

Does disorder lead to crime?

Leandro Piquet Carneiro

Summary

1. What is disorder and why communities and local public administration should care about disorder?
2. What evidences do we have that disorder is correlated with crime?
3. By controlling disorder, crime will drop?
4. What's the role of the community in that?
5. What local governemnt could do to control the problem?
6. Is that possible to control disorder without harm minorities, young people and the poor?

What is Disorder?

- Social Disorder, Acts of Incivilities and Anti-social Behaviors are individual or colective actions with negative externalities to other individuals, families, comunidades and public spaces.

Broken Windows Paradigm

Tackling disorder produce a indirect effect on crime (from practice to 'theory') Kelling e Wilson (1982) e de Kelling e Coles (1996).

New Jersey "experiment": Rules were defined and enforced by police and "regulars" residents:

- "Drunks and addicts could sit on the stops but could not lie down. People could sit on sides streets, but not at the main intersections. Bottles had to be in paper bags. Talking to, bothering, or begging from people waiting at the bus stop was strictly forbidden" (Broken Windows, 1982)

A Rival Explanation

- **Collective Efficacy:** the correlation between crime and disorder is a spurious correlation. (Robert Sampson and colleagues: 2002, 2001, 1999)
 - Some communities are more affected by crime and disorder because they are unable to exercise social control in its limits (collective efficacy).
 - Studied the correlation between crime and disorder after controlling by structural characteristics of the neighborhood as public services, family disruption, and income.
 - Sampson and colleagues developed direct measures of disorder (Systematic Social Observation).
 - Project on Human Development in Chicago Neighborhoods (PHDCN).

Why it could be important:

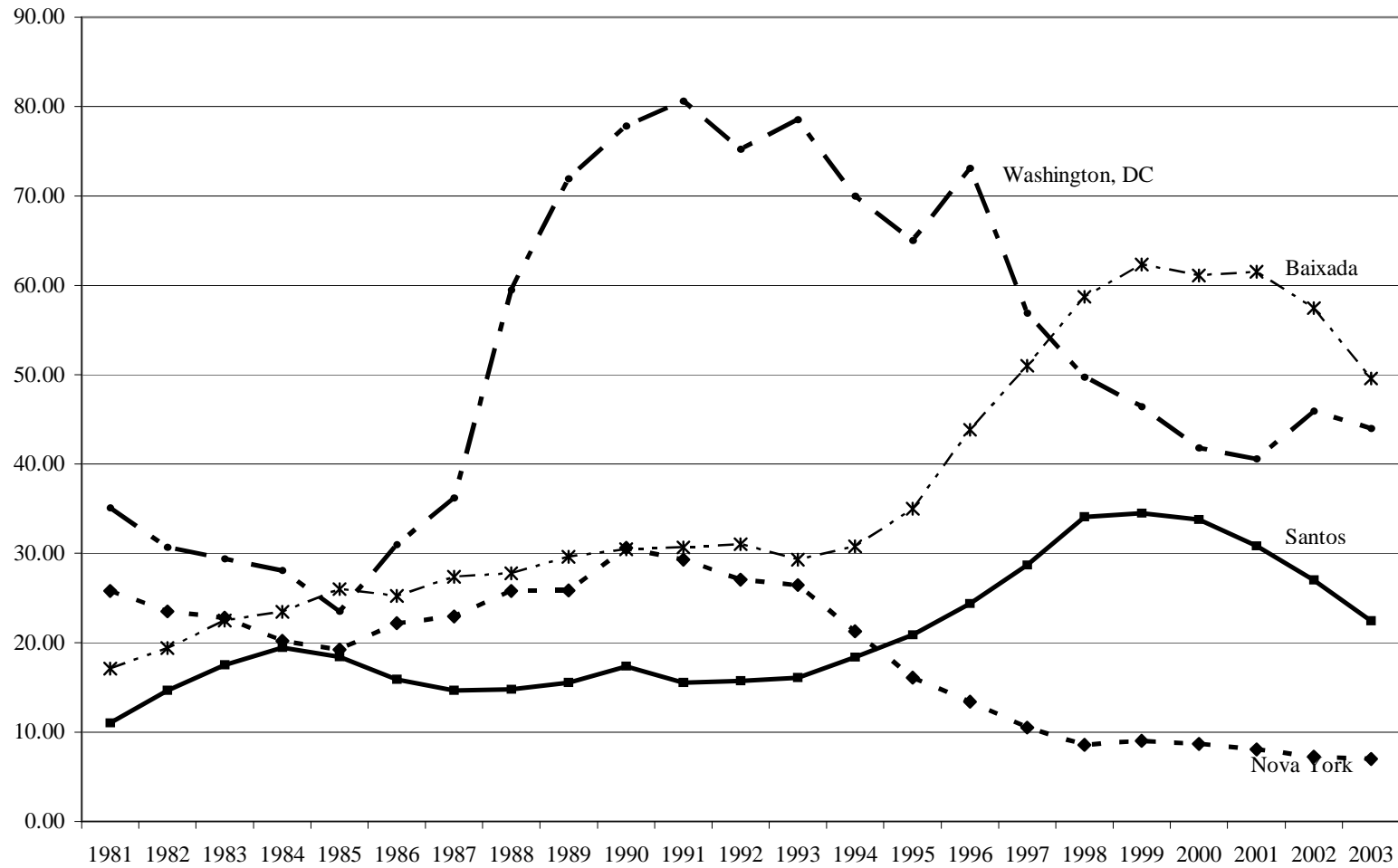
- The criminal activity is embedded in a social and physical ecosystem that provides important resources to criminal acts:
 - Drug dealers use street vendors and prostitutes to deliver drugs, etc.
- “The serious street crime flourishes in areas in which disorderly behavior goes unchecked. Muggers and robbers believe they reduce their chances of being caught if they operate in streets where potential victims are already intimidated by prevailing conditions” (Broken Windows).

How to Measure Disorder?

**An empirical assessment in a
Brazilian City**

Santos map

Homicide rate per 100 thousands inhabitants



Observação: Foi utilizada um média móvel trienal para as cidades brasileiras.

Survey with Community Leaders and Police Officers

- Research design directly inspired by the Project of Human Development in Chicago Neighborhoods.
- Survey with a sample of 118 community leaders and police officers.
- Structured questionnaire with maps.
- Identification of 1.325 specific points (street blocks, corners, squares, etc) with signs of physical and social disorder.
- The sample was designed to cover the urban area of Santos.

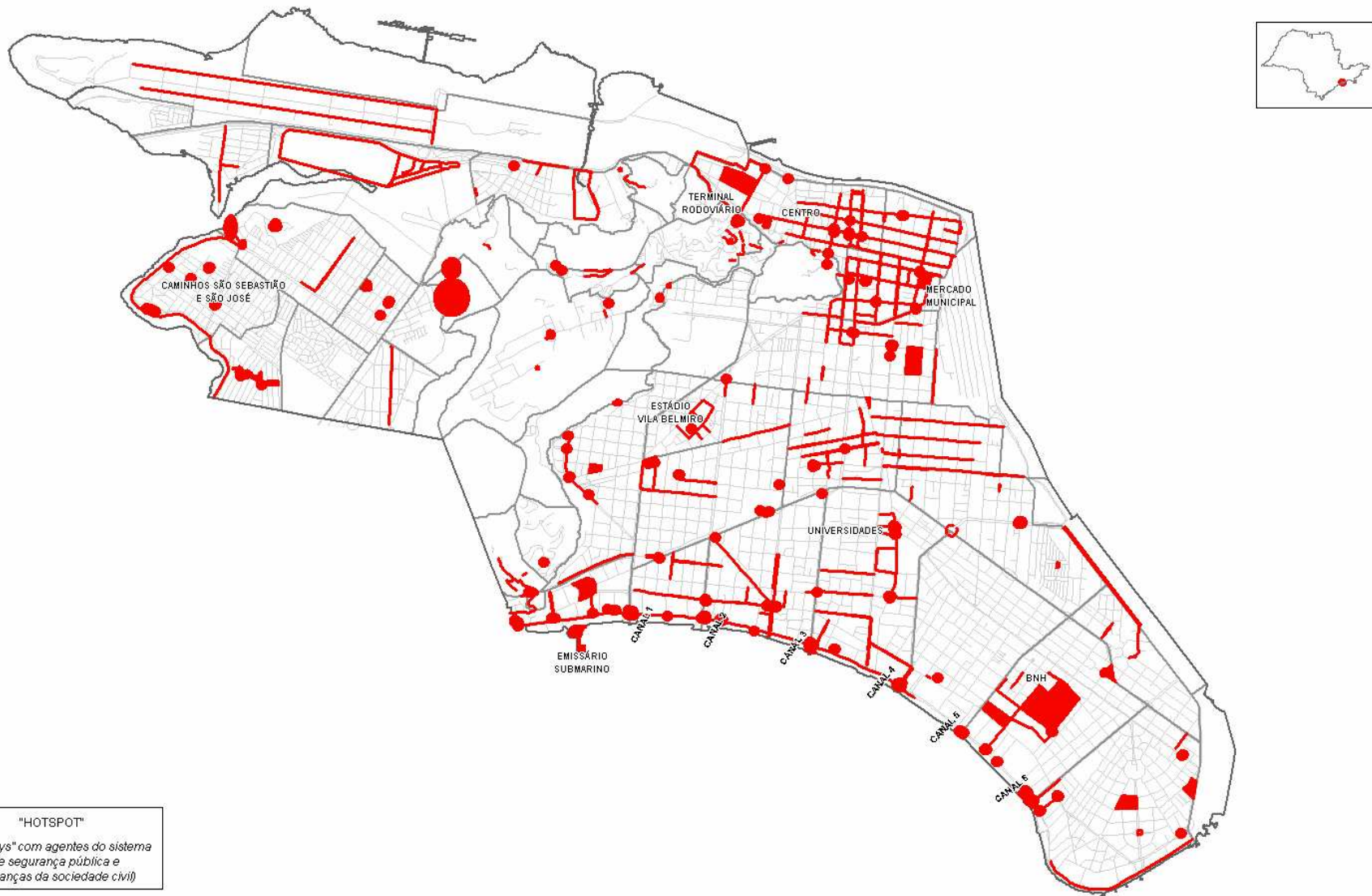
Social Disorder indicators:

1. Alcohol consumption in public areas,
2. Drug usage and dealing,
3. Gangs and young adults with open aggressive behavior;
4. Prostitution,
6. People fighting and arguing,
8. Noise and music,
9. Homeless,
10. Unsupervised minors,
11. Gambling,
12. Others Problem;

Physical Disorder

1. Garbage on streets and sidewalks,
2. Empty bottles on sidewalks
3. Abandoned buildings and cars,
4. Drug paraphernalia,
5. Condon on the sidewalks,
6. Graffiti,
7. Gang Graffiti (PCC, Ticket),
8. Other Problems.

Hot Spots and critical areas of Physical Disorder



ESCALA NUMÉRICA 1:52.000

PROJEÇÃO: UTM (UNIVERSAL TRANSVERSA DE MERCATOR)
 MERIDIANO CENTRAL: 45° W.G.R.
 DATUM HORIZONTAL: SAD-69 CHUÁ (MG)
 DATUM VERTICAL: MARÉGRAFO DE IMBITUBA (SC)

SISTEMA VIÁRIO
 — rua/estrada/rod.

CONVENÇÕES

LIMITES
 — limite municipal
 — divisa de bairro

ELABORAÇÃO: Geogr. Míriam Torriço

FONTES:
 Secretaria Municipal de Planejamento, 2004
 Secretaria Municipal de Segurança, 2006



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DISTRIBUIÇÃO ESPACIAL DAS DESORDENS FÍSICAS - 2006 - SANTOS-SP

Hot spots and critical areas of Social Disorder



● "HOTSPOT"
 ("Surveys" com agentes do sistema de segurança pública e lideranças da sociedade civil)

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CONVENÇÕES
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 — limite municipal
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**DISTRIBUIÇÃO ESPACIAL DAS DESORDENS
 SOCIAIS - 2006 - SANTOS-SP**

Systematic Social Observation

Disorder Hot Spots

Validation of Survey Based Measurement

- The survey offers limited information about disorder since it's based on the perception of respondents about the disorder problems.
- Disorder wasn't observed at its 'natural environment'.
- *Systematic Social Observation*
 - Reiss (1971)
 - Sampson and Raundenbush (1999, 2004)

'Seeing Disorder'



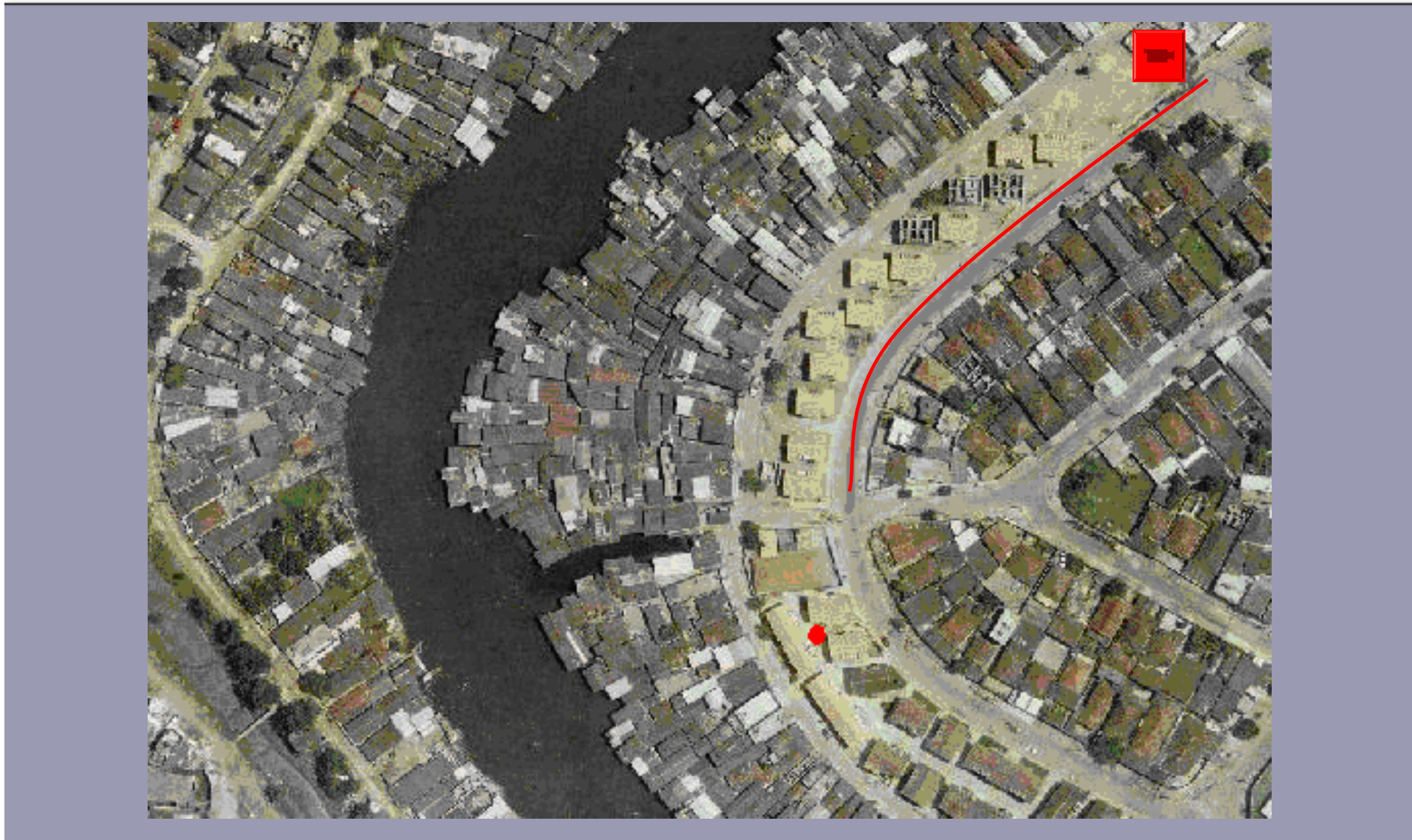
“BNH” no bairro de Aparecida

Seeing Disorder'



Área do Mercado Municipal

Seeing Disorder'



“Caminho de São Sebastião”

Resultados Desordem Social

Tipo de Desordem	Percentual de referências por tipo de função ¹			Setores Afetados ¹		Número médio de Referências por setor
	Número de Refrências	Líderes Comunitários	Agentes de Segurança Pública	Número	%	
Problema						
Desordem Social						
Pontos de venda de drogas	1022	65.9%	83.8%	263	43.5%	3.9
Consumo de drogas ilícitas nas ruas	996	61.1%	83.5%	259	42.8%	3.8
Pontos de concentração de pessoas sem ocupação	919	61.3%	74.2%	244	40.3%	3.8
Consumo de bebidas alcoólicas nas ruas	841	46.0%	73.8%	241	39.8%	3.5
Grupos de jovens com comportamento agressivo	824	52.3%	68.0%	261	43.1%	3.2
Locais de alta incidência de ocorrências como brigas e desinteligências	760	43.0%	65.9%	226	37.4%	3.4
Concentração de moradores de rua	664	34.3%	59.5%	201	33.2%	3.3
Problemas de poluição sonora	593	36.5%	49.6%	229	37.9%	2.6
Concentração de moradores e crianças de rua	453	27.6%	38.1%	149	24.6%	3.0
Prostituição	406	18.3%	38.0%	110	18.2%	3.7
Pontos de jogos de aposta	319	22.1%	25.2%	147	24.3%	2.2
Outros problemas	303	17.7%	25.6%	80	13.2%	3.8
Prostituição masculina, de transsexuais e intercurso sexual em áreas públicas	32					
Porte ilegal de armas	17					
Flanelinha	15					
Apologia ao Crime e Bailes Funks	13					
Miséria e desigualdade social	13					
Outros problemas	213					

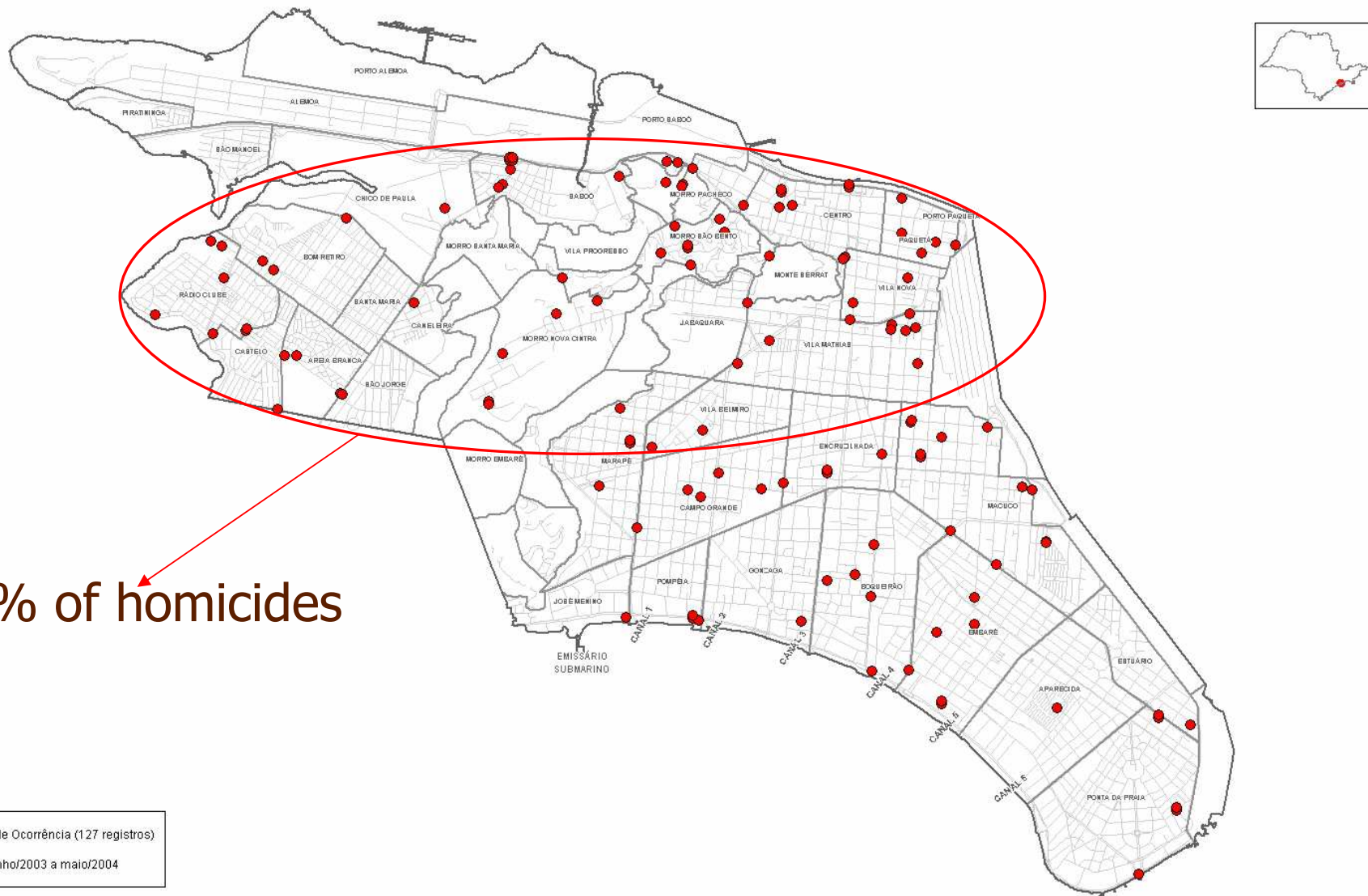
Resultados Desordem Física

Tipo de Desordem	Percentual de referências por tipo de função ¹			Setores Afetados ¹		Número médio de Referências por setor
	Número de Refrências	Líderes Comunitários	Agentes de Segurança Pública	Número	%	
Problema						
Desordem Física						
Ruas mal iluminadas	814	52.3%	66.8%	235	38.8%	3.5
Lixo e entulhos nas vias públicas	746	57.8%	55.4%	222	36.7%	3.4
Pichações e grafites	611	47.3%	45.4%	205	33.9%	3.0
Recipientes de bebida nas vias públicas	475	37.7%	34.7%	180	29.8%	2.6
Casas e prédios abandonados	368	14.8%	35.5%	146	24.1%	2.5
Camisinhas jogadas nas calçadas	329	31.2%	21.0%	141	23.3%	2.3
Seringas e outros utensílios utilizados para consumo de droga	292	18.5%	24.2%	143	23.6%	2.0
Pichações e grafites de grupos criminosos (PCC, TCC,etc)	216	47.3%	45.4%	94	15.5%	2.3
Carcaças de carros abandonados	143	10.3%	11.1%	67	11.1%	2.1
Outros problemas	320	19.1%	25.1%	92	15.3%	3.5
Poda de Árvores	40					
Invasões de Prédios	32					
Saneamento básico	24					
Falta de Policiamento	23					
Outros problemas	201					

There is a correlation between
crime and disorder?

Why this is important?

Why crime is concentrated in specific areas?



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DATUM VERTICAL: MARÉGRAFO DE IMBITUBA (SC)

CONVENÇÕES

SISTEMA VIÁRIO
— rua/estrada/rod.

LIMITES
— limite municipal
— divisa de bairro

ELABORAÇÃO: Geogr. Miriam Torriço

FONTES:
Secretaria Municipal de Planejamento, 2004
Secretaria de Segurança Pública - SP, 2006



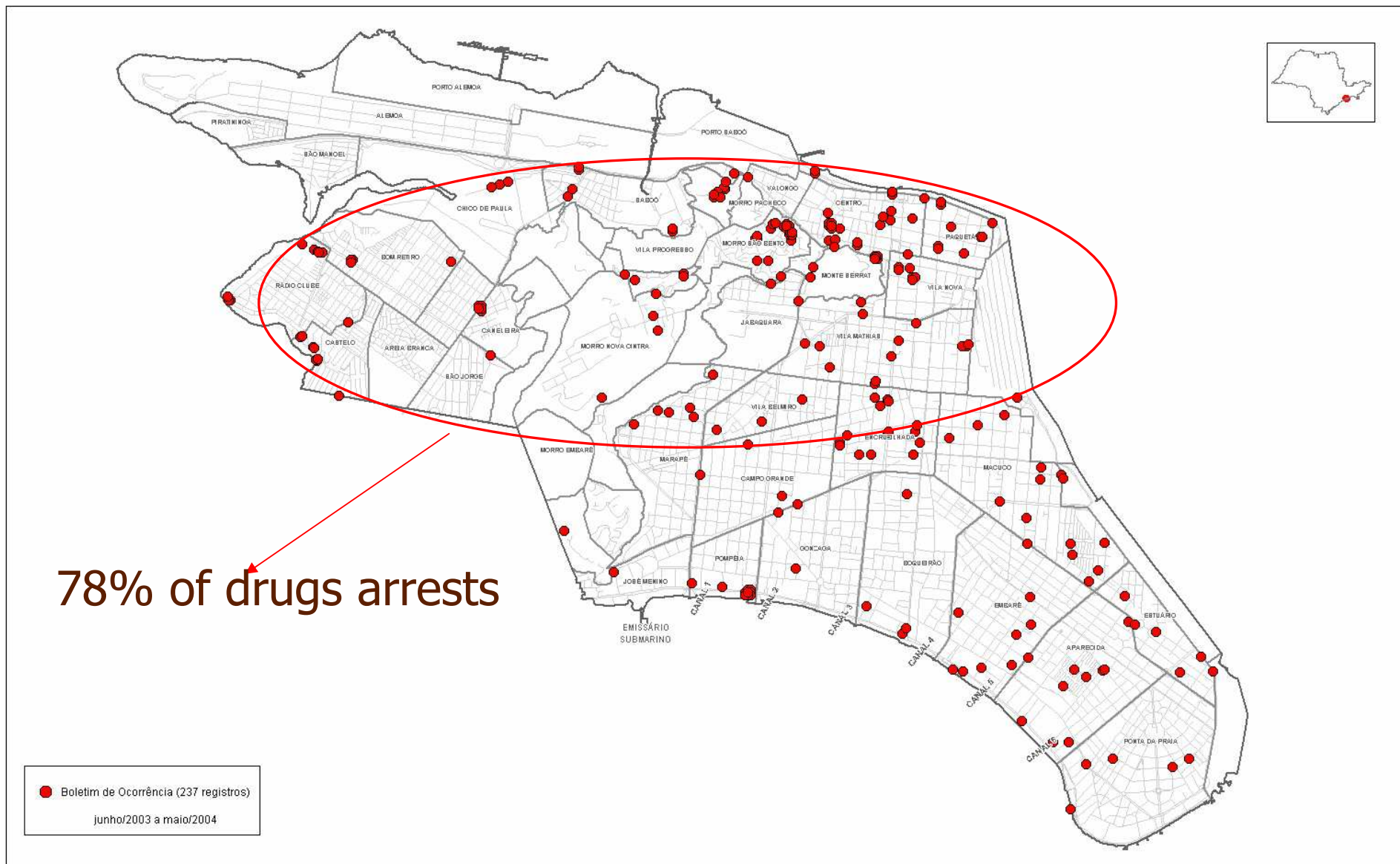
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HOMICÍDIO
2003/2004 - SANTOS-SP

Drugs Related Arrests



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DATUM HORIZONTAL: SAD-69 CHUÁ (MG)
DATUM VERTICAL: MARÉGRAFO DE IMBITUBA (SC)

CONVENÇÕES

— SISTEMA VIÁRIO
— rua/estrada/rod.

LIMITES
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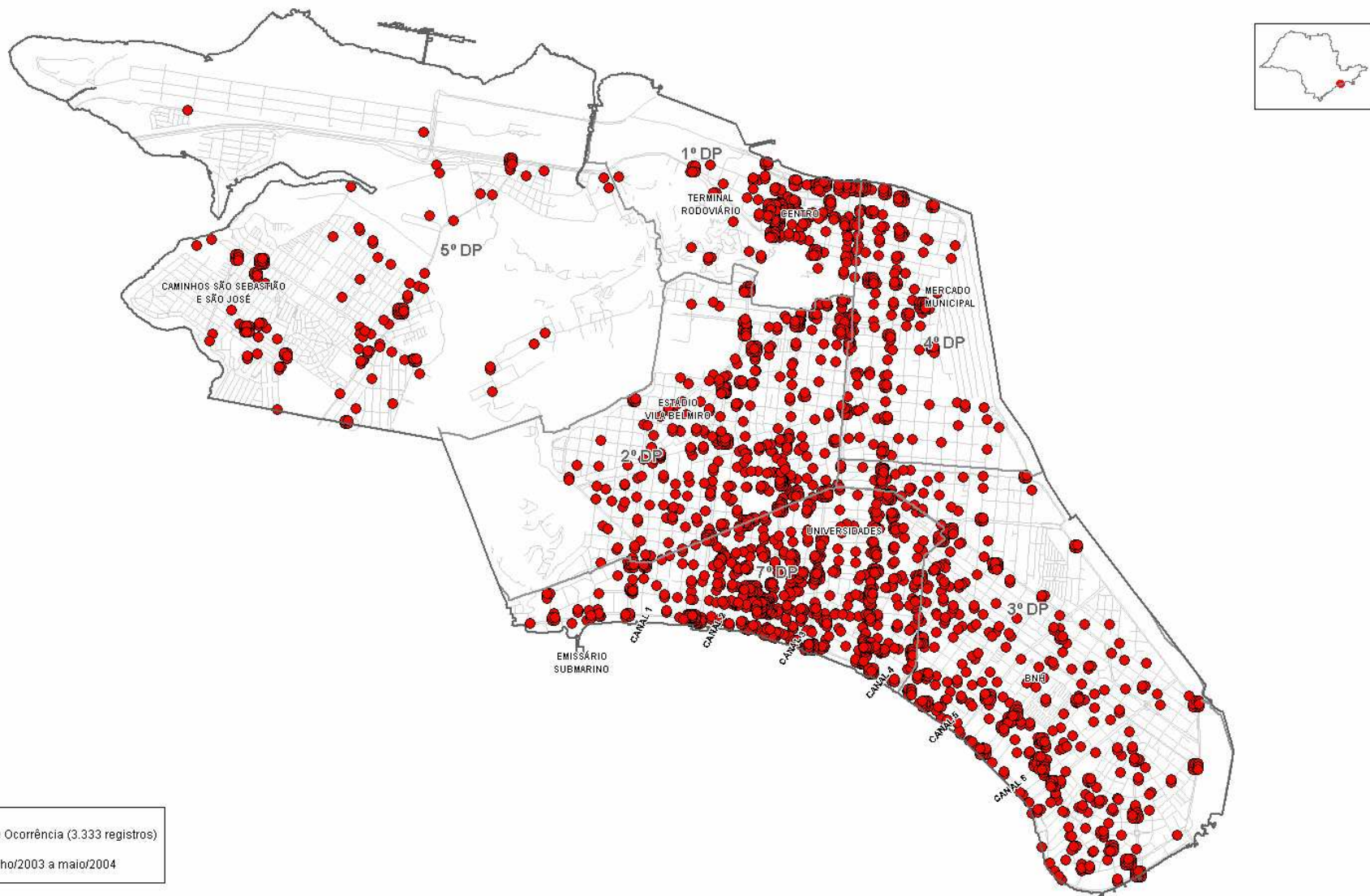


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**TRÁFICO DE ENTORPECENTE
2003/2004 - SANTOS-SP**

Roubo e Furto de Transeunte



● Boletim de Ocorrência (3.333 registros)
 Junho/2003 a maio/2004

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CONVENÇÕES

SISTEMA VIÁRIO
 — rua/estrada/rod.

LIMITES
 — limite municipal
 — distrito policial

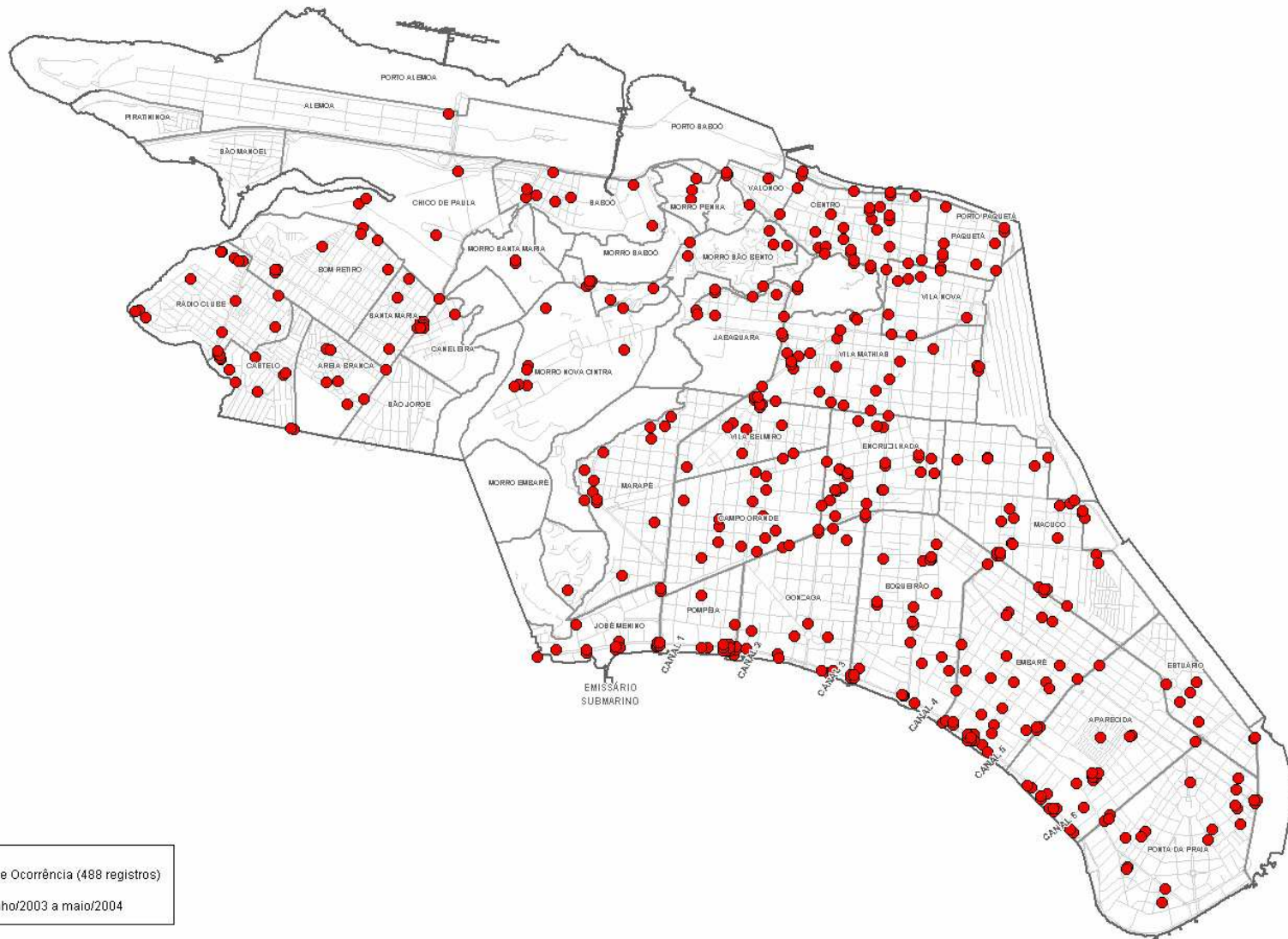
ELABORAÇÃO: Geogr. Míriam Torriço

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 Secretaria Municipal de Planejamento, 2004
 Secretaria de Segurança Pública - SP, 2006

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FURTO E ROUBO A TRANSEUNTE
 2003/2004 - SANTOS-SP

Ocorrências de Porte de Entorpecentes



● Boletim de Ocorrência (488 registros)
junho/2003 a maio/2004

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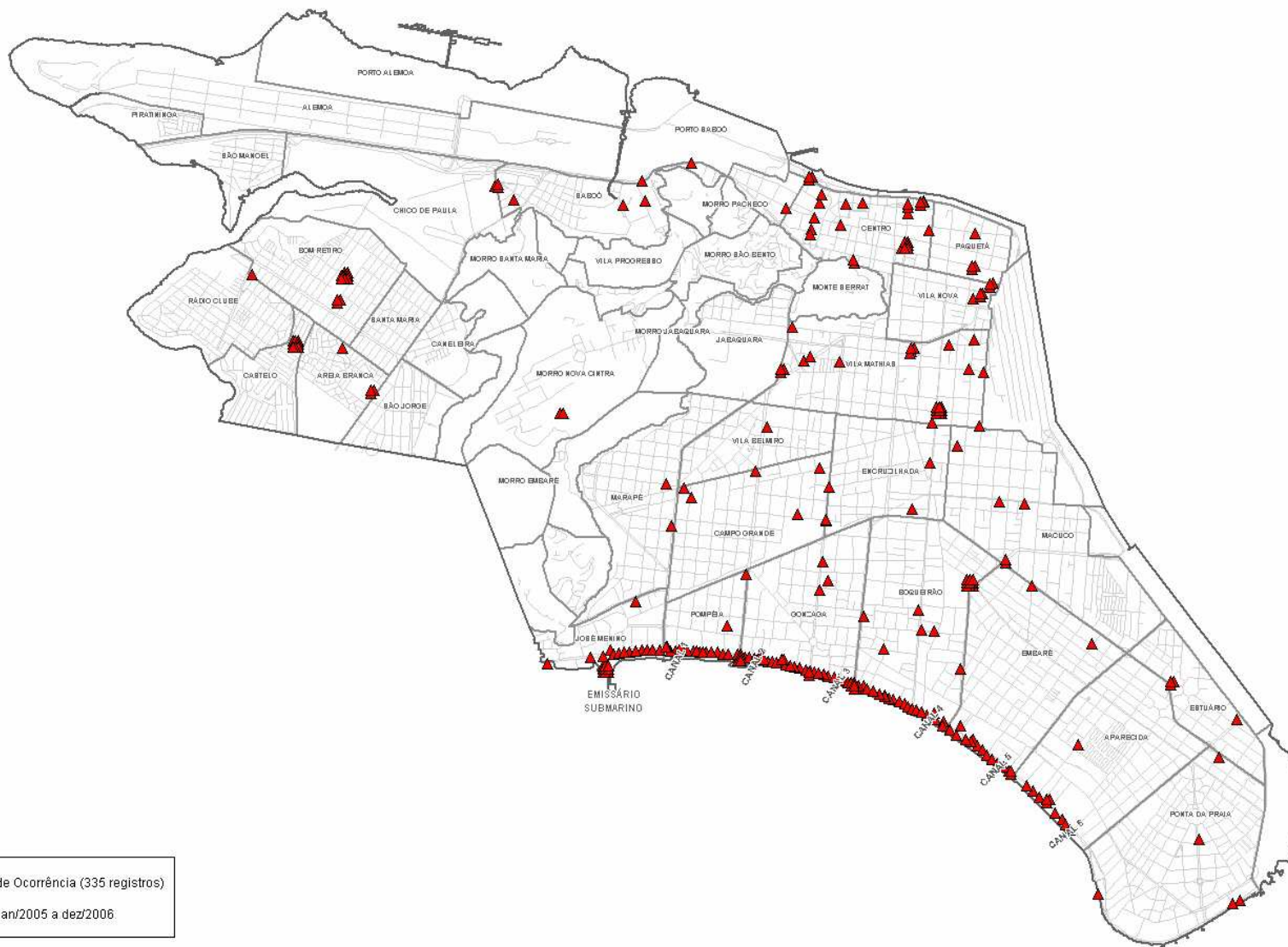
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**PORTE DE ENTORPECENTE
2003/2004 - SANTOS-SP**

Ocorrências da Guarda Municipal



▲ Boletim de Ocorrência (335 registros)
jan/2005 a dez/2006

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Secretaria Municipal de Planejamento, 2004
Secretaria Municipal de Segurança -
Guarda Municipal, 2006



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Secretaria Municipal de Segurança



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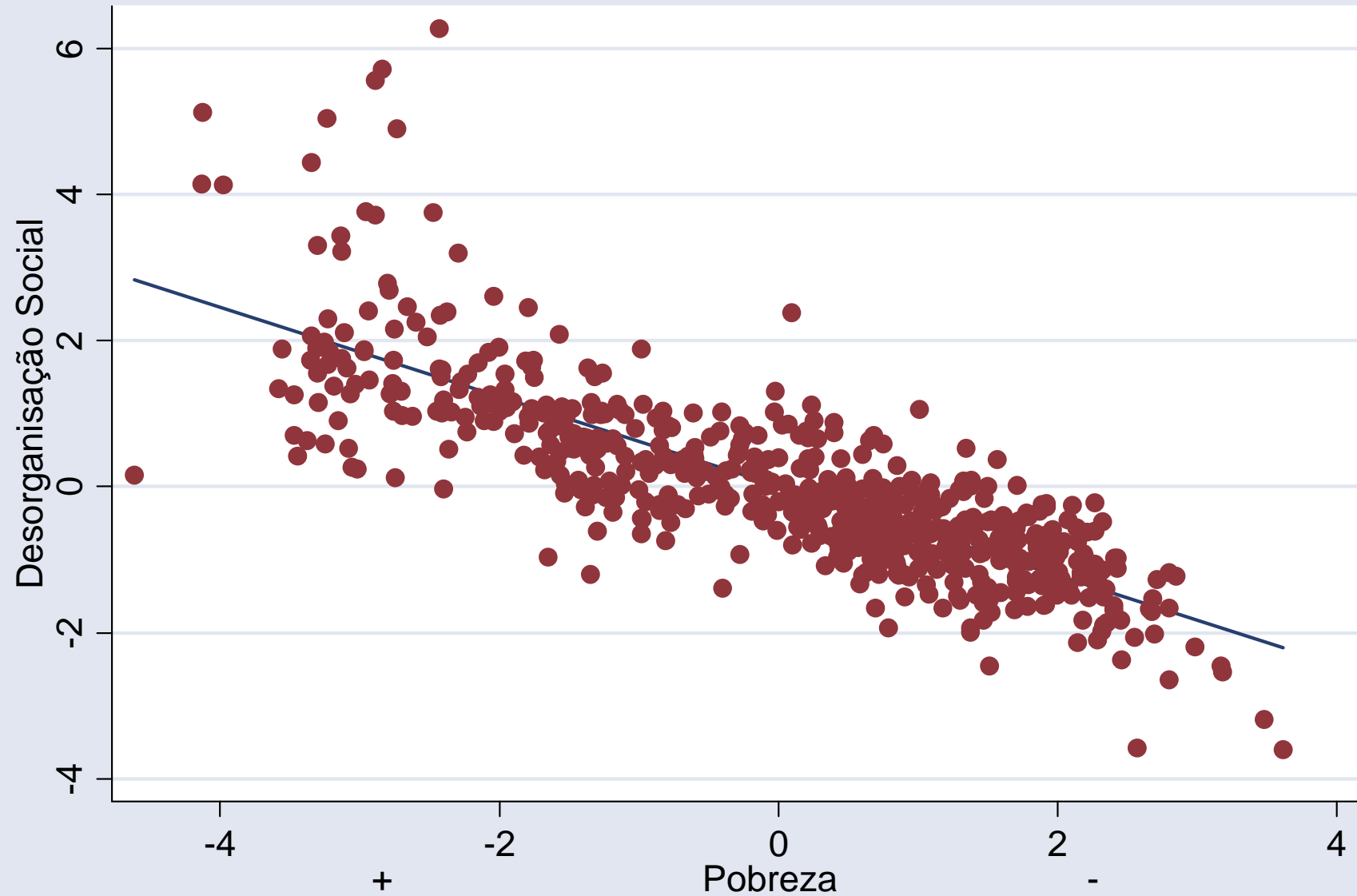
OCORRÊNCIAS TOTAIS - GUARDA MUNICIPAL
2005/2006 - SANTOS-SP

Disorder Covariates:

**Socio-economic Status and
Social Disorganization**

Crime and Disorder covariates

Correlação entre Pobreza e Desorganização Social



Poisson Regression Models

```

-----
Response Var. |           Robust
Explanatory |           IRR   Std. Err.      z    P>|z|
-----+-----

```

Alcohol Consumption

```

Social Disorg.   1.51712   .1193118   5.30   0.000
Poverty          .9386096   .0862151  -0.69   0.490
N                =         592
Wald chi2(2)    =        100.55
Prob > chi2     =         0.0000

```

Drug Consumption

```

Social Disorg.   1.488123   .1129594   5.24   0.000
Poverty          .9377963   .0815615  -0.74   0.460
N                =         592
Wald chi2(2)    =         93.35
Prob > chi2     =         0.0000

```

Poisson Regression Models

```

-----
Response Var. |           Robust
Explanatory |   IRR   Std. Err.   z   P>|z|
-----+-----

```

Young adults gathering

```

Social Disorg.   1.402077   .0986292   4.80   0.000

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Poverty          .9360394   .0791296  -0.78   0.434

```

```

N = 592

```

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Wald chi2(2) = 106.06

```

```

Prob > chi2 = 0.0000

```

Prostitution

```

Social Disorg   1.803092   .1684479   6.31   0.000

```

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Poverty          .8211762   .108354   -1.49   0.135

```

```

N = 592

```

```

Wald chi2(2) = 105.67

```

PRM for crime as response variable

```

-----+-----
Response Var. |                               Robust
Explanatory |                               IRR   Std. Err.   z   P> |z|
-----+-----
Drug Use(police records)
Model 1
Drug Consumption (disorder)   1.147113   .0315913   4.98   0.000
Social Disorg.                .8758498   .0791798   -1.47   0.143
Poverty                       .9745763   .0814(194  -0.31   0.758
      N = 592
      Wald chi2(3) = 40.96
      Prob > chi2 = 0.0000
Model 2
Alcohol (disorder)           1.164517   .032101   5.53   0.000
Social Disorg.               .8953409   .0747916   -1.32   0.186
Poverty                      .9861472   .0901679   -0.15   0.879
      N = 592
      Wald chi2(3) = 46.50
      Prob > chi2 = 0.0000

```

PRM for crime as response variable

```

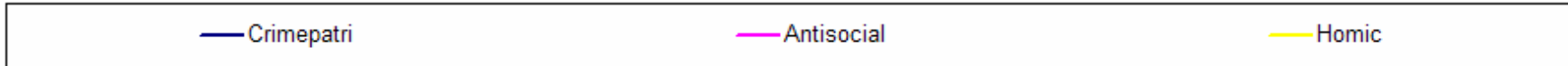
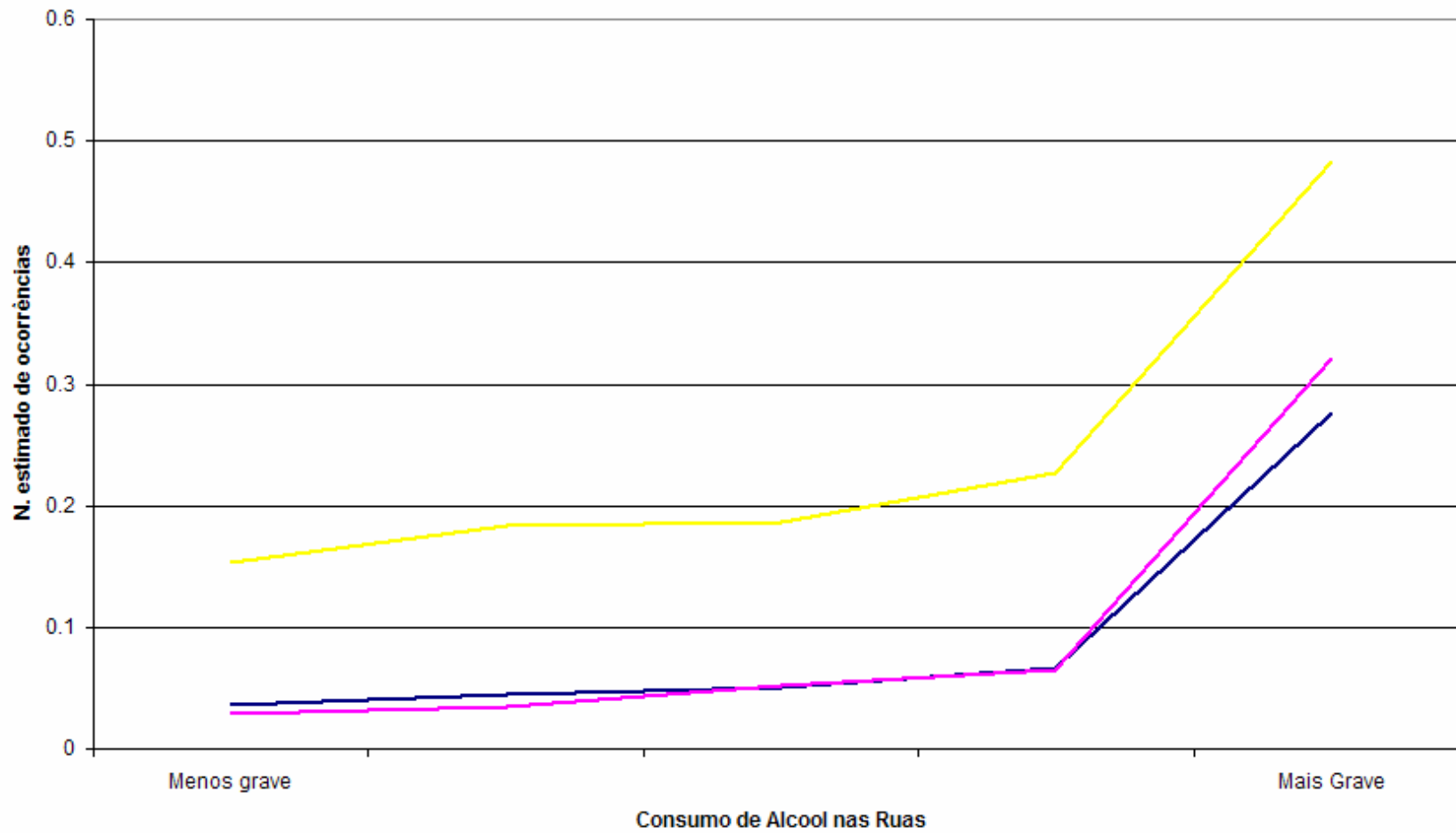
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Response Var. |
Explanatory |
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```

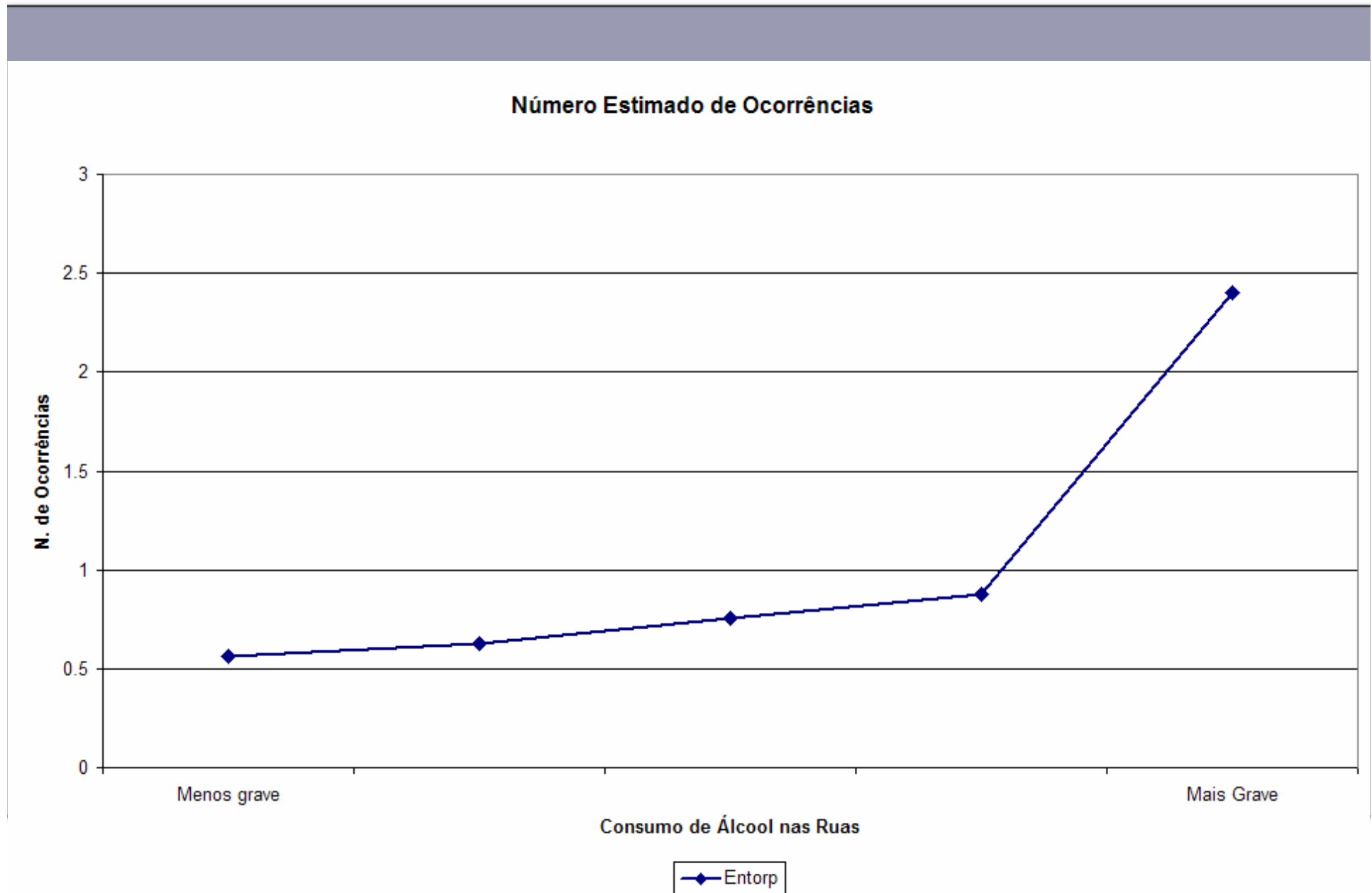
	IRR	Robust Std. Err.	z	P> z
Drug Dealing (Police records)				
Model 1				
Drug Consumption (disorder)	1.048949	.0321872	1.56	0.119
Social Disorganization	1.132813	.1113465	1.27	0.205
Poverty	.7594044	.0652951	-3.20	0.001
Model 2				
Alchol (disorder)	1.05821	.0364043	1.64	0.100
Social Disorsorg.	1.130873	.1105006	1.26	0.208
Poverty	.761982	.0665668	-3.11	0.002
N	=	592		
Wald chi2(3)	=	74.47		
Prob > chi2	=	0.0000		

Efeitos do Consumo de Álcool

Número Estimado de Ocorrências



Estimation of drug related incidents



Research questions

1. By controlling disorder, crime will drop?
 - Growing disagreement between Broken Windows and Collective Efficacy explanations.
2. What's the role of the community in disorder reduction policies?
 - How can we translate an abstract sociological concept into an operational guideline to field works?
3. What local government could do to control the problem?
 - Limited evaluations outside the US and UK (Anti-Social Behavior Act). The Cali, Bogota and Medellin experience where not evaluated.
4. Is that possible to control disorder without harm minorities, young people and the poor?
 - From "zero tolerance" to participatory approaches (UK's Anti-social behavior contract)

That's Not so Easy: Brazilian Street Carnival February



The Economist, July 14th, 2007

<http://www.economist.com/images/20070714/2807IR1.jpg>

