Introduction To Infrastructure - The Influence of Natural Disasters on Infrastructure

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INTRODUCTION TO INFRASTRUCTURE

THE INFLUENCE OF NATURAL DISASTERS ON INFRASTRUCTURE

HURRICANE MARIA - IRMA - HARVEY

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ABSTRACT

"Infrastructure has an important role in the nation’s development especially sustained economic development. Infrastructure consists of two main types which are “hard” infrastructure and “soft” infrastructure. Hard infrastructure is the physical networks which include transportation, power, etc. while soft infrastructure is institutions and human capital. No matter if it is “hard” or “soft” infrastructure, if infrastructure has inadequate and inefficient performance, it would prevent the economy to achieve its full growth. In the past decade, a significant increase in the number of natural disasters had great impact on infrastructure systems. In this paper, three major hurricanes in 2017 were examined to determine the damage those hurricanes have done to the infrastructure. The main topics that will be discussed include demographic analysis, geotechnical failures, structural damage, and transportation issues. Based on the examination information, each location will be evaluated by the sustainability and resiliency of its infrastructure systems."

Some diagrams are shown below:

- Hurricane Maria: Geotechnical damage in central and northeastern Puerto Rico as of Nov. 2, 2017
- Hurricane Harvey: River failures and infrastructure damage along the Rosewood dam failure that occurred during Harvey.
- Hurricane Irma: Flooded highways in the Florida Panhandle after Irma.©2019 Joe Raedle (McClatchy/Tribune News Service)