FORMS QUERY REVIEW

3. Driver injuries at Queens Blvd / Yellowstone Blvd 2018

db2.query\_to\_table(db, """

**select** count(victim\_num) dr\_inj **from**

(--distinct driver injuries at nodes or streets

**select** distinct victim\_num

**from** [FORMS].[dbo].[WC\_ACCIDENT\_F] as c

--selects all distinct driver injuries at Queens Blvd / Yellowstone Blvd during 2018

**join** FORMS.dbo.WC\_ACCIDENT\_VICTIM\_F as i

on c.INTEGRATION\_ID=i.ACCIDENT\_ID

**where** year(c.ACCIDENT\_DT) = 2018 – limits to 2018

and i.INJ\_KILLED = 'Injured' – excludes fatalities

and coalesce(c.VOID\_STATUS\_CD , 'N') = 'N'

and coalesce(nonmv, 0) = 0 – only motor vehicle accidents

and person\_role\_code = 'Driver' – only considers Drivers

and ped\_nonped = 'Occupant' – excludes all injuries that are not motor vehicle injuries

and coalesce(nodeid, lion\_node\_number) in (50275, 50276) – uses nodeid

**union**

**select** distinct victim\_num **from** [FORMS].[dbo].[WC\_ACCIDENT\_F] as c

**join** FORMS.dbo.WC\_ACCIDENT\_VICTIM\_F as i

on c.INTEGRATION\_ID=i.ACCIDENT\_ID

**join** (**select** \* from [FORMS].[dbo].[v\_IntersectionStreetNames\_Gen] **where** nodeid in (50275, 50276)) s

on

(lower(ltrim(rtrim(c.SRC\_ON\_STREET))) = lower(ltrim(rtrim(s.street\_1))) and

lower(ltrim(rtrim(c.SRC\_cross\_STREET))) = lower(ltrim(rtrim(s.street\_2))))

or (

(lower(ltrim(rtrim(c.SRC\_ON\_STREET))) = lower(ltrim(rtrim(s.street\_2))) and

lower(ltrim(rtrim(c.SRC\_cross\_STREET))) = lower(ltrim(rtrim(s.street\_1))))

)

**where** year(c.ACCIDENT\_DT) = 2018 – limits to 2018

and i.INJ\_KILLED = 'Injured' – excludes fatalities

and coalesce(c.VOID\_STATUS\_CD , 'N') = 'N'

and coalesce(nonmv, 0) = 0 – only motor vehicle accidents

and person\_role\_code = 'Driver' – only considers Drivers

and ped\_nonped = 'Occupant' – excludes all injuries that are not motor vehicle injuries

) inj

""")

4. Bike on ped injuries 2018

db2.query\_to\_table(db, """

**select** count(distinct victim\_num) bike\_ped\_inj

**from** [FORMS].[dbo].[WC\_ACCIDENT\_F] as c

--selects all distinct bike on ped injuries during 2018

**join** FORMS.dbo.WC\_ACCIDENT\_VICTIM\_F as i

on c.INTEGRATION\_ID=i.ACCIDENT\_ID

**where** year(c.ACCIDENT\_DT) = 2018 – limits to 2018

and i.INJ\_KILLED = 'Injured' – excludes fatalities

and coalesce(c.VOID\_STATUS\_CD , 'N') = 'N'

and coalesce(nonmv, 0) = 1 – only non motor vehicle accidents

and person\_role\_code in ('Pedestrian', 'In-Line Skater') – only considers pedestrians or bicyclists

""")

5. All Northern Blvd/Alameda Injuries 2009-2018 by Year

db2.query\_to\_table(db, """

**select** yr, count(victim\_num) dr\_inj **from**

--selects all distinct motor vehicle injuries at Blvd/Alameda during 2017-2019

(**select** distinct year(c.accident\_dt) yr, victim\_num

**from** [FORMS].[dbo].[WC\_ACCIDENT\_F] as c

--selects distinct motor vehicle injuries at Blvd/Alameda during 2017-2019 using SRC\_ON\_STREET and SRC\_CROSS\_STREET

**join** FORMS.dbo.WC\_ACCIDENT\_VICTIM\_F as i

on c.INTEGRATION\_ID=i.ACCIDENT\_ID

**where** year(c.ACCIDENT\_DT) between 2017 and 2019 – Date range within 2017 and 2019

and i.INJ\_KILLED = 'Injured' – excludes fatalities

and coalesce(c.VOID\_STATUS\_CD , 'N') = 'N'

and coalesce(nonmv, 0) = 0 – only motor vehicle accidents

and ((lower(ltrim(rtrim(SRC\_ON\_STREET))) like 'northern b%' and lower(ltrim(rtrim(SRC\_CROSS\_STREET))) like 'alameda a%')

or (lower(ltrim(rtrim(SRC\_ON\_STREET))) like 'alameda a%' and lower(ltrim(rtrim(SRC\_CROSS\_STREET))) like 'northern b%')) – Selects Blvd/Alameda by using wildcard street names

**union**

**select** distinct year(c.accident\_dt) yr, victim\_num

**from** [FORMS].[dbo].[WC\_ACCIDENT\_F] as c

--selects distinct motor vehicle injuries at Blvd/Alameda during 2017-2019 using street\_1 and street\_2 (grabs any missing matches that weren’t selected in using SRC\_ON\_STREET and SRC\_CROSS\_STREET)

**join** FORMS.dbo.WC\_ACCIDENT\_VICTIM\_F as i

on c.INTEGRATION\_ID=i.ACCIDENT\_ID

**join** [FORMS].[dbo].[v\_IntersectionStreetNames\_Gen] s

on s.nodeid = coalesce(c.nodeid, lion\_node\_number)

**where** year(c.ACCIDENT\_DT) between 2017 and 2019 – Date range within 2017 and 2019

and i.INJ\_KILLED = 'Injured' – excludes fatalities

and coalesce(c.VOID\_STATUS\_CD , 'N') = 'N'

and coalesce(nonmv, 0) = 0 – only motor vehicle accidents

and ((ltrim(rtrim(lower(street\_1))) like 'northern b%' and ltrim(rtrim(lower(street\_2))) like 'alameda a%')

or (ltrim(rtrim(lower(street\_2))) like 'northern b%' and ltrim(rtrim(lower(street\_1))) like 'alameda a%'))

) inj – Selects Blvd/Alameda

group by yr

""")

5. All Northern Blvd/Alameda Injuries 2009-2018 by Year (ALTERNATIVE)

db2.query\_to\_table(db, """

**select** yr, count(victim\_num) dr\_inj **from**

--selects all distinct motor vehicle injuries at Blvd/Alameda during 2017-2019

(**select** distinct year(c.accident\_dt) yr, victim\_num

**from** [FORMS].[dbo].[WC\_ACCIDENT\_F] as c

--selects distinct motor vehicle injuries at Blvd/Alameda during 2017-2019 using SRC\_ON\_STREET and SRC\_CROSS\_STREET

**join** FORMS.dbo.WC\_ACCIDENT\_VICTIM\_F as i

on c.INTEGRATION\_ID=i.ACCIDENT\_ID

**where** year(c.ACCIDENT\_DT) between 2017 and 2019 – Date range within 2017 and 2019

and i.INJ\_KILLED = 'Injured' – excludes fatalities

and coalesce(c.VOID\_STATUS\_CD , 'N') = 'N'

and coalesce(nonmv, 0) = 0 – only motor vehicle accidents

and coalesce(nodeid, lion\_node\_number) in (9029844, 9029856)

union)) – Selects Blvd/Alameda by using nodeid

**union**

**select** distinct year(c.accident\_dt) yr, victim\_num

**from** [FORMS].[dbo].[WC\_ACCIDENT\_F] as c

--selects distinct motor vehicle injuries at Blvd/Alameda during 2017-2019 using street\_1 and street\_2 or SRC\_ON\_STREET and SRC\_CROSS\_STREET

**join** FORMS.dbo.WC\_ACCIDENT\_VICTIM\_F as i

on c.INTEGRATION\_ID=i.ACCIDENT\_ID

**join** (**select** \* [FORMS].[dbo].[v\_IntersectionStreetNames\_Gen] **where** nodeid in (9029844, 9029856)) s

on

(lower(ltrim(rtrim(c.SRC\_ON\_STREET))) = lower(ltrim(rtrim(s.street\_1))) and

lower(ltrim(rtrim(c.SRC\_cross\_STREET))) = lower(ltrim(rtrim(s.street\_2))))

or (

(lower(ltrim(rtrim(c.SRC\_ON\_STREET))) = lower(ltrim(rtrim(s.street\_2))) and

lower(ltrim(rtrim(c.SRC\_cross\_STREET))) = lower(ltrim(rtrim(s.street\_1))))

)

**where** year(c.ACCIDENT\_DT) between 2017 and 2019 – Date range within 2017 and 2019

and i.INJ\_KILLED = 'Injured' – excludes fatalities

and coalesce(c.VOID\_STATUS\_CD , 'N') = 'N'

and coalesce(nonmv, 0) = 0 – only motor vehicle accidents

) inj

group by yr

""")

6. Senior mv passenger injuries 2018

db2.query\_to\_table(db, """

**select** count(distinct victim\_num) senior\_mv\_injuries

**from** [FORMS].[dbo].[WC\_ACCIDENT\_F] as c

--selects count of distinct senior motor vehicle passenger injuries in 2018

**join** FORMS.dbo.WC\_ACCIDENT\_VICTIM\_F as i

on c.INTEGRATION\_ID=i.ACCIDENT\_ID

**where** year(c.ACCIDENT\_DT) = 2018 – limits to 2018

and i.INJ\_KILLED = 'Injured' – excludes fatalities

and coalesce(c.VOID\_STATUS\_CD , 'N') = 'N'

and coalesce(nonmv, 0) = 0 – only motor vehicle accidents

and person\_role\_code = 'Passenger' – only considers passenger injuries

and ped\_nonped = 'Occupant' – excludes all injuries that are not motor vehicle injuries

and victim\_age between 65 and 100 – Specifies senior age range

""")

7. Basic crash info + narrative for single motorcycle injuries

db2.query\_to\_table(db, """

**select**

c.[ACCIDENT\_TIME\_WID], --accident time

c.[ACCIDENT\_DT] --accident date

,[OFF\_STREET] --reference maker (what part of the highway the crash happened)

,c.[X\_COORD] --for no reason

,c.[Y\_COORD] --for no reason

,c.[LATITUDE] --location

,c.[LONGITUDE] --location

,[SEGMENT\_ID]

,[SRC\_POLICE\_PRECINCT] --For boro information

,[SRC\_ADDRESS\_TYPE] --Lets you know if at itx, midblock, or highway etc

,[SRC\_ON\_STREET] -- intersection info

,[SRC\_CROSS\_STREET] -- intersection info

,[SRC\_OFF\_STREET] -- addresses

,[ACCIDENT\_DESC] --accident description

,[NODEID], [VICTIM\_NUM] --node intersection, victim number for injury count

,[PED\_NONPED] -- vehicle or ped or bike

,[INJ\_KILLED]

,[VICTIM\_AGE]

,veh\_count

,[PERSON\_ROLE\_CODE] --driver passenger, sometimes motorcycles have two people on people

,[VICTIM\_SEX] --MFU

,[DATE\_OF\_BIRTH]

,veh2.[VEHICLE\_NUM]

,[PRE\_ACDNT\_ACTION] --Description of what vehichle is doing. In forms is words

**from** forms.dbo.wc\_accident\_f c

**left join**

(**select** distinct case when person\_role\_code in ('Pedestrian', 'Other', 'In-Line Skater') or ped\_nonped = 'Bicyclist'

then accident\_id end accident\_id

**from** forms.dbo.wc\_accident\_victim\_f) v

on c.INTEGRATION\_ID = v.accident\_id

--getting cases with at least one non-motor vehicle/motorcyclist occupant

-- there can be cases where motorcyclist crash people . Want mc hitting inanimate objects

**join** forms.dbo.wc\_accident\_victim\_f v2

on c.INTEGRATION\_ID = v2.accident\_id

-- this is for retaining columns from victim table after excluding accidents with victims other than passenger or drivers of motorcycle

**join**

( **select** accident\_id, count(distinct vehicle\_num) veh\_count **from** FORMS.dbo.WC\_ACCIDENT\_VEHICLE\_F

group by accident\_id) veh

on c.integration\_id = veh.accident\_id

-- this is for excluding cases with more than one vehicle

--creating a vehicle count

**join** forms.dbo.WC\_ACCIDENT\_vehicle\_F veh2

on c.integration\_id = veh2.accident\_id and v2.VEHICLE\_NUM = veh2.VEHICLE\_NUM

-- this is for retaining columns from vehicle table after excluding accidents with more than one vehicle count

**where** year(c.accident\_dt) = 2018 and -- limits to 2018

v.accident\_id is null -- excludes accidents with non motorcycle passenger/driver injuries

and lower(rtrim(ltrim(vehicle\_type\_code))) in ('motorcycle') –selects accidents involving only motorcycles as vehicles

and inj\_killed = 'Injured' –excludes fatalities

and coalesce(c.VOID\_STATUS\_CD , 'N') ='N'

and coalesce(c.nonmv, 0) = 0 – only motor vehicle accidents

and veh\_count = 1 – excludes accidents with more than one vehicle

""")

8. Count of injury crashes on QUEENSBORO BRIDGE UPPER ROADWAY in Jan 2019

db2.query\_to\_table(db, """

**select** count(distinct case when inj\_killed = 'Injured' then accident\_id end) inj\_crashes

**from** forms.dbo.wc\_accident\_f c

--selects distinct cases removing duplicate records. Only intersted in injury crashes not how many injuries occurred in every crash

**join** forms.dbo.wc\_accident\_victim\_f v

on c.integration\_id = v.ACCIDENT\_ID

**where** off\_street like 'QBB0200%' -- reference maker

and year(c.accident\_dt) = 2019 and month(c.accident\_dt) = 1 – limits to january 2019

and coalesce(nonmv, 0) = 0 – only motor vehicle accidents

and coalesce(c.VOID\_STATUS\_CD , 'N') ='N'

""")

9. Pedestrian injuries by severity 2018

db2.query\_to\_table(db, """

**with data as (**

**select distinct c.INTEGRATION\_ID, coalesce(c.NODEID, c.LION\_NODE\_NUMBER) as node,**

**c.ACCIDENT\_DT, c.ACCIDENT\_TIME\_WID, i.VICTIM\_NUM, i.PERSON\_ROLE\_CODE, i.PED\_NONPED, i.INJ\_KILLED, sev.kabco**

**, c.ACCIDENT\_DIAGRAM, c.X\_COORD, c.Y\_COORD**

**from [FORMS].[dbo].[WC\_ACCIDENT\_F] as c**

**join FORMS.dbo.WC\_ACCIDENT\_VICTIM\_F as i**

**on c.INTEGRATION\_ID=i.ACCIDENT\_ID**

**join (**

**select ACCIDENT\_ID, VICTIM\_NUM, PED\_NONPED, PERSON\_ROLE\_CODE,INJ\_KILLED,**

**case**

**when [EMOTIONAL\_STATUS] = 'Apparent Death' then 'K'**

**when [EMOTIONAL\_STATUS] in ('Unconscious','Semiconscious','Incoherent') then 'A'**

**when [EMOTIONAL\_STATUS] in ('Shock', 'Conscious') and INV\_COMPLAINT\_TYPE IN**

**('Amputation','Concussion','Internal','Severe Bleeding','Moderate Burn','Severe Burn','Fracture - Dislocation', 'Fracture - Distorted - Dislocation') then 'A'**

**when [EMOTIONAL\_STATUS] in ('Shock', 'Conscious') and INV\_COMPLAINT\_TYPE IN ('Minor Bleeding','Minor Burn','Complaint of Pain')**

**--wiplash, severe laseration, paraysis**

**and [LOC\_PHYSICAL\_COMPL\_CODE] = 'Eye' then 'A'**

**when [EMOTIONAL\_STATUS] in ('Shock', 'Conscious') and INV\_COMPLAINT\_TYPE IN ('Contusion - Bruise','Abrasion') then 'B'**

**when [EMOTIONAL\_STATUS] in ('Shock', 'Conscious') and INV\_COMPLAINT\_TYPE IN ('Minor Bleeding','Minor Burn') and [LOC\_PHYSICAL\_COMPL\_CODE] != 'Eye' then 'B'**

**when [EMOTIONAL\_STATUS] in ('Shock', 'Conscious') and INV\_COMPLAINT\_TYPE in ('Complaint of Pain', 'Complaint of Pain or Nausea')**

**and [LOC\_PHYSICAL\_COMPL\_CODE] != 'Eye' then 'C'**

**when [EMOTIONAL\_STATUS] in ('Shock', 'Conscious') and INV\_COMPLAINT\_TYPE IN ('', 'None Visible', 'Whiplash') then 'C'**

**when [EMOTIONAL\_STATUS] = 'Shock' and INV\_COMPLAINT\_TYPE in ('', 'None Visible', 'Whiplash') and [LOC\_PHYSICAL\_COMPL\_CODE] = '' then 'C'**

**when [EMOTIONAL\_STATUS] = 'Conscious' and INV\_COMPLAINT\_TYPE in ('', 'None Visible') and [LOC\_PHYSICAL\_COMPL\_CODE] = '' then 'U'**

**else 'UNK' end as kabco**

**from FORMS.dbo.WC\_ACCIDENT\_VICTIM\_F**

**) as sev**

**on c.INTEGRATION\_ID=sev.ACCIDENT\_ID**

**where**

**coalesce(c.VOID\_STATUS\_CD, 'N') = 'N'**

**--and coalesce(c.nonmv, 0) = 0**

**and i.person\_role\_code in ('Pedestrian', 'In-Line Skater')**

**and i.INJ\_KILLED in ('Injured')**

**and year(c.ACCIDENT\_DT) = 2018)**

**select kabco, count(distinct INTEGRATION\_ID+VICTIM\_NUM) from data**

**group by kabco**

""")

--selects distinct counts of injury by severity. Uses integration\_Id + Victim\_Num to avoid filtering out false duplicates of victim\_num