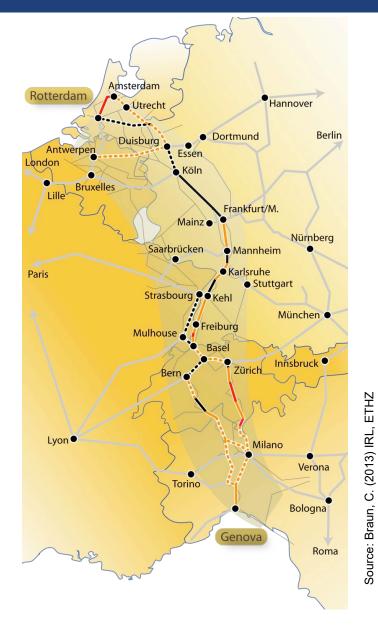
EGTC Rhine Alpine – Inspirational Story

Prof. em. Dr. Bernd Scholl, On-Line-Impulse Speech, Politecnico di Milano, 18th May 2021 Online Symposium: ESPON IMAGINE//Final Regional Forum



Overview

- **1** Rhine Alpine Corridor, Chances and Challenges for Cooperation
- 2 Strategies and Projects of Railway and Spatial Development in Switzerland / Zurich
- 3 Conclusions

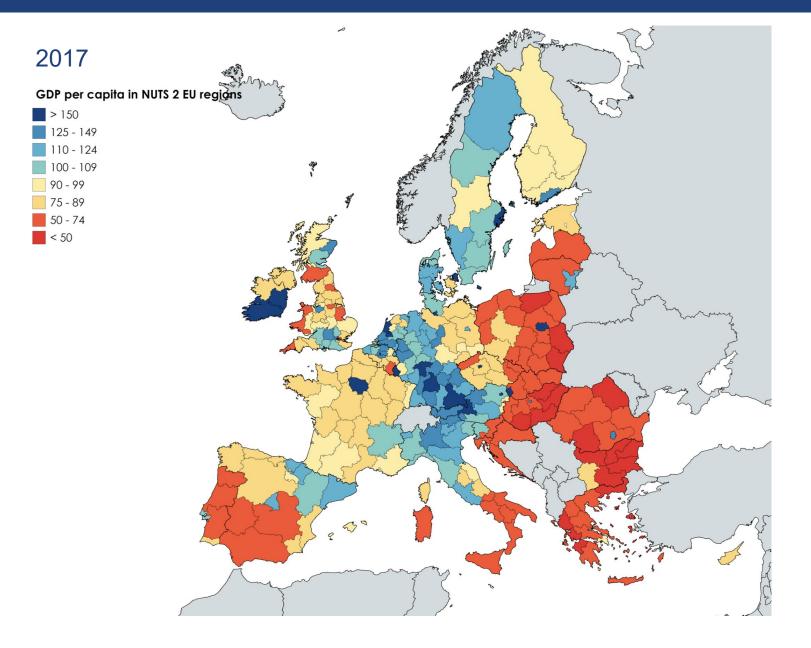


Rotterdam - Genova Railway Corridor (Rhine-Alpine)

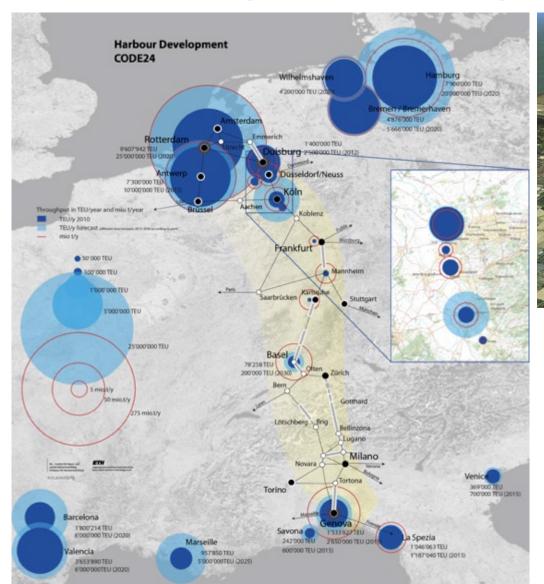


- Connecting North and Mediterranean Sea – 1,200 km
- Catchment area approx. 70 million inhabitants
- 700 Million tons of cargo on rail
- 50% of the whole European North-South cargo traffic on rail





Ports Development in Europe_Shift of Goods on Rail is Policy





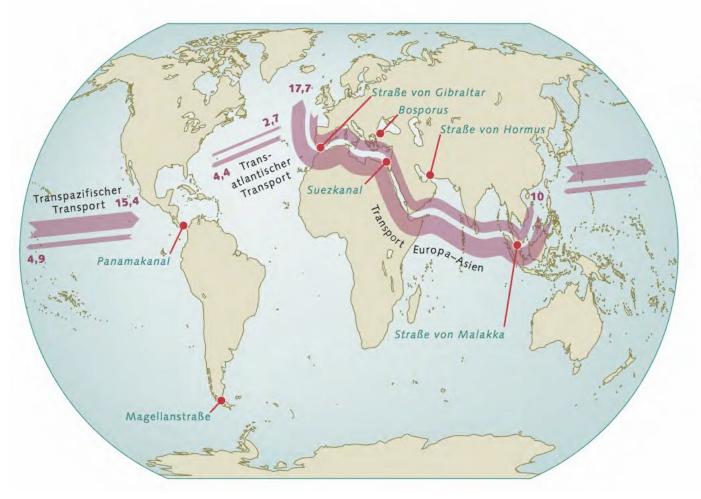
Maasvlakte 2, Port of Rotterdam

Importance of Hinterland Connections and Ports

Importance of River Rhine

Eidgenitaische Technische Hochschule Zürich Swiss Federal institute of Technology Zurich

Maritime Trade Routes



8.6 > Die Hauptrouten des weltweiten Containerverkehrs über die Meere. Die Zahlen geben die Menge der 2007 transportierten TEUs in Millionen Stück an.

Source: World Ocean Review Chapter 8 Hamburg, Nov. 2010

2000 m

1500 m

1000 m

500 m

0 m

Basel

Base Tunnels in Switzerland, Core Pieces of the Rhine Alpine Corridor

Openings:

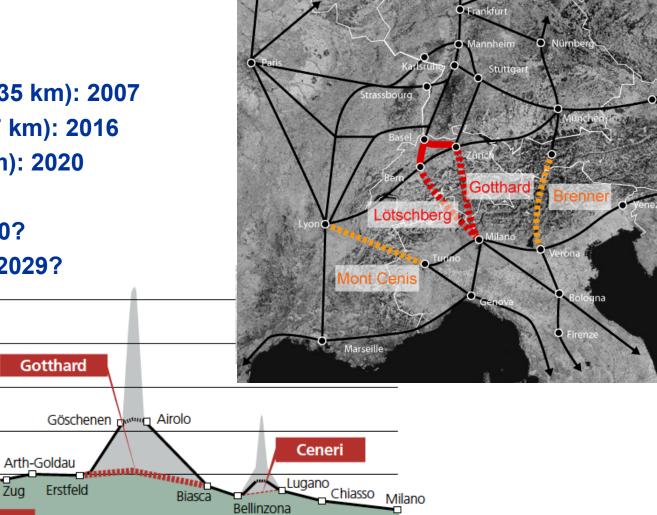
Lötschberg (35 km): 2007 Gotthard: (57 km): 2016 Ceneri (15 km): 2020

Brenner: 2030? Mont Cenis: 2029? 2500 m

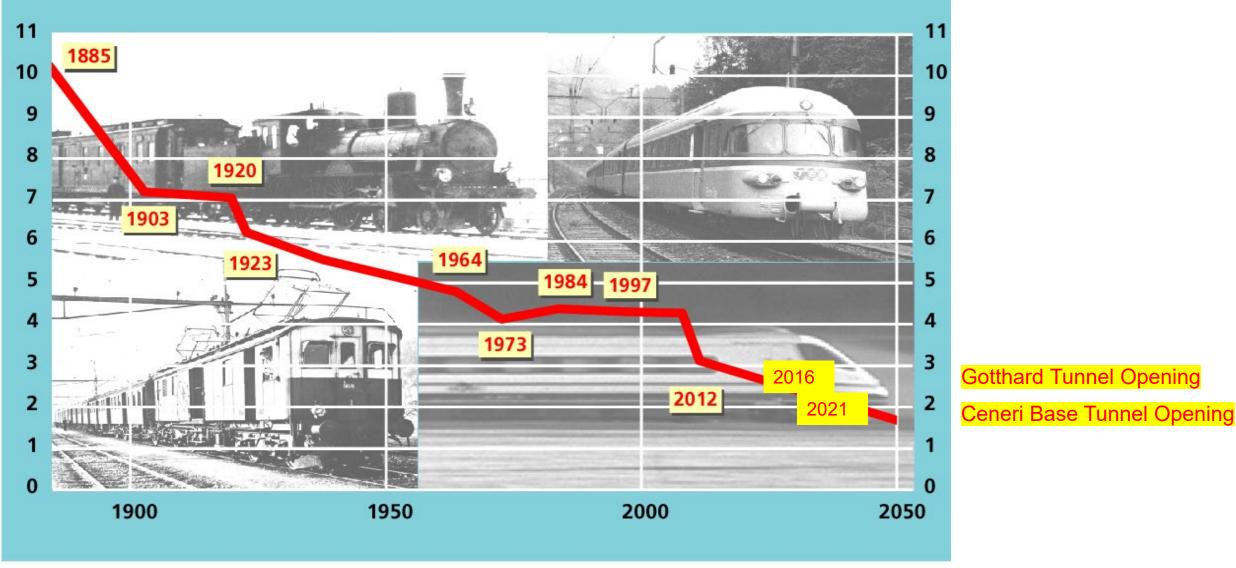
Zürich

Zimmerberg

Zuq



Reduction of Travel Time: Example Zurich _Milano



EHzürich

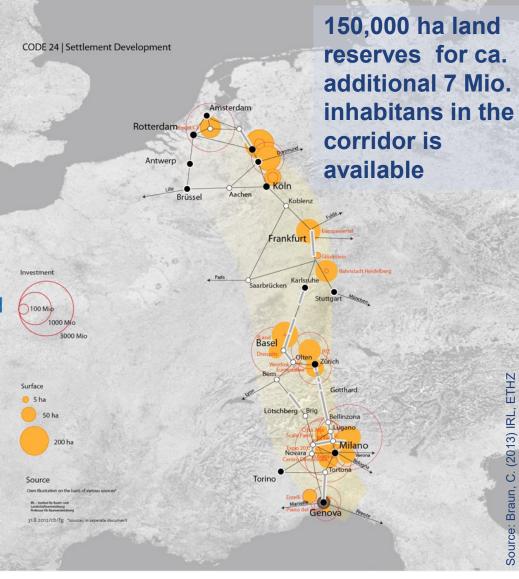
Railway Stations as Crystallization Points for Inward Development: Land Reserves in the Catchment Areas of Railway Stations of the Rhine Alpine Corridor



Frankfurt, Development Marshalling yard



Zürich, Development Central Station



EUROPEAN TEN-T CORE NETWORK CORRIDORS



Milano, Bovisa, Testplanning-Perimeter Prof. em. Dr. Bernd Scholl 18.05.2021 10 Integrated Railway and Spatial Development at Spaces and Projects of European Importance - Chances and Challenges for Regional and Cross Border Cooperation

Bottlenecks: Oberhausen-Emmerich (NL), Frankfurt - Mannheim; Offenburg – Basel Bellinzona- Chiasso, Chiasso – Milano, Genova – Milano

Noise: Middle Rhine Area

Logistic: Hinterland Rotterdam, Inland Waterway Rhine, multimodal Harbor Development

Cities

and

Regions: Hubs, Nodes, Inward Development

CODE24 CORRIDOR 24 DEVELOPMENT ROTTERDAM - GENOA

One Corridor – One Strategy

Joint regional development for the north-south corridor

HOME NEWS ACTIVITIES PROJECT PARTNERSHIP PUBLIC EVENTS DOWNLOADS MULTIMEDIA MEMBERS AREA CONTACT

Start of the EU Projekt Interreg 2010

MANNHEIM:

HARBOUR EQUIPMENT

ROTTERDAM

CODE24 CORRIDOR DEVELOPMENT

GENOA

EHzürich



egtc-rhine-alpine.eu/de/ Start 2015 - ongoing

Members of Italy are: Regione Lombardia, Regione Liguria, Regione Piemont, Ports of Genova, Union Trasporti, Comune die Novara

Overview

- 1 Rhine Alpine Corridor, Chances and Challenges for Cooperation
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Strategies ... for Spatial Development (on a national, regional and local lecel)

- 1 Inward Development before Outward Development is the main Spatial Strategy*
- 2 Railways are the Strategical Backbone of a sustainable Network of Cities and Locations
- 2 Railway Stations are the Cristallisation Points of Inward Development (Urban Density)

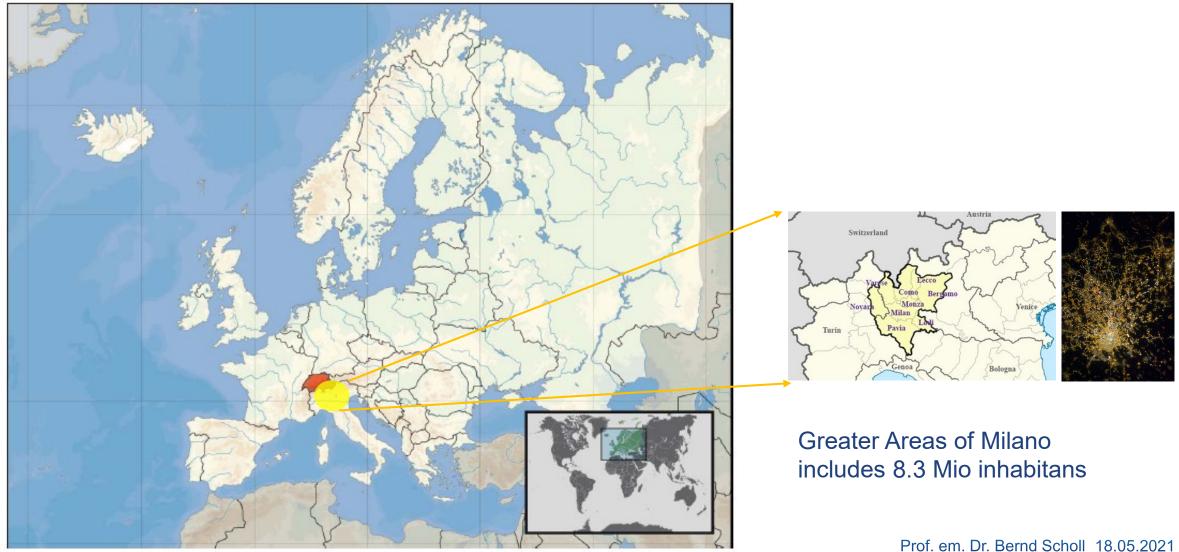
* is based on the revision of the spatial planning law 2014. Voted and accepted by the Swiss Citizens with a majority of 64%

Switzerland



Switzerland has about 8.7 Mio inhabitants

Switzerland



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Switzerland



... a small Country in the Middle of Europe

Switzerland has about 8.7 Mio inhabitants and is situated at important crossroads exspecially in the North-South-Direction

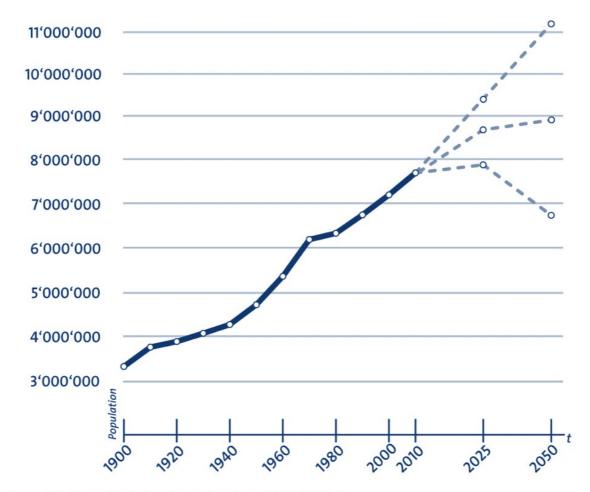
This is mainly because of the Gotthard Route through the Alps (Highway and Railway)

Therefore Switzerland has a lot transit traffic

Switzerland is still a prospering country with one of the highest GDP in Europe and has a dynamic population growth

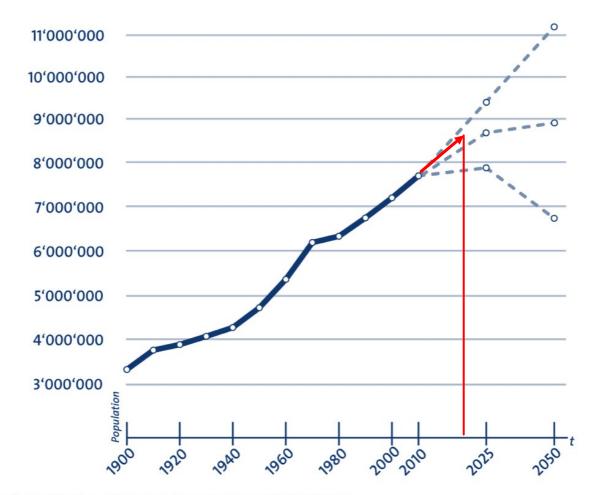
Projetion of Swiss Population Development (2010)

SWITZERLAND



Projetion of Swiss Population Development (2010)

SWITZERLAND



≈ 8.7 Mio. (per Dec. 2020)

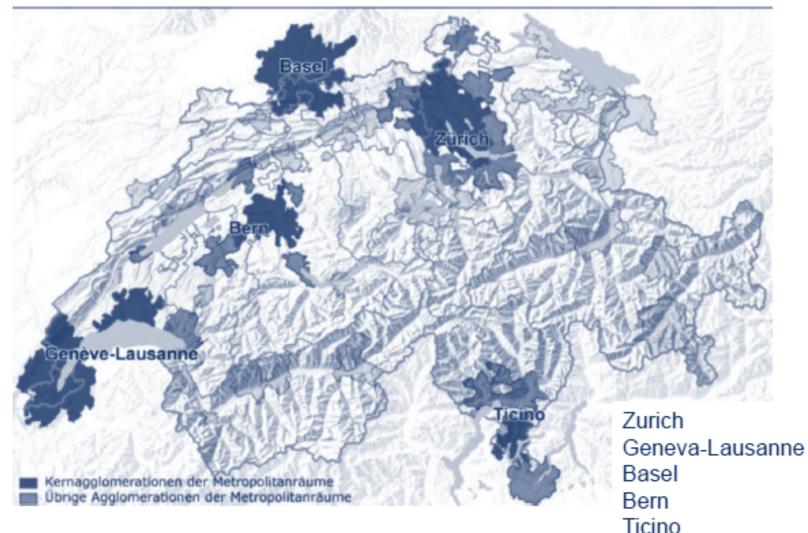
≈ averagre growth rate of last 10 years 0.9%

Challenge: Topagraphie



Prof. em. Dr. Bernd Scholl 18.05.2021 21

Metropolitan areas of Switzerland



Compare it with Metropolitian Area of Milano!

The Metropolitan Areas of Switzerland mainly situated in the Swiss Plateau Between (Jura and the Alps) has around 6 Mio inhabitants

We have to organise Switzerland as a competitive European Metropolitanregion

1.6 mio.

1.2 mio

0.7 mio.

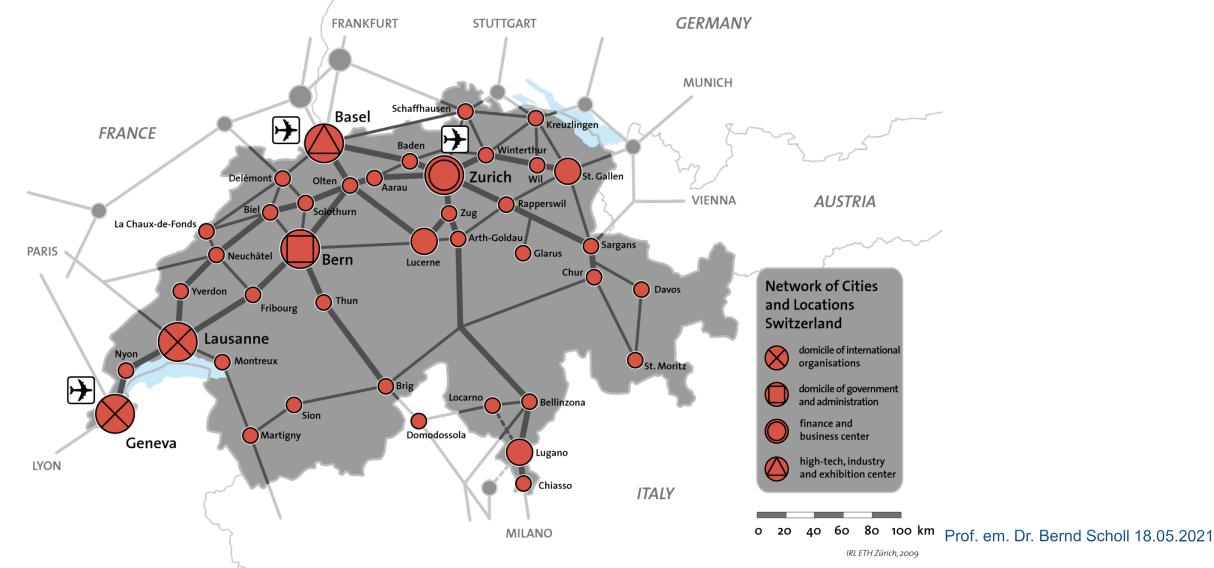
0.6 mio.

0.5 mio. Prof. em. Dr. Bernd Scholl 18.05.2021 22

EHzürich

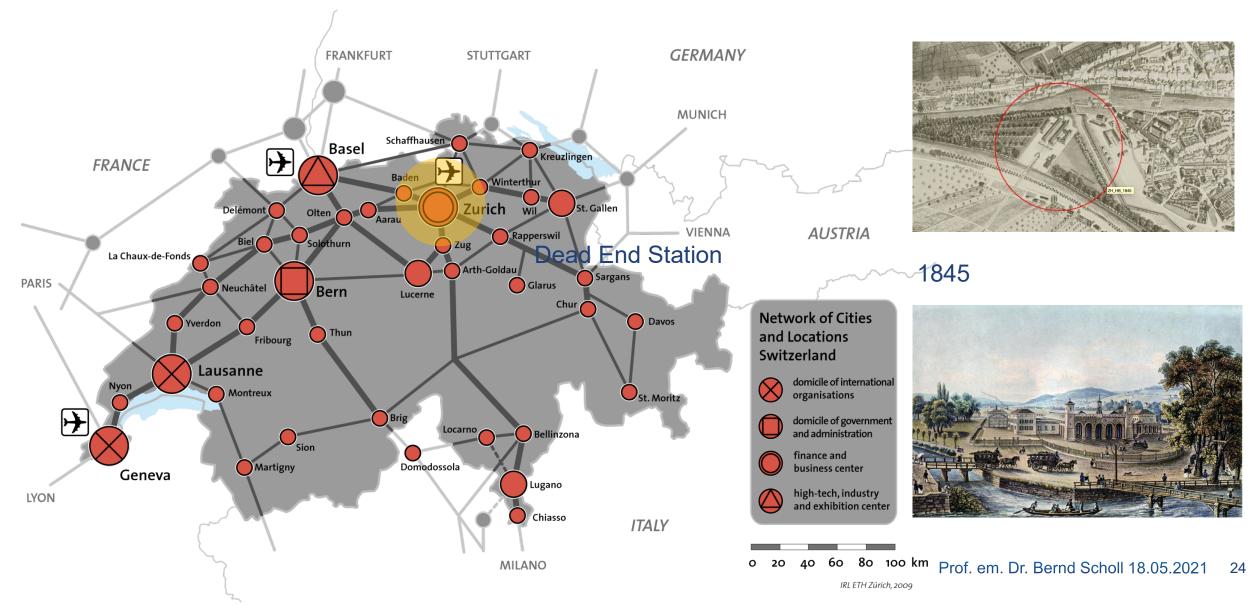
Main National Spatial Strategy: Network of Cities and Locations, Railway System is the strategical backbone, Dense frequency of longdistance, regional trains and urban public transport system

23



EHzürich

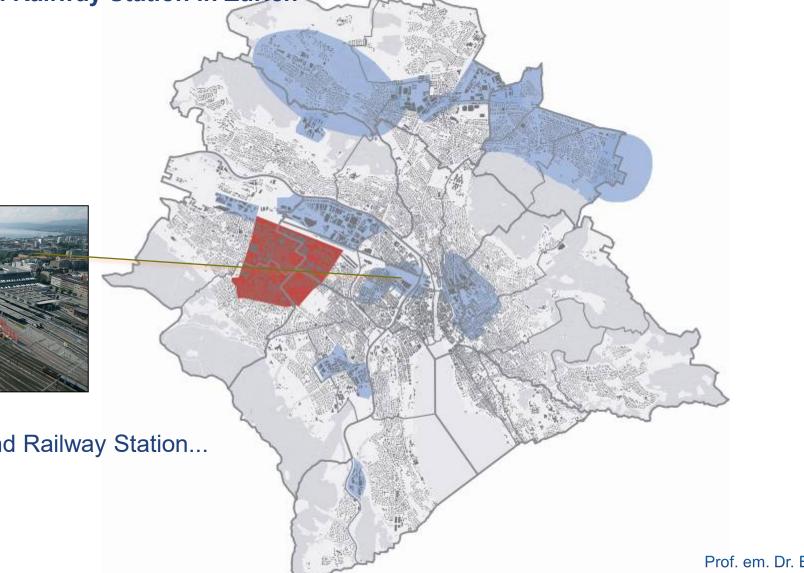
Main Railway Hub Zurich: Dead End Station and two Through Stations, step by step



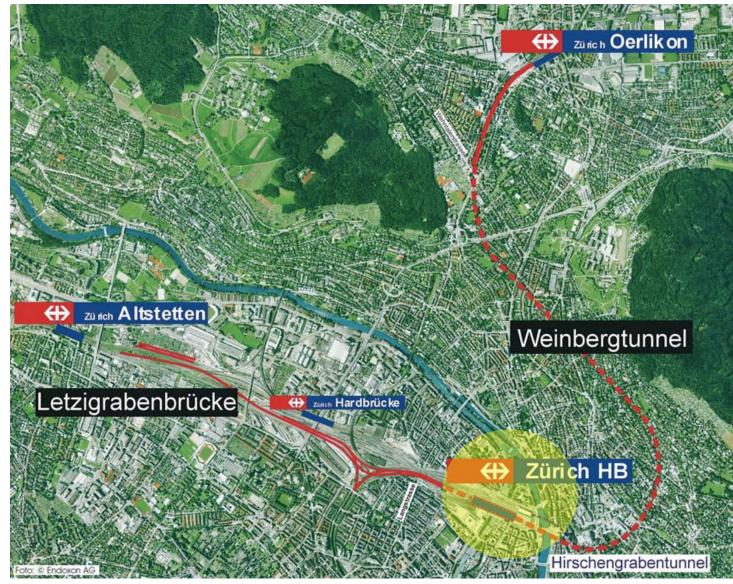
New Underground Railway Station in Zurich



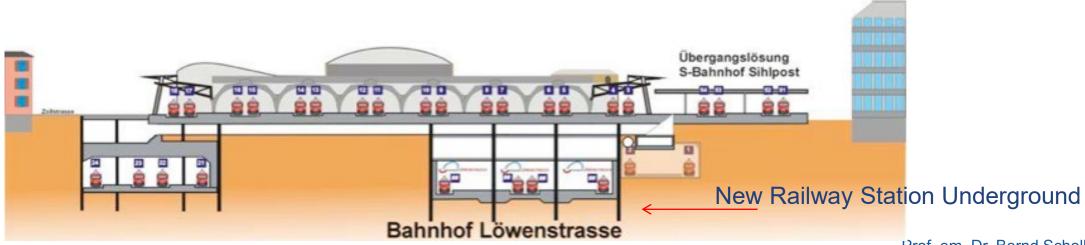
New Underground Railway Station... "Löwenstrasse"



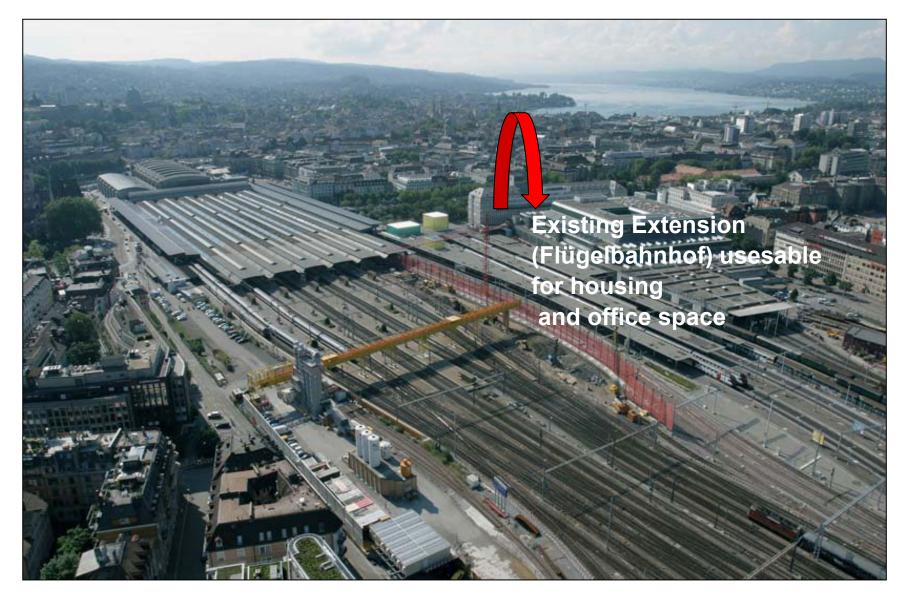
Additional Capacity with New Underground Railway Station Zurich







Additional Capacity Main with New Underground Railway Station Zurich and Chances for Inward Development





Railway Station 2016

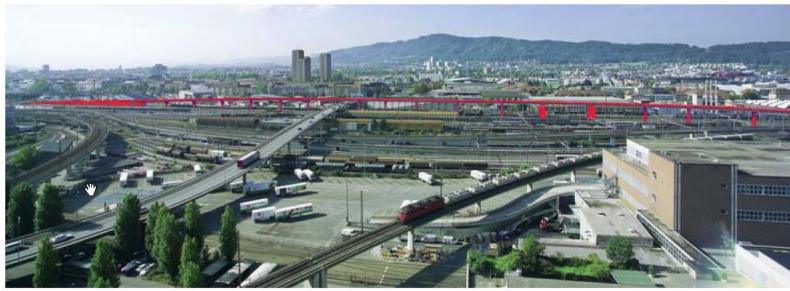


Europaallee 2017

Investments to the Train System Zurich 1.6 Billion CHF



Gleisanlagen Altstetten-Kohlendreieck



Standort: Hochhaus Pfingstweidstrasse, Blickrichtung Uetliberg. Rot eingefärbt; die Letzigrabenbrücke

Railway Stations as Crystallization Points for Inward Development



Main Railway Station Zürich, 450.000 passengers daily...before Pandemy times



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O Springer