

Ireland's Top Motors – Visualisation Tool

This activity is based around the Ireland's Top Motors visualisation tool which can be found here:

<https://www.cso.ie/en/interactivezone/visualisationtools/irelandstopmotors/>

Task 1 – Identifying the Most Popular Car by Month

The first data we are presented with is the most popular new car in Ireland for the most recent month of recorded sales.

We can see that in May 2020 the most popular new car was the Tesla Model 3. Click 'Show More' to bring up the number of cars sold of that model (56), along with the rest of the top 10 for that month.



Tesla Model 3

Was the most popular new car in Ireland in May 2020

Show More

New Private Cars Licensed for the First Time

May 2020

Copy

Excel

PDF

CSV

Print

Show 10 entries

Search for a car:

Rank	Car	Number licensed
1	Tesla Model 3	56
2	Volkswagen Tiguan	52
3	Hyundai Kona	50
3	Volkswagen Golf	50
5	BMW 3 Series	46
5	Ford Focus	46
7	Hyundai Tucson	38
8	Toyota Corolla	34
9	Volkswagen Polo	30
10	Volkswagen Passat	25

Task 2 – Calculating the Total Car Sales for a Particular Month

We will use an excel sheet to calculate the total number of car sales in a particular month. Click on the 'Excel' button to download data on all cars sold for that month.

New Private Cars Licensed for the First Time

May 2020

Copy **Excel** PDF CSV Print

Show 10 entries Search for a car:

Rank	Car	Number licensed
1	Tesla Model 3	56
2	Volkswagen Tiguan	52
3	Hyundai Kona	50
3	Volkswagen Golf	50

We want to sum all of the car sales in column C of the excel sheet to get the total number of car sales for that month. In the box directly underneath the last entry in column C enter the following text:

`=sum(C2:C154)`

Where C2 is the cell with the number of sales for the most popular car and C154 is the cell with the number of sales for the least popular car.

144	129	Mercedes Benz EQC	1
145	129	Opel Karl	1
146	129	Peugeot Rifter	1
147	129	Porsche Cayenne	1
148	129	Renault Scenic	1
149	129	Subaru Impreza	1
150	129	Subaru Forester	1
151	129	Tesla Model X	1
152	129	Volkswagen Up	1
153	129	Volvo S60	1
154	129	Volvo S90	1
155		<code>=SUM(C2:C154)</code>	1432

Press enter and this cell will now contain the TOTAL car sales for that month. For example in May 2020 there were 1,432 car sales in Ireland.

Task 3 – Calculating the number of sales of the most popular car in a particular month as a % of the total number of sales in that month.

For this we simply use the following formula:

$$\frac{\text{Number of Sales of the Most Popular Car}}{\text{Total Number of Sales}} \times \frac{100}{1}$$

For example, to calculate the number of Tesla Model 3s sold in May 2020 as a percentage of the total number of cars sold in May 2020:

$$\frac{\text{Sales of Tesla Model 3s}}{\text{Total Sales}} \times \frac{100}{1}$$

$$\frac{56}{1,432} \times \frac{100}{1} = 3.91\%$$

Perform your own calculations using a month of your choice.

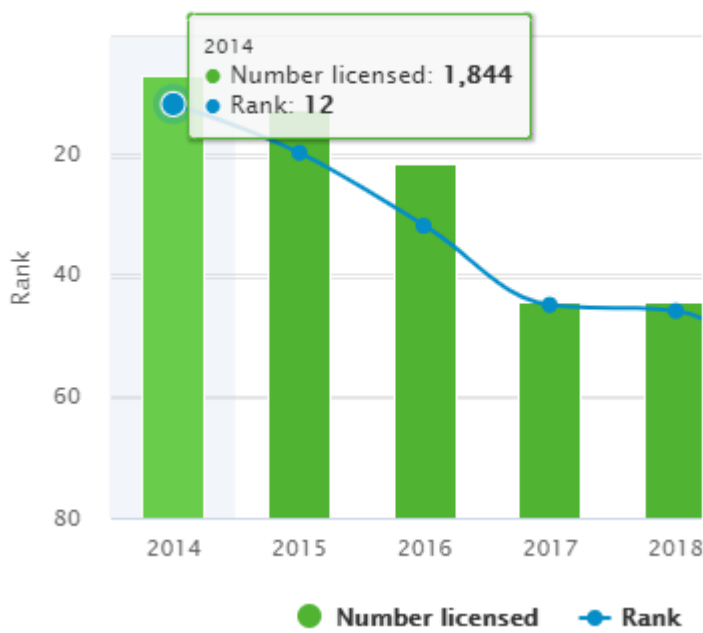
Task 4 – Tracking the Popularity of Your Car From 2014 to 2019

The screenshot shows the 'Annual Data' website interface. At the top, there is a dropdown menu set to '2019'. Below this are buttons for 'Copy', 'Excel', 'PDF', 'CSV', and 'Print'. A 'Show' dropdown is set to '10' entries. A search box contains the text 'insignia'. Below the search box is a table with the following columns: 'Rank', 'Car', and 'Number licensed'. The first row of the table shows a rank of '58', the car name 'Opel Insignia' with a small bar chart icon, and a 'Number licensed' of '555'. The rank '58' is highlighted in a green circle, the car name 'Opel Insignia' is highlighted in a blue circle, and the number '555' is highlighted in a purple circle.

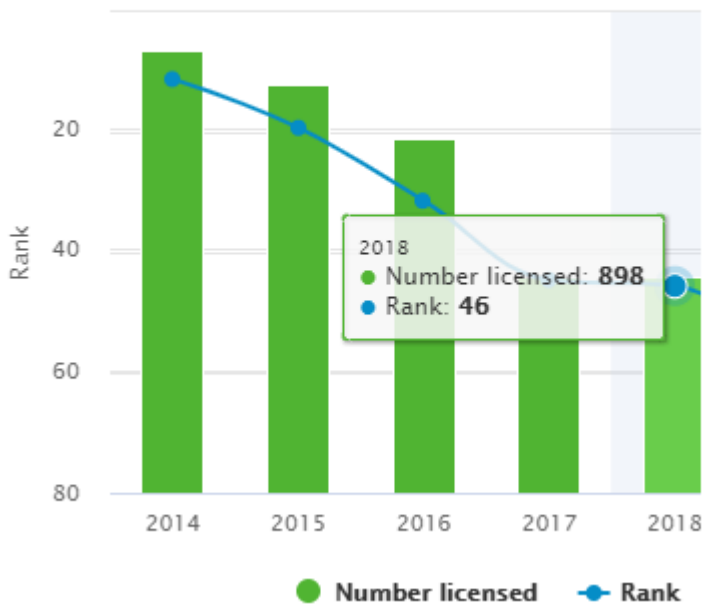
Enter the name of your own family car into the 'Search for a car' box of the Annual Data section. This will give the number of that model of car licensed in that year as well as its overall rank.

Select on the model of the car to bring up a combined bar chart/ trend graph of the rank. Comment on the sales of your car from 2014 to present.

Opel Insignia



Opel Insignia



Hovering over a particular bar brings up the numbers of cars sold in that year along with the rank.

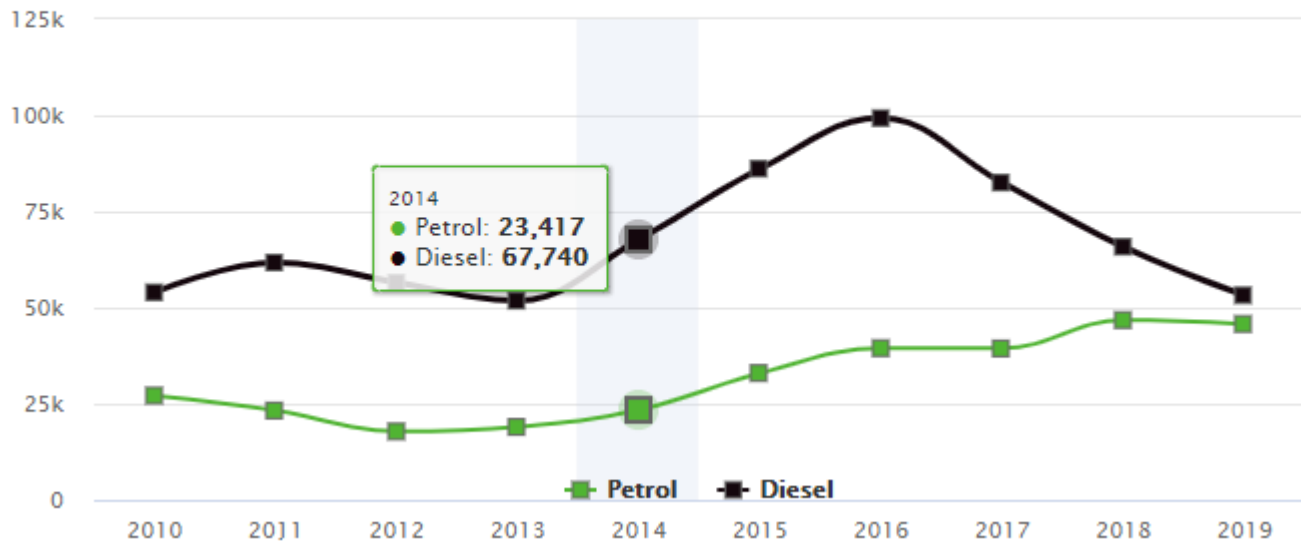
We can see that the Opel Insignia has declined in sales from 1,844 licensed in 2014 with a rank of 12 to 898 licensed in 2018 with a rank of 46.

Return to the Annual Data box and look up the number sold and the rank in 2019 to see if the trend for your car has continued. For example there were 555 Opel Insignias sold in 2019 showing a continued decline in their sales.

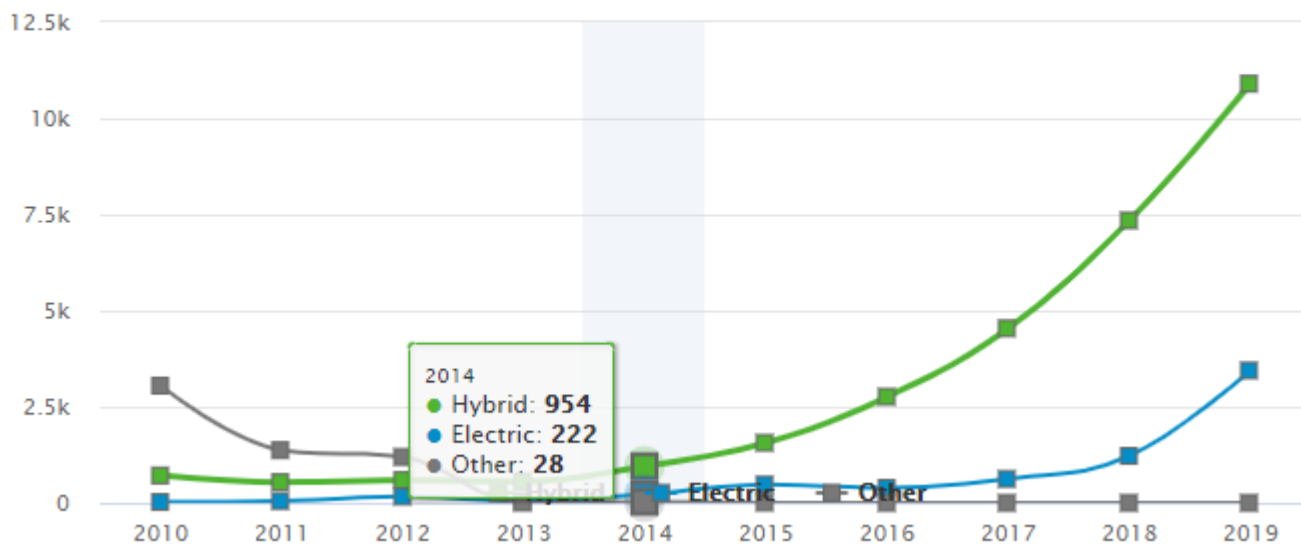
Task 5 – Trends of Fuel Types

Scrolling to the bottom of the page we can see charts for Sales of New Private Cars by Traditional Fuel (Petrol and Diesel) and Alternative Fuels (Hybrid, Electric and Other).

New Private Cars licensed by traditional fuel



New Private Cars licensed by alternative fuel



Comment on the trends illustrated by each chart and then combine the data to create one chart so that we may directly compare the Traditional Fuels with the Alternative Fuels.

Calculate for each of the years 2010 to present what percentage of cars licenced had alternative fuel.

For example in 2014:

$$\frac{\text{Alternative Fuel Types}}{\text{All Fuel Types}} \times \frac{100}{1}$$

$$= \frac{954 + 222 + 28}{954 + 222 + 28 + 23417 + 67740} \times \frac{100}{1}$$

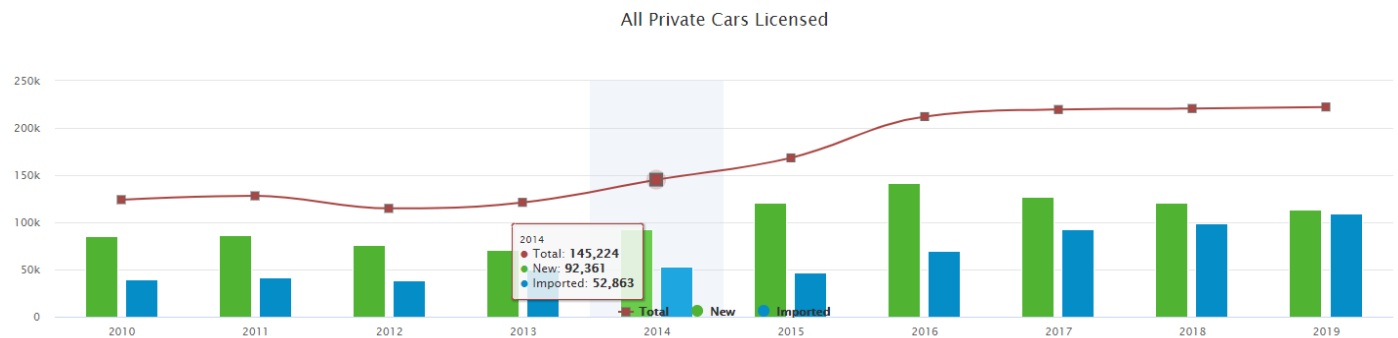
$$= \frac{1204}{92361} \times \frac{100}{1}$$

$$= 1.3\%$$

Use the results to comment on the trend of sales of alternative fuelled cars sold as a percentage of all cars sold from 2010 to present.

Task 6 – Percentage of Imported Cars

The final chart on the page shows the sales of All Private Cars Licensed both New and Imported.



Calculate for each of the years 2010 to present what percentage of cars licenced had been imported.

Use the results to comment on the trend of sales of imported cars licensed as a percentage of all private cars licensed from 2010 to present.