

Monitoring Education for Roma

2006

*A Statistical Baseline for
Central, Eastern, and South Eastern Europe*



OPEN SOCIETY INSTITUTE

EDUCATION SUPPORT PROGRAM

Introduction

There is a fundamental lack of accurate information on Roma in Central, Eastern, and South Eastern Europe. The official census data that does exist in these countries consistently underestimates the size of the Roma population and provides inadequate information about Roma participation in all spheres of life. Governments in the region are reluctant to collect ethnically disaggregated data. They defend this on the grounds that laws and regulations on citizen protection and privacy bar them from gathering such information, thus exploiting European anxieties about racial profiling both to conceal endemic discrimination against Roma and to hide the inadequacy of official efforts to secure rights and improve quality of life for Roma. Actually, the European Union consistently maintains the principle that citizen protection and privacy rules apply to personal data, and not to aggregate data about groups, or to data broken down according to ethnicity or other criteria.

This failure has far-reaching consequences: the lack of information renders policy and planning ineffective and makes it impossible to monitor changes. Inadequate data also perpetuates vast disparities in access to quality education. Inadequate information will continue to enable governments to evade responsibility for failing to create, fund, and implement effective programs for Roma integration. What is known for sure, however, is that only a tiny minority of Roma children ever complete school and the education to which they do have access is typically vastly inferior.

In response to this situation and in the interests of promoting education justice for Roma, the Open Society Institute presents here the best available data on Roma education in Central, Eastern, and South Eastern Europe. The inadequacy of the available information is plainly apparent in the table presented in this document, and the methodological challenges presented by attempting such a set of (roughly) comparative data were considerable. Nevertheless, the Statistical Baseline for Central, Eastern, and South Eastern Europe is an unprecedented compilation. This report collates information from 19 countries. It provides the clearest, most accurate image yet of Roma participation across a broad range of key education indicators, including enrollment and completion in primary, secondary, and tertiary education.

Effective policy is dependent on adequate data and other information. However, improving education for Roma also requires significant commitment to desegregation and delivery in education. In July 2003, OSI and the World Bank organized “Roma in an Expanding Europe: Challenges for the Future” to assist this process. This forum, the first high-level regional conference on the Roma, produced a resolution establishing the Decade of Roma Inclusion 2005–2015, which is potentially the most comprehensive effort ever undertaken to substantively improve the quality of life for Roma in Europe. The nine countries taking part in the Decade are Bulgaria, Croatia, the Czech Republic, Hungary, Macedonia, Montenegro, Romania, Serbia, and Slovakia. Conference participants identified education as a priority, and set up the Roma Education Fund to make an impact in education delivery. These national governments committed themselves to developing new strategies and action plans for improving educational opportunities for Roma children. Daunting challenges remain, even in the most committed countries, to achieving the desired goals in education.

The information in the Statistical Baseline for Central, Eastern, and South Eastern Europe demonstrates just how far behind the Roma are in the area of education. Majority populations have much better enrollment and completion rates, as the following examples attest:

- **In Serbia, over 66 percent of the general population had completed primary education in 2002. According to the table, by comparison only 36.1 percent of Serbia’s Roma had done so.**
- **In Slovenia, 96 percent of the general population had completed primary education in 2003. The table does not yet contain a reliable estimate of the portion of Roma in Slovenia who have completed primary education. But one survey showed that 98.2 percent of the 1,650 registered unemployed Roma in one community—representing about half of Slovenia’s Roma population, according to the table—had not completed primary education.**
- **In Bulgaria, 81 percent of all persons between 16 and 19 years of age are enrolled in secondary education. One estimate says that only 12 percent of the country’s Roma between 16 and 19 years of age are enrolled in secondary education, and the table shows that only 7.6 percent of all Roma complete secondary education.**

Significant efforts are necessary to develop better data and statistics for Roma over a range of priority issues, starting with more reliable and realistic population figures. OSI calls upon the countries of Central, Eastern, and South Eastern Europe to do the following:

- **Clarify the scope and degree to which privacy and citizen-protection laws and regulations preclude collecting data disaggregated by ethnicity, color, religion, language, gender, age, location, and nationality.**
- **Develop data collection procedures and mechanisms for education that provide disaggregated data.**
- **Create criteria and standards for data collection that will allow country-by-country and region-by-region comparison over time.**
- **Collect data anonymously and with adequate safeguards for protecting sensitive information and the identity and privacy of individuals.**

OSI by no means suggests that governments resort to compulsory racial, ethnic or religious profiling in school admissions or in any other situations. We do insist that the provision of reasonably accurate information on education for Roma, and other minority communities, is the responsibility of government, primarily through its central statistical services. We call for governments in Central, Eastern, and South Eastern Europe to collaborate effectively with Roma and other minority communities to develop effective ways to research and provide this information on a regular and systematic basis.

At the same time, we affirm that any and all such information on communities and individuals, at all times, be self-reported and provided willingly. In this way, the ability to obtain the data is an indicator of the confidence that people have in the system to describe themselves as they choose. The data itself provides information on the ability of the schooling system to meet the needs of minority, migrant, and otherwise marginalized communities. Both are key indicators of the open societies we want to achieve.

Methodological Discussion

The methodology used to derive these statistics allows for rough cross-border comparisons previously impossible to contemplate. It presents a vitally informative baseline for governments, international donors, transnational organizations, and Roma activists—a first step to assess progress toward improving life for the Roma in these regions.

To create this data set, numbers were extracted from the most recent reports and documents (strategies, policy documents, project reports, research reports, evaluation studies, and various other forms of reporting) available. Since sources used in the creation of this table were produced to different standards and for different purposes, they seldom offered information that could simply be inserted directly into the table: various formulas had to be developed to allow for the rough comparison across countries.

There are significant limitations to this data set. These arise from the variable dates of the data sources, the fact that few up-to-date statistics are available, and, in many cases, the reliability of the data was as questionable as the data was scarce. Nevertheless, despite the state of the available information, it was possible to derive estimates of numbers and percentages for the main indicators in education for Roma. This was achieved by using not only the existing information, but also by developing a set of calculations. In the absence of reliable data, this table and its methodology provide the only possible baseline for the state of education for Roma at the beginning of the Decade of Roma Inclusion. The only other option was to do nothing at all—and that was clearly unacceptable.

The information made available in the sources came in many different forms and situations. In order to properly address this, a relevant procedure for calculation was established for each individual case. Specific calculations were developed for each column that take into account the manner in which data was made available. They are presented here for the readers' review.

The decision as to what number to use in calculating estimates is an important general issue. The choices are to use either the government's official number or civil society estimates for the Roma population. Since it is widely recognized that official statistics grossly underrepresent the real numbers of Roma, numbers that are calculated and derived against this figure are most likely to be disproportionately large, and thus to misrepresent real education outcomes in favor of governments' preferred view of their delivery. On the other hand, there are many different estimates for Roma populations in the countries concerned. Those included in this table are considered "consolidated estimates" and are accepted by a majority of stakeholders and participants. Often, the "consolidated estimates" represent ranges of data. Numbers and percentages that are derived from civil society estimates of Roma populations are likely to seem paltry, and may paint an unfair picture for governments. At this point, the reality perhaps lies somewhere in between. Given the variance in numbers for the Roma population, and rather than presenting one over the other as the "truth," the "range" in data is presented to show that a wide gap between the two sets of numbers exists. This enables the reader to see that a number of possibilities exist, and to make clear that, at present, no one knows for sure what the real numbers are.

The editor of this report chose to present the range in data for all indicators, since the variability originates with the numbers for the Roma population, against which all other calculations stem. The presentation of such a range demonstrates that the table does not pretend to have the absolute numbers for these important indicators.

Lack of data has created large gaps in the existing table, visible absences that in themselves clearly point to related important issues for many countries. First, these gaps demonstrate the lack of data generally for Roma. Second, they highlight the general dearth of publications on the topic of Roma education across the region—more publications would make existing data more accessible to a wider audience. Finally, these absences illustrate the current scarcity of people who are committed to or researching this topic.

The review of methodology is organized by columns in the table. First, the kind of information presented in each column is explained. Following a clarification of terms, the calculation, the means and procedure for deriving estimated numbers, is presented. In the case of columns where different calculations exist, each is explicated separately in detail, showing for which countries that particular calculation is used. Finally, at the end of the explanation for each calculation, a country case is presented as a concrete, clarifying example.

Due to the differences in officially and unofficially reported data for Roma populations, a range of numbers and percentages exists in the table. The percentage range is shown when a number was found in the source. The number range is shown when a percentage was found in the source.

Table 1

International Comparative Data Set on Roma Education: Primary Education

	COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6
Country	Total Population (official) (millions)	Roma Population (official)	Roma Population (estimated)	Number and Percentage of Roma Children under 18	Roma Enrolled in Primary Education ⁱ	Roma Who Completed Primary Education
Albania	3.07	1,261 0.04%	90,000–100,000 3.1%	631–47,500 † 50% ^a	135–10,133 48.0% ^b	178–13,411 24.2% ^d
Bosnia and Herzegovina	3.83	8,864 0.23%	40,000–50,000 1.18%	4,077–20,700 46.0% ^a	906–4,600 50.0% ^b	1,782–9,047 32.6% ^d
Bulgaria*	7.93	370,908 4.68%	500,000–800,000 8.67%	146,880–257,400 39.6% ^a	31,139–54,569 47.7% ^b	114,811–201,201 46.2% ^d
Croatia*	4.44	9,463 0.21%	30,000–40,000 0.80%	4,684–17,325 49.5% ^a	1,700 ^c 81.7%-22.1%	1,301–4,846 25.2% ^e
Czech Republic*	10.23	11,746 0.11%	175,000–200,000 1.8%	5,638–96,000 48% ^a	unavailable	unavailable
Estonia	1.36	unavailable	1,000–1,500 0.09%	unavailable	unavailable	unavailable
Hungary*	10.1	189,984 1.9%	520,000–650,000 5.85%	81,123–249,795 42.7% ^a	18,027–55,510 50% ^b	74,385–229,047 60.8% ^f
Kosovo	2	34,000 1.7%	45,000 2.25%	17,049–22,564 50.1% ^a	1,332 ^c 17.6%-13.3%	6,417–8,493 32.4% ^d
Latvia	2.38	8,205 0.35%	13,000–15,000 0.59%	2,831–4,829 34.5% ^a	1,005 ^c 78.7%-46.8%	1,931–3,222 32.3% ^e
Lithuania	3.48	2,571 0.07%	3,000–4,000 0.1%	1,169–1,591 45.5% ^a	unavailable	688–937 43.1% ^d
Republic of Macedonia*	2.02	53,879 2.69%	135,490 6.77%	20,782–52,260 38.6% ^a	6,680 ^c 72.3%-28.8%	18,566–46,689 50.8% ^d
Moldova	3.39	12,900 0.38%	20,000–25,000 0.66%	unavailable	1,193 ^c % inestimable	unavailable
Montenegro*	0.67	2,601 0.43%	13,510 2.02%	1,345–6,984 51.7% ^a	1,006 ^c 168.3%-32.4%	293–1,523 19.8% ^d
Poland	38.2	12,731 0.03%	15,000–50,000 0.08%	6,577–16,789 51.7% ^a	2,045 ^c 70.0%-27.4%	unavailable
Romania*	21.7	535,140 2.5%	1,800,000–2,000,000 8.76%	230,854–819,639 43.1% ^a	64,756 ^c 63.1%-17.8%	108,711–385,974 31.7% ^d
Serbia*	7.5	108,193 1.44%	450,000–500,000 6.33%	44,375–194,818 41% ^a	17,323 ^c 87.8%-20.0%	25,713–112,888 36.1% ^d
Slovakia*	5.4	89,920 1.67%	480,000–520,000 9.26%	39,130–217,582 43.5% ^a	40,375 ^c 232.2%-41.8%	44,025–244,800 76.8% ^d
Slovenia	1.97	3,246 0.16%	8,000–10,000 0.46%	1,506–4,176 46.4% ^a	1,547 ^c 231.1%-83.4%	unavailable
Ukraine	48.5	47,600 0.1%	50,000–60,000 0.11%	unavailable	unavailable	unavailable

*Countries participating in the Decade of Roma Inclusion, 2005-2015

Table 1

International Comparative Data Set on Roma Education: Primary Education

Notes: Data in **bold** have been taken directly from the source, whereas data in regular font have been calculated.

Data marked with † means that the original data stated the number/percentage of Roma children aged 0-18.

- (i) Primary (compulsory) education in most countries covers grades 1-8 (7-14 age range).
- (a) The source provides information in percentage, so the estimated number of Roma under 18 is calculated both against the official and estimated Roma populations (columns 2 and 3), and is presented as a range (the first estimated number of Roma under 18 is calculated against official statistics and the second against the median of the estimated Roma population).
- (b) The source provides the percentage of Roma who are enrolled at a certain level of education. Based on that percentage, the number of Roma is estimated as a range (the first number represents the estimated number of Roma enrolled at that level of education based on official data, and the second is based on the estimated number of Roma in the appropriate age range – column 4).
- (c) The source provides the number of Roma who are enrolled at a certain level of education. Based on that number, the percentage of Roma is estimated as a range (the first percentage represents the estimated percentage of Roma enrolled at that level of education based on official data, and the second one is based on the estimated number of Roma in the appropriate age range – column 4).
- (d) The source provides the percentage of Roma aged 15 years and above who have completed a certain level of education. Based on this percentage, the number of Roma is estimated as a range (the first number represents the estimated number of Roma aged 15 years and above who have completed this level of education based on official data, and the second number represents the estimated number of Roma aged 15 years and above who have completed this level of education based on the estimated number of Roma – column 4).
- (e) The source provides the official number and percentage of Roma aged 15 years and above who have completed a certain level of education. Based on the given percentage, the second number is calculated (which represents the estimated number of Roma aged 15 years and above who have completed this level of education based on the estimated number of Roma – column 4).
- (f) The source provides the official number of Roma aged 15 years and above who have completed a certain level of education. Based on this the percentage of Roma aged 15 years and above who have completed this level of education is calculated (against the official number of Roma aged 15 years and above). Based on this percentage, the estimated number of Roma aged 15 years and above who have completed that level of education is calculated (based on the estimated number of Roma – column 4).

Short definition of columns:

Column 1: Total Population (official): numbers were taken from each country's latest census and were taken directly from the source or from the National Statistical Offices website.

Column 2: Roma Population (official): the official number and percentage of Roma (in most cases taken from Census data).

Column 3: Roma Population (estimated): the unofficial estimate is presented in most cases as a range. The percentage equals the median of the estimated numbers calculated against the official total population.

Column 4: Number and Percentage of Roma Children under 18: The estimated number of Roma under 18 is presented as a range. The first number is based on official data, and the second number is based on the median of the estimated Roma population.

Column 5: Roma Enrolled in Primary Education: Data taken from the source is in **bold**. Data which are calculated are presented as a range. The first estimate is calculated against official data, and the second one against unofficial data regarding the total number of Roma in the 7-14 age range who are eligible to be enrolled in Primary Education.

Column 6: Roma Who Completed Primary Education: Data taken from the source is in **bold**. Data which are calculated are presented as a range. The first estimate is calculated against official data and the second one against unofficial data regarding the number of Roma aged 15 years and above (those who could have completed at least primary education which is compulsory).

Table 1

International Comparative Data Set on Roma Education: Primary Education

Methodological Explanation²

COLUMN 1: TOTAL POPULATION (OFFICIAL)

Information for the official population of each country is based on each country's latest census and was taken directly from the source or from the National Statistical Offices website.

COLUMN 2: ROMA POPULATION (OFFICIAL)

The first row represents the official number of Roma and the second row represents the percentage. The percentage was calculated by dividing the official number of Roma by the official total population. The number was taken directly from the source or from the website of the National Statistical Offices.

COLUMN 3: ROMA POPULATION (ESTIMATED)

The first row represents the number of Roma in a country as estimated by Roma organizations or by relevant NGOs. In many cases a "consolidated estimation" is presented as a range. The second row represents the percentage of the estimated Roma population as per the official total population. The percentage is calculated by dividing the median of the range of the estimated Roma population by the official total population. For example, the estimated range of the Roma population in Bulgaria is between 500,000 and 800,000. In order to estimate the percentage of the Roma population, the median of this range was taken (650,000) and was divided by the official Bulgarian population (7.93 million), which calculates to 8.67 percent.

It is necessary to point out that the estimated figures given for Kosovo refer to the Roma, Ashkali, and Egyptian (RAE) population and that it was not possible to extract the figure solely for the Roma population.

COLUMN 4: NUMBER AND PERCENTAGE OF ROMA CHILDREN UNDER 18

The first row represents the number of Roma children under 18 as expressed as a range. The first number is an estimate based on the official Roma population (column 2), whereas the second number is an estimate based on the median of the estimated Roma population (column 3).

The second row represents the percentage of Roma children under 18 within the total Roma population. Since information found in the sources is very diverse varying country by country, all possible calculations regarding how the percentages and estimated range of numbers are obtained is explained. It should be pointed out that this information is not available for Estonia, Moldova, and Ukraine.

Table 1

International Comparative Data Set on Roma Education: Primary Education

Calculation 1 – The information is given in the source

Although data obtained directly from the source is the most exact, at the same time it is the rarest. In this calculation the percentage of Roma under 18 is available from the source. In order to estimate the range of the number of Roma children under 18, the percentage is multiplied by the official and estimated Roma population numbers (columns 2 and 3). The first and smaller number in the range represents the number of Roma under 18 based on official data (column 2), whereas the second and larger number represents the estimated number of Roma under 18 based on the median of the estimated Roma population (column 3). This is the case for Albania and Latvia.

For example, in the case of Albania the original information says that “over half of the Roma population is under 18 years of age, *Denied a future: The education of Roma/Gypsy traveller children in Europe*, 2001 (pg. 32). This information is taken as a percentage of the total number of children within the Roma population. To obtain the estimated number of Roma children under 18, this percentage is multiplied first by the official Roma population in Albania (column 2), and then by the median of the range of the estimated Roma population (column 3). In so doing it can be estimated that in Albania there are between 631 and 47,500 Roma under 18 years of age.

Calculation 2 – Estimate is based on the percentage of the Roma population in a certain age group

This calculation is applied in the case when the percentage of Roma children which is given in the source does not cover the 0-18 age range, but a different age range. The age range for which the percentage is given varies from country to country. In most cases the 0-14 or 0-19 age ranges are covered. Whatever the age ranges that are covered in the source, recalculation is done based on the same assumption: all one-year cohorts covered in the source are of the same size. Based on this assumption, and given the percentage of Roma children in a certain age range, it is possible to estimate the percentage of Roma children who belong to one cohort as an average percentage for the referred-to age range. Once the percentage of Roma children per cohort is estimated, it is then multiplied by 18 (the number of one-year cohorts under 18) in order to estimate the percentage of Roma children under 18 within the Roma population. In order to calculate the range of the number of Roma under 18, the percentage of Roma children under 18 is multiplied first by the official Roma population (column 2), and then by the median of the estimated Roma population (column 3). This calculation is applied for Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Hungary, Kosovo, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia, and Slovenia.

The Croatia case can be used as an example for this calculation. The information for Croatia was taken from *A background document prepared for the REF donors conference* (2004). The original data says that 55 percent of Roma are under the age of 20 (pg. 5). Assuming that there is an equal percentage of children per one-year cohort, the percentage of Roma children under 20 (55 percent) is divided by 20 (the number of years which means that the percentage of Roma per cohort would be 2.75 percent). In order to estimate the percentage of

Table 1

International Comparative Data Set on Roma Education: Primary Education

Roma children under 18 within the estimated Roma population, 2.75 percent is multiplied by 18, which calculates to 49.5 percent. Once this has been done, this percentage (49.5 percent) is multiplied by the median of the range of the estimated Roma population in Croatia (35,000), which calculates to 17,325.

COLUMN 5: ROMA ENROLLED IN PRIMARY EDUCATION

The first row represents the number of Roma children who are enrolled in primary education. The percentage shown represents the net enrollment of Roma children in primary school (the number of students who are actually enrolled against the number of students who are eligible to be enrolled in the 7–14 age range).

For some countries, the source gives the percentage of Roma enrolled in primary education. In this case, the number of Roma students in primary education is calculated as a range, with the first number calculated by the official number of Roma in the 7–14 age range, and second one calculated with the estimated number of Roma in the 7–14 age range. The number of students in this age range is calculated based on the number of Roma under 18 years of age (which is explained below). In other cases, the source gives the number of Roma students enrolled in primary education. In such a case, the percentage is expressed as a range with the first percentage calculated against official data regarding the number of Roma in 7–14 age range, and the second against the estimated number of Roma in the 7–14 age range.

In order to calculate the percentage, it is first necessary to calculate the total number of Roma children in the 7–14 age range who are eligible to be enrolled in primary education (in other words, the number of Roma children enrolled in primary education if all Roma children from the appropriate age range—usually 7–14—were to be enrolled). Since there is already information regarding the number of Roma under 18 (official and estimated), the number of Roma in the 7–14 age range is first calculated based on the assumption that all one year cohorts under 18 are of equal size. After, the percentage is calculated against both the official and estimated numbers of Roma in the 7–14 age group, which produces a range of percentages. The first one shows what the percentage of Roma enrollment would be according to official data, and the second one according to estimated data.

One should bear in mind that since the estimated Roma population is a few times larger than official data, net enrollment calculated with the estimated number of Roma children is much lower than the net enrollment calculated with official data.

This information was not available for the Czech Republic, Estonia, Lithuania, and Ukraine.

Table 1

International Comparative Data Set on Roma Education: Primary Education

Calculation 1 – Estimated based on the number of Roma children enrolled in primary education

In this calculation the number of Roma children enrolled in primary education is provided in the source. This calculation is applied in the cases of Croatia, Kosovo, Latvia, Macedonia, Moldova, Montenegro, Romania, Poland, Serbia, Slovakia, and Slovenia.

In order to calculate the percentage, the number of Roma children enrolled in primary education is divided by the estimated number of Roma children in the 7–14 age range (see above explanation on how the number is calculated based on the estimated number of Roma children under 18 from column 4). In this way, a percentage range presented in the table is calculated. The first percentage represents the net enrollment based on the official numbers of Roma in the 7–14 age range, and the second percentage represents the net enrollment based on the estimated number of Roma in the 7–14 age range.

It should be noted that in the case of Montenegro, Slovenia, and Slovakia the percentage of Roma enrolled in primary education which is calculated based on the official numbers of Roma in the 7–14 age range is bigger than 100 percent. This could be taken as an indicator that official statistics underestimate the size of the Roma population.

Due to the fact that the estimated number of Roma children under 18 (column 4) is unavailable for Moldova, the percentage of Roma children enrolled in primary education cannot be calculated. In this case, only the number of Roma children enrolled in primary education is included in the table.

Romania can be used as an example for this calculation. In the source document, *REF Needs assessment study – Romania, 2004*, (p. 11) it is stated that 64,756 Roma children were enrolled in primary education in the 2002–2003 school year. In column 4 of the table, it is estimated that the number of Roma children under 18 is in the range of 230,854–819,639. Assuming that all one-year cohorts of children under 18 are of the same size, the size of one cohort of children under 18 can be estimated by dividing 230,854 and 819,639 by 18. When calculated, the number of Roma children in one cohort is in the range of 12,825 to 45,535. Multiplying these numbers by 8 (number of cohorts in the 7–14 age range) gives the official and estimated size of Roma in the 7–14 age range as 102,602 to 364,284 children. Finally, in order to calculate the official and estimated percentages, the number of Roma children enrolled in primary education (64,756) is divided by the official and estimated number of Roma who should be enrolled in primary education (102,602 and 364,284 respectively), which gives an estimation that the net enrollment in primary education for Roma is not higher than 63.1 percent and not smaller than 17.8 percent, as presented in the table as a range.

Calculation 2 – Estimate based on the percentage of Roma children enrolled in primary education

In this calculation the percentage of Roma children enrolled in primary education is available in the source. Albania, Bosnia and Herzegovina, Bulgaria, and Hungary fall into this category.

Table 1

International Comparative Data Set on Roma Education: Primary Education

In order to calculate the number of Roma children enrolled in primary education in these countries, the percentage of Roma children enrolled in primary education is multiplied by both the official and estimated number of Roma children in the 7–14 age range (see above explanation regarding how the number is calculated based on the official and estimated number of Roma children under 18 from column 4). Therefore, the number of Roma children enrolled in primary education is expressed as range.

Bosnia and Herzegovina may be used as example for this calculation. Information that approximately 50 percent of Roma children between 7–14 years attend primary education is taken from the UNDP website “Vulnerable groups in Central and South East Europe” (<http://vulnerability.undp.sk/>). The official and estimated number of Roma children under 18 for Bosnia and Herzegovina (column 4) is 4,077 and 20,700 respectively. In order to estimate the size of one cohort of Roma children under 18, these numbers (4,077 and 20,700) are divided by 18, which calculates to 227 and 1,150 children. To obtain the estimated number of Roma children in the 7–14 age range (who should be enrolled in primary education), the official and estimated size of one cohort (227 and 1,150) is multiplied by 8 (the number of grades in primary education). By this calculation, the total number of Roma children who should be enrolled in primary education in Bosnia and Herzegovina, according to both official statistics and estimated data, is between 1,812 and 9,200 children. Finally, to estimate the number of Roma children who are enrolled in primary education, the official and estimated numbers of Roma children in the 7–14 age range are multiplied by the percentage of Roma children enrolled in primary education (50 percent). This gives an estimation that the number of Roma children in the 7–14 age range who are enrolled in primary education in Bosnia and Herzegovina is not smaller than 906 and not larger than 4,600 children, which is presented in the table as a range.

COLUMN 6: ROMA WHO COMPLETED PRIMARY EDUCATION

This column represents the number and percentage of Roma who have completed primary education, and includes those for whom this is the highest educational level and those who have completed upper educational levels as well. This information is not available for the Czech Republic, Estonia, Moldova, Poland, Slovenia, and Ukraine.

It should be noted that the number and percentage of Roma who have completed primary education is calculated not based on the total Roma population, but based on Roma aged 15 years and above since children younger than 15 have not completed compulsory education. The second reason for calculating this way is due to the fact that, in most cases, census data for education attainment is presented for the population aged 15 years and above.

Table 1

International Comparative Data Set on Roma Education: Primary Education

In order to calculate numbers and percentages, it was first necessary to estimate the size of the Roma population aged 15 years and above. Again, this was done separately with both official and estimated data. Since information regarding the percentage of Roma under 18 already exists, the percentage of Roma under 15 was first calculated assuming equal size of one-year cohorts in the 0–18 age range. When the percentage of Roma under 15 is subtracted from the total Roma population (100 percent), the percentage of Roma above 15 years of age is obtained. For example, in Poland 51.7 percent of Roma are under 18. This percentage is first divided by 18 in order to estimate the size of one cohort. This number is then multiplied by 15 in order to calculate the percentage of Roma under 15. This calculates to 43.1 percent of Roma being under 15, which means that 56.9% of Roma are above 15 years of age. Once the percentage of Roma aged 15 years and above is calculated, it is first multiplied by the official Roma population (column 2), and then by the median of the range of the estimated Roma population (column 3). In this way both the official and estimated number of Roma in a country aged 15 years and above is calculated.

Calculation 1 – Estimate based on the percentage of Roma who have completed primary education

In the case of most countries (Albania, Bosnia and Herzegovina, Bulgaria, Kosovo, Lithuania, Macedonia, Montenegro, Romania, Serbia, and Slovakia), sources contain the percentage of Roma who have completed primary education. In order to estimate the number of Roma who have completed primary education, the percentage is first multiplied by the official number, and then by the estimated number of Roma aged 15 years and above. This produces a range which is presented in the table with the first and smaller number based on official data and the second and larger number based on the estimated number of Roma in a country.

Serbia may serve as an illustration. The source *REF Need Assessment Summary Report*, World Bank, 2005, says that 36.1 percent of Roma in Serbia have completed primary education (pg. 8). Following this, the number of Roma aged 15 years and above is calculated. Since 41 percent of Roma in Serbia are under 18, and assuming equal size of one-year cohorts in this age range, the average size of one cohort under 18 can be calculated, by dividing 41 percent by 18, which calculates to about 2.28 percent per cohort. Then this percentage for one cohort is multiplied by 15 (number of cohorts under 15) which calculates to 34.2 percent of Roma in Serbia being under 15, which means that 65.8 percent of Roma in Serbia are aged 15 years and above. To calculate the number of Roma aged 15 years and above in Serbia, this percentage is multiplied first by the official Roma population (108,193), and then by the median of the estimated Roma population (475,000), which produces a range of 71,227–312,708. Finally, in order to calculate the official and estimated numbers of Roma in Serbia aged 15 years and above who have completed primary education, the percentage of Roma who have completed primary education (36.1 percent) is multiplied by the official (71,227) and estimated numbers (312,708) of Roma aged 15 years and above. This gives an estimation that in Serbia there is not less than 25,713 and not more than 112,888 of Roma who have completed primary education.

Table 1

International Comparative Data Set on Roma Education: Primary Education

Calculation 2 – Estimate based on the number of Roma who have completed primary education

This calculation is applied in the case of Hungary only. The website of the Hungarian Central Statistical office Census 2001 presents data on the educational attainment of Roma (www.nepszamlalas.hu/eng/volumes/06/00/tabeng/2/load01_8_0.html). According to data there are 74,385 Roma aged 15 years and above in Hungary who have completed primary education. In order to calculate the percentage, this number is divided by the official number of Roma in Hungary aged 15 years and above (122,381) which calculates that about 60.8 percent of Roma have completed primary education. Based on that, the estimated number of Roma who have completed primary education is calculated by multiplying this percentage by the estimated number of Roma in Hungary aged 15 years and above (376,838). It can be estimated that about 229,047 Roma in Hungary have completed primary education. Therefore, in Hungary one can expect to find between 74,385 and 229,047 Roma who have completed primary education.

Calculation 3 – Estimate based on the official number and percentage of Roma who have completed primary education

This calculation pertains to Croatia and Latvia. In these cases sources provide information regarding the official number and percentage of Roma who have completed primary education. Based on the official percentage, the estimated number of Roma who have completed primary education is calculated by multiplying the official percentage by the estimated Roma population aged 15 years and above.

Latvia may be used to illustrate this calculation. The source states that according to data from the 2000 Census, 1,931 out of 5,985 Roma aged 15 years and above have completed primary education, which calculates to approximately 32.3 percent. In order to calculate the estimated number of Roma who have completed primary education, this percentage (32.3 percent) is multiplied by the estimated number of Roma in Latvia who are 15 years and above (9,975), which gives an estimation that 3,222 Roma in Latvia have completed primary education. Therefore, it can be said that in Latvia between 1,931 and 3,222 Roma have completed primary education.

Table 2

International Comparative Data Set on Roma Education: Secondary Education

	COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6
Country	Total Population (official) (millions)	Roma Population (official)	Roma Population (estimated)	Number and Percentage of Roma Children under 18	Roma Enrolled in Secondary Education ⁱⁱ	Roma Who Completed Secondary Education
Albania	3.07	1,261 0.04%	90,000–100,000 3.1%	631–47,500 † 50% ^a	unavailable	32–2,383 4.3% ^d
Bosnia and Herzegovina	3.83	8,864 0.23%	40,000–50,000 1.18%	4,077–20,700 46.0% ^a	18–92 2.0% ^b	525–2,664 9.6% ^d
Bulgaria*	7.93	370,908 4.68%	500,000–800,000 8.67%	146,880–257,400 39.6% ^a	unavailable	17,893–31,356 7.2% ^d
Croatia*	4.44	9,463 0.21%	30,000–40,000 0.80%	4,684–17,325 49.5% ^a	200 ^c 19.2%-5.2%	322–1,192 6.2% ^e
Czech Republic*	10.23	11,746 0.11%	175,000–200,000 1.8%	5,638–96,000 48% ^a	31–533 2.5% ^b	85–1,350 1.2% ^d
Estonia	1.36	unavailable	1,000–1,500 0.09%	unavailable	unavailable	unavailable
Hungary*	10.1	189,984 1.9%	520,000–650,000 5.85%	81,123–249,795 42.7% ^a	unavailable	15,775–48,574 12.9% ^f
Kosovo	2	34,000 1.7%	45,000 2.25%	17,049–22,564 50.1% ^a	168 ^c 4.4%-3.4%	891–1,180 4.5% ^d
Latvia	2.38	8,205 0.35%	13,000–15,000 0.59%	2,831–4,829 34.5% ^a	unavailable	499–828 8.3% ^e
Lithuania	3.48	2,571 0.07%	3,000–4,000 0.1%	1,169–1,591 45.5% ^a	unavailable	450–613 28.2% ^d
Republic of Macedonia*	2.02	53,879 2.69%	135,490 6.77%	20,782–52,260 38.6% ^a	569 ^c 12.3%-4.9%	4,240–10,661 11.6% ^d
Moldova	3.39	12,900 0.38%	20,000–25,000 0.66%	unavailable	596 ^c % inestimable	unavailable
Montenegro*	0.67	2,601 0.43%	13,510 2.02%	1,345–6,984 51.7% ^a	unavailable	55–285 3.7% ^d
Poland	38.2	12,731 0.03%	15,000–50,000 0.08%	6,577–16,789 51.7% ^a	unavailable	unavailable
Romania*	21.7	535,140 2.5%	1,800,000–2,000,000 8.76%	230,854–819,639 43.1% ^a	unavailable	32,922–116,888 9.6% ^d
Serbia*	7.5	108,193 1.44%	450,000–500,000 6.33%	44,375–194,818 41% ^a	unavailable	6,410–28,144 9.0% ^d
Slovakia*	5.4	89,920 1.67%	480,000–520,000 9.26%	39,130–217,582 43.5% ^a	unavailable	8,599–47,813 15.0% ^d
Slovenia	1.97	3,246 0.16%	8,000–10,000 0.46%	1,506–4,176 46.4% ^a	40 ^c 12.0% - 4.3%	unavailable
Ukraine	48.5	47,600 0.1%	50,000–60,000 0.11%	unavailable	unavailable	unavailable

*Countries participating in the Decade of Roma Inclusion, 2005-2015

Table 2

International Comparative Data Set on Roma Education: Secondary Education

Notes: Data in **bold** have been taken directly from the source, whereas data in regular font have been calculated.

Data marked with † means that the original data stated the number/percentage of Roma children aged 0-18.

- (ii) Secondary education is considered post-primary, usually covering grades 9-12 (14-18 age range). Academic lyceums as well as technical schools are considered in this category.
- (a) The source provides information in percentages, so the estimated number of Roma under 18 is calculated both against the official and estimated Roma populations (columns 2 and 3), and is presented as a range (the first estimated number of Roma under 18 is calculated against official statistics and the second against the median of the estimated Roma population).
- (b) The source provides the percentage of Roma who are enrolled at a certain level of education. Based on that percentage, the number of Roma is estimated as a range (the first number represents the estimated number of Roma enrolled at that level of education based on official data, and the second is based on the estimated number of Roma in the appropriate age range – column 4).
- (c) The source provides the number of Roma who are enrolled at a certain level of education. Based on that number, the percentage of Roma is estimated as a range (the first percentage represents the estimated percentage of Roma enrolled at that level of education based on official data, and the second one is based on the estimated number of Roma in the appropriate age range – column 4).
- (d) The source provides the percentage of Roma aged 15 years and above who have completed a certain level of education. Based on this percentage, the number of Roma is estimated as a range (the first number represents the estimated number of Roma aged 15 years and above who have completed this level of education based on official data, and the second number represents the estimated number of Roma aged 15 years and above who have completed this level of education based on the estimated number of Roma – column 4).
- (e) The source provides the official number and percentage of Roma aged 15 years and above who have completed a certain level of education. Based on the given percentage, the second number is calculated (which represents the estimated number of Roma aged 15 years and above who have completed this level of education based on the estimated number of Roma – column 4).
- (f) The source provides the official number of Roma aged 15 years and above who have completed a certain level of education. Based on this the percentage of Roma aged 15 years and above who have completed this level of education is calculated (against the official number of Roma aged 15 years and above). Based on this percentage, the estimated number of Roma aged 15 years and above who have completed that level of education is calculated (based on the estimated number of Roma – column 4).

Short definition of columns:

Column 1: Total Population (official): numbers were taken from each country's latest census and were taken directly from the source or from the National Statistical Offices website.

Column 2: Roma Population (official): the official number and percentage of Roma (in most cases taken from census data)

Column 3: Roma Population (estimated): the unofficial estimate is presented in most cases as a range. The percentage equals the median of the estimated numbers calculated against the official total population.

Column 4: Number and Percentage of Roma Children under 18: The estimated number of Roma under 18 is presented as a range. The first number is based on official data, and the second number is based on the median of the estimated Roma population.

Column 5: Roma Enrolled in Secondary Education: Data taken from the source is in **bold**. Data which are calculated are presented as a range. The first estimate is calculated against official data, and the second one against unofficial data regarding the total number of Roma in the 14-18 age range who are eligible to be enrolled in Secondary Education.

Column 6: Roma Who Completed Secondary Education: Data taken from the source is in **bold**. Data which are calculated are presented as a range. The first estimate is calculated against official data and the second one against unofficial data regarding the number of Roma aged 15 years and above (those who could have completed at least primary education which is compulsory).

Table 2

International Comparative Data Set on Roma Education: Secondary Education

Methodological Explanation

COLUMN 5: ROMA ENROLLED IN SECONDARY EDUCATION

This first row represents the number of Roma children who are enrolled in secondary education. The second row shows the percentage that represents the net enrollment of Roma children in secondary school (the number of students who are actually enrolled against the number of students who are eligible to be enrolled in the 14–18 age range).

It should be stressed that as with enrollment in primary education, there are two kinds of cases. For some countries, the percentage of Roma enrolled in secondary education is provided in the source from which the number of Roma is calculated based on both official and estimated numbers of Roma in the respective age range (14–18). In the other case, the number of Roma enrolled in secondary education is given from which the percentage range is calculated based on the estimated number of Roma in the 14–18 age range, which is calculated based on both the official and estimated Roma populations (see above the explanation for column 5).

The following procedure is applied in order to estimate the number of Roma in the 14–18 age range. Since there are official and estimated numbers of Roma under 18, these numbers are divided by 18 (number of cohorts under 18) in order to estimate the number of Roma in one cohort (official and estimated). Then, these numbers (official and estimated) of Roma per cohort is multiplied by 4 (number of cohorts covered by secondary education) in order to get the official and estimated number of Roma children in the 14–18 age range who might be enrolled in secondary education.

This information is not available for Albania, Bulgaria, Estonia, Hungary, Latvia, Lithuania, Montenegro, Poland, Romania, Serbia, Slovakia, and Ukraine.

Calculation 1 – Estimate based on the number of Roma students enrolled in secondary education

This calculation is applied for Croatia, Kosovo, Macedonia, Moldova, and Slovenia. For all these countries the number found in the source refers to the number of Roma children enrolled in all grades of secondary education. In order to calculate the percentage of Roma children who are enrolled in secondary education, the number of enrolled Roma children is divided first by the official number of Roma children in the 14–18 age range, and then by the estimated number of Roma children in the 14–18 age range, since this represents all Roma children who should be enrolled in secondary education. The percentage is presented as a range where the first percentage is based on official data and the second one is based on estimated numbers.

Table 2

International Comparative Data Set on Roma Education: Secondary Education

Due to the fact that the estimated number of Roma children under 18 (column 4) is unavailable for Moldova, the percentage of Roma children enrolled in secondary education cannot be calculated. In this case, the number of Roma children enrolled in the secondary education is included in the table.

Macedonia may be used as an example for this calculation. In the source, *Decentralization for Human Development – National Report for Human Development Macedonia, 2004*, it is stated that 569 Roma children are enrolled in secondary education. In column 4 of the table, the estimated number of Roma children under 18 in Macedonia is between 20,782 (official) and 52,260 (estimated). Assuming that all one-year cohorts of children under 18 are of the same size, the size of one cohort under 18 can be estimated by dividing 20,782 and 52,260 by 18, which calculates the number of Roma children in one cohort as being between 1,155 (official) and 2,903 (estimated). Multiplying these numbers by 4 (number of cohorts in the 14–18 age range) gives the total number of Roma children who should be enrolled in secondary education in Macedonia as being between 4,618 and 11,613. Finally, in order to calculate the percentage of Roma children enrolled in secondary education, the number of those students, 569, is divided first by the official number of Roma children who should be enrolled in secondary education (4,618) for 12.3 percent, and then by the estimated number of Roma in the 14–18 age range (11,613) for 4.9 percent.

Calculation 2 – Estimate based on the percentage of Roma children enrolled in secondary education

In this calculation the percentage of Roma children enrolled in secondary education is found in the source, and is applied for Bosnia and Herzegovina and the Czech Republic.

In order to calculate the number of Roma children enrolled in secondary education, the percentage of Roma children enrolled in secondary education is multiplied first by the official number of Roma in the 14–18 age range, and then by the estimated number of Roma in the same age range. The first number represents the number of Roma enrolled in secondary education based on official data, and the second one represents the number of Roma in secondary schools based on the estimated Roma population.

Bosnia and Herzegovina can be given as an example for this calculation. The document *Denied a future: The education of Roma/Gypsy traveller children in Europe, 2001*, states that only 2 percent of Roma children are enrolled in secondary education (p. 67). The estimated number of Roma children under 18 for Bosnia and Herzegovina (column 4) is between 4,077 (official) and 20,700 (estimated). In order to estimate the size of one cohort of Roma children under 18, these numbers are divided by 18, which calculates respectively to 227 and 1,150 children. To obtain the estimated number of Roma children in the 14–18 age range, the size of one cohort is multiplied by 4 (the number of cohorts in the age range). This calculates to the total number of Roma children who should be enrolled in secondary education in Bosnia and Herzegovina as being between 906

Table 2

International Comparative Data Set on Roma Education: Secondary Education

and 4,600. Finally, to obtain the number of Roma children who are enrolled in secondary education, official and estimated numbers of Roma children in the 14–18 age range are multiplied by the percentage of Roma children enrolled in secondary education (2 percent). After calculating, it can be said that there are between 18 and 92 Roma in Bosnia and Herzegovina who are enrolled in secondary education.

COLUMN 6: ROMA WHO COMPLETED SECONDARY EDUCATION

This column represents the number and percentage of Roma who have completed secondary education, and includes those for whom this is the highest educational level and those who have completed upper educational levels as well. It should be noted that this information is not available for Estonia, Moldova, Poland, Slovenia, and Ukraine.

As it is explained for Table 1, column 6, the number and percentage of Roma who have completed secondary education is calculated not in relation to the total Roma population, but in relation to Roma above 15 years of age. The same explanation regarding how the size of the Roma population aged 15 years and above is calculated stands as was the case for Table 1, column 6.

Calculation 1 – Estimate based on the percentage of Roma who have completed secondary education

For most countries (Albania, Bosnia and Herzegovina, Bulgaria, Czech Republic, Kosovo, Lithuania, Macedonia, Montenegro, Romania, Serbia, and Slovakia), sources provide the percentage of Roma who have completed secondary education. In order to estimate the number of Roma who have completed secondary education, the percentage is multiplied first by the official number, and then by the estimated number of Roma aged 15 years and above, which gives a range which is presented in the table. The first and smaller number indicates the number of Roma who have completed secondary education based on official data, and the second and larger number is based on the estimated number of Roma.

Lithuania may serve as an example for this calculation. The source document, *In the dark: Segregating Roma in Lithuania*, E.K. Kucinskaite, 2005, pg. 81, states that according to the 2001 Census, 28.2 percent of Roma have completed secondary education. Based on this, the number of Roma aged 15 years and above is calculated. Taking into consideration that 45.5 percent of Roma in Lithuania are under 18 and assuming equal size of cohorts in this age range, the average size of one cohort under 18 can be calculated. This calculates to 45.5 percent. When divided by 18, this calculates to about 2.53 percent per cohort. This percentage for one cohort is multiplied by 15 (number of cohorts under 15), with the result that 37.9 percent of Roma in Lithuania are under 15—and 62.1 percent are above 15. To calculate the number of Roma aged 15 years and above in Lithuania, this percentage is multiplied first by the official Roma population (2,571), and then by the median of estimated Roma population (3,500), which produces an age range of between 1,596–2,173 representing the

Table 2

International Comparative Data Set on Roma Education: Secondary Education

official and estimated number of Roma aged 15 years and above. Finally, in order to calculate the official and estimated number of Roma in Lithuania aged 15 years and above who have completed secondary education, the percentage of Roma who have completed secondary education (28.2 percent) is multiplied by the official (1,596) and estimated numbers (2,173) of Roma aged 15 years and above. Thus, in Lithuania there is not less than 450 and not more than 613 Roma who have completed secondary education.

Calculation 2 – Estimate based on the number of Roma who have completed secondary education

This calculation is applied only in the case of Hungary. The website of the Hungarian Central Statistical Office for the Census 2001 presents data on the educational attainment of Roma (www.nepszamlalas.hu/eng/volumes/06/00/tabeng/2/load01_8_0.html). According to this data, there are 15,775 Roma aged 15 years and above in Hungary who have completed secondary education. In order to calculate the percentage, this number is divided by the official number of Roma in Hungary aged 15 years and above (122,381), which means that about 12.9 percent of Roma have completed secondary education. Based on this, the estimated number of Roma who have completed secondary education is calculated by multiplying this percentage by the estimated number of Roma in Hungary aged 15 years and above (376,838). This gives an estimation that about 48,574 Roma in Hungary have completed secondary education. Thus, in Hungary there are between 15,775 and 48,574 Roma who have completed secondary education.

Calculation 3 – Estimate based on the official number and percentage of Roma who have completed secondary education

This calculation is applied in the case of Croatia and Latvia. In these cases the source provides information regarding the official number and percentage of Roma who have completed secondary education. Based on the official percentage, the estimated number of Roma who have completed secondary education is calculated by multiplying the official percentage by the estimated Roma population aged 15 years and above.

The case of Croatia can be used to illustrate this calculation. The source, *Needs Assessment Study for the Roma Education Fund Background Paper – Croatia* (Annex II, table 9), states that, according to the 2001 Census, 322 Roma have completed secondary education out of 5,161 Roma aged 15 years and above (for whom information regarding education attainment is known), which calculates to about 6.2 percent. In order to calculate the estimated number of Roma who have completed secondary education, the percentage (6.2 percent) is multiplied by the estimated number of Roma in Croatia aged 15 years and above (19,229), which gives an estimate of 1,192 Roma who have completed secondary education. Thus, in Croatia there are between 322 and 1,192 Roma who completed secondary education.

Table 3

International Comparative Data Set on Roma Education: Tertiary Education

	COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6
Country	Total Population (official) (millions)	Roma Population (official)	Roma Population (estimated)	Number and Percentage of Roma Children under 18	Roma Enrolled in Tertiary Education ⁱⁱⁱ	Roma Who Completed Tertiary Education
Albania	3.07	1,261 0.04%	90,000–100,000 3.1%	631–47,500 † 50% ^a	unavailable	1–111 0.2% ^d
Bosnia and Herzegovina	3.83	8,864 0.23%	40,000–50,000 1.18%	4,077–20,700 46.0% ^a	20 ^c 2.2%-0.4%	11–56 0.2% ^d
Bulgaria*	7.93	370,908 4.68%	500,000–800,000 8.67%	146,880–257,400 39.6% ^a	unavailable	497–871 0.2% ^d
Croatia*	4.44	9,463 0.21%	30,000–40,000 0.80%	4,684–17,325 49.5% ^a	unavailable	14–58 0.3% ^e
Czech Republic*	10.23	11,746 0.11%	175,000–200,000 1.8%	5,638–96,000 48% ^a	unavailable	21–338 0.3% ^d
Estonia	1.36	unavailable	1,000–1,500 0.09%	unavailable	unavailable	unavailable
Hungary*	10.1	189,984 1.9%	520,000–650,000 5.85%	81,123–249,795 42.7% ^a	unavailable	583–1,795 0.5% ^f
Kosovo	2	34,000 1.7%	45,000 2.25%	17,049–22,564 50.1% ^a	10 ^c 0.3%-0.2%	79–105 0.4% ^d
Latvia	2.38	8,205 0.35%	13,000–15,000 0.59%	2,831–4,829 34.5% ^a	unavailable	26–40 0.4% ^e
Lithuania	3.48	2,571 0.07%	3,000–4,000 0.1%	1,169–1,591 45.5% ^a	unavailable	94–128 5.9% ^d
Republic of Macedonia*	2.02	53,879 2.69%	135,490 6.77%	20,782–52,260 38.6% ^a	184 ^c 4.0%-1.6%	219–551 0.6% ^d
Moldova	3.39	12,900 0.38%	20,000–25,000 0.66%	unavailable	26 ^c % inestimable	unavailable
Montenegro*	0.67	2,601 0.43%	13,510 2.02%	1,486–6,984 51.7% ^a	unavailable	10–54 0.7% ^d
Poland	38.2	12,731 0.03%	15,000–50,000 0.08%	6,577–16,789 51.7% ^a	unavailable	7–18 0.1% ^d
Romania*	21.7	535,140 2.5%	1,800,000–2,000,000 8.76%	230,854–819,639 43.1% ^a	513-1,820 1% ^b	2,401–8,523 0.7% ^d
Serbia*	7.5	108,193 1.44%	450,000–500,000 6.33%	44,375–194,818 41% ^a	unavailable	641–2,814 0.9% ^d
Slovakia*	5.4	89,920 1.67%	480,000–520,000 9.26%	39,130–217,582 43.5% ^a	unavailable	172–956 0.3% ^d
Slovenia	1.97	3,246 0.16%	8,000–10,000 0.46%	1,506–4,176 46.4% ^a	5 ^c 1.5%-0.5%	unavailable
Ukraine	48.5	47,600 0.1%	50,000–60,000 0.11%	unavailable	unavailable	unavailable

*Countries participating in the Decade of Roma Inclusion, 2005-2015

Table 3

International Comparative Data Set on Roma Education: Tertiary Education

Notes: Data in **bold** have been taken directly from the source, whereas data in regular font have been calculated.

Data marked with † means that the original data stated the number/percentage of Roma children aged 0-18.

- (iii) The assumption is that University education covers 18 - 22 year olds, so the total population of those who might be enrolled in University is estimated as the population of Roma in this age range.

- (a) The source provides information in percentage, so the estimated number of Roma under 18 is calculated both against the official and estimated Roma populations (columns 2 and 3), and is presented as a range (the first estimated number of Roma under 18 is calculated against official statistics and the second against the median of the estimated Roma population).
- (b) The source provides the percentage of Roma who are enrolled at a certain level of education. Based on that percentage, the number of Roma is estimated as a range (the first number represents the estimated number of Roma enrolled at that level of education based on official data, and the second is based on the estimated number of Roma in the appropriate age range – column 4).
- (c) The source provides the number of Roma who are enrolled at a certain level of education. Based on that number, the percentage of Roma is estimated as a range (the first percentage represents the estimated percentage of Roma enrolled at that level of education based on official data, and the second one is based on the estimated number of Roma in the appropriate age range – column 4).
- (d) The source provides the percentage of Roma aged 15 years and above who have completed a certain level of education. Based on this percentage, the number of Roma is estimated as a range (the first number represents the estimated number of Roma aged 15 years and above who have completed this level of education based on official data, and the second number represents the estimated number of Roma aged 15 years and above who have completed this level of education based on the estimated number of Roma – column 4).
- (e) The source provides the official number and percentage of Roma aged 15 years and above who have completed a certain level of education. Based on the given percentage, the second number is calculated (which represents the estimated number of Roma aged 15 years and above who have completed this level of education based on the estimated number of Roma – column 4).
- (f) The source provides the official number of Roma aged 15 years and above who have completed a certain level of education. Based on this the percentage of Roma aged 15 years and above who have completed this level of education is calculated (against the official number of Roma aged 15 years and above). Based on this percentage, the estimated number of Roma aged 15 years and above who have completed that level of education is calculated (based on the estimated number of Roma – column 4).

Short definition of columns:

Column 1: Total Population (official): numbers were taken from each country's latest census and were taken directly from the source or from the National Statistical Offices website.

Column 2: Roma Population (official): the official number and percentage of Roma (in most cases taken from Census data).

Column 3: Roma Population (estimated): the unofficial estimate is presented in most cases as a range. The percentage equals the median of the estimated numbers calculated against the official total population.

Column 4: Number and Percentage of Roma Children under 18: The estimated number of Roma under 18 is presented as a range. The first number is based on official data, and the second number is based on the median of the estimated Roma population.

Column 5: Roma Enrolled in Tertiary Education: Data taken from the source is in **bold**. Data which are calculated are presented as a range. The first estimate is calculated against official data, and the second one against unofficial data regarding the total number of Roma in the 18-22 age range who are eligible to be enrolled in Tertiary Education.

Column 6: Roma Who Completed Tertiary Education: Data taken from the source is in **bold**. Data which are calculated are presented as a range. The first estimate is calculated against official data and the second one against the estimated number of Roma aged 15 years and above (those who could have completed at least primary education which is compulsory).

Table 3

International Comparative Data Set on Roma Education: Tertiary Education

Methodological Explanation

COLUMN 5: ROMA ENROLLED IN TERTIARY EDUCATION

This column represents the number and percentage of Roma enrolled in tertiary education. It should be noted that in order to obtain the percentage, it is first necessary to estimate the population of Roma who are of an appropriate age for tertiary education. In other words, what would be the number of Roma enrolled in tertiary education if all Roma of an appropriate age were to be enrolled? Assuming that tertiary education lasts four years (covering the 18–22 age range), a good estimate of the Roma population is the number of Roma in 4 one-year cohorts.

The number of Roma in 4 cohorts is calculated based on the number of Roma children under 18 assuming equal size of cohorts. The calculation is done in the same way as in the case of enrollment in primary and secondary education (Tables 1 and 2, column 5).

This information is unavailable for the many countries: Albania, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Montenegro, Poland, Serbia, Slovakia, and Ukraine.

Calculation 1 – Estimate based on the number of Roma students enrolled in tertiary education

This calculation is applied for Bosnia and Herzegovina, Kosovo, Macedonia, Moldova, and Slovenia since the number of Roma enrolled in tertiary education is available in the sources. In order to obtain the percentage of Roma enrolled in tertiary education, the same procedure as in the case of primary and secondary education is applied. The number of enrolled Roma is divided by the official and estimated numbers of Roma in the 18–22 age range, since this age range represents all Roma who could be enrolled at the university level.

Due to the fact that the estimated number of Roma children under 18 (column 4) is unavailable for Moldova, the percentage of Roma enrolled in tertiary education cannot be calculated. In this case, only the number of Roma children enrolled in tertiary education is included in the table.

To illustrate this calculation, the case of Kosovo can be used. The source, *OSCE Department of Democratization: Regional Roundtable on Roma, Ashkali, and Egyptian (RAE) Education in Kosovo*, Pristina, 2000, states that 10 Roma are enrolled in tertiary education. In order to estimate the number of Roma in the 18–22 age range, the official and estimated numbers of Roma children under 18 (column 4: 17,049 and 22,564) are divided by 18 (number of cohorts under 18), and then multiplied by 4 (number of age cohorts in the 18–22 age range), which gives an estimate that in Kosovo there are between 3,785 and 5,010 Roma in the 18–22 age range. In order to

Table 3

International Comparative Data Set on Roma Education: Tertiary Education

calculate enrollment in tertiary education, the number of Roma enrolled in tertiary education (10) is divided by official and estimated numbers of Roma in the 18–22 age range (3,785 and 5,010), which gives a percentage range of between 0.3 percent and 0.2 percent, which is presented in the table.

Calculation 2 – Estimate based on the percentage of Roma students enrolled in tertiary education

This calculation is used for Romania. The source for this country says that less than 1 percent of Roma are enrolled in tertiary education. By multiplying this given percentage with the official and estimated number of Roma in the 18–22 age range (51,255 and 181,978), the number of Roma enrolled in tertiary education is estimated. Thus, in Romania between 513 and 1,820 Roma are enrolled in tertiary education.

COLUMN 6: ROMA WHO COMPLETED TERTIARY EDUCATION

This column represents the number and percentage of Roma who have completed tertiary education. It should be noted that this information is not available for Estonia, Moldova, Poland, Slovenia, and Ukraine.

As explained for column 5, the number and percentage of Roma who have completed a certain level of education is calculated for Roma aged 15 years and above. Also, as previously explained and illustrated, the size of the Roma population aged 15 years and above is calculated based on the population of Roma children under 18.

Calculation 1 – Estimate based on the percentage of Roma who have completed tertiary education

For most countries (Albania, Bosnia and Herzegovina, Bulgaria, Czech Republic, Kosovo, Lithuania, Macedonia, Montenegro, Romania, Serbia, and Slovakia), the available sources provide the percentage of Roma who have completed tertiary education. In order to estimate the number of Roma who have completed tertiary education, the percentage is multiplied first by the official number, and then by the estimated number of Roma aged 15 years and above, which produces a range that is presented in the table. The first and smaller number indicates the number of Roma who have completed tertiary education in the country based on official data, and the second and larger number is based on the estimated number of Roma.

The case of Romania will be used to illustrate this calculation. The UNDP site “Vulnerable groups in Central and South East Europe” (<http://vulnerability.undp.sk/>) states that 14 out of 1,971 Roma aged 15 years and above have completed tertiary education, which calculates to 0.7 percent. After this, the number of Roma aged 15 years and above is calculated. Taking into consideration that 43.1 percent of Roma in Romania are under 18 and assuming an equal size of one-year cohorts in this age range, an average size for one cohort under 18 can be calculated—43.1 percent divided by 18 comes to about 2.39 percent per cohort. This percentage for one cohort is then multiplied by 15, which means that 35.9 percent of Roma in Romania are under 15 and 64.1 percent

Table 3

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are above 15. Next, to calculate the number of Roma aged 15 years and above in Romania, this percentage is multiplied first by the official Roma population (535,140), and then by the median of the estimated Roma population (1,900,000), which gives an age range of between 342,936–1,217,583, for official and estimated numbers of Roma aged 15 years and above. Finally, in order to calculate the official and estimated numbers of Roma in Romania aged 15 years and above who have completed tertiary education, the percentage of Roma who have completed tertiary education (0.7 percent) is multiplied by the official (342,936) and estimated numbers (1,217,583) of Roma aged 15 years and above. Thus, in Romania there are not less than 2,401 and not more than 8,523 Roma who have completed tertiary education.

Calculation 2 – Estimate based on the number of Roma who have completed tertiary education

This calculation is applied in the case of Hungary only. The website of the Hungarian Central Statistical office Census 2001 presents data on the educational attainment of Roma (www.nepszamlalas.hu/eng/volumes/06/00/tabeng/2/load01_8_0.html). According to this data, there are 583 Roma aged 15 years and above in Hungary who have completed tertiary education. In order to calculate the percentage, this number is divided by the official number of Roma in Hungary aged 15 years and above (122,381), which shows that about 0.5 percent of Roma have completed tertiary education. Based on that, the estimated number of Roma who have completed tertiary education is calculated by multiplying this percentage by the estimated number of Roma in Hungary aged 15 years and above (376,838). This shows that about 1,795 Roma in Hungary have completed tertiary education. Thus, in Hungary there are between 583 and 1,795 Roma who have completed tertiary education.

Calculation 3 – Estimate based on the official number and percentage of Roma who have completed tertiary education

This calculation is applied in the case of Croatia and Latvia. In these cases the sources provide information regarding the official number and percentage of Roma who have completed tertiary education. Based on the official percentage, the estimated number of Roma who completed tertiary education is calculated by multiplying the official percentage by the estimated Roma population aged 15 years and above.

The case of Latvia can be used to illustrate this calculation. In the source document it is stated that according to the Census of 2000, 26 out of 5,985 Roma aged 15 years and above have completed tertiary education, which is about 0.4 percent. In order to calculate the estimated number of Roma who have completed tertiary education, the percentage (0.4 percent) is multiplied by the estimated number of Roma in Latvia aged 15 years and above (9,975), which gives the estimation that 40 Roma in Latvia have completed tertiary education. Thus, in Latvia between 26 and 40 Roma have completed tertiary education.

References

This section supplies additional sources, clarification, and information for the data in the table. In some cases, no additional information is included since all the relevant data appears in the table. The titles of publications identified in the entries below can be found in the bibliography.

ALBANIA

Total Population: Institute of Statistics of Albania (www.instat.gov.al) - Albania Census 2001, Resident population and households. *Comment:* Total population was 3,069,275.

Roma Population (official): European Roma Rights Center, 1997, p. 7. *Comment:* This number is based on the 1989 census data. The number represents the number of “others” nationalities composed mainly of Vlachs and Roma.

Roma Population (estimated): Koinova, M., August 2000, p. 7.

Number and Percentage of Roma Children under 18: Pinnock, K. (ed), 2001, p. 32. *Original text:* “Over half of the Roma population is under 18 years of age.”

Roma Enrolled in Primary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Albania, Education profile: Does the household member still attend school or training?” it is stated that 263 out of 548 Roma between 7–14 years old (58 percent) still attended school or training.

Roma Who Completed Primary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Albania, Education profile: What is his/her highest attained education level?” it is stated that 403 out of 1,667 Roma aged 15 years and above (24.2 percent) completed primary education.

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Albania, Education profile: What is his/her highest attained education level?” it is stated that 72 out of 1,667 Roma aged 15 years and above (4.3 percent) completed secondary education.

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Albania, Education profile: What is his/her highest attained education level?” it is stated that 4 out of 1,667 Roma aged 15 years and above (0.2 percent) completed tertiary education.

BOSNIA AND HERZEGOVINA

Total Population: Agency for Statistics of Bosnia and Herzegovina (www.bhas.ba), Statistical Bulletin 5, 2003, p. 22. *Comment:* Estimate of current population (June 30, 2002) was 3,828,397.

Roma Population (official): European Roma Rights Centre, February 2004, p. 19. *Comment:* This information was based on the census from 1991.

Roma Population (estimated): European Roma Rights Centre, February 2004, p. 19. *Original text:* As for the current situation, the London-based Minority Rights Group considers the number of Roma to be around 40,000–50,000 (Liegeois, Pierre, Gheorghe, Romi: europska manjina, London, 2001).

Number and Percentage of Roma Children under 18: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Bosnia and Herzegovina, Demographic profile: Household members by age groups,” it is stated that 695 out of 1,941 Roma were in the 0–14 age group (35.8 percent). *Comment:* Assuming that all age cohorts are of the same size, then the percentage of those who were under 18 was about 46 percent (35.8 percent divided by 14, and then multiplied with 18).

Roma Enrolled in Primary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Bosnia and Herzegovina, Education profile: Does the household member still attend school or training?” it is stated that 215 out of 430 Roma between 7-14 years old (50 percent) still attended school or training.

Roma Who Completed Primary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Bosnia and Herzegovina, Education profile: What is his/her highest attained education level?” it is stated that 406 out of 1,246 Roma aged 15 years and above (32.6 percent) completed primary education.

Roma Enrolled in Secondary Education: Pinnock, K. (ed), 2001, p. 67. *Original text:* “According to research carried out by the Roma Association Naša budu nost in 1995/96, there were 581 school-age Romani children living in Sarajevo canton, of whom just 13 (2 percent) were enrolled in secondary school.” *Comment:* The presumption is that in all cantons the percentage of enrolled children was the same.

Roma Who Completed Secondary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Bosnia and Herzegovina, Education profile: What is his/her highest attained education level?” it is stated that 119 out of 1,246 Roma aged 15 years and above (9.6 percent) completed secondary education.

Roma Enrolled in Tertiary Education: Sejdic, D., October 2004, p. 2. *Original text:* At the beginning of the 2003–2004 academic year, there [were] . . . only four or five students, who come from well-off families and whose parents are in regular employment, enrolled in university. *Comment:* Assuming that each academic year five students were enrolled and that university programs last four years covering four age cohorts, it can be estimated that about 20 Roma students were enrolled in tertiary education (five students times four academic years)

Roma Who Completed Tertiary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Bosnia and Herzegovina, Education profile: What is his/her highest attained education level?” it is stated that 2 out of 1,246 Roma aged 15 years and above (0.2 percent) completed tertiary education.

BULGARIA

Total Population: National Statistical Institute – Republic of Bulgaria (www.nsi.bg), Census 2001 data (www.nsi.bg/census_e/census_e.htm) *Comment:* Total population was 7,928,901.

Roma Population (official): National Statistical Institute – Republic of Bulgaria (www.nsi.bg), Census 2001 data (www.nsi.bg/census_e/census_e.htm). *Comment:* Total Roma population was 370,908.

Roma Population (estimated): Open Society Institute, 2001, p. 16; *Comment:* In the Table II-1. (Estimates of Roma Populations in Selected Central & Eastern European Nations), four estimates are presented: independent estimates (500,000–800,000), Minority Rights Group (700,000–800,000), NGO estimates (800,000–1,000,000), and official estimates (600,000). The range 500,000–800,000 was chosen since it covers almost all estimates.

Number and Percentage of Roma Children under 18: Burnett, N., Darvas, P., Kovacs-Cerovic, T., Ringold, D., Gillsater, C., Stevens, J., McLaughlin, M., Varallyay, J., 2005, p. 5. *Original text:* A table indicates that 44 percent of Roma were under 20 years old (Source: 2001 census). *Comment:* If all ages are equally represented, then those under the age of 18 represented 39.6 percent of the Roma population.

Roma Enrolled in Primary Education: Open Society Institute, 2001, p. 29. *Original text:* “Enrolment rate for Roma in primary education is 47.7 percent (Tomova, 1995).”

Roma Who Completed Primary Education: Open Society Institute, 2001, p. 29. *Original text:* “. . . the percentage of those who have completed primary education, 46.2 percent (NSI – National Statistical Institute).”

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: Open Society Institute, 2001, p. 32. *Original text:* “In Bulgaria, 74 percent of the general population, but only 6–8.5 percent of the Roma completed secondary school.” *Comment:* The median of the quoted range (7.2 percent) is used to represent Roma who completed secondary education.

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: UNDP, Vulnerable groups in Central and South East Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Bugaria, Education profile: What is his/her highest attained education level?” it is stated that 3 out of 1,534 Roma aged 15 years and above (0.2 percent) completed tertiary education.

CROATIA

Total Population: Hrvatski zavod za statistiku (Croatian Bureau of Statistics, <http://www.dzs.hr/>), Statistical Information 2005. *Comment:* Total population, according to the 2001 census, was 4,437,460.

Roma Population (official): Hrvatski zavod za statistiku (Croatian Bureau of Statistics, <http://www.dzs.hr/>). *Comment:* Official Roma population, according to the Census 2001, was 9,463.

Roma Population (estimated): Vlada Republike Hrvatske (Government of Croatia), 2003, p. 2.

Number and Percentage of Roma Children under 18: Burnett, N., Darvas, P., Kovacs-Cerovic, T., Ringold, D., Gillsater, C., Stevens, J., McLaughlin, M., Varallyay, J., 2005, p. 5. *Original text:* A table shows that 55 percent of Roma were under 20 years old (Source: 2001 census). *Comment:* Based on this information and the assumption that all cohorts under 20 are of equal size, it can be calculated that 49.5 percent of Roma were under 18.

Roma Enrolled in Primary Education: Needs Assessment Study for the Roma Education Fund Background Paper – Croatia, p. 16. *Original text:* In the school year 2002-2003, about 1,700 Roma were enrolled in primary education.

Roma Who Completed Primary Education: Needs Assessment Study for the Roma Education Fund Background Paper – Croatia, Annex II (table 9). *Comment:* Based on the data presented in table 9 (source: Census 2001), 1,301 Roma completed primary education out of 5,161 Roma aged 15 years and above for whom information about education attainment is known—or about 25.2 percent.

Roma Enrolled in Secondary Education: Vlada Republike Hrvatske, 2003, (Government of Croatia, 2003), p. 36. *Comment:* Number in the table is from the school year 2002–2003.

Roma Who Completed Secondary Education: Needs Assessment Study for the Roma Education Fund Background Paper – Croatia, Annex II (table 9). *Comment:* Based on the data presented in table 9 (according to the Census 2001 data), 322 Roma completed secondary education out of 5,161 Roma aged 15 years and above for whom information about education attainment is known—or about 6.2 percent.

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: Needs Assessment Study for the Roma Education Fund Background Paper – Croatia, Annex II (table 9). *Comment:* Based on the data presented in table 9 (according to the Census 2001 data), 14 Roma completed tertiary education out of 5,161 Roma aged 15 years and above for whom information about education attainment is known—or about 0.3 percent.

CZECH REPUBLIC

Total Population: Czech Statistical Office (www.czso.cz), Census 2001 data. *Comment:* Total population was 10,230,060.

Roma Population (official): Czech Statistical Office (www.czso.cz), 2006. *Comment:* Total Roma population was 11,746 (Census 2001 data).

Roma Population (estimated): Burnett, N., Darvas, P., Kovacs-Cerovic, T., Ringold, D., Gillsater, C., Stevens, J., McLaughlin, M., Varallyay, J., January 6, 2005, p. 6. *Original text:* Roma population size was 175,000–200,000. *Comment:* Source of the information is the Czech Statistical Office.

Number and Percentage of Roma Children under 18: Burnett, N., Darvas, P., Kovacs-Cerovic, T., Ringold, D., Gillsater, C., Stevens, J., McLaughlin, M., Varallyay, J., January 6, 2005, p. 6. *Original text:* 65,000 to 75,000 Roma are in the 0–14 age group. *Comment:* If the Roma population is 175,000–200,000 and 65,000–75,000 belong in the 0–14 age range, it means that about 37.3 percent of the Roma population were in the 0–14 age range. Based on this estimation and the assumption that all cohorts are of equal size, it means that 48 percent of the Roma population were under 18.

Roma Enrolled in Primary Education: Unavailable

Roma Who Completed Primary Education: Unavailable

Roma Enrolled in Secondary Education: Open Society Institute, 2001, p. 27. *Original text:* Only an estimated 2.5 percent entered secondary school (Gjuricova, 1992).

Roma Who Completed Secondary Education: European Roma Rights Centre, 1999, p. 6. *Original text:* According to census data, the proportion of Roma aged 15 or over who had achieved full secondary education in 1991 was 1.2 percent of the Roma population over the age of 15.

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: Open Society Institute, 2001, p. 33. *Original text:* In the Czech Republic and Slovakia, according to the 1991 census figures (Roma polled over 15 years old), 45 men (0.4 percent) and 19 women (0.2 percent) had some higher education (Conway, 1996). *Comment:* Assuming that number of Roma men and Roma women is similar, it means that about 0.3 percent of Roma in Czech Republic completed some higher education.

ESTONIA

Total Population: Statistical Office of Estonia (<http://www.stat.ee/>), 2001, p. 12. *Comment:* Total population of Estonia was 1,356,931 (Census 2000 data)

Roma Population (official): Unavailable

Roma Population (estimated): Willson, D., 2002, p.18. *Original text:* “Unofficial numbers vary between 1,000 to 1,500 (Sources: OSCE High Commissioner on National Minorities, OSCE Report on Roma/Sinti in the OSCE Area, 1999; Liegeois, J., Gheorghe, N., Roma/Gypsies: A European Minority, Minority Rights Group, Brixton, 1995.”

Number and Percentage of Roma Children under 18: Unavailable

Roma Enrolled in Primary Education: Unavailable

Roma Who Completed Primary Education: Unavailable

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: Unavailable

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: Unavailable

HUNGARY

Total Population: Hungarian Central Statistical Office (<http://www.nepszamlalas.hu/eng/index.html>). *Comment:* Estimation of total population on January 1, 2006, was 10,077,000.

Roma Population (official): Hungarian Central Statistical office, Census 2001, National and county data – Summary Data (table 2.1.8 Population by nationality, main demographic, occupational characteristics and sex - http://www.nepszamlalas.hu/eng/volumes/06/00/tabeng/2/load01_8_o.html). *Comment:* According to data presented in the table, there were 189,984 Roma in Hungary.

Roma Population (estimated): Burnett, N., Darvas, P., Kovacs-Cerovic, T., Ringold, D., Gillsater, C., Stevens, J., McLaughlin, M., Varallyay, J., 2005, p. 6. *Original text:* A table shows that the Roma population is unofficially estimated to be 520,000–650,000 (Source: Hungarian National Survey).

Number and Percentage of Roma Children under 18: Hungarian Central Statistical office, Census 2001, National and county data – Summary Data (table 2.1.8 Population by nationality, main demographic, occupational characteristics and sex - http://www.nepszamlalas.hu/eng/volumes/06/00/tabeng/2/load01_8_o.html). *Comment:* According to data presented in the table, there were 67,652 Roma children in the 0–14 age range.

Roma Enrolled in Primary Education: Burnett, N., Darvas, P., Kovacs-Cerovic, T., Ringold, D., Gillsater, C., Stevens, J., McLaughlin, M., Varallyay, J., January 6, 2005, p. 8. *Original text:* In Hungary, 50 percent of Roma children start first grade at the required age. *Comment:* It is assumed that the same applies to other grades of primary education.

Roma Who Completed Primary Education: Hungarian Central Statistical office, Census 2001, National and county data – Summary Data (table 2.1.8 Population by nationality, main demographic, occupational characteristics and sex - http://www.nepszamlalas.hu/eng/volumes/06/00/tabeng/2/load01_8_o.html) *Comment:* According to data presented in the table, 74,385 Roma completed primary education.

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: Hungarian Central Statistical office, Census 2001, National and county data – Summary Data (table 2.1.8 Population by nationality, main demographic, occupational characteristics and sex - http://www.nepszamlalas.hu/eng/volumes/06/00/tabeng/2/load01_8_o.html). *Comment:* According to data presented in the table, 15,775 Roma completed secondary education.

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: Hungarian Central Statistical office, Census 2001, National and county data

– Summary Data (table 2.1.8 Population by nationality, main demographic, occupational characteristics and sex - http://www.nepszamlalas.hu/eng/volumes/06/00/tabeng/2/load01_8_0.html) *Comment:* According to data presented in the table, 583 Roma completed tertiary education.

KOSOVO

Total Population: UNDP, 2002, p. 103.

Roma Population (official): Zavod za statistiku Kosova (Statistical office of Kosovo), Kosovo and its population, 2003, http://www.ks.gov.net/esk/index_english.htm, p. 3. *Original text:* “Other ethnic groups consist according to LSMS mainly of Muslim/Bosniaks (1.9 percent), Roma (1.7 percent), and Turkish (1 percent).”

Roma Population (estimated): OSCE, July 2003, p. 3. *Original text:* According to estimates, RAE (Roma, Ashkali, and Egyptians) population in Kosovo, after the 1999 conflict, dropped to 45,000 from an unofficial figure of over 100,000.

Number and Percentage of Roma Children under 18: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005 *Original text:* In the “Survey data, Kosovo, Demographic profile: Household members by age groups,” it is stated that 39 percent of Roma belonged to the 0–14 age range. *Comment:* Based on this and the assumption that all cohorts under 18 were of equal size, 50.1 percent of Roma are under 18.

Roma Enrolled in Primary Education: OSCE, July 2003, p. 3. *Original text:* According to data collected by the World Bank in April 2002 (World Bank/EMIS – Education Management Information System), RAE enrollment in regular schools was 2,963 (Roma, 1,332; Ashkali, 1,192; Egyptians, 439)

Roma Who Completed Primary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Kosovo, Education profile: What is his/her highest attained education level?” it is stated that 439 out of 1356 Roma aged 15 years and above (32.4 percent) completed primary education.

Roma Enrolled in Secondary Education: OSCE, July 2003, p. 3. *Original text:* According to data collected by the World Bank in April 2002 (World Bank/EMIS – Education Management Information System) . . . a very limited number of RAE children manage to reach the level of secondary schools (presently only 168 students).

Roma Who Completed Secondary Education: UNDP, Vulnerable groups in Central and South East Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Kosovo, Education profile: What is his/her highest attained education level?” it is stated that 61 out of 1,356 Roma aged 15 years and above (4.5 percent) completed secondary education.

Roma Enrolled in Tertiary Education: OSCE, July 2003, p. 3. *Original text:* According to data collected by the World Bank in April 2002 (World Bank/EMIS – Education Management Information System), “a very limited number of RAE children manage to reach the level of . . . university (10 students each in the higher pedagogical and university level . . .).”

Roma Who Completed Tertiary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Kosovo, Education profile: What is his/her highest attained education level?” it is stated that 5 out of 1356 Roma aged 15 years and above (0.4 percent) completed tertiary education.

LATVIA

Total Population: Central Statistical Bureau of Latvia (www.csb.lv), Census 2000 data; *Comment:* Total population was 2,377,383.

Roma Population (official): Central Statistical Bureau of Latvia (www.csb.lv), Census 2000 data; *Comment:* Total Roma population was 8,205.

Roma Population (estimated): Lukumiete, D., 2004, p. 5. *Original text:* The real number of Roma is more likely 13,000–15,000.

Number and Percentage of Roma Children under 18: Central Statistical Bureau of Latvia, 2000 Population and Housing Census results (Population of Latvia – City, District, Age, Sex – Ethnicity) <http://data.csb.lv/EN/Database/popcensus/popcensus.asp>. *Comment:* Based on information collected by the bureau, there were about 2,875 Roma under 18. Compared with the official Roma population (8,335, this means that 34.5 percent of Roma in Latvia were under 18.

Roma Enrolled in Primary Education: Ministry of Education of Latvia, Education for ethnic minorities (Power Point presentation), 2004, (<http://www.izm.gov.lv/default.aspx?tabID=7&id=1204&lang=5>). *Original text:* In 2003/04, there were 1,508 Roma students aged 7–18 in general education in Latvia. *Comment:* The number of Roma in the 7–14 age range who were enrolled in education is recalculated from this figure to be 1,005 students.

Roma Who Completed Primary Education: Latvian Centre for Human Rights and Ethnic Studies, 2003, p. 19. *Comment:* According to the 2000 census, 1,931 out of 5,985 Roma aged 15 years and above (32.3 percent) completed primary education.

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: Latvian Centre for Human Rights and Ethnic Studies, 2003, p. 19. *Comment:* According to the 2000 census, 499 out of 5,985 Roma aged 15 years and above (8.3 percent) completed secondary education.

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: Latvian Centre for Human Rights and Ethnic Studies, 2003, p. 19. *Comment:* According to the 2000 census, 26 out of 5,985 Roma aged 15 years and above (0.4 percent) completed tertiary education.

LITHUANIA

Total Population: Department of Statistics to the Government of the Republic of Lithuania (Statistics Lithuania) – Census 2001 data (www.std.lt). *Comment:* The total population was 3,483,972.

Roma Population (official): Kucinskaite, E. K., 2002, p. 6. *Comment:* Information from the 2001 census showed the total population of Roma to be 2,571.

Roma Population (estimated): Petrova, D., 2003, p. 29. *Comment:* Sources for the “unofficial number of Roma” are NGO estimates provided in Liegeois and Gheorghe (1995).

Number and Percentage of Roma Children under 18: Kucinskaite, E. K., 2005, p. 19. *Original text:* 974 children in the age group 0–15 (Letter No. (111)-06-1010 of the Deputy Director General of Lithuanian Statistics of September 16, 2002 for the OSI EUMAP reporter). *Comment:* Based on this number and the assumption that all cohorts under 18 are of equal size, it is calculated that there are 1,169 Roma under 18 (45.5 percent).

Roma Enrolled in Primary Education: Unavailable

Roma Who Completed Primary Education: Kucinskaite, E. K., 2005, p. 81. *Comment:* According to the 2001 census, 43.1 percent of Roma aged 10 years and above completed primary education.

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: Kucinskaite, E. K., 2005, p. 81. *Comment:* According to the 2001 census, 28.2 of Roma aged 10 years or above completed secondary education.

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: Kucinskaite, E. K., 2005, p. 81. *Comment:* According to the 2001 census, 5.9 percent of Roma aged 10 years and above completed tertiary education

MACEDONIA

Total Population: State Statistical Office of Republic Macedonia (www.stat.gov.mk/english/glavna_eng.asp), 2005; Census of Population, Households and Dwellings in the Republic of Macedonia 2002, p. 34. *Comment:* The total population was 2,022,547.

Roma Population (official): State Statistical Office of Republic Macedonia (www.stat.gov.mk/english/glavna_eng.asp), 2005; Census of Population, Households and Dwellings in the Republic of Macedonia 2002, p. 34. *Comment:* The total Roma population was 53,879.

Roma Population (estimated): Lakinska, D., Memedova, A., Durmish, Z., Ljatif, D., 2004, p. 6. *Comment:* Table 2. Unofficial data on the number of Roma in R. Macedonia, according to Elezovski (2003).

Number and Percentage of Roma Children under 18: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Macedonia, Demographic profile: Household members by age groups,” it is stated that 30 percent of Roma belong in the 0–14 age range. *Comment:* Based on this and the assumption that all cohorts under 18 are of equal size, it means that 38.6 percent of Roma are under 18.

Roma Enrolled in Primary Education: Lakinska, D., Memedova, A., Durmish, Z., Ljatif, D., 2004, p. 29. *Original text:* “Number of Roma students enrolled in primary schools in 2001/02 for 862 out of 1020 schools.” *Comment:* A table shows that 6,680 Roma students were enrolled in the primary education in 2001–2002.

Roma Who Completed Primary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Macedonia, Education profile: What is his/her highest attained education level?” it is stated that 615 out of 1,281 Roma aged 15 years and above (50.8 percent) completed primary education.

Roma Enrolled in Secondary Education: Eftimoski, D., Petrevski, G., Todorovski, I., Nikolovska, M., Treneska, R., Josev, S., 2004, p. 71. *Comment:* The data deals with the total number of all Roma students in secondary education.

Roma Who Completed Secondary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Macedonia, Education profile: What is his/her highest attained education level?” it is stated that 148 out of 1,281 Roma aged 15 years and above (11.6 percent) completed secondary education.

Roma Enrolled in Tertiary Education: Lakinska, D., Memedova, A., Durmish, Z., Ljatif, D., 2004, p. 34. *Comment:* In the 2002/03 school year, 46 Roma enrolled at university. Assuming that each academic year 46 students enrolled and that university programs last four years covering four age cohorts, it can be estimated that about 184 Roma students were enrolled in tertiary education (46 students times four academic years).

Roma Who Completed Tertiary Education: UNDP, Vulnerable groups in Central and South East Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Macedonia, Education profile: What is his/her highest attained education level?” it is stated that 8 out of 1,281 Roma aged 15 years and above (0.7 percent) completed tertiary education.

MOLDOVA

Total Population: National Bureau of Statistics of Republic Moldova (<http://www.statistica.md/links.php?lang=en>), Women and Men in the Republic of Moldova, 2005, p. 8. *Comment:* The total population was 3,389,700.

Roma Population (official): Anatol, G., 2001, p. 2. *Comment:* Total Roma population in 1998 was 12,900.

Roma Population (estimated): Liegeois, J.P., Gheorge, N., 1995, p 7. *Original text:* In a table estimating Roma populations in different countries, Moldavia is listed with 20,000–25,000 Roma. (Source: Gypsy Research Centre, René Descartes University, Paris, 1994; this table gives “stable” numbers more indicative of the long-term picture than of recent population movements.)

Number and Percentage of Roma Children under 18: Unavailable

Roma Enrolled in Primary Education: Stability pact for SEE, June 2002, p. 18. *Original text:* In the school year 1999/2000, there were 1,789 Roma students in grades 1–12. *Comment:* If 1,789 students were enrolled in grade 1–12, it can be estimated that 1,193 Roma students were enrolled in grade 1–8.

Roma Who Completed Primary Education: Unavailable

Roma Enrolled in Secondary Education: Stability pact for SEE, June 2002, p. 18. *Comment:* If 1,789 students were enrolled in grades 1–12, it can be estimated that 596 Roma students were enrolled in grades 9–12.

Roma Who Completed Secondary Education: Unavailable

Roma Enrolled in Tertiary Education: Gremalschi, A., August 2001, p. 9. *Comment:* In the section 2.2.3, it is stated that 26 Roma were enrolled in tertiary education in academic 2000/01 years.

Roma Who Completed Tertiary Education: Unavailable

MONTENEGRO

Total Population: Statistical Office Republic of Montenegro (<http://www.monstat.cg.yu/EngPrva.htm>), Census of Population, Households and Dwellings 2003 – Population: National or Ethnic affiliation, Podgorica, 2004, p. 12. *Comment:* The total population was 620,145, according to the 2003 census.

Roma Population (official): Statistical Office Republic of Montenegro, Census of Population, Households and Dwellings 2003 – Population: National or Ethnic affiliation, Podgorica, 2004, p. 13. *Comment:* The total Roma population, according to the 2003 census, was 2,601.

Roma Population (estimated): Milic, S., 2004, p. 6. *Comment:* The total RAE population was 20,470, of which 66.3 percent or 13,510 are Roma.

Number and Percentage of Roma Children under 18: Milic, S., 2004, p. 6. *Comment:* There were 11,120 RAE in the age group 0–19. Assuming that the proportion of Roma children is the same in this age group as the proportion of Roma in total RAE population (66.3%), then there were 7,372 Roma in the age group 0–19. A further calculation establishes that there were an estimated 6,984 Roma under 18 in Montenegro (51.7 percent of the Roma population).

Roma Enrolled in Primary Education: Milic, S., 2004, p. 18 (Chart 7, background data) *Comment:* The source document gives information that 1006 Roma children enrolled in the primary education in the 2003/04 school year.

Roma Who Completed Primary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Montenegro, Education profile: What is his/her highest attained education level?” it is stated that 97 out of 491 Roma aged 15 years and above (19.8 percent) completed primary education.

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Montenegro, Education profile: What is his/her highest attained education level?” it is stated that 18 out of 491 Roma aged 15 years and above (3.7 percent) completed secondary education.

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: Milic, S., 2004, p. 22. *Comment:* 0.3 percent finished college (three-year tertiary education) and 0.4 percent finished university.

POLAND

Total Population: Central Statistical Office of Poland (<http://www.stat.gov.pl/english/index.htm>), Census 2002; *Comment:* The total population on December 31, 2003 was estimated to be 38,190,600.

Roma Population (official): Nowicki, M. A., 2005, p. 37. *Comment:* Census 2002.

Roma Population (estimated): European Roma Rights Centre, 2002, p. 8.

Number and Percentage of Roma Children under 18: Adamowicz, M., 2002, p. 26. *Comment:* For the school year 2000–2001, 2,923 Roma children were of a compulsory school age; the number for the age group 0–18 was calculated to be 6,577 Roma or 51.7 percent out of official Roma population.

Roma Enrolled in Primary Education: Adamowicz, M., 2002, p. 26. *Comment:* For 2000–2001, 2,045 Roma attended school.

Roma Who Completed Primary Education: Unavailable

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: Unavailable

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: Topinska, I., 2003, p. 26.

ROMANIA

Total Population: Ulrich, C., July 2004, p. 2. *Comment:* Census 2002.

Roma Population (official): Ulrich, C., July 2004, p. 2. *Comment:* Census 2002.

Roma Population (estimated): Ulrich, C., July 2004, p. 2. *Original text:* Other estimations of Romanian sociologists range from 1,800,000 to 2,000,000, or about 7.9 percent of the entire population.

Number and Percentage of Roma Children under 18: UNDP RSC, 2003, p. 27. *Original text:* The 1992 census showed a total of 409,723 Roma, including 186,052 Roma who were 19 or younger. *Comment:* Since there were 186,052 Roma in the 0–19 age range, it means that, assuming equal distribution per generation, there were 176,750 Roma aged 0–18 (43.1 percent of the Roma population, according to the 1992 census).

Roma Enrolled in Primary Education: Ulrich, C., July 2004, p. 11. *Original text:* The most recent data showed the total number of students enrolled in the school year 2002–2003; the number of Roma students in grades 1–8 was 64,756.

Roma Who Completed Primary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Romania, Education profile: What is his/her highest attained education level?” it is stated that 625 out of 1,971 Roma aged 15 years and above (31.7 percent) completed primary education.

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Romania, Education profile: What is his/her highest attained education level?” it is stated that 189 out of 1971 Roma aged 15 years and above (9.6 percent) completed secondary education.

Roma Enrolled in Tertiary Education: Pinnock, K. (ed.), 2001, p. 324. *Original text:* A survey carried out in 1992 reported that . . . less than 1 percent attended university.

Roma Who Completed Tertiary Education: UNDP, Vulnerable groups in Central and South Eastern Europe (<http://vulnerability.undp.sk/>), 2005. *Original text:* In the “Survey data, Romania, Education profile: What is his/her highest attained education level?” it is stated that 14 out of 1,971 Roma aged 15 years and above (0.7 percent) completed tertiary education.

SERBIA

Total Population: Mihajlovic, M., July 2004, p. 4. *Comment:* Census 2002.

Roma Population (official): Mihajlovic, M., July 2004, p. 4. *Comment:* Census 2002.

Roma Population (estimated): Mihajlovic, M., July 2004, p. 4. *Original text:* The most common estimations made by experts indicate that the number of Roma living in Serbia is somewhere between 450,000 and 500,000 (about 6 percent of the population).

Number and Percentage of Roma Children under 18: Mihajlovic, M., July 2004, p. 4. *Comment:* According to the 2002 census, 31.9 percent of Roma were in the 0–14 age range. Based on this data and assuming that all cohorts under 18 were of equal size, it is calculated that 41 percent of Roma in Serbia were under 18.

Roma Enrolled in Primary Education: Mihajlovic, M., July 2004, p. 18. *Comment:* All Roma children in all grades in primary school for school year 2002–2003.

Roma Who Completed Primary Education: Mihajlovic, M., July 2004, p. 8. *Comment:* According to the 2002 census 2002, 36.1 percent of Roma completed primary education.

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: Mihajlovic, M., July 2004, p. 8. *Comment:* According to the 2002 census, 9.0 percent of Roma completed secondary education.

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: Mihajlovic, M., July 2004, p. 8. *Comment:* According to the 2002 census, 0.9 percent of Roma completed tertiary education.

SLOVAKIA

Total Population: Burnett, N., Darvas, P., Kovacs-Cerovic, T., Ringold, D., Gillsater, C., Stevens, J., McLaughlin M., Varallyay, J., 2005, p. 6. *Comment:* Census 2001.

Roma Population (official): UNDP RSC, 2003, p. 25. *Comment:* Census 2001.

Roma Population (estimated): Open Society Institute, 2001, p. 16. *Original text:* The source of the “unofficial number of Roma” is MRG reports provided in Liegeois and Gheorghe (1995)

Number and Percentage of Roma Children under 18: Salner, A. (ed.), January 2005 (www.governance.sk), p. 28. *Original text:* There are 132,000 Roma in the age group 0–14 and the total Roma population is estimated to be 390,000 (Age structure of Roma in 2004.) *Comment:* The number in the 0–18 age range is calculated to be 169,714 or 43.5 percent of the Roma population.

Roma Enrolled in Primary Education: Salner, A. (ed.), January 2005, (www.governance.sk), p. 7. *Original text:* In the school year 2000–2001. *Comment:* A table with information on enrollment in all primary grades was used to calculate that 40,375 Roma children were enrolled in grades 1–8.

Roma Who Completed Primary Education: Salner, A. (ed.), January 2005, (www.governance.sk), p. 8–9. *Original text:* According to the 2001 census (Table 4 on the level of education attained), 76.8 percent of Roma in Slovakia completed primary education.

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: Salner, A. (ed.), January 2005 (www.governance.sk), p. 8–9. *Original text:* According to Table 4 of the 2001 census, 15.0 percent of Roma completed secondary education.

Roma Enrolled in Tertiary Education: Unavailable

Roma Who Completed Tertiary Education: Salner, A. (ed.), January 2005 (www.governance.sk), p. 8–9. *Original text:* According to Table 4 of the 2001 census, 0.3 percent of Roma completed tertiary education.

SLOVENIA

Total Population: Statistical Office of the Republic of Slovenia, 2005. *Comment:* The Statistical Yearbook 2005 (http://www.stat.si/letopis/index_letopis.asp) states that the total population of Slovenia is 1,964,036 (Census 2002).

Roma Population (official): Statistical Office of the Republic of Slovenia, 2005. *Comment:* According to the Statistical Yearbook 2005 (http://www.stat.si/letopis/index_letopis.asp) the Roma population in Slovenia is 3,246.

Roma Population (estimated): Liegeois, J.P., Gheorghe, N., 1995, p. 7. *Original text:* In a table estimating the Roma population in different countries, the number for Slovenia is 8,000–10,000. (Source: Gypsy Research Centre, René Descartes University, Paris, 1994; this table gives “stable” numbers more indicative of the long-term picture than of recent population movements.)

Number and Percentage of Roma Children under 18: Statistical Office of the Republic of Slovenia, 2005. *Comment:* In the Statistical Yearbook 2005 (http://www.stat.si/letopis/index_letopis.asp), it is stated that there were 1,171 Roma in the 0–14 age range (Census 2002). Assuming that all age cohorts under 18 are of the same size, it means that there were about 1,506 Roma in 0–18 age range (1,171 divided by 14, and then multiplied by 18) or 46.4 percent of the Roma population.

Roma Enrolled in Primary Education: Ministry of Education, Science and Sport, National Policy Paper on the Education of Roma Children in Slovenia, Slovenia, 2004. *Comment:* Data from academic year 2004–2005.

Roma Who Completed Primary Education: Unavailable

Roma Enrolled in Secondary Education: Ministry of Education, Science and Sport, National Policy Paper on the Education of Roma Children in Slovenia, Slovenia, 2004. *Comment:* Data from academic year 2004–2005.

Roma completed Secondary Education: Unavailable

Roma Enrolled in Tertiary Education: Ministry of Education, Science and Sport, National Policy Paper on the Education of Roma Children in Slovenia, Slovenia, 2004. *Comment:* Data from academic year 2004–2005.

Roma Who Completed Tertiary Education: Unavailable

UKRAINE

Total Population: State Statistics Committee of Ukraine (<http://www.ukrstat.gov.ua/>), Census 2001. *Comment:* According to Census 2001, the total population of Ukraine was 48,457,100.

Roma Population (official): State Statistics Committee of Ukraine (<http://www.ukrstat.gov.ua/>), Census 2001. *Comment:* According to All-Ukrainian census of the population in 2001, (<http://www.ukrcensus.gov.ua/eng/results/general/nationality/>) there were 47,600 Roma in Ukraine.

Roma Population (estimated): Petrova, D., 2003, p. 29. *Comment:* The source of the “unofficial number of Roma” are NGO estimates provided in Liegeois and Gheorghe (1995).

Number and percentage of Roma Children under 18: Unavailable

Roma Enrolled in Primary Education: Unavailable

Roma Who Completed Primary Education: Unavailable

Roma Enrolled in Secondary Education: Unavailable

Roma Who Completed Secondary Education: Unavailable

Roma Enrolled in Tertiary Education: Unavailable

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16. Statistical Office of Republic Serbia (webrzs.statserb.sr.gov.yu/axd/en/index.php)
17. Statistical Office of the Slovak republic (www.statistics.sk/webdata/english/index2_a.htm)
18. Statistical Office of the Republic of Slovenia (www.stat.si/eng/index.asp)
19. State Statistics Committee of Ukraine (www.ukrstat.gov.ua/)

Notes

1. Of secondary sources used in the study 96.5% were published after 2000. Of primary sources cited within the secondary sources 77.5% were also from after 2000.
2. Since columns 1 – 4 are consistent in all of the tables, a detailed explanation of these columns will only appear for Table 1.

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Project Manager and Editor

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ESP-supported education monitoring projects to date include: the Report on Gender Issues in Education covering CIS countries, undertaken with the OSI Network Women's Program; *Monitoring School Dropouts and Education in a Hidden Marketplace: Monitoring of Private Tutoring*; and *Monitoring Education for Roma and the International Comparative Data Set in Roma Education*. ESP is currently engaged with OSI EUMAP program in a monitoring project on the access of Roma children to quality education. The resource pack/monograph on Religion and Schooling in Open Society also mapped current religious education policy in most of CEE/SEE/NIS, a compilation that had not previously been available and in which there has been significant interest. ESP's aim is to identify an efficient and effective way to monitor key education concerns, such as the need to provide vulnerable groups with equal access to quality education, including open society values.

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