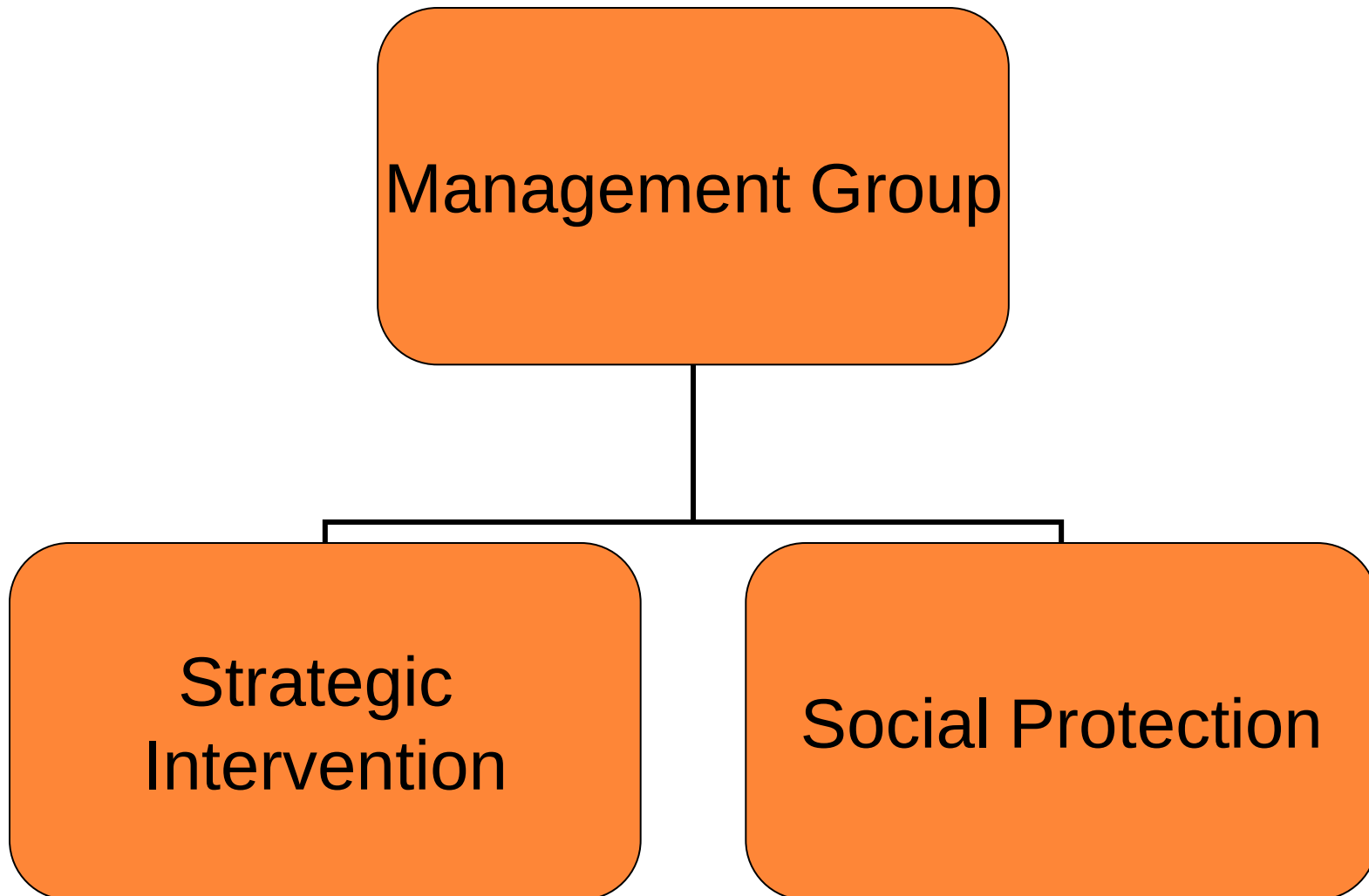


Fica Vivo Program

- Identifying locations (CRISP)
- Training police officers in problem solving techniques (CRISP)
- Special units in these locations
- Implementation
 - Local nucleons of reference
 - Identifying and incapacitating high prolific offenders
 - Social development
- Monitoring and evaluations
 - Process performance evaluations
 - Result evaluations
 - Cost benefit analysis



Fica Vivo (Stay Alive) Program Structure



Fica Vivo (Stay Alive) Program Structure





 SIMG - Sistema de Inteligência de Monitoramento de ...

 Sistema de Inteligência de Monitoramento de Gangues - SIMG

Cadastro

Usuário

Todos

Buscar

Novo

Cancelar

Salvar

Administração de Gangue

Gangue

* Nome:

Simbologia:

Histórico:

Primeira Menção:

Última Menção:

Integrante

Local

Atividade Ilícita

Aladas

Inimigas

Anexos

Eventos

Novo Item

	Pessoa	Função
1		  ASSALTANTE
2		  ASSALTANTE
3		  ASSALTANTE

Elaborado pelo LCC - UFMG

Concluído

Internet

100%





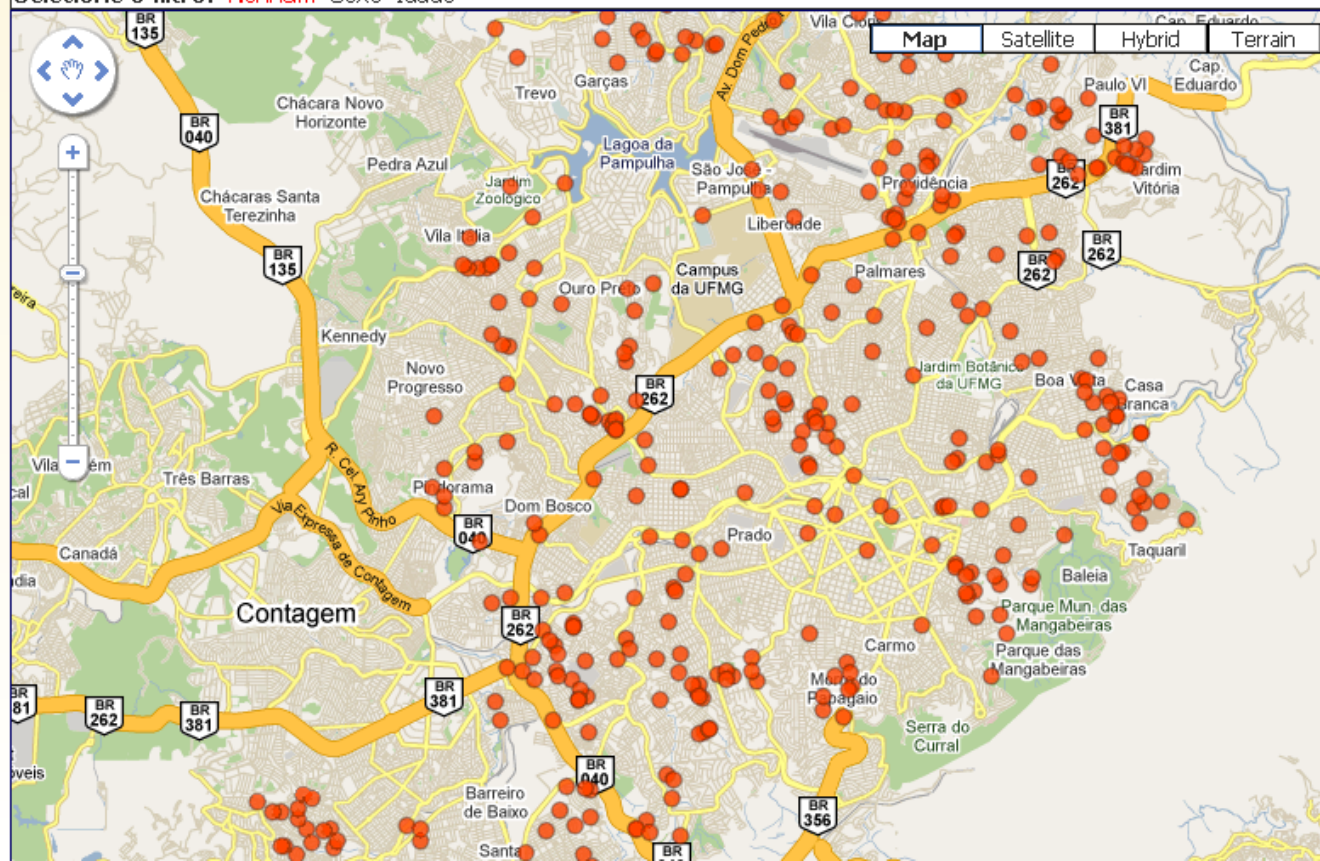
Homicídios em Belo Horizonte

Esta página apresenta, mês a mês, a localização dos homicídios registrados em Belo Horizonte, bem como a distribuição etária e por sexo das vítimas. O mapa é gerado a partir do georreferenciamento dos registros de inquéritos policiais da Divisão de Crimes Contra a Vida (DCCV) da Polícia Civil, consolidados pelo Centro Integrado de Informações de Defesa Social (CINDS).

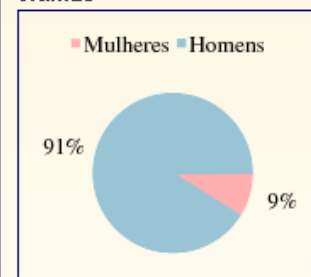
A definição de homicídio adotada pela Secretaria de Estado de Defesa Social (SEDS) envolve, além dos crimes com registro imediato, outros classificados como homicídio após o surgimento de novas informações decorrentes do trabalho policial e as tentativas de homicídio que evoluíram para morte. Para isso, a SEDS respeita o prazo legal de 30 (trinta) dias para conclusão do inquérito policial antes de publicar as [estatísticas](#) do número de homicídios consumados.

Selecione o ano e mês: 2009 Todos Janeiro Fevereiro Março Abril Maio Junho Julho Agosto Setembro Outubro Novembro Dezembro

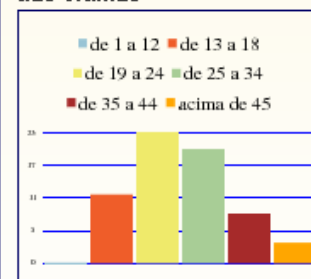
Selecione o filtro: Nenhum Sexo Idade



Distribuição % por sexo das vítimas



Distribuição % por idade das vítimas



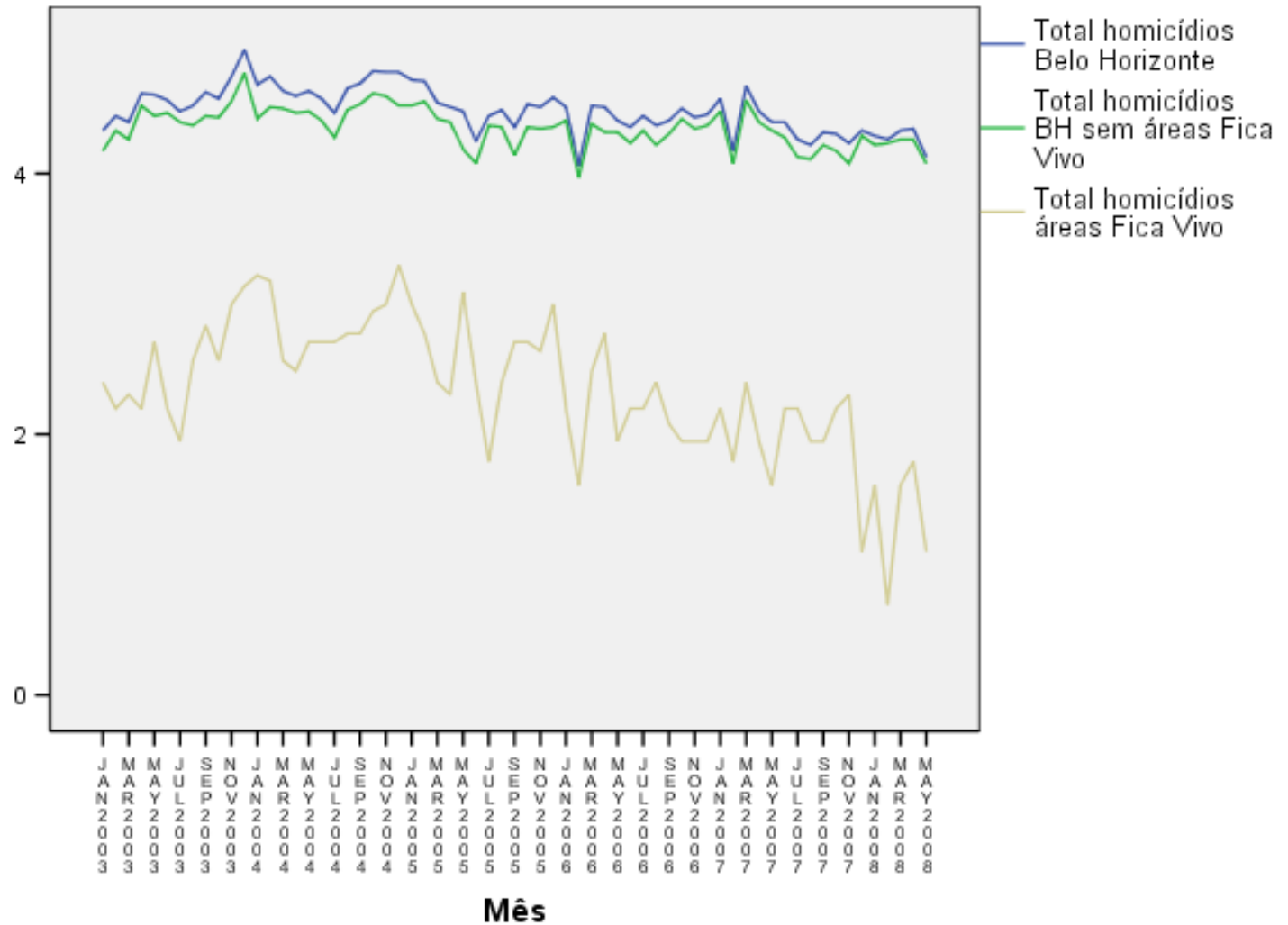
Fica Vivo (Stay Alive) Program Structure



Fica Vivo's activities



Results

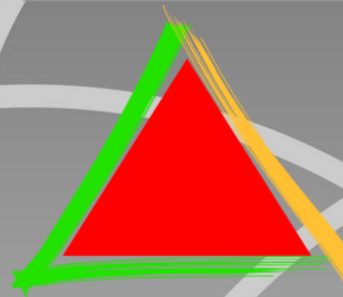


Transforms: natural log

COST-BENEFIT ANALYSIS

Programs	Present value of the cost of the program per beneficiary	Present value of the number of serious crimes prevented per beneficiary	Reais per serious crime prevented	Serious crimes prevented per million Reais
APAC	18417,990,00	0,87	21.109,75	47,37
Patrulha de Prevenção Ativa			6.916,42	
Liberdade Assistida	1.323,68	0,91	1.459,94	684,96
UERÊ	8.184,84	0,45	18.290,73	54,67
Paz nas Escolas	192,23	0,16	1.174,45	851,46
Fica Vivo	1.065,70	1,65	645,69	1.548,73
Bolsa Família	2.594,88	0,23	11.256,15	88,84
PROERD	35,43	0,02	1.682,33	594,42
CEAPA	145,40	-	-	-





**GOVERNO
DE MINAS**

DEFESA SOCIAL

Integração de Gestão em Segurança Pública

igesp

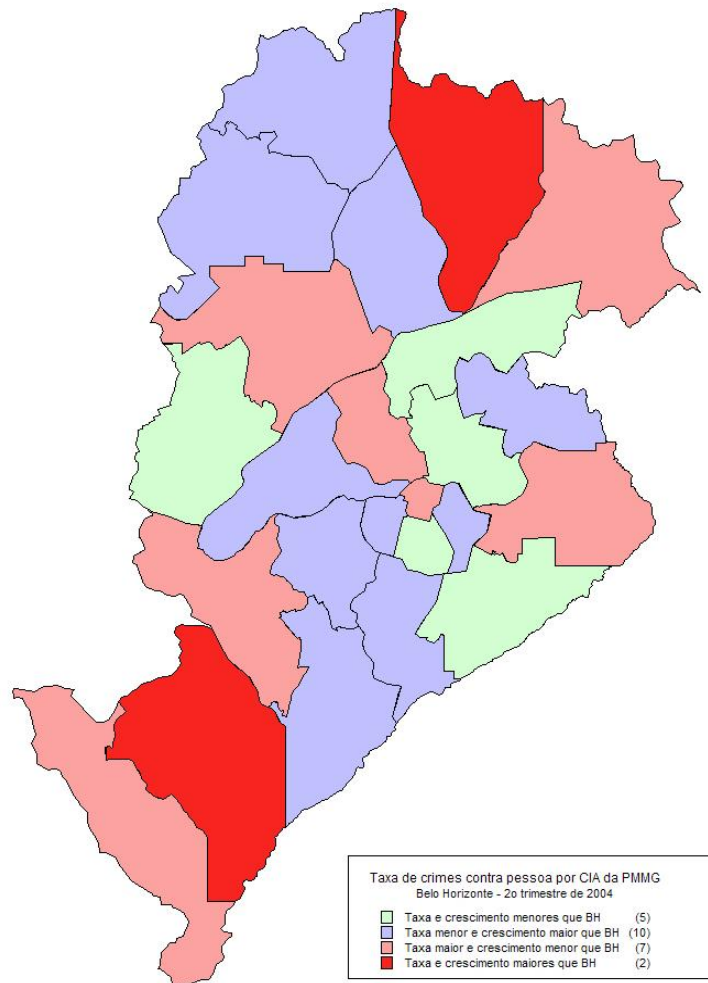
IGESP

Integration and management in Social; Security

- Decentralization
- Information sharing
- Activities to solve problems
- Community interactions
- Main problems
- Quality of police work

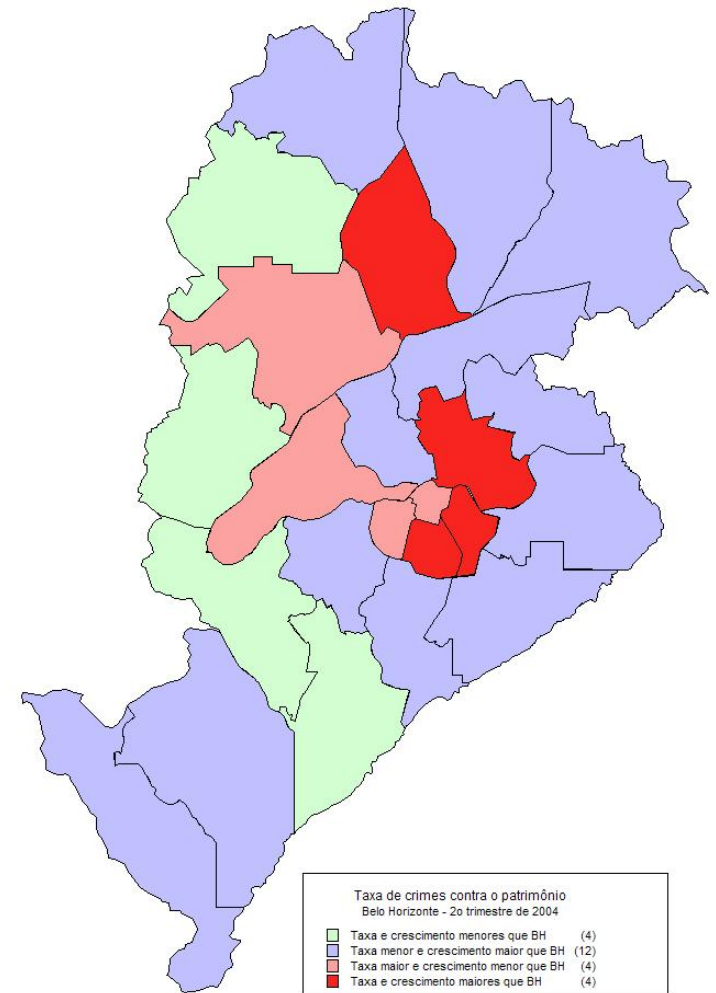


Priorities areas Personal crimes



* A taxa de Crimes Contra Pessoa em Belo Horizonte neste período foi de 35,6 por 100 mil hab. e o crescimento em relação ao trimestre anterior foi de -7%

Priorities areas Property crimes



A taxa de crimes contra o patrimônio em Belo Horizonte neste período foi de 450 por 100 mil hab. e o crescimento em relação ao trimestre anterior foi de 2%.



CRIMES VIOLENTOS BELO HORIZONTE

