

The Cluj-Napoca Metropolitan Bypass

in the context of the

Sustainable Urban Mobility Plan

Cluj-Napoca, 31.03.2016



European Bank
for Reconstruction and Development



ARUP



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SUMP Cluj-Napoca

2016 – 2030

Cluj-Napoca city + 18 adjacent communes

The first transport master plan in the last quarter of a century

Data collection (jan '15 – apr)

Analysis of current situation (feb – jun)

Construction of the Transport Model (mar – aug)

Construction of 3 alternative scenarios (aug – oct)

Refining the preferred scenario (oct – nov)

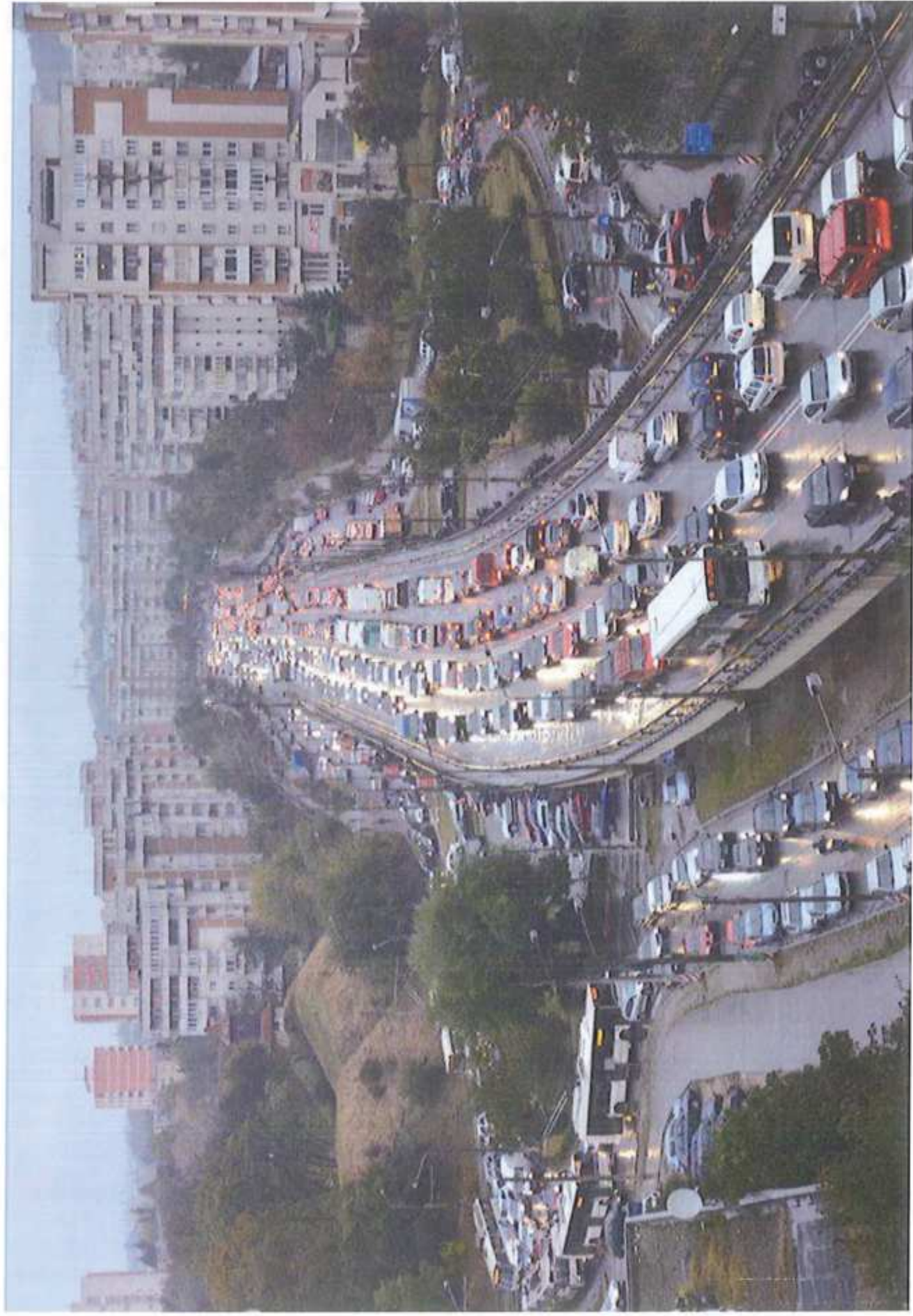
The SUMP Action Plan (nov)

Public consultation / refinement (dec '15 – may '16?)

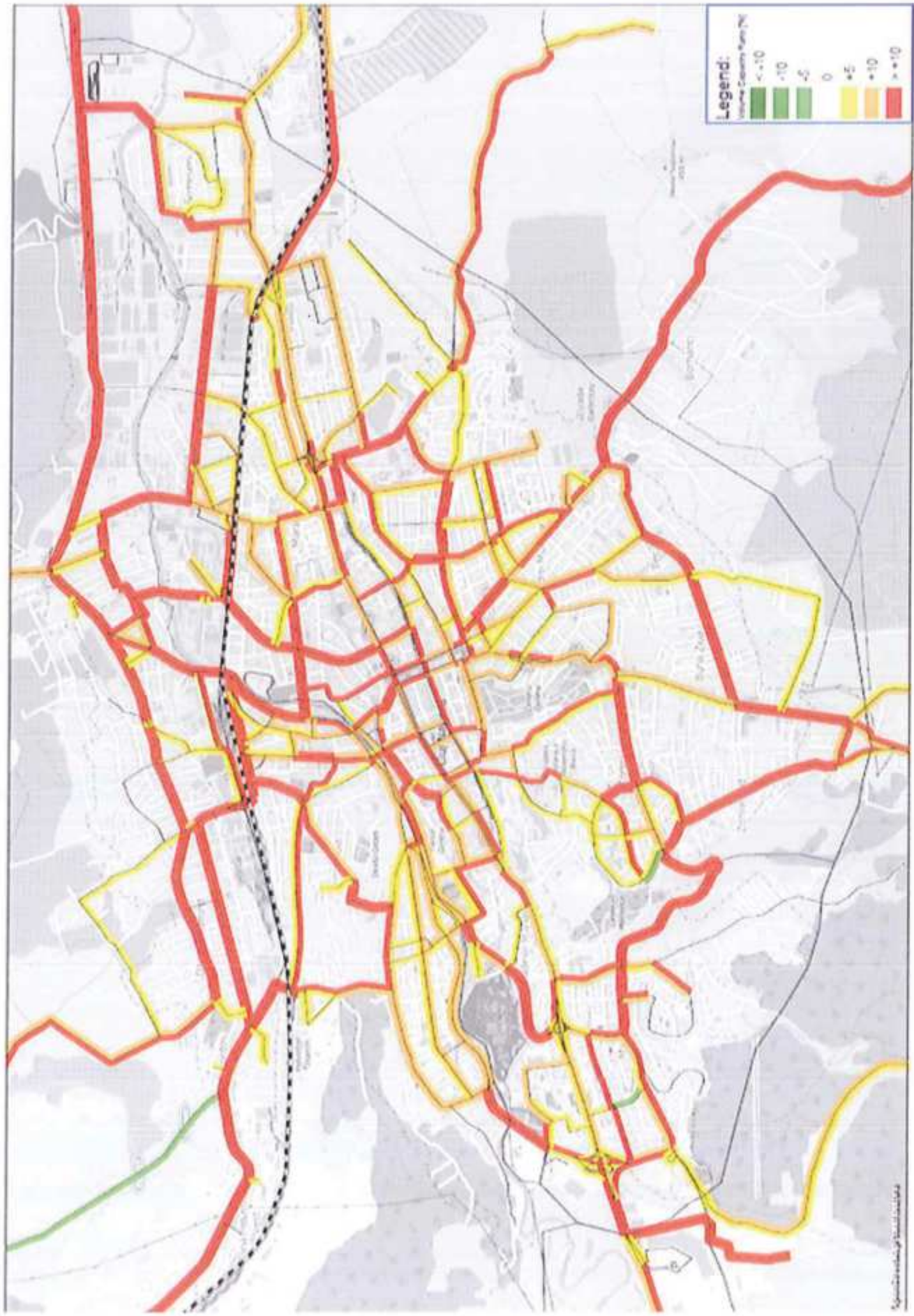
[illegible]

- ARUP

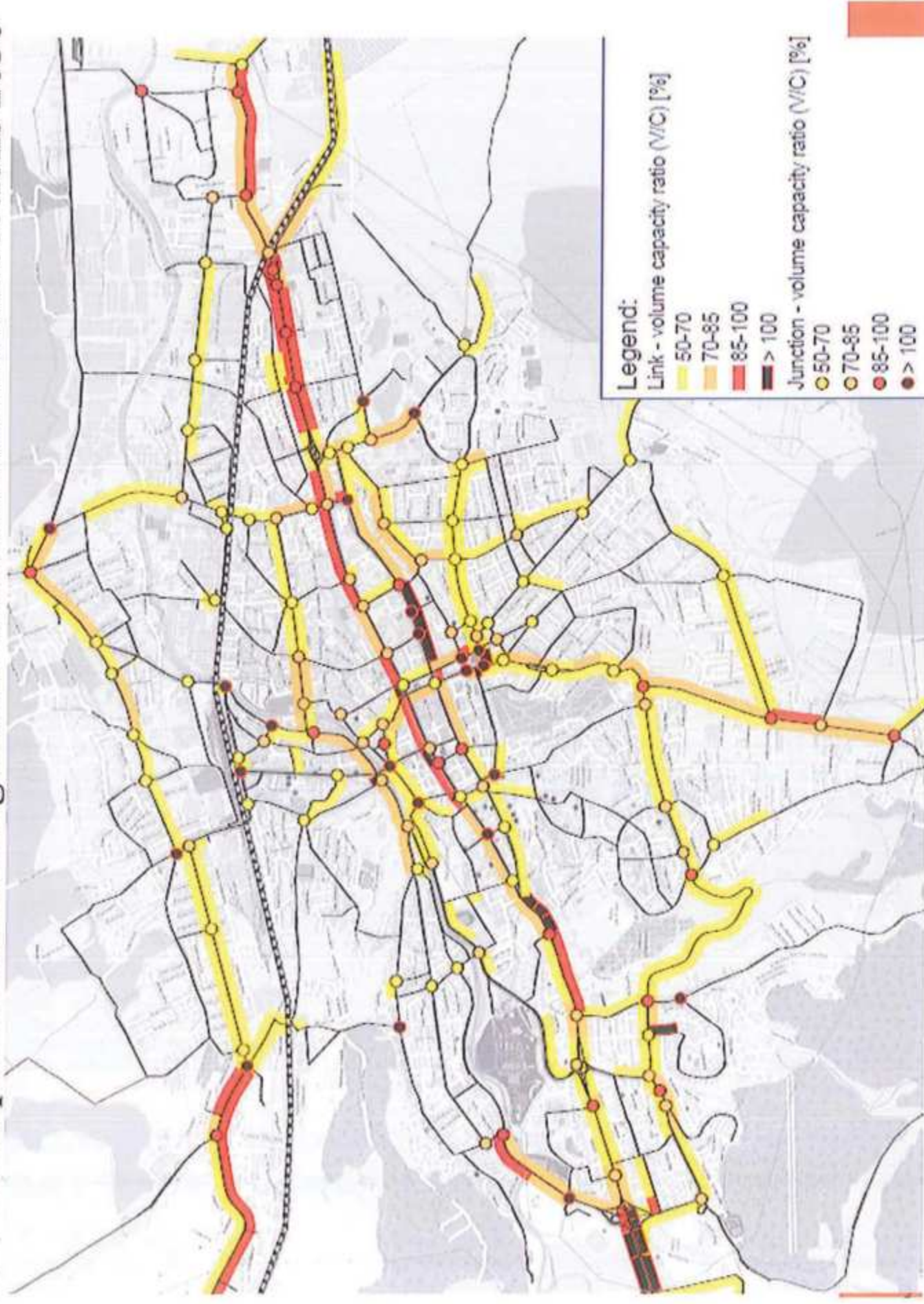
[visual representation:]



The Transport Model: V/C ratio variation 2015 – 2030

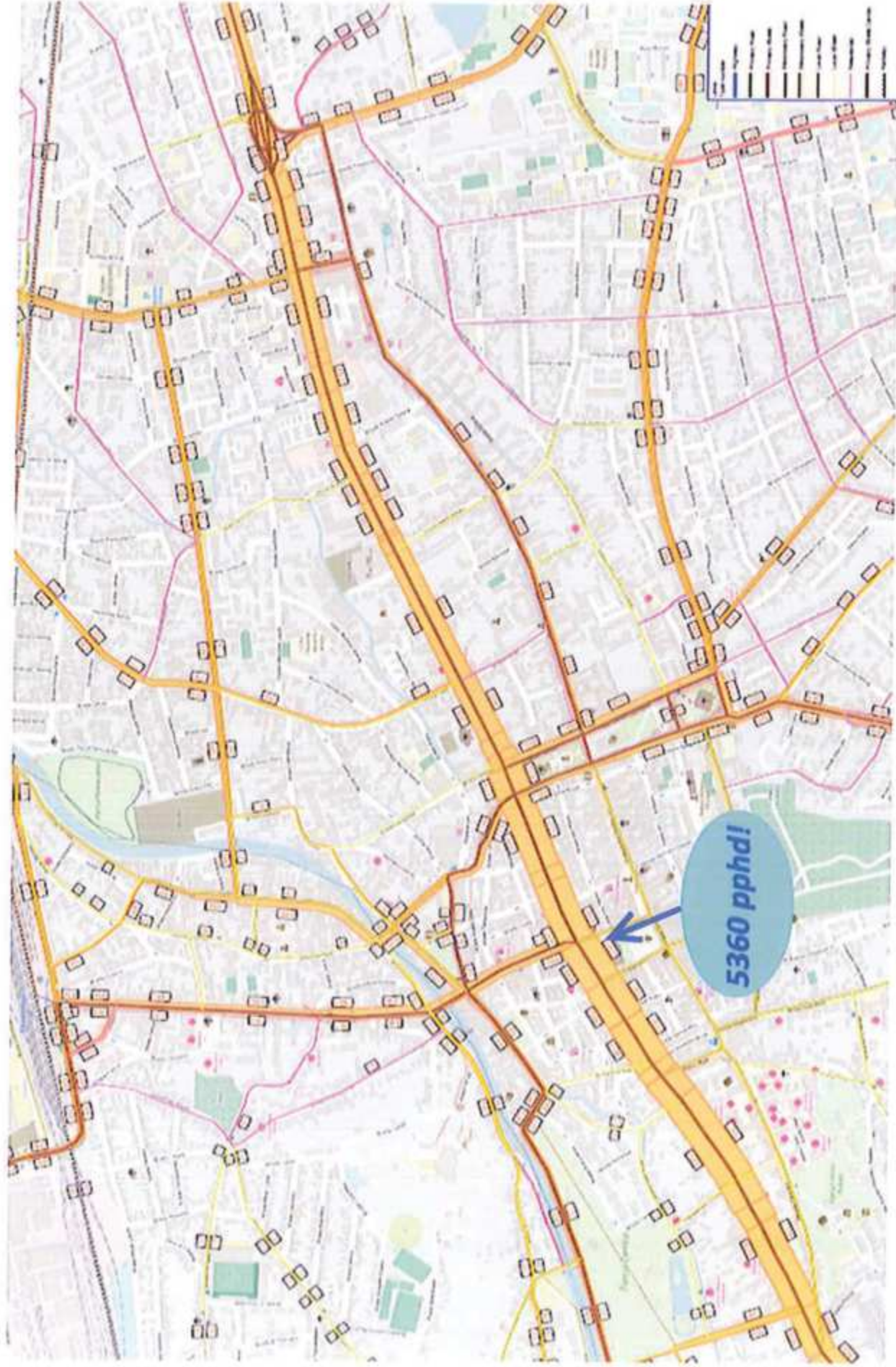


The Transport Model: congestions on links and in intersections 2030



Similar problems in the public transport network

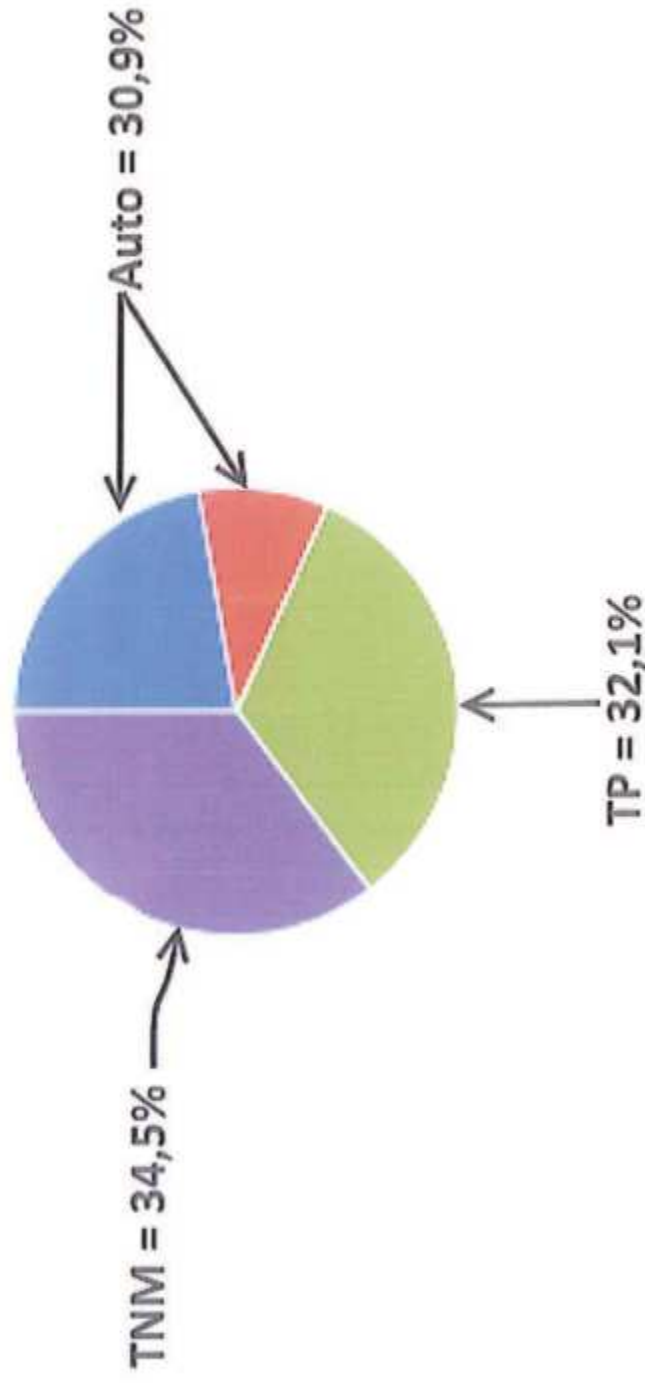
- Passenger volumes in the AM peak



Approach regarding the public transport

- The west – east PT corridor is at its superior limit regarding reasonable passenger flow in the AM peak
- However, given the AM modal share...

Distribuția modală a călătorilor în AM (06:00 - 10:00)

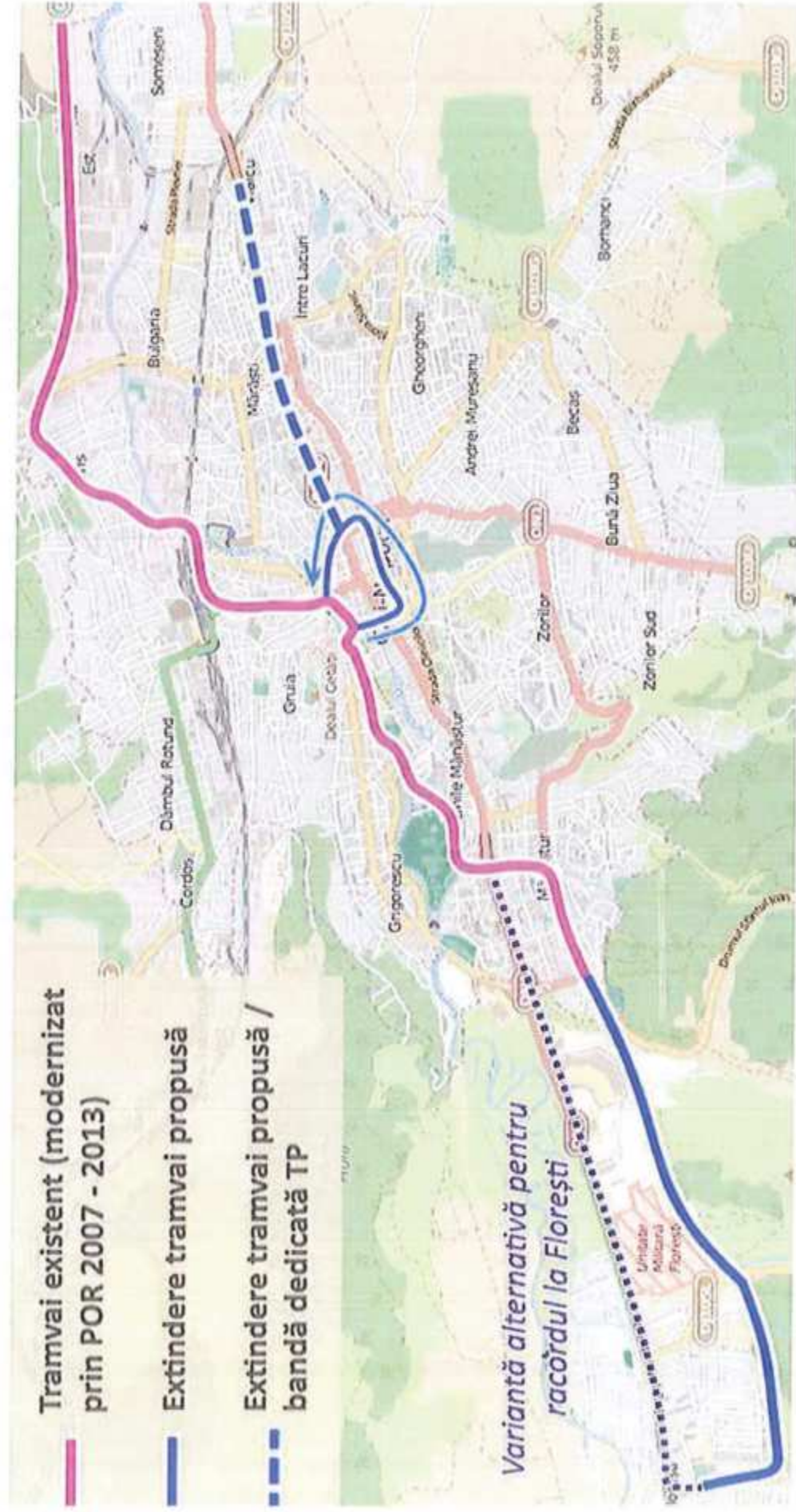


- → A significant transition towards sustainable mobility (auto →

PT, target: minimum 40% for 2030) is not possible in the current

construction of the PT system

The approach regarding the west – east PT axis



ScA 1: Priority west – east axis: the southern bypass



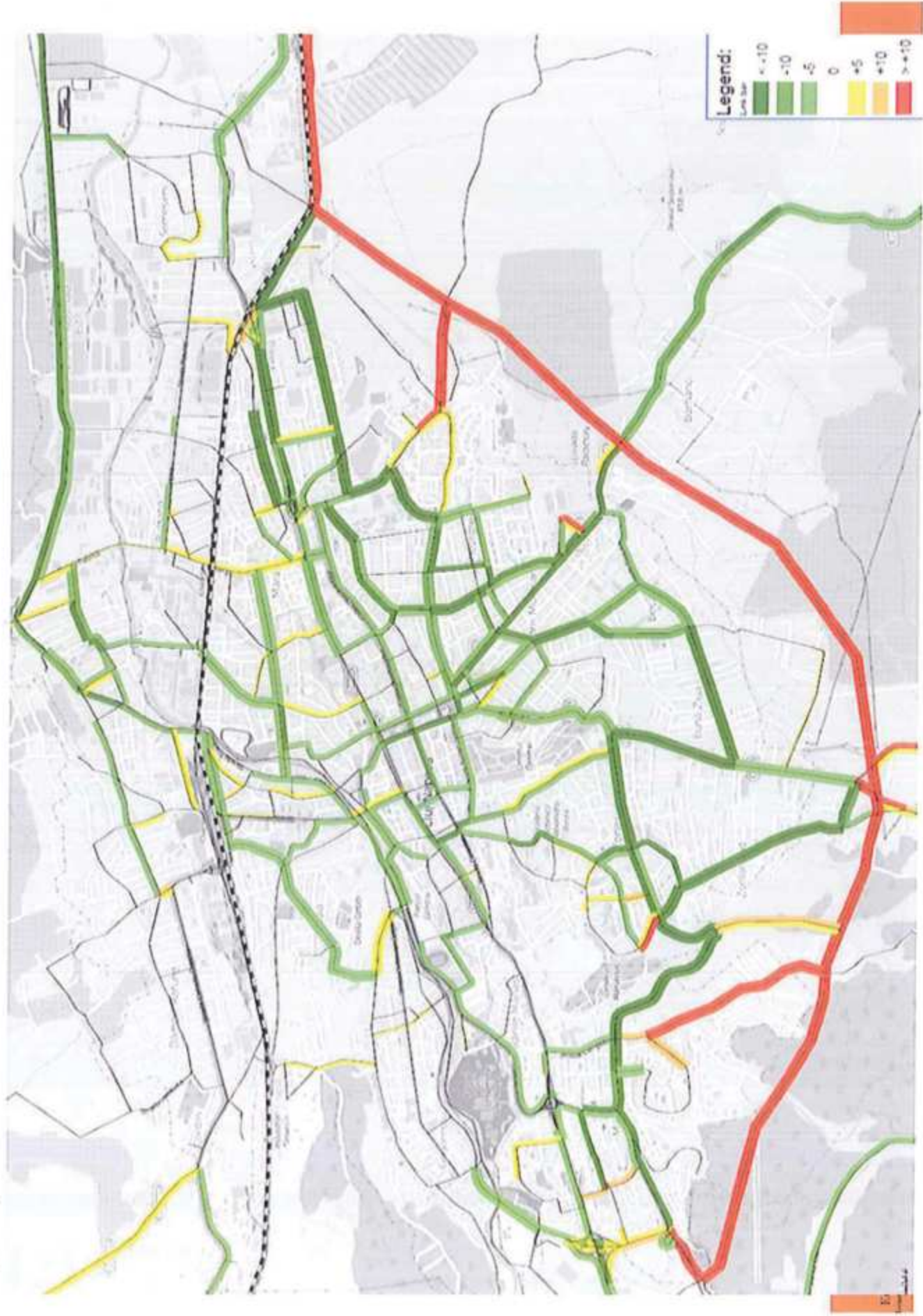
ScA 2: Priority west – east axis: = New road adjacent to the railway
 + the Someș riverbed roadway



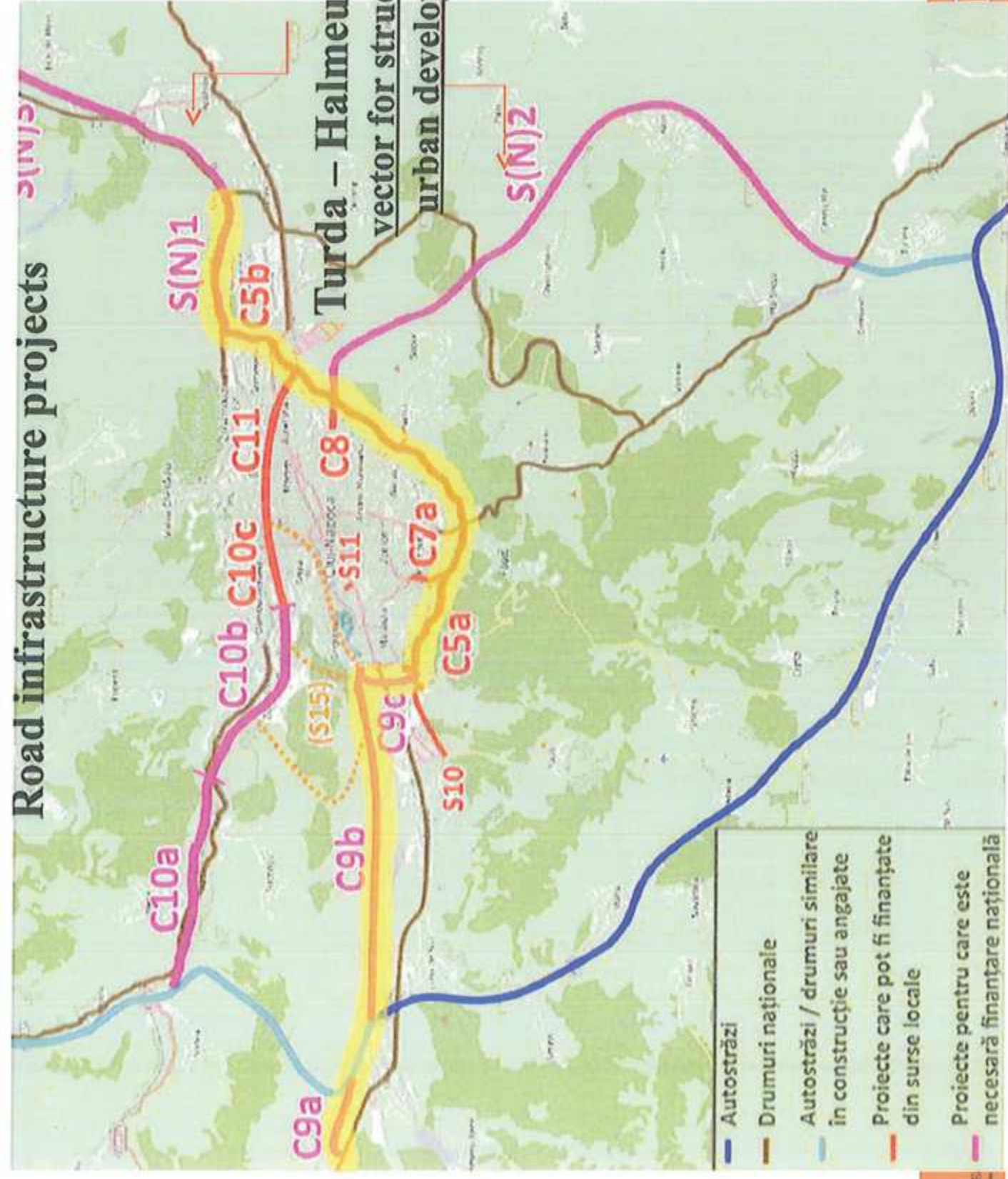
SCA 3: Priority west – east axis = Strengthening the existing central axis



Impact on reducing the congestion – Horizon 2020: SCA1

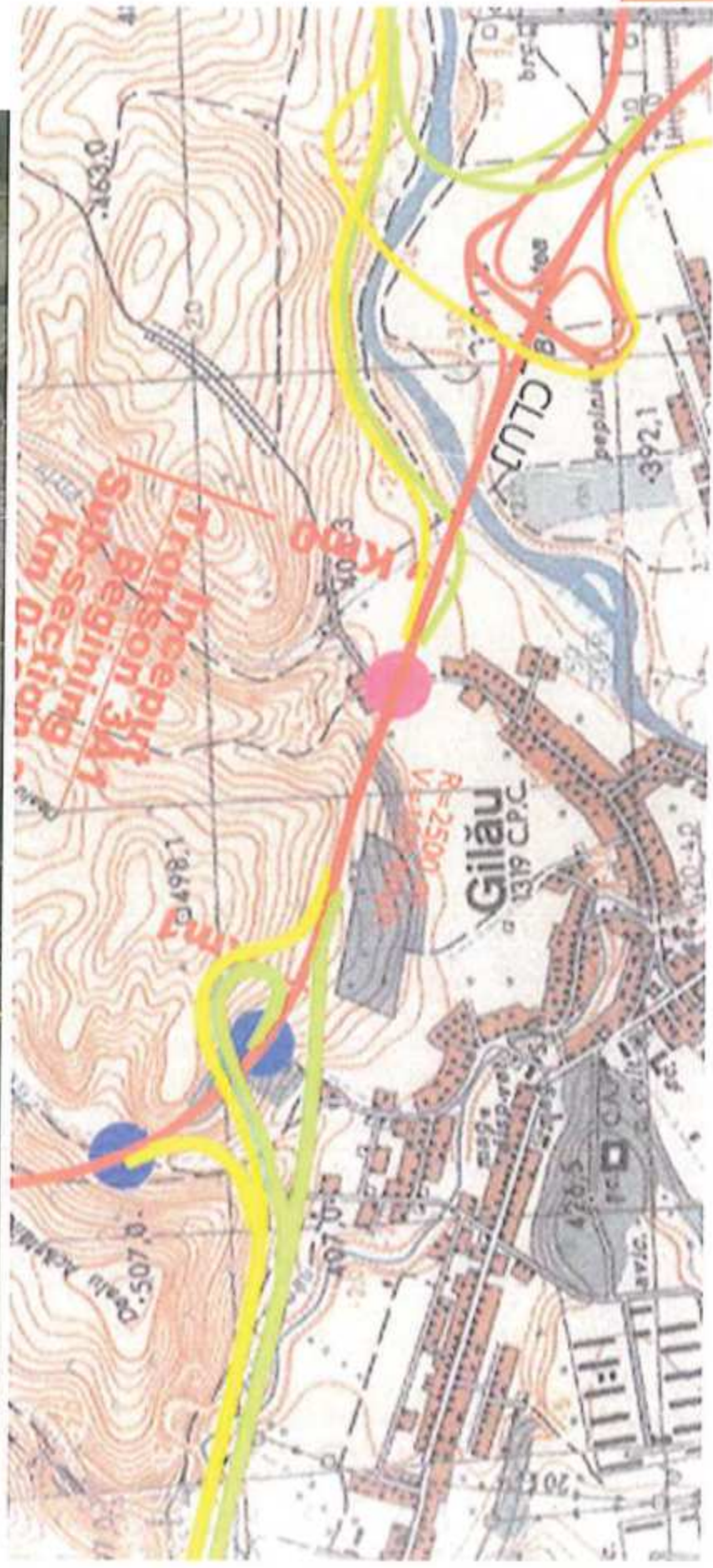


Road infrastructure projects

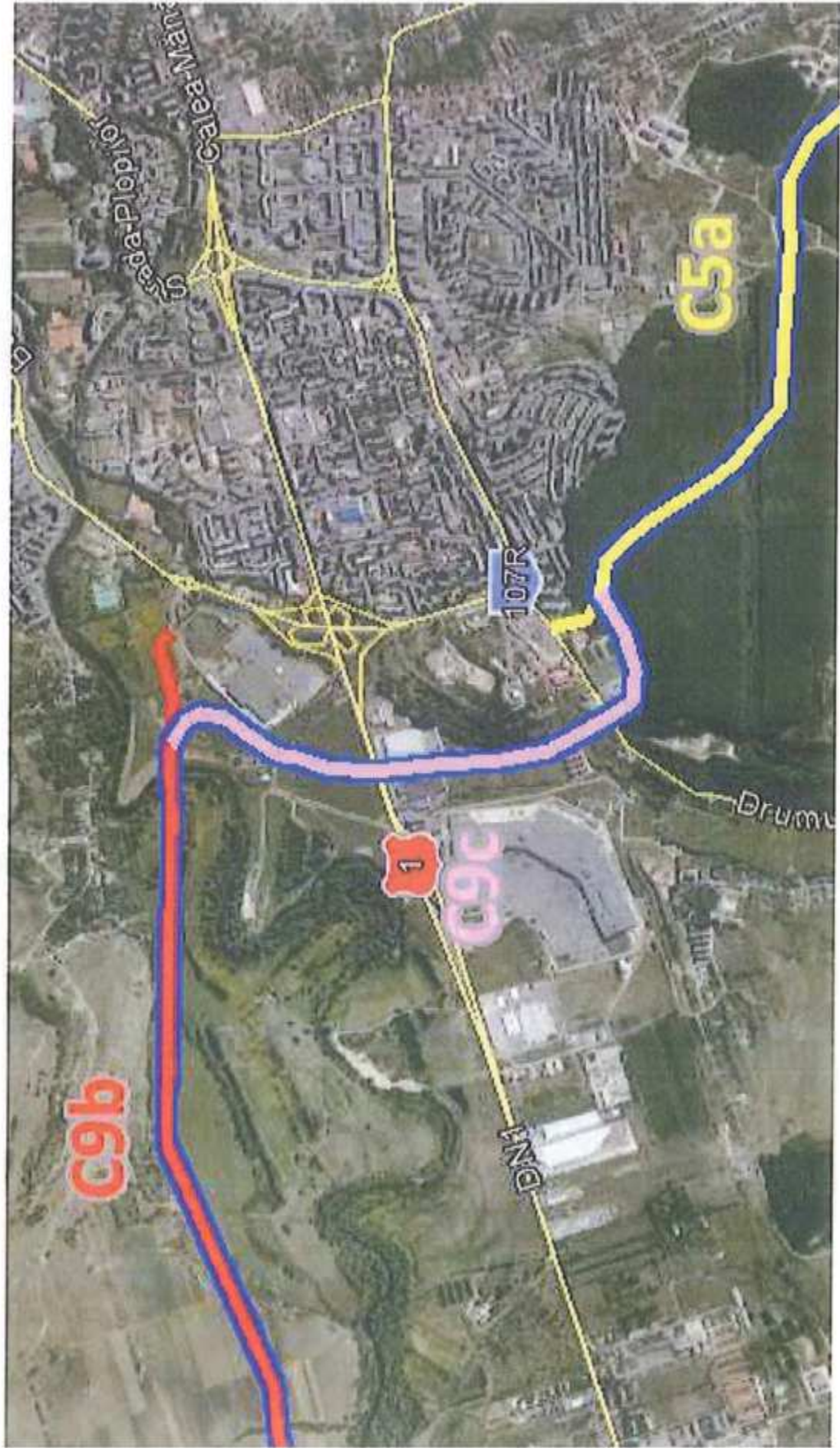


Turda – Halmeu xprwy a
vector for structuring
urban development

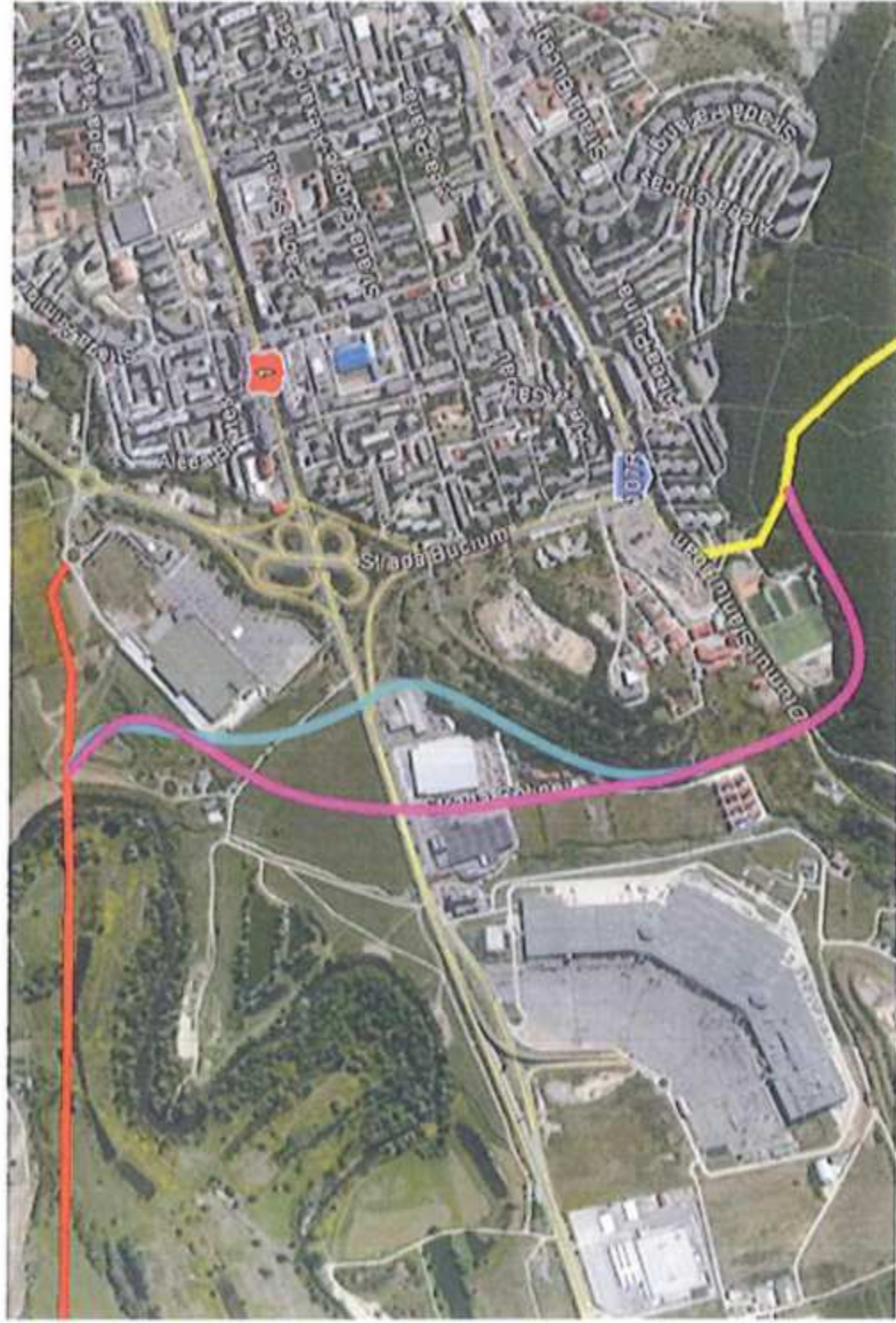
[C9a, C9b] Gilău bypass + expressway A3 – Cluj-Napoca



[C9c] CNMB: C9b - C5a connector



Una variantă de uascul, varianta violet, care traversează DN 1 la intersecția acestuia cu str. Colinei (pe al cărei aliniament ar urma să se înscrie, accesul la proprietățile adiacente urmând a fi reorganizat) și varianta cu albastru, care traversează DN 1 mai la est, desfășurându-se apoi prin vestul parcului Colina.



Privind nodurile rutiere cu C9b și C5a, se recomandă amenajarea acestora pentru păstrarea direcției principale pe axa C9b – C9c – C5a. În acest sens, se recomandă amenajarea un nod semidirecțional la joncțiunea C9b – C9c și continuarea C9c efectiv cu C5a, care ar urma să fie racordată în zona Bucium printr-un nod de tip trumpetă.

Ideal: de dorit amenajarea unui nod cu DN 1 (realist posibil doar în varianta adoptării traseului vestic).

[C5a] CNMB: The southern bypass (“Bucium – Selgros”)



The Cluj-Napoca Metropolitan Bypass – success factors

1. Given that all analyses, including those with the transport model, show that among all infrastructure projects this is the project that would bring the most benefits for the mobility in the city, we recommend the immediate preparation of the necessary studies.

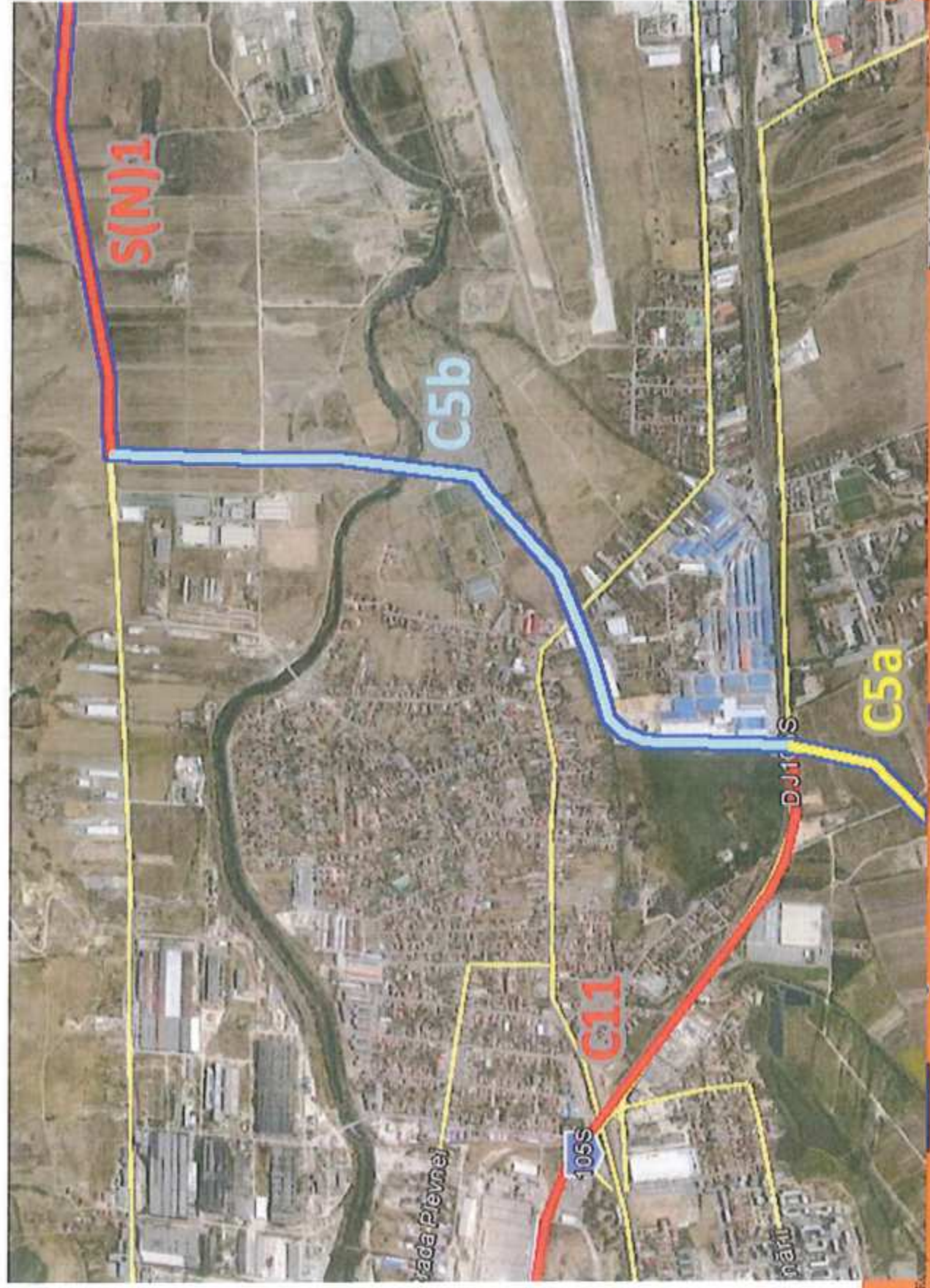
2. If this road is to attract not only transit and through traffic, but also intraurban traffic (with both the origin and destination inside the city), and not only during the peaks, it is essential that:

- access is strictly grade separated;
- geometric elements are favorable for high speeds;
- wherever possible, access roads from the urban area should themselves have adequate capacity and speeds.

Only under these conditions would the detour by using this road be compensated by a comparable or even reduced travel time.

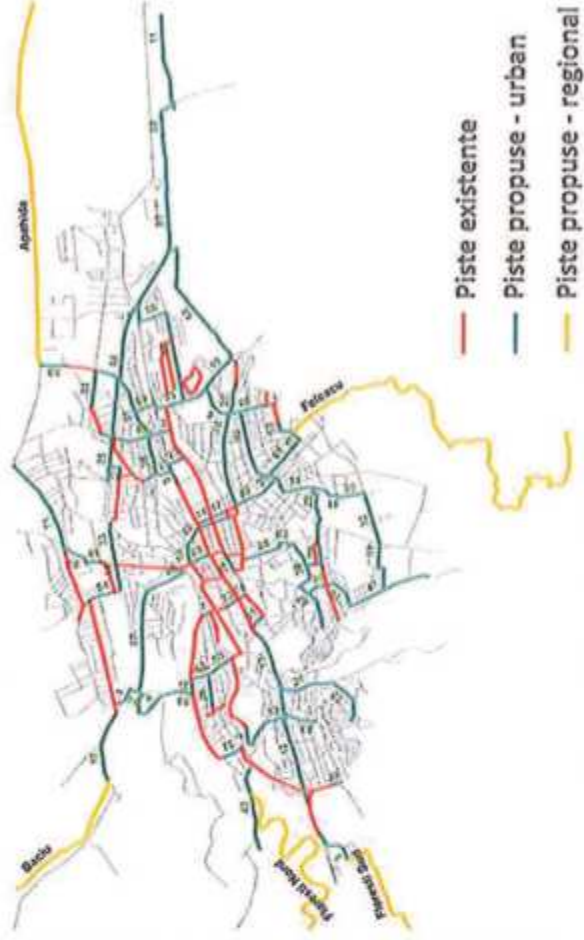
3. We recommend reserving sufficient right of way for constructing collector/distributor roads for future developments along the new road, as well as for expanding the road to three lanes per direction.

[C5b] CNMB: Selgros – Muncii

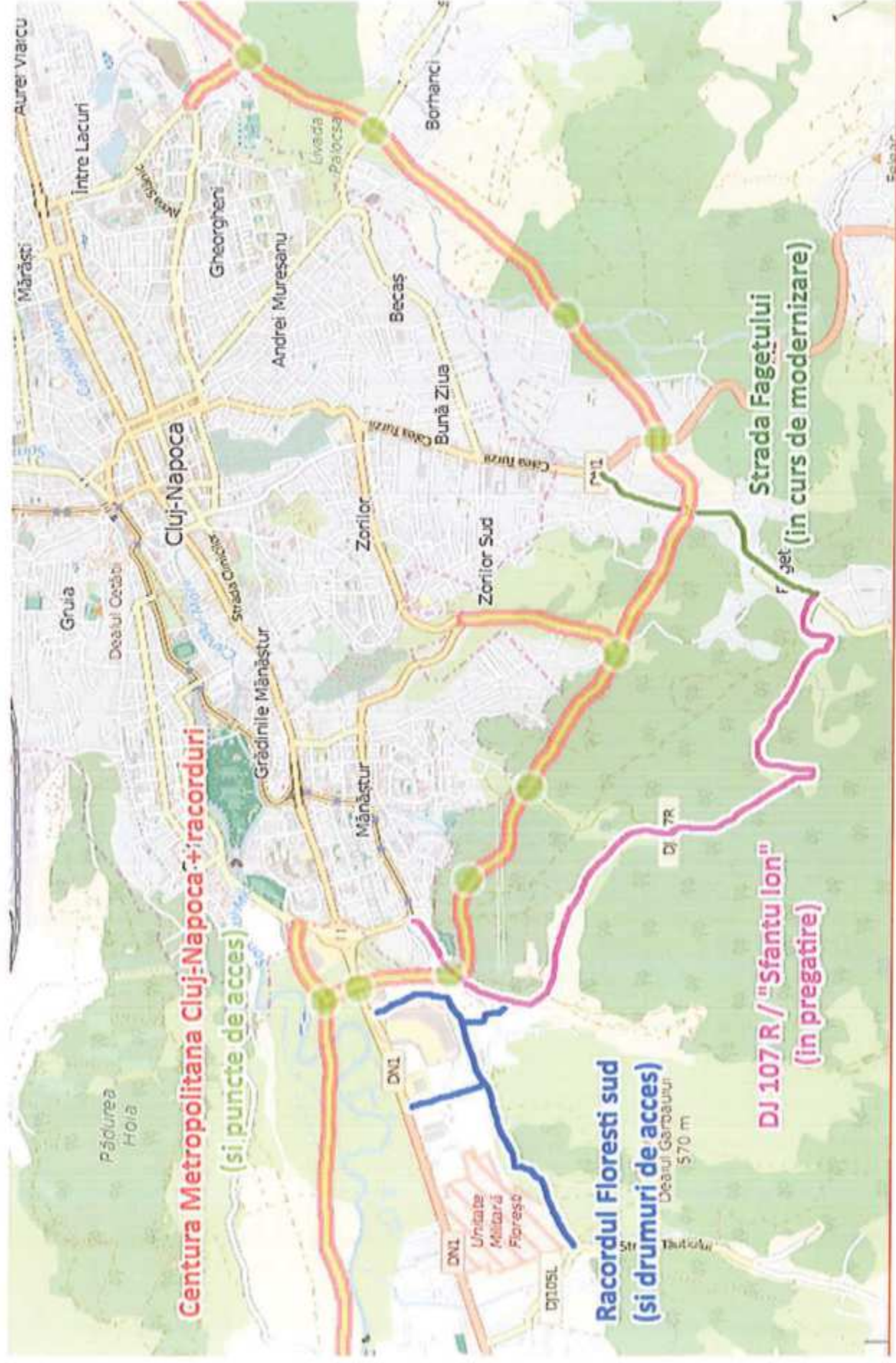




The SUMP comprises numerous sustainable mobility projects – but their success is conditioned by the construction of the CNMB



Short-term measures (of the Cluj-Napoca city hall) for decongesting the west – east urban road axes



SUMP Cluj-Napoca – Conclusions

In order to give priority to sustainable transport modes (PT, NMT), it is crucial to first solve the major issues regarding private transport.

Despite the government's investments during the last 10 years (the Apahida – Vâlcele bypass, the A3 motorway) a significant part of transit traffic still crosses the city

The major Cluj-Napoca SUMP projects cannot be successful without the support of the government / Ministry of Transport, specifically regarding:

- The construction of the Cluj-Napoca Metropolitan Bypass
- The adjacent railway road (to be realized as part of the project for the electrification and modernization of the Cluj-Napoca - Episcopia Bihor railway).