# 1985: MEXICO'S DEADLIEST EARTHQUAKE

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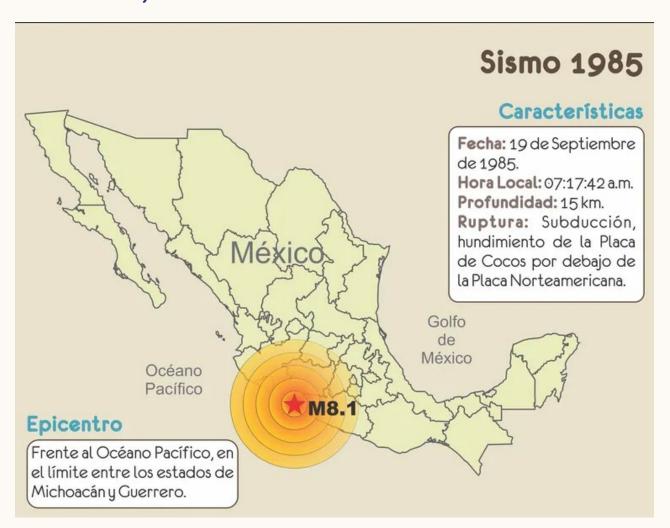


#### **INTRODUCTION**

On Thursday, September 19, 1985, an earthquake struck Mexico at 7:17 in the morning, reaching a magnitude of 8.1 on the Richter scale.



#### THE EPICENTER OF THE TELLURIC MOVEMENT WAS IN THE PACIFIC OCEAN, NEAR THE MOUTH OF THE BALSAS RIVER, ON THE COAST OF THE STATE OF MICHOACÁN.



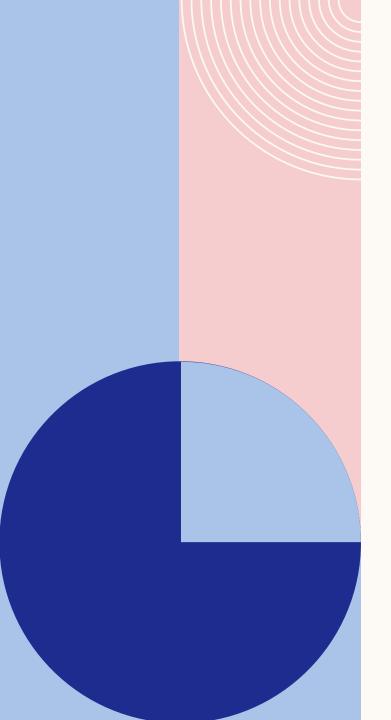


• The affected areas were the center, south, and west of the country. The quake caused severe damage to hundreds of buildings in the capital and completely changed the image of Mexico City, the exact number of victims is not known, and economic losses exceeded 4 billion dollars.

• So far it has been the most significant and damaging in the contemporary history of the country.







### **EFFECTS**

• Given the general lack of a civil protection culture and action protocols in the country, the hours that followed ended in general chaos, which gradually calmed down when civilians began to organize themselves to create rescue groups and provide medical assistance.

• The actual number of deaths, injuries, and property damage was never precisely known. As for the deceased people, there are only estimates: 3,192 was the official figure, while 20,000 was the data resulting from the calculations of some organizations.

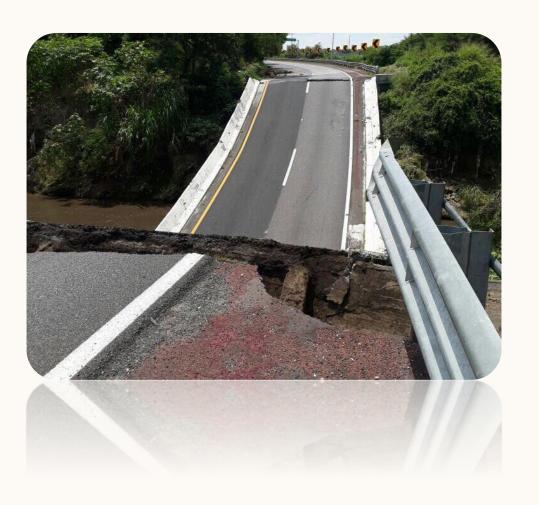




☐ The National Civil Protection System was born after the 8.1 magnitude Richter earthquake struck Mexico in 1985, it arises as an effort by the State to create and strengthen a culture in order to safeguard the security, heritage, and life of all the Mexican people. The objective of this commemoration is to recognize the effort and dedication of people whose sole intention is to safeguard the physical integrity of families.



# WHY DO EARTHQUAKES HAPPEN IN MEXICO?





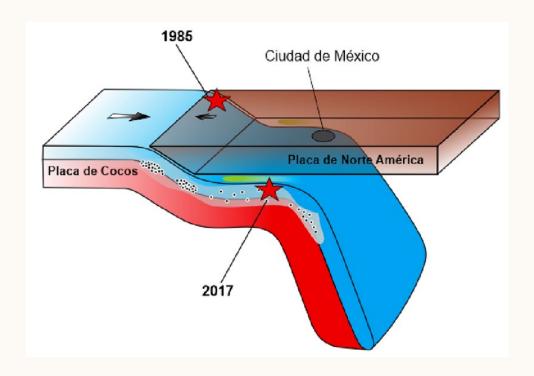
Downtown Mexico City is notoriously vulnerable due to the soft, wet terrain below.



The ground amplifies the jolt like jelly on a plate, and is prone to liquefaction, which is the ability to transform mud into a thick liquid when sufficiently stirred.



In the big earthquake of 1985, many large buildings were destroyed, and Tuesdays was another hit, mainly to older buildings and weaker structures.



The energy from the shaking was generated at the source of the quake, 30 miles down, for 20 seconds, but the waves rumbled for longer, more than a minute or two, on the mountains and valleys.

The tectonic plates were the motor of the shaking, as it happens in all the great earthquakes. Along the coast of Mexico, the Cocos plate is sliding under the North American plate, moving about 7 centimeters per year.

The quake, however, was caused by puckering that originated from the downward bending of the collapsed part of the Cocos plate, and/or directly by sliding between the plates.

FORTUNATELY, MEXICO HAS BUILT AN "EARLY SEISMIC WARNING" SYSTEM TO REDUCE THE TRAGEDY. THE SYSTEM DETECTS MOVEMENTS VERY CLOSE TO THE EPICENTER AND SENDS A WARNING OF IMPENDING CHAOS BEFORE THE SHAKE. AT LEAST SOME FRAGILE PEOPLE AND FACILITIES HAVE LITTLE TIME TO COMMUNICATE AND PREPARE.



#### REFERENCES

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## **EARTHQUAKE FREQUENCY**





