



BASELINE REPORT

On Sustainable Local Mobility in Amalgamated Hromadas of Ukraine

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BASELINE REPORT - ON SUSTAINABLE LOCAL MOBILITY IN AMALGAMATED HROMADAS OF UKRAINEV

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БУДІВНИЦТВА
ТА ЖИТЛОВО-КОМУНАЛЬНОГО ГОСПОДАРСТВА
УКРАЇНИ

TABLE OF CONTENTS

Introduction	4
Document background	4
Understanding of sustainable mobility	4
Role of mobility in decentralisation	6
Legal, financial and institutional capacity of hromadas related to mobility	7
Mobility demands in amalgamated hromadas	8
Popular transportation means and transport organization practices	10
CONDITION OF TRANSPORT INFRASTRUCTURE AND MOBILITY IN HROMADAS	14
Municipal streets and roads	14
Roads of local significance	15
Roads of national significance	18
Social transport services: school buses, social taxi, transportation at discounted rates	22
Road accident and fatality rate	23
Organisational capacity of hromadas	25
Gender aspect	25
RECOMMENDATIONS	26
Recommendations for amalgamated hromadas	26
Recommended changes in the state policy	30

Introduction

Document background

This report is based on the inception phase results of the "Support and Development of Sustainable Mobility Services in Amalgamated Hromadas" Project implemented by GIZ (Germany) Sustainable Mobility Cluster involving Ukrainian experts as part of the U-LEAD with Europe Programme. This document consolidates results of the baseline research conducted in November-December 2018 by studying relevant documents and data, interviewing key persons and undertaking on-site visits to selected hromadas in different regions of Ukraine. This document aims at informing stakeholders about the state of affairs in sustainable mobility, current key issues, as well as at giving recommendations in order to resolve issues and ensure sustainable mobility development. Conclusions provided hereunder will be considered for purposes of planning in the current project, including trainings and study visits, as well as for planning in other international projects. Authors hope that the report will draw attention of officials responsible for development of the state policy in the Verkhovna Rada of Ukraine, the Cabinet of Ministers of Ukraine, the Ministry of Infrastructure of Ukraine and the Ministry of Regional Development, Construction, Housing and Communal Services of Ukraine, thereby contributing to the development and implementation of changes to the state policy that will improve the situation and enhance sustainable mobility in hromadas.

Understanding of sustainable mobility

"Sustainable mobility" is a new concept for most Ukrainians and heads of amalgamated hromadas (the AHs) and therefore needs to be explained. According to the European transport policy experts, "mobility" is an ability of people to participate in activities that take place in different locations (for example, in a neighbouring village, city, rayon or oblast centre, or on a neighbouring street). Social mobility can have various features – for instance, be limited in terms of territory, time, or have economic restrictions. Social mobility of citizens may be assessed by its intensity - high or low. Low mobility is especially common for small settlements located far from the main roads, where a private car is practically the only means to visit activities in other locations, and its operation depends on weather conditions and owners' ability to pay for fuel at ever-rising prices.

Sustainable mobility:

- Ensures accessibility and satisfaction of needs of people, companies and society in development considering safety requirement and subject to community and ecosystem needs.
- Is accessible, fair and efficient;
- Provides choice of means of transport and promotes competition and territory development;
- Reduces air pollution and litter volume to facilitate absorption;
- Utilises, to the extent possible, renewable energy sources, minimises the impact on soil and reduces noise levels.

"People with reduced mobility" comes from "mobility" concept and means persons who experience difficulties in travelling alone and finding a right direction. Thus, it is difficult or impossible for these people to go upstairs or downstairs, cover significant distances by foot or without anyone's help. People with reduced mobility are elderly people, people with disabilities, preschool children, parents with baby strollers, pregnant women, as well as persons having temporary (permanent) health conditions, persons carrying luggage, such as luggage trolleys or trolley bags.

"Sustainable Mobility" concept comes from definition of "sustainability", i.e., the ability to meet current needs of people without compromising the needs of the future generations and the environment. Basically, this concept has environmental and economic dimension, which involves mitigation of damage caused to the environmental and finding the most cost-efficient approaches for ensuring people's mobility.

Definition given for the purposes of this Report:

"Sustainable mobility" is the ability of people to participate in activities that take place in different locations by making minimum adverse impact on environment, economy and spatial territory planning.

BA well-known example of this definition is provided in "Sustainable Development Goals" adopted by the UN General Assembly in 2015; considerable part of the foregoing document concerns mobility.

Mobility-related¹ UN sustainable development goals are as follows:

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Goal 10. Reduce inequality within and among countries

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 12. Ensure sustainable consumption and production patterns

Goal 13. Take urgent action to combat climate change and its impacts

Switzerland, Sweden, Germany and other EU member states can be named as examples of countries where mobility of the population has become highly refined and sustainable. According to a sociological survey conducted in 2016 in 28 EU member states, 82% of the Europeans consider that the place they live is well served or relatively well served by public transport and only 5% of the respondents replied that their area was not served by public transport. The level of public transport service is not linked to the living area type. For instance,

¹ Website of the United Nations Office in Ukraine, <http://www.un.org.ua/ua/tsili-rozvytku-tysiacholittia/tsili-staloho-rozvytku>

Austria having a high ratio of inhabitants in rural areas (around 40%), at the same time has one the largest coverages by the public transport network.²

Role of mobility in decentralisation

Ahs are facing many challenges, which are mainly caused by current demographic trends. Population in Ukraine is generally decreasing, while the rural population is decreasing faster than urban does. As of 2018, according to the State Statistics Service, share of rural population was 30.7%. Over the past 10 years rural population has decreased by more than million and a half, which is approximately 10%, and this trend will most likely remain intact.

Rural population dynamics in Ukraine in 2009-2018

YEAR	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Rural population, millions of people	14,557	14,438	14,337	14,253	14,174	14,090	13,256	13,176	13,102	13,015
Rural population, % of the total population	31,5	31,4	31,3	31,2	31,1	31	30,9	30,8	30,8	30,7

Given the new demographic reality and need to efficiently spend available resources, institutions providing social services in the new AHs are currently undergoing optimisation with the support of the government and international partners. New administrative service centres (ASCs), hub schools, libraries and post-school institutions are being actively established in hromadas. A wide range of legal services previously provided by village councils are now provided at ASCs.

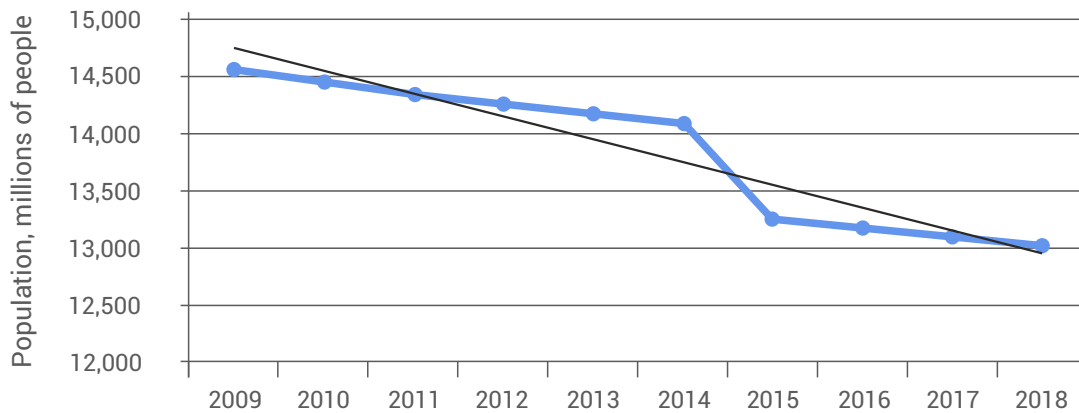
Thus, hromadas now more than ever need to ensure that residents of surrounding villages, as well as residents of a settlement being hromada's centre, have access to these services. Therefore, appropriate transportation is a must to provide the citizens with access to these social and administrative services. Labour mobility is also important: working age population of villages and settlements more often find work in neighbouring townships or in more remote oblast centres, and must be able to travel every day to work and back.

Organization of appropriate bus services becomes more expensive, in the first place, due to regular increase of the cost of motor vehicle operation, and secondly due to reduction of the number of passengers. Thus, despite the fact that population in hromadas and in Ukraine generally tends to decrease, the "per capita" cost of transport services is increasing.

² MobilitydataacrosstheEU 28 memberstates: resultsfromanextensiveCAWI survey; DavideFiorello , AngeloMartino, LoredanaZani, PanayotisChristidis, ElenaNavajas-Cawood - TransportationResearchProcedia, 14 (2016), 1104 – 1113

Appropriate road and street infrastructure, reliable and cost-efficient public transport, interconnection with other transport systems, in particular, railway, is the prerequisite to enhance the quality of living in hromadas and one of the decisive factors that impacts hromada's development or downturn.

Rural population dynamics in Ukraine, 2009-2018



Data "Demographic Passport of the Territory of Ukraine", 2018³

Ahs, efficient use of funds assigned for infrastructure, proper arrangement of regular and social transportation, as well as efficient interaction with other stakeholders – road services, regional state administrations (RSA) and private business will play a key role in this process. Those are the objectives of "Support and Development of Sustainable Mobility Services in Amalgamated Hromadas" Project, which was initiated in 2018 within the U-LEAD with EUROPE Programme and which includes this report.

Legal, financial and institutional capacity of hromadas related to mobility

As part of decentralisation reform, AHs received a number of powers related to mobility and transport, as well as respective financial resources.

Ahs' competencies and powers, including mobility, as well as sources of financing, are determined by the Constitution of Ukraine, the Budget Code of Ukraine, the Law of Ukraine "On Local Self-Governance" and other legislative acts of Ukraine. In general, within its powers an AH is responsible for:



Social and economic development, planning and reporting, including through elaboration of socio-economic and cultural development programmes); (Article 27 of the Law of Ukraine "On Local Self-Governance")

³ Website of the State Statistics Service of Ukraine, http://database.ukrcensus.gov.ua/Mult/Dialog/statfile1_c_files/pasport1.htm



Housing and communal services, transport and communication, including amenities (lighting, pavements, speed control means); approval of passenger traffic routes and schedules, procuring contracting enterprises, institutions and organisations (i.e. not owned by AH) for provision of appropriate transport services to the population and implementing activities aimed at transport enhancement; (Article 30 of the Law of Ukraine "On Local Self-Governance")



Construction of communal housing and social and cultural facilities, routes of local significance, carrying out rehabilitation and maintenance of streets and roads in settlements and other roads being a part of main roads (as co-financing on a contractual basis); (Article 31 of the Law of Ukraine "On Local Self-Governance")



Education, healthcare, culture, physical training and sports – including ensuring discounted travel tickets for schoolchildren, boarders, students and education staff for trips educational institution and back, as well as ensuring, within their powers, appropriate access to education (School Bus Programme, equipping bicycle parking racks near preschool and school education institutions, other social infrastructure facilities, etc.) (Article 32 of the Law of Ukraine "On Local Self-Governance")



Social protection of population – ensuring additional social protection guarantees at the expense of own funds and charitable contributions; providing aid to socially vulnerable population (Article 34 of the Law of Ukraine "On Local Self-Governance")

In order to fulfil their tasks AHs are vested with own and delegated powers by law. Sources of financing of AH activities include local and state budget funds assigned under the procedure stipulated by law, including through subventions and special programmes, provided, for instance, for infrastructure and education.

Decentralisation of roads, which provides for establishing of the State Road Fund and transferring roads of local significance from central level to oblast level, has not yet created new legal or financial opportunities for amalgamated hromadas. Roads of local significance are still owned by state authorities after their transfer from the State Road Agency of Ukraine (Ukravtodor) to the RSA level. According to the recent reports of the Ministry of Infrastructure of Ukraine, in 2018 over UAH 11 billion from the so-called "Road Fund" were allocated to RSA for repair and maintenance of roads of local significance.⁴

Mobility demands in amalgamated hromadas

Historically, the population of villages and small towns in Ukraine was less mobile compared to residents of cities. Soviet Union was focused on keeping people stay in their settlements due to impossibility to obtain a passport, a mandatory document since 1930s for travelling to

⁴ "2018 in Numbers", Website of the Ministry of Infrastructure, 09.01.2019, <https://mtu.gov.ua/news/30587.html>

other cities, which availability would be checked by the police. Rural population of Ukraine started obtaining passports only in 1969, and all village residents obtained passports and hence an opportunity to travel freely only in 1975-1980s.⁵

It is rather hard to assess current mobility level of people due to the lack of data. In Ukraine, mobility of population was studied only in big cities. No national-wide studies, or studies of mobility of residents in small settlement have been found to support this report. Therefore, to obtain information on transport needs, key destinations, popular transport means, level of satisfaction of hromada residents with transport services and infrastructure as of the date of this study, we have to rely on the quality (not quantity) methods of data collection, such as expert observations, informal and formal interviews and focus groups.

During the interviews with AH representatives, and according to observations made during visits to hromadas, a list of typical destinations regularly visited by hromadas' residents has been compiled.

Typical everyday destinations in rural area include:

- School, kindergarten
- Out-of-school facilities
- Grocery stores
- Enterprises and institutions providing employment
- Administrative centre of an AH or rayon

Typical regular destinations in rural area occasionally visited by people include:

- Churches
- Markets
- Hospital, healthcare center
- Administrative service centre
- Hair salon
- Bank
- Specialised stores, e.g. household stores
- Pension fund, tax inspection, other state services, notary
- Concerts, other cultural events
- Sessions of local councils, meetings of executive committees
- Cemetery (for visiting relatives' graves)

Other destinations popular among urban AH residents include:

- Supermarket (usually in a rayon centre)
- Bus station, railway station
- Oblast centre
- Private healthcare facilities, e.g. dental clinic
- Post offices and delivery service offices

⁵ "Passportless Serfdom", Tyzhden magazine, 28/03/2008, <https://tyzhden.ua/Publication/3814>

More detail about the transport needs, transport behaviour and level of satisfaction with services and infrastructure will be identified and presented in a structured manner as a result of focus groups in selected AHs to be conducted in 2019 within "Support and Development of Sustainable Mobility Services in AH" Project

Popular transportation means and transport organization practices

Ministry of Education defined that "Transport services shall be provided to schoolchildren residing farther than 3 km from their school with pre-determined bus stops to be made by a relevant transport. Distance from the place of residence to a meeting point must not exceed 500 m.⁶ "This 3-kilometre distance can be deemed a line where "short distance" trips end and "long distance" trips start.

Residents of villages, settlements and cities usually make short distance trips by foot or bicycles, although they tend to use a car if they have one.

Since we know the general vehicle-to-population ratio in Ukraine, we can assume that in average more than 30% of AHs' households own a car. That is why the largest share of AH's demand in transportation for trips father than 3 kilometres is covered by regular low and medium capacity bus transportation – by so-called "marshrutka" (minibus) (short for "minibus taxi"). As a rule, these services are provided by sole entrepreneurs or small firms that commonly use low and medium class buses with 18 to 35 seats. Those are Mercedes Sprinter minibuses or domestically-produced vehicles, such as Etalon and Bohdan. Lower capacity buses, such as Ruta minibus built on the basis of Russian Gazel mini truck, are operating on many routes. It is common for hromadas that operating buses are 10 years old or even older and need repair.



Children walking to school

⁶ National Sanitary Rules and Regulations on Equipping and Maintaining Education Institutions and Organising Teaching and Educational Process DSanPiN 5.5.2.008-01 approved by Regulation of the Head Sanitary Inspector of Ukraine No. 63, dated 14/08/2001, and Letter of the Ministry of Education and Science of Ukraine No. 1/12-1459, dated 05/06/2001.



People getting into a Mercedes Sprinter minibus ("marshrutka")



Typical Ukraine manufactured Etalon minibus

In hromadas, minibuses operate under determined routes and schedules, and generally satisfy the greater share of demand for transportation exceeding 3 kilometres. Regular buses are a generally affordable means of transportation: the average price of a trip is UAH 5 to 10, or approximately UAH 1 per 1 kilometre. In comparison, the cost of using a private vehicle consuming 8 litres of fuel per 100 kilometres is UAH 2.4 per 1 kilometre of run, excluding maintenance and repair expenses.

Common issues that the minibus users face are: overcrowded buses, especially in the mornings and evenings, low reliability during winter season, and sometimes – long distance from their home to a bus stop that only physically strong and healthy people can make. Lack of proper conditions in a bus waiting spot is a typical issue – equipped bus stops do not meet passengers' needs, they have no sheds, benches, proper lighting, litter baskets, information stands with transport schedule and route, etc.



Six female passengers waiting for a minibus



Ruta-type bus

Since the number of public transport routes usually cover more than one hromada, such transportations are arranged by RSA. In such cases, AH administration has no leverage over carriers which provide services to hromada's residents on a daily basis. As a result, when citizens file complaints about quality of services to AH management, AH management can only forward such complaints to RSA or negotiate with carriers.

Sometimes, in order to get private carriers interested in operating the routes, AH compensate carriers for carrying citizens eligible to privileges and entitled to free ride by law (people with disabilities, war veterans and other categories of citizens). They either have voucher system, or AH administration calculates the average number of persons enjoying privileges per one trip, multiply it by the number of trips and the cost of one trip, and then pay a relevant amount to a carrier based on the results of a reporting period.



Used car with foreign registration near a private household

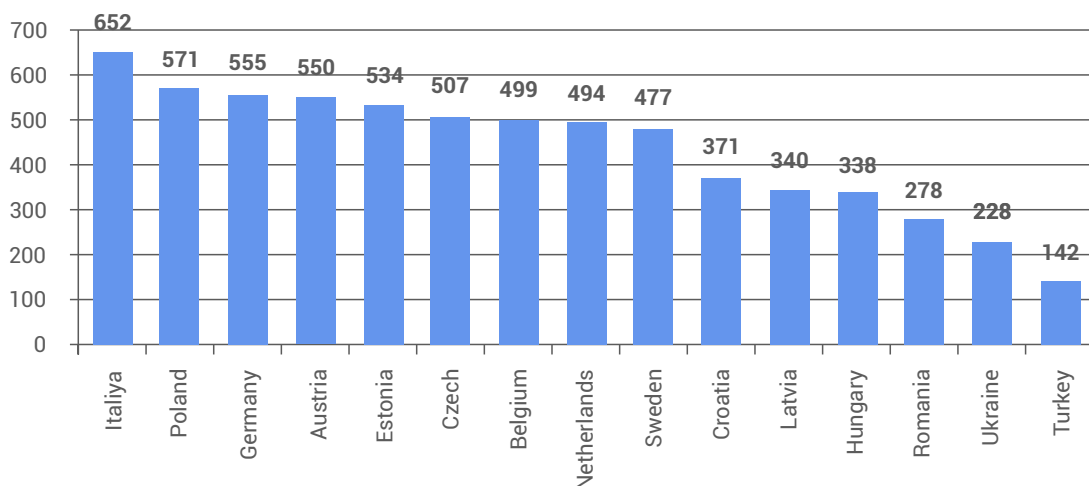
Private cars become more popular in hromadas. In Ukraine, there are approximately 10 million registered passenger cars, which results in vehicle-to-population ratio of 228 cars to 1,000 inhabitants. This is almost half the average ratio in European Union countries, which is 511 cars to 1,000 inhabitants.

Most cars in rural area are relatively old models with low energy-saving and safety performance, and are less environmentally-friendly. However, now we can see more often modern and new European, Korean and Japanese cars which are more environmentally-friendly and more efficient.

About 80,000 of such cars were sold in total in Ukraine in 2018.⁷

Demand for new quality cars will probably be increasing along with the population's income increase and interest rate reduction. In 2018 alone, average interest rate proposed by banks for new cars purchase dropped down from 13.5% to 12%,⁸ and financial market experts anticipate an increase of a number of car crediting.

Vehicle-to-population ratio (per 1,000 inhabitants) in certain EU countries



Data: "Vehicles in use: Europe 2018", ACEA, 2018

⁷ Current data for 2018, Autoconsulting group <http://www.autoconsulting.com.ua/article.php?sid=43090>

⁸ Analytical data for 2018, Prostobank Consulting website, http://www.prostobank.ua/avto_v_kredit/stati/top_15_luchshih_kreditov_na_pokupku_novoy_inomarki_srokom_na_3_goda_na_08_01_2019



A modern Skoda car near a 1980s Soviet Niva

Joint use of cars is a common practice for rural area. On-site research and interviews with hromadas' residents showed that in those places where public transport fails to meet existing demand, people often give a ride to their acquaintances, which in English is called 'carpooling'. In these circumstances, a car owner heading to work in a neighbouring village or returning from work to his village stops at a bus station and picks a few of his acquaintances. In most cases, such rides are free of charge, since in small settlements almost everybody knows each other.



People waiting for a bus, some of them trying to hitch a ride

Another type of joint use of cars, popular in AHs, is hitchhiking, i.e. when people, who need transport services, stop a random car heading in a relevant direction by raising their hand. In these cases, they usually pay for the ride an amount equal or somewhat higher than the minibus fare.

In hromadas located nearby the main roads, there is usually a greater public transport supply

and possibility to get somewhere farther and more quickly, since such hromadas are usually crossed by routes to a nearest rayon centre, oblast centre, more remote regional centres and the capital.

The issue of providing social transport services to people with reduced mobility who have no access to cars is quite challenging and requires comprehensive solution. Administrations in some hromadas handle such requests manually using their official cars to give a ride to such people. There are various solutions to resolve issue of transportation of social workers visiting citizens – social workers ride bicycles, scooters, official cars or take public transport. However, AHs administrations have no direct influence and are not responsible for this issue, as they play a limited role in social services provision by merely covering current expenses of Social Service Centres.

Condition of transport infrastructure and mobility in hromadas

Following decentralisation reform, AHs undertook responsibility for maintaining and developing infrastructure on their territory. Infrastructure of national significance, for which central executive authorities or their regional offices are responsible, is an exception. Major part of local infrastructure is directly related to people's mobility – those are roads, pavements, public transport stops, street lighting, cycling infrastructure and traffic control means. In most cases, AHs received this infrastructure in a poor condition, which in turn precludes development of proper conditions for safe, quality and comfortable transportation of people.

Municipal streets and roads

Main concern of amalgamated hromadas relate to municipal roads and streets in settlements. Generally, these are streets in low-rise private construction areas with low population density. Such streets are usually 8 to 12 metres wide from fence to fence.



Residential street in a township AH

Driveway of municipal street has various surfaces, but white crushed stone and asphalt are the most popular types. Street surfacemay also be unpaved, made of gravel or natural stone kept from the old times. There are some streets with the surface made of cement concrete tiles.

Local streets in villages and settlements usually have no pavements, people walk on the side of the road. Streets have a simple rain water disposal system made as channels between driveway and fences, and a driveway is usually 5 to 6 metres wide. Predominantly, such streets have no traffic signs or road surface marking. The only traffic arrangement means is self-made traffic-calming means (road bumps, so-called "speed bumps"), usually arranged by hromadas to mitigate an adverse impact of speedy traffic. These road bumps are made of road surfacing materials such as asphalt, concrete sett, concrete, rubber covers, and often are not covered with traffic signs and road marking, being a complete surprise for those driving such a street for the first time. They are usually constructed near schools and are sometimes accompanied by a "zebra crossing" sign.



Residential street in a rural AH



Central streets of one of the small towns in Ukraine

Common issues for these streets include random parking, excessively broad driveway in town centres (on central squares and near markets), badly placed and poorly arranged pedestrian crossings of over 10 metres long, and sometimes 15 and even over 20 metres long. Once such streets are repaired and the road becomes smooth for the first time in a decade, we immediately face an issue of traffic speeding, which hromadas address the only way they know – mentioned "speed/road bumps". Pavements on such streets, just like bus stops, are often in a poor condition and require major repairs for a quite some time already. In most cases, traffic signs are in place, but need to be replaced because they are wear and tear. Even when hromadas have road marking, it can usually be seen only on central streets, and only in more developed cities, which engage municipal enterprises to make road marking or procure relevant services from private firms (rarely). As a rule, there are no road marking and traffic signs placement schemes and all works are performed "customarily".

Roads of local significance

In hromadas, local roads that link villages with other villages, AH centre, main roads and neighbouring hromadas are important arterial roads. According to the official data, there are about 120,000 kilometres of local roads in Ukraine, while the length of roads of national

significance is approximately 47,000 kilometres.⁹

As part of road infrastructure decentralisation reform, local roads were transferred by Ukravtodor to RSA from 1 January 2018. Funds of the State Road Fund, amounting to 35% of all expenses, are to be spent on such roads repair and maintenance. Another 60% are to be spent on roads of national significance, and 5% – on traffic safety issues.

Roads of local significance, which have been suffering from the lack of funding for decades, are now in a poor technical condition and mostly need rehabilitation. As a rule, these roads have an asphalt surface, although this can hardly be verified, since potholes repair is not able to rectify the situation on most roads. Also, crushed stones are added during repair and road surface becomes half crushed stone and half ground.



Road of local significance in AH

Statutory transfer of local roads to oblast level effected on 01/01/2018 did not result in a drastic improvement of situation on these roads. 2018 was a transitional year and most oblasts neither maintained the roads nor implemented any road projects. According to the Ministry of Infrastructure of Ukraine (Ministry of Infrastructure), as of the date of roads acceptance, only 7 RSAs announced tenders for maintenance, other oblasts either announced tenders later or did not announce them at all.¹⁰

We would like to note amounts of money spent on roads of local significance in 2018. According to the Ministry of Infrastructure, in the late November 2018 when the repair season was already over, 10 out of 24 oblasts spent less than 80% of allocated funds, and some oblasts spent 40% to 60% of the projected funds.¹¹

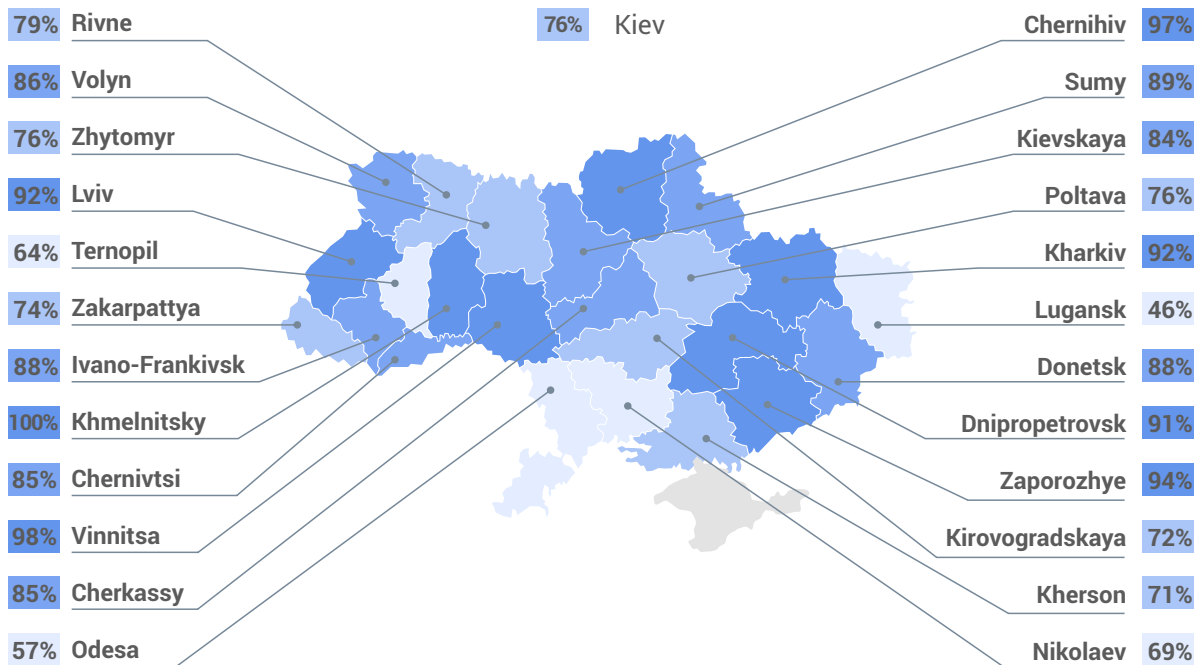
Regional administrations, now acting as a customer, often perform their functions "as they are accustomed to", i.e. by holding one big tender covering the entire oblast with the budget of

⁹ Data from the website of the Ministry of Infrastructure of Ukraine, <https://mtu.gov.ua/content/tehnichniy-stan-avtomobilnih-dorig-avtomobilnih-dorig-zagalnogo-vikoristannya.html>

¹⁰ "Road Decentralisation Reform: Outcomes of Q1 2018 Presented at the Round-Table Conference in the Ministry of Infrastructure", website of the Ministry of Infrastructure <https://mtu.gov.ua/news/29724.html>

¹¹ "Spending Money of the Road Fund on Local Roads (as of 30/11/2018)", website of the Ministry of Infrastructure, <https://mtu.gov.ua/news/30501.html>

DECENTRALIZED ROADS
the use of money from the Road Fund for local roads
the percentage of funding used by the regions (35% subvention, as of 30.11.2018)



hundreds of millions of hryvnias that is traditionally won by one contractor – state-owned Oblavtodor. As of the mid-2018, according to the monitoring conducted by the Ministry of Infrastructure, Oblavtodor offices were contractors in 16 cases out of 20 discovered services agreements in respect of local roads maintenance, and only 4 agreements were performed by private companies.

In turn, this impacts condition of local roads, especially during a winter season. According to AH heads in various oblasts, whom we met in terms of preparation of this report, works performed by Oblavtodor do not stand up to criticism. "Oblavtodor simply refuses to maintain these local roads and just says they have no fuel and no money. As a result, residents are jamming our switchboard, they are not satisfied with our explanations that oblast, not us, is responsible for the road. Thus, in an event of heavy snow, we clear the snow off local roads to make sure that school bus can pick up schoolchildren... Although, we are not statutory allowed to do that," said hromada's head who wished to remain anonymous.

Lack of proper maintenance and extremely poor condition of the roads results in a range of negative consequences for hromada – private carriers (minibuses) refuse travelling to such villages due to regular breakdowns and higher expenses, school buses are unable to pick up schoolchildren, people are unable to leave their villages for work and personal affairs in an administrative centre. As a result, villages degrade and people seek a more comfortable and accessible place to live.



| Road of local significance not cleared of snow

Roads of national significance

In most cases, AH territory is crossed by at least one road of national significance, the total network of which is about 47,000 kilometres. These roads can be international, national, regional and territorial.

On-site research and interviews with AH representatives revealed that roads of national significance often have the same issues as roads of local significance do, making them less safe and comfortable to use. The issues cover destroyed road base and surface, failure to clear or timely clear snow and ice, poor road marking and traffic signs which do not meet the national standards.

Roads of national significance in Ukraine as of 2018

ROAD TYPE	INDEX	LENGTH, KM
International	M	9032,6
National	H	7184,3
Regional	P	8120,7
Territorial/Local	T	22 656,5
Total		46 994,1

Pursuant to the Regulation of the Cabinet of Ministers of Ukraine "On Approving the List of Public Roads of National Significance" No. 712, dated 16 September 2015, as amended in 2017 and 2018



Map published on the website of the Ministry of Infrastructure,
<https://mtu.gov.ua/content/mapi-stanu-avtodorig.html>



A road of national significance which crosses this village hromada

A road of national significance crossing hromada's territory has both pros and cons.

The pros are: it greatly enhances the accessibility for village residents to administrative centre and rayon, oblast centre or other cities. In winter, this road is more likely to be cleared of snow and a school bus more likely to be able to drive on it. Moreover, such roads are usually more covered by fixed-route transport due to intercity and interregional transportation.

However, a road of national significance crossing hromada's territory often has negative consequences for residents. **First of all, these are traffic safety risks.**

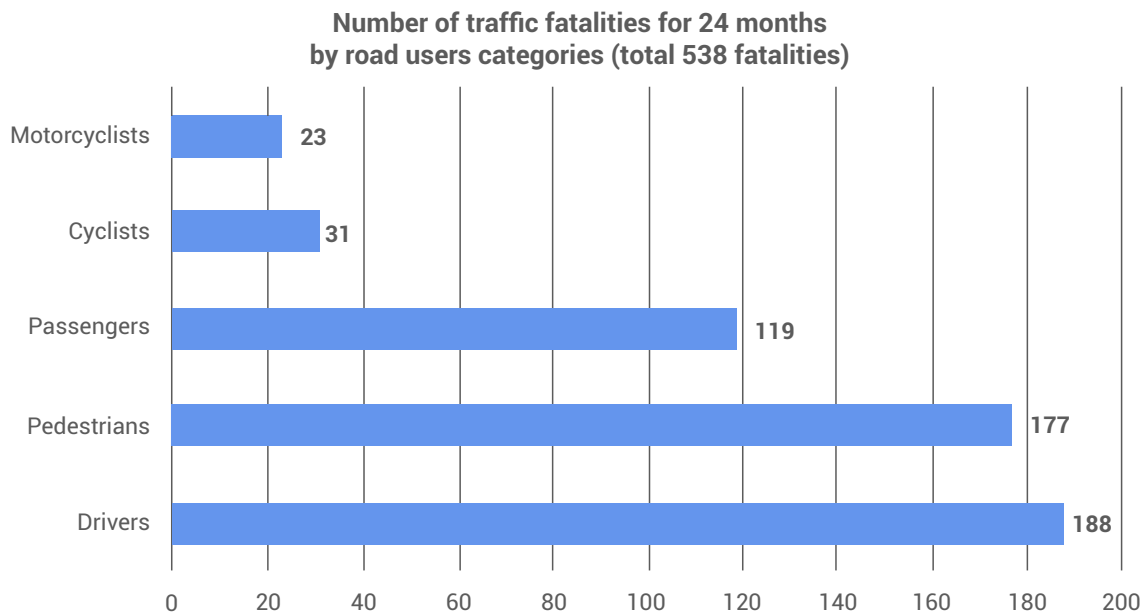


| International road of national significance and a zebra crossing

"Study of Road Accident, Injury and Fatality Rates in Kyiv Oblast", which was conducted within the framework of Zero Road Fatality in Kyiv Oblast Programme and procured by Kyiv RSA in 2017, revealed interesting facts and patterns:

- 1** Most traffic accidents – about 2/3 – happen on roads outside of cities, villages and settlements;
- 2** Among roads in Kyiv Oblast, five international roads of national significance have the highest ratio of fatalities (32.5%);
- 3** Share of vulnerable road users (pedestrians, cyclists and motorcyclists) among traffic accident victims constitutes 42.94%, including pedestrians – around 31%;
- 4** Most traffic fatalities happen in rayons near Kyiv crossed by busy international and national roads;
- 5** The lowest fatality rates are in rayons, which are located farther from the capital and are not crossed by international and national roads.

Since there have been no similar national studies, and the National Police does not publish traffic accident input (raw) or detailed data by oblasts, conclusions of the Kyiv Oblast study may be deemed relevant for understanding of the situation in amalgamated hromadas.



*Chart from the "Study of Road Accident, Injury and Fatality Rates in Kyiv Oblast"
(Kyiv RSA, 2017)*

Another issue is accessibility. Busy roads often cross the centre of a village or town, thereby making short-distance transportation (when people need to get to another part of a settlement) much more difficult. It is specifically relevant for the roads of I category having 2 lanes in each direction (M-06, M-05 and M-03 international roads, etc.). Customers and engineers are trying to resolve safety and accessibility issues by building pedestrian crossings at various levels. While it is possible to ensure that underground pedestrian crossings that match the relief are accessible by the people with the reduced mobility, pedestrian overpasses (footbridges) are not accessible by such people.

Even healthy people find these crossings impractical due to efforts and time they spend to cross a road. Therefore, in these cases it is a common practice to run across a road in all convenient places, or to make "illegal crossings" by demolishing part of a guard rail that divides traffic lanes.



International road crossing a hromada and having only footbridges

Social transport services: school buses, social taxi, transportation at discounted rates

According to the Constitution of Ukraine, the state shall ensure that citizens have access to basic secondary education. The Law of Ukraine "On Education" (Article 66) stipulates that rayon, city and AH councils shall ensure and finance transportation of school children and education staff to primary and basic secondary education institutions and back.

As a rule, hromadas use special school buses for performing these functions. Usually, those are medium capacity buses (30 to 35 seats), which according to the National Standard are yellow, have a "School Bus" marking on the side, yellow lights and other technical means aimed at improving transportation safety.¹²



| School bus in one of the hromadas

In general, it is difficult to find an amalgamated hromada in Ukraine with no school bus. However, hromadas face certain issues when operating such buses. Is it a typical problem that available school buses are not able to ensure timely transportation of school children and teachers to schools. The other issue mentioned by AH representatives during interviews concerns AHs doubts relating to proper arrangement of such buses operation and control over their maintenance costs, in particular cost of fuel and spare parts replacement. "Probably, we could use these buses more cost-efficiently and reasonably, but we don't know how," said one of AH representatives.

Another hromada expressed a similar concern about a special "social taxi" – transport for people with the reduced mobility. "If we could now get one of those minibuses for people with disabilities and elderly people, our phones would be down; I'm positive that people would like to use it, to go to a healthcare institutions or on business matters and back. However, we are not sure what would be the cost of this bus at the end of a year, and whether or not we can afford it," hromada stated.

¹² DSTU 7013:2009 "Specialised buses for transporting schoolchildren. Technical requirements", http://ksv.do.am/publ/dstu/dstu_7013_2009/3-1-0-494



School bus waiting for children

Another issue is non-efficiency of a large bus for transportation of children from small villages with just a few school-aged children needing such transportation. Heads of one of the hromadas under study used as example Lithuania's experience where state allows entering into contracts with individual entrepreneurs for daily transportation of such children, which appears to be more feasible than sending a large bus to such villages every day.

The same issue was emphasized by the analytical study conducted in 2018 as part of the U-LEAD with Europe Programme.¹³ This study revealed numerous challenges that hromadas operating school buses face, particularly, excessive cost of such social service, administrative and technical burden, and fleet obsolescence issue. "It is not uncommon when schoolchildren have to ride outdated and obsolescent 14-15-year-old buses," the report says.

This document has analysed experience of schools in Zaporizhzhia Oblast, which rent buses as an alternative to purchasing and operating own transport. Authors of the report have conducted economic analysis, based on which their recommendation is as follows:

"Newly established amalgamated hromadas, facing the issue of transportation of schoolchildren and teachers, especially in terms of school network formation and establishment of hub schools and branches, should consider renting transport to satisfy transportation needs subject to certain conditions. Depending on ... hromada's location and subject to available offer by a carrier, rented transport can be effective and cost-efficient alternative to purchase of school buses," the document says.¹⁴

Road accident and fatality rate

On-site visits and interviews with AH representatives proved that in those hromadas where passenger routes are linked to roads of national significance, all or almost all accidents resulting in fatalities or injuries happen on national roads.

¹³ "Review of Legislation and Specific Aspects of Arranging Schoolchildren Transportation for Local Self-Government Bodies", Dmytro Yakymchuk, U-LEAD South-Western Regional Hub

¹⁴ Full text of the study can be found at https://storage.decentralization.gov.ua/uploads/attachment/document/254/%D0%9E%D0%B3%D0%BB%D1%8F%D0%B4_%D0%B7%D0%B0%D0%BA%D0%BE%D0%BD%D0%BE%D0%B4%D0%B0%D0%B2%D1%81%D1%82%D0%B2%D0%B0.pdf

The damage caused by such traffic accidents is disproportional towards local hromada – transit vehicle drivers often violate traffic rules and are guilty in accidents, while most of residents of local villages and towns crossed by a route become victims of their mistakes and negligence.

For instance, in Yakushynetska Amalgamated Hromada near Vinnytsia, which was visited during the preparation of this report, accidents with fatalities happen at least several times a year, and the hromada cannot impact it. "We have repeatedly applied to the Road Service requesting to install a traffic light, however, nothing has been done to date, and people are dying every month," hromada's representative say.



One of the traffic accidents with fatality in Yakushynetska AH. Picture by 20 minutes (vn.20minut.ua)

The above study conducted in Kyiv Oblast revealed following traffic risk factors outside of big cities:

- speeding
- no pavements, hence pedestrians often walk on the side of a driveway
- low safety of pedestrian crossings
- deficiencies of intersections' design, turns and zebra crossings

Running over pedestrians and cyclists, which in most cases results in serious injuries and even fatalities, is a common type of traffic accidents on main roads. Other typical traffic accidents include collision of cars, especially on intersections and turns, and running into obstacles, e.g. trees and barrier fences along the road.

However, we can sometimes witness low traffic safety level outside of national roads, especially the so-called "subjective safety" perception, whereby people worry for themselves and their relatives, in particular children. It often happens on municipal streets with the new asphalt – smooth road "inspires" some drivers to drive faster than 50 km/h speed limit.



| A hromada resident walking along a road of national significance which has no pavement

It is a common practice for hromadas that residents start calling and filing written complaints demanding to install "speed bumps" to slow down the traffic (for example, such requests were reported by representatives from Yakushynetska AH in Vinnytsia Oblast and Lokhvytska AH in Poltava Oblast) immediately after a street repair.

Organisational capacity of hromadas

Interviews with AH heads and collected information on hromadas' applicable practices proved that organisational capacity differs greatly in hromadas. Hromadas in townships and settlements established around rayon centres often have a special department that performs infrastructure functions. For instance, those are housing and communal services department and a special municipal enterprise providing respective services. Such AHs often have an urban development and architecture department, whose employees procure and implement street repair and pavement construction projects. To the contrary, village amalgamated hromadas often have neither a municipal enterprise nor even special housing and communal services department, as well as urban development and architecture department. In general, such hromadas have a very limited number of offices. Hence, local roads, street repair and lighting issues are solved by AH head himself/herself or by his/her deputy in addition to their long list of tasks. It directly impacts capacity of hromadas to solve mobility issues.

Those hromadas, which have special structural units, facilities and resources, as well as relevant background relating to implementation of infrastructure projects, are more likely to develop and implement proper strategic documents and focused projects than hromadas having no such resources or background, even if they have equal access to financing and third-party expert assistance.

Gender aspect

During his visits to hromadas, the author of this report noticed there are more men who hold offices of AH heads and their deputies, heads of line structural units and elective offices of

local council deputies compared to women holding same offices. Furthermore, these men usually use a car as their everyday transport to travel around hromada, hence they tend to make decision following their driving experience. "Support and Development of Sustainable Mobility Services in AHs" Project will conduct a series of focus groups involving women for a more thorough research of gender and other social aspects of mobility in Ukrainian hromadas. This aspect needs to be taken into account for planning of future actions and studies.

Recommendations

This report contains two sets of recommendations:

1. Primarily technical recommendations intended for AHs;
2. Political recommendations at the national level, i.e. those describing recommended changes to the state policy.

Another important target audience for these recommendations - Ukraine's international partners, managers and experts of international technical assistance projects who may apply these recommendations when planning future programmes aimed at supporting decentralisation, sustainable mobility and local development in Ukraine.

Recommendations for amalgamated hromadas

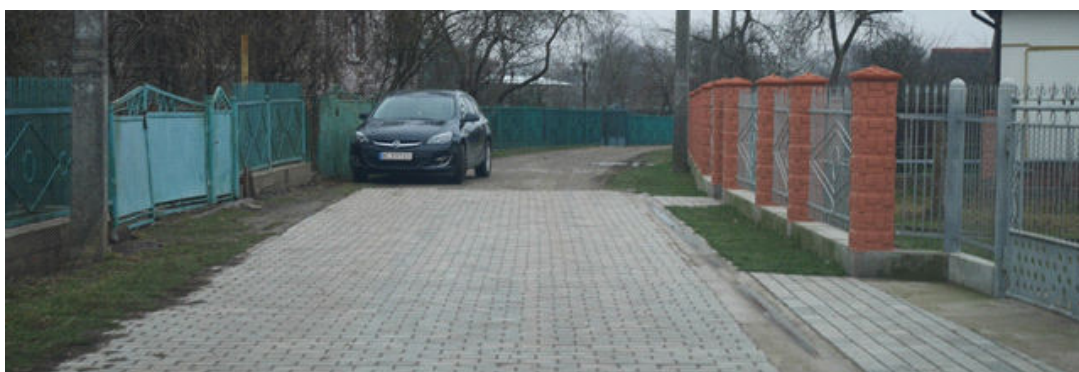
- 1 To appoint one official in AH executive office as an authorised sustainable mobility expert. Even if there is no respective structural unit, this person will coordinate passenger transportation, cycling and pedestrian traffic, traffic safety projects and actions, will participate in special training programmes, will organise studies and will plan development processes.
- 2 To carry out regular studies on mobility and transport. Mobility can be measured just like any other human activity. For that end, we have special mobility study approaches based on sociological methods. These studies are based on in-depth interviewing of households in terms of their "transport demand", existing means of transport and habits. Ukraine has experience in studying mobility in the capital and some other oblast centres, such as Mykolaiv, Vinnytsia, Lviv and Ivano-Frankivsk. There is no such experience at the level of small townships and AHs. However, it can be changed as soon as a couple of hromadas take initiative and procure such a study either at their own expense or using grant funds. Also, we should note traffic safety studies ordered by small towns, for instance, a study conducted in Dolyna Town, Ivano-Frankivsk Oblast (the town is currently undergoing AH formation process).¹⁵

¹⁵ "Dolyna Road Safety: Report and Recommendations, 2016, http://rada.dolyna.info/wp-content/uploads/2016/11/dolyna_road_safety_report_edition1.pdf

- 3 To develop strategic transport and mobility documents. In theory, each hromada must have a strategic development plan being the basis for specific strategic documents – concepts and programmes, including those relating to mobility and transport.¹⁶ Such documents may have different titles – “Sustainable Mobility Development Plan”, “Cycling Development Concept”, “Traffic Safety Improvement Programme”, etc. Elaboration of such documents, along with mandatory and regular involvement of stakeholders at all planning stages, will enable development of clear goals, activities to achieve these, as well as detecting necessary resources. In addition, integral strategic approach to transport infrastructure development through proper planning documents will enable engagement of external resources for implementation of key projects in hromada.

Example: Certain amalgamated hromadas in Ukraine already have experience in developing “Cycling Infrastructure Development Concepts” within “Green Light for Cycling in Hromadas” Project supported by the U-LEAD with Europe Programme and funded by the European Union and its member states. A cycling concept helps hromada understand what needs to be done in order to facilitate safe and comfortable cycling, to improve image of cycling as an efficient and modern means of transport, and to help determine strategic cycling projects, as well as to raise funds for their financing. Guidelines on developing cycling concepts are available in “Comfortable City” Guide issued by Kyiv Cyclists’ Association.¹⁷

- 4 To repair local streets based on a “common space” principle and using surfacing materials other than asphalt, in particular concrete tiles. As it was already mentioned above, most municipal streets in hromadas are narrow streets with low-rise private construction areas, low traffic, and busy pedestrian and cycling traffic, i.e. residential streets. Maximum speed on these streets must be limited to 30 km/h, whereas construction of a pavement and a bike path is practically unreasonable and economically unjustified. In order to ensure maximum comfort for pedestrians and cyclists, as well as to motivate drivers to stick to speed limits, it is advisable to use concrete tiles rather than asphalt for surface, and to arrange for well-organised and well-marked speed bumps.

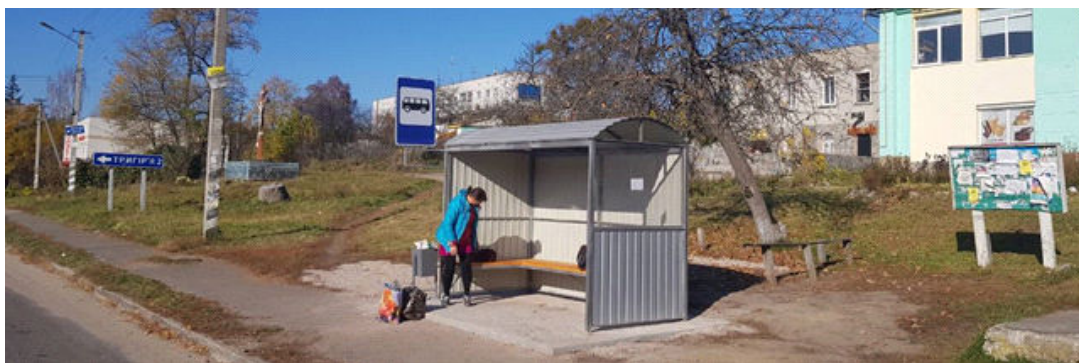


Example of a same-level street repair using concrete tiles

¹⁶ “Guidelines to Strategic Planning of the Development of an Amalgamated Hromada” – Civil Society Institute, 2017, http://www.slg-coe.org.ua/wp-content/uploads/2018/11/04_Strateg_Plan-PRN-5.pdf

¹⁷ “Comfortable City: How to Plan Cycling Infrastructure”, Ukrainian Centre for Cycling Expertise <http://velotransport.info/?p=4112>

- 5 To install pavilions at bus stops that meet at least minimum requirements of protection against weather conditions, as well as social safety and long-run operation criteria. Key requirements include protection from precipitation and sun rays by means of at least 2 metres wide shed, protection from wind due to one or two walls, a bench, proper stop lighting, visual stop transparency at least in direction of transport arrival. It is important to reasonably choose modern and quality materials and constructions in order to ensure that a stop pavilion serves at least 20 years without losing its consumer value and to make sure that the platform is connected with pavement.



Appropriate bus stop pavilion design installed in Zhytomyr Oblast with the support of the U-LEAD with Europe Programme, Picture from Okolytsia website

- 6 To invest at least 10% of AH's transport budget into walking and cycling infrastructure development. Walking and cycling are two most affordable means of mobility for people, the most popular ones in the world and in Ukrainian hromadas. However, when it comes to investment into infrastructure, drivers being the minority are often given the priority. Authors of this report understand and support the need for smooth and proper maintenance of roads in hromadas, however, we recommend that hromadas focus their attention on more simple means of mobility by creating proper conditions, such as pavements, bike paths and "public streets" (see above). Pavements are a "must" along the roads of national significance, central streets of settlements and other transit streets. Pavement must be wide enough, preferably 60-centimetre step wise – e.g. 180 cm, 240 cm, 300 cm, 360 cm, 420 cm. Minimum recommended width of pavement is 180 centimetres, with a possible narrowing to 150 cm, if necessary. It is not advisable to construct pavements narrower than 150 centimetres.



New pavement in one of the hromadas

- 7 To exert pressure on Ukravtodor in order to properly take care of traffic safety issues on accident-prone sections of main roads. According to the National Transport Strategy, Ukraine's strategic goal is a two time decrease of fatalities ratio on roads by 2030. The Constitution of Ukraine and other legislative acts guarantee citizens the right to life, health and safety. According to the Law of Ukraine "On the Road Traffic", road owners are responsible for the safety of road users and are not allowed to reduce capital expenditure to the detriment of safety. Therefore, the state represented by the State Road Agency of Ukraine (Ukravtodor) must take measures aimed at preventing such accidents in the future. In addition, the status of a road, both international or national, is not a valid excuse for refusal to act, since, for example, it is not prohibited to install traffic lights on roads of national significance. It is common for Ukraine to have signal-controlled intersections and signal-controlled pedestrian crossings on busy international roads. For instance, traffic lights with green light button have been recently installed on Kyiv-Chop M-06 road in villages in Rivne Oblast, which enabled residents to safely make it home or to school.
- 8 To implement measures on promoting bicycles even ahead of adoption of strategic documents and construction of bike paths. Results of the "Green Light for Cycling in Hromadas" Project, which was implemented in 2018 with the support of the U-LEAD with Europe Programme, proved that two types of measures were highly popular and efficient. Those are: equipping covered bicycle parking racks near schools and promoting these measures during the European Mobility Week (every September). Hromadas can take such measures "right here, right now" by studying the experience of Kyiv Cyclists' Association, which implemented the pilot project, or applying for assistance of experts of the U-LEAD with Europe Programme.



Covered bicycle parking rack near school in an amalgamated hromada

Recommended changes in the state policy

1. To enable citizens to be in charge of maintenance and repair of roads of local significance with no transit function. Many hromadas already have organisational and technical capacity to resolve issues of roads maintenance in winter and make their regular repairs during spring and summer season. The state is advised to finalise local roads decentralisation reform by transferring such roads at the local self-government level, i.e. to AHs. To mitigate risks and test legal and financial framework, we suggest implementing this recommendation in one oblast as a pilot project.

2. To revisit regulatory framework of social service relating to ensuring access to basic secondary education, in particular the requirement regarding the provision of school buses, to ensure that hromadas are more flexible and have more options in terms of efficient school transportation and material resources planning. In particular, it is advisable to use services of private carriers and rented buses – not very common practices today despite their economic feasibility. Effective technical requirements to school buses envisaged by the national standards need to be objectively assessed and discussed, including the risk factors, based on generally accepted scientific evidence, existing European practices and national standards of EU member states.

3. Provision of important social service for suburban and regional railway transportation requires new approaches. Railway transport is undeniably within the sustainable mobility spectrum and plays a crucial role in connecting many Ukrainian hromadas with big neighbouring cities and is of strategic importance for regional development. We recommend that the government, in cooperation with oblast administrations, amalgamated hromadas, mayor's offices of oblast centres and international partners, pay due attention to finding a way of restoring suburban and regional transportation. Ukrzaliznytsia, as a joint-stock company, focuses on restoring infrastructure, developing cargo and fast passenger transportation, hence suburban transportation is not a part of its strategic interests. In this case, the state must take a strategic decision to facilitate establishment of regional railway companies, which would plan the route network and operate the rolling stock on their own using Ukrzaliznytsia's infrastructure. Such a decision meets EU's best practices and policy section of EU legislation provided in "Forth Railway Package".¹⁸ For instance, 28 EU member states have 217 active suburban and regional operators. Germany alone has 56 operating carrier companies (excluding Deutsche Bahn 26 subsidiaries), Italy has 16, Poland has 11 railway operators. Usually, they operate under contracts in respect of public service obligations, parties to which are regional local self-government bodies or state authorities – provinces, cantons, federal lands, voivodeships, etc.

4. To develop and start implementing a programme for financial support to cycling development projects following the example of "cycling funds" operating in most EU countries.¹⁹ AHs of all types have a strong potential to develop cycling transport; it will have a positive environmental

¹⁸ Fourth railway package of 2016, European Commission, https://ec.europa.eu/transport/modes/rail/packages/2013_en

¹⁹ Budget allocation for cycling infrastructure: EU experience and proposals for Ukraine, 2017, https://issuu.com/kyivvelo/docs/fin_min_4.0

and economic impact at the national level. Therefore, the state must support development of this sustainable means of transport. It is recommended to start implementation of this programme as a separate project within the State Regional Development Fund with the focus on relatively large-scale projects, which hromadas are unlikely to implement on their own. For instance, to equip covered bicycle parking racks near all schools and other public facilities in AH, or to construct bike path connecting several villages with administrative centre. More details on the operation of "cycling funds" in EU countries are available in the study conducted by Kyiv Cyclists' Association.

5. To change the system of formation of passenger transport routes, as well as the system of procurement of carriers operating these routes, to revisit requirements to carriers and remuneration criteria. Implementation of this recommendation requires thorough planning and must include consideration of amalgamated hromadas' interests in forming the routes, lots, requirements to carriers and exercising control over their activity. The outdated privilege (discounted travel ticket) system also needs to be revisited and replaced with targeted subsidies and discounts provided to certain categories of users.

6. To take measures for enhancement of organisational capacity of AHs in the area of mobility and infrastructure, transport system management, in particular through organisation of regular training programmes on the basis of state education institutions, such as the National Academy for Public Administration under the President of Ukraine. International technical assistance projects, public organisations and professional associations can contribute to ensuring that these new programmes are relevant and meaningful.

