```sql
CREATE TABLE stg_nyc_mv_collision_persons (
    UNIQUE_ID bigint NOT NULL,
    COLLISION_ID bigint NOT NULL,
    CRASH_DATE datetime NULL,
    CRASH_TIME time NULL,
    PERSON_ID varchar(80) NULL,
    PERSON_TYPE varchar(80) NULL,
    PERSON_INJURY varchar(80) NULL,
    VEHICLE_ID varchar(80) NULL,
    PERSON_AGE int NULL,
    EJECTION varchar(80) NULL,
    EMOTIONAL_STATUS varchar(80) NULL,
    BODILY_INJURY varchar(80) NULL,
    POSITION_IN_VEHICLE varchar(255) NULL,
    SAFETY_EQUIPMENT varchar(255) NULL,
    PED_LOCATION varchar(255) NULL,
    PED_ACTION varchar(255) NULL,
    COMPLAINT varchar(255) NULL,
    PED_ROLE varchar(255) NULL,
    CONTRIBUTING_FACTOR_1 varchar(255) NULL,
    CONTRIBUTING_FACTOR_2 varchar(255) NULL,
    PERSON_SEX varchar(10) NULL,
    DI_PID varchar(20) NULL,
    DI_Create_Date datetime DEFAULT getdate() NULL,

    PRIMARY KEY (UNIQUE_ID)
);
```

Handwritten annotations:
- COLLISION_ID, CRASH_DATE → **Fct_Crash**
- PERSON_ID, PERSON_TYPE → **Dim_Person**
- EJECTION, EMOTIONAL_STATUS, BODILY_INJURY → **Dim_Injure**
- PED_LOCATION, PED_ACTION → **Dim_Ped**

```sql
CREATE TABLE stg_nyc_mv_collision_vehicles (
    UNIQUE_ID bigint NOT NULL,
    COLLISION_ID bigint NOT NULL,
    CRASH_DATE datetime NULL,
    CRASH_TIME time NULL,
    VEHICLE_ID varchar(80) NULL,
    STATE_REGISTRATION varchar(80) NULL,
    VEHICLE_TYPE varchar(80) NULL,
    VEHICLE_MAKE varchar(80) NULL,
    VEHICLE_MODEL varchar(80) NULL,
    VEHICLE_YEAR varchar(80) NULL,
    TRAVEL_DIRECTION varchar(255) NULL,
    VEHICLE_OCCUPANTS int NULL,
    DRIVER_SEX varchar(80) NULL,
    DRIVER_LICENSE_STATUS varchar(255) NULL,
    DRIVER_LICENSE_JURISDICTION varchar(255) NULL,
    PRE_CRASH varchar(255) NULL,
    POINT_OF_IMPACT varchar(255) NULL,
    VEHICLE_DAMAGE varchar(255) NULL,
    VEHICLE_DAMAGE_1 varchar(255) NULL,
    VEHICLE_DAMAGE_2 varchar(255) NULL,
    VEHICLE_DAMAGE_3 varchar(255) NULL,
    PUBLIC_PROPERTY_DAMAGE varchar(1024) NULL,
    PUBLIC_PROPERTY_DAMAGE_TYPE varchar(1024) NULL,
    CONTRIBUTING_FACTOR_1 varchar(255) NULL,
    CONTRIBUTING_FACTOR_2 varchar(255) NULL,
    DI_PID varchar(20) NULL,
    DI_Create_Date datetime DEFAULT getdate() NOT NULL,
```

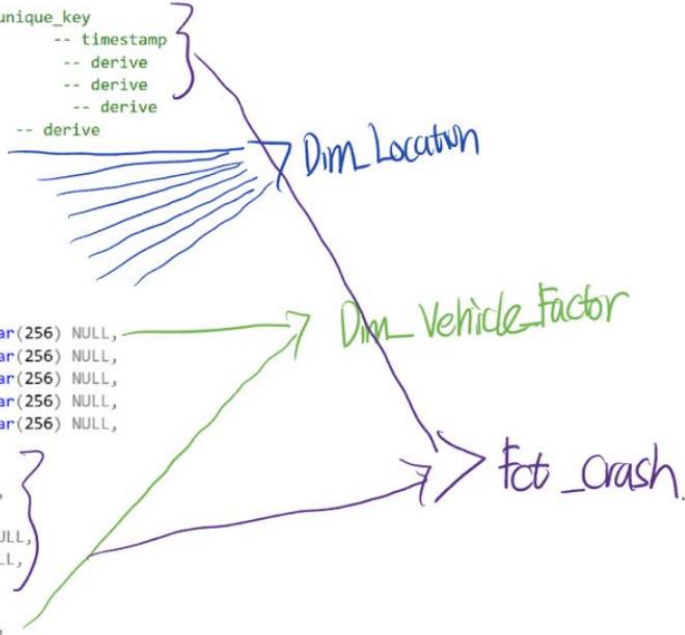Handwritten annotations:
- COLLISION_ID, CRASH_DATE → **Fct_Crash**
- VEHICLE_ID, STATE_REGISTRATION, VEHICLE_TYPE → **Dim_Vehicle**
- TRAVEL_DIRECTION → **Dim_Travel_Direction**
- DRIVER_SEX → **Dim_Driver**
- PRE_CRASH, POINT_OF_IMPACT, VEHICLE_DAMAGE → **Dim_Vehicle_Damage**

```sql
CREATE TABLE stg_nyc_mv_collisions_BigQuery
(
    COLLISION_ID bigint NOT NULL,     -- unique_key
    collision_dt datetime NULL,              -- timestamp
    collision_day date NULL,                 -- derive
    collision_time time NULL,                -- derive
    collision_hour int NULL,                 -- derive
    collision_dayoftheweek int NULL,        -- derive
    borough varchar(40) NULL,
    zip_code varchar(40) NULL,
    off_street_name varchar(40) NULL,
    on_street_name varchar(40) NULL,
    cross_street_name varchar(40) NULL,
    latitude numeric(24,6) NULL,
    longitude numeric(24,6) NULL,
    location varchar(256) NULL,
    contributing_factor_vehicle_1 varchar(256) NULL,
    contributing_factor_vehicle_2 varchar(256) NULL,
    contributing_factor_vehicle_3 varchar(256) NULL,
    contributing_factor_vehicle_4 varchar(256) NULL,
    contributing_factor_vehicle_5 varchar(256) NULL,
    number_of_cyclist_injured int NULL,
    number_of_cyclist_killed int NULL,
    number_of_motorist_injured int NULL,
    number_of_motorist_killed int NULL,
    number_of_pedestrians_injured int NULL,
    number_of_pedestrians_killed int NULL,
    number_of_persons_injured int NULL,
    number_of_persons_killed int NULL,
    vehicle_type_code1 varchar(80) NULL,
    vehicle_type_code2 varchar(80) NULL,
    vehicle_type_code_3 varchar(80) NULL,
    vehicle_type_code_4 varchar(80) NULL,
    vehicle_type_code_5 varchar(80) NULL,
```

(Handwritten annotations: "Dim_Location", "Dim_Vehicle_Factor", "fct_Crash.")

```sql
CREATE TABLE Dim_Date(
//sorragate key
Dim_Date_SK INT PRIMARY KEY,
//from stg_big_query
Date_NK Date,
Day INT,
DayOfWeek INT
)

CREATE TABLE Dim_Time(
//surrogate key
Dim_Time_SK INT PRIMARY KEY,
//from stg_big_query
Time_NK Time,
Hour INT
)

CREATE TABLE Dim_Injure(
//surrogate key
Dim_Injure_SK INT PRIMARY KEY,
//from stg_persons
EJECTION varchar(80) NULL,
EMOTIONAL_STATUS varchar(80) NULL,
BODILY_INJURY varchar(80) NULL,
POSITION_IN_VEHICLE varchar(255) NULL,
SAFETY_EQUIPMENT varchar(255) NULL,
//create
DI_PID varchar(20) NULL,
```

```sql
DI_Create_Date datetime DEFAULT getdate() NULL
)

CREATE TABLE  Dim_Person(
//surrogate key
Dim_PersonInfo_SK INT PRIMARY KEY,
//from Stg_persons
PERSON_ID varchar(80) NULL,
PERSON_TYPE varchar(80) NULL,
PERSON_INJURY varchar(80) NULL,
PERSON_AGE int NULL,
PERSON_SEX varchar(10) NULL,
Dim_Injure_SK INT FOREIGN KEY REFERENCES Dim_Injure(Dim_Injure_SK),
//create
DI_PID varchar(20) NULL,
DI_Create_Date datetime DEFAULT getdate() NULL
)

CREATE TABLE  Dim_Ped(
//surrogate key
Dim_Ped_SK INT PRIMARY KEY,
//from stg_persons
PED_LOCATION varchar(255) NULL,
PED_ACTION varchar(255) NULL,
COMPLAINT varchar(255) NULL,
PED_ROLE varchar(255) NULL,
//create
DI_PID varchar(20) NULL,
DI_Create_Date datetime DEFAULT getdate() NULL
)

CREATE TABLE Dim_Vehicle_Damage(
//surrogate key
Dim_Vehicle_Damge_SK INT PRIMARY KEY,
//from stg_vehicles
PRE_CRASH varchar(255) NULL,
POINT_OF_IMPACT varchar(255) NULL,
VEHICLE_DAMAGE varchar(255) NULL,
VEHICLE_DAMAGE_1 varchar(255) NULL,
VEHICLE_DAMAGE_2 varchar(255) NULL,
VEHICLE_DAMAGE_3 varchar(255) NULL,
PUBLIC_PROPERTY_DAMAGE varchar(1024) NULL,
PUBLIC_PROPERTY_DAMAGE_TYPE varchar(1024) NULL,
//create
DI_PID varchar(20) NULL,
DI_Create_Date datetime DEFAULT getdate() NULL
)

CREATE TABLE Dim_Travel_Direction(
//surrogate key
Dim_Travel_Direction_SK INT PRIMARY KEY,
//From stg_Vehicles
TRAVEL_DIRECTION varchar(255) NULL,
//Create
DI_PID varchar(20) NULL,
DI_Create_Date datetime DEFAULT getdate() NULL
)
```

```sql
CREATE TABLE Dim_Driver(
//Surrogate key
Dim_Driver_SK INT PRIMARY KEY,
//From stg_Vehicles
DRIVER_SEX varchar(80) NULL,
DRIVER_LICENSE_STATUS varchar(255) NULL,
DRIVER_LICENSE_JURISDICTION varchar(255) NULL,
//Create
DI_PID varchar(20) NULL,
DI_Create_Date datetime DEFAULT getdate() NULL
)

CREATE TABLE Dim_Vehicle(
//surrogate key
Dim_Vehicle_SK INT PRIMARY KEY,
//From stg_Vehicles
VEHICLE_ID varchar(80) NULL,
STATE_REGISTRATION varchar(80) NULL,
VEHICLE_TYPE varchar(80) NULL,
VEHICLE_MAKE varchar(80) NULL,
VEHICLE_MODEL varchar(80) NULL,
VEHICLE_YEAR varchar(80) NULL,
VEHICLE_OCCUPANTS int NULL,
//create foreign key
Dim_Vehicle_Damge_SK INT FOREIGN KEY REFERENCES Dim_Vehicle_Damage(Dim_Vehicle_Damge_SK),
Dim_Travel_Direction_SK INT FOREIGN KEY REFERENCES
Dim_Travel_Direction(Dim_Travel_Direction_SK),
Dim_Driver_SK INT FOREIGN KEY REFERENCES Dim_Driver(Dim_Driver_SK),

//create
DI_PID varchar(20) NULL,
DI_Create_Date datetime DEFAULT getdate() NULL
)

CREATE TABLE Dim_Location(
//Surrogate key
Dim_Location_SK INT PRIMARY KEY,
//From stg_big_Query
borough varchar(40) NULL,
zip_code varchar(40) NULL,
off_street_name varchar(40) NULL,
on_street_name varchar(40) NULL,
cross_street_name varchar(40) NULL,
latitude numeric(24,6) NULL,
longitude numeric(24,6) NULL,
location varchar(256) NULL,
//create
DI_JobID varchar(20) NULL,
DI_Create_Date datetime DEFAULT getdate() NULL
)

CREATE TABLE Dim_Vehicle_Factor(
//Surrogate key
Dim_Vehicle_Factor_SK INT PRIMARY KEY,
//From stg_big_query
contributing_factor_vehicle_1 varchar(256) NULL,
vehicle_type_code1 varchar(80) NULL,
//create
```

```sql
DI_JobID varchar(20) NULL,
DI_Create_Date datetime DEFAULT getdate() NULL
)


CREATE TABLE Fct_Crash(
//surrogate key
Fct_Crash_SK INT PRIMARY KEY,
//From stg_big_query
COLLISION_ID bigint NOT NULL,
collision_day date NULL,
Dim_Date_SK INT FOREIGN KEY REFERENCES Dim_Date(Dim_Date_SK),
Dim_Time_SK INT FOREIGN KEY REFERENCES Dim_Time(Dim_Time_SK),
collision_time time NULL,
Dim_Person_SK INT FOREIGN KEY REFERENCES Dim_Person(Dim_PersonInfo_SK),
Dim_Ped_SK INT FOREIGN KEY REFERENCES Dim_Ped(Dim_Ped_SK),
Dim_Vehicle_SK INT FOREIGN KEY REFERENCES Dim_Vehicle(Dim_Vehicle_SK),
Dim_Location_SK INT FOREIGN KEY REFERENCES Dim_Location(Dim_Location_SK),
number_of_cyclist_injured int NULL,
number_of_cyclist_killed int NULL,
number_of_motorist_injured int NULL,
number_of_motorist_killed int NULL,
number_of_pedestrians_injured int NULL,
number_of_pedestrians_killed int NULL,
number_of_persons_injured int NULL,
number_of_persons_killed int NULL,
//Create
DI_JobID varchar(20) NULL,
DI_Create_Date datetime DEFAULT getdate() NULL
)

CREATE TABLE Bridge(
//create foreign key
Dim_Vehicle_Factor_SK INT FOREIGN KEY REFERENCES
Dim_Vehicle_Factor(Dim_Vehicle_Factor_SK) ,
Vehicle_Factor_Group_SK INT FOREIGN KEY REFERENCES Fct_Crash(Fct_Crash_SK),
//create
DI_JobID varchar(20) NULL,
DI_Create_Date datetime DEFAULT getdate() NULL
)
```