



28TH BREAKFAST AT SUSTAINABILITY'S

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SUMP 2.0: Reshaping the EU Sustainable Urban Mobility Planning Guidelines

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<ORADEA METROPOLITAN AREA>



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CITY OF ORADEA



CITY OF ORADEA-10th largest city from Romania



- **Total area of the City of Oradea: 116 km² ;**
- **Number of inhabitants : 222.000**
- **Number of households: 88.800**
- **Number of inhabitants/km²: 1.913**
- **Total length of streets: 432 km (900 streets)**

Oradea Metropolitan Area

City of Oradea

Population - 222.000

Area – 116 sqkm

Oradea Metropolitan Area

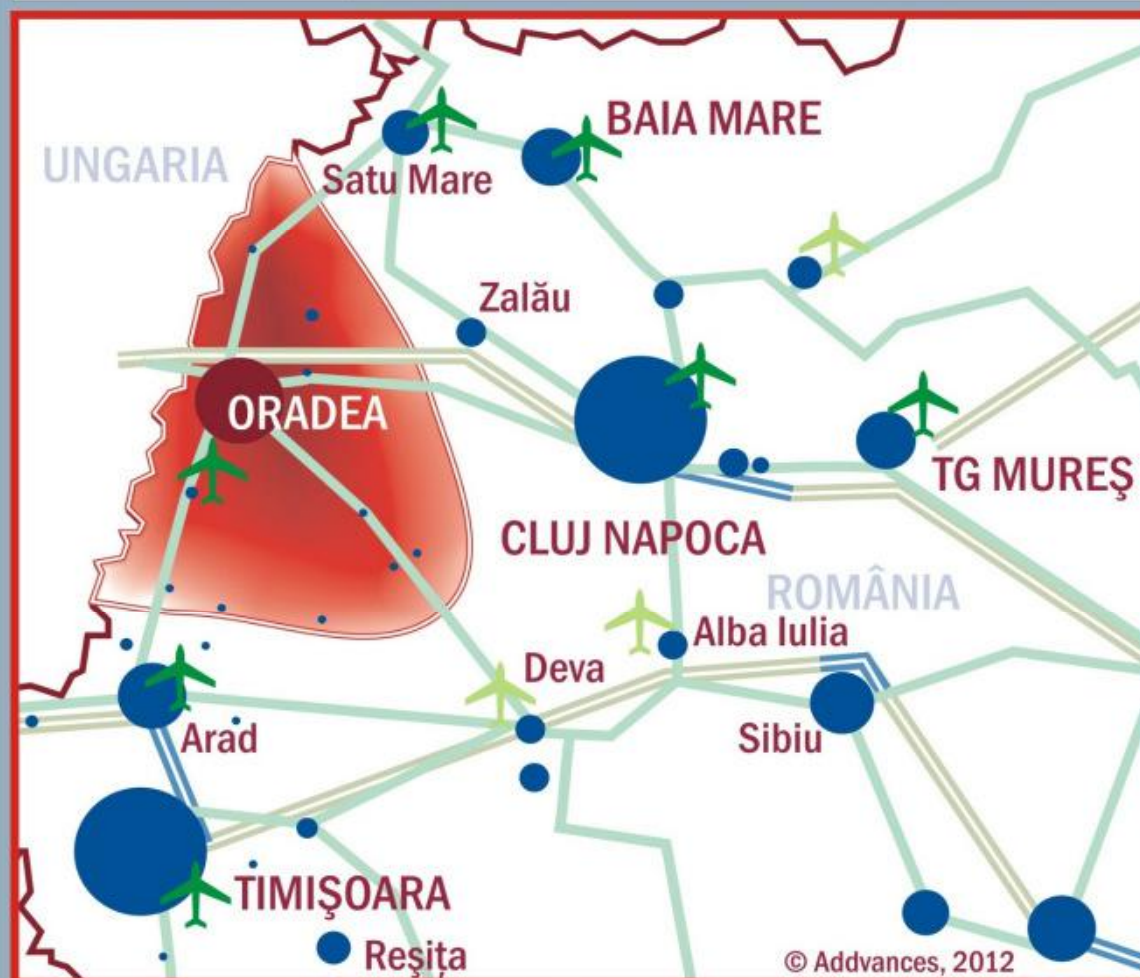
Population - 280.000

Area – 745 sqkm



THE TERRITORIAL INFLUENCE OF ORADEA

MUNICIPIUL ORADEA ÎN CONTEXT REGIONAL NAȚIONAL Zona de influență a municipiului Oradea



LEGENDA

- oraș cu populație de până la 1.000.000 locuitori
- drum principal, altul decât autostrada
- = autostradă funcțională
- = autostradă planificată / în lucru
- frontieră de stat
- ✈ aeroport funcțional
- ✈ aeroport planificat / în construcție
- = limita zonei de influență a municipiului Oradea

intensitatea influenței municipiului Oradea

maximă minimă

Categorii de mărime a orașelor după numărul de locuitori

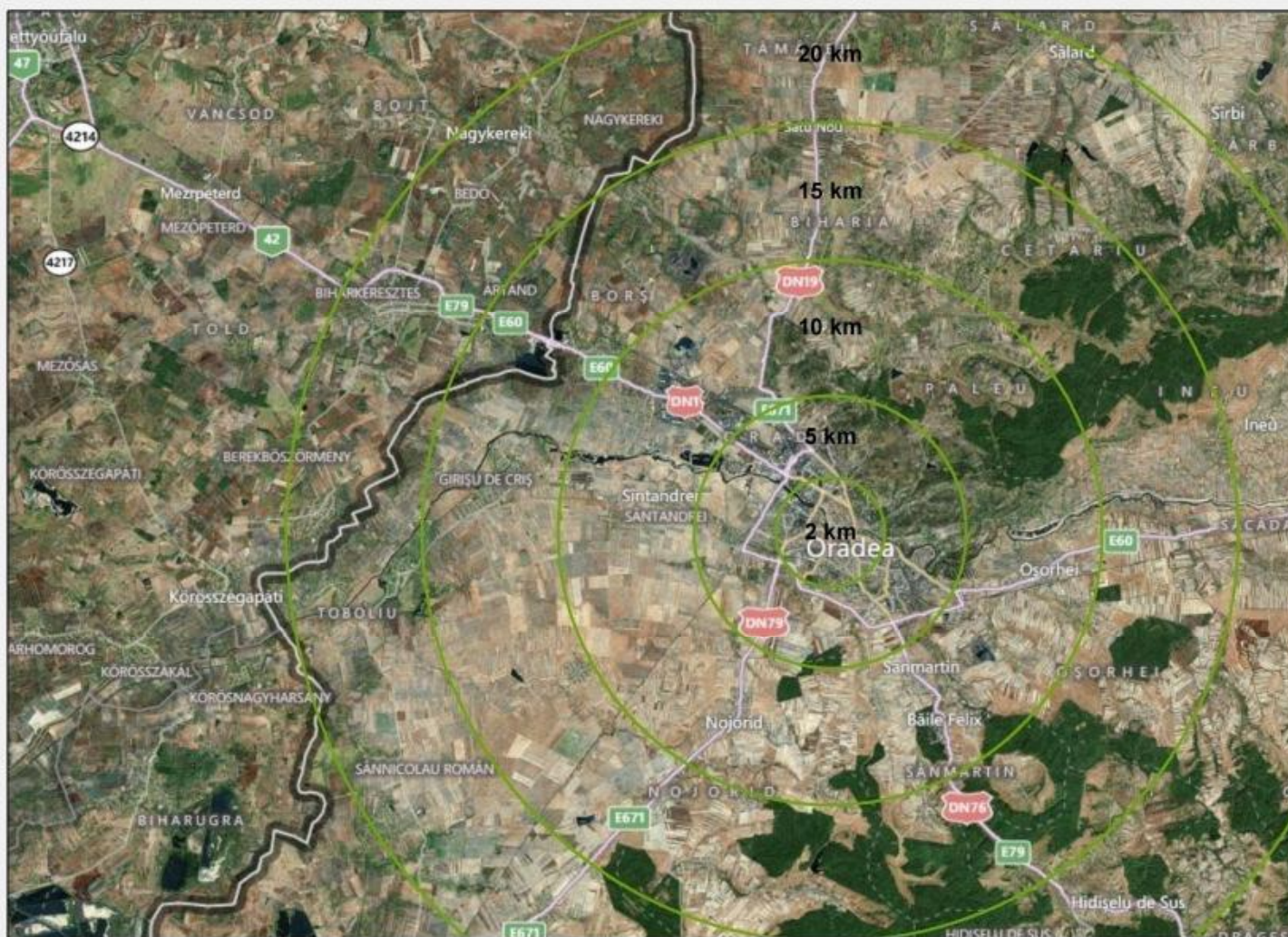
mii locuitori

500
400
300
200
100

Notă:

Această reprezentare cartografică are scop informativ și orientativ. Zona de influență a municipiului Oradea a fost determinată utilizând formulele Reilly-Converse și Florescu-Patrichi, pe baza datelor din anul 2010. Sursa datelor: Institutul Național de Statistică din România.

CROSS-BORDER IMPACT



NATIONAL MOBILITY CONTEXT



- Lack of a coherent network of motorways in correlation with the territorial development;
- Half of the registered cars from Romania in 2017 have more than 15 years (source: Romanian Health Observatory Report, 2018);
- The average network of cycle paths in major cities represents 22,3 km (source: Romanian Health Observatory Report, 2018);
- Urban Public transport:
 - Over 40 cities with a population between 60.000 and 2.000.000 (about 50% of Romania's population);
 - Annual number of trips provided = 1.600.000.000
 - 70 km of metro railway
 - 450 km of trolleybus lines
 - 750 km of tram lines
 - 4.800 km of bus lines
 - Over 7.000 public transport vehicles

LOCAL MOBILITY CONTEXT before the SUMP



- Lack of an integrated spatial planning policy; focus on authorizing procedures and less on integration and correlation with other sectoral policies;
- Lack of an urban mobility dedicated policy (except the feasibility studies for implementing of various investments in road infrastructure);
- Main facilities (hospitals, markets and hypermarkets) with an unbalanced spatial distribution at the level of the City
- Metropolitan development: more than 17.000 inhabitants from the City that moved in the functional urban area; (overall commuting rate is approx. 25.000 persons/day).
- Investments in transport system are more focused on the supply-side measures (new roads, modernizing the road infrastructures, increasing the road capacity, creating more parking places);

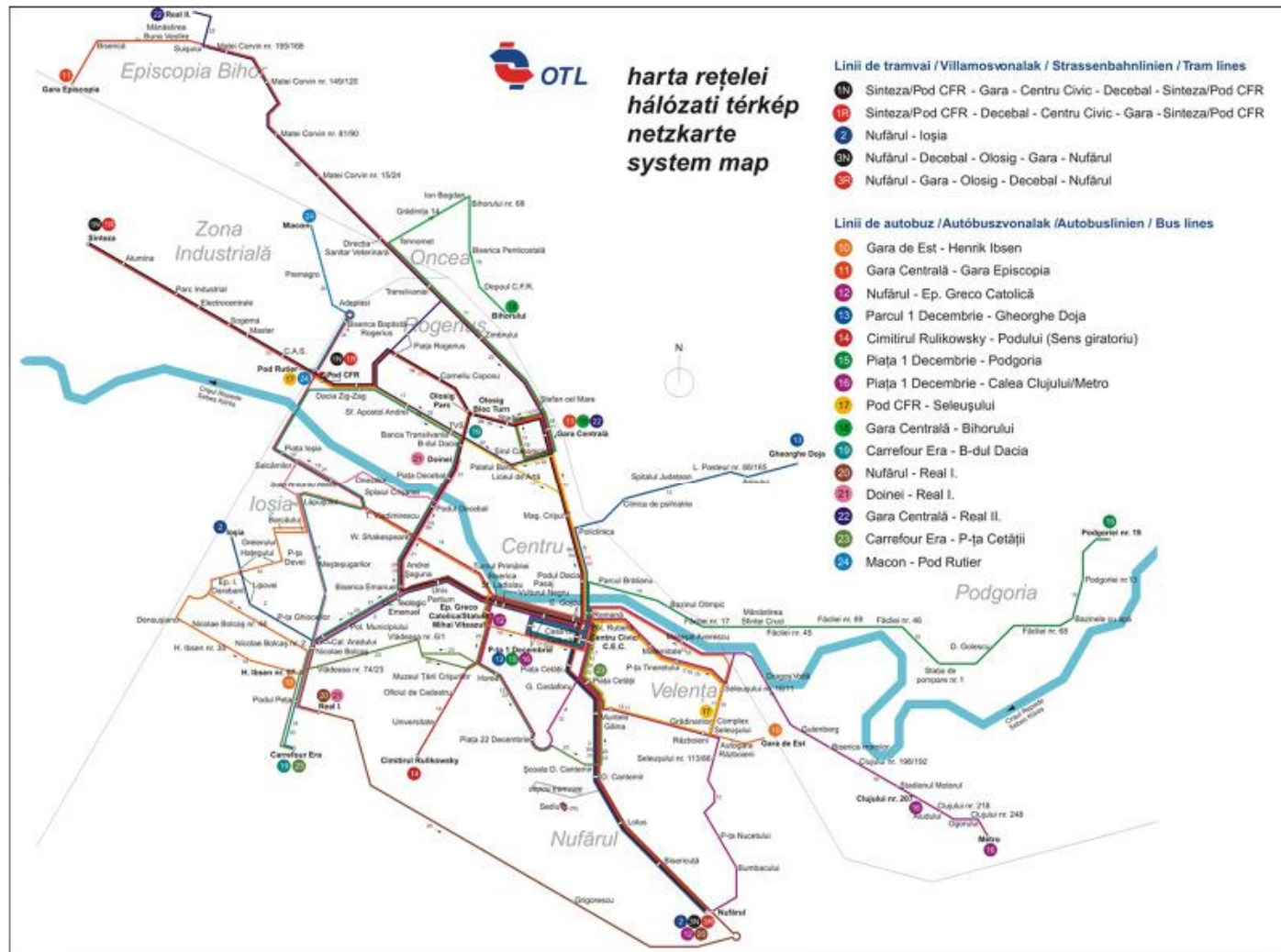
LOCAL MOBILITY CONTEXT before the SUMP



- Primary objective: traffic flow capacity, alternative for cars and speed;
- Important increasing of motorized transport (from 71.000 cars, in 2008 to 96.000 cars, in 2015);
- Urban sprawl moved some linking points toward new economic activities areas without modelling the PT system on this new reality;
- On few main corridors, tramway shares the road space with the cars generating at each change supplementary problems in terms of organizing the circulation, traffic jams;
- Lack of dedicated lanes for buses;
- The lack of an integrated metropolitan PT system.

LOCAL MOBILITY CONTEXT

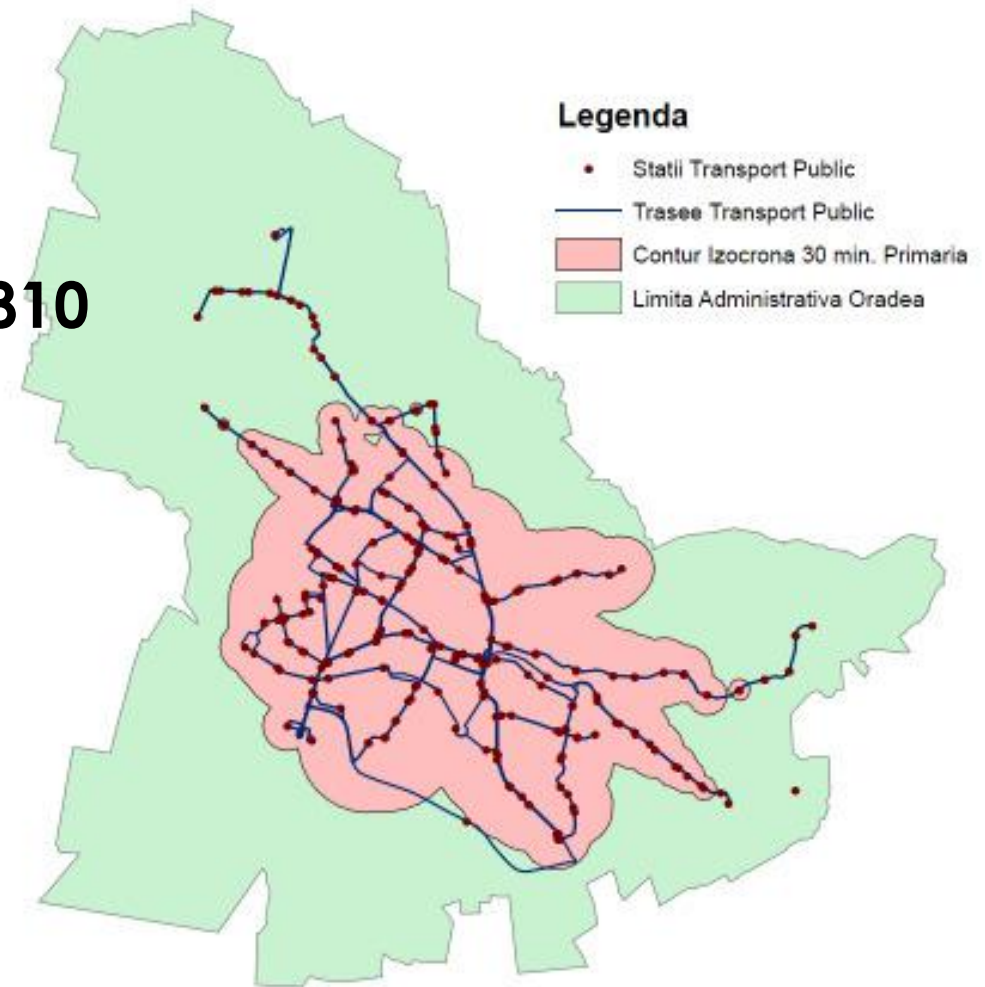
Public transport network: 5 tram lines + 19 bus lines



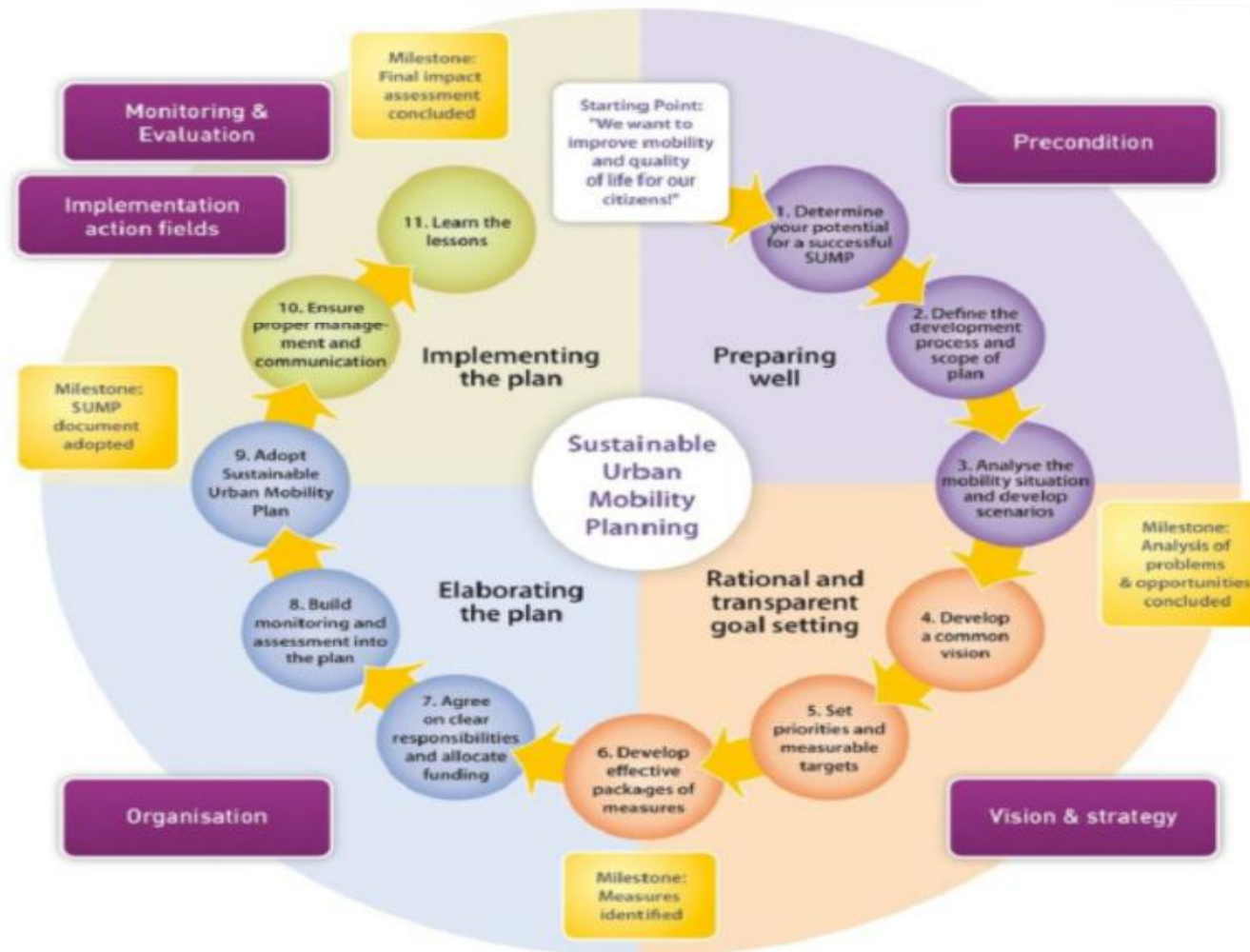
Covered area by the isochrone of 30 minutes having the polarizing point the City Hall of Oradea



- ▶ **Total travels/day: 174.027 travels/day**
- ▶ **Total travels/month: 5.220.810 travels/month**
- ▶ **Tramway: 127.544 travels/day**
- ▶ **Bus: 46.483 travels/day**



2013- STARTING THE TRANSITION TOWARD A SUMP APPROACH (first SUMP to be elaborated in Romania)



4 phases:

- 1) Preparing well,
- 2) Rational and transparent goal setting,
- 3) Elaboration of the Plan,
- 4) Monitoring.

1. PREPARING WELL PHASE



Element 1: Determine your potential for a successful SUMP

Preparing well

1. Determine your potential for a successful SUMP

- | | | | |
|-----|---|-----|--------------------------------------|
| 1.1 | Commit to overall sustainable mobility principles | 1.4 | Review availability of resources |
| 1.2 | Assess impact of regional/national framework | 1.5 | Define basic timeline |
| 1.3 | Conduct self-assessment | 1.6 | Identify key actors and stakeholders |

- In 2013, the SUMP was assumed by Oradea Local Transport Company.
- Due to the lack of financing at national level, only EU funds perspective (Regional Operational Program) and own local budgets were taken into account.
- In order to coordinate the overall development process, it was setup a Working Group.
- Lack of a self-assessment regarding the status of various SUMP elements (except for PT).
- Basic timeline : 2023 and 2030.
- Identifying of key actors and stakeholders: representatives of various departments from the City Hall, County Council, PT company, Environment Agency, Public Health Direction, County Police Department, universities, SME's, NGO's.

Element 2: Define the development process and scope of plan

Preparing well

2. Define the development process and scope of plan

- 2.1 Look beyond your own boundaries and responsibilities
- 2.2 Strive for policy coordination and an integrated planning approach
- 2.3 Plan stakeholder and citizen involvement
- 2.4 Agree on workplan and management arrangements



- The development process was the responsibility of Oradea Local Transport Company (phase 1-2013) and after the modification of the Law on urbanism, it was also assumed by the City of Oradea (phase 2-2015).
- In spite of involving of a diverse array of relevant stakeholders, participation level was limited and comprised in most cases the entities under the control of the municipality. In terms of content, it rather concentrated on traffic management and Public Transport.
- Correlation with the General Urban Plan, Development Strategy.
- Lack of integration between land-use planning and transport in terms of policy content and institutional structures.

Element 2: Define the development process and scope of plan

Preparing well

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- Stakeholders and citizens involvement: It were applied various tools in order to ensure the continuous communication and involvement processes of various stakeholders: letters, questionnaires (1.300), leaflets for drivers, students, participation in TV broadcasts, Mobility Forums, public consultation.
- Agree on work plan and management arrangements: It was setup a Working Group in charge of ensuring the defining of the work plan for the planning process and for monitoring progress.

Element 3: Analyse the mobility situation and develop scenarios

Preparing well

3. Analyse the mobility situation and develop scenarios

- 3.1 Prepare an analysis of problems and opportunities
- 3.2 Develop scenarios

Milestone:
Analysis of problems
& opportunities concluded

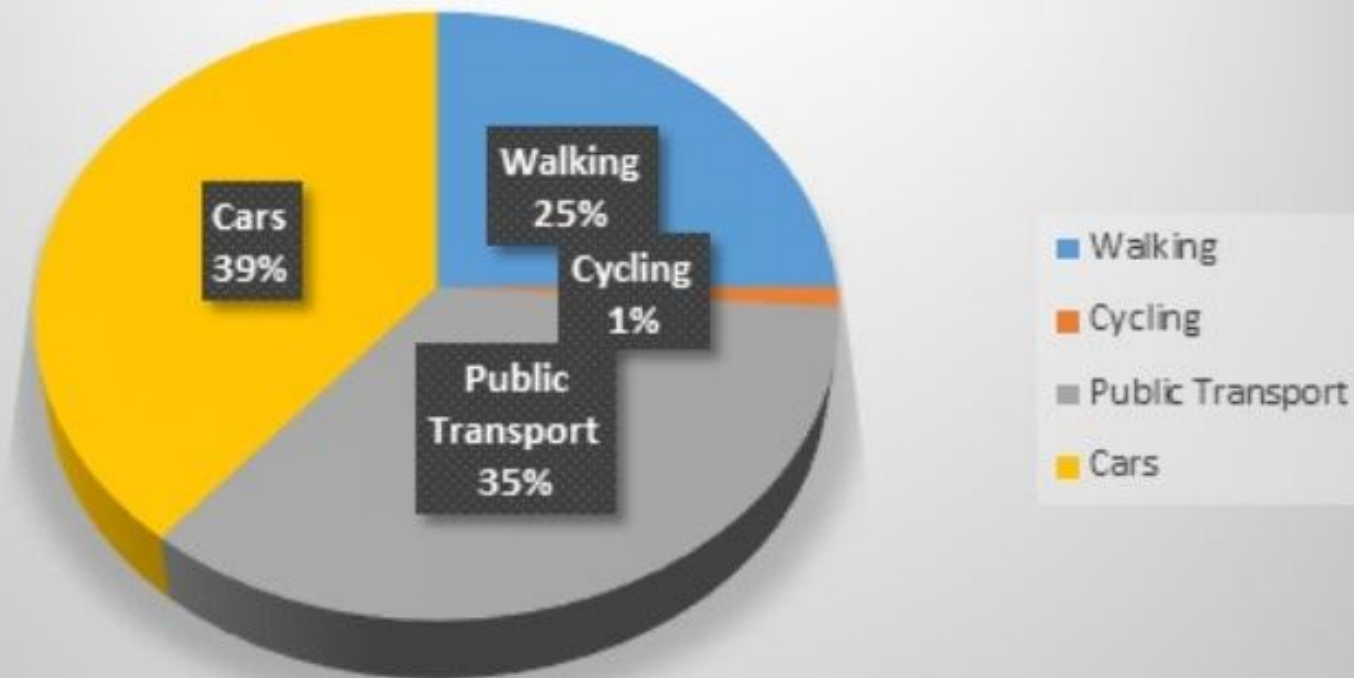


- **Traffic census= in 50 places from the City, 7.00 – 20.00**
- **Origin-Destination Surveys= 7 entries (5 on National Roads and 2 on County level roads)**
- **Census of passengers on PT- all lines, 5.00-23.00**
- **Origin-Destination Surveys main institutions, companies, schools- 1.325 filled-in questionnaires**
- **Transport modeling: VISUM software**

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MODAL SPLIT

City of Oradea- Modal Split



SCENARIOS DEVELOPMENT



- ***4 development scenarios:***
 - ❖ **Scenario 1 – “to do nothing”**
Short term (2017)
 - ❖ **Scenario 2 – “as until present”**
Medium term (2020)
 - ❖ **Scenario 3 – “minimalist policy”**
Medium term (2020)
 - ❖ **Scenario 4 – “committed policy”**
Long term (2030)

Phase 2. Rational and transparent goal setting

Element 4: Develop a common vision

Rational and transparent
goal setting

4. Develop
a common
vision

- 4.1 Develop a common vision of mobility and beyond
- 4.2 Actively inform the public



- **VISION:** Setting up an effective, integrated, sustainable and safe urban transport system that would promote the economic, social and territorial development in the City of Oradea and its catchment area
- **SUMP objectives:** Accessibility, Safety, Environment, Economic effectiveness, Quality of urban public space
- **Informing the public:** organizing of a Public Consultation

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Phase 2. Rational and transparent goal setting

Element 5: Set priorities and measurable targets

Rational and transparent
goal setting



5.1 Identify the priorities for mobility

5.2 Develop SMART targets



- **TARGETS:** Increase the occupancy rate of public transport vehicles with 8% until 2025; Extending the PT network, Ensuring the affordability for traveling in the PT system, Extension of NMT transportation modes Increasing the attractiveness of public space; Improvement of the pedestrian network; Revitalization of public space in decay; Reducing the GHG emissions and noise levels generated by the transport sector with 25% until 2030. Improving the rate of NMT modes in the overall modal split. Reducing the use of individual motorized transport with 5% until 2025, Reducing with 20% the number of car accidents, Reducing with 40% the number of fatalities due to car accidents, Increasing the number of companies that are connected to the PT network, Increasing the number of employees that use the PT service, Increasing the level of investment in the sustainable transportation modes.

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Phase 3. ELABORATING THE PLAN

Element 6: Develop effective packages of measures

Rational and transparent
goal setting

6. Develop effective packages of measures

- 6.1 Identify the most effective measures
- 6.2 Learn from others' experience
- 6.3 Consider best value for money
- 6.4 Use synergies and create integrated packages of measures

Milestone:
Measures
identified



- ***Determining the intervention scale: neighbourhoods, urban and suburban level;***
- ***Initial package= 98 measures,***
- ***Identifying the cities who have already implemented measures that were considered.***
- ***Distribution of measures in accordance with the scenarios,***
- ***Expanded set of measures= 76 measures***
- ***CBA and Multicriterial Analysis.***
- ***Final package of measures= 24 measures***

Phase 3. ELABORATING THE PLAN

Element 7: Agree on clear responsibilities and allocate funding

Elaborating
the plan

7. Agree
on clear
responsibilities
and allocate
funding

- 7.1 Assign responsibilities and resources
- 7.2 Prepare an action and budget plan



- Identifying the financing sources (Regional Operational Programme, PA 4 Sustainable Urban Development, IP 4.1 Sustainable Urban Mobility)
- Defining the roles in projects coordination: internal departments from the City Hall, Oradea Local Transport Company, Oradea Metropolitan Area; Transregio Transport Authority.
- Elaborating the Feasibility Studies (external expertise);
- Developing the application forms and submitting the projects;

Phase 3. ELABORATING THE PLAN

Element 8: Build monitoring and assessment into the plan

Elaborating
the plan

8. Build
monitoring and
assessment into
the plan

8.1 Arrange for monitoring and evaluation



- Total number of passengers in public transport;
- Bus / tram routes (number, length, density, coverage);
- Energy consumption related to fossil fuel consumption - in urban public transport of passengers;
- The length of the dedicated public transport lanes over the total street network;
- The ratio of the total population to the active fleet of public transport vehicles;
- The length of built cycle paths and pedestrian areas;
- Number of km of built/modernized streets;
- The level of GHG and noise emissions.

NATIONAL LEGISLATION REGARDING THE SUMP



In 2016, the Romanian Law on territorial planning was updated with the urban mobility plan concept. The Urban Mobility Plan is defined as a:

1. Complementary strategy of territorial development documentation suburban / metropolitan and general urban plan (PUG);
2. Strategic planning tool through which it is correlate the spatial development of the localities with the mobility and transport needs of persons and goods.
3. Urban Mobility Plan addresses all forms of mobility and transport, including public and private transport, freight and passengers, motorized and non-motorized moving or stationary;

SUMP Methodology



Chapter.1 – CORRELATION WITH THE STRATEGIC SPATIAL PLANNING DOCUMENTS

Chapter.2 – CURRENT ANALYSIS SITUATION (major circulation network, public transport, transport of goods, alternative means of transport, traffic management, identification of areas with a high level of complexity),

Chapter 3 DEVELOPING AND CALIBRATING THE URBAN MULTIMODAL TRANSPORT MODEL (Collection of traffic data, Origin-Destination Surveys, Developing the transport model- baseline year, General traffic, Public transport, Calibrating and validating the baseline model, Developing the transport models and demands for the next years),

Chapter.4 – EVALUATING THE IMPACT ON MOBILITY (economic effectiveness, environment, accessibility level and development trends, traffic safety)

Chapter.5 – THE DEVELOPMENT VISION OF URBAN MOBILITY

Chapter.6 – MOBILITY SCENARIOS ON THE BASIS OF THE TRANSPORT MODEL

Chapter.7 – ACTIONS PLAN (Major interventions on the road network, Public Transport, Transport of goods, Cycling and Pedestrians, Traffic and parking management, intermodal structures)

Chapter.8 – MONITORING THE IMPLEMENTING OF THE SUMP

Phase 4. IMPLEMENTING THE PLAN

Pedestrianization of central areas (Unirii Square)

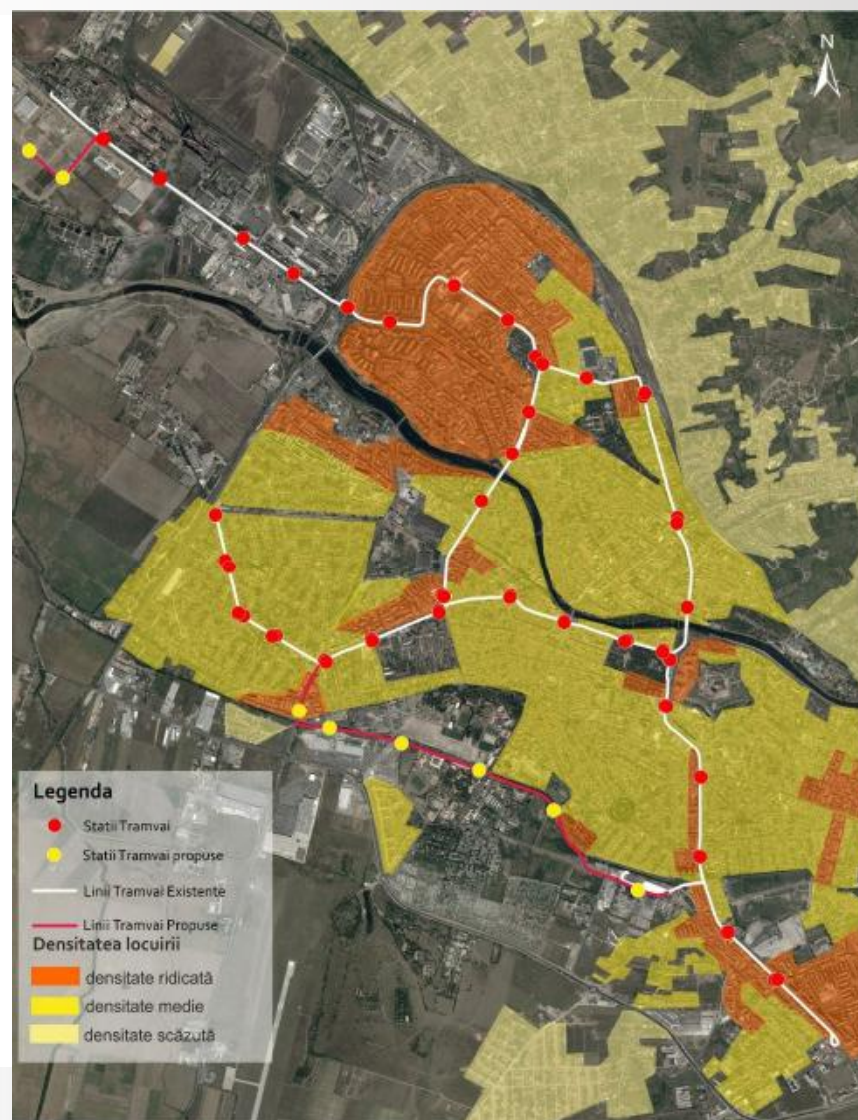


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Pedestrianization of central areas (Unirii Square)



EXTENSION OF THE TRAMWAY LINE IN THE SOUTHERN ARE OF THE CITY



**Status: signed
subsidy contract
Financing source:
Regional
Operational
Programme, IP 4.1
Value : 16 MIL.
EUROS**

MODERNIZING THE TRAMWAY FLEET



Status: signed subsidy contract

Financing source: Regional Operational Programme, IP 4.1

Value : 38 MIL. EUROS

INCREASING THE URBAN MOBILITY OF NUFARUL – CANTERMIR CORRIDOR (SOUTH TO NORTH AXIS)



Status : In preparation

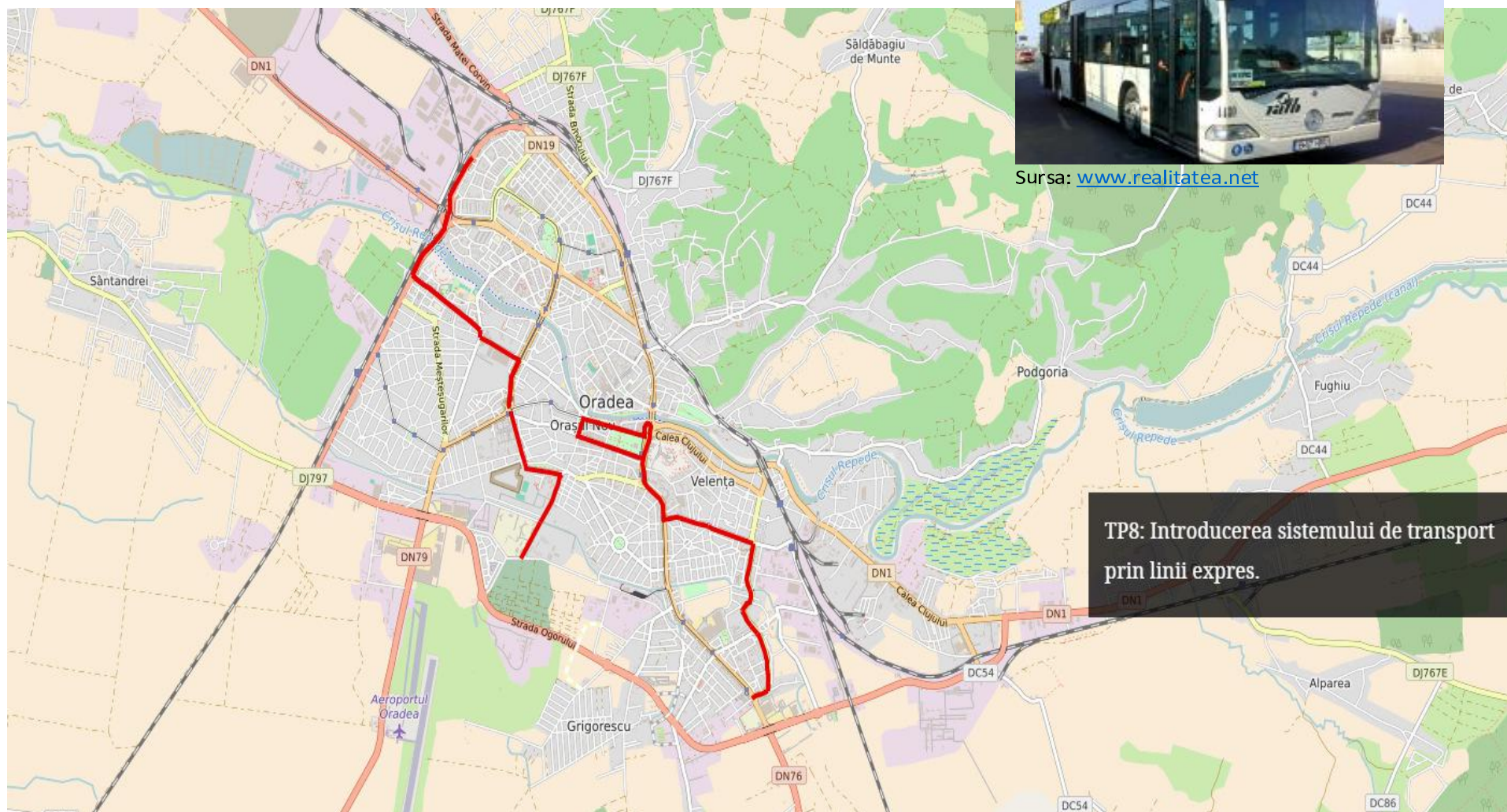
Financing source: Regional Operational Programme, IP 4.1

Value : 8.231.387 EUROS

INTRODUCING OF EXPRESS BUS LINES



Sursa: www.realitatea.net



PEDESTRIANIZATION OF FERDINAND SQUARE



PEDESTRIANIZATION OF FERDINAND SQUARE



Status: contracting

Financing source: Regional Operational Programme, IP 4.1

Value: 4,968,476.93 euros

PEDESTRIANIZATION OF AUREL LAZAR STREET



PEDESTRIANIZATION OF AUREL LAZAR STREET



Status: contracting

Financing source: Regional Operational Programme, IP 4.1

Value: 2,386,991.27 euros

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PEDESTRIANIZATION OF THE LEFT SIDE BANK OF CRISUL REPEDE RIVER



PEDESTRIANIZATION OF THE LEFT SIDE OF CRISUL REPEDE BANK RIVER



Status: contracting

Financing source: Regional Operational Programme, IP 4.1³⁷

Value: 2,870,964.13 euros

PEDESTRIANIZATION OF CENTRAL AREAS (LIBERTĂȚII STREET)





4.1. POLYCENTRIC MOBILITY IN 3 NEIGHBOURHOODS MAGNOLIA, CAZABAN, NUFĂRULUI



Status : In evaluation

Value : 7.341.059,78 euros

URBAN MOBILITY CORRIDOR BETWEEN EMANUIL GOJDU SQUARE – CITADEL SQUARE



Status: signed contract

Financing source: Regional Operational Programme, IP 4.1

Value: 19,453,635.93 euros

BUILDING OF CENTENARULUI BRIDGE



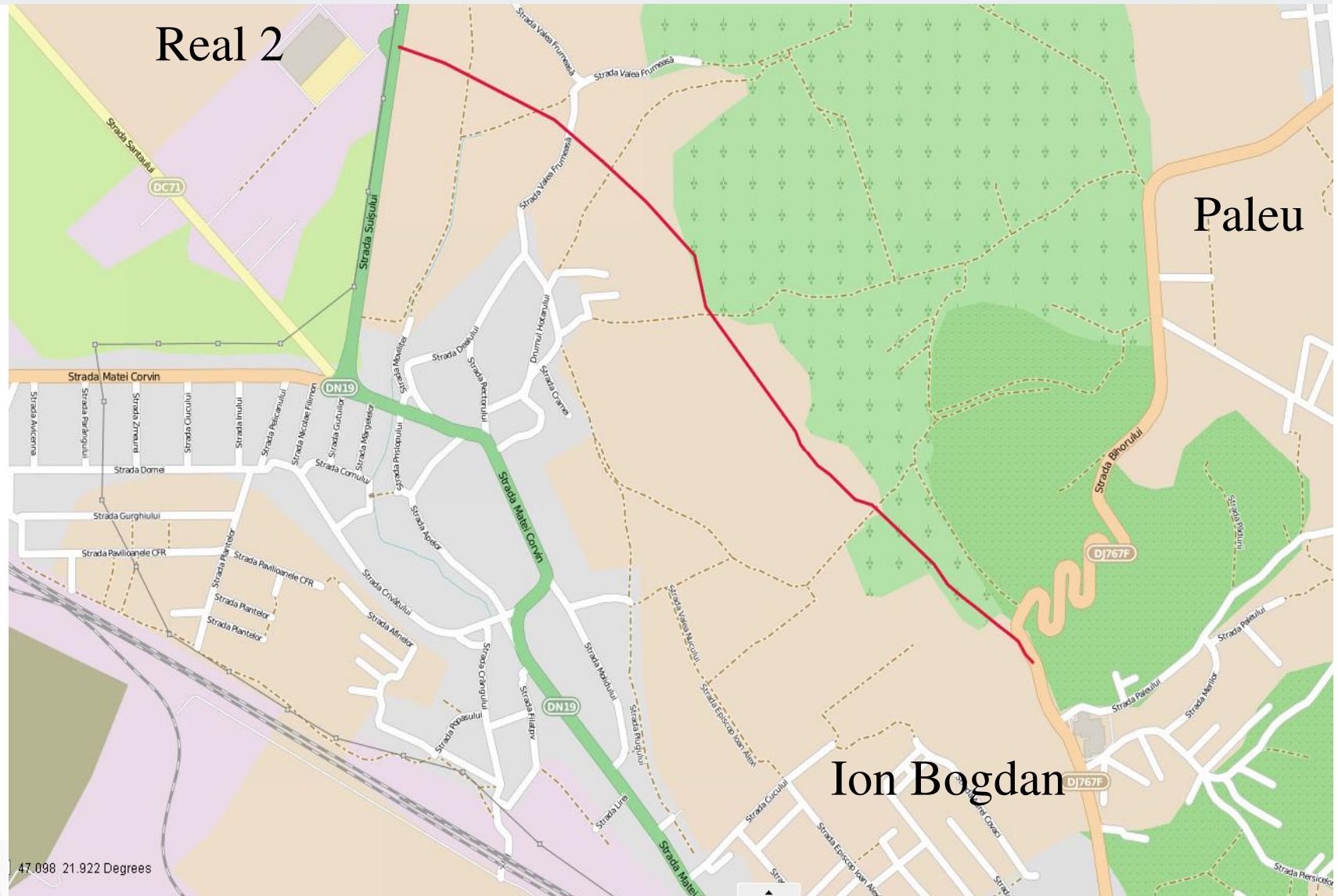
BUILDING OF 5 PARKING FACILITIES IN THE CITY CENTRE (APPROX. 1.500 PARKING PLACES)



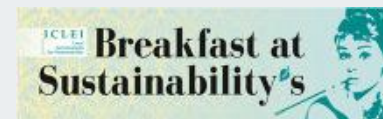
UNDERGROUND PASSAGE on Magheru boulevard, on the section between Aleea Strandului-Parcul Traian (Estimated value: 5 mil. Euros)

ENLARGING the Dacia Bridge with 6 m in order to ensure another lane for cars traffic





CONCLUSIONS



The EU SUMP guidelines have had a positive impact on the following levels:

1. Policy framework

2. Funding

3. Facilitating the exchange of experience and best practice

4. Awareness-raising

SUMP Guidelines enabled the decision-makers to better understand the importance of organizing the mobility in the city.

When SUMP became mandatory and EU funds were available, it enabled them to better integrate it in the urban development.

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CONCLUSIONS



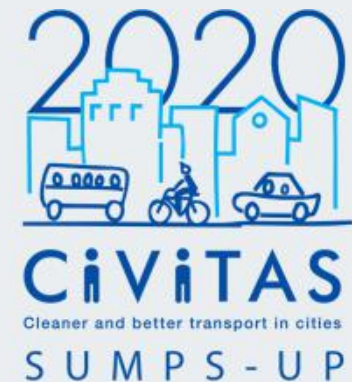
- Nevertheless, SUMP should become more than a mandatory document for accessing of EU funds.
- EU should continue to support, through the cohesion policy, the cities, in their transition toward a SUMP approach;
- SUMP should become mandatory at the level of all cities from EU with more than 100.000 inhabitants;
- EU level should be further involved in the preparation and evaluation phases of SUMP (e.g. cities with more than 500.000 inhabitants) particularly, when EU funds are requested.
- Identified BP should be further explored (technical, economical, social, environment impact) and promoted at the level of all cities.
- Need to define a set of indicators at European level in order to have a common evaluation grid of the SUMP in European cities.



Thank you!

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Projects Coordinator
Oradea Metropolitan Area

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