NYPD Trial
High-Level Review of Results

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NYPD PredPol Test Overview

- PredPol was asked to provide crime predictions to NYPD to demonstrate PredPol's predictive accuracy.
- This report is based upon PredPol's analysis of our predictions based upon the NYPD data received:
  - NYPD crime data reported between the time period of 7/1/15 and 7/31/15
  - Obtained from 17 precincts in Manhattan North, Queens South and Staten Island
- Results:
  - 5 boxes per precinct for each of 6 crime types (used a subset of crime codes within each crime type)
  - Results on following pages

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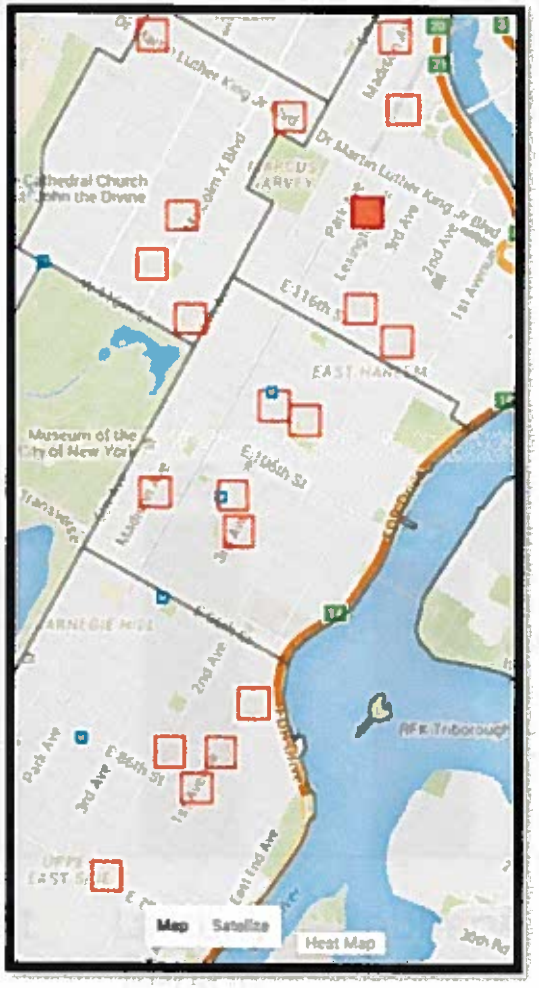
NYPD Tests – July, 2015

First Platoon

Second Platoon



Third Platoon

predictions over three Platoons show fine-grained shifts in crime risk

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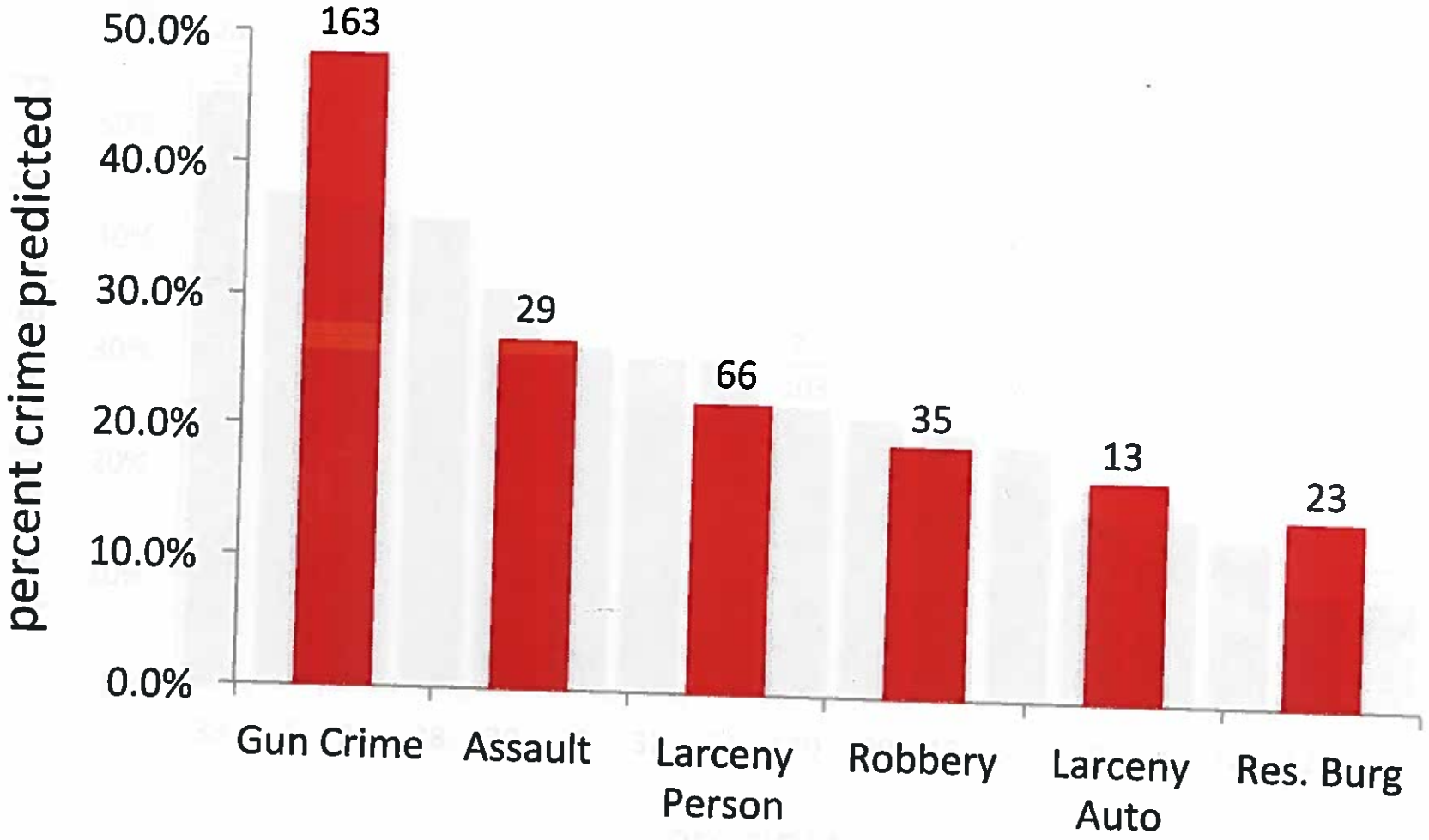
% of crimes correctly predicted to occur in PredPol boxes, by crime type



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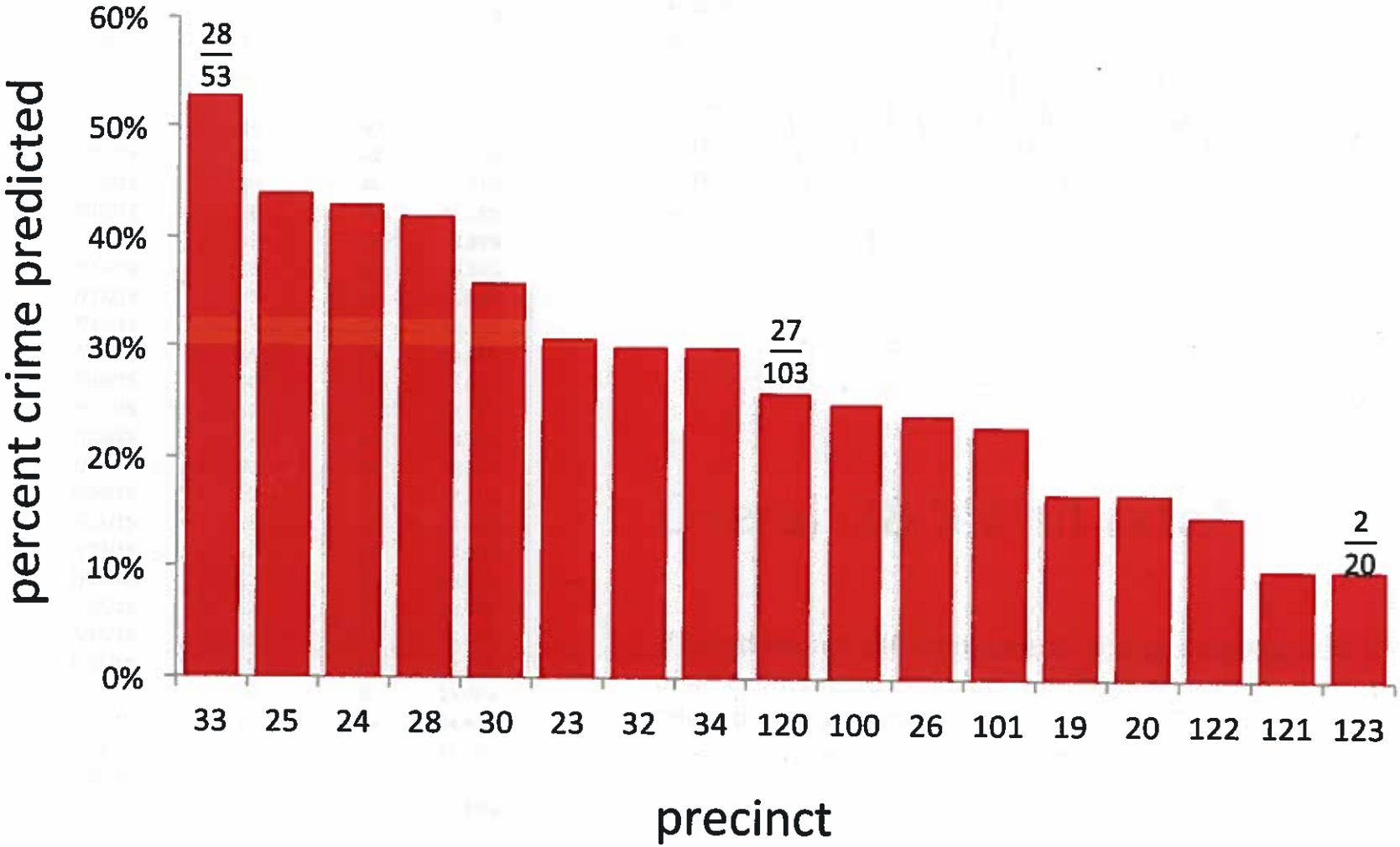
% of crimes correctly predicted to occur in PredPol boxes, by NYPD precinct



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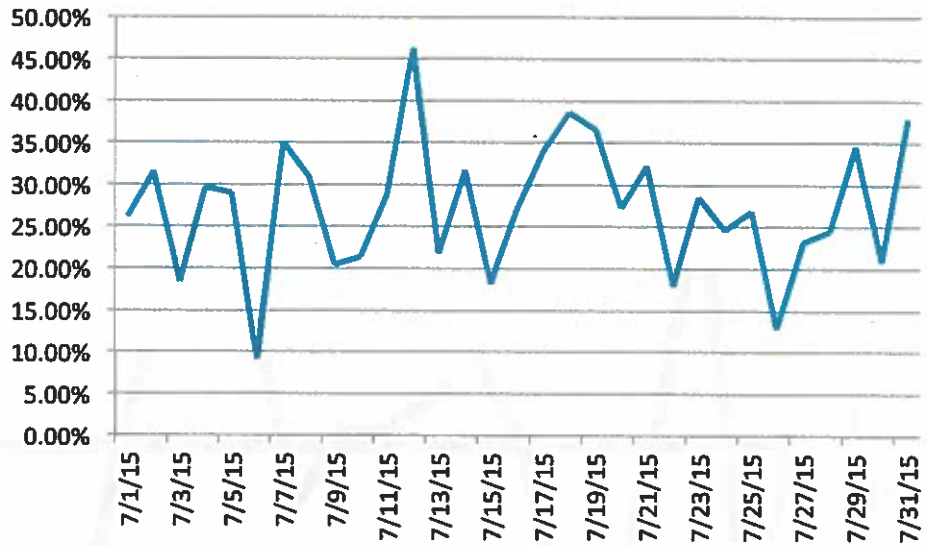
Successful Predictions (Hits) by Date

Date	Hits	Total Crime	% Predicted
7/1/15	12	46	26.09%
7/2/15	12	38	31.58%
7/3/15	9	49	18.37%
7/4/15	11	37	29.73%
7/5/15	9	31	29.03%
7/6/15	1	11	9.09%
7/7/15	14	40	35.00%
7/8/15	13	42	30.95%
7/9/15	10	49	20.41%
7/10/15	10	47	21.28%
7/11/15	13	45	28.89%
7/12/15	19	41	46.34%
7/13/15	5	23	21.74%
7/14/15	7	22	31.82%
7/15/15	4	22	18.18%
7/16/15	10	37	27.03%
7/17/15	15	44	34.09%
7/18/15	17	44	38.64%
7/19/15	15	41	36.59%
7/20/15	9	33	27.27%
7/21/15	11	34	32.35%
7/22/15	11	61	18.03%
7/23/15	12	42	28.57%
7/24/15	13	53	24.53%
7/25/15	11	41	26.83%
7/26/15	5	39	12.82%
7/27/15	6	26	23.08%
7/28/15	11	45	24.44%
7/29/15	18	52	34.62%
7/30/15	5	24	20.83%
7/31/15	11	29	37.93%



Overall 28.9% hit rate*

(*Based upon 1,140 crime events accurately geocoded. A total of 48 events were excluded from both hit scoring and total crime due to geocoding inconsistencies. Table includes all events sent to PredPol under Total Crime.)

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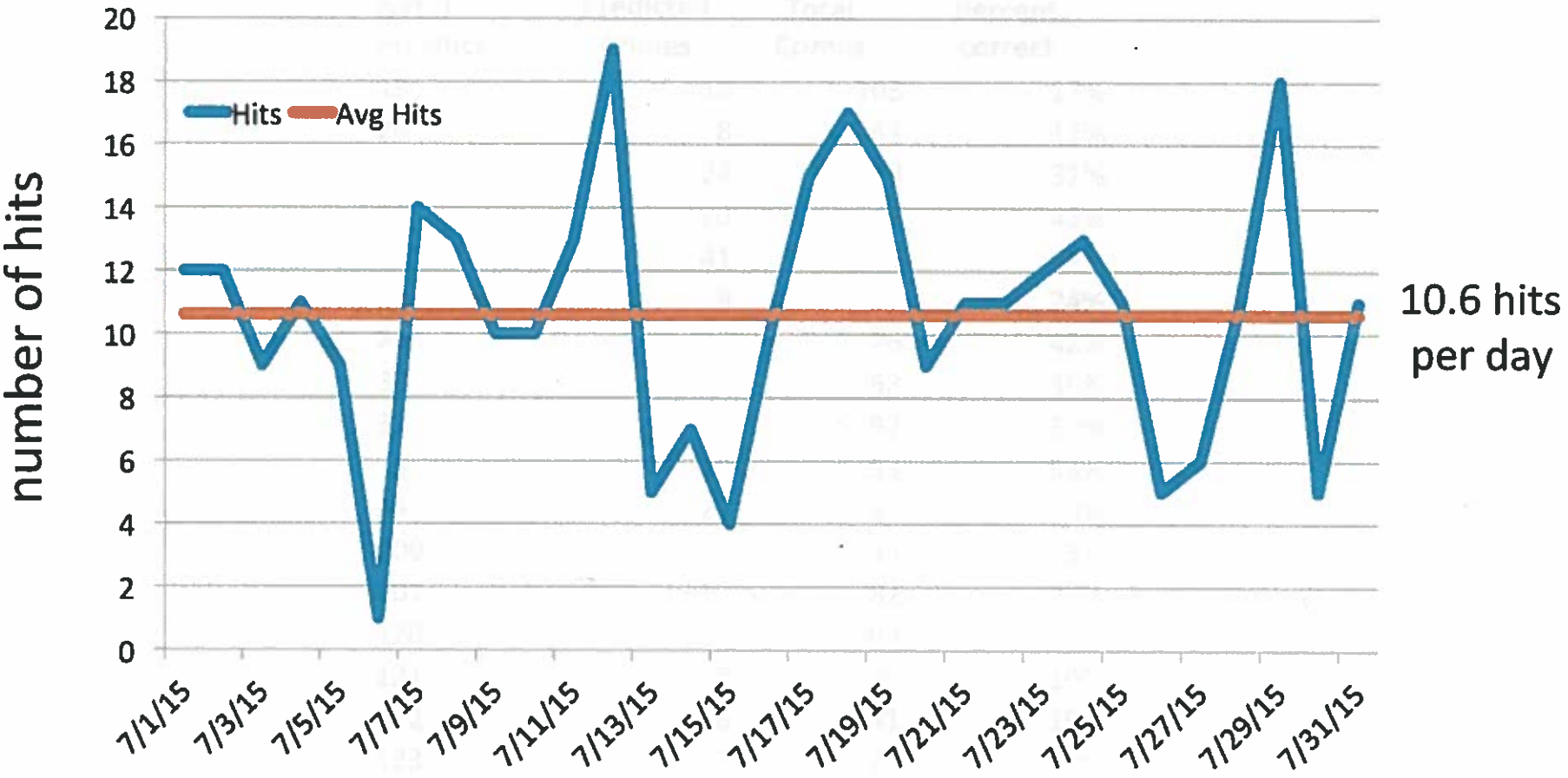
NYPD by Day – July, 2015



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Accuracy of Predictions by Precinct

(Crimes correctly predicted to occur in 500' x 500' PredPol box)

NYPD Precinct	Predicted Crimes	Total Crimes	Percent correct
19	18	103	17%
20	8	47	17%
23	24	78	31%
24	20	47	43%
25	41	93	44%
26	9	37	24%
28	32	76	42%
30	19	53	36%
32	28	92	30%
33	28	53	53%
34	28	93	30%
100	13	52	25%
101	19	82	23%
120	27	103	26%
121	7	70	10%
122	6	41	15%
123	2	20	10%

5 PredPol boxes in every precinct for each crime type

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NYPD Predictive Accuracy Test Highlights

- PredPol was successful in predicting an average of **28.9%** of all geo-coded crimes **within < 1% of the total land area** of all 17 precincts.
- PredPol was able to predict **close to 50% of all gun crimes** across all crime types during this 30 day period in the 17 precincts tested.
- PredPol's predictive accuracy for all crime types was **over 50% in the 33rd Precinct**.

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NYPD Test Summary - Notes

- The 30 day predictive results from this trial may be exceeded when PredPol is deployed by NYPD, as analysis of predictive accuracy improves with longer periods of study or deployment.
- The NYPD test was limited to predictive accuracy, NOT efficacy in crime reduction. While welcoming challenges of predictive accuracy, PredPol's goal is overall crime reduction achieved by our agency partners using PredPol's comprehensive solution.
  - PredPol is a daily operations/patrol solution optimized for ease of use and deployment; critical factors in improving officer acceptance/adoption. With 1+ million hours of in-field use on three continents, PredPol is a proven solution for both crime prediction and crime reduction.
  - PredPol's "virtuous cycle" of crime reduction means fewer calls for service, increasing available patrol time to focus on further crime reduction.
  - PredPol is ready to partner with NYPD for actual field deployment.

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