Mexico

Regions and Cities at a Glance provides a comprehensive assessment of how regions and cities across the OECD are progressing in a number of aspects connected to economic development, health, well-being and the net zero-carbon transition. It presents indicators on individual regions and cities to assess disparities within countries and their evolution since the turn of the new millennium. Each indicator is illustrated by graphs and maps. The report covers all OECD countries and, where data is available, partner countries and economies.

Territorial definitions

The data in this note reflect different sub-national geographic levels in OECD countries:

- **Regions** are classified on two territorial levels reflecting the administrative organisation of countries: large regions (TL2) and small regions (TL3). Small regions are classified according to their access to metropolitan areas (Fadic et al. 2019).
- **Functional urban areas** consist of cities – defined as densely populated local units with at least 50 000 inhabitants – and adjacent local units connected to the city (commuting zones) in terms of commuting flows (Dijkstra, Poelman, and Veneri 2019). Metropolitan areas refer to functional urban areas above 250 000 inhabitants.

In addition, some indicators use the degree of urbanisation classification (OECD et al. 2021), which defines three types of areas:

- **Cities** consist of contiguous grid cells that have a density of at least 1 500 inhabitants per km2 or are at least 50% built up, with a population of at least 50 000.
- **Towns and semi-dense areas** consist of contiguous grid cells with a density of at least 300 inhabitants per km2 and are at least 3% built up, with a total population of at least 5 000.
- **Rural areas** are cells that do not belong to a city or a town and semi-dense area. Most of these have a density below 300 inhabitants per km2.

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Regional economic trends

Employment and unemployment rates in regions

In Mexico, regional disparities in unemployment rates are moderate compared to other OECD countries. While in Tabasco 5.6% of the working force was unemployed in 2022Q2, the share was 1.5% in Guerrero and Oaxaca.

Meanwhile, the difference in employment rate between the regions with the highest (Nayarit) and lowest (Queretaro) employment rates reached 29 percentage points in 2020. This places Mexico among the top 10 OECD countries in terms of regional disparities in employment.

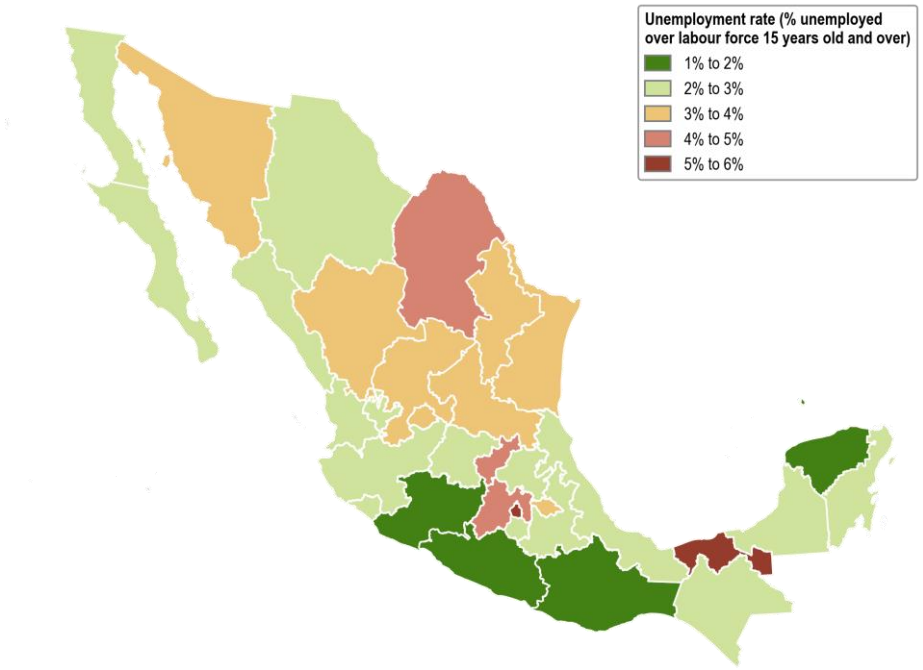

Figure 1: Unemployment rates in large regions, 2022Q2

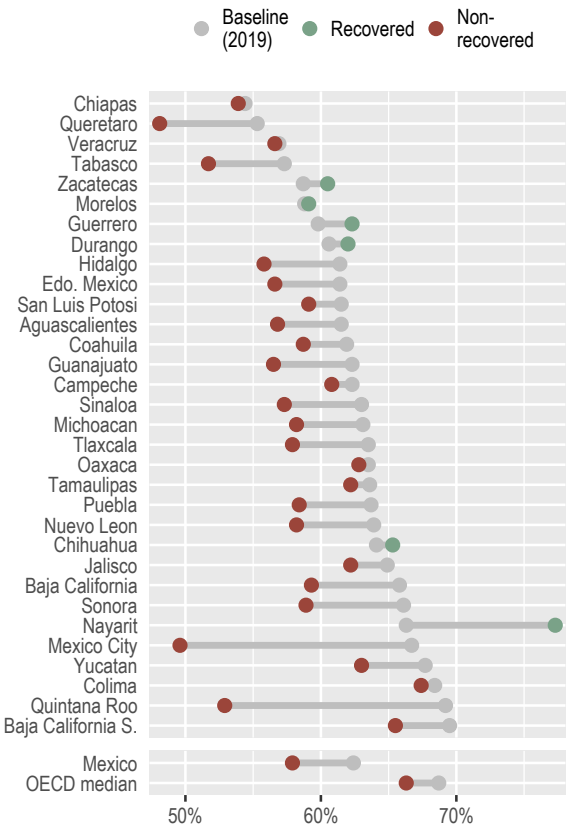

Figure 2: Change in employment rates in large regions, 2019-2020

Note: Employment rates, aged 15-64 years old; and harmonised unemployment rates, aged 15 and over. The OECD median corresponds to the median employment rate in large regions.
Source: OECD (2022), "Regional labour and Short-term regional statistics", *OECD Regional Statistics* (database)

The first year of COVID-19 on GDP per capita

The first year of COVID-19 resulted in a decrease in GDP per capita in most Mexican regions. Quintana Roo, a region with a GDP per capita -10% below the national average (15 709 vs. 17 374 USD PPP), experienced the largest decrease in GDP among Mexican regions, of approximately -29%.

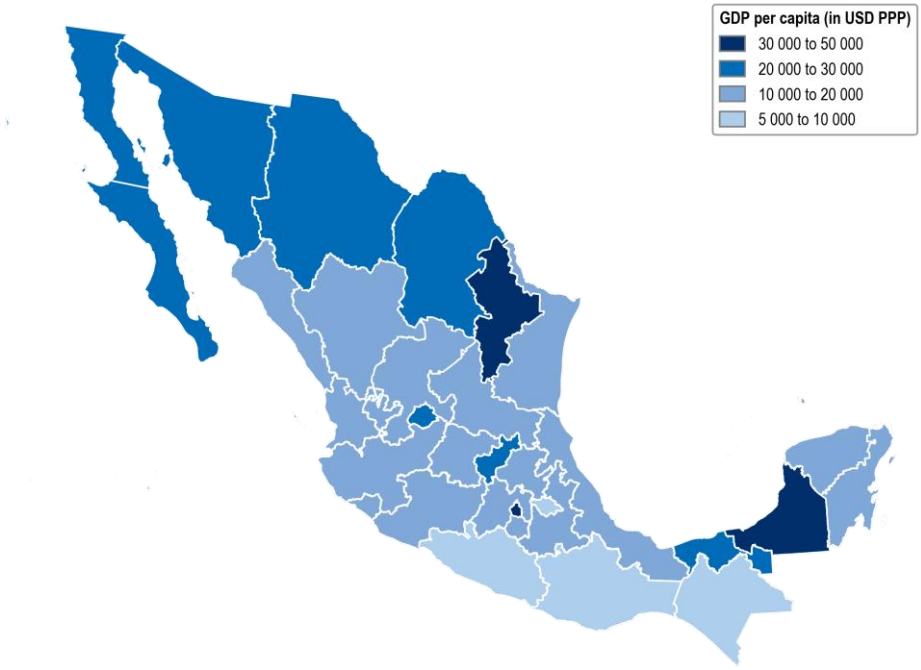

Figure 3: GDP per capita in large regions, 2020

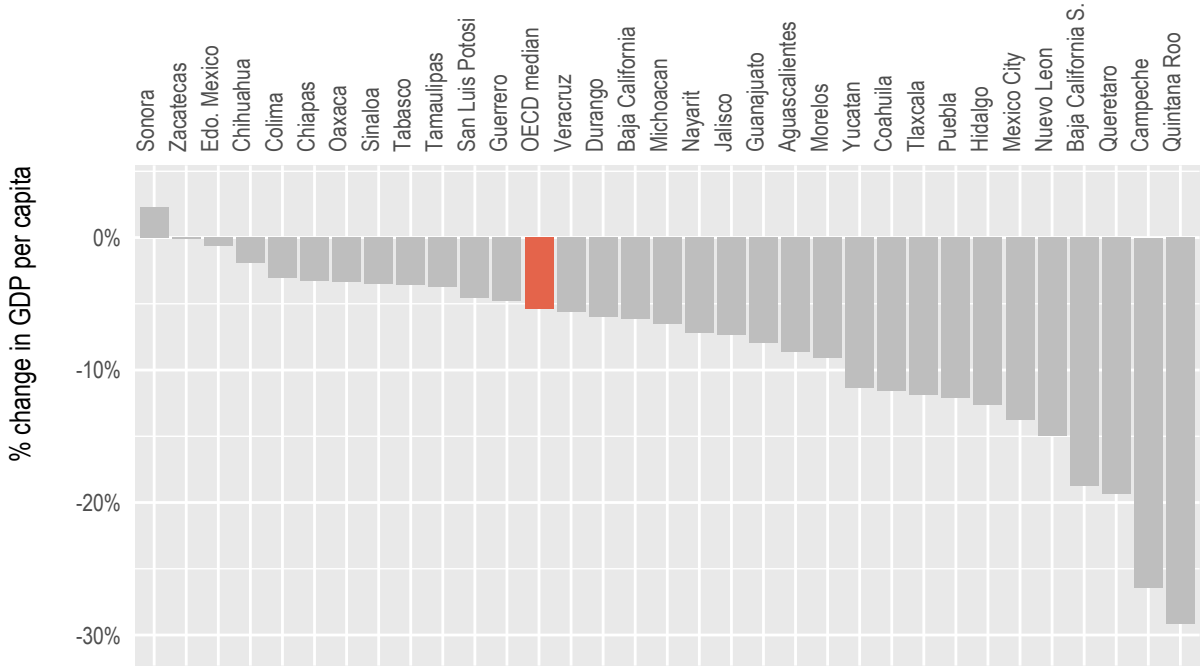

Figure 4: % change in GDP per capita in large regions, 2019-2020

Note: GDP per capita is measured in constant prices and constant PPPs, reference year 2015. Constant prices are calculated using national deflators. The OECD median corresponds to the median decline in GDP per capita observed across OECD large regions over the period.
Source: OECD (2022), "Regional economy", *OECD Regional Statistics* (database)

Trends in regional economic disparities in the last decade

Differences between Mexican regions in terms of GDP per capita have remained relatively stable over the past nine years, with the richest 20% of regions reporting a GDP per capita 3.7 times higher than the poorest 20% of regions.

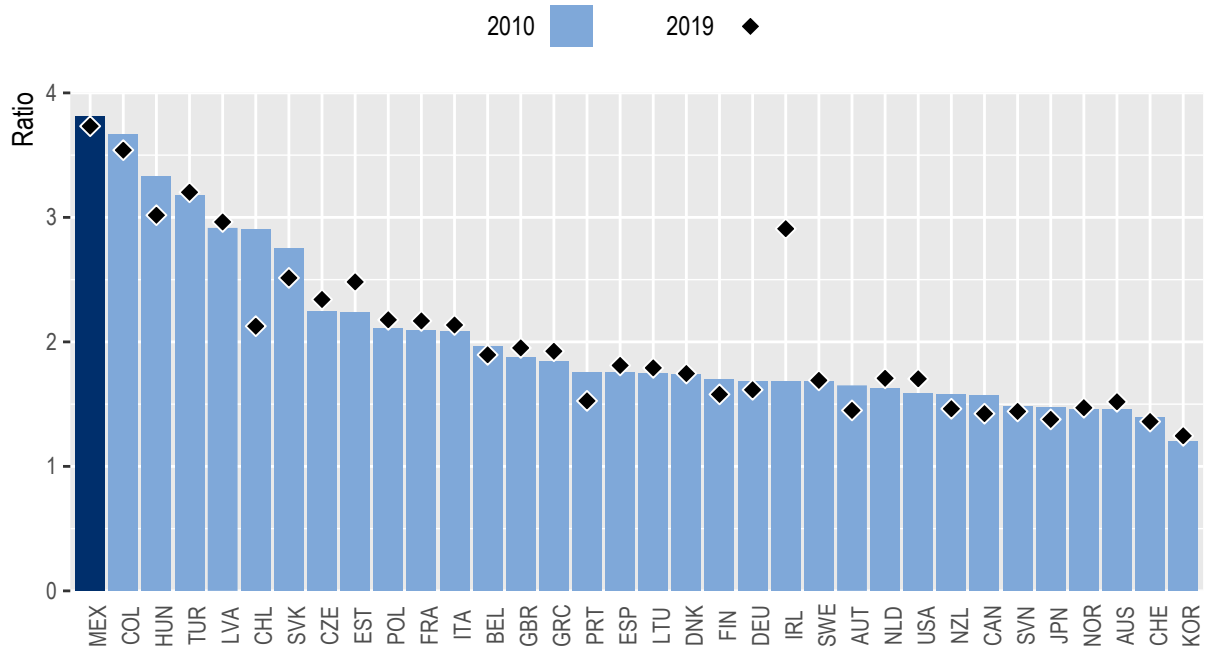

Figure 5: Index of regional disparities in GDP per capita (richest 20% relative to poorest 20% of regions)

Note: The GDP per capita of the top and bottom 20% regions are defined as those with the highest/lowest GDP per capita until the equivalent of 20% of the national population is reached. A ratio of 2 means the richest regions have a GDP per capita twice as large as the poorest regions. The indicator is calculated using large regions, except for Latvia and Estonia, where small regions are used instead. Irish GDP underwent an upwards revision in 2016. Care is advised in its interpretation.
Source: OECD (2022), "Regional economy", *OECD Regional Statistics* (database)

Productivity trends in the last decade

Between 2010 and 2019, Aguascalientes and Campeche experienced the highest and lowest productivity growth in Mexico, respectively. Aguascalientes saw a labour productivity increase of 2.5% per year, above the OECD average of 0.9%[1]. During the same period, Campeche experienced a decline in measured labour productivity, averaging -5.9% per year.

Most Mexican regions experienced a decline in labour productivity between 2019 and 2020. Campeche experienced the largest decline, with a drop of 22.4%

[1] International comparability in 2019 and 2020 is limited because of methodological differences in the calculation of employment counts during the height of the COVID-19 economic crisis.

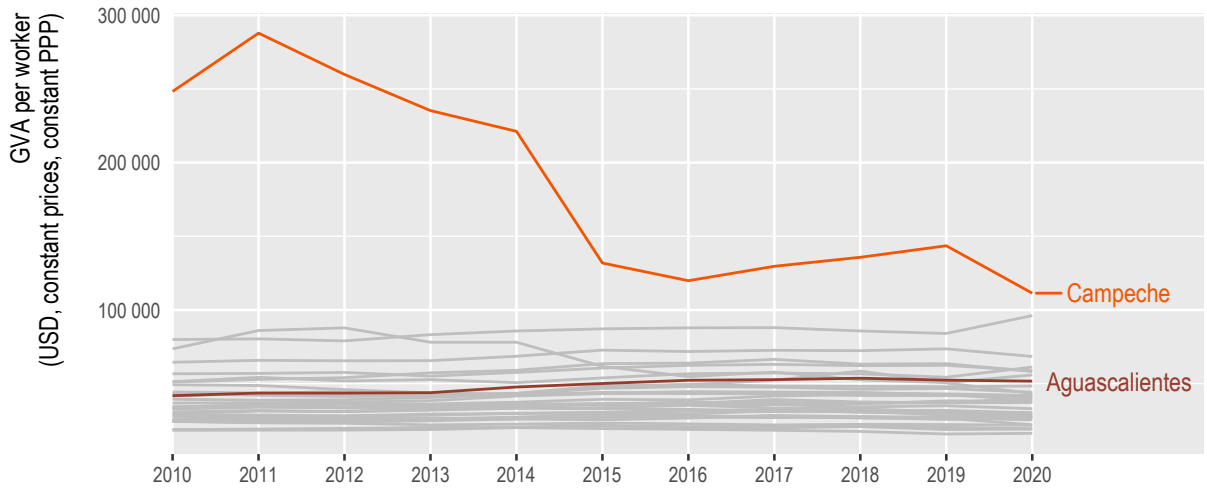

Figure 6: Regions with the highest and lowest productivity growth between 2010 and 2020

Note: Regional Gross Value Added (GVA) per worker, in USD, constant prices, constant PPP, base year 2015.
Source: OECD (2022), "Regional economy", *OECD Regional Statistics* (database)

Well-being, liveability and inclusion in regions

Regional well-being

Mexico faces stark regional disparities across eight well-being dimensions, with the starkest disparities in terms of jobs, life satisfaction and community.

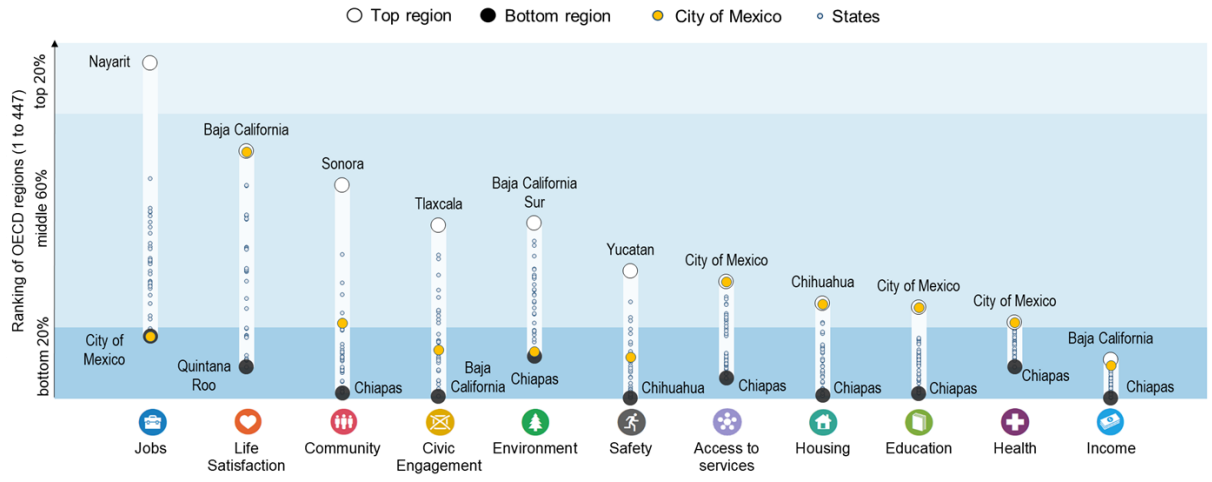

Figure 7: Regional gaps in well-being

Note: Regional indices provide a first comparative glance of well-being in OECD regions. The figure shows the relative ranking of the regions with the best and worst outcomes in the eleven well-being dimensions, relative to all OECD regions. The eleven dimensions are ordered by decreasing regional disparities in the country. Each well-being dimension is measured by the indicators in the table below.

Relative to other OECD regions, Mexico performs best in the life satisfaction dimension, with 28% of of Mexican regions lying in the top 50% of OECD regions.

The top 20% of Mexican regions rank above the OECD median region in 3 out of 14 well-being indicators, performing best in terms of life satisfaction and low unemployment rates.

	Country average	Median OECD region	Mexican regions	
			Top 20%	Bottom 20%
Jobs				
Employment rate 15 to 64 years old (%), 2020	57.9	68.5	63.9	52.0
Unemployment rate 15 to 64 years old (%), 2021	4.3	5.8	2.2	6.8
Life Satisfaction				
Life satisfaction (scale from 0 to 10), 2016-20	6.3	6.6	6.9	5.7
Community				
Perceived social network support (%), 2016-20	80.9	90.5	86.1	73.7
Civic engagement				
Voters in last national election (%), 2018	63.4	66.7	60.8	44.2
Environment				
Level of air pollution in PM 2.5 (µg/m³), 2020	15.1	10.8	12.7	17.5
Safety				
Homicide Rate (per 100 000 people), 2020	28.5	1.4	9.2	71.3
Access to services				
Households with broadband access (%), 2021	75.6	86.0	86.1	59.9
Internet download speed: deviation from OECD average (%), 2021-Q4	-64.0	..	-55.5	-77.5
Housing				
Rooms per person, 2020	1.0	1.6	1.2	0.9
Education				
Population with at least upper secondary education, 25-64 year-olds (%), 2020	41.6	80.4	51.8	31.5
Health				
Life Expectancy at birth (years), 2021	75.4	80.3	76.2	74.4
Age adjusted mortality rate (per 1 000 people), 2017	9.9	8.0	9.3	10.7
Income				
Disposable income per capita (in USD PPP), 2020	3 829	20 601	5 231	2 578

Figure 8: How do the top and bottom regions fare on the well-being indicators?

Note: Regional well-being indices are affected by the availability and comparability of regional data across OECD countries. The indicators used to create the indices can therefore vary across OECD publications as new information becomes available. For more visuals, visit https://www.oecdregionalwellbeing.org.

The digital divide

Fixed Internet connections in Mexican cities and rural areas deliver speeds significantly slower than the OECD average (-60% and -78%, respectively). This gap (18 percentage points) is smaller than in most other OECD countries.

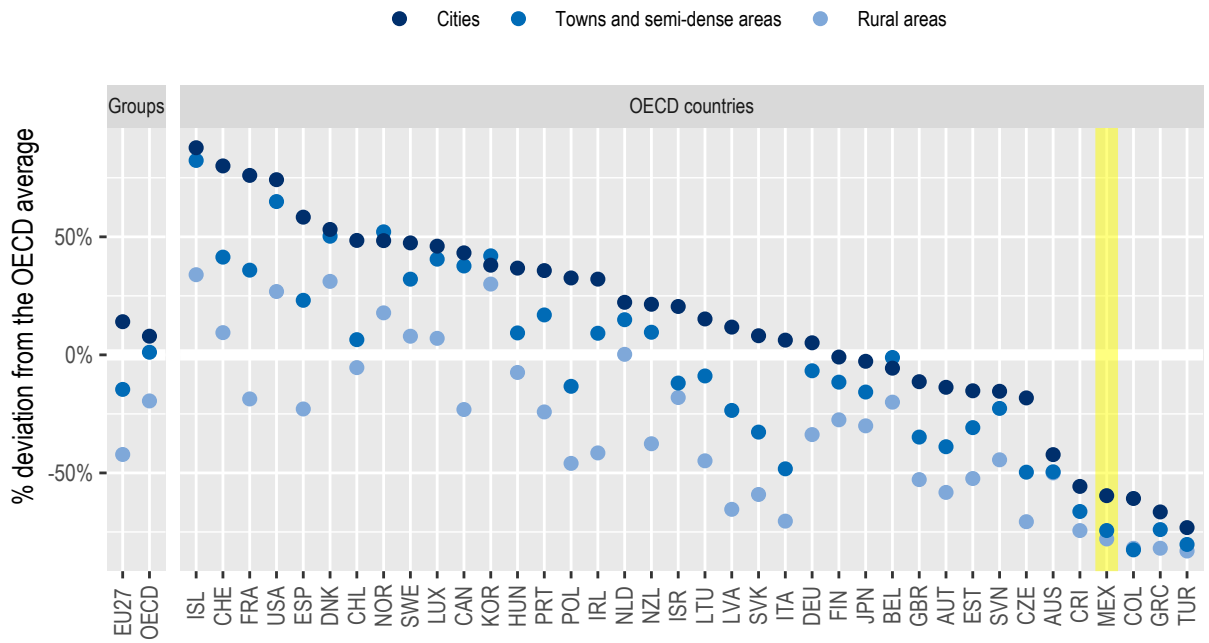

Figure 9: Speed of fixed Internet connections relative to the OECD average, by degree of urbanisation, 2021Q4

Note: Cities and rural areas are identified according to the degree of urbanisation (OECD et al. 2021). Internet speed measurements are based on speed tests performed by users around the globe via the Ookla Speedtest platform. As such, data may be subject to testing biases (e.g. fast connections being tested more frequently), or to strategic testing by ISPs in specific markets to boost averages. For a more comprehensive picture of Internet quality and connectivity across places, see OECD (2022), *"Broadband networks of the future"*.
Source: OECD calculations based on Speedtest by Ookla Global Fixed and Mobile Network Performance Maps for 2021Q4.

The average speed of fixed Internet connections is below the OECD average in all Mexican regions. Within the country, residents of Baja California, Mexico City and Nuevo Leon experience the fastest connections.

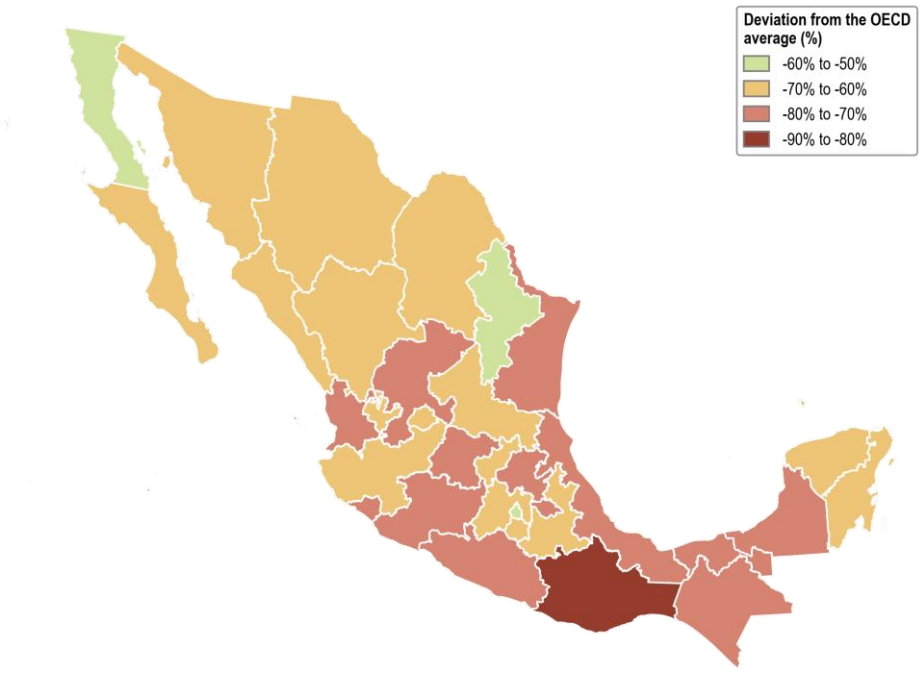

Figure 10: Speed of fixed Internet connections relative to the OECD average, in large regions (2021Q4)

Relative poverty rates

In Mexico, relative poverty rates[2] range from 8% to 62% across regions. This 54 percentage point difference is more pronounced than the average difference observed across the 29 OECD countries with available data (16 percentage points), placing Mexico among the five countries with the starkest regional disparities in the OECD.

[2] The relative poverty rate gives the share of people – as a % of the regional population – with an income below the relative poverty line (60% of the national median income).

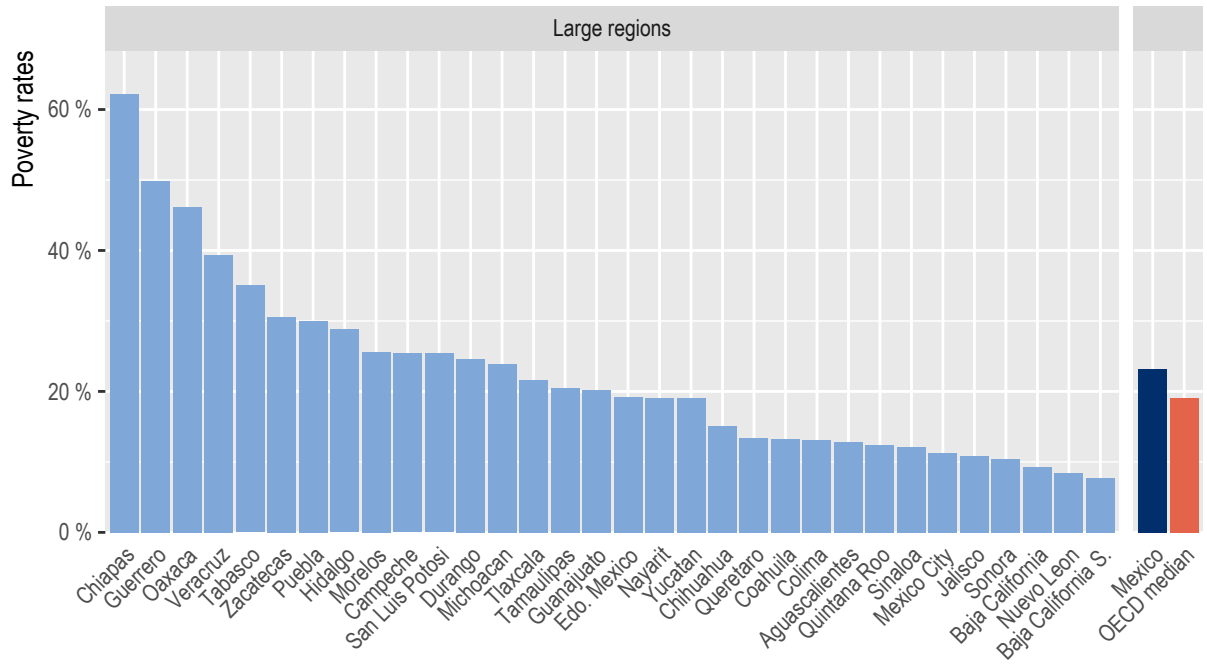

Figure 11: Relative poverty rates in 2018

Note: The OECD median gives the median relative poverty rate observed in a sample made of 326 large regions (from 28 countries), and 28 small regions (from Denmark, Lithuania and the Slovak Republic). Data corresponds to 2020 or the latest available year.

Demographic trends in regions and cities

Population in cities

Between 2010 and 2020, 98% of cities in Mexico experienced a rise in population. Population growth ranged from -0.5% per year in Othon P. Blanco to 3.9% per year in Los Cabos.

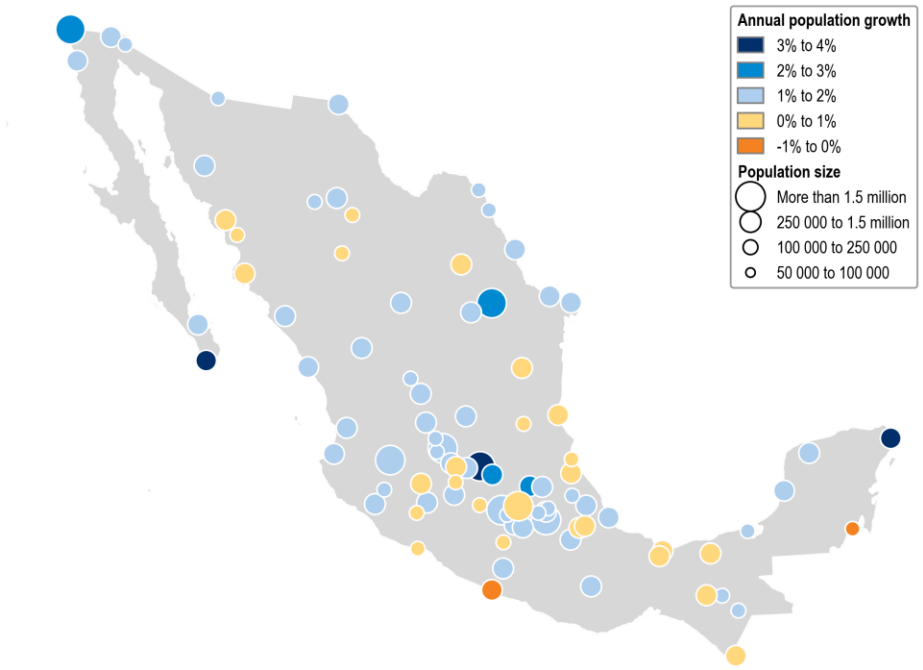

Figure 12: Population growth between 2010 and 2020

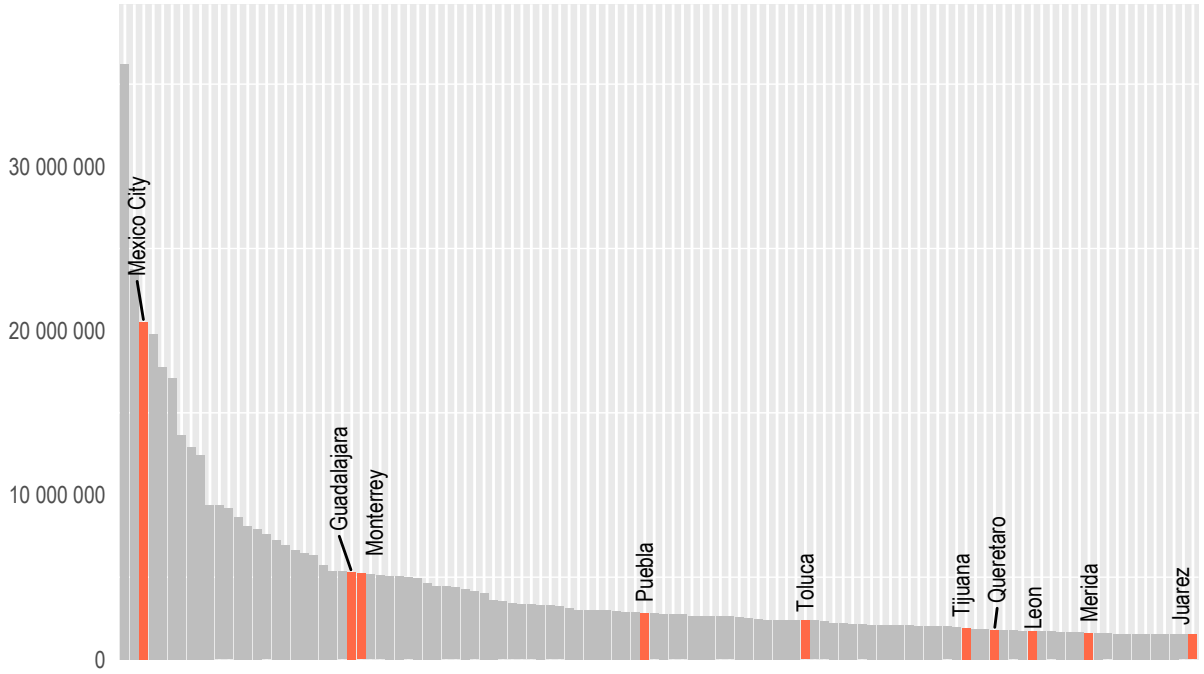

Figure 13: Population in OECD functional urban areas, 2021 or latest available year

Note: Cities refer to functional urban areas (Dijkstra, Poelman, and Veneri 2019). Population counts for the functional urban area are aggregated from administrative, municipal-level, data. For readability, only a selection of cities are labelled.

Over the past decade, the population has grown the most in Mexican cities with more than 1.5 million inhabitants. Cities with 100 000 to 250 000 inhabitants have seen their population grow, on average, but to a lesser extent.

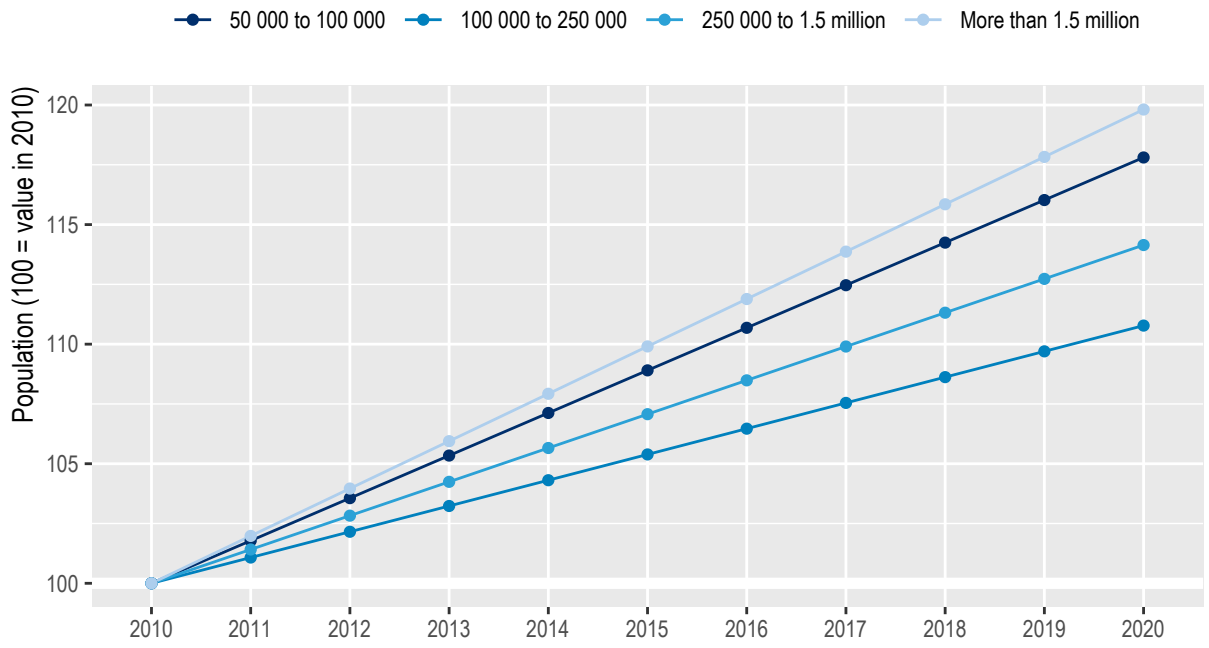

Figure 14: Population by size of functional urban area (100 = value in 2010), 2010-2020

Environmental challenges in regions and cities

Greenhouse gas emissions in regions

Since 1990, production-based greenhouse gas emissions have increased in most Mexican regions. Guerrero (242%) and Campeche (-58%) experienced the largest increase and decrease in emissions, respectively.

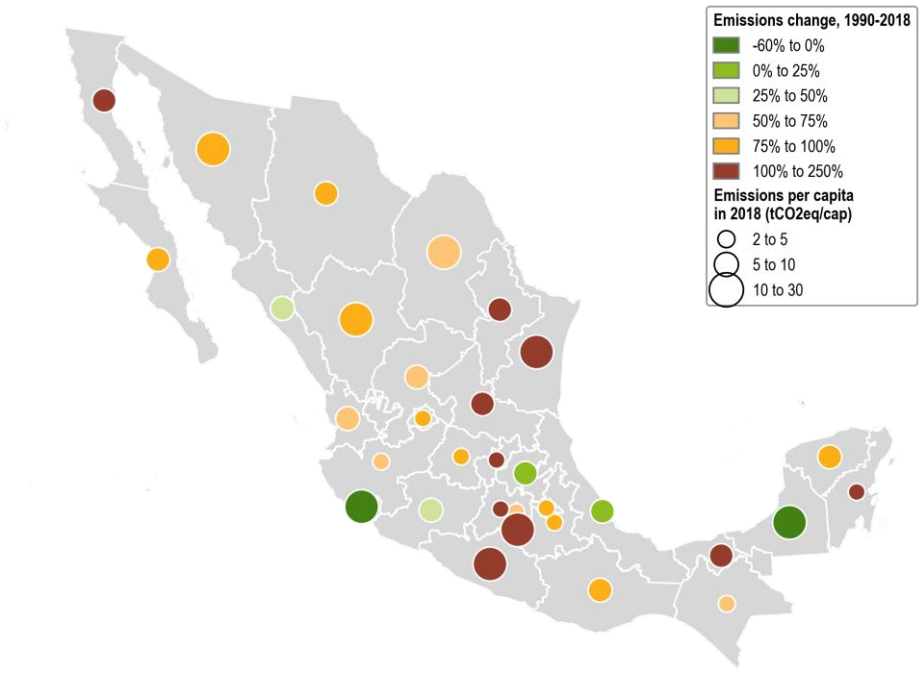

Figure 15: Change in production-based emissions in large regions, 1990-2018

Note: Bubbles are proportional to *per capita* greenhouse gas emissions, not to the overall level of greenhouse gas emissions in the region.
Source: OECD calculations, based on the Emissions Database for Global Atmospheric Research (European Commission. Joint Research Centre. 2019).

In 2018, greenhouse gas emissions per capita in Mexico were largest in Durango, Morelos and Coahuila.

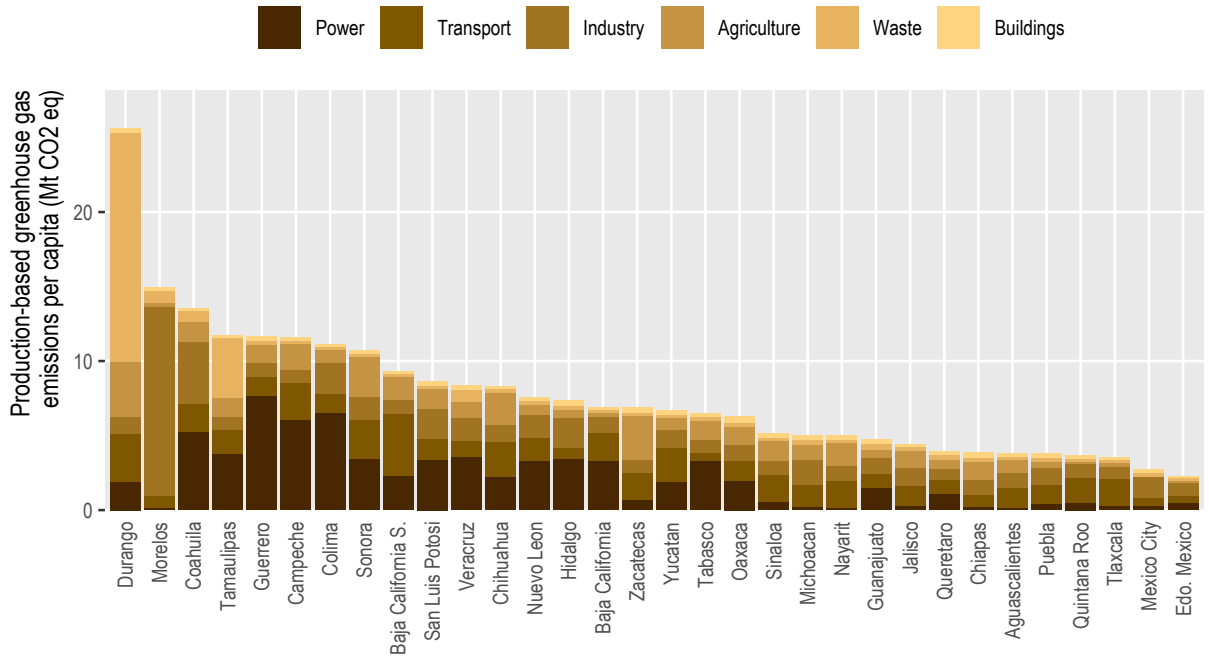

Figure 16: Production-based greenhouse gas emissions per capita in large regions, 2018

Note: Regions with low population counts may rank high in greenhouse gas emissions per capita while contributing relatively little to overall emissions in the country.

Urban heat island effect

In Mexican cities, the difference in temperature between cities and their surrounding areas (i.e. urban heat island intensity) reaches 2.3 degrees Celsius (°C). The largest effect is observed in Merida and Morelia, two cities that are, on average, 6.2°C warmer than their surrounding areas.

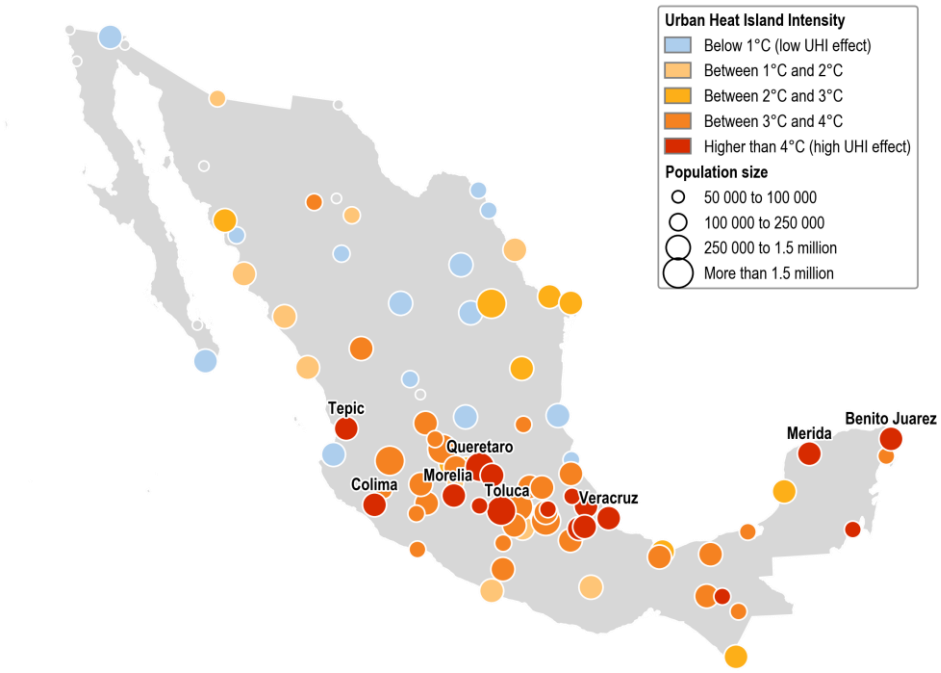

Figure 17: Urban heat island intensity index, 2021

Note: The Urban Heat Island Intensity (UHI) index is defined as the difference in land surface temperature between built-up areas and non-built-up areas within functional urban areas. This index can be affected by the type of vegetation and climate in non-built-up areas.
Source: OECD calculations, based on land surface temperature data from NASA's Moderate Resolution Imaging Spectroradiometer (MODIS) (Wan, Hook, and Hulley 2021a, 2021b)

References

Source of administrative boundaries: © OECD, © EuroGeographics, National Statistical Offices, © UN-FAO Global Administrative Unit Layers (GAUL)

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