Safety Data Viewer Crash History Tables Documentation

All of the below tables have the following conditions:

* Exclude = 0
* Appropriate 5-year range
* The lion table is used in all queries to get the masterid and/or mft information for the relevant segments/nodes on the study area
* For corridors, intersection crashes need to be limited to ones on the mfts and masterIDs of that corridor
  + To get ALL intersection crashes, we need to get all masterIDs.
    - Use the segmentIDs generated in the SDV to get the related masteridto and masteridfrom in the lion table for each segmentID on a corridor
  + To get ALL midblock crashes, we need to get all mfts
    - Use the segmentIDs generated in the SDV to get the mfts from lion

1. Injury Summary

Description: This is the sum of total injuries, severe injuries, KSI, and fatalities by mode on a selected corridor. Severe injuries come from ‘A’s in the ext\_of\_inj column in nysdot\_all, and fatalities come from the fatality\_nycdot\_current table. The KSI is the sum of severe injuries and fatalities.

Tables used

* Nysdot\_all
* Fatality\_nycdot\_current

Parameters:

* Accd\_type\_int (nysdot\_all)
  + 1= pedestrian crash
  + 2=bicyclist crash
  + 3=motor vehicle crash
* Mode (fatality\_nycdot\_current)
  + PD=pedestrian
  + BI=bicyclists
  + MO, PS, or DR=Motor Vehicle
* Ext\_of\_inj (severe crashes)
  + Severe injuries is the count of ‘A’s in ext\_of\_inj
  + Unknown severity is the total number letters in the ext\_of\_inj field subtracted from the total number of injuries and fatalities (from the nysdot\_all table)
* There are no unknown modes in the data

1. Fatalities

Description: The number of fatalities by mode during the specified 5 year analysis period as well as the number of fatalities from the beginning of the analysis period to present. Tables used:

* Fatality\_nycdot\_current

Parameters:

* Mode (fatality\_nycdot\_current)
  + PD=pedestrian
  + BI=bicyclists
  + MO, PS, or DR=Motor Vehicle

1. Non-Fatal Injuries by Severity

Description: this is the number of injuries grouped by severity of injury. This comes from the ext\_of\_inj field in nysdot\_all. The severity levels reported in the data are: A (severe), B (moderate), and C (mild).

Tables used:

* Nysdot\_all

Parameters

* Use ext\_of\_inj column in nysdot\_all to get injury severity
  + Count number of As, Bs, and Cs for Severe, Moderate, and Mild Injuries
* For Unknown severity
  + Unknown severity is the total number letters in the ext\_of\_inj field subtracted from the total number of injuries and fatalities (from the nysdot\_all table).

1. Injuries by Year

Description: This table shows the number of pedestrian, bicyclist, motor vehicle injuries by year.

Tables

* Nysdot\_all

Parameters

* No additional parameters

1. Injuries by Time of Day By Type

Description: This table shows the total number of known injuries by time of day and mode. This table also contains a column “Percent of Known Injuries” which refers to each time range as a percent of the total injuries where time is known. To provide a comparison, the “Percent of Known Injuries (Boro)” is also provided, which is the total number of injuries for each time range is divided by the total number of injuries where the time is known for the entire borough.

Tables

* Nysdot\_all

Parameters

* Known injuries are those with a value between 12:01am and 11:59pm in the accd\_tme column in the nysdot\_ all table.
* Those at exactly 12:00am or are null, blank, or out-of-range are classified as unknown times.
* Borough-wide known injuries are found using the same time parameters but using the “boro” column in nysdot\_all

1. Pedestrian Injuries by Intersection Control and Pedestrian Action

Description: This table shows the number of pedestrian injuries grouped by a combination of the type of traffic control and pedestrian action. All actions are at the intersection except the Midblock category (as defined by ped\_loc field). This table also contains a column “Percent of Known Injuries” which refers to each action and control group as a percent of the total injuries where action and control group is known. To provide a comparison, the “Percent of Known Injuries (Boro)” is also provided, which is the total number of injuries for action and control group is divided by the total number of injuries where the action and control group is known for the entire borough.

Tables used:

* Nysdot\_all

Parameters:

* Accd\_type\_int=1 (pedestrian crashes only)
* The control/pedestrian action combination uses the following columns from nysdot\_all
  + Traf\_cntl
    - 01: uncontrolled intersection
    - 02: signalized intersection
    - 03: stop-controlled intersection
  + Ped\_actn
    - 01: crossing with signal
    - 02: crossing against signal
  + Ped\_loc
    - 1: at intersection
    - 2: midblock
* The current established combinations for this table are:
  + TRAF\_CNTL = '02' AND PED\_ACTN = '01' AND PED\_LOC = '1' THEN 'Signalized Intersection: Crossing With Signal'
  + TRAF\_CNTL = '02' AND PED\_ACTN = '02' AND PED\_LOC = '1' THEN 'Signalized Intersection: Crossing Against Signal'
  + WHEN TRAF\_CNTL = '03' AND PED\_LOC = '1' THEN 'Stop-Controlled Intersection / Crosswalk'
  + WHEN TRAF\_CNTL = '01' AND PED\_LOC = '1' THEN ' Other Actions/Uncontrolled Intersection'
  + WHEN PED\_LOC = '2' THEN ' Midblock'
  + WHEN TRAF\_CNTL = '20' AND PED\_ACTN = '01' AND PED\_LOC = '1' THEN 'Other Control Types'
  + All other combinations are classified as ‘Unknown/Indeterminate’

1. Bicyclist Injuries by Intersection Control and Bicyclist Action

Description: This table shows the number of bicyclists injuries grouped by a combination of the type of traffic control and bicyclist’s action. All actions are at the intersection except the Midblock category. This table also contains a column “Percent of Known Injuries” which refers to each action and control group as a percent of the total injuries where action and control group is known. To provide a comparison, the “Percent of Known Injuries (Boro)” is also provided, which is the total number of injuries for action and control group is divided by the total number of injuries where the action and control group is known for the entire borough.

Tables used:

* Nysdot\_all

Parameters:

* Accd\_type\_int=2 (bicyclist crashes only)
* Bicyclist’s action is recorded in the PED\_ACTN field
* The control/pedestrian action combination uses the following columns from nysdot\_all
  + Traf\_cntl
    - 01: uncontrolled intersection
    - 02: signalized intersection
    - 03: stop-controlled intersection
  + Ped\_actn
    - 01: crossing with signal
    - 02: crossing against signal
  + Ped\_loc
    - 1: at intersection
    - 2: midblock
* The current established combinations for this table are:
  + TRAF\_CNTL = '02' AND PED\_ACTN = '01' AND PED\_LOC = '1' THEN 'Signalized Intersection: Crossing With Signal'
  + TRAF\_CNTL = '02' AND PED\_ACTN = '02' AND PED\_LOC = '1' THEN 'Signalized Intersection: Crossing Against Signal'
  + WHEN TRAF\_CNTL = '03' AND PED\_LOC = '1' THEN 'Stop-Controlled Intersection / Crosswalk'
  + WHEN TRAF\_CNTL = '01' AND PED\_LOC = '1' THEN ' Other Actions/Uncontrolled Intersection'
  + WHEN PED\_LOC = '2' THEN ' Midblock'
  + WHEN TRAF\_CNTL = '20' AND PED\_ACTN = '01' AND PED\_LOC = '1' THEN 'Other Control Types'
  + All other combinations are classified as ‘Unknown/Indeterminate’

1. Motor Vehicle Injuries by Collision Type

Description: This table describes the total number of motor vehicle occupant injuries grouped by collision type. This table also contains a column “Percent of Known Injuries” which refers to each collision type as a percent of the total injuries where collision type is known. To provide a comparison, the “Percent of Known Injuries (Boro)” is also provided, which is the total number of injuries for collision type is divided by the total number of injuries where the collision type is known for the entire borough.

Tables

* Nysdot\_all

Parameters:

* Collision\_ field in nysdot\_all for collision type
* Accd\_type\_int=3 (MV crashes only)
* Known crashes fall in to the following categories:
  + Rear End (collision\_=01)
  + Right Turn (collision\_ = 05 or 06)
  + Left Turn (collision\_ = 03 or 10)
  + Head On (collision\_=07)
  + Sideswipe, Opposite Direction (collision\_=08)
  + Right Angle (collision\_=04)
  + Sideswipe, Same Direction (collision\_=02)
  + Other Known (collision\_=09)
* All other values in the collision\_ field are classified as Unknown crashes

1. Injuries by Age Group

Description: This is the number of injuries by age group, limited to pedestrian and bicyclist injuries only. Motor vehicle occupants are excluded from this table due to limitations in the data structure. Additionally, because we cannot definitively attribute an age to each injury in a multi-injury, this analysis is limited to single-injury crashes.

Tables used

* Nysdot\_all
* nysdot\_vehicle

Parameters

* Pedestrian and Bicycle crashes only (accd\_type\_int 1 and 2)
* Known age crashes
  + Pedestrian/bicyclist is between the ages of 1 and 120
  + Single injury
  + Only 1 bicyclist/pedestrian in the vehicle table

1. Pedestrian Injuries by Vehicle Action and Pedestrian Action

Description: This table contains the number of pedestrian injuries by what the pedestrian was doing and what the motor vehicle was doing. In order to avoid double counting, this analysis for known crashes is limited to single-vehicle crashes.

Tables used:

* Nysdot\_all
* Nysdot\_vehicle

Parameters:

* When both pedestrian and vehicle action are known:
  + One vehicle crashes only
  + If a crash has more than one injury, the pedestrian action is applied to all injuries
* When either pedestrian action or vehicle action are unknown
  + If there is more than one motor vehicle or the value in the pre\_accd\_actn field is ‘ZZ’, vehicle action is unknown
  + Pedestrian Action is unknown when the value in the ped\_actn field is ‘ZZ’ or null or a string outside of ’01’ – ‘14’

1. Length of Corridor

Description: This provides the total length of the corridor being analyzed and is used to generate the KSI per mile rate that is used in the ranking only refers to corridors.

Tables used:

* Lion

Parameters:

* Use generic (centerline) view of LION
* Segments/geometries of the corridor need to be unique as some segments exist as multiple records in LION.
* Considers all segments on an MFT as long as one segment on that MFT is selected

1. KSI Per Mile

Description: This is the total number of fatalities and severe injuries on a corridor divided by the total length of the corridor, in miles

Tables used:

* Lion
* Nysdot\_all
* Fatality\_nycdot\_current

Parameters

* Use generic (centerline) view of LION
* Segments/geometries of the corridor need to be unique as some segments exist as multiple records in LION.
* Considers all segments on an MFT as long as one segment on that MFT is selected
* Severe injuries come from counting the number of “A”’s in the ext\_of\_injury column in nysdot\_all on the selected masterIDs and mfts
* Fatals come from counting the number of records in fatalty\_nycdot\_current on the selected masterIDs and mfts

1. Most Dangerous Intersection

Description: This is the intersection on the selected corridor that has the highest number of total severe injuries and fatalities combined.

Tables used:

* Lion
* Nysdot\_all
* Fatality\_nycdot\_current

Parameters:

* Use generic (centerline) view of LION
* Segments/geometries of the corridor need to be unique as some segments exist as multiple records in LION.
* Considers all segments on an MFT as long as one segment on that MFT is selected
* Severe injuries come from counting the number of “A”’s in the ext\_of\_injury column in nysdot\_all on the selected masterIDs on the corridor
* Fatals come from counting the number of records in fatalty\_nycdot\_current on the selected masterIDs on the corridor