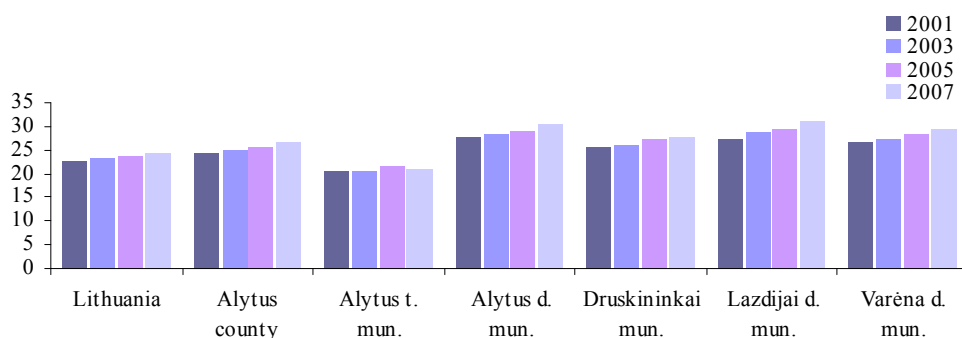


## ENVIRONMENT OF ALYTUS COUNTY

### Housing

Provision of the residents of Alytus county with a living space is relatively adequate: at the end of 2007, there were 26.4 m<sup>2</sup> of useful floor area per capita in Alytus county, which is by 2.2 m<sup>2</sup> more than the national average; useful floor area per capita was lower than the national average only in the densely populated Alytus town municipality, while in Alytus and Lazdijai district municipalities it was higher than the national average. A higher supply of living space in the municipalities of Alytus county is one of the factors that could increase the attractiveness of its environment. Given a relatively well-developed social infrastructure and service sector, most of the county's municipalities could become more attractive for living to persons arriving from other regions, as well as stimulate social and economic development of the entire region.

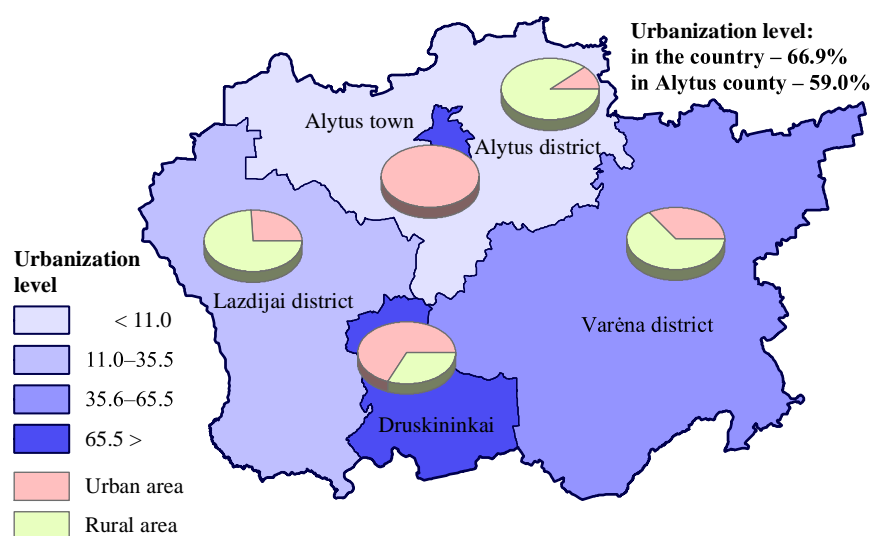
### Useful floor area per capita, 2001–2007 m<sup>2</sup>



### Social infrastructure

#### Urbanization level in municipalities, beginning of 2008

Per cent



The Alytus county centre – Alytus town – ranks sixth in Lithuania in terms of size; in 2008, it was inhabited by 68.3 thousand persons (more than one-third of the county population). Meanwhile, the centre of Lazdijai district municipality – Lazdijai town – was

inhabited by just 4811 persons, while in Alytus district municipality there were no major towns at all. The most urbanised municipalities were those of Alytus town and Druskininkai – only in the said municipalities, more than half of the population were living in urban areas. In the rest of municipalities, the largest part of the population were living in rural areas.

Inhabitants of less populated municipalities are more often faced with problems arising due to insufficiently developed social services; in such municipalities, private enterprises also provide fewer services. Geographical distribution of the social infrastructure in Alytus county municipalities often conditions the level of attractiveness of certain territories for living. The issues of accessibility of the social infrastructure are of particular relevance in those areas where the objects of the social infrastructure are located far from each other, namely in the rural municipalities of Alytus, Lazdijai and Varėna districts. In the urbanised municipalities, the most of important objects are easier accessible to residents; however, even these municipalities are faced with certain problems related to provision of public services.

### Preschool education institutions

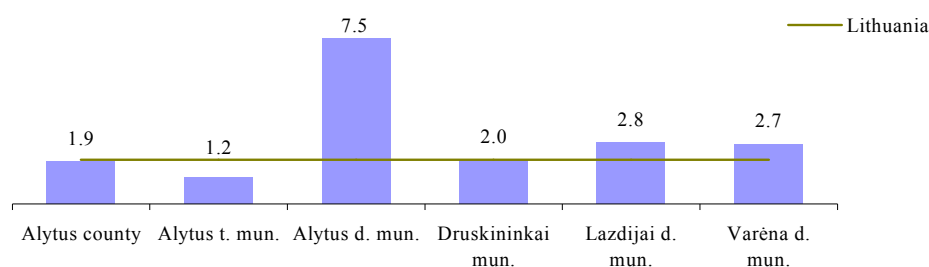
Half of preschool education institutions in Alytus county were concentrated in Alytus town municipality, whereas in the rest of municipalities their number was several times lower.

#### Number of preschool education institutions, 2001–2007

	2001	2003	2005	2007
<b>Alytus county</b>	<b>37</b>	<b>35</b>	<b>32</b>	<b>32</b>
Alytus t. mun.	17	16	16	16
Alytus d. mun.	6	6	3	3
Druskininkai mun.	2	3	3	3
Lazdijai d. mun.	4	4	4	4
Varėna d. mun.	8	6	6	6

At the end of 2007, there were, on average, 2 children of preschool age per place in the country's preschool education institutions. The Alytus county indicator was somewhat better than the national average. The shortage of places in kindergartens was observed in the entire county; however, considerable disparities have been observed between the county's municipalities: in Alytus town municipality, the difference between the number of children and that of places in preschool education institutions made up 20 %, in the rest of municipalities – 2–3, while in Alytus district municipality – almost 8 times. In Lazdijai districts municipality, this indicator made up 2.9, Alytus district – 7.7, while in Alytus town municipality – just 1.2. The poorest ratio of the number of children to that of places in preschool education institutions was in rural municipalities, where in quite a number of settlements there were no preschool education institutions at all (in Alytus district municipality, since 2003, the number of such institutions halved). In more urbanised municipalities and towns, the distance to the nearest preschool education institution is usually relatively short; however, the number of places in such institutions is much lower than demand for them.

#### Number of children aged 1–6 per place in preschool education institutions, end of 2007



The density of the network of preschool education institutions in Alytus county is similar to the national average; there are several regions (Alytus, Lazdijai, Varėna district municipalities) which are faced with the threat of becoming less attractive to the youth and women wishing to participate in the labour market. Shortage of preschool education institutions may condition not only insufficient quality of provided services, but also further depopulation of scarcely populated territories and slowdown in local economic development.

### General schools

In Alytus county, as well as in the entire Lithuania, a downward trend in the number of general schools has been observed.

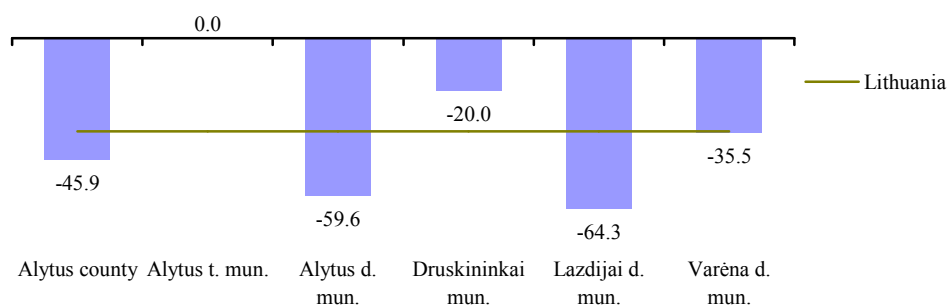
Over 2001–2007, the number of general schools decreased in Lazdijai district municipality – 2.8 times, in Alytus district municipality – 2.5 times, while in Alytus town municipality this number remained unchanged

### Number of general schools

	Number of general schools				Number of pupils per general school			
	2001-2002	2003-2004	2005-2006	2007-2008	2001-2002	2003-2004	2005-2006	2007-2008
<b>Lithuania</b>	<b>2270</b>	<b>1932</b>	<b>1534</b>	<b>1472</b>	<b>265.4</b>	<b>301.8</b>	<b>351.1</b>	<b>332.5</b>
<b>Alytus county</b>	<b>148</b>	<b>128</b>	<b>81</b>	<b>80</b>	<b>220.8</b>	<b>245.3</b>	<b>355.7</b>	<b>325.7</b>
Alytus t. mun.	18	18	18	18	789.9	762.1	704.4	646.2
Alytus d. mun.	47	40	19	19	88.6	97.4	187.1	164.6
Druskininkai mun.	10	8	7	8	475.8	568.3	599.4	470.5
Lazdijai d. mun.	42	41	17	15	107.8	107.1	233.5	236.4
Varėna d. mun.	31	21	20	20	161.9	230.8	220.5	199.4

### Change in the number of general schools, 2001–2008

Per cent



The number of schools has been rapidly decreasing in those municipalities where schools having a low number of pupils have been predominant (e.g. in Alytus district municipality, where there were, on average, 164.6 pupils per school). A trend common both to Lithuania and Alytus county has been observed – schools serve more pupils, while in more remote areas general educational services become less accessible to pupils. Only in Varėna district municipality a contrary phenomenon has been observed – here, since 2003, the average number of pupils per school has been decreasing. In more densely populated (Druskininkai town and Alytus town) municipalities, the number of schools has been stable, while that of pupils has been decreasing.

With the decrease in the number of schools and enlargement of the remaining ones, a heavier load in future should fall within educational institutions located in Alytus, Druskinikai, Varėna towns and other municipal centres; transport issues, related to trips to school of pupils

living in more remote areas, will have to be solved; attention will have to be directed towards the demand for the teaching staff, which will be growing in future.

### Cultural infrastructure

In Alytus county, there is a relatively well-developed cultural infrastructure, which allows satisfying cultural needs of the local population, as well as providing an opportunity to engage in social activity. There were, in total, 102 libraries subordinate to the Ministry of Culture in Alytus county at the end of 2007, the major share whereof fell within less populated areas – Alytus, Varėna and Lazdijai district municipalities.

### Libraries, end of 2001–2007

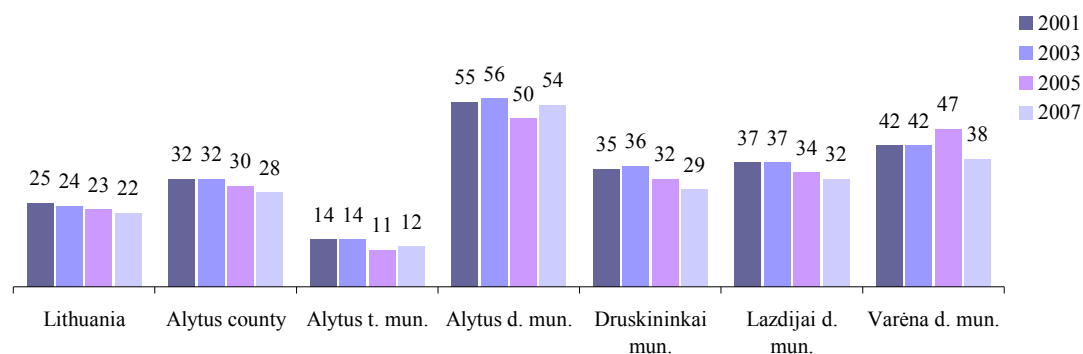
	Number of libraries				Number of libraries per 1000 population			
	2001	2003	2005	2007	2001	2003	2005	2007
<b>Lithuania</b>	<b>1449</b>	<b>1418</b>	<b>1396</b>	<b>1395</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>
<b>Alytus county</b>	<b>105</b>	<b>102</b>	<b>102</b>	<b>102</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>
Alytus t. mun.	4	4	4	4	0.1	0.1	0.1	0.1
Alytus d. mun.	37	34	34	34	1.1	1.1	1.1	1.1
Druskininkai mun.	7	7	7	7	0.3	0.3	0.3	0.3
Lazdijai d. mun.	28	28	28	28	1.1	1.1	1.1	1.1
Varėna d. mun.	29	29	29	29	1.0	1.0	1.0	1.0

It might be observed that in terms of accessibility of libraries more densely populated Alytus county municipalities significantly lag behind the less populated ones, whereas in Varėna, Lazdijai and Alytus district municipalities relative density of the network of libraries exceeds the national average more than two times. Libraries are more easily accessible in Alytus, Lazdijai and Varėna district municipalities. Most of the population inhabiting more remote areas has a possibility to use library services. Alytus town and Druskininkai municipalities may be characterised by bigger libraries, serving a higher number of library users.

Densely located and easily accessible libraries attract quite a number of local residents – more than one-fourth of the Alytus county population used library services at the end of 2007 (national average – 22 %); the highest number of users was accepted by the libraries of Alytus (more than half of the county population) and Varėna district municipalities, while the lowest – by those of Alytus town municipality. Libraries situated in more remote and less populated areas attract more local residents.

### Share of library users, 2001–2007

Against the total population, per cent



In addition to their primary function of providing information, libraries have considerable potential for becoming centres of attraction to the population, contributing to the improvement of the residents' qualification and activeness, providing a possibility to use information technologies. Thus, the living environment and quality of life is improving namely in those areas where the supply of other social services is rather poor, whereas residents of the territories where this potential is underused may be faced with a problem of increasing "information exclusion".

The distribution of cultural centres in Alytus county is rather even as well – the highest number thereof is in Varėna, Lazdijai and Alytus district municipalities. Fewer cultural centres are situated in Druskininkai municipality. In 2007, a cultural centre was established in Alytus town municipality.

The number of cultural centres per 1000 population in Alytus county exceeded the national average. In two (Lazdijai and Varėna district) municipalities, the national average was exceeded almost 3 times. Based on these data, a conclusion may be drawn that main cultural services have been provided even in small administrative units of Alytus county municipalities; however, a large number of cultural centres was observed only in part of the county's municipalities; the number of cultural centres was low in Druskininkai and Alytus town municipalities, where the demand for cultural centres was lower due to a higher supply of other cultural services.

#### **Number of cultural centres, 2001–2007**

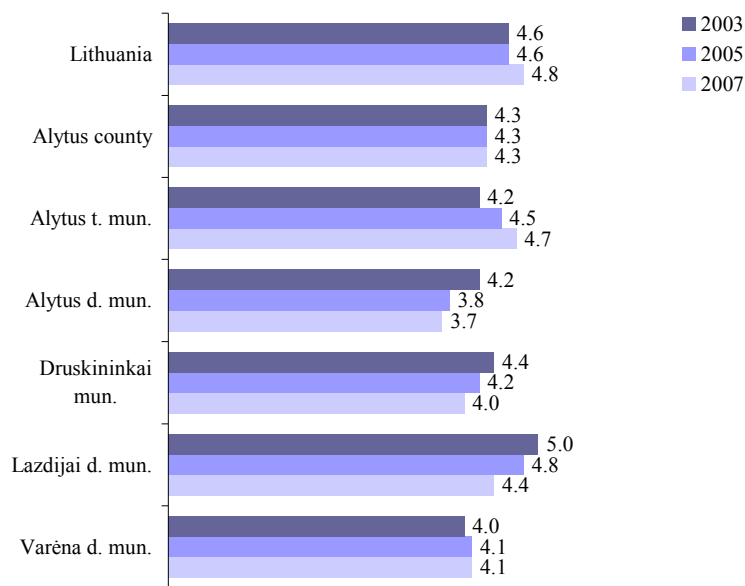
	Number of cultural centres				Number of cultural centres per 1000 population			
	2001	2003	2005	2007	2001	2003	2005	2007
<b>Lithuania</b>	<b>947</b>	<b>882</b>	<b>850</b>	<b>853</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>	<b>0.3</b>
<b>Alytus county</b>	<b>70</b>	<b>68</b>	<b>66</b>	<b>70</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>
Alytus t. mun.	0	0	0	1	0.0	0.0	0.0	0.0
Alytus d. mun.	23	22	18	22	0.7	0.7	0.6	0.7
Druskininkai mun.	4	4	4	4	0.2	0.2	0.2	0.2
Lazdijai d. mun.	21	20	22	21	0.8	0.8	0.9	0.8
Varėna d. mun.	22	22	22	22	0.7	0.7	0.7	0.8

Even and dense distribution of cultural centres and the expanded network of libraries provide favourable conditions for the provision of cultural services of local importance in less populated county's municipalities and forming centres of attraction for local residents. However, a high number of small cultural establishments causes problems related to the maintenance and renovation of the existing infrastructure; initiative on improving service quality and active contribution of local communities are of great importance. The existing infrastructure allows providing cultural services and stimulating social activity; however, the infrastructure, per se, does not ensure good quality of offered services.

#### **Trade and service enterprises**

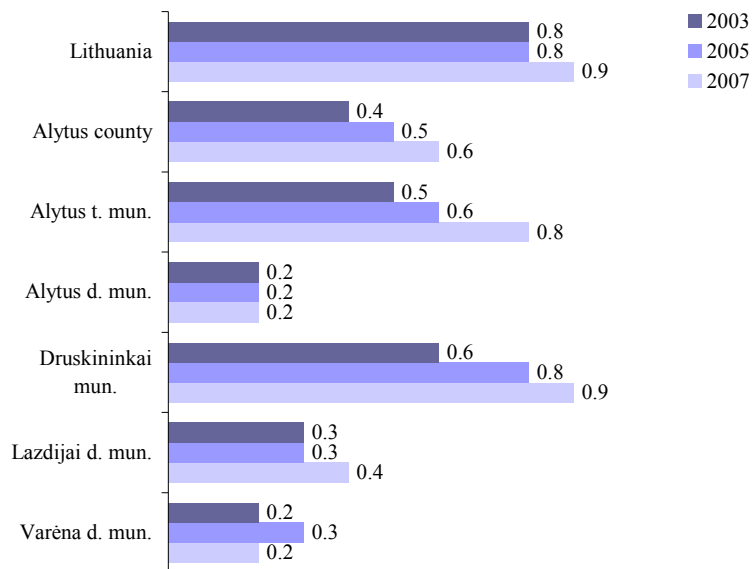
It has been observed that at the end of 2007 the number of shops per 1000 Alytus county population was slightly lower than the national average. This indicator has been decreasing across the entire county, except for Alytus town municipality.

### Number of shops per 1000 population, 2003–2007



The number of restaurants, bars and canteens in the county was relatively low; only in the resort Druskininkai municipality at the end of 2007 the number of restaurants, bars and canteens per 1000 population equalled the national average, while in the regional centre – Alytus town municipality – was slightly lower. In other municipalities, the said indicator was 2–3 times lower than the national average. Nevertheless, positive changes have been observed: in all municipalities, this indicator has been either increasing, or remained stable.

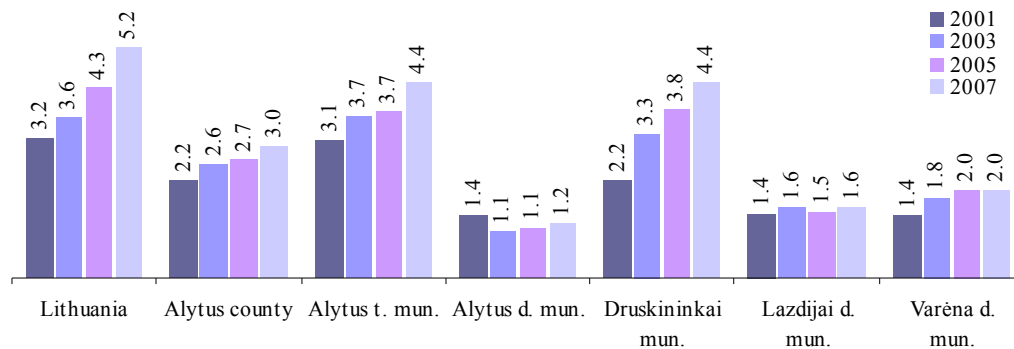
### Number of restaurants, bars, canteens per 1000 population, 2003–2007



The total number of service enterprises in Alytus county in 2005 was also considerably lagging behind the national average (2.7 and 4.3 service enterprises per 1000 population respectively). The indicators of Alytus town and Druskininkai municipalities were the best – 3.7 and 3.8 service enterprises per 1000 population; these municipalities were lagging behind the national average relatively insignificantly. The poorest indicators were observed in Lazdijai and Alytus district municipalities – just 1.1 and 1.5 service enterprises per 1000 population. Although the number of service enterprises in Alytus county has been gradually increasing, this growth was not sufficient for approximating the national average. The indicators of the

regional centre, Alytus town municipality, which in 2003 had exceeded the national average, later fell considerably behind.

### Number of service enterprises per 1000 population, 2001–2007



The low number of service enterprises may be an indicator of insufficiently exploited tourism development potential in the region, as well as insufficient income of its residents. On the other hand, service supply and quality may be the decisive factors when choosing the place of residence, particularly in case of high-income people. Therefore, negative service sector development trends in Alytus county may mean notable deterioration in the living environment and quality of life in future.

### Communication

The best-developed communication infrastructure – in Alytus town municipality; however, due to the small area and high population density, indicators of this municipality are not comparable with the national averages. In all (except for Alytus town) county's municipalities, average density of the road network is lower than the national average. Among the rest of municipalities, the communication infrastructure is better developed in Lazdijai district municipality, where the density of the road network was the highest, while the worst-developed – in Varėna district municipality. Despite high density of the road network, the share of roads with an improved roadway surface against the total length of roads in Lazdijai district municipality was slightly lower than the national average. In other county's municipalities, the share of roads with an improved roadway surface was higher than the national average.

### Density of the network of national and local roads, 2007

km/km<sup>2</sup>

	National and local roads			Share of roads with an improved roadway surface, against the total number of roads, per cent
	Total	surfaced	with an improved roadway surface	
<b>Lithuania</b>	<b>1.2</b>	<b>1.1</b>	<b>0.4</b>	<b>28</b>
<b>Alytus county</b>	<b>0.9</b>	<b>0.8</b>	<b>0.3</b>	<b>32</b>
Alytus t. mun.	3.7	3.2	2.1	57
Alytus d. mun.	1.1	1.1	0.3	30
Druskininkai mun.	1.0	0.9	0.4	42
Lazdijai d. mun.	1.0	0.9	0.3	28
Varėna d. mun.	0.7	0.6	0.2	31

Quite a number of residents of Alytus county own cars: at the end of 2007, there were 433 private cars per 1000 population (national average – 429). Since 2001, this number increased by as much as 45 %. The highest number of private cars per 1000 population was in

Alytus town municipality, while the lowest – in Alytus, Lazdijai and Varėna district municipalities

#### Private cars per 1000 population, 2001–2007

	2001	2003	2005	2007
<b>Lithuania</b>	<b>304</b>	<b>336</b>	<b>395</b>	<b>429</b>
<b>Alytus county</b>	<b>299</b>	<b>337</b>	<b>398</b>	<b>433</b>
Alytus t. mun.	357	392	439	460
Alytus d. mun.	239	283	369	423
Druskininkai mun.	320	327	400	439
Lazdijai d. mun.	225	299	350	402
Varėna d. mun.	273	305	371	401

Although most of the areas of Alytus county municipalities are rather easily accessible by private cars (due to relatively high quality of roads and high number of cars), the public transport system in the county is developed rather unevenly: half of bus routes functioning in Alytus county in 2007 fell within Alytus town municipality, while in Varėna district municipality their share made up just 7.5 %. The territory of the county per bus route was by 42 % larger than the national average. Peripheral municipalities were lagging from the median value of the country – in most of the country's municipalities, the density of the bus route network was higher. In Varėna district municipality, the territory per bus route was more than six times larger than the national average. In Alytus district municipality, which was also lagging in terms of this indicator, the situation significantly improved: the number of bus routes from 2005 to 2007 grew almost three times. The number of bus routes almost doubled in Druskininkai municipality. In Varėna and Lazdijai district municipalities, the growth in the number of bus routes was inconsiderable, while in Alytus town municipality their number decreased. Although in part of the county's territory communication by shuttle buses became more easily accessible, Lazdijai and Varėna district municipalities remained problematic in this respect.

#### Number of routes, 2001–2007

	2001	2003	2005	2007
<b>Lithuania</b>	<b>3859</b>	<b>4001</b>	<b>3807</b>	<b>3155</b>
<b>Alytus county</b>	<b>250</b>	<b>243</b>	<b>220</b>	<b>224</b>
Alytus t. mun.	169	171	148	121
Alytus d. mun.	11	7	7	19
Druskininkai mun.	21	22	22	40
Lazdijai d. mun.	27	27	27	27
Varėna d. mun.	22	16	16	17
<b>Territory per route, km<sup>2</sup></b>				
<b>Lithuania (average)</b>	<b>16.9</b>	<b>16.3</b>	<b>17.2</b>	<b>20.7</b>
Lithuania (median)*	30.8	29.9	28.1	29.3
<b>Alytus county</b>	<b>21.7</b>	<b>22.3</b>	<b>24.7</b>	<b>24.2</b>
Alytus t. mun.	0.2	0.2	0.3	0.3
Alytus d. mun.	127.6	200.6	200.6	73.9
Druskininkai mun.	21.6	20.6	20.6	11.4
Lazdijai d. mun.	48.5	48.5	48.5	48.5
Varėna d. mun.	100.8	138.6	138.6	130.5

\*the largest share of bus routes falls within the municipalities of major cities/towns; therefore, smaller municipalities may be compared with each other by means of estimation of the country's median – a middle (central) value of indicators of all municipalities.



The number of bus trips per capita also demonstrates that in the municipalities other than those of Alytus town and Druskininkai the public transport system is substantially underused. The lowest number of bus trips per capita was in Varėna, Alytus and Lazdijai district municipalities, i.e. in the municipalities with the lowest number of private cars per capita and a sparse network of bus routes. However, positive trends have been observed: the residents of Alytus and Lazdijai district municipalities, against 2001–2005, were using bus services more actively.

### Public safety

Alytus county may be attributed to one of the safest regions in Lithuania. In 2007, there were 1358 registered criminal offences per 100 000 Alytus county population, which is by 37.8 % less than the national average. The lowest number of criminal offences was registered in Alytus (two times lower than the national average) and Lazdijai district municipalities, while the highest – in Varėna district and Druskininkai municipality. Although cities and towns are usually characterised by a high crime rate, the number of criminal offences and crimes registered in Alytus town municipality was similar to that in rural municipalities and much lower than the national average.

### Registered criminal offences per 100 000 population, 2007

	Criminal offences	Crimes
<b>Lithuania</b>	<b>2185</b>	<b>2014</b>
<b>Alytus county</b>	<b>1358</b>	<b>1255</b>
Alytus t. mun.	1390	1272
Alytus d. mun.	989	960
Druskininkai mun.	1531	1392
Lazdijai d. mun.	1354	1223
Varėna d. mun.	1542	1445

A usual trend of the number of registered criminal offences being lower in peripheral, rural municipalities in Alytus county proves to be just partly true – in Alytus and Lazdijai district municipalities, the crime rate is lower; however, in terms of the number of registered crimes, Varėna district municipality outpaces other county's municipalities. All county's municipalities are relatively safe; therefore, the differences in the quality of their living environment are determined by other factors.

### Environmental protection and management

Improvement of the quality of water of Nemunas River remains among the most important task of environmental protection in Alytus county. In 2007, 4 540 557 thous. m<sup>3</sup> of domestic, municipal and industrial waste water was discharged into Lithuanian surface waters, of which 209 073.3 thous. m<sup>3</sup> – that requiring treatment. About 3 % of the total amount of Lithuanian waste water requiring treatment was discharged in Alytus county. Although waste water discharge in Alytus county is not considerable, the amount of waste water treated in the county in 2007 was by 27 % larger than the national average.

The largest share (85 %) of waste water requiring treatment was generated in Alytus town and Druskininkai. Pollution reduction measures implemented in the region conditioned the fact that the amount of domestic, municipal and industrial waste water treated to meet the established maximum allowable pollution (MAP) standards in the county, against previous, years, considerably increased. In Alytus town, waste water collected through waste water networks is mechanically and biologically treated in waste water treatment facilities, which were reconstructed and expanded in 1999 and meet all national and EU requirements for waste water treatment; the said waste water treatment system also has facilities for biological

(nitrogen and phosphorus) nutrient removal. In 2006, facilities for biological treatment of waste water were put into operation in Druskininkai town; it was the last town in Alytus county where up to the end of the year 2005 only mechanical waste water treatment facilities had been operating.

### Domestic, municipal and industrial waste water generated that required treatment, 2001–2007

Thousand m<sup>3</sup>

	2001	2003	2005	2007	Share of waste water treated to meet standards (MAP) in the total amount of waste water generated, per cent			
					2001	2003	2005	2007
<b>Lithuania</b>	<b>171169.6</b>	<b>167064.5</b>	<b>192212.4</b>	<b>209073.3</b>	<b>17.8</b>	<b>54.6</b>	<b>70.5</b>	<b>72.3</b>
<b>Alytus county</b>	<b>6218.4</b>	<b>6573.4</b>	<b>6870.1</b>	<b>6459.7</b>	<b>76.8</b>	<b>70.2</b>	<b>74.4</b>	<b>99.2</b>
Alytus t. mun.	4269.0	4227.0	4620.0	3759.0	100.0	100.0	100.0	100.0
Alytus d. mun.	225.3	201.3	182.8	176.3	87.5	97.8	94.3	97.8
Druskininkai mun.	1390.5	1296.5	1357.5	1729.6	3.7	6.6	4.7	99.6
Lazdijai d. mun.	217.7	164.1	183.4	154.2	82.7	19.5	98.0	100.0
Varėna d. mun.	115.9	684.5	526.4	640.6	68.6	10.6	14.7	93.4

Waste management in Alytus region is one of the priority areas of environmental protection. In all towns, most of the townships, as well as in larger villages and settlements, waste is collected in a centralised way, the waste collection infrastructure is being further developed; however, given economic development and increasing consumption, the amount of municipal waste has been annually increasing. Since 2004, the amount of municipal waste generated has been increasing in all Alytus county municipalities, except for Lazdijai district municipality. In 2006, the amount of domestic waste generated in Alytus county made 64 266 tonnes, 95 % of generated waste was managed.

### Municipal waste generated, 2004–2006

Tonnes

	2004	2005	2006
<b>Alytus county</b>	<b>61698.0</b>	<b>66491.8</b>	<b>64266.1</b>
Alytus t. mun.	27199.6	23391.0	30937.5
Alytus d. mun.	1514.5	6719.9	6907.5
Druskininkai mun.	13233.6	16614.0	16412.2
Lazdijai d. mun.	15250.8	14494.4	4691.1
Varėna d. mun.	4499.6	5272.5	5317.8

In most of the county's municipalities, domestic waste has been managed at the same location where it was generated; only in Alytus town and district municipalities a common waste management system has been used.

### Municipal waste managed, 2004–2006

Tonnes

	2004	2005	2006
<b>Alytus county</b>	<b>59622.6</b>	<b>61256.8</b>	<b>61345.5</b>
Alytus t. mun.	0.0	0.0	35.3
Alytus d. mun.	27582.9	26885.5	36085.0
Druskininkai mun.	13120.6	16128.3	16118.3
Lazdijai d. mun.	14606.1	13443.0	3858.9
Varėna d. mun.	4313.0	4800.0	5248.0

As required by the State Strategic Waste Management Plan approved by the Government of the Republic of Lithuania, public municipal waste management services are provided in all villages of Alytus county, which have more than 200 residents. A system for collection and sorting of secondary raw material was introduced in Alytus town. As a container waste collection system is being gradually introduced, increasing amount of waste is brought to the dumping ground of Alytus and other major dumping grounds, which contributes to the improvement of management of such waste.

The attractiveness of certain territories for living and quality of the living environment may be determined by many other factors, which were not discussed in this chapter. These are economic development of the region, labour market situation, real estate prices, as well as other subjective factors, which are hardly expressible in quantitative terms. The municipalities analysed are very different: in terms of the population (differing several or even several tens of times), area, other characteristics. Smaller municipalities may offer a relatively large area for living; however, they are traditionally characterised by a sparser network of the social infrastructure, which is also harder accessible due to an insufficiently effective public transport system. Druskininkai municipality is a characteristic resort locality; integration of Alytus town and district municipalities has been increasing; relations between municipalities and their localities allow making better use of advantages of different territories, as well as providing more and better services to the population.