

**Better solutions.
Fewer disasters.
Safer world.**



León

**Nicaragua National Disaster Preparedness Baseline Assessment
Department Profile**

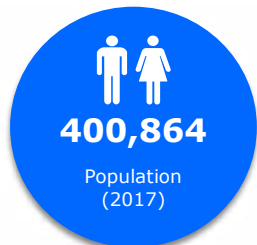
Department: León



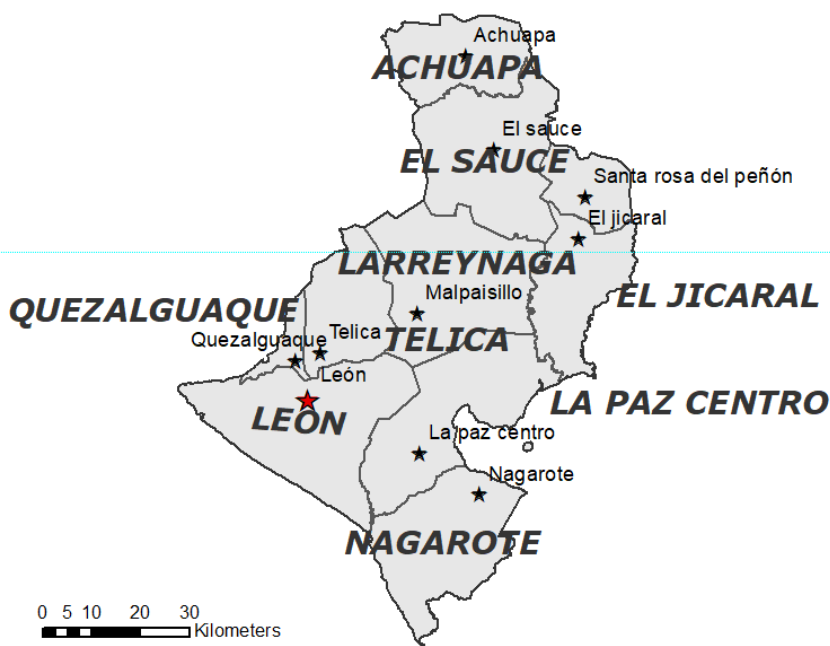
Department Capital: León

Area: 5,138 km²

León is located on the Pacific Coast of Nicaragua. This department is known for its historic cultural sites, volcanic mountains, and Pacific Coast beaches.



Municipality	Population
Achuapa	14,882
El Sauce	31,301
Santa Rosa del Peñón	10,745
El Jicaral	11,613
Larreynaga	32,584
Telica	25,708
Quezalguaque	9,649
León	194,924
La Paz Centro	31,833
Nagarote	37,625



**Multi-Hazard Risk Rank:
Low (12 of 17)**

**Lack of Resilience Rank:
Very Low (14 of 17)**

RVA Component Scores

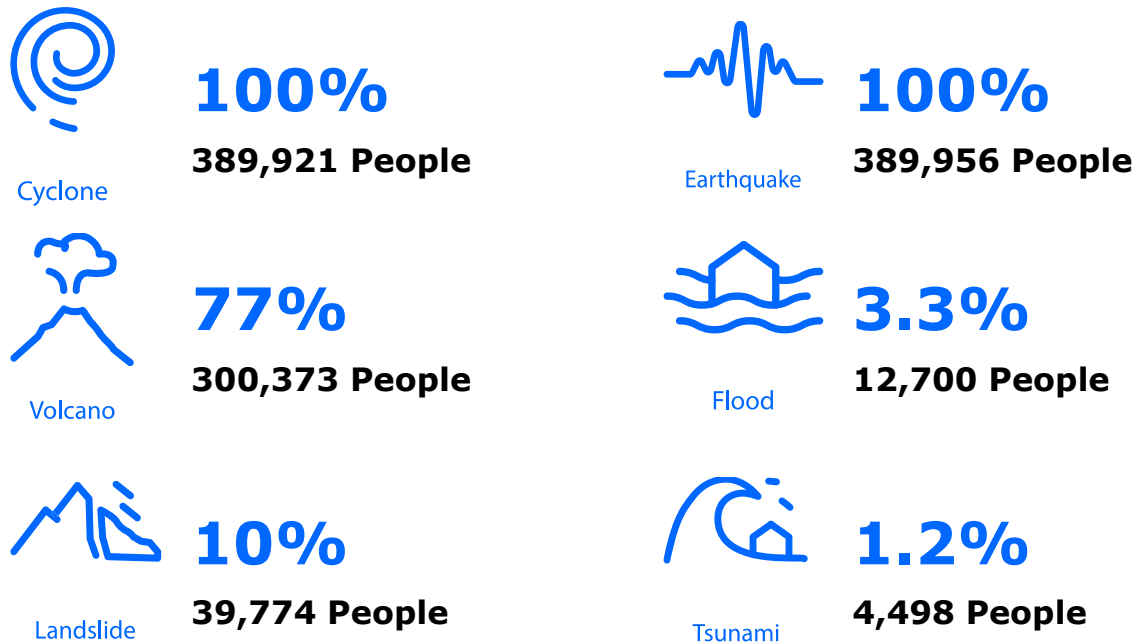
Table 1. Department scores and ranks (compared across departments) for each index

Multi-Hazard Risk		Lack of Resilience		Multi-Hazard Exposure		Vulnerability		Coping Capacity	
Low		Very Low		High		Very Low		Very High	
Score	Rank (of 17)	Score	Rank (of 17)	Score	Rank (of 17)	Score	Rank (of 17)	Score	Rank (of 17)
0.468	12	0.347	14	0.710	5	0.310	14	0.616	3

Multi-Hazard Exposure (MHE)

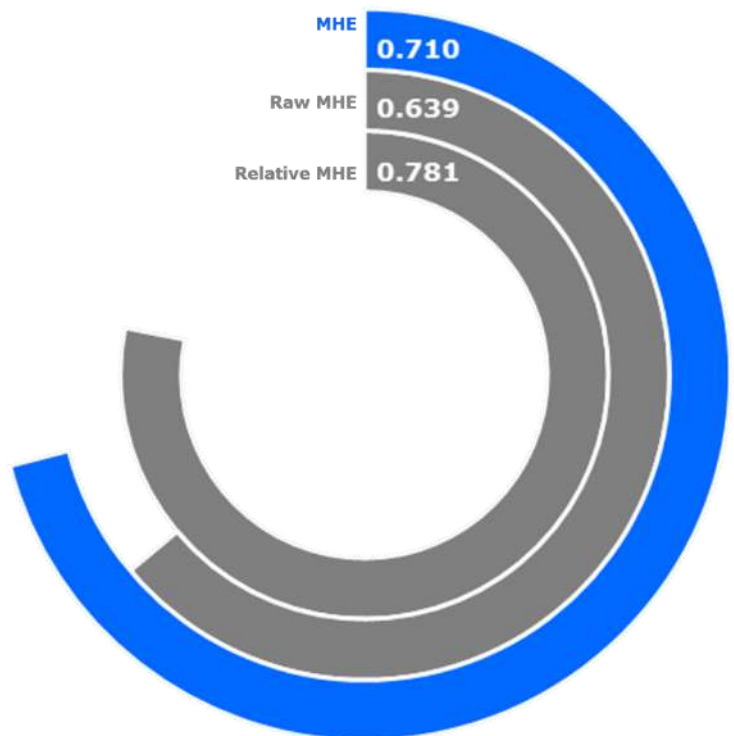
Multi-Hazard Exposure¹ Rank: 5 of 17 Departments (Score: 0.710)

Table 2. Estimated ambient population² exposed to each hazard



Case Study: León CODEPRED

The CODEPRED in León operates 24/7 regardless of activation level (i.e., ongoing response or no response). Employees at CODEPRED do 12 hours shifts. The response coordination group includes representatives from civil defense, national police, MINSA, fire department, MINED, and the volunteer fire department.



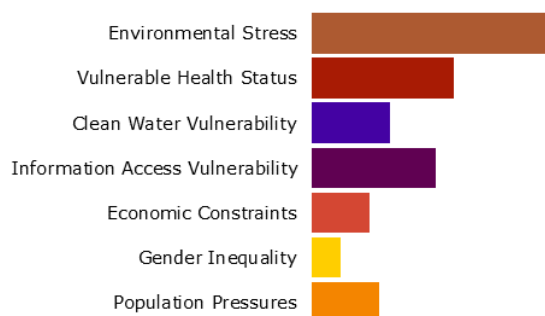
¹ Multi-Hazard Exposure: Average exposure of the population to hazards.








² Ambient Population: 24-hour average estimate of the population in each department. Ambient population typically differs from census population.

Vulnerability (V)

Vulnerability³ Rank: 14 of 17 Departments (Score: 0.310) Vulnerability in León is primarily driven by Environmental Stress. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Vulnerability score.

Table 3. Component scores for each vulnerability sub-component



	Environmental Stress	100% Province at Drought Risk	40.9% Erosion Risk	89.5 Livestock per km ²			
	Vulnerable Health Status	10.6 Infant Mortality Rate	24.6 Maternal Mortality Rate	76.5 yrs Average Life Expectancy	4.4% Acute Malnutrition (Children < 5)	2.5% Population Disabled	
	Clean Water Vulnerability	81.1% Households with Access to Improved Water	44.8% Households with Access to Flush Toilets				
	Information Access Vulnerability	17.9% Illiteracy	6.6 yrs Average Years of Schooling	87.2% Primary School Enrollment	95.3% Households without Internet	14.8% Households without TV	62.0% Households without Radio
	Economic Constraints	51.1 Economic Dependency Ratio	60.5% Population in Poverty				
	Gender Inequality	50.0% Female Seats in Government	1.12 Female to Male Secondary Education Enrollment	0.28 Female to Male Labor Ratio			
	Population Pressures	1.55% Average Annual Population Change	2.24% Average Annual Urban Population Change				

³ **Vulnerability:** The socioeconomic conditions that are associated with the susceptibility to disruptions in a country's normal functions.

Coping Capacity (CC)

Coping Capacity⁴ Rank: 3 of 17 Departments (Score: 0.616) León exhibits weaker Coping Capacity in the area of Environmental Capacity. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.

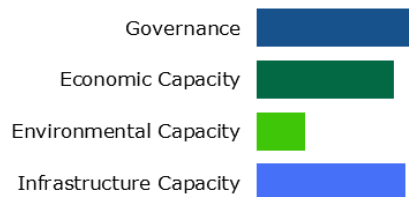


Table 4. Component scores for each coping capacity sub-component

	Economic Capacity	11.3% Households that Receive Remittances	77.5% Employment Rate (Male)	55.9% Employment Rate (Female)	25.9% Population in Highest Welfare Quintile	\$1,309 Annual Nominal Global Revenue per Capita
	Governance	93.9% Crime Complaints Cleared	1230.1 Crime Rate per 100k Persons	60.0% Households without Garbage Collection	70.7% Voter Participation (2016 Election)	
	Environmental Capacity	14.2% Protected or Reforested Land				
	Infrastructure Capacity					
	Health Care Capacity		11.1 Hospital Beds per 10,000 Persons	16.0 Nurses per 10,000 Persons	11.1 Physicians per 10,000 Persons	19.2 km Average Distance to Nearest Hospital
	Communications Capacity		15.9% Households with Access to Fixed Phone Line	79.5% Households with Access to Mobile Phone		
	Transportation Capacity		29.5 km Average Distance to Nearest Port or Airport	0.40 km Total Length of Road per km ² (area)		

⁴ Coping Capacity: The systems, means, and abilities of a country to absorb and respond to events that could potentially disrupt normal function.

Lack of Resilience (LR)

Lack of Resilience⁵ Rank: 14 of 17 Departments (Score: 0.347)

León's score and ranking are due to very low Vulnerability combined with very high Coping Capacity scores.

Table 5. The three thematic areas with the weakest relative scores



Environmental Stress



Environmental Capacity



Vulnerable Health Status

Multi-Hazard Risk (MHR)

Multi-Hazard Risk⁶ Rank: 12 of 17 Departments (Score: 0.468)

León's score and ranking are due to high Multi-Hazard Exposure combined with very low Vulnerability and very high Coping Capacity scores.

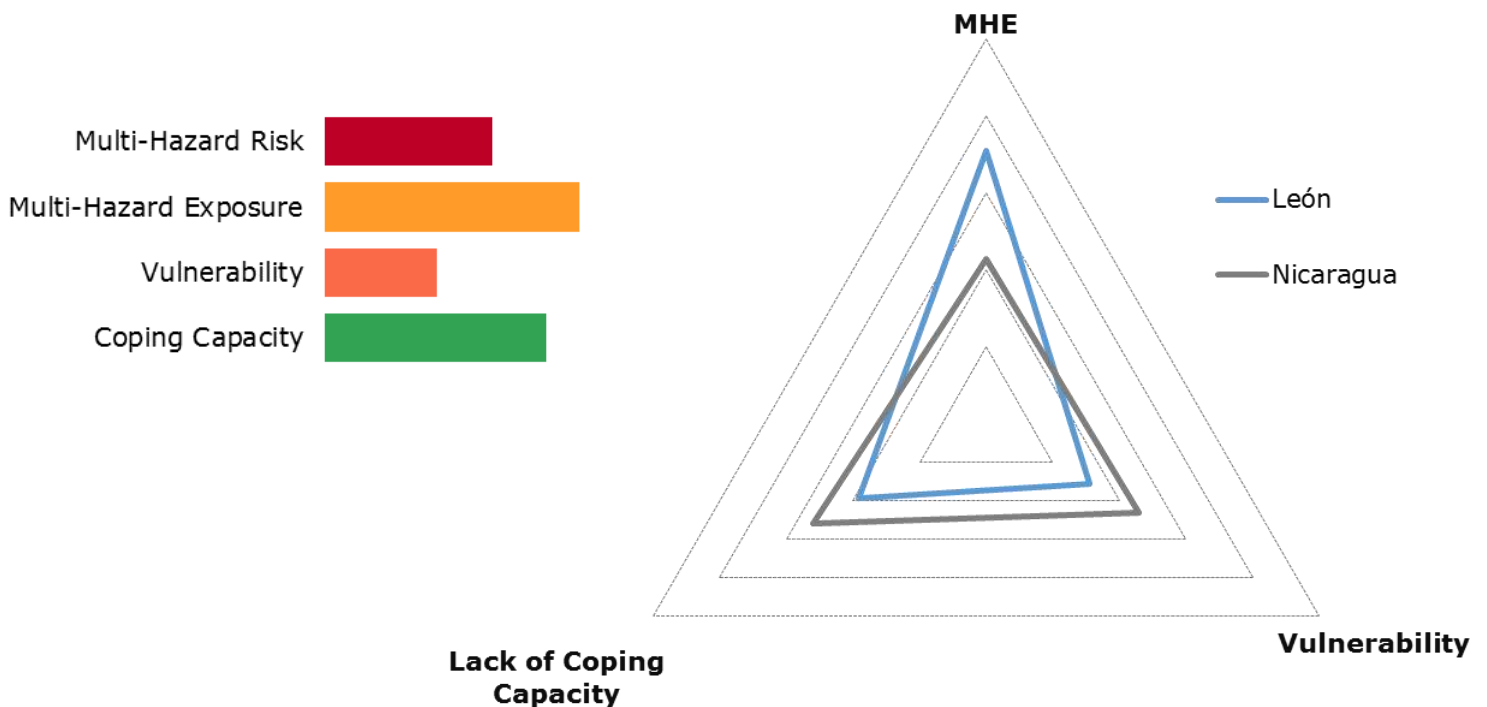


Figure 1. Department Multi-Hazard Risk component scores compared to overall average country scores

⁵ **Lack of Resilience:** The susceptibility to impact from the short-term inability to absorb, respond to, and recover from disruptions to a country's normal function. This index provides a hazard-independent look at current socioeconomic conditions.

⁶ **Multi-Hazard Risk:** The likelihood of losses or disruptions to a country's normal function due to interaction between multi-hazard exposure, socioeconomic vulnerability, and coping capacity.

Successes



Low overall vulnerability

Ranked 14 of 17 departments, low overall vulnerability indicates that León department is less susceptible to the negative impacts of a disaster and will likely recover faster after an event.



Highest overall governance

Ranked 1 of 17 departments, high governance could facilitate the implementation of disaster management initiatives into departmental and municipal communities.

Recommendations

01

Reduce environmental stress

Invest in drought- and erosion-mitigation projects to reduce environmental stress and degradation.

02

Reduce vulnerable health status

Invest in public welfare services to support the disabled population and reduce maternal mortality.



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