

# Technical visits: Agenda & site introduction

Policy-making training: technical visits  
TU Wien | 12 February 2025

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TU Wien

„LIVEVOICE“

Audio guide for today

Mobile phone & headphones?

LiveVoice app installed?

Event:

**891412**

<https://livevoice.io/listen/891412>



# TECHNICAL VISITS: TIMETABLE

14:24 dep. Wien Hbf., IC539 (coach 23)

14:54 arr. Wiener Neustadt Hbf.

→ **Site 1: ÖBB station Wiener Neustadt Hbf.**

16:33 dep. Wiener Neustadt, CJX9

16:45 arr. Baden

→ **Site 2: ÖBB station Baden**

17:47 dep. Baden Viadukt, Badener Bahn

18:05 arr. Guntramsdorf Lokalbahn

→ **Site 3: Badener Bahn**

~ 1.7 km walk (ÖBB station Guntramsdorf Thallern)

→ **Socializing dinner @ Klostergasthaus Thallern**

21:24 dep. Guntramsdorf Thallern, S4

21:56 arr. Wien Hbf.

**Knowledge quiz over dinner by  
ÖBB-Infrastruktur colleagues! ;-)**

# WHAT WILL YOU LEARN IN TECHNICAL VISITS?

## Proposal: 3 Pilot Action clusters (A, B, C)

|                            | A - Missing links and catchment areas | B - Timetable systematization | C - Feeder access to existing public transport corridors |
|----------------------------|---------------------------------------|-------------------------------|----------------------------------------------------------|
| Bf. Wiener Neustadt        | ✓                                     | ✓                             | ✓                                                        |
| Bf. Baden                  | ✓                                     | ✓                             | ✓                                                        |
| Badener Bahn / WLB         | ✓                                     |                               | ✓                                                        |
| Hst. Guntramsdorf Thallern |                                       |                               | ✓                                                        |

Addition: Wiener Neustädter Kanal (industrial transport history)

Guides: Isabella Messinger & Erik Molnar (ÖBB-Infrastruktur AG)

Tools: (a) LiveVoice App & (b) 2 PPSX files @ Mobile Phones

# PT TRAVEL TIME: SYSTEMS PERSPECTIVE

travel time =

time on access & egress path ( $v_{AC/EG}$ ) +

time for waiting/interchanges ( $t_s$ ) +

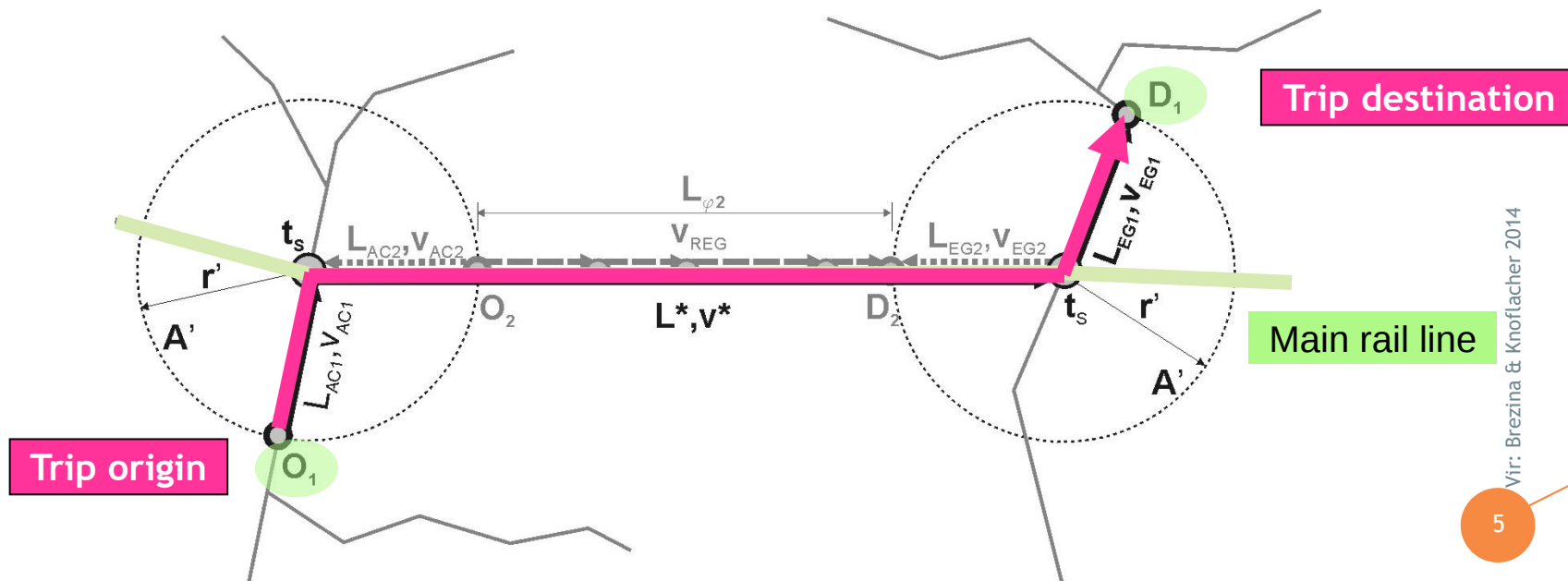
time on main leg of journey ( $v^*$ )

minimize

minimize

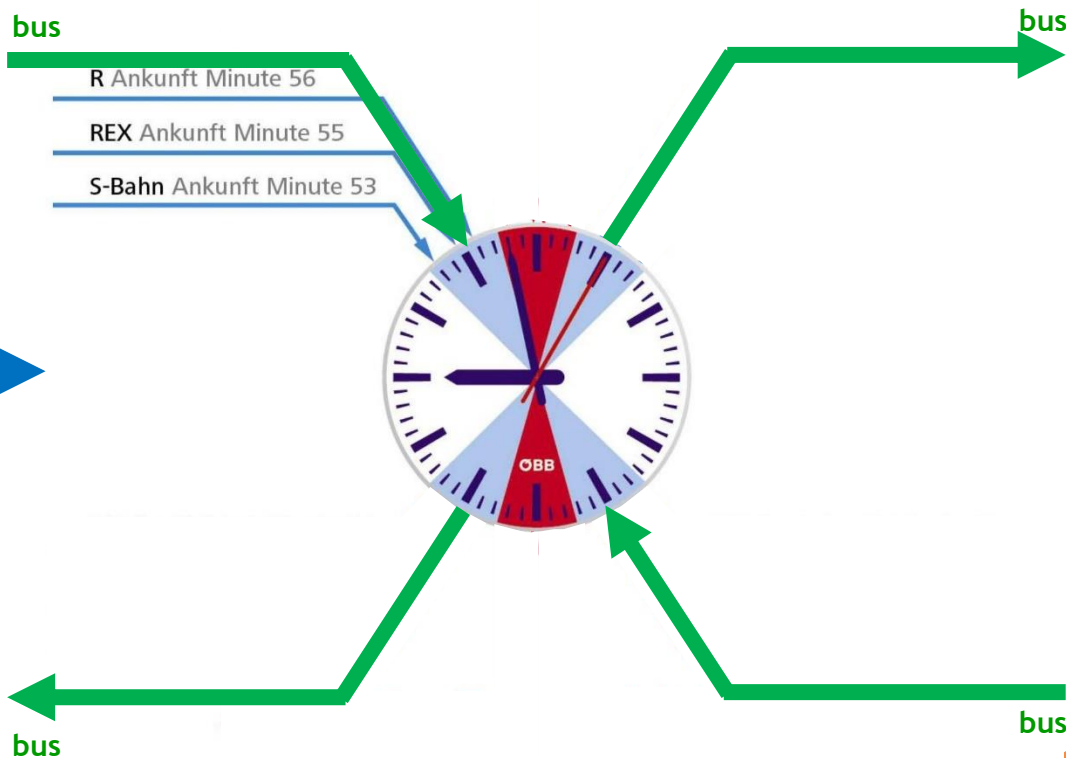
“not the only important”

big part of  
„integrated“



# INTEGRATED TIMETABLE: BASIC PROPERTIES 1

- „Taktknoten“ / node  
minute 00 and 30
- Arrival shortly before,  
departure shortly after
- Fast → between slow →
- The train perspective  
„backbone“
- PT procurement  
agencies: (regional)  
busses →



# INTEGRATED TIMETABLE: MODEL OF NODE AMSTETTEN

Amstetten „full node“ since 12/2012

5 trains within 10 minutes enable all relevant connections every hour

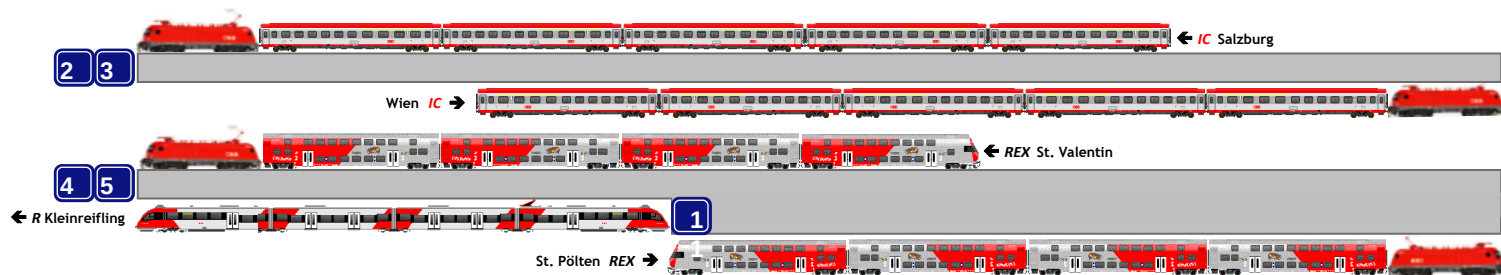
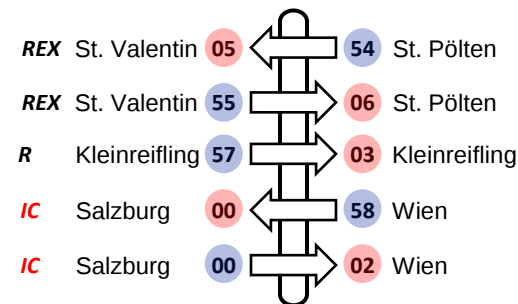
Wiener Neustadt: 10 platforms

+ split in sections



Arrival & departure times at station Amstetten

● arrival ● departure



# INTEGRATED TIMETABLE: BASIC PROPERTIES 2

First introduced in AUT in 1991: „NAT‘91“

Passengers benefit from

- Short interchange times
- Noticeable time tables and
- Frequent travel options

Speed is of secondary importance

- Edge time as multiple of 30 minutes (or 15) is primary
- Not as fast as (technically) possible  
but as fast as (organizationally) useful

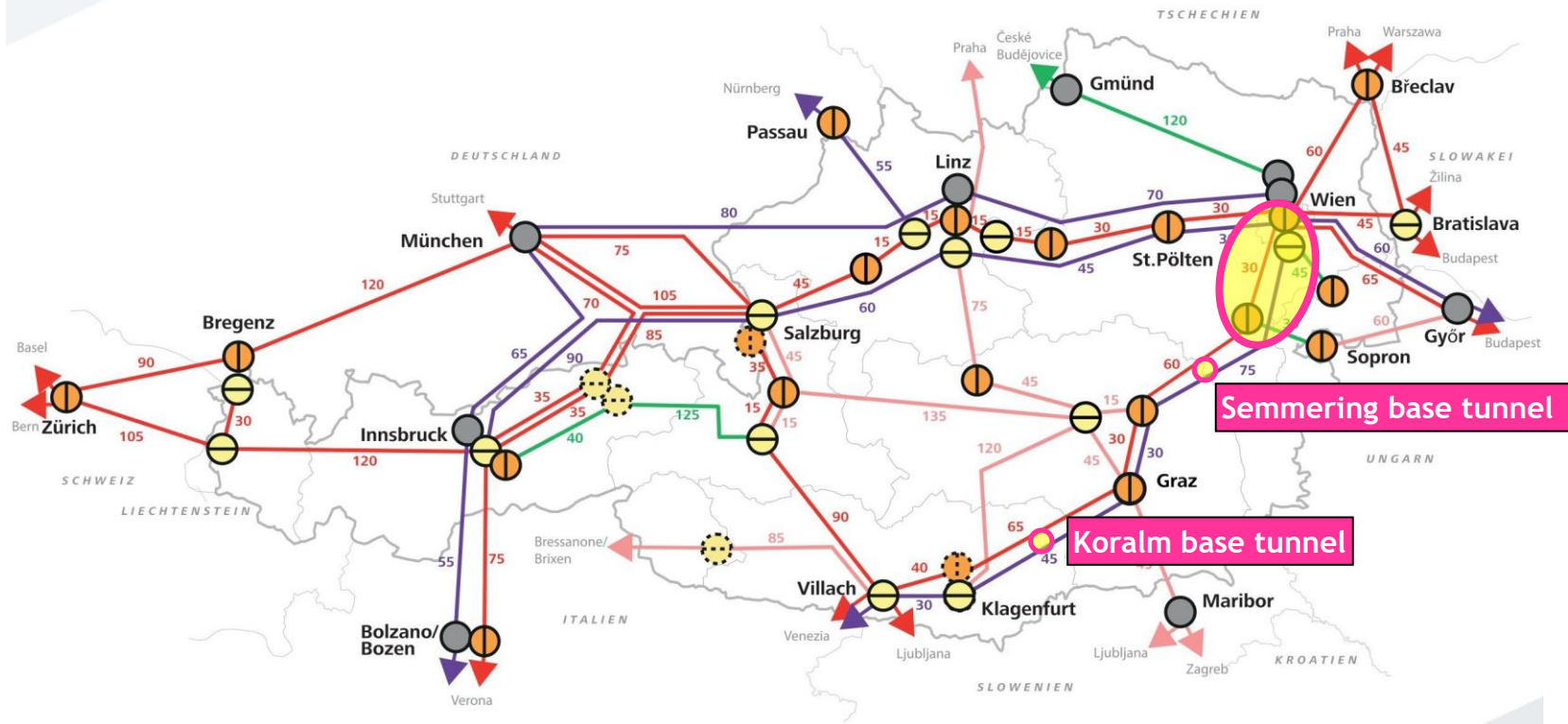
ITT serves as basis for ALL infrastructure investments

**Drafted in 2011**



- Fahrzeiten entsprechen der Kantenfahrzeit inkl. anteiligem Knotenaufenthalt
- Tatsächliche Fahrzeit zwischen den Knoten ist um einige Minuten kürzer
- Zwischenhalte sind nicht dargestellt

# ITT: AUSTRIA'S NODE-LINK MODEL 2040



## MARKTSEGMENTE | Personenverkehr

- FVB** Fernverkehr hochrangig beschleunigt
- FVH** Fernverkehr hochrangig
- FVI** Interregio
- SNV** Schneller Nahverkehr

## Erläuterung | Knoten-Kanten-Modell

- Knoten Min 00 und/oder Min 30
- Knoten Min 15 und/oder Min 45
- Asymmetrischer Knoten
- Keine Knotenfunktion
- 30** Kantenfahrzeit\* in Min je Marktsegment (\*inkl. Umsteigezeiten in den Knoten)

# INTEGRATED TIMETABLE: AUSTRIA'S ZIELNETZ 2040

## Zielnetz 2040

Fachentwurf



## ARL

### ARLBERG Innsbruck — Feldkirch

#### ZIELE

- Verdichtung Nahverkehr im Tiroler Oberland (30 min-Takt im schnellen Nahverkehr)
- Einheitliches Haltemuster der Fernverkehrszüge im Tiroler Oberland

## BNZ

### BRENNER NORDZULAUF Salzburg — Innsbruck

#### ZIELE

- Fahrzeitverkürzung im Fernverkehr (Kantenfahrzeit Salzburg — Innsbruck: 90 min)
- Kapazitätssteigerung Brenner-Nordzulauf

## AMK

### AMSTETTEN — KLEINREIFLING

#### ZIELE

- Angebotsausweitung auf einen 30 min-Takt im Abschnitt Amstetten — Waidhofen a.d. Ybbs
- Optimierte Einbindung in den Taktknoten Amstetten

## IAP

### INNERALPIN Bruck a.d. Mur — Bischofshofen

#### ZIELE

- Fahrzeitverkürzung zwischen Graz und dem oberen Ennstal bzw. Salzburg (Kantenfahrzeit Interregio Leoben — Bischofshofen: 135 min)
- Ermöglichung Stundentakt im Fernverkehr zwischen Graz und Linz bzw. Graz und Salzburg

## BMG

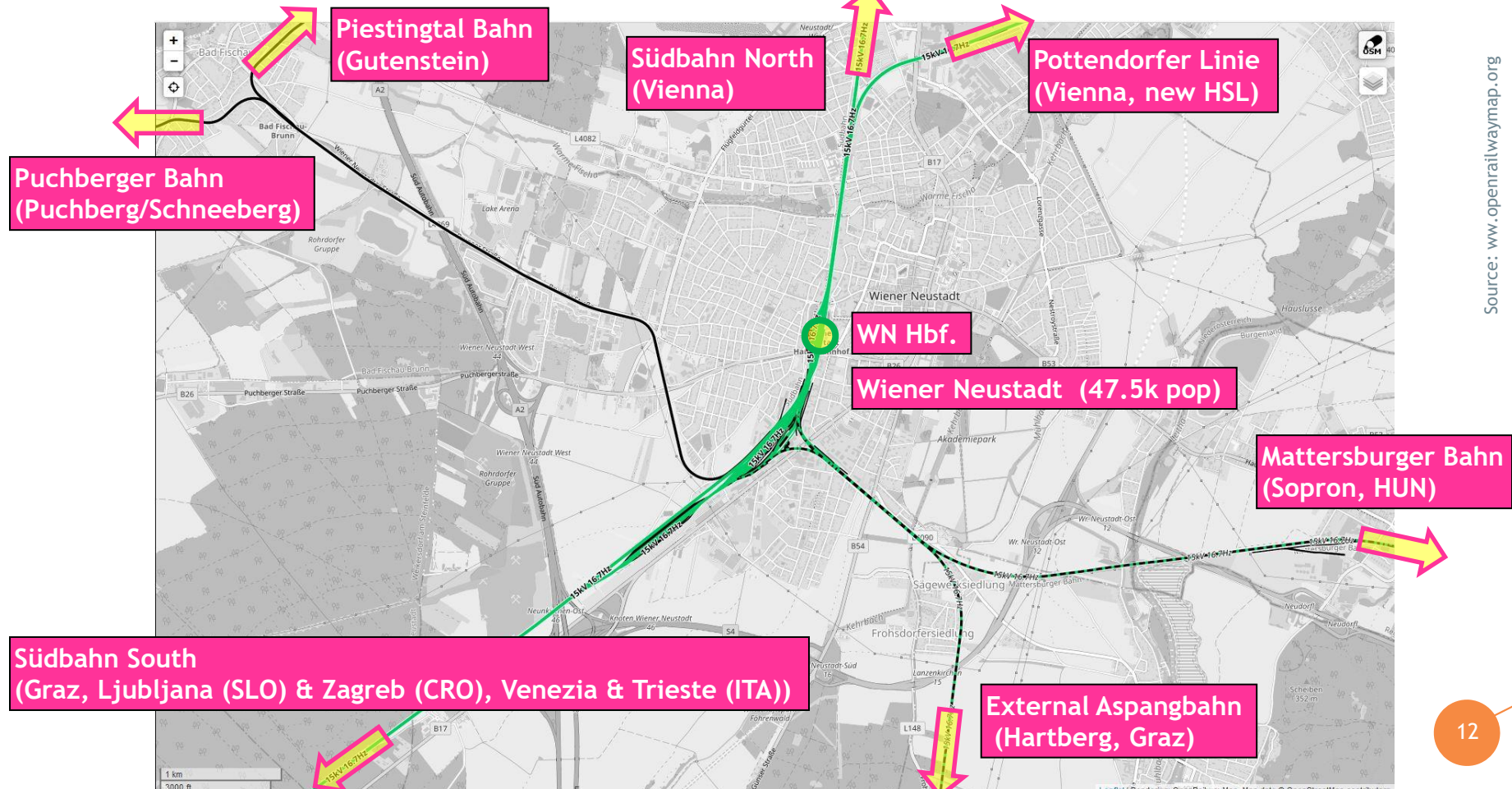
### BRUCK A.D. MUR — GRAZ

#### ZIELE

- Angebotsausweitung und Fahrzeitverkürzung im Fernverkehr (Kantenfahrzeit Bruck a.d. Mur — Graz: 30 min)
- Verdichtung des Nahverkehrs nördlich von Graz

Beilage A

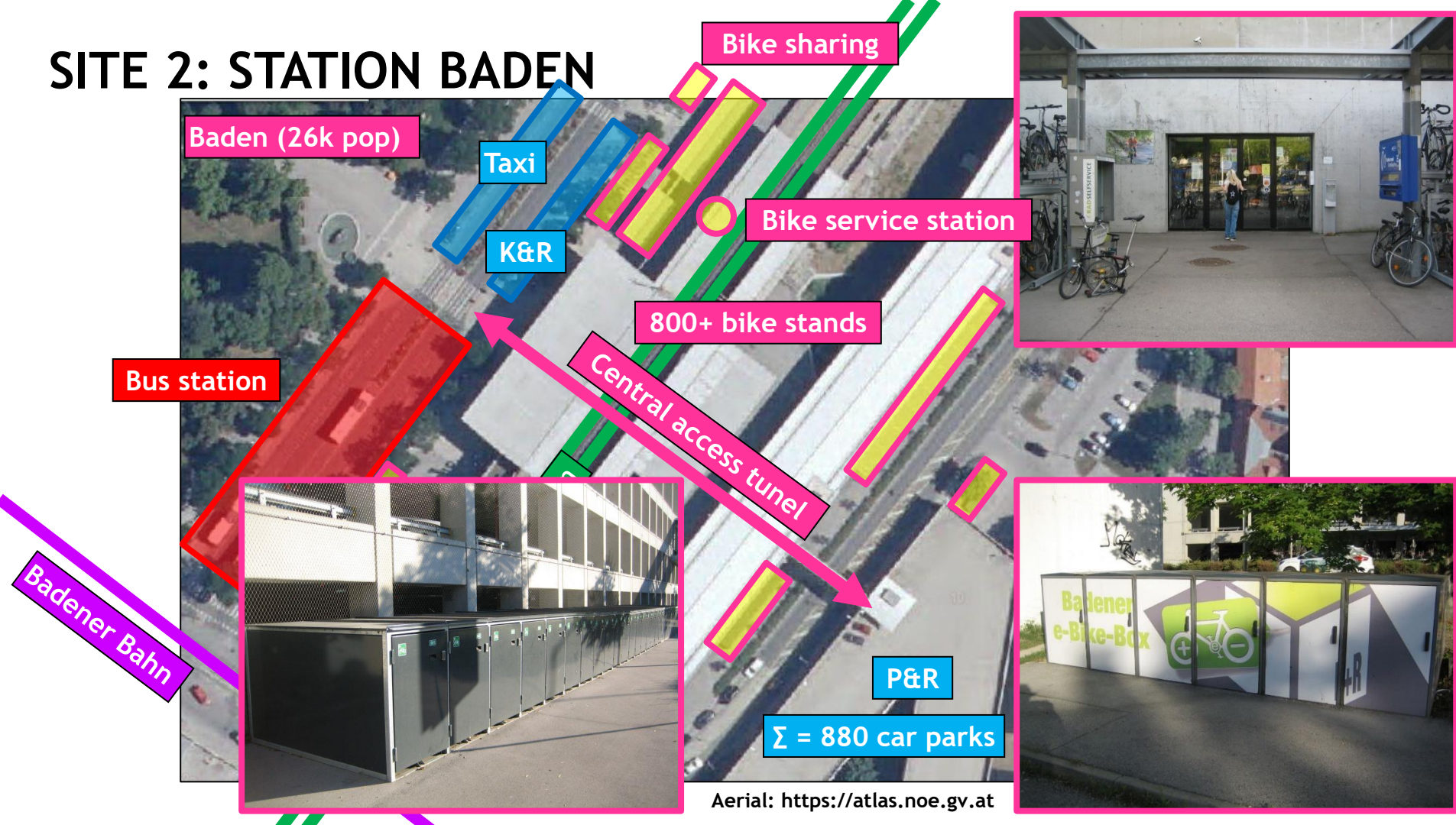
# SITE 1: WIENER NEUSTADT HBF.



# SITE 1: WIENER NEUSTADT HBF.



# SITE 2: STATION BADEN



# SITE 3: REGIONAL RAILWAY “BADENER BAHN”

**Badener Bahn:**  
older,  
new built (N) &  
recently renovated (R)  
stations

## **Wr. Neustadt Canal:**

- Built 1797-1803
- Shipping until 1916
- Mid 1860ies highest transport volumes; parallel to railway
- Today: 36 km & 38 locks remain & very popular recreational area

Guntramsdorf (9.5k pop)

Guntramsdorf Lokalbahn  
“easy mobil station”

Gdf. Kaiserau

N/R

ÖBB Südbahn

Wr. Neustadt Canal

Prioritized road crossing

Pfaffstätten (3.5k pop)

Baden (26k pop)

Baden  
Bahnhof

N/R

Baden Viadukt

Prioritized road crossing

Badener Bahn

Traiskirchen (19k pop)

$v_{MAX} = 80 \text{ km/h}$

Internal Aspangbahn

Single → double track  
Tramway → railway

## SITE 3: BADENER BAHN SPECIFICS

Regional railway Vienna - Baden

Runs through centers of towns and villages

Operated by Wiener Lokalbahnen AG

Operation start: 1873 (Baden), 1894 (W-Guntramsdf.), 1899 (Gdf.-BN)

Max speed: 80 km/h

Interval: Baden - (15') - Wiener Neudorf - (7.5') - Wien

Mixed operations: Baden Josefsplatz - **TRAM** - Baden Landeskrankenhaus -  
**RWY** - Wien Schottentorplatz - **TRAM** - Wien Oper

# of tracks: Baden Josefsplatz - 1 (2 km) - Baden Landeskrankenhaus -  
2 (27 km) - Wien Oper

# of passengers: 15.8 million (year 2023)  $\approx$  43.000 per day

# SITE 3: BADENER BAHN, RENOVATED STATIONS



Pfaffstätt (3.5k pop)



"easy mobil station":  
E-car sharing  
Bike sharing (nextbike)  
Parcel pick-up box  
Covered bike parking spaces  
Lockable & rentable bike boxes  
(municipality)  
DIY bike service station  
Touch screen infopoint  
E-filling station (Wien Energie)  
Free WI-FI  
Snack machine  
Mobile phone accessories vending  
machine

Guntramsdorf (9.5k pop)



„LIVEVOICE“

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# Let's go for lunch ...

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... and after that to Wien Hbf.  
IC539 (coach 23) departs 1424h



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