

District concordance note

The CEDA portal contains data across a number of time periods ranging from 1999 upto 2017-18 at district level. Given that districts are constantly revised and redrawn by states, with new districts added or existing districts redrawn, the district data becomes inconsistent and incomparable across years, if no action is taken to standardise the data. There were 593 districts as of census 2001, rising to 640 districts as of census 2011. The periodic labour force survey (PLFS) of the National Sample Survey conducted in 2017-18 uses 646 districts, which itself is an underestimate of the number of new districts formed as of that year.

To ensure comparability of district level data across years, the CEDA portal displays all data concorded and rebased to districts as they existed at the time of the 2011 census. Data for districts that existed before 2011 (and were split or recombined as of 2011), or data for districts formed after 2011, are reweighed to corresponding 2011 districts using population as a weighing factor.

The table below is an example of a district concordance from 2001 to 2011.

state_name_source	district_name_source	state_name_target	district_name_target	date_of_change	notes	concordance_name	source_census_date	target_census_date	share_source_popn_transferred	share_of_source_popn_target_pop
Punjab	Rupnagar	Punjab	Rupnagar	April 5, 2006	https://www.rbi.org.in/SCRIPTS/BS_FemaNotifications.aspx?Id=2896	2001-2011-total	01-01-2001	01-01-2011	0.5709	1
Punjab	Rupnagar	Punjab	Sahibzada Ajit Singh Nagar	April 5, 2006	https://www.rbi.org.in/SCRIPTS/BS_FemaNotifications.aspx?Id=2896	2001-2011-total	01-01-2001	01-01-2011	0.4291	0.651
Punjab	Patiala	Punjab	Patiala	April 5, 2006	https://www.rbi.org.in/SCRIPTS/BS_FemaNotifications.aspx?Id=2896	2001-2011-total	01-01-2001	01-01-2011	0.8608	1
Punjab	Patiala	Punjab	Sahibzada Ajit Singh Nagar	April 5, 2006	https://www.rbi.org.in/SCRIPTS/BS_FemaNotifications.aspx?Id=2896	2001-2011-total	01-01-2001	01-01-2011	0.139	0.349

In this example, a new district called Sahibzada Ajit Singh Nagar (Mohali) was formed in Punjab on April 5 2006, by extracting areas from existing districts of Rupnagar and Patiala. This effectively led to the formation of not one, but three new districts – the new district of Mohali and the redrawing of its parent districts of Rupnagar and Patiala.

The first two columns of the table indicate the state and district names as they existed as of Census 2001. Columns marked 'date of change' and 'notes' indicate the date of formation/reorganisation of district and a source for information about the change.

The concordance name column indicates the concordance system used, and indicates the source and target dates of the system. Since for a given area, there are multiple concordance systems possible (data could be rebased to 1991 or 2015, instead of 2011), each concordance system from a source year to a target year is given a separate name (in this case, '2001-2011-total'). The 'source_census_date' and 'target_census_date' columns indicate the source and target years respectively.

The column marked 'share_source_popn_transferred' indicates the proportion of population from the source district that was transferred to the 'child' district in 2011 after splitting. In this case, with

the formation of Mohali district, 42.9% of erstwhile Rupnagar district's 2001 population was in Mohali, with the balance 57% being maintained within the redrawn (smaller) Rupnagar district. Similarly, 14% of Patiala district population was transferred to Mohali, with 86% of the population remaining in the newly demarcated Patiala district. For a given source district and concordance system, for a given source year, the sum of 'share_source_popn_transferred' across all areas should be 1.

The final column ('share_of_source_pop_in_target_pop ') indicates the other side of the equation. It shows the contribution of the source district population to the final population of the newly formed district. In this case, since the 2011 rupnagar district was wholly carved out from a single parent, the contribution of the parent district to the child district of Rupnagar is 100% (this is the case for the district of Patiala as well). 65% of Mohali's population came from Rupnagar, while the balance 35% of its population is from Patiala. For a given target district and concordance system, for a given target year, the sum of 'share_of_source_pop_in_target_pop' across all areas should be 1.

Sources:

The following sources were used for creating concordances:

2001 to 2011: A set of village level files mapping villages between 2001 and 2011 for each state and for towns for all-India which were available at

<http://egovstandards.gov.in/code-directories-of-generic-data-elements-for-land-region-codification>.

The links to these files are currently broken. But they are made available here.

Districts formed after 2011: Notifications from the Reserve Bank of India describing the formation of new districts.

1991 to 2001: Concordance for 1991 to 2001 and for NSS districts from 1999-2000 was derived from the following paper:

Kumar, Hemanshu and Somanathan, Rohini, "MAPPING INDIAN DISTRICTS ACROSS CENSUS YEARS, 1971-2001", Working Paper No 176, Centre for Development Economics, Delhi School of Economics, March 2009 (Tables 5 and 6c)

Usage of concordance

Absolute values (expressed as number of persons or households for example) are transferred from source districts to target districts using the proportion of source target population transferred to the target district population (i.e. using variable 'share_of_source_pop_in_target_pop' in the example above). Relative values (expressed as percentages or any other normalized variable) are computed as a weighted average across all source districts which are parents of a given target district (e.g. across Rupnagar and Patiala in the example above) with weights being the total source district population as a proportion of the target district population (i.e. using the variable 'share_of_source_pop_in_target_pop' in the example above).