

Project "North Sea Baltic Connector of Regions" – NSB CoRe

FEASIBILITY STUDY OF "PARK & RIDE" STRATEGY FOR KAUNAS RAILWAY STATION

SUMMARY

In case of Kaunas urban node, the feasibility study as the project proposals was prepared. It included the outlines of the Park&Ride strategy. This document will be used by the local authority to prepare decisions regarding the further development and management of Park&Ride facilities, taking into account the role and potentials of individual car transport within urban, regional and interregional transport

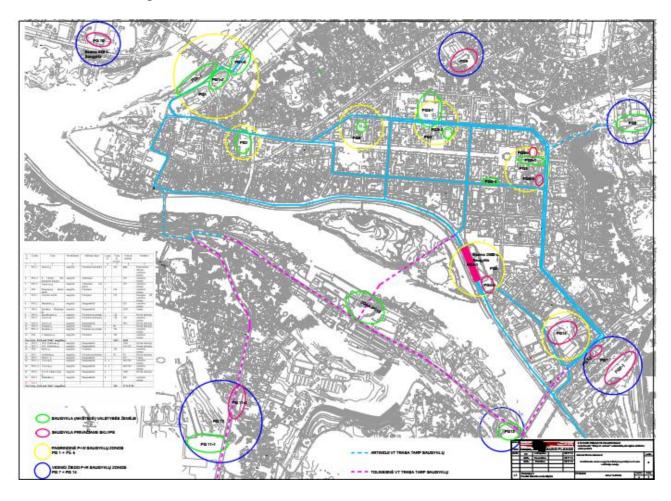
Combined transport systems were analyzed:

Park&Ride system – a transport system designed to encourage drivers to park their cars outside the city and use public transport to travel into the city (external ring) or to leave the cars near the city center (internal ring) and walk within the city center or choose future travel by other mode (bus, train or similar).

Kiss&Ride system – a facility designed system which allows commuters to be dropped off by car and complete their journey by public transport (train in our case).

The study defines the current state of the system under development. The inventory includes:

- Identification of existing facilities
- Identification of site ownership by facility
- Listing of transit and non-transit services provided along with responsible agency
- Identification of access attributes of each facility with respect to high occupancy vehicle and/or freeway networks
- Inventory of spaces provided and utilization and turnover rate, costs, etc.



Possible Park&Ride places were considered:

Possible close zone (internal ring) options for Park&Ride parking:

No.	Code	Location	Туре	Floors	Underground parking spaces	Surface parking spaces	Notes
1	PG7-1	M.K.Čiurlionio str.	Multilevel	5	-	1050	Private territory
2	PG7-2	M.K.Čiurlionio str.	Multilevel	3	-	156-220	Private territory
3	PG8	Sporto str.	Underground	1	240	-	State land
4	PG9	Aukštaičių str.	Underground/surface	2	90	90	Private territory
5	PG10	Brastos str.	Multilevel	6	-	650	Existing
6	PG11- 1	Veiverių rd.	Multilevel	2-4	-	480-960	State land
7	PG11- 2	Veiverių rd.	Multilevel	2-4	-	480-960	State land
8	PG12	H. ir O. Minkovskių str.	Multilevel	6	-	1000	Private territory
9	PG13	Piliakalnio str.	Multilevel	6	-	800	State land

No.	Direction	Location	Туре		Floors (levels)	Parking spaces	PT lines (T- trolleubus, B- bus)
1	Jurbarkas, Tauragė, Šilutė	Raudondvario rd. (camping)	multilevel)	(might	be 1-2 and more	100-200 and more	T7, T11, B 44
2	Jurbarkas, Tauragė, Šilutė	Raudondvario rd. (VT territory)	Surface multilevel)	(might	be 1-2 and more	100-200 and more	T7, T11, B 44
3	Klaipėda, Panevėžys	Žemaičių rd.	Surface multilevel)	(might	be 1-2 and more	100-200 and more	B3, B23, B35, B37
4	Klaipėda, Panevėžys, Zarasai	Islandijos rd.	Surface multilevel)	(might	be 1-2 and more	100-200 and more	T1, T2, T4, T13, T14
5	Klaipėda, Panevėžys, Zarasai	Jonavos str. (camping)	Surface multilevel)	(might	be 1-2 and more	100-200 and more	B13, B20
6	Vilnius, Zarasai	Savanorių ave.	Surface multilevel)	(might	be 1-2 and more	100-200 and more	T11. T13, T14, B6, B16
7	Vilnius	Ateities rd.	Surface multilevel)	(might	be 1-2 and more	100-200 and more	B16
8	Alytus, Marijampolė	T. Masiulio str.	Surface multilevel)	(might	be 1-2 and more	100-200 and more	Τ5
9	Alytus, Marijampolė	6 fort ring	Surface multilevel)	(might	be 1-2 and more	100-200 and more	T5, B39
10	Alytus, Marijampolė, Suvalkai	M.K.Čiurlionio str.	Multilevel		3-4 and more	200-600 and more	T5, T7, T13, T14, T15, T16
11	Alytus, Marijampolė, Suvalkai	Kaunakiemio str.	Multilevel		2 and more		T5, T7, T13, T14, T15, T16
12	Alytus, Marijampolė, Suvalkai	Veiverių rd.	Surface multilevel)	(might	be 1-2 and more	100-200 and more	B6, B16
13	Alytus, Marijampolė, Suvalkai	M. K. Čiurlionio str.	Surface multilevel)	(might	be 1-2 and more	100-200 and more	
14	Alytus, Marijampolė, Suvalkai	Veiverių rd.	Surface multilevel)	(might	be 1-2 and more	100-200 and more	B6, B16

Possible far zone (external ring) options for Park&Ride parking

After evaluation four most suitable scenarios were selected for the future study:

- 1. 2 sections, 3 floors Park&Ride lot at M.K.Čiurlionio str. next to Kaunas railroad station;
- 2. 2 sections, 3 floors Park&Ride lot at M.K.Čiurlionio str. next to Kaunas railroad station with vehicle elevator;
- 3. 2 sections, 3 floors Park&Ride lot at M.K.Čiurlionio str. next to Kaunas railroad station;
- 4. 2 sections, 5 floors Park&Ride lot at M.K.Čiurlionio str. next to Kaunas railroad station (entry from Juozapavičiaus str.);

The first scenario:

- 220 cars parking lot
- Investment 2.03 mln. EUR
- 1 parking space cost 9230 EUR

Pros:

- Easy entrance
- Cost efficient plan scheme
- Cheap exploitation

Cons:

- High site costs (half of territory is not state owned)
- High costs for utility networks reconstructions
- High requirements for building exterior



The second scenario:

- 156 cars parking lot
- Investment 1.3 mln. EUR
- 1 parking space cost 8470 EUR

Pros:

- Easy entrance

Cons:

- Complicated car elevation scheme
- High site costs (half of territory is not state owned)
- High costs for utility networks reconstructions
- High requirements for building exterior



The third scenario:

- 157 cars parking lot _
- Investment 1.4 mln. EUR _
- 1 parking space cost 8460 EUR _

Pros:

- -
- Easy entrance Cheap exploitation _

Cons:

- Site structure is not cost efficient -
- High site costs (half of territory is not state owned) _
- High requirements for building exterior _



The forth scenario:

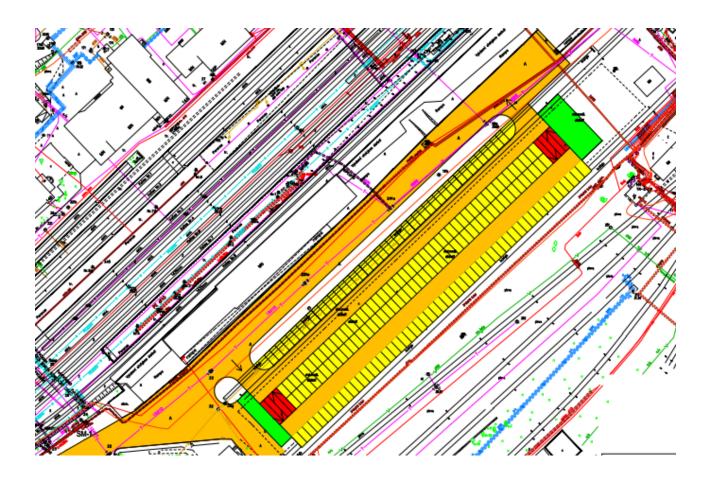
- 1050 cars parking lot
- Investment 7.4 mln. EUR
- 1 parking space cost 7000 EUR

Pros:

- Cost efficient site structure
- Possible connection to station building (via tunnel)
- Cheap exploitation

Cons:

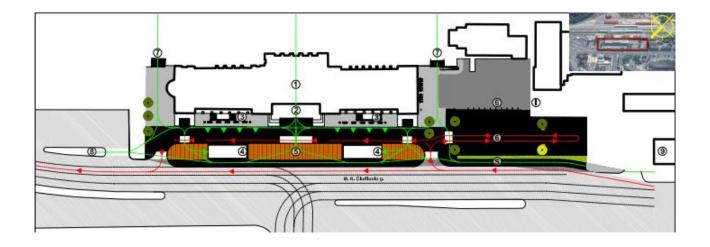
- Complicated entrance
- Part of Juozapavičiaus rd. reconstruction is necessary
- Conversion of railroad territory need to be done



Variants 1 or 1A are proposed for further development.

Feasibility study of Park&Ride strategy for Kaunas railway station concluded that the best selection for Park&Ride site development together with Rail Baltica would be variants 1 or 1A. But since there is no exact data about Rail Baltica passenger flows and Park&Ride service demand – the investments are too high at the moment.

So as the first step, technical planning documents for Kiss&Ride and Park&Ride zones near Kaunas railway station were prepared within the NSB CoRe project.



Kiss&Ride zone is located in front of main Kaunas train station building. It includes 8 short-term parking lots.

Park&Ride site is located near Kaunas train station building and contains 48 parking lots for long-term parking.