

Critical infrastructure research paper sample

[Law](#), [Security](#)



Critical Infrastructure

Critical infrastructure is defined as those systems and assets both physical and cyber so vital to the Nation that their incapacity or destruction would have a debilitating impact on national security, national economic security, and/or typically means protecting assets from damage caused by physical forces such as explosion, impact, and fire (Moteff & Parfomak 2004).

The critical infrastructure includes, Public Health Emergency Services, Government Defense Industrial, energy, transportation and chemical Industry. The critical infrastructures are further, subdivided into, physical assets that include both tangible assets such as animals and products and intangible assets such as information. The second assets include human assets including those persons who are in access of crucial information and the third subdivision is the cyber assets. This includes information hardware, software, data, and the networks that serve the functioning and operation of the assets (Lewis 2006).

These infrastructures are critical because they are linked with high fixed costs, long economic lives and strong links to economic development. These are the assets that are mostly targeted by external and internal threats so as to cripple a country's economy (Lewis 2006). . Taken as a whole, the services that they provide form the underpinnings of the nation's defense, a strong economy, health and safety. Therefore critical infrastructure can be said to include those built projects which human beings rely solely for their safety and well being. If the projects therefore fail then the consequences are said to be devastating.

After considering the above critical infrastructures, then we will consider whether education is a critical infrastructure. To do this we will consider whether education poses any serious threat on the national security, economy or safety. While disrupting education may pose a threat on the economy and national security, its threat is minimal. For the critical infrastructure their destruction then poses a real threat on the nation for a long time and the effect are felt long after the destruction has already occurred.

In order for education to fall into a critical infrastructure, then there must be a massive destruction of schools and their stationeries, eliminating teachers in the country such that it impacts on the economy in a wide range. The destruction must also be so severe such that to construct them will actually impact on the economy of the country and the effects are felt long after the destruction has occurred (Moteff & Parfomak 2004).

As we have seen from above, critical infrastructure comprises those assets that when destroyed pose a danger on economic lives, national security, national economy and health. Education on the other hand poses little danger on affecting the country on any of the mentioned factors therefore it does not fall under the category of critical infrastructure. Education is also dynamic and changes with events that happen in the society, then its destruction is rarely in threat. Even where the security of information is distorted, the same may be of little effect unless the distorted information is of national security.

References

Lewis, T. (2006). Critical Infrastructure Protection in Homeland Security:
Defending a

Networked Nation: Hoboken: John Wiley & Sons. Print.

Moteff, J & Parfomak, P. (2004). Critical Infrastructure and Key Assets:

Definition and

Identification. Retrieved on 12th Sep. 2012 from [http://www. fas.](http://www.fas.org)

[org/sgp/crs/index. html](http://www.fas.org/sgp/crs/index.html)