



UNIVERSITY
OF PARDUBICE
FACULTY
OF TRANSPORT
ENGINEERING

Possibilities for Introducing a Suburban Rail Line in the Holice area

Authors:

- Ing. Radek Prokop
- Ing. Filip Moučka

Territorial Overview



TOWN OF HOLICE - 6 813
INHABITANTS (2023),
PARDUBICE REGION



REGIONAL CENTER WITH
STRONG LINKS TO PARDUBICE
AND HRADEC KRÁLOVÉ

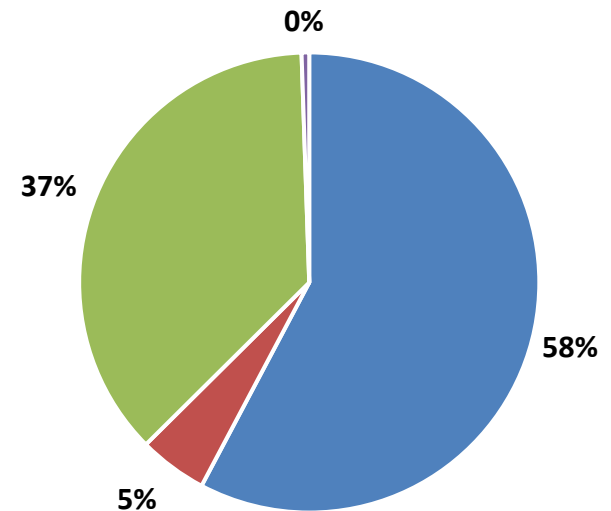


GENTLY UNDULATING TERRAIN
– SUITABLE FOR CYCLING AND
WALKING

Current Transport Situation in Holice

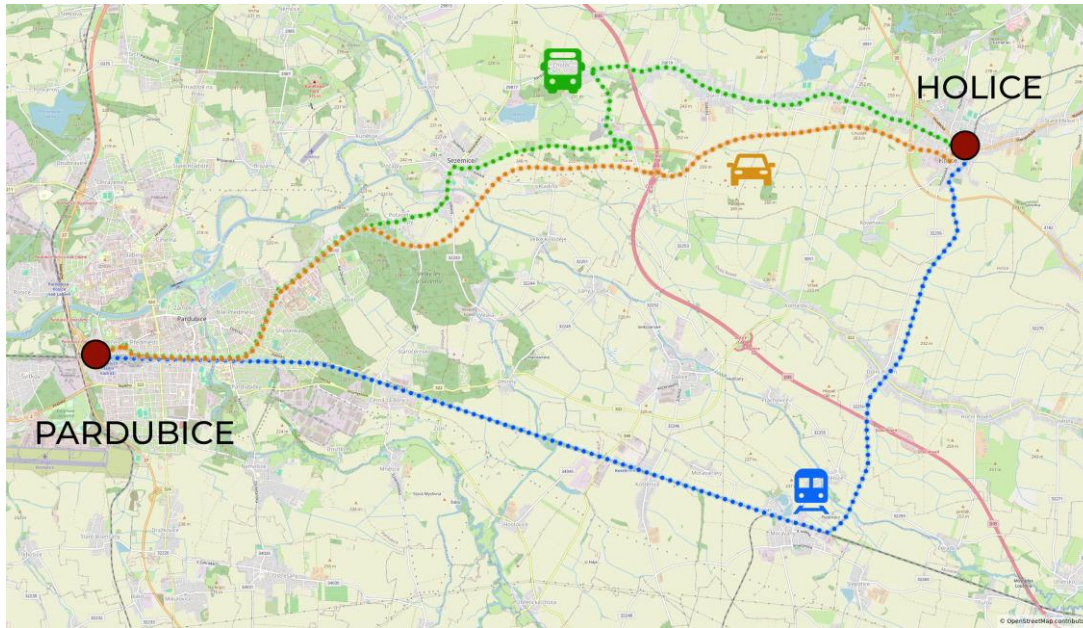
- Private car transport: 58% of all trips
- Bus transport: 37%
- Rail: limited service, poorly located station
- No cycling infrastructure despite high share of cyclists in inner-city transport

Daily commute between
Holic and Pardubice



■ Car ■ Train ■ Bus ■ Bicycle

Estimated average times for commuting to Pardubice

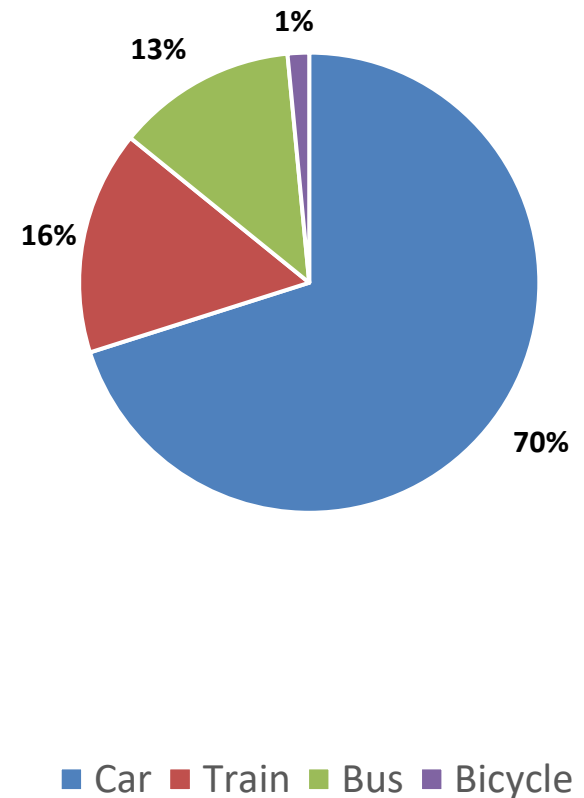


Means of transport	Average travel time [min]
Train	35
Bus service	37
Individual car transport	22 (expected 17)

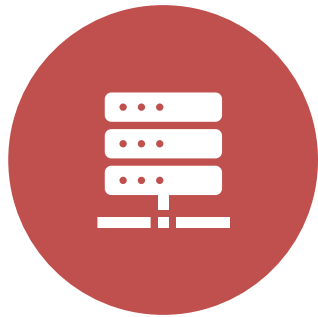
Identified Problems in the Region

- Region includes Holic, Přebouč and Heřmanův Městec
- Low competitiveness of public transport
- High dependency on private cars
- Insufficient intermodal connections
- Low quality of public spaces

Daily commute to Pardubice



Proposed Solution – New Suburban Rail Line



ROUTE: HOLICE – MORAVANY
– PARDUBICE – PŘELOUČ –
HEŘMANŮV MĚSTEC



OPTION 1: DIRECT EXPRESS
TRAINS WITHOUT TRANSFERS



OPTION 2: TRAIN COUPLING IN
MORAVANY AND PŘELOUČ

Supporting Infrastructure



P+R and B+R parking at railway stations



Improved rail accessibility for surrounding communities



Safe connecting cycling infrastructure



Better intermodal transfers

Yield Management and Fare Policy



DYNAMIC PRICING
FOR TICKETS AND
PARKING



DISCOUNTS FOR
COMBINING
PARKING + TRAIN



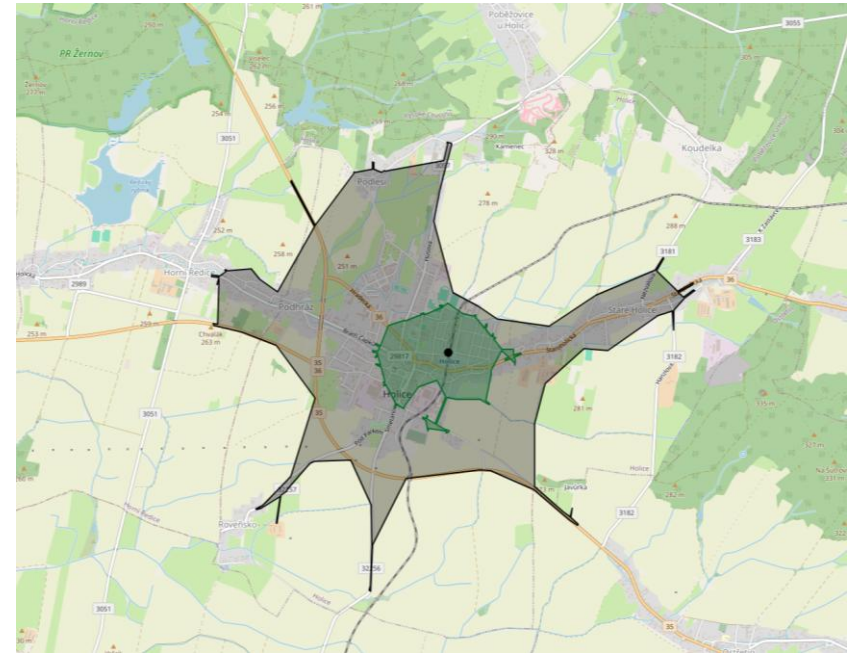
FINANCIAL
INCENTIVES FOR
REGULAR USERS



GOAL: EFFECTIVE
DEMAND
MANAGEMENT

Bike system for last mile

- The combination of train travel and bicycle use for the so-called "last mile" attracts a larger number of passengers
- Creating suitable conditions and high-quality infrastructure for bicycle use can attract more than twice as many residents compared to walking, given the same travel time.
- Safe bicycle storage + Shared bike system for last mile (ČDbike for daily commute)
- A model example is the OV-fiets system in the Netherlands, which records up to 6 million rides annually for trips to and from the train. As many as 40% of all passengers in the Netherlands use a bicycle for the last mile of their journey.



Isochrones of accessibility to the Holice railway station

- 10 minute bike ride
- 10 minute walk

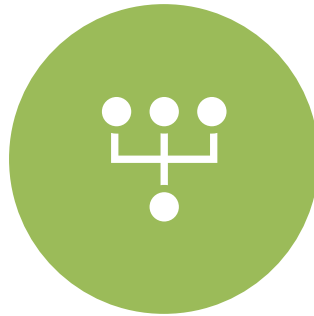
Benefits of the Proposal

- Shorter travel time to Pardubice
- Reduced traffic burden in Pardubice
- Higher attractiveness of public transport
- Support for intermodality and sustainability
- Transferable model for other regional centers

Conclusions and Recommendations



INTRODUCING THE LINE
SUPPORTS SUSTAINABLE
MOBILITY



NEED FOR COORDINATION
AMONG MUNICIPALITIES,
REGION, AND OPERATORS



ESSENTIAL: HIGH-QUALITY
INFRASTRUCTURE AND
SMART FARE INCENTIVES

Questions and Discussion



THANK YOU FOR YOUR
ATTENTION.



TIME FOR QUESTIONS.