

# NYC Parking Project

## NYC Open Data

- Open Parking and Camera Violations
- Parking Violations Issued



# BUSINESS INTELLIGENCE GUIDEBOOK

From Data Integration to Analytics

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# Deliverables

- Perform Data Profiling
- Load data into stage & reject tables:
  - NYC Open Parking and Camera Violations data
  - NYC Parking Violations data for 2014 to 2021
- Create dashboards
  - NYC Open Parking and Camera Violations
  - NYC Parking Violations



# Open Parking and Camera Violations

Note: image linked to NYC Open Data

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## Open Parking and Camera Violations

City Government

The Open Parking and Camera Violations dataset was initially loaded with all violations contained in the mainframe database as of May 2016. Subsequent new violation issuance and updates to existing violations are applied to this data set on the following schedule:

Updated November 3, 2020  
Data Provided by Department of Finance

View Data Visualize Export API

### About this Dataset

Updated **November 3, 2020**

Data Last Updated November 3, 2020 Metadata Last Updated June 15, 2020

Date Created January 4, 2016

Views **95K** Downloads **25.5K**

Data Provided by Department of Finance (DOF) Dataset Owner NYC OpenData

**Update**

Update Frequency	Daily
Automation	Yes
Date Made Public	1/11/2016

**Dataset Information**

Agency	Department of Finance (DOF)
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**Attachments**

- DOF\_Open\_Parking\_and\_Camera\_Violations\_data\_dictionary.xlsx
- ParkingViolationCodes\_January2020.xlsx

**Topics**

Category	City Government
Tags	dof, parking, summons, violation

Show Less

### What's in this Dataset?

Rows **57.3M** Columns **19** Each row is a **Open Parking and Camera Violations Issued**

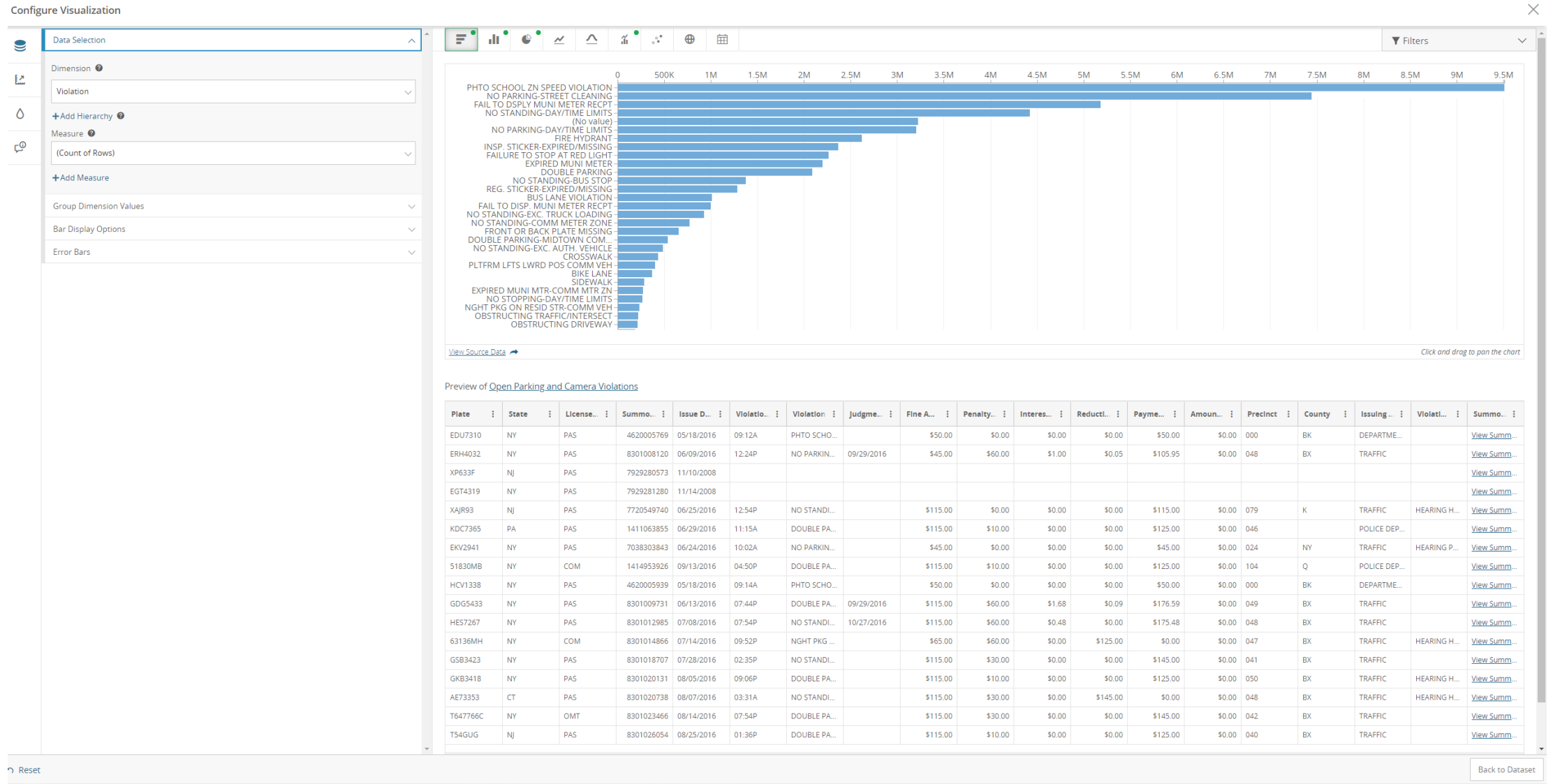
Columns in this Dataset

Column Name	Description	Type
Plate		Plain Text T
State		Plain Text T
License Type		Plain Text T
Summons Number		Number #
Issue Date		Plain Text T
Violation Time		Plain Text T
Violation		Plain Text T
Judgment Entry Date		Plain Text T
Fine Amount		Number #
Penalty Amount		Number #
Interest Amount		Number #
Reduction Amount		Number #
Payment Amount		Number #
Amount Due		Number #
Precinct		Plain Text T
County		Plain Text T
Issuing Agency		Plain Text T
Violation Status		Plain Text T
Summons Image		Website URL

Show Less



# Open Parking and Camera Violations



# Open Parking and Camera Violations

NYC OpenData

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Open Parking and Camera Violations

This dataset contains Open Parking and Camera Violations issued by the City of New York. Updates will be applied to this data set on the following schedule: New or open tickets will be updated weekly (Sunday). Tickets satisfied will be updated daily (Tuesday through Sunday). \* Initial dataset loaded 01/09/2016

Export

API

SOURCE DATASET [Open Parking And Camera Violati...](#)

Showing all Open Parking and Camera Violations Issueds

Summons Number

Search

Type a number and press Enter to search

Plate

Search

Type some text and press Enter to search  
(Examples: "BLANKPLATE" or "N/A")

State


Search

Type some text and press Enter to search  
(Examples: "NY" or "NJ")


Number of Open Parking and Camera Violations Issueds by Issuing Agency

Number of Open Parking and Camera Violations Issueds by Violation Status

### Related Content Using this Data



Public

## Open Parking and Camera Violations



November 3, 2020

42.7K Views



This dataset contains Open Parking and Camera Violations issued by the City of New York. Updates will be applied to this data se...

# Parking Violations Issued - Fiscal Year 2021

Note: image linked to NYC Open Data

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## Parking Violations Issued - Fiscal Year 2021

City Government View Data Visualize ▾ Export API ...

Parking Violations Issuance datasets contain violations issued during the respective fiscal year. The Issuance datasets are not updated to reflect violation status, the information only represents the violation(s) at the time they are issued. Since appearing on an issuance dataset, a violation may have been paid, dismissed via a hearing, statutorily expired, or had other changes to its status. To see the current status of outstanding parking violations, please look at the Open Parking & Camera Violations dataset.

Updated  
October 16, 2020  
Data Provided by  
Department of Finance (DOF)

- Parking Violations Issued Fiscal Year 2020 can be found here
- Parking Violations Issued Fiscal Year 2019 can be found here
- Parking Violations Issued Fiscal Year 2018 can be found here
- Parking Violations Issued Fiscal Year 2017 can be found here
- Parking Violations Issued Fiscal Year 2016 can be found here
- Parking Violations Issued Fiscal Year 2015 can be found here
- Parking Violations Issued Fiscal Year 2014 can be found here

[Less](#)

### About this Dataset

Mute Dataset

Updated  
**October 16, 2020**

Data Last Updated  
October 16, 2020

Metadata Last Updated  
August 6, 2020

Date Created  
July 22, 2016

Views  
**36.4K**

Downloads  
**4,061**

Data Provided by  
Department of Finance (DOF)

Dataset Owner  
NYC OpenData

Update

Update Frequency	Monthly
Automation	Yes
Date Made Public	8/24/2017

Dataset Information

Agency	Department of Finance (DOF)
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Attachments

- OpenDataPortalMonthlyIssuance20160920.xlsx
- ParkingViolationCodes\_January2020.xlsx

[Show More](#)

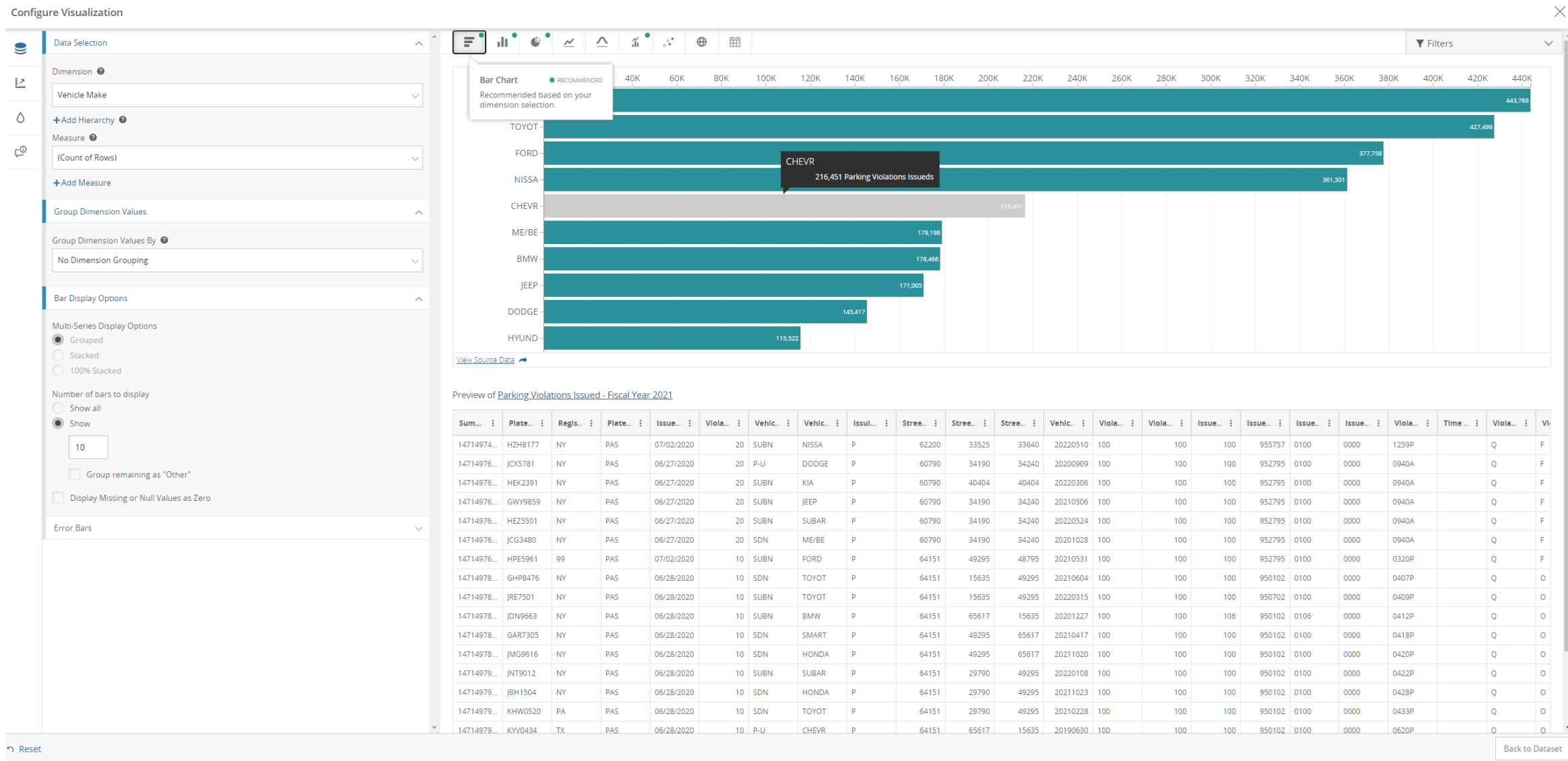
What's in this Dataset?

Rows **3.84M** Columns **43** Each row is a **Parking Violations Issued**

Columns in this Dataset

Column Name	Description	Type
Summons Number		Number # ▾
Plate ID		Plain Text T ▾
Registration State		Plain Text T ▾
Plate Type		Plain Text T ▾
Issue Date		Date & Time 📅 ▾
Violation Code		Number # ▾
Vehicle Body Type		Plain Text T ▾
Vehicle Make		Plain Text T ▾
Issuing Agency	A-PORT AUTHORITY, B-TRIBOROUGH BRIDGE AND TUNNEL...	Plain Text T ▾
Street Code1		Number # ▾
Street Code2		Number # ▾
Street Code3		Number # ▾
Vehicle Expiration Date		Number # ▾
Violation Location		Plain Text T ▾
Violation Precinct		Number # ▾
Issuer Precinct		Number # ▾
Issuer Code		Number # ▾
Issuer Command		Plain Text T ▾

# Parking Violations Issued



# OData Connections

## OData

<https://data.cityofnewyork.us/api/odata/v4/pvqr-7yc4>

## OData

<https://data.cityofnewyork.us/api/odata/v4/nc67-uf89>

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### Parking Violations Issuance

City Government

Parking Violations Issuance datasets represent the violation(s) at the time of the violation. The Issuance datasets are not updated to reflect other changes to its status. To see the most current data, please look at the Open Parking & Camera Violations dataset.

- Parking Violations Issued Fiscal Year 2017
- Parking Violations Issued Fiscal Year 2018
- Parking Violations Issued Fiscal Year 2019
- Parking Violations Issued Fiscal Year 2020

Updated November 3, 2020

Data Last Updated November 3, 2020 Metadata Last Updated June 15, 2020

Date Created

**Access this Dataset via OData**

Use OData to open the dataset in tools like Excel or Tableau. This provides a direct connection to the data that can be refreshed on-demand within the connected application.

Tableau users should select the OData v2 endpoint option.

[Socrata OData Documentation](#)

OData Endpoint

<https://data.cityofnewyork.us/api/odata/v4/pvqr-7yc4> OData V4 [Copy](#)

[Done](#)

### Open Parking and Camera Violations

City Government

The Open Parking and Camera Violations dataset contains information on violations contained in the mainframe database and updates to existing violations and new violations.

[View Data](#)

[More](#)

**About this Dataset**

Updated November 3, 2020

Data Last Updated November 3, 2020 Metadata Last Updated June 15, 2020

Date Created

**Access this Dataset via OData**

Use OData to open the dataset in tools like Excel or Tableau. This provides a direct connection to the data that can be refreshed on-demand within the connected application.

Tableau users should select the OData v2 endpoint option.

[Socrata OData Documentation](#)

OData Endpoint

<https://data.cityofnewyork.us/api/odata/v4/nc67-uf89> OData V4 [Copy](#)

[Done](#)



# Deliverables: NYC Open Parking and Camera Violations

- Load NYC Open Parking and Camera Violations data – 57.3M rows
  - OneDrive \Data - NYC Open Parking and Camera Violations\Open\_Parking\_and\_Camera\_Violations.tsv
  - Sql script: create\_STG\_open\_parking\_and\_camera\_violations .sql
    - STG\_open\_parking\_and\_camera\_violations
    - STG\_open\_parking\_and\_camera\_violations\_rejects
  - Use Talend
- Upload
  1. table counts total & by issue\_date year
  2. Exported Talend jobs
  3. screenshots of completed Talend job
- Totals Rows: 57.3M

# Deliverables: NYC Open Parking and Camera Violations

- Date data type: Issue\_Date & Judgement\_Entry\_Date
- Time data type: Violation\_Time
- Data quality checks
  - Issue\_Date:
    - Invalid dates in source, i.e. 1/36/2014
    - Invalid data entry for dates, i.e. date greater than today's date (use for this example)
  - Judgement\_Entry\_Date:
    - Invalid dates in source, i.e. 1/36/2014
    - Invalid data entry for dates, i.e. date greater than today's date (use for this example)
- Data cleansing
  - Zero length strings (or blanks) should be NULLs

# Deliverables: NYC Parking Violations data for 2014 to 2020

- Load NYC Parking Violations data for 2014 to 2021
  - OneDrive \Data - NYC Parking Violations
    - Parking\_Violations\_Issued\_-\_Fiscal\_Year\_2021.tsv
    - Parking\_Violations\_Issued\_-\_Fiscal\_Year\_2020.tsv
    - Parking\_Violations\_Issued\_-\_Fiscal\_Year\_2019.tsv
    - Parking\_Violations\_Issued\_-\_Fiscal\_Year\_2018.tsv
    - Parking\_Violations\_Issued\_-\_Fiscal\_Year\_2017.tsv
    - Parking\_Violations\_Issued\_-\_Fiscal\_Year\_2016.tsv
    - Parking\_Violations\_Issued\_-\_Fiscal\_Year\_2015.tsv
    - Parking\_Violations\_Issued\_-\_Fiscal\_Year\_2014.tsv
  - Sql script: create stg\_parking\_violations and rejects.sql
  - Use Talend
- Upload
  1. table counts total & by issue\_date year
  2. Exported Talend jobs
  3. screenshots of completed talend jobs

# Deliverables: NYC Parking Violations data for 2014 to 2020

- Load NYC Parking Violations
  - Issue\_Date is date data type
  - Vehicle\_Expiration\_Date & Date\_First\_Observed are an integer in YYYYMMDD format except for 2015 (and you need to convert to integer)
  - Several columns are an integer data type and have 0 values that should become NULL
- Data quality checks
  - Issue\_Date:
    - Invalid dates in source, i.e. 1/36/2014
    - Invalid data entry for dates, i.e. date greater than today's date (use for this example)
  - Vehicle\_Expiration\_Date & Date\_First\_Observed as an integer data type with YYYYMMDD values need to have valid YYYYMMDD values
  - There may be a column with an integer data type that has a string as a value in the source
  - There may be a couple of columns that are strings that have lengths that do not fit into target table and appear to be invalid data