



# BARCELONA ROAD TRAFFIC ACCIDENTS: WHAT HAPPENS IN AUGUST?

SABBAH & ELLIOTT

# PROJECT GOALS

*Our playlist...*

- 'Here comes the summer sun'
- 'A hard days night'
- 'Working 9 to 5'

*Skills used...*

- Locate
- Understand
- Pandas, SQL
- Interrogate
- Report



# DATA SOURCE

*Who, why?*

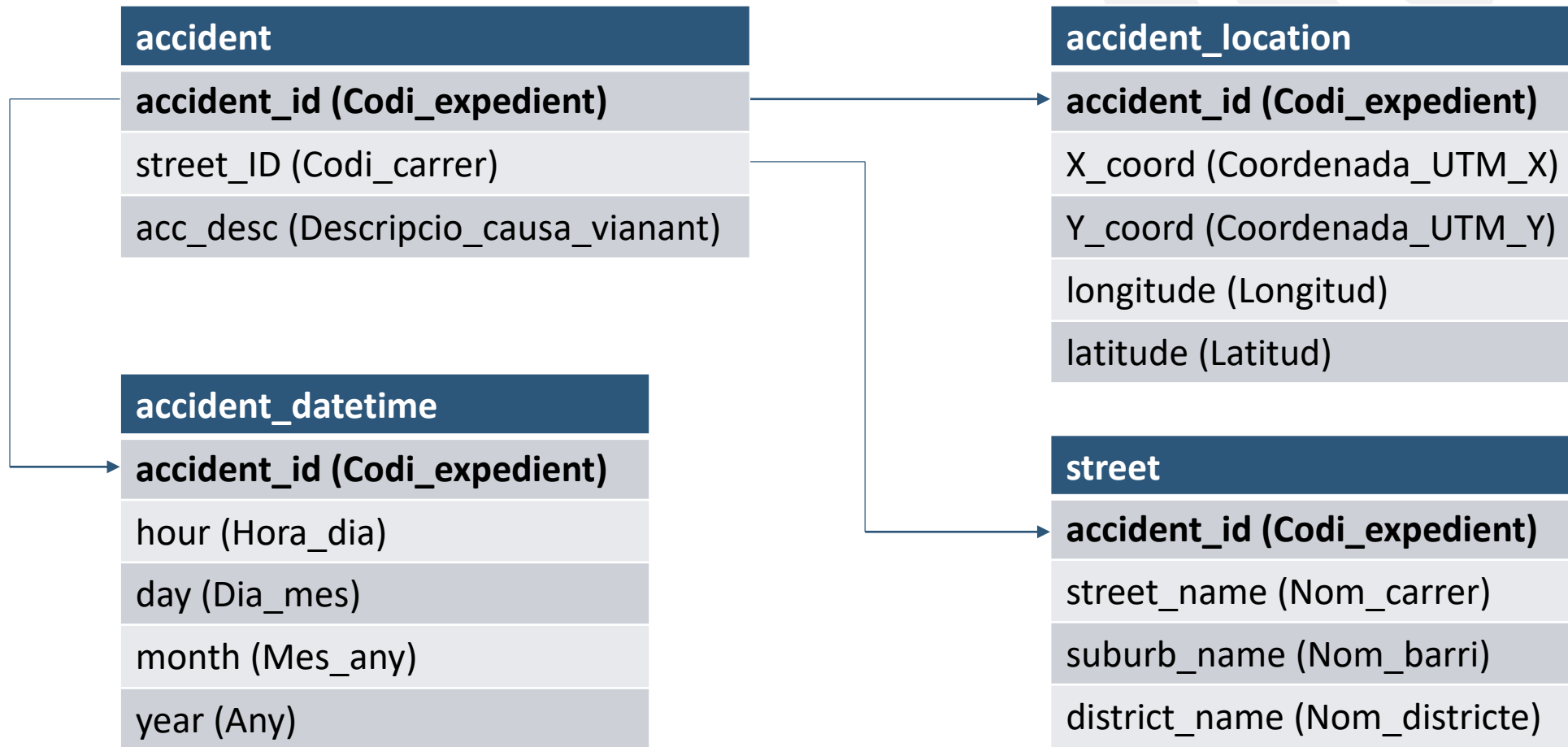
- Open Data BCN
- “Hem après català”

*Where, what, when?*

- Repeating identifiers, UTF8, trailing white space
- Process



# ERD



# FINDINGS

## INFLUENCE OF MONTH

<b>10 - Oct</b>	<b>989</b>
5 - May	874
7 - July	864
3 - Mar	862
4 - Apr	853
1 - Jan	851
6 - Jun	828
11 - Nov	805
12 - Dec	800
2 - Feb	770
9 - Sep	751
<b>8 - Aug</b>	<b>683</b>

## Time (Hrs)

0	165
1	121
2	85
3	73
<b>4</b>	<b>66</b>
5	77
6	195
7	313
8	546
9	572
10	511
11	575

## Time (Hrs)

12	535
13	677
14	704
15	615
<b>16</b>	<b>625</b>
17	622
<b>18</b>	<b>659</b>
19	605
20	579
21	427
22	352
23	231

## INFLUENCE TIME OF DAY

# FINDINGS

## AUGUST – BY HOUR

Time (Hrs)	#	Time (Hrs)	#
0	16	12	38
1	10	13	59
2	13	14	48
3	7	15	50
4	4	16	39
5	9	17	42
6	21	18	37
7	17	19	29
8	26	20	31
9	30	21	27
10	35	22	29
11	47	23	19

Time (Hrs)	#	Time (Hrs)	#
0	15	12	43
1	16	13	61
2	6	14	75
3	5	15	55
4	11	16	66
5	8	17	79
6	18	18	58
7	36	19	57
8	61	20	53
9	64	21	30
10	56	22	43
11	51	23	22

## OCTOBER– BY HOUR



# FINDINGS

## INFLUENCE OF SEASONS

### Season

Autumn 2593

Spring 2553

Summer 2297

Winter 2477

## DISTRICT

Ciutat Vella 560

Eixample 2945

Gràcia 462

Horta-Guinardó 723

Les Corts 671

Nou Barris 551

Sant Andreu 676

Sant Martí 1184

Sants-Montjuïc 1032

Sarrià-Sant Gervasi 1116

# LEARNING & FURTHER RESEARCH

*We're smart...*

- Clean data in Pandas
- Create AWS DB
- Pandas -> SQL
- Created relational DB

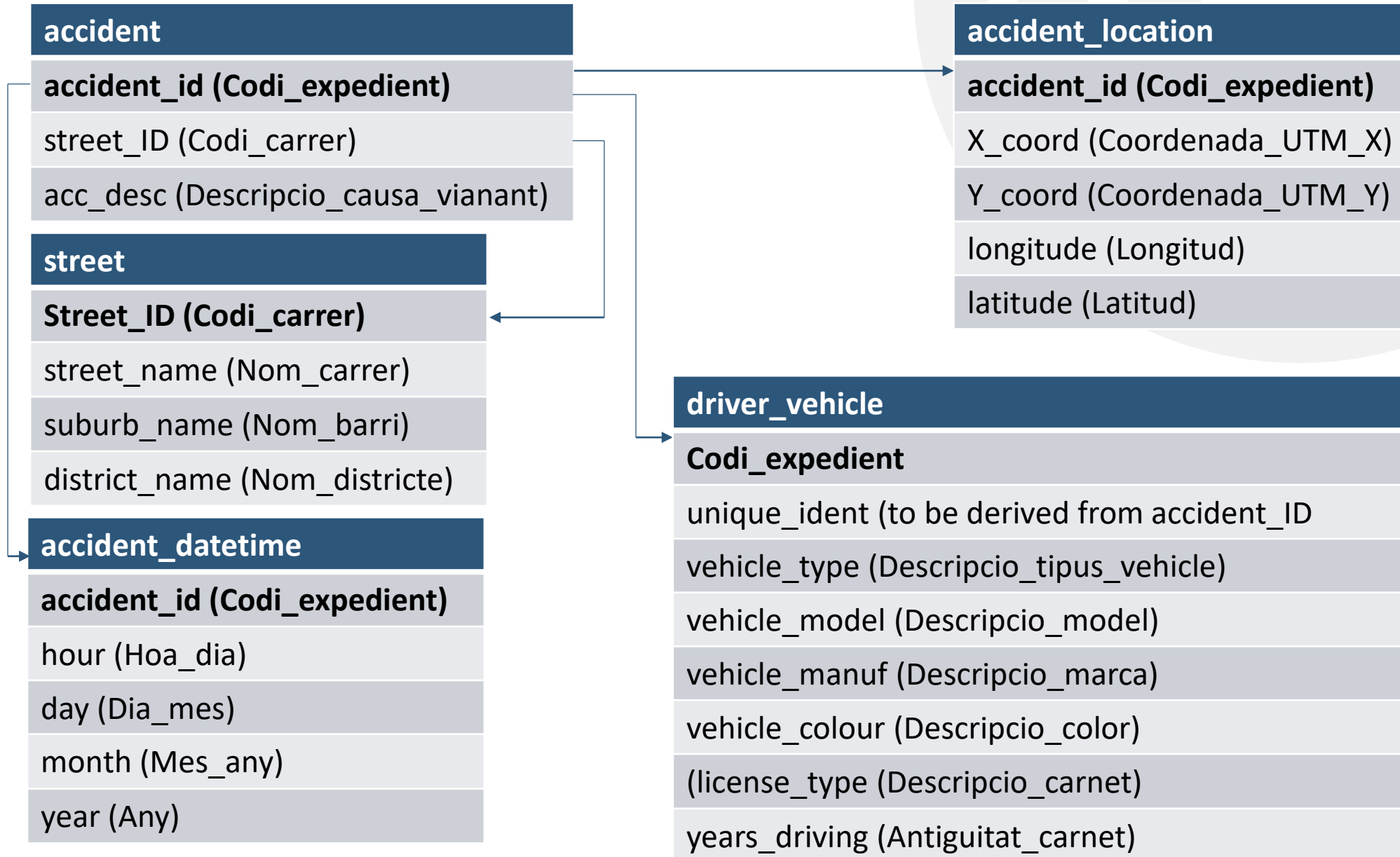
*But could be smarter...*

- Look at multiple years
- Overlay different data sets





# PROPOSED ERD FOR FUTURE IMPROVEMENTS





THANK YOU!