

BUILDING AN INTELLIGENCE-LED OPERATIONS STRATEGY AT THE HAMILTON COUNTY (OH) SHERIFF'S OFFICE

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INTRODUCTION

The Hamilton County Sheriff's Office (HCSO) provides law enforcement, court, and jail services for Hamilton County, Ohio. Located in the Southwest corner of the state and home to the City of Cincinnati, Hamilton County is the 3rd largest county in Ohio with approximately 817,000 residents. The HCSO's Patrol Division provides law enforcement services for 13 unincorporated townships within Hamilton County: Anderson Township, Columbia Township, Green Township, Miami Township, Symmes Township, Crosby Township, Harrison Township, Sycamore Township, Whitewater Township, the Village of North Bend, the Village of Silverton, the village of Arlington Heights, and the Village of Lincoln Heights. These jurisdictions are home to roughly 200,000 residents and span about 207 square miles. In total, roughly 250 Sheriff's Deputies serve in the Patrol Division across 5 patrol districts.

The HCSO has effectively always operated under the standard model of policing, which includes random patrol in large police beats, rapid response to calls for service, increased patrol and enforcement in response to high crime levels, and generally applied follow-up investigations once a crime is committed.¹ HCSO's primary crime reduction strategy has been "extra patrol" across geographically large areas, and the impact of the response has not been measured yet its effect is likely minimal.²

DEVELOPING AN INTELLIGENCE-LED OPERATIONS STRATEGY

The HCSO has understood its need to adapt to more modern and effective methods. In 2017, the HCSO, based on the initiative of Captain Tony Orue, began planning to implement an agency-wide intelligence-led operations strategy (ILOS). In 2018, a first draft ILOS was written and approved by the Sheriff. The ILOS incorporates aspects of Problem-Oriented Policing, Intelligence-Led Policing, and Evidence-Based Policing among others policing strategies. The key to the ILOS is that the agency is moving toward a data-driven approach to develop holistic solutions to crime and disorder problems, while using evidence-based methods. In 2019, the HCSO began implementing the ILOS agency-wide. This strategy is data-driven, evidence-based, and harnesses data, information, and intelligence throughout the organization.

Building an Intelligence Unit

A key aspect of this strategy included the formation of an Intelligence Unit (IU). On December 10, 2019, Captain Tony Orue, who conceptualized the ILOS, was asked to serve as IU Commander. In early 2020, the HCSO hired a Research Specialist/Intelligence Analyst (RSIA), Akshata Kumavat (who was promoted to IU Manager in October, 2020). The IU Commander and RSIA were tasked with planning and implementing the ILOS with direction and support from the Sheriff and Chief Deputy.

The IU's mission is to formulate strategies for crime prevention to reduce harm, preserve public safety and promote threat assessment; to deliver timely, dependable, and intelligible solutions while evolving

¹ Weisburd, D., & Eck, J. E. (2004). What Can Police Do to Reduce Crime, Disorder and Fear? *The Annals of the American Academy of Political and Social Science*, 593(1), 42–65.

² Kelling, G. L., Pate, T., Dieckman, D., & Brown, C. E. (1974). *The Kansas City Preventive Patrol Experiment: A Summary Report*. Washington, DC: Police Foundation.

through continuous improvement in analysis, community outreach, and upholding standards for best practices.

Obtaining a Records Management System

The HCSO has historically used a paper-based crime incident records. An incident report is taken in paper form, checked by a supervisor, and routed through inter-departmental mail to the Criminal Investigations Section. There it gets a physically stamped incident number. If the case requires investigative follow-up, it is assigned to a detective. The original report then physically travels downtown to the Bureau of Records (BUR), which can take from one to four days depending on weekends and holidays. When a report arrives at the BUR, it is coded for UCR statistics manually and processed by another employee who scans the document and does limited database entry for major fields such as address, victim, suspect, etc. The remainder of the report is not searchable and cannot be used in any analysis. In effect, HCSO has only calls-for-service (CFS) data, which are collected in a Computer-Aided Dispatch system at the Emergency Communications Center, in a semi-ready to use format for analysis.

Obviously, an electronic records management system (RMS) was paramount for moving towards robust crime and intelligence analysis for HCSO's ILOS. During 2020, HCSO had developed an internal needs assessment for an RMS and began researching various commercial RMS on the market. An RMS was estimated to cost HCSO between \$1.5 and \$2M to implement. The economic downturn associated with the Covid-19 pandemic that impacted local government budgets was making it more difficult for HCSO to fund a RMS. In early June, HCSO became aware of the RMS being provided by OHLEG Office of the Ohio Attorney General. A product demo was hosted for all interested users across the state. The HCSO Sheriff and the Chief were on board with the product as well. Thereafter, OHLEG along with the vendor's team began working together to address additional requirements and concerns. Presently, the product has gone live and configurations are being setup. However, HCSO will only begin using the full electronic RMS by January 2021.

Partnering with the Institute of Crime Science

Because the HCSO has been taking paper-based reports, it had not previously developed an internal crime analysis capacity. The IU's creation and the hiring of the RSIA marked the first steps to build analytical capacity. In early 2020, HCSO began partnering with Drs. Cory Haberman and Jillian Desmond of the University of Cincinnati's Institute of Crime Science (ICS). ICS is a research institute with expertise in crime and intelligence analysis, and thus a valuable partner. The HCSO-ICS partnership was developed so that ICS could provide analysis, training, technical assistance, and research support to HCSO as needed.

OHIO CONSORTIUM OF CRIME SCIENCE CRIME ANALYSIS PROJECT

To date, the primary focus of the HCSO-ICS partnership has been to develop the use of crime and data analysis in HCSO. Towards the end of July 2020, the Ohio Consortium of Crime Science (OCCS), a program housed in the Ohio Office of Criminal Justice Services (OCJS), provided funding for a pilot crime analysis development project between HCSO and ICS.

Building a Hot Spot Identification Process

At the beginning of the project, HCSO IU members and ICS Team met a couple times to discuss the HCSO IU's vision for crime analysis. Given the lack of electronic crime data, it was determined that ICS would conduct some preliminary analyses of calls for service (CFS) data to help HCSO understand its call volume and concentrations.

At the beginning of August 2020, HCSO and ICS submitted a request for CFS data from Hamilton County Communications Center (HCCC). The HCCC agreed to provide CFS data for the period of January 1, 2020 – July 31, 2020. Further, HCCC agreed to establish a monthly process to provide the previous month's CFS data at the conclusion of each month. The HCCC wrote a scheduled query to extract the data, and a monthly email with the CFS data was sent to ICS to complete the process.

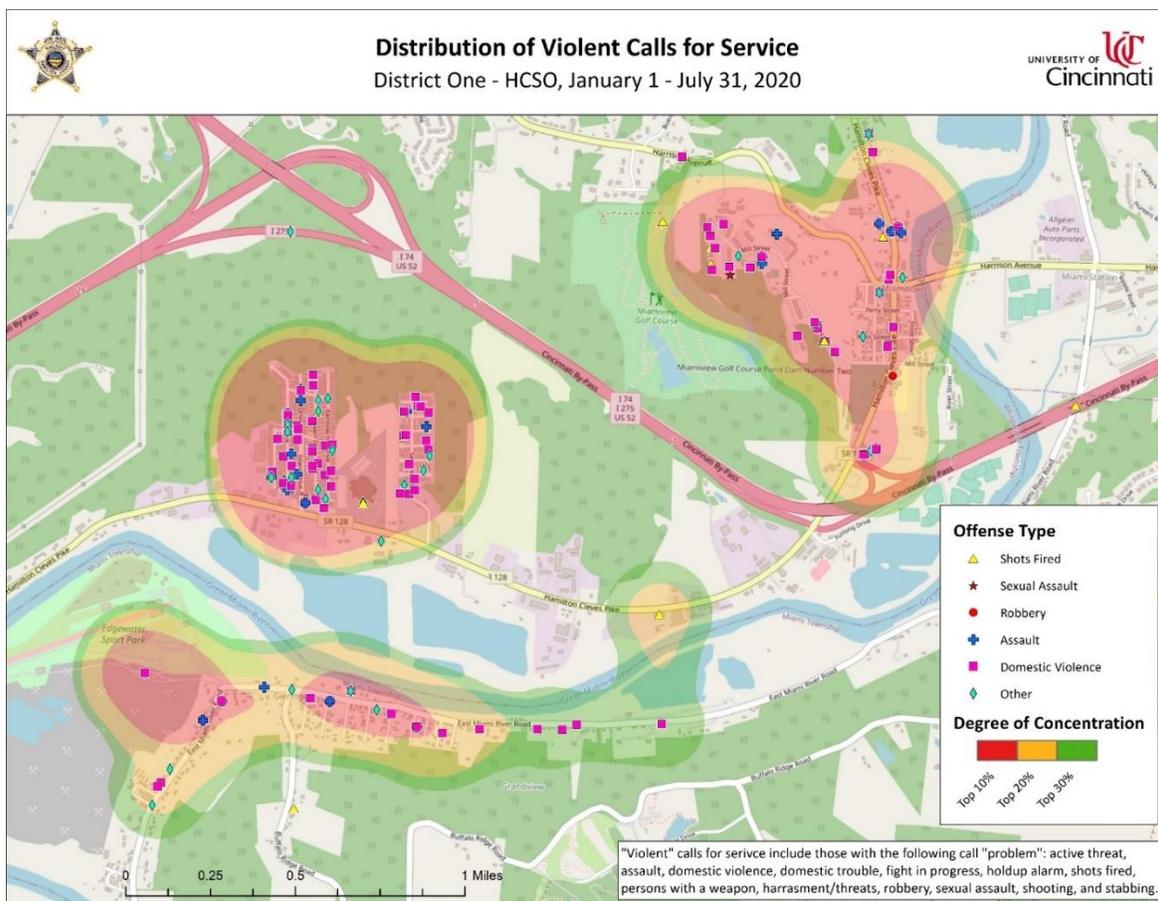
To date, ICS has produced four analytical products on a monthly basis from August to November, 2020. All reports are shown in succession in Appendix 1.

In the **August report**, kernel density estimation (KDE) was used to develop violent and property crime CFS hot spots for each of HCSO's districts for January 1, 2020 – July 31, 2020 (Figure 1 below).³

The analysis found:

- 53.2% of violent CFS were concentrated in just 4.0% of HCSO's patrol area
- 36.1% of serious property CFS were concentrated in just 4.8% of HCSO's patrol area
- Each jurisdiction had specific delineated hot spots for both violent and property CFS

Figure 1. Example Kernel Density Map from August Report



³ Violent crime included: (1) calls for shots fired (shots fired, shooting), (2) sexual assault (sexual assault), (3) robbery (robbery, holdup alarm), (4) domestic violence (domestic trouble, violence), (5) assault (assault, fight in progress, stabbing), and (6) other (person with weapon, threat, harassment). Property crime included: (1) auto (auto theft, vehicle alarm, vehicle tampering), (2) burglary (burglary in progress or report).

Nonetheless, the number of results generated by the analysis were somewhat overwhelming for a command staff just starting with crime analysis.

1. HCSO's jurisdictions were not equally criminogenic and serious crime was still quite rare in many areas.
2. Given most HCSO jurisdictions are relatively small villages and townships, the street network and land use patterns are compact.
3. The notion of smoothing via the KDE algorithm and the interpretation of the output values is somewhat vague to non-technical audiences.
4. Splitting the KDE hot spots by jurisdiction and crime types produced a lot of maps.

As a result of points 1 and 2, the KDE's smoothing algorithm produced maps that could be confusing to read for two reasons. First, the KDE smoothing algorithm could both "pull together" nearby KDE hot spots, thus merging hot spots with unrelated crime problems. Second, in some instances hot spots were generated around just one or two CFS when the surrounding areas had virtually no crime. While these are well-known limitations of KDE, it can make it more difficult to interpret the maps and/or identify areas that are not voluminous enough to warrant law enforcement resources. The latter point can also reduce legitimacy amongst readers who are not well versed in KDE because they see hot spots in area they were not expecting to. The end result was that interpreting the maps was nuanced and required some technical skills HCSO command staff had not yet had the training and time to develop.

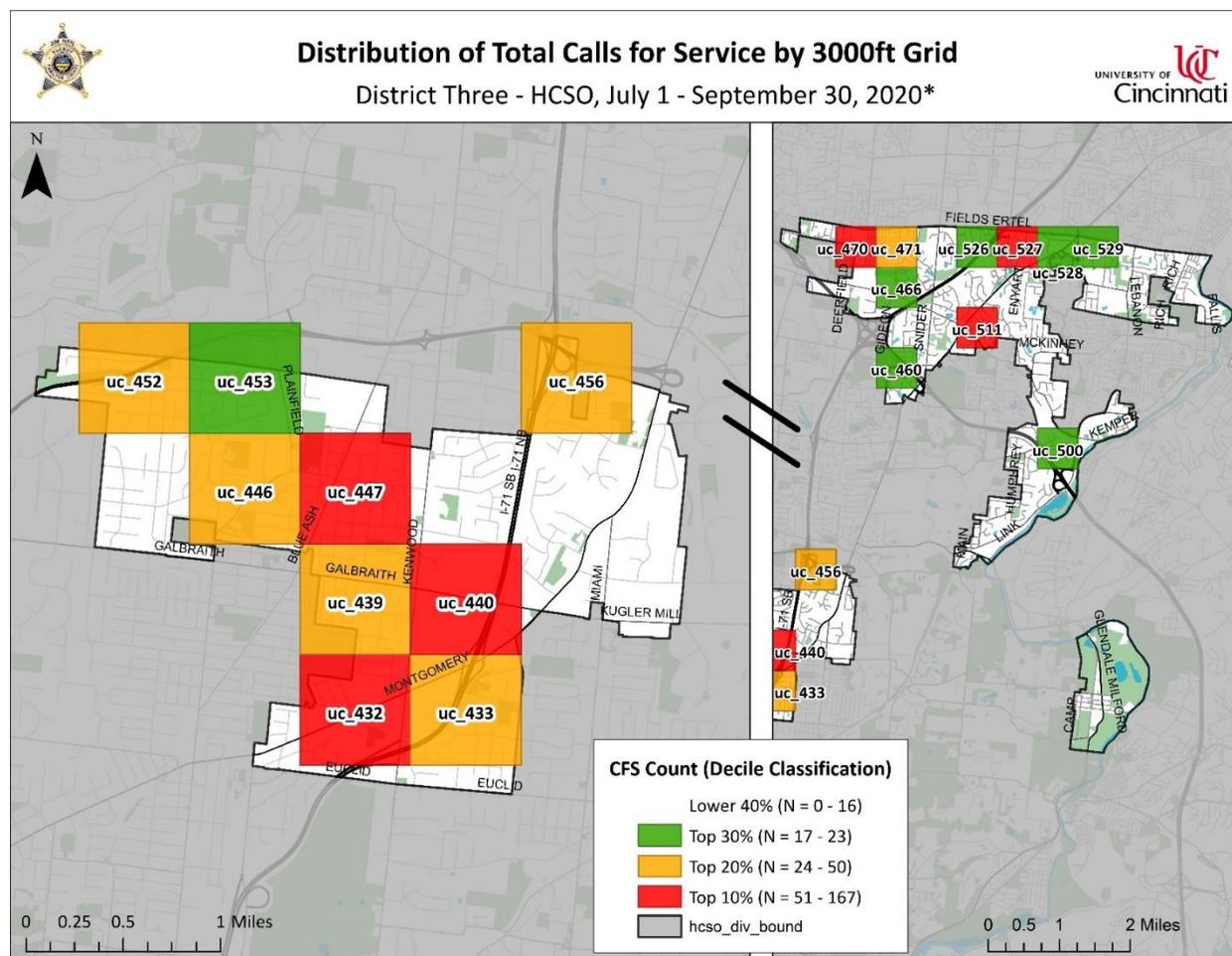
For the *September report*, a decision was made to revise the analysis plan. The analysis focused on June 1, 2020 to August 31, 2020. CFS counts were generated for 3,000 by 3,000 feet grid cells and classified by deciles for all localities within HCSO's jurisdiction. The grid cells contain approximately 18 street blocks on average (Range: 0 – 139), thus providing a relatively micro-unit yet representing an area where patrol officers could conduct continuous vehicles patrols.⁴ Additionally, grid cells were given ID numbers for easy reference, and the major facilities and underlying features and counts of different crime types in the top 10% of grid cells were developed. For each HCSO district, maps showing the top 3 deciles (30%) and ID numbers for the top decile of CFS counts were produced (see Figure 2 below). Additionally, tables with the grid cell ID numbers and the major facilities and underlying features and counts of different crime types were produced for the top decile grid cells in the jurisdiction. Again, all monthly reports can be found in Appendix 1.

For the *October report*, the same analyses were replicated for July 1, 2020 to September 30, 2020 with two additions. First, because one jurisdiction's hot spots included a large shopping mall, an analysis of CFS by retailer were provided for that jurisdiction. Second, percentage change relative to the 3-month period from the September report at the jurisdiction level were displayed in a table.

For the *November report*, the analyses from the previous month were effectively replicated for August 1, 2020 to October 31, 2020. One change, however, included calculating the percentage change between the present 3-month analysis period and the 3-month period from the previous report in each grid cell. These percent changes were also visualized using a choropleth map alongside the CFS decile count maps in order to see where both crime was concentrated and where increases or decreases in CFS were occurring.

⁴ 1,500 by 1,500 feet grid cells were considered but ultimately ruled out because they identified hot spots that were smaller than operationally preferred for vehicle patrols. The smaller grid cells seemed like a good candidate for future problems solving initiatives.

Figure 2. Example Grid Cell Count Map from October Report



In sum, it was determined that the monthly crime analysis report would be best for HCSO if it included:

- District by district analysis
- Streamlined CFS categories tailored to agency’s (dynamic) focus areas
- Summary tables tracking district-level CFS volume and changes relative to the previous period
- Easily interpretable hot spot maps (i.e., counts instead of KDE hot spots)
- Temporal trends and period-to-period changes in hot spots to track progress

How the Analytical Products Were Used by HCSO

HCSO District Commanders have used the standard model of policing for a long time. Therefore, it was imperative to initiate a change in their thought-process before asking them to use any analyses. It was understood that the Commanders would need more in-depth understanding than to merely share maps and task them with addressing the hot spots. When the first set of analyses were shared (the August Report describe above), the Commanders hesitated to adopt them into practice. However, they displayed strong interest and willingness to learn.

The Intelligence Unit has been pioneering the uses and advantages of problem-oriented policing, intelligence-led policing and community-based policing. On September 9, 2020, an internal problem-

oriented policing training on response development was designed that contained important principles and context to use these policing techniques as well as how to use the CHEERS criteria for problem identification.⁵ All District Commanders and Supervisors attended the training, which included a test at the end that was scored for everyone.

Additionally, monthly meetings were arranged as the previously described monthly analyses were received from ICS. After each report was produced, ICS met with the HCSO IU to discuss the analyses. Next, the HCSO IU met with the District Commanders to present the analyses. The awareness and understanding of the maps and statistics gradually increased, and thus District Commanders discomfort while reading them decreased over time. To ensure accountability for using the monthly analyses, the District Commanders were given a problem template where each one was asked to report priority problems, their possible causes, any identified solutions or strategies and how they plan to begin executing it. After a period of one month, a meeting was convened to discuss and foster trust through brainstorming sessions where problems from each district were put on the table for all to offer prospective solutions given their versatile experiences. A key piece to this was allowing District Commanders to choose their own problems rather than being told where to concentrate their efforts. They were given resources and encouraged to do their own research and investigation behind the causes and develop solutions by openly engaging with their patrol officers who most frequently come in touch with these problems.

During the meeting, there was no mandate to have clear solutions, but to only initiate a change in the approach of considering problems. The Scanning and Analysis stages of the SARA model were given higher priority. The District Commanders all came prepared with the completed template in great detail. This was a first step for them to embrace change, which demonstrated success in the HCSO's organizational change process. HCSO was successful in designing its planned discussion forum where the Commanders could openly share their ideas for addressing crime problems.

Presently, the Commanders are documenting each district's problems and consolidating this information into a single report that will be shared across the agency so that accountability is maintained. This initial report can be used in the future as a baseline for what was planned and has changed within the agency.

NEXT STEPS

While the HCSO has made significant advances towards implementing its ILOS, there remains several important next steps for further advancing the changes.

Understanding Initial Implementation Strengths & Barriers

First, HCSO plans to work with ICS to conduct an initial qualitative assessment of implementation to date. ICS researchers will conduct interviews with HCSO District Commanders and Supervisors to understand their perspective of the changes to date. A focus will be placed on understanding the strengths and weaknesses of the analytical products shared, strategy implementation, and perceived next steps.

Hiring & Training Additional Analysts

Second, HCSO plans to hire 3 analysts in the first quarter of 2021. Those analysts will then be trained to take over the analyses produced by ICS. The goal is to have the analysts hired and conducting the monthly analyses by the end of the second quarter of 2021. In the meantime, there is a need to develop a formal process and training for conducting the monthly analyses for the analysts once they come onboard.

⁵ For example, see: <https://popcenter.asu.edu/content/crime-analysis-problem-solvers-60-small-steps>

RMS Implementation

Third, HCSO will be implementing RMS in three stages. The first stage is intended to have all patrol officers begin creating incident reports and traffic crash reports thus contributing to the system's master indices. The second stage will be the integration of the property room database where historic data, the only piece of historical integration, will be uploaded into RMS. This integration will also affect the master indices. Thirdly, the most crucial one is the CAD integration. Without this integration, two features of the system will not be ready for use just yet. One is the auto-population of call details and incident information on the reports for officers, and second is the ability to use calls for service data for generating spatial or temporal analysis. One of the best features of the product allows officers to set a date range, select type of offense and region for viewing the hot spots. But, this will not be available until the next quarter, as HCSO is still in the planning phases, it will take substantial amount of time until the deliverable will be ready to use and continue its maintenance thereafter. This is why interrupting the analyses provided by UC ICS will adversely affect the progress made thus far and break the process of organizational change that is taking place.

Continuing to Implement Evidence-Based Strategies

Fourth, the HCSO will continue to advance intelligence-led, evidence-based strategies. In the 2020 federal grant cycle, HCSO was awarded two federal grants from the Bureau of Justice Assistance. The grants will provide funding to support the implementation of two separate evidence-based programs. First, in Lincoln Heights a comprehensive community-based problem-solving approach will be developed and implemented. Second, across all HCSO districts, a strategy addressing repeat CFS locations using comprehensive problem solving will be developed and implemented. These projects were developed in partnership with the ICS who will provide technical assistance and scientific evaluation of the initiatives.

FOR MORE INFORMATION

For more information about the University of Cincinnati's Institute of Crime Science please email Dr. Cory Haberman via cory.haberman@uc.edu or visit <https://cech.uc.edu/about/centers/ics.html>.



APPENDICES

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August Spatial Crime Analysis

Hamilton County Sheriff's Office

Institute of Crime Science

Violent Calls for Service

Shots Fired (shots fired, shooting)

Sexual Assault (sexual assault)

Robbery (robbery, holdup alarm)

Domestic Violence (domestic trouble, violence)

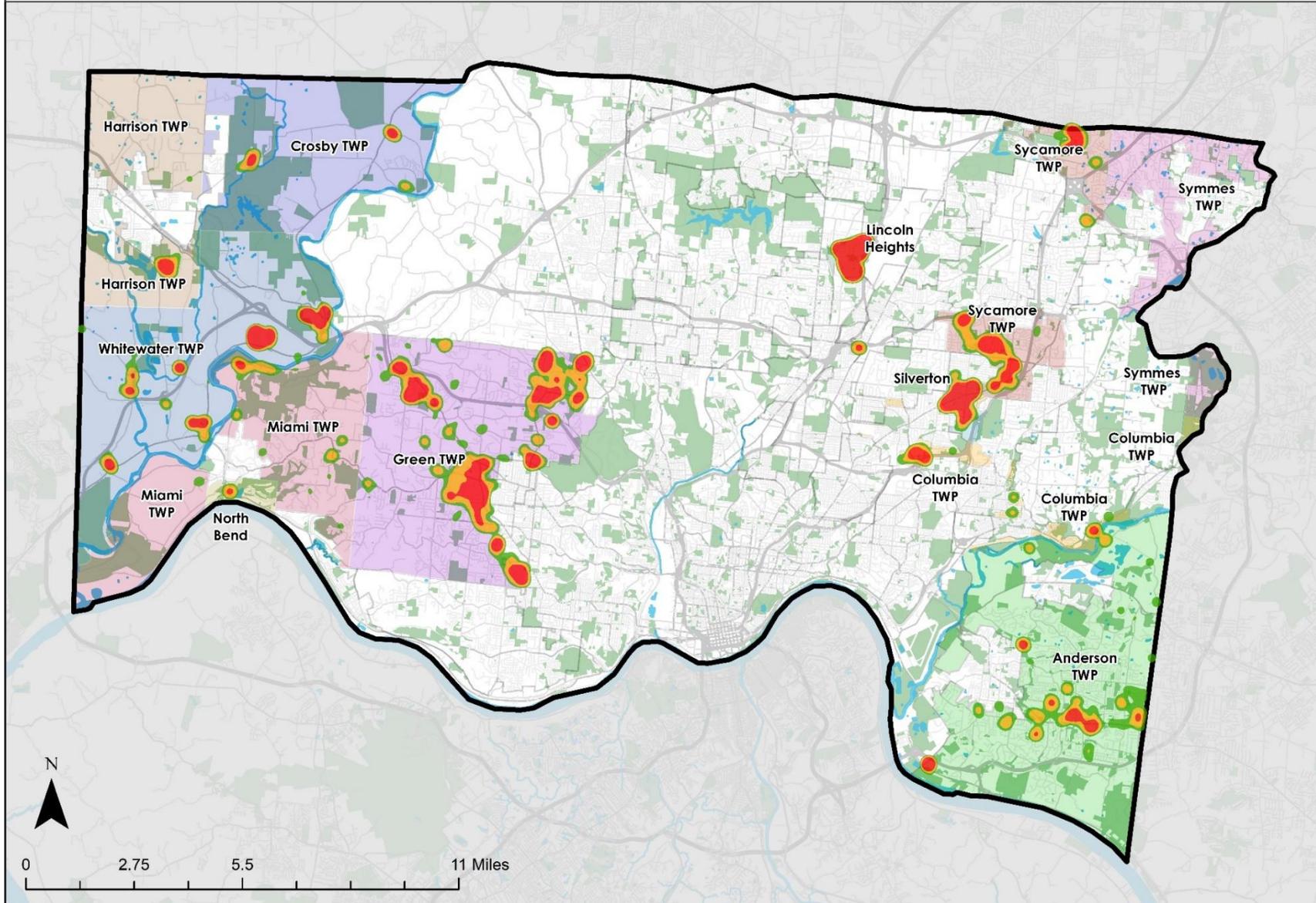
Assault (assault, fight in progress, stabbing)

Other (person with weapon, threat, harassment)



Concentration of Violent Crime, HCSO Jurisdictions

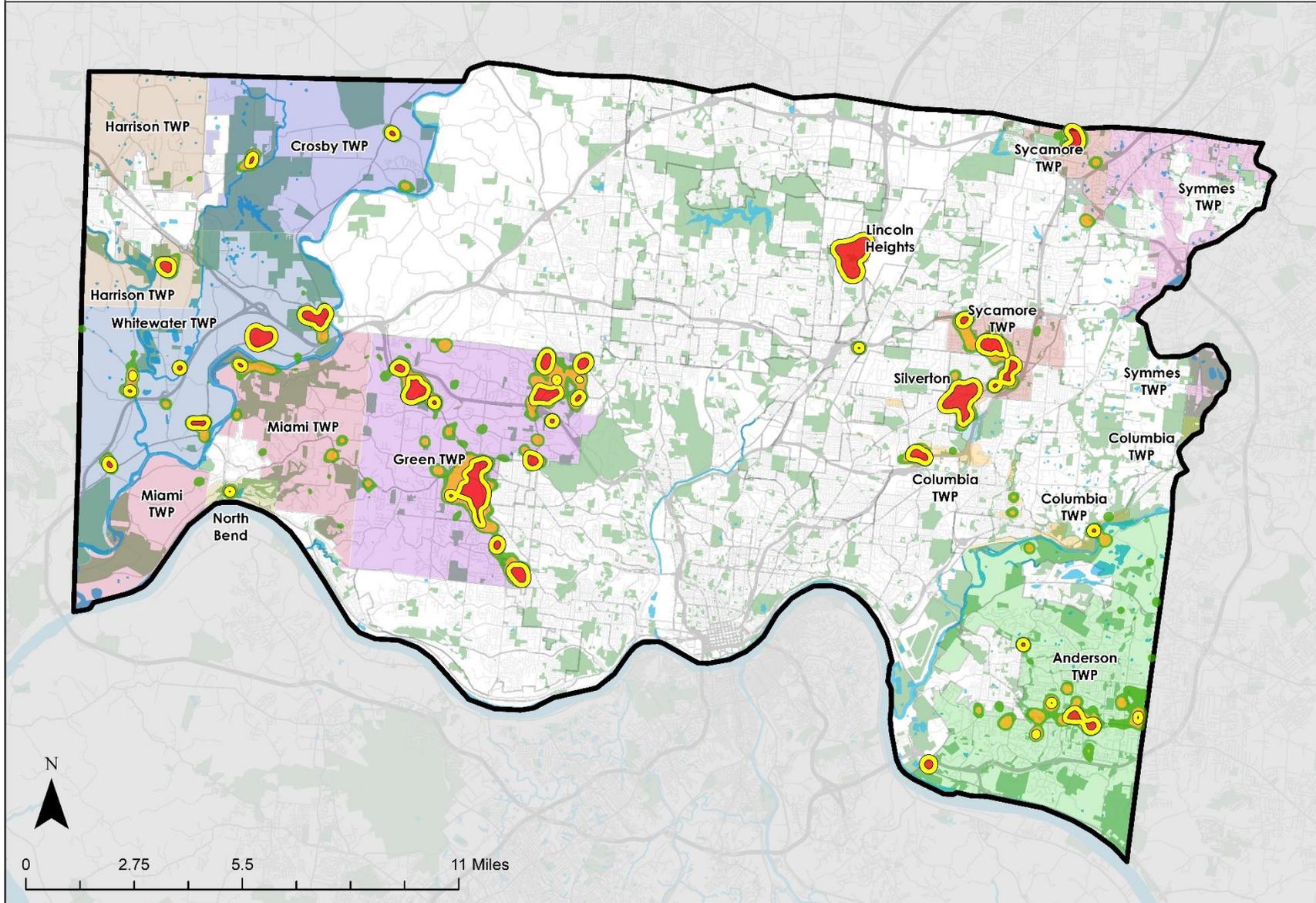
January 1 - July 31, 2020





Concentration of Violent Crime, HCSO Jurisdictions

January 1 - July 31, 2020



**53.2% of violent CFS
in just 4.0% of
geographic area**

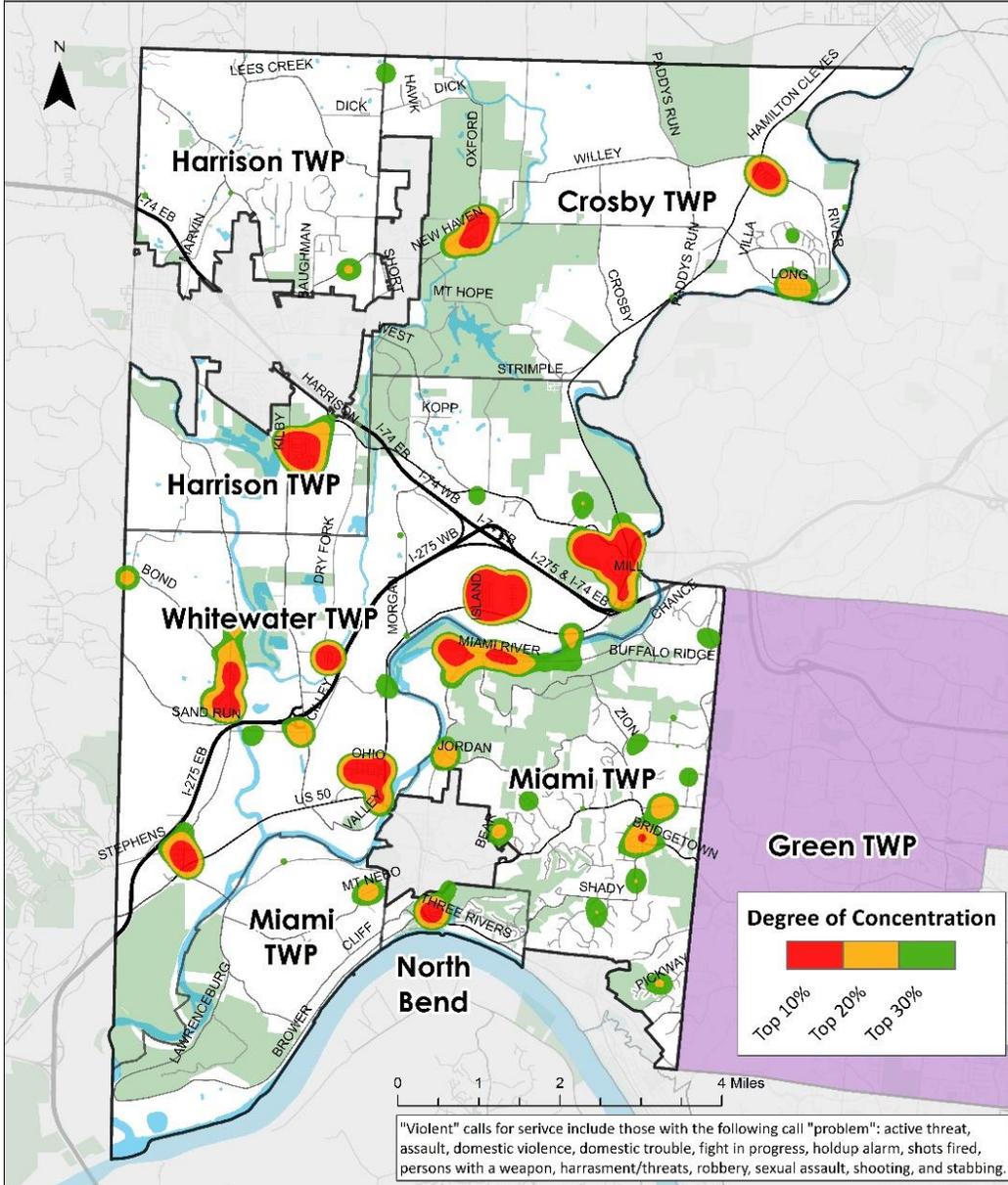


Distribution of Violent Calls for Service
District One - HCSO, January 1 - July 31, 2020



District One

Harrison TWP, Crosby TWP, Whitewater TWP, Miami TWP, Village of North Bend

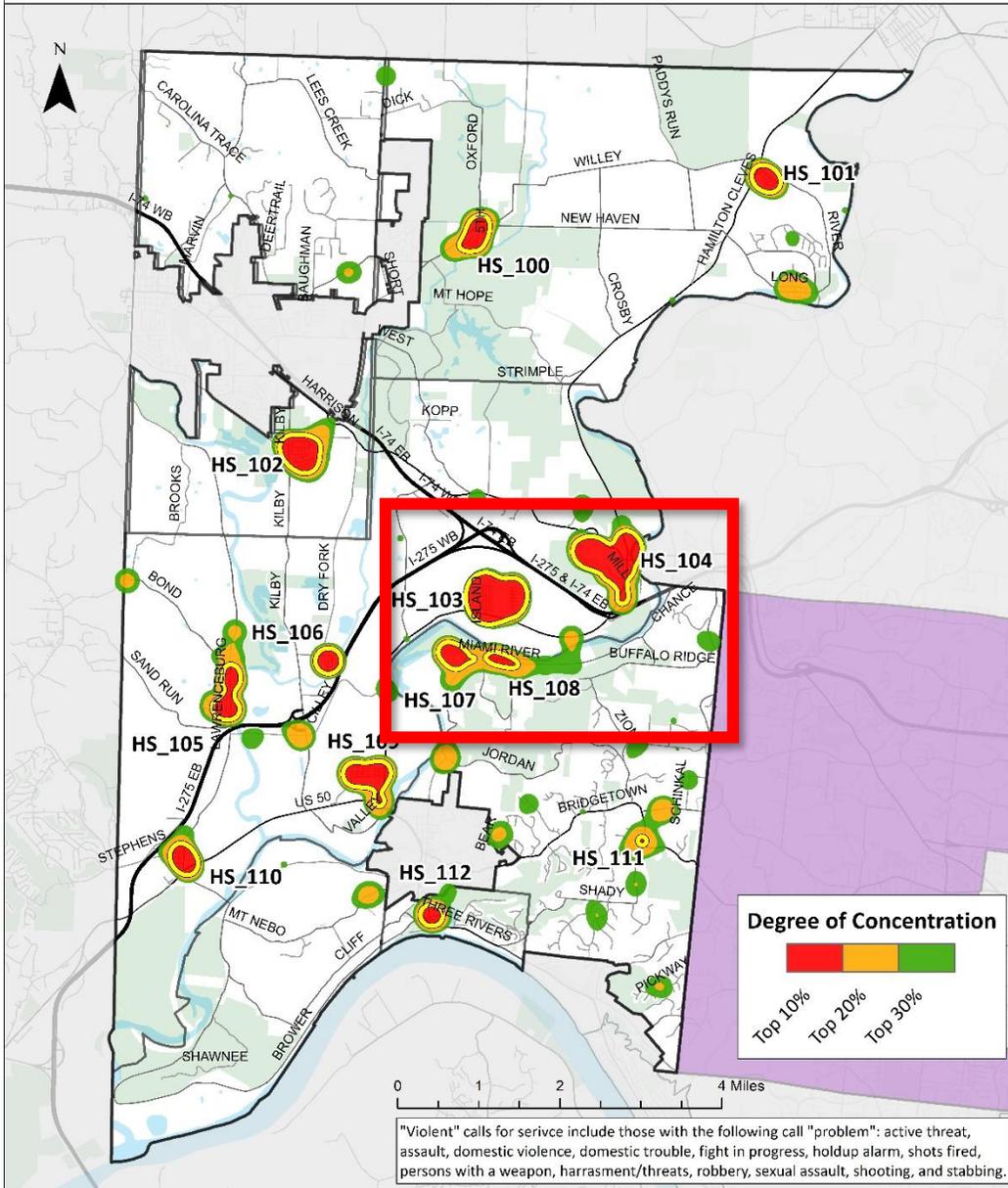


• District – Wide Details

- **Size:** 80 sq miles, 74,139 population
- **# violent CFS:** 640 CFS, 863 per 100k residents
- **Driving offense type:** Domestic violence
- **Driving facilities:** 9 of 10 in Whitewater
 - Mobile Home Parks



Distribution of Violent Calls for Service
District One - HCSO, January 1 - July 31, 2020



District One

Harrison TWP, Crosby TWP, Whitewater TWP,
Miami TWP, Village of North Bend

- **Hot Spots – Only Details**

- **Size:** 1.9 sq miles
- **# violent CFS:** 367 CFS
- **12 hot spots**
 - **Notes:** Largely driven by mobile home parks

57.3% of D1's violent CFS in just 2.4% of its geographic area

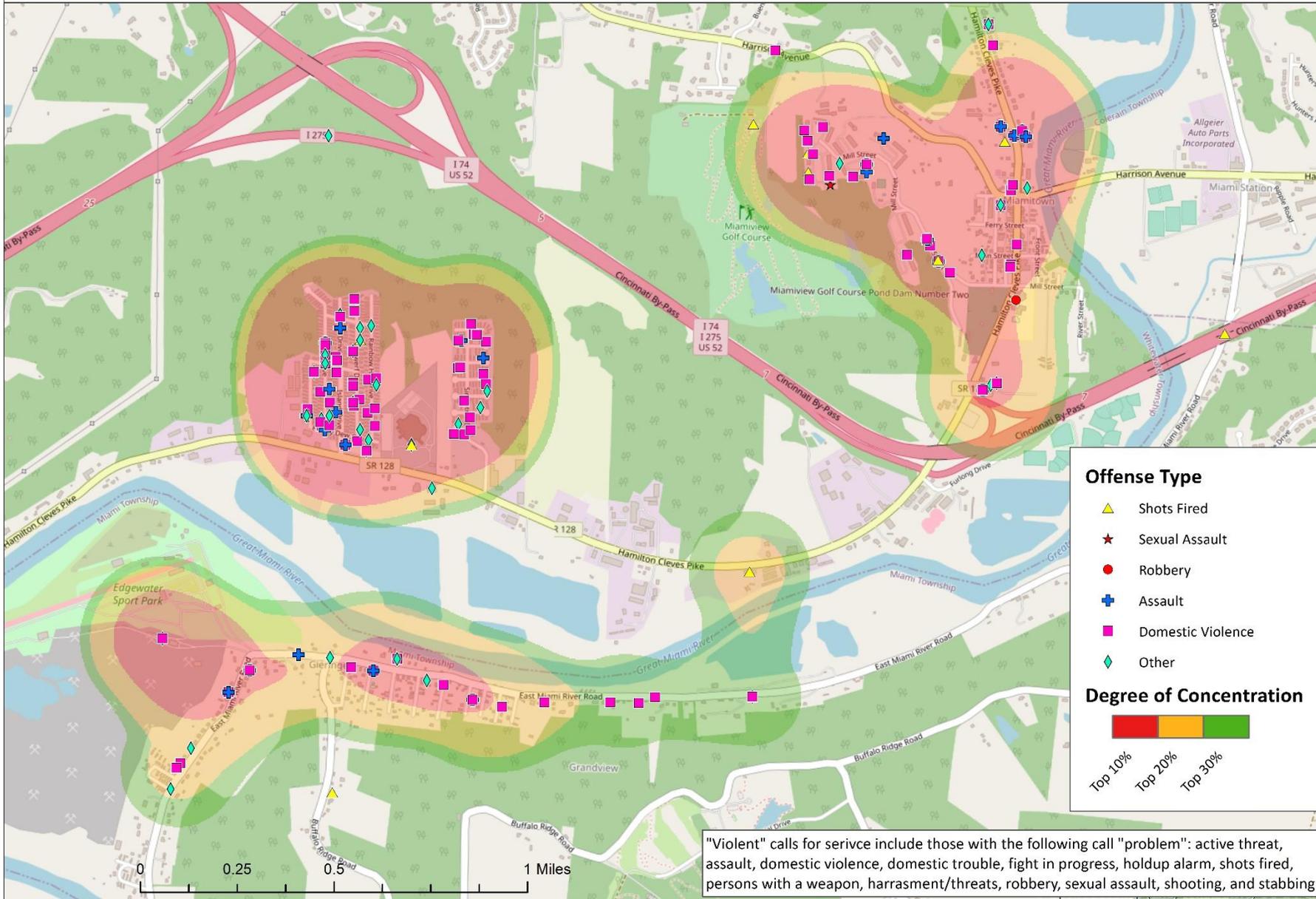


Distribution of Violent Calls for Service

District One - HCSO, January 1 - July 31, 2020



District One Hot Spots





Distribution of Violent Calls for Service

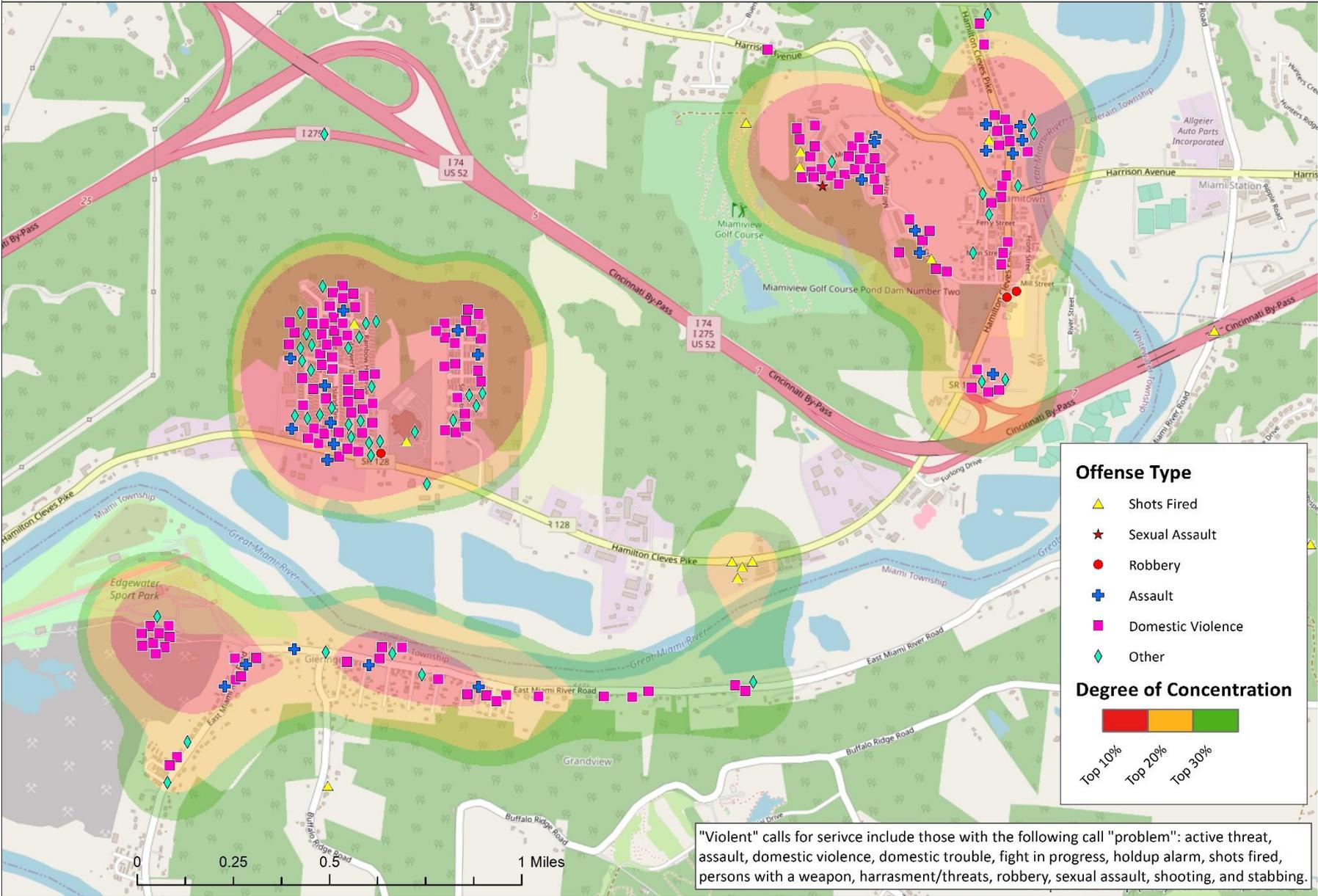
District One - HCSO, January 1 - July 31, 2020



District One Hot Spots

- Four "hot" facilities
 - Miamiview Apts
 - Weinle Motorsports
 - Westbrook Village MHP
 - Ross Park Business Center
- Map Extent
 - N = 235 violent CFS
 - 7.6 Square Miles

36.7% of D1's violent CFS in 9.5% of its geographic area



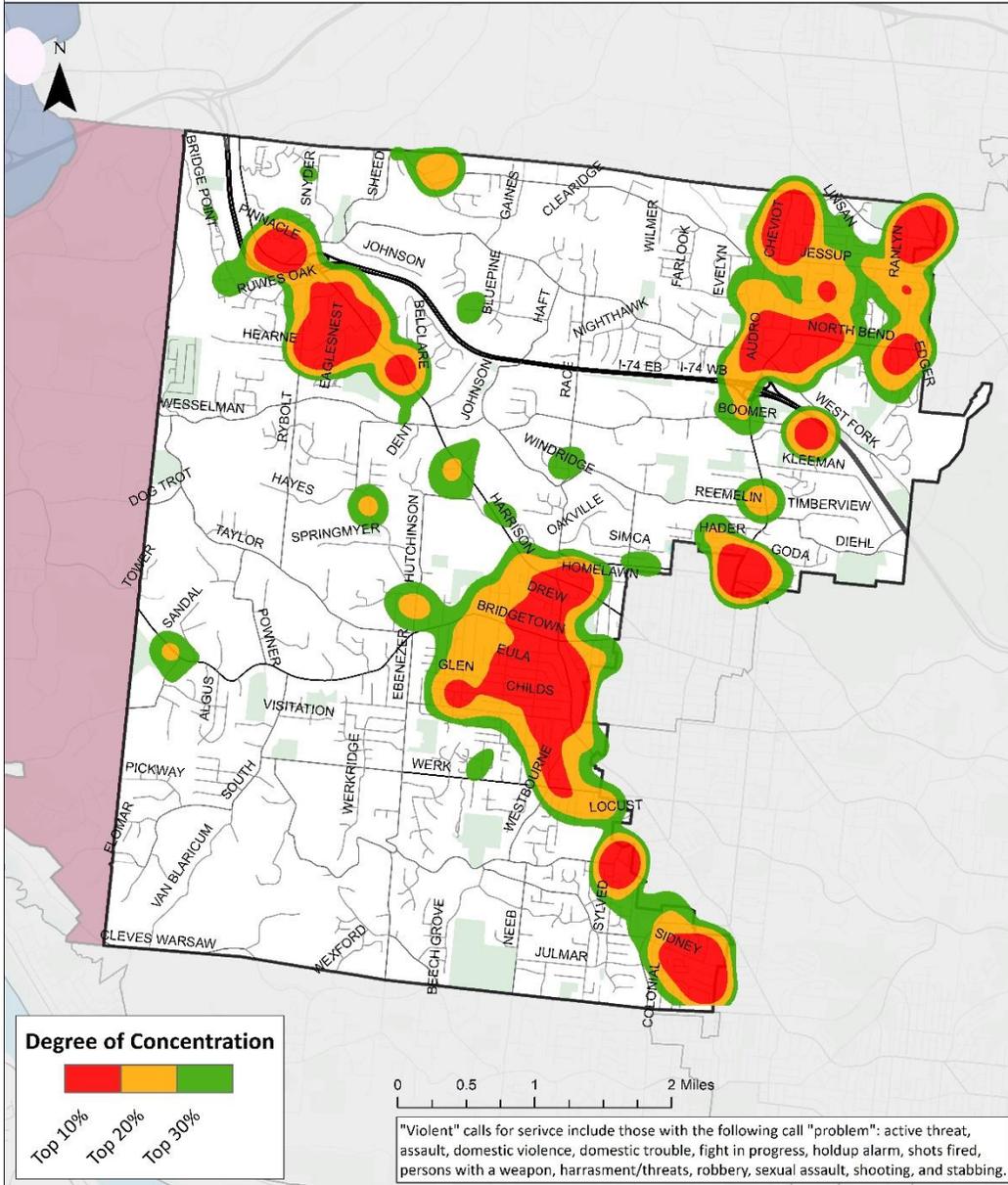


Distribution of Violent Calls for Service
District Two - Green TWP, January 1 - July 31, 2020



District Two

Green TWP



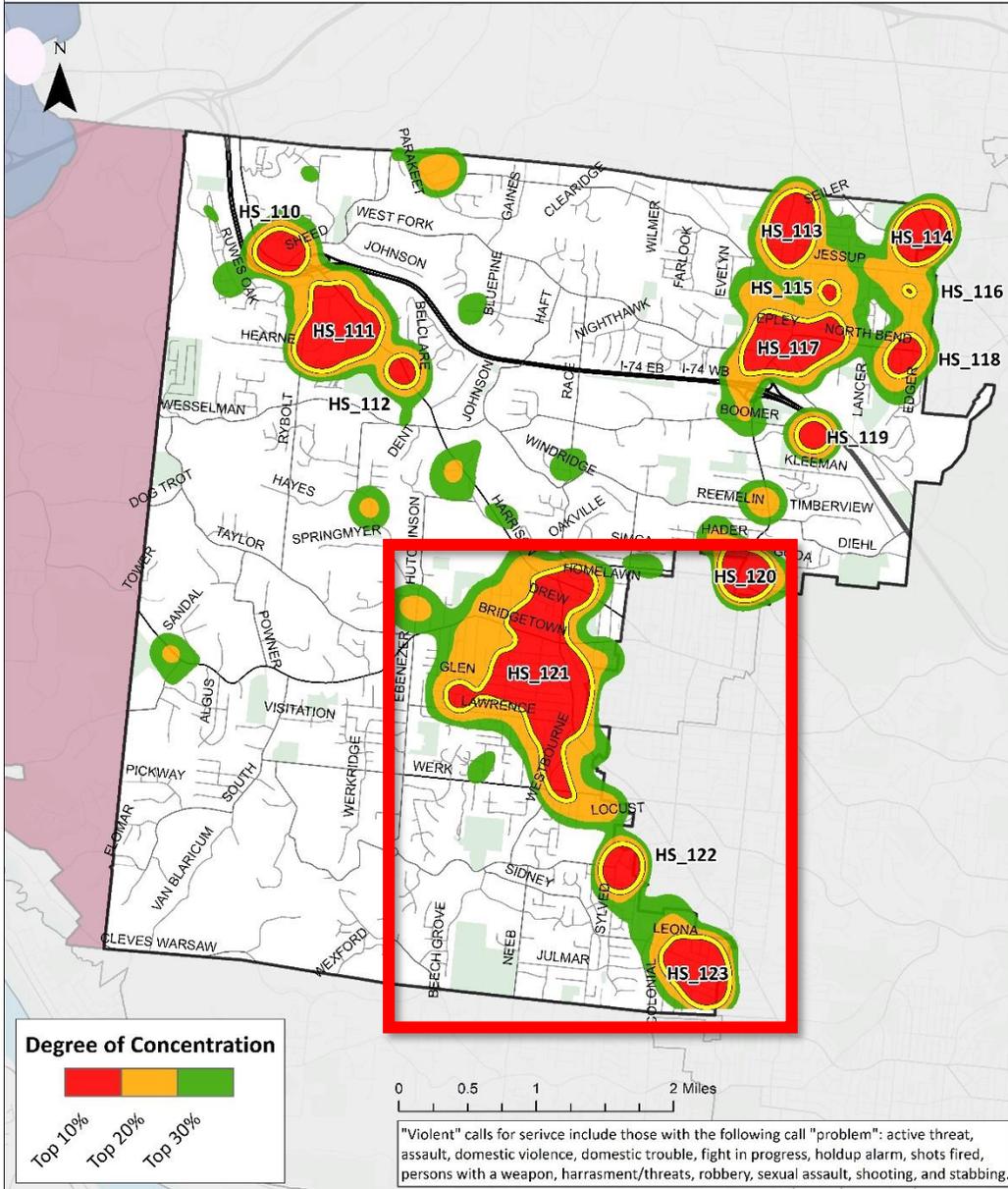
• District – Wide Details

- **Size:** 27.8 sq miles; 74,139 population
- **# violent CFS:** 875 CFS; 1180 per 100k residents
- **Driving offense type:** Domestic violence
- **Driving facilities:**
 - Mercy Health – West (reporting location?)
 - Multi-family home
 - Apartment Complex (2)
 - UDF



District Two

Green TWP



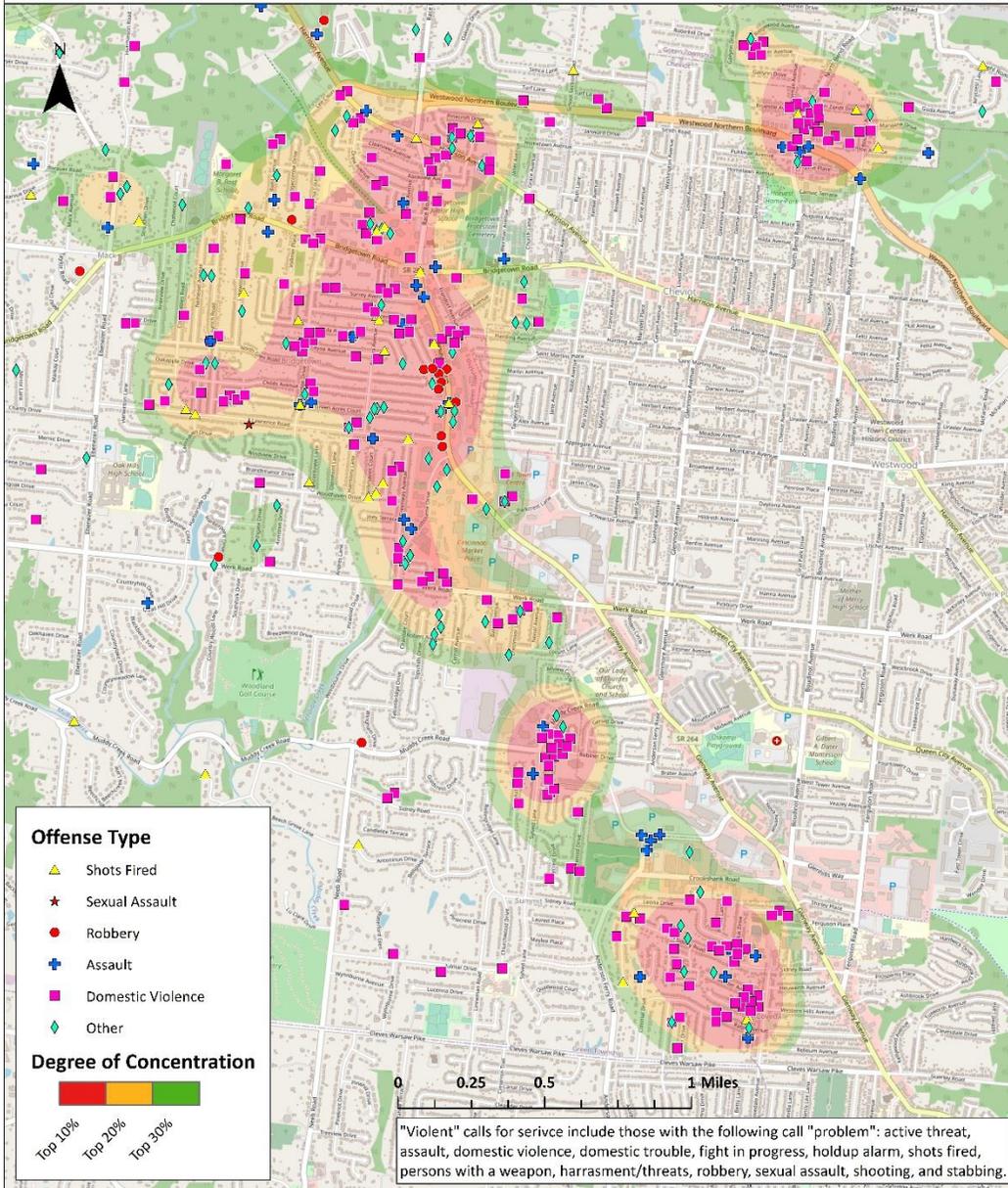
• Hot Spots – Only Details

- **Size:** 2.3 sq miles
- **# violent CFS:** 443 CFS
- **14 hot spots**
 - **Notes:** Rob Roy Apartments, not id-ed by hot facility

50.6% of D2's violent CFS in just 8.2% of its geographic area.



Distribution of Violent Calls for Service
District Two - Green TWP, January 1 - July 31, 2020

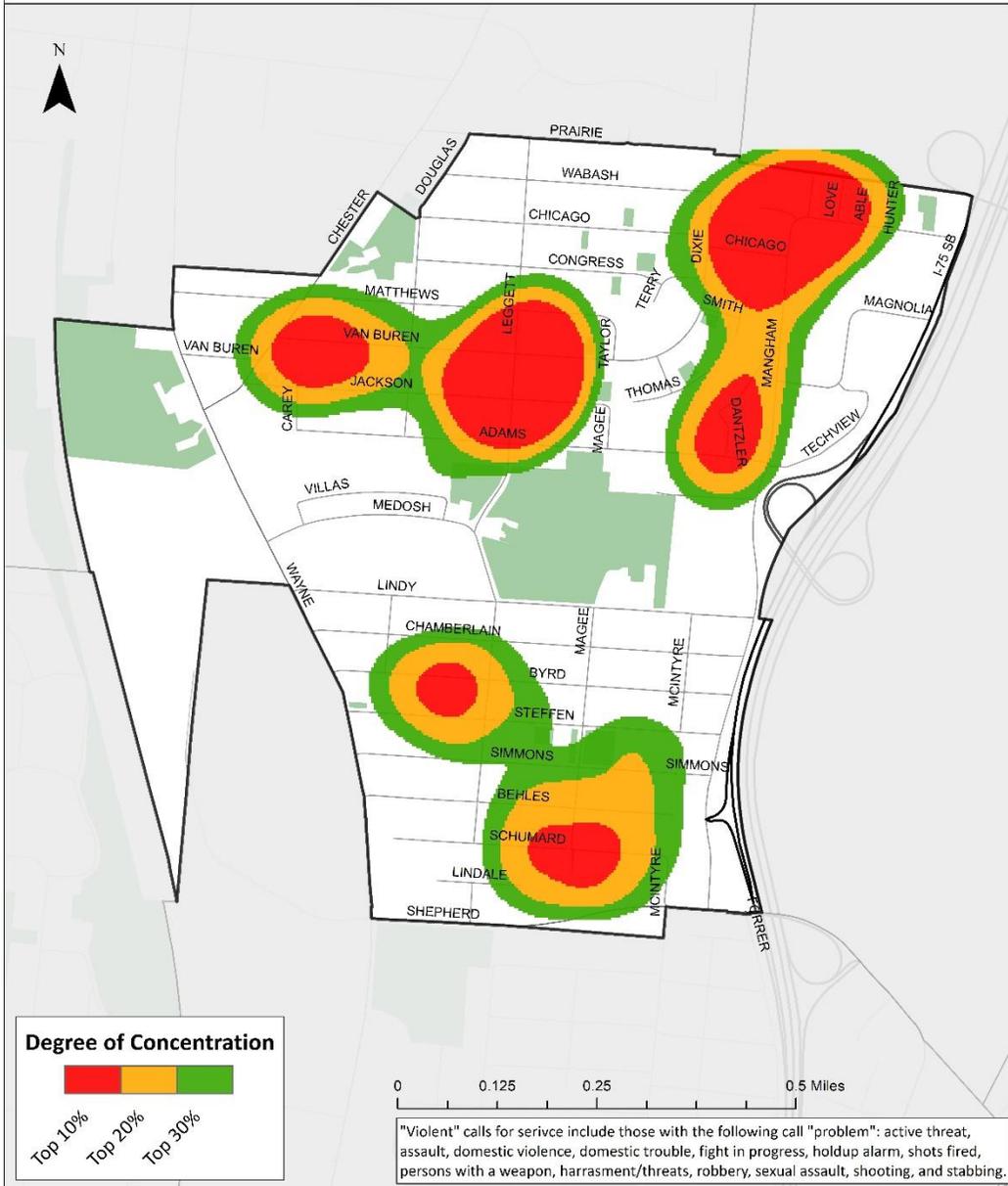


District Two Hot Spots

- 3 “hot” facilities
 - United Dairy Farmers
 - Single-family homes (2)
- Map Extent
 - Size: 13 square miles
 - Crime: 376 violent CFS
- Other Notes:
 - Robbery: Chic-Fil-A (multiple holdup alarms)
 - Jtaps Bar & Grill (multiple fights/assaults)
 - Buffalo WW (multiple assaults)

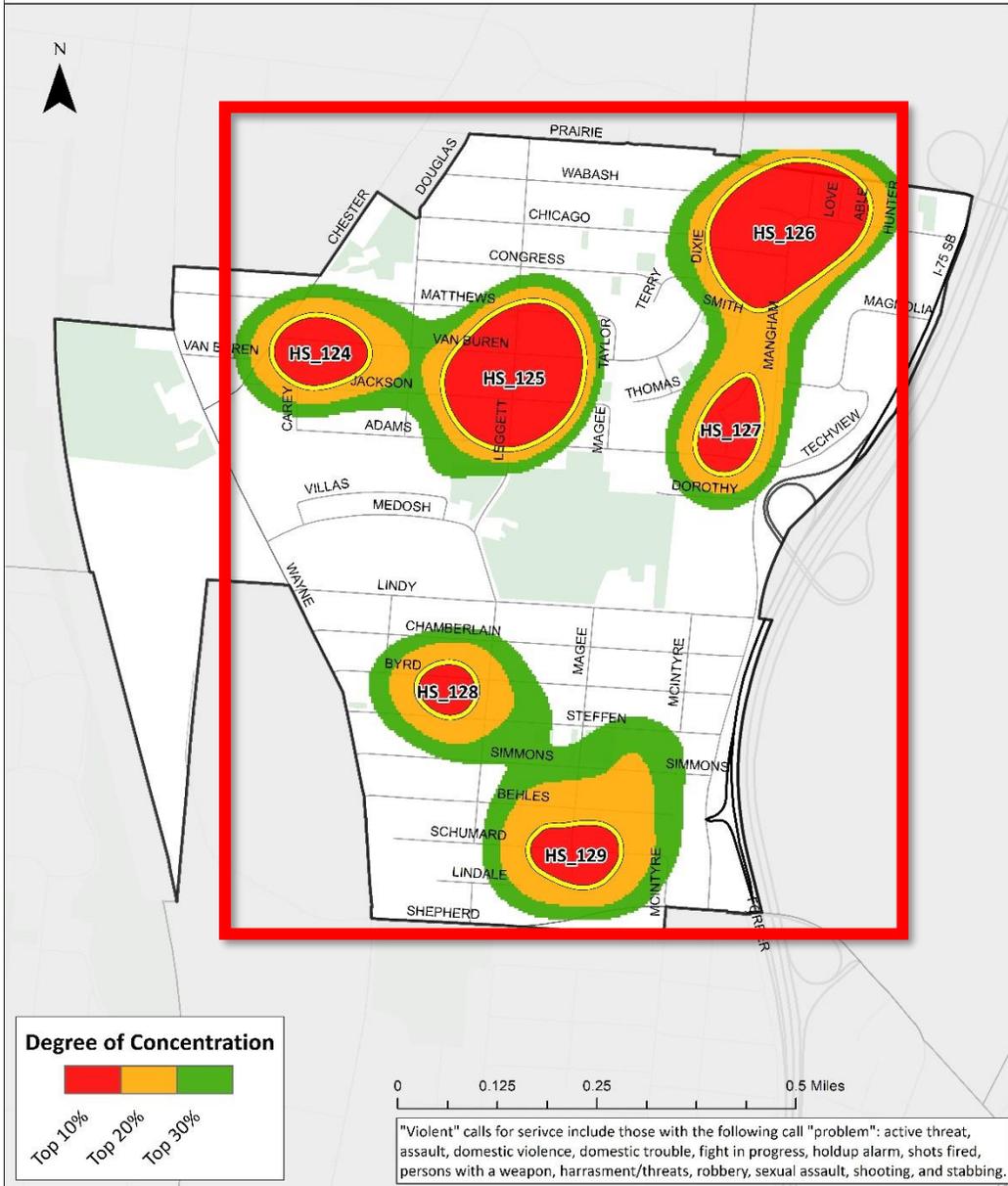


Distribution of Violent Calls for Service
Lincoln Heights, January 1 - July 31, 2020



Lincoln Heights

- **Jurisdiction – Wide Details**
 - **Size:** ¾ sq miles; 3,331 population
 - **# violent CFS:** 216 CFS; 6,484 per 100k residents
 - **Driving offense type:** Domestic violence, Assault, Shots fired
 - **Driving facilities:**
 - Apartment Complex (Dantzler Dr, Adams St)
 - Single-family (repeat DV)
 - **Other Notes:**
 - Legget & Shivers Streets (Shots Fired & Assault)
 - Small geographic area



Lincoln Heights

• Hot Spots – Only Details

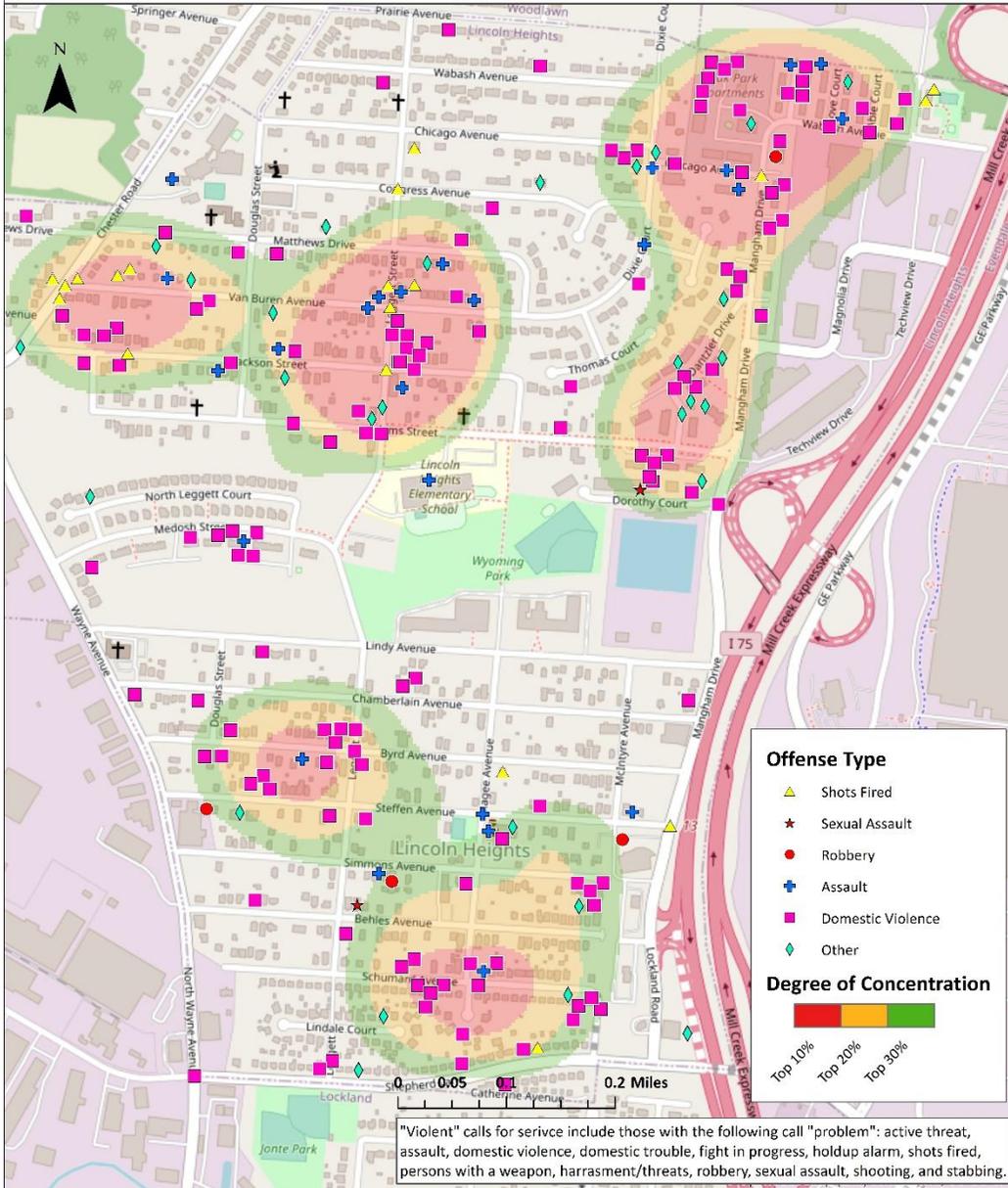
- **Size:** 0.08 sq miles
- **# violent CFS:** 90 CFS
- **5 “micro” hot spots**
 - **Notes:** Fanci’s Convenience Store & Leggett St;
Chester Rd & Van Buren Ave

41.7% of Lincoln Heights violent CFS in 10.7% of its geographic area.

(Less concentrated than expected)



Distribution of Violent Calls for Service
Lincoln Heights, January 1 - July 31, 2020



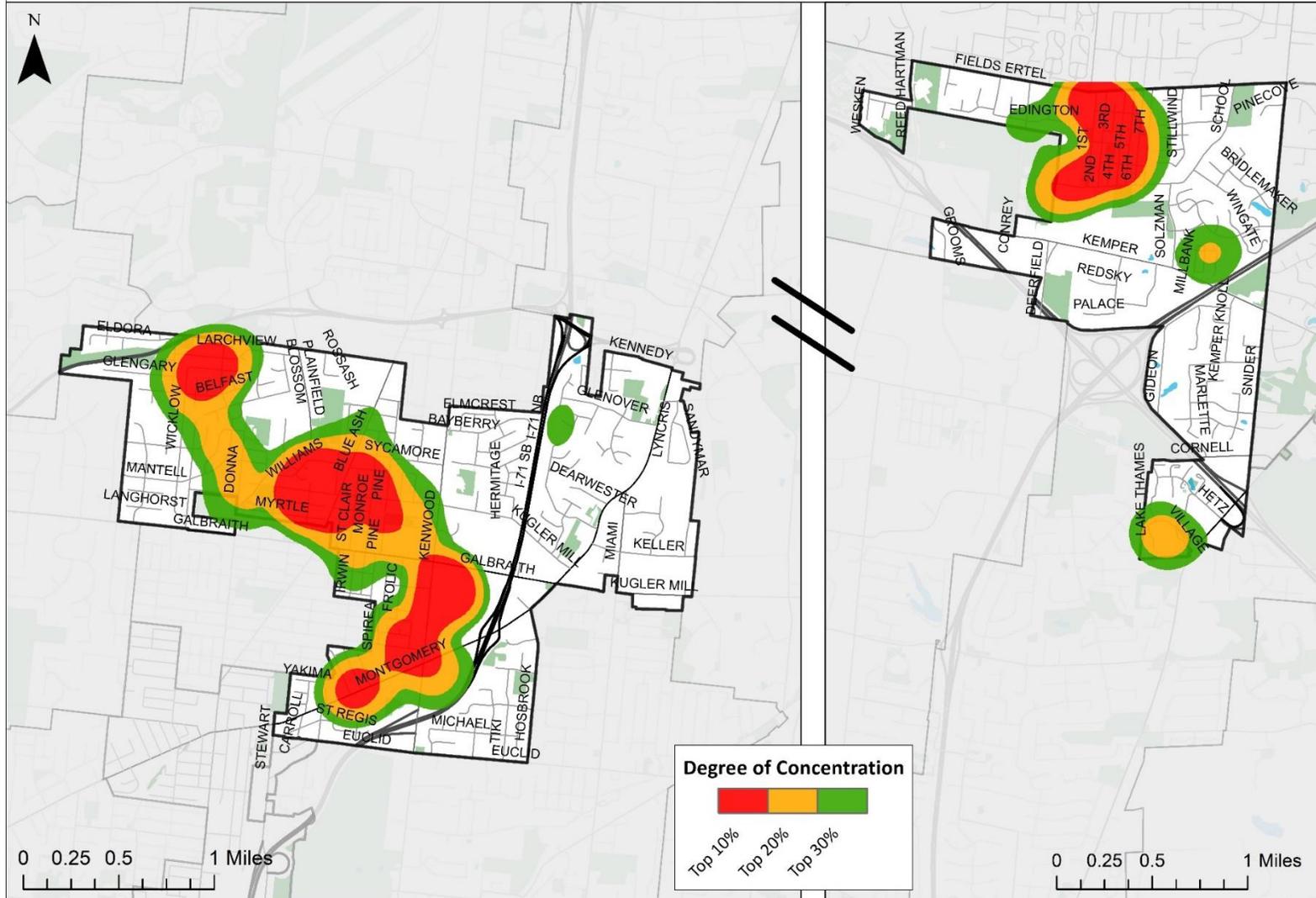
Lincoln Heights Hot Spots

- **8 “hot” facilities**
 - Apartment Complexes
 - More areal than other jurisdictions (?)
- **Map Extent**
 - Size: 0.7 square miles (93%)
 - Crime: 215 violent CFS (99.9%)
- **Other Notes:**
 - Corner of Chester Rd & Van Buren Ave (shots fired)
 - Fanci’s Convenience (multiple assaults, shots)



Distribution of Violent Calls for Service; Sycamore TWP, HCSO

January 1 - July 31, 2020



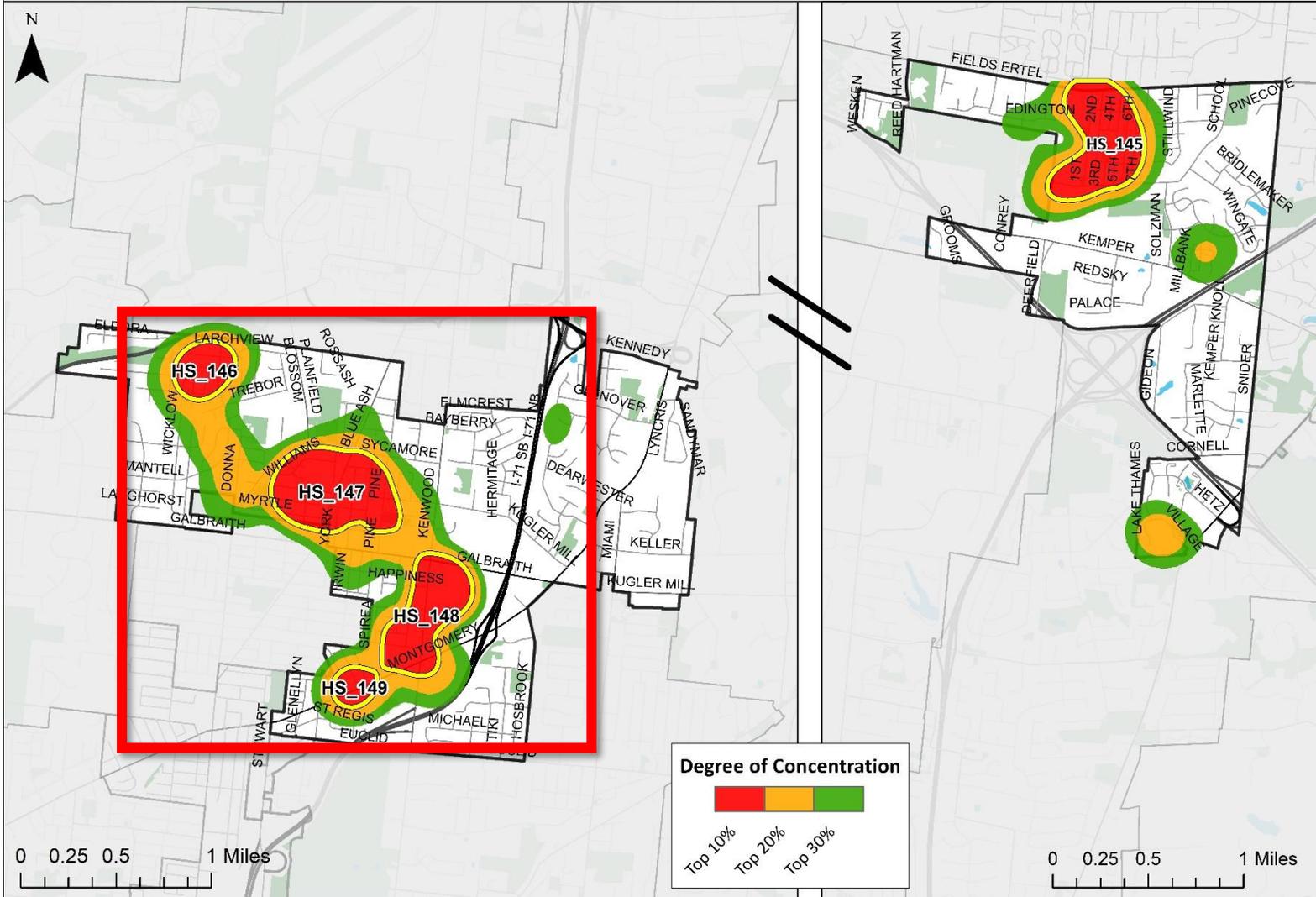
District Three

- **Includes:** Sycamore TWP & Symmes TWP
 - **Note:** No density analysis of Symmes yet
- **Size:** 15.4 sq miles; 34,384 pop
- **# violent CFS:** 616 CFS
 - N = 298 in Sycamore
 - N = 318 in Symmes
- **Driving Offense Type:** Domestic Violence
 - 2nd most voluminous (Syc) = "Other"
 - 2nd most voluminous (Sym) = Shots Fired
- **Driving Facilities**
 - Kenwood Towne Center
 - Single Family homes (DV)
 - Apartment Complexes (2)



Distribution of Violent Calls for Service; Sycamore TWP, HCSO

January 1 - July 31, 2020



Sycamore Hot Spots

• Hot Spots – Only Details

- **Size:** 3/4 square mile (sycamore only)
- **# violent CFS:** 154 (51.7% of Sycamore)
- **5 hot spots**
 - Hot facilities drive hot spot; largest crime attractor/generator in area is Kenwood Towne Center

51.7% of Sycamore's violent CFS in 11.1% of its geographic area.



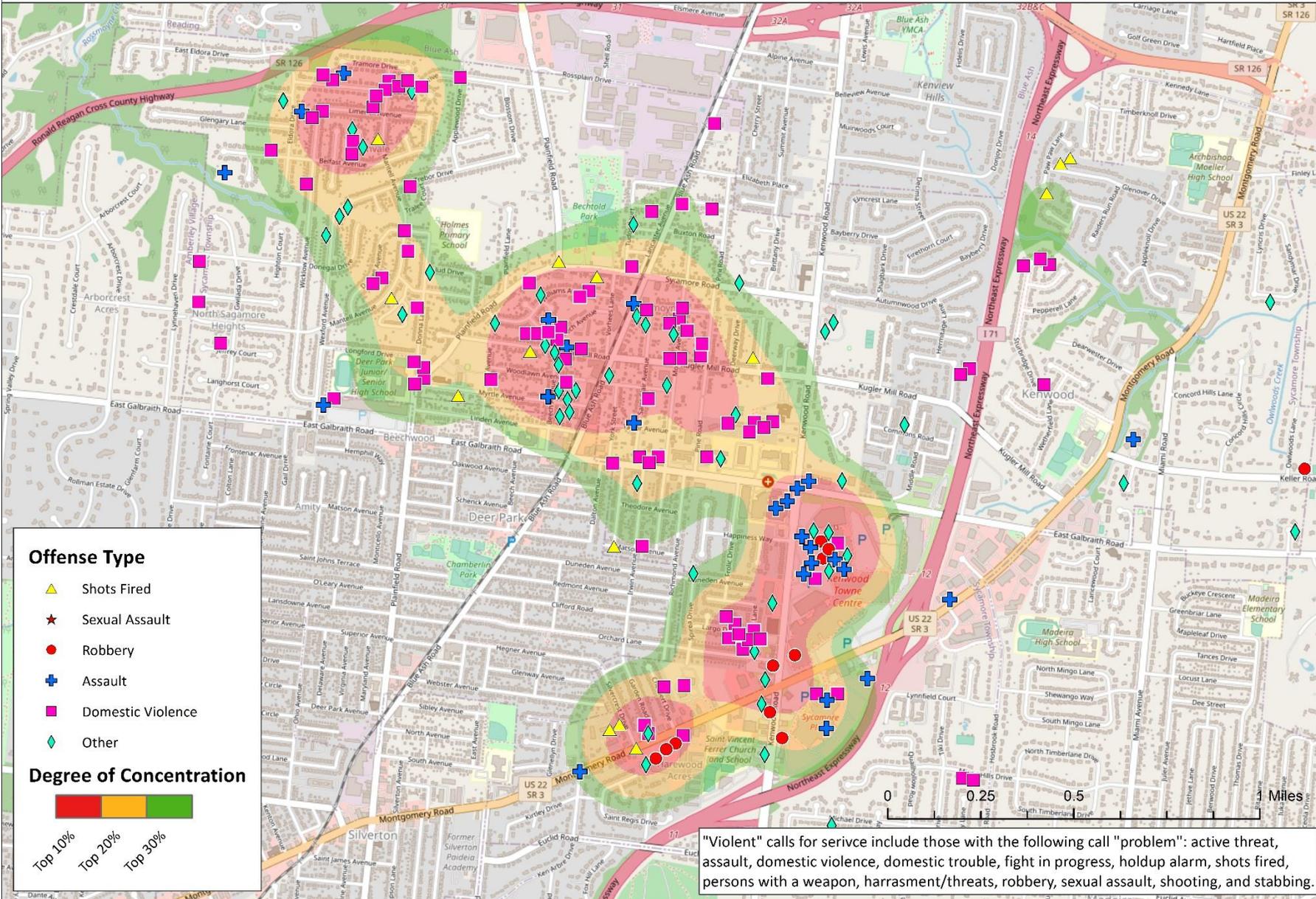
Distribution of Violent Calls for Service

Sycamore TWP, January 1 - July 31, 2020



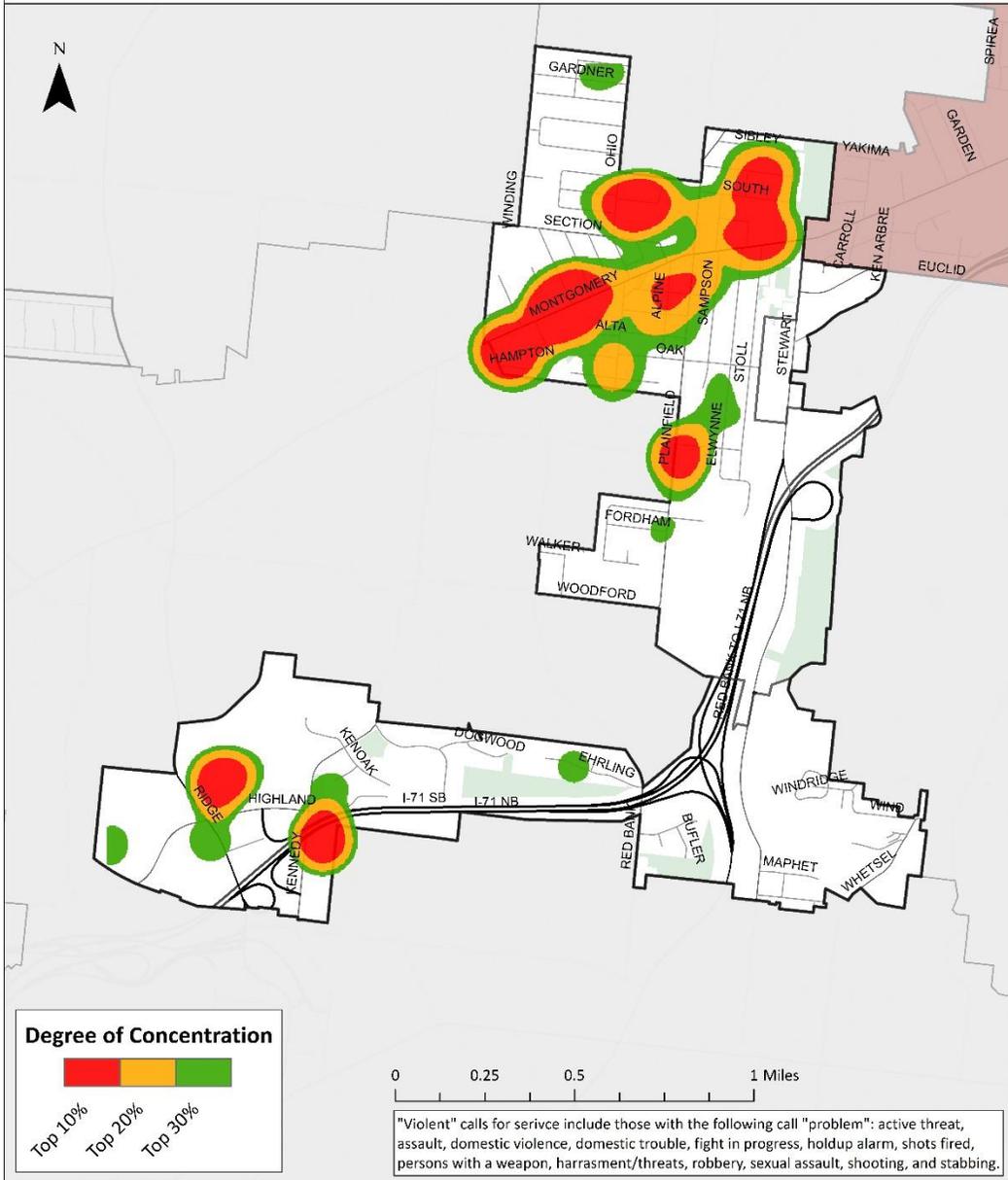
Sycamore Hot Spots

- Only one “hot” facilities
 - Kenwood Towne Center
 - All other “clusters” = multi-unit apartment complexes
- Map Extent
 - N = 195 violent CFS
 - 8.0 Square Miles
- Other Notes:
 - Concentrations within the mall!





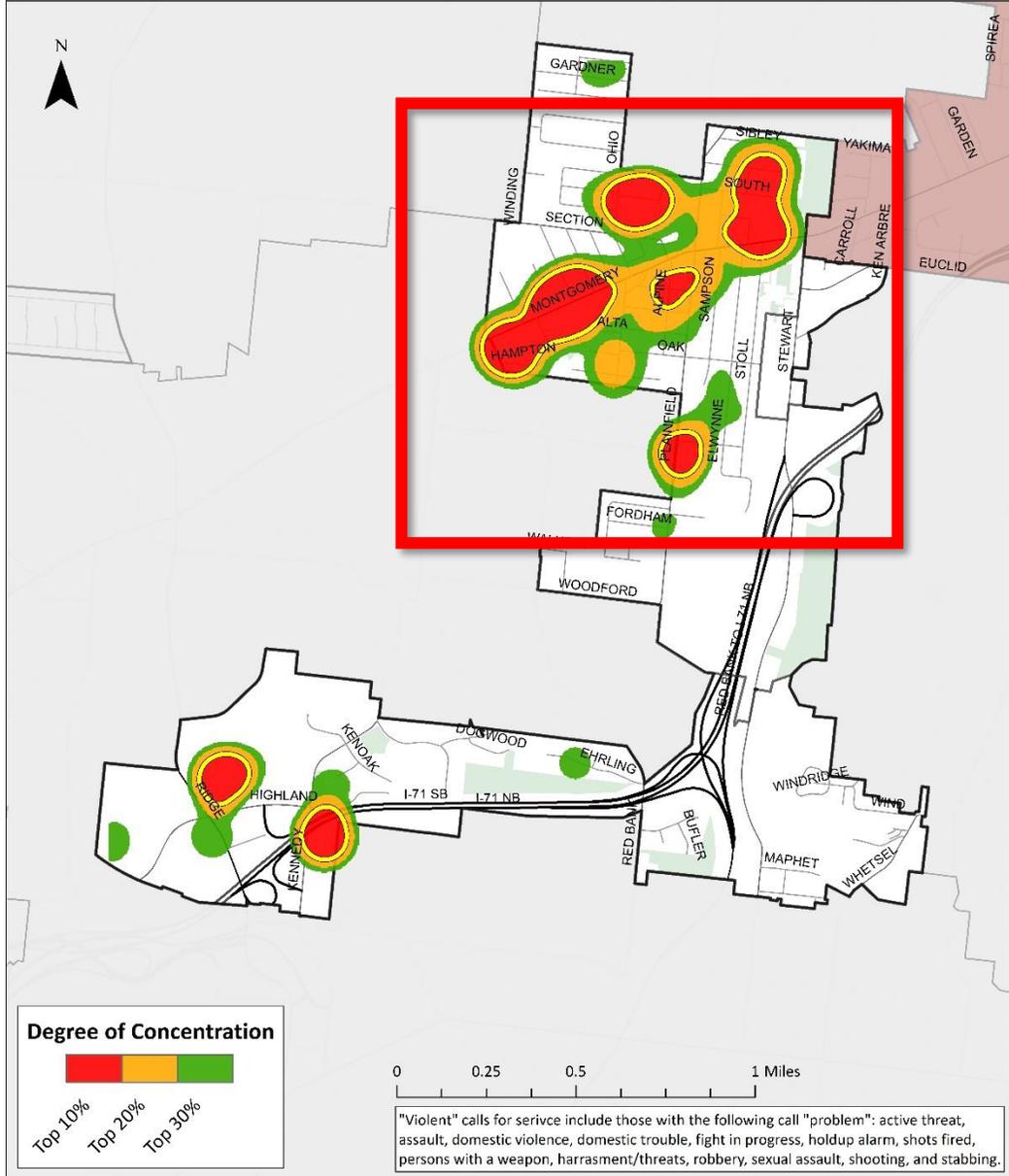
Distribution of Violent Calls for Service
District Four - HCSO, January 1 - July 31, 2020



District Four

Silverton and Columbia TWP

- **Jurisdiction – Wide Details**
 - **Size:** 3 ¾ sq miles; 9,257 population
 - **# violent CFS:** 267 CFS; 2,884 per 100k residents
 - **Driving offense type:** Domestic violence, Other Violent
 - **Driving facilities:**
 - Motels (2)
 - Multi-family homes
 - **Other Notes:**
 - D4 “islands” are included in all analyses, except the hot spots (next slide)



District Four

Silverton and Columbia TWP

• Hot Spots – Only Details

- **Size:** 0.17 sq miles (4.5% D2's area)
- **# violent CFS:** 118 CFS (44.2%)
- **7 "micro" hot spots**
 - 5 driven by hot facility
 - 2 "dispersed" hot spots

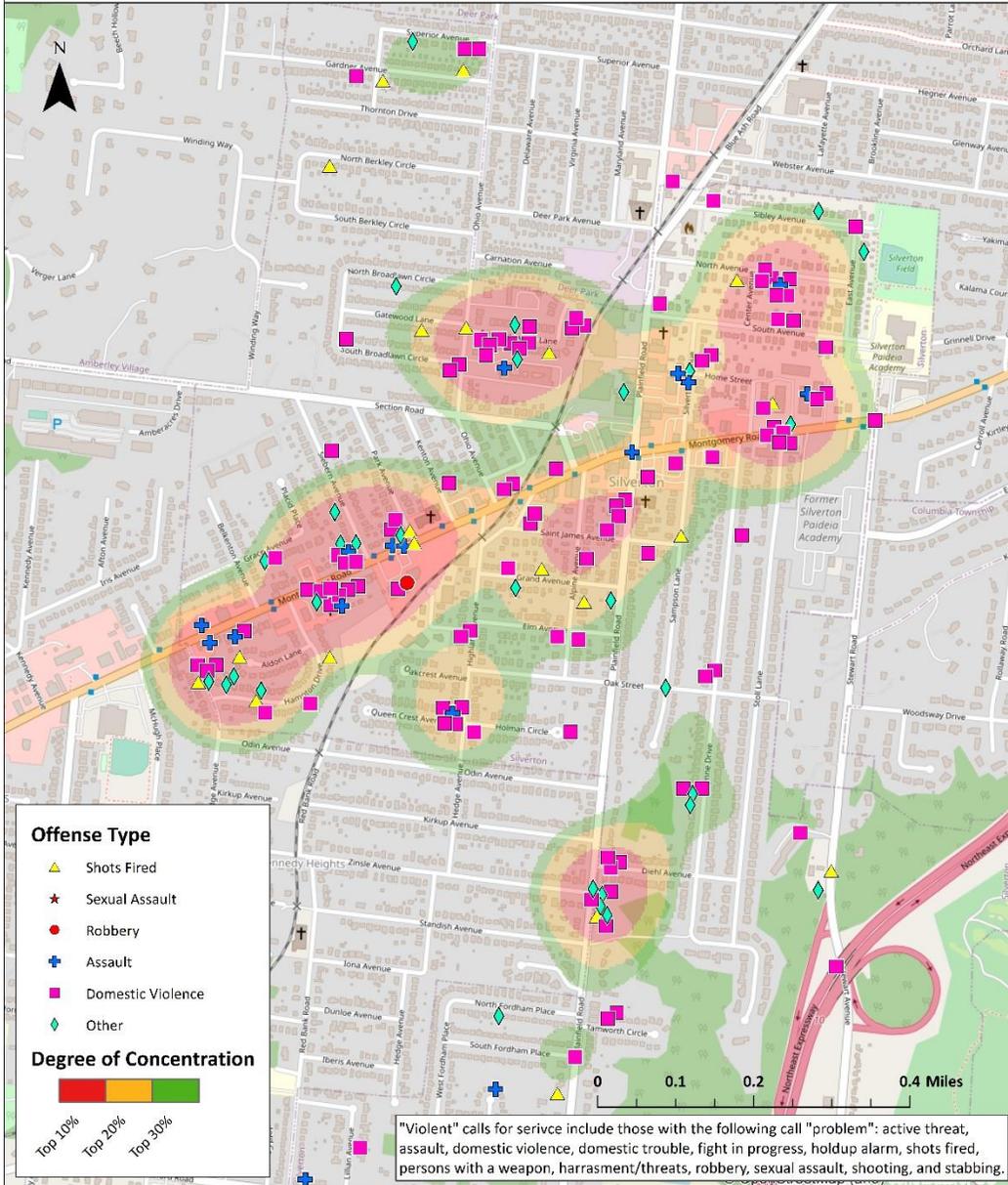
44.2% of D4's violent CFS in 4.5% of its geographic area



Distribution of Violent Calls for Service District Four - HCSO, January 1 - July 31, 2020



District Four Hot Spots*



- **6 "hot" facilities**

- Motel 6 (DV, Other Violence, and QOL)
- Quality Inn & Suites (DV, Other Violence, and QOL)

- **Map Extent**

- Size: ~2 square miles (53%)
- Crime: 173 violent CFS (64.8%)

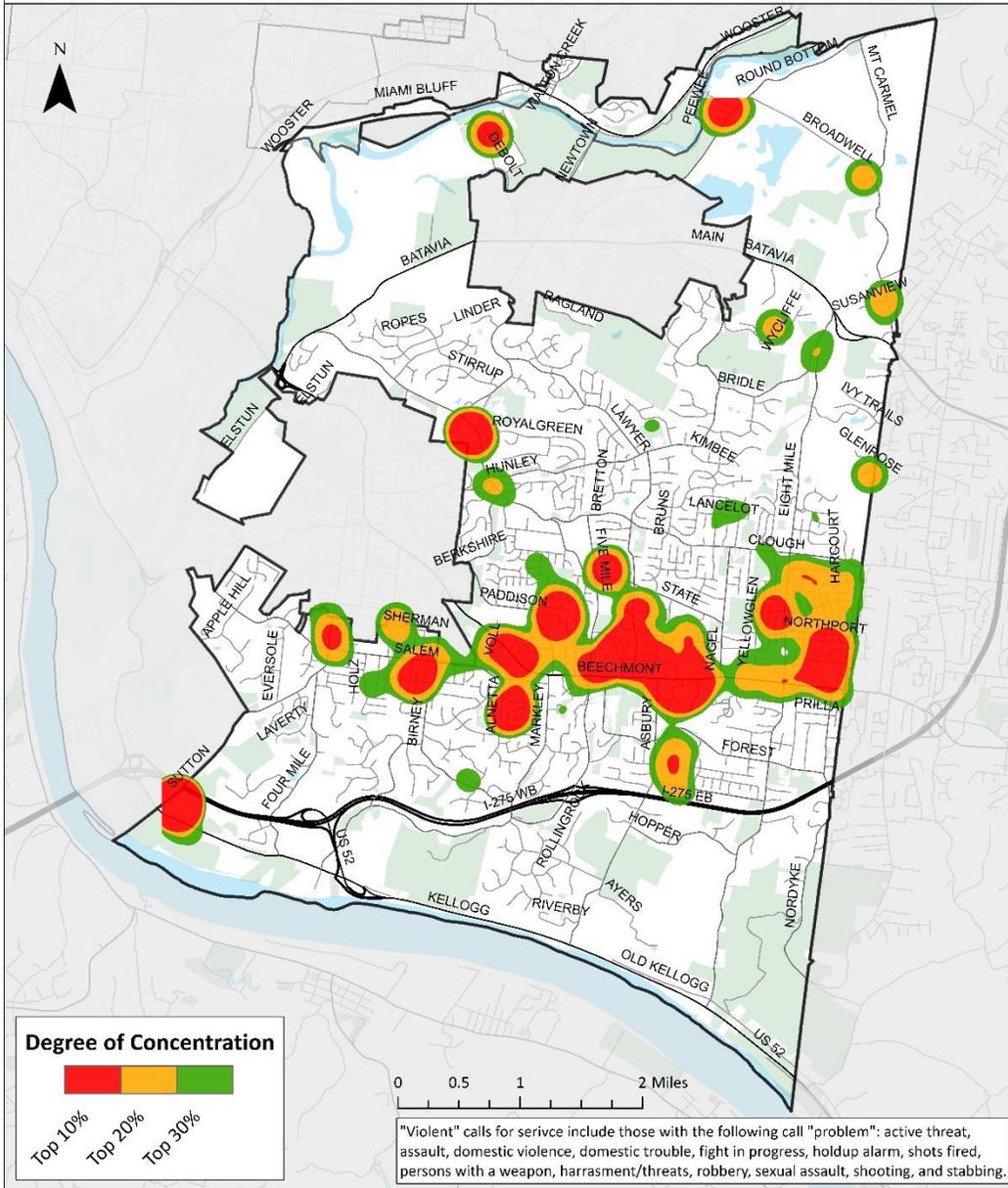
- **Other Notes:**

- Gatewood Lane Apartments (DV, shots, assaults)



Distribution of Violent Calls for Service

District Five – Anderson TWP, January 1 – July 31, 2020



District Five

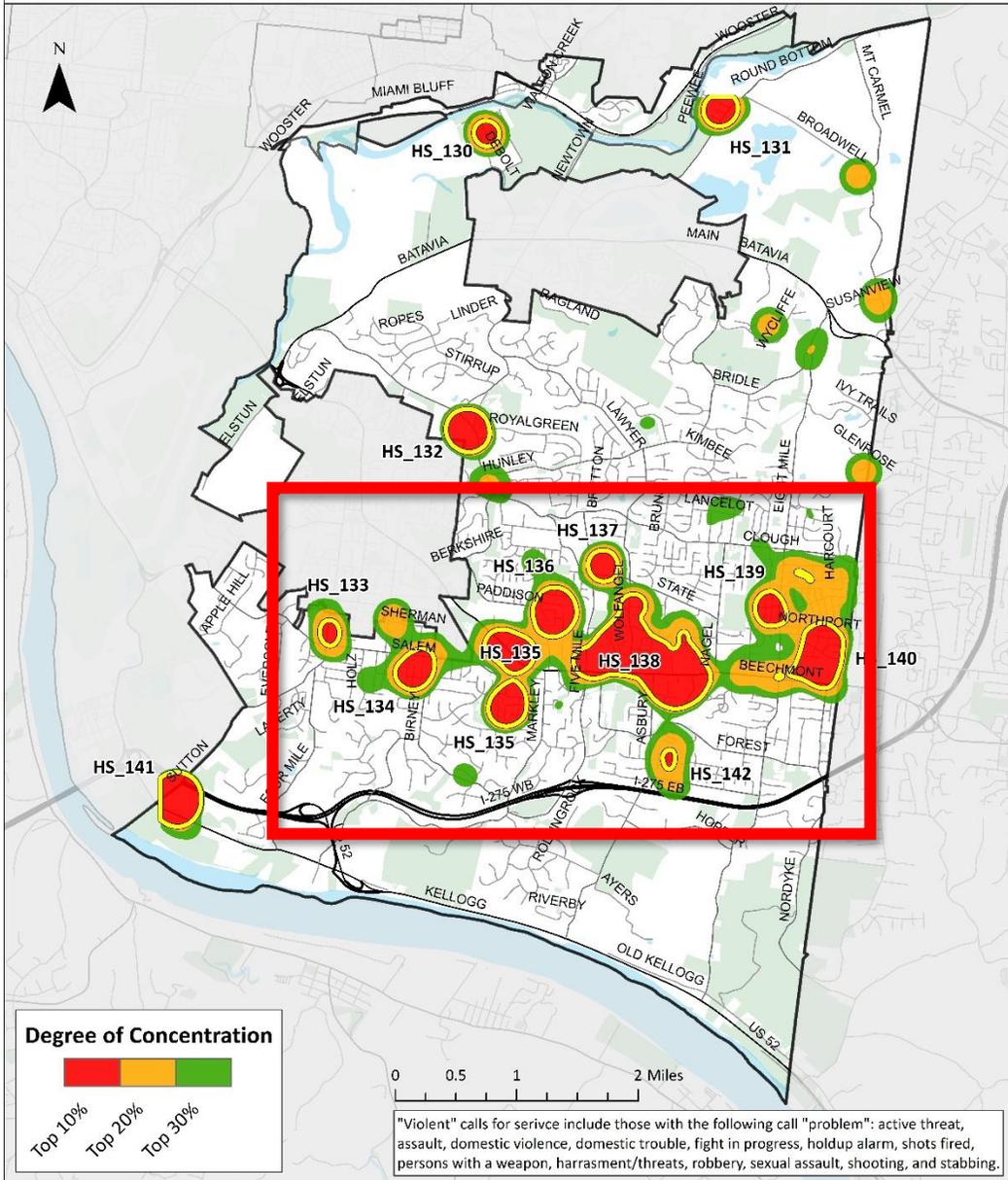
Anderson TWP

• District – Wide Details

- **Size:** 31.5 sq miles; 44,081 population
- **# violent CFS:** 381 CFS; 864 per 100k residents
- **Driving offense type:** Domestic violence, Harassment
- **Driving facilities:**
 - St. Joseph Orphanage – Altcrest Campus (assault)
 - Condominiums
 - Mercy Health (Reporting ?)
 - Strip commercial area



Distribution of Violent Calls for Service
 District Five – Anderson TWP, January 1 – July 31, 2020



District Five

Anderson TWP

- **Hot Spots – Only Details**

- **Size:** 2.3 sq miles
- **# violent CFS:** 443 CFS
- **16 hot spots**
 - **Notes:** adjacent to Beechmont or remote

50.6% of D4's violent CFS in just 8.2% of its geographic area

"Violent" calls for service include those with the following call "problem": active threat, assault, domestic violence, domestic trouble, fight in progress, holdup alarm, shots fired, persons with a weapon, harrasment/threats, robbery, sexual assault, shooting, and stabbing.



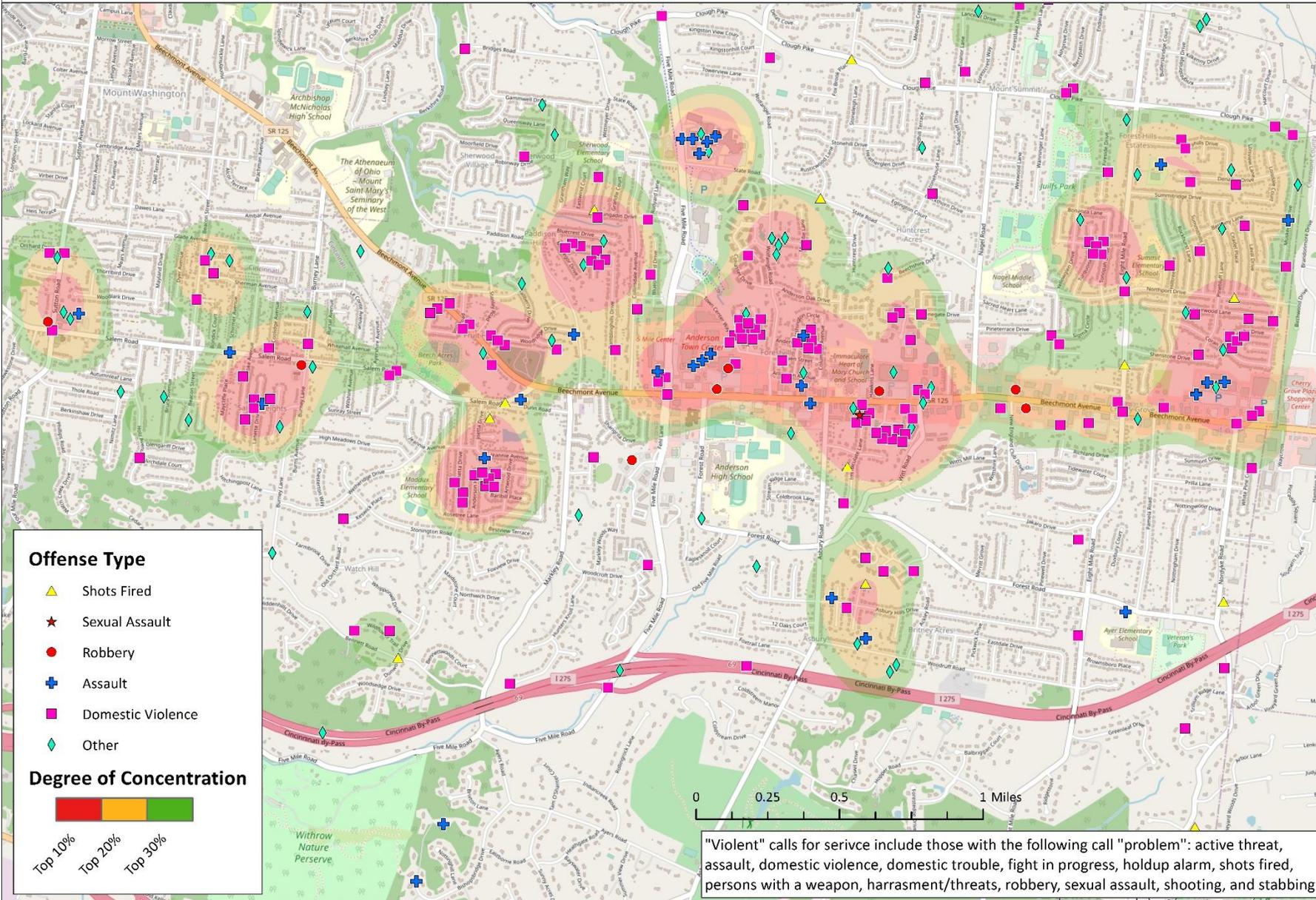
Distribution of Violent Calls for Service

District Five – Anderson TWP, January 1 – July 31, 2020



District Five Hot Spots

- Five “hot” facilities
 - Crotty Court Condos
 - Mercy Health
 - Strip Commercial
 - Single-family home (2)
- Map Extent
 - N = 264 violent CFS
 - 14.8 Square Miles
- Other Notes:
 - Small pockets of DV
 - The Woods of Turpin (multiple addresses in community)
 - Gabe’s Department Store (assault)



Property Calls for Service

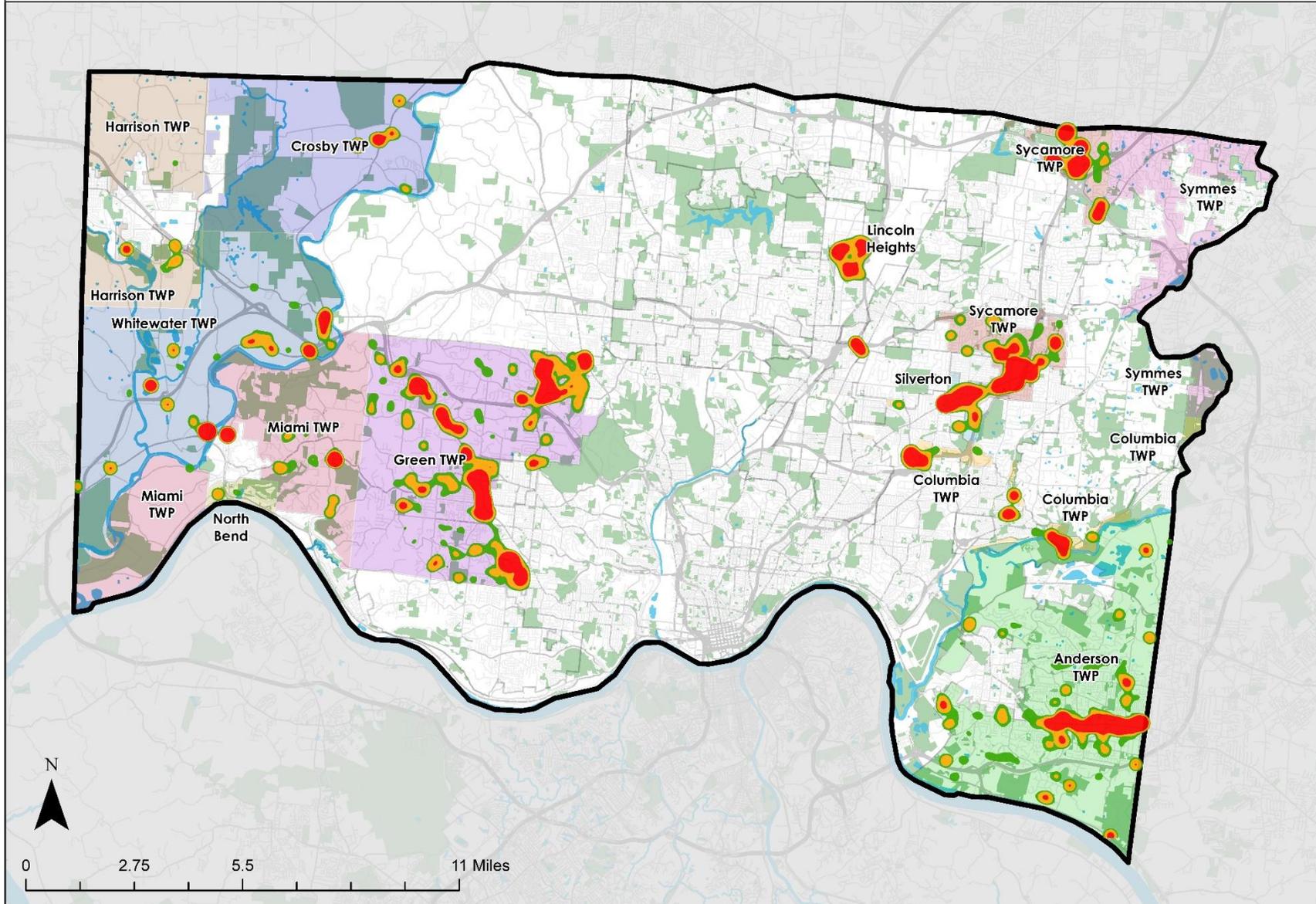
Auto (auto theft, vehicle alarm, vehicle tampering)

Burglary (burglary in progress or report)



Concentration of Serious Property Crime, HCSO Jurisdictions

January 1 - July 31, 2020



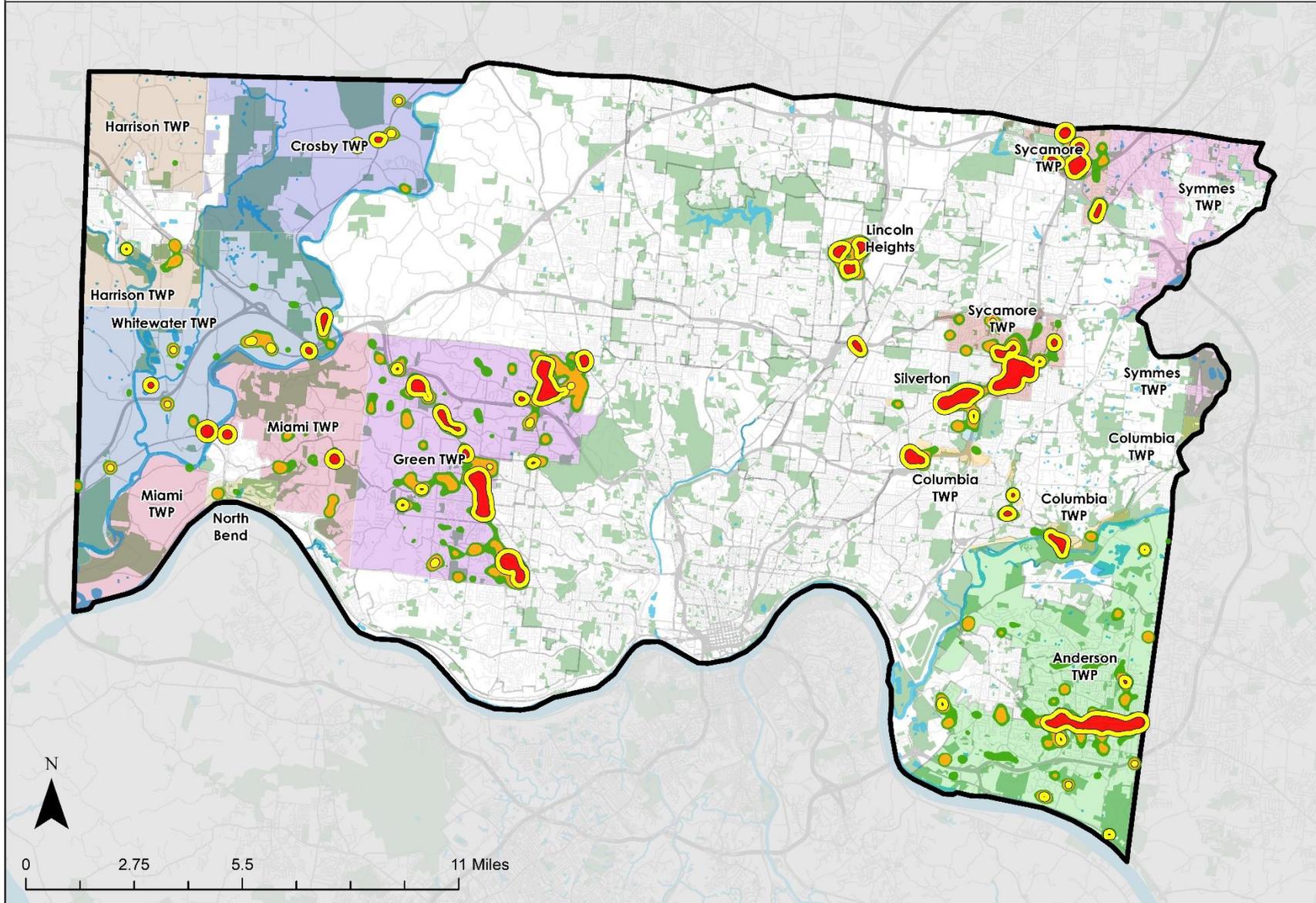
Important Notes

- Less voluminous than violent CFS
 - Every CFS is a hotspot
- Attached to nature of auto and burglary offenses
 - Only can occur where there homes or vehicles
 - Tends to follow *Near-Repeat* pattern (rather than repeat facilities)
- Larceny/Shoplifting Removed



Concentration of Serious Property Crime, HCSO Jurisdictions

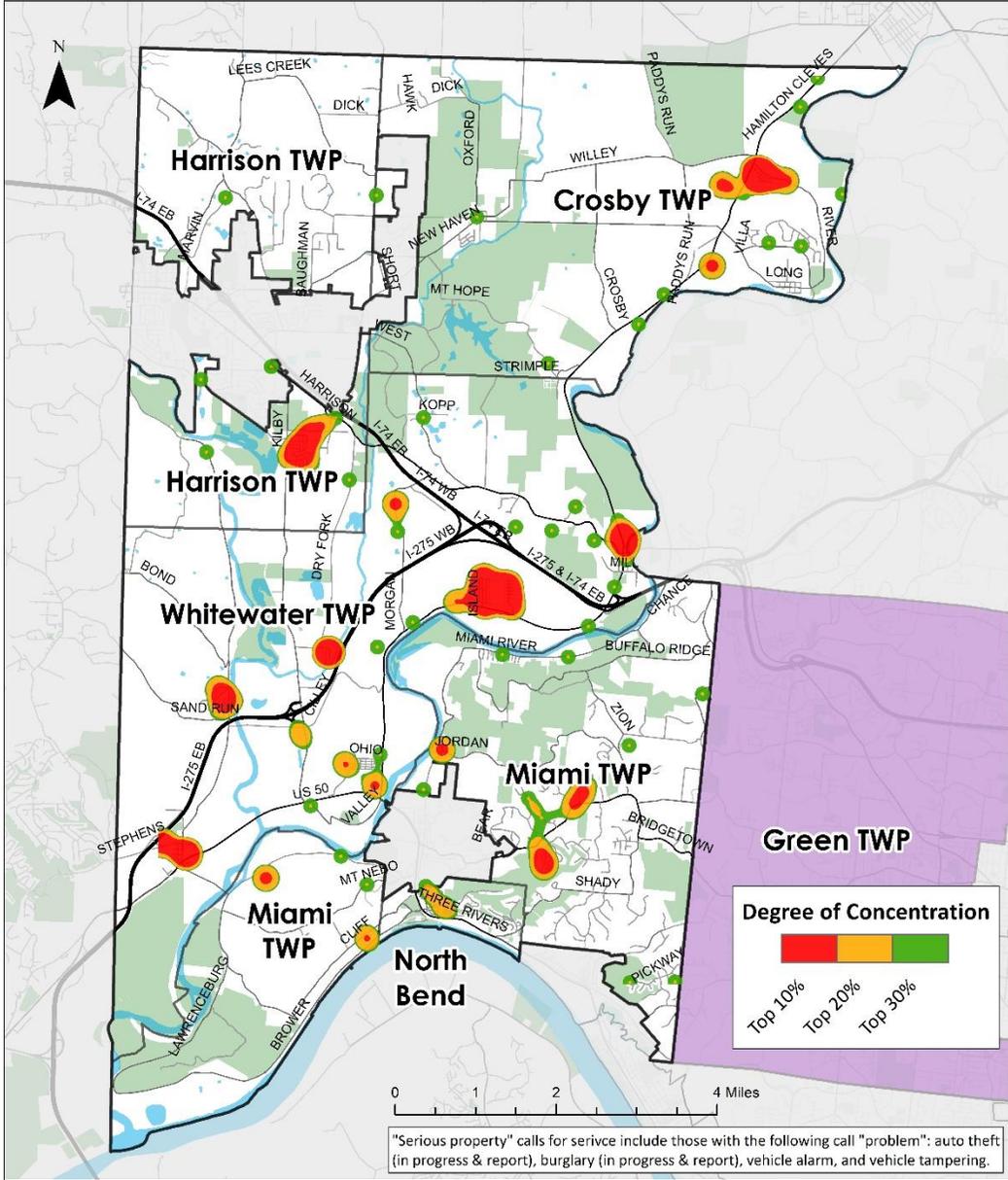
January 1 - July 31, 2020



36.1% of serious property CFS in just 4.8% of geographic area



Distribution of Serious Property Calls for Service
District One - HCSO, January 1 - July 31, 2020



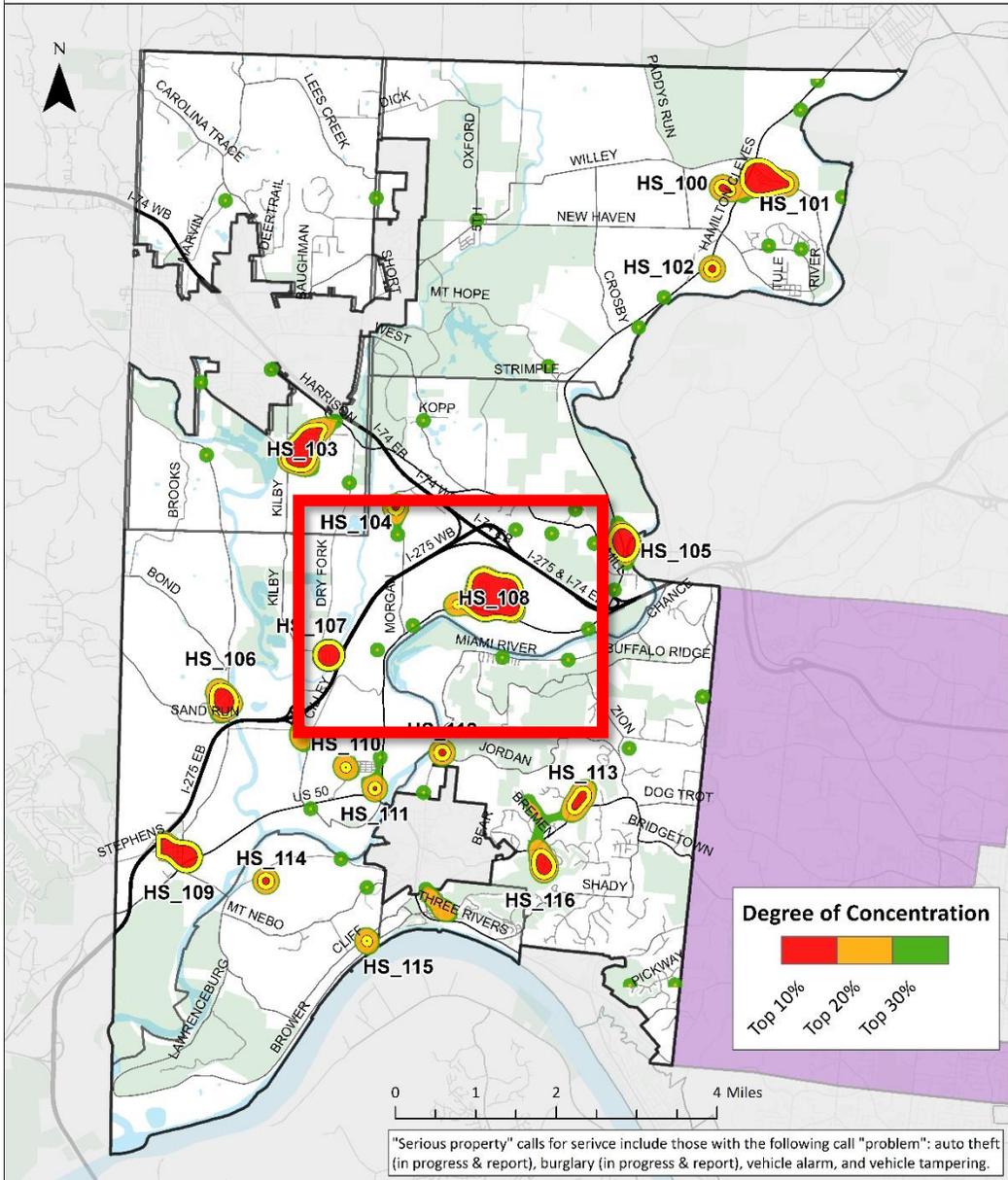
District One

Harrison TWP, Crosby TWP, Whitewater TWP, Miami TWP, Village of North Bend

- **District – Wide Details**
 - **Size:** 80 sq miles, 74,139 population
 - **# property CFS:** 131 CFS, 177 per 100k residents
 - **Driving offense type:** burglary (58%)
 - **Driving facilities:** Only 12 addresses with repeat calls (≥ 2 CFS)
 - **Mobile Home Parks**
 - **Commercial facilities** (storage facility, flying club, business center)



Distribution of Serious Property Calls for Service
District 1 - HCSO, January 1 - July 31, 2020



"Serious property" calls for service include those with the following call "problem": auto theft (in progress & report), burglary (in progress & report), vehicle alarm, and vehicle tampering.

District One

Harrison TWP, Crosby TWP, Whitewater TWP,
Miami TWP, Village of North Bend

- **Hot Spots – Only Details**

- **Size:** 1.4 sq miles
- **# serious property CFS:** 74 CFS
- **16 hot spots**
 - **Notes:** Largely driven by mobile home parks

56.5% of D1's serious property CFS in just 1.8% of its geographic area



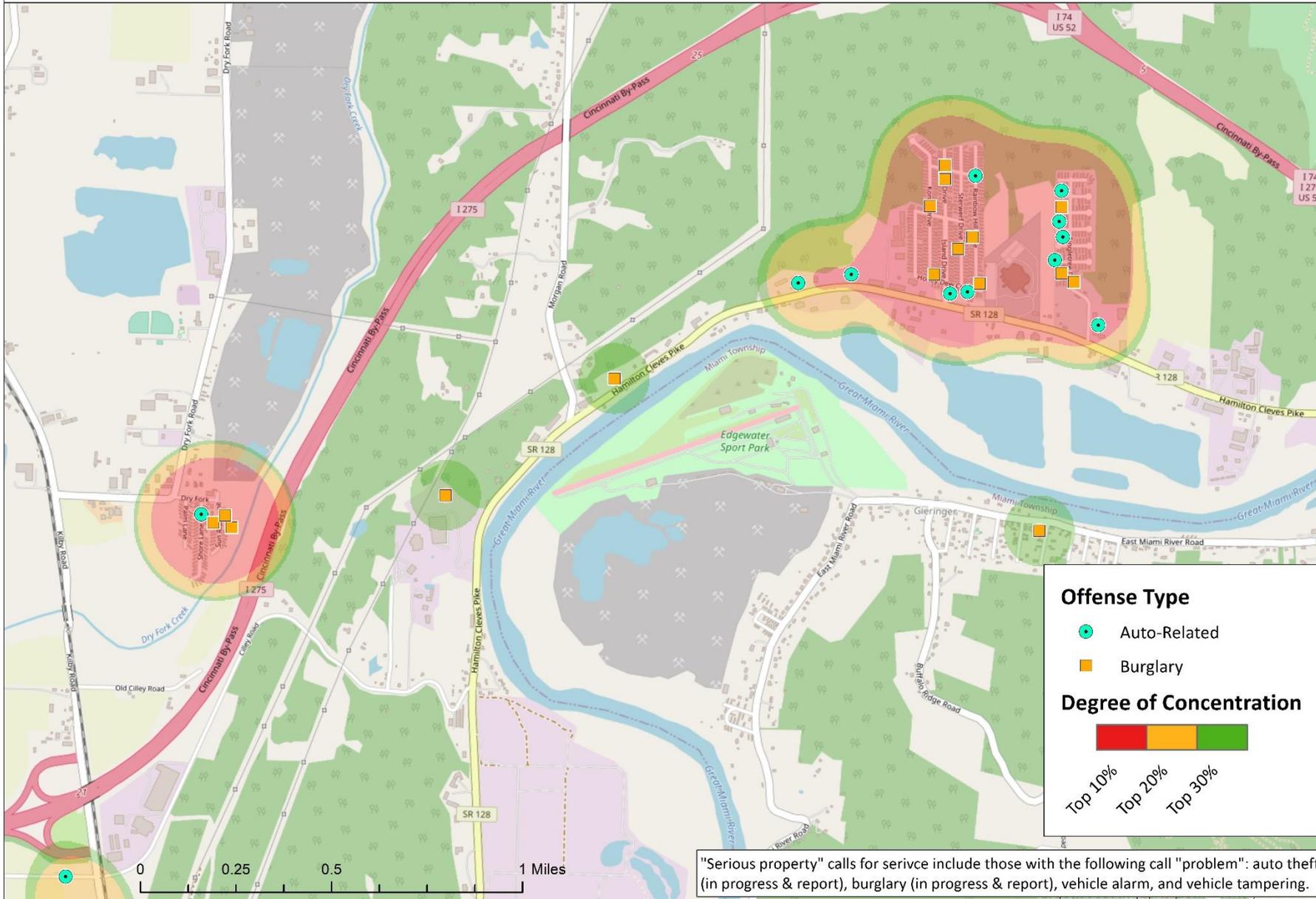
Distribution of Auto or Burglary Calls for Service

District One - HCSO, January 1 - July 31, 2020



District One Hot Spots

- Examples of near repeat vs. repeat facilities
- Map Extent
 - N = 26 serious property CFS
 - 7.6 Square Miles
- Same hot spots with violent calls for service



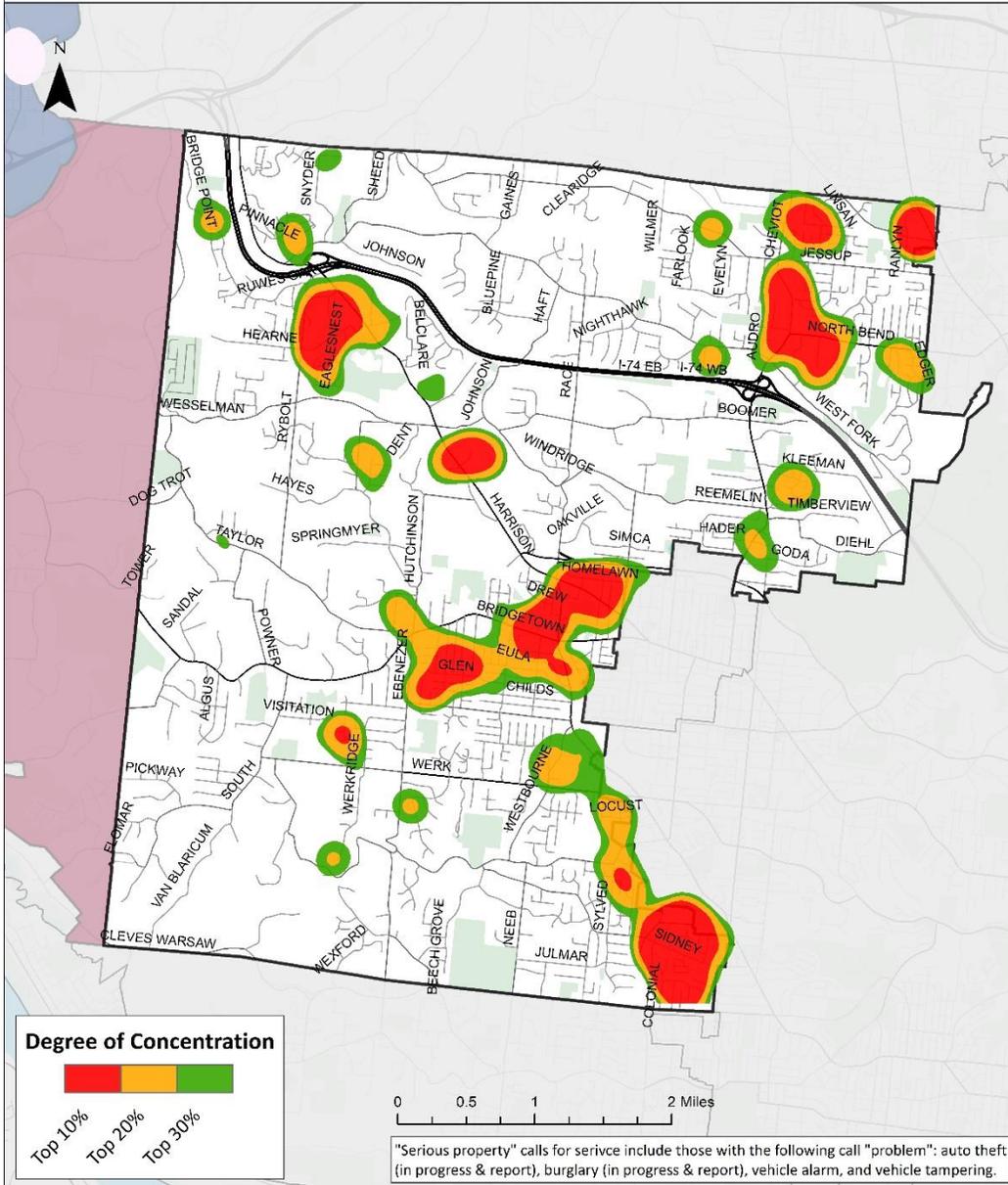


Distribution of Serious Property Calls for Service
 District Two - Green Township, January 1 - July 31, 2020



District Two

Green TWP



• District – Wide Details

- **Size:** 27.8 sq miles; 74,139 population
- **# serious property CFS:** 192 CFS; 259 per 100k residents
- **Driving offense type:** burglary (67%)
- **Driving facilities:** Only 13 addresses with 2 or more serious CFS

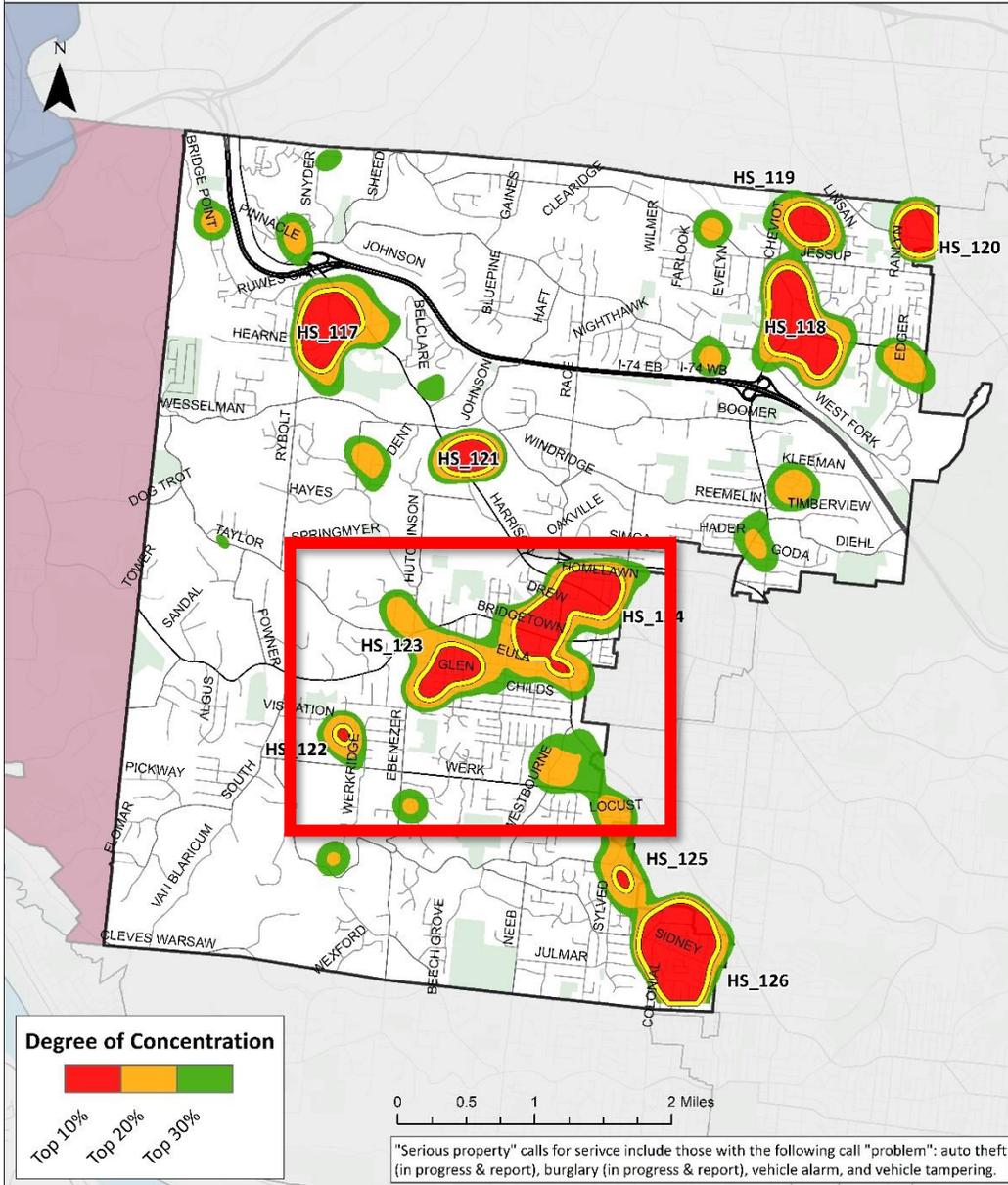


Distribution of Serious Property Calls for Service
 District Two - Green Township, January 1 - July 31, 2020



District Two

Green TWP



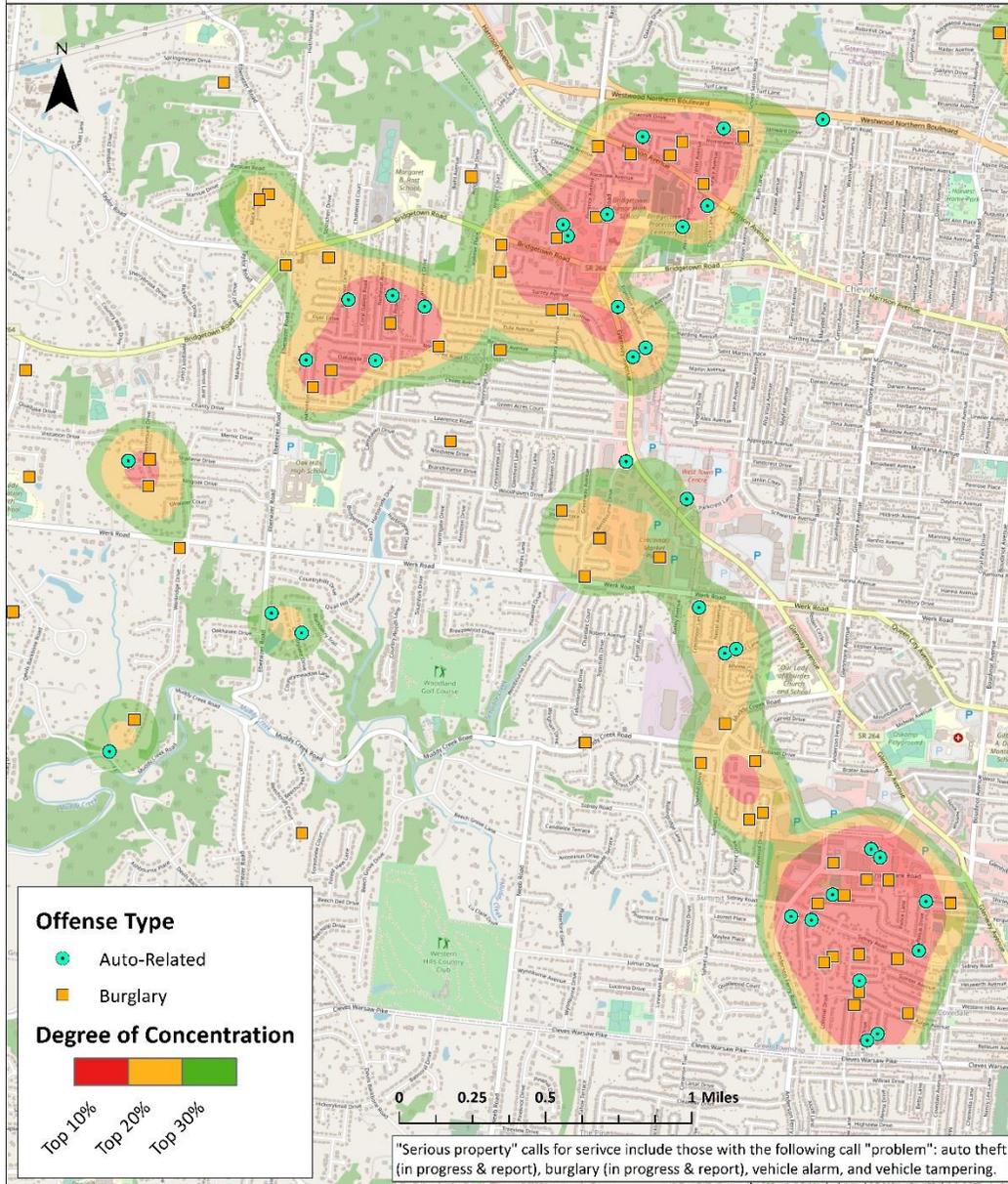
• Hot Spots – Only Details

- **Size:** 1.5 sq miles
- **# serious property CFS:** 88 CFS
- **10 hot spots**
 - **Notes:** Largely consistent with residential and commercial areas

45.8% of D2's serious property CFS in just 5.4% of its geographic area.



Distribution of Serious Property Calls for Service District Two - Green TWP, January 1 - July 31, 2020

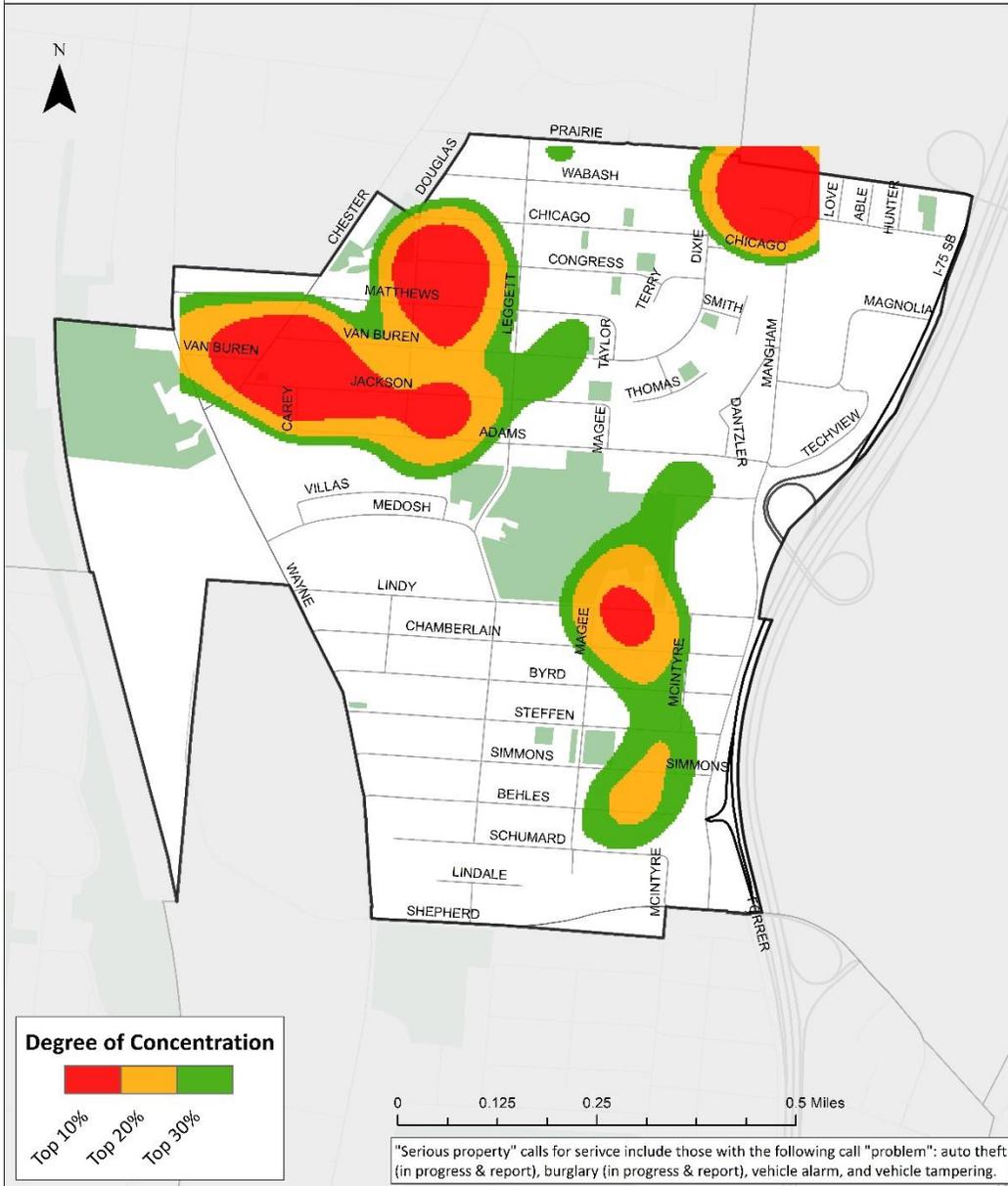


District Two Hot Spots

- **Only 1 “hot” facilities**
 - Single-family home
- **Map Extent**
 - Size: 13 square miles (46.4%)
 - Crime: 91 serious property CFS (47.0%)
- **Other Notes:**
 - Hot Spot surrounding school (consistent research)



Distribution of Serious Property Calls for Service Lincoln Heights, January 1 - July 31, 2020

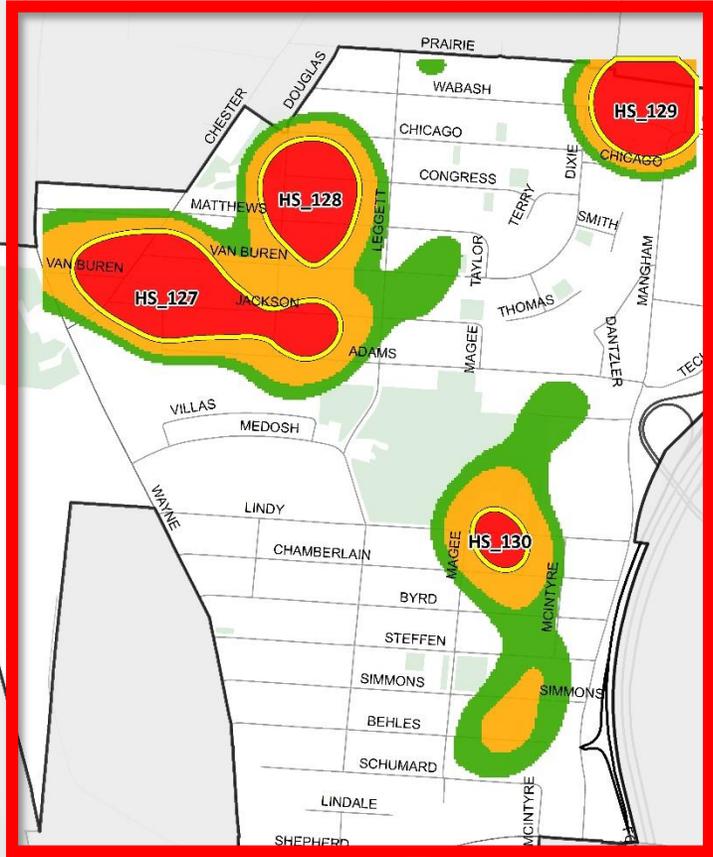


Lincoln Heights

- **Jurisdiction – Wide Details**
 - **Size:** $\frac{3}{4}$ sq miles; 3,331 population
 - **# serious property CFS:** 36 CFS; 1081 per 100k residents
 - **Driving offense type:** Burglary
 - **Driving facilities:**
 - Shopping Plaza
 - Apartment Complex
 - **Other Notes:**
 - Near Repeats around “hot facilities” too



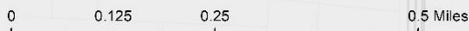
Distribution of Serious Property Calls for Service
Lincoln Heights, January 1 - July 31, 2020



Degree of Concentration



Top 10%
Top 20%
Top 30%



"Serious property" calls for service include those with the following call "problem": auto theft (in progress & report), burglary (in progress & report), vehicle alarm, and vehicle tampering.

Lincoln Heights

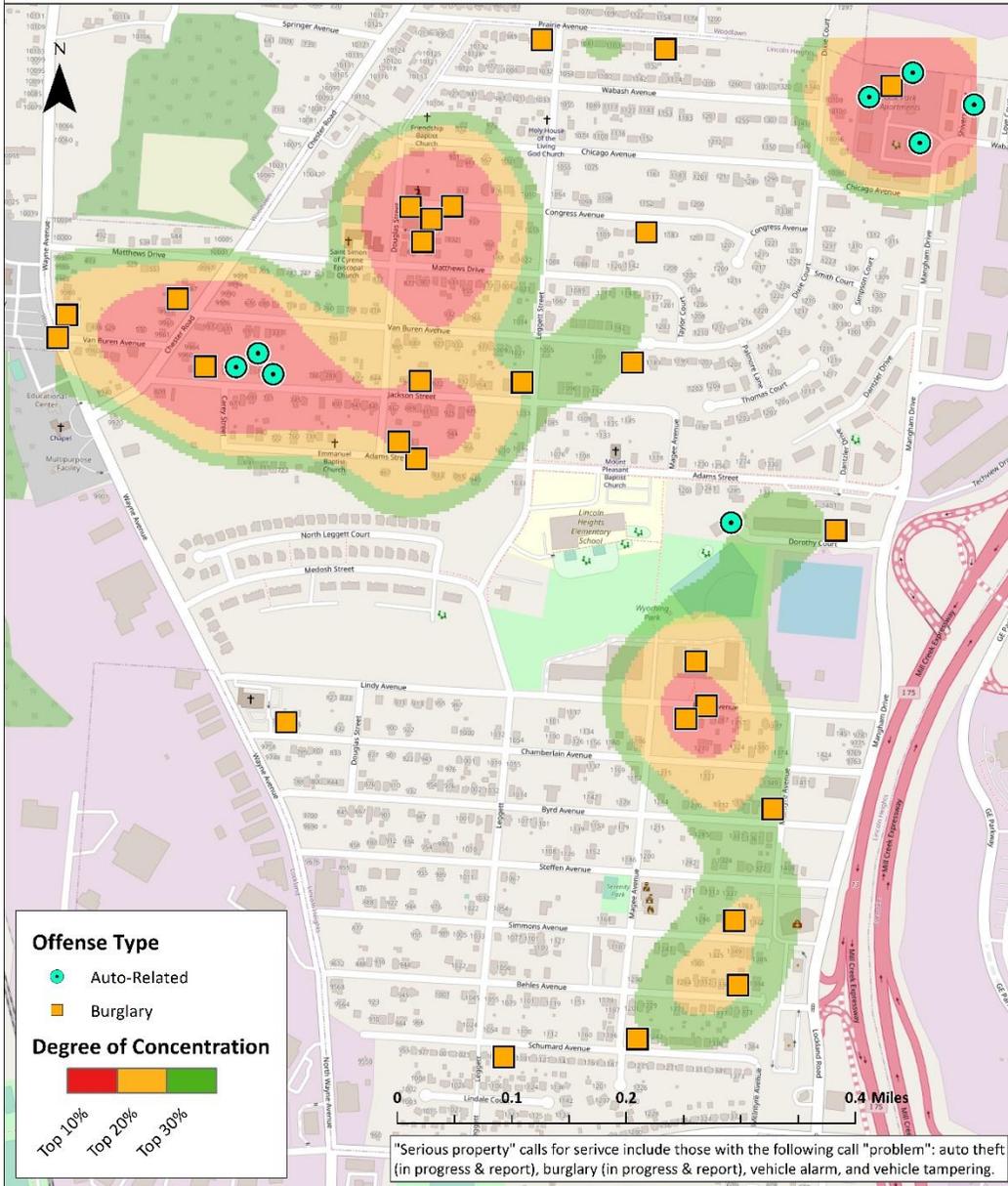
- **Hot Spots – Only Details**

- **Size:** 0.08 sq miles
- **# serious property CFS:** 19 CFS
- **4 “micro” hot spots**
 - **Notes:** All are driven by a repeat victim

52.8% of Lincoln Heights violent CFS in 12.6% of its geographic area.



Distribution of Serious Property Calls for Service Lincoln Heights, January 1 - July 31, 2020



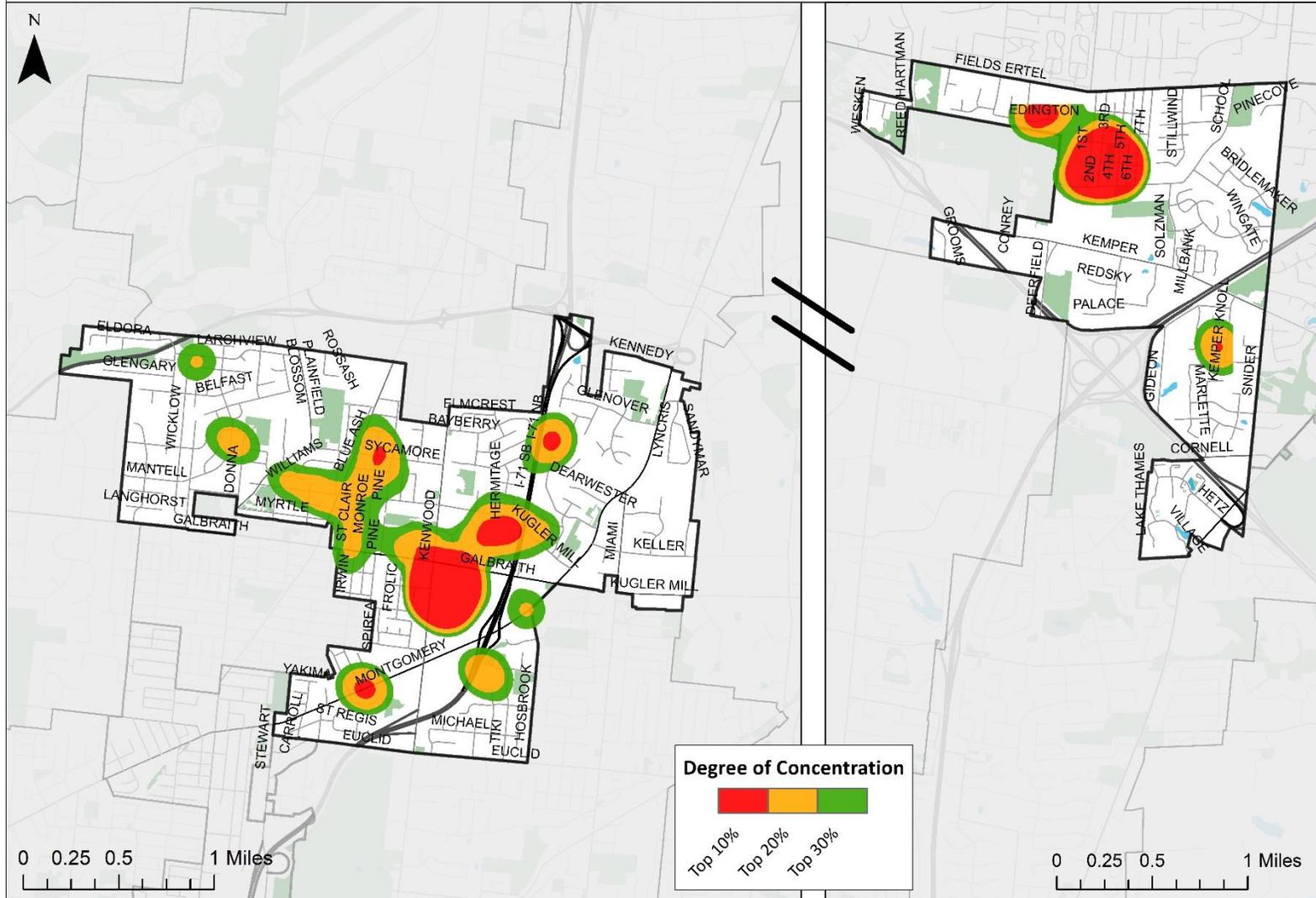
Lincoln Heights Hot Spots

- **4 “hot” facilities**
 - Apartment Complexes
 - Shopping Plaza
 - Single-family home
- **Map Extent**
 - Size: 0.7 square miles (93%)
 - Crime: 36 serious property CFS (100%)
- **Other Notes:**
 - Very little theft – no opportunity or representative of lack of 911 calls?



Distribution of Serious Property Calls for Service; Sycamore TWP, HCSO

January 1 - July 31, 2020



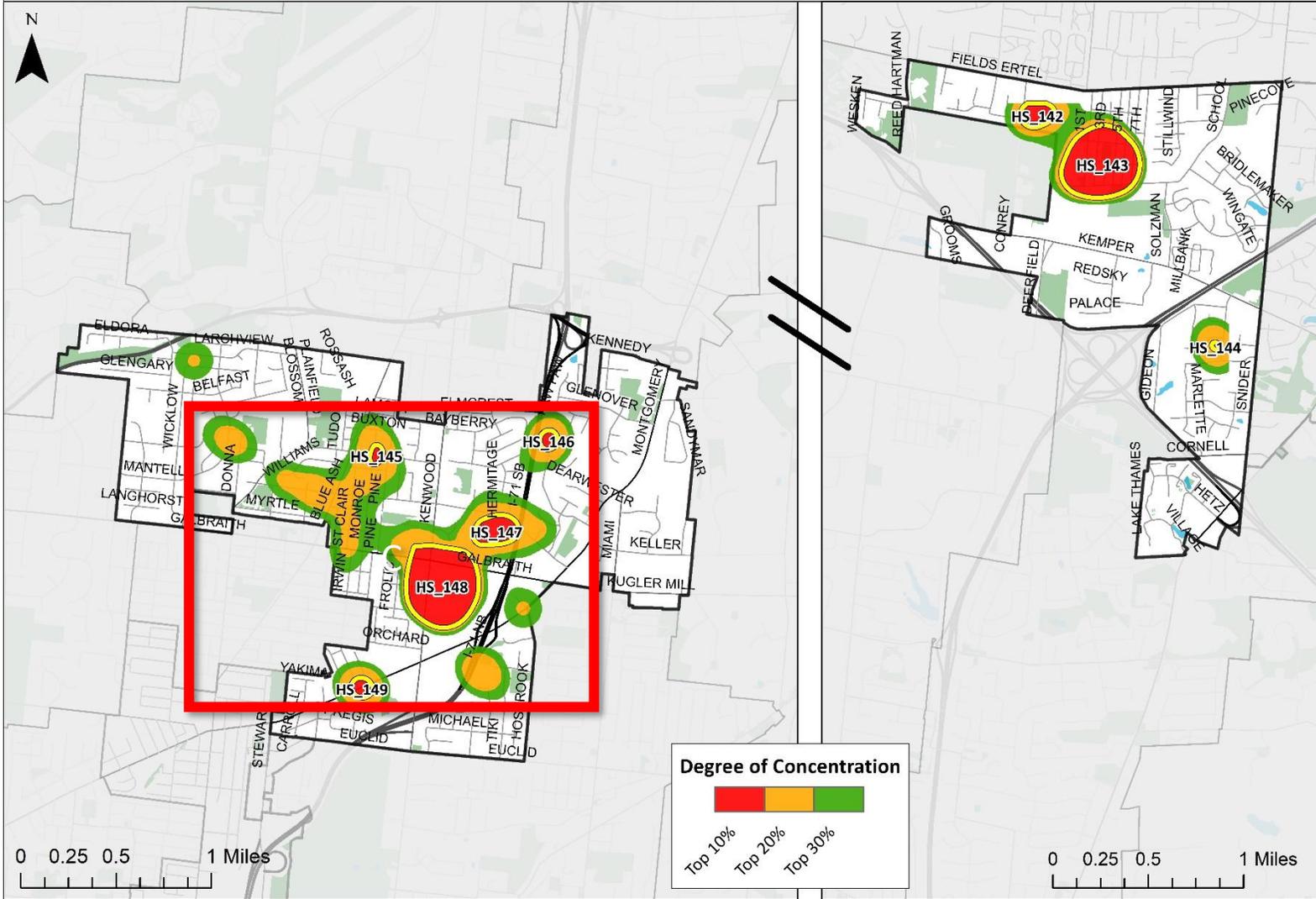
District Three

- **Includes:** Sycamore TWP & Symmes TWP
 - **Note:** No density analysis of Symmes yet
- **Size:** 15.4 sq miles; 34,384 pop
- **# serious Property CFS:** 128 CFS
 - N = 77 in Sycamore
 - N = 51 in Symmes
- **Driving Offense Type:** Burglary
 - *** more Facilities with 3 or more serious property CFS
- **Driving Facilities**
 - Kenwood Towne Center
 - Commercial area (Tire Store)
 - Single-family homes



Distribution of Serious Property Calls for Service; Sycamore TWP, HCSO

January 1 - July 31, 2020



Sycamore Hot Spots

- **Hot Spots – Only Details**
 - **Size:** 0.47 square mile (sycamore only)
 - **# serious property CFS:** 20 (28.6% of Sycamore)
 - **7 hot spots:**
 - Notes: Hot facilities drive hot spot; largest crime attractor/generator in area is Kenwood Towne Center

28.6% of Sycamore’s violent CFS in 6.9% of its geographic area.



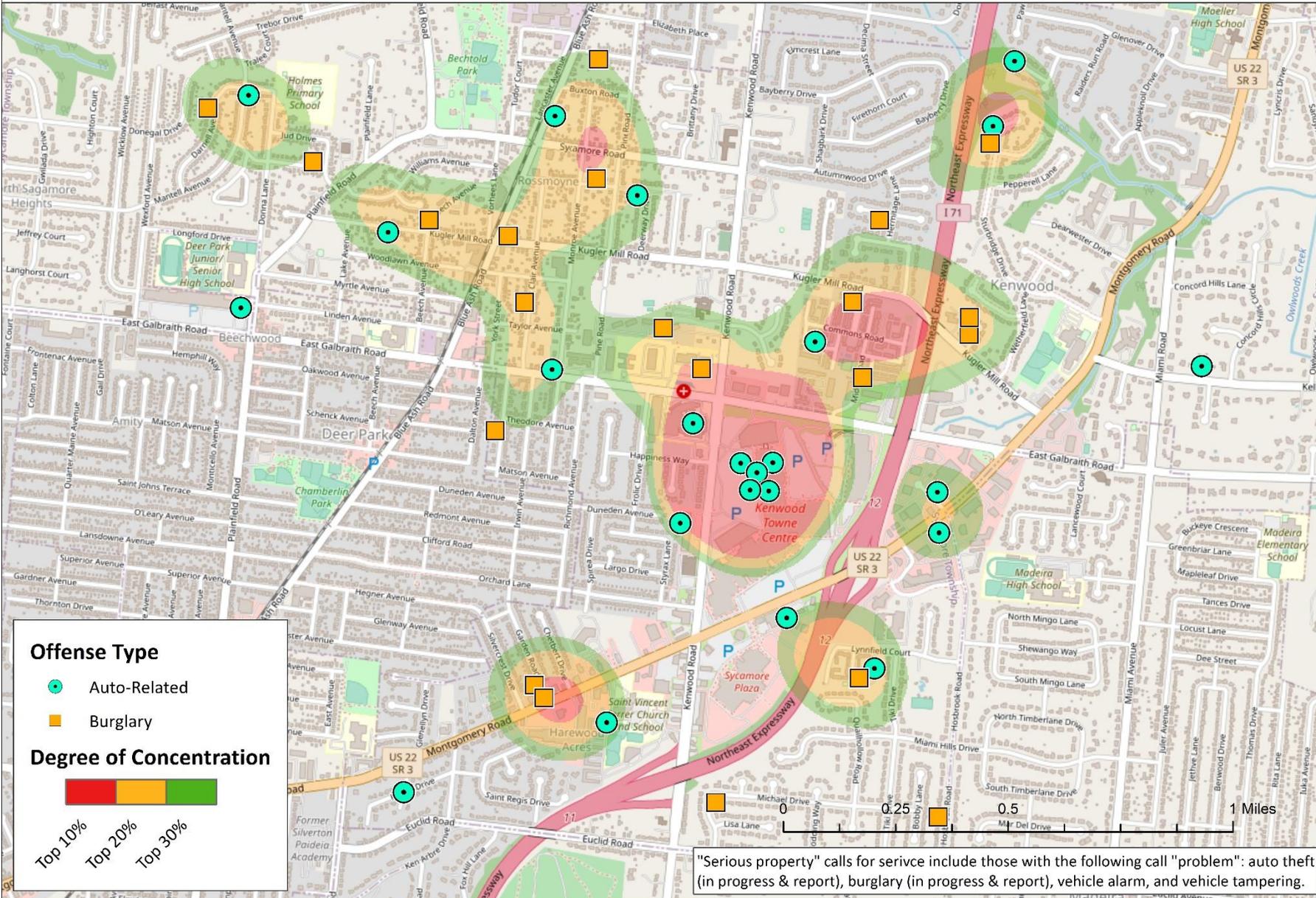
Distribution of Serious Property Calls for Service

Sycamore TWP, January 1 - July 31, 2020



Sycamore Hot Spots

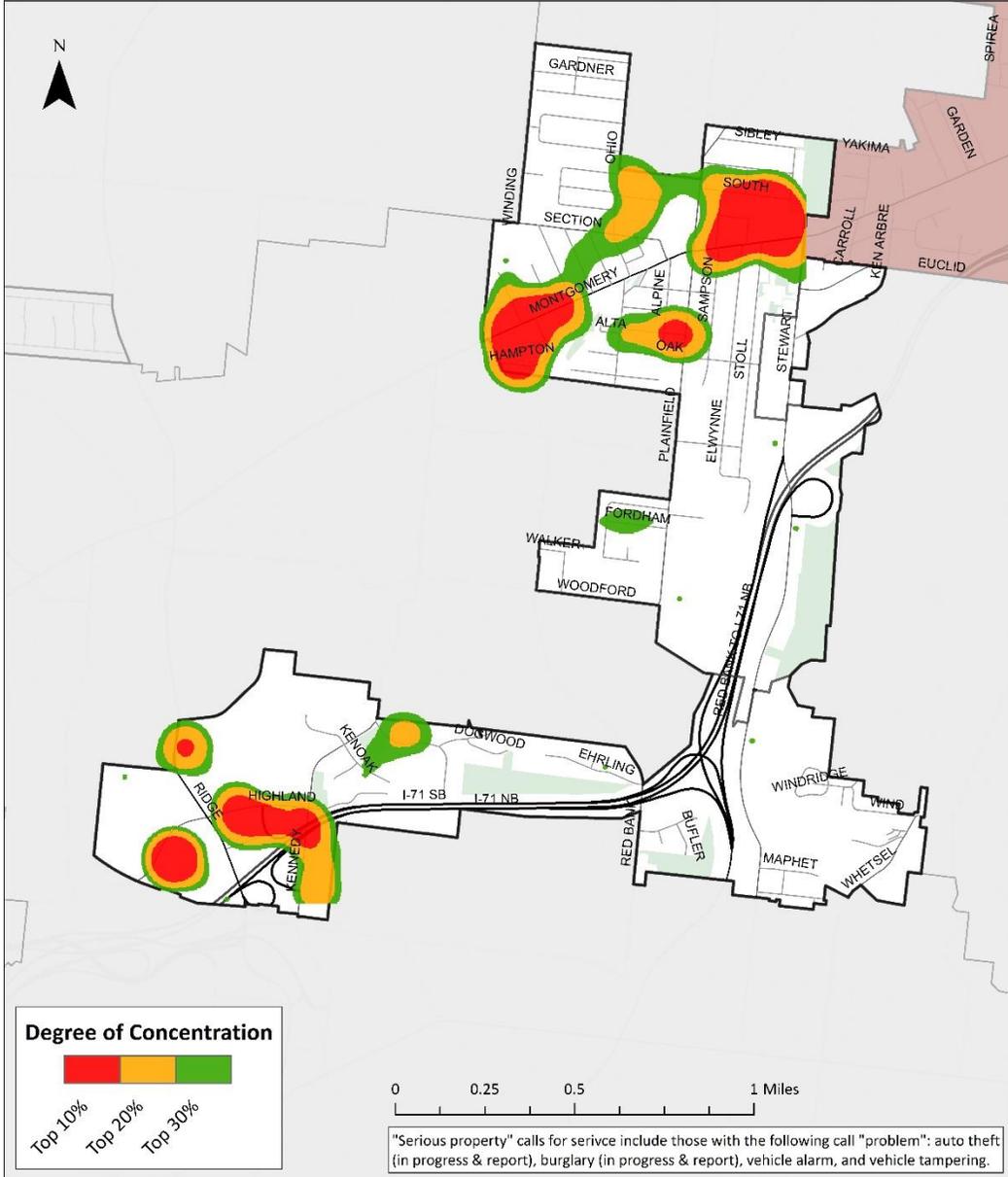
- Only one “hot” facilities
 - Kenwood Towne Center (auto related)
- Map Extent
 - N = 46 serious property CFS
 - 8.0 Square Miles
- **Note:** Little tight concentration creates sensitize density analysis (hence the hot spot with no crime along Sycamore Rd)



"Serious property" calls for service include those with the following call "problem": auto theft (in progress & report), burglary (in progress & report), vehicle alarm, and vehicle tampering.



Distribution of Serious Property Calls for Service
District Four - HCSO, January 1 - July 31, 2020



"Serious property" calls for service include those with the following call "problem": auto theft (in progress & report), burglary (in progress & report), vehicle alarm, and vehicle tampering.

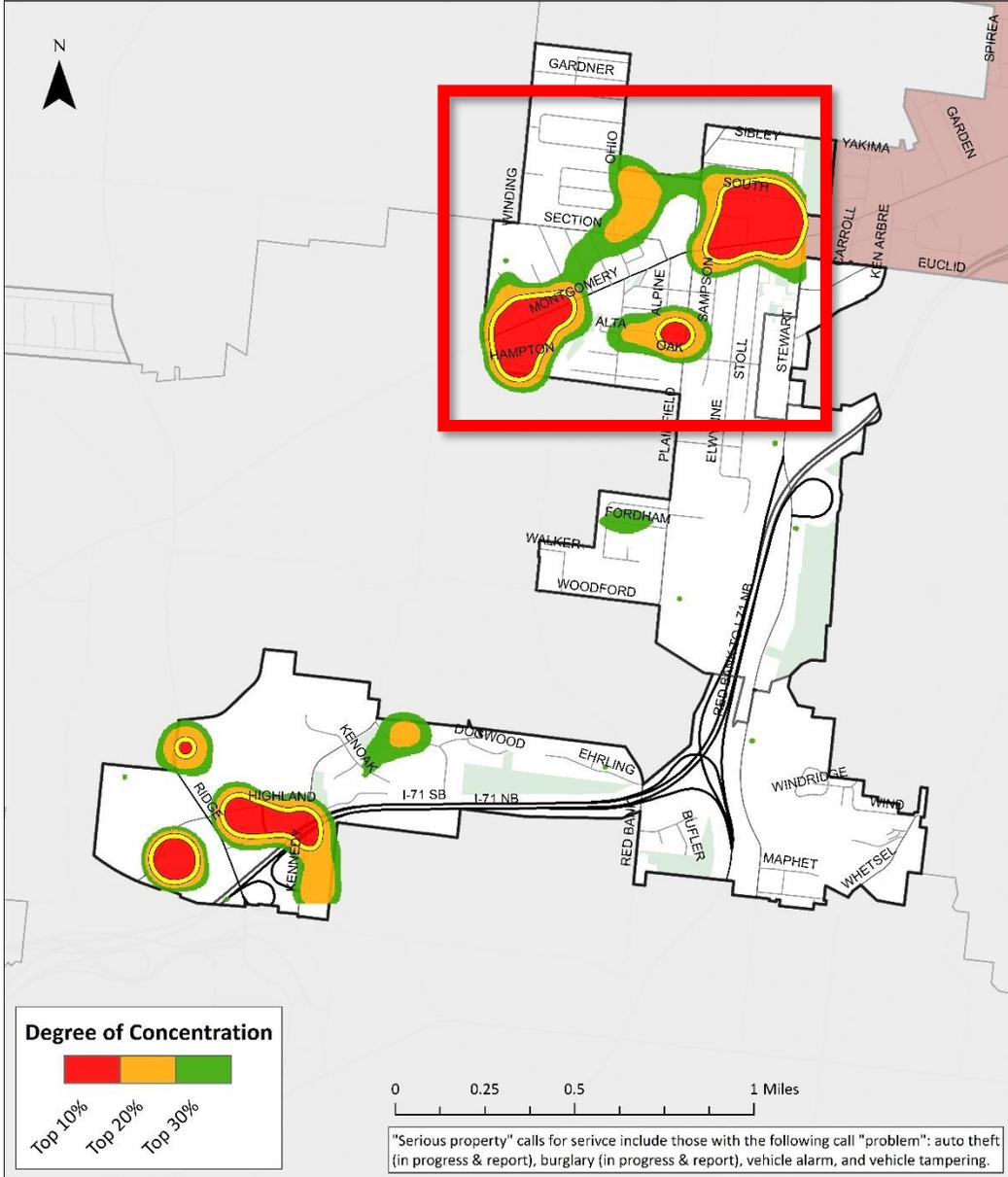
District Four

Silverton and Columbia TWP

- **Jurisdiction – Wide Details**
 - **Size:** 3 ¾ sq miles; 9,257 population
 - **# serious property CFS:** 75 CFS; 810 per 100k residents
 - **Driving offense type:** 50/50 split
 - **Driving facilities:**
 - Business Center, Car dealerships/rental
 - Single-family homes
 - **Other Notes:**
 - D4 “islands” are included in all analyses, except the hot spots (next slide)



Distribution of Serious Property Calls for Service
District Four - HCSO, January 1 - July 31, 2020



District Four

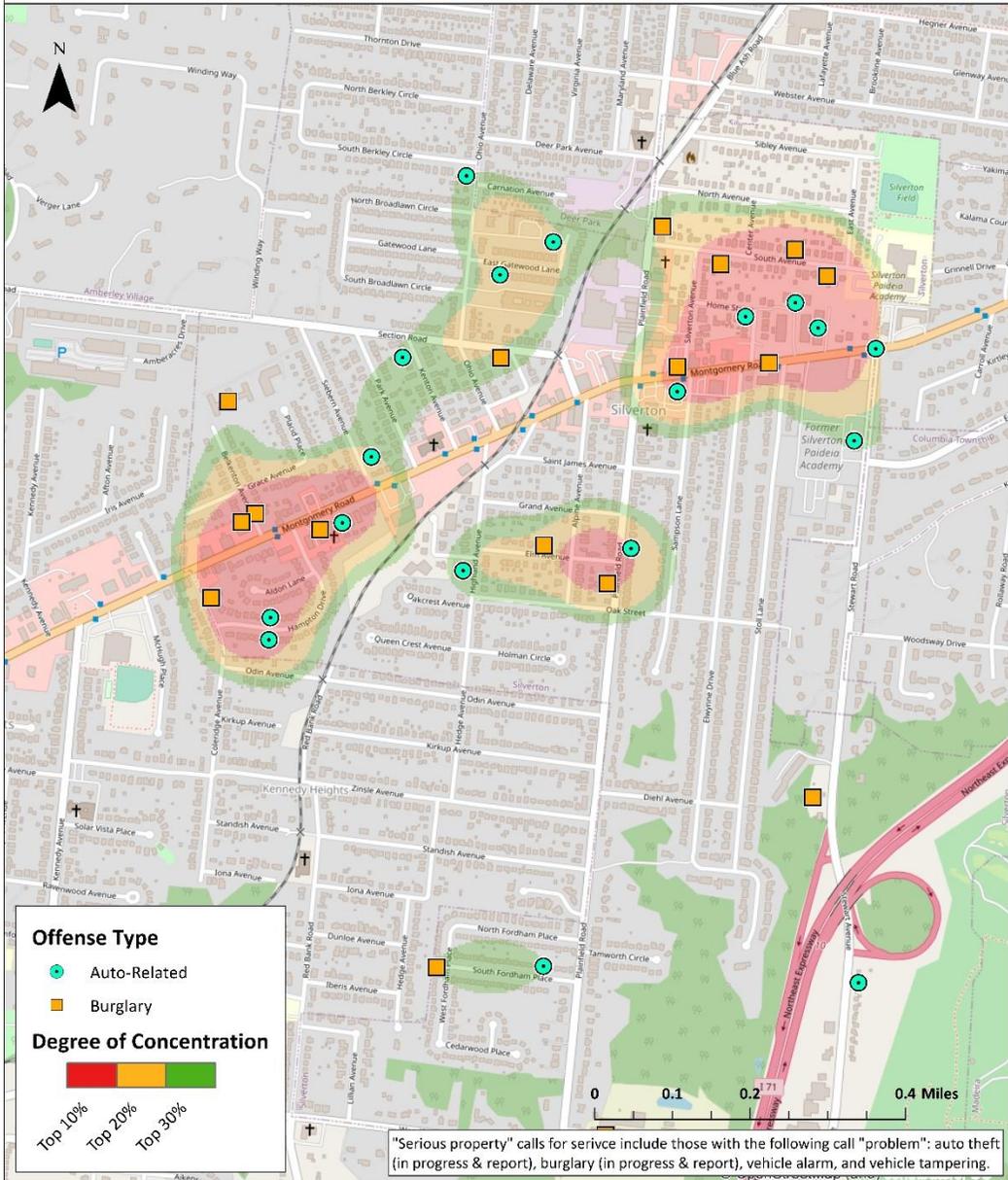
Silverton and Columbia TWP

- **Hot Spots – Only Details**
 - **Size: 0.13 sq miles**
 - **# serious property CFS: 26 CFS**
 - **6 “micro” hot spots**
 - **Notes: Very few repeat victims**

34.6% of Lincoln Heights violent CFS in 3.5% of its geographic area.



Distribution of Serious Property Calls for Service
District Four - HCSO, January 1 - July 31, 2020

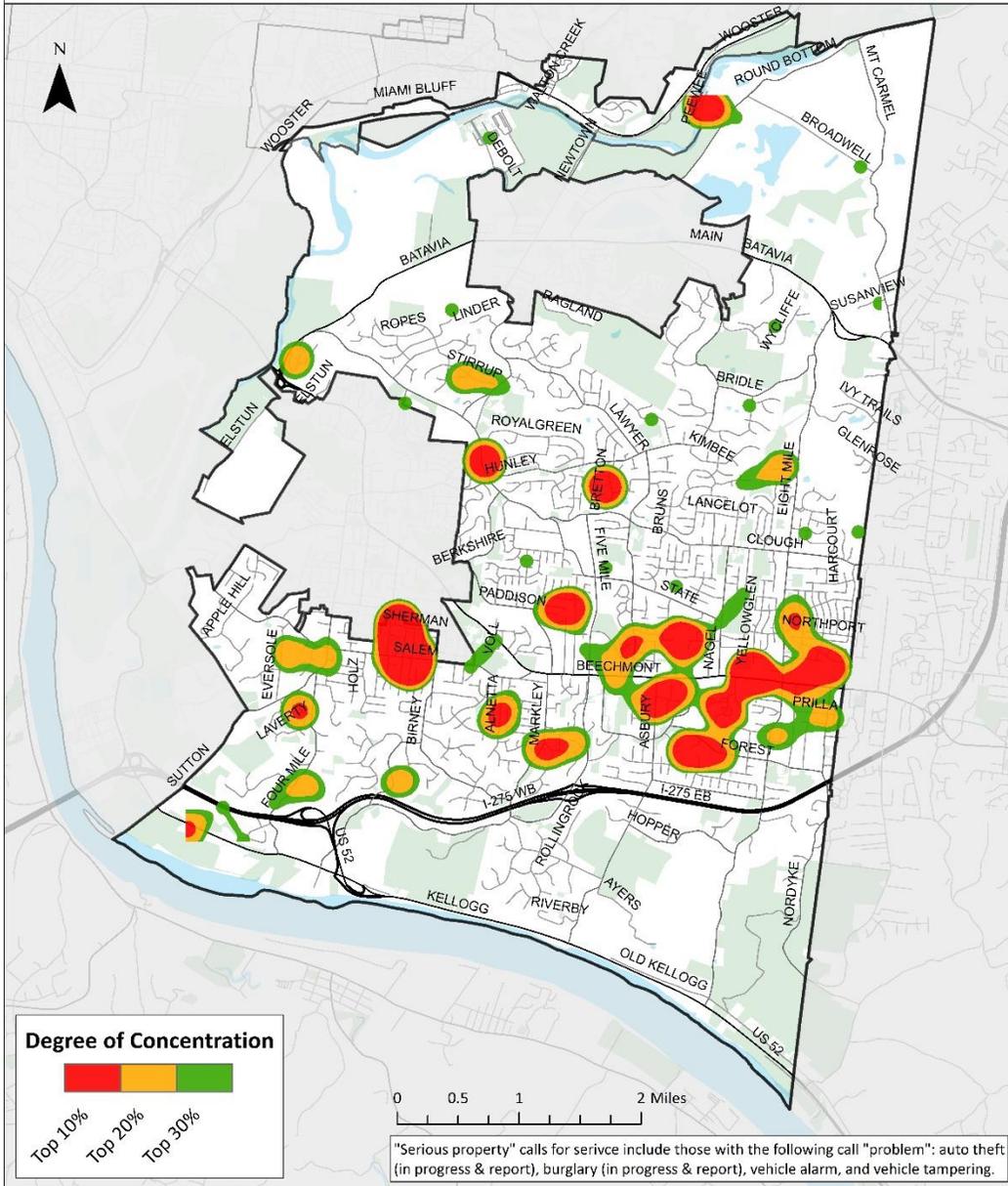


District Four Hot Spots*

- **Only 1 “hot” facilities shown**
 - Single-family home (2 CFS)
- **Map Extent**
 - Size: 2 square miles (53%)
 - Crime: 35 serious property CFS (46.7%)
- **Other Notes:**
 - Only six addresses **total** with two or more serious property CFS



Distribution of Serious Property Calls for Service
 District Five – Anderson TWP, January 1 – July 31, 2020



"Serious property" calls for service include those with the following call "problem": auto theft (in progress & report), burglary (in progress & report), vehicle alarm, and vehicle tampering.

District Five

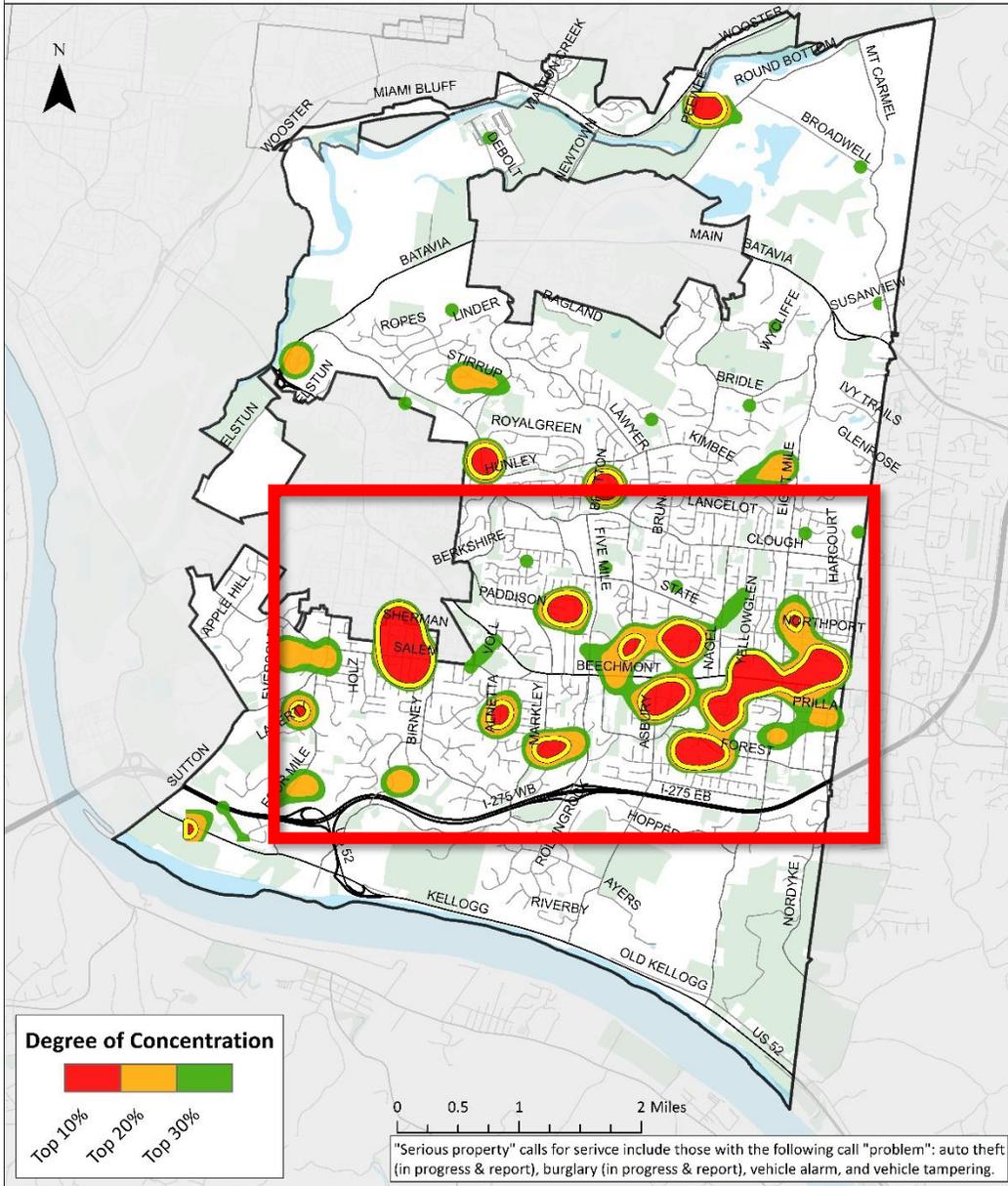
Anderson TWP

• District – Wide Details

- **Size:** 31.5 sq miles; 44,081 population
- **# serious CFS:** 113 CFS; 256 per 100k residents
- **Driving offense type:** 50/50 split
 - Auto-related near Beechmont Ave
 - Burglary in community pockets
- **Driving facilities:**
 - Single-family homes
 - Condominiums



Distribution of Serious Property Calls for Service
 District Five – Anderson TWP, January 1 – July 31, 2020



District Five

Anderson TWP

- **Hot Spots – Only Details**

- **Size:** 1.2 sq miles
- **# serious property CFS:** 62 CFS
- **15 hot spots**
 - **Notes:** Rob Roy Apartments, not id-ed by hot facility

54.9% of D4's serious property CFS in just 3.8% of its geographic area

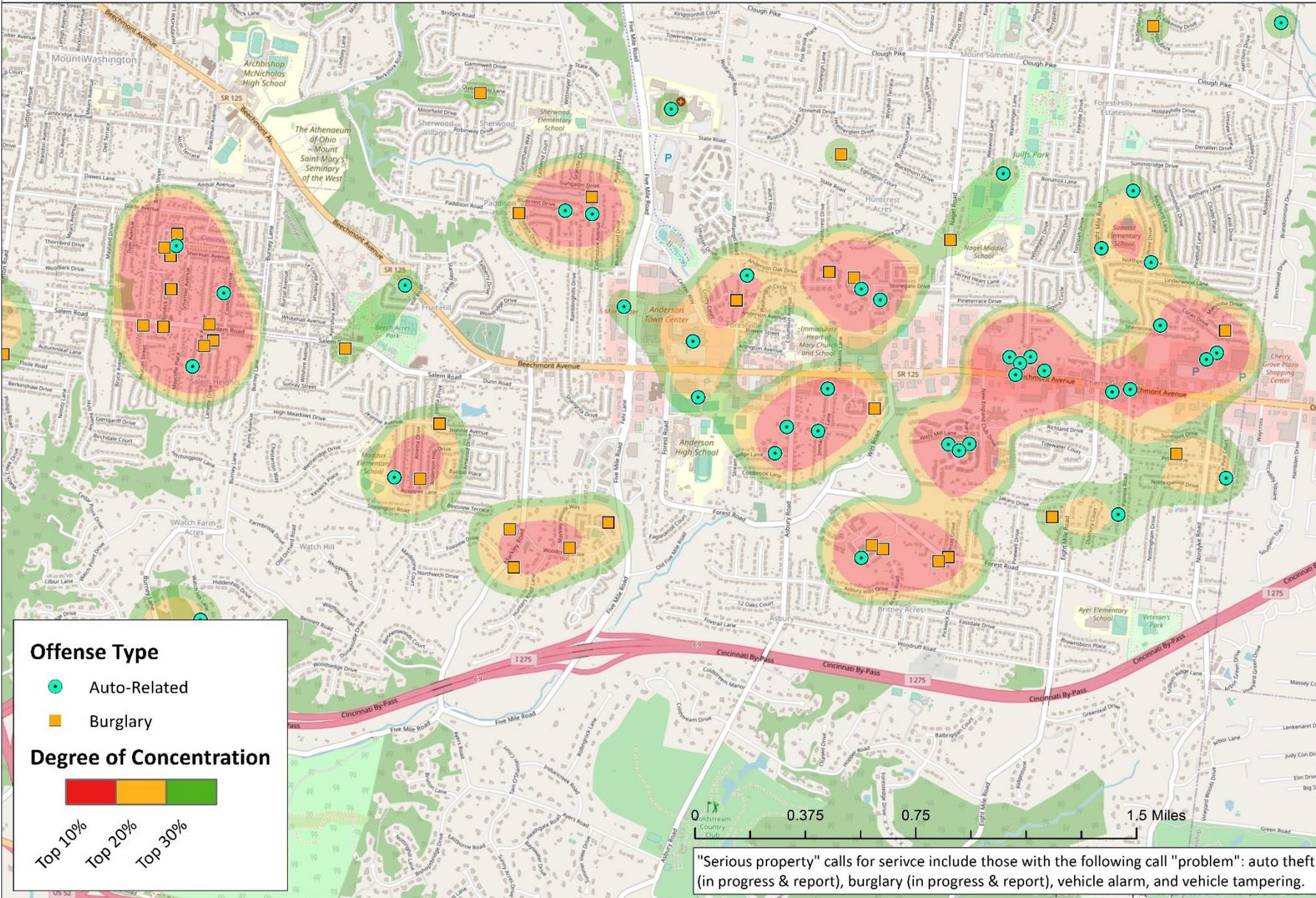


Distribution of Serious Property Calls for Service
 District Five – Anderson TWP, January 1 – July 31, 2020



District Five Hot Spots

- Five “hot” facilities
 - U-Haul
 - Harbor Freight
 - Condominiums
 - Single-family homes (2)
- Map Extent
 - N = 74 serious property CFS
 - 13.0 Square Miles
- Other Notes:
 - Anderson TWP example of different *needs* of communities
 - Ex. Lincoln Heights & Anderson



Moving Forward

- What will future meetings look like?
 - Same analyses with updated data
 - Deep dives into other offense types
 - Focus on violent or property
 - Answers to district commander questions
- Questions?

September Spatial Crime Analysis

Hamilton County Sheriff's Office

Institute of Crime Science

All HCSO Jurisdictions

Date Range: June 1 – August 31, 2020

(Symmes Township: May 1 – July 31, 2020)

CFS Counts by Category and Division

	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
D1	168 (16.2%)	142 (13.7%)	61 (5.9%)	83 (8%)	39 (3.8%)	545 (52.5%)	1,038
D2 (Green)	219 (12.4%)	198 (11.2%)	74 (4.2%)	228 (12.9%)	65 (3.7%)	983 (55.6%)	1,767
Lincoln Heights	50 (21.6%)	39 (16.9%)	17 (7.4%)	12 (5.2%)	8 (3.5%)	105 (45.5%)	231
D3 (Sycamore & Symmes)	102 (8.8%)	85 (7.3%)	51 (4.4%)	181 (15.6%)	39 (3.4%)	699 (60.4%)	1,157
D4 (Silverton & Columbia)	57 (9.4%)	53 (8.8%)	33 (5.5%)	112 (18.5%)	16 (2.6%)	334 (55.2%)	605
D5 (Anderson)	83 (8.7%)	71 (7.5%)	51 (5.4%)	89 (9.4%)	31 (3.3%)	626 (65.8%)	951

Note: Cells contain count of call for service category for each division and the proportion of it's total CFS

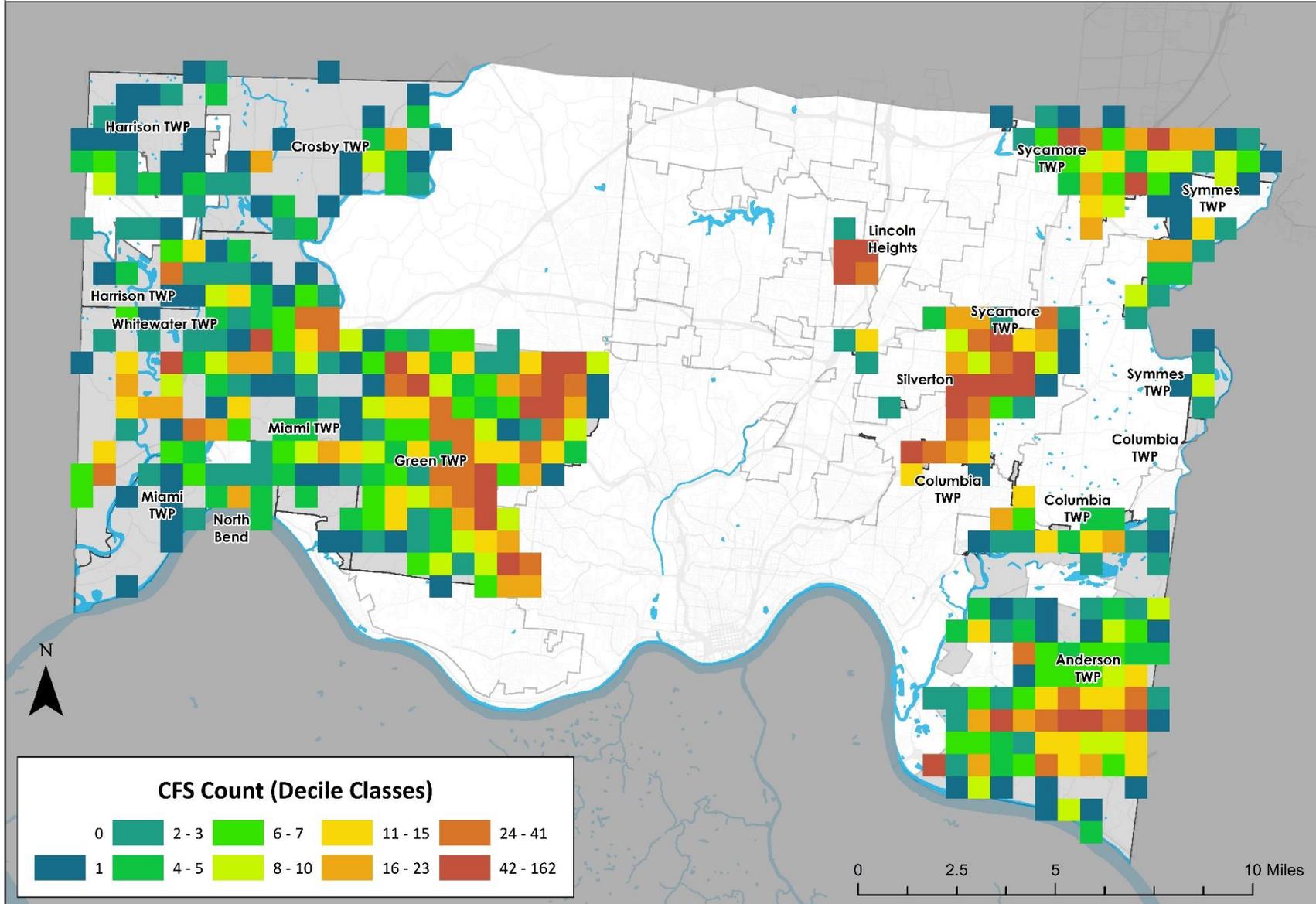


Distribution of Total Calls for Service by 3000ft Grids

June 1 - August 31, 2020*



3000 ft Grids



- Average of 18 streets per grid
 - Range: 0 - 139
- Large Areas than Kernel Density
- Overall, Id-ed the same places

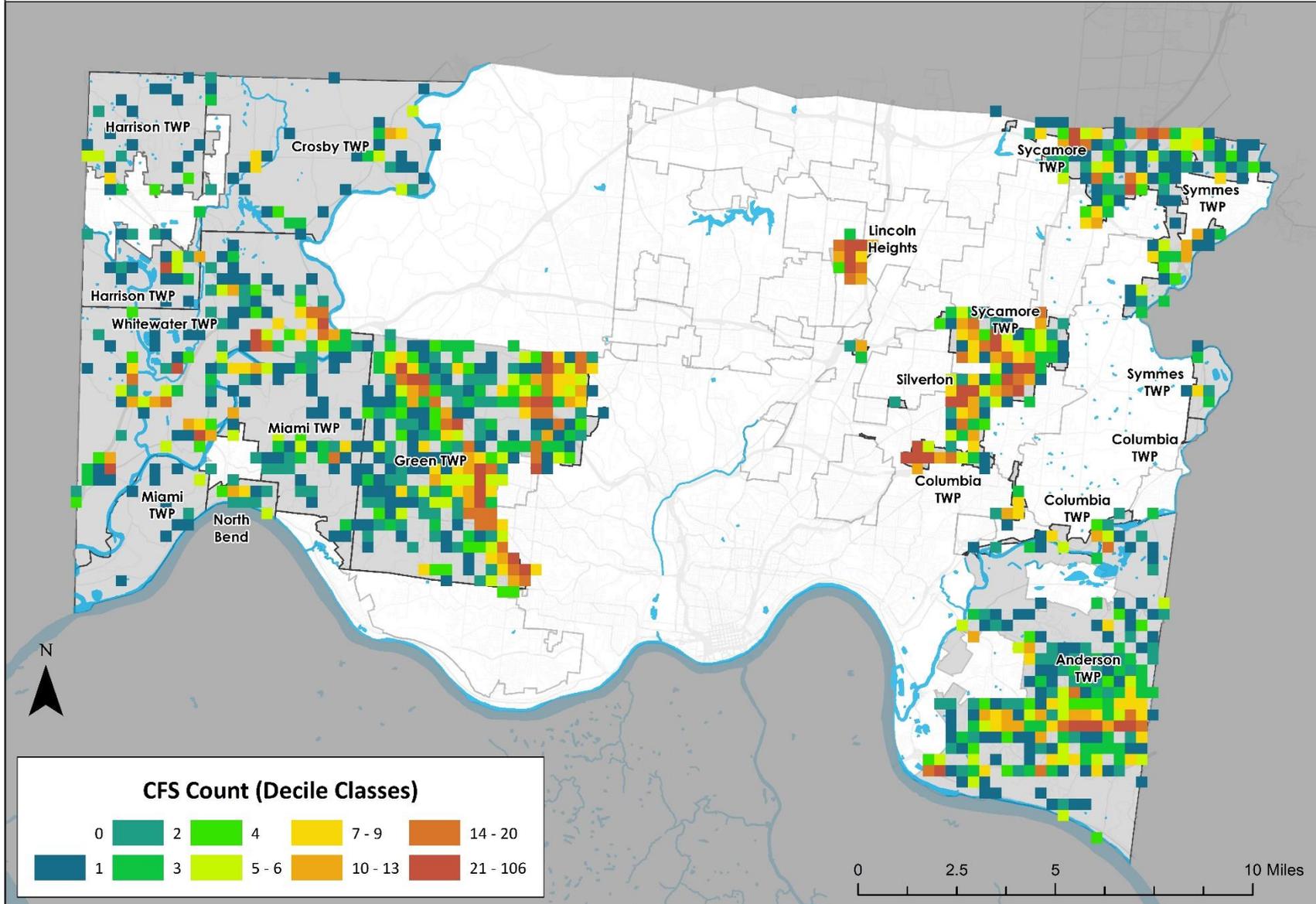


Distribution of Total Calls for Service by 1500ft Grids

June 1 - August 31, 2020*



1500 ft Grids



- Average of 5 streets per grid
 - Range: 0 - 57
- Overall, ID-ed the same places, but split a few hot spots
- ID-ed areas good for problem-solving

District One

Harrison TWP, Crosby TWP, Whitewater TWP, Miami TWP, North Bend

Date Range: June 1 – August 31, 2020

District One Overview

- 24 grids with 10+ total calls for service
 - 8 grids in each class (ie. Top 10%, Top 20%, Top 30%)
- 49.5% of grids have no CFS
 - 65.8% have one or fewer CFS
- Most “hot” grids located near border of Whitewater & Miami Townships
 - Contain most “crossover” grids (ie. top violent, top QOL, top drug-related)

CFS Counts by Category and Jurisdiction

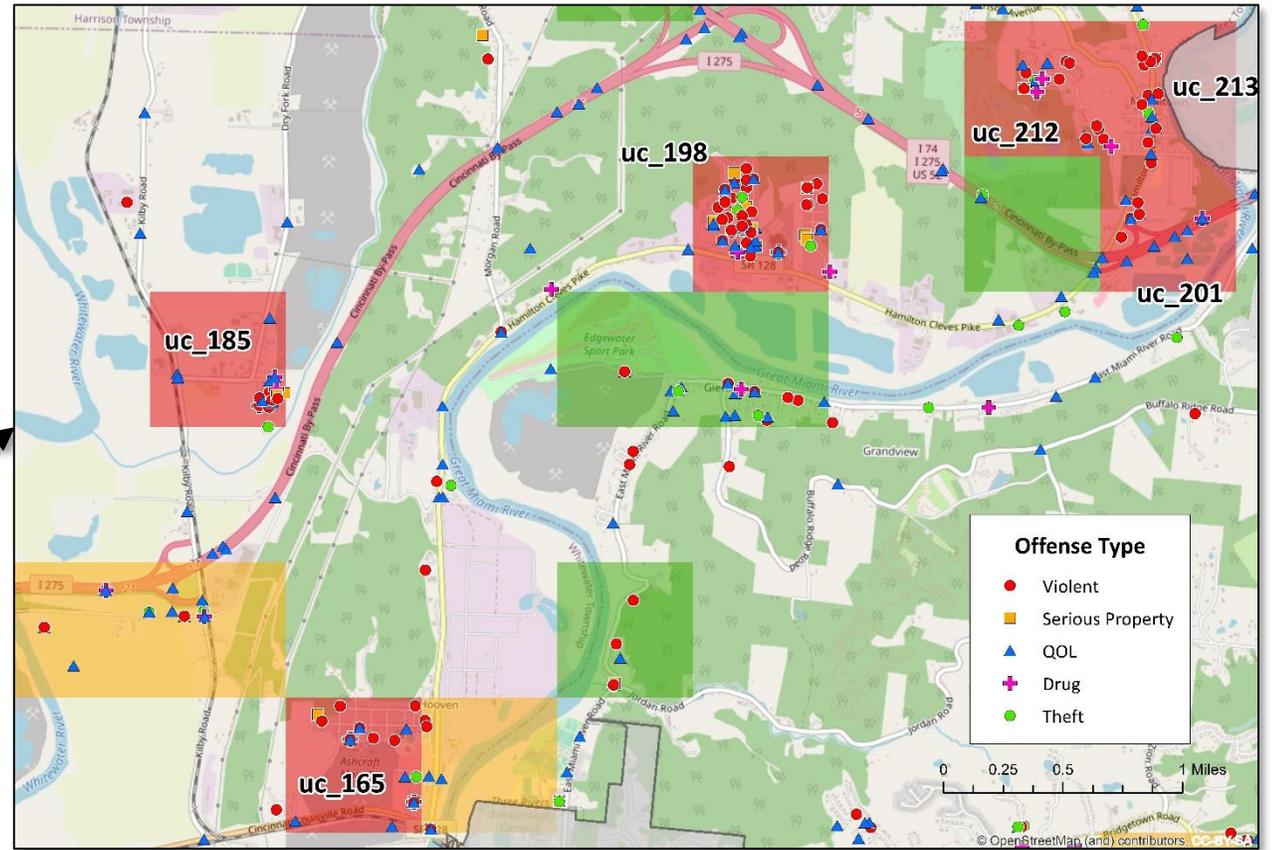
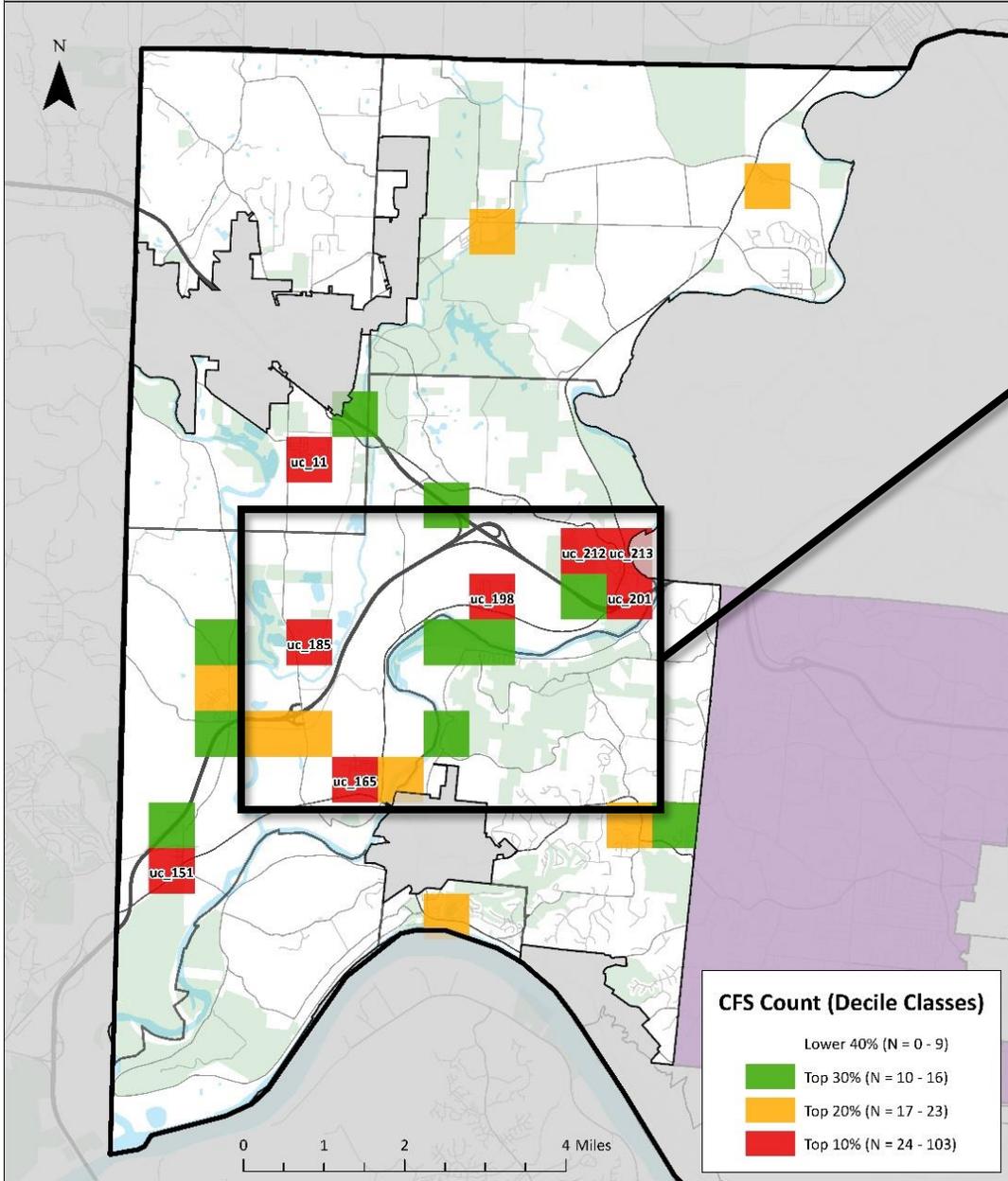
June 1 – August 31, 2020

Jurisdiction	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
Harrison TWP	18 (14.9%)	14 (11.6%)	6 (5%)	11 (9.1%)	2 (1.7%)	70 (57.9%)	121
Crosby TWP	21 (21%)	12 (12%)	11 (11%)	8 (8%)	4 (4%)	44 (44%)	100
Whitewater TWP	96 (15.6%)	85 (13.8%)	28 (4.6%)	45 (7.3%)	25 (4.1%)	335 (54.6%)	614
Miami TWP	28 (16.9%)	29 (17.5%)	13 (7.8%)	14 (8.4%)	5 (3%)	77 (46.4%)	166
North Bend	5 (13.5%)	2 (5.4%)	3 (8.1%)	5 (13.5%)	3 (8.1%)	19 (51.4%)	37

Note: Cells contain count of call for service category for each jurisdiction and the proportion of it's total CFS



Distribution of Total Calls for Service by 3000ft Grid
District One - HCSO, June 1 - August 31, 2020



Possible Tactics

- Hot Spot Patrols
- Problem-Solving Programs
- Domestic Violence Focused Deterrence
- CPTED Eval / Space Re-designs (Defensible Space)

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_198 (5700 Hamilton Cleves)	Westbrook Village MHP, Miamiview MHP	103	Violent (N = 46) DV (N= 27) Non-DV (N = 19)	QOL (N = 34) Suspicious (11) Mixed Disorder	Property (N = 19) Serious (9) Theft (10)
UC_185 (Dry Fork Rd)	Dry Fork MHP	43	QOL (N = 21) Prowlers/Suspicious Trouble	Violence (N = 10) DV (N = 5) Weapons or Assault (5)	Serious Prop (N = 6) Burglary (N = 5)
UC_165 (Hooven)	Single-Family Home	41	QOL (N = 17) Suspicious (10)	Violent (N = 16) Assault (N = 7) DV (N = 5)	
UC_213 (Miamitown)	WWTF Station, Miami Savings Bank	41	Violent (N = 21) DV (10) Assault (5) Harassment (5)	QOL (N = 15) Suspicious (10) Disorder (5)	

Remaining Top 10% (N = 31 CFS)

- UC 151 (Elizabethtown): Redwood MHP, Smitty's
- UC 212 (Miamitown): Miamiview Apts
- UC 11 (8400 block of Kilby Rd): Rolling Acres MHP

District Two

Green TWP

Date Range: June 1 – August 31, 2020

District Two Overview

- More commercial area = more heavily influenced by theft/shoplifting or unruly customers (QOL)
 - Particularly true adjacent to major thoroughfares (Harrison Ave, Glenway Ave)
- Only 9% of grids with no CFS (16% with ≤ 1)
 - More distributed than rural areas (ie. D1)
- “Hot” grids concentrating in commercial areas
 - Cheviot, Bridgetown, White Oak

CFS Counts by Category and Jurisdiction

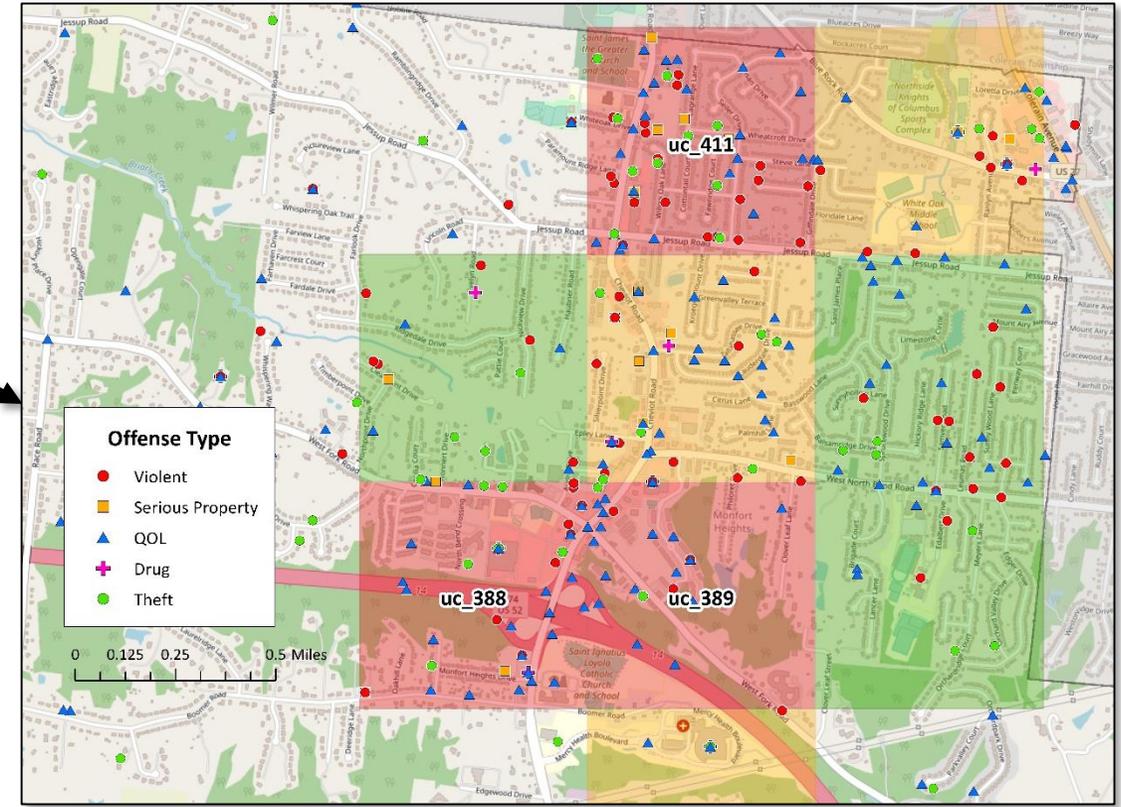
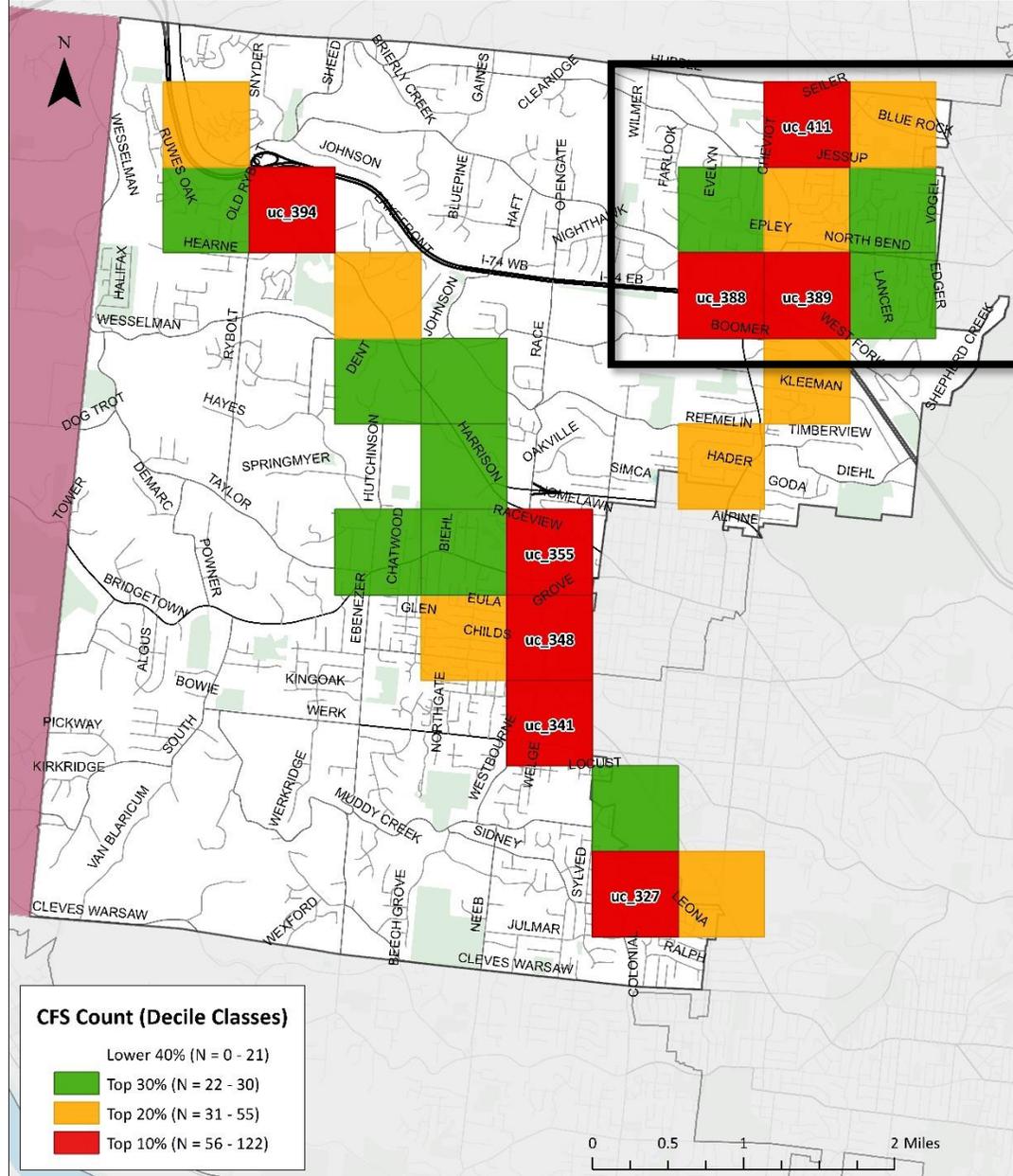
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D5 (Anderson)	83 (8.7%)	71 (7.5%)	51 (5.4%)	89 (9.4%)	31 (3.3%)	626 (65.8%)	951



Distribution of Total Calls for Service by 3000ft Grid

District Two - Green TWP, June 1 - August 31, 2020



Possible Tactics

- Altering Theft Reporting Practices
- CPTED Evaluations
- Problem-Solving Projects

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_355 (Bridgetown Rd & Glenway Ave)	Family Dollar, UDF, Walgreens	122	QOL (N = 80) Suspicious = 60 Trouble = 11	Violent (N = 27) DV = 14 Non-DV = 13	Theft (N = 9)
UC_394 (Harrison Ave off I-74)	Meijer Shopping Center, Holiday Inn, Skyline, Kohl's	99	QOL (N = 58) Suspicious = 45 Trouble = 9	Theft (N = 20)	Violent (N = 16) DV = 9 Non-DV = 7
UC_348 (Glenway Ave & Westbourne Dr)	Speedway, McDonalds, Chic-Fil-A, Western Bowl	85	QOL (N = 52) Suspicious = 24 Trouble = 21	Violent (N = 19) DV = 6 Non-DV = 13	Theft (N = 10)
UC_388 (Cheviot Rd off I-74)	Speedway, Sam's Club, Walgreen's	79	QOL (N = 52) Suspicious = 38 Trouble = 7	Theft (N = 12)	Violent (N = 10) DV = 5 Non-DV = 5
UC_411 (5800 block of Cheviot Rd)	Apartment, Marathon, Sports' Bars (Releaf, Crossroads, Kenny's)	77	QOL (N = 34) Suspicious = 16 Disorder = 7	Violent (N = 26) DV = 15 Non-DV = 11	Theft (N = 11)

Lincoln Heights

Date Range: June 1 – August 31, 2020

Lincoln Heights Overview

- Unique Characteristics
 - Small geographic area
 - Few commercial facilities
 - High volume of CFS throughout area
- Only 4 grids fit over LH
 - All Quadrants higher than *most* jurisdiction's Top 10% class
- Fewest CFS, but highest CFS rate (by population or area)

CFS Counts by Category and Jurisdiction

June 1 – August 31, 2020

	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
D1	168 (16.2%)	142 (13.7%)	61 (5.9%)	83 (8%)	39 (3.8%)	545 (52.5%)	1,038
D2 (Green)	219 (12.4%)	198 (11.2%)	74 (4.2%)	228 (12.9%)	65 (3.7%)	983 (55.6%)	1,767
Lincoln Heights	50 (21.6%)	39 (16.9%)	17 (7.4%)	12 (5.2%)	8 (3.5%)	105 (45.5%)	231
D3 (Sycamore & Symmes)	102 (8.8%)	85 (7.3%)	51 (4.4%)	181 (15.6%)	39 (3.4%)	699 (60.4%)	1,157
D4 (Silverton & Columbia)	57 (9.4%)	53 (8.8%)	33 (5.5%)	112 (18.5%)	16 (2.6%)	334 (55.2%)	605
D5 (Anderson)	83 (8.7%)	71 (7.5%)	51 (5.4%)	89 (9.4%)	31 (3.3%)	626 (65.8%)	951

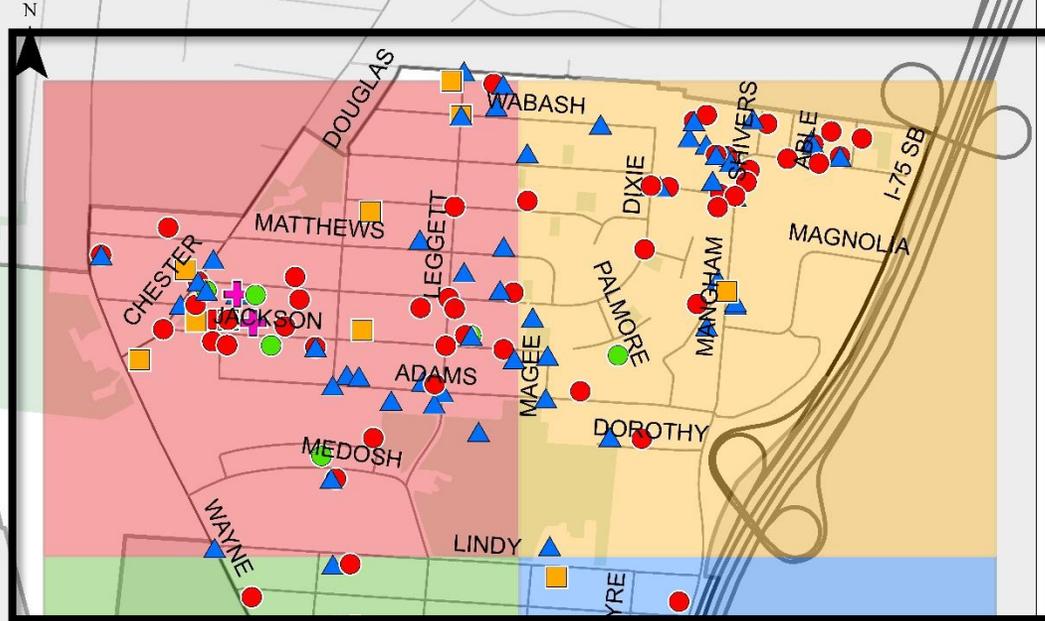
CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_426 (NW Quadrant)	Fanci's Convenience, Our Corner, Apartments	88	Violent (N = 35) DV = 20 Non-DV = 15 (asslt & shot)	QOL (N = 34) Trouble = 10 Suspicious/Disorder = 18	Serious Prop (N = 11) Burglary = 7 Auto = 4
UC_427 (NE Quadrant)	Marianne Terrace Apartments	65	QOL (N = 37) Suspicious = 11 Disorder = 8	Violent (N = 26) DV = 11 Non-DV = 15 (mix)	
UC_423 (SW Quadrant)	Residential Area	49	QOL (N = 23) Suspicious = 13 Disorder = 7	Violent (N = 16) DV = 13 Non-DV = 3	Drug (N = 6)
UC_424 (SE Quadrant)	Residential Area	26	Violent (N = 12) DV = 6 Non-DV = 6	QOL (N = 9) Trouble = 4 Suspicious = 5	



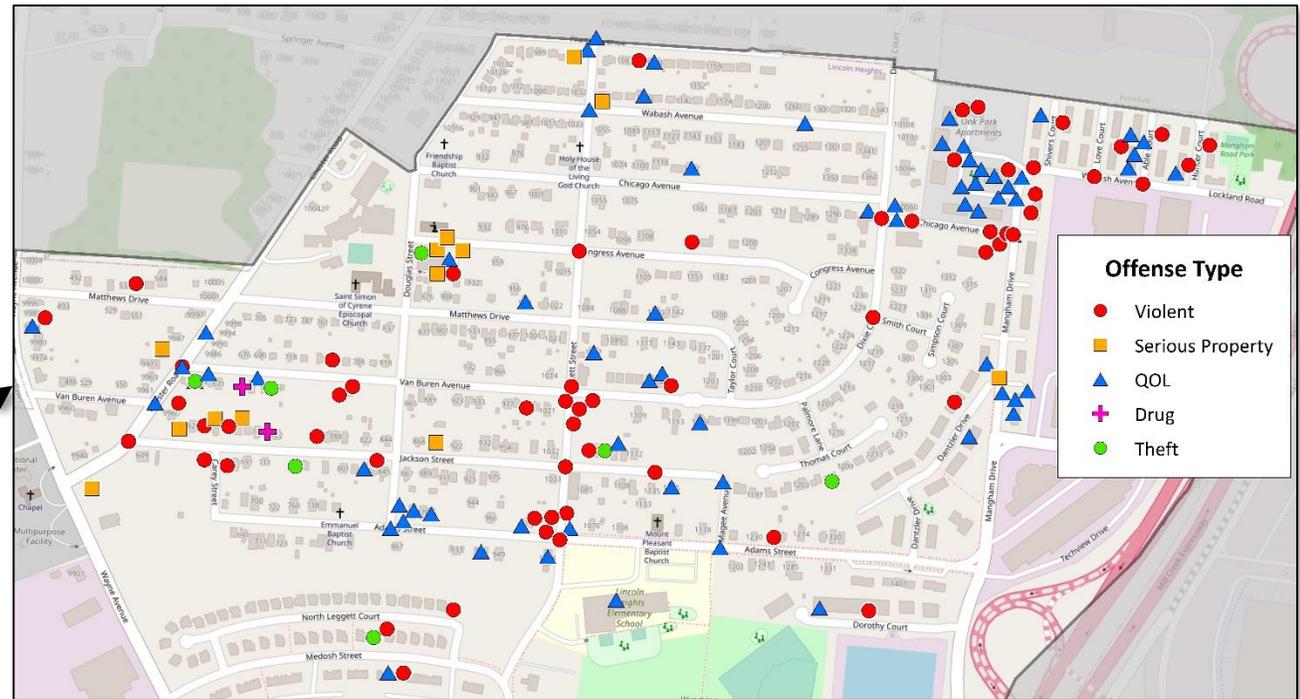
Distribution of Total Calls for Service by 3000ft Grid

Lincoln Heights - HCSO, June 1 - August 31, 2020



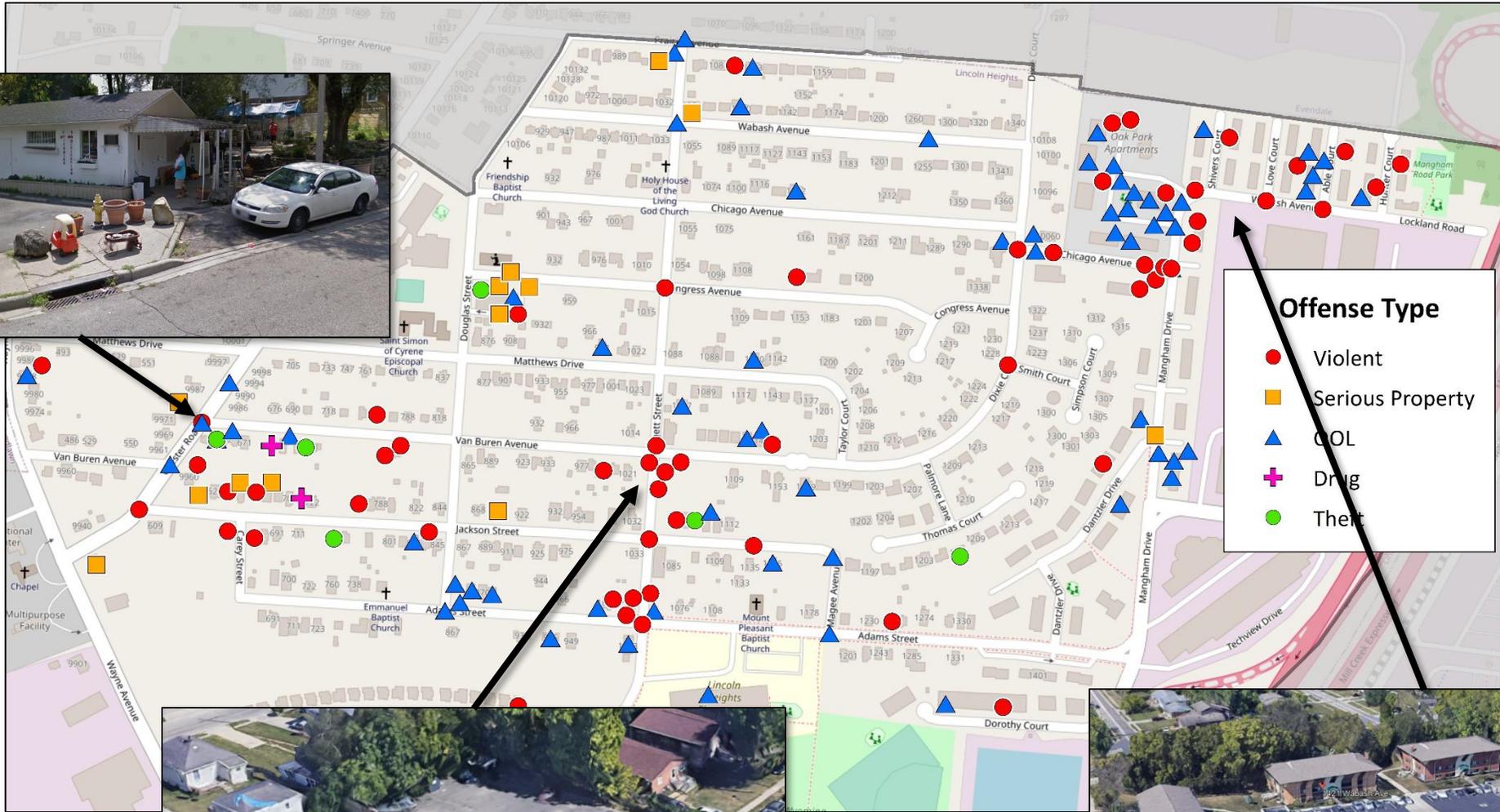
CFS Count	
UC_424	(N = 26)
UC_423	(N = 49)
UC_427	(N = 65)
UC_426	(N = 88)

0 0.125 0.25 0.5 Miles



Possible Tactics

- Co-Offending Networks Interventions
- Hot Spot Patrols
- Problem-Oriented Projects
- Domestic Violence Focused Deterrence



District Three

Sycamore TWP & Symmes TWP

Sycamore Date Range: June 1 – August 31, 2020

Symmes Date Range: May 1 – July 31, 2020

District Three Overview

- Houses major crime generator/attractor (Kenwood Towne Center)
 - Grid 440 – Highest total CFS count in HCSO area
- Largely commercial area = Theft and QOL opportunity
- 27 “hot” grids \geq 11 total CFS
 - 8 in each class
 - Largely surrounding Kenwood Towne Center

CFS Counts by Category and Jurisdiction

June 1 – August 31, 2020*

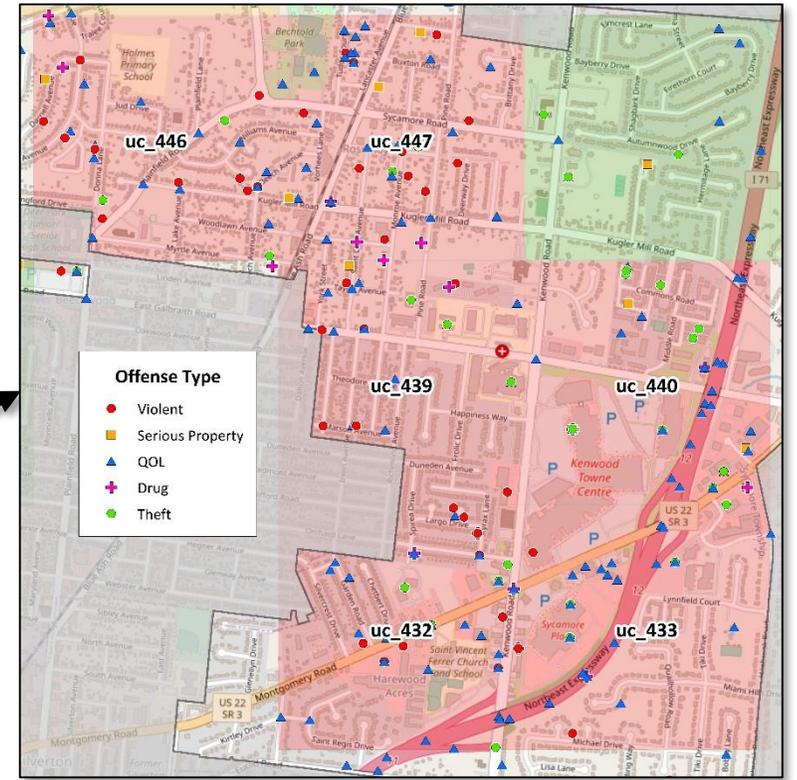
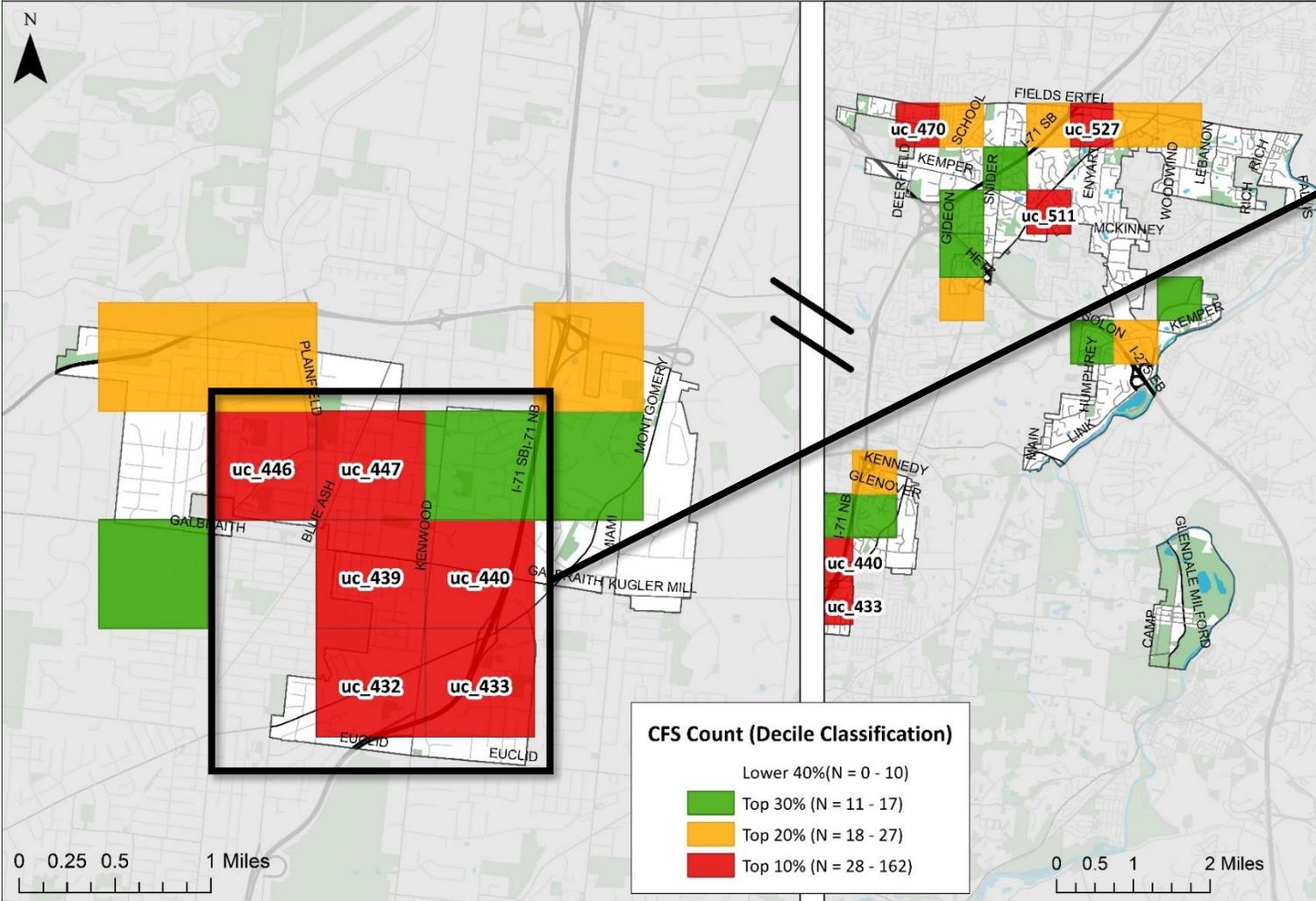
Jurisdiction	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
Sycamore TWP	75 (9.3%)	63 (7.8%)	35 (4.4%)	132 (16.4%)	26 (3.2%)	472 (58.8%)	803
Symmes TWP	27 (7.6%)	22 (6.2%)	16 (4.5%)	49 (13.8%)	13 (3.7%)	227 (64.1%)	354
Total D3	102 (8.8%)	85 (7.3%)	51 (4.4%)	181 (15.6%)	39 (3.4%)	699 (60.4%)	1,157

* Note: Symmes data includes calls made between May and July 31, 2020. August data was unavailable, therefore, the most recent 3 months were used for this jurisdiction.



Distribution of Total Calls for Service by 3000ft Grid

District Three - HCSO, June 1 - August 31, 2020*



Possible Tactics

- CFS Reporting Tactics
- Problem-Oriented Projects

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_440 (Kenwood TC - Main)	Kenwood Town Center, Shell Gas Station	162	Theft (N = 71)	QOL (N = 69) Trouble = 20 Suspicious/Disorder = 37	
UC_447 (Blue Ash Rd & Sycamore Rd)	Bechtold Park, Residential Area	72	QOL (N = 49) Disorder = 21 Suspicious = 21	Violent (N = 12) DV = 6 Non-DV = 6	
UC_432 (Kenwood TC - SW)	BP, Wendy's, Fifth Third, Trader Joe's	66	QOL (N = 41) Suspicious = 28 Trouble = 8	Violent (N = 13) DV = 8 Non-DV = 5	
UC_470 (Highpoint)	Village Green MHP, Residential Area	64	QOL (N = 33) Trouble = 15 Suspicious = 15	Violent (N = 19) DV = 10 Non-DV = 9	
UC_527 (Fields Ertel Rd & Mason Rd)	Mason Way Ct Apartments, Comfort Inn, Commercial Area	58	QOL (N = 40) Suspicious = 30 Trouble = 9		

District Four

Village of Silverton & Columbia Township

Date Range: June 1 – August 31, 2020

District Four Overview

- Unique Area
 - Mixed Use Area (Opportunity for some violent crime & theft/QOL)
 - Large area without streets/addresses
 - Islands make any density/spatial analysis difficult
- “Hot” grids located only on “main” land (CFS \geq 23 total CFS)
 - 7 hot grids, ~2 each class

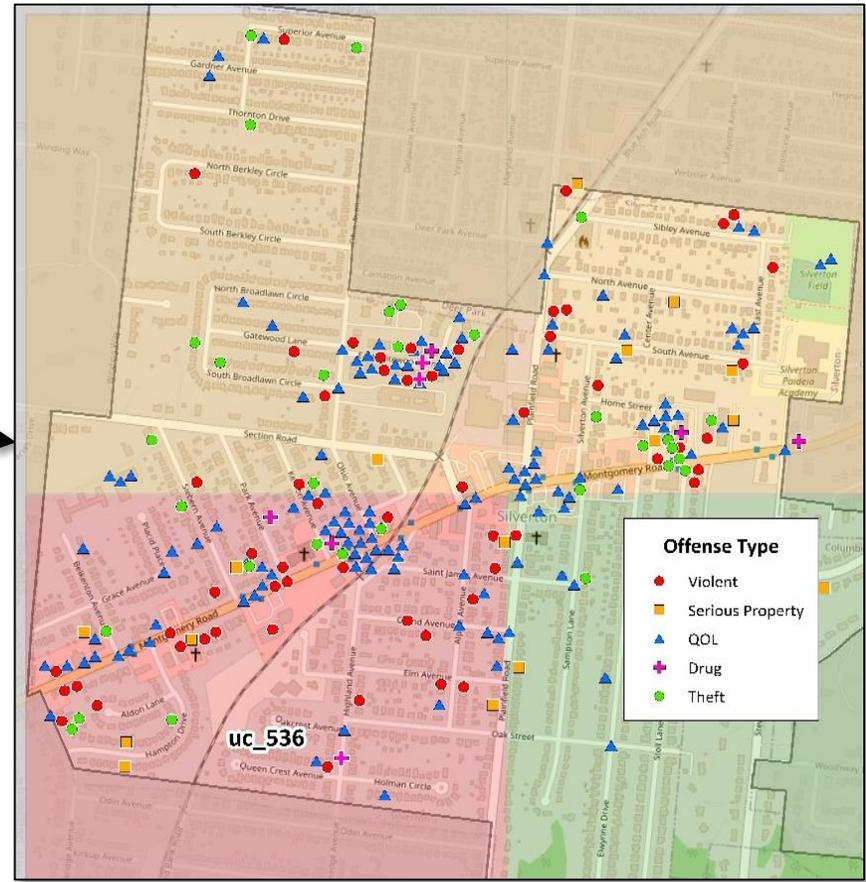
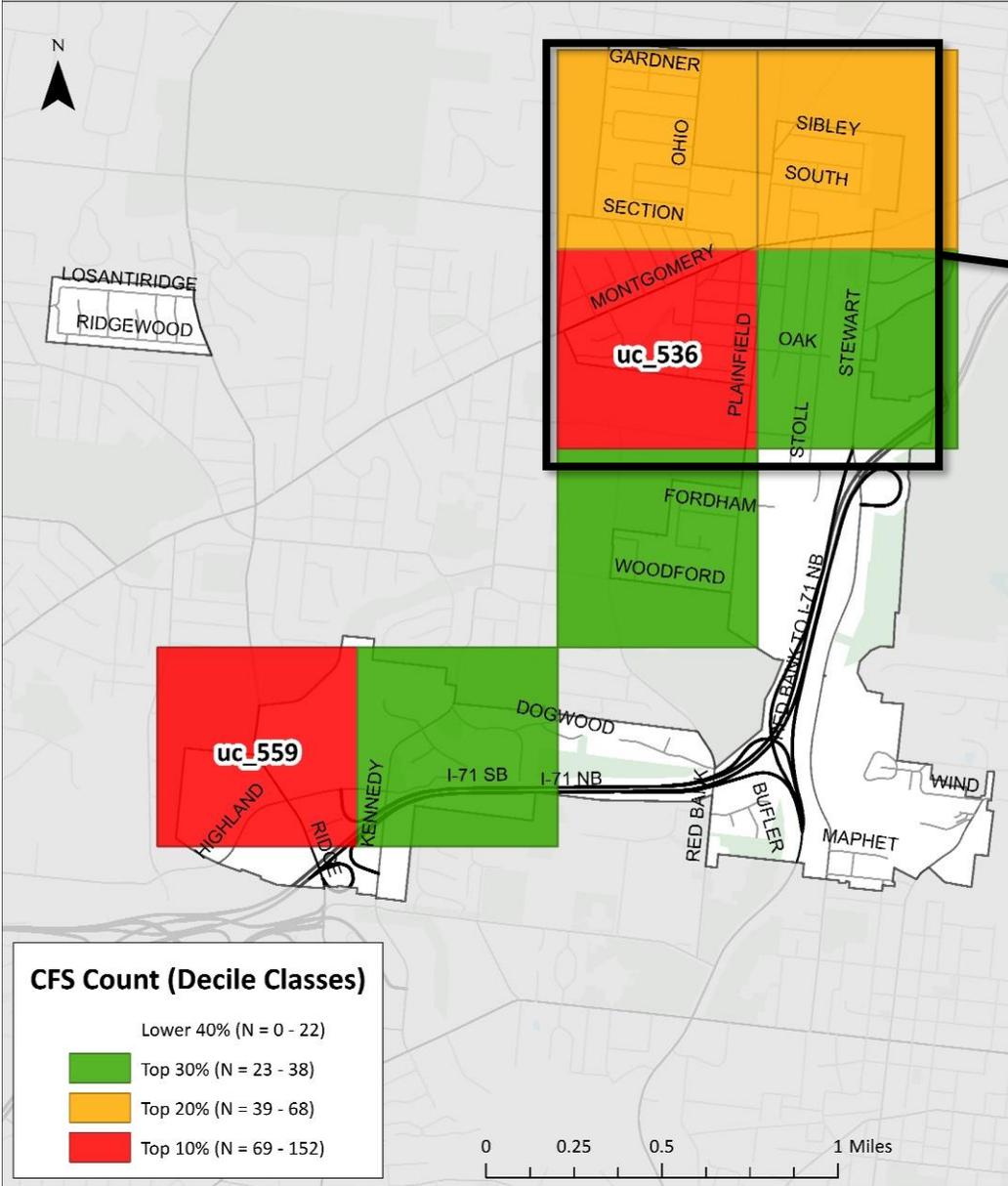
CFS Counts by Category and Jurisdiction

June 1 – August 31, 2020

Jurisdiction	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
Village of Silverton	34 (11.2%)	34 (11.2%)	20 (6.6%)	37 (12.2%)	10 (3.3%)	169 (55.6%)	304
Columbia TWP	23 (7.6%)	19 (6.3%)	13 (4.3%)	75 (24.9%)	6 (2%)	165 (54.8%)	301
Total D4	57 (9.4%)	53 (8.8%)	33 (5.5%)	112 (18.5%)	16 (2.6%)	334 (55.2%)	605



Distribution of Total Calls for Service by 3000ft Grid
District Four - HCSO, June 1 - August 31, 2020



Possible Tactics

- CFS Reporting Tactics
- Problem-Oriented Projects

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_559 (Kennedy Ave off I-71)	Home Depot, Quality Inn, Lowe's	152	Theft (N = 66)	QOL (N = 62) Trouble = 32 Suspicious/Disorder = 24	Violent (N = 13) DV = 6 Non-DV = 7
UC_536 (Montgomery Rd & Section Ave)	UDF, Grandtree Apartments, Residential Area	106	QOL (N = 56) Suspicious = 27 Trouble = 14	Violent (N = 31) DV = 16 Non-DV = 15	
UC_539 (NE Silverton)	Montgomery Plaza Apartments, Twin Pines, Commercial Area	68	QOL (N = 36) Suspicious = 17 Trouble = 12	Violent (N = 15) DV = 9 Non-DV = 6	
UC_538 (NW Silverton)	Gatewood Ln Apartments	61	QOL (N = 30) Disorder = 10 Damaging/Juv = 14	Violent (N = 15) DV = 7 Non-DV = 8	

District Five

Anderson TWP

Date Range: June 1 – August 31, 2020

District Five Overview

- Large Geographic Area
 - Commercial Strip (Beechmont Ave)
 - Residential Communities – Winding, Single In/Out, Remote
- 24 hot grids, ~8 each class (CFS \geq 12 total CFS)
 - Most “hot” grids adjacent to Beechmont Ave
 - Others have driving facility

CFS Counts by Category and Jurisdiction

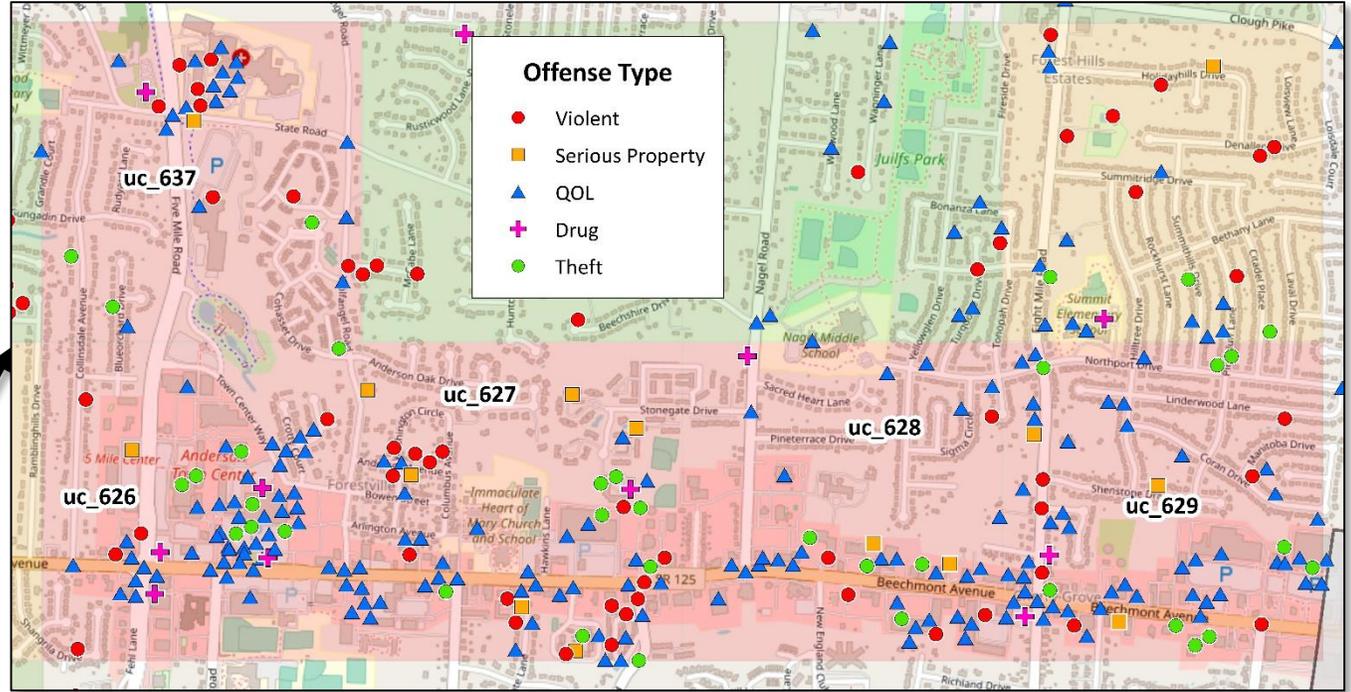
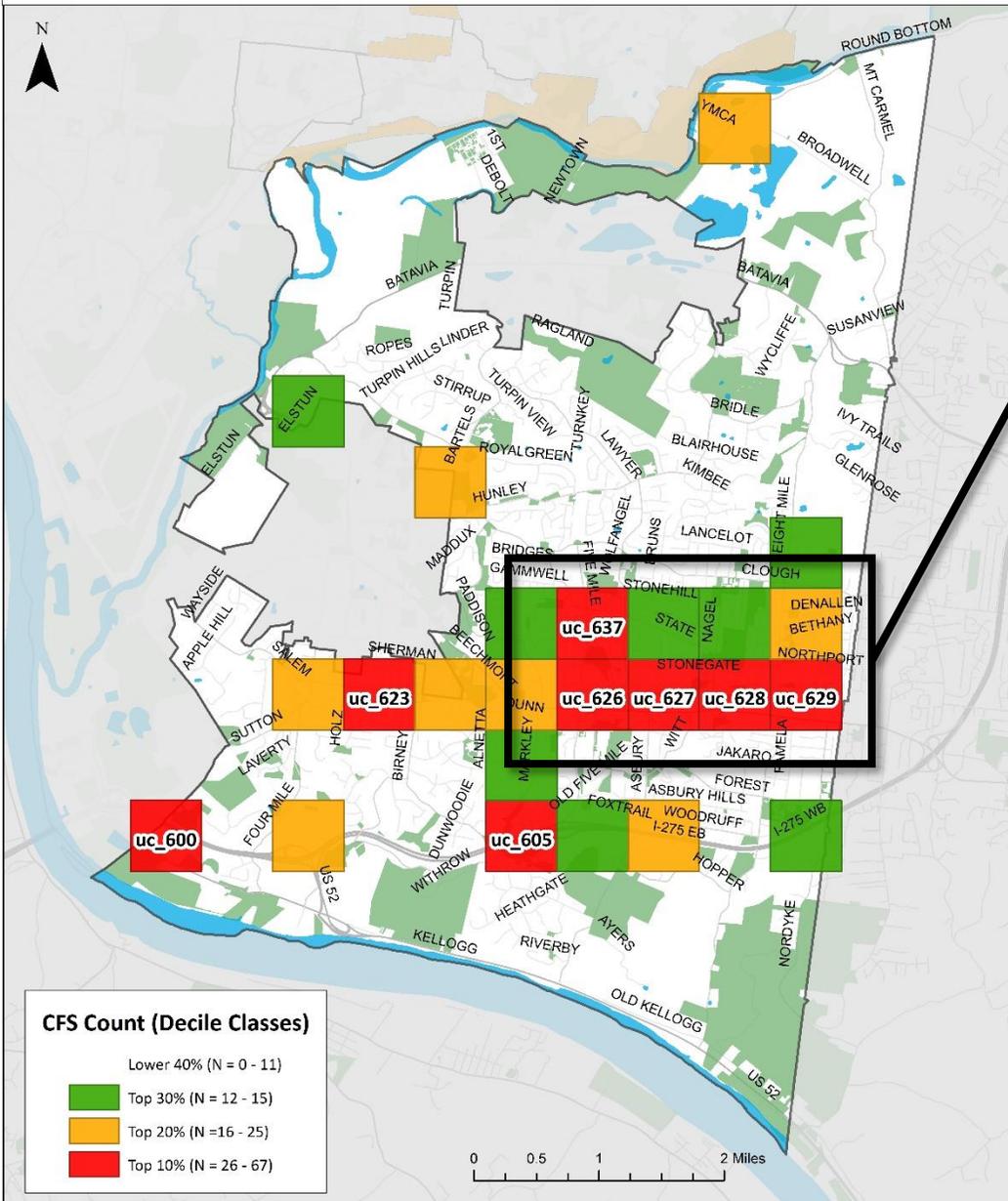
June 1 – August 31, 2020

	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
D1	168 (16.2%)	142 (13.7%)	61 (5.9%)	83 (8%)	39 (3.8%)	545 (52.5%)	1,038
D2 (Green)	219 (12.4%)	198 (11.2%)	74 (4.2%)	228 (12.9%)	65 (3.7%)	983 (55.6%)	1,767
Lincoln Heights	50 (21.6%)	39 (16.9%)	17 (7.4%)	12 (5.2%)	8 (3.5%)	105 (45.5%)	231
D3 (Sycamore & Symmes)	102 (8.8%)	85 (7.3%)	51 (4.4%)	181 (15.6%)	39 (3.4%)	699 (60.4%)	1,157
D4 (Silverton & Columbia)	57 (9.4%)	53 (8.8%)	33 (5.5%)	112 (18.5%)	16 (2.6%)	334 (55.2%)	605
D5 (Anderson)	83 (8.7%)	71 (7.5%)	51 (5.4%)	89 (9.4%)	31 (3.3%)	626 (65.8%)	951



Distribution of Total Calls for Service by 3000ft Grids

District Five - HCSO, June 1 - August 31, 2020*



Possible Tactics

- CFS Reporting Tactics
- Problem-Oriented Projects
- High-Visibility Patrols/Business Outreach

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
uc_629	Target, Speedway, Chic-Fil-A	67	QOL (N = 46) Suspicious = 26 Disorder = 9 Trouble = 6	Theft (N = 9)	
uc_626	Anderson Town Center, Kroger, Various Commercial Est.	66	QOL (N = 48) Suspicious = 31 Trouble = 9	Theft (N = 8)	
uc_627	SEM Retirement Community, McDonalds, Various Commercial Est.	64	QOL (N = 34) Suspicious = 18 Trouble = 8	Violent (N = 16) DV = 12 Non-DV = 4	
uc_600	Coney Island, Belterra Park, Altercrest	56	QOL (N = 40) Suspicious = 24 Trouble = 14	Violent (N = 7) DV = 0 Non-DV = 7	
uc_623	Brooke Ave (Single Family Homes), Mixed	43	QOL (N = 27) Suspicious = 18	Violent (N = 7) DV = 1 Non-DV = 6	

Questions?

October Spatial Crime Analysis

Hamilton County Sheriff's Office

Institute of Crime Science

All HCSO Jurisdictions

Date Range: July 1 – September 30, 2020

(Symmes Township: May 1 – July 31, 2020)

CFS Counts by Category and Division

	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS	
D1	146 (17.5%)	48 (5.7%)	100 (12%)	62 (7.4%)	29 (3.5%)	451 (53.9%)	836	- 202 (-19.5%)
D2 (Green)	181 (11.8%)	78 (5.1%)	153 (10%)	227 (14.8%)	52 (3.4%)	839 (54.8%)	1,530	- 237 (-13.4%)
Lincoln Heights	28 (19.7%)	9 (6.3%)	21 (14.8%)	7 (4.9%)	8 (5.6%)	69 (48.6%)	142	- 89 (-38.5%)
D3 (Sycamore & Symmes)	107 (9.4%)	48 (4.2%)	87 (7.6%)	181 (15.9%)	39 (3.4%)	678 (59.5%)	1,140	- 17* (-1.5%)
D4 (Silverton & Columbia)	49 (9.8%)	31 (6.2%)	46 (9.2%)	85 (16.9%)	13 (2.6%)	278 (55.4%)	502	- 103 (-17.0%)
D5 (Anderson)	76 (9.8%)	38 (4.9%)	57 (7.4%)	64 (8.3%)	22 (2.8%)	518 (66.8%)	775	- 176 (-18.5%)

Note: Cells contain count of call for service category for each division and the proportion of it's total CFS

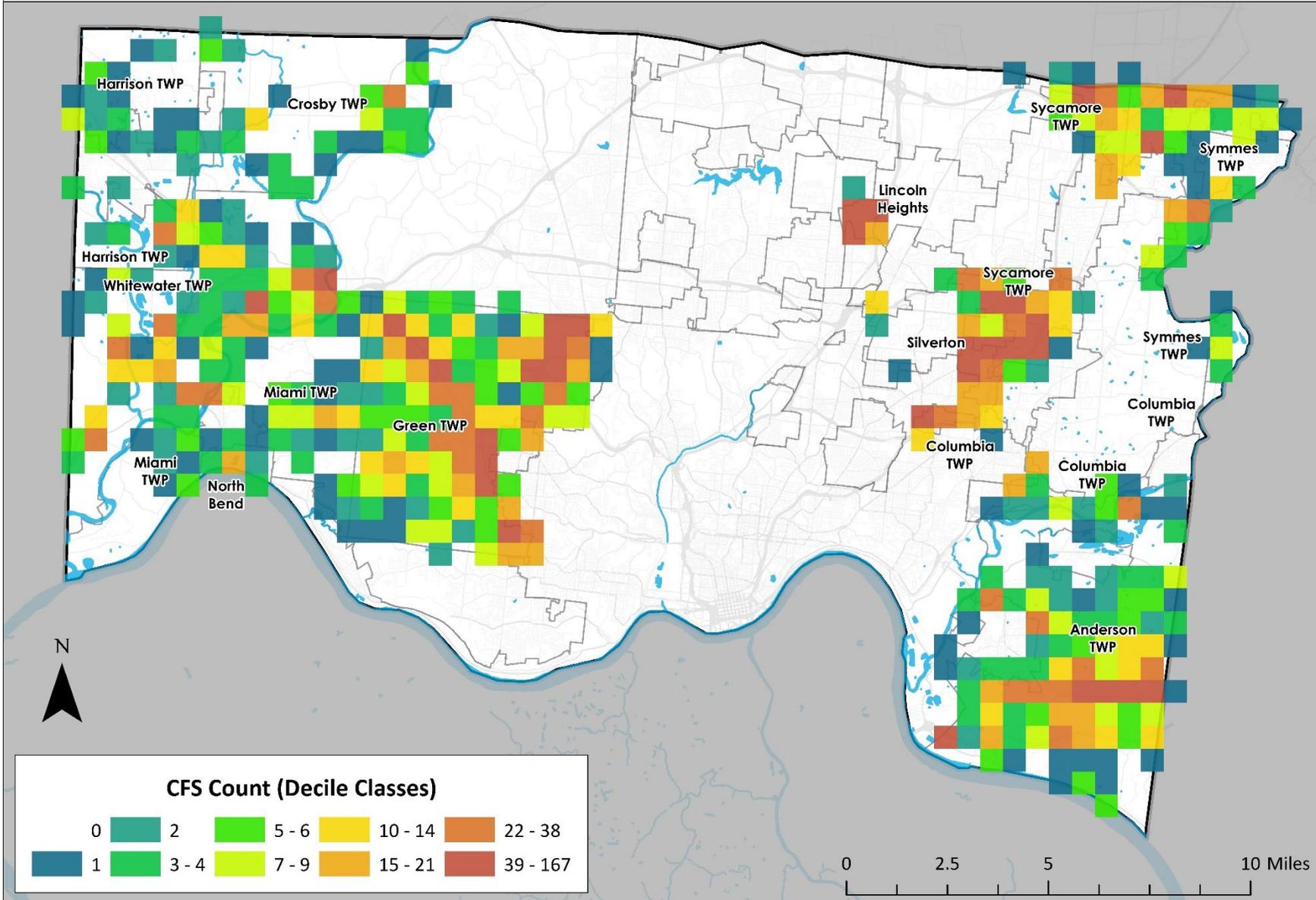


Distribution of Total Calls for Service by 3000ft Grids

July 1 - September 30, 2020*



3000 ft Grids



- Average of 18 streets per grid
 - Range: 0 - 139
- Large Areas than Kernel Density
- Overall, Id-ed the same places

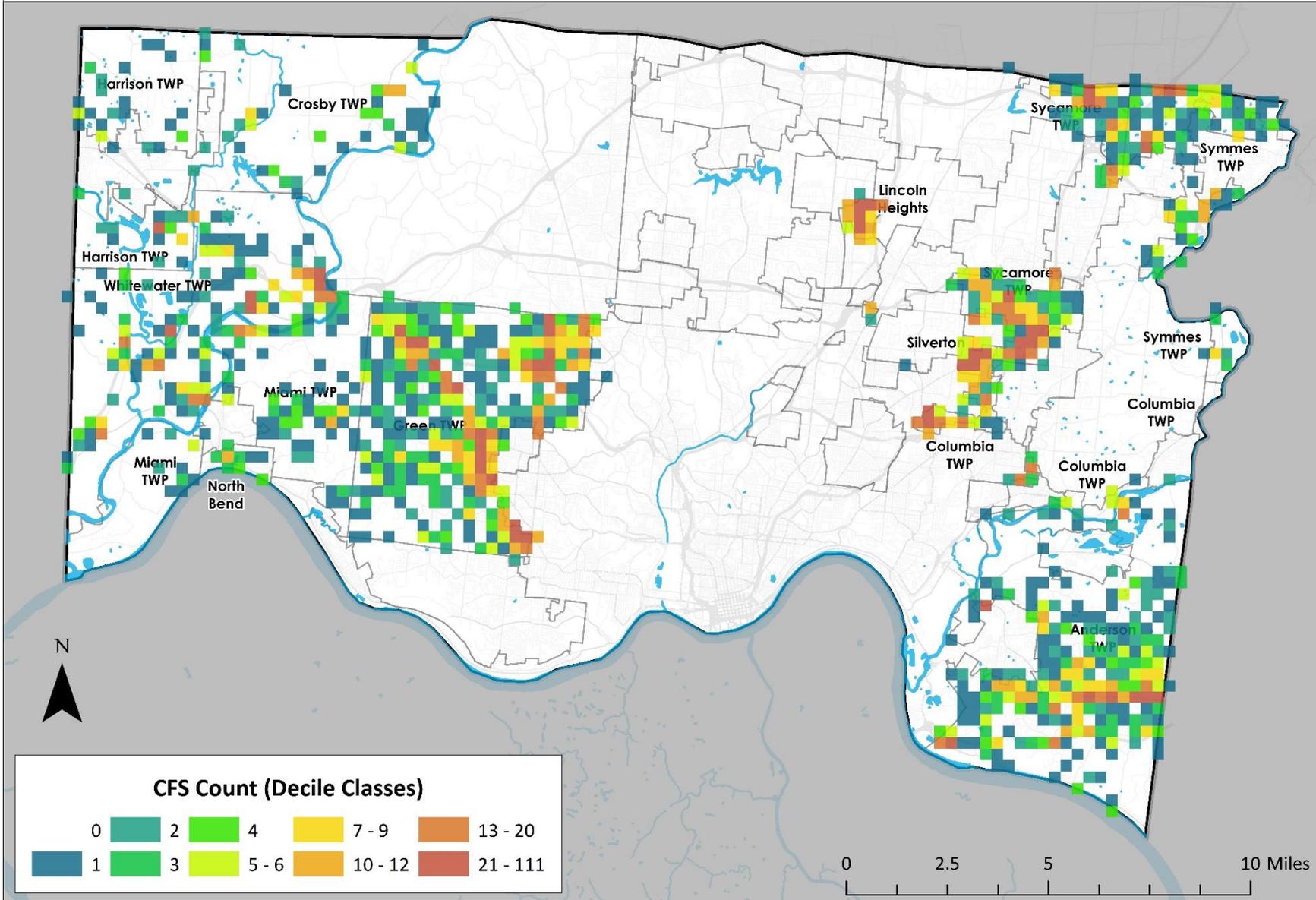


Distribution of Total Calls for Service by 1500ft Grids

July 1 - September 30, 2020*



1500 ft Grids



- Average of 5 streets per grid
 - Range: 0 - 57
- Overall, ID-ed the same places, but split a few hot spots
- ID-ed areas good for problem-solving

District One

Harrison TWP, Crosby TWP, Whitewater TWP, Miami TWP, North Bend

Date Range: July 1 – September 30, 2020

District One Overview

- 26 grids with 10+ Total Calls for Service
- Most “Hot” Grids Located near Border of Whitewater & Miami
 - Contain Most “Crossover” Grids
- Compared to Last Month’s Analysis
 - Large Raw Reduction in Whitewater across all Call Types
 - Grids between WW and Miami Larger (Relative) Count
 - Grid at Elizabethtown Lower (Relative) Count

CFS Counts by Category and Jurisdiction

July 1 – September 30, 2020

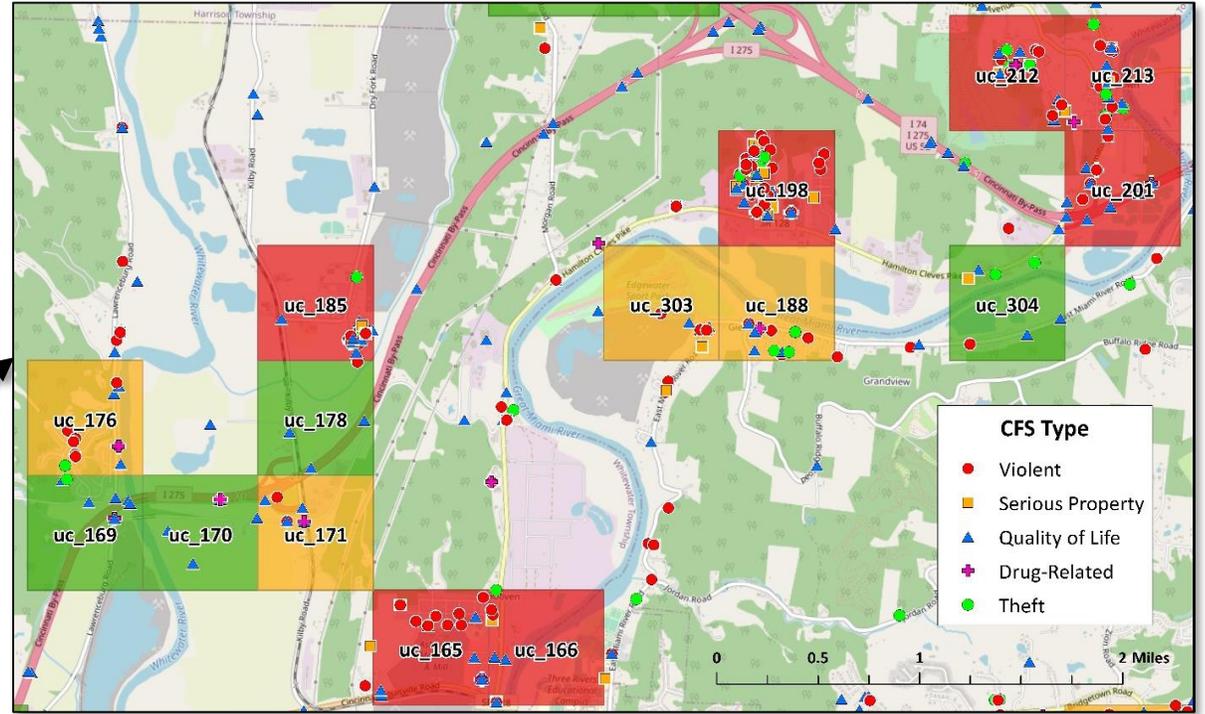
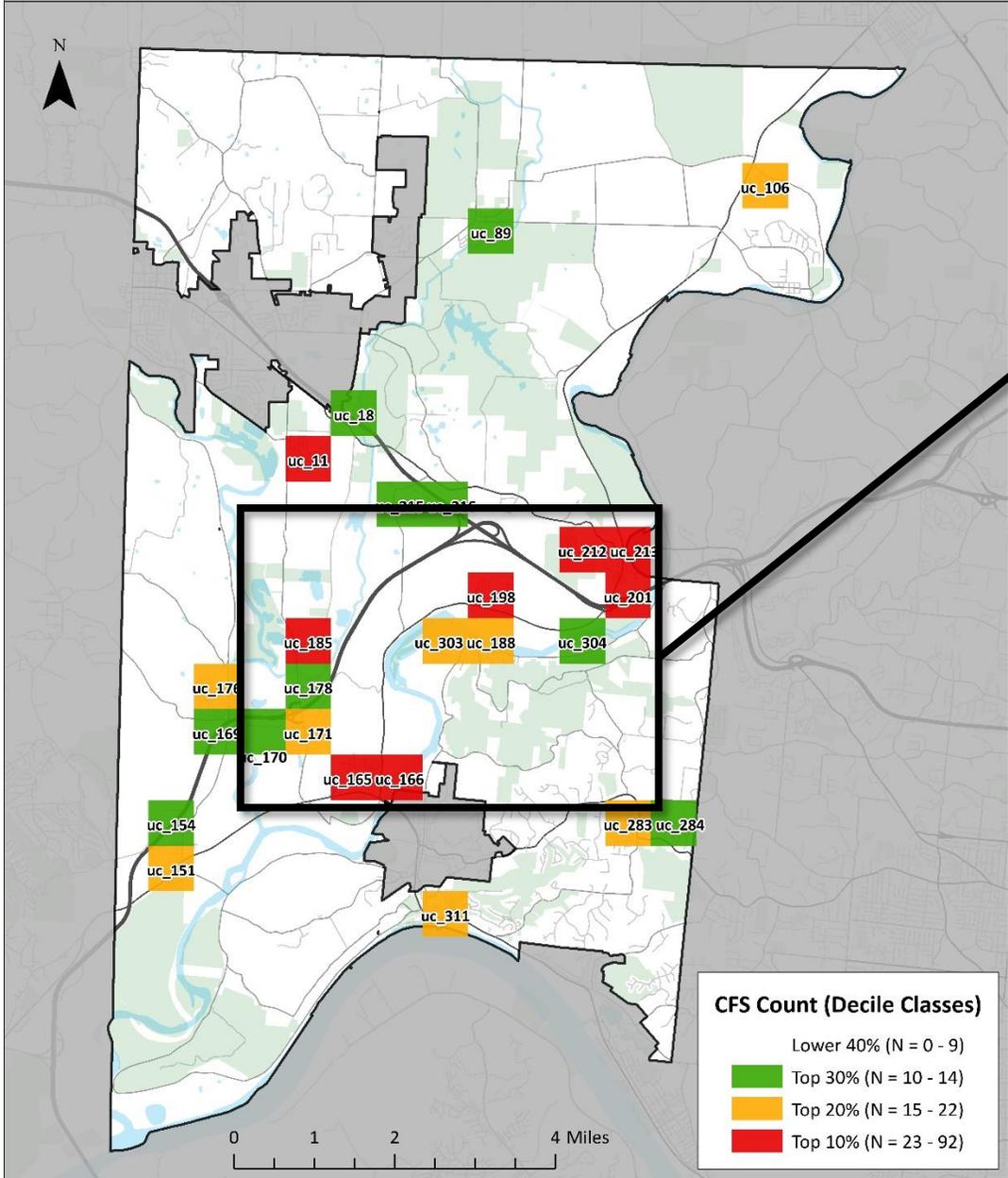
Jurisdiction	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS	
Harrison TWP	19 (17%)	23 (20.5%)	4 (3.6%)	5 (4.5%)	2 (1.8%)	59 (52.7%)	112	-9 (-7.4%)
Crosby TWP	21 (19.6%)	10 (9.3%)	13 (12.1%)	8 (7.5%)	4 (3.7%)	51 (47.7%)	107	+7 (+7.0%)
Whitewater TWP	69 (15.5%) (-28.1%)	48 (10.8%) (-43.5%)	17 (3.8%)	28 (6.3%)	16 (3.6%)	266 (59.9%) (-20.6%)	444	-170 (-27.7%)
Miami TWP	31 (22%)	17 (12.1%)	13 (9.2%)	19 (13.5%)	3 (2.1%)	58 (41.1%)	141	-25 (-15.1%)
North Bend	6 (18.8%)	2 (6.2%)	1 (3.1%)	2 (6.2%)	4 (12.5%)	17 (53.1%)	32	-5 (-13.5%)

Note: Cells contain count of call for service category for each jurisdiction and the proportion of it's total CFS



Distribution of Total Calls for Service by 3000ft Grid

District One - HCSO, July 1 - September 30, 2020



Possible Tactics

- Hot Spot Patrols
- Problem-Solving Programs
- Domestic Violence Focused Deterrence
- CPTED Eval / Space Re-designs (Defensible Space)

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_198 (5700 Hamilton Cleves Rd)	Westbrooke Village MHP, Miamiview MHP	92	Violent (N = 42) DV (N= 24) Assault/Weapon (N = 11)	QOL (N = 28) Suspicious (N = 9) Trouble (N = 7)	Property (N = 18) Serious (9) Theft (9)
UC_213 (7060 Hamilton Cleves Rd)	WWTF Station, Miami Savings Bank, Apartment	45	QOL (N = 18) Suspicious (N = 11) Mixed	Violence (N = 18) DV (N = 9) Assault/Weapon (N = 5)	Serious Prop (N = 8) Theft (N = 5)
UC_165 (Hooven)	Kroger, Single-Family Home	36	QOL (N = 18) Suspicious (N = 13) Trouble (N = 4)	Violent (N = 14) Assault/Weapon (N = 6) DV (N = 5)	
UC_212 (8100 block of Mill St)	Miamiview Apartments	36	Violent (N = 17) DV (N = 13) Mixed	QOL (N = 9) Disorder (N = 4) Mixed	Theft (N = 5)

Remaining Top 10% (N = 31 CFS)

- UC 201 (Hamilton Cleves near I74 Ramp)
- UC 11 (8400 block of Kilby Rd): Rolling Acres MHP

District Two

Green TWP

Date Range: July 1 – September 30, 2020

District Two Overview

- More Commercial Area = More Heavily influenced by Theft / Shoplifting or Unruly Customers (QOL)
 - Adjacent to Major Thoroughfares (Harrison Ave, Glenway Ave)
- “Hot” Grids Concentrating in Commercial Areas (\geq 18 Total CFS)
 - Cheviot, Bridgetown, White Oak
- Compared to Last Month’s Analysis
 - Large Reduction Non-DV Violence, but Increase in Serious Property Crime
 - Very Little Geographic Change

CFS Counts by Category and Jurisdiction

July 1 – September 30, 2020

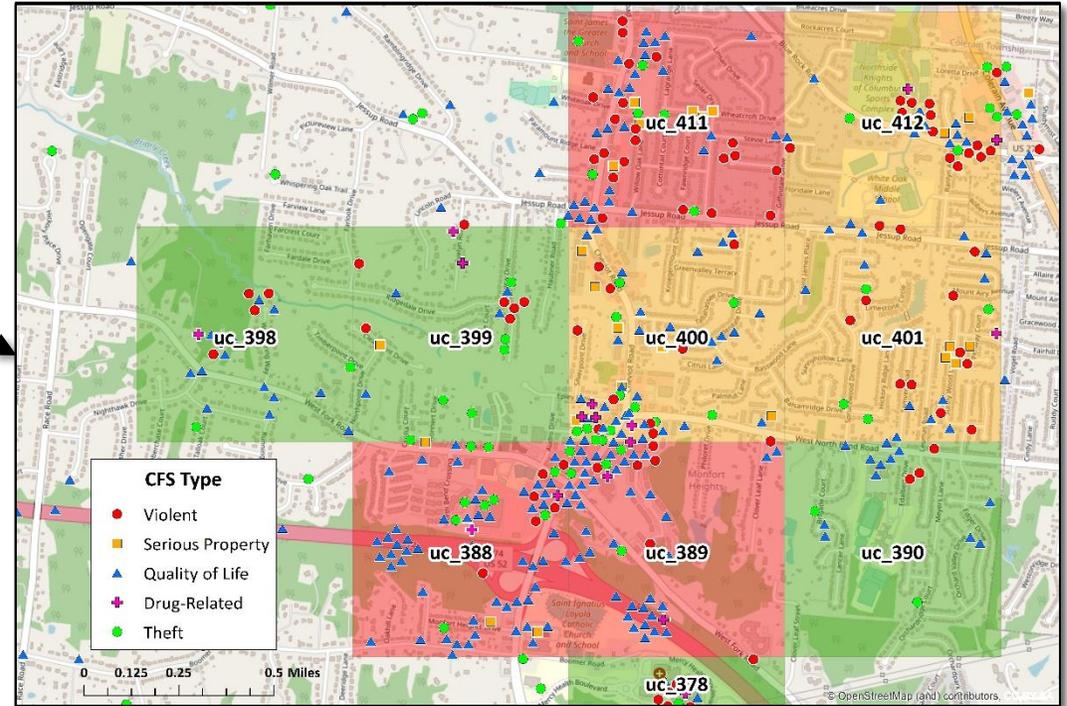
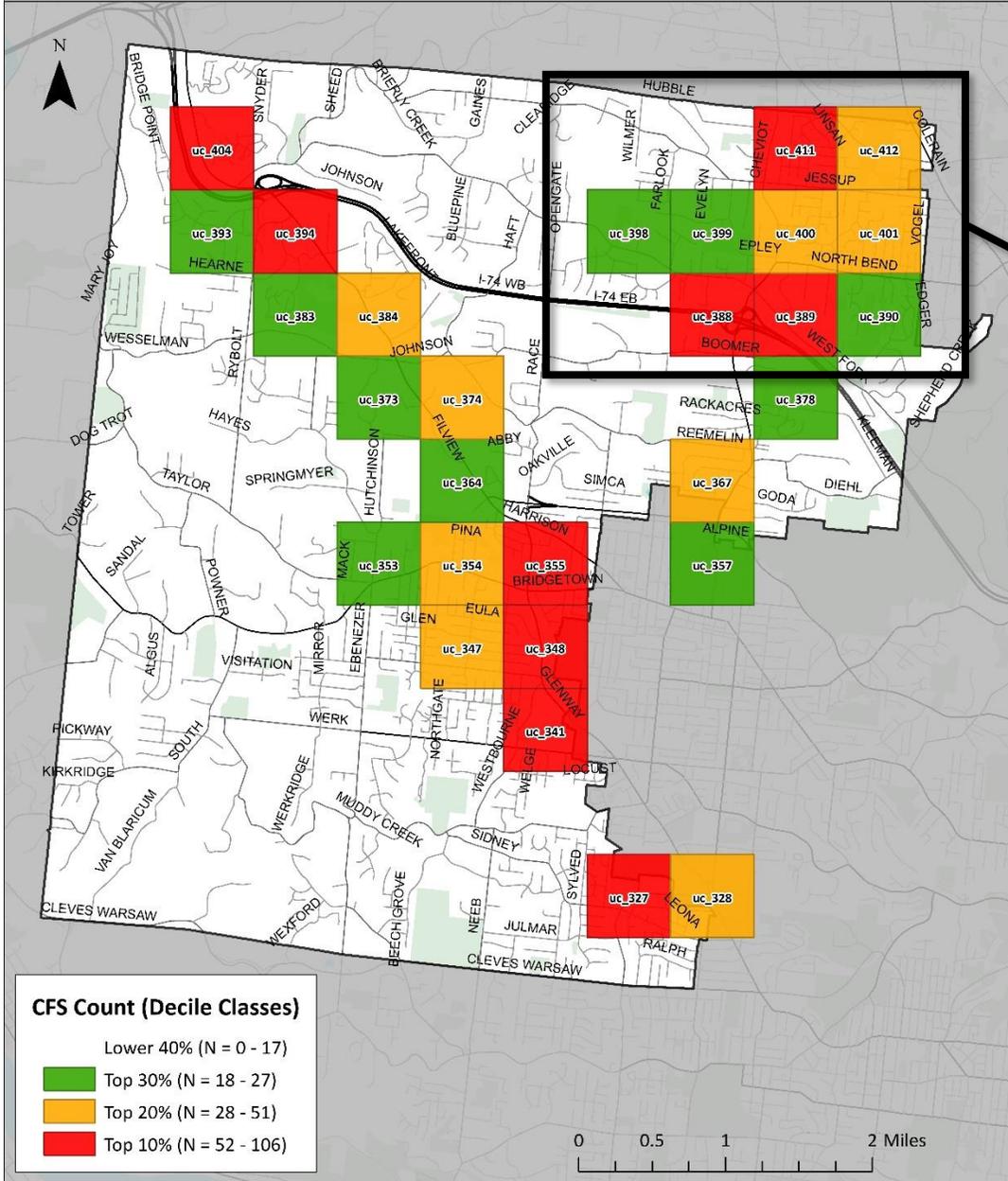
	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
D1	146 (17.5%)	48 (5.7%)	100 (12%)	62 (7.4%)	29 (3.5%)	451 (53.9%)	836
D2 (Green)	181 (11.8%)	78 (5.1%) (-60.1%)	153 (10%) (+108%)	227 (14.8%)	52 (3.4%)	839 (54.8%) (-14.6%)	1,530
Lincoln Heights	28 (19.7%)	9 (6.3%)	21 (14.8%)	7 (4.9%)	8 (5.6%)	69 (48.6%)	142
D3 (Sycamore & Symmes)	107 (9.4%)	48 (4.2%)	87 (7.6%)	181 (15.9%)	39 (3.4%)	678 (59.5%)	1140
D4 (Silverton & Columbia)	49 (9.8%)	31 (6.2%)	46 (9.2%)	85 (16.9%)	13 (2.6%)	278 (55.4%)	502
D5 (Anderson)	76 (9.8%)	38 (4.9%)	57 (7.4%)	64 (8.3%)	22 (2.8%)	518 (66.8%)	775

- 237
(-13.4%)



Distribution of Total Calls for Service by 3000ft Grid

District Two - HCSO, July 1 - September 30, 2020



Possible Tactics

- Altering Theft Reporting Practices
- CPTED Evaluations
- Problem-Solving Projects

CFS Counts by Category and Jurisdiction

Previous Month

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_355 (Bridgetown Rd & Glenway Ave)	Family Dollar, UDF, Walgreens	106	QOL (N = 68) Suspicious = 44 Trouble = 13	Violent (N = 22) DV = 10 Non-DV = 12	Theft (N = 10)
UC_394 (Harrison Ave off I-74)	Meijer Shopping Center, Holiday Inn, Skyline, Kohl's	98	QOL (N = 51) Suspicious = 37 Trouble = 9	Theft (N = 25)	Violent (N = 17) DV = 9 Non-DV = 8
UC_348 (Glenway Ave & Westbourne Dr)	Speedway, McDonalds, Chic-Fil-A, Western Bowl	86	QOL (N = 51) Suspicious = 23 Trouble = 18	Violent (N = 18) DV = 7 Non-DV = 11	Theft (N = 9)
UC_388 (Cheviot Rd off I-74)	Speedway, Sam's Club, Walgreen's	75	QOL (N = 53) Suspicious = 35 Trouble = 9	Theft (N = 11)	Violent (N = 6) DV = 2 Non-DV = 7
UC_327 (Anderson Ferry Rd, Sidney Rd)	Buffalo Wild Wings, City Limits Laundry & Tan, Sing-Family Home	66	QOL (N = 34) Suspicious = 9 Trouble = 15 Disorder = 5	Violent (N = 20) DV = 9 Non-DV = 11	Theft (N = 7)

Lincoln Heights

Date Range: June 1 – August 31, 2020

Lincoln Heights Overview

- Unique Characteristics
- Only 4 grids fit over LH
 - All Quadrants higher than *most* jurisdiction's Top 30% class
- Compared to Last Month's Analysis
 - Fewer CFS across all Call Types
 - More in SW Quadrant (Near 600 Block of Byrd Ave)
 - Same Micro-Concentrations / Hot Facilities

CFS Counts by Category and Jurisdiction

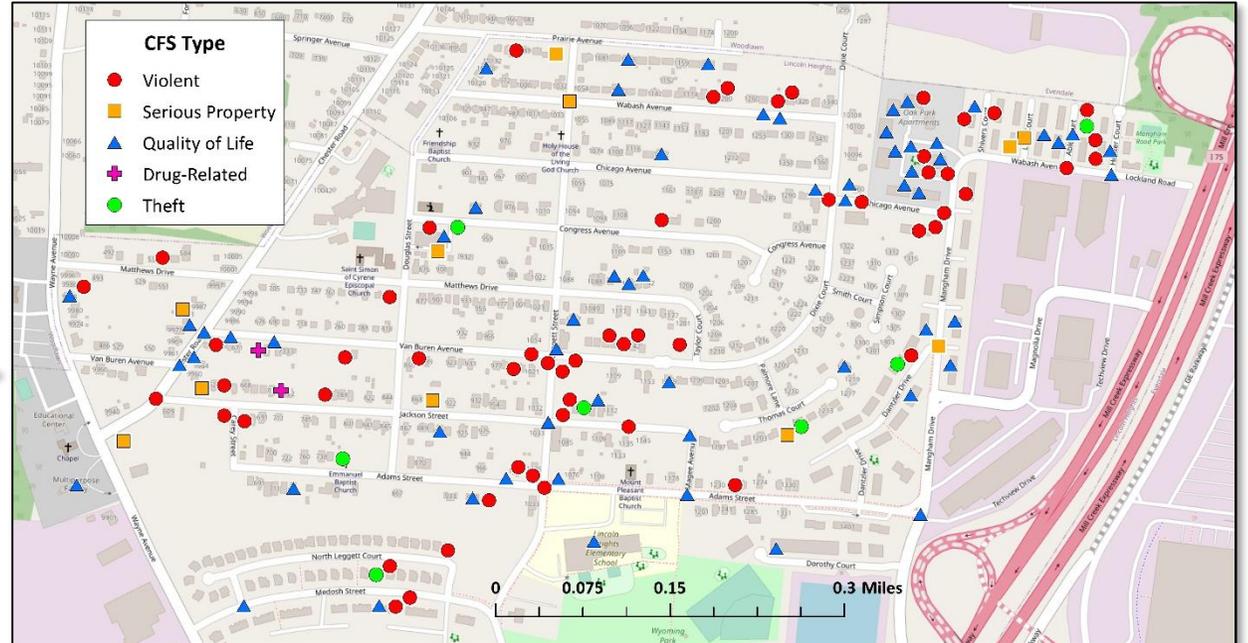
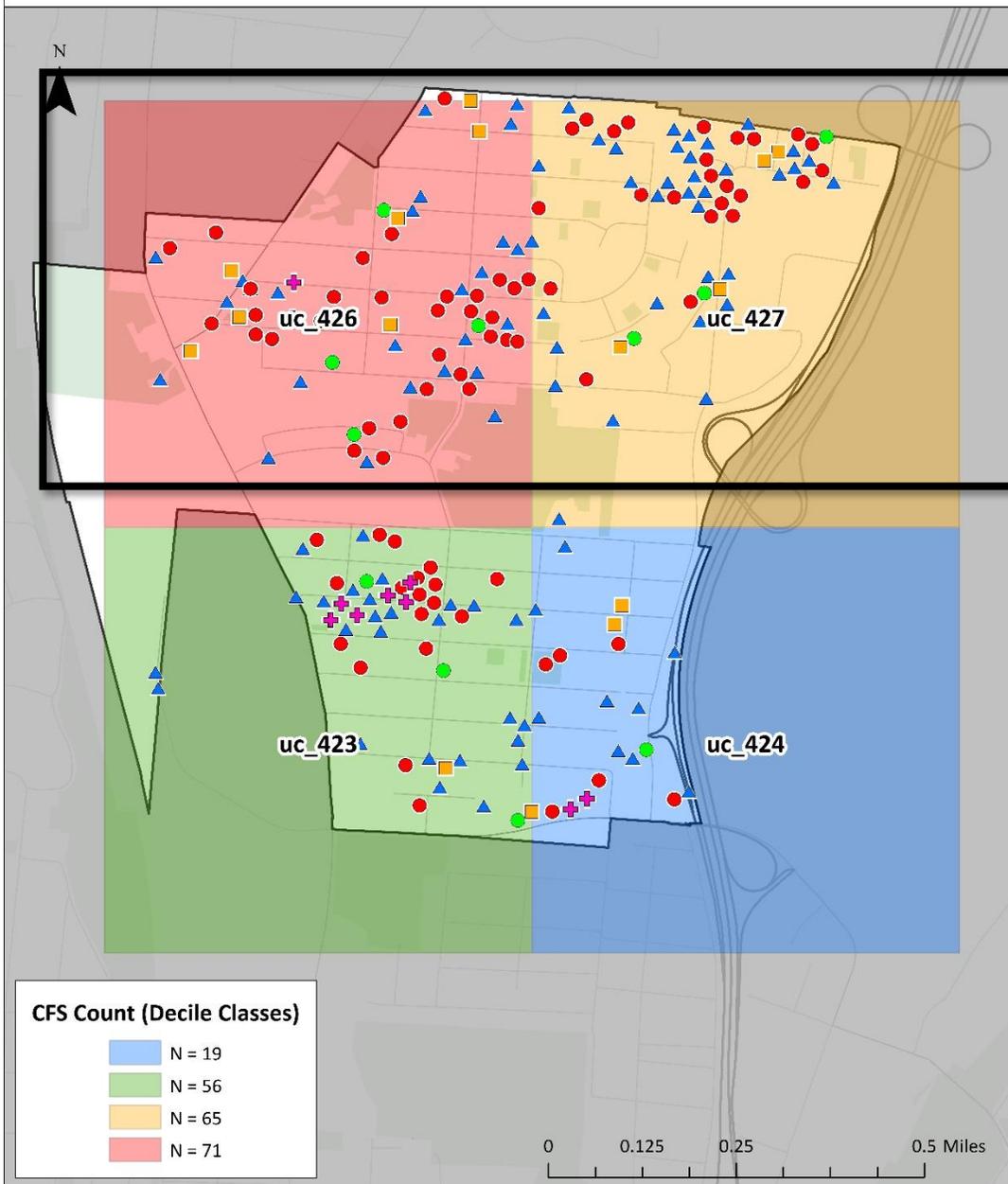
July 1 – September 30, 2020

	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
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D2 (Green)	181 (11.8%)	78 (5.1%)	153 (10%)	227 (14.8%)	52 (3.4%)	839 (54.8%)	1530
Lincoln Heights	28 (19.7%)	9 (6.3%) (-76.9%)	21 (14.8%)	7 (4.9%)	8 (5.6%)	69 (48.6%) (-34.3%)	142
D3 (Sycamore & Symmes)	107 (9.4%)	48 (4.2%)	87 (7.6%)	181 (15.9%)	39 (3.4%)	678 (59.5%)	1140
D4 (Silverton & Columbia)	49 (9.8%)	31 (6.2%)	46 (9.2%)	85 (16.9%)	13 (2.6%)	278 (55.4%)	502
D5 (Anderson)	76 (9.8%)	38 (4.9%)	57 (7.4%)	64 (8.3%)	22 (2.8%)	518 (66.8%)	775

- 89
(-38.5%)



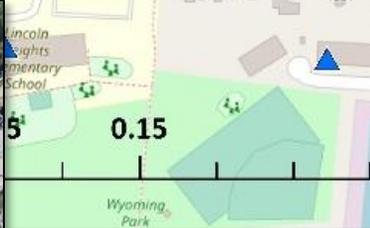
Distribution of Total Calls for Service by 3000ft Grid
Lincoln Heights, July 1 - September 30, 2020



Possible Tactics

- Co-Offending Networks Interventions
- Hot Spot Patrols
- Problem-Oriented Projects
- Domestic Violence Focused Deterrence

CFS Type



CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_426 (NW Quadrant)	Friendship Plaza, Our Corner, Apartments	71	Violent (N = 31) DV = 18 Non-DV = 13	QOL (N = 28) Suspicious/Disorder = 17 Mix	Serious Prop (N = 6) Burglary = 4 Auto = 2
UC_427 (NE Quadrant)	Marianne Terrace Apartments, Oak Park Apartments	65	QOL (N = 34) Suspicious = 14 Disorder = 6	Violent (N = 24) DV = 13 Non-DV = 11 (mix)	
UC_423 (SW Quadrant)	Residential Area	56	QOL (N = 27) Suspicious = 15 Disorder = 8	Violent (N = 18) DV = 12 Non-DV = 6	Drug (N = 6)
UC_424 (SE Quadrant)	Residential Area	19	Violent (N = 6) DV = 2 Non-DV = 4	QOL (N = 8) Trouble = 4 Suspicious = 4	

District Three

Sycamore TWP & Symmes TWP

Sycamore Date Range: July 1 – September 30, 2020

Symmes Date Range: May 1 – July 31, 2020

District Three Overview

- Houses Major Crime Generator / Attractor (Kenwood Towne Centre)
 - Grid 440 – Highest Total CFS Count in HCSO area
- 19 “Hot” Grids \geq 17 Total CFS
 - About Half among Sycamore & Symmes
 - Largely surrounding Kenwood Towne Centre
- Compared to Last Month’s Analysis
 - Very little Change
 - ** No New Data for Symmes Township

CFS Counts by Category and Jurisdiction

July 1 – September 30, 2020*

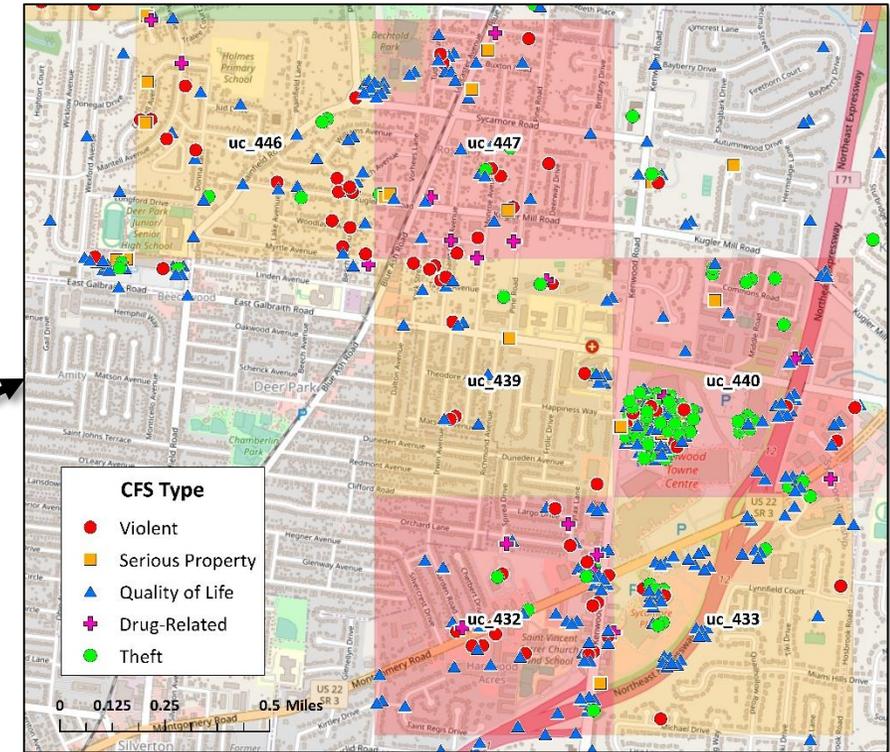
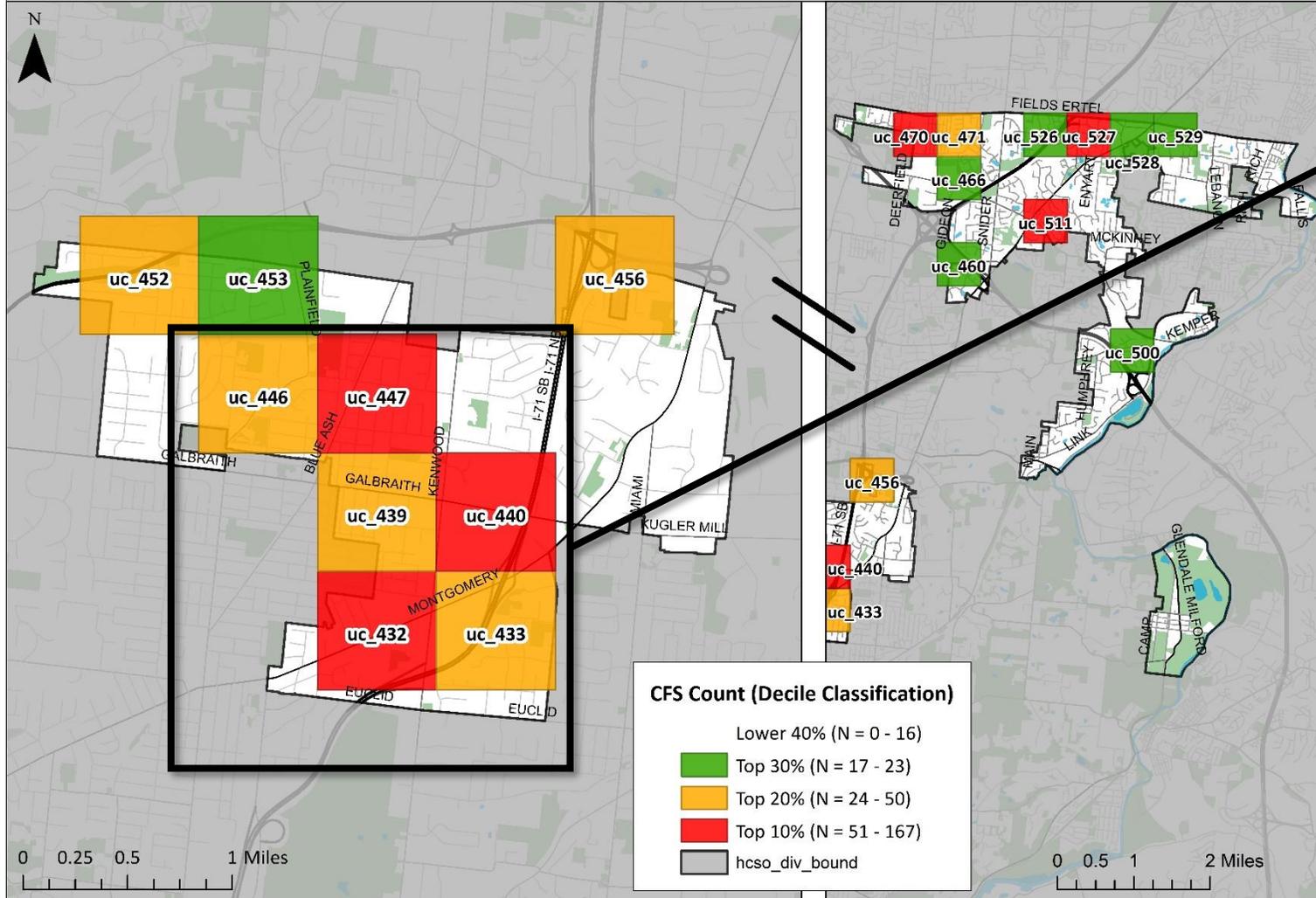
Jurisdiction	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
Sycamore TWP	80 (10.2%)	64 (8.2%)	32 (4.1%)	132 (16.8%)	26 (3.3%)	451 (57.5%)	785
Symmes TWP	27 (7.6%)	23 (6.5%)	16 (4.5%)	49 (13.8%)	13 (3.7%)	227 (63.9%)	355
Total D3	107 (9.4%)	48 (4.2%)	87 (7.6%)	181 (15.9%)	39 (3.4%)	678 (59.5%)	1,140 ^{-17*} (-1.5%)

* Note: Symmes data includes calls made between May and July 31, 2020. August data was unavailable, therefore, the most recent 3 months were used for this jurisdiction.



Distribution of Total Calls for Service by 3000ft Grid

District Three - HCSO, July 1 - September 30, 2020*



Possible Tactics

- CFS Reporting Tactics
- Problem-Oriented Projects

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_440 (Kenwood TC - Main)	Kenwood Town Center, Shell Gas Station	167	Theft (N = 79)	QOL (N = 66) Suspicious = 37 Trouble = 20	
UC_432 (Kenwood TC - SW)	BP, Wendy's, Fifth Third, Trader Joe's	80	QOL (N = 51) Suspicious = 38 Trouble = 7	Violent (N = 16) DV = 11 Non-DV = 5	
UC_470 (Highpoint)	Village Green MHP, Residential Area	70	QOL (N = 44) Disorder = 22 Suspicious = 12	Violent (N = 17) DV = 8 Non-DV = 9	
UC_527 (Fields Ertel Rd & Mason Rd)	Mason Way Ct Apartments, Comfort Inn, Commercial Area	58	QOL (N = 40) Suspicious = 15 Trouble = 15		
UC_447 (Blue Ash Rd & Sycamore Rd)	Bechtold Park, Residential Area	57	QOL (N = 35) Suspicious = 19 Disorder = 11	Violent (N = 9) DV = 5 Non-DV = 4	

Concentration w/in Kenwood Towne Centre

Store	Violent	Quality of Life	Theft	Total
Macy's	1	1	18	20 (18%)
Dillards	0	3	6	9 (8.1%)
Nordstrom	1	3	0	4 (3.6%)
Cheesecake Factory	1	2	1	4 (3.6%)
Lenscrafters	0	1	3	4 (3.6%)
Forever 21	1	0	2	3 (2.7%)
Total Kenwood	11	31	63	111

District Four

Village of Silverton & Columbia Township

Date Range: July 1 – September 30, 2020

District Four Overview

- Unique Area & Bordering Kenwood Towne Centre
- “Hot” Grids Located only on Main Land (CFS \geq 24 Total CFS)
- Compared to Last Month’s Analysis
 - Little Change, with Exception of QOL (between 10 and 20% Reduction)
 - Little Geographic Change

CFS Counts by Category and Jurisdiction

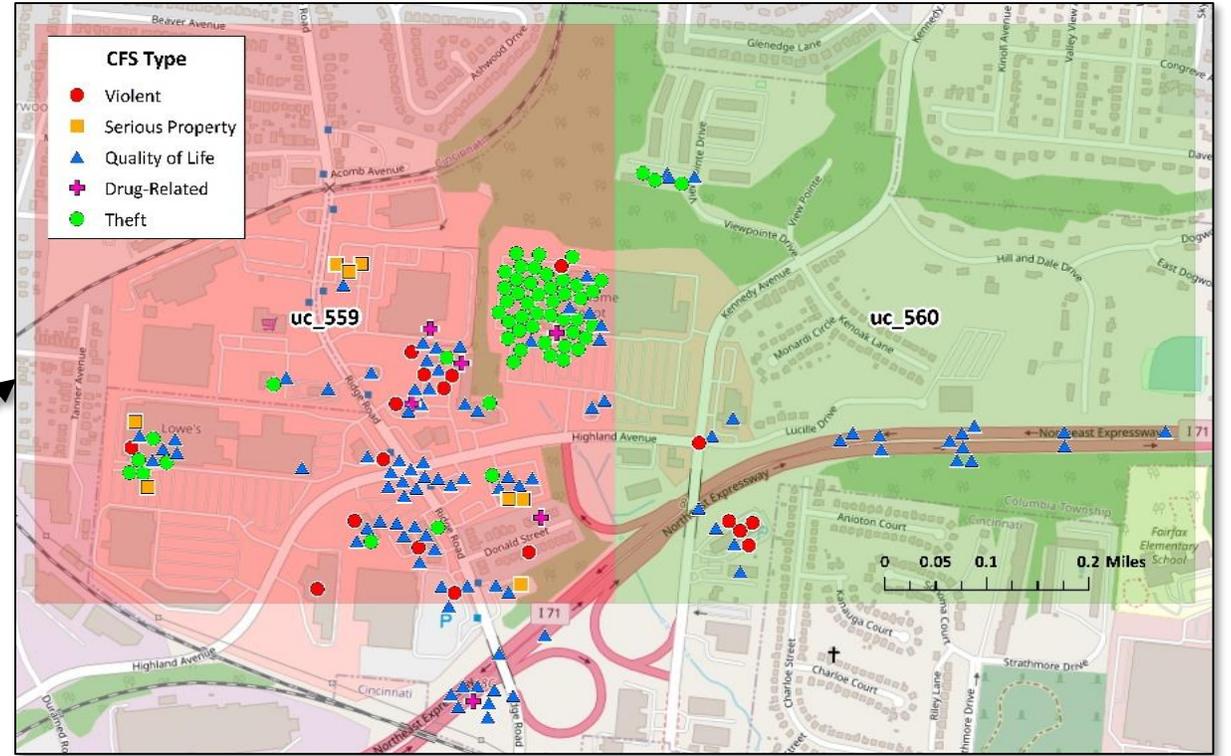
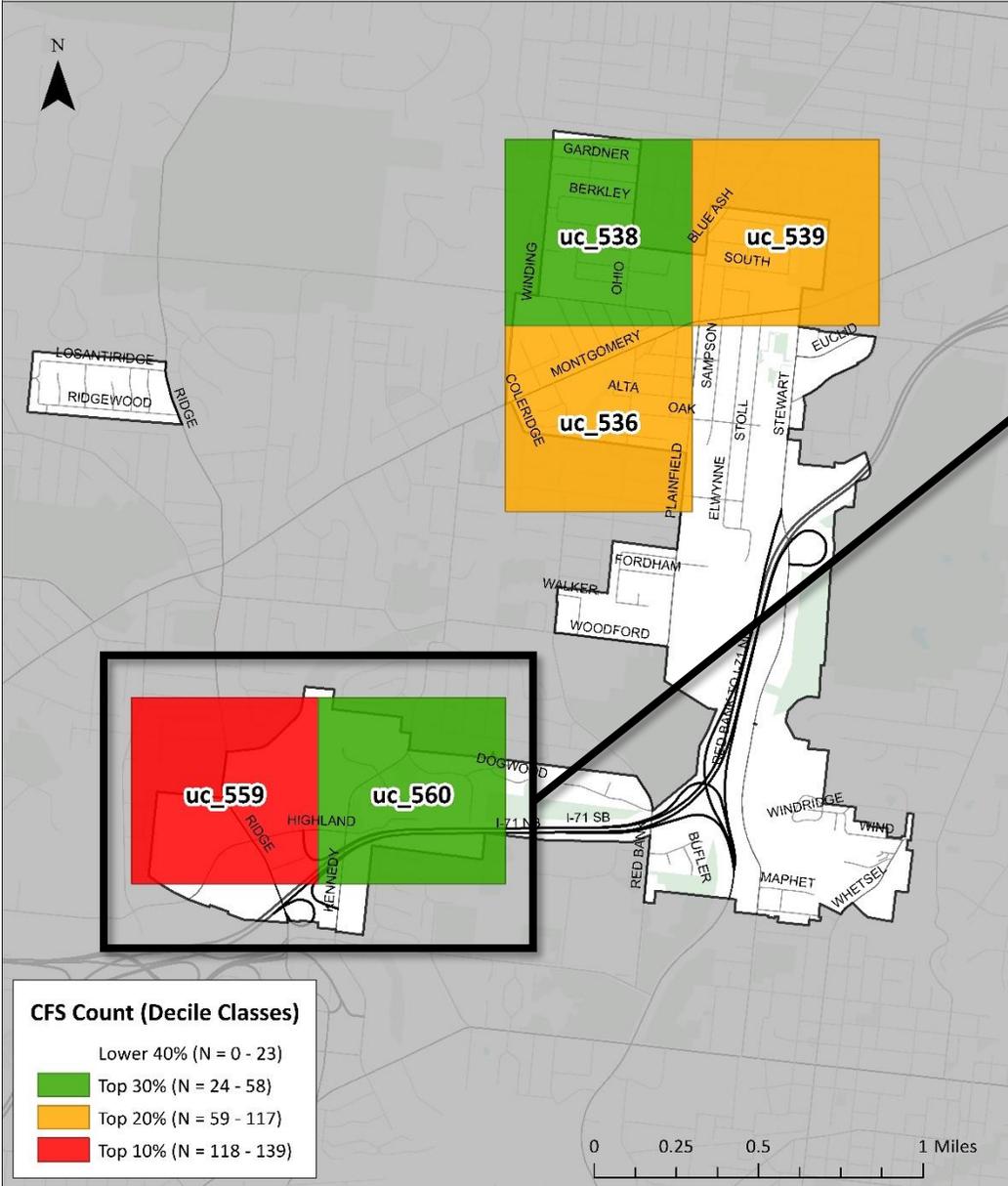
July 1 – September 31, 2020

Jurisdiction	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
Village of Silverton	28 (11.9%)	28 (11.9%)	19 (8.1%)	24 (10.2%)	6 (2.5%)	131 (55.5%) (-22.5%)	236
Columbia TWP	21 (7.9%)	18 (6.8%)	12 (4.5%)	61 (22.9%)	7 (2.6%)	147 (55.3%) (-10.5%)	266
Total D4	49 (9.8%)	31 (6.2%)	46 (9.2%)	85 (16.9%)	13 (2.6%)	278 (55.4%)	502 -103 (-17.0%)



Distribution of Total Calls for Service by 3000ft Grid

District 4 - HCSO, July 1 - September 30, 2020



Possible Tactics

- CFS Reporting Tactics
- Problem-Oriented Projects

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_559 (Kennedy Ave off I-71)	Home Depot, Quality Inn, Lowe's, Shell Gas Station, Dollar General	139	QOL (N = 60) Trouble = 26 Suspicious/Disorder = 27	Theft (N = 53)	Violent (N = 13) DV = 8 Non-DV = 5
UC_536 (Montgomery Rd & Section Ave)	UDF, Grandtree Apartments, Beans & Brew, Residential Area	117	QOL (N = 61) Suspicious = 27 Trouble = 17 Disorder = 11	Violent (N = 31) DV = 15 Non-DV = 16	
UC_539 (NE Silverton)	Montgomery Plaza Apartments, Twin Pines, Commercial Area	68	QOL (N = 37) Suspicious = 16 Trouble = 15	Violent (N = 16) DV = 12 Non-DV = 4	
UC_538 (NW Silverton)	Gatewood Ln Apartments	58	QOL (N = 28) Disorder = 10 Suspicious = 10	Violent (N = 18) DV = 10 Non-DV = 8	

District Five

Anderson TWP

Date Range: July 1 – September 30, 2020

District Five Overview

- Large Geographic Area
 - Commercial Strip, Residential Communities, Single Facilities
- 26 hot grids (CFS \geq 10 total CFS)
 - Most “Hot” Grids Adjacent to Beechmont Ave
 - Others have “Hot” Facility
- Compared to Last Month’s Analysis
 - Large Reduction in Non-DV Violence and QOL
 - No Geographic Change

CFS Counts by Category and Jurisdiction

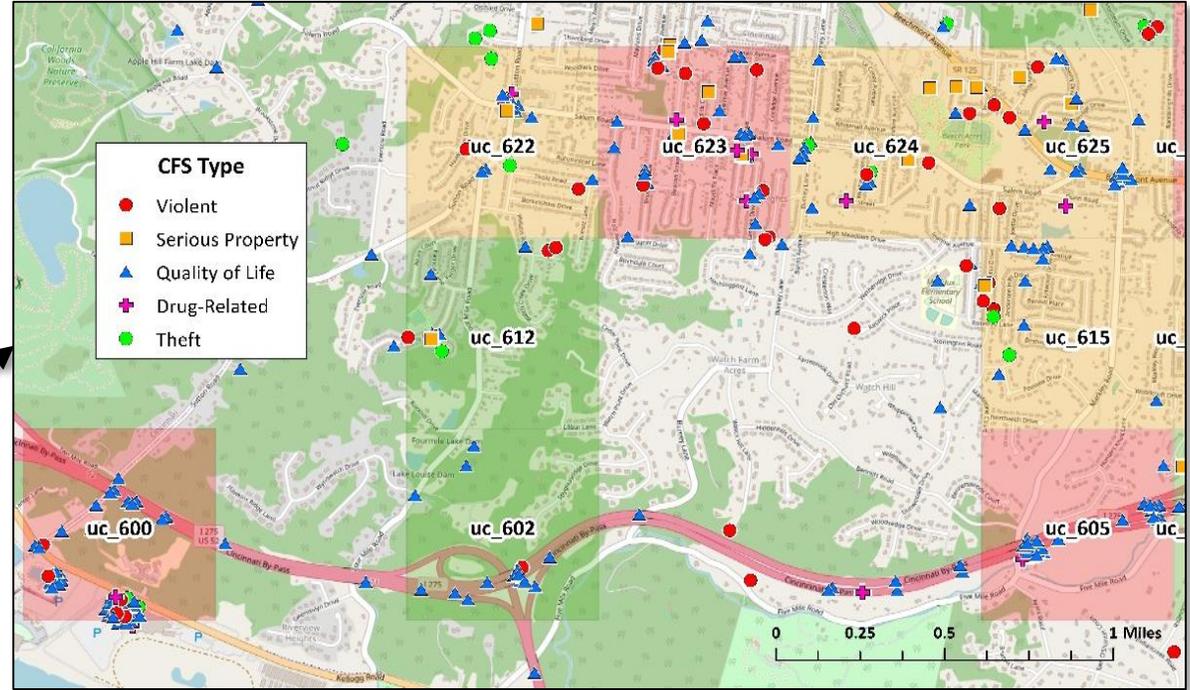
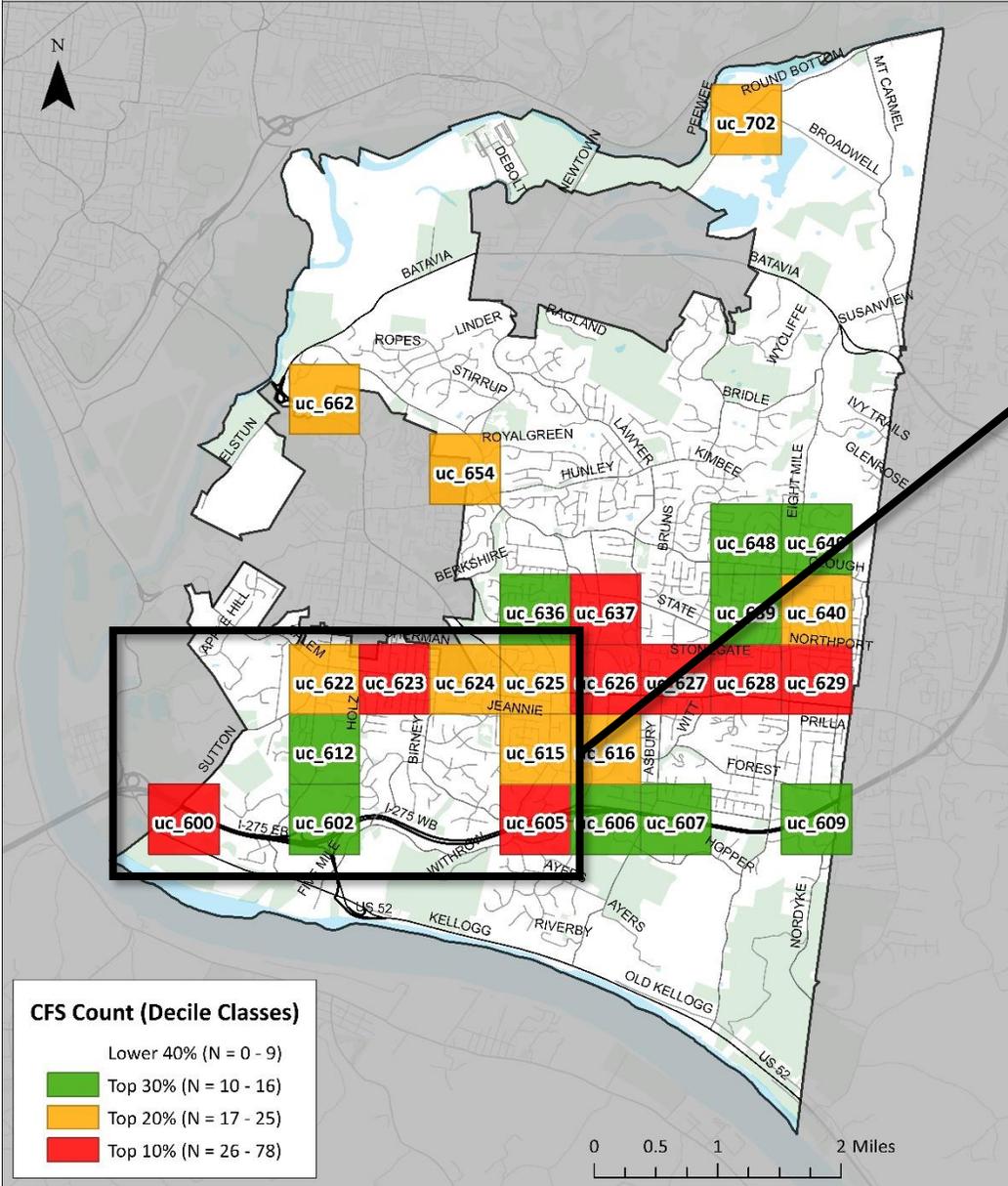
July 1 – September 30, 2020

	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS	
D1	146 (17.5%)	48 (5.7%)	100 (12%)	62 (7.4%)	29 (3.5%)	451 (53.9%)	836	
D2 (Green)	181 (11.8%)	78 (5.1%)	153 (10%)	227 (14.8%)	52 (3.4%)	839 (54.8%)	1530	
Lincoln Heights	28 (19.7%)	9 (6.3%)	21 (14.8%)	7 (4.9%)	8 (5.6%)	69 (48.6%)	142	
D3 (Sycamore & Symmes)	107 (9.4%)	48 (4.2%)	87 (7.6%)	181 (15.9%)	39 (3.4%)	678 (59.5%)	1140	
D4 (Silverton & Columbia)	49 (9.8%)	31 (6.2%)	46 (9.2%)	85 (16.9%)	13 (2.6%)	278 (55.4%)	502	
D5 (Anderson)	76 (9.8%)	38 (4.9%)	57 (7.4%)	64 (8.3%)	22 (2.8%)	518 (66.8%)	775	- 176 (-18.5%)
		(-46.5%)				(-17.3%)		



Distribution of Total Calls for Service by 3000ft Grid

District 5 - HCSO, July 1 - September 30, 2020



Possible Tactics

- CFS Reporting Tactics
- **Problem-Oriented Projects**
- High-Visibility Patrols/Business Outreach

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total CFS Count	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
uc_629	Target, Speedway, Chic-Fil-A, Dollar Tree, Assorted Fast Food / Convenience	78	QOL (N = 50) Suspicious = 32 Disorder = 10 Trouble = 5	Theft (N = 13)	
uc_626	Anderson Town Center, Kroger, Various Commercial Est.	72	QOL (N = 57) Suspicious = 41 Trouble = 8	Theft (N = 7)	
uc_627	SEM Retirement Community, McDonalds, Ollie's, Various Commercial Est.	64	QOL (N = 30) Suspicious = 19 Trouble = 6	Violent (N = 22) DV = 12 Non-DV = 10	
uc_600	Coney Island, Belterra Park, Altercrest	61	QOL (N = 46) Suspicious = 22 Trouble = 21	Violent (N = 6) DV = 2 Non-DV = 4	
uc_628	Cincinnati Used Auto Sales, Mercy Health, Assorted Fast Food/Convenience Stores	41	QOL (N = 27) Suspicious = 20 Trouble = 4	Violent (N = 6) DV = 3 Non-DV = 3	

Questions?

November Spatial Crime Analysis

Hamilton County Sheriff's Office
Institute of Crime Science

November 20, 2020

All HCSO Jurisdictions

Date Range: August 1 – October 31, 2020

(Symmes Township: May 1 – July 31, 2020)

CFS Counts by Category and Division

	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS	
D1	173 (17.3%)	120 (12%)	68 (6.8%)	85 (8.5%)	38 (3.8%)	515 (51.6%)	999	- 63 (-5.9%)
D2 (Green)	205 (11.8%)	183 (10.5%)	96 (5.5%)	260 (14.9%)	61 (3.5%)	937 (53.8%)	1742	- 141 (-7.5%)
Lincoln Heights	49 (21.6%)	45 (19.8%)	12 (5.3%)	12 (5.3%)	10 (4.4%)	99 (43.6%)	227	- 34 (-13.0%)
D3 (Sycamore & Symmes)	109 (9.2%)	93 (7.9%)	54 (4.6%)	191 (16.2%)	38 (3.2%)	694 (58.9%)	1179	+ 111* (+10.4%)
D4 (Silverton & Columbia)	59 (11.5%)	48 (9.3%)	37 (7.2%)	97 (18.9%)	12 (2.3%)	261 (50.8%)	514	- 136 (-20.9%)
D5 (Anderson)	83 (9.2%)	66 (7.3%)	65 (7.2%)	90 (10%)	27 (3%)	573 (63.4%)	904	- 85 (-8.6%)

Note: Cells contain count of call for service category for each division and the proportion of it's total CFS



Distribution of Total Calls for Service

August 1 - October 31, 2020

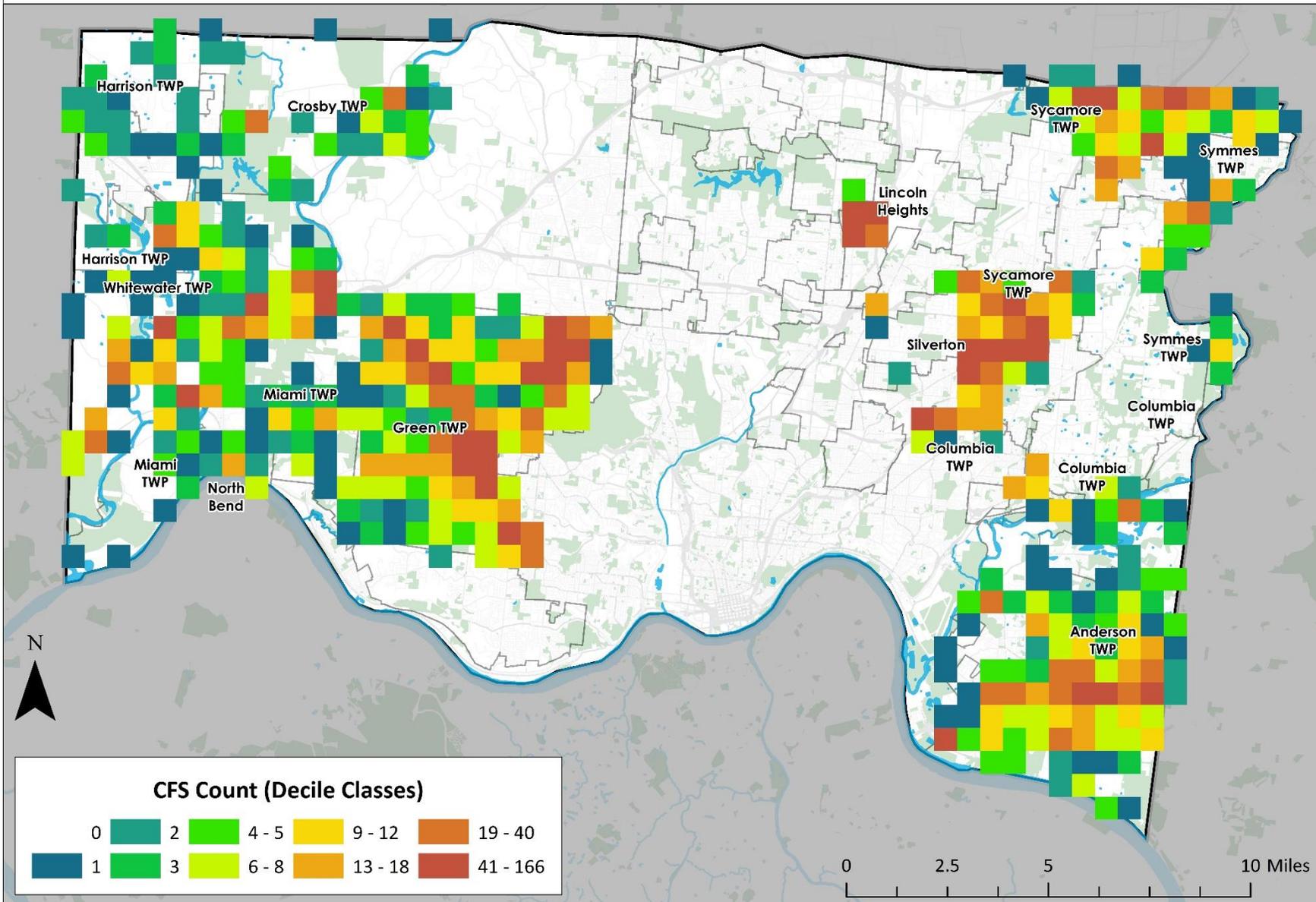


Current 3 Months

August 1, 2020

–

October 31, 2020





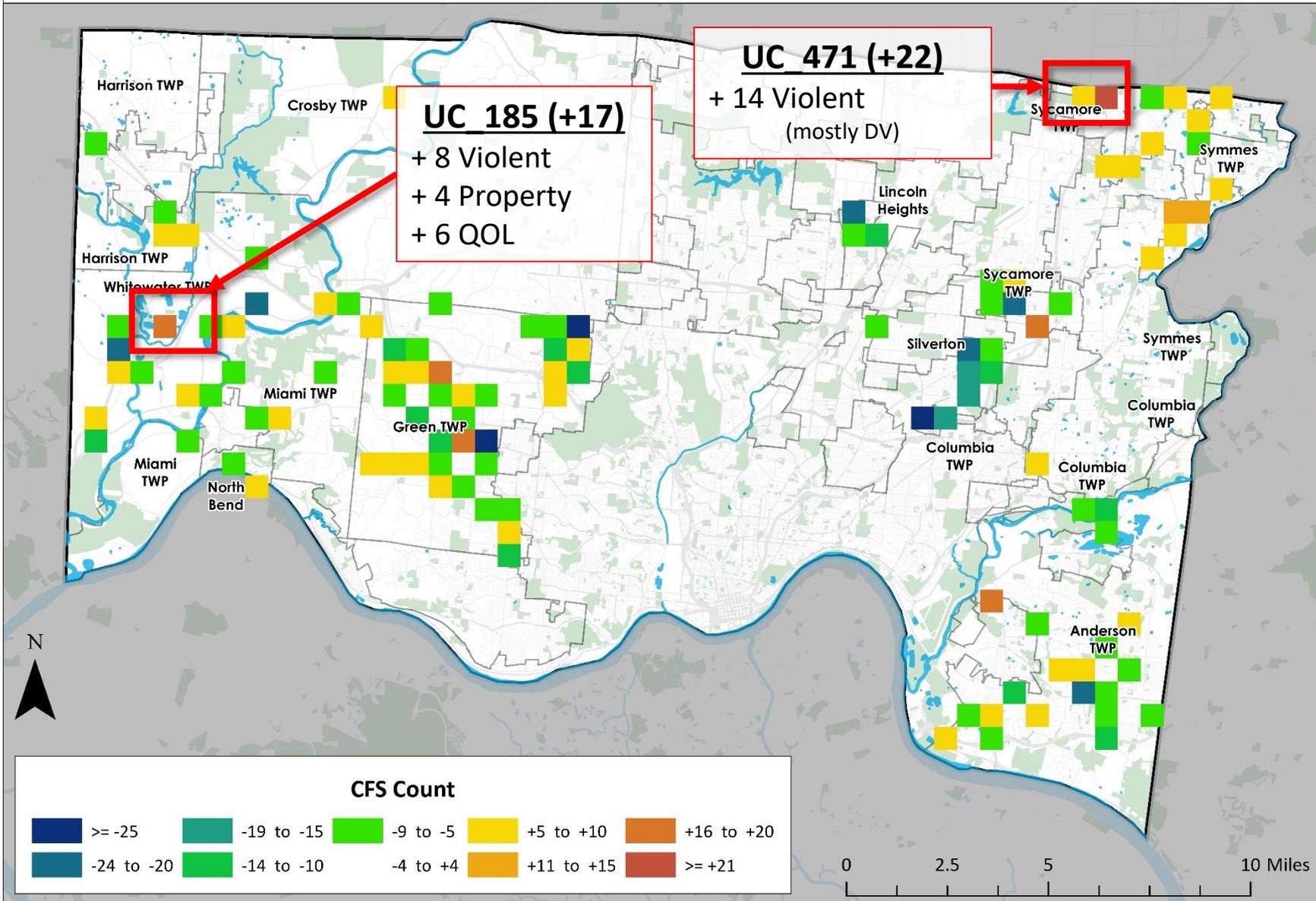
Distribution of Total Calls for Service

August 1 - October 31, 2020



Change in CFS Count

Current 3 Months - Prior 3 Months



- Note: Symmes Date Range
- Most places same or decreasing
- Seasonal Trends?
- COVID-19 Policies?

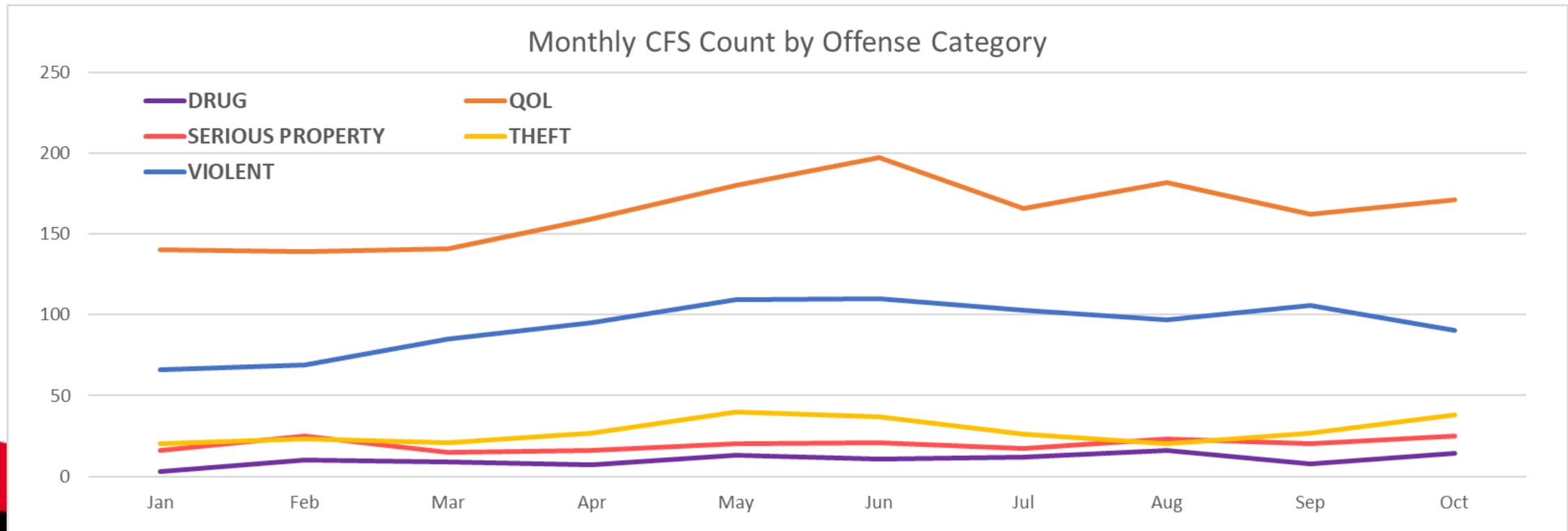
District One

Harrison TWP, Crosby TWP, Whitewater TWP, Miami TWP, North Bend

Date Range: August 1 – October 31, 2020

District One Overview

- Monthly Break-Down
 - 338 in August, 323 in September, 338 in October



CFS Counts by Category and Jurisdiction

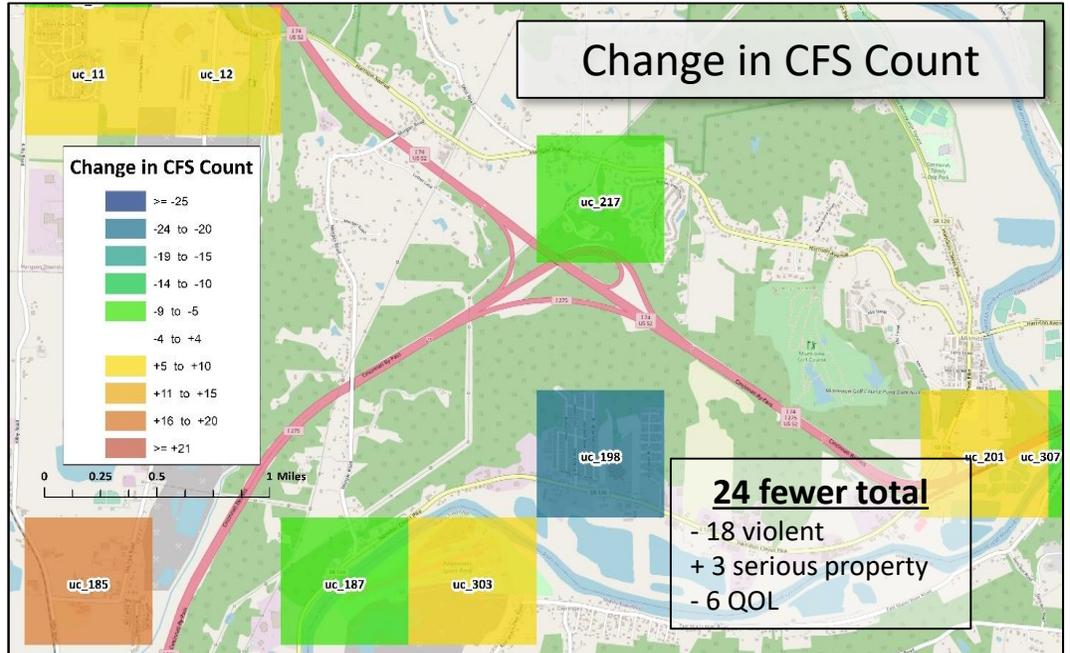
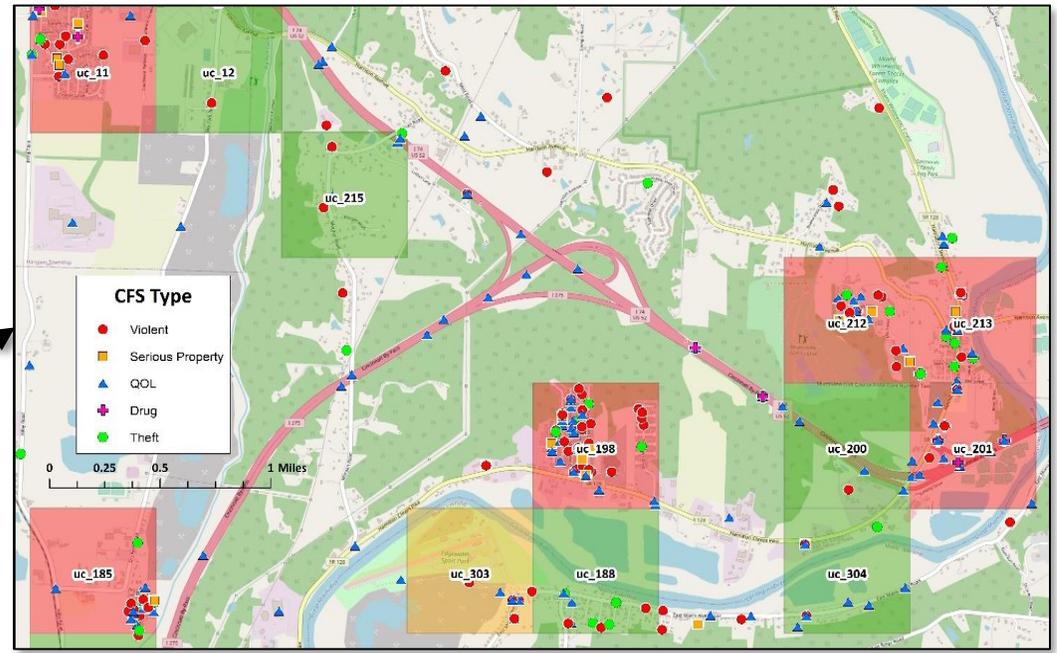
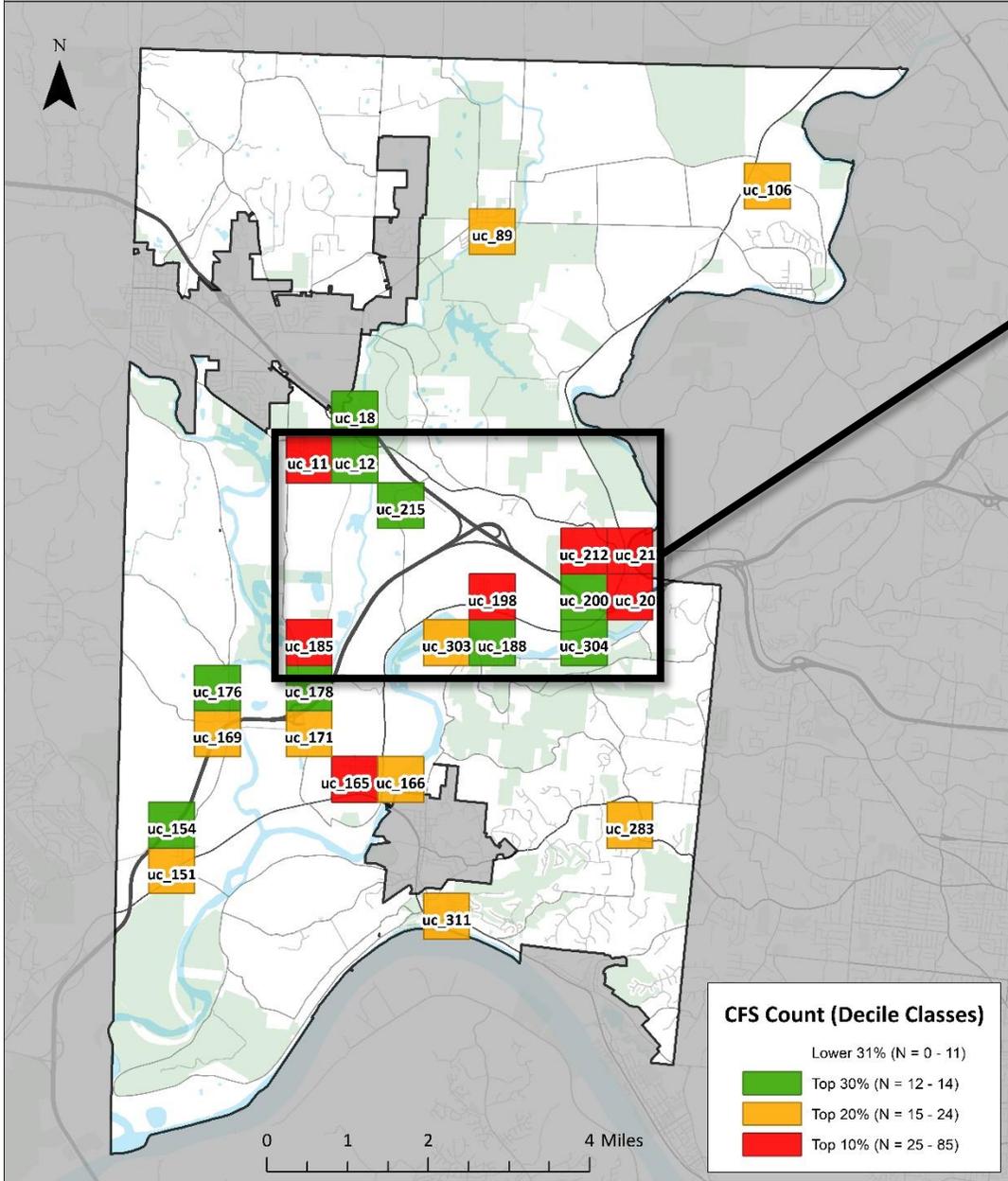
August 1 – October 31, 2020

Jurisdiction	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS	
Harrison TWP	17 (15%)	21 (18.6%) (+9)	7 (6.2%)	8 (7.1%)	3 (2.7%)	57 (50.4%) (-11)	113	- 4 (-3.4%)
Crosby TWP	29 (25%) (+10)	14 (12.1%)	9 (7.8%)	10 (8.6%)	3 (2.6%)	51 (44%) (+14)	116	+ 20 (+20.8%)
Whitewater TWP	90 (15.4%) (-22)	65 (11.1%) (-13)	38 (6.5%)	43 (7.4%)	26 (4.5%)	322 (55.1%)	584	- 34 (-5.5%)
Miami TWP	30 (19.6%)	18 (11.8%) (-14)	11 (7.2%)	21 (13.7%)	3 (2%)	70 (45.8%) (-23)	153	- 41 (-21.1%)
North Bend	7 (21.2%)	2 (6.1%)	3 (9.1%)	3 (9.1%)	3 (9.1%)	15 (45.5%)	33	- 4 (-10.8%)
Total D1	173 (17.3%)	120 (12%)	68 (6.8%)	85 (8.5%)	38 (3.8%)	515 (51.6%)	999	

Note: Cells contain count of call for service category for each jurisdiction and the proportion of it's total CFS



Distribution of Total Calls for Service
District 1 - HCSO, August 1 - October 31, 2020



CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total (Change*)	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_198 (5700 Hamilton Cleves Rd)	Westbrooke Village MHP, Miamiview MHP	85 (-24)	Violent (N = 33) DV = 24 Assault/Shots = 9	QOL (N = 31) Suspicious = 9 Trouble/Disorder = 18	Property (N = 18) Serious = 11 Theft = 7
UC_213 (7060 Hamilton Cleves Rd)	WWTF Station, Miami Savings Bank, Apartment	44 (-2)	QOL (N = 17) Suspicious = 11 Mixed	Violence (N = 13) DV = 6 Assault/Weapon = 7	Theft (N = 9)
UC_165 (Hooven)	Kroger, Single-Family Home	43 (+6)	QOL (N = 20) Suspicious = 9 Trouble = 8	Violent (N = 16) Assault/Weapon/Shot = 8 DV = 7	
UC_185 (Dry Fork Rd & Kilby Rd)	Unnamed MHP, Mixed	42 (+17)	Violent (N = 13) DV = 5 Assault/Weapon = 7	QOL (N = 9) Disorder (N = 4) Mixed	Property (N = 8) Burglary = 3 Theft = 4

* Change reflects difference between current 3 months and prior 3 months

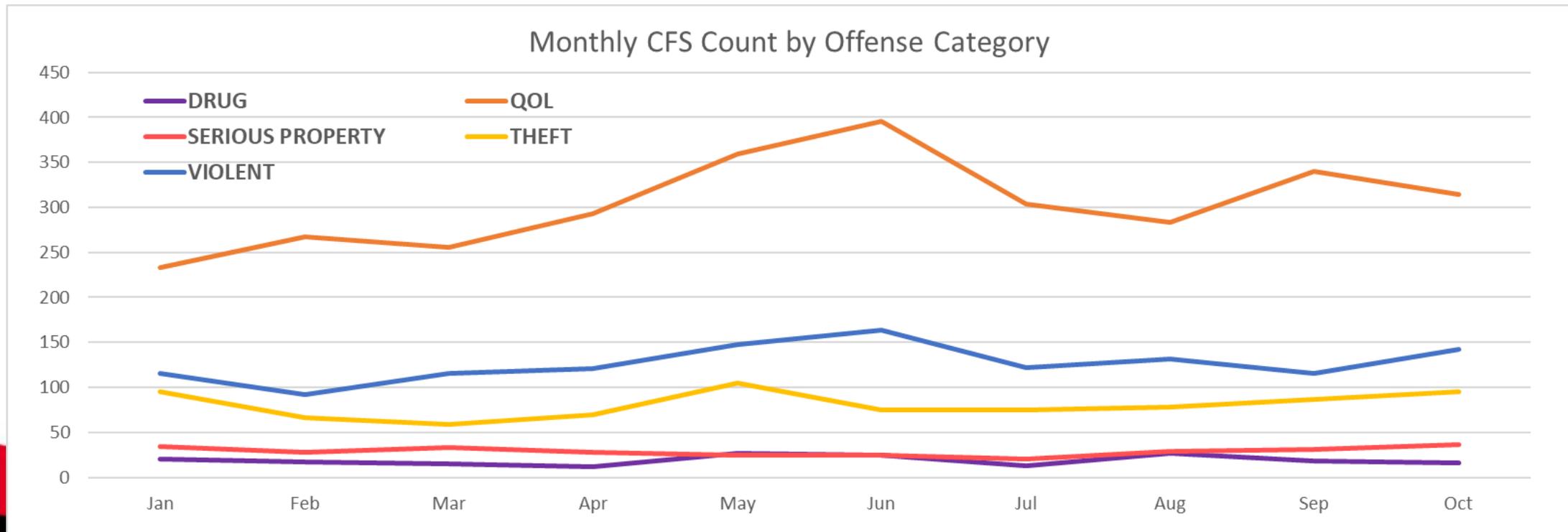
District Two

Green TWP

Date Range: August 1 – October 31, 2020

District Two Overview

- Monthly Break-Down
 - 548 in August, 591 in September, 603 in October



CFS Counts by Category and Jurisdiction

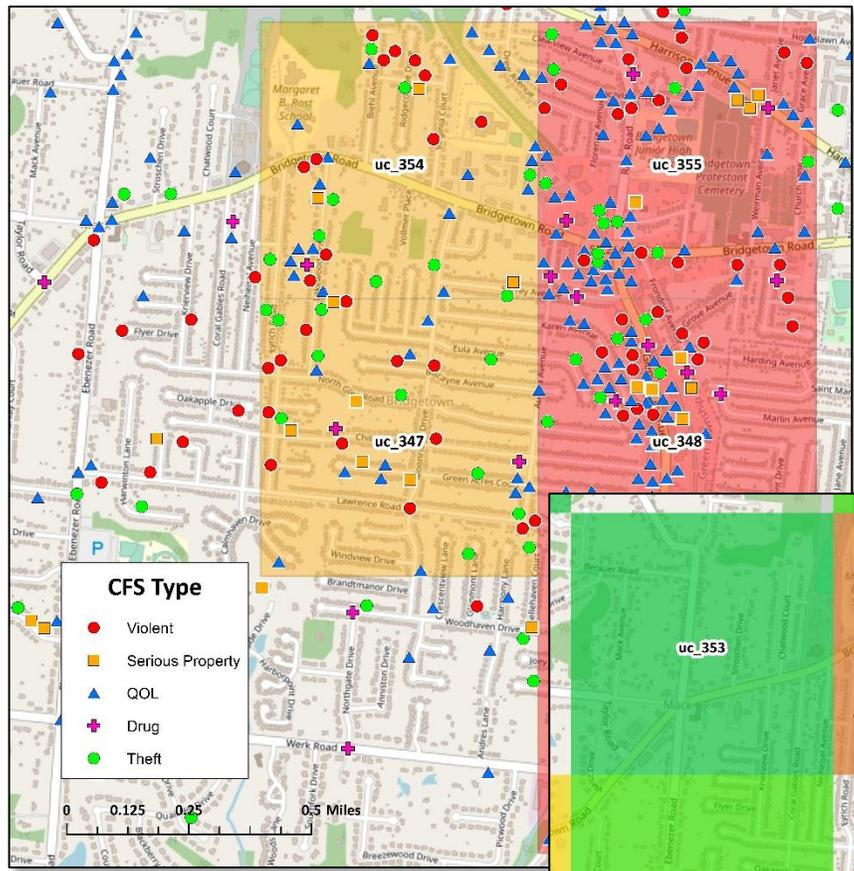
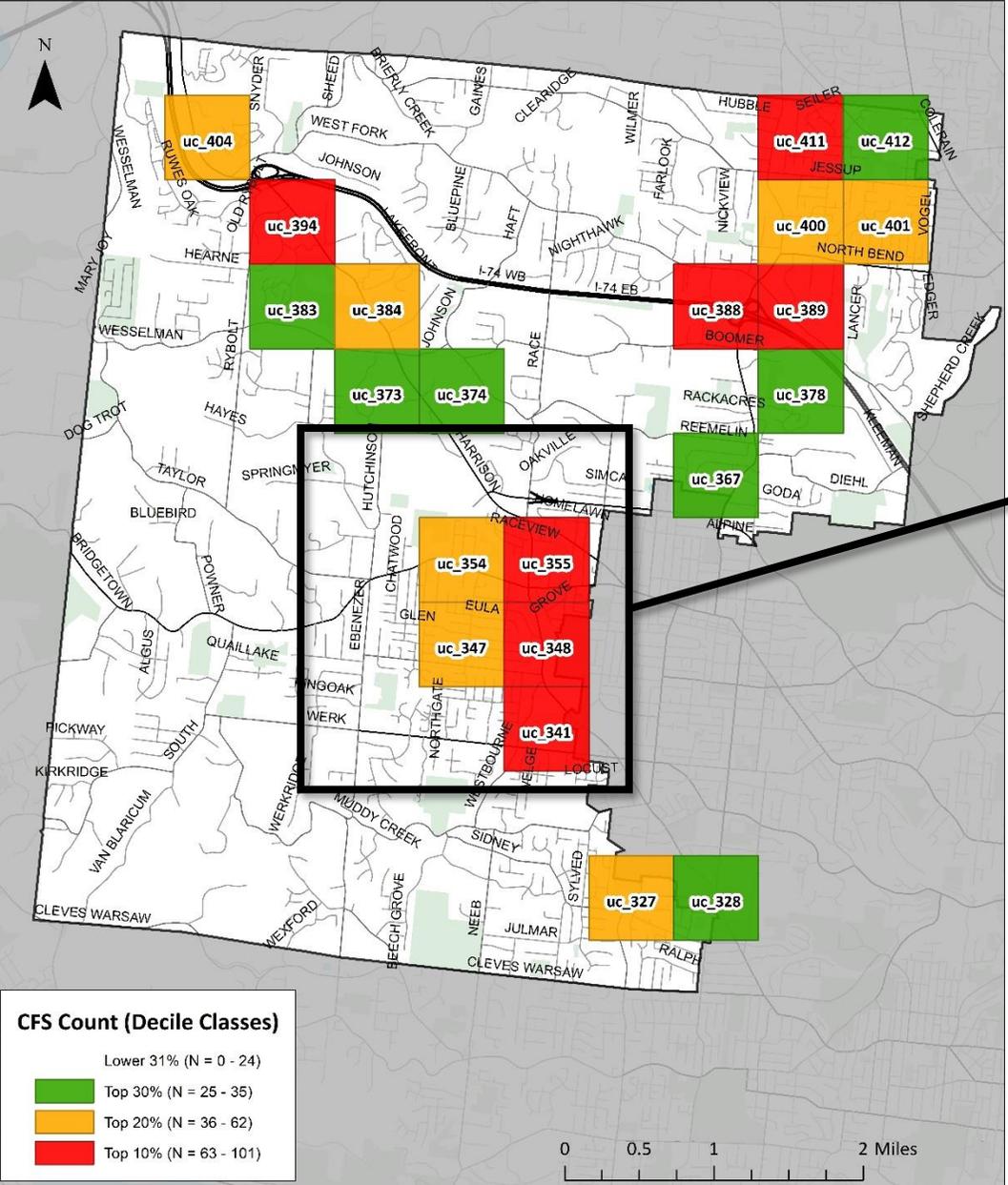
August 1 – October 31, 2020

	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
D1	173 (17.3%)	120 (12%)	68 (6.8%)	85 (8.5%)	38 (3.8%)	515 (51.6%)	999
D2 (Green)	205 (11.8%) (- 12)	183 (10.5%) (- 34)	96 (5.5%) (+ 26)	260 (14.9%)	61 (3.5%)	937 (53.8%) (- 122)	1742
Lincoln Heights	49 (21.6%)	45 (19.8%)	12 (5.3%)	12 (5.3%)	10 (4.4%)	99 (43.6%)	227
D3 (Sycamore & Symmes)	109 (9.2%)	93 (7.9%)	54 (4.6%)	191 (16.2%)	38 (3.2%)	694 (58.9%)	1179
D4 (Silverton & Columbia)	59 (11.5%)	48 (9.3%)	37 (7.2%)	97 (18.9%)	12 (2.3%)	261 (50.8%)	514
D5 (Anderson)	83 (9.2%)	66 (7.3%)	65 (7.2%)	90 (10%)	27 (3%)	573 (63.4%)	904

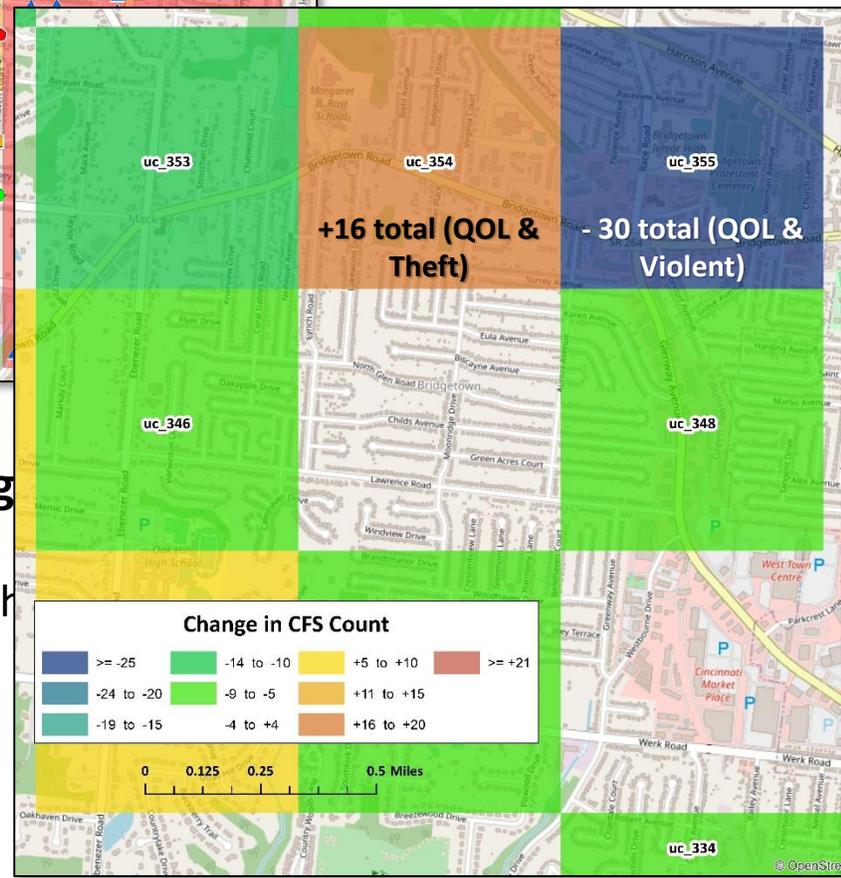
**- 141
(-7.5%)**



Distribution of Total Calls for Service District 2 - HCSO, August 1 - October 31, 2020



Change in CFS Count



- Original
- Project Development Ph

+16 total (QOL & Theft)

-30 total (QOL & Violent)

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total (Change*)	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_394 (Harrison Ave off I-74)	Meijer Shopping Center, Holiday Inn, Skyline, Kohl's	101 (-9)	QOL (N = 51) Suspicious = 38 Trouble = 9	Theft (N = 31)	Violent (N = 13) DV = 7 Non-DV = 9
UC_355 (Bridgetown Rd & Glenway Ave)	Family Dollar, UDF, Walgreens	97 (-30)	QOL (N = 60) Suspicious = 33 Trouble/Damaging = 16	Violent (N = 16) DV = 9 Shots/Weapon = 5	Theft (N = 11)
UC_348 (Glenway Ave & Westbourne Dr)	Speedway, McDonalds, Chic-Fil-A, Western Bowl	88 (-8)	QOL (N = 55) Suspicious = 28 Trouble = 19	Violent (N = 16) DV = 5 Robbery = 6	Property (N = 13) Theft = 7 Auto = 4
UC_388 (Cheviot Rd off I-74)	Speedway, Sam's Club, Walgreen's	78 (0)	QOL (N = 55) Suspicious = 38 Trouble = 9	Theft (N = 9)	Violent (N = 8) DV = 1 Robbery = 4
UC_389 (Monfort Heights)	Kroger, Anytime Workout, Speedway, Shell, Fast food	76 (+8)	QOL (N = 52) Suspicious = 33 Trouble = 9	Violent (N = 8) DV = 3 Assault/Weapon = 5	Theft (N = 10)

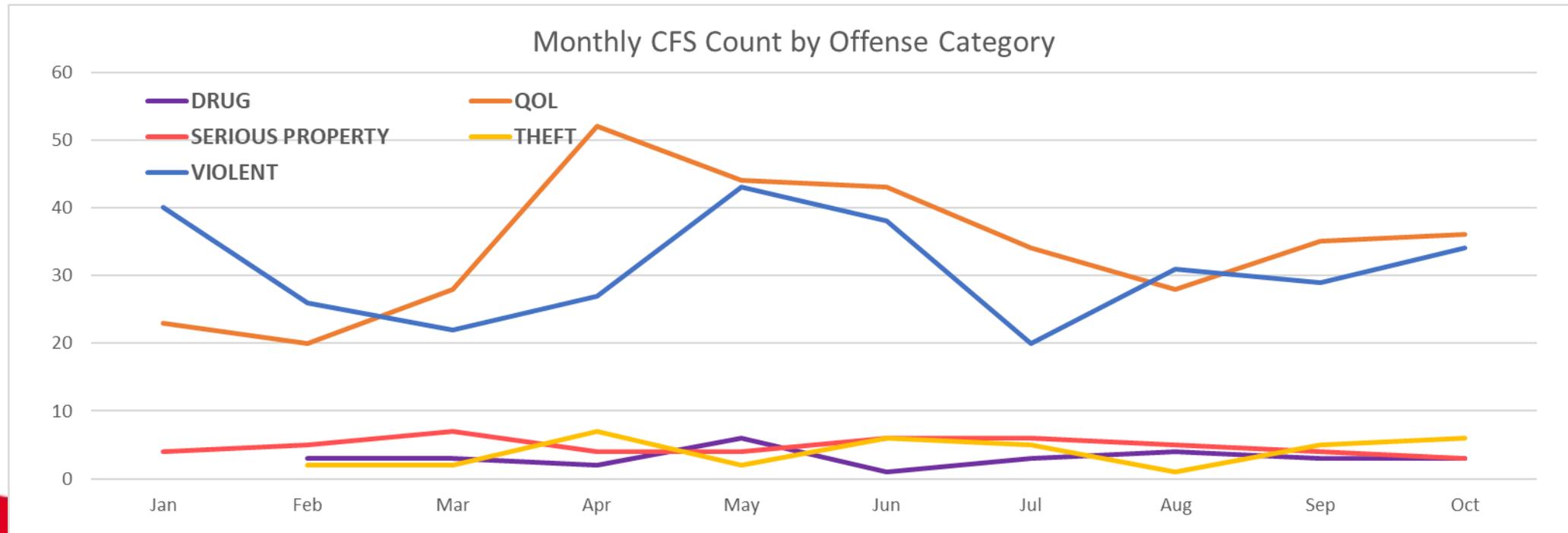
* Change reflects difference between current 3 months and prior 3 months

Lincoln Heights

Date Range: August 1 – October 31, 2020

Lincoln Heights Overview

- Monthly Break-Down
 - 69 in August, 76 in September, 82 in October



CFS Counts by Category and Jurisdiction

August 1 – October 31, 2020

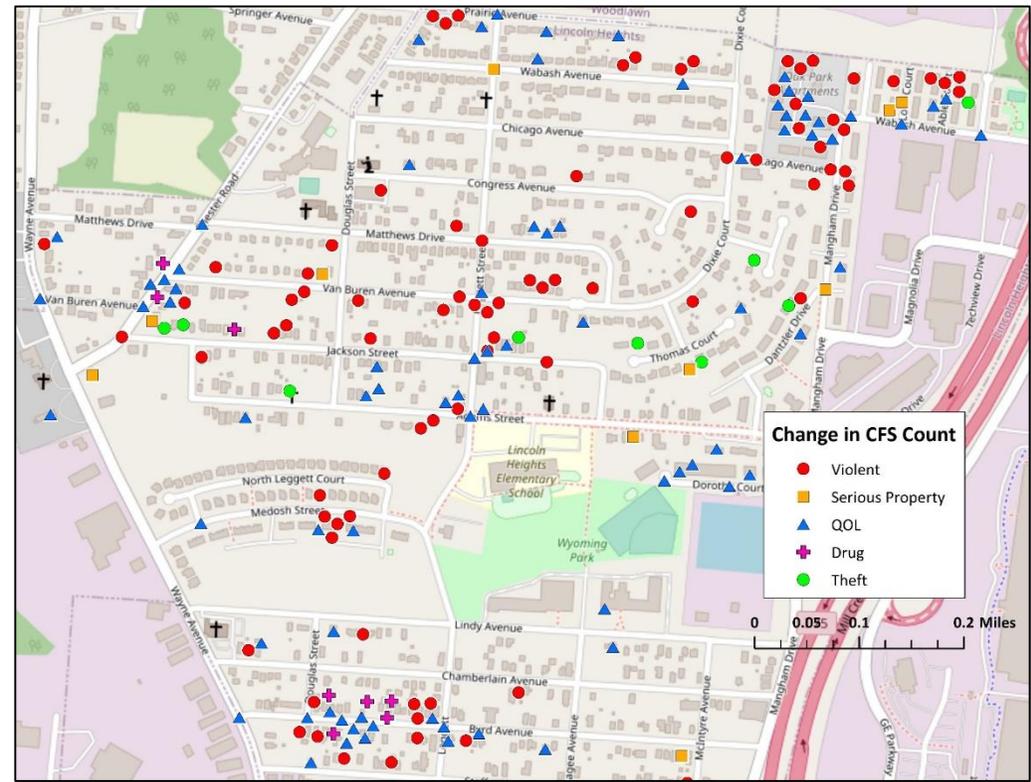
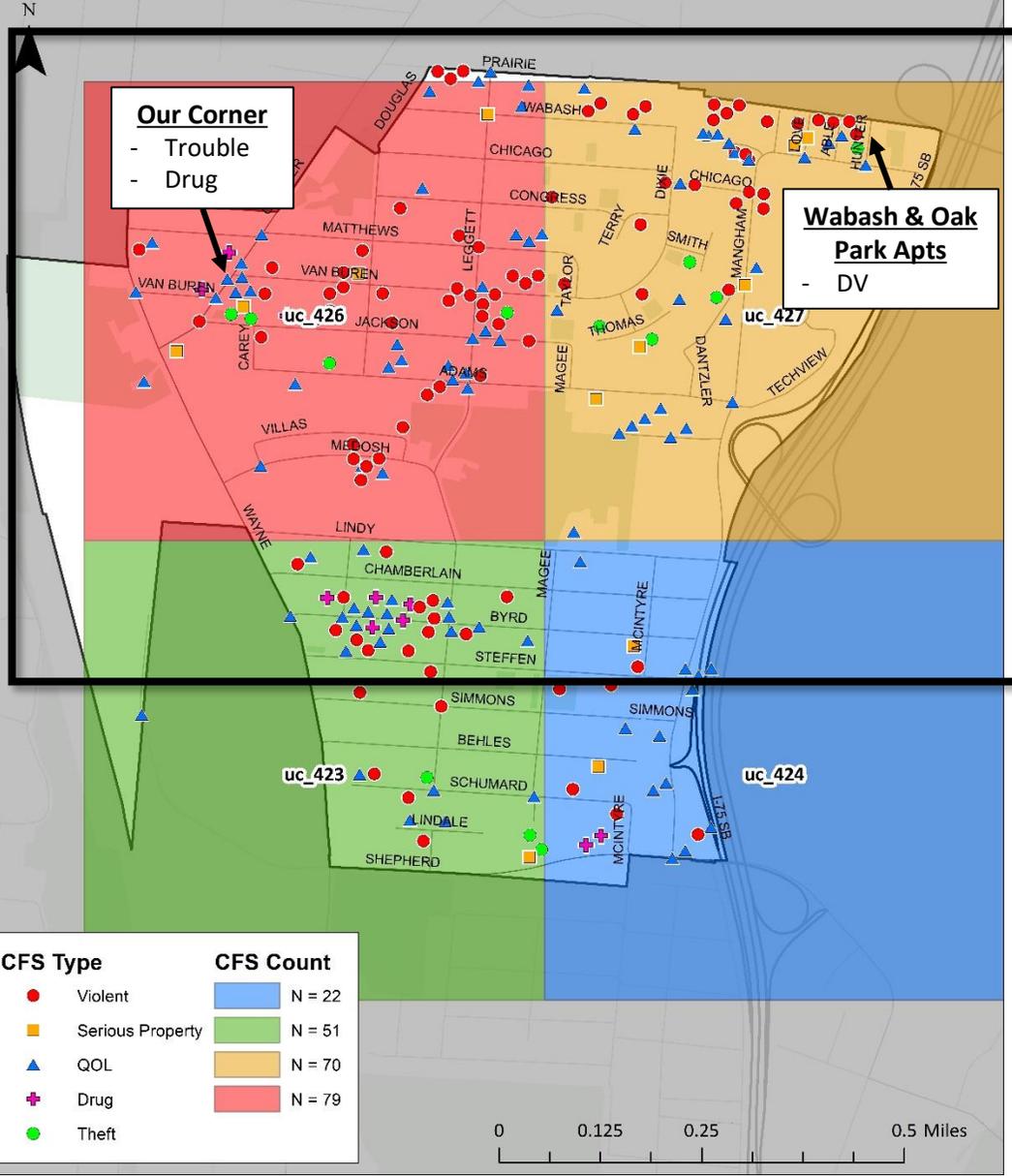
	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
D1	173 (17.3%)	120 (12%)	68 (6.8%)	85 (8.5%)	38 (3.8%)	515 (51.6%)	999
D2 (Green)	205 (11.8%)	183 (10.5%)	96 (5.5%)	260 (14.9%)	61 (3.5%)	937 (53.8%)	1742
Lincoln Heights	49 (21.6%) (-13)	45 (19.8%) (+6)	12 (5.3%)	12 (5.3%)	10 (4.4%)	99 (43.6%) (-22)	227
D3 (Sycamore & Symmes)	109 (9.2%)	93 (7.9%)	54 (4.6%)	191 (16.2%)	38 (3.2%)	694 (58.9%)	1179
D4 (Silverton & Columbia)	59 (11.5%)	48 (9.3%)	37 (7.2%)	97 (18.9%)	12 (2.3%)	261 (50.8%)	514
D5 (Anderson)	83 (9.2%)	66 (7.3%)	65 (7.2%)	90 (10%)	27 (3%)	573 (63.4%)	904

**- 34
(-13.0%)**



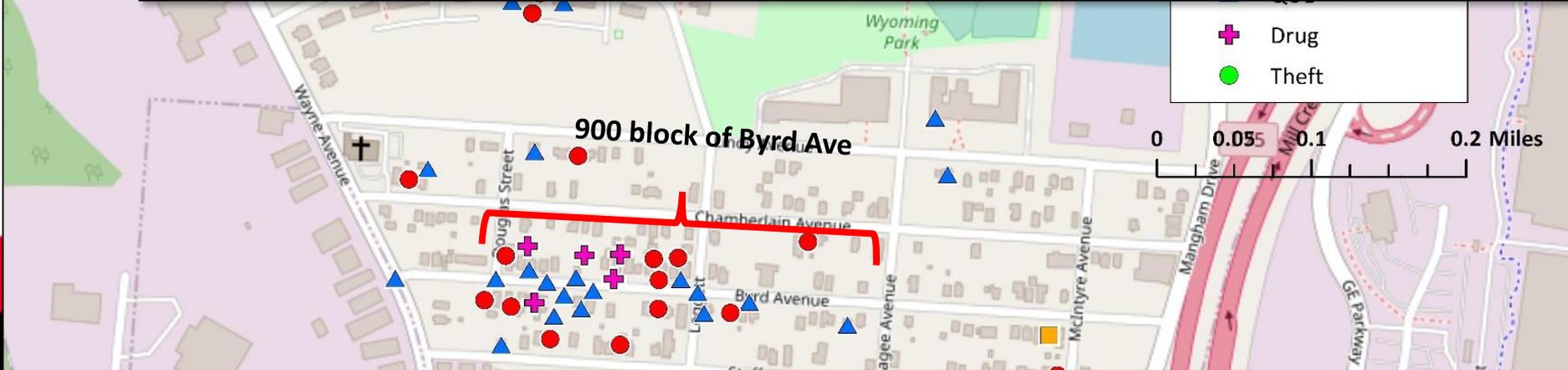
Distribution of Total Calls for Service

Lincoln Heights - HCSO, August 1 - October 31, 2020



Ongoing Projects

- Project Development Phase
- CBCR Grant – Being Accepted



CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total (Change*)	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_426 (NW Quadrant)	Friendship Plaza, Our Corner, Apartments	79 (-20)	Violent (N = 36) DV = 18 Assault = 6 Weapon/Shots = 10	QOL (N = 32) Suspicious/Disorder = 21 Trouble = 9	Property (N = 4) Theft = 4 Auto = 2
UC_427 (NE Quadrant)	Marianne Terrace Apartments, Oak Park Apartments	70 (+2)	QOL (N = 30) Suspicious = 8 Disorder = 6 Trouble = 9	Violent (N = 30) DV = 15 Weapon/Shots = 10 Assault = 4	
UC_423 (SW Quadrant)	Residential Area	51 (-6)	QOL (N = 23) Suspicious = 11 Disorder = 8	Violent (N = 19) DV = 11 Weapon/Assault = 7	Drug (N = 5)
UC_424 (SE Quadrant)	Residential Area	22 (-12)	Violent (N = 6) DV = 2 Non-DV = 4	QOL (N = 12) Trouble = 4 Suspicious = 8	

* Change reflects difference between current 3 months and prior 3 months

District Three

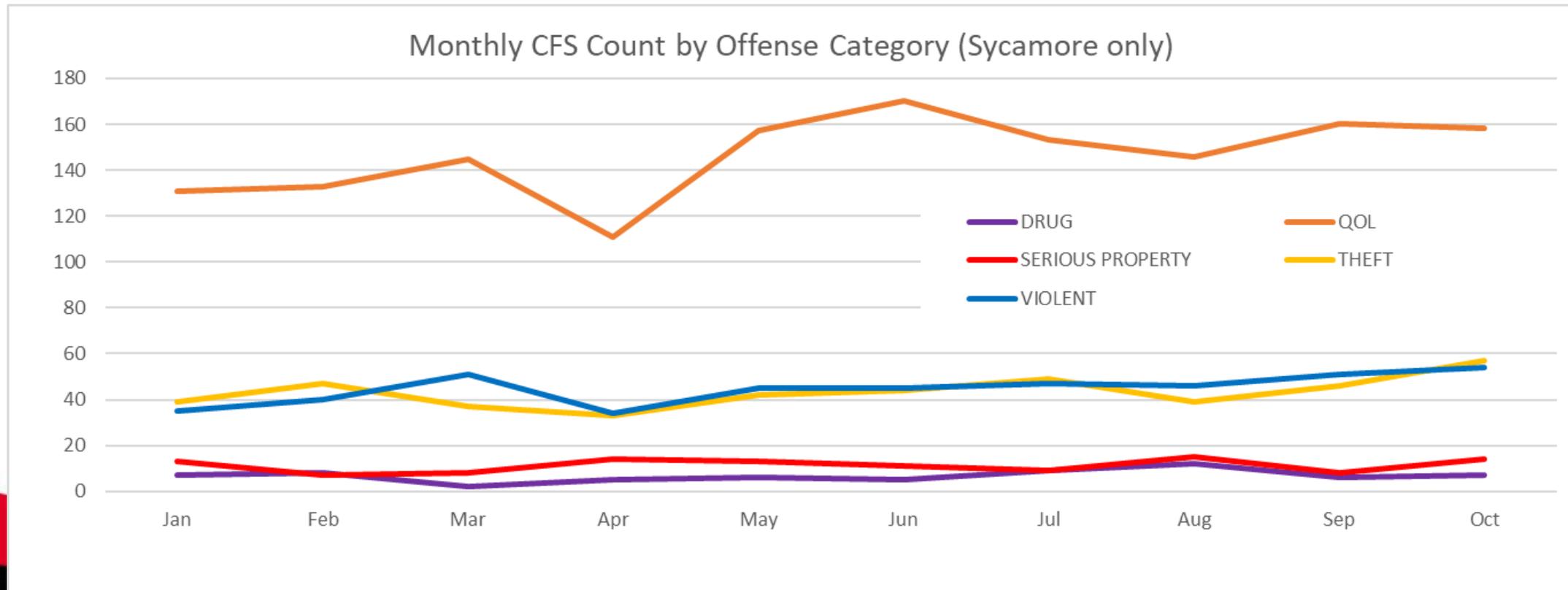
Sycamore TWP & Symmes TWP

Sycamore Date Range: August 1 – October 31, 2020

Symmes Date Range: May 1 – July 31, 2020

District Three Overview

- Monthly Break-Down (Reflects Only Sycamore Counts)
 - 258 in August, 271 in September, 290 in October



CFS Counts by Category and Jurisdiction

August 1 – October 31, 2020*

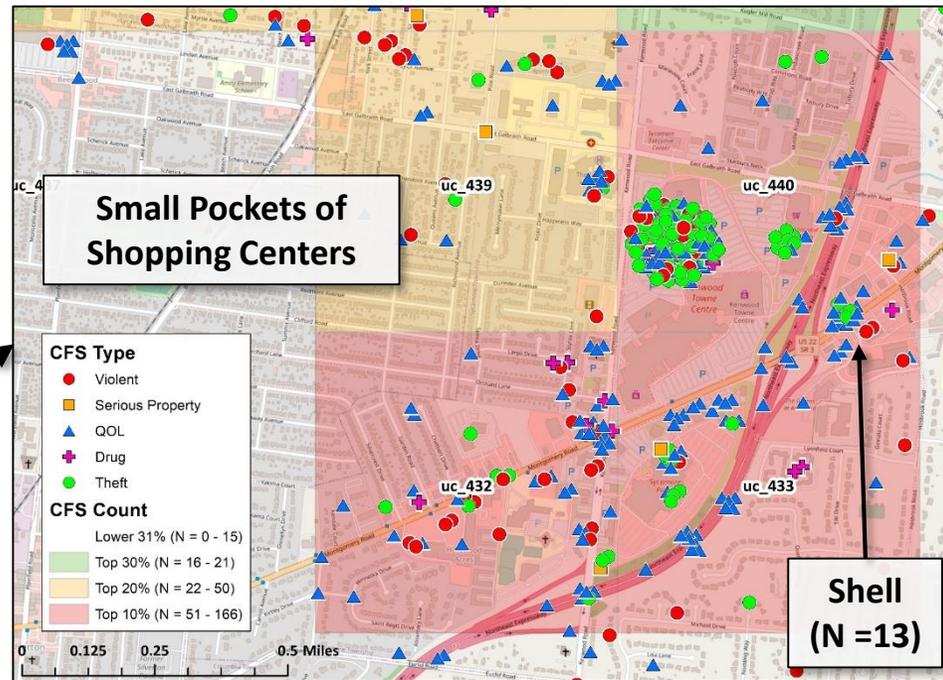
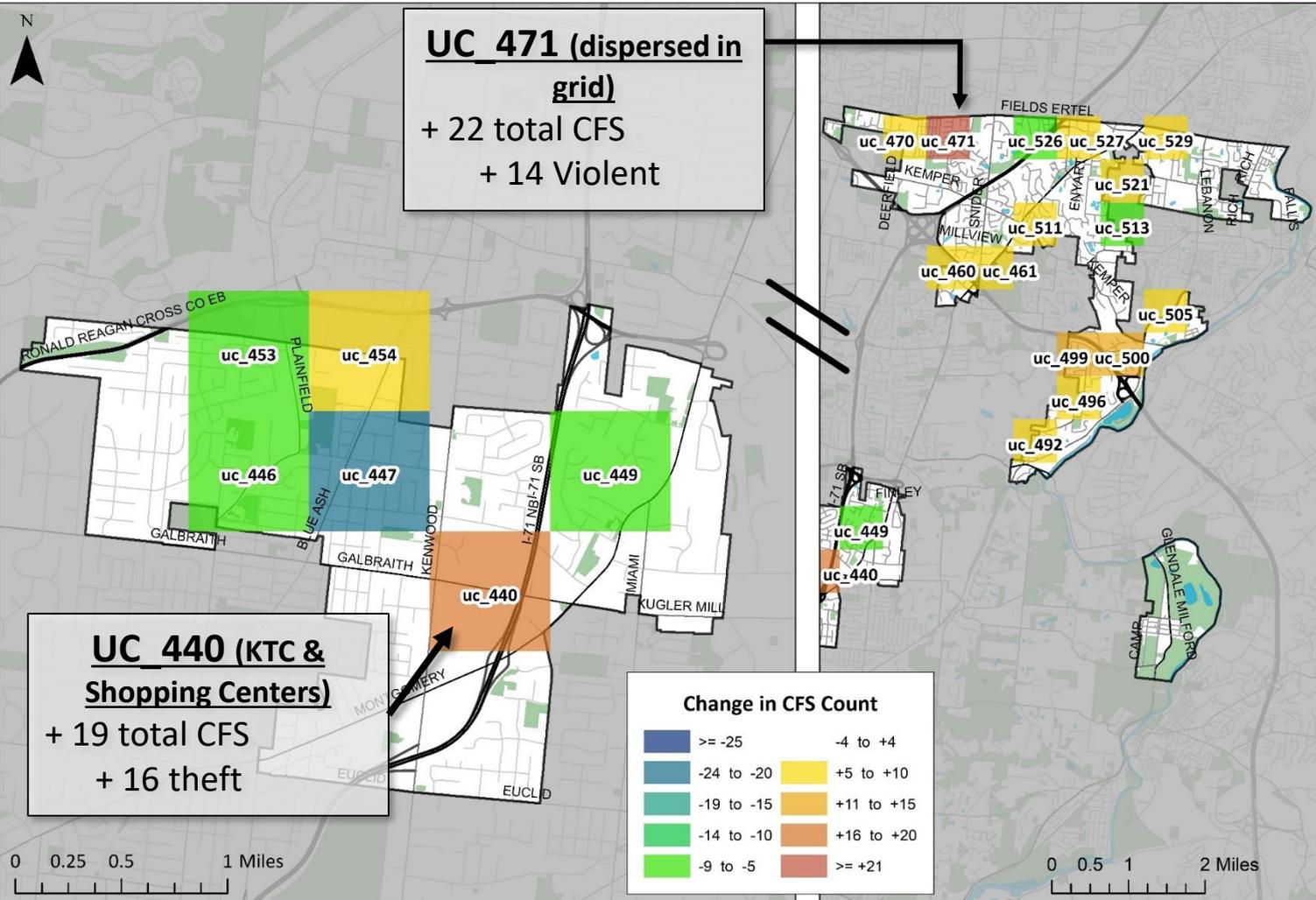
Jurisdiction	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
Sycamore TWP	54 (9.5%)	52 (9.1%)	22 (3.9%)	103 (18.1%) (-31)	13 (2.3%)	325 (57.1%) (-148)	569 -228 (-28.6%)
Symmes TWP	27 (7.8%)	23 (6.6%)	17 (4.9%)	49 (14.2%)	13 (3.8%)	217 (62.7%)	346
Total D3	81 (8.9%)	75 (8.2%)	39 (4.3%)	152 (16.6%)	26 (2.8%)	542 (59.2%)	915

* Note: Symmes data includes calls made between May and July 31, 2020. August data was unavailable, therefore, the most recent 3 months were used for this jurisdiction.



Change in Distribution of Total Calls for Service

District Three - HCSO, August 1 - October 31, 2020*



CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total (Change*)	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_440 (Kenwood TC - Main)	Kenwood Town Center, Shell Gas Station	166 (+19)	Theft (N = 78)	QOL (N = 63) Suspicious = 31 Trouble = 24	Violent (N = 18) DV = 6 Robbery = 4
UC_432 (Kenwood TC - SW)	BP, Wendy's, Fifth Third, Trader Joe's	74 (+1)	QOL (N = 42) Suspicious = 27 Trouble = 9	Violent (N = 17) DV = 6 Robbery = 6	
UC_470 (Highpoint)	Village Green MHP, Residential Area	61 (+9)	QOL (N = 38) Disorder = 29 Suspicious = 12	Violent (N = 13) DV = 6 Assault/Weapon = 8	Property (N = 9) Burglary = 4 Theft = 4
UC_433 (Near Kenwood TC)	Sycamore Plaza	57 (+3)	QOL (N = 41) Suspicious = 29 Trouble = 8		
UC_447 (Blue Ash Rd & Sycamore Rd)	Bechtold Park, Residential Area	50 (-22)	QOL (N = 31) Suspicious = 15 Disorder = 11	Violent (N = 8) DV = 4 Weapon/Shots = 4	
UC_471 (East of Highpoint)	Mixed	50 (+22)	QOL (N = 23) Suspicious = 8 Disorder = 8	Violent (N = 23) DV = 16 Assault/Weapon = 6	

* Change reflects difference between current 3 months and prior 3 months

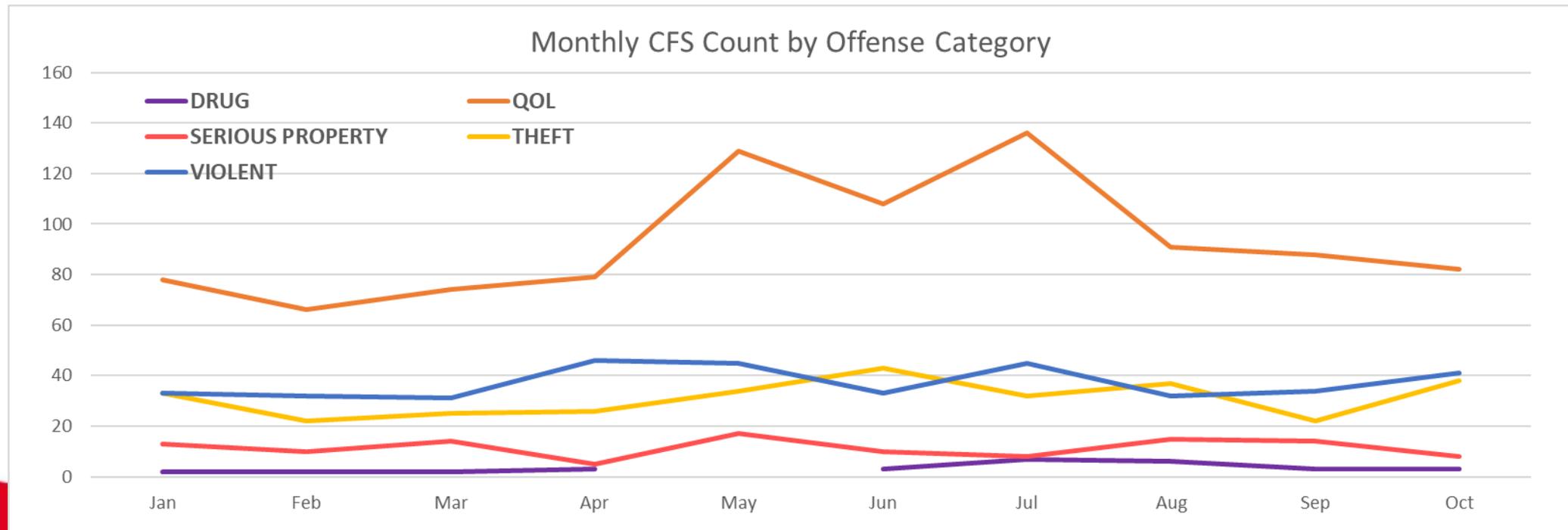
District Four

Village of Silverton & Columbia Township

Date Range: August 1 – October 31, 2020

District Four Overview

- Monthly Break-Down
 - 181 in August, 161 in September, 172 in October



CFS Counts by Category and Jurisdiction

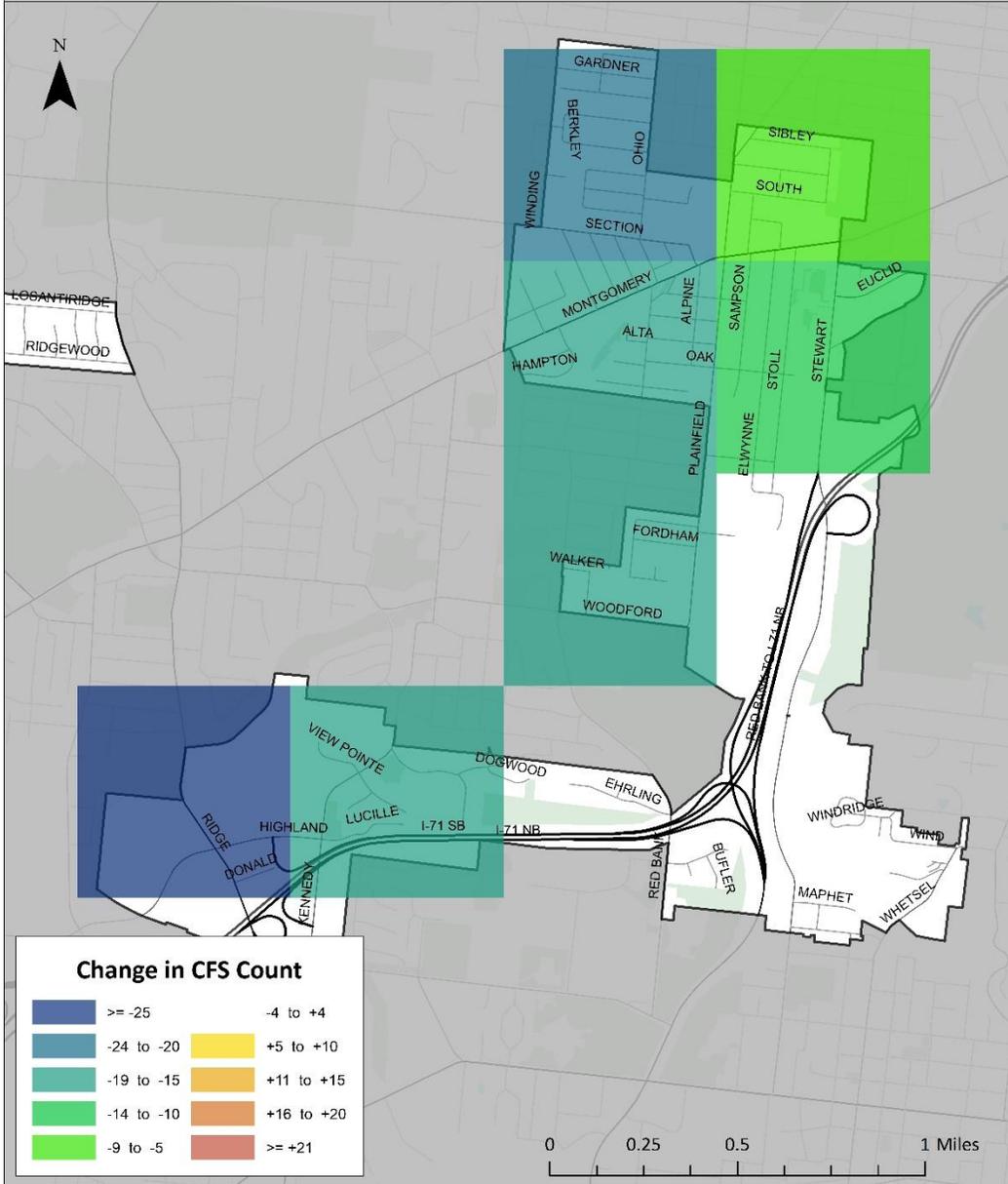
August 1 – October 31, 2020

Jurisdiction	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
Village of Silverton	39 (15.1%)	24 (9.3%) (-15)	23 (8.9%)	24 (9.3%)	7 (2.7%)	142 (54.8%) (-43)	259 -67 (-20.4%)
Columbia TWP	20 (7.8%)	24 (9.4%) (+10)	14 (5.5%)	73 (28.6%)	5 (2%)	119 (46.7%) (-69)	255 -69 (-21.4%)
Total D4	59 (11.5%)	48 (9.3%)	37 (7.2%)	97 (18.9%)	12 (2.3%)	261 (50.8%)	514

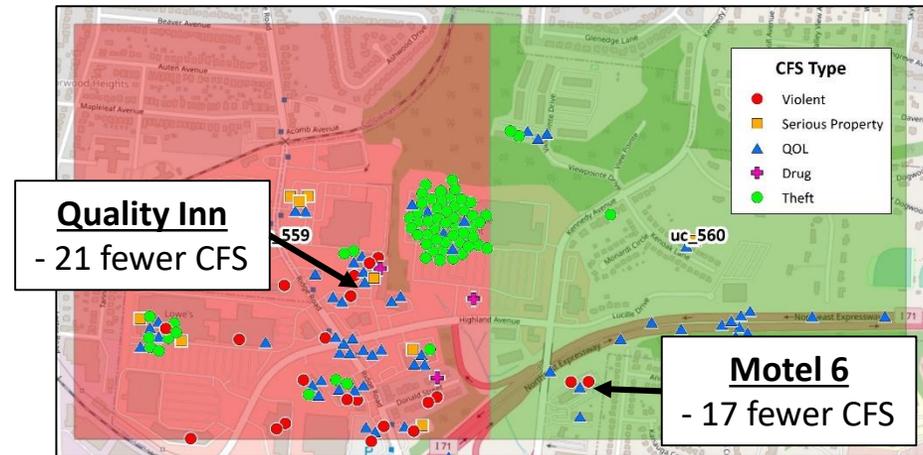


Change in Distribution of Total Calls for Service

District 4 - HCSO, August 1 - October 31, 2020



Ongoing Projects



CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total (Change*)	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
UC_559 (Kennedy Ave off I-71)	Home Depot, Quality Inn, Lowe's, Shell Gas Station, Dollar General	132 (-32)	Theft (N = 60)	OL (N = 42) Trouble = 17 Suspicious/Disorder = 21	Violent (N = 19) DV = 8 Assault = 4 Weapon/Shots = 6
UC_536 (Montgomery Rd & Section Ave)	UDF, Grandtree Apartments, Beans & Brew, Residential Area	96 (-15)	QOL (N = 57) Suspicious = 19 Trouble = 16 Disorder = 17	Violent (N = 22) DV = 11 Assault = 6 Weapon/Shots = 5	
UC_539 (NE Silverton)	Montgomery Plaza Apartments, Twin Pines, Commercial Area	62 (-5)	QOL (N = 29) Suspicious = 13 Trouble = 9	Violent (N = 19) DV = 15 Non-DV = 4	
UC_538 (NW Silverton)	Gatewood Ln Apartments	51 (-21)	QOL (N = 26) Disorder = 11 Suspicious = 10	Violent (N = 13) DV = 7 Assault = 5	

* Change reflects difference between current 3 months and prior 3 months

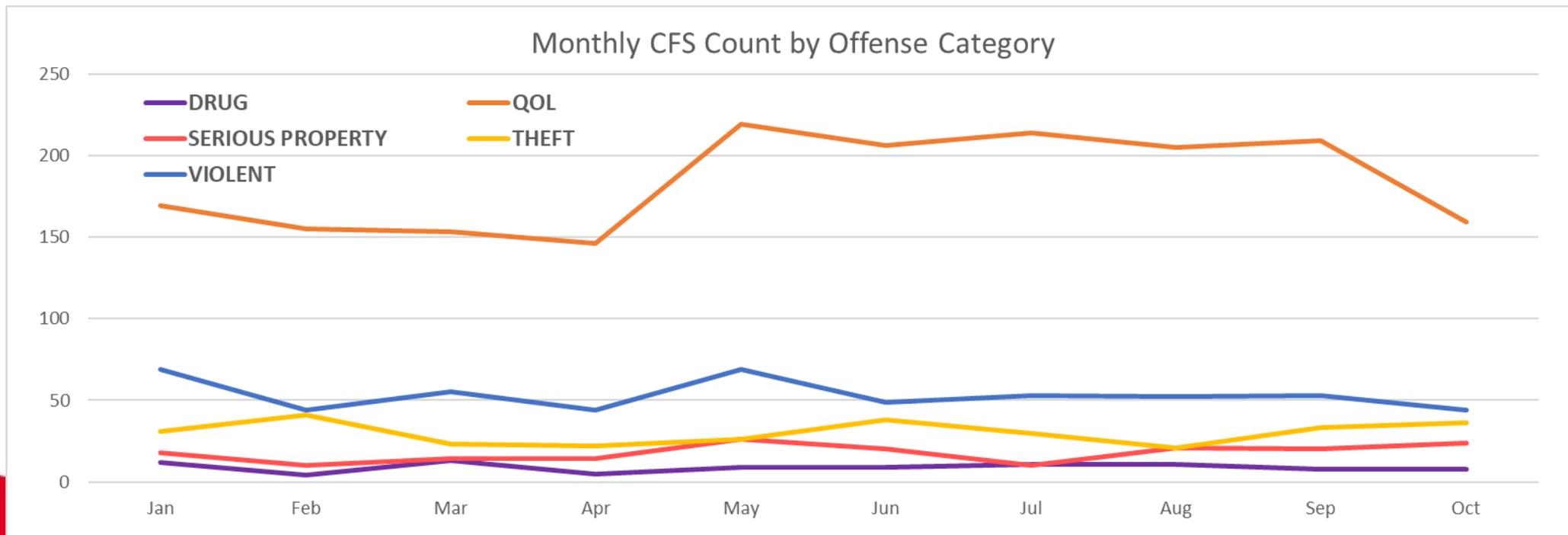
District Five

Anderson TWP

Date Range: August 1 – October 31, 2020

District Five Overview

- Monthly Break-Down
 - 310 in August, 323 in September, 271 in October



CFS Counts by Category and Jurisdiction

August 1 – October 31, 2020

	Violent – DV	Violent – Non-DV	Serious Property	Theft	Drug	Quality of Life	Total CFS
D1	173 (17.3%)	120 (12%)	68 (6.8%)	85 (8.5%)	38 (3.8%)	515 (51.6%)	999
D2 (Green)	205 (11.8%)	183 (10.5%)	96 (5.5%)	260 (14.9%)	61 (3.5%)	937 (53.8%)	1742
Lincoln Heights	49 (21.6%)	45 (19.8%)	12 (5.3%)	12 (5.3%)	10 (4.4%)	99 (43.6%)	227
D3 (Sycamore & Symmes)	109 (9.2%)	93 (7.9%)	54 (4.6%)	191 (16.2%)	38 (3.2%)	694 (58.9%)	1179
D4 (Silverton & Columbia)	59 (11.5%)	48 (9.3%)	37 (7.2%)	97 (18.9%)	12 (2.3%)	261 (50.8%)	514
D5 (Anderson)	83 (9.2%)	66 (7.3%)	65 (7.2%)	90 (10%)	27 (3%)	573 (63.4%)	904

- 85
(-8.6%)

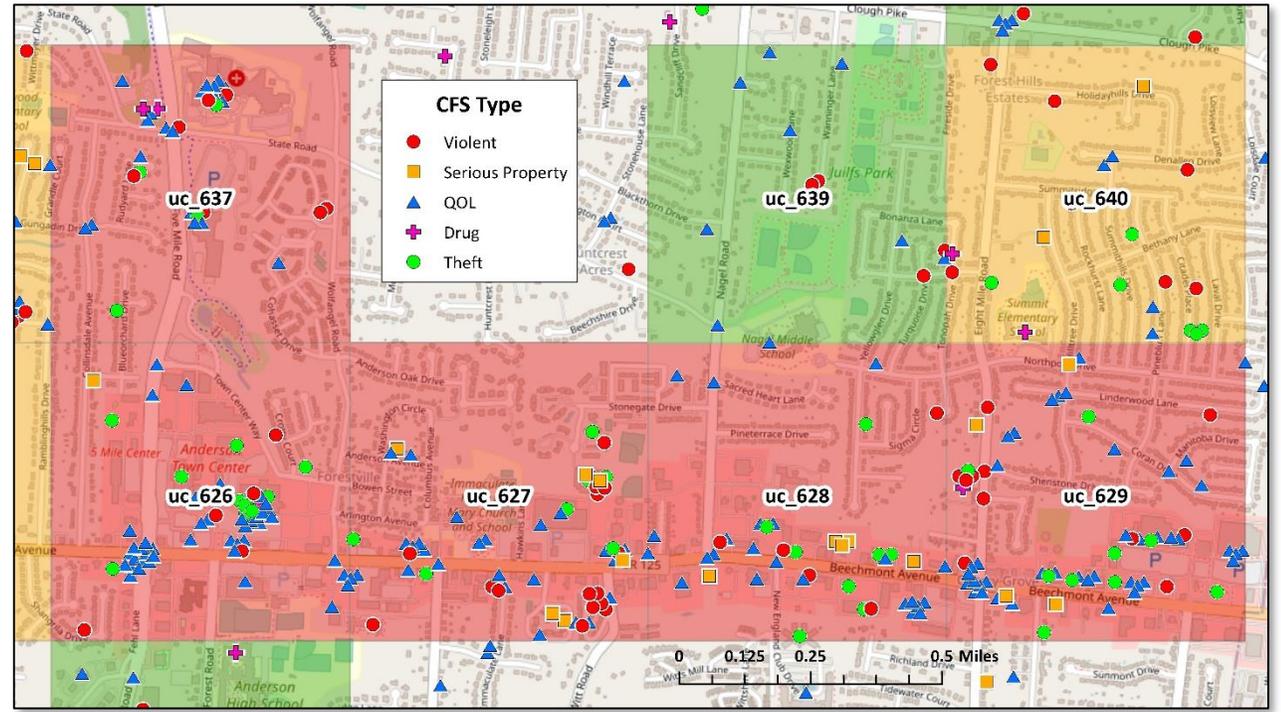
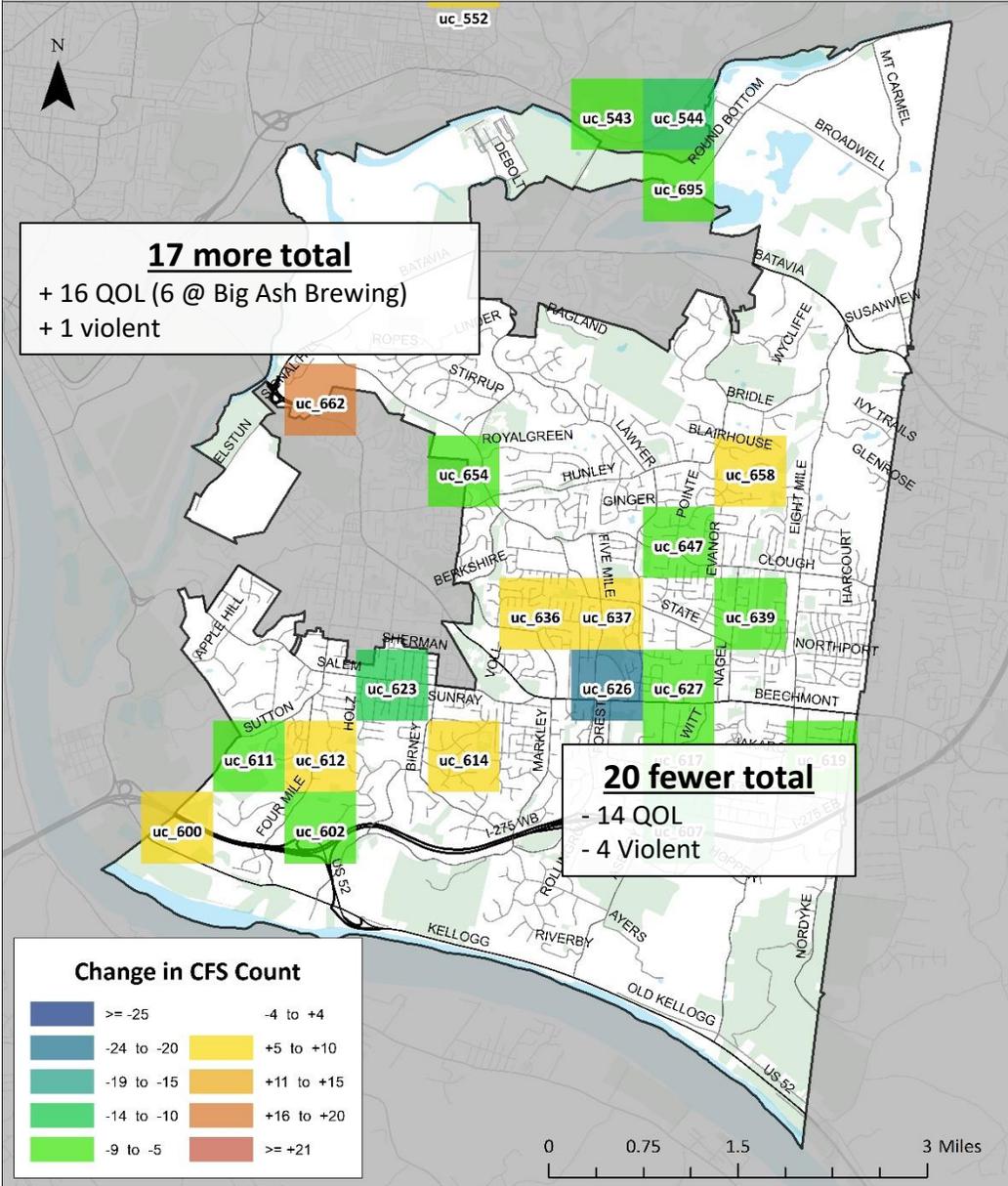
(-18)

(-66)



Change in the Distribution of Total Calls for Service

District 5 - HCSO, August 1 - October 31, 2020



Ongoing Projects

- Project Development Phase

CFS Counts by Category and Jurisdiction

Grid ID / Location	Facilities	Total (Change*)	Primary Offense Type	Secondary Offense Type	Tertiary Offense Type
uc_629	Target, Speedway, Chic-Fil-A, Dollar Tree, Assorted Fast Food / Convenience	66 (+1)	QOL (N = 41) Suspicious = 23 Disorder = 7 Trouble = 7	Violent (N = 11) DV = 9 Non-DV = 2	
uc_626	Anderson Town Center, Kroger, Various Commercial Est.	59 (-20)	QOL (N = 41) Suspicious = 34	Theft (N = 11)	
uc_627	SEM Retirement Community, McDonalds, Ollie's, Various Commercial Est.	58 (-5)	QOL (N = 29) Suspicious = 19	Violent (N = 16) DV = 7 Weapons/Shots = 8	
uc_600	Coney Island, Belterra Park, Altercrest	54 (+8)	QOL (N = 41) Suspicious = 18 Trouble = 20	Drug (N = 7)	
uc_628	Cincinnati Used Auto Sales, Mercy Health, Assorted Fast Food/Convenience Stores	40 (-1)	QOL (N = 22) Suspicious = 16	Theft (N = 8)	

* Change reflects difference between current 3 months and prior 3 months

Questions?