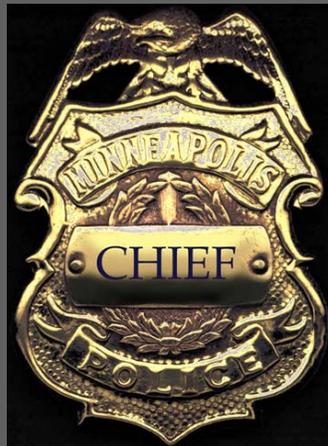


Minneapolis Police Department Business Technology Unit



SPATIAL ANALYSIS OF
PROBATIONER CONTACTS

AND

AUTOMATED EMAIL ALERTS

NIJ WORKSHOP

Part I
Spatial Analysis
of Probationer Contacts
with Minneapolis Police
in 2006

NIJ MAPS 2007

An Exploratory Effort

MOTHER GOOSE & GRIMM MIKE PETERS



Where did the data come from?

How do I know a person is on
Probation?

How do I know when there is a
contact?

Automated Probation Alerts



Minnesota Department of Corrections – Probation sends me a list of Probationers.

Hennepin and Ramsey Counties, the Counties containing Minneapolis and Saint Paul, and Anoka County send me lists of their Probationers.

All lists contain the Probation Officer's email address.

Almost all Probationers in Minnesota are covered. (120,000 +)



**U.S. Probation
District of Minnesota**



Daily Checks

- Every day, over 120,000 Probationers (NAMES and DOBs) are checked for Police contact during the past 24 hours.
- If there is an exact match, an email is automatically sent to the Probation Officer.
- The email gives the PO a brief event summary.

Illustrations

The screenshot shows a web browser window titled "Microsoft Outlook Web Access - Mozilla Firefox". The address bar displays "https://webmail.ci.minneapolis.mn.us/exchange/". The Outlook interface includes a left-hand navigation pane with icons for "Inbox", "Calendar", "Contacts", "Folders", "Options", and "Log Off". The main content area shows a message list under the heading "Hicks, Doug : Inbox". The list is displayed in a table format with columns for "From", "Subject", "Received", and "Size". The messages are primarily "RAMSEY COUNTY PROBATION ALERT" emails from "Hicks, Doug".

	From	Subject	Received	Size
<input type="checkbox"/>	Hicks, Doug	AkervJ -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	6 KB
<input type="checkbox"/>	Hicks, Doug	FetteS -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	10 KB
<input type="checkbox"/>	Hicks, Doug	JungmT -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	10 KB
<input type="checkbox"/>	Hicks, Doug	SitzeC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	5 KB
<input type="checkbox"/>	Hicks, Doug	FernoB -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	5 KB
<input type="checkbox"/>	Hicks, Doug	RCRC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	12 KB
<input type="checkbox"/>	Hicks, Doug	AkervJ -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	6 KB
<input type="checkbox"/>	Hicks, Doug	RucciJ -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	6 KB
<input type="checkbox"/>	Hicks, Doug	JohnsT -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	5 KB
<input type="checkbox"/>	Hicks, Doug	RucciJ -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	6 KB
<input type="checkbox"/>	Hicks, Doug	SitzeC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	5 KB
<input type="checkbox"/>	Hicks, Doug	LannuC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	7 KB
<input type="checkbox"/>	Hicks, Doug	RCRC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	8 KB
<input type="checkbox"/>	Hicks, Doug	LannuC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	12 KB
<input type="checkbox"/>	Hicks, Doug	FernoB -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	5 KB
<input type="checkbox"/>	Hicks, Doug	RCRC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM	8 KB
<input type="checkbox"/>	Hicks, Doug	HennCty JUVENILE PROBATION ALERT Started-- Lotus Notes users, use LAUNCH to open.	Wed 9/13/2006 6:32 AM	1 KB
<input type="checkbox"/>	Hicks, Doug	PROBATION ALERT -- Lotus Notes users, use LAUNCH to open.	Wed 9/13/2006 6:31 AM	6 KB
<input type="checkbox"/>	Hicks, Doug	PROBATION ALERT -- Lotus Notes users, use LAUNCH to open.	Wed 9/13/2006 6:31 AM	10 KB
<input type="checkbox"/>	Hicks, Doug	PROBATION ALERT -- Lotus Notes users, use LAUNCH to open.	Wed 9/13/2006 6:31 AM	6 KB

The Windows taskbar at the bottom shows the Start button and several open applications: "Crime Analysis for C...", "NOMinneapolis Auto...", "Microsoft Outlook W...", and "TACA NO". The system tray on the right shows the time as 11:38 AM.

Probation Report

Microsoft PowerPoint - INOMinneapolis Automated Email A...
AccessReport19.rtf - Microsoft Word

File Edit View Insert Format Tools Table Window Help Type a question for help

Final Showing Markup Show

1 2 3 4 5 6 7

MPD Contact With Ramsey County Probationer

Reference list is updated weekly. Current list installed on: 7/17/2006 4:05:26 PM
Date/Time this report was run: 7/25/2006 6:42:25 AM

Probationer: Walker, Keonte 3/28/1986
Agent: PederG

MPD Case Number: MP 2006 205994

Primary_Offense: MISC Doesnt Fit Any Crim
Role: **Arrestee**

ReportedDate: 7/24/2006 7:32:00 7: 32
BeginDate: 7/24/2006 5:50:00 5: 50
PCT: 03 Squad: 372 Officer: Kimmerle

PublicInformation:
AP1 was placed under arrest after driving a MV with stolen license plates. AP1 booked HCJ.

End of Report on: Walker, Keonte 3/28/1986

Page 1 Sec 1 1/1 At 1" Ln 1 Col 1 REC TRK EXT OVR

start 4 Microsoft... 2 Microsoft... MACIA 2 Microsoft... AccessRepor... 2:56 PM

If you have doubts.....

- Thought you all might be interested in this "success" story!! This is from Federal Probation!!

09/06/06 10:54 AM >>>

Hey Deb... this weekend you had forwarded me an Alert that was sent to Elizabeth Callahan (what the heck were you working on a holiday weekend for anyway??). Anyway, that particular officer is my husband's partner, and they were out working on Saturday (they work off-hours). Well, Betsy had received a call from one of her client's wives indicating there was an issue with her ex-husband and being arrested and stuff....and Betsy thought oh great, here we go trying to track him down now! Well, she turned on her computer, and there was the alert from the Mpls PD. They went right there and were able to talk to the arresting officer and get a copy of the report, which enabled them to quickly find their guy. My husband's remark was "Oh man, that was so awesome...it would have taken us a WEEK to track this guy down". So this alert system is so awesome. I can't wait for all law enforcement agencies to participate!

Jean Hermes
United States Probation
District of Minnesota

What are Automated Email Alerts?

Details in Part II of Workshop.

- QUERIES of computerized databases
- designed for specific purposes and PEOPLE
- automatically run and delivered via email
- to desktop computers, display cell phones or display pagers
- without intervention
- on a set schedule.

My hypothesis....

- Probationers are drawn to crime “hot spots”
- An analysis linking Probationer Residences to Probationer Arrest Sites may indicate favorite “hot spots”
- Strategies to improve Probation Supervision and Police Patrol can be developed from this examination

First Exploration...

- Link Residence to Arrest Location
- Many Probation Contacts were NOT arrests
- I chose to focus on the Arrests.

- Explored CMAP CASE Spatial Tools and Movement – Link Points.
- The results were not as expected.

Crime Mapping and Analysis Program

Crime Mapping & Analysis Program - CASE - Windows Internet Explorer

http://www.crimeanalysts.net/case.htm

Google | Go | Bookmarks | 0 blocked | Check | AutoLink | AutoFill | Send to | Settings

Crime Mapping & Analysis Program - C...

Phone: 1-800-416-8086
Fax: 303-871-2500
Email: CMAP@du.edu

Home Training Resources

CMAP CASE (Crime Analysis Spatial Extension)

ArcGIS 9.2 is not yet supported. CMAP will announce when this version is supported at our homepage.

One of the best sets of GIS tools available to the crime analyst was developed for the science of Ecology; specifically, the United States Geological Survey's homegrown **ArcView** extension, **Animal Movements**. The Animal Movement Analysis ArcView Extension developed by the Alaskan Biological

CASE Features:

- Spider Diagram
- Nearest Neighbor
- Study Area
- Standard Deviation Ellipse
- Sequencing
- Minimum Convex

Download CASE

[Download Case Now](#)

CASE Lessons!

[Click here to view the Lessons](#)

Internet | Protected Mode: On | 100%

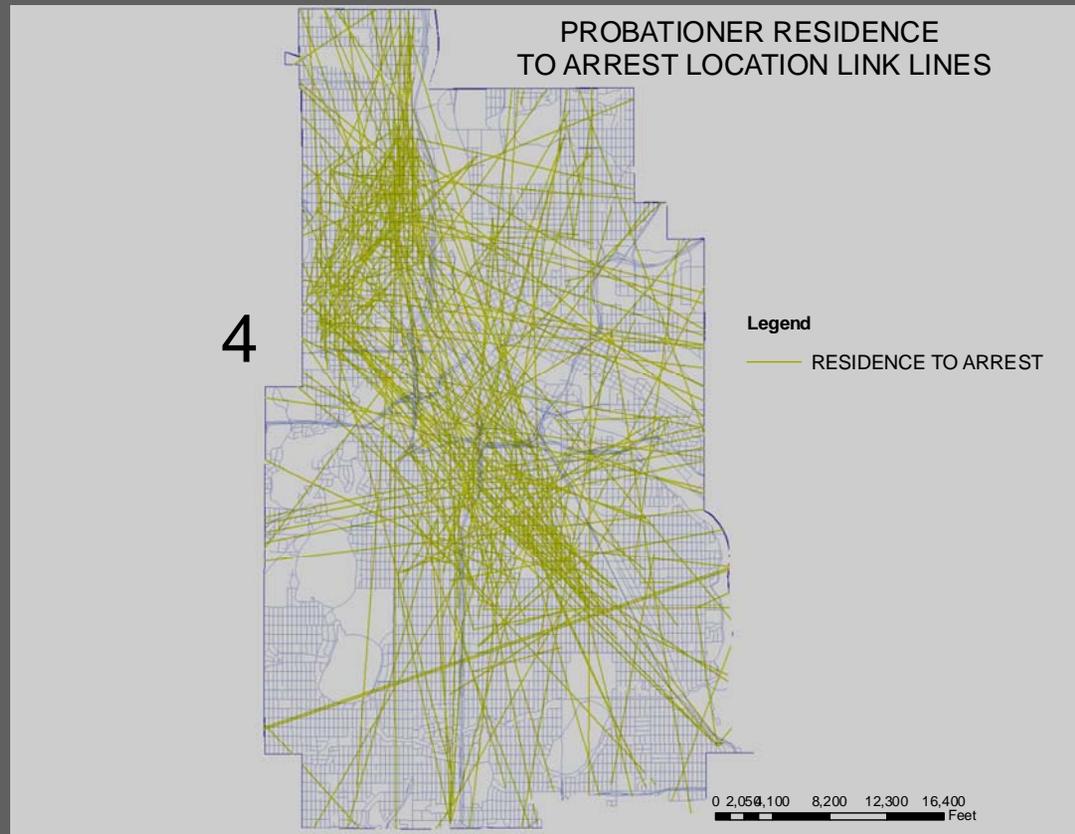
Microsoft PowerPoin... | Crime Mapping & An... | 2:58 PM

My Expectations

- I expected a clear display of lines channeling to “hot spots”
- I got lines all over the place without any clear pattern.
- I tried limiting the lines to various distances

PROBATIONER RESIDENCE TO ARREST LOCATION CMAP CASE -- MOVEMENT -- LINK POINTS TOOL

FOLLOW PROBATIONER TO HOT SPOTS



Example – Link Points

Probation Contact and Residence Analysis

- Legend**
- RTtoA2 half to 2miles
 - NIJArrResMatchedSD 1
 - All Crime
 - All Arrests
 - PDPrecincts
 - tlg_roads_1
 - CityBoundary

4

0 4,900 9,800 19,600 Feet

As of 2/27/2006



Conclusions about Link Points

- It worked well on good clean data.
- It was the wrong tool for this challenge.
- It is better suited to small sets of data for the actions of an individual.
- It only worked with points that geocoded as a “Match”

Background Views

- Examine all crime for August 2006
- Examine all arrests for August 2006
- Examine Probationer Arrest sites
- Examine Probationer Residence Locations
- Examine Bar sites

3 Part Views

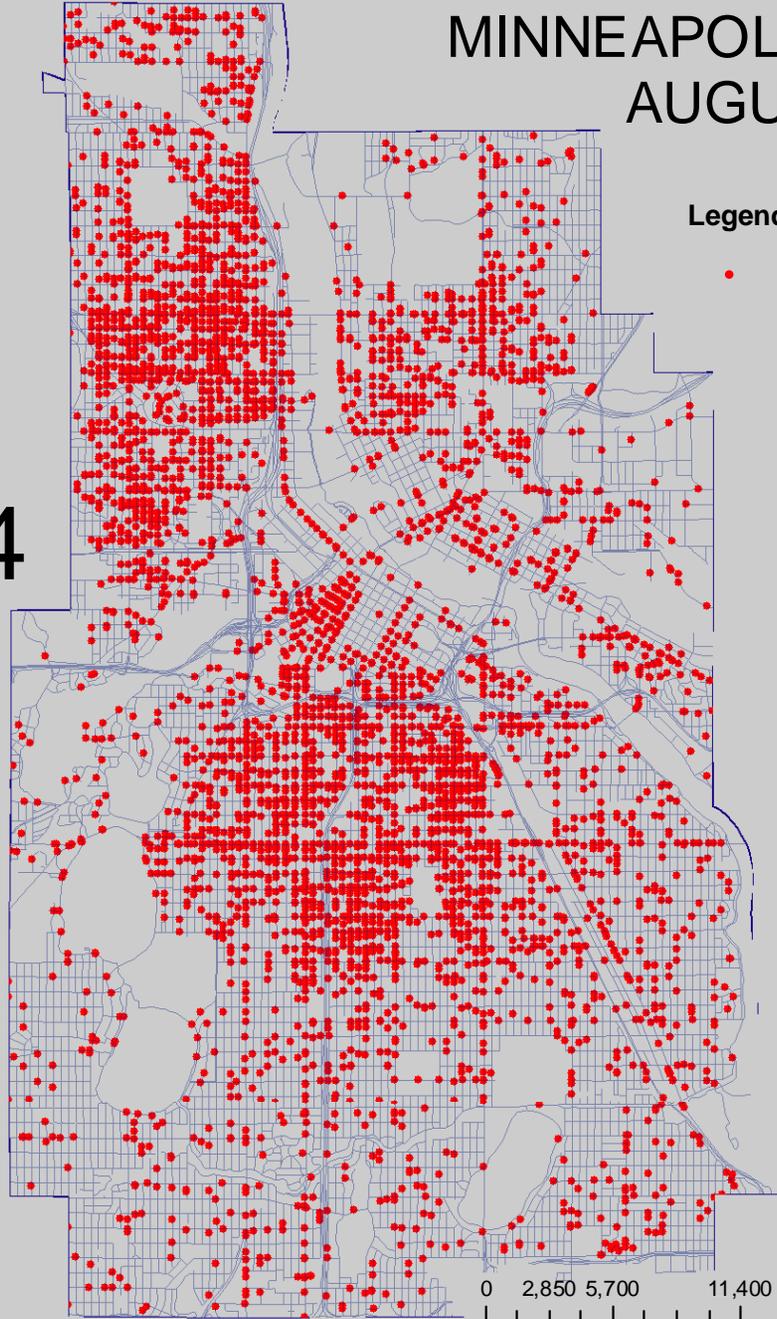
- Simple point maps of the events
- Dot maps with CMAP CASE Activity Space – 1 Standard Deviation Ellipse
- Thought the Ellipse would give a clear conclusion.
- The Ellipse was too large given what I was searching for. Again – wrong tool for this effort.

MINNEAPOLIS - ALL CRIME AUGUST 2006

Legend

• ALL CRIME - AUG 06

4

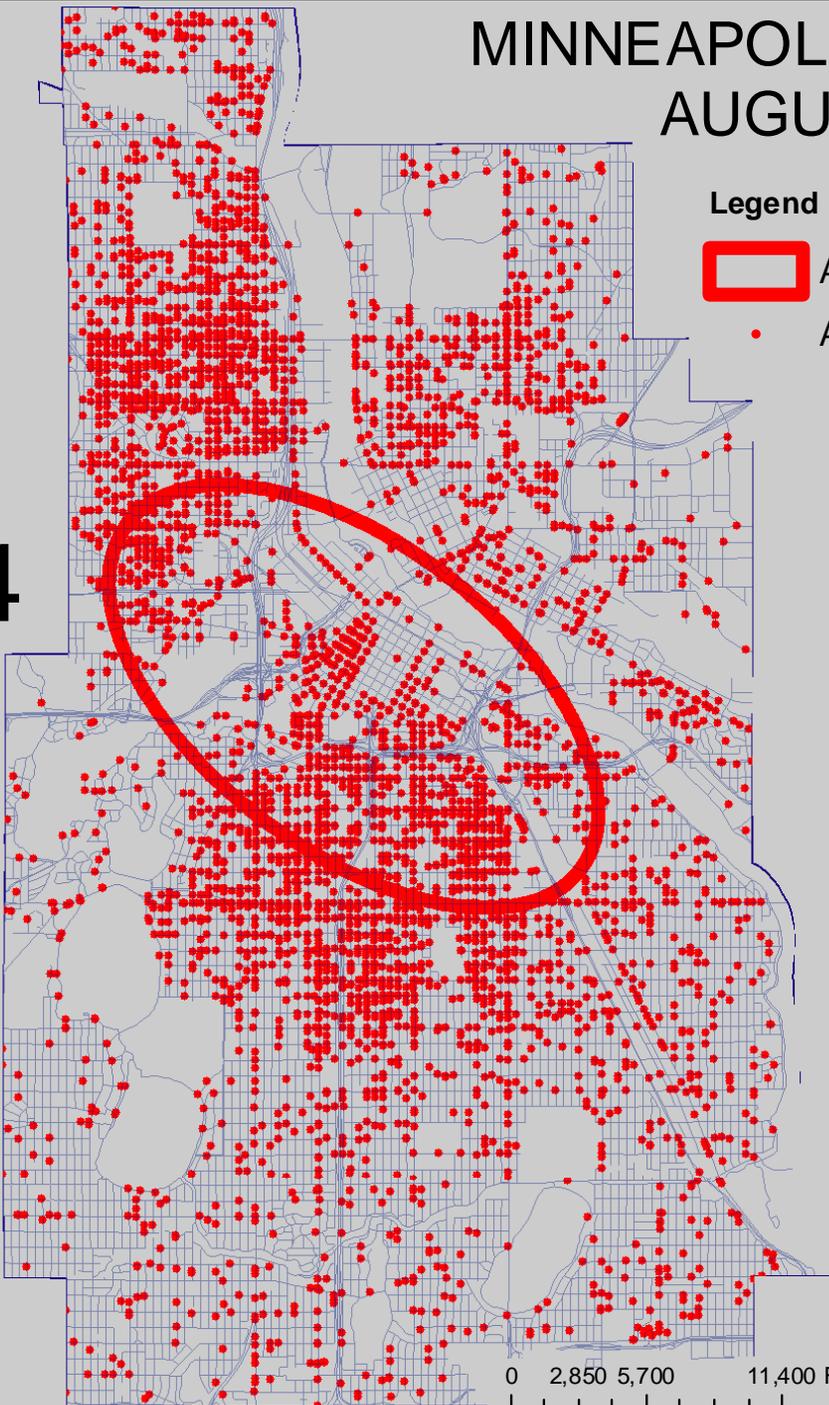


MINNEAPOLIS - ALL CRIME AUGUST 2006

Legend

-  ALL CRIME - AUG 06 - 1SD
-  ALL CRIME - AUG 06

4



0 2,850 5,700 11,400 Feet

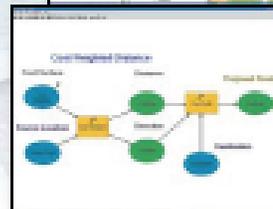
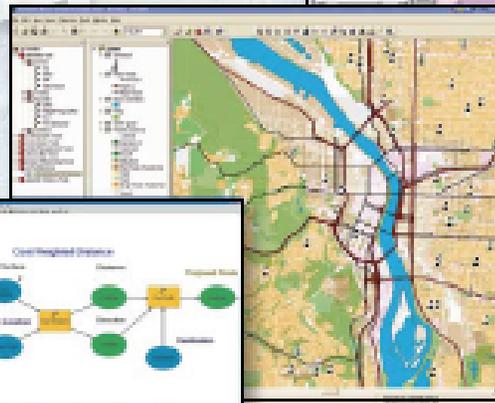
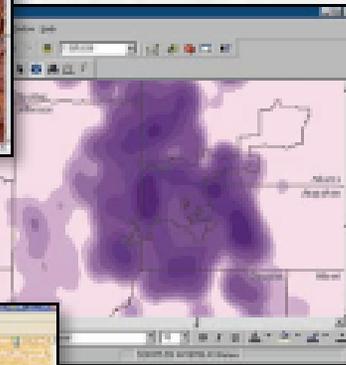
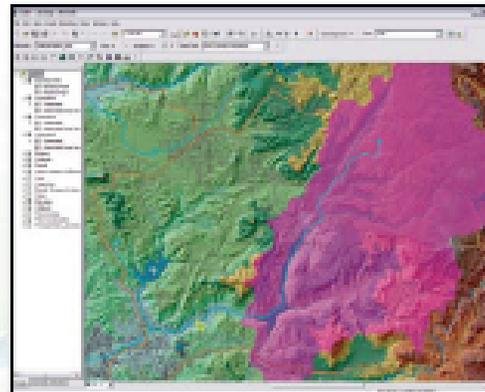
ESRI Spatial Analyst Extension AREA – DENSITY MAPS

Eureka!

Now we are getting somewhere.

ArcGIS' Spatial Analyst

Advanced Raster Spatial Analysis



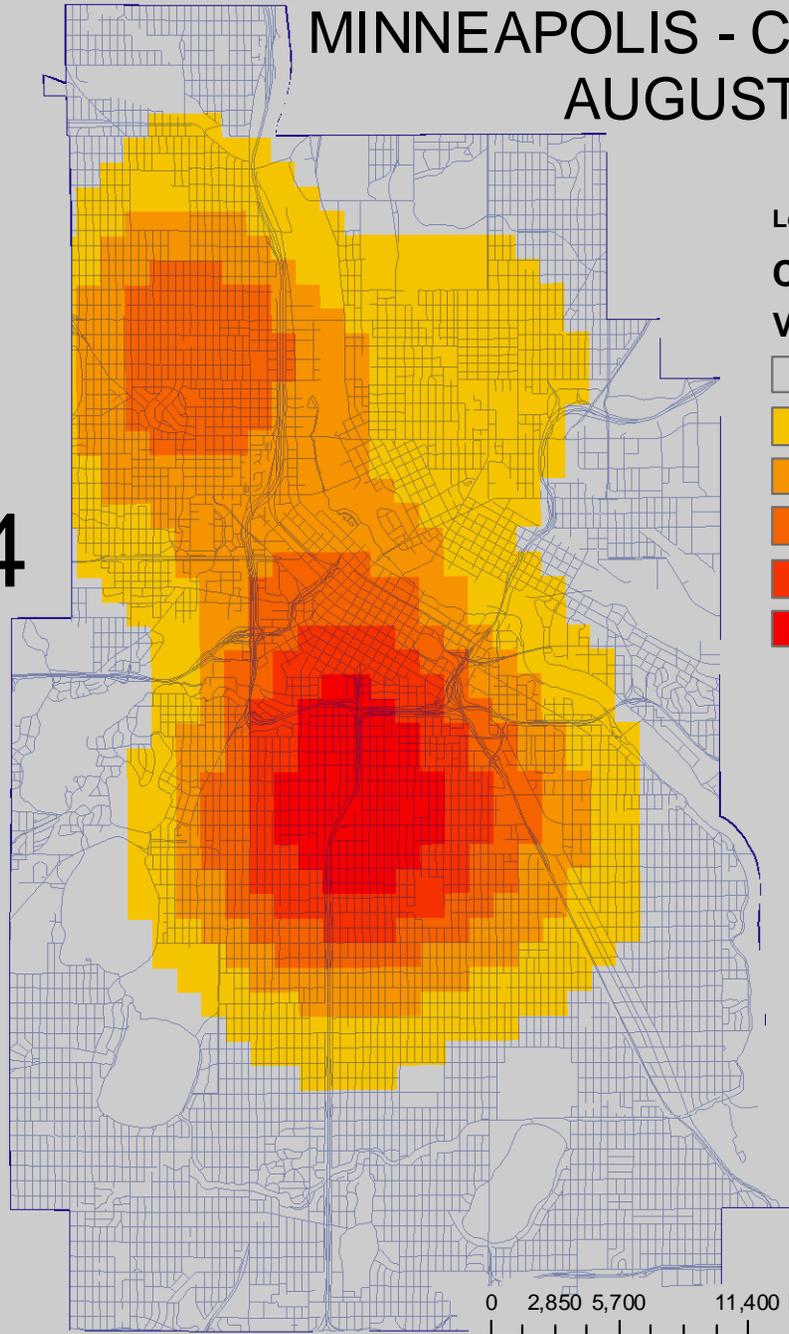
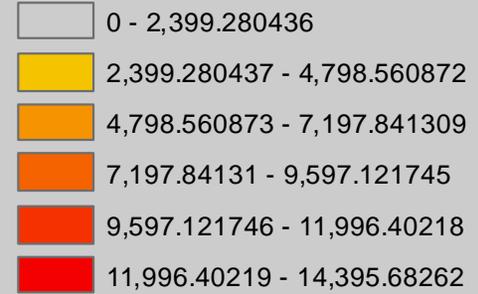
MINNEAPOLIS - CRIME DENSITY AUGUST 2006

4

Legend

CRIME DENSITY

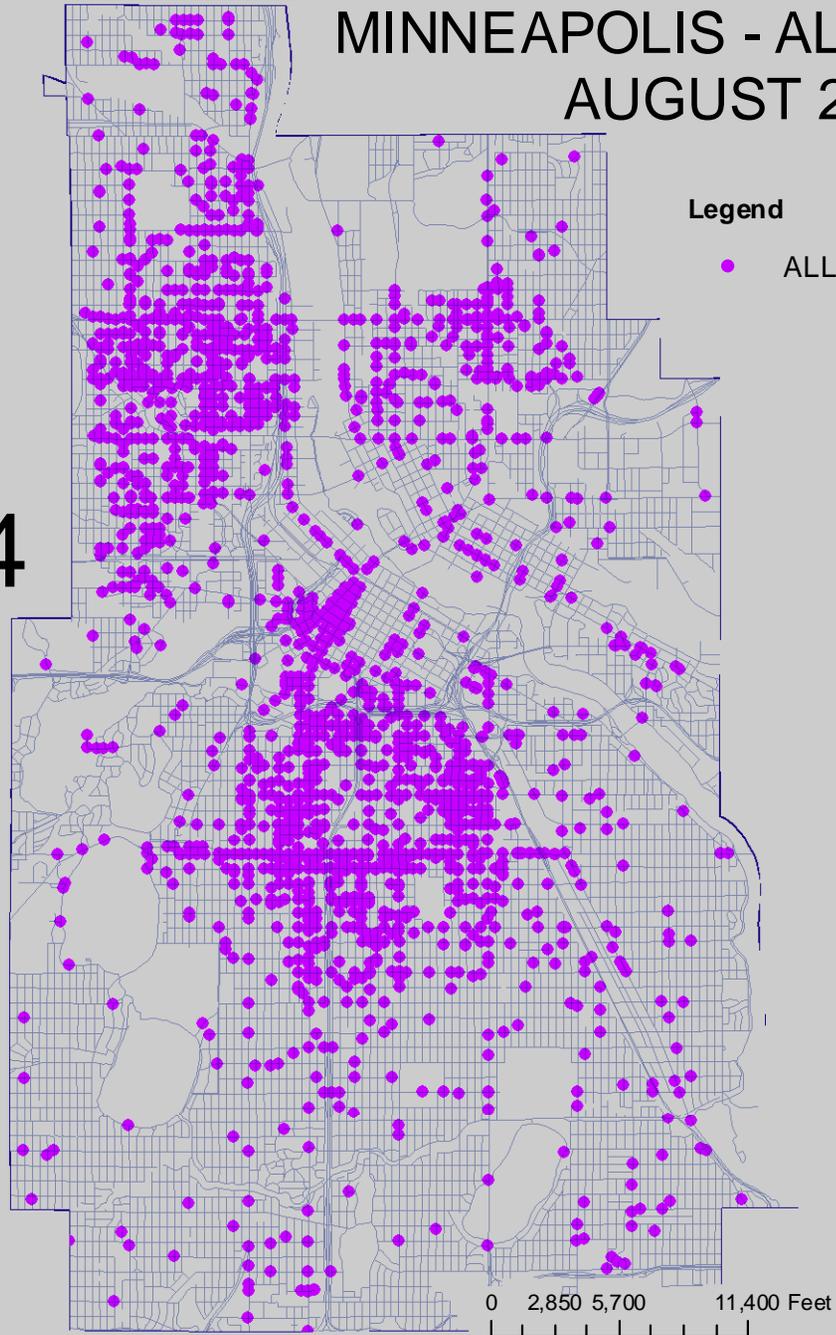
Value



0 2,850 5,700 11,400 Feet

MINNEAPOLIS - ALL ARRESTS AUGUST 2006

4



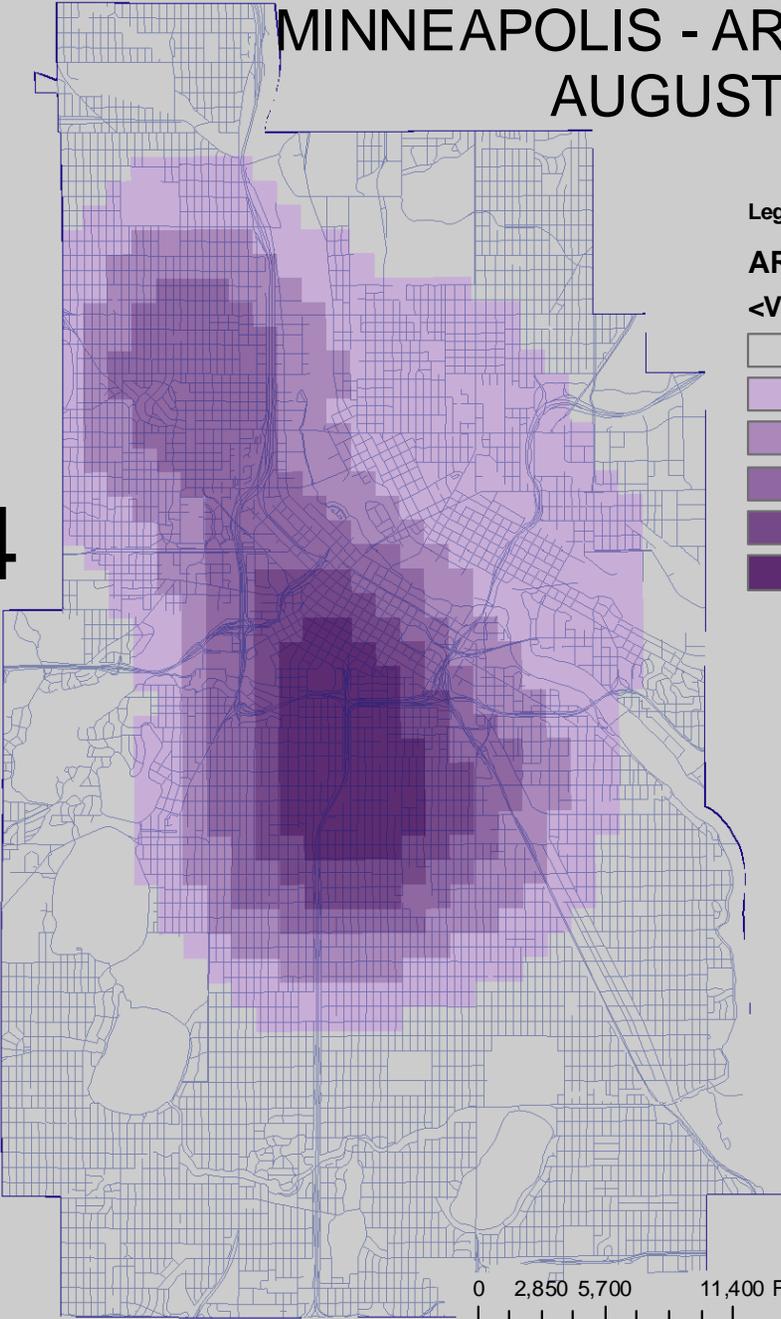
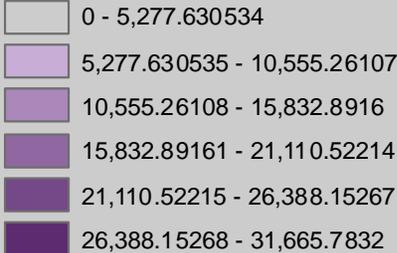
MINNEAPOLIS - ARREST DENSITY AUGUST 2006

4

Legend

ARREST DENSITY

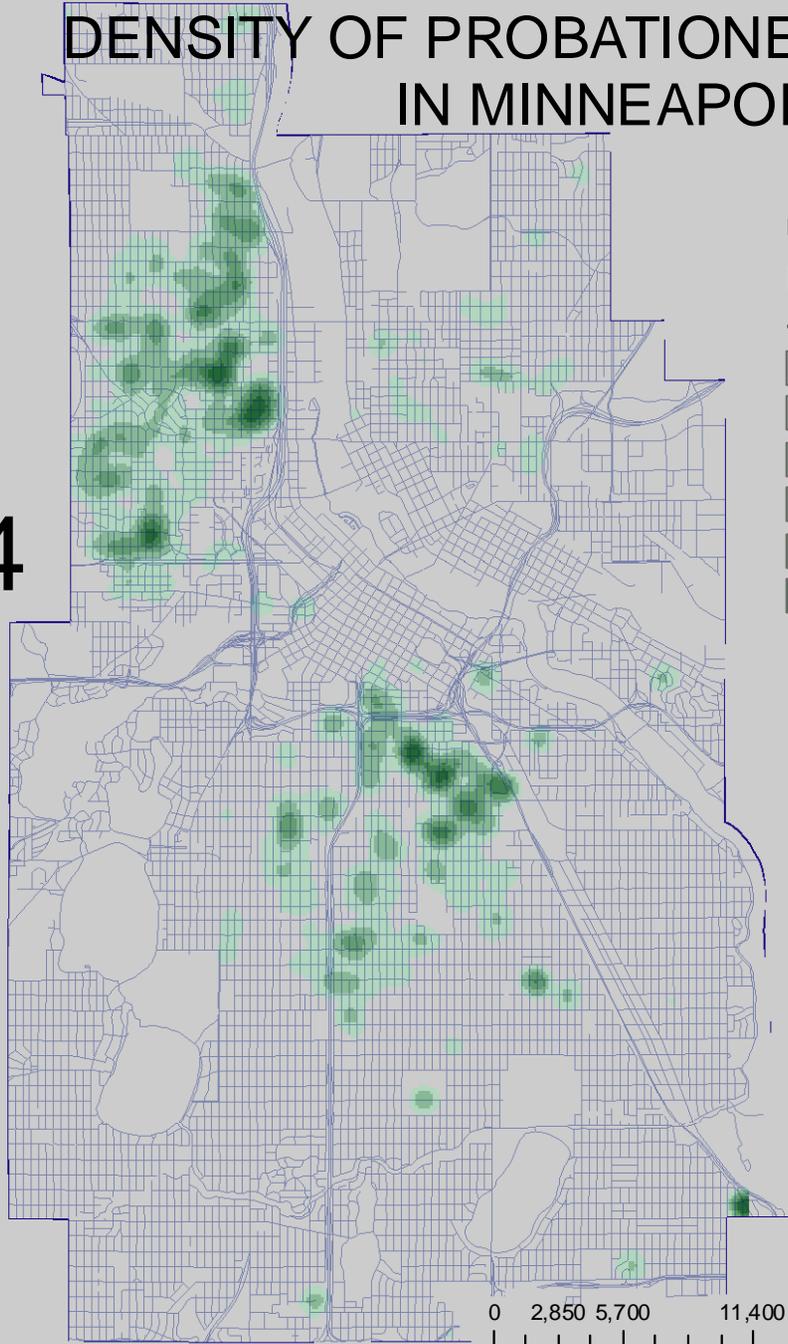
<VALUE>



0 2,850 5,700 11,400 Feet

DENSITY OF PROBATIONER RESIDENCE IN MINNEAPOLIS

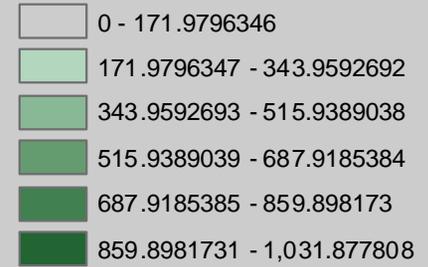
4



Legend

PROBATIONER RESIDENCE

<VALUE>

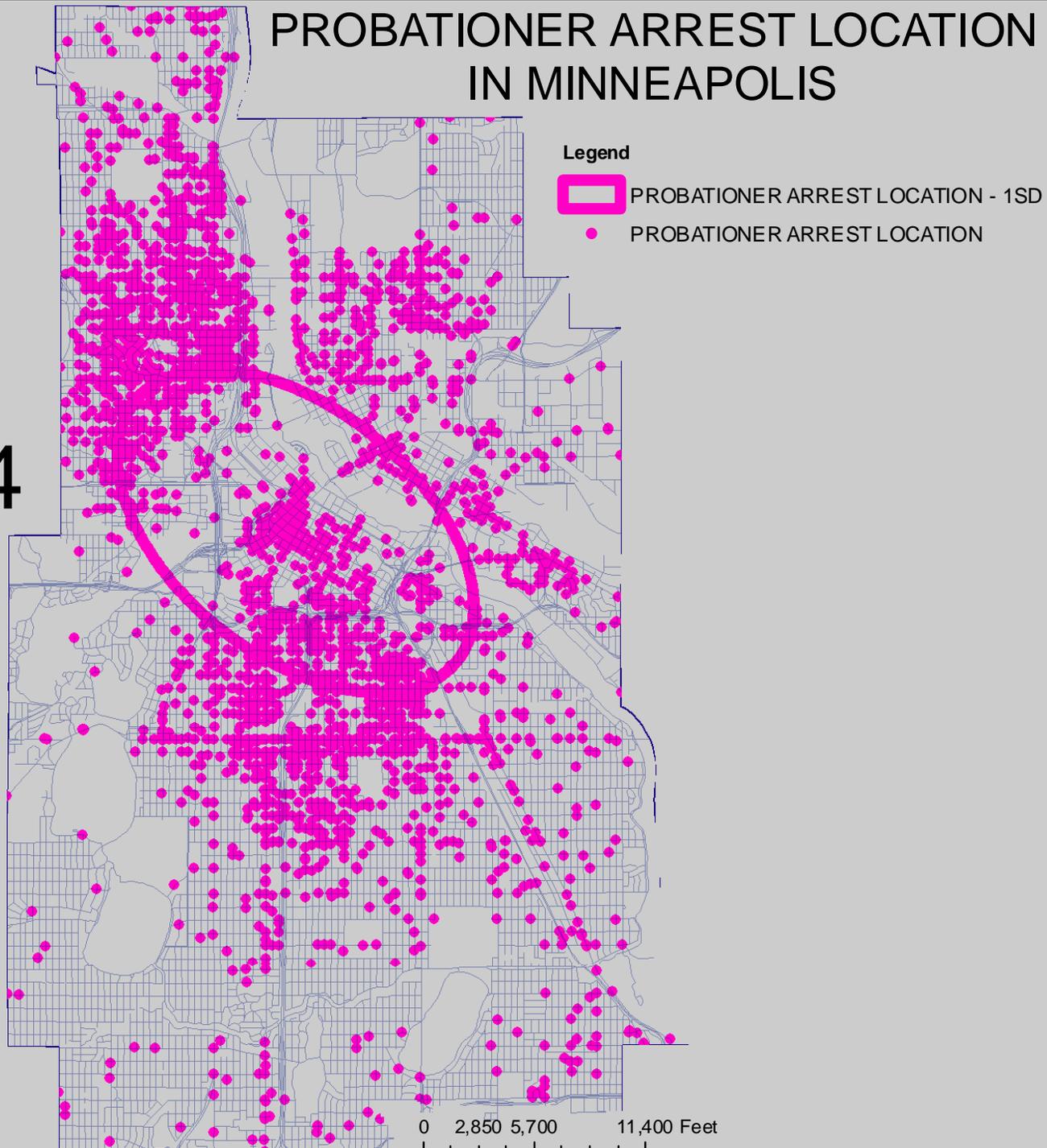


0 2,850 5,700 11,400 Feet



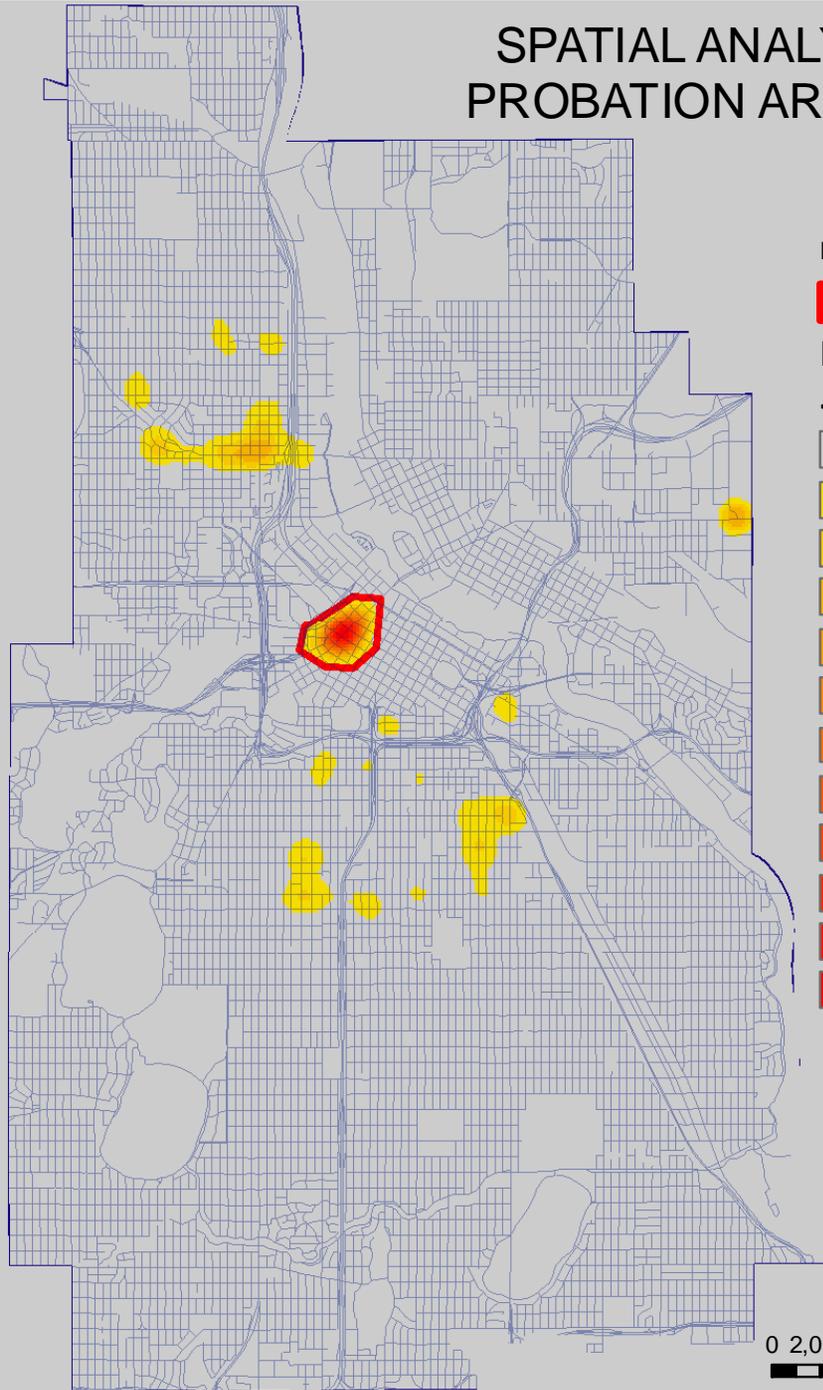
PROBATIONER ARREST LOCATION IN MINNEAPOLIS

4



SPATIAL ANALYST -- DENSITY PROBATION ARREST LOCATION

4



Legend

 DOWNTOWN POLYGON FOR SPIDER

PROBATIONER ARREST DENSITY

<VALUE>



0 2,056,100 8,200 12,300 16,400
Feet

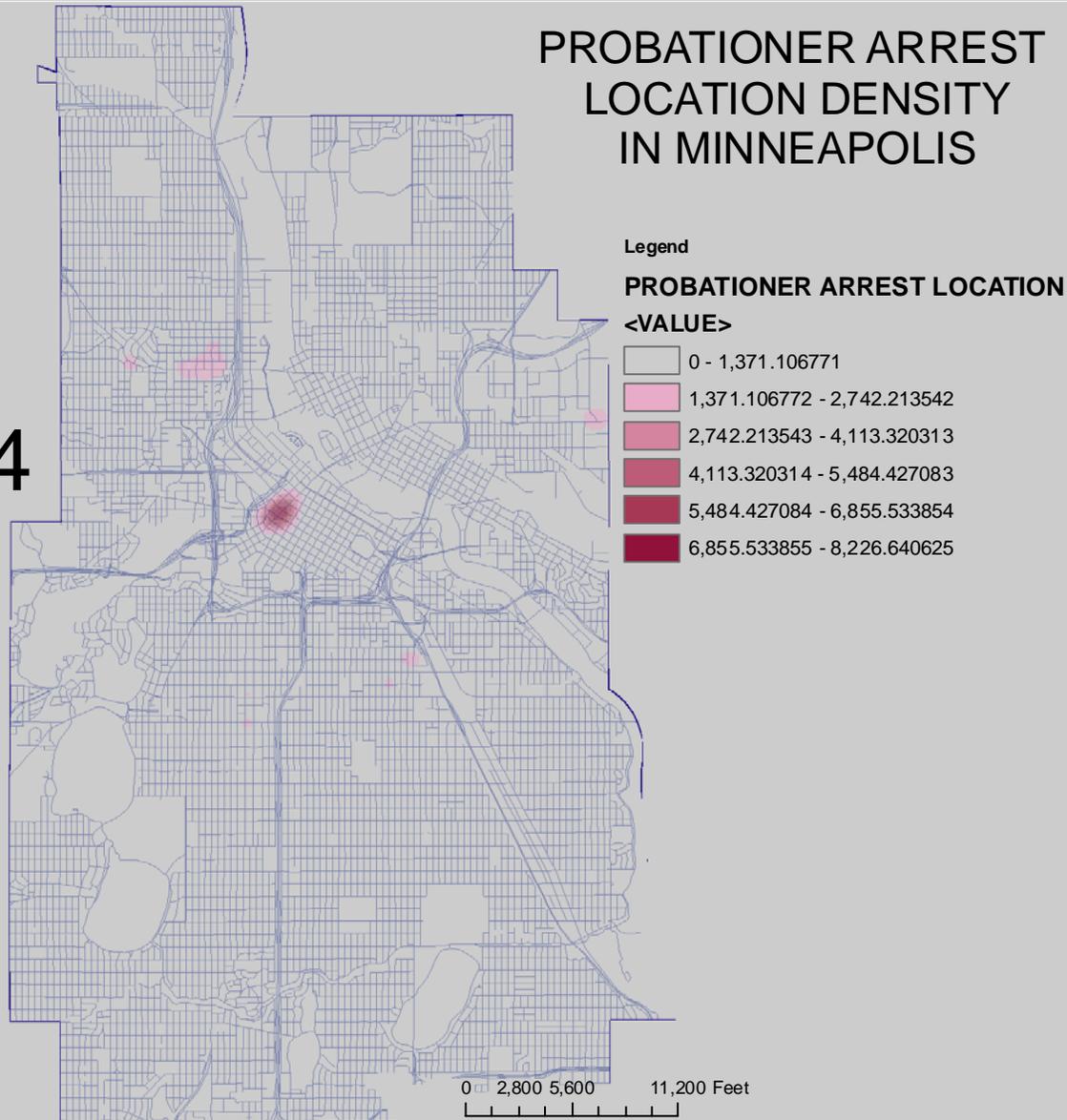
Density Maps Really Illustrate this Issue

- One needs to play with the number of density categories to get a clear picture.
- Using 5 or 6 categories the downtown area showed but other areas did not.
- Expanding to 12 categories clearly showed the lower volume “hot spots”

Examples

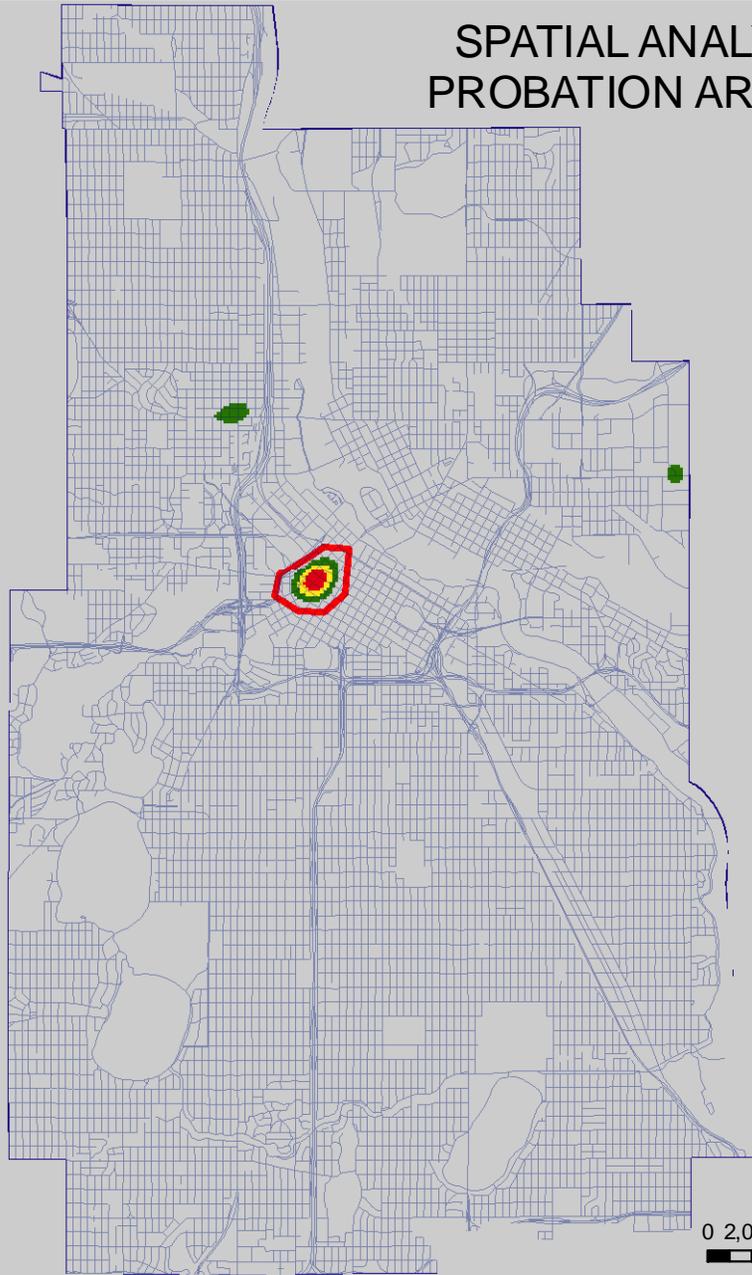
4

PROBATIONER ARREST LOCATION DENSITY IN MINNEAPOLIS



SPATIAL ANALYST -- DENSITY PROBATIONER ARREST LOCATION

4



Legend

 DOWNTOWN POLYGON FOR SPIDER

PROBATIONER ARREST DENSITY

<VALUE>

 0 - 2,056.660156

 2,056.660157 - 4,113.320313

 4,113.320314 - 6,169.980469

 6,169.98047 - 8,226.640625

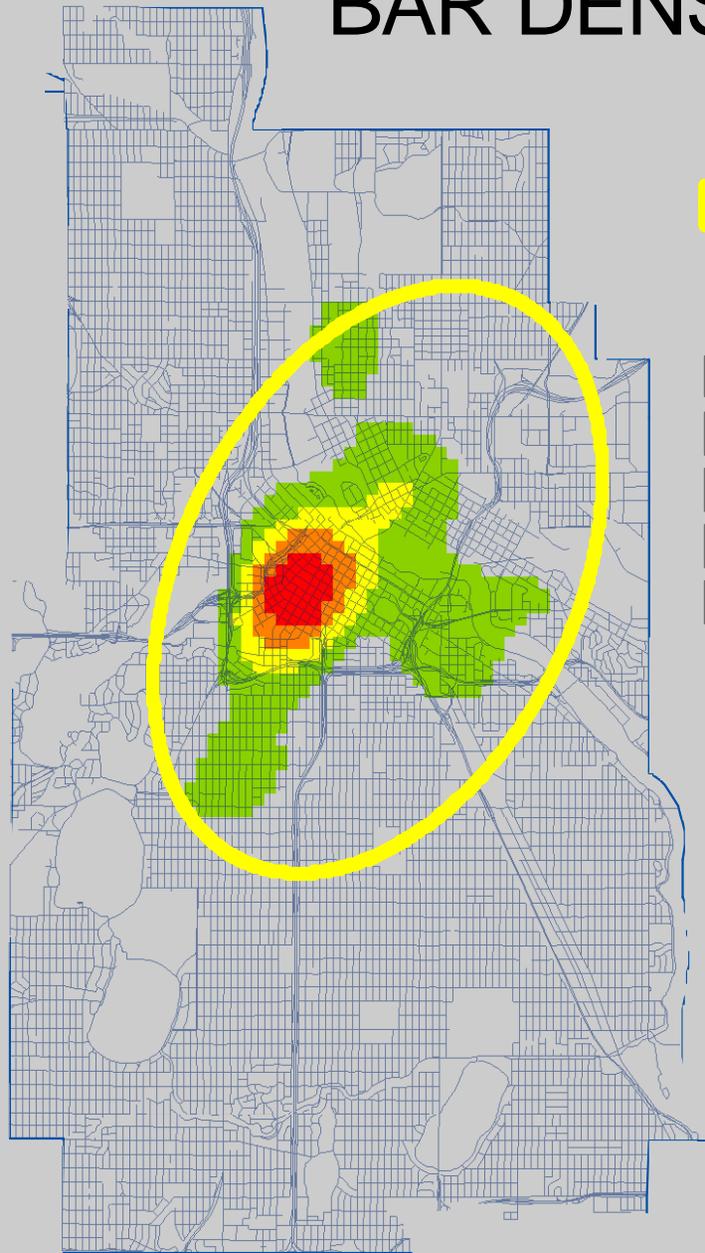
0 2,056.660156 4,113.320313 8,226.640625 16,453.28125
Feet

Downtown was the “HOT SPOT”

Guess where the bars are?

- Downtown is the central entertainment district.
- The bars alone have Fire Martial capacity limits of 30,000.
- Throw in the Target Center with seating for another 35,000 and beer and you get a crowd on Saturday night in Minneapolis!

BAR DENSITY



Legend

 BARS 1SD

BAR_DENSITY

<VALUE>

 0 - 4.704577255

 4.704577256 - 9.40915451

 9.409154511 - 14.11373177

 14.11373178 - 18.81830902

 18.81830903 - 23.52288628

Spatial Analyst Density

I used the defaults

Density

Input data: MplsBars

Population field: <None>

Density type: Kernel Simple

Search radius: 1449.07621

Area units: Square Miles

Output cell size: 171.364035

Output raster: E:\NIJ07Pub\BarDensity

OK Cancel

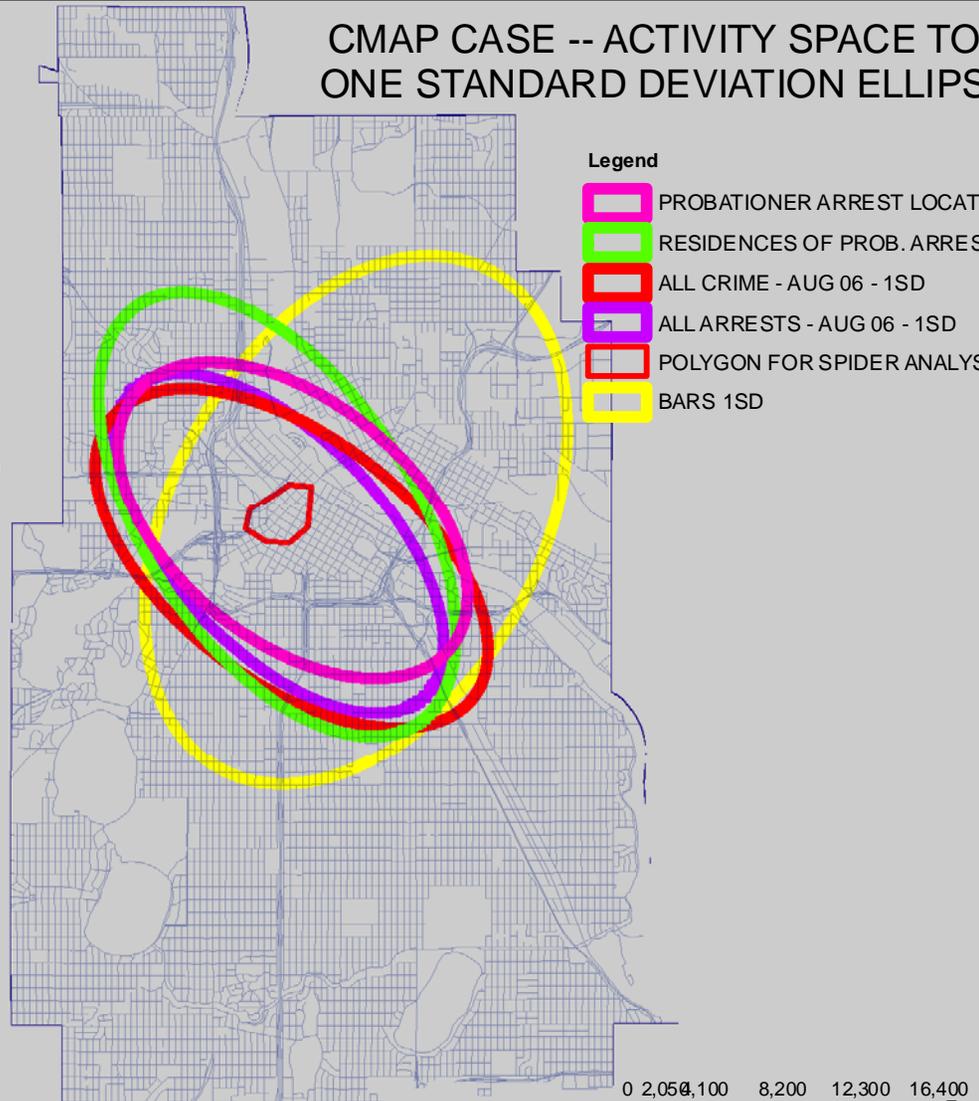
Downtown – The Atomic Core

4

CMAP CASE -- ACTIVITY SPACE TOOL
ONE STANDARD DEVIATION ELLIPSES

Legend

- PROBATIONER ARREST LOCATION - 1SD
- RESIDENCES OF PROB. ARRESTEE -- 1SD
- ALL CRIME - AUG 06 - 1SD
- ALL ARRESTS - AUG 06 - 1SD
- POLYGON FOR SPIDER ANALYSIS
- BARS 1SD

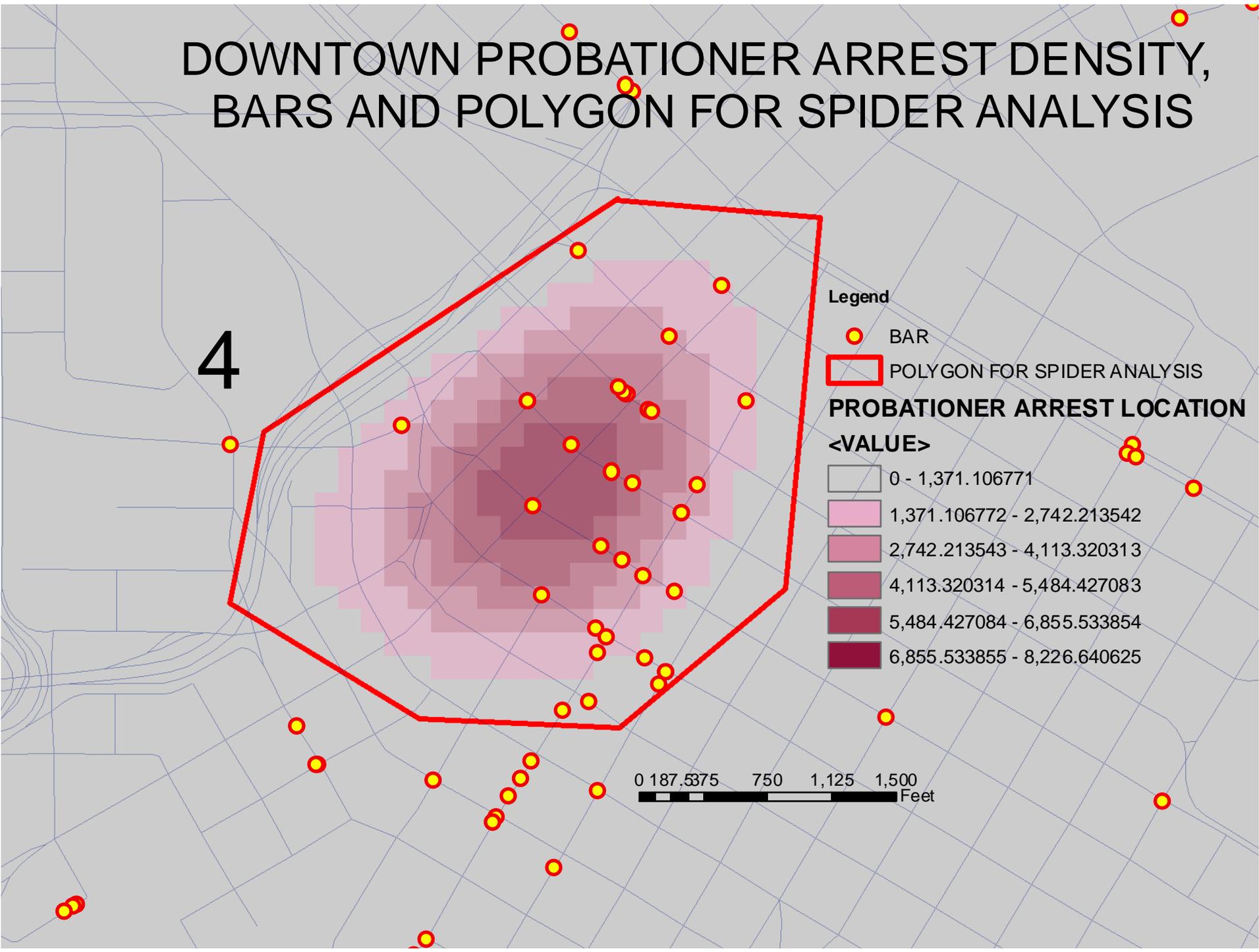


DOWNTOWN PROBATIONER ARREST DENSITY, BARS AND POLYGON FOR SPIDER ANALYSIS

4

Legend

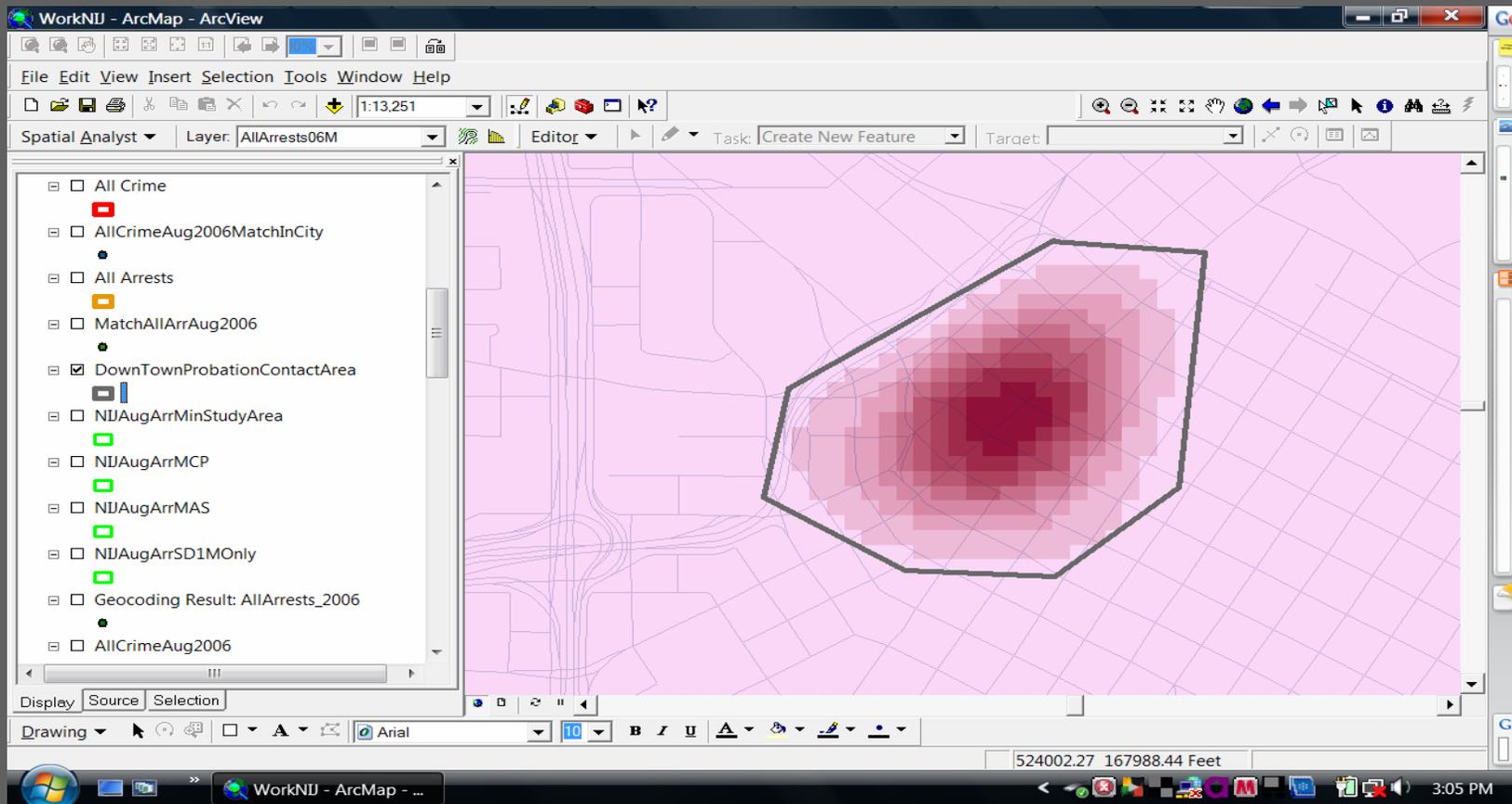
-  BAR
-  POLYGON FOR SPIDER ANALYSIS
- PROBATIONER ARREST LOCATION**
- <VALUE>**
-  0 - 1,371.106771
-  1,371.106772 - 2,742.213542
-  2,742.213543 - 4,113.320313
-  4,113.320314 - 5,484.427083
-  5,484.427084 - 6,855.533854
-  6,855.533855 - 8,226.640625



Downtown Polygon for Spider Analysis

- I drew the polygon based on a different number of density categories than shown.
- This polygon was used to select the Probationer arrests in Downtown
- These Arrests were “related” to the Residence table to get the corresponding Residence locations.
- Residences in Minneapolis were selected for the spider analysis

Downtown Contact Spider Polygon



Images of the Downtown High Contact Area

- Major Athletic/Concert arena
- Bars (Current occupant capacity – 30,000)
 - Imagine bar closing....
- Theater
- Smaller concert venues
- Major Retail and High Rise Business Towers on the edge





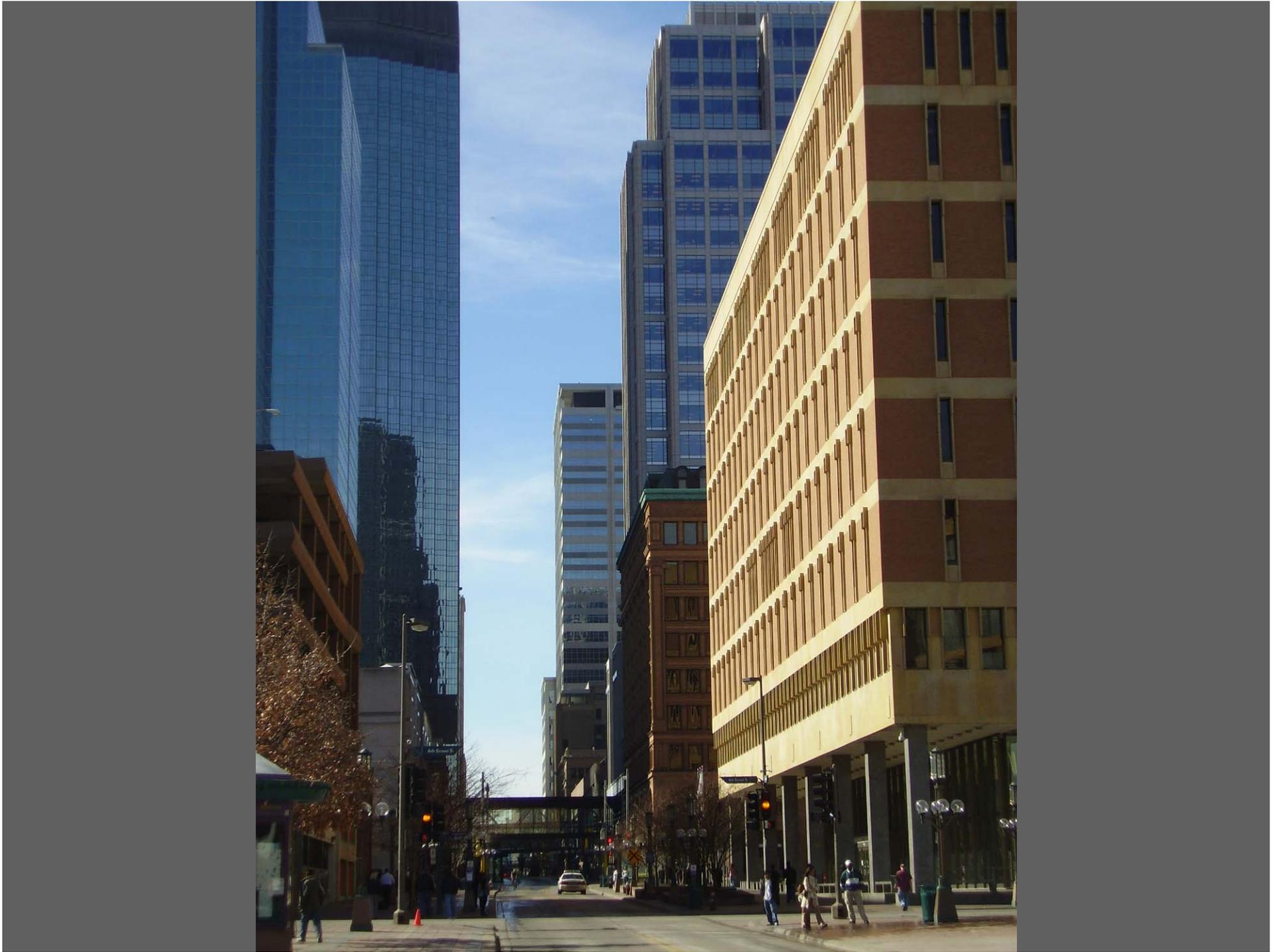
















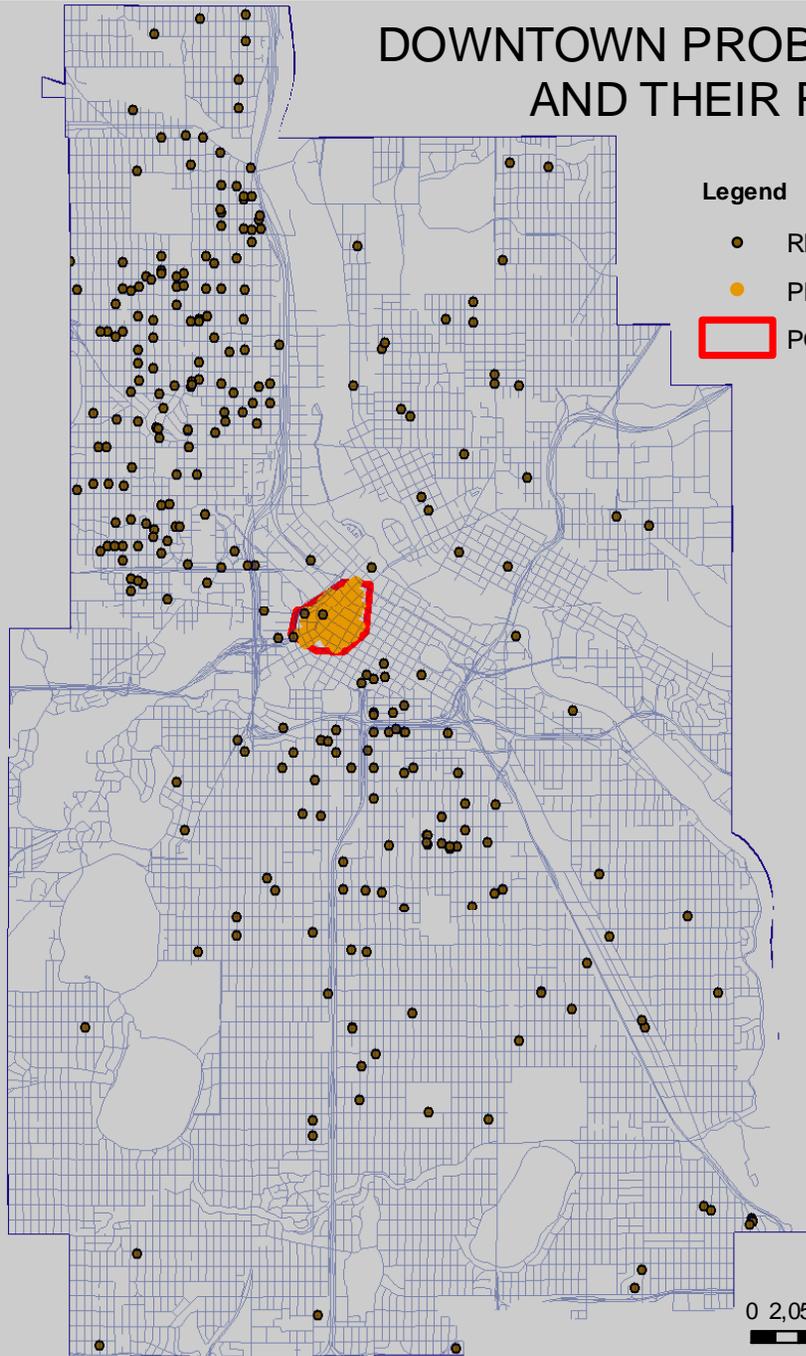
**EVENING &
WEEKEND
CONTRACT
PARKING
AVAILABLE
612-341-8000**

GIS Spider Analysis

- A spider diagram creates lines that connect the edge of a single polygon to multiple points.
- For our purposes the single polygon is the downtown “hot spot” area.
- The multiple points are the Probationer arrestee residences.

DOWNTOWN PROBATIONER ARRESTS AND THEIR RESIDENCES

4



Legend

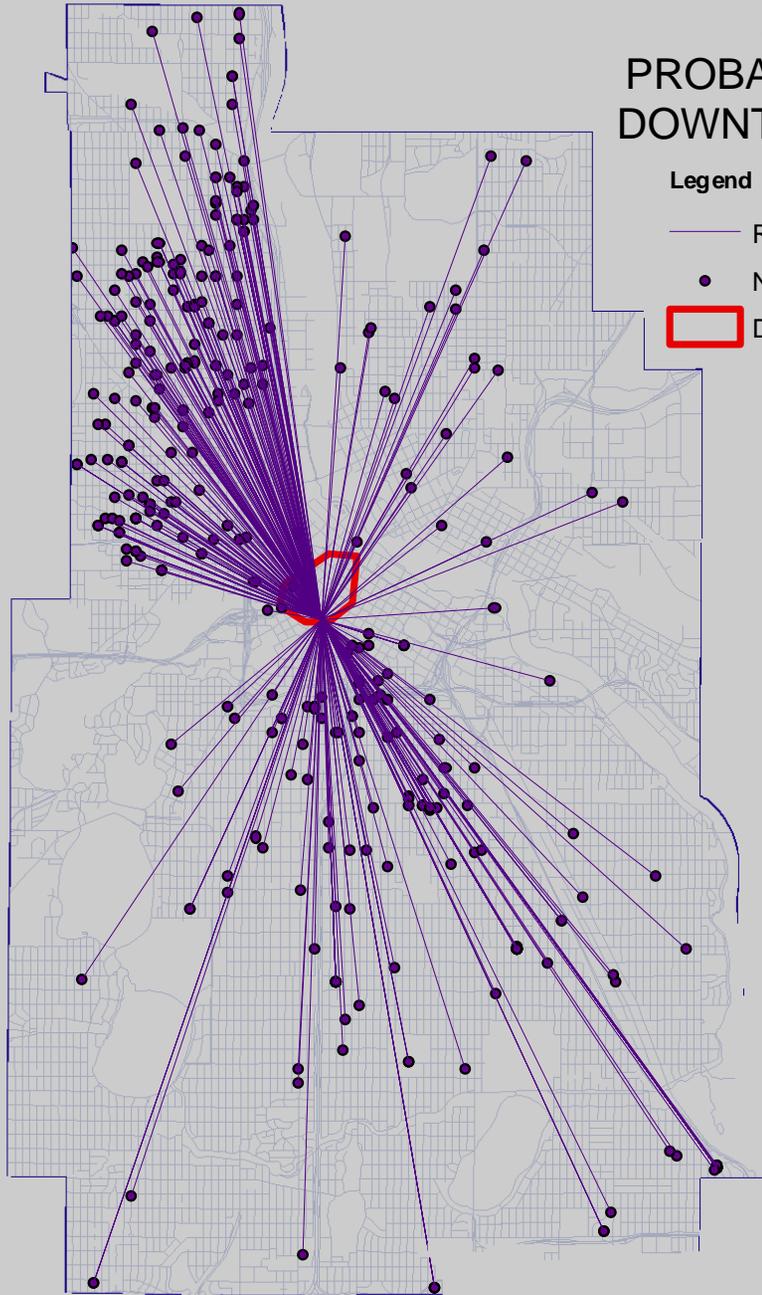
- RESIDENCE OF DT PROBATION ARRESTS
- PROBATIONER ARRESTS DT
- ▭ POLYGON FOR SPIDER ANALYSIS

0 2,050 4,100 8,200 12,300 16,400 Feet

SPIDER ANALYSIS PROBATIONER RESIDENCE TO DOWNTOWN ARREST POLYGON

Legend

- RESIDENCE TO DT POLYGON
- NIJDownTownSpatialJoin----POINT LAYER
- DownTownProbationContactArea----POLYGON LAYER



Probation Contact Analysis

Implications

- The downtown bar/entertainment district is a major Probationer contact area.
- Probationers living in the 4th Police Precinct (upper NW corner) are highly represented in these contacts.
- Geographic and Temporal restrictions prohibiting Probationers from downtown after 9 PM may be beneficial. (Needs further analysis)
- Probation Officers should be more actively involved downtown. (MPD works very closely and amiably with Probation.)

Further Study Indicated

- Examine the nature of all contact events.
- Examine the nature of the arrest events.
- Expand to view statewide perspective.
- Explore other Probationer “hot spots” in Minneapolis and surrounding communities
- Examine the involvement of bars or particular venues in the contacts.
- Examine the time of downtown contacts.

Douglas Hicks
Minneapolis Police Department

“doug.hicks@ci.minneapolis.mn.us”

612 673-3699

Part II – Automated Email Alerts

What are Automated Email Alerts?

- QUERIES of computerized databases
- designed for specific purposes and PEOPLE
- automatically run and delivered via email
- to desktop computers, display cell phones or display pagers
- without intervention
- on a set schedule.

Examples

The screenshot shows a web browser window titled "Microsoft Outlook Web Access - Mozilla Firefox". The address bar displays the URL "https://webmail.ci.minneapolis.mn.us/exchange/". The Outlook interface includes a left-hand navigation pane with icons for "Inbox", "Calendar", "Contacts", "Folders", "Options", and "Log Off". The main content area shows a message list under the heading "Hicks, Doug : Inbox". The list contains 20 entries, each with a checkbox, a status icon, a "From" field, a "Subject" field, a "Received" date, and a "Size" field. The messages are all from "Hicks, Doug" with subjects starting with "C4WK - CFS - Residential Property Alert" followed by a number. The "Received" date for all messages is "Wed 9/13/2006 11:32 AM". A "Found New Hardware" notification bubble is visible in the bottom right corner of the browser window. The Windows taskbar at the bottom shows the "start" button and several open applications: "Review - Urban Night...", "Microsoft PowerPoint ...", and "Microsoft Outlook We...". The system clock in the bottom right corner of the taskbar shows "11:33 AM".

			From	Subject	Received	Size
<input checked="" type="checkbox"/>	!	✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 77	Wed 9/13/2006 11:32 AM	16 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 78	Wed 9/13/2006 11:32 AM	21 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 79	Wed 9/13/2006 11:32 AM	8 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 74	Wed 9/13/2006 11:32 AM	16 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 75	Wed 9/13/2006 11:32 AM	64 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 76	Wed 9/13/2006 11:32 AM	10 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 71	Wed 9/13/2006 11:32 AM	16 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 72	Wed 9/13/2006 11:32 AM	33 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 73	Wed 9/13/2006 11:32 AM	16 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 67	Wed 9/13/2006 11:32 AM	37 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 68	Wed 9/13/2006 11:32 AM	10 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 69	Wed 9/13/2006 11:32 AM	16 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 70	Wed 9/13/2006 11:32 AM	17 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 62	Wed 9/13/2006 11:32 AM	55 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 63	Wed 9/13/2006 11:32 AM	16 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 64	Wed 9/13/2006 11:32 AM	8 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 65	Wed 9/13/2006 11:32 AM	28 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 60	Wed 9/13/2006 11:32 AM	16 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 61	Wed 9/13/2006 11:32 AM	57 KB
<input type="checkbox"/>		✉	Hicks, Doug	C4WK - CFS - Residential Property Alert 55	Wed 9/13/2006 11:32 AM	10 KB

Microsoft Outlook Web Access interface showing an email inbox for Doug Hicks. The browser address bar shows <https://webmail.ci.minneapolis.mn.us/exchange/>. The page displays a list of 20 messages, with the first two folders (CAPRSTeam and gis) expanded. The messages are sorted by received date, showing a list of alerts and reports from Doug Hicks and other contacts like Jamie Hopkins and Sue Roethele.

<input type="checkbox"/>			From	Subject	Received	
<input type="checkbox"/>			Hicks, Doug	C4Wk -- Commercial Property CFS Alert	Wed 9/13/2006 11:30 AM	1
<input type="checkbox"/>			Hicks, Doug	C4Wk -- Commercial Property CFS Alert	Wed 9/13/2006 11:30 AM	1
<input type="checkbox"/>			Hicks, Doug	C4Wk -- Commercial Property CFS Alert	Wed 9/13/2006 11:30 AM	1
<input type="checkbox"/>			Hicks, Doug	C4 Weekly -- Little Earth CFS	Wed 9/13/2006 11:09 AM	1
<input type="checkbox"/>			Hicks, Doug	CFS StartDates: CFS C4 Week Form	Wed 9/13/2006 11:09 AM	1
<input type="checkbox"/>			Hicks, Doug	C4 Weekly -- Little Earth CFS For Law Enforcement Use Only.	Wed 9/13/2006 11:09 AM	2
<input type="checkbox"/>			Jamie Hopkins	presentation at CONNECT	Wed 9/13/2006 11:09 AM	1
<input type="checkbox"/>			Hicks, Doug	C4 Weekly -- CFS in Safe Zone Camera Area.	Wed 9/13/2006 11:06 AM	42
<input type="checkbox"/>			Hicks, Doug	CFS StartDates: CFS C4 Week Form	Wed 9/13/2006 11:02 AM	1
<input type="checkbox"/>			Hicks, Doug	New CFS DAILY StartDates	Wed 9/13/2006 11:02 AM	1
<input type="checkbox"/>			Hicks, Doug	Daily Calls Suggesting Ordinance 389.65 Violations	Wed 9/13/2006 11:02 AM	2
<input type="checkbox"/>			Hicks, Doug	Daily Calls At MPHA Properties (qryDailyCallsMPHAAddresses)	Wed 9/13/2006 11:02 AM	1
<input type="checkbox"/>			Hicks, Doug	Hourly -- Safe Zone Camera List	Wed 9/13/2006 11:01 AM	1
<input type="checkbox"/>			Hicks, Doug	Daily Calls At Problem Properties (qryDailyCallsProbProp2)	Wed 9/13/2006 10:58 AM	1
<input type="checkbox"/>			SanJuanita Lopez	RE: C4 Wkly -- (RJ)Adult Arrest List. CODEFOR WK 449 -- 8/29/2006 through 9/4/2006	Wed 9/13/2006 10:54 AM	1
<input type="checkbox"/>			Hicks, Doug	Count of Calls for Service Yesterday.	Wed 9/13/2006 10:38 AM	1
<input type="checkbox"/>			Roethele, Sue	Out of Office AutoReply: Daily -- CALLS FOR SERVICE in P3 Convenience Stores.	Wed 9/13/2006 10:37 AM	2
<input type="checkbox"/>			Hicks, Doug	CFS Daily -- Problem Property Nature Code Alert	Wed 9/13/2006 10:37 AM	4
<input type="checkbox"/>			Hicks, Doug	Daily -- CALLS FOR SERVICE in P3 Convenience Stores.	Wed 9/13/2006 10:37 AM	1
<input type="checkbox"/>			Hicks, Doug	Daily -- CFS SHOTS FIRED reported by Citizens in past 24 hours.	Wed 9/13/2006 10:37 AM	1

Edit View Go Bookmarks Tools Help
 https://webmail.ci.minneapolis.mn.us/exchange/

Microsoft Outlook Web Access
 Hicks, Doug : Inbox Page: 21 of 521

CAPRSTeam
 gis

<input type="checkbox"/>			From	Subject	Received
<input type="checkbox"/>			Hicks, Doug	AkervJ -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	FetteS -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	JungmT -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	SitzeC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	FernoB -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	RCRC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	AkervJ -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	RucciJ -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	JohnsT -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	RucciJ -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	SitzeC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	LannuC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	RCRC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	LannuC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	FernoB -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	RCRC -- RAMSEY COUNTY PROBATION ALERT	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	HennCty JUVENILE PROBATION ALERT Started-- Lotus Notes users, use LAUNCH to open.	Wed 9/13/2006 6:32 AM
<input type="checkbox"/>			Hicks, Doug	PROBATION ALERT -- Lotus Notes users, use LAUNCH to open.	Wed 9/13/2006 6:31 AM
<input type="checkbox"/>			Hicks, Doug	PROBATION ALERT -- Lotus Notes users, use LAUNCH to open.	Wed 9/13/2006 6:31 AM
<input type="checkbox"/>			Hicks, Doug	PROBATION ALERT -- Lotus Notes users, use LAUNCH to open.	Wed 9/13/2006 6:31 AM

webmail.ci.minneapolis.mn.us

If you have doubts.....

- Thought you all might be interested in this "success" story!! This is from Federal Probation!!

09/06/06 10:54 AM >>>

Hey Deb... this weekend you had forwarded me an Alert that was sent to Elizabeth Callahan (what the heck were you working on a holiday weekend for anyway??). Anyway, that particular officer is my husband's partner, and they were out working on Saturday (they work off-hours). Well, Betsy had received a call from one of her client's wives indicating there was an issue with her ex-husband and being arrested and stuff....and Betsy thought oh great, here we go trying to track him down now! Well, she turned on her computer, and there was the alert from the Mpls PD. They went right there and were able to talk to the arresting officer and get a copy of the report, which enabled them to quickly find their guy. My husband's remark was "Oh man, that was so awesome...it would have taken us a WEEK to track this guy down". So this alert system is so awesome. I can't wait for all law enforcement agencies to participate!

Jean Hermes
United States Probation
District of Minnesota

Is this expensive?

- NO!
- Built with Microsoft Access
- Minimal involvement of formal IT
- Experience with Access?

Drag a column header here to group by that column.

	From	Subject	Received	
✉	Hicks, Doug	Daily -- Edison Students (age 19 and under)	Fri 7/28/2006 6:30...	✉
✉	Hicks, Doug	Daily -- JordanPark Students (age 19 and under)	Fri 7/28/2006 6:30...	✉
✉	Hicks, Doug	Daily -- Folwell Students (age 19 and under)	Fri 7/28/2006 6:30...	✉
✉	Hicks, Doug	Daily -- SW Students (age 19 and under)	Fri 7/28/2006 6:29...	✉
✉	Hicks, Doug	Daily -- Henry Students (age 19 and under)	Fri 7/28/2006 6:29...	✉
✉	Hicks, Doug	Daily -- North Students (age 19 and under)	Fri 7/28/2006 6:29...	✉
✉	Hicks, Doug	Daily -- South Students (age 19 and under)	Fri 7/28/2006 6:29...	✉
✉	Hicks, Doug	Daily -- Roosevelt Students (age 19 and under)	Fri 7/28/2006 6:29...	✉
✉	Hicks, Doug	Daily -- NE Students (age 19 and under)	Fri 7/28/2006 6:29...	✉
✉	Hicks, Doug	Daily -- Andersen Students (age 19 and under)	Fri 7/28/2006 6:29...	✉
✉	Hicks, Doug	Daily -- One Year JUVENILE Arrest Histories of Arrestees in ...	Fri 7/28/2006 6:29...	✉
✉	Hicks, Doug	Daily -- One Year JUVENILE Arrest Histories of Arrestees in ...	Fri 7/28/2006 6:29...	✉
✉	Hicks, Doug	Daily -- One Year JUVENILE Arrest Histories of Arrestees in ...	Fri 7/28/2006 6:29...	✉
✉	Hicks, Doug	Daily -- One Year Adult Arrest Histories of Arrestees in P5.	Fri 7/28/2006 6:28...	✉
✉	Hicks, Doug	Daily -- One Year Adult Arrest Histories of Arrestees in P4.	Fri 7/28/2006 6:26...	✉
✉	Hicks, Doug	Daily -- One Year Adult Arrest Histories of Arrestees in P3.	Fri 7/28/2006 6:25...	✉
✉	Hicks, Doug	Daily -- One Year Adult Arrest Histories of Arrestees in P1.	Fri 7/28/2006 6:23...	✉
✉	Hicks, Doug	Daily -- BogusBoys -- MPD Contact Check (Hurley List) Exa...	Fri 7/28/2006 6:21...	✉
✉	Hicks, Doug	Daily -- DOE Boys -- MPD Contact Check Exact match on Fir...	Fri 7/28/2006 6:21...	✉
✉	Hicks, Doug	StartDates: Daily Ran Run Table	Fri 7/28/2006 6:21...	✉

9637 Items, 3544 Unread

- Calendar
- Contacts
- Tasks
- Notes
- Deleted Items (20)
- My Shortcuts
- Other Shortcuts

Drag a column header here to group by that column.

From	Subject	Received
Hicks, Doug	JarosV -- RAMSEY COUNTY JUVENILE PROBATION ALERT	Fri 7/28/2006 6:37...
Hicks, Doug	All Conditions Complete -- PROBATION ALERT	Fri 7/28/2006 6:37...
Hicks, Doug	Daily DOC Probation Started7/28/2006 6:37:10 AM	Fri 7/28/2006 6:37...
Hicks, Doug	Kelly Heng -- PROBATION ALERT	Fri 7/28/2006 6:37...
Hicks, Doug	ANOKA COUNTY PROBATION ALERT	Fri 7/28/2006 6:37...
Hicks, Doug	Daily -- PUBLIC P3 COURT WATCH LIST.	Fri 7/28/2006 6:37...
Hicks, Doug	Daily -- PUBLIC P5 COURT WATCH LIST.	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- African or Other Suspects or Arrestees	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- Major Assault or Gang Cases	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- ProbProp People Residence	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- CAPRS Conduct On Premise Offenses	Fri 7/28/2006 6:36...
Hicks, Doug	Daily (Original) -- CAPRS Problem Property Check	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- CAPRS Problem Property Check	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- P3 Chronicles -- Contact Check using Exact match on...	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- Adults Arrested Chi to Bloom, 28 to 31	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- MPD Check on HCSO Warrants	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- Ck of 25 Habitual Offenders	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- Sex Offender Alert	Fri 7/28/2006 6:36...
Hicks, Doug	Daily -- Assaults Working List Includes all assaults, aggrev...	Fri 7/28/2006 6:35...
Hicks, Doug	Daily -- Lino Lakes Area Residents	Fri 7/28/2006 6:35...
Hicks, Doug	Daily -- Inver Grove Heights Residents	Fri 7/28/2006 6:35...

9637 Items, 3544 Unread

Drag a column header here to group by that column.

From	Subject	Received
Hicks, Doug	New CFS StartDates: C4 Week Form	Wed 7/26/2006 11:14 AM
Hicks, Doug	C4WK - CFS- CONDUCT (qryC4WkConduct)	Wed 7/26/2006 11:14 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 342	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 343	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 344	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 345	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 338	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 339	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 340	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 341	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 334	Wed 7/26/2006 11:13 AM
MAILER-DAEM...	failure notice	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 335	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 336	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 337	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 329	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 330	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 331	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 332	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 333	Wed 7/26/2006 11:13 AM
Hicks, Doug	C4WK - CFS - Residential Property Alert 324	Wed 7/26/2006 11:13 AM

9503 Items, 3414 Unread

- Outlook Shortcuts
- Calendar
- Contacts
- Tasks
- Notes
- Deleted Items (150)
- My Shortcuts
- Other Shortcuts

- Folders
- look Today
- Calendar
- Contacts
- Deleted
- Drafts
- GANG
- Inbox
- CAPR
- gis
- Journal
- Junk E-mail
- Notes
- Outbox
- Saved
- saved_mll
- Sent Items
- Tasks
- Public Folders

Drag a column header here to group by that column.

From	Subject	Received
Hicks, Doug	C4Wk -- Commercial Property CFS Alert	Wed 7/26/2006 11:10 AM
Hicks, Doug	C4Wk -- Commercial Property CFS Alert	Wed 7/26/2006 11:10 AM
Hicks, Doug	C4Wk -- Commercial Property CFS Alert	Wed 7/26/2006 11:10 AM
Hicks, Doug	C4Wk -- Commercial Property CFS Alert	Wed 7/26/2006 11:10 AM
Hicks, Doug	C4 Weekly -- Little Earth CFS For Law Enforceme...	Wed 7/26/2006 10:53 AM
Hicks, Doug	C4 Weekly -- Little Earth CFS	Wed 7/26/2006 10:53 AM
Hicks, Doug	CFS StartDates: CFS C4 Week Form	Wed 7/26/2006 10:53 AM
Hicks, Doug	CFS StartDates: CFS C4 Week Form	Wed 7/26/2006 10:50 AM
Hicks, Doug	New CFS DAILY StartDates	Wed 7/26/2006 10:50 AM
Hicks, Doug	Daily Calls Suggesting Ordinance 389.65 Violations	Wed 7/26/2006 10:50 AM
Hicks, Doug	Daily Calls At MPHA Properties (qryDailyCallsMP...	Wed 7/26/2006 10:50 AM
Hicks, Doug	Daily Calls At Problem Properties (qryDailyCallsP...	Wed 7/26/2006 10:45 AM
Hicks, Doug	Count of Calls for Service Yesterday.	Wed 7/26/2006 10:39 AM
Hicks, Doug	CFS Daily -- Problem Property Nature Code Alert	Wed 7/26/2006 10:37 AM
Hicks, Doug	Daily -- CALLS FOR SERVICE in P3 Convenience St...	Wed 7/26/2006 10:37 AM
Hicks, Doug	Daily -- CFS SHOTS FIRED reported by Citizens in...	Wed 7/26/2006 10:37 AM
Hicks, Doug	Daily Narcotic Activity Around High NARC Call Loc...	Wed 7/26/2006 10:37 AM
Hicks, Doug	Daily -- CFS High NARC Call Locations, Dates/Tim...	Wed 7/26/2006 10:37 AM
Hicks, Doug	Daily CFS High NARC Call Locations past 7 days.	Wed 7/26/2006 10:37 AM
Hicks, Doug	CFS StartDates: CFS Daily	Wed 7/26/2006 10:36 AM
Bruce, Christop...	Fraud Case	Wed 7/26/2006 9:02 AM

9503 Items, 3414 Unread

Police Databases

- Hold tremendous volumes of information
- Are very accurate
- Can be easily queried and summarized
- Are independent of each other
- Are UNDERUTILIZED

Databases Used in Minneapolis

- MPD CAPRS database (MS SQL Server)
- Probation (Adult and Juvenile)
- 911 Emergency Calls for Service
- Public Housing Locations
- PC Pickup/Warrant database
- Registered Sex Offenders
- Known Gang Members
- Residential Properties

Automated Email = Automated Queries / Done and Sent

- Excel files are the currency
- Cheap and Easy

Requests:

- Range from Simple to Complex
- Are very time consuming
- Never stop coming
- Are cumulative
- Are frequently asked for over and over
- Difficult to keep track of
- Are composed of database QUERIES

Requests can be unreasonable....Can you?

- Check daily for officer contacts with known Gang members?
- Checking 1-20 may be reasonable
- What about 5000?
- Minneapolis has 5000+ known gang members. We check them daily!

You can do it too!

How?

Automated
Email Alerts

Automated Alerts

- We check over 150,000 people for any contact with our Department EVERY DAY.
- We do it without thinking about it
- We do it without touching the computer
- We automatically notify authorities of the contacts
- We do it in an hour or less.
- It is working right now!

Process Schedules

- Hourly
- Daily
- Weekly
- Monthly

AUTOMATED REQUESTS

EXAMPLES

HOURLY ALERTS

- Alert Investigators of their warrant arrests.
- Notice is sent to 911 Dispatch on weekends and evenings
- Monitor “Special People” for Narcotics and send message to phone when arrested.
- Safe Zone Camera Events

DAILY ALERTS

- GANG ALERT -- Check over 5000 known GANG Members for contact and alert Gang Investigators of any contacts and list all people in the case.
- PROBATION ALERT -- Check High Risk Probationer list and email PO of contact. 130,500 are checked each morning at 0630.

Probation Report

Microsoft PowerPoint - INOMinneapolis Automated Email A...
AccessReport19.rtf - Microsoft Word

File Edit View Insert Format Tools Table Window Help
Type a question for help

Final Showing Markup Show

1 2 3 4 5 6 7

MPD Contact With Ramsey County Probationer

Reference list is updated weekly. Current list installed on: 7/17/2006 4:05:26 PM
Date/Time this report was run: 7/25/2006 6:42:25 AM

Probationer: Walker, Keonte 3/28/1986
Agent: PederG

MPD Case Number: MP 2006 205994

Primary_Offense: MISC Doesnt Fit Any Crim
Role: **Arrestee**

ReportedDate: 7/24/2006 7:32:00 7: 32
BeginDate: 7/24/2006 5:50:00 5: 50
PCT: 03 Squad: 372 Officer: Kimmerle

PublicInformation:
AP1 was placed under arrest after driving a MV with stolen license plates. AP1 booked HCJ.

End of Report on: Walker, Keonte 3/28/1986

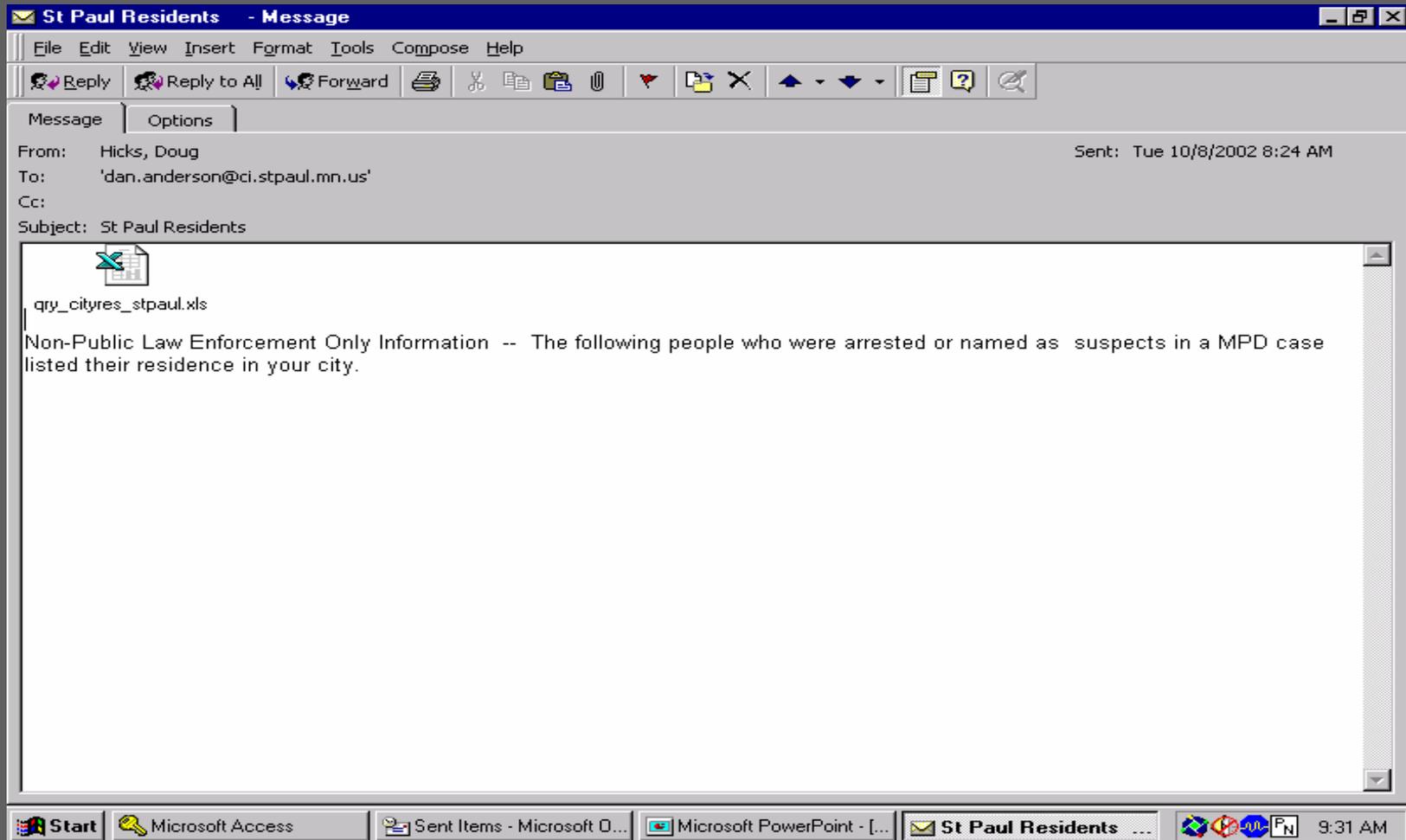
Page 1 Sec 1 1/1 At 1" Ln 1 Col 1 REC TRK EXT OVR

start 4 Microsoft... 2 Microsoft... MACIA 2 Microsoft... AccessRepor... 2:56 PM

DAILY ALERTS

- REGISTERED SEX OFFENDERS -- check for any contacts and notify Sex Crimes Investigators. Alerts them to potential problems, failure to notify of change of address, probation violations, etc.
- RESIDENT ALERT -- “heads up” to surrounding communities of their residents arrested in Mpls. (50+ Communities)

Resident Alert



Microsoft Excel - qry_cityres_stpaul.xls

File Edit View Insert Format Tools Data Window Help

MS Sans Serif 10 B I U \$ % , +.0 +.00 100%

L24 =

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	ReportedDate	aryOffer	Offense	OffDesc	Role	LastName	FirstName	DateOfBirth	GangAffil	SetMember	Race	Sex	CaseYear
2	07-Oct-02		R&C	Stolen Propty Offens	A	Hoper	Timothy	16-Jan-80			O	M	200
3	07-Oct-02		WT	Warrant	A	Hoper	Timothy	16-Jan-80			O	M	200
4	07-Oct-02	FALSNM	FALSNM	False Name Or Info	A	Brown	Laron	11-Apr-71	VICE LORD		B	M	200
5	07-Oct-02	FALSNM	NODL	No Valid DI	A	Brown	Laron	11-Apr-71	VICE LORD		B	M	200
6													
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24													

Ready

Start Microsoft Access Sent Items - Mic... Microsoft PowerP... St Paul Residents... Microsoft Exc... 9:33 AM

DAILY ALERTS

- PUBLIC SCHOOLS -- notify Liaison Officer of students arrested who attend their school.
- CITY ATTORNEY -- monitor their top chronic offenders

DAILY ALERTS

- PUBLIC HOUSING -- list crimes in and persons arrested anywhere who used a PH address as their residence.
- JUVENILE DIV -- alert to juvs arrested with auto theft histories.
- SPECIAL INVESTIGATIONS -- monitor “Heavy Hitters”

DAILY ALERTS

- SHOTS FIRED -- 911 Reports .
- EMERGING NARCOTIC CALL AREAS -
- based on 911 calls received.
- GRAFFITI -- cases and persons arrested.
- MASS TRANSIT -- bus related offenses.

WEEKLY REQUESTS

- PUBLIC SCHOOLS -- list of Juveniles involved with weapons, drugs or assaults.
- COMMUNITY COURTS / RESTORATIVE JUSTICE -- compile lists of arrested persons who match the program's criteria.

WEEKLY REQUESTS

- SHELTER RESIDENTS -- public list of Adults arrested anywhere who gave a “shelter” or “NPA” as their address. Provided to shelters.
- PARKING GARAGES -- monitor crimes reported in downtown parking ramps.

WEEKLY REQUESTS

- Asian Arrests for Gang Strike Force
- Crimes in Bars
- Crimes around the Veterans Admin Hosp.
- Thefts and Burglary of Biz downtown
- Neighborhood Summaries

MONTHLY REQUESTS

- Crimes against persons for County.
- “Crime on Campus” Compliance
- Top Livability Offenders for City Attorney
- Juveniles arrested for Auto Theft
- High Crime Area report for Precinct
- Community Requests

Suggestions or other ideas that
spring to mind.....?

How is it done?

- We will work through the process...to satisfy a simple request....
-Your Gang Unit wants to know about all Gang related events **EVERY MORNING.**

First, what do you need from your formal IT for Automation?

Microsoft Access

Direct access to the data tables of your information system(s) – ODBC connections

Static IP address for your workstation

SMTP permissions for your jurisdiction's email server AND permissions to forward email to "outside" addresses

What you need to build

- The **QUERY** to meet the information need
- A **TABLE** to store dates to control the daily runs (when it last ran and when to run next)
- A **FORM** to make the dates available to queries and other functions
- A **MACRO** to package the operations for the time period
- A **QUERY** to reset the dates for the time period when the runs are done.
- An **AUTOEXEC MACRO** to kick in and direct the processing any time the database opens.
- An **ALARM CLOCK** runs 24/7 to kick off calls to open the database and execute the autoexec macro

Start by building the basic parts.

Finish with embellishments!

Build the query to meet the information needs.
The query with “hard coded” dates – you will change that later.

Microsoft Access - [qryDailyGangQueryToBeAutomated : Select Query]

File Edit View Insert Query Tools Window Help

Type a question for help

tblIncidentInfo

- *
- CaseNbr
- IncidentDate
- PersonName
- GangName

Field:	CaseNbr	IncidentDate	PersonName	GangName	
Table:	tblIncidentInf	tblIncidentInfo	tblIncidentInf	tblIncidentInf	
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:		Between #3/1/2007# And #3/20/2007#			
or:					

Ready

NIJ07 Stuff Work cop... MAPS 07Workshop Work : Database (Ac... qryDailyGangQueryT... 3:09 PM

I need to tell the computer when to do the runs and what dates to use in the queries – I need a **TABLE** to store **SCHEDULE DATES**

- The last date/time the query ran -- frequently used as the Begin_Date when the query runs.
- The date/time it should run again
- The date range it should use when it runs again.
- Any other information to pass to the query or the Email process

We need to make a table to keep track of the dates for the daily requests -- tblDailyDates

Microsoft Access - [tblDailyDates : Table]

File Edit View Insert Format Records Tools Window Help

Type a question for help

LastRanDate	RunAfterDate
3/1/2007 10:30:00 AM	3/1/2007 10:30:00 AM

Record: 2 of 2

Datasheet View

Scratch Pad

Type notes here - then

Photos

Web Clips

Loading Web ..

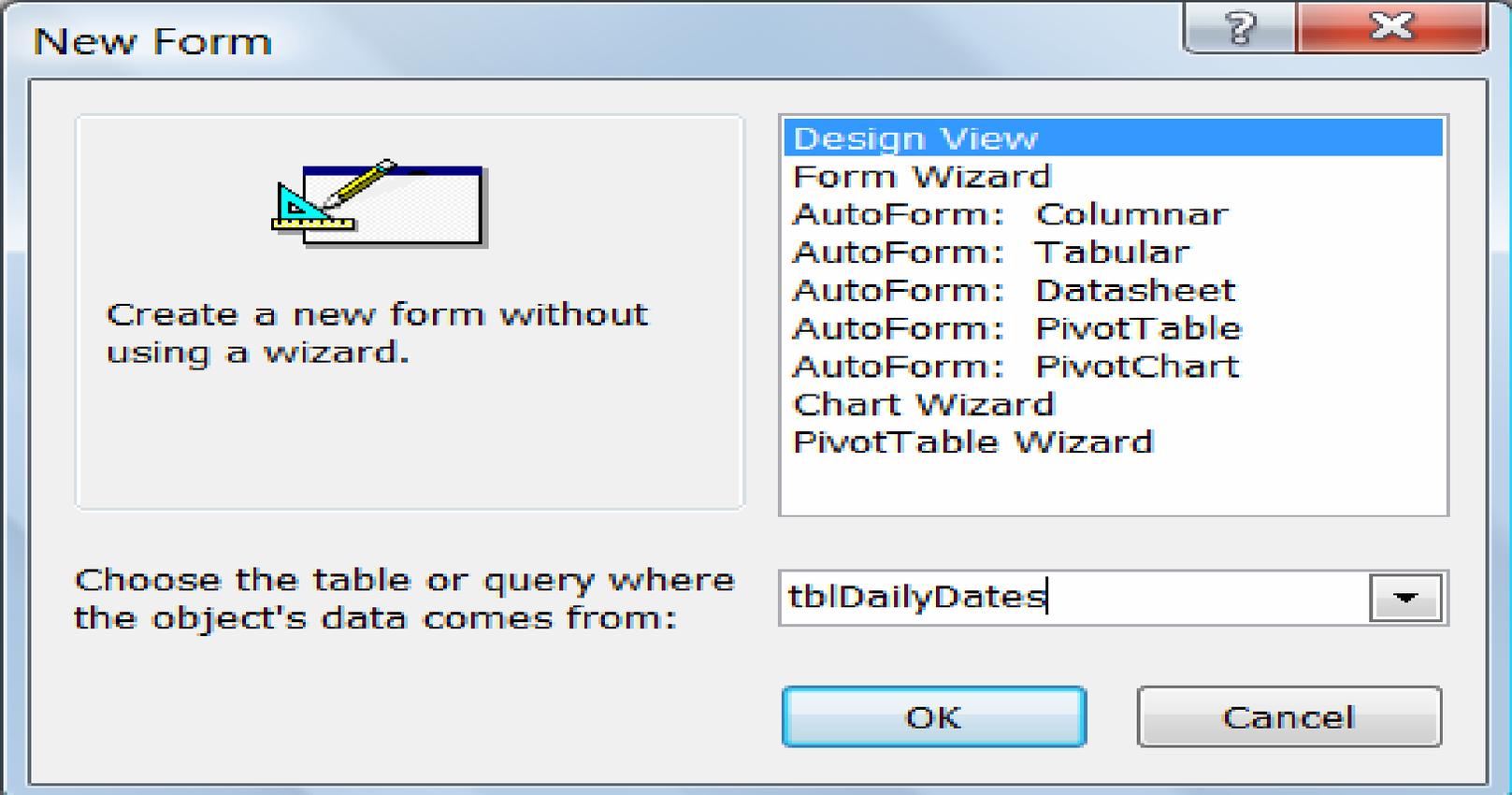
Weather

Google

NI07 Stuff Work cop... MAPS 07Workshop Work : Database (Ac... tblDailyDates : Table 3:21 PM

Create a DailyDates FORM – using tblDailyDates

Acts as intermediary between table and query.



The screenshot shows the 'New Form' dialog box in Microsoft Access. The dialog has a title bar with a question mark and a close button. The main area is divided into two sections. The left section contains an icon of a pencil and a ruler, with the text 'Create a new form without using a wizard.' The right section contains a list of options: 'Design View' (highlighted), 'Form Wizard', 'AutoForm: Columnar', 'AutoForm: Tabular', 'AutoForm: Datasheet', 'AutoForm: PivotTable', 'AutoForm: PivotChart', 'Chart Wizard', and 'PivotTable Wizard'. Below the list is a dropdown menu with 'tblDailyDates' selected. At the bottom are 'OK' and 'Cancel' buttons.

New Form

Create a new form without using a wizard.

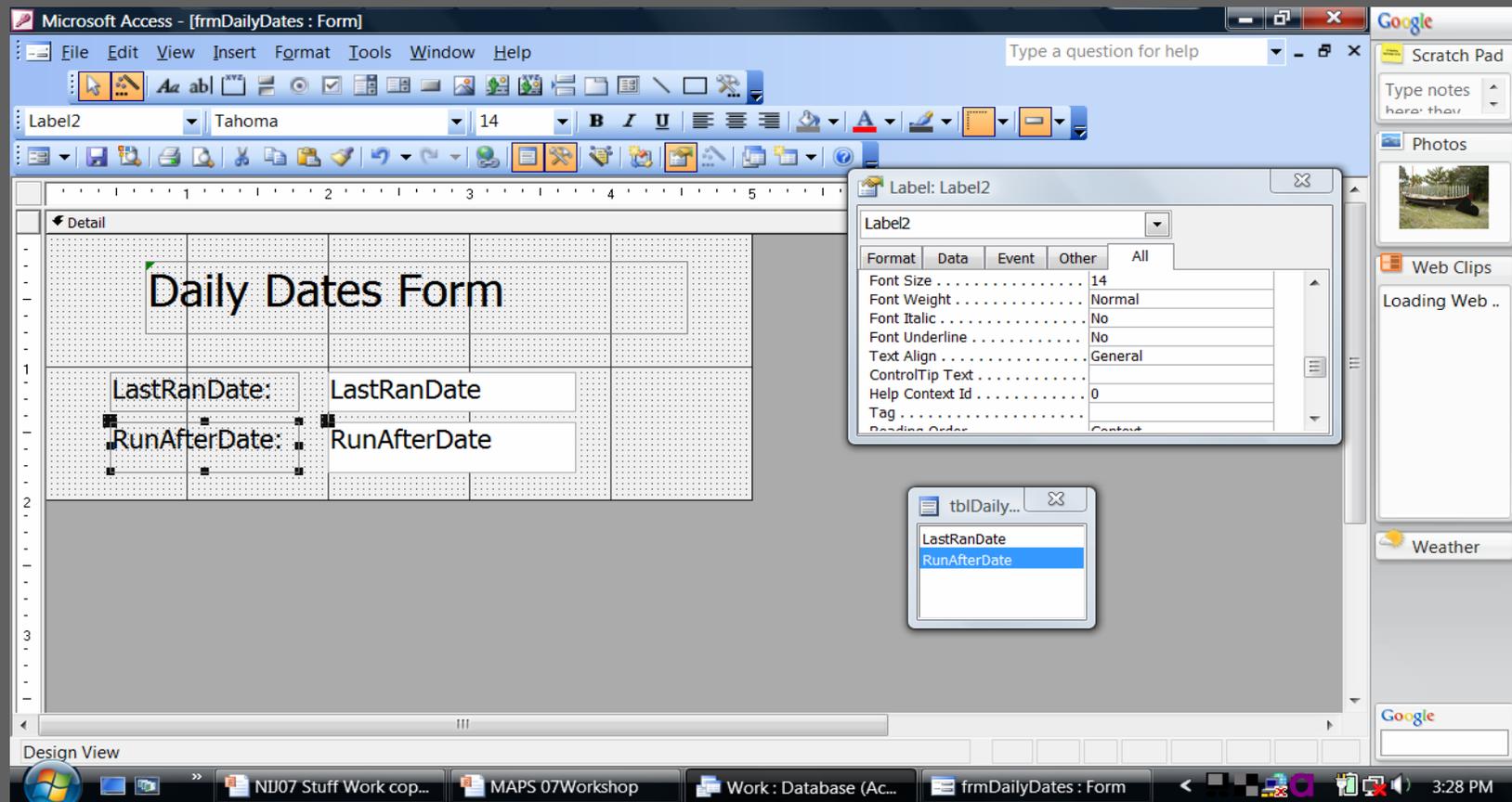
Choose the table or query where the object's data comes from:

tblDailyDates

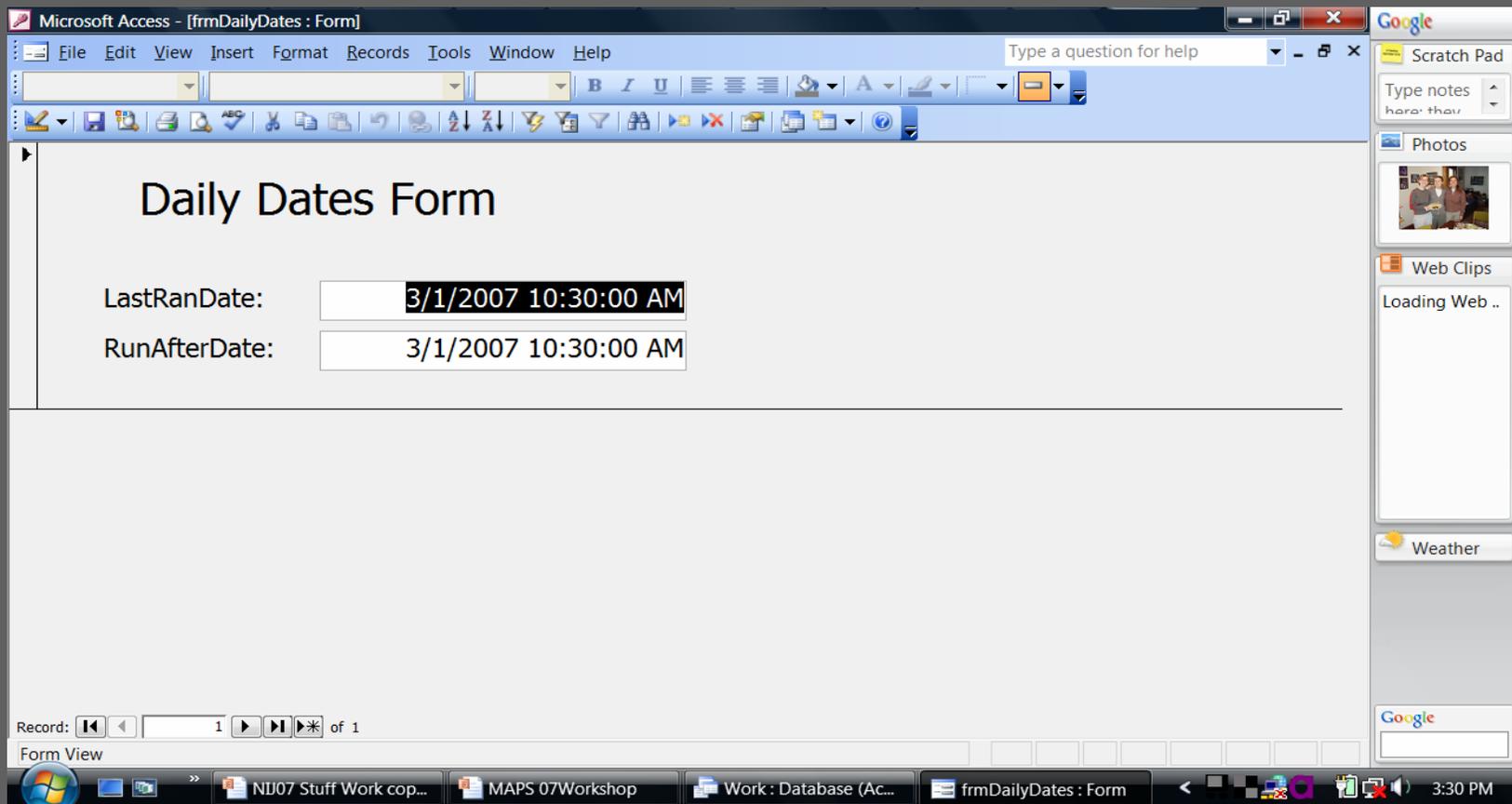
Design View
Form Wizard
AutoForm: Columnar
AutoForm: Tabular
AutoForm: Datasheet
AutoForm: PivotTable
AutoForm: PivotChart
Chart Wizard
PivotTable Wizard

OK Cancel

A simple form works – it is just a pass through



Automated queries will use the form dates



Modify the Query to use the Form Dates

`>=[Forms]![frmDailyDates].[LastRanDate].[Value]`

The screenshot shows the Microsoft Access interface for a query named 'qryDailyGangQueryToBeAutomated : Select Query'. The design grid is configured as follows:

Field:	CaseNbr	IncidentDate	PersonName	GangName	
Table:	tblIncidentInf	tblIncidentInfo	tblIncidentInf	tblIncidentInf	
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:		>=[Forms]![frmDailyDates].[LastRanDate].[Value]			
or:					

The taskbar at the bottom shows the system clock at 3:47 PM and several open applications including 'ND07 Stuff Work cop...', 'MAPS 07Workshop', 'Work : Database (Ac...', and 'qryDailyGangQueryT...'.

When the daily runs are done we need to reset the daily timer dates found in tblDailyDates.
Build an update query.
DateAdd("d",1,[RunAfterDate])

The screenshot shows the Microsoft Access interface with an update query named 'qryDailyDatesUpdate : Update Query'. The table 'tblDailyDates' is selected, showing fields 'LastRanDate' and 'RunAfterDate'. The query design grid below shows the update logic for both fields.

Field:	LastRanDate	RunAfterDate		
Table:	tblDailyDates	tblDailyDates		
Update To:	DateAdd("d",1,[LastRanDate])	DateAdd("d",1,[RunAfterDate])		
Criteria:				
or:				

tblDailyDates Before

Microsoft Access - [tblDailyDates : Table]

File Edit View Insert Format Records Tools Window Help

Type a question for help

LastRanDate	RunAfterDate
3/1/2007 10:30:00 AM	3/1/2007 10:30:00 AM

Record: 2 of 2

Datasheet View

Taskbar: NI07 Stuff Wor..., MAPS 07Worksh..., Work : Databas..., frmDailyDates : ..., tblDailyDates : T..., 4:00 PM

tblDailyDates After...qryDailyDatesUpdate has run.
We added one day to the existing dates.

Microsoft Access - [tblDailyDates : Table]

File Edit View Insert Format Records Tools Window Help

Type a question for help

LastRanDate	RunAfterDate
3/2/2007 10:30:00 AM	3/2/2007 10:30:00 AM

Record: 2 of 2

Datasheet View

Taskbar: NI07 Stuff Work cop..., MAPS 07Workshop, Work : Database (Ac..., tblDailyDates : Table

System tray: 4:05 PM

Right sidebar: Google, Scratch Pad, Type notes here, Photos, Web Clips, Loading Web .., Weather, Google

Review

- You have the query to generate the desired product and it uses the frmDailyDates
- You have tblDailyDates which stores the critical dates to use in ALL the daily queries via the frmDailyDates
- You have a query to update the Daily Dates stored in tblDailyDates
- YOU NEED TO PACKAGE THE PROCESS.....IN A MACRO -- macDaily

macDaily needs to do the following:

- Open frmDailyDates
- Run ALL the daily queries
- Close the frmDailyDates
- Run qryDailyDatesUpdate to update the dates in tblDailyDates
- Quit

macDaily packages the queries and processes BUT it is still manual.

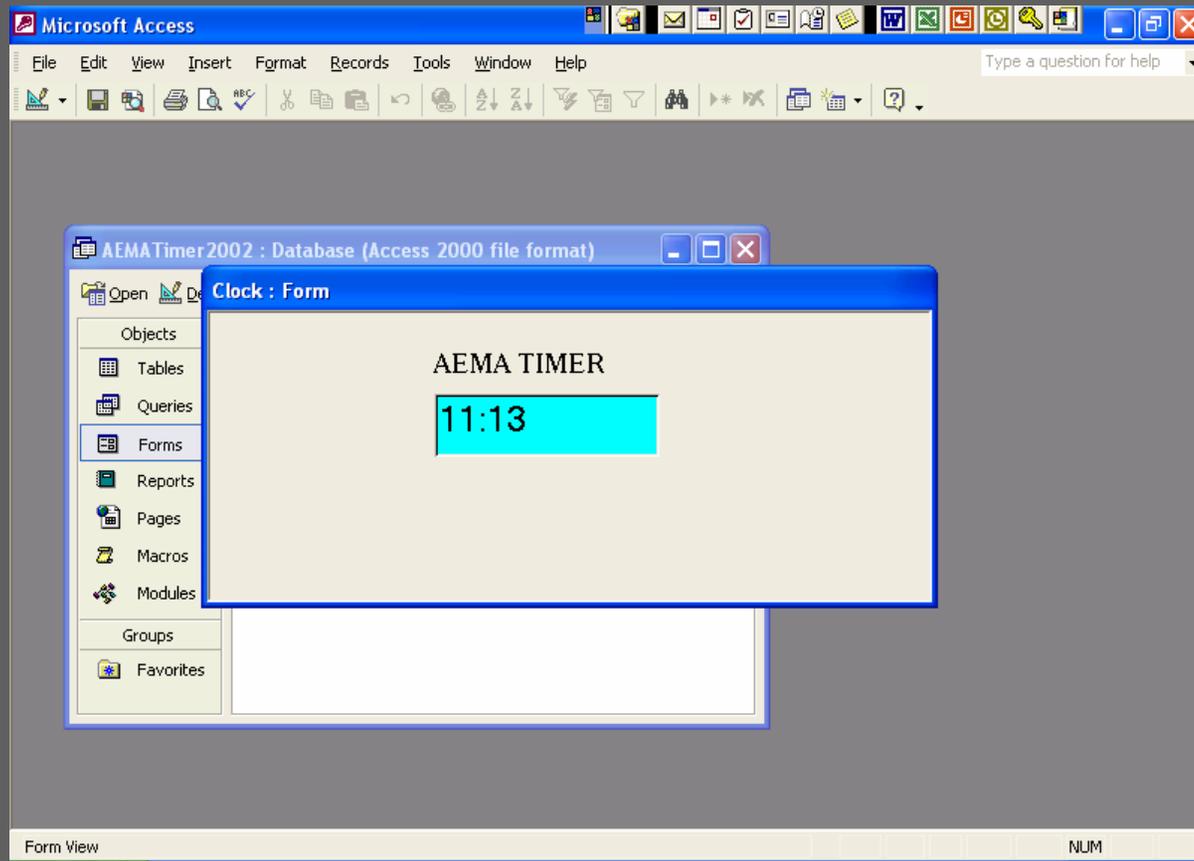
How do I automate it?

- You have been working in Work.mdb
- Create an AUTOEXEC macro that will run macDaily
- When you name a macro “AUTOEXEC”, Access gives it special powers. When you open the database it automatically runs.
- (Hold the shift key down when opening the database to bypass the AUOTEXEC macro.)

Review

- You have the query you need
- That query uses dates from the table tblDailyDates via the form frmDailyDates
- The query is packaged in a macro
- The Work.mdb has an autoexec macro which calls (runs) the daily macro.
- We need an “Alarm Clock” to call Work.mdb to start the AutoExec macro

Your Alarm Clock – Clock.mdb



CLOCK.MDB

- BUILD AN ALARM CLOCK TO OPEN THE “WORK.MDB” DATABASE AND KICK OFF THE AUTOEXEC MACRO.
- Clock.mdb has a form that functions like a clock.
- It has code which is triggered at specific times of the day – just like an alarm clock
- When triggered, it opens Work.mdb which then executes its autoexec macro which runs the Daily runs.

Code for the Clock form in the Clock.mdb

- Copy clock code here.
- Instructions on how to use it.

How does the Email part work?

What is SMTP Email?

- Access and Outlook don't like *STANDARD* Automatic Email.
- Automated Standard Email (SendObject) is intercepted to guard against viruses
- SMTP is your organization's primary "behind the scene" Email process.
- With permissions you can use SMTP to send email without interception.

SMTP – Simple Mail Transfer Protocol

- (pronounced as separate letters) Short for *Simple Mail Transfer Protocol*, a protocol for sending e-mail messages between servers. Most e-mail systems that send mail over the Internet use SMTP to send messages from one server to another; the messages can then be retrieved with an e-mail client using either POP or IMAP. In addition, SMTP is generally used to send messages from a mail client to a mail server. This is why you need to specify both the POP or IMAP server and the SMTP server when you configure your e-mail application.

SMTP Requirements

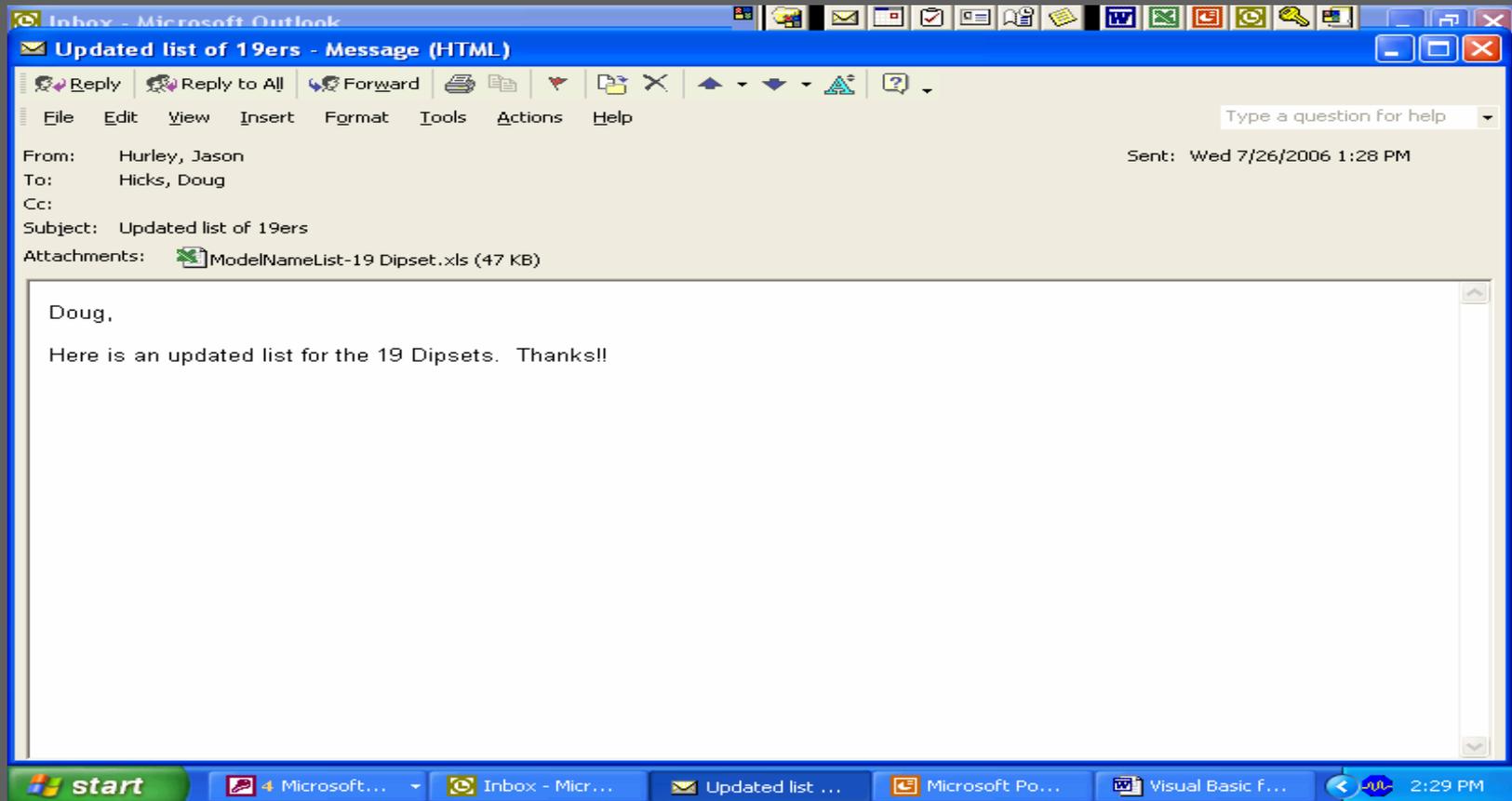
- Formal IT permissions
- Static IP address on your node
- VBA Code rather than Access Macros
- I want to use the SMTP server to send email to remote sites (outside your organization) from my computer.

How do I get data from other agencies like Probation?

- They email me an extract of their database in Excel or text format – on their schedule.
- I save their file on MPD network (using the same name)
- I use Access to “link” to the file
- I replace the file – link endures.

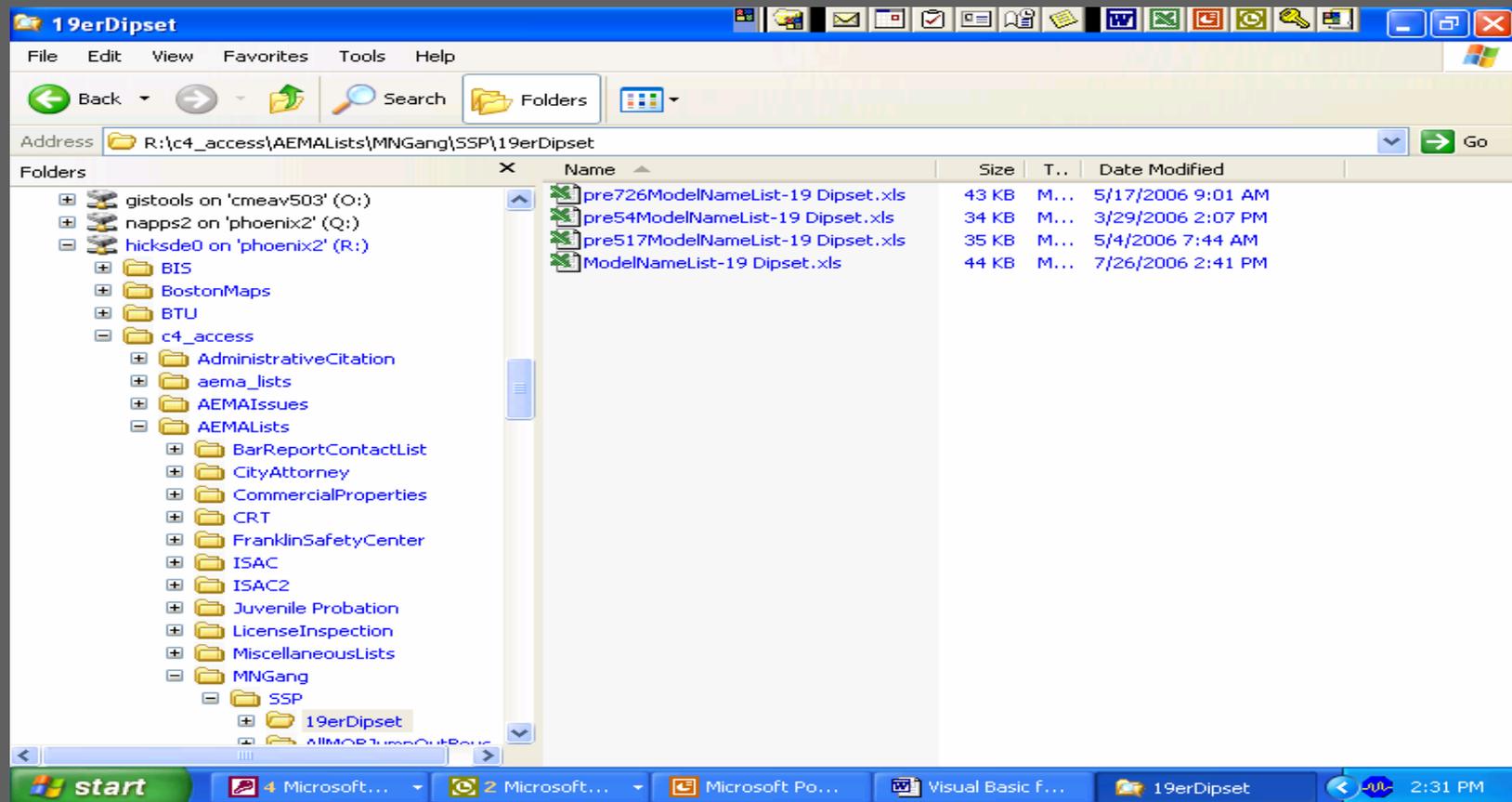
- It is easy and avoids costly IT involvement

An update for a file...



Copy and Paste!

Rename and save previous – just in case.



Embellishment

- Query your main system tables for the date range you need into local db tables – “tblJustLikeMainDB_People” etc.
- Run your queries against these temporary tables.
- Moves processing from the main server to your desktop workstation.

Embellishment

“Current List Installed on:”

Microsoft PowerPoint - INOMinneapolis Automated Email A...
AccessReport19.rtf - Microsoft Word

File Edit View Insert Format Tools Table Window Help Type a question for help

Final Showing Markup Show

1 2 3 4 5 6 7

MPD Contact With Ramsey County Probationer

Reference list is updated weekly. Current list installed on: 7/17/2006 4:05:26 PM
Date/Time this report was run: 7/25/2006 6:42:25 AM

Probationer: Walker, Keonte 3/28/1986
Agent: PederG

MPD Case Number: MP 2006 205994

Primary_Offense: MISC Doesnt Fit Any Crim
Role: **Arrestee**

ReportedDate: 7/24/2006 7:32:00 7: 32
BeginDate: 7/24/2006 5:50:00 5: 50
PCT: 03 Squad: 372 Officer: Kimmerle

PublicInformation:
AP1 was placed under arrest after driving a MV with stolen license plates. AP1 booked HCJ.

End of Report on: Walker, Keonte 3/28/1986

Page 1 Sec 1 1/1 At 1" Ln 1 Col 1 REC TRK EXT OVR

start 4 Microsoft... 2 Microsoft... MACIA 2 Microsoft... AccessRepor... 2:56 PM

Embellishment

VBA Code to OPEN the Calls for Service Database at 10:35 Daily.

- If Clock.Caption = "10:35" Then
 'RUN CALLS FOR SERVICE
 - RetVal = Shell("C:\PROGRAM FILES\MICROSOFT OFFICE\Office10\msaccess.exe r:\c4_access\cfs_a2002.mdb", 6)
- End If

Embellishment Complex Timer Form CFS CODEFOR Week Timer Form

Microsoft Access - [frm_C4_timer : Form]

File Edit View Insert Format Records Tools Window Help

Start Date: 8/22/2006 12:01:00 AM End Date: 8/29/2006 11:59:00 PM

Run After: 8/30/2006 6:00:00 AM

Current Date: 8/24/2006 2:21:26 PM

YStart: 1/1/2006 12:01:00 AM LYStart: 1/1/2005 12:01:00 AM

DATES FOR CODEFOR WEEKLY RUNS

DATES FOR LAST YEAR

LastYearStartDate: 8/22/2005 12:01:00 AM LastYearEndDate: 8/29/2005 11:59:00 PM

ReportDateSetBack:

Email To: ReportStart:

MonitoredDateRange:

ReportDateRange:

ONE YEAR PRIOR TO CODEFOR WK 448 -- 8/22/2005 through 8/29/2005

YEAR TO DATE THROUGH CODEFOR WK 448 -- 1/1/2005 through 8/29/2006

LAST YEAR, YEAR TO DATE -- 1/1/2005 through 8/29/2005

Record: 1 of 1

Form View

start | Inbox - Microsoft ... | 1 Reminder | 5 Microsoft Access | Microsoft PowerPoi... | 2:21 PM

Embellishment

Email the report **ONLY** when there is data to send.

- If (DCount("casenbr", "qryNameCk_VOTFSSP") > 0) Then
- Send the report
- Otherwise don't send anything.

Dcount Function

- Dcount(“variable in your query” , “query name”) condition
- DCount("controlnbr","qry_gang_ccns")>0

Embellishment

Put the query result in a generic Excel file format and attach it to the email.

- DoCmd.OutputTo acQuery, "qryNameCk_VOTFSSP", "MicrosoftExcelBiff8(*.xls)", "c:\documents and settings\hicksde0\local settings\temp\QueryResult.xls", False, "", 0
- AEMAMail.AddAttachment "c:\documents and settings\hicksde0\local settings\temp\QueryResult.xls"
-

Embellishment

- Use “entered date” as opposed to incident begin date.
- You can depend upon the dates crimes were entered into your information system. You can’t depend on the begin date to fall in the query date range. A report entered yesterday for a crime that occurred a week ago will be missed using begin date but not when using entered date.

Embellishment

AutoExec Macro uses Form dates to control execution in the Condition Column.

The screenshot shows the Microsoft Access Macro Editor window titled "Microsoft Access - [autoexec : Macro]". The window contains a table with three columns: Condition, Action, and Comment. The table lists several macro actions, including SetWarnings, OpenForm, RunMacro, and OpenQuery, with their respective conditions and comments. Below the table is an "Action Arguments" section with a text box for "Warnings On" set to "No" and a large empty area with the instruction "Enter a conditional expression in this column." The Windows taskbar at the bottom shows the Start button, several open applications (Inbox - Micro..., Microsoft..., Microsoft Po..., MACIA -- E..., Microsoft W...), and the system tray with the time 2:17 PM.

Condition	Action	Comment
	SetWarnings	
	OpenForm	open the WEEKLY timer form (frm_TestTimer)
		Weekly runs
[Forms]![frm_TestTimer].[runafter].[Value]<Now()	RunMacro	generate Asian Arrests report for Gang Task Force
...	RunMacro	generate Drug Report for MPS
...	RunMacro	generate list of all juveniles arrested during time period for Sgt. Ganley in
...	RunMacro	run the macro to generate weapon reports for MPS
...	RunMacro	run va_crimes
...	RunMacro	run the krueger macro
...	RunMacro	kruegers RJustice runs
...	Close	Close the timer form -- ADD NEW PRODUCTS ABOVE THIS LINE.
...	OpenQuery	Reset the timer files weeklyrunrunry
...	Close	
	OpenForm	open the DAILY timer from
[Forms]![frm_DailyTimer].[runafter].[Value]<Now()	RunMacro	sid
...	RunMacro	juvenile auto thieves with 2 or more arrests autoth, 10+ CAPRS, 2 felonie
[Forms]![frm_DailyTimer].[runafter].[Value]<Now()	RunMacro	MPHA events
...	RunMacro	MPHA people
...	RunMacro	Graffiti
...	RunMacro	City Attorney Alert

Warnings On: No

Action Arguments: Enter a conditional expression in this column.

F6 = Switch panes. F1 = Help.

Start | Inbox - Micro... | Microsoft ... | Microsoft Po... | MACIA -- E... | Microsoft W... | 2:17 PM

Timer Control Illustration

- If (Forms!frm_DailyTimer.runafter.Value < Now()) Then
- Query
- Query
- Query
- Close the Timer Form
- Reset Timer Values via a Query with results in a Table
- End If

Embellishment

Use VBA Code

Visual Basic for Access

- Macros can be converted to VBA – Visual Basic for Access
- Build your core process in a macro using the SendObject function then convert it to VBA
- Adjust as needed and cut and paste to add new functions
- Code for SMTP is cut and pasted in as needed.

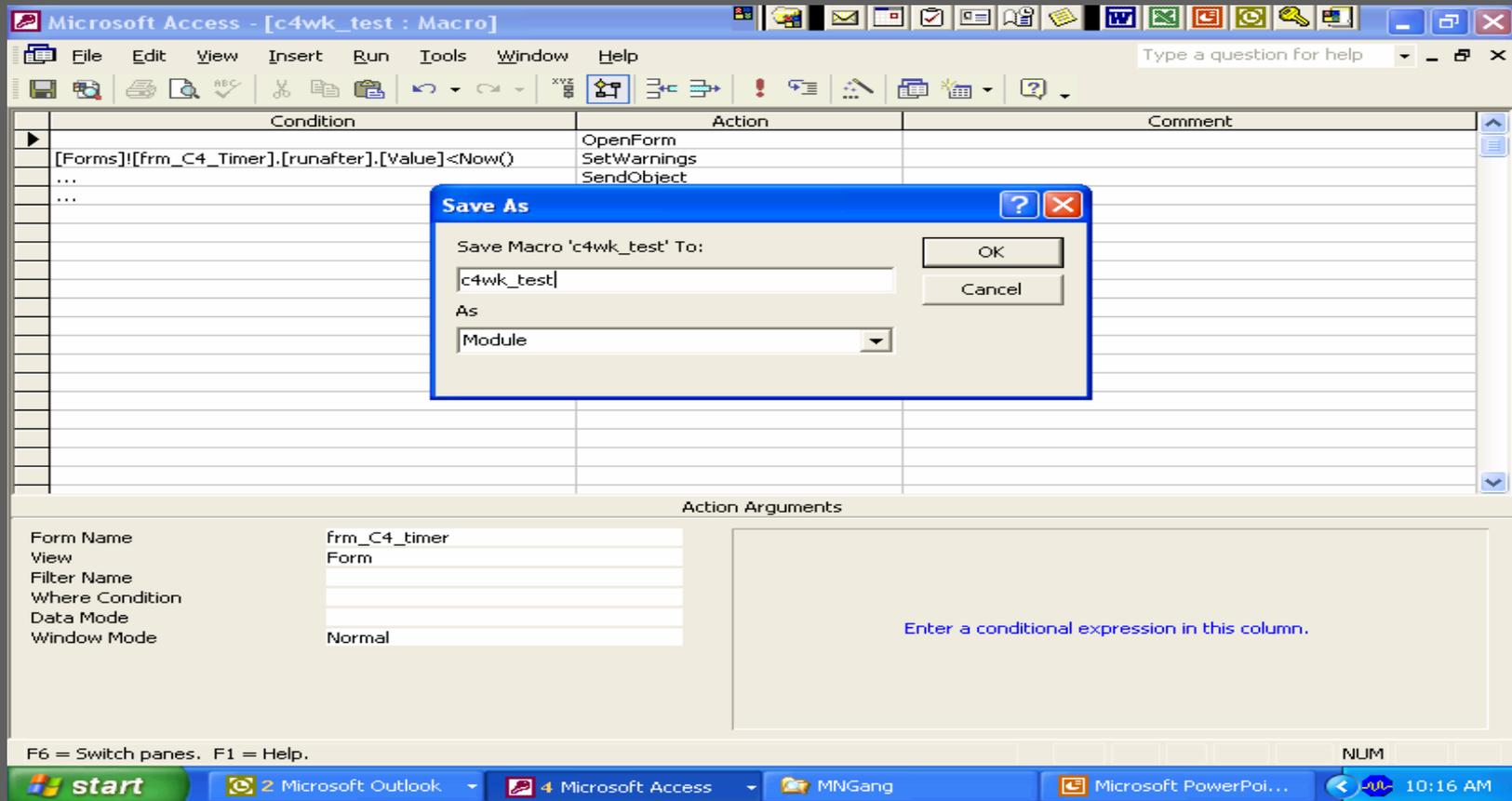
VBA Code Examples and Explanation

- TIP -- Store common code in text file
- Store common query field configurations (IncidentAddress, etc.)
- Cut and paste where needed.

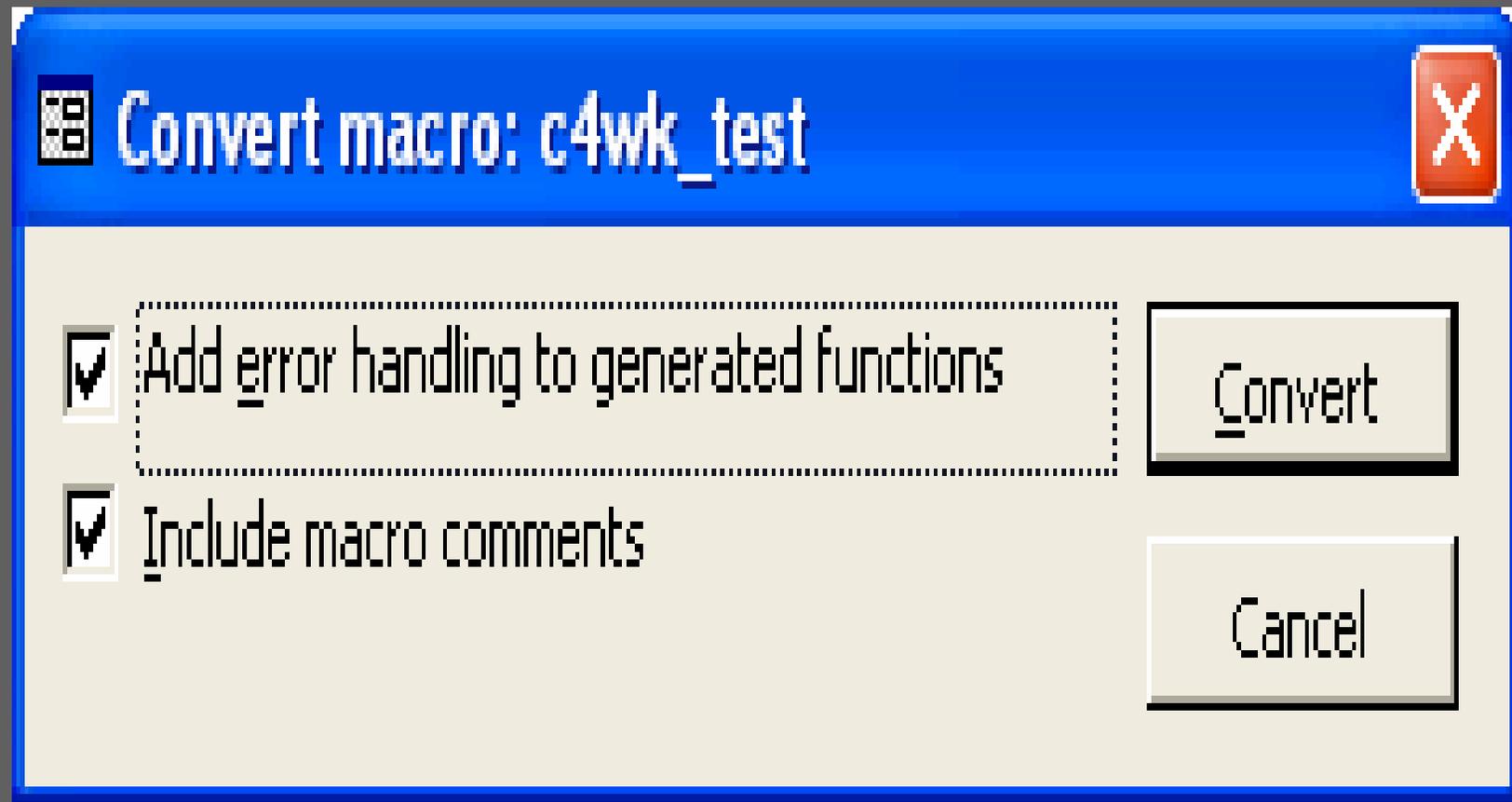
VBA sounds scary!

- If you know how to use Access Macros, you are $\frac{3}{4}$ of the way to VBA
- Access can convert a macro to VBA
- Use the Access SendObject macro function, convert to VBA then Cut, Paste and Edit SMTP code to reflect your needs here.

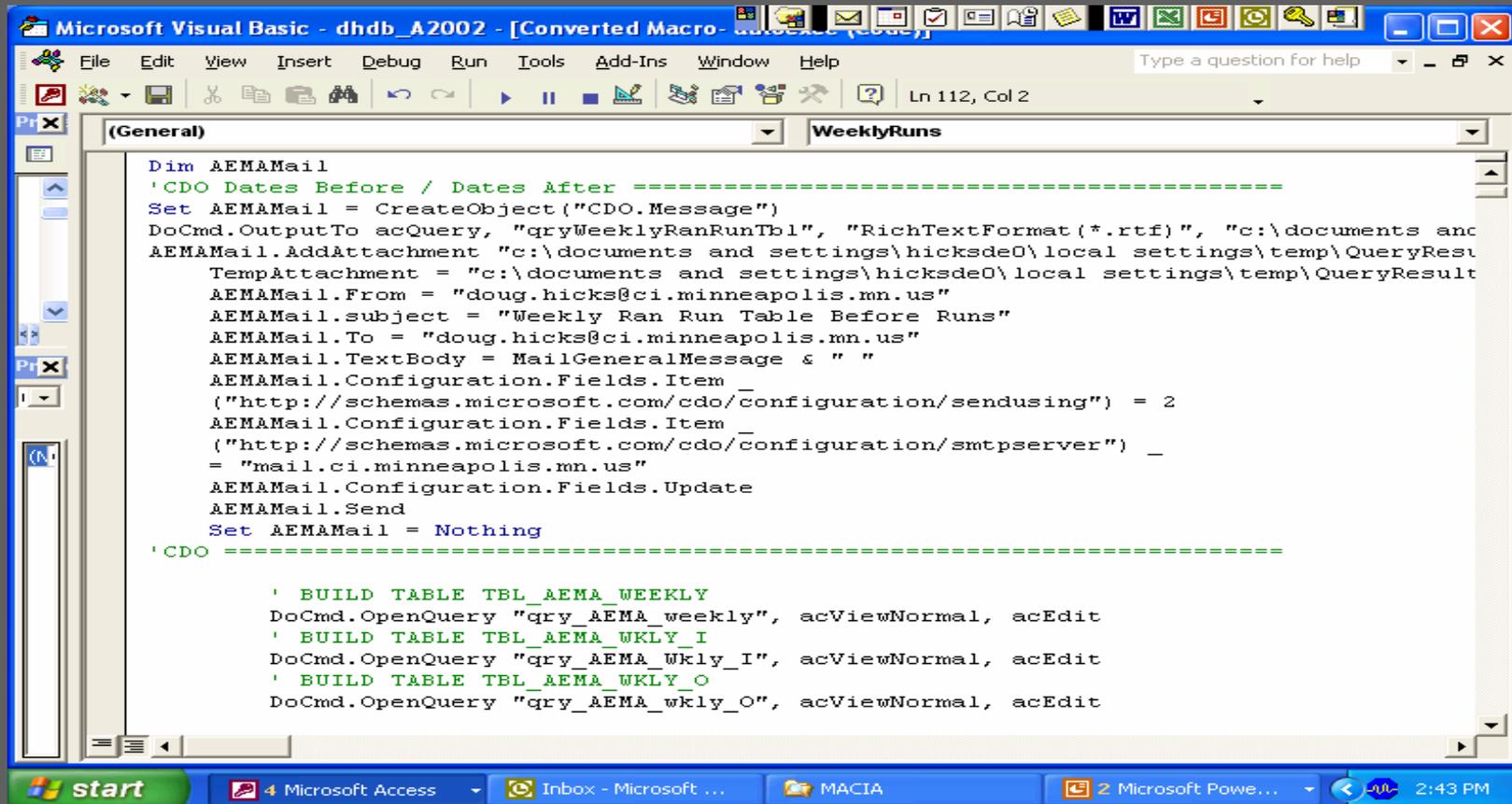
Convert Macro to VBA Macro/File/Save As/Module



Convert Macro to VBA



VBA Code Block for SMTP Email.



```
Microsoft Visual Basic - dhdb_A2002 - [Converted Macro-
File Edit View Insert Debug Run Tools Add-Ins Window Help
Ln 112, Col 2
(General) WeeklyRuns
Dim AEMAMail
' CDO Dates Before / Dates After =====
Set AEMAMail = CreateObject("CDO.Message")
DoCmd.OutputTo acQuery, "qryWeeklyRanRunTbl", "RichTextFormat (*.rtf)", "c:\documents and
AEMAMail.AddAttachment "c:\documents and settings\hicksde0\local settings\temp\QueryRes
TempAttachment = "c:\documents and settings\hicksde0\local settings\temp\QueryResult
AEMAMail.From = "doug.hicks@ci.minneapolis.mn.us"
AEMAMail.subject = "Weekly Ran Run Table Before Runs"
AEMAMail.To = "doug.hicks@ci.minneapolis.mn.us"
AEMAMail.TextBody = MailGeneralMessage & " "
AEMAMail.Configuration.Fields.Item _
("http://schemas.microsoft.com/cdo/configuration/sendusing") = 2
AEMAMail.Configuration.Fields.Item _
("http://schemas.microsoft.com/cdo/configuration/smtpserver") _
= "mail.ci.minneapolis.mn.us"
AEMAMail.Configuration.Fields.Update
AEMAMail.Send
Set AEMAMail = Nothing
' CDO =====

' BUILD TABLE TBL_AEMA_WEEKLY
DoCmd.OpenQuery "qry_AEMA_weekly", acViewNormal, acEdit
' BUILD TABLE TBL_AEMA_WKLY_I
DoCmd.OpenQuery "qry_AEMA_Wkly_I", acViewNormal, acEdit
' BUILD TABLE TBL_AEMA_WKLY_O
DoCmd.OpenQuery "qry_AEMA_wkly_O", acViewNormal, acEdit
```

(General) DailyNameChecks

```
'CDO =====  
Set AEMAMail = CreateObject("CDO.Message")  
'XLS Query -----  
DoCmd.OutputTo acQuery, "qryNameCk_VOTFSSP", "MicrosoftExcelBiff8(*.xls)", "c:\docume:  
AEMAMail.AddAttachment "c:\documents and settings\hicksde0\local settings\temp\QueryR  
TempAttachment = "c:\documents and settings\hicksde0\local settings\temp\QueryResult..  
AEMAMail.From = "doug.hicks@ci.minneapolis.mn.us"  
AEMAMail.Bcc = "doug.hicks@ci.minneapolis.mn.us"  
  
AEMAMail.subject = "Daily -- VOTF SSP -- MPD Contact Check" & Chr(13) & "Exact match  
AEMAMail.To = "jeffrey.waite@ci.minneapolis.mn.us"  
AEMAMail.To = AEMAMail.To & " ; " & "michael.carlson@ci.minneapolis.mn.us"  
AEMAMail.To = AEMAMail.To & " ; " & "timothy.eck@ci.minneapolis.mn.us"  
AEMAMail.To = AEMAMail.To & " ; " & "patrick.king@ci.minneapolis.mn.us"  
  
AEMAMail.TextBody = AEMAMail.subject & Chr(13)  
AEMAMail.TextBody = AEMAMail.TextBody & MailGeneralMessage & MailNotPublicBlock  
AEMAMail.Configuration.Fields.Item _  
("http://schemas.microsoft.com/cdo/configuration/sendusing") = 2  
AEMAMail.Configuration.Fields.Item _  
("http://schemas.microsoft.com/cdo/configuration/smtpserver") _  
= "mail.ci.minneapolis.mn.us"  
AEMAMail.Configuration.Fields.Update  
AEMAMail.Send  
Set AEMAMail = Nothing  
'CDO =====  
End If
```

Don't be intimidated by the code.

- Make simple macros you understand
- Convert them to VBA
- Study them

- VBA is a more detailed, manageable and versatile way to work
- Copy, paste and experiment

Embellishment

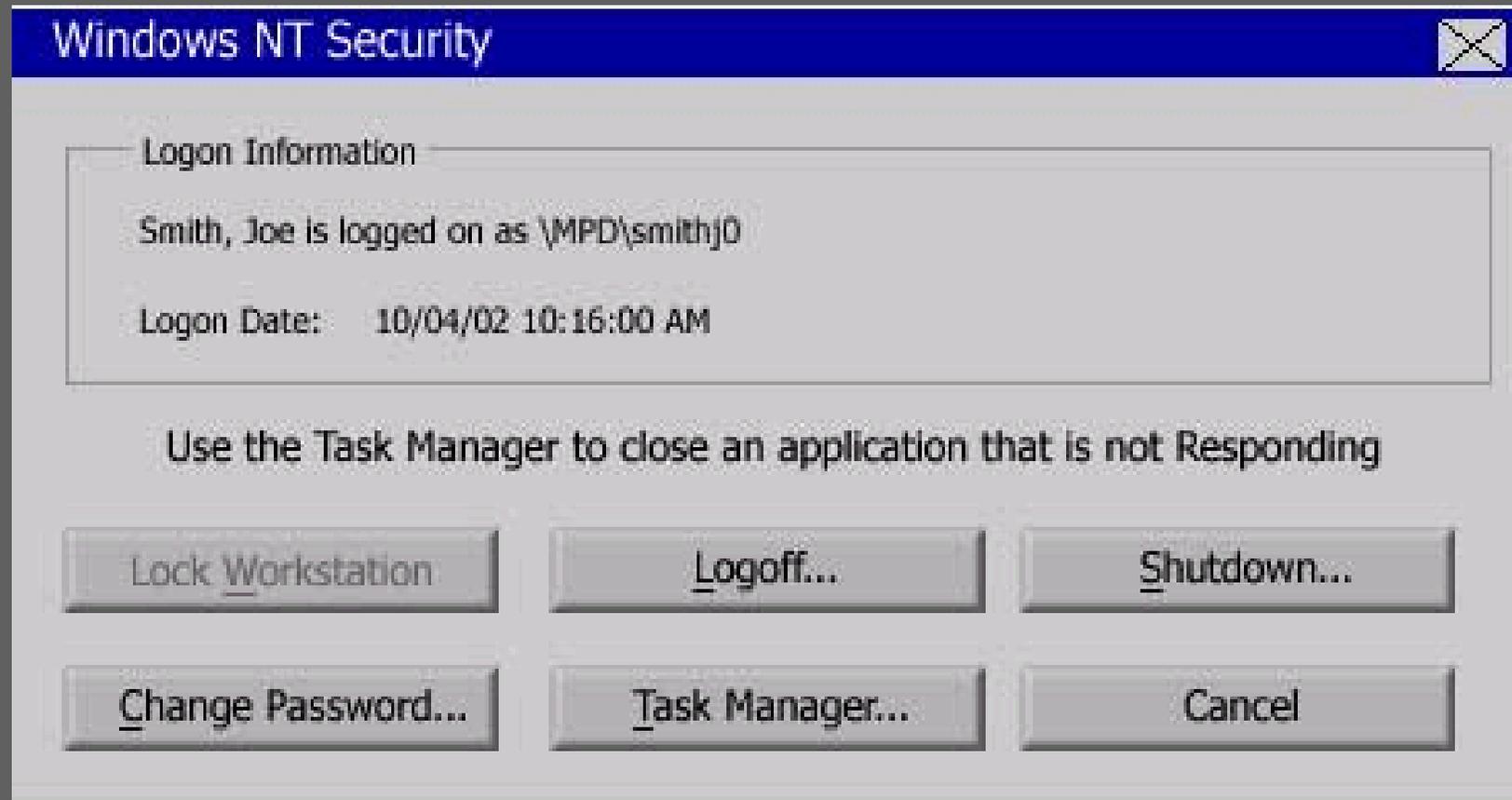
Lock your workstation but leave it running.

How can I secure my node and keep the processes running while I am away from my desk -- at the NIJ Conference in Pittsburgh?

Lock Workstation (Control Alt Delete)

- Windows Security (NT Screen shown)
- May need to be activated on your node
- Allows you to “lock” and leave your workstation.
- You are still logged on and processes still run.
- Others can not log on or use your node.

Lock Workstation





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MINNEAPOLIS POLICE

