

World Oil Consumption and Production

New Mexico

Supercomputing Challenge

Final Report

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Team 19

Bosque School

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Summary

Our project was originally planned to find oil consumption and production in the past few years. From that information we would then calculate our future oil consumption and production leading us to predict when we would have to start digging into our reserves. Later the project evolved into what happens to oil consumption and production over the past and next few years. We have calculated what happens during war, when we find a new oil cache, or even when people start to demand for more oil. We have put this information and these variables into C++. We have now calculated the effects of war and supply and demand on oil. With this we can see when production has reached an all time low and consumption has reached an all time high, showing us when use of reserves are necessary in order to function. We also are finding the effects of oil on the economy.

Saving the oil or the economy

We haven't had much time to think about this, but we have decided that we can do one of two things. We could start by taking down the demand for oil by instructing people to use less. Instead of cars people could start using bikes. People can learn to use oil less. Or on the other hand we wouldn't have to worry about running out of oil because we either find how to reproduce oil at a faster rate, or we stop using oil. Instead of oil we could turn to a new element that could be used to run our new technology. We could change our engines to run on cut grass, or something similar.

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From our study

From our study we found that the lines of oil consumption and production have already crossed more than once. The cause of this could be recent wars, or supply and demand raises in the economy. Our study has shown us how much the world consumes and produces oil. But because our project had little purpose before we have changed it using only part of our information as variables in our C++ code.

Conclusion of Results

After looking over our study and our code we have discovered that the world will actually last a few more years with the oil supplies being found and the caches we already have reserved. But once we do run out of oil the world will go crazy unless we find a new resource that world technology can run on. Many people would be surprised how much this world uses oil. Even just going out for a while in your car uses oil.

While doing research we came upon two different theories about the world and creating oil. These two theories can change any project on this completely. One theory was that there was only so much oil, and that we would eventually run out. We based our project mostly on this theory. The second theory was that the remains of dinosaur fossils in the earth mix with other elements in the earth's crust creating oil. Though this process in long it still creates a vast amount of oil.

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Code

Our code is based largely off team 016's code. We used an early copy of their code to assist in the making of ours, because the over all format of their code was exactly what we needed. Their code gave a product that was composed of varying variables, which is what we needed. Our code makes a product that is basically a price per barrel of oil that is affected by different inputs. These inputs are things like supply and demand, if there is a war, production rates, consumption rates, and things along those lines.

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