

## INTRODUCTION

We chose this project because we thought Iceland is a very interesting country due to its many natural features. We based it on volcanic activity in Iceland and its affect on its Economy using statistics and geographical facts. Iceland is an island off the coast of Greenland and in on the mid Atlantic ridge. It has lots of volcanos, geysers, lava fields and hot springs. Therefore it attracts many tourists

## SPECIFYING AND PLANNING

On average a volcano eruption occurs in Iceland every 4 to 5 years. This isn't surprising as the island has between 150 and 200 volcanos. We will research a few of Iceland's volcano eruptions and the cost to repair their damages and then we will see how many tourists arrived and what they spent. We will then compare these statistics. Then we will see if Tourism in Iceland makes more money for the economy, or does all the money they make end up going towards repairing damages done by volcanic activity.

## DATA COLLECTION

The volcano eruptions we will be comparing are Hekla, Heimaey, Krafla, Gjalp, and Eyjafjallajökull. The Eyjafjallajökull in 2010 was a pretty small eruption but it canceled over 100,000 flights and caused a lot of damage to crops and roads. The cost of the repairs globally was €4.9 billion. After this eruption the amount of tourists increased by 18% between 2010 and 2014, and rose another 30% by 2017. (Graph 1)

# Does volcanic activity in Iceland make more money for the economy through tourism or cost more money from damages caused by volcanos?

## NUMERICAL AND GRAPHICAL ANALYSIS

Chart 1

Volcano Eruption	Damage	Cost €
Hekla 1970	8000 sheep killed by fluoride poisoning	1 -2 million
Heimaey 1973	400 buildings buried in lava	80 million
Krafla 1975-84	Construction of geothermal power plant delayed by 2 decades	70 million
Gjalp 1996	Destruction of bridges, power lines & sections of main road between Seth & east Iceland	25 million
Eyjafjallajökull	Reconstruction of ring road due to flooding, repair of Fimmvörduháls mountain range Jeep track & other road related projects.	650,000 in Iceland
	Havoc on Europe's airways	4.9 billion globally



Graph 1



Graph 2



Graph 3



## CONCLUSION

As you can see from all our charts volcanic eruptions especially Eyjafjallajökull has had some pros and cons. From the 5 volcanic eruptions we have studied, we've learned that the cost to repair damages in Iceland was roughly 177 million and the global cost was 4.9 billion (see chart 1) However, the positive side to this is that after their 2010 eruption, their tourism income generated a total of 14,260 billion from 2010 to 2018 (see graph 3) and created approximately 13,000 tourism related employment (see graph 2) Lots of people were dying to see the newly erupted volcano. Iceland has gained back all of the money that they lost and also made a profit. In conclusion it appears that Iceland makes more money for the economy through tourism than it costs to repair damages caused by eruptions.

## REFERENCES

<https://www.icelandreview.com>  
<https://russellgroup.ac.uk>  
<https://www.ferdamalastofa.is>  
<https://qz.com/uk/>  
<https://hospitalityinsights.ehl.edu>  
<https://www.ceicdata.com>  
 We contacted Promote Iceland tourist board and they told us 700 million was spent on marketing campaign 'Inspired by Iceland' after the 2010 eruption. This prevented 34 billion loss in Icelandic tourism revenue