

Queries:

Count of trips that cover less than 30 miles

```
SELECT count(*) as Count From `bigquery-public-data.chicago_taxi_trips.taxi_trips`  
WHERE trip_miles < 30
```

Count of short trips(distance <= 30) from 2013 to today, grouped by year and month

```
SELECT EXTRACT(MONTH FROM trip_start_timestamp) AS month,EXTRACT(YEAR FROM  
trip_start_timestamp) AS YEAR, count(1) as Count  
From `bigquery-public-data.chicago_taxi_trips.taxi_trips`  
WHERE trip_miles <= 30  
GROUP BY MONTH,YEAR  
ORDER BY YEAR, MONTH
```

Data Stored: <https://drive.google.com/file/d/1aCN8XkfhzHQ89tG5rUnPNgnjjivjHHu/view>

Count of long trips(distance >= 30) from 2013 to today, grouped by year and month

```
SELECT EXTRACT(MONTH FROM trip_start_timestamp) AS month,EXTRACT(YEAR FROM  
trip_start_timestamp) AS YEAR, count(1) as Count  
From `bigquery-public-data.chicago_taxi_trips.taxi_trips`  
WHERE trip_miles > 30  
GROUP BY MONTH,YEAR  
ORDER BY YEAR, MONTH
```

Data : <https://drive.google.com/file/d/1k-cXoifd8lgT5m-kdMMlvAyCORXdpS16/view>

Day Trips Vs tips

```
SELECT trip_start_timestamp, CAST(trip_start_timestamp As time) As stat_time,  
trip_end_timestamp, CAST(trip_end_timestamp As time) As end_time, trip_miles, trip_seconds,  
tips,  
From `bigquery-public-data.chicago_taxi_trips.taxi_trips`  
WHERE EXTRACT(YEAR FROM trip_start_timestamp ) = 2019 and EXTRACT(MONTH FROM  
trip_start_timestamp ) = 1 and tips !=0 and Extract(time from trip_start_timestamp) > "06:00:00"  
and Extract(time from trip_start_timestamp) < "22:00:00"and Extract(time from  
trip_end_timestamp) < "22:00:00" and Extract(time from trip_end_timestamp) > "06:00:00"
```

Data: [https://drive.google.com/drive/folders/1\\_T3zu2ymsNkz7nzDAEknvbu5ikS4GkXp](https://drive.google.com/drive/folders/1_T3zu2ymsNkz7nzDAEknvbu5ikS4GkXp)

Night Trips Vs Tips

```

SELECT trip_start_timestamp, CAST(trip_start_timestamp As time) As stat_time,
trip_end_timestamp, CAST(trip_end_timestamp As time) As end_time, trip_miles, trip_seconds,
tips,
From `bigquery-public-data.chicago_taxi_trips.taxi_trips`
WHERE EXTRACT(YEAR FROM trip_start_timestamp ) = 2019 and EXTRACT(MONTH FROM
trip_start_timestamp ) = 1 and tips !=0 and Extract(time from trip_start_timestamp) >=
"22:00:00" and Extract(time from trip_end_timestamp) < "06:00:00"

```

Data : <https://drive.google.com/file/d/1zCzb70CuqksTOXq2sVOK-QhqWTJdh-iK/view>

#### Avg tip for day trips (between 6am to 10 pm)

```

SELECT AVG(tips), EXTRACT(MONTH FROM trip_start_timestamp ) As month,
EXTRACT(YEAR FROM trip_start_timestamp ) As year,
From `bigquery-public-data.chicago_taxi_trips.taxi_trips`
WHERE Extract(time from trip_start_timestamp) > "06:00:00" and Extract(time from
trip_start_timestamp) < "22:00:00"and Extract(time from trip_end_timestamp) < "22:00:00" and
Extract(time from trip_end_timestamp) > "06:00:00"
GROUP BY month, year
Order By Year, Month

```

#### Avg Night Tip

```

SELECT AVG(tips), EXTRACT(MONTH FROM trip_start_timestamp ) As month,
EXTRACT(YEAR FROM trip_start_timestamp ) As year,
From `bigquery-public-data.chicago_taxi_trips.taxi_trips`
WHERE (Extract(time from trip_start_timestamp) >= "22:00:00" OR Extract(time from
trip_start_timestamp) <= "06:00:00" )and (Extract(time from trip_end_timestamp) < "06:00:00"
OR Extract(time from trip_end_timestamp) > "22:00:00")
GROUP BY month, year
Order By Year, Month

```

\*\*\*\*\*

#### Group by days of week

```

SELECT EXTRACT(DAYOFWEEK from trip_start_timestamp) AS Day, count(1)
FROM `bigquery-public-data.chicago_taxi_trips.taxi_trips`
WHERE EXTRACT(YEAR FROM trip_start_timestamp) = 2019 AND EXTRACT(MONTH FROM
trip_start_timestamp) = 1 AND trip_seconds != 0 AND trip_miles != 0 AND
EXTRACT(DAYOFWEEK from trip_start_timestamp) = 1
GROUP BY DAY
order by DAY

```

\*\*\*\*\*

Find peak hour in each day

- Morning 4 - 12 PM.
- Afternoon is at 12:00:01 PM - 17:00:00 PM.
- Evening is from 17:00:01 PM to 20:00:00 PM, or around sunset.
- Rest is night

Morning

```
SELECT EXTRACT(MONTH from trip_start_timestamp) AS MONTH, EXTRACT(DAYOFWEEK  
from trip_start_timestamp) AS Day, count(1)
```

```
FROM `bigquery-public-data.chicago_taxi_trips.taxi_trips`
```

```
WHERE EXTRACT(YEAR FROM trip_start_timestamp) = 2019 AND
```

```
trip_seconds != 0 AND trip_miles != 0 AND
```

```
(  
(EXTRACT (time from trip_start_timestamp) BETWEEN "06:00:00" AND "12:00:00")  
OR  
(EXTRACT(time from trip_end_timestamp) BETWEEN "06:00:00" AND "12:00:00")  
)
```

```
GROUP BY MONTH, DAY  
order by MONTH, DAY
```

\*\*\*\*\*

Afternoon Count

```
SELECT EXTRACT(MONTH from trip_start_timestamp) AS MONTH, EXTRACT(DAYOFWEEK  
from trip_start_timestamp) AS Day, count(1)
```

```
FROM `bigquery-public-data.chicago_taxi_trips.taxi_trips`
```

```
WHERE EXTRACT(YEAR FROM trip_start_timestamp) = 2016 AND
```

```
trip_seconds != 0 AND trip_miles != 0 AND
```

```
(  
(EXTRACT (time from trip_start_timestamp) BETWEEN "12:00:01" AND "17:00:00")  
OR  
(EXTRACT(time from trip_end_timestamp) BETWEEN "12:00:01" AND "17:00:00")  
)
```

GROUP BY MONTH, DAY

order by MONTH, DAY

\*\*\*\*\*

Evening

SELECT

EXTRACT(MONTH from trip\_start\_timestamp) AS MONTH, EXTRACT(DAYOFWEEK  
from trip\_start\_timestamp) AS Day, count(1)

FROM

`bigquery-public-data.chicago\_taxi\_trips.taxi\_trips`

WHERE

EXTRACT(YEAR FROM trip\_start\_timestamp) = 2019 AND

trip\_seconds != 0 AND trip\_miles != 0 AND

(  
(EXTRACT (time from trip\_start\_timestamp) BETWEEN "17:00:01" AND "20:00:00")  
OR  
(EXTRACT(time from trip\_end\_timestamp) BETWEEN "17:00:01" AND "20:00:00")  
)

GROUP BY

MONTH, DAY

order by

MONTH, DAY

\*\*\*\*\*

Night

SELECT EXTRACT(MONTH from trip\_start\_timestamp) AS MONTH, EXTRACT(DAYOFWEEK  
from trip\_start\_timestamp) AS Day, count(1)

FROM

`bigquery-public-data.chicago\_taxi\_trips.taxi\_trips`

WHERE

EXTRACT(YEAR FROM trip\_start\_timestamp) = 2019 AND

trip\_seconds != 0 AND trip\_miles != 0 AND

```
(
  (EXTRACT (time from trip_start_timestamp) >= "20:00:01" OR EXTRACT (time from
trip_start_timestamp) <="23:59:59" )
  OR
  (EXTRACT (time from trip_start_timestamp) >= "00:00:00" OR EXTRACT (time from
trip_start_timestamp) <= "05:59:59" )
  OR
  (EXTRACT(time from trip_end_timestamp) >= "20:00:01" OR EXTRACT (time from
trip_start_timestamp) <= "23:59:59")
  OR
  (EXTRACT(time from trip_end_timestamp) >= "00:00:01" OR EXTRACT (time from
trip_start_timestamp) <= "05:59:59")
)
```

```
GROUP BY
  MONTH, DAY
order by
  MONTH, DAY
```

\*\*\*\*\*

To query lat,long,speed, day of week and extra filed

```
SELECT
  unique_key, pickup_latitude, pickup_longitude, dropoff_latitude, dropoff_longitude,
  trip_miles*3600/trip_seconds AS speed,
  EXTRACT (DAYOFWEEK from trip_start_timestamp) AS day,

CASE
  WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "00:00:01" AND "01:00:00")
  THEN 1
  WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "01:00:01" AND "02:00:00")
  THEN 2
  WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "02:00:01" AND "03:00:00")
  THEN 3
  WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "03:00:01" AND "04:00:00")
  THEN 4
  WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "04:00:01" AND "05:00:00")
  THEN 5
  WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "05:00:01" AND "06:00:00")
  THEN 6
  WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "06:00:01" AND "07:00:00")
  THEN 7
  WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "07:00:01" AND "08:00:00")
  THEN 8
```

```

    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "08:00:01" AND "09:00:00")
    THEN 9
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "09:00:01" AND "10:00:00")
    THEN 10
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "10:00:01" AND "11:00:00")
    THEN 11
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "11:00:01" AND "12:00:00")
    THEN 12
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "12:00:01" AND "13:00:00")
    THEN 13
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "13:00:01" AND "14:00:00")
    THEN 14
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "14:00:01" AND "15:00:00")
    THEN 15
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "15:00:01" AND "16:00:00")
    THEN 16
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "16:00:01" AND "17:00:00")
    THEN 17
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "17:00:01" AND "18:00:00")
    THEN 18
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "18:00:01" AND "19:00:00")
    THEN 19
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "19:00:01" AND "20:00:00")
    THEN 20
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "20:00:01" AND "21:00:00")
    THEN 21
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "21:00:01" AND "22:00:00")
    THEN 22
    WHEN (EXTRACT (time from trip_start_timestamp) BETWEEN "22:00:01" AND "23:00:00")
    THEN 23
    Else 24
END AS timeslot

```

```

FROM `bigquery-public-data.chicago_taxi_trips.taxi_trips`

```

```

WHERE
    pickup_latitude is not NULL AND
    pickup_longitude is not NULL AND
    dropoff_latitude is not NULL AND
    dropoff_longitude is not NULL AND

```

```

EXTRACT(YEAR FROM trip_start_timestamp) = 2017
AND

```

```
EXTRACT (MONTH from trip_start_timestamp) = 1  
AND  
trip_seconds > 0  
AND  
trip_miles > 0
```