



Criminal Justice Planning

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**SPATIAL ANALYSIS OF PUBLIC INTOXICATION and
PUBLIC INTOXICATION ENHANCED OFFENSES
January through May 2010**

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INTRODUCTION

The data contained within this report include arrests for Public Intoxication and Public Intoxication Enhanced offenses for the period of January 1, 2010 through May 31, 2010. The data was captured from Travis County Jail booking records and the locations referenced in the spatial analysis are based on the "Arrest Location" entered at the time of booking. This data will not reflect all Public Intoxication offenses in the Austin and Travis County area as some people are issued citations with a summons to appear at municipal court rather than being arrested and booked into jail.

The data are broken in to two groups:

- Public Intoxication, and
- Public Intoxication Enhanced

This grouping was used to try and quantify the impact of chronic public intoxicants and to determine the areas in which these chronic public intoxicants are being arrested. Some of these individuals may have been charged with offenses other than the Public Intoxication/Public Intoxication Enhanced charges reflected here.

PUBLIC INTOXICATION

During the period from January 1 through May 31, 2010, there were 3,514 Public Intoxication arrests. The Average Length of Stay (ALOS) in jail for these arrests was 1.98 days.

Table 1

Month	Arrests	ALOS
January	640	1.91
February	665	2.37
March	702	2.51
April	686	2.03
May	821	1.22
Total	3,514	1.98

In order to conduct spatial analysis and demonstrate the spatial relationships of these arrests, the data (arrest locations) must be geo-coded. Following the geocoding process, 71.2% of the total arrests (2,501) were used for the spatial analysis conducted. A 70% match rate is fairly good and consistent with large data sets. Addresses that are not entered at all, partial addresses and referenced locations that could not be identified through an address locator were some of the reasons for failed addresses in this data set. For the remainder of this report, the Public Intoxication data discussed are of the sample of 2,501 arrests used for spatial analysis.

Spatial Analysis

The Public Intoxication sample was spread across 470 streets in the Austin-Travis County area with the vast majority along the Interstate 35 corridor from South to North Austin. The most common arrest location was 6th

Street. 15.89% (385) of the 2,501 arrests were on 6th Street. The top ten arrests locations are outlined in Table 2 on the next page.

Table 2

Street	Arrests	Percentage of Total Arrests	Vicinity
6 th Street	385	15.39%	Downtown
Congress Avenue	127	5.08%	Downtown
North Lamar	99	3.96%	North Austin
Riverside Drive	68	2.72%	South Austin
Guadalupe Street	66	2.64%	Central Austin
7 th Street	60	2.40%	Downtown
San Jacinto	53	2.12%	Downtown
Research Blvd	43	1.72%	North Austin
Ben White Blvd	41	1.64%	South Austin
Trinity	40	1.60%	Downtown
Top Ten Total	982	39.26%	

Half of the top ten arrest locations are in the downtown area, accounting for 68% of the top ten arrest areas. The arrests on these five street categories combined account for over a quarter (26.59%) of the total sample across 470 streets.

To better understand the spatial and geographic impact of Public Intoxication arrests, hot spot analysis of the sample was conducted. The analysis first integrates all 2,501 arrests by aggregating incidents within 100 feet. This aggregates not only the multiple arrests at the same location, but assumes that incidents within 100 feet are closely related. Next, hot spot analysis is conducted where the aggregated events are weighted and their spatial relationship to one another is determined. A distance band of a ¼ mile was used; this weights the aggregated events occurring within ¼ mile of one another more strongly than those further away, in order to determine “hot spots”.

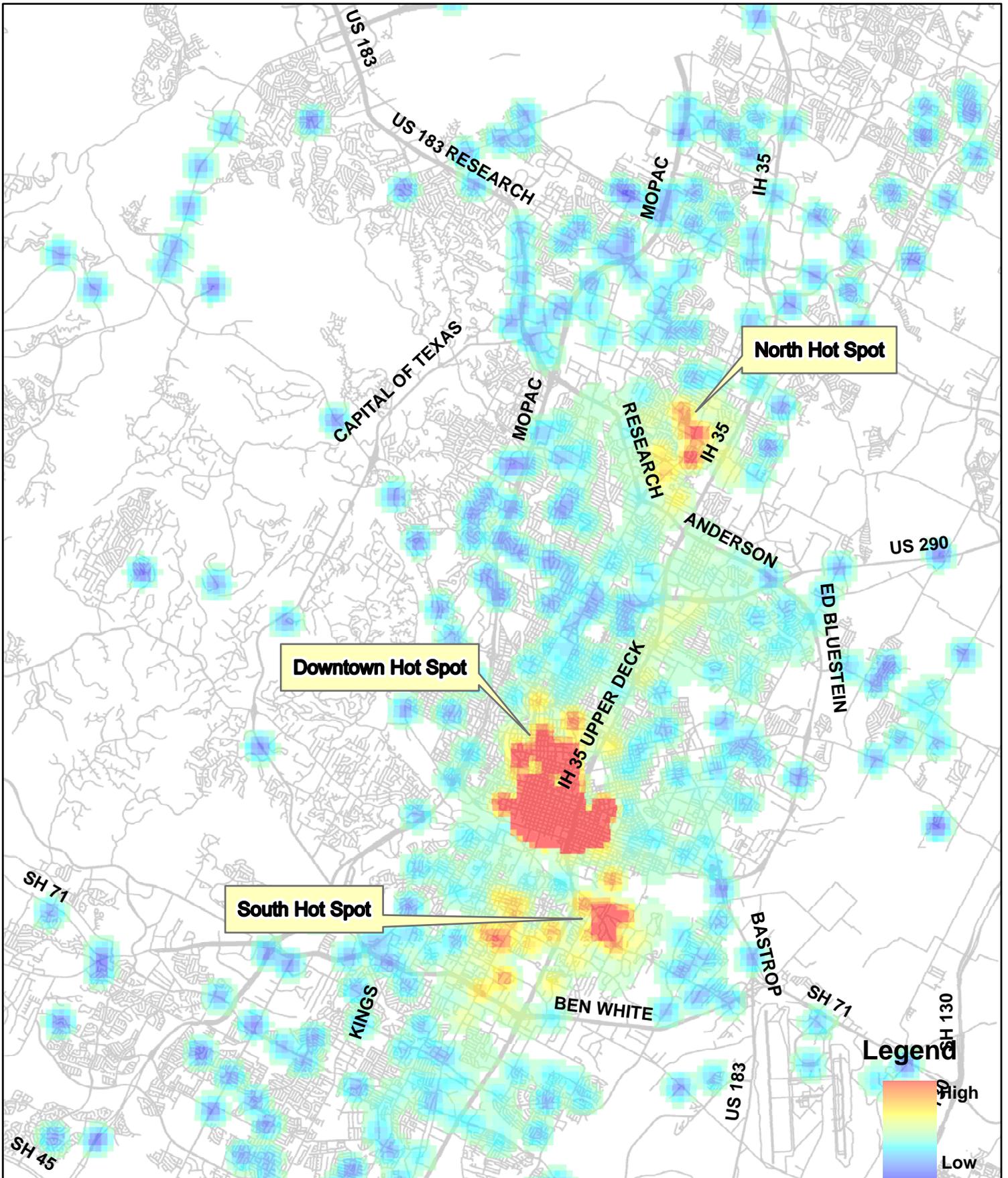
The analysis produced three primary “hot spots” with regard to Public Intoxication arrests.

- 1) North - west of Interstate 35 from Georgian to Mearns Meadow and along North Lamar from roughly Payton Gin to Rutland.
- 2) Downtown - both east and west of Interstate 35. On the west side from South 1st to 23rd and west to Lamar. On the east side just south of Cesar Chavez to Rosewood and just east of Comal.
- 3) South – primarily East Riverside to Pleasant Valley along Town Lake and south to Oltorf, though a small south hot spot exists around Congress and Oltorf on the west side of Interstate 35.

The maps on the following pages are of the overall hotspot analysis demonstrating the three hot spot areas. Additionally, there are maps zoomed in to each of the hot spot areas individually. The maps of the specific hot spot areas include the points for each of the individual arrests. This was done for perspective as to where along a street or area arrests are occurring. The points should not be viewed as a way to capture the volume in an area however, as one point may be a location where multiple arrests occurred. For example, one point at Rundberg and Lamar had 12 arrests associated with that location during the sample period.

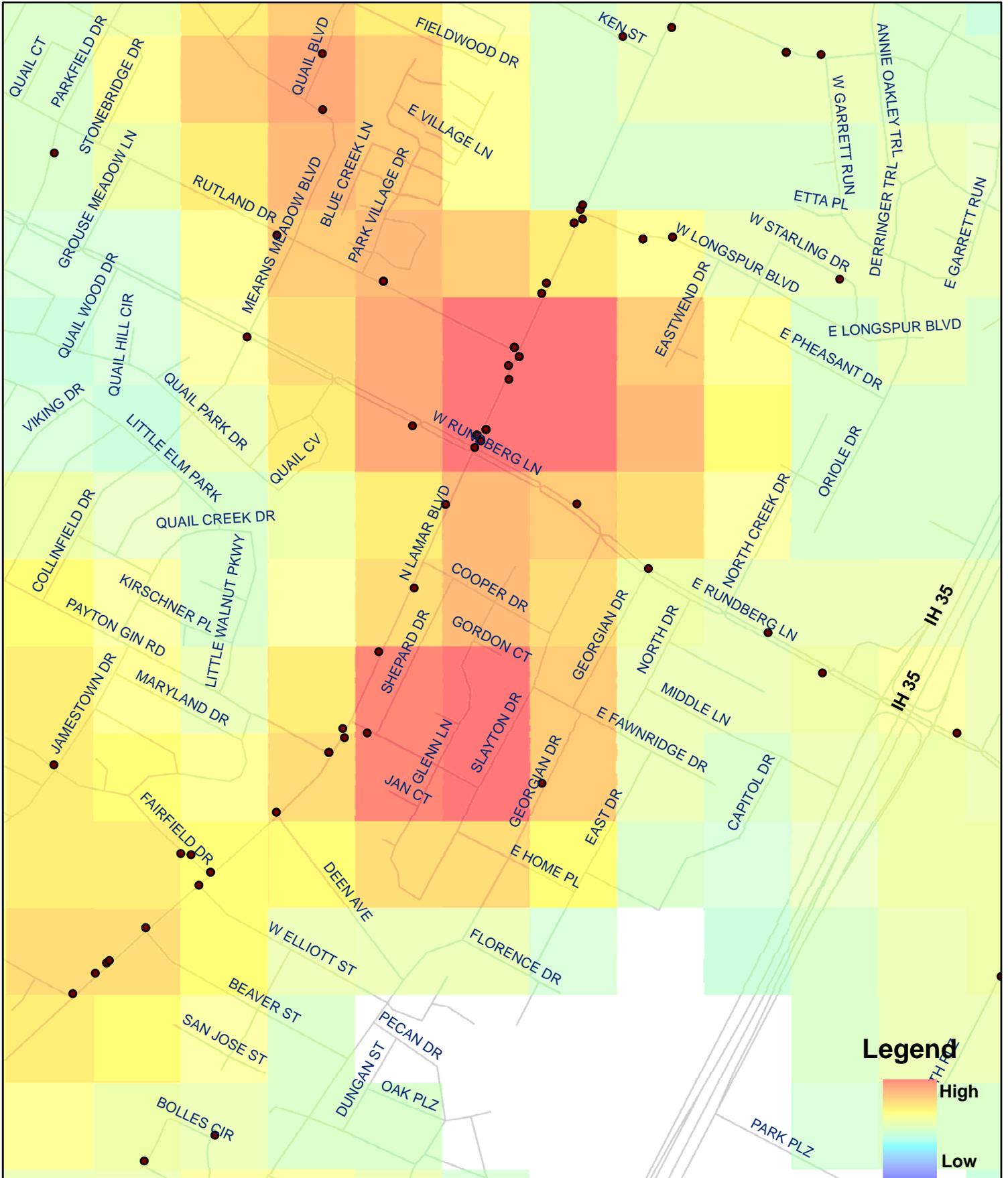
Public Intoxication Arrests Jan-May 2010

Hot Spot Analysis



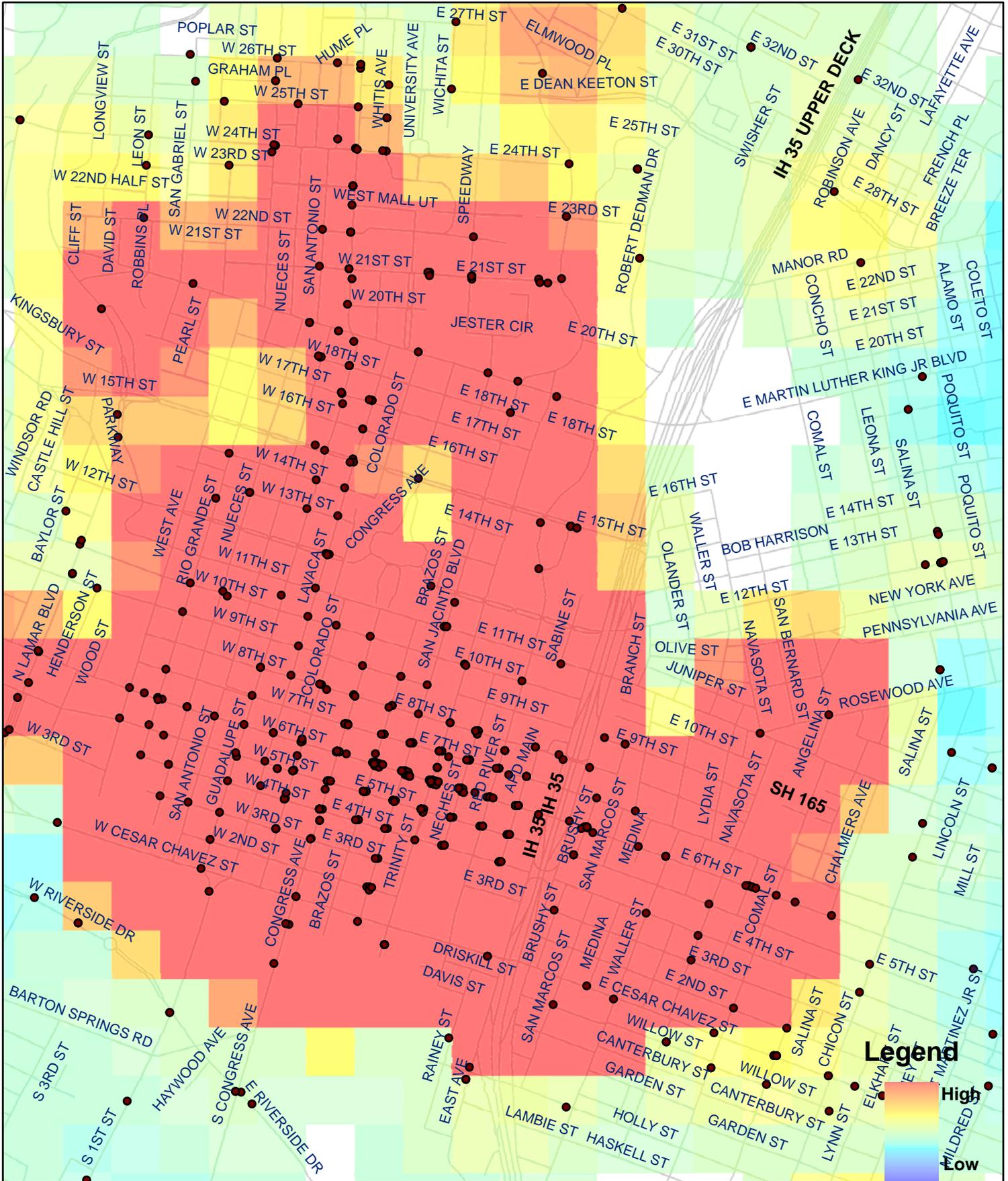
Public Intoxication Arrests Jan-May 2010

NORTH HOT SPOT



Public Intoxication Arrests Jan-May 2010

DOWNTOWN HOT SPOT



The distribution was much smaller with the Public Intoxication Enhanced arrests. There were 104 street groupings with 45.79% of all arrests occurring along the top ten streets. The greatest frequency occurred on 6th Street with 9.35% (30) of the arrests. Table 5 outlines the top ten streets on which arrests occurred.

Table 5

Street	Arrests	Percentage of Total Arrests	Vicinity
6 th Street	30	9.35%	Downtown
Interstate 35*	27	8.41%	Central
North Lamar	18	5.61%	North
Riverside	16	4.98%	South
Guadalupe	13	4.05%	Central
Congress Avenue	12	3.74%	Downtown
William Cannon	10	3.12%	South
Cameron Road	8	2.49%	North
Burnet Road	7	2.18%	North
Braker Lane	6	1.87%	North
Top Ten Total	147	45.79%	

*Refers to multiple intersections along Interstate 35 service road.

The number one street in both the Public Intoxication and Public Intoxication Enhanced groups was 6th Street. However, the downtown area only accounted for 29% of the Public Intoxication Enhanced group’s top ten arrest areas, as opposed to 68% in the lower Public Intoxication group. North Austin streets accounted for 27% of the top ten for Public Intoxication Enhanced.

Identical Hot Spot Analysis was conducted on the Public Intoxication Enhanced sample. This analysis produced four primary “hot spots” with regard to Public Intoxication arrests.

- 1) North – primarily in the Lamar/Rutland and Rundberg area.
- 2) Central - produced 3 small hot spots;
 - a. Interstate 35 and Cameron/53rd
 - b. Interstate 35 between 38th and 41st
 - c. Rio Grande and 28th/29th Streets
- 3) Downtown - both east and west of Interstate 35. On the west side from South 2nd to 10th and west to Rio Grande. On the east side from 4th to 9th and east to roughly San Marcos Street.
- 4) South – primarily East Riverside along Town Lake and south to Woodland. A small south hot spot exists around Congress and East Side Road on the west side of Interstate 35.

The maps on the following pages are of the overall Public Intoxication Enhanced Hot Spot Analysis, demonstrating the four primary hot spot areas as well as a map zoomed in to each of the hot spot areas individually.

PUBLIC INTOXICATION ENHANCED

Public Intoxication Enhanced is charged to offenders with three or more prior Public Intoxication offenses. These chronic public intoxicants are frequent consumers of jail bed days and while each individual stay is not typically long, their frequency has some chronic public intoxicants consuming as many aggregated jail bed days as a lower level felony offender might consume in a single stay.

During the period of January 1 through May 31, 2010 there were 321 Public Intoxication Enhanced arrests. The ALOS for these arrests was 12.40 days.

Table 3

Month	Arrests	ALOS
January	45	13.22
February	56	12.38
March	67	15.19
April	64	10.73
May	89	11.10
Total	321	12.40

These 321 arrests/bookings were involving 153 people, with an average of 2.10 arrests per person. The table below outlines the breakdown of arrests by people.

Table 4

Number of People	Arrests per Person	Total Arrests
1	7	7
5	6	30
7	5	35
9	4	36
21	3	63
40	2	80
70	1	70
153		321

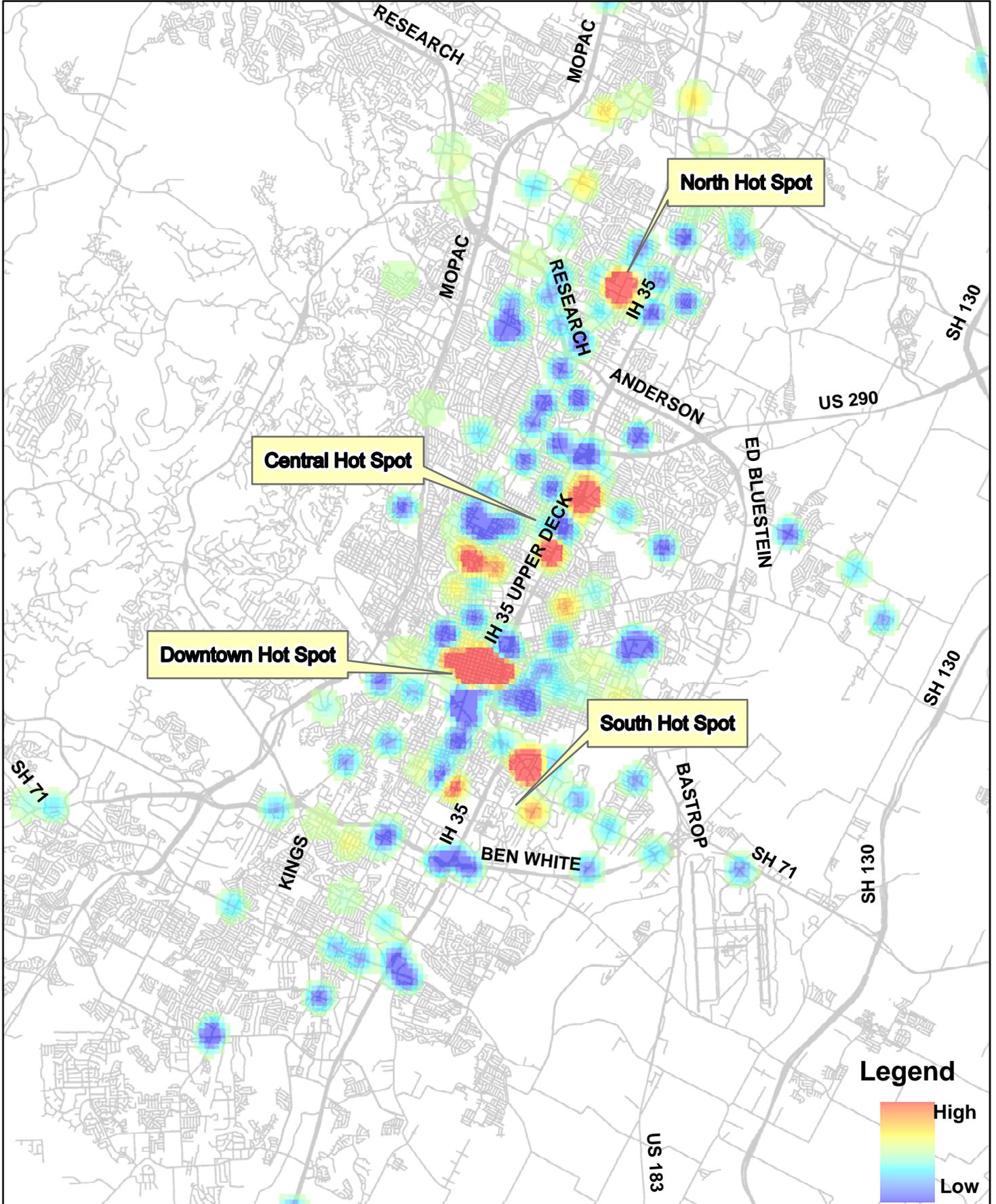
The person arrested seven times consumed a total of 90 jail bed days during the evaluation period. One of the highest jail bed days consumed across the sample period was 105 days, consumed by an offender with six Public Intoxication Enhanced arrests. This individual also had Criminal Mischief and City Ordinance Violations in a couple of his arrests during the sample period.

Spatial Analysis

All 321 arrests were included in the spatial analysis. Addresses were geo-coded with a 69% match initially, the remaining of the addresses were manually.

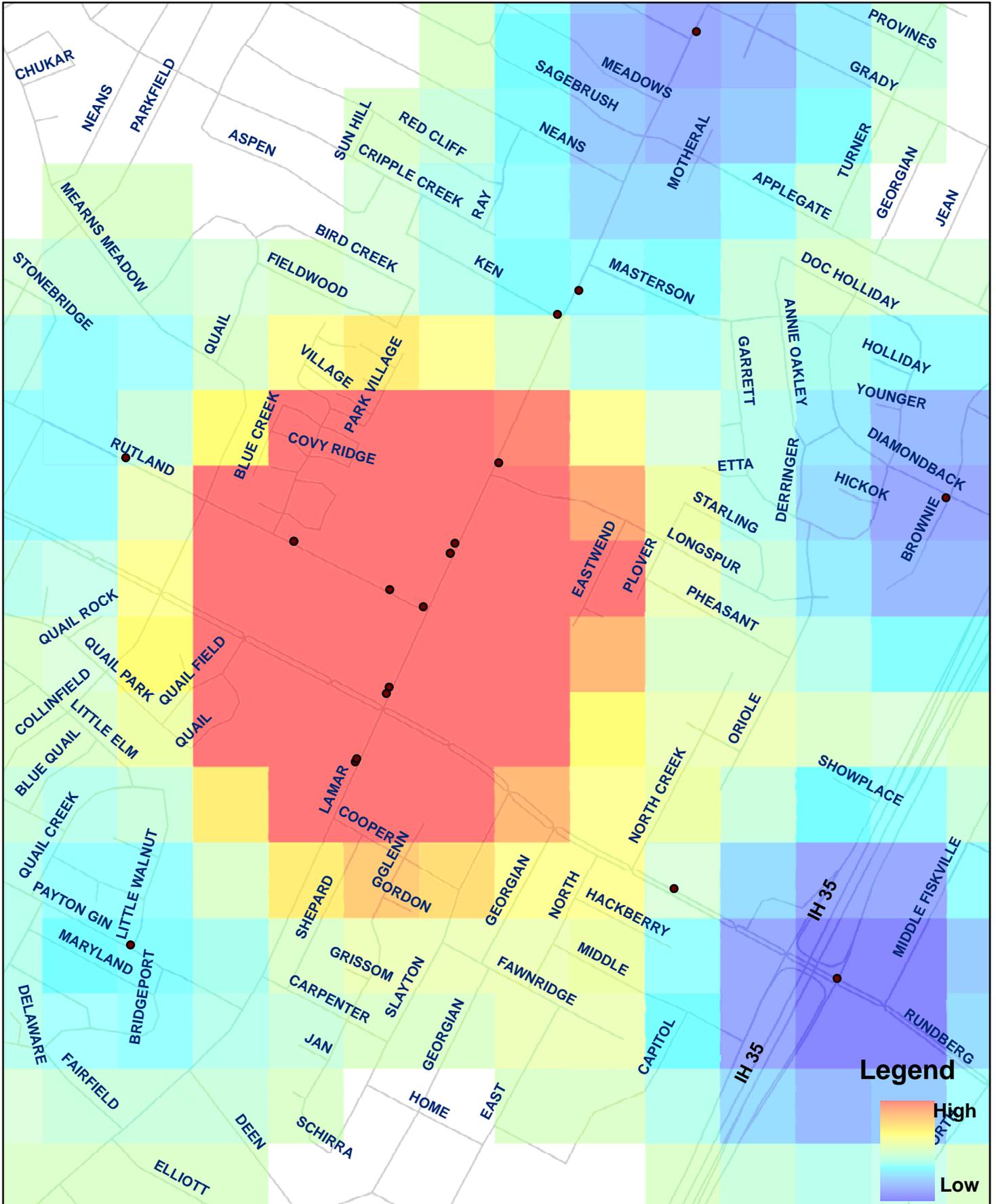
PI Enhanced Arrests Jan-May2010

Hot Spot Analysis



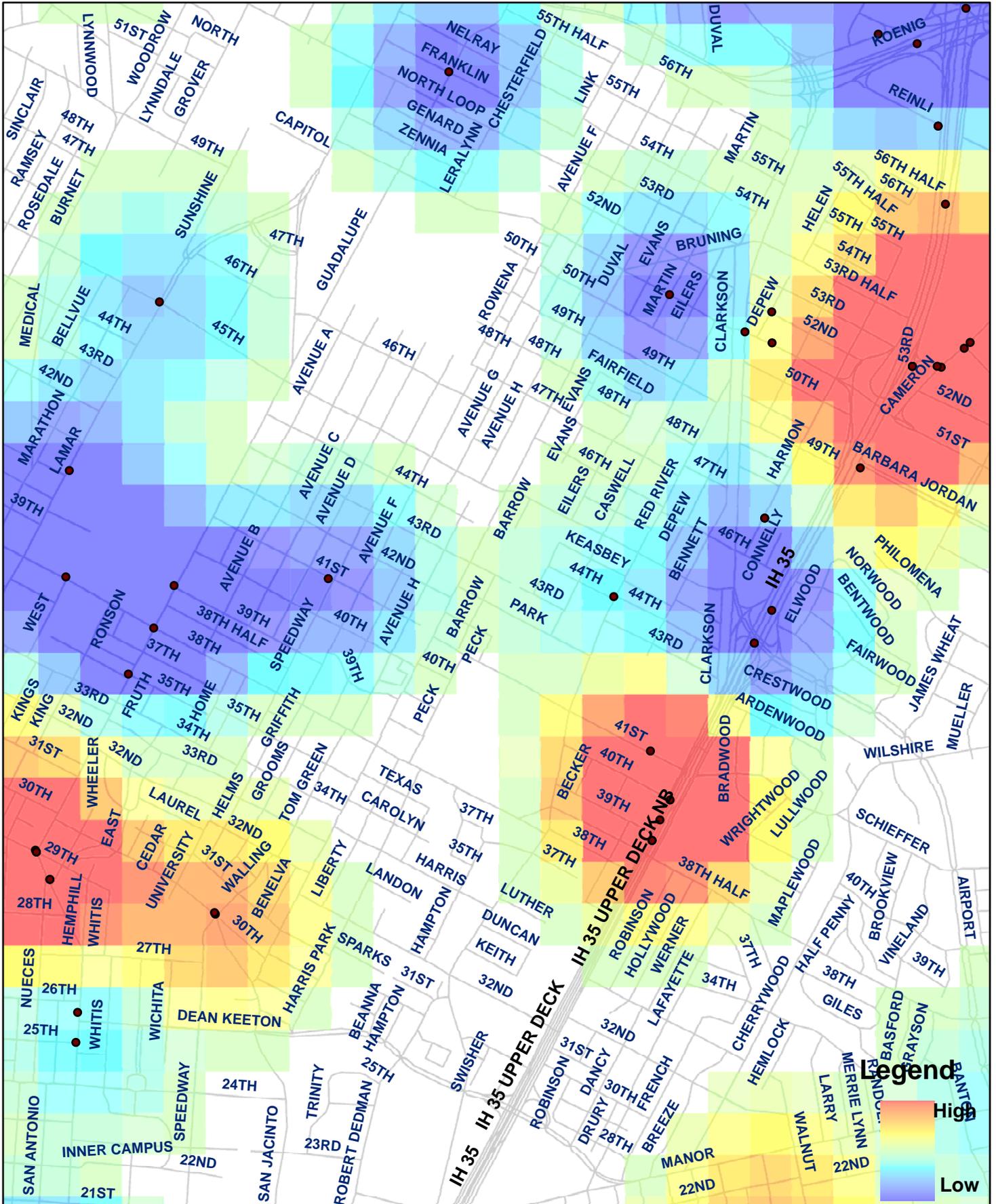
PI Enhanced Arrests Jan-May 2010

NORTH HOT SPOT



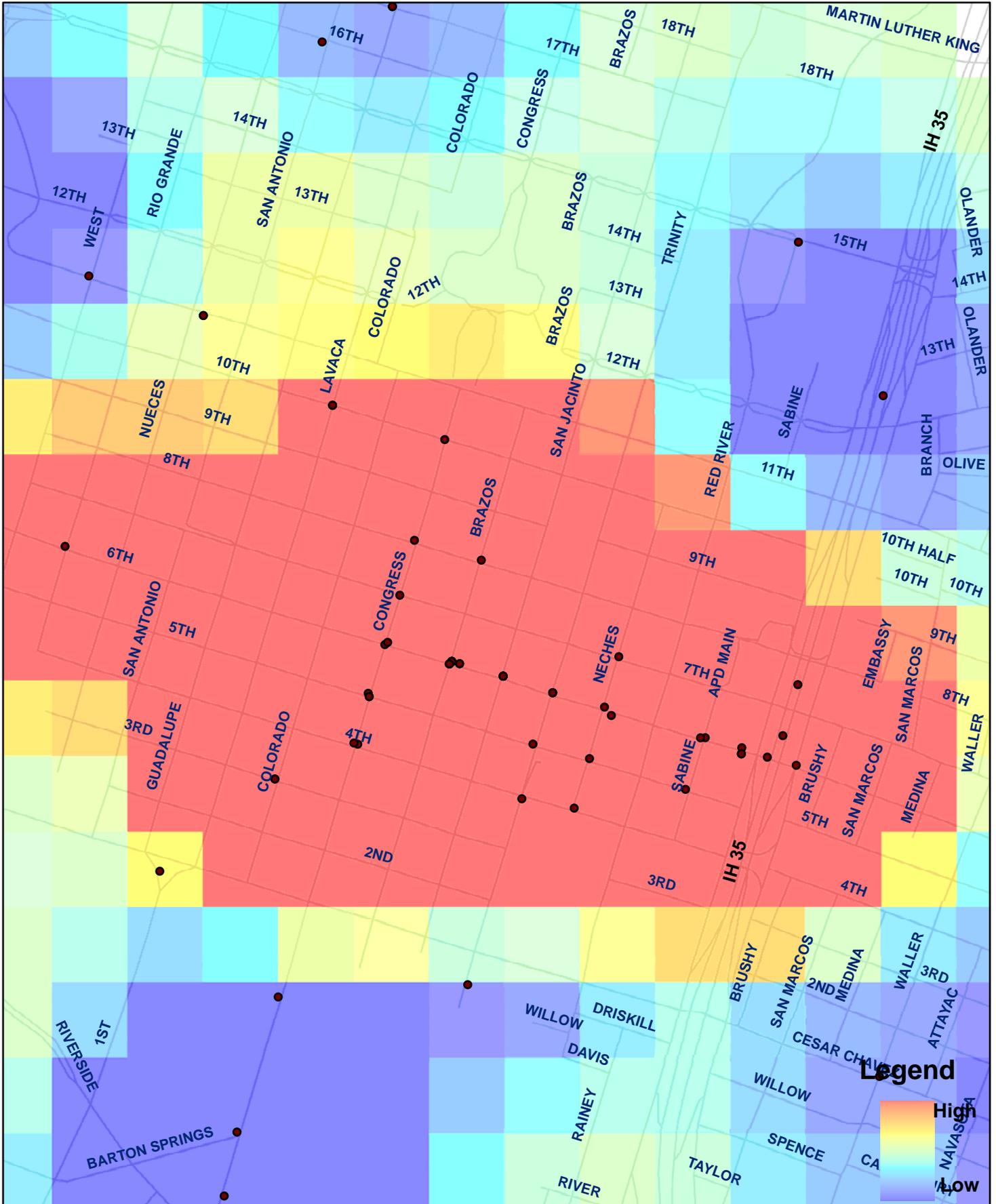
PI Enhanced Arrests Jan-May 2010

CENTRAL HOT SPOTS



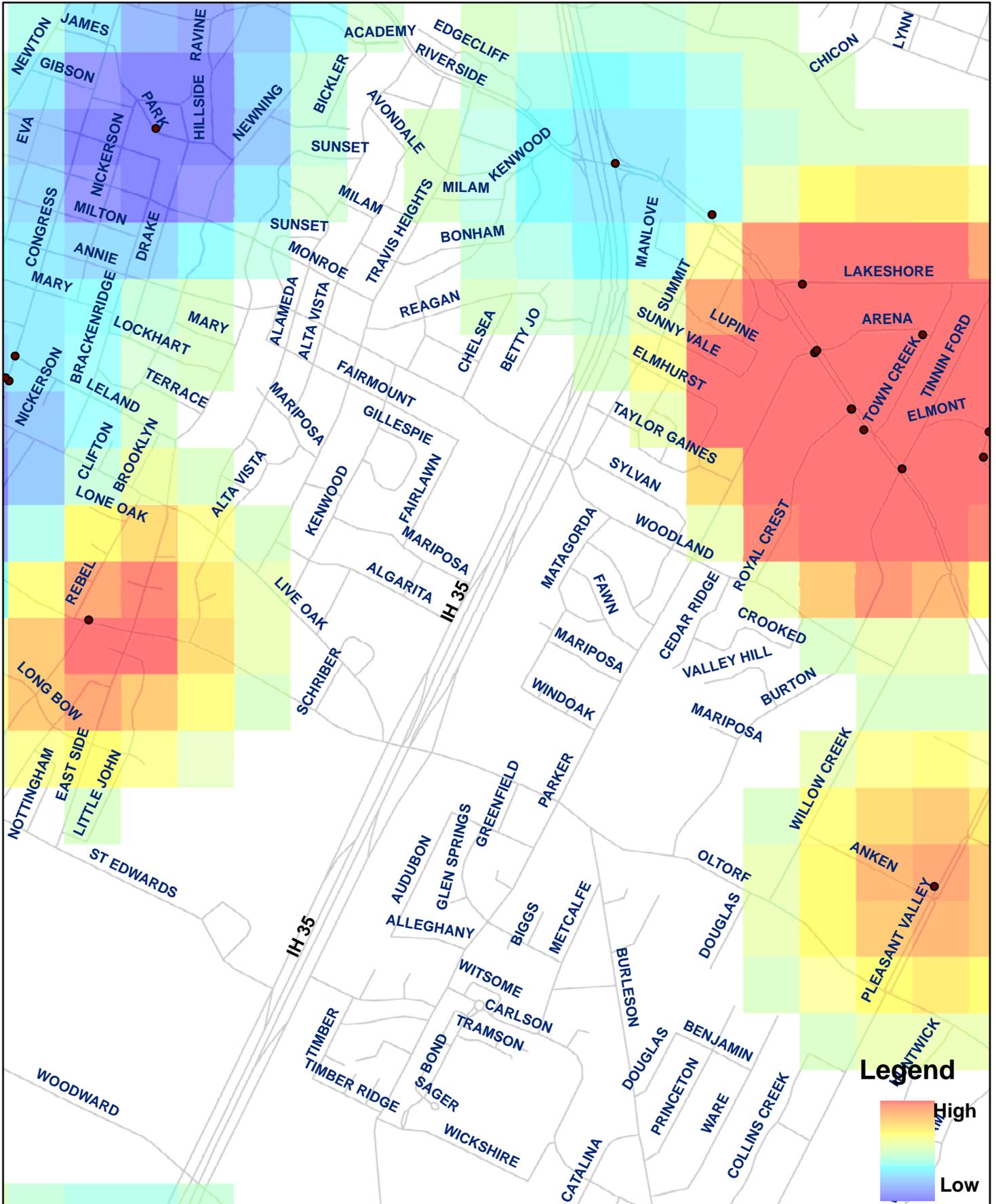
PI Enhanced Arrests Jan-May 2010

DOWNTOWN HOT SPOT



PI Enhanced Arrests Jan-May 2010

SOUTH HOT SPOTS



CONCLUSIONS

Though the Public Intoxication arrests are dispersed more throughout the city, both Public Intoxication and Public Intoxication Enhanced share some basic hot spot areas: North, Downtown and South. The Public Intoxication Enhanced arrests are more condensed in smaller areas within these hot spots.

Public Intoxication Enhanced produced an additional hot spot area, in North Central Austin around Interstate 35 and 51st/Cameron area. While not pronounced as a glaring hot spot, this area is also picked up in the lower level Public Intoxication arrests.

The largest hot spot in both samples is the downtown area with high concentration along 6th Street.

Public Intoxication and Public Intoxication Enhanced arrests produced 3,835 arrests between January and May 2010, including the 1,013 Public Intoxication arrests that were not part of the spatial analysis. This was 14.93% of the overall jail bookings during the same period.