

EERI VERT Chiapas Earthquake

Lifelines

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Overview of topic and how it affected various regions

Regional roads, city streets,

- Landslides and settlements on the highways
 - Cintalapa-Tuxtla,
 - Arriaga-Ocozocuaula
 - Tuxtla-San Cristobal
 - Oaxaca-Tehuantepec
- Part of a bridge on a highway being built to the site of Mexico City's planned new international airport collapsed due to the earthquake, local media reported.
- Adelfo Regino Montes said highways have been severely damaged, hundreds of homes have collapsed, crops have been lost and electrical service knocked out.
- The city of Rios had roads blocked because of funeral processions, while residents cordon off streets to prevent further collapses from the vibration of moving vehicles.



Bridge connecting Juchitan to Union Hidalgo in Oaxaca state, Mexico. Bridge survived but, the road leading up to each side fissured and the supporting walls buckled. (AP Photo/Rebecca Blackwell)

Source: <http://playazipolite.blogspot.com/>



Tuxtla-Cd Cuahatemoc Highway

<http://www.diariodechiapas.com/landing/deslave-en-la-carretera-ciudad-cuauhtemoc-la-mesilla/>



Rockslide in Tuxtla Gutierrez
Photo: Rodolfo Gonzalez

Overview of topic and how it affected various regions

Electrical power

- The Federal Electric Commission said there were 1.85 million of affected clients in 11 states. On September 8, 60% of the service was restored and the 90% was restored on September 9.
<http://www.huffingtonpost.com.mx/2017/09/08/esto-dice-cfe-sobre-las-fallas-de-luz-por-el-sismo-a-23201604/>
- In Tabasco, a toddler died under a collapsing wall and a newborn perished in his respirator when the hospital caring for him lost power.
- In Mexico City, windows were broken at the airport and power went out in several neighbourhoods.



Electricity poles in Chiapas
[@stereo100xela](#)



Damaged power line in Juchitan (Photo - Reuters)

Overview of topic and how it affected various regions

Gas, fuel

- The Mexican Natural Gas Association (MNGA) reported that the nation's gas pipelines and distribution are under constant surveillance and certified to resist ground shaking in susceptible areas such as Mexico City, with pipe security valves closing automatically when near prescribed limits.
- State-run oil company Pemex said on Monday it has not restarted its Salina Cruz refinery due to the aftershocks.
- Mexico's state oil company is reassuring the country that fuel supplies will not be interrupted despite a magnitude-8.1 earthquake.
- Pemex reports that a refinery in the southern city of Salina Cruz, Oaxaca state, was shut down automatically for safety reasons after the late Thursday quake off the southern Pacific coast. But an inspection turned up only minor damage to power generators, and the facility should come back online once that's solved.

Overview of topic and how it affected various regions

Potable water, sewage, auxiliary water (for fire-fighting)

- Juchitan and surrounding areas, including Asunción Ixtalepec, lacked running water immediately following the earthquake.
- Simple rations including potable water is being delivered by government officials to areas such as Juchitan, although residents have complained about the slow pace of assistance.
- President Peña reported that the operation of 7 wells distributing potable water to Juchitan had already been restored on September 9, less than 2 days following the earthquake.
- Water is one of the main items being distributed in the aid centers



@Liconsa is sending 100 liters of water daily to Chiapas and Oaxaca. Source [@LuisEMirandaN](#)

Overview of topic and how it affected various regions

Telecommunications, internet

- Internet and telephone service were interrupted in Mexico City, Puebla, Chiapas and Oaxaca, but the internet service was quickly restored. The Department of Civil Protection advised people to use the telephone just in case of emergency to avoid saturation of the system (@pcsegob).
- 'The house moved like chewing gum and the light and internet went out momentarily,' said Rodrigo Soberanes, who lives near San Cristobal de las Casas in Chiapas, a poor, largely indigenous state popular with tourists.



The Civil Protection asks people to refrain from using the phone after the earthquake

Overview of topic and how it affected various regions

Telecommunications, internet

- An aftershock has resulted in toppling down a cellphone tower from the top of a three story building in Tuxtla Gutiérrez, the capital of Chiapas. (In figure)



(source: <http://mexiconewsdaily.com/news/aftershocks-continue->

Overview of topic and how it affected various regions

Public transportation, airports, ports

- In Mexico City, windows were broken at the airport
- All airports were reported to be fully functional following the earthquake



Overview of topic and how it affected various regions

Schools, hospitals, aid, shelter

- 1000 schools, 48 health sector facilities, 29 public buildings, 52 churches, 106 commercial complexes and 11 bridges have been severely damaged. Mexico News Daily.
- One hospital in Juchitan collapsed
- In a series of tweets, Peña Nieto said schools would be closed for the day in Mexico City, the state of Mexico, Chiapas, Hidalgo, Veracruz, Guerrero, Tabasco, Oaxaca, Puebla and Tlaxcala. He said the suspension of classes would allow experts to determine the damage to schools.
- The catastrophe has thrown Mexicans' simmering distrust of their government into sharp relief as suspicions mount that aid will be diverted for political gain — or simply siphoned off by corrupt officials.
- At least 500 people were going to the shelter every day for food, which was donated by Mexicans from other areas in Oaxaca or neighbouring states since there is no running water or electricity.

Schools, hospitals, aid, shelter



Hospital in Juchitan disabled after the earthquake @lajornadaonline



Matias Romero Hospital, Oaxaca @pocopelo23



Juchitan School @djonestlalpan

Questions that a reconnaissance team could look into

- Restoration time for each lifeline
- Restoration curves
- Disaster management protocols for each lifeline
- Efficacy of repair work
- Government strategies for post-earthquake data collection

Links to media articles discussing the topic

Highways

<https://www.bnamericas.com/en/news/infrastructure/in-brief-bridge-on-highway-to-new-mexico-city-airport-collapses/>

<http://www.aljazeera.com/news/2017/09/mexico-earthquake-victims-complain-slow-response-170910212611484.html>

Electricity

<https://www.theguardian.com/world/2017/sep/08/mexico-earthquake-warning-tsunami>

<http://www.sandiegouniontribune.com/opinion/the-conversation/sd-mexico-earthquake-damage-20170908-htmllstory.html>

<https://www.theguardian.com/world/2017/sep/08/mexico-earthquake-warning-tsunami>

<https://www.nytimes.com/aponline/2017/09/08/world/americas/ap-lt-mexico-earthquake.html?mcubz=3>

Gas and fuel

<https://www.csmonitor.com/World/Americas/2017/0912/Relief-efforts-begin-for-2.5-million-affected-by-Mexico-s-earthquake>

<http://abcnews.go.com/International/wireStory/latest-killed-mexico-quake-chiapas-49696357>

<http://www.dailymail.co.uk/news/article-4864392/Massive-8-0-magnitude-earthquake-recorded-Mexico.html>

<https://www.csmonitor.com/World/Americas/2017/0912/Relief-efforts-begin-for-2.5-million-affected-by-Mexico-s-earthquake>

<http://www.dailymail.co.uk/news/article-4864392/Massive-8-0-magnitude-earthquake-recorded-Mexico.html>

Links to media articles discussing the topic

Water

<https://www.csmonitor.com/World/Americas/2017/0912/Relief-efforts-begin-for-2.5-million-affected-by-Mexico-s-earthquake>

https://www.democracynow.org/2017/9/11/oaxacan_residents_plead_for_water_food

<http://www.jornada.unam.mx/2017/09/10/politica/002n1pol>

Telecommunications, internet

<http://www.dailymail.co.uk/news/article-4864392/Massive-8-0-magnitude-earthquake-recorded-Mexico.html#ixzz4sVRdqZHq>