

Crime Research Group Data Brief to Brattleboro Select Board 8.20.2024

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Introduction

The Department of Public Safety (DPS) contracted with Crime Research Group, Inc. (CRG) to conduct data analysis for departments involved with the Public Safety Enhancement Team. The purpose of the analysis is to help departments understand their data and to find places where community partners may intervene to help community members and reduce calls to the police.

Data Source

The Brattleboro Police Department (BPD) uses Valcour for its computer aided dispatch and records management system (CAD/RMS). Brattleboro began using Valcour in late 2021. The prior system, Spillman, was very difficult to extract data from. Data prior to Valcour adoption is generally not available for analysis. ¹ BPD provided CRG with extracts from Valcour from 1/1/2022 through 08/13/2024. The extract included the location, call type, all persons involved and all arrestees for in all incidents the department recorded during the study period.

¹ Analysis of BPD data prior to Valcour is available for traffic stop and race data found [here](#). Most crimes in Brattleboro can be analyzed through the National Incident Based Reporting System found [here](#).

Data Quality

The Vaclour system presents a few challenges to analyzing data. The first challenge is the address field. The address field in Vaclour allows multiple entries for the same address. For example, Table 1 shows that the data has 12 different permutations of the address “2 Main St”. When we did a light cleaning, similar to what could be accomplished in excel, we got a different result than when we thoroughly cleaned the data, added the coordinates and matched on the coordinates. Anytime analysis is done on a new extract, the address data will need to be cleaned. CRG has provided the Brattleboro Police with a master list of cleaned addresses and their latitude and longitude for their use. However, future extracts will need to be cleaned to the correct format for the master list to be useful. CRG can provide a script in the R programming language, and instruction on how to use it, that will clean the address to the specifications and map them.

Table 1: Address Permutations for the Co-Op

Location	n	percent
2 Main St #Co Op, Brattleboro, VT, 05301	224	44.98%
2 Main St #Food Co Op, Brattleboro, VT, 05301	114	22.89%
2 Main St #FOOD CO-OP, Brattleboro, VT, 05301	71	14.26%
2 Main St, Brattleboro, VT, 05301	60	12.05%
2 Main St #WHETSTONE BRIDGE, Brattleboro, VT, 05301	8	1.61%
2 Main St #CO-OP, Brattleboro, VT, 05301	7	1.41%
2 Main St #Coop Lot, Brattleboro, VT, 05301	4	0.80%
2 Main St #FOOD COOP, Brattleboro, VT, 05301	3	0.60%
2 Main St #Back End of Parking Lot, Brattleboro, VT, 05301	2	0.40%
2 Main St #Co Cop, Brattleboro, VT, 05301	2	0.40%
2 Main St #Sidwalk, Brattleboro, VT, 05301	2	0.40%
2 Main St #Whetstone walkway, Brattleboro, VT, 05301	1	0.20%

Another challenge with Valcour data are the call types. There are two call types in Valcour: an agency defined Call Type and a state defined Common Call Type. The agency defined call type should be updated as the investigation progresses. For example, if a person calls in and says they have been robbed. The agency defined call type is entered in as a robbery. However, upon investigation, the police determine that the crime was a burglary and not a robbery. The officer should update the call type to reflect the actual crime they are investigating. Other agencies also have issues with officers not updating the call types. CRG did not audit Brattleboro's Call Types for accuracy. The Department should select a few incidents every month to audit for Call Type accuracy.

The agency defined Call Type is mapped to the Common Call Type, which include the National Incident Based Reporting System (NIBRS) categories, and other state defined categories. Brattleboro did not provide us with the Common Call Type. The Department should create a table of Call Type to Common Call Types to verify accuracy in coding.

What types of calls does Brattleboro Respond to?

Brattleboro recorded 105 different call types during the study period. Table 2 shows the type and number of calls. There were 28,758 calls for service from 2022-August 13, 2024. The most common call type was suspicious person/circumstance.

Table 2: Top 10 Call Types

Call Type	n	percent
Suspicious Person/Circumstance	3794	13.20%
Traffic Stop	3459	12.03%
Trespassing	1973	6.86%
Theft	1592	5.54%
Citizen Assist	1357	4.72%
Agency Assistance	1262	4.39%
Welfare/Suicide Check	1175	4.09%
Citizen Dispute	1058	3.68%
Public Speaking	1029	3.58%
Crash - Property Only	1006	3.50%

Grouped Offenses

CRG classified some call types into larger categories to understand the type of calls to which Brattleboro responds. CRG created categories for Motor Vehicle, Agency/Citizen Assist, Drugs, Assaults, Animal Issues, Disorder, Property Offenses, and All Others. Table 3 shows the types of call types that were labeled as Disorder.

Table 3: Call Types Grouped in Disorder

Call Type	n	percent
Suspicious Person/Circumstance	3794	40.02%
Trespassing	1973	20.81%
Citizen Dispute	1058	11.16%
Threatening	560	5.91%
Noise Disturbance	446	4.70%
Family Fight/Domestic	338	3.57%
Juvenile Problem	329	3.47%
Disorderly Conduct	307	3.24%
Vandalism	213	2.25%
Intoxicated Person	167	1.76%
Harassment	108	1.14%
Loitering	86	0.91%
Custodial Dispute	58	0.61%
Property Damage, Non Vandalism	29	0.31%
Vagrancy	15	0.16%

When grouped, the distribution is as follows:

Table 4: Distribution of Call Groups

Call Group	n	percent
Disorder	9481	32.97%
Motor Vehicle	6120	21.28%
Agency/Citizen Assist	4843	16.84%
All Other	3571	12.42%
Property Offenses	3151	10.96%
Animal Issues	725	2.52%
Drugs	558	1.94%
Assaults	309	1.07%

Disorder Locations

The interactive presentation submitted with this report includes a map of the 10 most frequent addresses in the data associated with disordered incidents. There were no private addresses in the top 10. Other PSET jurisdictions had at least one multi-family housing unit in their top 10. In other PSET towns, the middle school was also a hot spot.

Table 5: Top 10 Locations for Disorder

Name	n	percent
Quality Inn	732	14.37%
Co-op	607	11.92%
Market 32	552	10.84%
Hannafords	542	10.64%
Hospital	502	9.85%
Transport Center	491	9.64%
Groundworks	407	7.99%
Econo Lodge	325	6.38%
Travelodge	291	5.71%
Dalem's Chalet	223	4.38%
Family Dollar	216	4.24%
Circle K	206	4.04%

The Top 20 people

CRG identified the 20 people most associated with disorder calls. The people on the list changed since the data were first analyzed through March 2024. Three people on the list changed. Going forward BPD/Project HEAT should focus on the frequency of recent contacts by person, looking at the number of daily contacts (BPD has responded to a call about Person X 3 days this week) and number of contacts per day (Person X had three contacts on Thursday) as evidence of a person in need of non-police services.

All Calls Involving the Top 20

After Disorder, Agency/Citizen Assist was the most common call group. Project HEAT should review these calls to understand their nature. Only 1% of the calls involved Assaults, and only 4% involved Property Offenses, including Retail Theft.

Table 6: All Incidents of the Top 20

Call Group	n	percent
Disorder	1121	65.94%
Agency/Citizen Assist	238	14.00%
All Other	161	9.47%
Property Offenses	72	4.24%
Motor Vehicle	42	2.47%
Drugs	35	2.06%
Assaults	18	1.06%
Animal Issues	13	0.76%