

# [Example of essay on critical infrastructure](https://assignbuster.com/example-of-essay-on-critical-infrastructure/)

[](https://assignbuster.com/)[Sociology](https://assignbuster.com/essay-subjects/sociology/), [Violence](https://assignbuster.com/essay-subjects/sociology/violence/)

\n[toc title="Table of Contents"]\n

\n \t

1. [Threats to America’s Critical Infrastructure and Assets:](#threats-to-americas-critical-infrastructure-and-assets) \n \t
2. [The Issue of Education as a part of Critical Infrastructure:](#the-issue-of-education-as-a-part-of-critical-infrastructure) \n \t
3. [Reasons Why Critical Infrastructures are Fragile:](#reasons-why-critical-infrastructures-are-fragile) \n \t
4. [Monuments and Icons as Critical Infrastructure in the U. S:](#monuments-and-icons-as-critical-infrastructure-in-the-u-s) \n \t
5. [References:](#references) \n

\n[/toc]\n \n

Ever since the infamous September 11th attack, there has been serious and concerted efforts, to protect and reduce the likelihood of occurrence of a similar or any other form of attack on the U. S. The phrase Homeland Security arose in the year 2003. It refers to efforts put in place to ensure that all of America is safe from any form of attack. As a result of the establishment of Homeland Security, several infrastructure and assets were identified as critical to America’s existence. All the infrastructure and assets identified have the characteristic of being vital to America to the extent that the country would suffer grave loss if they were to be destroyed or incapacitated.

## Threats to America’s Critical Infrastructure and Assets:

All potential threats to America’s security have been classified into three categories. These categories include all risks that are related to natural calamities, human related actions and threats that result from accidental or technical mishaps. Some of the potential risks that have been classified under the natural threats category include losses that may arise as a result of extreme weather conditions i. e. the existence of extreme hot or cold weather conditions. The potential occurrence of geological hazards such as earthquakes and tsunamis have also been classified under the natural threats category. Other potential geological hazards such as the occurrence of volcanic eruptions and land shifts have also been identified as potential natural threats.

There are a number of factors that have also been identified as potential risks that face America as a result of human actions. Examples of human related threats include riots, the occurrence of cyber attacks and tampering of products. The potential occurrence of bombings and explosions has also been identified as human related threats. All the risks facing America that are caused by human activities are referred to as acts of terrorism. The accidental and technological threats facing America include the risk of occurrence of transport related accidents, losses that result from the failure of infrastructure and the risk posed by hazardous materials.

## The Issue of Education as a part of Critical Infrastructure:

Since the identification of specific, critical infrastructure and assets started in America after the September 11 attacks, there has been a huge debate on whether education should be included as part of America’s critical infrastructure. Those in support of inclusion of education as part of America’s critical infrastructure claim that there is a great need to increase the quality of education in America.

Supporters of the inclusion education as a part of critical infrastructure, claim that in order to increase people’s ability to come up with new ideas of developing and protecting America, the issue of improving the quality of education in America should be taken more seriously. It has also been claimed that an improvement of the quality of education offered in America will have the effect of empowering American’s to engage in activities that are likely to generate a good income to them. This will, therefore, reduce the likelihood of American’s to engage actions that pose a threat to America’s homeland security.

However, some critics who are against the inclusion of education as part of America’s critical infrastructure claim that it is the responsibility of parents, guardians and other relevant stakeholders to ensure that their children have access to quality education. In my view, education should be considered as a crucial part of America’s critical infrastructure. This is because there is a great need for American’s to be educated in order for people to come up with innovations of protecting America. I disagree with those people who have the notion that American parents are responsible for their child's education. This because some American parents are irresponsible while others lack the means to pay for their children’s tuition fees. The government of America should, therefore, consider education as a part of their country’s critical infrastructure.

## Reasons Why Critical Infrastructures are Fragile:

Critical infrastructure in the U. S can be described as fragile because they are more vulnerable to attacks as compared to other infrastructure due to a number of reasons. There are two main reasons why critical infrastructure in the U. S has been described as being vulnerable. One of the reasons why critical infrastructure is said to be vulnerable can be attributed to their geographical location.

The reason why the geographical location of critical infrastructure is a source vulnerability is the fact that most of them are located near each other. Therefore, any single attack targeting a some certain form of critical infrastructure in the U. S is likely to affect or even destroy other forms of critical infrastructure. For example, more than 33% shipments containing waterborne containers pass through the Los Angeles and Long Beach ports. Another example of the proximity of critical infrastructure in the U. S is the fact the states of Texas and Louisiana contain around 43% of all the oil refineries found in the U. S. Thus, an attack on one of the above critical infrastructure will most likely affect all the whole region of infrastructure.

In recent times, the use of computer systems and other forms of technology has also increased the vulnerability of critical infrastructure in the U. S. For example, a system known as SCADA is used to control the generation and distribution of energy in the U. S. The same system is also used to control the distribution of water and electricity in the U. S. A cyber attack on such a computer system would, therefore, have a devastating effect on the distribution of water, and electricity in the U. S. The use of centralized computer systems to control the operation of critical infrastructure in the U. S, thus, makes them more fragile and vulnerable to attack.

## Monuments and Icons as Critical Infrastructure in the U. S:

I do agree with the inclusion national monuments and icons as part of America’s critical infrastructure. There are a number of reasons that inform my decision to agree with their inclusion. The first reason why I think that national monuments and icons should be treated as critical infrastructure is the fact that such infrastructure are important hallmarks of America’s history and heritage. Therefore, there is a need to protect such national monuments and icons in a bid to preserve America’s culture and heritage.

Secondly, national icons and monuments should be considered as critical infrastructure since they are a major source of revenue to the American economy. The U. S records a huge number of tourists who come into the country to see its national monuments and icons. Such tourists spend a lot of money in the American economy while touring the country’s monuments and icons.

Thirdly, it is important to consider America’s national monuments and icons as critical infrastructure due to the fact that they offer a lot of employment opportunities to the American people. Neglect of national monuments and icons would, therefore, cause a lot of American’s to lose their jobs. Therefore, in a bid to ensure the preservation of America’s history and heritage, increased generation of revenue and the creation of job opportunities, it is important to include national monuments and icons as part of America’s critical infrastructure.

## References:

Robles, R. J., Choi, M.-K., Cho, E.-S., Kim, S.-s., Park, G.-c., & Lee, J.-H. (2008). Common Threats and Vulnerabilities of Critical Infrastructures. International Journal of Control and Automation, 17-22.