

NYPD Arrests

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BUSINESS INTELLIGENCE GUIDEBOOK

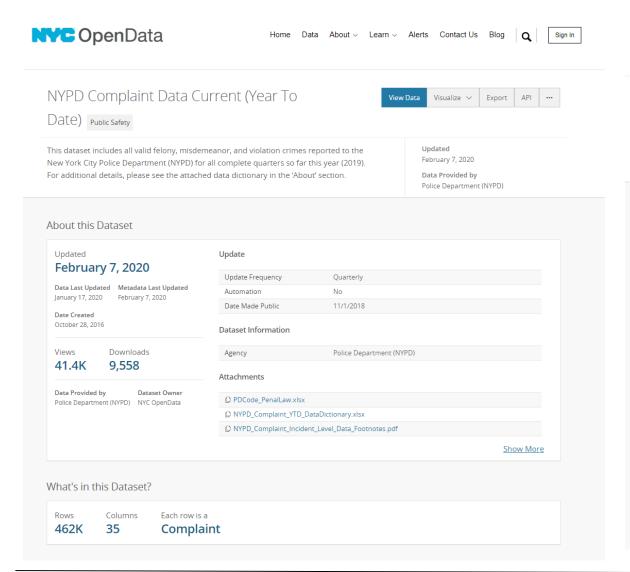
From Data Integration to Analytics

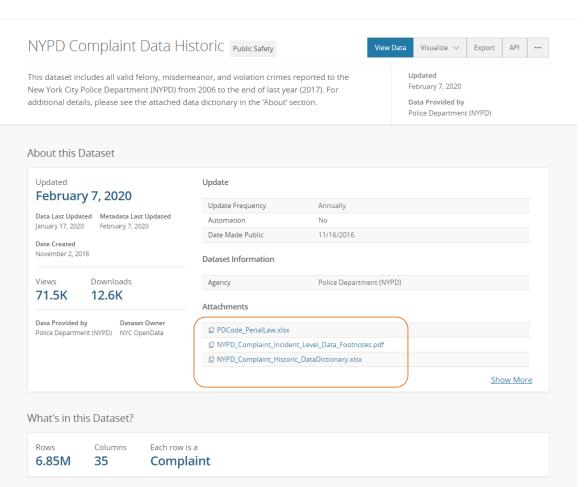


RICK SHERMAN

FOREWORD BY **CLAUDIA IMHOFF**PRESIDENT OF INTELLIGENT SOLUTIONS, INC.

NYPD Complaints Data: YTD (2019), Historical (2006-2018)





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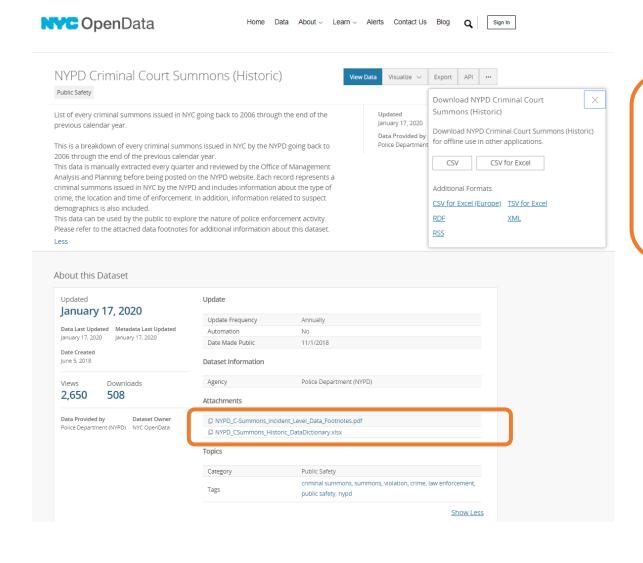
NYC OpenData

NYPD Complaints Data - Columns

O - le come a Norma -	Outure Description
Column Name	Column Description
CMPLNT_NUM	Randomly generated persistent ID for each complaint
ADDR_PCT_CD	The precinct in which the incident occurred
BORO	The name of the borough in which the incident occurred
CMPLNT_FR_DT	Exact date of occurrence for the reported event (or starting date of occurrence, if CMPLNT_TO_DT exists)
CMPLNT_FR_TM	Exact time of occurrence for the reported event (or starting time of occurrence, if CMPLNT_TO_TM exists)
CMPLNT_TO_DT	Ending date of occurrence for the reported event, if exact time of occurrence is unknown
CMPLNT_TO_TM	Ending time of occurrence for the reported event, if exact time of occurrence is unknown
CRM_ATPT_CPTD_CD	Indicator of whether crime was successfully completed or attempted, but failed or was interrupted prematurely
HADEVELOPT	Name of NYCHA housing development of occurrence, if applicable
HOUSING_PSA	Development Level Code
JURISDICTION_CODE	Jurisdiction responsible for incident. Either internal, like Police(0), Transit(1), and Housing(2); or external(3), like Correction, Port Authority, etc.
JURIS_DESC	Description of the jurisdiction code
KY_CD	Three digit offense classification code
LAW_CAT_CD	Level of offense: felony, misdemeanor, violation
LOC_OF_OCCUR_DESC	Specific location of occurrence in or around the premises; inside, opposite of, front of, rear of
OFNS_DESC	Description of offense corresponding with key code
PARKS_NM	Name of NYC park, playground or greenspace of occurrence, if applicable (state parks are not included)
PATROL_BORO	The name of the patrol borough in which the incident occurred
PD_CD	Three digit internal classification code (more granular than Key Code)
PD_DESC	Description of internal classification corresponding with PD code (more granular than Offense Description)
PREM_TYP_DESC	Specific description of premises; grocery store, residence, street, etc.
RPT_DT	Date event was reported to police
STATION_NAME	Transit station name
SUSP_AGE_GROUP	Suspect's Age Group
SUSP_RACE	Suspect's Race Description
SUSP_SEX	Suspect's Sex Description
TRANSIT_DISTRICT	Transit district in which the offense occurred.
VIC_AGE_GROUP	Victim's Age Group
VIC_RACE	Victim's Race Description
VIC_SEX	Victim's Sex Description
X_COORD_CD	X-coordinate for New York State Plane Coordinate System, Long Island Zone, NAD 83, units feet (FIPS 3104)
Y_COORD_CD	Y-coordinate for New York State Plane Coordinate System, Long Island Zone, NAD 83, units feet (FIPS 3104)
Latitude	Midblock Latitude coordinate for Global Coordinate System, WGS 1984, decimal degrees (EPSG 4326)
Longitude	Midblock Longitude coordinate for Global Coordinate System, WGS 1984, decimal degrees (EPSG 4326)



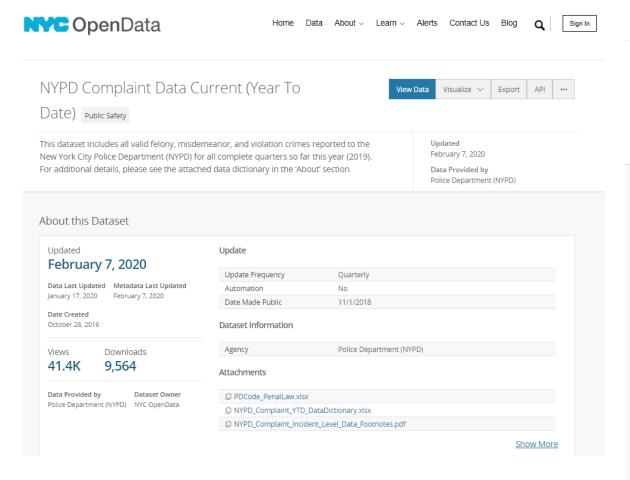
NYPD Complaints Data

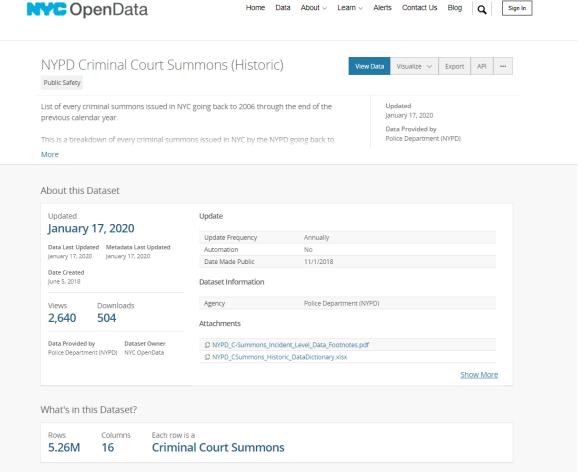


OneDrive: \Project - NYPD Data

- Neighborhood Tabulation Areas (NTA).geojson
- NYPD_Complaint_Data_Current__Year_To_Date_csv.zip
- NYPD_Complaint_Data_Current__Year_To_Date_tsv.zip
- NYPD_Complaint_Data_Historic_csv.zip
- NYPD Complaint Data Historic tsv.zip
- NYPD_Complaint_Historic_DataDictionary.xlsx
- NYPD_Complaint_Incident_Level_Data_Footnotes.pdf
- PDCode_PenalLaw.xlsx
- Police Precincts.geojson



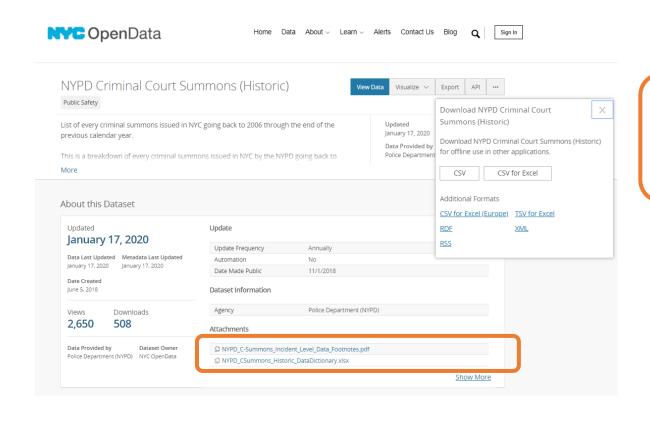






Column Name	Column Description
SUMMONS_KEY	Randomly generated persistent ID for each violation
SUMMONS_DATE	Exact date of violation for the reported event
OFFENSE_DESCRIPTION	Description of the violation committed
LAW_SECTION_NUMBER	NYS Penal Law and local law section number
LAW_DESCRIPTION	Description of the law dictionary where the cited violation came from. Blank fields represent errors in the database
SUMMONS_CATEGORY_TYPE	General description of the violation category
AGE_GROUP	Perpetrator's age within a category
SEX	Perpetrator's sex code. M(Male), F(Female), U(Unknown or violation issued to a business)
RACE	Perpetrator's race description. U(Unknown or violation issued to a business)
JURISDICTION_CODE	Jurisdiction responsible for the issued violation. Jurisdiction codes 0(Patrol), 1(Transit) and 2(Housing) represent NYPD whilst codes 3 or more represent non NYPD jurisdictions
BORO	New York City Boroughs
PRECINCT_OF_OCCUR	Precinct where the violation was issued
Latitude	Latitude coordinate for Global Coordinate System, WGS 1984, decimal degrees (EPSG 4326)
Longitude	Longitude coordinate for Global Coordinate System, WGS 1984, decimal degrees (EPSG 4326)
X_COORDINATE_CD	Midblock X-coordinate for New York State Plane Coordinate System, Long Island Zone, NAD 83, units feet (FIPS 3104)
Y_COORDINATE_CD	Midblock Y-coordinate for New York State Plane Coordinate System, Long Island Zone, NAD 83, units feet (FIPS 3104)





OneDrive: \Project - NYPD Data

- Neighborhood Tabulation Areas (NTA).geojson
- NYPD_C-Summons_Incident_Level_Data_Footnotes.pdf
- NYPD Criminal Court Summons Historic csv.zip
- NYPD_Criminal_Court_Summons__Historic_tsv.zip
- NYPD_CSummons_Historic_DataDictionary.xlsx
- PDCode_PenalLaw.xlsx
- Police Precincts.geojson

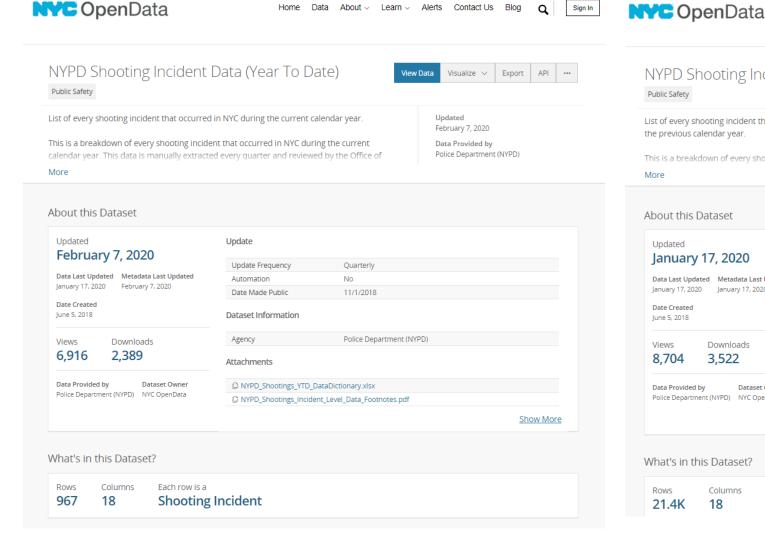


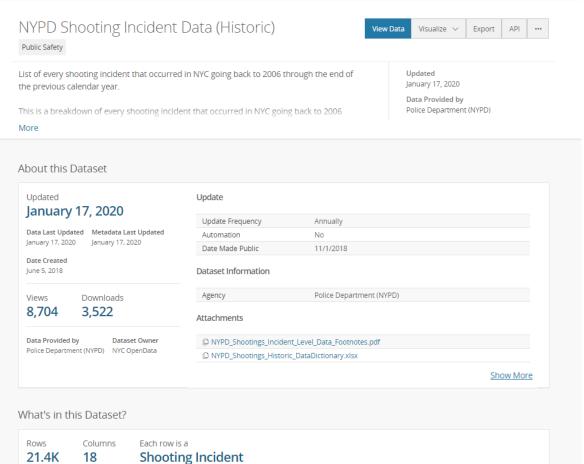
NYPD Shooting Incident Data

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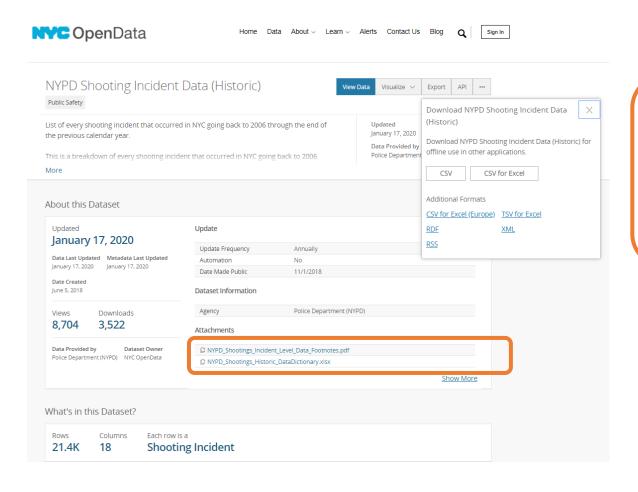


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NYPD Shooting Incident Data



OneDrive: \Project - NYPD Data

- Neighborhood Tabulation Areas (NTA).geojson
- NYPD_Shootings_Historic_DataDictionary.xlsx
- NYPD Shootings Incident Level Data Footnotes.pdf
- NYPD_Shooting_Incident_Data__Historic_.csv
- NYPD Shooting Incident Data Historic .tsv
- NYPD_Shooting_Incident_Data__Year_To_Date_.csv
- NYPD Shooting Incident Data Year To Date .tsv
- PDCode_PenalLaw.xlsx
- Police Precincts.geojson

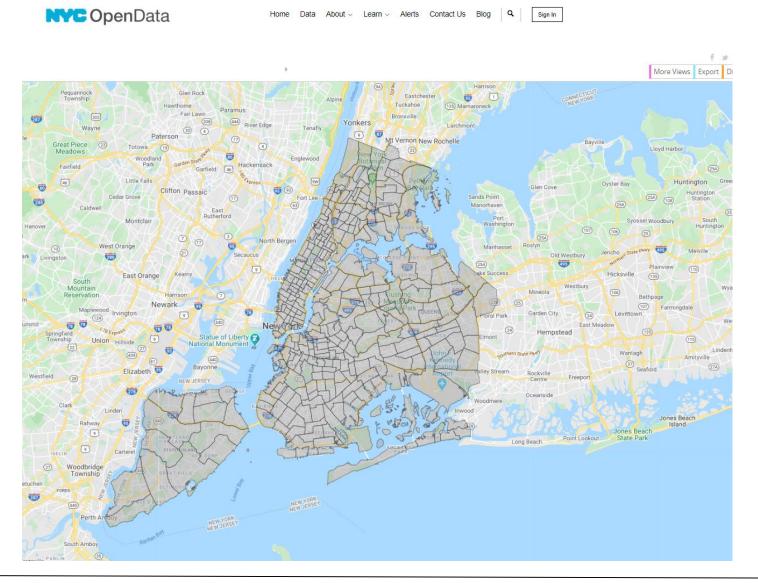


NYPD Shooting Incident Data - Columns

Column Name	Column Description
INCIDENT_KEY	Randomly generated persistent ID for each incident
OCCUR_DATE	Exact date of the shooting incident
OCCUR_TIME	Exact time of the shooting incident
BORO	Borough where the shooting incident occurred
PRECINCT	Precinct where the shooting incident occurred
JURISDICTION CODE	Jurisdiction where the shooting incident occurred. Jurisdiction codes 0(Patrol), 1(Transit) and
JORISDIC HON_CODE	2(Housing) represent NYPD whilst codes 3 and more represent non NYPD jurisdictions
LOCATION_DESC	Location of the shooting incident
STATISTICAL_MURDER_FL AG	Shooting resulted in the victim's death which would be counted as a murder
PERP_AGE_GROUP	Perpetrator's age within a category
PERP_SEX	Perpetrator's sex description
PERP_RACE	Perpetrator's race description
VIC_AGE_GROUP	Victim's age within a category
VIC_SEX	Victim's sex description
VIC_RACE	Victim's race description
X_COORD_CD	Midblock X-coordinate for New York State Plane Coordinate System, Long Island Zone, NAD 83, units feet (FIPS 3104)
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NYPD Arrests Data



NYPD Sectors.geojson



NYPD Assignments

- Create Dimensional Data Model
 - Create data model with ER/Studio
 - Create schema in NYPD database MySQL
- Load data into data model using Talend
- Create Data Visualizations in Tableau & Power BI using db above



NYPD Complaints Data

- Analyze complaints, i.e. felony, misdemeanor, and violation crimes reported, by
 - Date/Time Committed
 - Type, severity and "success" of offense
 - Location of reported crime
 - Attributes of alleged victim(s)
- Data Visualizations
 - Tabular Reports
 - Bar charts, Line charts, Treemaps and other that tells story
 - Map
 - Default
 - Use spatial file is available to map to NYC boroughs, sectors and/or police precincts



NYPD Shooting Incident Data

- Analyze shooting incidents by
 - Date/Time Committed
 - Whether there was a death
 - Location of reported crime
 - Attributes of victim(s)
 - Attributes of perpetrator(s)
- Data Visualizations
 - Tabular Reports
 - Bar charts, Line charts, Treemaps and other that tells story
 - Map
 - Default
 - Use spatial file is available to map to NYC boroughs, sectors and/or police precincts



- Analyze Criminal Court Summons by
 - Date/Time Committed
 - Type and severity of crime
 - Location of reported crime
 - Attributes of perpetrator(s)
- Data Visualizations
 - Tabular Reports
 - Bar charts, Line charts, Treemaps and other that tells story
 - Map
 - Default
 - Use spatial file is available to map to NYC boroughs, sectors and/or police precincts

