

The background of the entire page is a blue-tinted map. The top half shows Mexico with cities like Obregón, Los Mochis, Culiacán, Torreón, Saltillo, Monterrey, Reynosa, Matamoros, and Brownsville. The bottom half shows Brazil with cities like Rio Branco, Porto Velho, Cui-Parana, Palmas, Juazeiro, and Feira de Santana. The word 'MEXICO' is written in large letters across the top map, and 'BRASIL' is written across the bottom map.

# SPP | SUBNATIONAL POLITICS PROJECT

C O D E B O O K



Tecnológico de Monterrey  
Escuela de Ciencias Sociales  
y Gobierno



**Principal Investigator**

Agustina Giraudy

American University / Tecnológico de Monterrey

**Collaborators**

Francisco Urdinez

Universidad Católica de Chile

Guadalupe González

University of Maryland, College Park

Felipe Soto Jorquera

Hertie School, Berlin

**Research Assistant**

Sergio Huertas Hernández    Universidad Católica de Chile

**Version:** 1

**Date:** October 2025

## Suggested Citation for Codebook

Giraudy, Agustina; Gonzalez, Guadalupe Andrea; Urdinez, Francisco, 2025, "Codebook: Subnational Politics Project (SPP) (v. 1)", <https://doi.org/10.17605/OSF.IO/H96FD>



## Suggested Citation for Each Database

Database Name	Abbreviation	Suggested Citation
Subnational Executive Database	SED	Giraudy, Agustina, Guadalupe Andrea Gonzalez, Sergio Huertas-Hernández, and Francisco Urdinez. 2025. "Subnational Executive Database (SED) (v. 1)." Subnational Politics Project. <a href="https://doi.org/doi:10.7910/DVN/1D3P3J">https://doi.org/doi:10.7910/DVN/1D3P3J</a>
Subnational Executive Elections Database	SEED	Giraudy, Agustina, Guadalupe Andrea Gonzalez, Sergio Huertas-Hernández, and Francisco Urdinez. 2025. "Subnational Executive Elections Database (SEED) (v. 1)." Subnational Politics Project. <a href="https://doi.org/doi:10.7910/DVN/UPOWMW">https://doi.org/doi:10.7910/DVN/UPOWMW</a>
Subnational Legislative Elections Database	SLED	Giraudy, Agustina, and Guadalupe Andrea Gonzalez. 2025. "Subnational Legislative Elections Database (SLED) (v. 1)." Subnational Politics Project. <a href="https://doi.org/doi:10.7910/DVN/084FXF">https://doi.org/doi:10.7910/DVN/084FXF</a>
Subnational Democracy Indices	SDI	Giraudy, Agustina. 2025. "Subnational Democracy Indices (SDI) (v. 1)." Subnational Politics Project. <a href="https://doi.org/doi:10.7910/DVN/7TNLBW">https://doi.org/doi:10.7910/DVN/7TNLBW</a>
Capital Federal & Tierra del Fuego Legislatures Database	CFTDFLD	Giraudy, Agustina, and Guadalupe Andrea Gonzalez. 2025. "Capital Federal & Tierra Del Fuego Legislatures Database (CFTDFLD) (v. 1)." Subnational Politics Project. <a href="https://doi.org/doi:10.7910/DVN/AJLHX">https://doi.org/doi:10.7910/DVN/AJLHX</a>
National Executive Database	NED	Giraudy, Agustina, Guadalupe Andrea Gonzalez, Sergio Huertas-Hernández, and Francisco Urdinez. 2025. "National Executive Database (NED) (v. 1)." Subnational Politics Project. <a href="https://doi.org/doi:10.7910/DVN/HNKQUH">https://doi.org/doi:10.7910/DVN/HNKQUH</a>

# Table of Contents

<b>Introduction</b>	<b>7</b>
<b>Databases</b>	<b>8</b>
Databases' Structure	8
Intellectual Property	8
Quality Assurance	9
Variable Information	9
<b>Country Coverage and Temporal Scope</b>	<b>11</b>
Note on Coverage	11
<b>Description of Individual Variables</b>	<b>13</b>
<b>Identifier Variables</b>	<b>13</b>
Country Name (country_name)	13
Country Code (country_code)	13
State Name (state_name)	13
State Code (state_code)	14
Country State Code (country_state_code)	14
Region Name (region_name)	14
Year (year)	14
<b>Executive Branch Variables</b>	<b>15</b>
<b>National Executive</b>	<b>15</b>
President Name (name_head_nat_exe)	15
President Gender (sex_head_nat_exe)	15
Start Date of Presidential Term (start_date_head_nat_exe)	15
End Date of Presidential Term (end_date_head_nat_exe)	16
Presidential Term Length (term_length_in_years_nat_exe)	16
Presidential Reelection (consecutive_reelection_nat_exe)	16
President Early Exit (early_exit_nat_exe)	16
President Party (head_party_nat_exe)	17
President Party Ideology (ideo_party_nat_exe)	17
Presidential Election Year (year_election_nat_exe)	18
President Years in Power (cumulative_years_in_power_nat_exe)	18
<b>Subnational Executive</b>	<b>18</b>
Governor Name (name_head_sub_exe)	18
Governor Gender (sex_head_sub_exe)	19
Start Date of Governor Term (start_date_head_sub_exe)	19
End Date of Governor Term (end_date_head_sub_exe)	19

Gubernatorial Term Length (term_length_in_years_sub_exe)	19
Governor Turnover (turnover_head_sub_exe)	20
Cumulative Changes of Governor (cumulative_changes_head_sub_exe)	20
Governor Early Exit (early_exit_sub_exe)	20
Governor Reelection (consecutive_reelection_sub_exe)	21
Governor Years in Power (cumulative_years_in_power_sub_exe)	21
Governor Party (head_party_sub_exe)	21
Party Years in Power (cumulative_years_in_power_party_sub_exe )	21
Governor Party Ideology (ideo_party_sub_exe)	22
Subnational Executive Elections Concurrent with National Elections (concurrent_with_nat_election_sub_exe)	22
Party Turnover (turnover_party_sub_exe)	23
Cumulative Changes of Party (cumulative_changes_party_sub_exe)	23
Political Alignment With National Government (alignment_with_nat_sub_exe)	23
<b>Electoral Variables</b>	25
<b>Subnational Executive</b>	25
Gubernatorial Election Year (election_sub_exe)	25
Winning Candidate Name (winner_candidate_sub_exe)	25
Election Date (date_election_sub_exe)	25
Registered Voters (voters_registered_sub_exe)	26
Total Voters (total_voters_sub_exe)	26
Voter Turnout Percentage (perc_voter_sub_exe)	26
Valid Votes (valid_votes_sub_exe)	26
Valid Vote Percentage (perc_valid_votes_sub_exe)	26
Invalid Votes (invalid_votes_sub_exe)	26
Invalid Vote Percentage (perc_invalid_votes_sub_exe)	27
Winner Total Votes (votes_candidate_winner_sub_exe)	27
Winner Vote Percentage (perc_votes_winner_candidate_sub_exe)	27
Second Place Total Votes (second_place_votes_sub_exe)	27
Second Place Vote Percentage (perc_second_place_sub_exe)	27
Last Place Total Votes (last_place_votes_sub_exe)	28
Last Place Vote Percentage (perc_last_place_sub_exe)	28
Margin of Victory (margin_victory_sub_exe)	28
Number of Parties Competing in Elections (num_parties_election_contest_sub_exe)	28
Cumulative Executive Elections (cumulative_elections_year_sub_exe)	28
Snap Election (snap_election_sub_exe)	29
Effective Number of Parties (Laakso and Taagepera, 1979) (enp_sub_exe)	29
<b>Subnational Legislative</b>	30
Chamber Election (chamber_election_sub_leg)	30
Date of Legislative Election (date_election_sub_leg)	30
Registered Voters in Legislative Election (voters_registered_sub_leg)	30
Total Voters in Legislative Election (total_voters_sub_leg)	30
Voter Turnout in Legislative Election (perc_voters_sub_leg)	31
Valid Votes in Legislative Election (valid_votes_sub_leg)	31
Percentage of Valid Votes in Legislative Election (perc_valid_votes_sub_leg)	31
Party Name in Legislative Election (party_name_sub_leg)	31
Party Votes in Legislative Election (total_votes_party_sub_leg)	32
Percentage of Party Votes in Legislative Election (perc_votes_party_sub_leg)	32

Party Seats (total_seats_party_sub_leg)	32
Percentage of Party Seats in Legislative Election (perc_seats_party_sub_leg)	33
Number of Blank Votes (blank_votes_sub_leg)	33
Number of Null Votes (null_votes_sub_leg)	33
Number of Challenged Votes (challenged_votes_sub_leg)	33
Number of Contested Votes (contested_votes_sub_leg)	33
Number of Votes Offset by Discrepancy (compensation_for_record_discrepancy_votes_sub_leg)	34
Margin of Victory in Legislative Election (margin_victory_sub_leg)	34
Cumulative Legislative Elections (cumulative_elections_year_sub_leg)	34
Subnational Legislative Elections Concurrent with National Elections (concurrent_election_with_nat_sub_leg)	34
Number of Parties in Contest in Legislative Elections (num_parties_election_contest_sub_leg)	35
Total of Seats in Contest in Legislative Elections (total_seats_in_contest_sub_leg)	35
Total of Seats in Chamber in Legislative Elections (total_chamber_seats_sub_leg)	36
Number of Seats of Incumbent in Legislative Elections (num_seats_incumbent_sub_leg)	36
Percentage of Seats of Incumbent in Legislative Elections (perc_seats_incumbent_sub_leg)	36
Number of Seats of Opposition in Legislative Elections (num_seats_opos_sub_leg)	37
Percentage of Seats of Opposition in Legislative Elections (perc_seats_opos_sub_leg)	37
Effective Number of Parties (Laakso and Taagepera, 1979) in Leg. (enp_sub_leg)	37
Type of Chamber (chamber_sub_leg)	38
Legislators' Term Length (term_length_in_years_sub_leg)	39
Type of Renewal in Chamber (renewal_type_sub_leg)	39
Type of Electoral System in Chamber (electoral_system_sub_leg)	39
<b>Subnational Democracy Indices</b>	40
SUR Index Giraudy (2015) (SUR_index_giraudy_2015)	40
SUR Index (SUR_index_sub_exe)	40
Subnational Contestation Executive (contestation_sub_exe)	40
Subnational Contestation Legislative (contestation_sub_leg)	40
Turnover Executive (turnover_sub_exe)	41
Clean Elections Giraudy (2015) (clean_elections_sub_exe_giraudy_2015)	41
<b>Data Sources</b>	44
<b>Primary Sources</b>	44
Argentina:	44
Brazil:	44
Mexico:	44
<b>Appendices</b>	45
<b>Appendix A: Subnational Units by Country</b>	45
Argentina (24 units)	45
Brazil (27 units)	45
Mexico (32 units)	45
<b>Appendix B: State Codes by Country</b>	46
<b>Appendix C: Key References</b>	51

# Introduction

The ***Subnational Politics Project (SPP)*** is a collaborative initiative dedicated to compiling, generating, and disseminating systematic, transparent, and publicly accessible data on subnational political institutions, processes, and electoral outcomes across Latin America. The SPP's central goal is to build a comprehensive and standardized data infrastructure that enables both detailed within-country analysis and robust cross-national comparisons of subnational political dynamics.

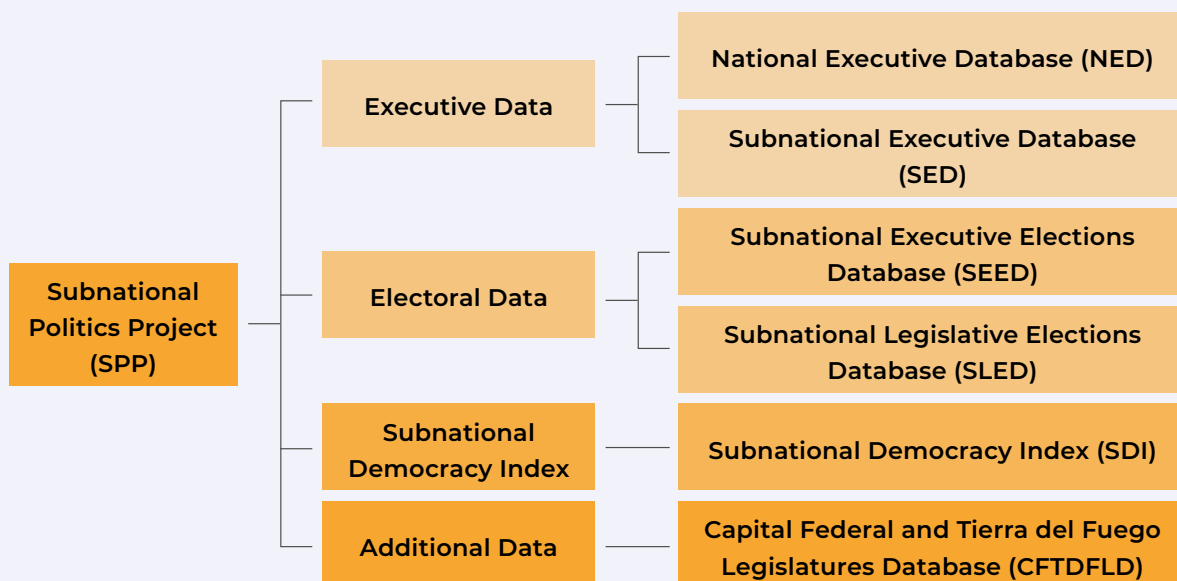
By providing consistent, high-quality, and spatially disaggregated longitudinal data, the SPP seeks to advance scholarly and policy-oriented research on the political foundations and consequences of territorial inequality in Latin America. This data infrastructure will support empirical work on a wide range of topics, including federalism, decentralization, subnational democracy and authoritarianism, party competition, electoral accountability, territorial governance, among others.

This codebook outlines the coding strategies, data sources, and variable construction protocols employed in the development of the SPP databases. As of September 2025, the project includes comprehensive databases for three federal countries in Latin America—Argentina, Brazil, and Mexico—covering the period from the 1980s through 2024 (see Table 1 below for detailed country-specific information).

# Databases

## Databases' Structure

As Figure 1 shows, the *Subnational Politics Project* is made up of different databases. Each database employs a country-state-year structure, with observations at the subnational unit level for each electoral year. Each observation represents a subnational unit (province/state) in a given year.



**Figure 1:** Databases in SPP

## Intellectual Property

Variables taken directly from external sources, with no original coding beyond possible imputation of missing data, are not considered products of the *Subnational Politics Project*. In contrast, when data are drawn from multiple sources and combined in a way that involves analytical judgment, mathematical alteration, or aggregation, the resulting variable is classified as a *Subnational Politics Project* product.



## Quality Assurance

All data have undergone rigorous verification processes:

- 1. Primary Source Verification:** All data were cross-checked with official electoral records
- 2. Academic Validation:** Data were compared to established academic datasets, when available
- 3. Multiple Source Confirmation:** Key variables were verified through multiple independent sources
- 4. Temporal Consistency Checks:** Longitudinal data were reviewed for consistency and logical progression

## Variable Information

As shown in Figure 2, the databases in the *Subnational Politics Project* divide variables into the following variable types:

Variables Type	Sub-variable Type	Description	Dataset
Identifiers Variables	Cross-National Variables	Data on country names, years, and states	
Executive Branch Variables	National Executive Variables	Data on national executive branches per country	<b>NED</b>
	Sub-national Executive Variables	Data on subnational executive branches per state/province, per country	<b>SED</b>
Electoral Variables	Subnational Executive Elections Variables	Data on electoral results for executive branch	<b>SEED</b>
	Subnational Legislative Elections Variables	Data on subnational executive elections per state/province, per country	<b>SLED</b>
	Subnational Legislatures Variables	Data on institutional and electoral information about state-level/provincial legislatures	<b>SLED</b>
Index Variables	Subnational Democracy Index Variables	Data on levels of subnational democracy per state/province, per country	<b>SDID</b>

**Figure 2:** Variables and Corresponding Database

Variables include the following information:

- a. Identifier Variables:** Data identifying country names and codes, state names and codes, region names, and time periods
- b. Executive Branch Variables:** Data on national and subnational executive branches, such as length of term, incumbent party, cumulative years of president/governor in office, etc.
- c. Electoral Variables:** Data on subnational executive and subnational legislative elections, including legislatures' composition
- d. Indices:** Data generated by adding and combining variables, or creating cumulative scales

# Country Coverage and Temporal Scope

**Table 1:** Coverage by Country

Country	Subnational Units	Executive Elections; data collection starts in:	Legislative Election; data collection starts in	Temporal Coverage
Argentina	24 provinces	1983	1983	1983-2024
Brazil	27 states	1998	1998	1998-2024
Mexico	32 states	1985	1985	1985-2024

## Note on Coverage

**Argentina:** Data for most provinces start in 1983, coinciding with the country's return to democracy. Data for Tierra del Fuego and Ciudad Autónoma de Buenos Aires (formerly Capital Federal) began in 1991 and 1996, respectively, when these two subnational jurisdictions acquired the same legal status as all other provinces. In addition, information may be missing or incomplete for subnational legislative elections in Salta (1993), La Rioja (2015), and San Luis (2019).

**Brazil:** Electoral data for all 27 states begin in 1998, the earliest year for which systematically verified data are available. The database is compiled primarily from records of the *Tribunal Superior Eleitoral* and cross-validated using the ElectionsBR database (Meireles et al., 2016).

**Mexico:** The general starting point for data collection in v. 1 is 1985, though coverage varies across states. The following states are included beginning in:

- 1985: Campeche, Colima, Guanajuato, Nuevo León, Querétaro, Sonora
- 1986: Aguascalientes, Chihuahua, Durango, Guerrero, Michoacán, Puebla, Sinaloa, Tamaulipas, Tlaxcala, Veracruz
- 1987: Baja California Sur, Coahuila, Quintana Roo
- 1988: Chiapas, Jalisco, Morelos, Tabasco
- 1989: Baja California
- 1991: San Luis Potosí
- 1992: Oaxaca, Zacatecas
- 1993: Hidalgo, Nayarit
- 1995: Yucatán
- 1997: CDMX
- 1999: Estado de México



# Description of Individual Variables

## Identifier Variables

### Country Name (country\_name)

- **Description:** Indicates the country's name
- **Type:** Categorical
- **Values:** ARGENTINA, BRAZIL, MEXICO
- **Source:** *Subnational Politics Project*, own coding based on ISO 3166 country names

### Country Code (country\_code)

- **Description:** Indicates the numeric country code according to ISO 3166-1 standard
- **Type:** Categorical
- **Values:** 032 (Argentina), 076 (Brazil), 484 (Mexico)
- **Source:** *Subnational Politics Project*, own coding based on ISO 3166-1 numeric country codes

### State Name (state\_name)

- **Description:** Indicates the name of the subnational unit (province/state)
- **Type:** Categorical
- **Note:** See Appendix A for a complete list of subnational units by country
- **Source:** *Subnational Politics Project*, own coding based on official administrative records

## State Code (state\_code)

- **Description:** Indicates the numeric code for subnational unit within a given country
- **Type:** Categorical
- **Note:** Follows official coding systems used by each country's electoral authorities. See Appendix B for a complete list of subnational codes
- **Source:** *Subnational Politics Project*, own coding based on official coding systems from national electoral authorities

## Country State Code (country\_state\_code)

- **Description:** Indicates the combined country and state code (*country\_code* + *state\_code*)
- **Type:** Categorical
- **Format:** 5-digit numeric code
- **Note:** List of codes available in Appendix B
- **Source:** *Subnational Politics Project*, own coding based on official country and state codes

## Region Name (region\_name)

- **Description:** Indicates the geographic region within a given country
- **Type:** Categorical
- **Note:** Regional classifications follow established geographic divisions for each country. See Appendix B for a complete list of regions
- **Source:** *Subnational Politics Project*, own coding based on official geographic classifications for each country

## Year (year)

- **Description:** Indicates the calendar year of observation
- **Type:** Numeric
- **Range:** 1983-2024 (varies by country)
- **Source:** *Subnational Politics Project*, own coding

# Executive Branch Variables

## National Executive

### President Name (name\_head\_nat\_exe)

- **Description:** Indicates the national head of state's name (i.e., President)
- **Type:** Text
- **Note:** If the president held office during a given year, their name is recorded for the entirety of that year. For example, in 2024 the president of Argentina was Javier Milei; therefore, the variable name\_head\_nat\_exe for 2024 records "Javier Milei". In years with multiple presidents in office—such as electoral years—the name of the winning candidate is recorded as president for that year. For instance, presidents-elect in Argentina take office on December 10. In 2023, the variable name\_head\_nat\_exe records "Javier Milei", as he took office on December 10, 2023
- **Source:** *Subnational Politics Project*, own coding based on World Statesmen (worldstatesmen.org) and V-Dem

### President Gender (sex\_head\_nat\_exe)

- **Description:** Indicates the national head of state's gender
- **Type:** Binary
- **Values:**
  - 0 = Male
  - 1 = Female
- **Source:** V-Dem

### Start Date of Presidential Term (start\_date\_head\_nat\_exe)

- **Description:** Indicates the start date of the presidential term, in year-month-day format
- **Type:** Date
- **Format:** yyyy-mm-dd (ISO 8601 standard)
- **Source:** V-Dem

## End Date of Presidential Term (end\_date\_head\_nat\_exe)

- **Description:** Indicates the end date of the presidential term, in year-month-day format
- **Type:** Date
- **Format:** yyyy-mm-dd (ISO 8601 standard)
- **Source:** V-Dem

## Presidential Term Length (term\_length\_in\_years\_nat\_exe)

- **Description:** Indicates the total duration of the president's current term in office
- **Type:** Numeric
- **Unit:** Years (decimal values allowed)
- **Formula:** Length of presidential term in years, calculated as the difference between *start\_date\_head\_nat\_exe* and *end\_date\_head\_nat\_exe*.
- **Example:**
  - Brazil, Lula's first term (2003-2006): years\_nat\_gov = 4.0 for all years 2003, 2004, 2005, 2006
  - Mexico, AMLO's term (2018-2024): years\_nat\_gov = 6.0 for all years 2018, 2019, 2020, 2021, 2022, 2023, 2024
- **Source:** *Subnational Politics Project*, own calculation based on *start\_date\_head\_nat\_exe* and *end\_date\_head\_nat\_exe* (V-Dem)

## Presidential Reelection (consecutive\_reelection\_nat\_exe)

- **Description:** Indicates whether a president was re-elected to a consecutive term
- **Type:** Binary
- **Values:**
  - 1 = Head of government has been reelected
  - 0 = Otherwise
- **Note:** Only consecutive re-elections are coded. Non-consecutive terms are **not** considered as re-elections
- **Example:** Lula da Silva's third term (2023-) is **not** coded as a re-election, despite the fact that he served in office in the past (from 2002 through 2010)
- **Source:** *Subnational Politics Project*, own coding based on V-Dem

## President Early Exit (early\_exit\_nat\_exe)

- **Description:** Indicates whether the president left office before completing their constitutional term



- **Type:** Binary
- **Values:**
  - 1 = Early exit from office (due to resignation, death, impeachment, removal, or other causes)
  - 0 = Completed full constitutional term or still in office
- **Note:** Includes all forms of early departure, regardless of cause.
  - Raúl Ricardo Alfonsín (Argentina) had an early exit in July of 1989 because he official/constitutional term ended in December of 1989. He is not coded as early exit
- **Source:** *Subnational Politics Project*, own coding based on official records

## President Party (head\_party\_nat\_exe)

- **Description:** Indicates the president's political party
- **Type:** Categorical
- **Source:** *Subnational Politics Project*, own coding based on World Statesmen (worldstatesmen.org) and V-Dem

## President Party Ideology (ideo\_party\_nat\_exe)

- **Description:** Indicates the ideology of the president's political party
- **Type:** Ordinal
- **Values:**
  - 1 = Left
  - 2 = Center-left
  - 3 = Center-right
  - 4 = Right
  - [blank] = Independent or no political affiliation
- **Note:** Coding captures political party platforms and programs, not the policies implemented by its leaders
- **Examples:**
  - **Left (1):** Brazil's PT (Partido dos Trabalhadores) under Lula/Dilma 2003-2016
  - **Center-left (2):** Argentina's FREPASO (Frente País Solidario) or Brazil's PSB (Partido Socialista Brasileiro) in coalition governments
  - **Center-right (3):** Argentina's UCR (Unión Cívica Radical) or Brazil's PSDB (Partido da Social Democracia Brasileira)
  - **Right (4):** Mexico's PAN (Partido Acción Nacional) 2000-2012, Argentina's PRO (Propuesta Republicana) under Macri
  - **Independent [blank]:** Rare at presidential level in these countries

- **Source:** *Subnational Politics Project*, own coding based on Coppedge (1997), Szajkowski (2005), Murillo et al. (2010), and official party platforms/websites

## Presidential Election Year (year\_election\_nat\_exe)

- **Description:** Indicates whether national presidential elections were held during the observed calendar year
- **Type:** Binary
- **Values:**
  - 1 = Presidential election year
  - 0 = Otherwise
- **Source:** *Subnational Politics Project*, own coding based on national electoral agencies: [argentina.gob.ar/dine](http://argentina.gob.ar/dine), [ine.mx](http://ine.mx), [tse.jus.br](http://tse.jus.br)

## President Years in Power (cumulative\_years\_in\_power\_nat\_exe)

- **Description:** Indicates the total number of years the president held executive office
- **Type:** Numeric (count)
- **Source:** *Subnational Politics Project*, own calculation based on official records of executive office tenure

# Subnational Executive

## Governor Name (name\_head\_sub\_exe)

- **Description:** Indicates the head of subnational state's (Governor) name
- **Type:** Text
- **Note:** If the governor held office during a given year, their name is recorded for the entirety of that year. For example, in 2019 the Jefe de Gobierno of CDMX was Claudia Sheinbaum; therefore, the variable `name_head_sub_exe` for 2019 records "Claudia Sheinbaum". In years with multiple governors in office—such as electoral years—the name of the winning candidate is recorded as governor for that year. For instance, Jefe de Gobierno-elect in CDMX took office on December 5. In 2018, the variable `name_head_sub_exe` records "Claudia Sheinbaum", as she took office on December 5, 2018
- **Source:** *Subnational Politics Project*, own coding based on Andy Tow's data (Argentina) Argentine data verified by Tulia Falleti, email correspondence on 04/21/2023). For Brazil and Mexico: official subnational electoral information and state web portals

## Governor Gender (sex\_head\_sub\_exe)

- **Description:** Indicates the governor's gender
- **Type:** Binary
- **Values:**
  - 0 = Male
  - 1 = Female
- **Source:** *Subnational Politics Project*, own coding based on official records

## Start Date of Governor Term (start\_date\_head\_sub\_exe)

- **Description:** Indicates the start date of the gubernatorial term, in year-month-day format
- **Type:** Date
- **Format:** yyyy-mm-dd (ISO 8601 standard)
- **Source:** *Subnational Politics Project*, own coding based on V-Dem

## End Date of Governor Term (end\_date\_head\_sub\_exe)

- **Description:** Indicates the end date of the gubernatorial term, in year-month-day format
- **Type:** Date
- **Format:** yyyy-mm-dd (ISO 8601 standard)
- **Source:** *Subnational Politics Project*, own coding based on V-Dem

## Gubernatorial Term Length (term\_length\_in\_years\_sub\_exe)

- **Description:** Indicates the total duration of the governor's term
- **Type:** Numeric
- **Unit:** Years (decimal values allowed)
- **Formula:** Length of governor's term in years, calculated as the difference between *start\_date\_head\_sub\_exe* and *end\_date\_head\_sub\_exe*. Example:
  - María Eugenia Vidal served as Governor of Buenos Aires (Argentina) from December 11, 2015, to December 11, 2019, which amounts to approximately 4.00 years, using December 10, 2023, as the reference date
- **Source:** *Subnational Politics Project*, own calculation based on *start\_date\_head\_sub\_exe* and *end\_date\_head\_sub\_exe* (V-Dem)

## Governor Turnover (turnover\_head\_sub\_exe)

- **Description:** Indicates whether there was turnover in the subnational executive branch
- **Type:** Binary
- **Values:**
  - 1 = Year when turnover occurred
  - 0 = Otherwise
- **Note:** Refers to any type of turnover, including succession due to early exit/federal intervention/death/etc.
- **Source:** *Subnational Politics Project*, own coding based on official records

## Cumulative Changes of Governor (cumulative\_changes\_head\_sub\_exe)

- **Description:** Indicates the cumulative count of gubernatorial changes since start of data series (specific to each individual state)
- **Type:** Numeric (count)
- **Range:** 0 to n (where n = total changes observed)
- **Note:** Increments of 1, each time a new governor takes office, including interim or new appointment (due to early exit)
- **Measurement:** Cumulative count from first year of data coverage for each state
- **Example:**
  - **Buenos Aires Province, 1983-2023:**
    - 1983: Felipe Solá becomes governor (cumulative\_changes\_head\_sub = 1)
    - 1987: Antonio Cafiero takes office (cumulative\_changes\_head\_sub = 2)
    - 1991: Eduardo Duhalde elected (cumulative\_changes\_head\_sub = 3)
    - 1999: Carlos Ruckauf takes office (cumulative\_changes\_head\_sub = 4)
    - 2002: Felipe Solá returns to office (cumulative\_changes\_head\_sub = 5)
    - 2007: Daniel Scioli elected (cumulative\_changes\_head\_sub = 6)
    - 2015: María Eugenia Vidal takes office (cumulative\_changes\_head\_sub = 7)
    - 2019: Axel Kicillof elected (cumulative\_changes\_head\_sub = 8)
- **Source:** *Subnational Politics Project*, own calculation based on official records

## Governor Early Exit (early\_exit\_sub\_exe)

- **Description:** Indicates early exit from gubernatorial office for a given year (as a result of, for example, resignation, death, impeachment, federal intervention, among others)



- **Type:** Binary
- **Values:**
  - 1 = Early exit
  - 0 = Otherwise
- **Source:** *Subnational Politics Project*, own coding based on official records

## Governor Reelection (consecutive\_reelection\_sub\_exe)

- **Description:** Indicates whether a governor was re-elected to a consecutive term
- **Type:** Binary
- **Values:**
  - 1 = Governor was reelected (won election for consecutive term)
  - 0 = Governor was not reelected (first term, term-limited, or defeated)
  - [blank] = Not applicable (e.g., Mexico where gubernatorial reelection is prohibited)
- **Note:** Only consecutive re-elections are coded. Non-consecutive terms are **not** considered as re-elections
- **Source:** *Subnational Politics Project*, own coding based on official records

## Governor Years in Power (cumulative\_years\_in\_power\_sub\_exe)

- **Description:** Indicates the total number of years the governor held subnational executive office
- **Type:** Numeric (count)
- **Source:** *Subnational Politics Project*, own calculation based on official records of executive office tenure

## Governor Party (head\_party\_sub\_exe)

- **Description:** Indicates the governor's political party
- **Type:** Categorical
- **Source:** *Subnational Politics Project*, own coding based on national and subnational electoral agencies

## Party Years in Power (cumulative\_years\_in\_power\_party\_sub\_exe)

- **Description:** Indicates the cumulative number of years that a party has controlled subnational executive office
- **Type:** Numeric
- **Unit:** Years (decimal values allowed)

- **Source:** *Subnational Politics Project*, own calculation based on subnational electoral agencies

## Governor Party Ideology (ideo\_party\_sub\_exe)

- **Description:** Indicates the governor's political party's ideology
- **Type:** Ordinal
- **Values:**
  - 1 = Left
  - 2 = Center-left
  - 3 = Center-right
  - 4 = Right
  - [blank] = Independent or no political affiliation
- **Note:** Classification based on party platforms and programs, not on implemented policies
- **Source:** *Subnational Politics Project*, own coding based on Coppedge (1997), Szajkowski (2005), Murillo et al. (2010), and official party platforms/websites

## Subnational Executive Elections Concurrent with National Elections (concurrent\_with\_nat\_election\_sub\_exe)

- **Description:** Indicates whether gubernatorial and presidential elections were held concurrently on a given year
- **Type:** Binary
- **Values:**
  - 1 = Concurrent election (both gubernatorial and presidential elections held)
  - 0 = Non-concurrent (only one type of election or neither)
- **Measurement:** Based on calendar year, not exact election dates
- **Note:** Important for analyzing electoral coattail effects and vertical electoral coordination
- **Examples:**
  - **Concurrent (1):** Brazil, 2018 - All states elect governors in October alongside a presidential elections
  - **Concurrent (1):** Mexico, 2018 - 9 states (including CDMX, Jalisco, and Morelos) hold gubernatorial elections the same year as the presidential election
  - **Non-concurrent (0):** Argentina, 2017 - No presidential election, but several provinces (Buenos Aires, Córdoba, etc.) elect governors
  - **Non-concurrent (0):** Mexico, 2019 - No presidential election, but Baja California holds gubernatorial election

- **Country patterns:** Brazil always concurrent (every 4 years), Argentina/Mexico mixed timing
- **Source:** *Subnational Politics Project*, own coding based on national and subnational electoral agencies

## Party Turnover (turnover\_party\_sub\_exe)

- **Description:** Indicates party turnover in gubernatorial office
- **Type:** Binary
- **Values:**
  - 1 = Year when turnover occurred
  - 0 = Otherwise
- **Source:** *Subnational Politics Project*, own coding based on official records

## Cumulative Changes of Party (cumulative\_changes\_party\_sub\_exe)

- **Description:** Indicates the cumulative count of changes of a political party
- **Type:** Numeric (count)
- **Source:** *Subnational Politics Project*, own coding based on official records

## Political Alignment With National Government (alignment\_with\_nat\_sub\_exe)

- **Description:** Indicates political alignment between the president and the governor
- **Type:** Binary
- **Values:**
  - 1 = Political alignment exists
  - 0 = No political alignment
- **Coding Criteria:** Following Giraudy (2015) and Niedzwiecki (2018), coded as 1 if any of the following conditions are met:
  - **Same party membership:** President and governor belong to the same political party
  - **Coalition partnership:** Governor's party is part of the president's legislative coalition (at national level)
  - **Political cooperation:** Despite different party affiliations, observable political affinity and cooperative behavior exists between president and governor

- **Examples:**
  - **Criterion 1 - São Paulo, 2003:** PT President Lula + PT Governor José Genoíno = 1 (same party)
  - **Criterion 2 - Santa Fe, Argentina, 2008:** PJ President Cristina Kirchner + PS Governor Hermes Binner = 1 (PS supports national government coalition)
  - **Criterion 3 - Nuevo León, Mexico, 2001:** PAN President Fox + Independent Governor Natividad González = 1 (cooperation despite different affiliations)
  - **No alignment - Córdoba, Argentina, 2017:** Cambiemos President Macri + PJ Governor Schiavetti = 0 (opposition parties, no cooperation)
- **Note:** Focuses on political cooperation rather than strict party membership
- **Source:** *Subnational Politics Project*, own coding based on Giraudy (2015) and Niedzwiecki (2018)

# Electoral Variables

## Subnational Executive

### Gubernatorial Election Year (election\_sub\_exe)

- **Description:** Indicates whether there legislative elections were held on a given year
- **Type:** Binary
- **Values:**
  - 1 = Election held
  - 0 = Otherwise
- **Source:** *Subnational Politics Project*, own coding based on official records of subnational executive elections

### Winning Candidate Name (winner\_candidate\_sub\_exe)

- **Description:** Indicates the winning candidate name who effectively took office
- **Type:** Text
- **Source:** *Subnational Politics Project*, own coding based on Andy Tow's data (Argentina, verified by Tulia Falletti, email correspondence on 04/21/2023) and, for other countries, official subnational electoral information and state web portals

### Election Date (date\_election\_sub\_exe)

- **Description:** Indicates the date of the subnational executive electoral process
- **Type:** Date
- **Format:** yyyy-mm-dd (ISO 8601 standard)
- **Source:** Subnational Electoral Agencies

## Registered Voters (voters\_registered\_sub\_exe)

- **Description:** Indicates the total number of registered voters for each subnational executive elections
- **Type:** Numeric (count)
- **Source:** Subnational Electoral Agencies

## Total Voters (total\_voters\_sub\_exe)

- **Description:** Indicates the total number of voters in subnational executive elections
- **Type:** Numeric (count)
- **Note:** Includes votes for parties, blank votes, and null votes
- **Source:** Subnational Electoral Agencies

## Voter Turnout Percentage (perc\_voter\_sub\_exe)

- **Description:** Indicates the voter turnout rate for subnational executive elections
- **Type:** Numeric (percentage)
- **Formula:**  $(total\_voters\_sub / voters\_registered\_sub) \times 100$
- **Source:** *Subnational Politics Project*, own calculation based on data from subnational electoral agencies

## Valid Votes (valid\_votes\_sub\_exe)

- **Description:** Indicates the total valid votes for subnational executive elections
- **Type:** Numeric (count)
- **Source:** Subnational Electoral Agencies

## Valid Vote Percentage (perc\_valid\_votes\_sub\_exe)

- **Description:** Indicates the valid votes as percentage of total votes in subnational executive elections
- **Type:** Numeric (percentage)
- **Formula:**  $(valid\_votes\_sub / total\_voters\_sub) \times 100$
- **Source:** *Subnational Politics Project*, own calculation based on data from subnational electoral agencies

## Invalid Votes (invalid\_votes\_sub\_exe)

- **Description:** Indicates the total invalid/void votes for subnational executive elections



- **Type:** Numeric (count)
- **Source:** *Subnational Politics Project*, own calculation based on data from subnational electoral agencies

## Invalid Vote Percentage (perc\_invalid\_votes\_sub\_exe)

- **Description:** Indicates the invalid votes as percentage of total votes in subnational executive elections
- **Type:** Numeric (percentage)
- **Formula:**  $(invalid\_votes\_sub / total\_voters\_sub) \times 100$
- **Source:** *Subnational Politics Project*, own calculation based on data from subnational electoral agencies

## Winner Total Votes (votes\_candidate\_winner\_sub\_exe)

- **Description:** Indicates the total votes for the winning gubernatorial candidate
- **Type:** Numeric (count)
- **Source:** Subnational Electoral Agencies

## Winner Vote Percentage (perc\_votes\_winner\_candidate\_sub\_exe)

- **Description:** Indicates the vote share for the winning gubernatorial candidate
- **Type:** Numeric (percentage)
- **Formula:**  $(votes\_candidate\_winner / valid\_votes\_sub) \times 100$
- **Source:** *Subnational Politics Project*, own calculation based on data from subnational electoral agencies

## Second Place Total Votes (second\_place\_votes\_sub\_exe)

- **Description:** Indicates the total votes for the second-place gubernatorial candidate
- **Type:** Numeric (count)
- **Source:** Subnational Electoral Agencies

## Second Place Vote Percentage (perc\_second\_place\_sub\_exe)

- **Description:** Indicates the vote share for second-place gubernatorial candidate
- **Type:** Numeric (percentage)
- **Formula:**  $(second\_place\_votes / valid\_votes\_sub) \times 100$
- **Source:** *Subnational Politics Project*, own coding based on subnational electoral agencies

## Last Place Total Votes (last\_place\_votes\_sub\_exe)

- **Description:** Indicates the total votes for last-place gubernatorial candidate
- **Type:** Numeric (count)
- **Source:** Subnational Electoral Agencies

## Last Place Vote Percentage (perc\_last\_place\_sub\_exe)

- **Description:** Indicates the vote share for last-place gubernatorial candidate
- **Type:** Numeric (percentage)
- **Formula:**  $(last\_place\_votes / valid\_votes\_sub) \times 100$
- **Source:** Subnational Politics Project, own calculation based on subnational electoral agencies

## Margin of Victory (margin\_victory\_sub\_exe)

- **Description:** Indicates the margin of victory between the winner and runner-up in gubernatorial elections
- **Type:** Numeric (percentage)
- **Formula:**  $winner\_candidate\_ratio - second\_place\_ratio$
- **Source:** Subnational Politics Project, own calculation based on subnational electoral agencies

## Number of Parties Competing in Elections (num\_parties\_election\_contest\_sub\_exe)

- **Description:** Indicates the number of parties competing in gubernatorial elections
- **Type:** Numeric (count)
- **Source:** Subnational Politics Project, own calculation based on subnational electoral agencies

## Cumulative Executive Elections (cumulative\_elections\_year\_sub\_exe)

- **Description:** Indicates the cumulative count of subnational executive elections in a state
- **Type:** Numeric (count)
- **Source:** Subnational Politics Project, own calculation based on official subnational electoral calendars

## Snap Election (snap\_election\_sub\_exe)

- **Description:** Indicates snap subnational executive elections
- **Type:** Binary
- **Values:**
  - 1 = Snap election occurred
  - 0 = Otherwise
- **Source:** *Subnational Politics Project*, own coding based on national and subnational electoral agencies

## Effective Number of Parties (Laakso and Taagepera, 1979) (enp\_sub\_exe)

- **Description:** Indicates the effective number of parties competing in gubernatorial elections
- **Type:** Numeric (continuous)
- **Range:** 1.0 to n (where n = theoretical maximum based on number of candidates)
- **Formula:**  $ENP = 1/\sum(p_i^2)$ , where  $p_i$  is the vote share of party i
- **Calculation:** Based on Laakso and Taagepera (1979) index using vote shares of all competing parties
- **Interpretation:**
  - Values near 1.0 = dominant party system
  - Values near 2.0 = two-party competition
  - Higher values = more fragmented party system
- **Examples:**
  - **Dominant system (ENP ≈ 1.2):** Coahuila, Mexico, 2005 - PRI candidate wins with 89% vs. 8% PAN, 3% others
  - **Two-party competition (ENP ≈ 2.1):** São Paulo, Brazil, 2018 - PSDB 51.7% vs. PT 48.3% in runoff
  - **Fragmented system (ENP ≈ 3.8):** Buenos Aires, Argentina, 2015 - Cambiemos 35.4%, FPV 30.1%, Massa 20.8%, others 13.7%
  - **Highly fragmented (ENP ≈ 5.2):** CDMX, Mexico, 2018 - MORENA 32.1%, PAN 21.8%, PRD 15.4%, PRI 12.3%, others 18.4%
- **Source:** *Subnational Politics Project*, own calculation based on subnational electoral agencies

## Subnational Legislative

### Chamber Election (chamber\_election\_sub\_leg)

- **Description:** Indicates the chamber in which elections are held on a given year
- **Type:** Categorical
- **Values:**
  - 1 = Lower Chamber
  - 2 = Upper Chamber
- **Source:** *Subnational Politics Project*, own coding based on official records

### Date of Legislative Election (date\_election\_sub\_leg)

- **Description:** Indicates the date of subnational legislative elections
- **Type:** Date
- **Format:** yyyy-mm-dd (ISO 8601 standard)
- **Source:** Subnational Electoral Agencies

### Registered Voters in Legislative Election (voters\_registered\_sub\_leg)

- **Description:** Indicates the total number of registered voters for subnational legislative elections
- **Type:** Numeric (count)
- **Note:** In states with mixed electoral systems, the total number of registered voters equals the sum of all registered voters across all districts in each province. For example, Río Negro's (Argentina) legislature is made up of 46 seats/legislators. 24 legislators are elected in selected electoral districts, while 22 are elected to represent the province as a single district. In the 2023 legislative election there were a total of 589,251 registered voters, each of whom cast two ballots due to the mixed system. Accordingly, the database records 1,178,502 ( $589,251 \times 2$ ) as the total number of registered voters in that year for Río Negro
- **Source:** Subnational Electoral Agencies

### Total Voters in Legislative Election (total\_voters\_sub\_leg)

- **Description:** Indicates the total number of people who voted in subnational legislative elections
- **Type:** Numeric (count)
- **Note:** Includes votes for parties, blank votes, and null votes.

In states with mixed electoral systems, the total number of voters equals the sum of those counted across all districts. For example, Río Negro's (Argentina) legislature is made up of 46 seats/legislators. 24 legislators are elected in selected electoral districts, while 22 are elected to represent the province as a single district. In the 2023 legislative election there were a total of 400,227 voters for the former, and 400,993 voters for the latter. Accordingly, the database records 801,220 (400,227 + 400,993) as the total number of voters for Río Negro in that year

- **Source:** Subnational Electoral Agencies

## Voter Turnout in Legislative Election (perc\_voters\_sub\_leg)

- **Description:** Indicates the voter turnout rate for subnational legislative elections
- **Type:** Numeric (percentage)
- **Formula:**  $(total\_voters\_sub\_leg / voters\_registered\_sub\_leg) \times 100$
- **Source:** *Subnational Politics Project*, own calculation based on subnational electoral agencies

## Valid Votes in Legislative Election (valid\_votes\_sub\_leg)

- **Description:** Indicates the total number of valid votes for subnational legislative elections
- **Type:** Numeric (count)
- **Note:** Official records sometimes report the same number of valid votes and positive votes for selected electoral years. Additionally, the number of valid votes in states with mixed electoral systems equals the sum of valid votes obtained by each party across all electoral districts
- **Source:** Subnational Electoral Agencies

## Percentage of Valid Votes in Legislative Election (perc\_valid\_votes\_sub\_leg)

- **Description:** Indicates the percentage of valid votes in legislative elections
- **Type:** Numeric (percentage)
- **Formula:**  $(valid\_votes\_sub\_leg / total\_voters\_sub\_leg) \times 100$
- **Source:** *Subnational Politics Project*, own calculation based on subnational electoral agencies

## Party Name in Legislative Election (party\_name\_sub\_leg)

- **Description:** Indicates the political party's or electoral coalition's name competing in subnational legislative elections
- **Type:** Text

- **Source:** *Subnational Politics Project*, own coding based on subnational electoral agencies

## Party Votes in Legislative Election (total\_votes\_party\_sub\_leg)

- **Description:** Indicates the total number of people who voted for a party/electoral coalition in subnational legislative elections
- **Type:** Numeric (count)
- **Note:** In states with mixed electoral systems, the total number of votes obtained by each party equals the sum of votes cast across all districts. For example, Río Negro's (Argentina) legislature is made up of 46 seats/legislators. 24 legislators are elected in selected electoral districts, while 22 are elected to represent the province as a single district. In the 2023 elections, Juntos Somos Río Negro obtained 101,159 votes across the electoral districts and 85,592 votes in the single provincial district, for a total of 186,751 votes. Accordingly, the database records 186,751 as the total votes obtained by that party in that year
- **Source:** Subnational Electoral Agencies

## Percentage of Party Votes in Legislative Election (perc\_votes\_party\_sub\_leg)

- **Description:** Indicates the party/electoral coalition's percentage of votes obtained in subnational legislative elections
- **Type:** Numeric (percentage)
- **Formula:**  $(total\_votes\_party\_sub\_leg / valid\_votes\_sub\_leg) \times 100$
- **Source:** *Subnational Politics Project*, own calculation based on subnational electoral agencies

## Party Seats (total\_seats\_party\_sub\_leg)

- **Description:** Indicates the number of seats obtained by the party/electoral coalition in subnational legislative elections
- **Type:** Numeric (count)
- **Note:** In states with mixed electoral systems, the total number of seats obtained by each party equals the sum of seats cast across all districts. For example, in the Río Negro (Argentina) elections, 24 legislators are elected per electoral district, while another 22 are elected using the province as a single district. In the 2023 elections, Juntos Somos Río Negro obtained 13 seats across the electoral districts and 6 seats in the single provincial district, for a total of 19 seats. Accordingly, the database records 19 as the total seats obtained by that party in that year
- **Source:** subnational legislatures and subnational electoral agencies



## Percentage of Party Seats in Legislative Election (perc\_seats\_party\_sub\_leg)

- **Description:** Indicates the percentage of seats obtained by the party/electoral coalition in subnational legislative elections
- **Type:** Numeric (percentage)
- **Formula:**  $(total\_seats\_party\_sub\_leg / total\_seats\_in\_contest\_sub\_leg) \times 100$
- **Source:** *Subnational Politics Project*, own calculations from *total\_seats\_party\_sub\_leg* variable

## Number of Blank Votes (blank\_votes\_sub\_leg)

- **Description:** Indicates the number of blank votes in subnational legislative elections
- **Type:** Numeric (count)
- **Note:** The number of blank votes in states with mixed electoral systems equals the sum of blank votes obtained by each party across all electoral districts
- **Source:** Subnational Electoral Agencies

## Number of Null Votes (null\_votes\_sub\_leg)

- **Description:** Indicates the number of null votes in subnational legislative elections
- **Type:** Numeric (count)
- **Note:** The number of null votes in states with mixed electoral systems equals the sum of null votes obtained by each party across all electoral districts
- **Source:** Subnational Electoral Agencies

## Number of Challenged Votes (challenged\_votes\_sub\_leg)

- **Description:** Indicates the number of challenged votes in subnational legislative elections
- **Type:** Numeric (count)
- **Note:** The number of challenged votes in states with mixed electoral systems equals the sum of challenged votes obtained by each party across all electoral districts
- **Source:** Subnational Electoral Agencies

## Number of Contested Votes (contested\_votes\_sub\_leg)

- **Description:** Indicates the number of contested votes in subnational legislative elections

- **Type:** Numeric (count)
- **Note:** In Argentina this is called 'votos de identidad impugnada'. The number of contested votes in states with mixed electoral systems equals the sum of contested votes obtained by each party across all electoral districts
- **Source:** Subnational Electoral Agencies

## Number of Votes Offset by Discrepancy (compensation\_for\_record\_discrepancy\_votes\_sub\_leg)

- **Description:** Indicates the number of votes offset by discrepancy in the tally sheets in subnational legislative elections
- **Type:** Numeric (count)
- **Source:** Subnational Electoral Agencies

## Margin of Victory in Legislative Election (margin\_victory\_sub\_leg)

- **Description:** Indicates the margin of victory between the winner and runner-up in subnational legislative elections
- **Type:** Numeric (percentage)
- **Formula:** percentage of votes obtained by the winning party - percentage of votes obtained by the second-place party
- **Source:** *Subnational Politics Project*, own calculation based on subnational electoral agencies

## Cumulative Legislative Elections (cumulative\_elections\_year\_sub\_leg)

- **Description:** Indicates the cumulative count of subnational legislative elections
- **Type:** Numeric (count)
- **Note:** Running total from beginning of data series
- **Source:** *Subnational Politics Project*, own coding based on subnational electoral agencies

## Subnational Legislative Elections Concurrent with National Elections (concurrent\_election\_with\_nat\_sub\_leg)

- **Description:** Indicates whether gubernatorial and presidential elections were held during the same year
- **Type:** Binary
- **Values:**

- 1 = Concurrent election year (both gubernatorial and presidential elections held)
- 0 = Non-concurrent year (only one type of election or neither)
- **Measurement:** Based on calendar year, not exact election dates
- **Note:** Important for analyzing electoral coattail effects and vertical electoral coordination
- **Examples:**
  - **Concurrent (1):** Brazil, 2018 - All states elect governors in October alongside presidential election
  - **Concurrent (1):** Mexico, 2018 - 9 states (including CDMX, Jalisco, and Morelos) hold gubernatorial elections same year as presidential
  - **Non-concurrent (0):** Argentina, 2017 - No presidential election, but several provinces (Buenos Aires, Córdoba, etc.) elect governors
  - **Non-concurrent (0):** Mexico, 2019 - No presidential election, but Baja California holds gubernatorial election
  - **Country patterns:** Brazil always concurrent (every 4 years), Argentina/Mexico mixed timing
- **Source:** *Subnational Politics Project*, own coding based on national and subnational electoral agencies

## Number of Parties in Contest in Legislative Elections (num\_parties\_election\_contest\_sub\_leg)

- **Description:** Indicates the number of parties that competed in subnational legislative elections
- **Type:** Numeric (count)
- **Source:** *Subnational Politics Project*, own coding based on subnational electoral agencies

## Total of Seats in Contest in Legislative Elections (total\_seats\_in\_contest\_sub\_leg)

- **Description:** Indicates the number of seats in dispute in subnational legislative elections
- **Type:** Numeric (count)
- **Note:** For states with mixed electoral systems, the variable *total\_seats\_contest* is defined as the sum of all seats in dispute across electoral districts within the state. For example, in the 2023 Río Negro (Argentina) election, 46 seats were in contest, where 24 legislators are elected to represent special electoral district,

while 22 are elected to represent the province as a single district. The total number of seats in the dataset for that state/year equals '46'

- **Source:** Subnational Electoral Agencies

## Total of Seats in Chamber in Legislative Elections (total\_chamber\_seats\_sub\_leg)

- **Description:** Indicates the total seats in subnational lower/single chamber
- **Type:** Numeric (count)
- **Source:** Subnational Electoral Agencies

## Number of Seats of Incumbent in Legislative Elections (num\_seats\_incumbent\_sub\_leg)

- **Description:** Indicates the seats held by the governor's party in subnational legislatures
- **Type:** Numeric (count)
- **Note:** Excludes coalition partners; only the governor's own party. Additionally, for states with mixed electoral systems, the variable *num\_seats\_incumbent\_sub\_leg* is defined as the sum of all seats obtained by the incumbent party across electoral districts within the state
- **Source:** *Subnational Politics Project*, own coding based on subnational electoral agencies

## Percentage of Seats of Incumbent in Legislative Elections (perc\_seats\_incumbent\_sub\_leg)

- **Description:** Indicates the percentage of legislative seats held by the governor's political party
- **Type:** Numeric (percentage)
- **Range:** 0.0 to 100.0
- **Formula:**  $(num\_seats\_legislative\_government / num\_legislative\_seats) \times 100$
- **Measurement Rules:**
  - **Party identification:** Only counts seats won by the governor's exact party
  - **Coalition exclusion:** Does not include allied or coalition parties
  - **Independent governors:** Coded as 0 when governor has no party affiliation
- **Interpretation:**
  - Values > 50.0 = Governor's party has legislative majority
  - Values < 50.0 = Governor's party in legislative minority

- **Examples:**
  - **Strong majority:** Veracruz, Mexico, 2016 - PAN Governor + 30 of 50 seats (60.0%)
  - **Bare majority:** Minas Gerais, Brazil, 2018 - NOVO Governor + 38 of 77 seats (49.4%)
  - **Weak minority:** Buenos Aires, Argentina, 2015 - Cambiemos Governor + 15 of 92 seats (16.3%)
  - **Coalition scenario:** Santa Fe, Argentina, 2019 - PJ Governor wins but allied parties hold additional seats not counted in this variable
  - **Independent governor:** Nuevo León, Mexico, 2015 - Independent Governor = 0.0% (no party affiliation)
- **Source:** *Subnational Politics Project*, own calculation based on subnational electoral agencies

## Number of Seats of Opposition in Legislative Elections (num\_seats\_opos\_sub\_leg)

- **Description:** Indicates the seats held by opposition parties in subnational legislatures
- **Type:** Numeric (count)
- **Note:** Includes all parties in the opposition. Additionally, for states with mixed electoral systems, the variable *num\_seats\_incumbent\_sub\_leg* is defined as the total number of seats won by opposition parties across all electoral districts within the state
- **Source:** *Subnational Politics Project*, own coding based on subnational electoral agencies

## Percentage of Seats of Opposition in Legislative Elections (perc\_seats\_opos\_sub\_leg)

- **Description:** Indicates the percentage of legislative seats held by the opposition
- **Type:** Numeric (percentage)
- **Formula:**  $(num\_seats\_legislative\_opos / num\_legislative\_seats) \times 100$
- **Source:** *Subnational Politics Project*, own calculation based on subnational electoral agencies

## Effective Number of Parties (Laakso and Taagepera, 1979) in Leg. (enp\_sub\_leg)

- **Description:** Indicates the effective number of legislative parties
- **Type:** Numeric (continuous)

- **Range:** 1.0 to n (where n = theoretical maximum based on number of parties)
- **Formula:**  $ENPL = 1 / (v_i^2)$ , where  $v_i$  is the vote share of party i in legislative elections
- **Calculation:** Based on Laakso and Taagepera (1979) index using vote shares of all competing parties in subnational legislative elections
- **Interpretation:**
  - Values near 1.0 = dominant party system in legislature
  - Values near 2.0 = two-party competition
  - Higher values = more fragmented party system
- **Examples:**
  - **Dominant system (ENP ≈ 1.1):** La Rioja, Argentina, 2023 - FRENTE DE TODOS 82.22% vs. JUNTOS POR EL CAMBIO 10.34%, LA LIBERTAD AVANZA 5.46%, others 1.89%
  - **Two-party competition (ENP ≈ 2.0):** Santa Cruz, Argentina, 1987 - FRENTE RENOVADOR JUSTICIALISTA 49.35% vs. UNION CIVICA RADICAL 47.34% in runoff
  - **Fragmented system (ENP ≈ 3.8):** La Pampa, Argentina, 1983 - JUSTICIALISTA 40.38%, UNION CIVICA RADICAL 32.07%, MOVIMIENTO FEDERALISTA PAMPEANO 19.62%, others 7.93%
  - **Highly fragmented (ENP ≈ 8.9):** Ciudad de Buenos Aires, Argentina, 2003 - ALIANZA FUERZA PORTEÑA 13.84%, AUTODETERMINACIÓN Y LIBERTAD 12.53%, ALIANZA FRENTE DE LA ESPERANZA PORTEÑA 12.20%, ALIANZA FRENTE COMPROMISO PARA EL CAMBIO 10.35%, others 51.13%
- **Note:** Measures party system fragmentation at the electoral level (votes) rather than seat allocation
- **Source:** *Subnational Politics Project*, own calculation based on subnational electoral agencies

## Type of Chamber (chamber\_sub\_leg)

- **Description:** Indicates the number of chambers in subnational legislatures
- **Type:** Categorical
- **Values:**
  - 1 = Unicameral
  - 2 = Bicameral
- **Note:** Data captured for lower or single chamber only. The following Argentine provincial changes are reflected:
  - Córdoba was bicameral until the 2001 constitutional reform, when it became unicameral



- San Luis has been bicameral since 1987
- Tucumán has been unicameral since 1990
- **Source:** Official records.

## Legislators' Term Length (term\_length\_in\_years\_sub\_leg)

- **Description:** Indicates the legislator's tenure in years as of July 2025
- **Type:** Numeric (count)
- **Source:** Official records. Latest version of provincial constitutions through July 2025

## Type of Renewal in Chamber (renewal\_type\_sub\_leg)

- **Description:** Indicates the type of renewal per chamber as of July 2025
- **Type:** Categorical
- **Values:**
  - 1 = Staggered every 2 years
  - 2 = Full renewal
- **Source:** Official records. Latest version of provincial constitutions through July 2025

## Type of Electoral System in Chamber (electoral\_system\_sub\_leg)

- **Description:** Indicates the type of electoral system per chamber as of July 2025
- **Type:** Categorical
- **Values:**
  - 1 = Proportional Representation
  - 2 = Simple Majority
  - 3 = Mixed (Proportional Representation and Simple Majority)
  - 4 = Mixed (Proportional Representation with predefined electoral districts)
- **Source:** Official records. Latest version of provincial constitutions through July 2025

## Subnational Democracy Indices

### SUR Index Giraudy (2015) (SUR\_index\_giraudy\_2015)

- **Description:** Measures levels of subnational democracy in Argentina and Mexico (only)
- **Type:** Numeric (continuous)
- **Calculation:**
  - Argentina:  $turnover\_sub\_exe + (contestation\_sub\_exe \times contestation\_sub\_leg)$
  - Mexico:  $turnover\_sub\_exe + (contestation\_sub\_exe \times contestation\_sub\_leg \times clean\_elections\_sub\_exe)$
- **Note:** Higher values indicate higher levels of subnational democracy. All individual indicators are standardized between 0 and 1  
The values of this index are based on Giraudy (2015), and not on the individual variables compiled by SPP
- **Source:** Giraudy (2015)

### SUR Index (SUR\_index\_sub\_exe)

- **Description:** Measures levels of subnational democracy in the executive branch
- **Type:** Numeric (continuous)
- **Calculation:**  $turnover\_sub\_exe + contestation\_sub\_exe$
- **Note:** Higher values indicate higher levels of subnational democracy. All individual indicators are standardized between 0 and 1
- **Source:** *Subnational Politics Project*

### Subnational Contestation Executive (contestation\_sub\_exe)

- **Description:** Measures levels of subnational contestation (i.e., electoral competitiveness) in the executive branch
- **Type:** Numeric (continuous)
- **Calculation:**  $(enp\_sub\_exe + (1 - margin\_victory\_sub\_exe))/2$ .
- **Note:**  $enp\_sub\_exe$  and  $margin\_victory\_sub\_exe$  are standardized between 0 and 1
- **Source:** *Subnational Politics Project*

### Subnational Contestation Legislative (contestation\_sub\_leg)

- **Description:** Measures levels of subnational contestation (i.e., electoral competitiveness) in the legislature branch
- **Type:** Numeric (continuous)

- **Calculation:**  $(enp\_sub\_leg + (1 - margin\_victory\_sub\_leg))/2$ .
- **Note:** *enp\_sub\_leg* and *margin\_victory\_sub\_leg* are standardized between 0 and 1
- **Source:** Giraudy (2015)

## Turnover Executive (*turnover\_sub\_exe*)

- **Description:** Average of governor turnover and party turnover at the subnational executive in a given year
- **Type:** Numeric (continuous)
- **Calculation:** (Governor turnover + Party turnover) /2
  - Argentina: Governor turnover = 1 if governor in office for less than or equal to 3 consecutive terms, 0 otherwise (this rule follows Levitsky and Way (2010))
  - Party turnover = 1 if party in office for less than or equal to 3 consecutive terms, 0 otherwise (this rule follows Levitsky and Way (2010))
  - Brazil: Governor turnover = 1 if governor in office for less than or equal to 3 consecutive terms, 0 otherwise (this rule follows Levitsky and Way (2010))
  - Party turnover = 1 if party in office for less than or equal to 3 consecutive terms, 0 otherwise (this rule follows Levitsky and Way (2010))
  - Mexico: Governor turnover = 1 if governor in office for less than 12 consecutive years, 0 otherwise (this rule follows Levitsky and Way (2010))
  - Party turnover = 1 if party in office for less than 12 consecutive years, 0 otherwise (this rule follows Levitsky and Way (2010))
- **Note:** Governor turnover *and* Party turnover are standardized between 0 and 1
- **Source:** *Subnational Politics Project*

## Clean Elections Giraudy (2015) (*clean\_elections\_sub\_exe\_giraudy\_2015*)

- **Description:** Clean Elections (Index of Post-electoral Conflict (Giraudy 2015)).
- **Calculation:** Duration and intensity of post-electoral conflict is calculated following Eisentadt's (2004) index. Post-electoral conflicts are defined as instances of social mobilization following gubernatorial elections in which protestors demand a vote recount. The Index of Post electoral conflict ranges from 0 to 3, where 3 = absence of post electoral conflict, 2 = post electoral conflict lasted less than a week (7 days), and there were no dead and/or human casualties, 1 = post electoral conflict lasted more than a week (8 days to 30 days), and/or people were held in custody, and/or there were human/material casualties, 0 = post electoral conflict lasted more than one month and/or there were human deaths. Post electoral conflicts were manually coded using local newspapers in all 32 states. A list of the newspapers includes:

State	Newspaper
Aguascalientes	Hidrocálido
Baja California	Semanario Zeta
Baja California Sur	El Mexicano
Campeche	Sudcaliforniano
Coahuila	Novedades de Campeche
Colima	El Sol del Norte
Chiapas	El Siglo del Torreón
Chihuahua	Diario de Colima
Distrito Federal	Cuarto Poder
Durango	El Heraldo de Chihuahua
Guanajuato	La Jornada
Guerrero	El Sol de Durango
Hidalgo	El Heraldo de León
Jalisco	El Sol del Bajío
Estado de México	El Universal
Michoacán	El Sol de Chilpancingo
Morelos	El Sol de Acapulco
Nayarit	El Sol de Hidalgo
Nuevo León	El Occidental
Oaxaca	Ocho Columnas
	El Demócrata
	El Sol de Toluca
	El Sol de Morelia
	Diario de Michoacán
	El Sol de Michoacán
	El Diario de Morelos
	Meridiano de Nayarit
	El Heraldo de Nayarit
	El Norte
	El Imparcial

State	Newspaper
Puebla	El Sol de Puebla
	El Herald de Puebla
	Novedades de Puebla
Querétaro	Diario de Querétaro
Quintana Roo	Novedades de Quintana Roo
San Luis Potosí	El Sol de San Luis
Sinaloa	El Sol de Sinaloa
	Nuevo Día
	El Independiente
Sonora	El Imparcial
	Milenio Tabasco
	Avance
Tabasco	El Herald
	El Sol de Tampico
	El Sol de Tlaxcala
Tamaulipas	ABC Noticias
	El Sol de Veracruz
	El Liberal Del Sur
Tlaxcala	Diario de Yucatán
	Diario Sureste
	El Mundo al Día
Veracruz	El Mundo al Día
	Novedades de Zacatecas
Yucatán	
Zacatecas	

- **Coverage:** Mexico 2000-2009
- **Type:** Numeric (ordinal)
- **Source:** Giraudy (2015)

# Data Sources

## Primary Sources

### Argentina:

- Dirección Nacional Electoral ([argentina.gob.ar/dine](http://argentina.gob.ar/dine))
- Cámara Nacional Electoral
- Selected Provincial Electoral Tribunals
- Andy Tow's Electoral Repository ([andytow.com](http://andytow.com))

### Brazil:

- Tribunal Superior Eleitoral ([tse.jus.br](http://tse.jus.br))
- ElectionsBR database (Meireles et al., 2016)
- State Electoral Tribunals

### Mexico:

- Instituto Nacional Electoral ([ine.mx](http://ine.mx))
- State Electoral Institutes (Instituto Electoral Estatal)



# Appendices

## Appendix A: Subnational Units by Country

### Argentina (24 units)

Buenos Aires, Ciudad Autónoma de Buenos Aires, Catamarca, Chaco, Chubut, Córdoba, Corrientes, Entre Ríos, Formosa, Jujuy, La Pampa, La Rioja, Mendoza, Misiones, Neuquén, Río Negro, Salta, San Juan, San Luis, Santa Cruz, Santa Fe, Santiago del Estero, Tierra del Fuego, Tucumán

### Brazil (27 units)

Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso do Sul, Mato Grosso, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Piauí, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Sergipe, Tocantins

### Mexico (32 units)

Aguascalientes, Baja California, Baja California Sur, Campeche, Ciudad de México, Chiapas, Chihuahua, Coahuila, Colima, Durango, Guanajuato, Guerrero, Hidalgo, Jalisco, México, Michoacán, Morelos, Nayarit, Nuevo León, Oaxaca, Puebla, Querétaro, Quintana Roo, San Luis Potosí, Sinaloa, Sonora, Tabasco, Tamaulipas, Tlaxcala, Veracruz, Yucatán, Zacatecas

## Appendix B: State Codes by Country

Table B.1: Complete List of Subnational Units with Codes

Country	Country Code	State Name	State Code	Combined Code	Region
Argentina	032				
Argentina	032	BUENOS AIRES	06	03206	PAMPA
Argentina	032	CAPITAL FEDERAL	02	03202	PAMPA
Argentina	032	CATAMARCA	10	03210	NOROESTE
Argentina	032	CHACO	22	03222	NORDESTE
Argentina	032	CHUBUT	26	03226	PATAGONIA
Argentina	032	CORDOBA	14	03214	CENTRO
Argentina	032	CORRIENTES	18	03218	NORDESTE
Argentina	032	ENTRE RIOS	30	03230	CENTRO
Argentina	032	FORMOSA	34	03234	NORDESTE
Argentina	032	JUJUY	38	03238	NOROESTE
Argentina	032	LA PAMPA	42	03242	PAMPA
Argentina	032	LA RIOJA	46	03246	CUYO
Argentina	032	MENDOZA	50	03250	CUYO
Argentina	032	MISIONES	54	03254	NORDESTE
Argentina	032	NEUQUEN	58	03258	PATAGONIA
Argentina	032	RIO NEGRO	62	03262	PATAGONIA
Argentina	032	SALTA	66	03266	NOROESTE
Argentina	032	SAN JUAN	70	03270	CUYO

Country	Country Code	State Name	State Code	Combined Code	Region
Argentina	032	SAN LUIS	74	03274	CUYO
Argentina	032	SANTA CRUZ	78	03278	PATAGONIA
Argentina	032	SANTA FE	82	03282	CENTRO
Argentina	032	SANTIAGO DEL ESTERO	86	03286	NOROESTE
Argentina	032	TIERRA DEL FUEGO	94	03294	PATAGONIA
Argentina	032	TUCUMAN	90	03290	NOROESTE
BRAZIL	076				
Brazil	076	ACRE	12	07612	NORTE
Brazil	076	ALAGOAS	27	07627	NORDESTE
Brazil	076	AMAPA	16	07616	NORTE
Brazil	076	AMAZONAS	13	07613	NORTE
Brazil	076	BAHIA	29	07629	NORDESTE
Brazil	076	CEARA	23	07623	NORDESTE
Brazil	076	DISTRITO FEDERAL	53	07653	CENTRO OESTE
Brazil	076	ESPIRITO SANTO	32	07632	SUDESTE
Brazil	076	GOIAS	52	07652	CENTRO OESTE
Brazil	076	MARANHAO	21	07621	NORDESTE
Brazil	076	MATO GROSSO DO SUL	50	07650	CENTRO OESTE

Country	Country Code	State Name	State Code	Combined Code	Region
Brazil	076	MATO GROSSO	51	07651	CENTRO OESTE
Brazil	076	MINAS GERAIS	31	07631	SUDESTE
Brazil	076	PARA	15	07615	NORTE
Brazil	076	PARAIBA	25	07625	NORDESTE
Brazil	076	PARANA	41	07641	SUR
Brazil	076	PERNAMBUCO	26	07626	NORDESTE
Brazil	076	PIAUI	22	07622	NORDESTE
Brazil	076	RIO DE JANEIRO	33	07633	SUDESTE
Brazil	076	RIO GRANDE DO NORTE	24	07624	NORDESTE
Brazil	076	RIO GRANDE DO SUL	43	07643	SUR
Brazil	076	RONDÔNIA	11	07611	NORTE
Brazil	076	RORAIMA	14	07614	NORTE
Brazil	076	SANTA CATARINA	42	07642	SUR
Brazil	076	SAO PAULO	35	07635	SUDESTE
Brazil	076	SERGIPE	28	07628	NORDESTE
Brazil	076	TOCANTINS	17	07617	NORTE
MEXICO	484				
Mexico	484	AGUASCALIENTES	01	48401	OCCIDENTE
Mexico	484	BAJA CALIFORNIA	02	48402	NOROESTE

Country	Country Code	State Name	State Code	Combined Code	Region
Mexico	484	BAJA CALIFORNIA SUR	03	48403	NOROESTE
Mexico	484	CAMPECHE	04	48404	SUR
Mexico	484	CDMX	09	48409	CENTRO SUR
Mexico	484	CHIAPAS	07	48407	SUR
Mexico	484	CHIHUAHUA	08	48408	NOROESTE
Mexico	484	COAHUILA	05	48405	NORESTE
Mexico	484	COLIMA	06	48406	OCCIDENTE
Mexico	484	DURANGO	10	48410	NOROESTE
Mexico	484	GUANAJUATO	11	48411	CENTRO NORTE
Mexico	484	GUERRERO	12	48412	SUR
Mexico	484	HIDALGO	13	48413	CENTRO NORTE
Mexico	484	JALISCO	14	48414	OCCIDENTE
Mexico	484	MEXICO	15	48415	CENTRO NORTE
Mexico	484	MICHOACAN	16	48416	OCCIDENTE
Mexico	484	MORELOS	17	48417	CENTRO SUR
Mexico	484	NAYARIT	18	48418	NOROESTE
Mexico	484	NUEVO LEON	19	48419	NORESTE
Mexico	484	OAXACA	20	48420	ORIENTE

Country	Country Code	State Name	State Code	Combined Code	Region
Mexico	484	PUEBLA	21	48421	CENTRO SUR
Mexico	484	QUERETARO	22	48422	CENTRO NORTE
Mexico	484	QUINTANA ROO	23	48423	SUR
Mexico	484	SAN LUIS POTOSI	24	48424	CENTRO NORTE
Mexico	484	SINALOA	25	48425	NOROESTE
Mexico	484	SONORA	26	48426	NOROESTE
Mexico	484	TABASCO	27	48427	SUR
Mexico	484	TAMAULIPAS	28	48428	NORESTE
Mexico	484	TLAXCALA	29	48429	CENTRO SUR
Mexico	484	VERACRUZ	30	48430	ORIENTE
Mexico	484	YUCATAN	31	48431	SUR
Mexico	484	ZACATECAS	32	48432	CENTRO NORTE

## Appendix C: Key References

- Coppedge, Michael. 1997. "A classification of Latin American political parties." *Working Paper #224*. Kellogg Institute.
- Giraudy, Agustina. 2015. *Democrats and autocrats: Pathways of subnational undemocratic regime continuity within democratic countries*. Oxford University Press.
- Laakso, Markku, and Rein Taagepera. 1979. "Effective number of parties: a measure with application to West Europe." *Comparative Political Studies* 12(1): 3-27.
- Meireles, Fernando, Denisson Silva, and Beatriz Costa. 2016. "electionsBR: R functions to download and clean Brazilian electoral data." Available at: <http://electionsbr>
- Murillo, María Victoria, Virginia Oliveros, and Milan Vaishnav. 2010. "Dataset on Political Ideology of Presidents and Parties in Latin America." Columbia University Press.
- Szajkowski, Bogdan. 2005. *Political Parties of the World*. 6th ed. London: John Harper.



Tecnológico de Monterrey  
Escuela de Ciencias Sociales  
y Gobierno