Methodology for Calculating the Index of Cities' Child-Friendliness (CFC index)

The index of cities' child-friendliness is calculated based on 7 parameters:

- 1. Participation of children in social life and decision making.
- 2. Living environment.
- 3. Child safety in the city.
- 4. Healthcare and healthy lifestyles.
- 5. Education and development.
- 6. Leisure and culture.
- 7. Providing help in difficult situations in life.

Each parameter is assessed vis-à-vis two types of indicators: objective and subjective.

The source of information to calculate *objective indicators* could be statistical reporting data, including departmental, which is regularly collected by divisions of district executive committees responsible for the respective social sphere. All used data should reflect the situation in the city excluding the district.

The source of information to calculate *subjective indicators* could be surveys conducted among children aged 6-12, adolescents aged 13-17 and parents of children aged 0 to 12.

For each indicator the normalized value from 0 to 10 is calculated, where 10 means the most favourable conditions, while 0 means the least favourable conditions. The method for calculating the normalized value of the indicator is given in the description of the indicator.

3 basic principles of normalization are applied in the methodology as follows:

- 1) city data is normalized based on the republican statistics which is accepted as the mean value. If the value of the indicator in the city coincides with the republican statistics, the normalized value of the indicator becomes «5». The better is the statistics in the city as compared to the republican data, the closer is the normalized value of the indicator to «10»;
- 2) city data is normalized based on the total number of children in the city, whose situation the indicator evaluates. The higher is the share of children who are in a better situation, the higher is the normalized value. If 100% of the described target group of children are in favourable conditions according to the indicator, its value reaches «10»;
- 3) subjective indicators are normalized based on the share of answers of respondents who evaluate the situation with the indicator positively. If 100% of respondents are satisfied with the state of affairs for the indicator, its value reaches «10».

The normalized parameter value is the mean arithmetic value of the normalized values of all parameter indicators; the formula for calculation is given at the end of the indicator description of each parameter.

The index of child-friendliness is the mean arithmetic value of the normalized values of the 7 parameters.

All indicators, normalized indicator, parameter values and the index are rounded up to the decimal point.

Sampling for surveys

Sampling for surveys depends on the city category and is done as follows:

City category	Number of survey respondents among children aged 6-12	Number of survey respondents among children aged 13-17	Number of survey respondents among the parents of children aged 0-12	Requirements for the survey
Capital	200 ± 20	200 ± 20	200 ± 20	- All districts represented; - At least 20 education establishments represented; - Gender distribution for the surveys among children is 50% ± 5%; - Distribution of parents with children aged 0-6 versus children aged 7-12 is 50% ± 5%
Oblast	150 ± 15	150 ± 15	150 ± 15	- All districts of the city represented (if any); - At least 15 education establishments represented; - Gender distribution for the surveys among children is 50% ± 5%; - Distribution of parents with children aged 0-6 versus children aged 7-12 is 50% ± 5%
District	100 ± 10	100 ± 10	100 ± 10	- At least 5 education establishments represented; - Gender distribution for the surveys among children is 50% ± 5%; - Distribution of parents with children aged 0-6 versus children aged 7-12 is 50% ± 5%

Cities can decide to survey more respondents to get more accurate survey results.

The survey plan for each interviewer is drafted by the coordinator. Each interviewer must interview approximately the same number of boys and girls when conducting the survey of school children, and approximately the same number of men and women while conducting the parent survey.

- 1. Respondents for the survey are selected randomly.
- 2. Surveys are conducted at the campuses upon agreement with the management of an educational establishment.
- 3. To ensure that all students of an educational establishment are equally likely to become a respondent interviewers must conduct the survey at different times and in the places where they could meet students of different grades. The best option is conducting interviews at the entrance to the educational establishment.

If the school management suggest that interviewers ask their questions to the students in class, maximum 4 students from each form should be interviewed, and these are to be selected at random (for instance, by drawing lots, or, say, all students sitting at the third desk to the right are interviewed).

It is absolutely prohibited to interview solely the children who are school activists.

- 4. To ensure that all parents of children aged 0-12 are equally likely to become respondents, and that parents living in various parts of the city could be interviewed, the parent survey is better arranged by asking random passers-by in various parts of the city at busy street crossings and squares of the city. If the parent survey is organized at the entrance to/exit from educational establishments and pre-school facilities, it is needed to ensure the ratio of 50/50 respondents interviewed at educational establishments and pre-school facilities.
- 5. The interviewer can by no means interview his/her relatives or acquaintances, or teachers from the schools their children attend.

To ensure random sampling for the surveys of children aged 6-12 and 13-17, if the survey is conducted at the educational establishment, one could use the following methods for selecting respondents:

1. The interviewer selects respondents at the entrance and exit from an educational establishment.

- 2. Five or six forms are determined by drawing lots, two respondents of different sexes are invited from each of them; besides, lot drawing is also conducted in each selected class to select those who would participate in the survey among boys and girls.
- 3. Five or six forms are determined by drawing lots, and from these classes the respondents sitting at a certain desk at a class are invited, for example, respondent 1 sits in maths classes in the mid row at the second desk from the board to the left, and respondent 2 sits in maths classes in the left row at the first desk to the right.

When sampling the parents of children aged 0-12 one should remember to include into the survey the parents of preschool children.

To ensure the random sampling of the parents of children aged 0-12 one could use the following sampling methods:

- 1. Interviewing respondents in the streets, at the children's playgrounds or recreation areas.
- 2. Random interviewing of respondents before or after a general parents' meeting at the entrance to or exit from the educational establishment / preschool facility.

You should include the description of sampling procedure per each category of respondents into the 'Introduction' section of the State of the City's Children Report.

Description of indicators per parameter 1 'Participation of children in social life and decision making'

Justification for the choice of indicators:

A child friendly city warrants the right of each young citizen to influence decision making on the matters affecting their lives and express their opinion on the city they want. Children must be aware of the process of city development, engaged into this process and see in practice that their opinions and experiences are respected, they are acknowledged as partners and individuals, as active citizens with equal rights.

No.	Indicator	Type of	Intended use of the	Data collection	Toolkit questions used to calculate the	Indicator calculation method	Calculating
		indicator	indicator	method	indicator		indicator
							normalized value
1.1.	Proportion of children	Subjective	The indicator is used to	Surveys of	The indicator is estimated based on the	Numerator: number of	$n_{1.1} = 10*k$
	aged 13-17 and parents		measure progress in the	children aged 13-	answers to the question "Have you	respondents of two surveys	
	who mentioned that they		provision of information	17 and parents of	received through mass media or	who answered 'Yes'	
	received information		to the children and their	children aged 0-	otherwise information about what	Denominator: number of	
	about what decisions		parents about what	12	decisions affecting children were taken	respondents who participated	
	affecting children were		decisions affecting		in the city within the last 12 months?"	in two surveys	
	taken in the city during		children are taken at the		For answers the following scale is used:	Indicator is calculated as: $k =$	
	the last 12 months		city level		yes; no; refuse to answer.	numerator/denominator	
1.2.	Proportion of children	Subjective	The indicator is used to	Surveys of	The indicator is estimated based on the	Numerator: number of	$n_{1.2} = 10*k$
	aged 13-17 and parents		measure progress in	children aged 13-	answers to the question:	respondents of two surveys	
	who mentioned that		implementing	17 and parents of	"Have you participated within the last 12	who answered 'Yes'	
	representatives of the		consultations with	children aged 0-	months in the discussion of any	Denominator: number of	
	government asked their		children and their	12	questions related to children?" from the	respondents who participated	
	opinion regarding the		parents at the city level		questionnaire for children aged 13-17;	in two surveys	
	matters affecting		on the matters affecting		"Have you participated within the last 12	Indicator is calculated as: $k =$	
	children during the last		children		months in the discussions initiated by	numerator/denominator	
	12 months				the government of any problem		
					situations related to children and/or		
					ways to address them?" from the		
					questionnaire for the parents of children		
					aged 0-12.		
					For answers the following scale is used:		
					yes; no; refuse to answer.		
1.3.	Proportion of children	Subjective	The indicator is used to	Surveys of	The indicator is estimated based on the	Numerator: number of	$n_{1.3} = 10*k$
	aged 13-17 who		measure progress in	children aged 13-	answers to the question: "Have you	respondents who answered	
	participated in the		involving children into	17	participated in the preparation or	'Yes'	
	preparation and conduct		socially beneficial		conduct of social events within the last	Denominator: number of	
	of social events within		activities at the city level		12 months?" For answers the following	respondents who participated	
	the last 12 months				scale is used: yes; no; refuse to answer.	in the survey	
						Indicator is calculated as: $k =$	
						numerator/denominator	

1.4.	Proportion of children	Subjective	The indicator is used to	Surveys of	The indicator is estimated based on the	Numerator: number of	$n_{1.4} = 10*k$
	aged 13-17 who		measure progress in	children aged 13-	answers to the question: "Have you	respondents who answered	
	participated in the		empowering children's	17	participated in the election of school or	'Yes'	
	election of self-		participation in self-		city self-government within the last 12	Denominator: number of	
	government at the		government bodies at		months?" For answers the following	respondents who participated	
	school or city level, as		the level of school, city,		scale is used: yes; no; refuse to answer	in the survey	
	well as in the election of		children's or youth			Indicator is calculated as: $k =$	
	the management of		organization			numerator/denominator	
	children's and youth						
ŀ	organizations within the						
	last 12 months						
1.5.	Degree of satisfaction of	Subjective	The indicator is used to	Surveys of	The indicator is estimated based on the	Numerator: 4*a + 3*b + 2*c +	$n_{1.5} = k/4*10$
ŀ	children aged 13-17 with		measure the quality of	children aged 13-	answers to the question:	1*d + 0*e, where a is the	
	participation in public life		children's and their	17 and parents of	"Is it true that you are satisfied with how	number of respondents of two	
ŀ	and decision making, as		parents' participation in	children aged 0-	you are engaged in decision making on	surveys who answered	
	well as degree of		decision making at the	12	the issues affecting your interests?" of	'absolutely true', b - number of	
ŀ	satisfaction of parents		city level on the matters		the questionnaire for children aged 13-	respondents who answered	
ŀ	with involvement in the		concerning the interests		17;	'more true than false', c -	
	discussion of issues		of children		"Is it true that you like how the city	number of respondents who	
	affecting children				government engages you into decision	answered 'true and false to the	
					making on the issues concerning the	same extent', d - number of	
					interests of your children?" from the	respondents who answered	
					questionnaire for the parents of children	'more false than true', e -	
					aged 0-12.	number of respondents who	
					For answers the following scale is used:	answered "absolutely false"	
					4 – absolutely true, 3 – more true than	Denominator: number of	
					false, 2 – true and false to the same	respondents who participated	
					extent, 1 – more false than true, 0 –	in two surveys	
					absolutely false	Indicator is calculated as: $k =$	
						numerator/denominator	

$$P_1 = (n_{1.1.} + n_{1.2.} + n_{1.3.} + n_{1.4.} + n_{1.5.}) / 5$$

Description of indicators per parameter 2 'Living environment'

Justification for the choice of indicators:

A child friendly city warrants the right of each young citizen to have access to comfortable accommodation, proper sanitation, well-furnished areas for games and sports, and to green spaces. Disabled children must have a possibility of unhindered exit from living room spaces in order to meet and play with their friends, attend school, outpatient clinic and other institutions.

No.	Indicator	Type of indicator	Intended use of the indicator	Data collection method	Toolkit questions used to calculate the indicator	Indicator calculation method	Calculating indicator normalized value
2.1.	Proportion of houses furnished for barrier-free access of prams and wheelchairs	Subjective	The indicator is used to measure progress in ensuring barrier-free environment for the children with disabilities and their young parents	Surveys of parents of children aged 0- 12	The indicator is estimated based on the answers to the question "Is there barrier-free access for prams and wheelchairs in your house?" For answers the following scale is used: yes; no; refuse to answer	Numerator: number of respondents of the survey who answered 'Yes' Denominator: number of respondents who participated in the survey Indicator is calculated as: k = numerator/denominator	n _{2.1} = 10*k
2.2.	Proportion of children aged 6-17 who mentioned that there is a separate children's room in the apartment/home	Subjective	The indicator is used to measure progress in providing children with personal space for games and pastime	Surveys of children aged 6- 12 and children aged 13-17	The indicator is estimated based on the answers to the question: "Is there a children's room separate from your parents' room in the apartment/house where you live" of the questionnaire for children aged 6-12; "Do you have a room separate from your parents' room?" of the questionnaire for children aged 13-17. For answers the following scale is used: yes; no; refuse to answer	Numerator: number of respondents of three surveys who answered 'Yes' Denominator: number of respondents who participated in three surveys Indicator is calculated as: k = numerator/denominator	n _{2.2} = 10*k
2.3.	Proportion of children aged 6-12 and parents who mentioned that there is a place with a furnished playground where children can play close to their home	Subjective	The indicator is used to measure progress in providing children with places to play and pass time in the open air	Surveys of children aged 6- 12 and the parents of children aged 0- 12	The indicator is estimated based on the answers to the question: "Is there a children's playground near your home where you can play?" of the questionnaire for children aged 6-12; "Is there a children's playground near your home furnished with the necessary equipment?" of the questionnaire for the parents of children aged 0-12. For answers the following scale is used: yes; no; refuse to answer	Numerator: number of respondents of three surveys who answered 'Yes' Denominator: number of respondents who participated in three surveys Indicator is calculated as: k = numerator/denominator	n _{2.3} = 10*k

2.4.	Proportion of children aged 6-17 who mentioned that there are furnished playgrounds or establishments where children can do sports	Subjective	The indicator is used to measure progress in providing children with the possibility of doing sports	Surveys of children aged 6- 12 and children aged 13-17	The indicator is estimated based on the answers to the question: "Is there a place near your home where you can do sports?" of the questionnaire for children aged 6-12; "Is there a place near your home where you can do sports?" of the questionnaire for children aged 13-17; For answers the following scale is used: yes; no; refuse to answer	Numerator: number of respondents of three surveys who answered 'Yes' Denominator: number of respondents who participated in three surveys Indicator is calculated as: k = numerator/denominator	n _{2.4} = 10*k
2.5.	Proportion of children aged 6-17 and parents who mentioned that there are places near their home (maximum 15 minutes walking range) where children could communicate with nature (miniparks, parks, embankment)	Subjective	The indicator is used to measure progress in providing the access of children to green areas of the city	Surveys of children aged 6- 12, children aged 13-17 and the parents of children aged 0- 12	The indicator is estimated based on the answers to the question: "Is there a minipark or a park near your home where you could walk to with your parents?" of the questionnaire for children aged 6-12; "Is there a minipark or a park near your home where you could walk to in about 15 minutes?" of the questionnaire for children aged 13-17; "Is there a minipark or a park near your home where you could walk to with your child in about 15 minutes?" of the questionnaire for the parents of children aged 0-12. For answers the following scale is used: yes; no; refuse to answer	Numerator: number of respondents of three surveys who answered 'Yes' Denominator: number of respondents who participated in three surveys Indicator is calculated as: k = numerator/denominator	n _{2.5} = 10*k
2.6.	Proportion of children aged 6-17 and parents who mentioned that it is clean around the home and there is no litter	Subjective	The indicator is used to measure progress in providing children with access to clean yard areas in the city	Surveys of children aged 6- 12, children aged 13-17 and the parents of children aged 0- 12	The indicator is estimated based on the answers to the question: "Is it true that it is clean and there is no rubbish near your home?" of the questionnaire for children aged 6-12; "Is it true that it is clean and there is no rubbish near your home?" of the questionnaire for children aged 13-17 and of the questionnaire for the parents of children aged 0-12. For answers the following scale is used: 4 — 'absolutely true', 3 - 'more true than false', 2 - 'true and false to the same extent', 1 - 'more false than true', 0 - 'absolutely false'	Numerator: 4*a + 3*b + 2*c + 1*d + 0*e, where a is the number of respondents of three surveys who answered 'absolutely true', b is the number of respondents of three surveys who answered 'more true than false', c is the number of respondents of three surveys who answered 'true and false to the same extent', d is the number of respondents of three surveys who answered 'more false than true', and e is the number of respondents of three surveys	n _{2.6} = k/4*10

						who answered 'absolutely	
						false'.	
						Denominator: number of	
						respondents who participated	
						in three surveys	
						Indicator is calculated as: k =	
		6.1.	- 1 · ! · · ·		-	numerator/denominator	1/4*40
2.7.	Degree of satisfaction of	Subjective	The indicator is used to	Surveys of	The indicator is estimated based on the	Numerator: 4*a + 3*b + 2*c +	$n_{2.7} = k/4*10$
	children aged 6-17 and		measure the quality of	children aged 6-	answers to the question:	1*d + 0*e, where a is the	
	parents with the		the infrastructure	12, children aged	"Is it true that it is comfortable for you to	number of respondents of	
	condition of the living		ensuring comfortable	13-17 and the	live in your city?" of the questionnaire	three surveys who answered	
	environment		accommodation of chil	parents of	for children aged 6-12;	'absolutely true', b is the	
			dren in the city	children aged 0-	"Is it true that it is comfortable for you to	number of respondents of	
				12	live in your city?" of the questionnaire	three surveys who answered	
					for children aged 13-17;	'more true than false', c is the	
					"Is it true that your city is child friendly?"	number of respondents of	
					of the questionnaire for the parents of	three surveys who answered	
					children aged 0-12.	'true and false to the same	
					For answers the following scale is used: 4	extent', d is the number of	
					– 'absolutely true', 3 - 'more true than	respondents of three surveys	
					false', 2 - 'true and false to the same	who answered 'more false than	
					extent', 1 - 'more false than true', 0 -	true', and e is the number of	
					'absolutely false'	respondents of three surveys	
						who answered 'absolutely	
						false'.	
						Denominator: number of	
						respondents who participated	
						in three surveys	
						Indicator is calculated as: $k =$	
						numerator/denominator	

$$P_2 = \left(n_{2.1.} + n_{2.2.} + n_{2.3.} + n_{2.4.} + n_{2.5.} + n_{2.6.} + n_{2.7.} \right) / 7$$

Description of indicators per parameter 3 'Child safety in the city'

Justification for the choice of indicators:

A child friendly city warrants the right of every young citizen to be protected from exploitation, violence and abuse. Children must be safeguarded from the actions, which could harm their health and their physical, mental, spiritual, moral and social development.

No.	Indicator	Type of	Intended use of	Data collection	Toolkit question		Indicator calculation method	Calculating indicator normalized value
		indicator	the indicator	method	calculate the inc	dicator		
3.1.	Morbidity rate for	Objective	The indicator is	Data for the	Departmental	reporting	Numerator: number of	$n_{3.1} = 10*(1 - k/(k+k_{Pb}))$, where k_{Pb} morbidity rate for
	children aged 0-17		used to measure	city is provided	form No.		trauma, poisonings and some	children caused by trauma, poisoning and some other
	caused by trauma,		progress in	by the Health			other consequences of the	consequences of the impact of external causes in the
	poisoning and		reducing	Department of			impact of external causes	Republic of Belarus per 100,000 people of this age.
	some other		morbidity rate	the District			registered in the city among	Information for calculating k_{PB} is contained in the
	consequences of		for children	Executive			children aged 0-17 multiplied	annual statistical data book "Children and Youth of the
	the impact of		resulting from	Committee			by 100,000	Republic of Belarus"
	external causes		external causes				Denominator: number of	
							children aged 0-17 in the city	
							Indicator is calculated as: k =	
							numerator/denominator	
3.2.	Proportion of	Objective	The indicator is	Data for the	Departmental	reporting	Numerator: number of	$n_{3.2} = 10*(1 - k/(k+k_{Pb}))$, where k_{Pb} is the number of
	minors (children		used to measure	city is provided	form No.		children in the city aged 0 - 17	minors who are victims of committed crimes in the
	aged 0-17) who are		progress in	by the Internal			who are victims of committed	Republic of Belarus multiplied by 100,000 and divided
	victims of		reducing the rate	Affairs			crimes (including parents'	by the number of children aged 0-17. The information
	committed crimes		of crimes against	Department of			evasion of child	for calculating k_{PB} is contained in the annual statistical
			children	the District			maintenance), multiplied by	data book "Law Violations in the Republic of Belarus"
				Executive			100,000	
				Committee			Denominator: number of	
							children aged 0-17 in the city	
							Indicator is calculated as: $k =$	
							numerator/denominator	
3.3.	Mortality rate for	Objective	The indicator is	The data for	Departmental	reporting	Numerator: number of	$N_{3.3} = 10*(1 - k/(k+k_{PE}))$, where k_{PE} is the mortality rate
	children and young		used to measure	the city is	form No.		children and young people	for children and young people aged 5-17 in the
	people aged 5-17		progress in	provided by			aged 5-17 who died in the city	Republic of Belarus per 1,000 children of this age.
			reducing child	the Health			multiplied by 1,000	Information for the calculation of the numerator k_{PE} is
			mortality	Department of			Denominator: number of	given on the site of the Ministry of Health of the
				the District			children and young people	Republic of Belarus at
				Executive			aged 5-17 in the city	http://minzdrav.gov.by/ru/static/numbers/smertnost,
				Committee			Indicator is calculated as: $k =$	and for calculation of the denominator - in the
							numerator/denominator	statistical reference book "Children and Youth of the
								Republic of Belarus".

3.4.	Proportion of children aged 6-17 and parents who mentioned that within the last 12 months their children had not been subjected to physical and/or psychological violence	Subjective	The indicator is used to measure progress in increasing child safety level when not at home	Surveys of children aged 6-12, children aged 13-17 and the parents of children aged 0-12	The indicator is estimated based on the answers to the question: "Have you come across a situation when you or somebody else in your presence was beaten, called names, unjustly accused?" of the questionnaire for children aged 6-12; "Have you come across a situation within the last 12 months when you or somebody else in your presence was beaten, called names, humiliated, unjustly accused?" of the questionnaire for children aged 13-17; "Have you come across a situation within the last 12 months when somebody from the children was beaten, called names, humiliated or unjustly accused" of the questionnaire for the parents of children aged 0-12. For answers the following scale is used: yes; no;	Numerator: number of respondents of three surveys who answered 'No' Denominator: number of respondents who participated in three surveys Indicator is calculated as: k = numerator/denominator	$n_{3.4} = 10*k$
3.5.	Proportion of children aged 6-17 and parents who think that it is safe for children to live in their city	Subjective	The indicator is used to measure child safety level in the city	Surveys of children aged 6-12, children aged 13-17 and the parents of children aged 0-12	scale is used: yes; no; refuse to answer The indicator is estimated based on the answers to the question: "Is it true that you have nothing to fear in your city?" of the questionnaire for children aged 6-12; "Is it true that it is safe to live in your city?" of the questionnaire for children aged 13-17;	Numerator: 4*a + 3*b + 2*c + 1*d + 0*e, where a is the number of respondents of three surveys who answered 'absolutely true', b is the number of respondents of three surveys who answered 'more true than false', c is the number of respondents of three surveys who answered 'true and false to the same extent', d is the number of	$n_{3.5} = k/4*10$

		"Is it true that it is safe for	respondents of three surveys	
			•	
		,	who answered 'more false	
		city?" of the questionnaire	than true', and e is the	
		for the parents of children	number of respondents of	
		aged 0-12.	three surveys who answered	
		For answers the following	'absolutely false'.	
		scale is used: 4 – 'absolutely	Denominator: number of	
		true', 3 - 'more true than	respondents who	
		false', 2 - 'true and false to	participated in three surveys	
		the same extent', 1 - 'more	Indicator is calculated as: k =	
		false than true', 0 -	numerator/denominator	
		'absolutely false'		

$$P_3 = (n_{3.1.} + n_{3.2.} + n_{3.3.} + n_{3.4.} + n_{3.5.}) / 5$$

Description of indicators per parameter 4 'Healthcare and healthy lifestyles'

Justification for the choice of indicators:

A child friendly city warrants the right of every young citizen to have access to medical care. Children must receive quality medical services, knowledge, and skills necessary to keep healthy.

No.	Indicator	Type of indicator	Intended use of the indicator	Data collection method	Toolkit questions used to calculate the indicator	Indicator calculation method	Calculating indicator normalized value
4.1.	Mortality rate for children aged 0-4	Objective	The indicator is used to measure progress in reducing infant mortality	The data for the city is provided by the Health Department of the District Executive Committee	Departmental reporting form No.	Numerator: number of children aged 0-4 who died in the city multiplied by 1,000 Denominator: number of children aged 0-4 in the city Indicator is calculated as: <i>k</i> = numerator/denominator	$n_{4.1} = 10*(1 - k/(k+k_{PE}))$, where k_{PE} is child mortality rate for children aged 0-4 in the Republic of Belarus per 1,000 children of this age. The information for calculating k_{PE} is contained in the annual statistical data book "Children and Youth of the Republic of Belarus"
4.2.	Proportion of children aged 6-17 who have chronic illnesses or are declared handicapped according to preventive health checkups (school children belonging to the 3 rd or 4 th health group)	Objective	The indicator is used to measure progress in child welfare	The data for the city is provided by the Health Department of the District Executive Committee	Departmental reporting form No.	Numerator: number of children aged 6-17 who have chronic illnesses or are declared handicapped according to preventive health checkups (school children belonging to the 3rd or 4th health group) Denominator: number of children aged 6-17 in the city Indicator is calculated as: <i>k</i> = numerator/denominator	n _{4.2} = 10*(1 – k)
4.3.	Pregnancy termination rate among girls aged 15- 19	Objective	The indicator is used to measure progress in preventing early pregnancies	The data for the city is provided by the Health Department of the District	Departmental reporting form No.	Numerator: number of abortions among girls aged 15-19 in the city multiplied by 1,000 Denominator: number of girls aged 15-19 in the city	$n_{4.3} = 10*(1 - k/(k+k_{PB}))$, where k_{PB} is pregnancy termination rate for the girls aged 15 - 19 in the Republic of Belarus per 1,000 of

				Executive Committee		Indicator is calculated as: k = numerator/denominator	women of the relevant age. Information for calculating k_{PB} is contained in the annual statistical data book "Health of the people of the Republic of Belarus"
4.4.	Proportion of children aged 13-17 who mentioned that it was possible for them to get medical consultation on HIV/AIDS, unwanted pregnancy or sexually transmitted infections	Subjective	The indicator is used to measure progress in ensuring children's and adolescents' access to the information regarding reproductive health	Survey of children aged 13-17	The indicator is estimated based on the answers to the question "Do you have the possibility to consult a medical worker on HIV/AIDS, unwanted pregnancy or sexually transmitted infections?" of the questionnaire for children aged 13-17. For answers the following scale is used: yes; no; refuse to answer	Numerator: number of respondents of the survey who answered 'Yes' Denominator: number of respondents who participated in the survey Indicator is calculated as: k = numerator/denominator	n _{4.4} = 10*k
4.5.	Proportion of children aged 13-17 who have not smoked tobacco within the last month	Subjective	The indicator is used to measure progress in preventing tobacco smoking	Survey of children aged 13-17	The indicator is estimated based on the answers to the question "Have you smoked within the last month?" of the questionnaire for children aged 13-17. For answers the following scale is used: yes; no; refuse to answer	Numerator: number of the survey participants who answered 'No' Denominator: number of respondents who participated in the survey Indicator is calculated as: <i>k</i> = numerator/denominator	n _{4.5} = 10*k
4.6.	Proportion of children aged 13-17 who have not drunk alcoholic or soft alcoholic beverages within the last 6 months	Subjective	The indicator is used to measure progress in alcoholism prevention	Survey of children aged 13-17	The indicator is estimated based on the answers to the question "Have you drunk any alcoholic beverages (including beer, gin-tonic) within the last 6 months?" of the questionnaire for children aged 13-17. For answers the following scale is used: yes; no; refuse to answer	Numerator: number of the survey participants who answered 'No' Denominator: number of respondents who participated in the survey Indicator is calculated as: <i>k</i> = numerator/denominator	n _{4.6} = 10*k
4.7.	Proportion of children aged 13-17 who have never used narcotic substances	Subjective	The indicator is used to measure progress in drug abuse prevention	Survey of children aged 13-17	The indicator is estimated based on the answers to the question "Have you ever done drugs?" of the questionnaire for children aged 13-17. For answers the following scale is used: yes; no; refuse to answer	Numerator: number of the survey participants who answered 'No' Denominator: number of respondents who participated in the survey Indicator is calculated as: k = numerator/знаменатель	n _{4.7} = 10*k
4.8.	Degree of satisfaction of children aged 13-17 and	Subjective	The indicator is used to measure the quality of health care services and	Survey of children aged 13-17 and the parents of	The indicator is estimated based on the answers to the question:	Numerator: 4*a + 3*b + 2*c + 1*d + 0*e, where a is the number of respondents of	n _{4.8} = k/4*10

parents with health care	promoting	healthy	children aged 0 -	"Is it true that they take good care of	two surveys who answered	
services	lifestyles		12	your health in this city?" of the	'more true than false', c is	
				questionnaire for children aged 13-17;	the number of respondents	
				"Is it true that medical care for your	of three surveys who	
				child's health is organized well in the	answered 'true and false to	
				city?" of the questionnaire for the	the same extent', d is the	
				parents of children aged 0-12.	number of respondents of	
				For answers the following scale is used:	three surveys who	
				4 – 'absolutely true', 3 - 'more true than	answered 'more false than	
				false', 2 - 'true and false to the same	true', and e is the number of	
				extent', 1 - 'more false than true', 0 -	respondents of three	
				'absolutely false'	surveys who answered	
					'absolutely false'.	
					Denominator: number of	
					respondents who	
					participated in two surveys	
					Indicator is calculated as: <i>k</i> =	
					numerator/denominator	

 $\underline{\mbox{The normalized parameter value is calculated from the formula:}}$

$$P_4 = (n_{4.1.} + n_{4.2.} + n_{4.3.} + n_{4.4.} + n_{4.5.} + n_{4.6.} + n_{4.7.} + n_{4.8..}) / 8$$

Description of indicators per parameter 5 'Education and Development'

Justification for the choice of indicators:

A child friendly city warrants the right of each young citizen to education. Children must receive quality education necessary for their continuous physical, intellectual, spiritual, moral, psychological and social development independent of their sex, language they speak, beliefs, nationality, ethnicity or social set-up, property status, health or any other circumstances.

No.	Indicator	Type of	Intended use of the	Data collection	Toolkit questions used to calculate the	Indicator calculation	Calculating indicator
		indicator	indicator	method	indicator	method	normalized value
5.1.	Average score of examinations after the 9 th grade at the educational establishments of the city	Objective	The indicator is used to measure progress in providing children's access to quality education	The data for the city is provided by the Education Department of the District Executive Committee	Departmental reporting form No.	Indicator is calculated as: k is the average score of examinations after the 9th grade at the educational establishments of the city	n _{5.1} = k
5.2.	Proportion of parents who have access to child daycare and preschool facilities conveniently located near the home or place of work	Subjective	The indicator is used to measure progress in providing children's access to preschool facilities conveniently located near the home or place of parents' work	Survey of the parents of children aged 0 – 6	The indicator is estimated based on the answers to the question "Is it true that the preschool facility that your child attends is conveniently located near your home or place of work?" of the questionnaire for the parents of children aged 0 – 6. For answers the following scale is used: 4 – 'absolutely true', 3 - 'more true than false', 2 - 'true and false to the same extent', 1 - 'more false than true', 0 - 'absolutely false'	Numerator: 4*a + 3*b + 2*c + 1*d + 0*e, where a is the number of survey respondents who answered 'more true than false', c is the number of respondents of three surveys who answered 'true and false to the same extent', d is the number of respondents of three surveys who answered 'more false than true', and e is the number of respondents of three surveys who answered 'absolutely false'. Denominator: number of respondents who participated in the survey Indicator is calculated as: k = numerator/denominator	$n_{5.2} = k/4*10$
5.3.	Proportion of disabled children aged 6-17 who study at specialized	Objective	The indicator is used to measure progress in providing access to	The data for the city is provided by the Education Department of	Departmental reporting form No.	Numerator: number of disabled children aged 6-17 in the city who study at home, at the centres for	$n_{5.3} = 10*(1-k)$

_	T	T	T				-
	educational		inclusive education of	the District		correction development	
	establishments		disabled children	Executive		and education, special	
				Committee		boarding schools offering	
						general secondary school	
						curriculum	
						Denominator: number of	
						children aged 6-17 with	
						peculiarities of	
						psychophysical	
						development in the city	
						Indicator is calculated as: $k =$	
						numerator/denominator	
5.4.	Proportion of children	Subjective	The indicator is used to	Surveys of	The indicator is calculated based on the	Numerator: number of	$N_{5.4} = 10*k$
5.4.	aged 6-17 who have	Jubjective	measure progress in the	children aged 6-	answers to the question:	survey respondents who	145.4 - 10 K
			, ,	12 and children	- "Do you know your rights well enough	answered "Yes".	
	stated that they know		development of				
	their rights well enough		knowledge and skills	aged 13-17	to be able to tell about them to a	Denominator:	
	to be able to tell grown-		among children on their		grown up?" of the questionnaire for	the number of respondents	
	ups about them		rights		children aged 6-12;	who took part in the survey	
					- "Do you know your rights well enough	Indicator is calculated as	
					to be able to tell about them to a	follows:: $k =$	
					grown up?" of the questionnaire for	numerator/denominator	
					children aged 13-17.		
					For answers the following scale is used:		
					yes; no; refuse to answer		
5.5.	Degree of satisfaction of	Subjective	The indicator is used to	Surveys of	The indicator is estimated based on the	Numerator: 4*a + 3*b + 2*c	$n_{5.5} = k/4*10$
	children aged 6-17 and		measure the quality of	children aged 6-	answers to the question:	+ 1*d + 0*e, where a is the	
	parents with the quality		providing services in the	12, children aged	"Is it true that it is interesting for you	number of respondents of	
	of education in the city		sphere of education and	13-17 and the	to study?" of the questionnaire for	three surveys who	
	•		children development in	parents of	children aged 6-12;	answered 'more true than	
			the city	children aged 0-	"Is it true that you are receiving quality	false', c is the number of	
			,	12	education?" of the questionnaire for	respondents of three	
					children aged 13-17;	surveys who answered 'true	
					"Is it true that your child is receiving	and false to the same	
					quality education?" of the	extent', d is the number of	
					questionnaire for the parents of	respondents of three	
					children aged 0 – 12.	surveys who answered	
					For answers the following scale is used:	'more false than true', and e	
					4 – 'absolutely true', 3 - 'more true	is the number of	
					than false', 2 - 'true and false to the	respondents of three	
					same extent', 1 - 'more false than true',	surveys who answered	
					0 - 'absolutely false'	'absolutely false'.	
						Denominator: number of	
						respondents who	
						participated in three	
						surveys	

			Indicator is calculated as: <i>k</i> =	
			numerator/denominator	

$$P_5 = (n_{5.1} + n_{5.2} + n_{5.3} + n_{5.4} + n_{5.5}) / 5$$

Description of indicators per parameter 6 'Leisure and Culture'

Justification for the choice of indicators:

A child friendly city warrants the right of each young citizen to participate in the city's cultural life. Children must have access to study at extended education establishments, clubs and sports establishments in line with their hobbies, as well as health improvement in the summer.

No.	Indicator	Type of	Intended use of	Data collection	Toolkit questions used to	Indicator calculation method	Calculating
		indicator	the indicator	method	calculate the indicator		indicator
							normalized value
6.1.	Proportion of children aged 6-17 receiving education at establishments for extended education for children and youth, at specialized educational and sports establishments, schools of Olympic	Objective	The indicator is used to measure progress in providing access to extended education for children and youth	The data for the city is provided by the Education Department of the District Executive Committee	Departmental reporting form No.	Numerator: sum of children aged 6-17 in the city , receiving education at establishments for extended education for children and youth, at specialized educational and sports establishments, schools of Olympic reserve, and clubs Denominator: number of children aged 6-17 in the city Indicator is calculated as: <i>k</i> = <i>numerator</i> / <i>denominator</i>	$n_{6.1} = 10*k$, if the numerator is less than the denominator, $n_{6.1} = 10$, if the numerator is greater or equal to the denominator
	reserve, and clubs ¹						
6.2.	Proportion of children aged 6-17 who spent more than a week at a school or out of town camp, went hiking or were on a vacation outside of Belarus during the summer holidays	Subjective	The indicator is used to measure progress in improving children's and young people's health during vacations	Surveys of children aged 6-12 and 13-17	The indicator is calculated based on the answers to the question: - "Did you spend more than a week at a school or out of town camp, hiking or on a vacation outside of Belarus during the summer holidays?" of the questionnaire for children aged 6-12; - "Did you spend more than a week at a school or out of town camp, hiking or on a vacation outside of Belarus during the summer	Numerator: number of respondents of 2 surveys who answered "Yes" Denominator: number of respondents who took part in 2 surveys Indicator is calculated as: k = numerator/denominator	n _{6.2} = 10*k

¹ Clubs are studios, amateur artistic groups (vocal studios and choirs, choreographic, theatre, musical and instrumental groups)

					halidays?" of the		
					holidays?" of the		
					questionnaire for children		
					aged 13-17.		
					For answers the following		
					scale is used: yes; no; refuse		
					to answer		
6.3.	Proportion of	Subjective	The indicator is	Surveys of	The indicator is calculated	Numerator: number of respondents of 2 surveys who answered	$n_{6.3} = 10*k$
	children aged 6-17		used to measure	children aged	based on the answers to the	"Yes"	
	who have visited a		progress in the	6-12 and 13-	question:	Denominator: number of respondents who took part in 2 surveys	
	cultural event (a		arrangement of	17	- "Have you visited a cultural	Indicator is calculated as: $k = numerator/denominator$	
	performance,		cultural activities		event (performance, circus,		
	circus, concert,		for children by		concert, exhibition) with your		
	exhibition) during		their family		parents or relatives during		
	the last 12 months				the last 12 months?" of the		
					questionnaire for children		
					aged 6-12;		
					- "Have you visited a cultural		
					event (performance, circus,		
					concert, exhibition) with your		
					parents or relatives during		
					the last 12 months?" of the		
					questionnaire for children		
					aged 13-17.		
					0		
					For answers the following		
					scale is used: yes; no; refuse		
		0.11			to answer		10#1
6.4.	Proportion of	Subjective	The indicator is	Surveys of	The indicator is calculated	Numerator: number of respondents of 2 surveys to answered	$n_{6.4} = 10*k$
	children aged 14-17		used to measure	children aged	based on the answers to the	"Yes" Denominator: number of respondents who answered "Yes"	
	who can, if		progress in	13-17	question:	to the question "Have you reached 14?"	
	necessary, get a		providing		- "Do you have an	Indicator is calculated as follows: $k = nominator/denominator$	
	part-time job when		children with		opportunity to get a job		
	free from studies		opportunities		when free from studies, if		
			for secondary		necessary? of the		
			employment		questionnaire for children		
			when free from		aged 13-17.		
			studies		For answers the following		
					scale is used: yes; no; refuse		
					to answer		
6.5.	Degree of	Subjective	The indicator is	Surveys of	The indicator is calculated	Numerator: $4*a + 3*b + 2*c + 1*d + 0*e$, where a is the number	$n_{6.5} = k/4*10$
	satisfaction of	,	used to measure	children aged		of respondents of three surveys who answered 'more true than	, ,
	children aged 6-17		the quality of	6-12, children		false', c is the number of respondents of three surveys who	
	and parents with		providing	aged 13-17 and	"Is it true that there are lots	answered 'true and false to the same extent', d is the number of	
	the system of		services in the	the parents of		respondents of three surveys who answered 'more false than	
	organizing		sphere of culture	pa.c	you and your parents can	- 125 - 110 C. S.	
L	OLPHILLIE	l	1 sprice of culture		you and your parents can		

	children's and	and organizing	children aged	enjoy your time?" of the	true', and e is the number of respondents of three surveys who	
	young people's	children's leisure	0-12	questionnaire for children	answered 'absolutely false'.	
	leisure in the city	in the city	0 12	aged 6-12;	Denominator: number of respondents who participated in three	
	leisure in the city	In the city		"Is it true that you are happy	surveys	
				with how your leisure-time		
				,	indicator is calculated as. k = numer ator / denominator	
				activities are organized?" of		
				the questionnaire for		
				children aged 13-17;		
				"Is it true that you are happy		
				with how the leisure-time		
				activities of your child are		
				organized?" of the		
				questionnaire for the parents		
				of children aged 0-12.		
				For answers the following		
				scale is used: 4 – 'absolutely		
				true', 3 - 'more true than		
				false', 2 - 'true and false to		
				the same extent', 1 - 'more		
				false than true', 0 -		
				,		
1				'absolutely false'		

$$P_6 = (n_{6.1} + n_{6.2} + n_{6.3} + n_{6.4} + n_{6.5}) / 5$$

Description of indicators per parameter 7 'Providing help in difficult situations in life'

Justification for the choice of indicators:

A child friendly city warrants the right of each young citizen to protection and support in a difficult situation in life

No.	Indicator	Type of	Intended use of the	Data collection	Toolkit questions used to calculate the	Indicator calculation	Calculating indicator
7.1.	Proportion of children aged 0-17 in the city who are recognized at social risk and are registered by the end of the year	indicator Objective	indicator The indicator is used to measure progress in preventing social orphanhood	method The data for the city is provided by the Education Department of the District Executive Committee	indicator Departmental reporting form No.	method Numerator: number of children aged 0-17 in the city who are recognized at social risk and are registered by the end of the year multiplied by 1,000 Denominator: number of children aged 0-17 in the city Indicator is calculated as: k = numerator/denominator	normalized value $n_{7.1} = 10^*(1 - k/(k+k_{PE}))$, where k_{PE} is the number of children aged 0-17 in the Republic of Belarus who are recognized at social risk and are registered by the end of the year, multiplied by 1,000 and divided by the number of children aged 0-17. The information to calculate k_{PE} is contained in the annual statistical data book "Children and Youth in the Republic
7.2.	Proportion of orphaned children and children deprived of parental care identified during the year and placed in foster families	Objective	The indicator is used to measure the progress in providing the right for upbringing in a family	The data for the city is provided by the Education Department of the District Executive Committee	Departmental reporting form No.	Numerator: number of orphaned children and children aged 0-17 deprived of parental care identified during the year and placed in foster families Denominator: number of orphaned children and children aged 0-17 deprived of parental care identified during the year Indicator is calculated as: <i>k</i> = numerator/denominator	of Belarus" $n_{7.2} = 10*k/(k+k_{PE})$, where k_{PE} is the number of orphaned children and children aged 0-17 in the Republic of Belarus deprived of parental care identified during the year and placed in foster families, divided by the number of orphaned children aged 0-17 deprived of parental care and identified

							during the year in the Republic of Belarus. The information to calculate k_{Pb} is contained in the annual statistical data book "Children and Youth in the Republic of Belarus"
7.3.	Proportion of minors with a police record	Objective	This indicator is used to measure the progress in preventing law violations by minors	The data for the city is provided by the Internal Affairs Department of the District Executive Committee	Departmental reporting form No.	Numerator: number of children aged 0-17 in the city with a police record multiplied by 1,000 Denominator: number of children aged 0-17 in the city Indicator is calculated as: k = numerator/denominator	$n_{7.3} = 10*(1 - k/(k+k_{PE}))$, where k_{PE} is the number of children aged 0-17 in the Republic of Belarus with a police record multiplied by 1,000 and divided by the number of children aged 0-17 in the Republic of Belarus. The information to calculate k_{PE} is contained in the annual statistical data book "Law Violations in the Republic of Belarus"
7.4.	Proportion of parents who have ever received consultations or training on responsible parenting	Subjective	The indicator is used to measure progress in providing a child with the possibility of development in the family	Surveys of parents of children aged 0- 12	The indicator is estimated based on the answers to the question "Did you receive consultations or training on responsible parenting?" of the questionnaire for the parents of children aged 0-12. For answers the following scale is used: yes; no; refuse to answer	Numerator: number of respondents of the survey who answered 'Yes' Denominator: number of respondents who participated in the survey Indicator is calculated as: k = numerator/denominator	n _{7.4} = 10*k
7.5.	Proportion of children aged 6-17 who have the possibility to contact a relevant specialist or call a hotline to discuss their problems without parents knowing it	Subjective	The indicator is used to measure progress in providing a child with the possibility of receiving information about his/her problems	Surveys of children aged 6- 12 and children aged 13-17	The indicator is estimated based on the answers to the question: "Could you if needed discuss your problems with the teacher or call a crisis counseling line?" of the questionnaire for children aged 6-12; "Do you have the possibility if needed and without your parents knowing it	Numerator: number of respondents of two surveys who answered 'Yes' Denominator: number of respondents who participated in two surveys Indicator is calculated as: k = numerator/denominator	n _{7.5} = 10*k

					contact the necessary specialist or call a		
					crisis counseling line to discuss your		
					problems?" of the questionnaire for		
					children aged 13-17.		
					For answers the following scale is used:		
					yes; no; refuse to answer		
7.6.	Degree of satisfaction of	Subjective	The indicator is used to	Surveys of	The indicator is estimated based on the	Numerator: 4*a + 3*b + 2*c	$n_{7.6} = k/4*10$
	children aged 13-17 and		measure the quality of	children aged 6-	answers to the question:	+ 1*d + 0*e, where a is the	
	parents with the system		provided services in	12 and children	"Is it true that in your city you get help in	number of respondents of	
	of arranging assistance to		providing help to the	aged 13-17 and	any situation?" of the questionnaire for	three surveys who	
	children who find		children who find	surveys of the	children aged 6-12;	answered 'more true than	
	themselves in difficult		themselves in difficult	parents of	"Is it true that in your city you get help in	false', c is the number of	
	situations.		situations.	children aged 0-	any situation?" of the questionnaire for	respondents of three	
				12	children aged 13-17;	surveys who answered 'true	
					"Is it true that in your city your child will	and false to the same	
					get help in any difficult situation?" of the	extent', d is the number of	
					questionnaire for the parents of children	respondents of three	
					aged 0-12.	surveys who answered	
					For answers the following scale is used:	'more false than true', and e	
					4 – 'absolutely true', 3 - 'more true than	is the number of	
					false', 2 - 'true and false to the same	respondents of three	
					extent', 1 - 'more false than true', 0 -	surveys who answered	
					'absolutely false'	'absolutely false'.	
						Denominator: number of	
						respondents who	
						participated in three	
						surveys	
						Indicator is calculated as: <i>k</i> =	
						numerator/denominator	

$$P_7 = (n_{7.1} + n_{7.2} + n_{7.3} + n_{7.4} + n_{7.5} + n_{7.6}) / 6$$

The calculation of the city's child-friendliness index:

$$I = (P_1 + P_2 + P_3 + P_4 + P_5 + P_6 + P_7) / 7$$

Toolkit for the calculation of subjective indicators

The following questionnaires are the toolkit for the surveys:

- 1. Questionnaire for children aged 6-12 to assess a city's child-friendliness.
- 2. Questionnaire for children aged 13-17 to assess a city's child-friendliness.
- 3. Questionnaire for the parents of children aged 0-12 to assess a city's child-friendliness.

Currently the questionnaires contain the minimum number of questions needed to calculate the indicators. If the city government needs to examine the situation in more detail, necessary questions could be added to the developed questionnaires, and in doing so the questions contained in the developed questionnaires could be by no means shortened or replaced.

Preparation to the survey analysis

Before analyzing the three surveys one should number the filled in questionnaires, and select those suitable for analysis.

A questionnaire for children aged 6-12 is suitable for analysis if it meets the following criteria:

- the respondent's age is indicated as 6-12;
- the respondent's sex is indicated;
- the respondent indicated the city under assessment as his/her place of permanent residence;
- only one response is chosen to all questions with a five-point rating scale for responses: '0. Absolutely false',
- '1. More false than true', '2. True and false to the same extent', '3. More true than false', '4. Absolutely true'.

A questionnaire for children aged 13-17 is suitable for analysis if it meets the following criteria: the respondent's age is indicated as 13-17;

- the respondent's sex is indicated;
- the respondent indicated the city under assessment as his/her place of permanent residence;
- only one response is chosen to all questions with a five-point rating scale for responses: '0. Absolutely false',
- '1. More false than true', '2. True and false to the same extent', '3. More true than false', '4. Absolutely true'.

A questionnaire for the parents of children aged 0-12 is suitable for analysis if it meets the following criteria:

- at least one answer: '1. less than 6 years old' and '6-12 years old' is ticked in responding the question "To what age group does your child/do your children belong?";
- the respondent indicated the city under assessment as his/her place of permanent residence;
- only one response is chosen to all questions with a five-point rating scale for responses: '0. Absolutely false',
- '1. More false than true', '2. True and false to the same extent', '3. More true than false', '4. Absolutely true'.

The form for calculating a city's child-friendliness index

The form for calculating a city's child-friendliness index (hereinafter referred to as Index) is a book in Excel format consisting of 12 sheets with their names indicated under the window:

- 1. Guidelines guidelines on filling in the Index form.
- 2. Statistics Belarus the sheet for entering statistical data for the Republic of Belarus.
- 3. Statistics city the sheet for entering statistical data for the city.
- 4. Survey 6-12 the sheet for entering survey data for children aged 6 12.
- 5. Survey 13-17 the sheet for entering survey data for children aged 13 17.
- 6. Survey parents the sheet for entering parent survey data.
- 7. Res 6-12 the sheet for calculation of the survey results for children aged 6-12.
- 8. Res 13-17 the sheet for calculation of the survey results for children aged 13-17.
- 9. Res parents—the sheet for calculation of the survey results for parents.
- 10. Survey results the sheet for calculation of the survey results for children and parents.
- 11. Index the sheet for calculating the Index.
- 12. Chart the sheet for constructing the chart illustrating the calculation results.

To fill in the 'Statistics Belarus' sheet use the data from three statistical data books regularly published at the web site of the National Statistical Committee of the Republic of Belarus (http://belstat.gov.by/index.htm) and the site of the Ministry of Health of the Republic of Belarus (http://minzdrav.gov.by/ru/static/numbers/smertnost):

- "Children and Youth of the Republic of Belarus" published once every 2 years;
- "Health of the Population of the Republic of Belarus" published once every 3 years;
- "Law Violations in the Republic of Belarus" published annually.

To fill in the "Statistics city" use the data stated in the departmental and statistical reports submitted by the divisions of the city/district executive committee:

- Statistical Department/Directorate;
- Education, Sports and Tourism Committee / Directorate / Department;
- Health Committee / Directorate / Department;
- Culture Committee / Directorate / Department;
- Internal Affairs Committee / Directorate / Department.

The sheets 'Survey 6-12', 'Survey 13-17', "Survey parents' are used to enter the data from the survey questionnaires for children aged 6-12, children aged 13-17 and parents of children aged 0-12 respectively.

The data of the «Res 6-12», «Res 13-17», «Res parents», «Survey results», 'Index' and 'Chart' sheets are generated automatically.

Internal Data Quality Audit

After calculating the Index with the form it is necessary to check the quality of data input for the calculation of objective and subjective indicators. A person who did not participate in filling the form should be commissioned to do this job.

Data quality audit per objective indicators is done by detail test of basic source documents, which are responses to the information requests from the structural divisions of city/district executive committees, and the inspection of the accurateness of filling in Excel tables based on these documents. During the comparison one has to check both whether the source documents are present and if the provided information meets the requirements of the Index calculation methodology.

The survey data input quality control is performed as follows:

- You should check whether the questionnaires of three surveys are suitable for analysis in accordance with the criteria listed in the section *Preparation to the Survey Analysis*. The data from the questionnaires not suitable for analysis entered into the Index calculation form should be deleted.
- From the questionnaires of each survey suitable for analysis you should select randomly 20% of questionnaires, and these questionnaires should be checked for the consistency of data input into

Excel tables. If there is at least one input error in a questionnaire it is considered that the questionnaire data is entered incorrectly. If input errors occur in more than 10% of questionnaires, you should perform the detailed test of the survey data input. All identified errors of data input should be corrected.

Recommended Timeline for the Index Calculation

The data for the calculation of objective indicators is collected at the end of the year preceding the year for which the Index is calculated. For example, if the Index is calculated in 2013, the data per objective indicators is collected for 2012.

The process of data collection to calculate objective indicators and the surveys should be started in April at least once in two years. April is the most appropriate month for the evaluation, since the state statistics for the calculation of the objective indicators is already available, the preparation for school exams has not yet started and the pupils are not that overloaded and can be involved in the survey.