THE ARCHITECTURAL LEAGUE - CO

Architecture and Justice



Spatial Information Design Lab

Columbia University Graduate School of Architecture, Planning and Preservation



Million Dollar Blocks: Justice and the City

The United States currently has more than 2 million people locked up in jails and prisons. A disproportionate number of them come from a very few neighborhoods in the country's biggest cities. In many places the concentration is so dense that states are spending in excess of a million dollars a year to incarcerate the residents of single city blocks. When these people are released and reenter their communities, roughly forty percent do not stay more than three years before they are reincarcerated.

Using rarely accessible data from the criminal justice system, the Spatial Information Design Lab and the Justice Mapping Center have created maps of these "million dollar blocks" and of the city-prison-city-prison migration flow for five of the nation's cities. The maps suggest that the criminal justice system has become the predominant government institution in these communities and that public investment in this system has resulted in significant costs to other elements of our civic *infrastructure* – education, housing, health, and family. Prisons and jails form the distant *exostructure* of many American cities today.

Have prisons and jails become the mass housing of our time? How has the war on drugs affected incarceration rates? What are the differences between crime maps and prison admission maps? What are the relationships between prison populations and poor communities? Has incarceration become a response to poverty rather than to crime? What are the relationships between jailed populations and homeless ones?

The relationships implied by these questions become evident when criminal justice data is aggregated geographically and visualized in maps. The focus shifts away from a case-by-case analysis of the crime and punishment of an individual, away from the geographic notation of crime events, and toward a geography of incarceration and return.

The maps pose difficult ethical and political questions for policy makers and designers. When they are linked to other urban, social, and economic indicators of incarceration, they also suggest new strategies for approaching urban design and criminal justice reform together.

Information as Resource, Data and the City

We start with the idea that a city is not simply a collection of people or buildings but rather a network of relationships, a dynamic and often unstable assemblage of interactions and forces. Information about the elements of these networks – people, buildings and infrastructure, environment and landscape, wealth and force and effect – is constantly exchanged and produced within and between them. Information is the oxygen of the networks that make up our cities. All of us, and our surroundings, have been knowingly or unknowingly translated into data. Stored and recirculated and transformed, with and without our consent, information functions

independently of its origins, and its pattern of circulation and use is wide open – for better and worse. Information is a resource, local and global, regardless of whether the decisive factors in its use are its accessibility or its mode of presentation.

You may be a person, but you are not a citizen if you are not recorded in a database. This simple fact has given rise to an enormously complex politics of information access and visibility, closure and opacity. Civic, urban, and global networks today are formed not only of visible but also invisible information resources with concrete effects on our daily lives. Information builds and organizes most of the structures, policies, and landscapes of our cities.

Public
Health

Criminal
Justice

CITY

Housing

Civic
Institutions

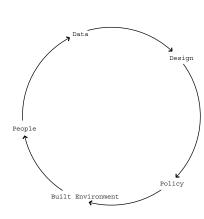
An indeterminate but powerful feedback loop is generated that links data, people, design, policy, and the multitude of spaces that constitute the built environment. As a resource, information can make visible the complex ways in which cities are organized, are built, and grow. But before we can work with data – make arguments with it, generate and resolve conflicts with it – we have to obtain it, which is often difficult, and see it, which requires its translation into visual images.

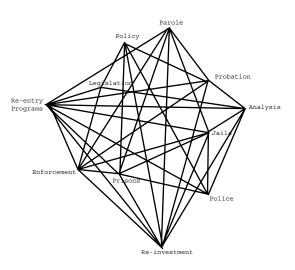
Architecture and Justice

The Spatial Information Design Lab's project on *Architecture and Justice* focuses on the alarming and unprecedented growth of the U.S. criminal justice system over the last three decades.

Growing with it have been vast archives of data; indeed, criminal justice in the U.S. today is a data management and mining enterprise. Criminal justice information is primarily used to regulate and organize the lives of individuals inside its system, playing its part in an institutional self-perpetuation.

Our project refocuses criminal justice information: we start from the inside of the city, rather than trying to leave it behind. Our approach is a spatial one because questions of residence and movement are at the unacknowledged heart of the criminal justice system today – where people live, where they go to prison, and where they return.





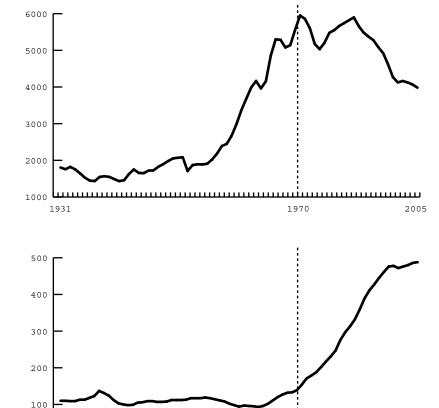
Criminal Justice policy is driven by a complex web of connected services and contingent systems.

Why Are So Many Americans in Jail and Prison?

Since 1970 Americans have been living in an era of what some have called mass incarceration, one of the "greatest social experiments of our time" (Travis 2005.)

1931

The crime rate in America over the course of the last century has moved up and down in a periodic wave. The corresponding rates, at which Americans have been incarcerated, look very different. In contrast to the periodic undulations of the crime rate, the incarceration rate has remained constant for most of the century. From



1970

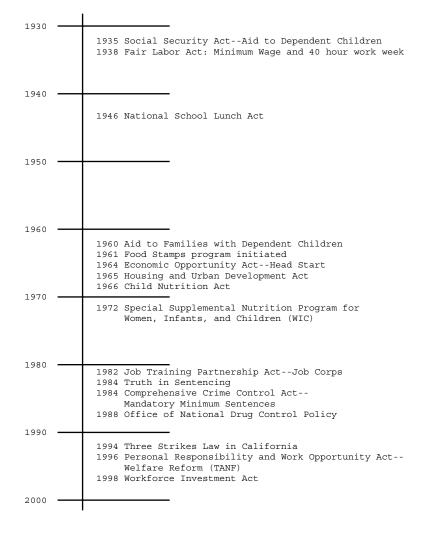
2005

Top: Crime rates form a relatively self-consistent wave of activity.

Bottom: Incarceration rates remain relatively constant until 1970, when a radical upward trend is driven by policy.

the late 1970s, however, it has been climbing rapidly. The result has been a tenfold increase in the standing prison population, from 200,000 in 1970 to 2,000,000 in 2000. How we respond to crime is a matter of values, decisions, and policy, all the way down to the most basic questions defining what counts as a crime. In

the late 1970s and early 1980s, efforts to fight poverty were systematically replaced by the "war on drugs," including the criminalization of most drug offenses – crime became the surrogate for poverty – and incarceration the primary response.



Poverty policy in the United States since 1900, indicated by major shifts.

From Data to Maps

There is no such thing as raw data. Data sets are created and designed even before they are visualized. All data are collected, processed, and presented for specific purposes and perspectives, whether or not we admit or suspect it. Information and data are created relative to claims, values, and arguments, structured by the situation of their designer and the reasons for their collection.

As a result, no data and no maps are neutral, and our project is no less purposeful: we want to interrogate traditional criminal justice data through the geography of the city. What can we do with this data? What images and stories come to light when we reorganize criminal justice data to emphasize urban infrastructures, rather

than give in to the traditional forms in which crime statistics are presented and utilized?

A criminal justice data set is most commonly maintained and presented as a list. It is designed to track people as individual cases. As individuals make their way through the system, information is entered into a database and accumulates: name, crime, length of sentence, home address, and so on. Individually, the information forms a portrait of a case; aggregated, the cases create a statistical portrait of a society.

When maps are made from data like these, they often stop at the very first element: what crimes were committed and where. 'Crime maps' have played a significant role in the public discourse on cities over the last thirty years. These maps have, in fact, become one of the most prominent

instruments through which we understand and interpret our cities.

According to the National Institute of Justice(2005), "mapping crime can help law enforcement protect citizens more effectively in the areas they serve. Simple maps that display the locations where crimes or concentrations of crimes have occurred can be used to help direct patrols to places they are most needed. Policy makers in police departments might use more complex maps to observe trends in criminal activity."

Mapping the data about the location of crimes has prompted successful campaigns to transform urban policing from a reactive, calls-for-service approach to a proactive community-policing strategy focused on so-

called high-crime locations. Crime maps collect individual incidents over time to identify "hot spots," places that can become the focus of intense police – and political – attention. As the N.I.J. report puts it, candidly if rather casually: "using maps that help people visualize the geographic aspects of crime, however, is not limited to law enforcement. Mapping can provide specific information on crime and criminal behavior to politicians, the press, and the general public."







Typical crime map, from www.chicagocrime.org

Criminal events, not people, are mapped to the city.

M DE COMMITTODO CAMBO ENTRE CONTROL DE M TOR CONTROL COMED ENTRE CONTROL O M TOR CONTROL OF CONTROL ENCOUS DEPONE OF	400 G () 0.000 Delet 41 (THE SEMESTER SOUTH TO	20 -00 88 -001 -001 30 -00 88 -001 -001 50 -0 4 -003 -008	17 0 0 5V GREEN-ST 17 0 0 SW GRANCY-NASH-BRILLIN 17 0 0 TH BIPGLAYUNG	101 10 10340 (1 1 Nov 101 0) 101 10 0/0550 (1 1 Nov 101 0) 101 10 0/0550 (1 1 Nov 101 0)	10 MACRES ST 01% T 64 27 MACRES SE	STORAGE SO IN
	Min o I o drom some in I	SACRES ST. ANALOG SPACE AND SECURITY OF	E E E SP 100	1		ST BLOCK See	ORDINSTE SYMMET
M 100 1 100 FMCCOCK II 2017019 7 177421 177421 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NYME	# 10 TEST BIR AND COS STREET # 10 COS STREET #	80 20 883 2874 7604 50 0 80 2071 1614 884 50 0 80 3071 1608 50 0 80 3071 1608 50 0 80 3071 1608 50 100 4071 16071 50 50 100 5071 7603 50 0 100 4071 7603 50 0 100 4071 7603	M. H. E. O. Res. AGG (High) DER 1 (HIGHE SHIP)	100 100		TREAD TREET AND AS CO.
M TEL THEOREM 27 MINOR BRYON OF	reso e c o casso serve e l	micolinewastil Boots in	N 1 N 101 1001 W	THE REPORT OF STREET AND ASSOCIATED ASSOCIAT	ALL OR DESIGN IN THURSDAY	763 00/607 III 260 W 0/21 07 Th Hollands IT	SECURE DISTRIBUTE
M THI THINDRAN IT MITTOF BATTON DEPOSIT OF MITTON CONTROL OF MITTO	100 C 1 C 1000 C 1000 C 1	67-00 TO MODARD IN BUT	10 M 10 M 10 M	IF D O TH CHMSAZODER METHOD	til til Kiljile i tlevetin (k	IT LICES SC	-000 MOSBURGLOF MALEK
M 401 (CGPMM ST 96140) (CANO SHOOL O	00000 0 1 0 11000 00040 at 2 00000 0 1 0 10000 0 10 0 0 00000 0000 0 10 0 0 0 00000 0000 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BIRD ALTHOUGH BEDGING IN	00 00 144 40°L 10511	of the contraction and	NO NO BORNO DI TROVINO DE	OF CANDS OF AN	TO RECEIVE SHE SO SO
## 101 00 Green 17 001001 00000 000000 0 # 178 40 470 4844 001001 18 4000 18 40000 # 102 40 170 170 184 00101 00000 0 # 102 20 187 00000 00000 0 # 102 20 187 00000 000000 0	METHO 2 2 0 NUMBER BOTTOT AN 2	1 SENSO SE CARROLLE SE SECTIO SE 1 SENSO SE TELECTORISMO SECTION SE 1 SENSO SE TELECTORISMO SECTION SE	00 00 M4 7001 100H 10 10 70 MPL 100H	ST 0 0 50 CRMSACCOUR, BUSINESS	NO SE SECULO DI TROPINO DE NEI SE SECULO DI TROPINO DE	NO TON DOO NOT	THE STATE OF THE S
M TOR DRAINERS OF TOUGHT DOUBLE CO	THE TATE OF THE PART OF THE PA	MARK SERVICE STREET STREET, SECOND SE	6 D 4 DE 100	ST D O THE CHARGES COMPLETED BY	50 50 EXAM 21 Thorse IX 10 50 EXAM 21 Thorse IX	20 100-0701 11	PROADE I SERVER
W TOR TORNACOUNT AND TOWNS THE COUNTY OF THE	MODE TO S SERVE MANN TO S	O SAME OF THE STREET OF ST	0 D 4 PF 100 0 1 D 10 PF 100 0 D 10 D 10 DF	E T D D TOATS LIE DESCRIPTION	\$1 MG \$2500 21 TBur NO DE \$0 BD \$2500 21 TBur NO DE \$1 TBU BBARD 21 TBur NO DE \$1 TBU BBARD 21 TBur NO DE	01 GARNS 07 60 91 10 AH 100 TD1 210 NB 201 1 32 505 RESPECTIVE 01 100 MACRIST 02 11 GARNAGE 00 11 GARNAGE 00	VECTOR DATE OF THE ACT
M THE THE LINES GAVE NEEDED TO SHEED OF THE CASE OF TH	MOTES TO O CREATE MARKET IN I	BOTO DE LEMANS AN PROCESS DE BOTO DES PORTE BOILS PROCESS DE BORRES DE DOMENTACION PROCESS DE DOMENTACION DE BOTO DE BO	20 0 10 10 10 10 10 10 10 10 10 10 10 10	If B O BY MEASURE BONE		220 LINCON BWI 520 LINCON BWI 520 LINCON	
M 76 R FOR DOWNSTRAM POWER POWER P STANDON STANDONS FOR THE PERSONS FOR THE PE	MOTION 10 0 GRAND WHAT DIT I SHAND 10 1 ORDER SERVE ST S MODEL OF S I KLAND SOUTH ST S	ORDER OF THE PROPERTY OF THE PROPERTY OF	E T B TT 100	SEC. 1 DA CHARACTER STREET	100 100	STO LECEN BWI SET PARK BYEN WE MAKE BYEN	THE PARTY AND PARTY AND PERSONS AND PERSON
S AND ASSESSED. CONTAIN MACHINE OF	ADDR Q 2 T KLAMB DATAS D 2 FORD 1 0 2 OTEMS BATS M 2 MIND 1 0 0 ONES BATS M 2	FOR CONTRACT BETTER TO SECURE TO SEC	0 0 0 0 00 1000 0 0 0 0 005 460 90 0 0 005 400 0 0 0 005 40	IF D. O. TH SUPPLIED OF	NOT NOT SECURE OF The Part OF	SH STREAM IN	TECHNICIPA (A) HIS
W TOR ON THE SOR, NOT THE BROKE SHOWER OF THE STREET OF TH		1 DATE THE LEWIS TO A PROPERTY IN	20 0 20 00 00 20 1 20 10 100 20 1 20 10 100	E V I D YDAM Law Dealful Grown 3F D D ZON CHAM FOR MEAN CHEST	100 00 0,000 0 1 thereto its 100 00 0,000 01 100-100 00 100 00 0,000 01 100-100 00	THE LEASE OF THE SER COMMISSION OF THE SER C	TRESTANTON ANY DISCHARGE TREATMENT OF THE REAL PROPERTY OF THE REAL PROP
M TOR THE LEGISLAND STREET BASIN DOCUMENT OF MERCAL DATE OF STREET BASIN	PURE TO O GLERN BEEN W 2 PURE TO O SIMBLE BUSINESS OF T SOURCE TO O CLERKE TOTAL ST. 1	Prints the Lineary At Broads in Date and Control of Broads in Lineary III Broads in Broads in Lineary III Broads in Lineary II Broads in Lineary III Broads in Lineary II Broads in Linea	20 3 30 304 3040 82 10 50 307 3050 80 50 800 3074 3050	TO DO SON CHARGES SEA ONE DISC. FOR COMMISSION SEA ONE DISC. FOR	10 10 1/580 31 160/10 18 60 60 24/40 31 160/10 18 60 10 10/40 31 160/10 18 60 60 16460 31 160/10 18	SEE CORN NO.	CONTRACTOR OF THE STATE OF THE
M TO 1 20 ILLUSTRATION OF THE STREET STREET OF	Manual 1 0 0 Gazana Bandan SI 0 Panga 1 0 0 Gazana Manasa 10 1	DESCRIPTION OF PURITY OF	8 8 80 BP 30H	17 A O SHI CHARGES CONTRACTORD	NO NO MARKS II Charles IN	SE BAN NO.	SCHELDS III server SCHEDNIC III on on
\$ 100.0 \$20.0000 (10000 \$100000 \$1000000 \$1000000 \$1000000 \$1000000 \$1000000 \$1000000 \$10000000 \$1000000 \$10000000 \$10000000 \$100000000	60*400 1 0 0 06*4404 306640 67 1 62*400 1 7 7 1140401 308446 60 1	DOMESTICAL PROPERTY	10 0 W 4Pt 100H 10 D 10 MPt 100H	SF B D THE CHAPTER CONTRIBUTION	NO. 40. KNEWS II SHOW THE DE- SE TO BUSING IN SERVICE DR	30 I I OT	TO HOSTEANDAINE SIN SIN
M TO R TORONOCIUM TROUGH DOWNS OF AN TORONOCIUM TROUGH TROUGH OF TROUGH DISCOUNT OF TR	PERSON TO CO. OCENSO. DESIGN TO C.	1 TORREST SPERMENT STATE SPECIAL STATES	60 50 75 5474 10011 60 50 70 5874 1608	SF D O THE CRAMPOSE COMMUNICATIONS SF D O THE SEMPLATFORD SF D O THE SEMPLATFORD	NO NO KNEED IT Thousand IN	NO MYCRE DE LES PERSONNES DE LES PERSONN	TO SEPARATE THE RESERVE
M TO R TORPOWELLTS TERCOPA BROOKS PRODUCT OF M THE OFFICENCY METERS FOR THE OFFICENCY OF THE OFFICENCY CONTROL CONTROL OF THE OFFICENCY CONTROL CONTROL OFFICENCY OF THE OFFICENCY CONTROL CONTROL OFFICENCY OF THE OFFICENCY CONTROL CONTROL OFFICENCY OF THE OFFICE	MERGO 1 0 0 GABASO MERAS SI 1 MERGO 1 0 0 FEBRUS MERASO SI 1	Supplies DE Build SHE	60 20 75 2040 2044 60 20 75 2040 1056 70 10	## 0 0 4m (Bentan, Origin, symithm 1	100 100	28 FOREL E 84 DON'T HIS 10 EAST-SEE HI 11 DASC HI 265 NOS SH ST 265 NOS SH ST 265 NOS SH ST 265 NOS SH ST	TO CONTROL TO LOS SE TO CONTROL TO LOS SE TO CONTROL TO LOS SE TO LOS LOS
## 100 CANNESS ## 151704 EMBELS DEBUSED ## 151704 ## 150805 ## 151704 ## 150805 ## 151704 ## 150805 ## 151704 ## 150805 ## 151704 ## 150805 ## 150	1990 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CYCOCHESCS SI SCOULS IN	60 50 68 691 190H	IF 0 0 6H CRMSACOURS SHITING	NO NO DESCRIPTION OF	ST BASE, ST STEEL ST	1000 A COMPANY BATCHES SECTION 1
	SPHID TO O CERTIFO SOMESTINES IN	BERGIN ARTER OF BOOLS IN	60 60 601 601 100 M	EF A O SHI COMPOSICONES SUSSICIANO	NO NO CRND I Thorne OR	201 MV 279+ 27 197 NSS SH SI 193 E MRY 7090	10501.0RHG-RV59U 00:00
M 75 R GADRIGHTON HYDROXI DISEASE DISEASE OF M 101, 15 MARCH AND 15 MINOR DISEASE OF DISEASE OF THE TAX OF THE	6040 1 0 0 0'880# K/407 5# 1	HISOGRAPHIC BOOKS IN	00 10 31 (se) 100H 00 3 40 374 700H	SF 6 0 6H COMSACCONTAINENSE	til til indetti til therete de	64 BOOKEN DA	10 SCATTER ST DELINE 100 SFEE AVE MANNE
M SEE COLUMNIC TREES DEED TREES OF	espino ne i go camino denser de l'	TOTAL TO MARCH PARTIES BROAD IN 1 STATION SCHIESCOLINE BROAD IN 1 SUBSIN SUPPLIES BROAD IN	20 42 44 402 1403	EF D. O. THI BERGLIGHTSED EF D. F. BY POSSETS JAC.	AS AS MADES IN COURSE ON	OR ATTEMOS INC.	100 HOOK STORY NAME OF THE PARTY OF THE PART
M TOR 100 DESTRUCTION AT 170 DE CHARLE CHARLES E 1 2 4 CONDECTOR 170 DESTRUCTION SHOULD SHOU	4010 5 0 0 118401 MONE W 2	TODG TAMPC PARKS BCG1/4	0 0 4 40 00 000 0 0 4 40 00 00 0 0 4 40 00 00	If A O the COMSACCOURS SHEEDS	10 40 Kento II thorns in	64 BOOTS 166 667 667 667 667 667 677 677 67 67 67	100 PG AVE server 100 RD OCT STORET NO NO 100 RD OCT STORET NO NO 100 RD OCT STORET NO 100 RD OCT STORET 100 RD OCT STOR
M TED 1291-0909-00 1281-001 208001 2080010 0 M 408 2089-20801 209-008 209-008 208008	THE PARKS WHEN D. I. I. DRICK TO S. DRICK	SOURCE HE LINCOLNE BOOKSTR IN TOTAL TOOLST HOUSE IT BOOKSTR IN COURSE HE DOCUMENT IN IN COU	0 0 4 00 000 0 0 0 0 00	AT D O DE GRADLANDRILLEY	61 61 E-66 2 1 16-16 55 61 61 E-66 2 1 16-16 55 61 61 15 16-16 15 61 61 15-16 11 16-16 15	ST BENDEN SE	TREATMENT AND
M TO R TOCKWOOD IN TORONO SWITCH TOWARD IN THE SET OF TOWARD IN THE SET OF TOWARD SWITCH TOWARD STATE OF TOWARD SWITCH TOWARD SW	MANUAL TO COMPANY MATERIAL TO CO.	DAMES OF SECURITY STORY OF	40 1 4 10 WH		NO NO DESCRIPTION OF	H DOMON III	TETUTO DETRACTO ACE SO SO TEMPO ACCUSO DE UM
N 40 1 STATERALL TO ASSESS STREET TO THE STATE OF THE STA	THE CAPPE NAME OF THE OWNER.	STATES STATES OF	0 0 0 00 000 0 0 0 00 000	AF U O SH ONMARRODER SHITTED	THE RESIDENCE AT THE REP. LEW	25 FERR 1 81 COVER 1	SECURIORISTS AFOR OF SECURIORISTS AND AND
M TO R INSTALLOR II TOTAL ENGOS DIRECTOR OF MARCH PROPERTY OF THE PROPERTY OF	AND THE PARTY STATES OF T		87 F 8 PL WIT	17 10 10 10 10 10 10 10	10 10 10 10 10 10 10 10	150 FELON 15 100 HORSE D 101 MINUSTRAL 40	THE REPORT OF THE RESIDENCE
M THE PERSONNEL PROPERTY OF THE PERSON NAMED IN	HOR O I O HOM DAN # 1		D 10 N 10'S 10'S D 10 N 10'S 10'S 10'S	IF B. 1 THE CHARGES COMMUNICATION IN FOR STREET COMMUNICATION OF PROPERTY OF THE PROPERTY OF T	NO THE BOTTON IN THE PART OF T	461 1077 64	70/24/19/25 81 00:00
	MATERIAL TO THE CONTROL OF THE CONTR		D W S W1 WS	THE THE CHARGE CONTROL OF THE THE CONTROL OF THE CO	10 10 UP10 3 1 Series IX 10 10 CORD 31 1 Series IX 10 10 SERIES 31 1 Series IX	STOR BESTER AND AND ADDRESS OF THE PERSON NAMED IN COLUMN TO A PERSON NAMED IN COLUMN	TOTAL STATE OF THE
8 8 GECHMENTARO W GTORN F BRIGGO DIRECTO M M 100 R 1544 CAMPILL DF TRETOL SHRIPE DERIVED OF M 100 R 00 DATHWIS AVE 125 TORS D SORTAN SORTAN M 151 TOS AMPRILO SAVERT TRESSEY SYMPOS SOMPOSI OF	STREET TO O DESIGN STREET IN T	CONTRACTOR STORY OF THE STORY O	6 10 40 101 101 100 60 1 40 101 1001 100 60 40 101 401 1001 10 40 101 401 1001	A Y O O TOAR LE-DISTRICTION	50 10 00100 21 184-10 18 50 10 1666 21 184-10 (8 50 10 8050 21 184-10 (8	TO MPCSS MESST	March IALEAND Conce.
M IS 1. TO MARKET SHOWN THESE P. STANDS CONTROL OF	MORE TO COMMENT TRANSPORT OF S	MODEL TO MATERIALIST STOCKER IN	60 0 40 8FL 1860 00 40 10 400 1008	ST 0 0 BY CHMPOSINEARD RECORDS	NO SO MARKS IN TRACTOR OR	101 MPCSS SATISTY ST NOST HITER	YOUR DESTRUCTION ON THE PROPERTY AND THE
M 101 OTEMPTE AN TORNEY MADE MADE S	PRODUCT TO T A COLUMN CONTROL OF T	DISCONSTRUCTOR STORY IN	0 23 0 001 1001 0 10 0 1001 1001	SF D O SH OWNERCOMS SHIPS OF D O SH COMPANION SHOWS SHOW THE SHOW	\$1 10 1750 1 1800 10 18 60 10 0010 1 1800 10 00	STO MATERIAL AND	MACHINGS, IT we see MONTONELIS AUC OD OD
M TO L DESTRUCTE TOURS DESCRIPTION OF M TO THE OWNER OF THE PARTY OF THE OWNER OF THE PARTY OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER	CHIED T I A CLETIC BURIES AT I STREET TO C CLETIC MONTHS AT I	1 (0.0700 31757 4.040 Big. 9) (0.0700 310 Big. 9) (0.0700 310 Big. 9)	60 M2 M3 M24 M25 M25M	If a contract contract of the	TO THE PURSUE IN THE PART OF	61 ACCUT Reper 610 MYTHUS AN 610 GENERAL RI 261 STA AND 661 DACK RI 110 DE CED AND	SCHOOL STATE OF THE PARTY OF TH
M. 5.1 - 50-Membra (Membra - 5000000 - 500000 - 500000 - 500000 - 500000 - 500000 - 500000 - 5000000 - 500000 - 500000 - 500000 - 500000 - 500000 - 500000 - 5000000 - 500000 - 500000 - 500000 - 500000 - 500000 - 500000 - 5000000 - 500000 - 500000 - 5000000 - 500000 - 5000000 - 500000 - 5000000 - 500000 - 5000000 - 500000 - 5000000 - 5000000 - 500000000	1 19 SASSE COUNTY OF C C C COSMO	military	20 1081 30 2775 1828 50 8 80 805 2868	1	10	19 DE CR. AND 1914 2010/25 D	TO GRAND ACTOR ON STREET, THE STREET, ACTOR STREET, ACTOR OF STREET, STREET, ACTOR OF STREET, STREET, STREET, ACTOR OF STREET, STRE
M TO A CONTRACT OF THESE DAYS DAYS OF	ACTION 1 O O MARKET MARKET IT I	TOTAL SERVICE AND ADDRESS OF THE PERSON OF	00 0 00 101 1000 00 0 00 101 1010 00 10 00 101 101	THE D BY PERSON CONTROL OF STREET	10 10 1400 H 16410 (1 10 10 ENIO H 16410 H	AND DATES AND THE PARTY AND TH	THE DAY NOW YORK HAVEN
W TOR DEPART AND TERROR DEPORT OF THE PERSON	THE T I GIVE SHEET IT	TO STORE BEFORE AND STORE TO S	80 MS 100 MPL 10035 80 MS 100 MPL 10035 30 YG 80 WFL 10036	THE R P. LEWIS COMPANIONS OF STATE	NO. SO. SUPPLY ST. THOUSEN DR. NO. SO. SUPPLY ST. THOUSEN DR. NO. SO. SUPPLY DR. THOUSEN DR.	SEE PARTY AVE	TROUGHT WITHOUT HERE
M REL MANUSCRAFFUR TRANSC MINER MINER OF STREET	MONEY OF A CLEAN WHAT HE I	Statement and according and the second con-	D D S NO MON MAN	SF D. O. BIN CRIPTIPOVALISTIF PROPI \$000	101 00 001460 31 1 how not 30 101 103 107460 41 1 how not 00 101 103 107460 41 1 how not 00 101 101 25546 61 1 how not 00 101 101 25566 01 1 how not 00 101 101 100660 01 1 how not 00	NO MODELLE AND	WHITE THE PARTY OF
100	1100 1 1 6 GENE MESS U 2	PROPERTY OF STREET OF STREET STREET	00 20 52 80% 80% 00 50 69 80% 80% 00 8 8 80% 900 00 8 8 80% 900 00 8 8 80% 90%	If D I TY BINGSHOUSE	Tell	61 ACCORDE ME 60 MORE OF 66 PROPERT PAR 70 ACCORD NO. 31 PROCESSORY NO.	WEST STORM WE HAVE
A THE STREET, WIT THROUGH THROUGH THE	MODE TO COMMENT WASHINGTON TO	TOTAL STREET, AND SPECIAL STREET, STRE	0 7 9 91 93	AF E D IN GRADLANDERSTE	NO TO BOTH IN THE THE RE	SE PERSONNY NO.	THEN CONTROL IT HAS BEEN AND ASSESSED.
	THE STATE OF THE PARTY OF THE STATE OF THE S	1. SARREST WINDS BEDSTALL	6 18 80 10 L WH	ST C 1 MIL OWNERSCOPPERATORS	17 No. 34507 21 Thurston DK NO. 140 14508 0 1 Section DK NO. 150 16518 21 Thurston DK NO. 150 26618 21 Thurston DK	SH'S LINCON BLYD 2% JAMASCO SHI SET MYDERAL SHI SET BOSTFORD SHIE	VEHICLEOFF STREET
M SEL CHICEPOD AND COURSE MAKES MAKES OF	tran o 1 1 mane anno 4 1	STATES OF SCHOOL STATES OF STATES OF STATES OF SCHOOL STATES OF SCHOOL STATES OF STATE	0 0 0 00 WH	1	NO TO MANUAL DI TRAVERS DE GI GE BRANC DI TRAVERS DE	ST STEEL ST	THE CAPTULE TO A SECOND STREET OF SECOND
N TOTA TOTALISATION TOWARD DIRECTOR TO THE STREET OF THE S	Man to o Hand Man U 2	HARD STANDARD OF STANDARD STAN	D 1 8 15 WH	OF BUILD AND PROBABILIST	ALL OF TRACE I Thought IN	TOTAL MARKET NAME AND ADDRESS NAME AND A	TO DESCRIPT AN ADDRESS OF
S S NO-SECTION AND ASSESS DESIGN OF THE SECTION OF	ACRES TO O GRAND MARKS IN T	COTTES SONS FOON SCHOOL/N SHOOK ITS IN CONTROL NOS SCHOOL/N SON SCHOOL/N SHOOK ITS SHOOK ITS SHOOK ITS IN CONTROL NOS SHO	40 1 41 101 1001	IF 0 I BY SIDMAND	107 50 80807 8 186410 108 101 100 00540 8 1864100 08 101 10 20540 21 186410 88 80 00740 2 186410 88	NO POWER OF	TTS AT AFTIC AFE OF OR 100 PROSPECT PLATOR OF 10 SCHOOLST FIRST OR 10 LIFECK ROSE OR
	1700 1 0 0 0000 0001 30 1 1700 1 0 0 0000 0001 31 2 1700 1 1 0 0000 0000 00 1	1 BOSES TO PORTURE OF SPECIAL PER PROPERTY OF SPECIAL PROPERTY OF	20 3 30 305 505 30 10 30 405 305	SF D I BY MORROW DAD	ASS ASS COUNTY I SECURE AN	THE PLANT IS THE BUILD IN	SOLUTION NOTION AND
# 100 R TERRICALO-Ne TRATAL DIRECTOR DIRECTOR # 100 R 201 (20170300 ev 201701 104001 104000 # 100 R 301 (20170300 ev 201701 104001 104000 # 100 R 100 R 100 R 100 P 1	6000 1 0 0 00000 M580 0 1	GREEN BY FLOCK STATE PROSEIN BY	0 1 4 10 000	1	200 200	DESCRIPTION TOTAL TOTAL	GOUSECH ROSE SE SEPTIMES IT SEE SEE 100 AUGMENDE ROSE SEE SECURITIES IT SEE SE 40 SHAPPING AT SEE SE 100 VEST TOTAL SEE SE
M 101. 000 WOFK OF 15800 N DOUGHT DOUGHT OF THE OF T	4590 1 0 0 0000 4510 6 1 1700 1 1 0 0000 8786 6 7	STREET ST	50 8 60 801 904 30 8 30 301 903	If 5 0 5v G00850-8F 2F D 1 6v R00889-98D	10 10 1400 I 15010 II 10 10 IV. I 15010 II	SHS WOLL IL	100 STREET TO THE HEAVE
M TO B TO FLATORISH WE W TARREST TOWNERS CONCERN CO.	M200 5.0 0 MANUE 80/186 0 1 MANUE 7.0 0 MANUE 808/86 0 2	STORY STREET, STORY STOR	D 0 8 00 104	E Y O O YDAN Largestin form	NO. NO. ORDER DE LINEATON DE NO. NO. ORDER DE LINEATON DE	SE CATALON OF W	WHEELTH Famous
M 101 000 W 074 01 150 W 00000 000000 0 M 101 115 AVE 1 150 W 0000 000000 0 M 101 00 0000 AVE 1 150 W 1 10000 000000 0	MONRO 1 O O GRANDO MOTARI SI SI MONRO 1 O O GRANDO BUTANO 21 S	0.000 20 FUFE 00 AS N PCO 1/A III 0.000 20 W(X) + 17 PCO 1/A III 0.000 10 W(X) + 17 PCO 1/A III	60 10 40 101 1004 60 23 50 1005 7005	IF B O SV GOODSTAND	NO NO INDIANO II Thornton OF	565 W 971 07	1011 CORDINESTER RESIDENCE
	NOTES 1 O O ORDER CHESTS 25 O	10 (100 17 / 4 (100 1) 10 (100 17) 10 (100 1	50 B dd 101, 1004 dd 23 88 8074, 1004 50 90 60 601, 1004 50 80 60 604, 600 50 10 8 401, 1006 30 10 8 401, 200	IF B O BY ASSAULTST BOOKS IF B I IV BURGER BOOKS	NO NO DEVEL IS NEAR ON THE	OR FEELING FL.	100:00/08/SUA ST 66066 200:100:53/80 SU 66066
100 000	NAMES IN C. O. METRO: SCHOOL IN C. SCHOOL IN C. S. SCHOOL IN C. S.	1 STOLED STREET BOOKS IN	0 40 H 401 658 D T B TT B	# F E O ON GRADUARDSYLATE # Y I O FDAID Lair Delated from	NO NO DENNE DI TROPRO DE	### BOUTH 0 III. ### UNFAFETTE INTE \$14 BLTON III	190 Own 197 th OT Sea Sea. 2006 OCCAN AND NOTICE
M SEE SECTION OF THESE DESIGN CONTROL OF	MANUS 1 0 0 ORDERS MANUS OF 2 MANUS 1 0 0 ORDERS MANUS OF 2	MODELLE MODELLE MODELLE IN	D 0 N 071 W	27 A O TON CHAPPING COMMUNICATION OF THE COMMUNICAT	TO THE MARKET 22 1 Barrier DE 160 HE MARKET 23 1 Barrier DE	SE DEARWAY W	200-DAST TO STREET AND
A 2 STATEMENT ST. SANGER BORRY SORGER OF	ASSESS TO S CHARGE VALUE IN I.	T REPORT OF PLANTING BY THE PROPERTY OF	80 0 10 107 107 1 60 1 4 17 101	SF 0 0 NH CHARGE COMMUNICATIONS	NOT THE MARKET IN TRAVELLE IN	THE FLORIDGE OF	DEFEND OF SERVICES
	COMP 1 0 0 OFFICE STATE OF THE PARTY OF THE	DYTES TO ENGINEERING DECKLES IN COLUMN TO SECURIZE TO	E E S ES ES	ST D D NO CHARGE CONTRACTOR	NO TO DESCRIPTION OF	TO STREET D	SELECTION OF THE PROPERTY OF T
M 40 4 TM-HBV B MADDEZ STARTS STARTS M M 101 475 979 A/E 150009 STATE STARTS OF M 401 DECEMBER MADDEZ STARTS STARTS OF	MORE TO 1 0 OWNER SPEED TO 1	T DATED AT THE AND SECURITY OF STREET AND ST	E W N NO WO	OF D 1 SY RESERVED.	10 10 10 10 10 10 10 10	THE STREET, THE ST	THE PROJECT OF SHARE
M TEL 40 VITAM D 100 TE A SHADE SHADES TO M TEL 11 MOST ON HIS HOUSE SHADES SHADES OF	THE SHEET CHEET O C C CHEET	1 DOMESTING AND SPECIAL IN	60 1 40 191 7010 80 1 30 191 914	If C O by Hamman (In)	No. 50 TABLE I TRUE NO. 16. NO. 60 GROSS AS TRUE NO. 16.	400 AYEAA 20 H HARPER ME 28 BAST D 20 SEC APPARE D	TO VEST MY STHOLO PERSONNEL WE SHARE
M TO A DURITY IS NOADO DIMENS DIMENS DI	METER TO D ORDER HERE ST D	BISSES REACT 17 2796	D 1 R 15 WH		NO TO TANKS 23 Through its NO TO MANN 2 Through its NO TO MANN 21 Through its	DE BATT DE DE	SECTION OF STREET AND ADDRESS.
M 101 201 ACRES 6 1010 0 1040 1040 1040 1040 0 1040 104	1000 10 0 0000 1000 to 1	BUSINESS LASTA BUSINESS BUSINE	90 W OF WY TOWN 40 3 4 30 100 50 1 W 50 000	17 0 0 TAX CHARLAGED R. BARTINE 17 0 0 TOV CHARLOS MENTS (NOCEONE)	NO TO ROBER 25 TRAVERS OR	TES LACAS BUT ES MANNAGON TES MANNAGON MIS	1000 BEST CRECIONAL IN 100 CO.
	60'00 1 0 0 158'00 (5.000 51 1 8'000 1 0 0 158'00 (5.000 6')	1000 1000	50 1 80 101 100 100 1	TF 0 0 0V ASSAUTTS BORES	NO TO MAKE IT THOUSEN ON NO. 40. 40. (AMADE I THOUSEN ON	100 APRICES HIS 101 101 101 101 101 101 101 101 101 10	2001 PEDET RATE BY NO HAR 2014 DRIJET MET DIG GO
M 101 A 000 YET 10 YOUNG TO REPORT TO BE ONE OF THE OWNER OF THE OWNER OF THE OWNER	MORE TO 0 NATION MATERIAL ST T	1 SETTED THE WICKSET AND SPECIAL TO 1 SHEEDS SHIS MORESTEEN AV. SPOOLEN TO	40 I 40 IOL 1004	SF D I TV BRIGHRY NO SF A D THE CRANDAU CHER, BURTONS HF D I SV ROSESTA-SF	55 50 MANUEL S 1844/00 DK 40 40 FARIO SI 1844/00 DK	SES HOMEOGET IN	
M TEST MERCHANT NETRED BREST SCREET OF MERCHAND NO.	PRED TO 0 SCHOOL TARRES N. S.	TO TROTHER ENTREET BELTON OF THE PROPERTY OF T	6 61 48 461 W	ST A O TL MUNICIPALITY FROM	NO TO SENSO 23 Thoronto DE NO TO COMES & Thoronto DE	0 0.000 P.	DESPACED STREET
10 10 10 10 10 10 10 10	1700 10 0 N/00 M/00 1 1	TOTAL STANDS OF	90 0 80 971 9000 70 0 80 971 9000 70 0 80 875 9000	6 Y 0 0 10 Min LavOelamin Nova 37 C 0 80Y CHARGE MARCH-DISCOSSIBIL 67 D 0 TH (HIGGAR) 80 87 D 0 6Y ASSASTORD	100 100 120 120 100	SE THORN NE.	1501 UPDERVIOLET Frames
S THE STANDARD THE THREE DATES OF THE STANDARD	ACTION TO C STATUS STREAMS OF ST	The control of the	D 0 M NY 900	FF D D BY AMALOND SAMPEDS FF D D SHI CHMING SAMPEDS FF D D SHI CHMING COFFE DISTORD FF A D I SHI CAMPACE COFFE DISTORD FF D D SHI CHMING COFFE DISTORD FF D D SHI CHMING COFFE DISTORD FF D D SHI CHMING COFFE DISTORD	10 14 MOS 1 1 North 16 10 14 MOS 1 1 North 16 10 10 MS 0 1 1 North 18	THE PURPOSE OF THE PERSON OF T	2014 AVENUE on the bid PACIFIC ST NE common bid GRAND ST section 19th LIPERS NOTE on the 19th LIPERS NOTE on the
	10790 1 0 0 04840 106401 11 1	STATE OF THE PARTY	50 1 54 8FL 1002 80 22 8 30FL 2028 6 6 8 90 100L 2028 5 6 8 90 2288 5 7 8 10 10 10 10 10 10 10 10 10 10 10 10 10	ST A O 11 IMPORTABLES	MAI	100 PC 6	250UVORANIDOSES
M 101 102 FOOTNOTE METERS DESCRIPTION OF THE METERS OF THE	ethic to o Came tells a l	\$4000 F(0 HC)	D 0 B 00 100 100 B	If D O to CRESALCOUR SHITES	10 10 ASIO 1 18010 OI	100 6VC 6 00 NOLEY 5e 00 ORIGIN 5e 00 ORIGIN 5e 00 ORIGIN 6E 17 PRINCY 5E 17 PRINCY 5E 18 F.	1901 HDMCGROST AT DRIVE
M TO A STANFOLD OF MARKET TO STANFOLD CONTROL OF MARKET STANFOLD CONTROL OF	MIND TO O DAME TANK D I	TOTAL TO PROBLEMAN BELTS IN	10 1 10 10 100 20 2 3 10 10 103	TO DE DESCRIPTION OF THE PERSON OF THE PERSO	NO TO TAKE IT Thorse IN	40 CHEST NO.	DELAMACE WE ARE NO DESCRIPTION OF THE PARTY DELAMACE AND DESCRIPTION OF DELAMACE AND DESCRIPTION OF DELAMACE AND DESCRIPTION OF THE PARTY OF T
M TOTAL CONTRACTOR STATES DESPRES DESPRES OF MARRIED STATES OF THE STATE	MARTO 1 0 0 TANNE MARKS 20 1 MARKS 1 1 0 GRAND MARKS 0 1	TOTAL TO PROGRESS AND THE STATE OF THE STATE	E 1 7 PL WIT	THE COLUMN STATE OF THE STATE O	THE THE RESIDE IS TRAVELLED IN	400 SCHENER MIS 15' RESECUTIONAME 25' NAVE 51, 50 NELOCH ST	PERSONAL PROPERTY AND ADDRESS OF THE PERSONS AND
M TO L DE DUTTER AND THE RESIDENCE DESCRIPTION OF THE METERS OF THE PROPERTY O	THE SECOND SHOP TO	STREET STREET,	D TO B TOT 100H		tel to trade it there is	DE STYLE OR THE THE PARTY NAMED IN	DESIGN OF PRESENCE
M SOL DESTREAM AND NEEDS PRODUCT DROOM OF MARKET DROOM OF	Chief 7 1 0 Other Hitter II 1	DAMES TO STANDARD WITH BEDDING HE	0 0 7 107 100 0 0 1 100 100 0	4F U U THE CHARLECOPPE SARTIFFE	THE NO. BOOMS I THOU HAVE SEEN AND ADDRESS OF THE SEEN ADDRESS OF THE SEEN AND ADDRESS OF THE SEEN ADDRESS OF THE	201 0.775F1 0a 1938 ESPEAN Feet 201 27745A07 605 161 0 451 07	2012/VORA A HER HARMONIA DESCRIPTO Y STATE ON SE SERVICE POUT ON SE
M DOI DESTRUCTION NOTITY ENGINE DIRECTED OF SELECTION OF	MIND TO C CERRO TOTAL S C	SAMES NO SAFETY STREET BECOMES IN	D T S TO T	E T O O TOAM Landermotions	for the RATIO 25 Charles on	20 11/45A07 4/5 48 1 43+ 67 50 8407 7 37 204 9 6#	SECULTOR WINES ON THE SECULTOR WINES A 199 NO. 1995 A ST WALLES
M TO R JOSE COLLAR PROV. NOT TO 1 SHOOM SHOOMS OF	45900 1 0 0 11/007 12/040 41 1 6000 1 0 0 68/60 06881 0 T	TOTAL SERVICE STATE OF THE STAT	40 1 40 191 303	27 C 7 DV ARION DISTRICT PRINCIP PRINCIP	NO TO ASSESS IN TRACTOR OF	SEE COMMITTEE OF	20 MISSER STREETS
M 100 J. THE FRICKS BALL SOUTH P. DISSUIT SCIENCES OF S. THE PROCESSOUTH SQUEETER SOUTH SO	MODE & O O GENER TANK TO A \$1000 TO O FEMALE MODES ON S	1 BARRES THAT RECORD SCILLARY BY STOCKLAR AND STOCKLAR AN	80 W # WF 1801 80 3 M 10 WA	F 0	NO TO STAND IS 1 Service OF NO TO KNASS SS 1 Service ON	NOT PICKE But THE RESOURCE THE THE STATES OF	290-0000095 ETFEE services 190-007000005 EVFC person
M 101 17 STARTE NACION SHEET SHEET CONTROL OF M 101 111 1000 OC N 1000 R SCHOOL SHEET OF	NORTH TO G TERM BUTTER TO I	THE STATE OF	60 W di W W 10001 60 3 M R W 100 W 10001 60 50 70 1000 10001 60 50 40 1000 10001	IF D D SOL CHARLECTER SAFTING	10 10 10 10 10 10 10 10	17 FAME SF	28-00009 STRE season (56-0174006) AVEC season (56-98-01 St. 1740 season (50) WG474-57 consex
I S NESTYPHISM ACTION S NOTICE SHAFTS CONTING OF MARKET SPRINGS OF	MOTION OF O O MARKET BERNED TO D	TORES ON STANDOR OF SELECTION O	D D N ON WH	ST E T AN ASSAULTING ST E O BE GRADLANDRUCH	NO TO READ II Thorns IX	THE STOREGE SE	2001 SEX POTON FOR the NA
M TO A STREAM THE MADE TO DRIVE SHAPE OF M TO A SOCIAL POST OF THE STREAM OF THE STREA	MARKET T F F CRAFFIE BARRIER TO F F 1970 TO CO. CO. CO. CO. CO. CO. CO. CO. CO. CO	TOTAL STREET STATE OF THE STREET STRE	10 H 71 HPL 160H	IF D D TH BURGLIFFORD	\$11 TO \$150.00 I Think NO DK	25 BAST IN IS 80 DAST OFFE	THE WEST STATE WHEN
M TOR SCORPS MALL SOFTED DIRECT DIRECT OF MALES OF MALES AND TOURS OF	1000 10 0 0210 2500 U 1	100 100	00 00 10 00 000 1000 00 1 10 00 000 1000 00 1 10 10 000 1000 00 1 10 10 100 1000 00 1 10 100 1000 00 10 10 100 1000	17 D D TH BERGLEVEN DOESN'T TO D D D D D D D D D D D D D D D D D D	101 101 204-01 1	ST DINTE BAL.	SO REPORTED TO AND AND SO RESIDENCE MINEL, BOLICON
N TO R SCHENNING MIGHT LIMBERT DRIVEN OF S S S S S S S S S S S S S S S S S S	10'00 10 0 OTAGE SHARE 21 2	DRIED RESIDENT DECORPT	40 101 46 101 1014 10 101 46 101 1014	11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 0 MANUAL AND TO FOR 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	60 50 5550 01 18cm for 04 50 50 6550 0 1 18cm for 04 60 50 86560 01 18cm for 04	SE SENSON SEE	10 IESTOTINE SERVE
N TO A TOTAL COMPANY TO THE CONTROL OF T	COME TO C TANK BASE TO C	DOMESTICHNESS BEOXIVE IN	0 1 4 10 101 0 1 4 10 101	THE D SHI CHARCES CORRESPONDED IN C. D. SV HOMBER (NO.	NO TO MARKO JI Thornto IX	ATT FORELL DE	SELECTION POST SHOWER
M TOTAL OFFICE THE THREE BETWEEN THROUGH THE THREE BETWEEN THREE BETWE	100 10 0 1860 M186 N 0 0	TAMES ASSESSED BROOKS IN	10 10 10 10°C 10°C 10°C 10°C 10°C 10°C 1	14 0 0 Sex chough version sets - 8004	10 10 MANAGO SI TROVING DE 10 10 (4154) SI TROVING DE	433 PANCES OF 31 341 5407 01 01 01 01 01	100 GOAT INCOME
M NO. I DECIMITION TODAY DISENSE DISENSE OF MALE OF MA	NOTES TO D ORDER MOME IN T	STORE HE RESTRICTED BY THE RESTREEN	E 0 10 101 10.0	27 O O TO MARIE AND ENGINEERS	to the profes in the real as	101 PORTAGO NA	POLIVERANT THE GO
S S STREAMS THE THIRD DRIVE CHANGE OF	1700 1 0 0 0000 M100 0 1	DOWN BY SOUTHWARM BECOME IN	E 1 2 15 160	ST C O TY REPOSITIONAL BUT ST D I SOY CHAPCES WARRING SHOOTSHILL		SET NOT STOLE AND	PRINCIPATION PRODUCES.
M TOT THE LANGE FOR THE TOTAL BURGAL DISCOURT TO	THE TO STAND DAME IS I	1 STORY STREET, STORY IN	5 7 5 75 M	T T O O TOAR LANDSTON ROSE	NO TO STREET I THOUGHT IN	TO LINES BY	ST HOUSE PLANTER
M 101 1 100 MET 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	THE TO S SHOW HE PARTY IN THE PARTY IN	BODIC SA REIT GUTTE PRODUCE HARRY SHAPP, WAS BODICED HARRY SHAPP, WAS BODICED HARRY SHAPP, WAS BODICED AND SHAPP, WAS BODICED AND SHAPP BODICED SOUTH STORM SHAPP BODICED STORM SHAP	10 20 84 20% 2008 20 70 86 70% 10008 60 8 60 87% 96.88	AT C O THE CHARGE COMPLETED OF	NOT THE RESIDENCE IN THE PARTY OF	TO LINES BY AND A SECOND STATE OF SECOND STATE OF SECOND STATE OF SECOND STATE OF SECOND SECO	2011/2/06 1748 cone 2011/2/06 1748 cone 2011/2/19/31 1/5
M SIL SEMESHER ST TOTAL SPECIAL SPECIA	MONTH TO C STREET TOTAL IN I	CONTROL TO CONTROL CON	E T S TO 100	1	100 100	2M PACH ME. 300 GLF103 Flam 800 MSNAMSH SF 301 000455 SF 400 DANSH SS 301 PACH S 301 TAAPE SS 11 BAFFED Am	20 PROTEST NUMBER OF THE
M 911 38 MENNEY 11 121001 SWAY SWAYS OF A 100 MENNEY 12 10	THE 10 0 NAME OF STREET	01000 30 MSA-4012F BEGS LTR	20 10 50 001 1008 10 0 50 001 008 10 0 50 001 008 10 10 10 008 10 10 10 008 10 10 10 008 10 10 10 008	AT 6 0 SH GRADLASSIN-TH	NO TO TAKE I THOUGH IN	40 DAMONT	TO PET M ROTTER OD 100 100 LOUGED I WI OD 00 500 FARRAGET ROSE NO 500 LOUGED IT WAS TO
W TO A STREET IN THESE STREET STREET OF	THE TO S TANK BRIDE S	1 SUTES STEAMED FLOS SPECIAL PO 2 SHEEL STEAMED FLOS SPECIAL PO 2 SHEEL STEAD FOR SPECIAL PO	0 1 0 Pt TON 0 1 0 Pt TON	SF D D SV AMALIUM SF D D SV AMALIUM	THE THE STREET I Thomas IN	94 BUTTALD AM	200 ET ETFEST op der 200 ET ETFEST op der
0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	Mallo III O O OLTHO MAND II I	DESCRIPTION PROPERTY OF	900 100 1 1FL W	1 T O D TOAN Lavolatini from	to to past I though to	SEE PACKE OF SEE STATE OF SEE SACRE OF SEE SACRE OF SEE SECOND OF SEE SEE SEE SEE SEE SEE SEE SEE SEE SE	SE RODONEW WALLES
M TES TESTACHEST TESSES ENGINE SONS STANDS OF THE STANDS O	MODE & O O CHEEN BOME U I	DB00 108 PCPC IF	100 100 1	ST D O TH CHARLEST SESSONS	NO TO ATOM IN THE OWNER OF	SE NORTH II	DESCRIPTION AND STREET
M 101 OLIGARIO DE TESTA DIRECTIONES DE MANTE DE LA CONTRACTOR DE LA CONTRA	MINE TO O CHOSE MAN TO I	T SMOOD OF TORPHOLOUGH AND SMOOTH	973 3 284 3P4 38.38 60: 3 40 100 1864	17 0 0 3V BANKAGATAVITI	101 10 886-00 El 18er 00 SK 101 10 846-00 E 18er 00 SK	SE WUDGES OF	SANCERS STORES
M TO R DR CRECCEST ID THOSE R DROOT DROOM OF M TO 1 198 CHOCKE OF STOUTH MIGHIN MICHAEL OF	1700 2 0 0 08200 80800 T 1	O COUNTY OF BOARD AND BELLEVILLE OF	60 NV 60 NPS NOS	TF C T SV PRIMERY OF ST C O O OV ASSAUTION	NT NT 25,000 2 16mm DK	NO DROCKET IN	SECURITION OF PERFORMANCE
M SD L TROCKIA CHE (TROCK DISCONDE ON SD L TROCK DISCONDE DISCONDE DISCONDE DISCONDE DISCONDE DISCONDE DISCONDE DI	1 2 March 1 0 0 0 0000 Greek 6 2	PARTY TO COLUMN STREET	0 1 8 PL 004	If C 67 POMPLET	65 65 8/650 5 18mm 55 56	No CORN Ser N TOWNS ST	SECOPHRAT server.
M TO R SECRET TO ST. PROPER DIRECT COMPANY OF	PERC TO C CENTER METER IN T	ONCE OF SECURITY SECU	87 1 8 Pt 303	THE PROPERTY OF	NO TO ACCUSE A Thorono AN	AN BATT IS IT	SELECTION OF STREET
M TO L. PRINCIPLE NOV. PRINCIPLE STREET, STREET, ST.		STATES AND DANGETT. MITTER IN	# 10 SE 1075 W.S.	1F A TO TL HE-RESPONDED	NOT THE MALES IN The PART OF	NO CANCLE IF	SECRET SPECIAL AND AND AND ADDRESS OF THE PERSON NAMED IN COLUMN NAMED IN COLU
M TO L THIS CAPABLE TO THE THE BOTTOM CONTROL OF	AND 10 0 ORTHO READ DI			If D O MIT HERMOCKTHANDAD- BOX	100 60 EVENTO EL 1 Servicio DE	HAR SATH AT	AND DESCRIPTION OF THE PARTY.
M TO 1 TRITICATION FOR THESE EMPIRE DEPOSE OF M TO 1 TRITICATE DEPOSE OF THE T	Marie 1 0 0 085 to 100 to 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 01000 101140111 BU.S. ISSUED IN	100 h m 101 more		101 10 KNOD II I Seattle Inc.	1901 EAST OF THE	100 G (355 (04) pages
M 101 1515-247-047 1907 1902-04 20900 209000 20 20 20 20 20 20 20 20 20 20 20 20	Marie 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0003 000.0074 07 00.00 00.	NO 5 8 101 1001 20 5 8 101 1000 20 5 8 101 1000	TO D TO HOUSEWAY	NO NO MAKE IT THOUSAND IN	901 DAGE 07 08	100 GATES INC NAME OF THE 10T WILLIAM LANGES HAVE HAD 10TO TO ANTIVES HAD THE
\$1.00 \$\text{\$\exintet{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$	Marie 1 0 0 0 15 Tem 15 Per 15 Tem 15	00000 000 000 000 000 000 000 000 000	D T S TO TOS	17 0 0 5% GREED ST 17 0 1 14 MARCHARD STO 17 0 1 17 MARCHARD STO 17 0 20 CHARGE SEARCH DECORDER	NO. NO. PARKED OF TRAVERS OF NO. SEC. SEC. SEC. SEC. SEC. SEC. SEC. SEC	ST SATE OF ST ST ST SATE OF SATE OF ST SATE OF SATE OF ST SATE OF SATE OF ST SATE OF	100 GOES INC ON NO INT VISION EVENT HIS HIS 200 TO CORN, ON NO INCLUDING PURP HIS HIS 200 SECTION, THE AN AV
M 10.1 1.51 1.4	Marie 1 0 0 0 12 Tell 12 0 12 12 12 12 12 12 12 12 12 12 12 12 12	MARTINE OR MARTINE OF THE PROPERTY OF THE PR	00 1 0 10 00 000 00 1 0 00 00 000 00 1 0 00 000 00 0 0 00 000	17 0 0 0 000000000000000000000000000000	No. Colon	01 EAS 01 01 110 00 0 101 0000 101 0000 101 0000 101 0000 101 0000	100 GATCS INC DATE OF THE STATE
1	Marie	TOTAL STATE OF THE	1	11 0 0 70 ACRES 451 11 0 1 1 10 ACRES 451 11 0 1 1 10 ACRES 451 11 0 1 10 ACRES 451 11 0 0 1 ACRES 451	10	1	DOGGES INCOME IT WALLOW WHICH HE HE INCOME THE HE HE INCOME THE HE HE INCOME THE HE HE INCOME THE INCOME THE HE INCOME THE INCOME THE HE INCOME THE HE INCOME THE INCO
M 10 10 10 10 10 10 10	200 1	COLUMN	50 TO 30 TO 1200 TO 12	11 0 0 0 0 0 0 000000 000 21 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		601 6405 01 01 10 10 10 10 10 10 10 10 10 10 10	487 SER-BREET MET 100 100
1	March	1,000 1,00	80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 50 1000000 1000000 10000000000	10 2660 27 10 10 10 10 10 10 10 1	611 645 (1 0) 101 00 0 101 00000 00 101 00000 00 101 00000 00 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 00000 101 000000 101 000000 101 0000000 101 0000000 101 00000000	4010-450-750 co
	1	CHILD STATE OF THE	## 1 ## 10 #	1	10 2666 27 10 10 10 10 10 10 10 1	01	4010-450-750 co
Value Valu	1968 1975	STATE STAT	0	20		100 100	487 SER-BREET MET 100 100

Now imagine a map visualizing the same data set, but this time shifting the focus from the crime events to the home addresses of the people incarcerated as a result. The transformation reveals a pattern that – unless you live there – is difficult to see: the density or clustering of large numbers of imprisoned residents in very few and very small sections of the city.

With this map, we stop talking about where to deploy police resources or how to track individual prisoners for institutional purposes; instead, we begin to assess the impact of justice on a city, even a city block, and start to evaluate some of the implicit decisions and choices we have been making about our civic institutions.

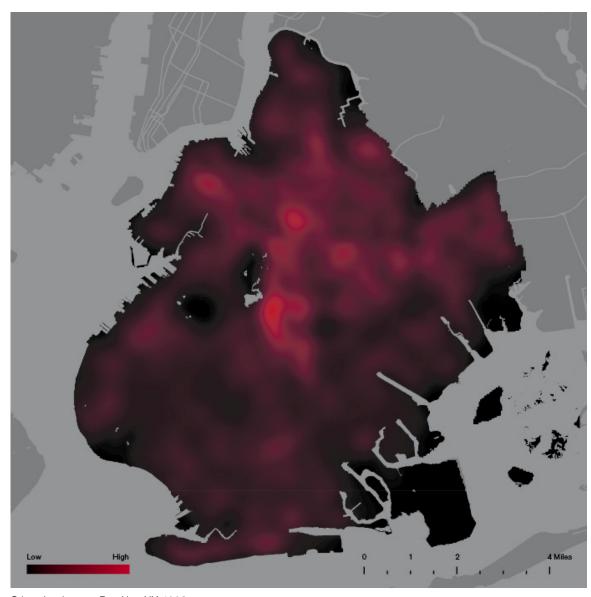


Prison admissions by home address, Brooklyn, NY, 2003.

From Crime Maps to Admissions Maps

If crime maps succeeded dramatically in mobilizing public opinion, redefining the city as a mosaic of safe and unsafe spaces, and forcing the reallocation and targeting of police resources on specific neighborhoods, the gains were shortlived. The resulting crime prevention techniques,

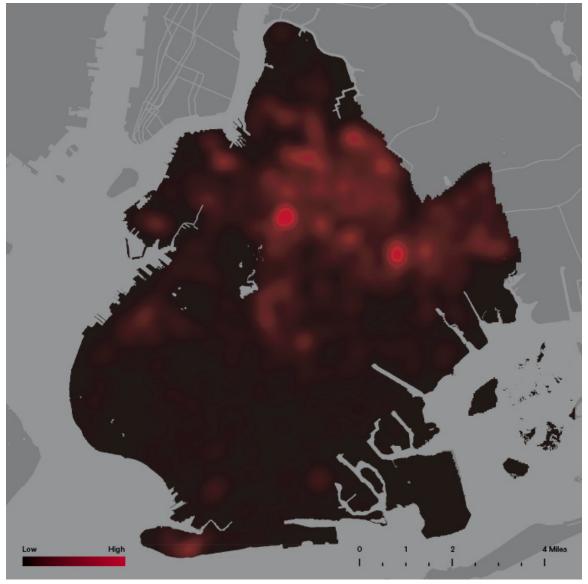
and the community-policing movement in general, soon reached the inevitable limits of any purely tactical approach. The city spaces that were targeted became safer, but too often crime incidents were simply displaced to other locations.



Crime density map, Brooklyn, NY, 1998.

By focusing solely on events, the human underpinnings of crime were left largely unaffected. When we shift the maps' focus from crime events to incarceration events, strikingly different patterns become visible. The geography of prison differs in important ways from the geography of crime.

Crime happens in many different places, diffused and dispersed across the city. But the people who are convicted and imprisoned for urban crimes are often quite densely concentrated geographically.



Prison admissions density map, Brooklyn, NY, 2003.

The crime rates in the most affected precincts are typically four times higher than the lowest. But the highest incarceration rate precincts show activity upwards of ten times higher than those of the lowest incarceration rate precincts. Like poverty, incarceration is spatially concentrated, much more so than crime.

It's as if by imprisoning the residents of these neighborhoods, making them disappear from their city, we were simply mirroring the disappearance of the conversation on poverty.

Prison admissions by census tract, Brooklyn, NY, 2003.

Just as the incarceration rate tracks the eclipse of that debate, the geographical inquiry into criminal justice in the city uncovers the territory of the juxtaposition between crime and poverty. Focusing on where incarcerated people live when they are not in prison and comparing that

with poverty suggests this conjunction rather starkly. Is incarceration policy the new solution to poverty, or a new structural component?



Population living in poverty by census tract, Brooklyn, NY, 2000.

Redefining the Problem: Mass Migration and Reentry

600,000 people return from prison each year in the United States, and millions more come home from jails. About 240,000 of the released prisoners – roughly forty percent – will return to prison within three years. In and out, they come

and go, all too often simply cycling back and forth between the same places.

New maps can help us grasp this extraordinary phenomenon: prison migration and with it highresettlement communities. When crime maps are replaced by incarceration maps, we can finally visualize the geography of a massive migration,

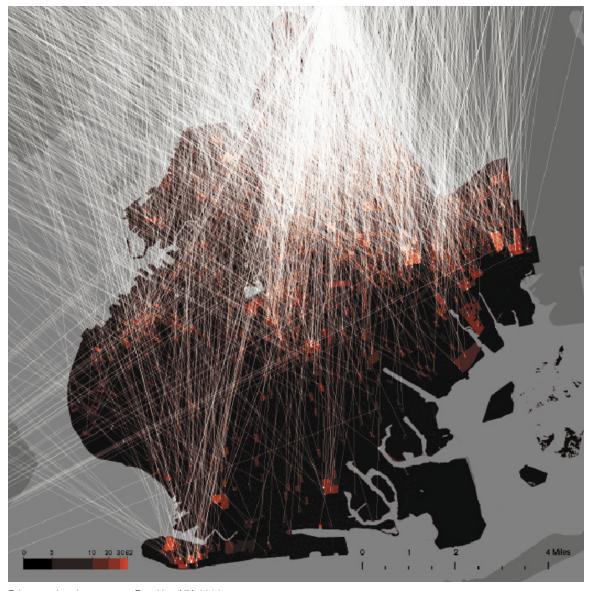


Prisoner migration patterns, Brooklyn to New York State, 2003.

the flow of people in and out of the city. We can ask whether this quiet but pervasive migration crisis isn't creating a growing class of noncitizens, concentrated in very few places in all of our major cities.

The new visualizations reveal what was previously difficult to see – the mass disappearance and reappearance of people

in the city. They focus on the systematic phenomenon of ex-prisoners' reentry and examine new institutions that respond to this structural feature of urban life. What happens to these people when they come home? We often know where they are going and what will happen. What is our responsibility to effectively resettle them, given all that we know?



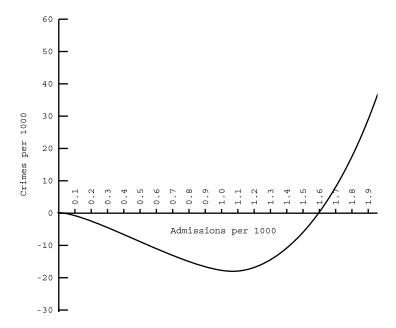
Prisoner migration patterns, Brooklyn, NY, 2003.

The Tipping Point

In this context, Jeremy Travis (2005) poses a critical challenge to designers and advocates alike: "Rather than view these new situations simply as matters of concern to criminal justice experts, [we should] analyze how our incarceration policies affect the work of practitioners, advocates and community leaders in other policy arenas" (84).

The migration cycle, which is something like a permanent or recurring refugee crisis, takes

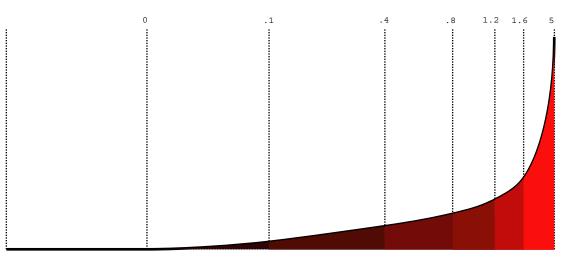
a dramatic toll on the communities where it happens. Todd R. Clear's research (2003) suggests that communities reach a tipping point beyond which increased incarceration begins to undermine local networks and the infrastructure of everyday life. Once past that point, neighborhoods can enter a downward spiral in community viability, which, in turn, can promote an increase in crime and juvenile delinquency, and a decrease in everything from public health to housing values to political participation.



For places where prison has become the predominant government institution and incarceration is no longer a last resort, the criminal justice system ceases to function as the antonym of civil society. Instead, as the recycling of men and women between prison and home becomes an everyday fact, the institutions of everyday life are profoundly transformed. So, a policy response in one sector – incarceration as the answer to crime – has multiplier effects in other sectors: prison migration now implicates urban infrastructures and networks as diverse

as education, family, housing, health, and civic involvement.

Questions of crime become questions of the city. If the maps have exposed otherwise obscure places in the city, then advocates and designers alike are obligated to look further, to investigate the urban networks that are now more obviously implicated in the situation.



Prison Expenditures Expressed in Millions of Dollars

The resulting histogram displays what statisticians call a Power Law distribution – the largest share of the total dollars are represented by a very small share of census blocks.

Money Maps

Measured in dollars, the criminal justice network has frequently become the most important public institution in high-resettlement neighborhoods.

The stakes and impacts of this unacknowledged investment become clearer when we make the incarceration maps slightly more complex by adding information about the actual costs of imprisonment. How much money does it cost to keep people in prison? The figures are available, and when they are correlated with the addresses of the people on whom the money is being spent, a remarkable pattern emerges.

We call them "Million Dollar Blocks," single blocks in inner-city neighborhoods across the country for which upwards of a million dollars are allocated each year to imprison its residents.

The maps now suggest a link between those places and the dollars spent (elsewhere) on their

residents. They ask us to weigh the opportunity costs – for each city block, neighborhood, or wider community – of committing those funds to recycle people through jail and prison, back home, and then (for more than a third of them) back inside again.

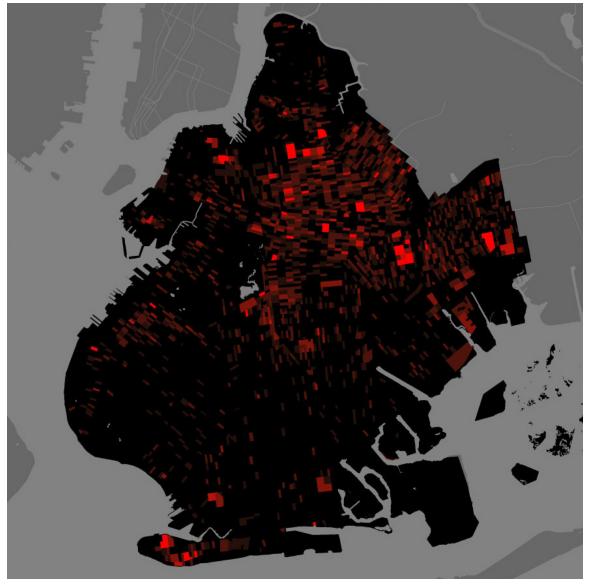
This pattern is visible in all too many major American cities: New Haven, New Orleans, New York City, Phoenix, and Wichita.

Money spent on criminal justice is money not spent on other civic institutions, especially in these communities. Guided by the maps of Million Dollar Blocks, urban planners, designers, and policy makers can identify those areas in our cities where, without acknowledging it, we have allowed the criminal justice system to replace and displace a whole host of other public institutions and civic infrastructures. Those neglected sectors are the very ones we have already identified as the collateral damage of the incarceration explosion – education, family,

housing, health, and civic involvement. – Now the investment pattern, and spending priorities that feed this condition become dramatically evident.

The new maps, it turns out, have induced a thought experiment and raised a fundamental question:

What if we sought to undo this shift, to refocus public spending on community infrastructures that are the real foundation of everyday safety, rather than criminal justice institutions of prison migration?



Prison expenditures by census block in Brooklyn, NY, 2003, represented as dollar totals.

Criminal Justice as Infrastructure

Data has often been used to inform policy, especially where cities – a veritable paradigm of the large complex organization that requires information if it is to be managed properly – are concerned. The "efficient city" sought to address the poverty question with information and put data to work to clear slums and level urban blight in the 1960s.

Where are we today? Are we proposing something similar? Here information is visualized in a way that exposes policy and makes it accountable to the people who have to live through its effects, the everyday networks of civil society. The maps ask and help us to look closely at each city block, where a small piece of the pattern is located. Can we experiment in the reverse direction, starting from the block and aiming for the city?

Clearly, although the Million Dollar Block is our focus, the maps indicate that we cannot answer this question at the level of the block alone.

We propose to treat prisons and jails as an urban exostructure. No matter how physically removed they are from the neighborhoods of the people they hold, they remain firmly rooted as institutions of the city, as everyday parts of life for people, impacting their homes, social networks and migrations.

An analysis of any Million Dollar Block will demonstrate how the overlapping resources of these networks conflate individuals and infrastructure, the local and the global, the close and the far, the piece and the system. Doing anything here, attempting to restructure the way the criminal justice system works, means working with contingent, dynamic and overlapping systems and collaborations between multiple agencies, tools, and techniques.

What does it mean to design policy, to design multiple policies, around a single place?

The maps are both a picture and a design strategy. The picture is an aggregate situation. The design strategy is start from the block and build, incrementally, new networks which might inform this crippled urban *infra*structure.

In this way, these maps depart radically from the maps and statistical analyses that fueled mid-20th-century urban renewal and policing projects. The map is not a top-down view. And neither is it a bottom-up account. It is both.

Identify an area. Zoom in, and examine the specific conditions. Zoom out, and then, consider both scales at the same time. The resulting image is no longer Hard Data. It is a Soft Map that is infinitely scalable, absolutely contingent, and open to vision and, hence, revision.

Eric Cadora and Laura Kurgan



31 men, two blocks, 4.4 million dollars, Brownsville, Brooklyn, NY, 2003. What would you do?

Notes

- 1. The Metropolitan Area as a Racial Problem, Morton Grodzins, 1958, University of Pittsburgh Press.
- 2. What is Crime Mapping: Briefing Book. National Institute of Justice, 2005 http://www.ojp.usdoj.gov/nij/maps/briefingbook.html
- 3. But They All Come Back; Facing the Challenges of Prisoner Reentry, Jeremy Travis 2005, The Urban Institute Press.
- 4. Todd R. Clear, Dina R. Rose, Elin Waring and Kristen Scully, "Coercive, Mobility and Crime: A Preliminary Examination of Concentrated Incarceration and Social Disorganization", *Justice Quarterly*, 20[1] Spring, 2003, pp.33-64.

Graphical Innovations in Justice Mapping is the first project of the Spatial Information Design Lab which was founded in 2004 as an interdisciplinary research unit in the Graduate School of Architecture, Planning, and Preservation at Columbia University. The project is collaboration between the Justice Mapping Center, the Spatial Information Design Lab and the JFA Institute.

Project Team

Project Directors: Eric Cadora and Laura Kurgan Research Associates: David Reinfurt, Sarah Williams. Research Assistant: Leah Meisterlin With special thanks to Charles Swartz of the Justice Mapping Center and to Kirtley Cameron, Eunice Kim, John Liu, Charles Miles, Brian Walker and Wian Wang, GSAPP students who

contributed to this project in its initial stages.

The Spatial Information Design Lab is a think-and-action-tank at Columbia University specializing in the visual display of spatial information about contemporary cities and events. The lab works with data about space – numeric data combined with narratives and images to design compelling visual presentations about our world today. The projects in the lab focus on linking social data with geography to help researchers and advocates communicate information clearly, responsibly, and provocatively.

Spatial Information Design is a name for new ways of working with the vast quantity of statistical and other data available about the contemporary city. By reorganizing tabular data using unique visualization techniques, and locating it geographically, we try to correlate disparate items of information and picture the patterns and networks they create. Putting data on a map can open new spaces for action, and new options for intervention, as the often unseen shapes and forms of life in the city become visible

Design here is less like a tool and more like a language, a practice that shapes the outcomes and understandings of the things we do. It is not simply an aesthetic prejudice. The ways in which we present ideas and information can sometimes be even more important than the material itself, for better, or more commonly, for worse. The words and pictures we choose make a difference to the way people, including us, imagine their own possibilities of responding to what we say and do.

Spatial Information Design Lab Graduate School of Architecture Planning and Preservation / Columbia University 1172 Amsterdam Avenue 400 Avery Hall New York NY 10027

http://www.arch.columbia.edu/SIDL

September 15-October 28, 2006