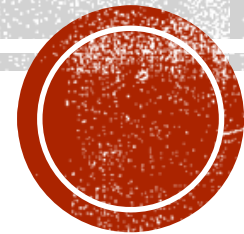


**SMART CITY  
CRIME CONTROL  
CHINA**



# CRIME IN THE CITY OF CHINA

The cities of China overall security situation

**Crime Index for Country (125 countries in the world 2017) lower ranking less crime**

Rank	Country	Crime Index	Safety Index
90	Sudan	35.05	64.95
91	Sri Lanka	34.57	65.43
92	China	33.90	66.10
93	Kuwait	33.48	66.52
94	Cyprus	32.46	67.54

**Crime Index for Country (117 countries in the world 2016) lower ranking less crime**

Rank	Country	Crime Index	Safety Index
86	Germany	32.95	67.05
87	Azerbaijan	32.39	67.61
88	China	32.08	67.92
89	Czech Republic	32.06	67.94
90	Spain	31.77	68.23



# CRIME IN THE CITY OF CHINA

Thefts



Burglaries



Auto thefts



Robberies



Assaults



Sexual assaults



Murders



Arson



# INDUCEMENT OF THE CITY CRIME

- living expenses
- unemployment
- average income
- populational density
- exotic floating population

Reference from: Liu Zhizhong, Chen Xiaoling, *The Impact Analysis of Population Structure to Crime Rate in China*



# WHY CRIME CONTROL IN THE CITY IS CRITICAL?

- Affect citizen's mood, satisfaction.
- Affect the tourism.
- Affect the infrastructure maintenance.
- Indirectly affect the economy of the city.





# CONTEMPORARY COMMON MEASURES OF CRIME CONTROL IN CHINA

CCTV Camera (Sky net)



Police Patrol Car



Patrol Police



Security Pavilion



Citizen Report

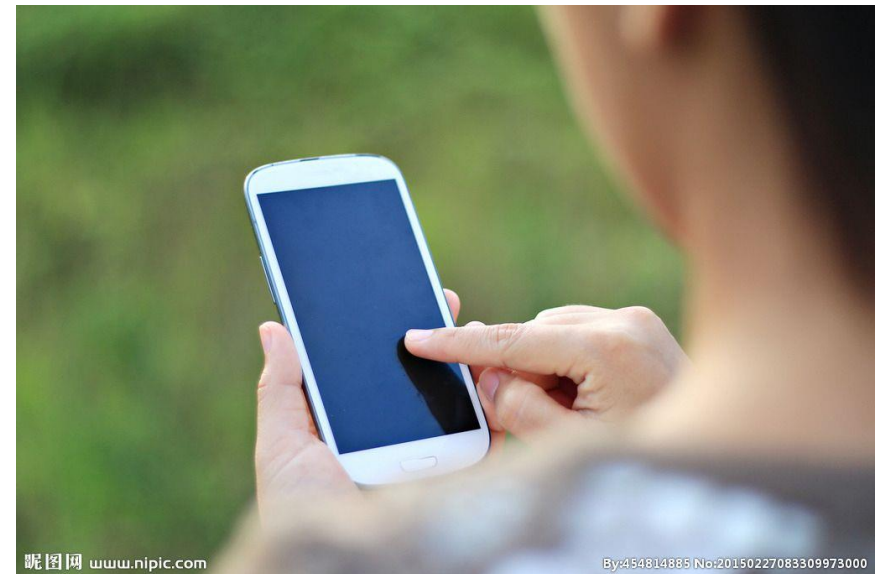


# HOW CAN SMART CITY TAKE PART IN CRIME CONTROL OF CHINESE CITIES?



# WHY CHINA?

- Because of the structure of the Chinese government, it creates powerful infrastructure for top-bottom smart system.
- 2017 Smartphone Penetration: 51.7%.  
Smartphone user: 717,310,000 gives a steady foundation for bottom-top smart system.





# PREVENT CRIME

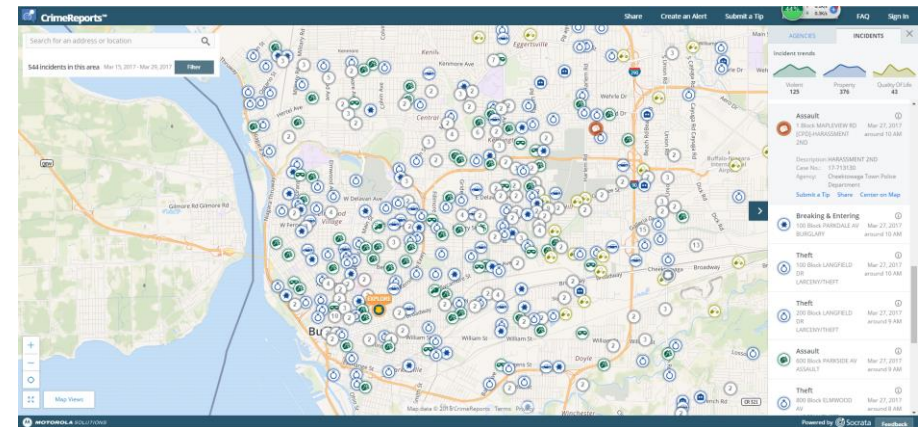
- Current measure in the city of Chicago:

## **Public tip-offs**

disadvantage: Contingency

- Predict crime in smart city:

**Using Analytics and Big Data predict crime. professors Eric Piza and Leslie Kennedy**



(reference: Hilton Collins, [Predicting-Crime-Using-Analytics-and-Big-Data](https://www.crimereports.com/), <https://www.crimereports.com/>)



# DETER CRIME

- Sense the ongoing crime in Chinese cities:  
current measure: **citizen report or observation of Patrol Police**  
disadvantage: **delay, misleading information**

Case: 2014, March 1<sup>st</sup>. Terrorist attack at Kunming railway station, Yunnan province, China. 29 citizen were killed by 8 Terrorists, 130 citizen were injured.



- Sense the crime in smart city:

1. sense the citizen's mood:

sensor on the smart citizen (reference: [new-devices-can-sense-your-mood-and-tell--or-even-text--others, this-new-tech-can-detect-your-mood](#))

sensor on the CCTV camera :

facial recognition detect the emotion

focus on the eyes and mouth

analyze the tone of voice

(reference: [Read-Emotion](#), Sky Net CCTV Camera System )



## 2. Collect the data:

collects data from citizen's mobile device or the cctv system in the city to city crime control center.

## 3. Use the data:

By analyzing the data, the smart system in the crime control center can immediately locate the massive rapid mood change of the citizens in the same area which could be potential ongoing crime area.

instead of waiting citizen's report, the control center can check the area by using the cameras and send police officers to deter the crime.



# PURSUE CRIME

- Current measure: Chase of the police officer, sky net CCTV camera.
- Smart city measure:
  1. analyze the data from camera by computer, locate every movement of the people that come out from the crime area.
  2. Use the mood data to determine possible escape direction of the criminal.
  3. Use facial or voice recognition to determine and locate the criminal.





# CONCLUSION

- Even though city of China has a good safety ranking, the large territory and large population make crime control harder. The introduction of smart system to the police system could change how the police system works today, makes the system more efficient and stop the crime before it starts.

