5. Alba Iulia Municipality

5.1 Local context

5.1.1 City size and context

Alba Iulia, the capital city of the Alba county in Romania, has a total population of 63,536 inhabitants (2011 Census). Alba Iulia Municipality is the local public administration which strives for the sustainable development and well-being of its local community. Its vision is to become a more attractive city to live, work, and invest in by 2020. Four strategic objectives were defined to achieve this vision:

1. Alba Iulia - a smart, accessible, and cohesive city,

2. Alba Iulia - a green city with efficient public services

3. Alba Iulia - a competitive and creative city, and

4. Alba Iulia - a European cultural and tourist attraction.

A short video regarding the local strategic development can be watched here.

The Municipalities' goals in terms of local sustainable transport are defined under the strategic objective 1. Alba Iulia - a smart, accessible, and cohesive city and encompass:

KEY FIGURES

Population: 63,536 inhabitants

Area: 104 km^2

Density: 610 inhab/km^2

NUTS level: NUTS 3 (County)

TEN-T corridor(s): Rhine-Danube corridor (15km far)

ULaaDS role: satellite city

- The development and modernisation of regional and national infrastructure;

- The development of an efficient and sustainable public transport system;
- The implementation of intelligent transport systems.

Alba Iulia Intercommunity Development Association – Local Transportation (acronym AIDA–TL) is an association of 7 local administrative-territorial units (Alba Iulia and 6 surrounding villages) which aims to ensure a metropolitan passenger transportation system. The AIDA-TL area can be considered as Functional Urban Area of Alba Iulia. The local public transportation service is outsourced and managed by a private operator since 2012. The association is providing an integrated public passenger transport, interconnected transport services within a well-defined geographical area, with a single information provider service, a unique charging system, and a single transportation schedule, in accordance with the EC Regulation no. 1370/2007. The local public transportation is one of the most modern in the country and recognized at the European level.[13] Besides public transportation, there are also private operators in AIDA areal, as there are many daily commuters who live in the surrounding villages and work in Alba Iulia.

Figure 26 Metropolitan transport in AIDA region (Alba Iulia, Ciugud, Sântimbru, Ighiu, Cricău, Galda de Jos and Întregalde)

Source: https://www.stpalba.ro/sitenou/transport_metropolitan.php?lang=en

[13] IRU Bus Excellence Award 2013.
http://www.busandcoach.travel/de/smart_policies/smart_awards/winners/2013.htm

5.1.2 Geography

Alba Iulia is the capital city of Alba County (NUTS 3), located within the Centre Region (NUTS 2) of Romania.

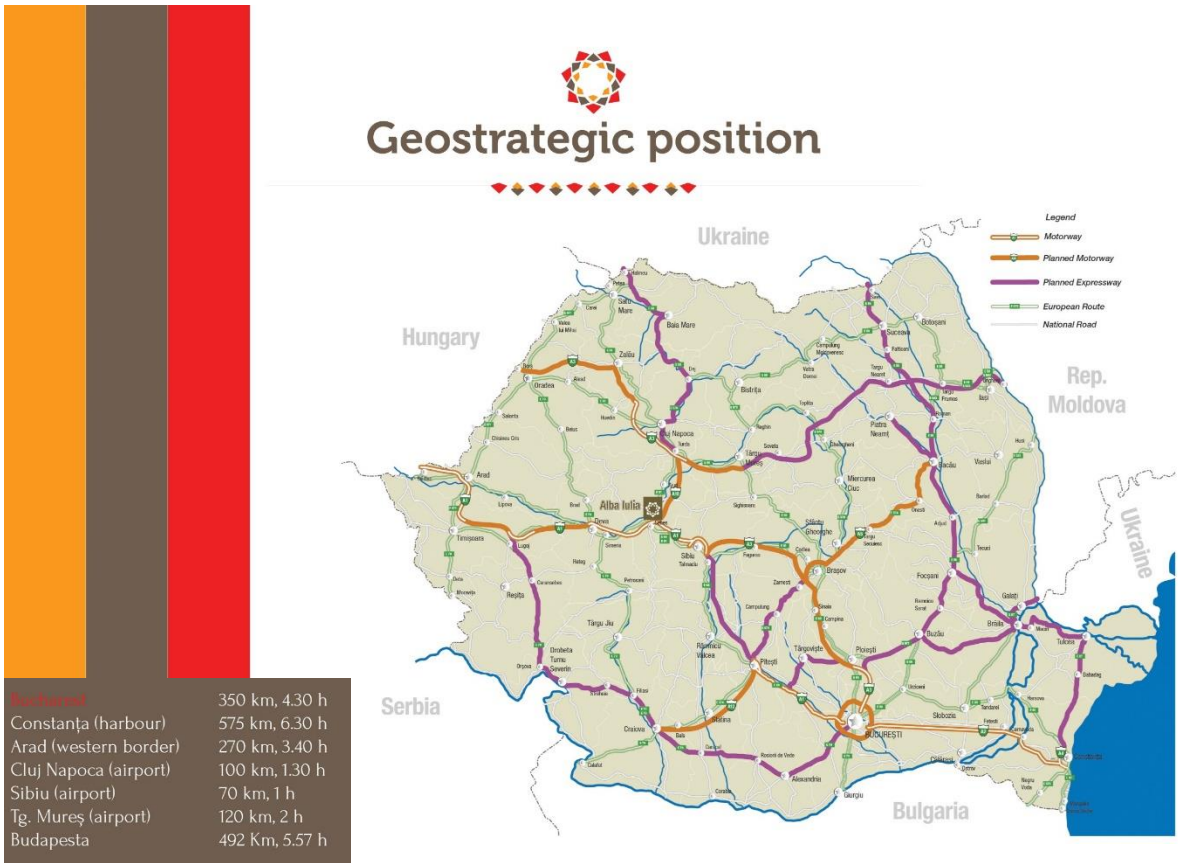


Figure 27 Geostrategic Position of Alba Iulia

Alba Iulia is situated 15km North from the **Rhine-Danube corridor** and crossed by two major highways.

- The **A1 motorway** (link here) connects Bucharest (the capital city of Romania) with the Western part of the country through Alba Iulia. As the motorway is built along the Trans-European Transport Network Rhine-Danube Corridor, the construction receives 85% funding from the European Union. Currently, the section between Alba Iulia and Sebes (15km from Alba Iulia) and the section between Alba Iulia and Aiud (20km from Alba Iulia) are still under construction. The A1 motorway is being built along the ring road of Alba Iulia and will highly impact the local mobility and transportation, as the traffic will be redirected on the motorway.

- **The A10 motorway** (link here) connects Sebes and Turda through Alba Iulia. 2 out of 4 sections are still under construction. When the A10 motorway will be finished, Alba Iulia will have two road junctions (one in the North and one in the South part of the city).

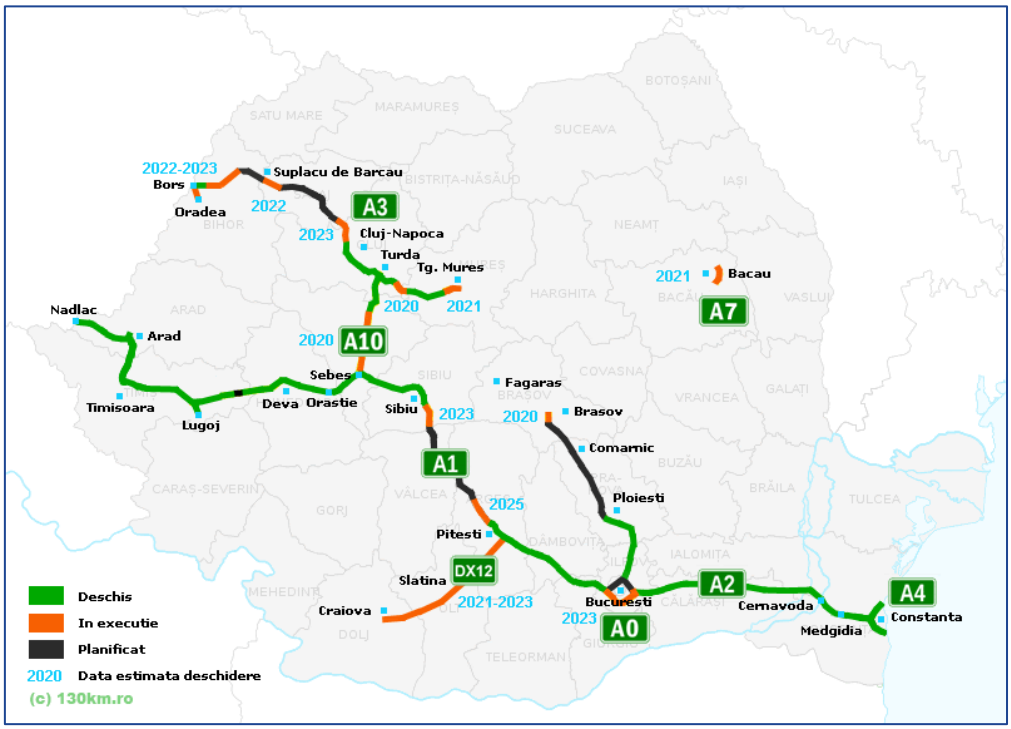


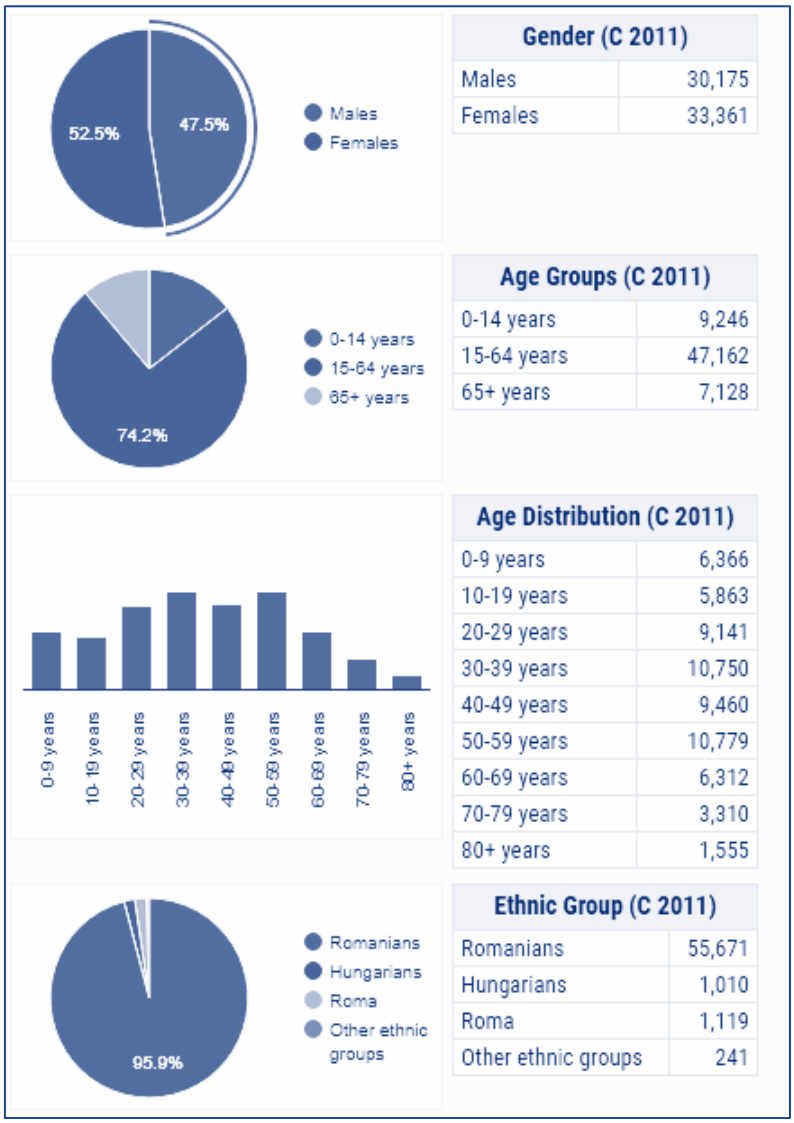
Figure 28 Motorways in Romania

Source: http://www.130km.ro/romanianhighwaymap.gif

The existing road and rail transport network at local level guarantees satisfying conditions for the development of the economic and commercial activity as well as for the transport of passengers and the commuting of the workforce. The railway line 200 (link here) Curtici – Brasov passes through Alba Iulia.

5.1.3 Population

Alba Iulia is the capital of Alba County, with a total population of 63.536 citizens according to the most recent National Census form 2011. Considering its total surface of 104 km², one can estimate a population density around 610 citizens/km². The total population of the AIDA region (FUA) is about 90.000 inhabitants.



Gender (C 2011)	
Males	30,175
Females	33,361

Age Groups (C 2011)	
0-14 years	9,246
15-64 years	47,162
65+ years	7,128

Age Distribution (C 2011)	
0-9 years	6,366
10-19 years	5,863
20-29 years	9,141
30-39 years	10,750
40-49 years	9,460
50-59 years	10,779
60-69 years	6,312
70-79 years	3,310
80+ years	1,555

Ethnic Group (C 2011)	
Romanians	55,671
Hungarians	1,010
Roma	1,119
Other ethnic groups	241

Figure 29 Alba Iulia demographics

Source: https://www.citypopulation.de/en/romania/alba/_/001017__alba_iulia/

The gender distribution of the population at the level of Alba Iulia is unequal (30,175 male and 33,361 female), resulting in a masculinity index of 0.9 (900 men for 1000 women). This gender imbalance is the consequence of the nearly 7-year difference between the average lifespan of women and the average lifespan of men.

Although it is the county capital with a rapid process of demographic ageing, the municipality of Alba Iulia has a relatively good situation in terms of the age structure of the population. According to the 2011 Census, the population aged over 65 years counts for 11% of the total population, which represents a small percentage of elderly people.

5.1.4 Area (km²)

The Area of the Alba Iulia city is 104 km² large, while the AIDA areal (FUA) reaches approximately 420 km².

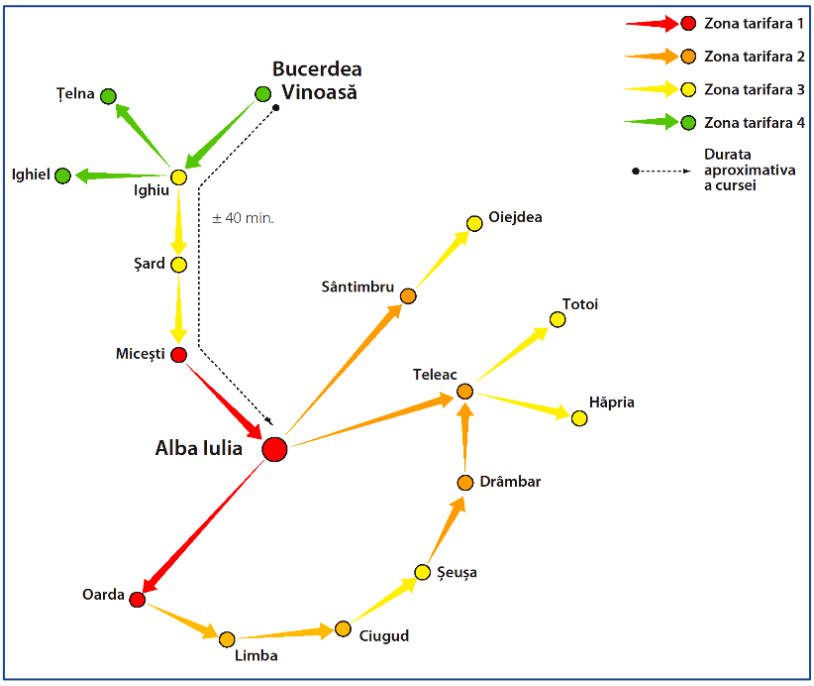


Figure 30 Alba Iulia functional area tariff planning

The existing metropolitan transportation system is managed by public transportation authority (AIDA-TL), divided in 7 administrative-territorial units: Alba Iulia Municipality together with Ciugud, Sântimbru, Ighiu, Cricău, Galda de Jos and Întregalde communes as well as one private transportation services provider.

5.1.5 Modal split

Alba Iulia's current modal split is as follows:

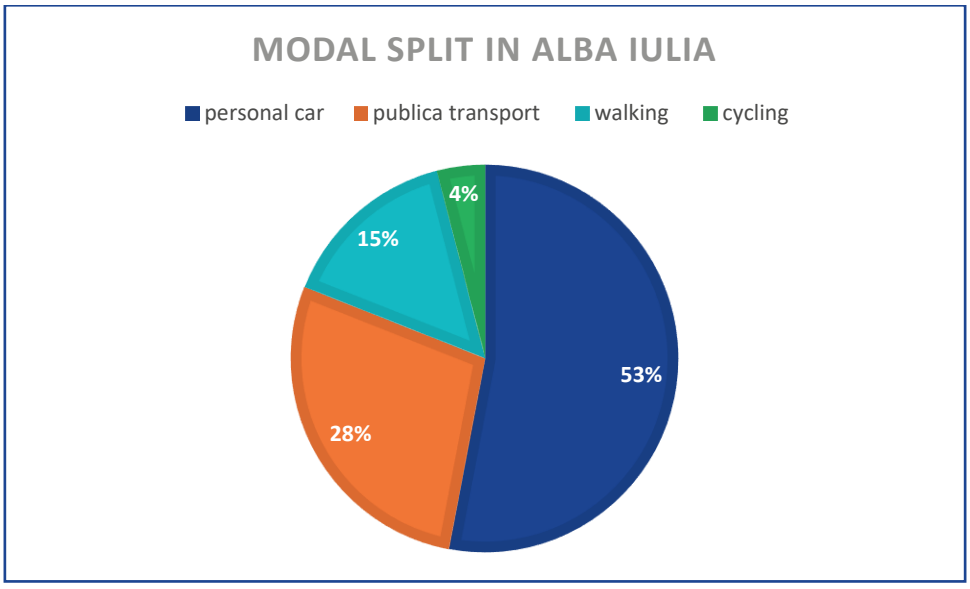


Figure 31 Modal split in Alba Iulia

The private car represents 53% of the modal split, with a **number of private vehicles registered in Alba Iulia** around **30.425.**

Currently at the city level, the STP Alba sells 2.222.477 bus tickets and 35.131 subscriptions per year and more than 9.500 inhabitants of Alba Iulia regularly use public transport (15% of the total population of Alba Iulia).

- There are **6 private taxi companies** at local level.
- There is **1 electric bus for tourists** operating in Alba Carolina Citadel since 2015.
- The Municipality has **1 electric vehicle** within the existing car fleet and **9 cargo bikes**.
- There is **1 private bike-sharing centre** in the city (I-Velo).
- **Total number of the public transportation means (buses and minivans) in Alba Iulia: 55**
- **Total number of the public transportation means at AIDA level: 77**
- **Number of means of transport adapted for persons with disabilities**: **37**
- **Number of bus stops in Alba Iulia**: **98**

Regarding the street network, the total length of streets in Alba Iulia (including private roads) is around **310km**, out of which 46% represent renovated roads, 9% represent cobbled roads and 45% represent ground roads. the

- **Total length of streets at the level of AIDA region: 455,60 km**
- **Total length of public bus/minivan routes in Alba Iulia: 52 km**
- **Total length of public bus/minivan routes at the level of AIDA region**: **156 km**
- **Total length of bike lanes in Alba Iulia**: **19 km**
- **Total length of bike lanes at the level of AIDA region**: **26 km**
- **Total number of parking lots in Alba Iulia: 7.854**

However, at the end of 2022, to the above-mentioned figures, the Municipality will **add** the following outputs:

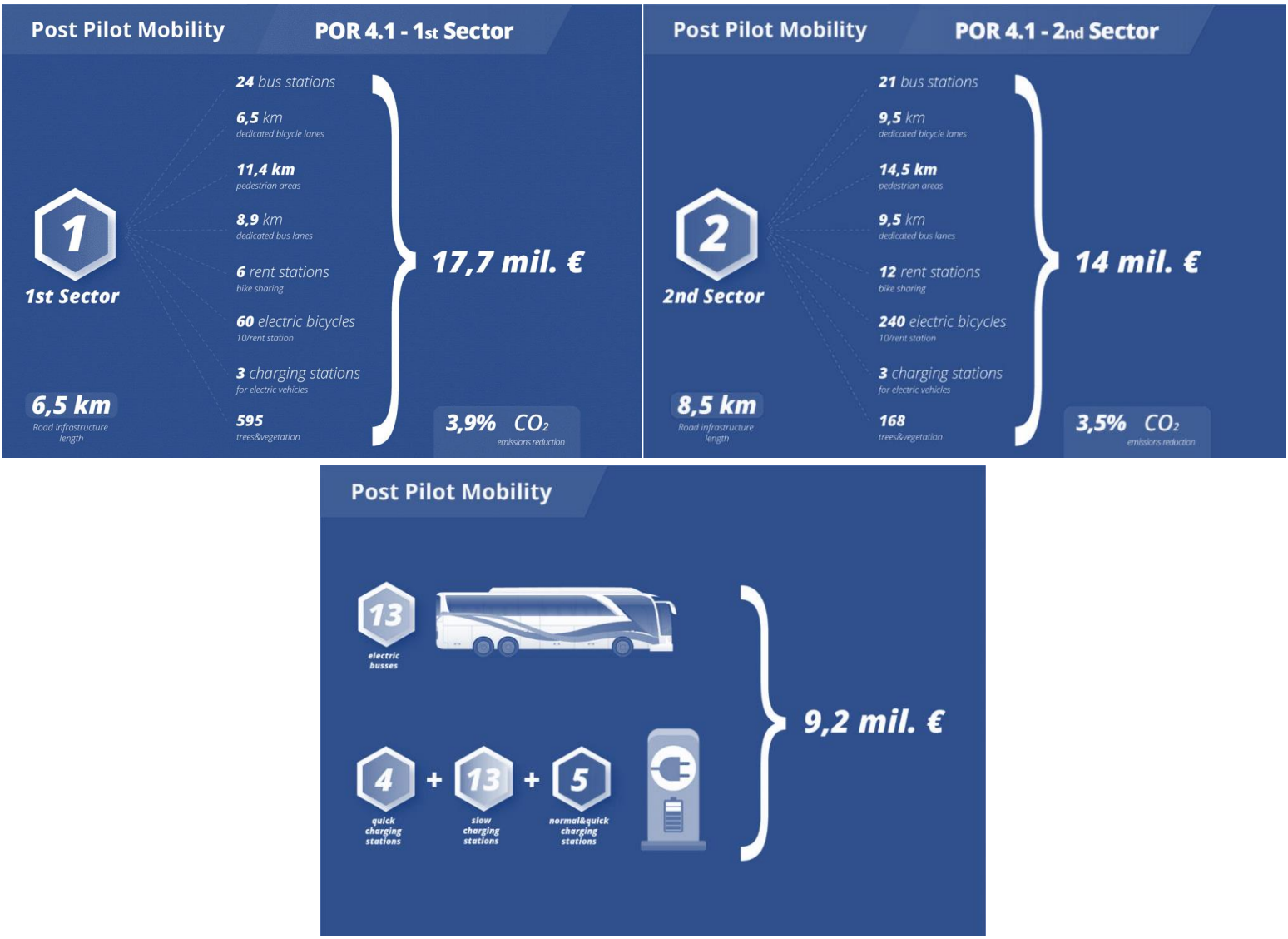


Figure 32 Alba Iulia Mobility projections for 2022

5.2 Sustainable Urban Logistics Strategies and Initiatives

5.2.1 Logistics ecosystem

The city logistics network of Alba Iulia Municipality:

With respect to the local freight transport, the private companies own and manage their physical warehouses/storages. Most of the warehouses are situated along the bypass road which is located at the South-Est part of the city.

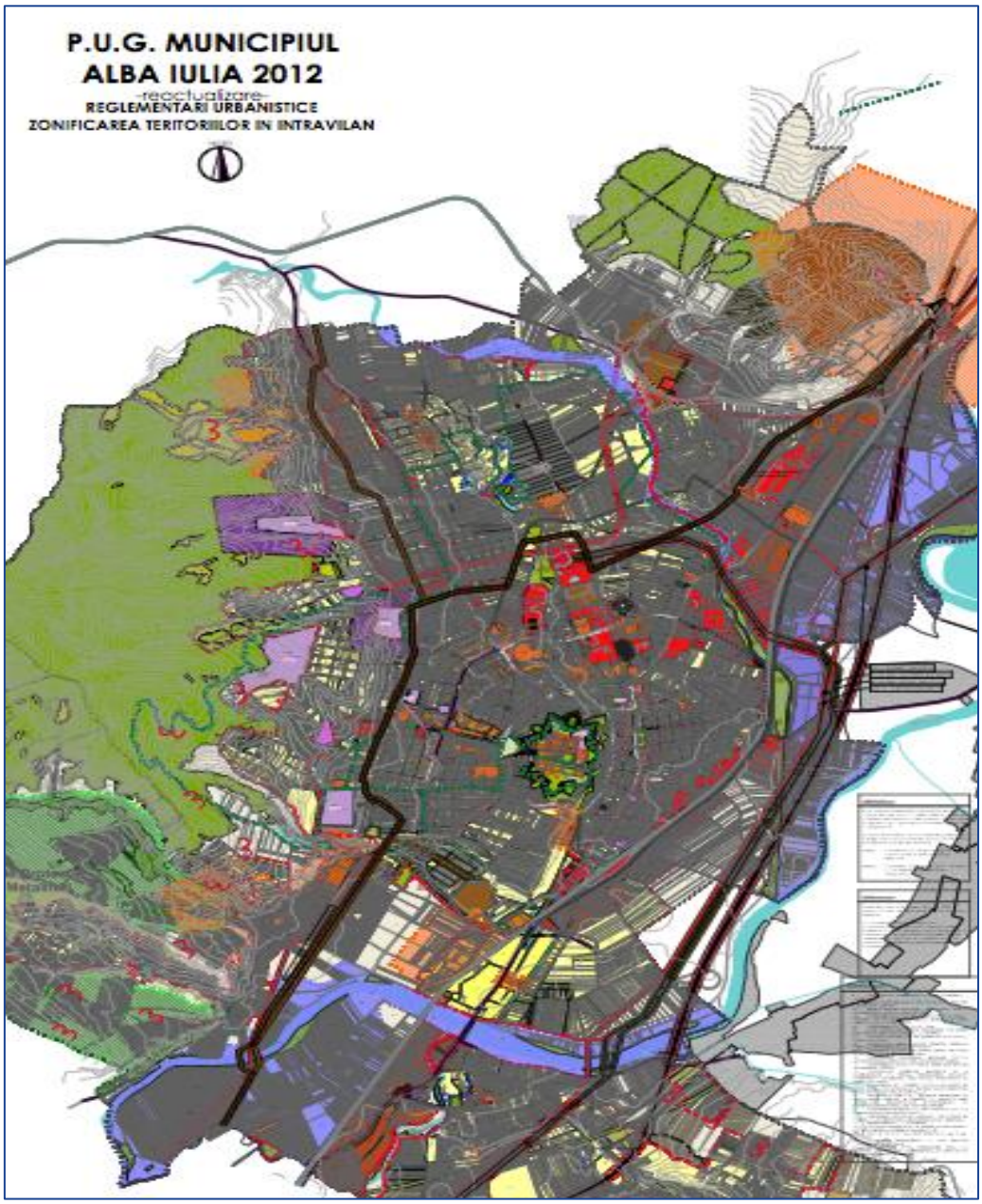


Figure 33 The General Urban Plan of Alba Iulia, 2012

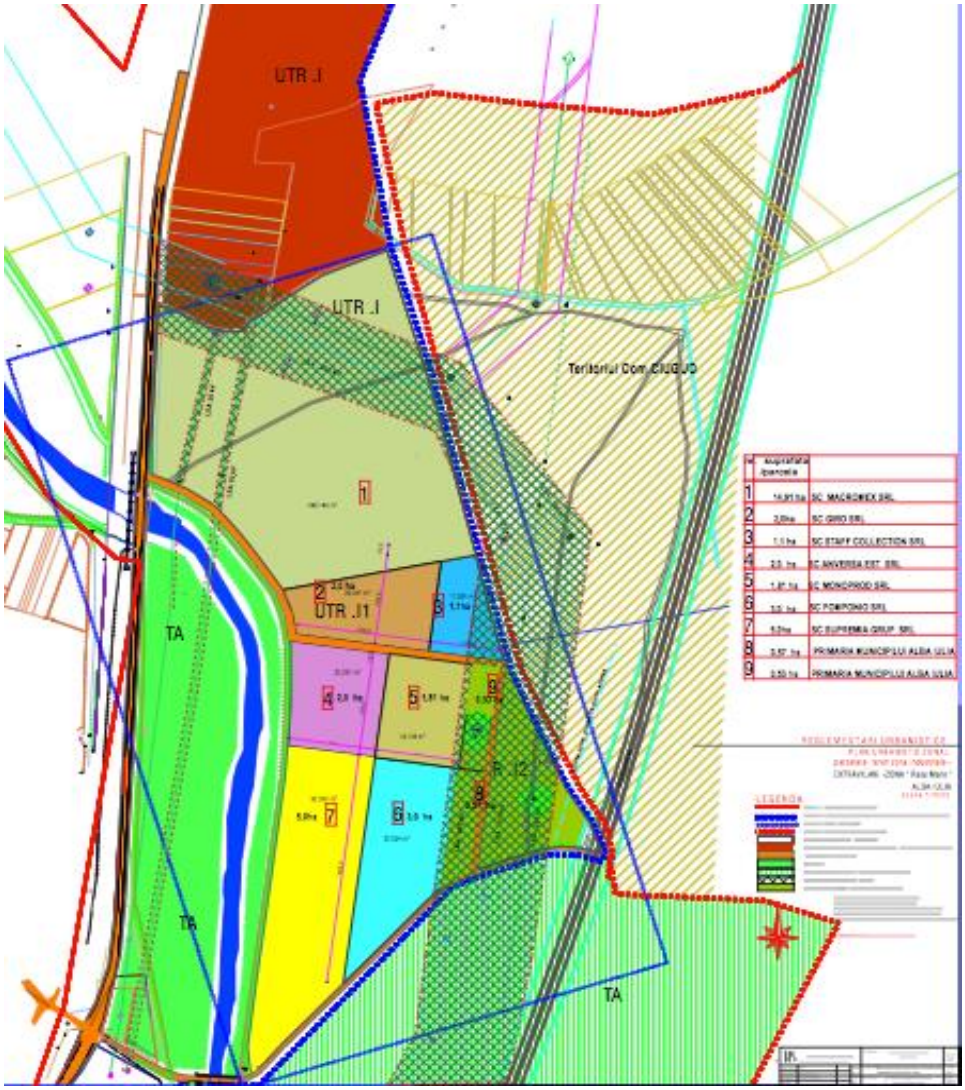


Figure 34 Alba Iulia economic development area

Alba Iulia Economic Development Area covers a surface of 40ha and is located on the East side, across the highway and the ring road that passes by the East side of the city. The Municipality provides investment opportunities for private companies if they comply with several requirements. The mechanism works as follows: The land is provided for free by Alba Iulia City Hall during the operation of an efficient investment in production, services, or logistics. The local administration also assures the necessary utilities and the accesses to the land. With an investment amounting to 5 million €, the investor has the possibility to directly buy the land at a price determined through an independent evaluation at the time of delivering the location for investment and before starting the construction works. The investor must invest at least 1.5 million € in tangible assets and open a working space in Alba Iulia. The submission of a business plan with certain guarantees regarding the investment financing capacity and economic viability, that will be evaluated by a Committee of City Council is mandatory. The investment must start in maximum 18 months after delivery of the land. If the business is sold, the buying company receives the land in the same conditions as the company that

sold it. The area is connected to the existing ring road (which further connects Alba Iulia with Cluj Napoca and Sebeș), Bărăbanț railway freight yard, Ciugud Industrial Area and the most important railway junction in Transylvania.

This whole area is thus intended for investment purposes only. The intention of the Municipality is to extend the area according to the conditions presented above, by inviting business operators to invest in the given area. The fact that the highway now crosses this area facilitates freight transport within it. One of the main purposes is therefore also to incentivise companies to implement logistic centres there to reduce the freight transport frequency through the city centre.

5.2.2 Decentralised warehouse(s) / distribution centre(s) description

According to the SULP of Alba Iulia, there are certain areas where such platforms already exist, and which could be modernized and extended. There are also areas where such new platforms could be created, such as:

- "ICRA" Platform - with the possibility of expansion and modernisation;
- The former Refractara factory;
- The former “Utilajul” plant;
- In Cetate district, in the area of the ammunitions warehouse;
- In the development area along the existing bypass road;
- In the development area of the exit to Sebeş, on the right side, before the area known as “Three bridges”.

All these platforms would benefit from excellent railway links to the main traffic routes and to the existing NR1 and NR74 as well as those planned in the near future - the Sebes - Turda motorway or the western bypass road as laid down in the General Urban Development Plan.

On the same principle as Consolidation and Distribution Centres, but at a smaller level, small platforms can be created to cater to limited areas on the perimeter of the town. These platforms could receive the goods from carriers so that the last mile to the shops and service providers could be travelled by small vehicles, environmentally friendly, such as carts or bicycles specifically designed for the delivery of goods. This would significantly reduce the flow of logistics in residential, administrative, or business areas in the town.

5.2.3 Existing urban logistic solutions

Table 10: Existing urban logistics solutions in Alba Iulia

	Total	Description
Cargo bike schemes	1	The Municipality owns 9 individual cargo bikes which are used in public events. The cargo bikes are not used by the residents due to high prices, hilly area, lack of dedicated bike lanes and existing mindsets and preconceptions related to the advantages of using private cars. In about two years from now, after the

	Total	Description
		implementation of the two planned active mobility projects, a cargo bike scheme might become an option to consider.
Mobility Hubs	N/A	Alba Iulia does not have modern mobility hubs. However, one can outline a specific area situated in the city outskirts, where four means of transport meet: the train station, public bus stations (bus terminal), private taxi operators and private transport providers. Also, one can highlight the mobility hub developed within the TInnGO project, where Alba Iulia Municipality is involved as project partner (link here).
Bicycle couriers	1	The private company Glovo (link here) extended its network in Alba Iulia in 2020 in the pandemic context. The services provided by Glovo met the people's need to reduce mobility, by providing home delivery of food, beverage, and other non-food products.
E-vans	N/A	The Municipality does not have E-vans within its public transportation fleet. Yet, to complement the public transportation system, the Municipality will purchase 13 electric buses, 13 slow re-charging stations and 4 fast re-charging stations for buses through the project entitled "Purchase of public transport means - electric buses"

Source: Alba Iulia

5.2.4 Supporting policies for sustainable urban logistics

Alba Iulia Municipality adopted the Sustainable Urban Mobility Plan (SUMP)[14] in 2017, for the period 2016-2030. The document is now being updated and sustainable urban logistics is also envisaged. The six SUMP strategic objectives encompass:

- OS.1 Ensuring the accessibility of all categories of people, including people with disabilities
- OS.2 Ensuring a safe environment for the population
- OS.3 Ensuring an optimal level of accessibility within the locality and within the service area of Alba Iulia
- OS.4 Improving the efficiency of transport services and infrastructure
- OS.5 Implementing integrated systems of territorial use at the level of the area of influence of Alba Iulia municipality
- OS.6 Reducing the needs of motorized transport, reducing the impact on the environment and reducing energy consumption for transport activities.

Back in 2011 Alba Iulia Municipality elaborated a **Sustainable Energy Action Plan (SEAP)**, which was officially assumed by the Local City Council and also by the European Covenant of Mayors Office. In

[14] Alba Iulia SUMP, 2017. https://www.apulum.ro/index.php/primaria/document/3168

2014, Alba Iulia Municipality elaborated a **Sustainable Urban Logistic Plan (SULP)**, which is based on identifying feasible solutions for the local implementation of sustainable logistics and energy efficiency measures. The development strategy of Alba Iulia Municipality takes into consideration the implementation of projects which are aiming to enhance the efficiency of urban mobility in the local community. The Municipality adopted the new **Sustainable Energy and Climate Action Plan (SECAP)** in 2019[15].

Additionally, the **Integrated Urban Development Strategy of Alba Iulia Municipality**, 2014-2023[16], constitutes another strategic plan, which is also being updated. The strategy covers both the general management of the city and the general development in the short, medium and long term. The general objectives of the strategy refer to a sustainable and smart growth and an economic competitiveness, considering an intervention area which aims to strengthen and develop ICT infrastructure for the population of Alba Iulia and the tourists visiting the city, together with a sustainable development of the cultural and business tourism and with an efficient use of city branding strategies for consolidating the position of Alba Iulia as a tourist destination of excellence.

Another strategic document is the Smart city Strategy for Alba Iulia, which is still in the making. The strategy will be finished next year and will set out the strategic development of Alba Iulia on its path to becoming a smart city. 11 smart relevant areas are analysed, smart projects are proposed to the municipality, as well as relevant funding sources.

5.2.5 SUMP and SULP at a glance

Table 11: Alba Iulia SUMP and SULP at a glance

City	ALBA IULIA
Type of strategy	SUMP (2017, new one currently developed following the 2019 Sustainable Energy and Climate Action Plan) SULP (2014)
Goals	**SUMP** • Ensure the accessibility of all categories of people, including people with disabilities • Ensure a safe environment for the population • Ensure an optimal level of accessibility within the locality and within the service area of Alba Iulia • Improve the efficiency of transport services and infrastructure • Implement integrated systems of territorial use at the level of the area of influence of Alba Iulia municipality • Reduce the needs of motorised transport, reducing the impact on the environment and the energy consumption for transport activities

[15] Alba Iulia Sustainable Energy and Climate Action Plan (SECAP), 2019. https://www.apulum.ro/index.php/primaria/document/4953

[16] Integrated Urban Development Strategy of Alba Iulia Municipality, 2014-2023. https://www.apulum.ro/index.php/primaria/document/3597

	SULP (objectives outlined in SUMP) • Facilitating the freight industry in obtaining support of national authorities • Improve travel times of vehicles transporting goods • Assist freight drivers and reduce number of trips and kilometres travelled • Assist freight companies at loading, delivery and collection points • Reduce the environmental impact and the risk of accidents involving freight vehicles
Transport measures (with potential impacts on logistics) **Authority level specified in brackets (L = local, R = regional, N = national)**	• Remodel and resize the street network (including sidewalks, roads and dedicated lanes), following regulations set by the National Road Administration **(L)** • Develop and extend street network, integrating it with the public lightning system, traffic lights & intelligent public transport systems **(L)** • Streamline city traffic at peak hours **(L)** • Prohibit parking on main arteries & create differential parking rates • Improve rural-urban mobility connections **(L, R)** • Modernise and extend intelligent transport systems for public transport **(L)** • Improve public transport routes in Alba Iulia **(L)** • Implement an integrated system of landscaped green spaces, interconnected at zonal and local levels (IZL) **(L, R)** • Implement an integrated parking system for residents and tourists **(L)** • Implement an integrated bike lane system **(L)** • Implement an integrated system for public spaces use **(L)** • Reduce motorised transport through the integrated land use system **(L, R)**

Logistics measures	• **'Material' infrastructure:**
	  ○ Linear measures - connections from the urban transportation network
	  ○ Surface measures - areas of freight transportation and storage operations
	  ○ Install/improve traffic signs, create special lanes for trucks
	  ○ Simplify and harmonise weight, size and building regulations
	  ○ Introduce loading points on street, proximity delivery areas
	  ○ Encourage the use of green vehicles
	• **'Immaterial' infrastructure:**
	  ○ Use Telematics or Intelligent Transportation Systems (e.g., traffic information systems, route optimization services, etc.)
	  ○ Support freight transportation partnerships
	  ○ Offer information and maps for freight transport
	  ○ Impose road fees
	  ○ Implement time regulations for access and loading of goods for vans and trucks carrying goods & encourage night delivery
	  ○ Standardise regulations on vehicle size, weight and GHG emissions
	• **Provide/improve logistics 'equipment':**
	  ○ Cargo loading units
	  ○ Transportation units (e.g., vehicles using alternative fuels solutions)
	  ○ Urban consolidation centres

5.2.6 Regional and national frameworks

All mobility plans adopted at the local level must be coherent with the Central Development Region's strategies (Regiunea de Dezvoltare Centru)[17].

Any local measure needs to consider the national legal framework, regulations, ordinances related to urban planning and land management, the supply and transportation of divisible goods, on-road transportation and finally national environment protection strategies.

Alba Iulia Municipality is also **member of the Covenant of Mayors** since 2010. By signing the Covenant of Mayors in partnership with the Alba Local Agency for Energy (ALEA), along with the main activities of the Sustainable Energy Action Plan, Alba Iulia engaged itself to reduce with 24% the CO2 emissions until 2020, compared to the reference year 2008. The first initiatives aimed at meeting the European standards for energy efficiency emerged in 2010, when Alba Iulia Municipality decided to join the Covenant of Mayors Initiative promoted by the European Commission. This commitment is the local government's response regarding energy and environment with the intent to counter the challenges posed by the urban development of the municipality in recent years: the environmental pollution induced by accelerated development, the management of the expanding traffic network, the constructions boom, the urban waste management, the need for public utility services of decent quality.

5.3 Relevant projects

Table 12: Relevant projects in Alba Iulia

#	Name of the project	Short description	Relevance to ULaaDS	Funding scheme Start-end
1	Rehabilitation of the major urban public transport infrastructure in Alba Iulia - Sector no. 1 and 2	Activities: Development of a traffic management system, including all the subsystems (Traffic control machines, modern led lighting system for the traffic lights system within the foreseen conjunctions, detection system) Development of a video surveillance system which provides video traffic information from the e foreseen points of interest. Development of a traffic information system which allows	Improving the local mobility in a sustainable manner	Regional Operational Programme, Priority axis: Supporting sustainable urban development, Operation: Reducing carbon emissions in county municipalities through investment based on sustainable urban mobility plans.

[17] Regional Development Plan for 2014-2020. https://www.centruregion.com/regional-development-plan-for-2014-2020/?lang=en

		the transmission of information to citizens through dynamic information panels. Development of an enforcement system in order to increase traffic discipline with beneficial results in terms of road safety. Development/upgrade of the public lighting management in the area of pedestrian crossings and the introduction of a smart system. Development of an electric vehicle power supply system to stimulate the use of private electric vehicles. Development of an automatic bicycle rental system: a total of 6 bicycle rental facilities were provided. Development of a Control centre with 2 subsystems - All systems will be coordinated from the control centre.		*Start:* 2020 *End:* 2022
2	Purchase of public transport means - electric buses	Under this project, 13 electric buses, 13 slow re-charging stations and 4 fast re-charging stations for buses will be purchased.	Improving the local mobility in a sustainable manner	The project is funded through a partnership with the Ministry of Regional Development and Public Administration, as a leading partner in the project "Acquisition of public transport means - electric buses", Priority Axis 4 - Support of sustainable urban development, Investment Priority 4e - Promotion of low-carbon strategies for all types of territories, especially for urban areas, including the promotion of

				sustainable multimodal urban mobility and adaptation measures relevant to mitigation, Specific objective 4.1 - Reducing carbon emissions in county-based municipalities through investments based on sustainable urban mobility plans.
3	Re-charging stations for electric vehicles	Development of 5 re-charging stations for electric cars.	Improving the local mobility in a sustainable manner	Environmental Fund Administration, Program concerning reducing greenhouse gas emissions in transport by promoting infrastructure for energy-efficient road transport vehicles: Re-charging stations for electric vehicles in municipalities of county-based financing.
4	Integrated Transport Systems: Transferable tools for Authorities, Acronym SUITS	This project represents a part of the CIVITAS initiative and it is coordinated by the lead partner Coventry University.	The project proposes the implementation of innovative actions with respect to urban mobility area while implementing the Sustainable Urban Mobility Plan at the level of each partner.	*Funding scheme:* HORIZON 2020 *Start:* October 2016 *End:* October 2019
5	Transport Innovation Gender Observatory, Acronym TInnGO	The project that aims to contribute to the sustainable development of the city by developing intelligent mobility mechanisms with a focus	The project is addressing the current challenges in the area of mobility with priority on the	*Funding scheme:* HORIZON 2020: *Start:*

		on promoting women's access to modern mobility services.	current needs of women, creating a route for "Sensitive Gender-sensitive Mobility", thus providing a strong connection with the current project proposal.	December 2018 *End:* November 2021
6	CityChanger CargoBike CCCB	The project aims to contribute to the sustainable development of the city by using cargo-bicycles as an alternative mean of transporting goods and an efficient tool for personal use for shopping, spending family leisure timeetc.	The project contributes to the development of the interconnections of the existing local transportation systems.	*Funding scheme:* HORIZON 2020: *Start:* September 2018 - *End:* August 2021
7	Positive City ExChange - acronym CityxChange	The project will address current challenges in the field of energy efficiency, prioritising current needs of the municipalities. Alba Iulia Municipality, being a follower city in the Positive CityxChange project, the city will try to create the first Positive Energy Building - PEB - within the city. The area is already defined in the Dorin Pavel college complex of buildings. 4 of these buildings are to receive energy from the PVs of the main building to create an energy sustainable mini district. The implementation of the project will be a challenge for the municipality, given the fact that the legal framework is not very well defined at the European level. Most probably the city will brace the prosumer law and use the national grid for energy transportation from a building to another. The main building ”loses” almost 100.000 kw/year by putting	The project aims to contribute to the sustainable development of the city by developing intelligent energy efficiency support mechanisms with a focus on promoting smart and innovative neighbourhood solutions.	*Funding scheme:* HORIZON 2020: *Start:* November 2018 - *End:* October 2023

		the electric power back in the national grid.		
8	iVelo bike sharing center	The project resulted as a collaboration between the Municipality and the Green Revolution Association. The project aims as implementing a bike-sharing center, for local citizens and tourists in the city and in the proximities of the city.	The project contributes to the development of the interconnection of the existing local transportation systems.	*Funding scheme:* private funding *Start:* 2014 *End*: present
9	Campaign: recycling with the cargo (Link)	Campaign carried out together with the private sanitation provider for collecting and recycling paper garbage within the local community. Cargo bikes are being used to collect the paper garbage.		*Start: 2015*

Source: Alba Iulia

As a result of these manifold projects implementations, Alba Iulia has built strong cooperation with local stakeholders.

5.4 Success factors and enabling conditions

Success factors: existing human resources; existing and potential non-reimbursement funding.

Crucial enabling conditions: good, agile leadership within Alba Iulia Municipality; long term vision for a local sustainable development, devoted and skilled staff for a successful project implementation; financial resources.

External stakeholders: local public authorities, STP Alba Iulia (the public transport company), private transport operators, private providers for fast courier delivery services, supermarket and hypermarket administrators, local NGOs and public entities focused on energy efficiency and sustainable urban mobility (Alba Local Energy Agency – ALEA, ADR Centru), representatives of large production companies representatives of local educational sector (”1st of December 1918 Alba Iulia” University, Technical University of Cluj-Napoca – Alba Iulia branch), residents, tour operators/travel agencies.

Other relevant stakeholders: large private companies located in Sebes, a smaller city located at about 15km from Alba Iulia. Sebes is known to have an important industrial area.

5.5 Challenges and barriers

Challenges: changing existing mentalities of the people who should be focused on green alternative solutions related to mobility, raise awareness about the challenges of energy efficient and sustainable urban logistics at local and metropolitan level, re-organisation of some areas with traffic issues,

discouraging ad-hoc parking on high traffic roads with negative effects on traffic safety and on the town's image.

Barriers: lack of financial resources to provide green logistic solutions, lack of a modern development strategy focused on the sustainable urban logistics plan at local level and at AIDA level, lack of knowledge on the topic of urban freight, the lack of a bypass roads in the North, West and South of the city which would pick up the heavy urban traffic, lack of public-private partnerships, lack of freight quality partnerships (between the freight transport industry, the local government, local businesses, local community, environmental groups and other stakeholders), lack of an industrial park. For now the lack of physical cycling infrastructure is a barrier to implement cargo bike solutions, yet in 2 years from now, the new bike lanes and smart bike scheme should facilitate the mentality change and enable new habits and new transport conceptions.