

CITYBUS CONCEPT FOR

PREROV

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Introduction

The new bus concept is based on the system of an integrated timetabel with a **"rendevouz concept"** for the main train station and furthermore a timetable easy to remember. The busnetwork consists of **10 Lines**, whereas five of them run directly to the train station (lines 1, 4, 5, 7, 8), the other five lines are running through the city, connect to the others and complete the network. Those lines going to the train station arrive at exactly the same time from all directions of the city and depart together in these directions. In the meanwhile of 4 minutes the passengers have the opportunity to change easily the bus line and go further on to another direction.

Advantage: Independant bus lines with attractive interchange connections. If one line is delayed, it will not affect the. Prerov nowadays has got too long bus lines with unattractive detours througout the city.

The distances throughout Prerov are not long. Therefore even a bus with many stops will be fast, if the car traffic and traffic lights are wisely coped with. With bus bulbs and the prevention of overtaking cars and bus controlled traffic lights an

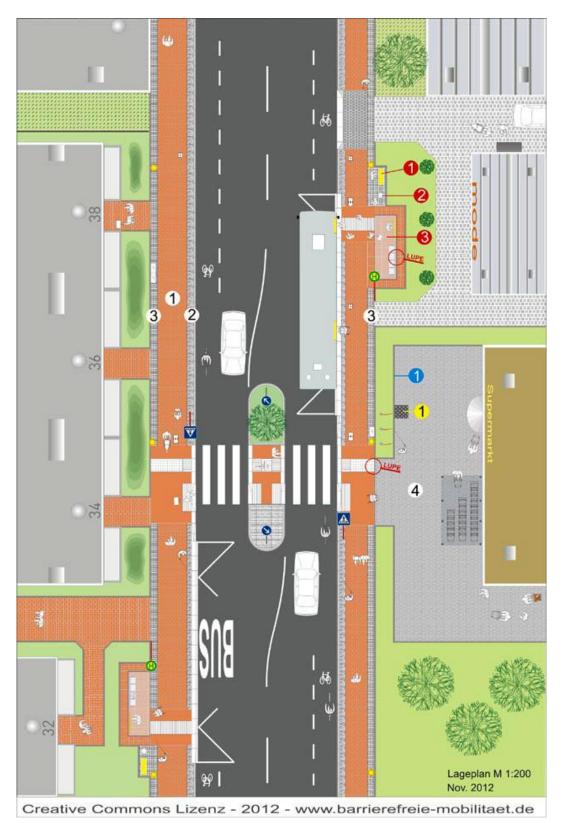
- Efficient
- Reliable and
- Cheap

Bus public transport can be built up.



Example of an state-of-the-art-bus-stop (1)

An example for a state-of-the-art-bus-stop is shown below:



Example of an state-of-the-art-bus-stop (2)

Important

There are several very important things need to be changed for an attractive public bus transport in Prerov:

✓ Passengers do not want to remember difficult timetables. In order to bring more people on buses, a simple timetable need to be introduced. (e.g.: Bregenz,...)

		Bahn	hof ·	- Aı	m '	Tann	enba	ch								
S T A D T BUS BREGENZ		Montag - Freitag				Samstag				So- u. Feiertag						
		Schule	von	Та	kt	bis	V	on .	Takt	bis		von	Т	akt	bis	
Bregenz Bahnhof		7.39				19.37	7.					8.07	.07			
Inselstraße/Kornmarkt	~	7.41				19.39	7.		-			8.09	.09	.39		
Hafen Bahnhof		7.43				19.41	7.					8.11	.11		19.4	-
Kaserne	~	7.44				19.42		12 .1				8.12	.12	.42		
Am Tannenbach		7.45				19.43		13 .1		19.43		8.13			19.4	
weiter als			0110									0.10		. 10	.0.1	-
Am Tannenbach ab		7.45	6.13	.13	.43	19.43	7.	13 .1	3 .43	19.43		8.13	.13	.43	19.4	3
1 Pfänderbahn an		7.46	0 14			10 11		4 4 4	4 .44	19.44		8.14	14	4.4	19.4	4
-		10122000				19.44 ach -	Bahr	14 .1 hof		19.44		0.14	.14	.44	19.4	.4
S T A DTBUS		Am	Tan	ner	ıba		(1) (5)(4)	hof			1	0.00				
1		10122000	Tan	ner	ıba		(1) (5)(4)	hof			1	0.00			erta	
S T A DTBUS		Am	Tan	ner reita	ıba		(1) (5)(4)	hof		g	1	0.00		Fei		
S T A D T BUS Bregenz Am Tannenbac	ch	Am Monta Schule 7.45	Tanı ag - F von 6.13	ner reita	aba ag akt .43	bis 19.13	Bahr	von 7.13	msta Tak .13 .4	g t bis 3 19.13		Sc von 8.13)- U. Ta .13	Fei kt	erta bis 19.13	19.43
S T A D T BUS BREGENZ Bregenz Am Tannenbac Michl-Felder-Straße	sh	Am Monta Schule 7.45 7.45	Tanı ag - F von 6.13 6.13	reita	akt .43	bis 19.13	Bahr 19.43	von 7.13 7.13	msta Tak .13 .4	g t bis 3 19.13 3 19.13	19.43	Von 8.13 8.13	0- U. Tal .13 .13	Fei kt .43	bis 19.13	19.43 19.43
S T A D T BUS BREGENZ Bregenz Am Tannenbac Michl-Felder-Straße Pfänderbahn	ch	Am Monta Schule 7.45 7.45 7.46 12.43	Tanı ag - F von 6.13 6.13 3 6.14	reita Ti .13 .13	aba ag akt .43 .43	bis 19.13 19.14	Bahr 19.43 19.43 19.44	von 7.13 7.14	msta Tak .13 .4 .13 .4 .14 .4	g t bis 3 19.13 3 19.13 4 19.14	19.43 19.44	Von 8.13 8.13 8.14	D- U. Ta .13 .13 .14	Fei kt .43 .43	bis 19.13 19.14	19.43 19.43 19.44
S T A D T BUS Bregenz Am Tannenbac Michl-Felder-Straße Pfänderbahn Bezirksgericht	ch	Am Monta Schule 7.45 7.45 7.46 12.4 12.4	Tanı ag - F von 6.13 6.14 5 6.16	reita T 13 .13 .14 .16	aba ag akt .43 .43 .44	bis 19.13 19.13 19.14 19.16	19.43 19.43 19.44 19.46	von 7.13 7.14 7.16	Tak 13 .4 .13 .4 .14 .4 .16 .4	g t bis 3 19.13 3 19.13 4 19.14 6 19.16	19.43 19.44 19.46	Von 8.13 8.13 8.14 8.16	Ta .13 .13 .14 .16	Fei kt .43 .44 .44	bis 19.13 19.14 19.16	19.43 19.43 19.44 19.46
S T A DTBUS Bregenz Am Tannenbao Michl-Felder-Straße Pfänderbahn Bezirksgericht Rathaus/Kornmarkt		Am Monta Schule 7.45 7.45 7.46 12.43	Tanı ag - F von 6.13 6.13 3 6.14 5 6.16 6 6.17	reita T 13 .13 .14 .16 .17	akt .43 .43 .44 .46 .47	bis 19.13 19.14 19.14 19.14 19.14 19.17	19.43 19.43 19.44 19.46 19.47	von 7.13 7.14 7.16 7.17	Tak 13 .4 .13 .4 .14 .4 .16 .4 .17 .4	g t bis 3 19.13 3 19.13 3 19.13 3 19.13 4 19.14 6 19.16 7 19.17	19.43 19.44 19.46 19.47	Von 8.13 8.13 8.14 8.16 8.17	Ta .13 .13 .14 .16 .17	Fei kt .43 .44 .46 .47	bis 19.13 19.14 19.16 19.17	19.43 19.43 19.44 19.46 19.47
S T A D T BUS Bregenz Am Tannenbac Michl-Felder-Straße Pfänderbahn Bezirksgericht	ch R	Am Monta Schule 7.45 7.45 7.46 12.4 12.4	Tanı ag - F von 6.13 6.13 3 6.14 5 6.16 6 6.17	reita T 13 .13 .14 .16 .17	akt .43 .43 .44 .46 .47	bis 19.13 19.13 19.14 19.16	19.43 19.43 19.44 19.46 19.47	von 7.13 7.14 7.16 7.17	Tak 13 .4 .13 .4 .14 .4 .16 .4 .17 .4	g t bis 3 19.13 3 19.13 4 19.14 6 19.16	19.43 19.44 19.46 19.47	Von 8.13 8.13 8.14 8.16 8.17	Ta .13 .13 .14 .16 .17	Fei kt .43 .44 .46 .47	bis 19.13 19.14 19.16 19.17	19.43 19.43 19.44 19.46
S T A D T BUS Bregenz Am Tannenbac Michl-Felder-Straße Pfänderbahn Bezirksgericht Rathaus/Kornmarkt Bahnhof		Am Monta Schule 7.45 7.45 7.46 12.4 12.4	Tanı ag - F von 6.13 6.14 5 6.16 6 6.17 9 6.20	reita .13 .13 .14 .16 .17 .20	ag akt .43 .43 .44 .44 .46 .47 .50	bis 19.13 19.14 19.14 19.14 19.14 19.17	19.43 19.43 19.44 19.46 19.47	von 7.13 7.13 7.14 7.16 7.17 7.20	Tak .13 .4 .13 .4 .14 .4 .16 .4 .17 .4 .20 .5	g t bis 3 19.13 3 19.13 3 19.13 3 19.13 4 19.14 6 19.16 7 19.17	19.43 19.44 19.46 19.47	Von 8.13 8.13 8.14 8.16 8.17	Ta .13 .13 .14 .16 .17 .20	Fei kt .43 .44 .46 .47 .50	bis 19.13 19.13 19.14 19.16 19.17 19.20	19.43 19.43 19.44 19.46 19.47
S T A D T BUS Bregenz Am Tannenbac Michl-Felder-Straße Pfänderbahn Bezirksgericht Rathaus/Kornmarkt Bahnhof weiter als	R	Am Monta Schule 7.45 7.45 7.46 12.4 12.4 12.4 12.4	Tanı ag - F von 6.13 6.14 5 6.16 5 6.17 9 6.20 1 6.22	reita Ti 133 134 14 16 17 17 12 12	ag akt .43 .44 .46 .47 .50	bis 19.13 19.13 19.14 19.16 19.17 19.20	19.43 19.43 19.44 19.46 19.47	von 7.13 7.14 7.16 7.17 7.20 7.22	Tak .13 .4 .13 .4 .14 .4 .16 .4 .17 .4 .20 .5	g t bis 3 19.13 3 19.13 4 19.14 6 19.16 7 19.17 0 19.20	19.43 19.44 19.46 19.47	Von 8.13 8.13 8.14 8.16 8.17 8.20	Ta .13 .13 .14 .16 .17 .20 .22	Fei kt .43 .44 .44 .46 .47 .50	bis 19.13 19.13 19.14 19.16 19.17 19.20 19.22	19.43 19.43 19.44 19.46 19.47

Source: Stadtwerke Bregenz, an example for a simple timetable.

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Kozlovice u pomniku Lovesice, tocna

	pondělí - neděle			
	od	vždy n	ninuta	do
Kozlovice u pomniku	5.25	.25	.55	22.55
Kozlovice naves	5.27	.27	.57	22.57
nemocniční hlavní vchod	5.29	.29	.59	22.59
nemonice 🕘	5.30	.30	.00	23.00
Dvorakova	5.31	.31	.01	23.01
Dvorakova/Zelatovska 😣	5.33	.33	.03	23.03
hribitov	5.34	.34	.04	23.04
Jizni Ctvrt arr. 🔞	5.36	.36	.06	23.06
Jizni Ctvrt dep. 🔞	5.38	.38	.08	23.08
CSAD-STS	5.39	.39	.09	23.09
Lovesice, hrbitov	5.41	.41	.11	23.11
Lovesice, podjezd	5.42	.42	.12	23.12
Lovesice, tocna	5.43	.43	.13	23.13

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Lovesice, tocna -Kozlovice u pomniku

	pondělí - neděle					
	od	vždy n	ninuta	do		
Lovesice, tocna	5.46	.46	.16	22.16		
Lovesice, podjezd	5.47	.47	.17	22.17		
Lovesice, hrbitov	5.49	.49	.19	22.19		
CSAD-STS	5.51	.51	.21	22.21		
Jizni Ctvrt arr. 🔞	5.52	.52	.22	22.22		
Jizni Ctvrt dep. 🔞	5.54	.54	.24	22.24		
hribitov	5.56	.56	.26	22.26		
Dvorakova/Zelatovska 😣	5.57	.57	.27	22.27		
Dvorakova	5.59	.59	.29	22.29		
nemonice 🕘	6.00	.00	.30	22.30		
nemocniční hlavní vchod	6.01	.01	.31	22.31		
Kozlovice naves	6.03	.03	.33	22.33		
Kozlovice u pomniku	6.05	.05	.35	22.35		

Timetable-example for new line number 10, Prerov

- Passengers do not want to walk long distances to the next stop. We found out that in the city, above all in the inner city, there are far too few bus stops. There need new bus stops to be opened. Other bus stops, which are not just before an intersection need to be placed just BEFORE the intersection. This not only because of the larger catchment area of this particular bus stop, but also because of the new concept, which is completely different from the one today: People will need to change the bus more often but will therefore get faster to their destination. The timetable will allow short waiting times.
- Bus bays need to be removed to accelerate the buses. Above all in the western city part.
- ✓ The traffic lights need to be influenced by the buses. (Green in front of the bus, red during the passenger exchange and green when the exchange is finished.) In front of roundabouts stops need to be placed just in front of them with prevention of being overtaken by cars (SAFER, FASTER, MORE ATTRACTIVE).
- ✓ Passengers do not want to make detours with the buses. The buses of Prerov nowadays do not go directly to the place where the passenger wants. The new concept offers attractive interchange possibilities between the bus lines.

Describing the lines, Infrastructure

All 5 lines which are going to the train station need to stop next to each other in order to make a quick passenger change possible (maximum **4 at a time**).

All stops described with xxxx/yyyy (e.g.: Lipnicka/Hranicka) need to be built JUST BEFORE this particular intersection!!!

LINE 1

Along the road Palackeho and Velka Dlazka the bus stops need to be newly arranged at about the same distance to each other, therefore look at the map with the newly planned bus stops. Therefore stops with no bus bay should be used. In the front of the stop a pedestrian passing should be set up. The advantage of this system is that the time of the bus stopping is reduced and the traffic is behind and not in front of the bus (acceleration, cheaper). The station olomucka in the very north needs (exception!) a bus bay for the standing time (last stop). The standing time is needed to offer an accurate connection (bus is on time).

Should the new street through the city be opened, line 1 can easily be changed and go through this street.

LINE 2

The last stop in the north of line 2 needs to be one where cars can overtake (bus bay, exception!) because of standing time. It uses some stops with line 1, then goes left into komenskeho. At the intersection svisle/ Ztracena the stop "hrbitov" need to be arranged. (possibility of interchange to line 10). In the south there are two new stops before the intersection of gen. Stefanika/ztracena and the second one before the intersection of Trebizskeho/Gen. Stefanika, last stop. Cars need the possibility to overtake (ONLY here!!!).

LINE 3

The line 3 needs at the intersection Lipnicka/Hranicka a new stop for the interchange with lines 6 and 1. (see also lines 6 and 1). The stop Trzni/Dluhonska need to be built to make it more attractive to interchange between line 5 and 3. The stop Velke novosady/nabr. Protifasist. Bojovniku is the interchange point to line 9. The stop Dvorakova/Zelatovska need to be newly built and the stop Zelatovska need to be removed about 150m to the east. The last stop Optiky/Kabelkova need to be newly built with the opportunity for cars to overtake.

LINE4

Line 4, which goes through cechova street every 15 minutes, needs two stops throughout cechova street. One (Cechova) is placed in front of the park namesti svobody, the other one (Prior) needs to be replaced in front of the shopping center further northeast (see plan).

LINE 5

Because of the railway intersection next Dluhonice there need to be a longer driving time and therefore a whole bus only for this line! (possible delays) It mostly uses the old bus stops along the way except the new stops Trecni/Dluhonska and Velke novosady/nabr. Protifasist. Bojovniku.

LINE 6

This line brings the passengers from the outer city parts Lysky, Vinary (new stop in the centre of vinary "vinary misto"!) and Popovice (new stops Kovarska and U drahy) to predmosti where they can change to line 1 (attractive and timeefficient connection) to the train station. After the new stop most miru (line 1) it turns left heading Kopaniny. The two new stops Za Mlynem/U Vystaviste and Mestsky park Michalov make the line more attractive for passengers.

LINE 7, LINE 9

On the western part of the line it is very necessary to prevent the overtaking of the cars in the stops in order to accelerate the buses at the traffic light. No bus bays!! (see: the viennese busline 57A!)

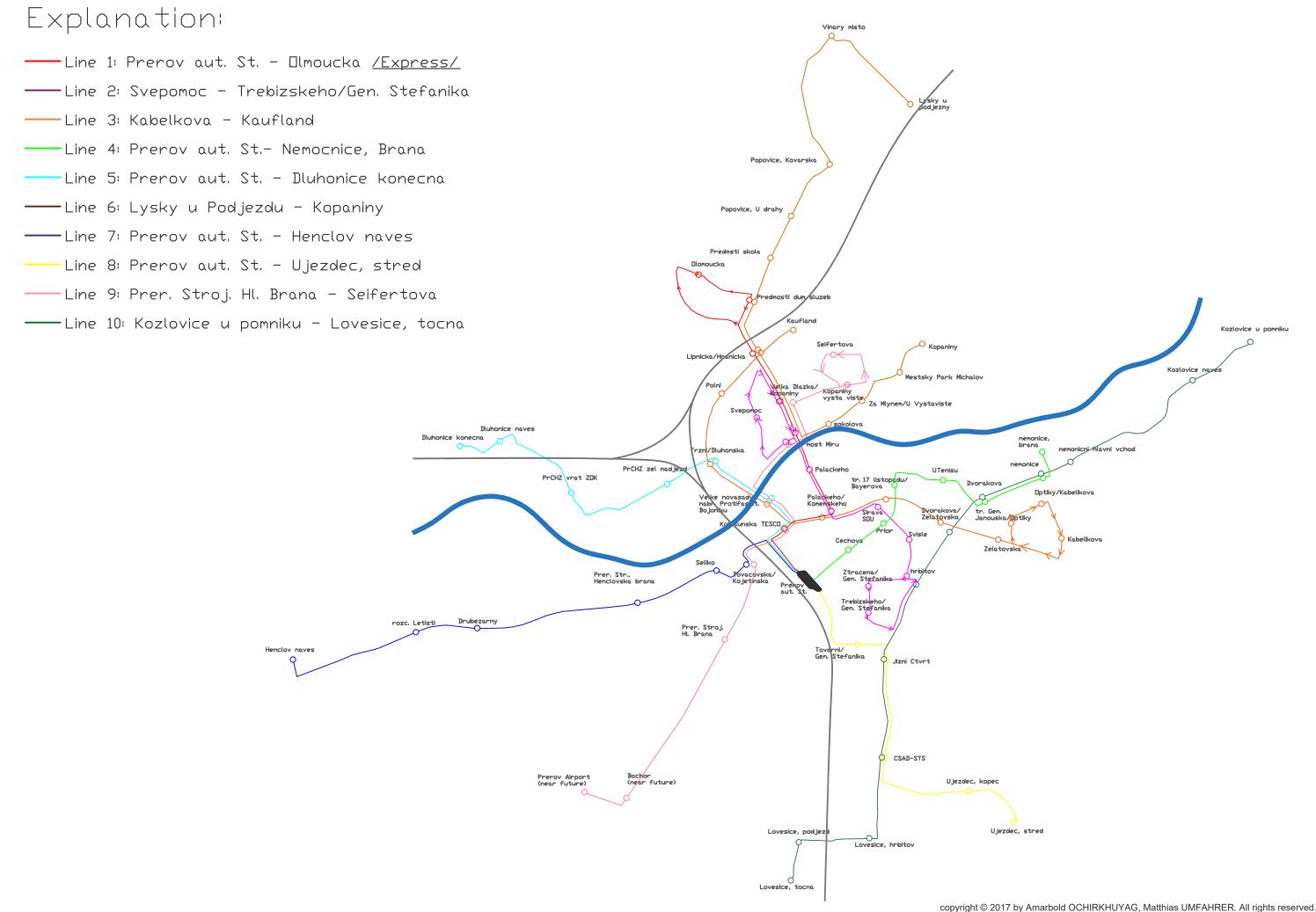
New stop Tovacovska/Kojetinska need to be built in order to interchange between those lines.

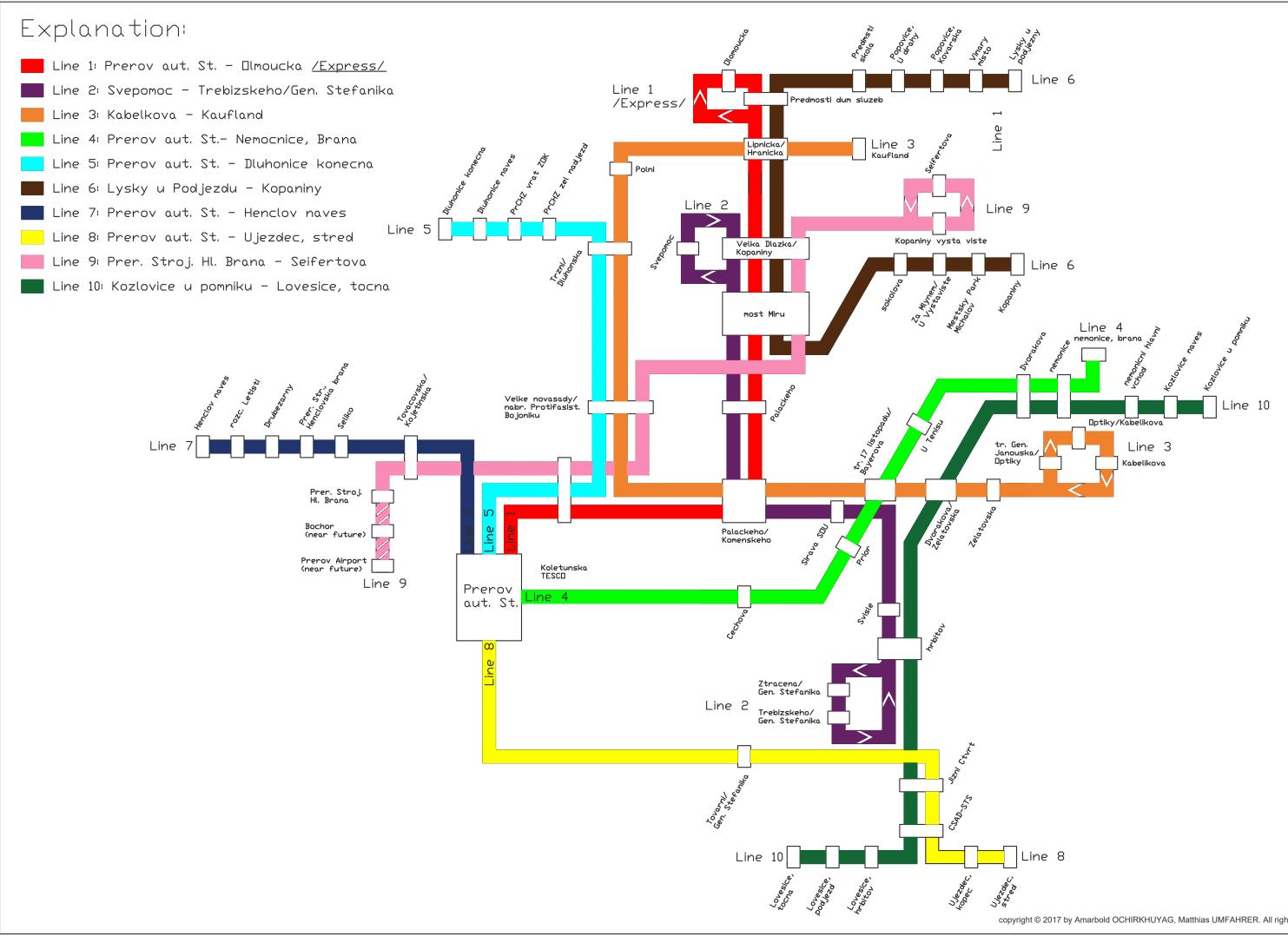
LINE 10

Traffic light at the intersection gen.stefanika/street 0557 where the new line number 10 will cross the street is urgently needed. The bus is often waiting there for more than 3 (!) minutes. Also at the tunnel under the railway just afterwards a traffic light should sign red when the bus approaches in order to accelerate. The only new stop is dvorakova/Zelatovska.

LINE 8, LINE 10

The drivers of the buses 10 and 8 must wait for each other at the stop Jizni CTVRT in both directions in order to ensure the connection bus.





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