



# Crime Risk Forecasting in a Risk Assessment

POWERING THE RESOURCE TO RISK  
ALLOCATION STRATEGY



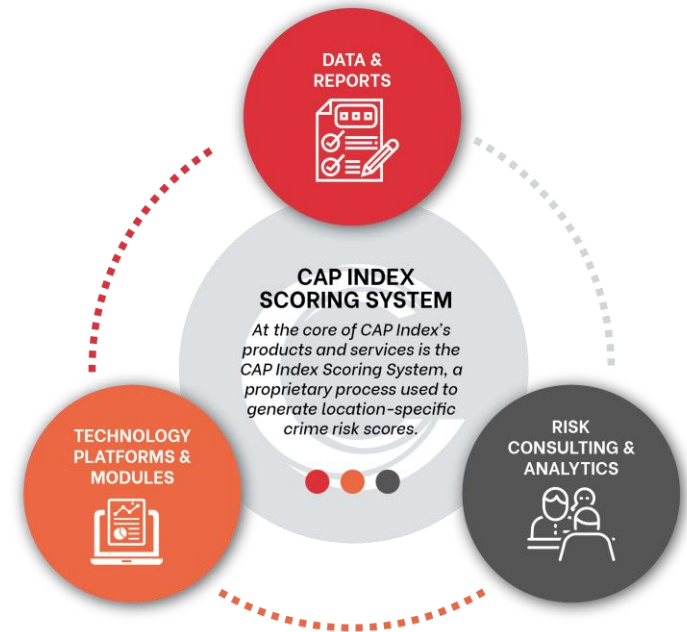
**THE LEADERS IN CRIME RISK FORECASTING**

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## THE PIONEERS OF LOCATION-BASED CRIME RISK FORECASTING

CAP Index is a team of criminologists, security professionals, and legal experts.

Over 35 years ago, we pioneered the complex field of crime risk forecasting, and are the preeminent source of crime risk data in the US, the UK, Canada, and Mexico.





## Theory of social disorganization

The CRIMECAST Scoring System is based on the strong relationship between a neighborhood's "social disorganization" and the amount of crime that occurs there.

+ Journey to Crime & Routine Activities Theory



# TRUSTED BY OVER 10,000 CLIENTS



OVER  
**80%**  
OF FORTUNE  
100 COMPANIES



**8**  
OF THE TOP 10  
RESTAURANT  
BRANDS



**23**  
OF THE TOP 25  
FINANCIAL  
INSTITUTIONS



**23**  
OF THE TOP 25  
RETAILERS



**9**  
OF THE TOP 10  
INSURANCE  
COMPANIES



OVER  
**700**  
SECURITY  
CONSULTANTS



OVER  
**200**  
HEALTHCARE  
ORGANIZATIONS



OVER  
**300**  
LAW FIRMS





THIS SITE'S CAP INDEX® SCORE:

**425**

THE CRIME RISK AT THIS SITE IS 4.25  
TIMES THE NATIONAL AVERAGE OF 100.

CRIMES AGAINST PERSONS

491

CRIMES AGAINST PROPERTY

369

Homicide

491

Breaking & Entering

106

Sexual Assault

250

Theft

435

Robbery

524

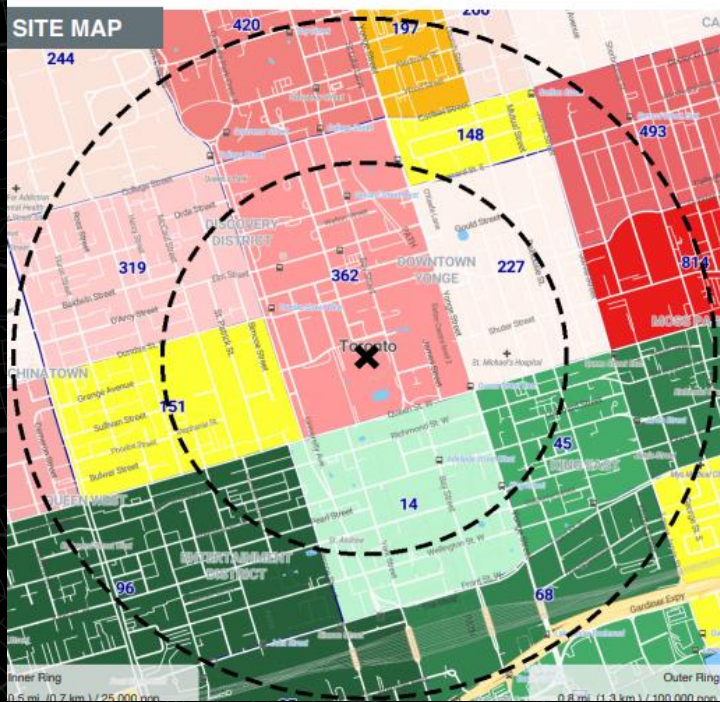
Motor Vehicle Theft

322

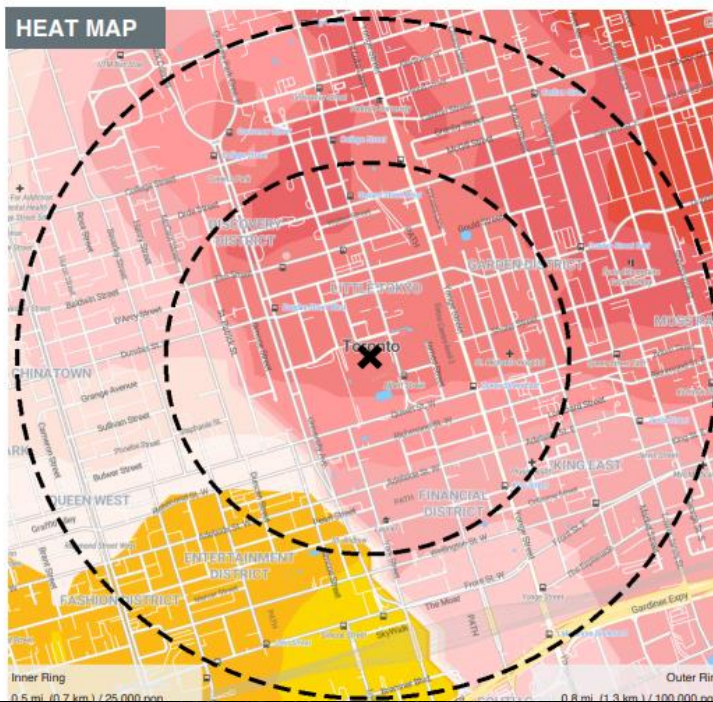
Assault

544

SITE MAP



HEAT MAP



425

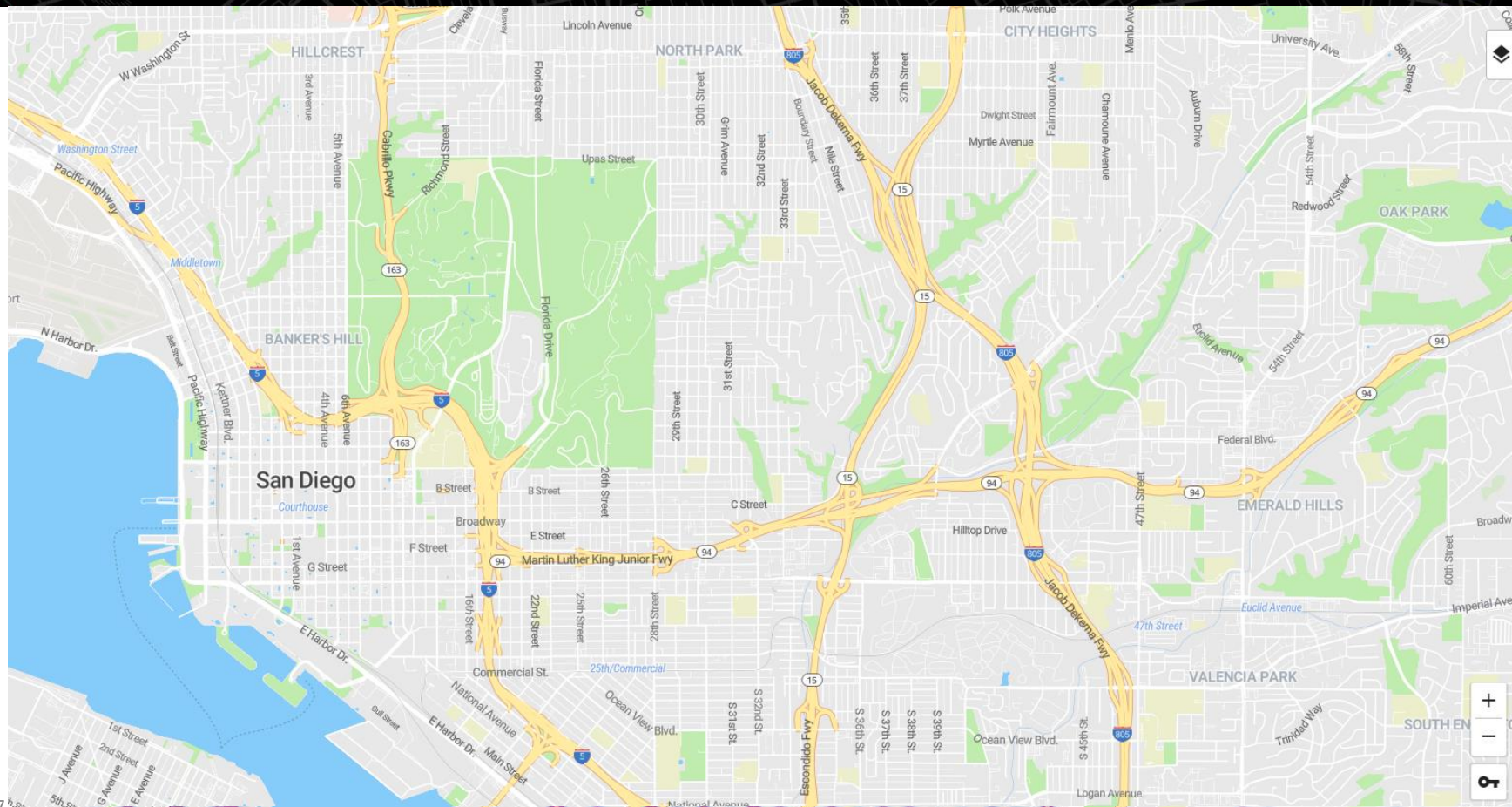


# THE CAP INDEX SCORING SYSTEM

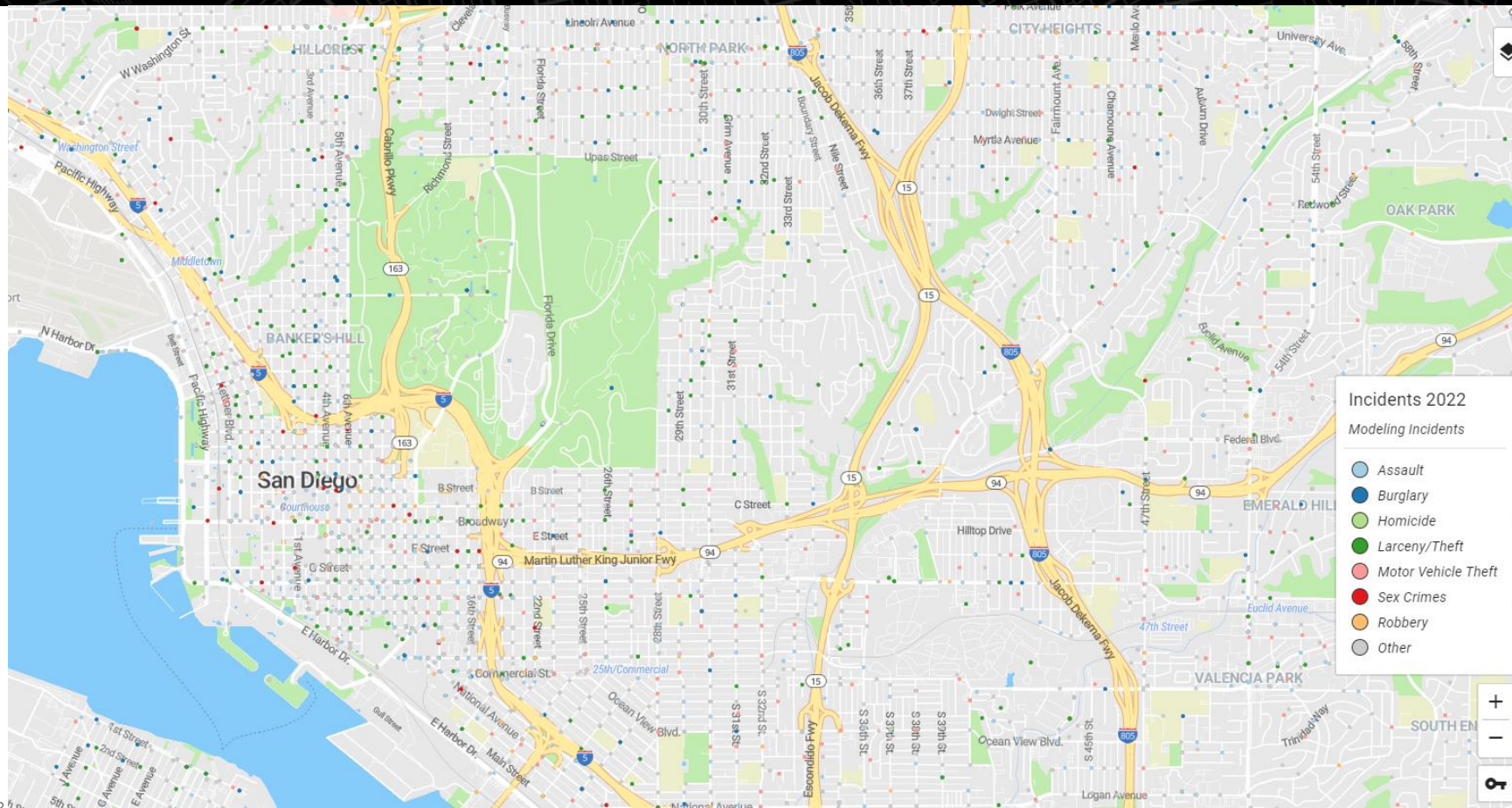




# WHAT IS CRIME RISK FORECASTING



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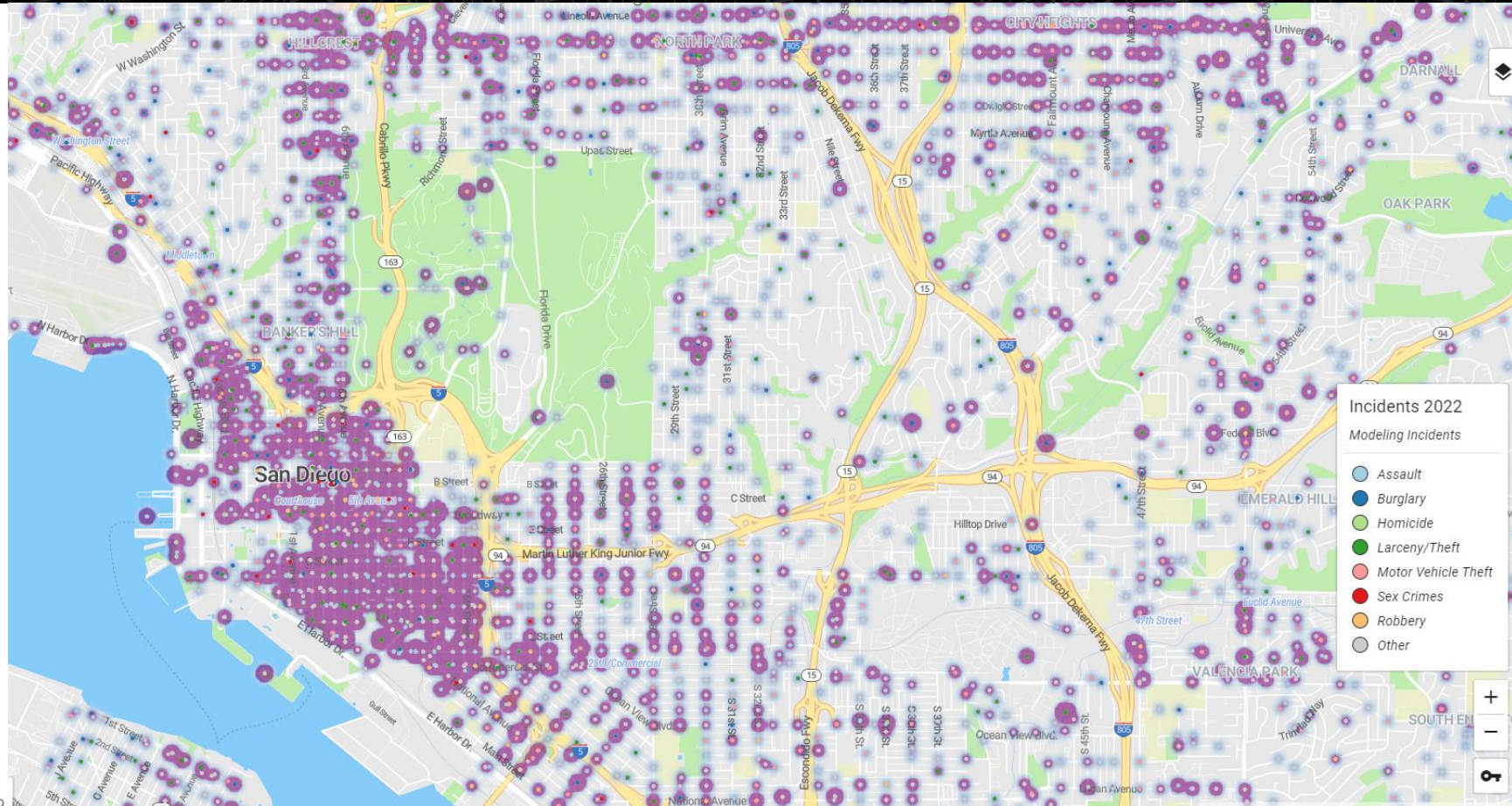
Incidents 2022

Modeling Incidents

- Assault
- Burglary
- Homicide
- Larceny/Theft
- Motor Vehicle Theft
- Sex Crimes
- Robbery
- Other

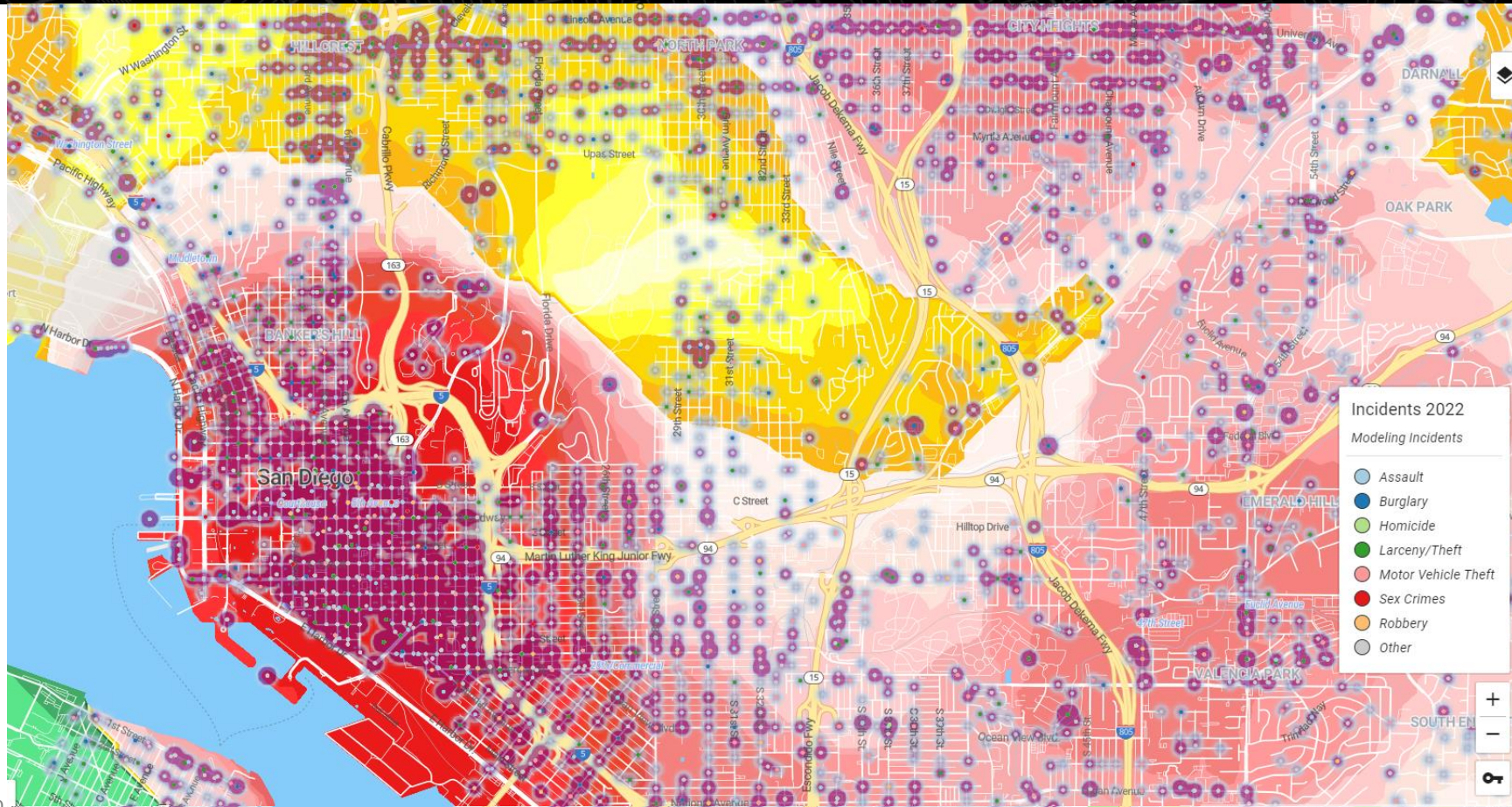


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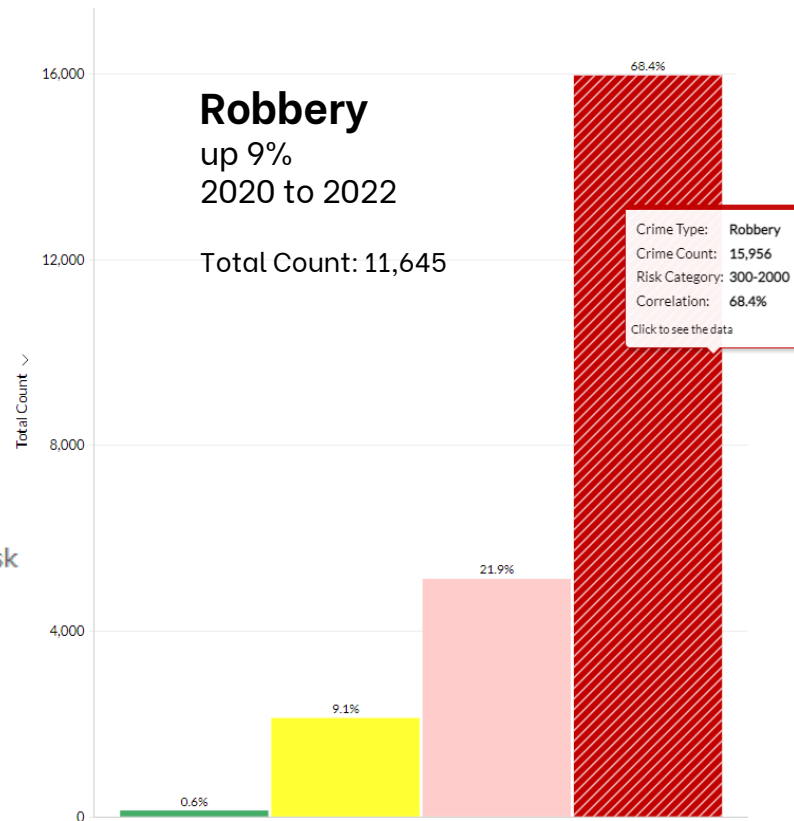
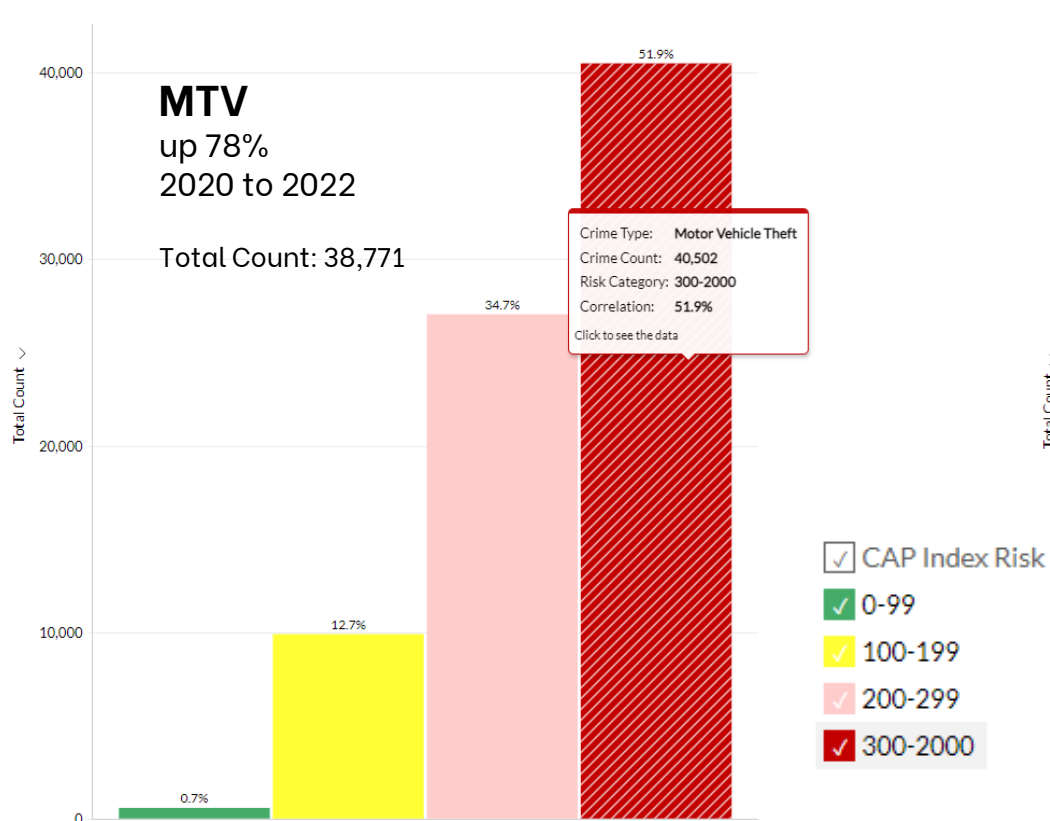


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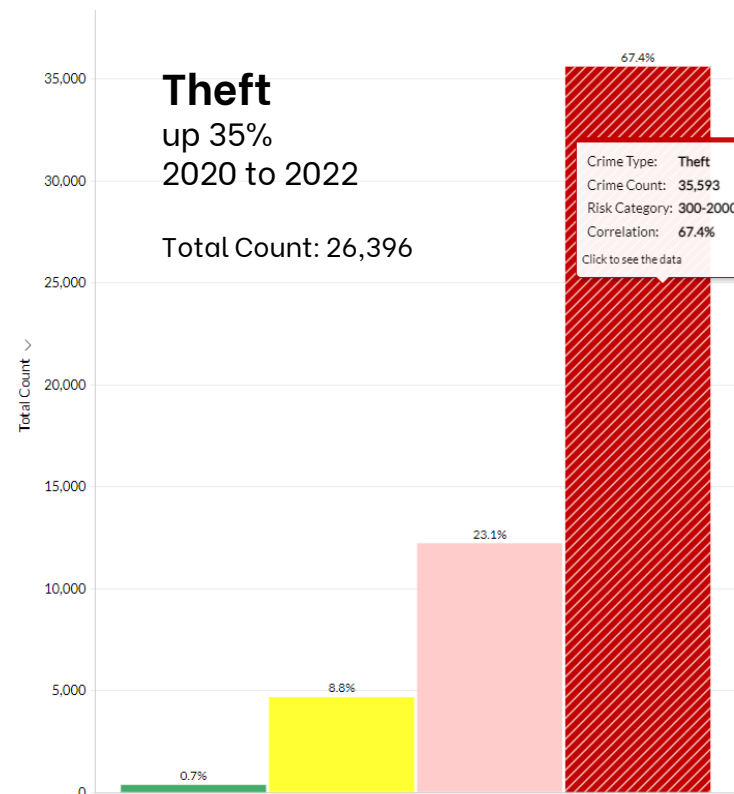
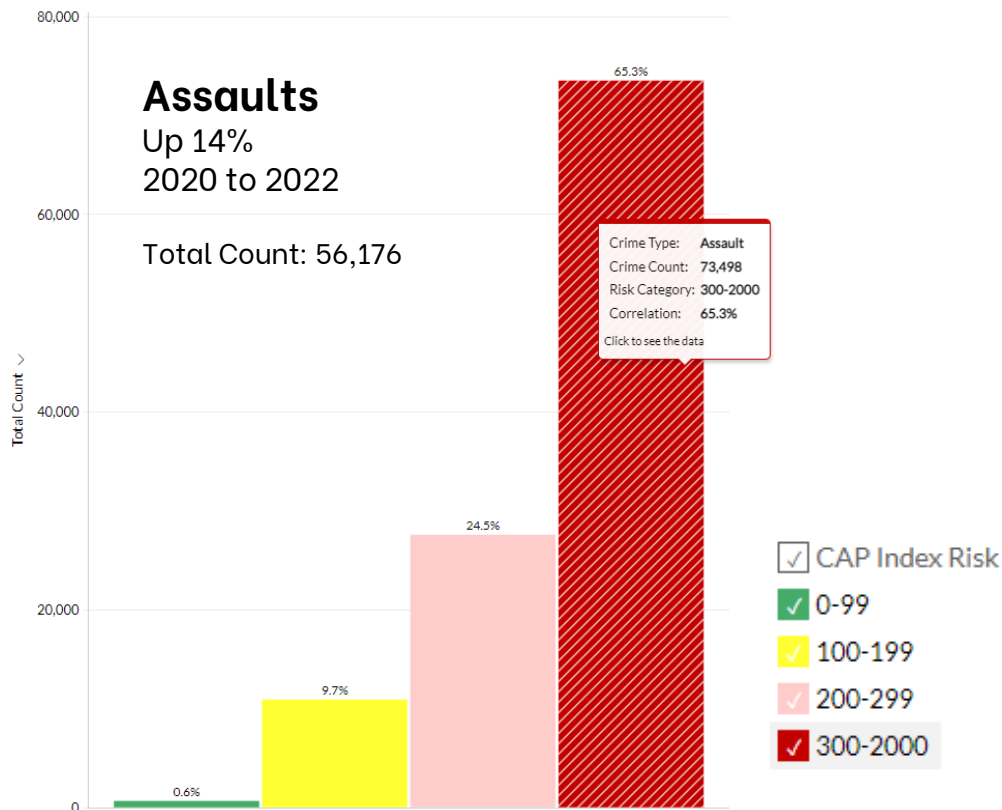




## 2020-2022: Toronto, Montreal & Sherbrooke Crime Data



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# REFERENCE SCORE RANGE DISTRIBUTION



Score Range	National CAP Index	
No Score	1292	
0-100	37438	66%
100-199	12374	22%
200-299	3556	6%
300-2000	1930	3%
Grand Total	56590	

# WHY CRIME RISK FORECASTING?



## **OBJECTIVITY: Data integrity is free of bias**

Police data can be influenced by political, financial, definitional, and reporting biases.



## **PREDICTABILITY: Not solely historic but includes a predictive aspect**

Police and crime reports are historic in nature.



## **AVAILABILITY: Complete coverage**

Address-specific crime data is often unavailable.



## **PRECISION: Concise comparison**

Aggregated datasets for larger geographies does not differentiate between high- and low-crime locations.



## **CONSISTENCY: Is it consistent across all jurisdictions?**

Collection and reporting by individual police jurisdictions and other resources varies. Is it comparable?



## Area Crime Potential

<b>13. What is the area crime potential for this banking office?</b>	
Low Potential (e.g. CAP Index Score=0-99)	10
Moderate Potential (e.g. CAP Index Score=100-399)	20
Elevated Potential (e.g. CAP Index Score=400-2000)	30
<b>Area Crime Potential Total Points</b>	

## Crime History Rating

<b>14. How many bank robberies has this banking office had in the past 36 months?</b>	
Zero (0) – One (1)	10
Two (2)	20
Three (3) or More*	30
<b>15. How many other non-bank robberies (ATM robbery, night depository robbery, parking lot or other exterior common area robbery) has this banking office had in the past 36 months?</b>	
Zero (0) – One (1)	10
Two (2)	20
Three (3) or More*	30
<b>Crime History Rating Total Points</b>	

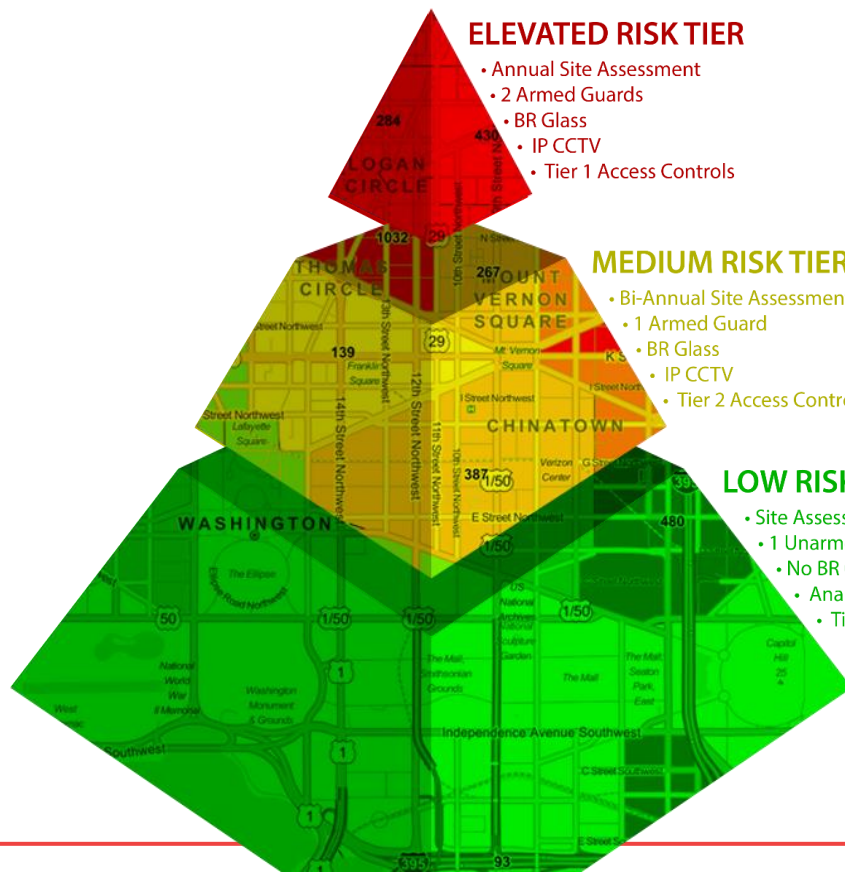
## Risk Category Rating

### Scoring - Example

**Risk Measurement Assessment Total Points + Exposure Rating Total Points + Area Crime Potential Total Points + Crime History Rating Total Points = Total Score**

Risk Measurement Assessment Total Points:	36
Exposure Rating Total Points:	6
Area Crime Potential Total Points	20
Crime History Rating Total Points:	40
<b>Total Score</b>	<b>102</b>
Category 1 (Baseline) (e.g. Total Score 51-84)	
Category 2 (Enhanced) (e.g. Total Score 85-118)	✓
Category 3 (Elevated) (e.g. Total Score 119-153)	

# SECURITY RESOURCE ALLOCATION



## ELEVATED RISK TIER

- Annual Site Assessment
- 2 Armed Guards
- BR Glass
- IP CCTV
- Tier 1 Access Controls

## Tier 1

CAP Index Scores 400-2000

Annual Spend: \$250,000 at each location

## MEDIUM RISK TIER

- Bi-Annual Site Assessment
- 1 Armed Guard
- BR Glass
- IP CCTV
- Tier 2 Access Controls

## Tier 2

CAP Index Scores 200-399

Annual Spend: \$100,000 at each location

## LOW RISK TIER

- Site Assessment Every 3 Years
- 1 Unarmed Guard
- No BR Glass
- Analog CCTV
- Tier 2 Access Controls

## Tier 3

CAP Index Scores 0-99

Annual Spend: \$60,000 at each location

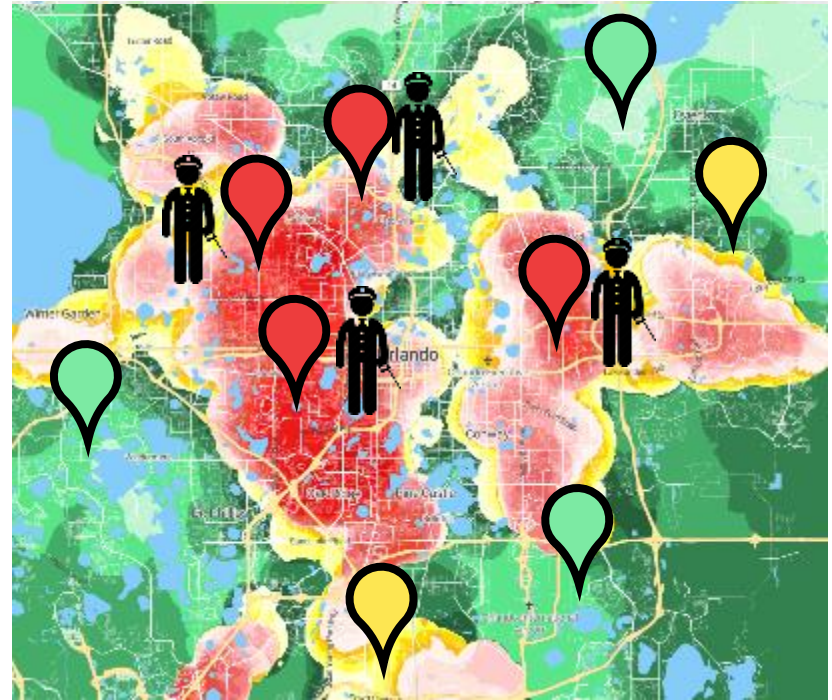
(for demonstration purposes only)



# RANK, COMPARE AND PRIORITIZE



Identifying the crime risk at each site will assist in deploying the guards – aligning “*resource to risk*”



# RANK, COMPARE AND PRIORITIZE



Company is investing in new safes.

Will replace all 600 over three year.

How do they deploy over time?

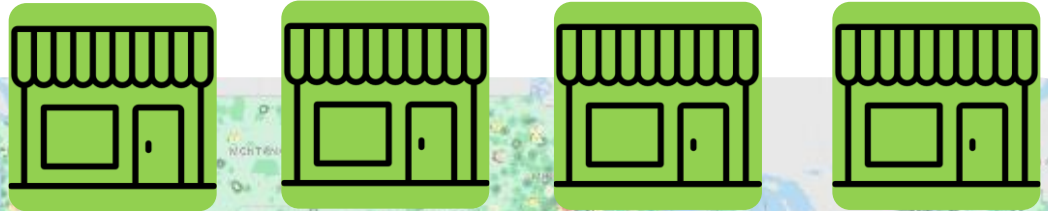


# RANK, COMPARE AND PRIORITIZE

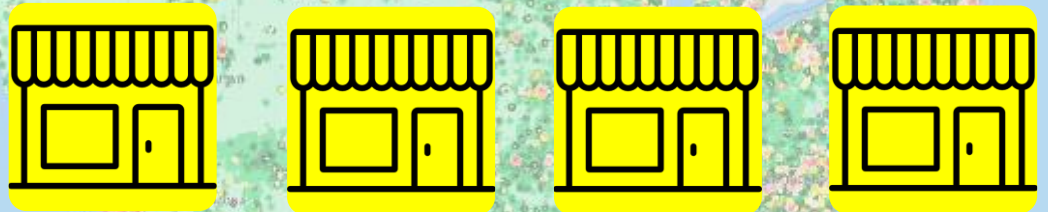


**Prioritize budget  
spend in constrained  
context...**

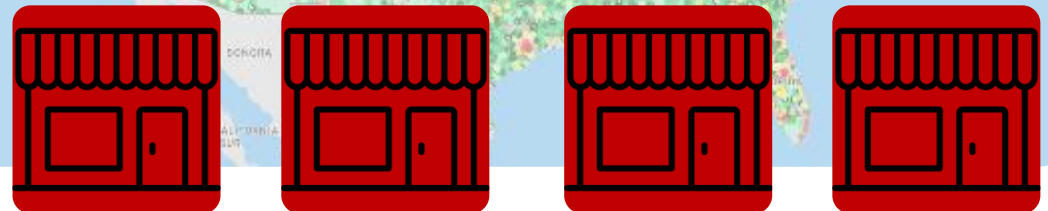
Year One



Year Two



Year Three





# RANK, COMPARE AND PRIORITIZE



- Staffing levels
- Span of control
- Training programs/frequencies
- Differential pay rates
- Frequency of audits, inspections
- Optimize goal setting
- Proforma P&L for new stores
- Density of coverage



**For more information, please contact:**

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