



Country /City China/Chengdu

University / School Sichuan Agricultural University

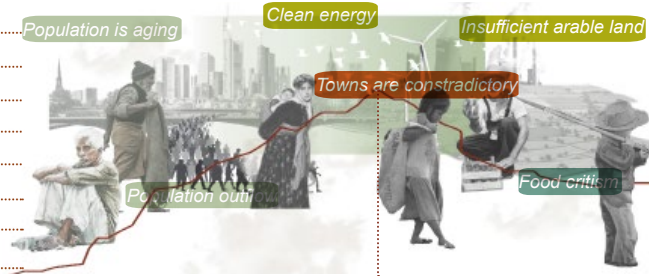
Academic year 2021-2022

Title of the project Munich Express 600

Authors Zheyuan Zhou, Mu Li, Weiwen He, Xin Peng

TECHNICAL DOSSIER

Title of the project Munich Express 600
Authors Zheyuan Zhou, Mu Li, Weiwen He, Xin Peng
Title of the course Landscape Planning and Design
Academic year 2021-2022
Teaching Staff Jia Zhong
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Written statement, short description of the project in English, no more than 250 words

The aging of the rural population in Munich is gradually serious. With the development of industry and commerce, it has caused many population outflows and accelerated the decline of the countryside. Although the local government has taken relevant measures, it is still unable to meet the self-sufficiency of agricultural products. In addition, Germany is also facing a serious energy crisis, the country advocates the use of new energy and clean energy.

We came up with the Express 600 to try to solve these problems. Through the new express high-speed rail (Express 600), the use of geothermal energy, energy recovery stations and other locations in the city to supply energy and transport crops to various places, and improve transportation efficiency. This project will connect urban and rural areas through new modes of transportation, redesign of 6 representative points, and apply these to other similar areas in Munich.

For further information

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SCHOOL PRIZE



SITE1 Untermerzing



Site2 Blumenfeld



Site3 Savitsstraße



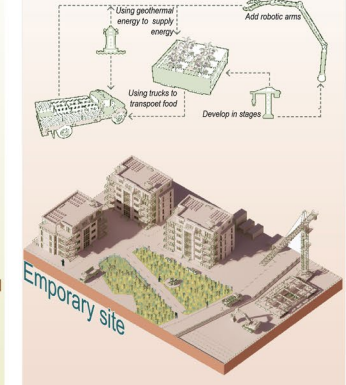
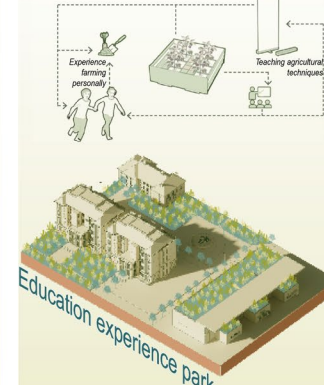
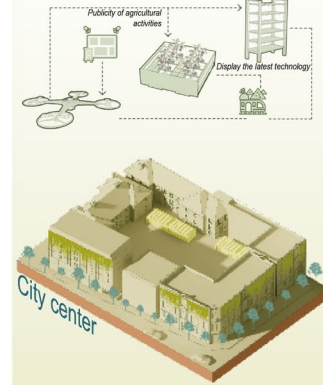
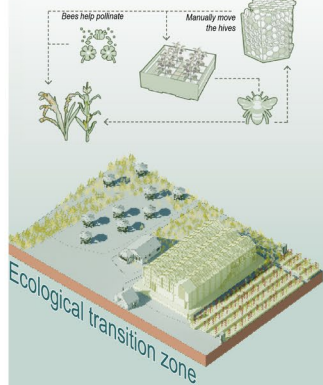
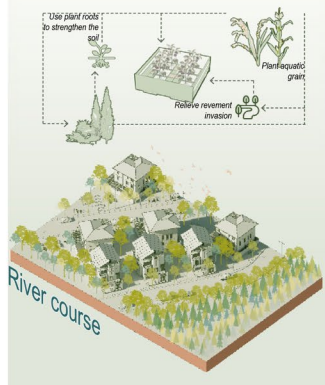
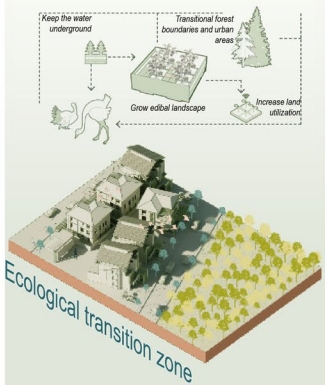
Site4 Altstadt-Lehel



Site5 Berglaim



Site6 Freiham



SITE1 Untermerzing

Population statistics analysis
 👤 **1,204/km²** Population Density (2021)
 📈 **0.19%** Annual population change (2011-2021)
Crop species analysis

Plantago asiatica L. 75%	Citrullus lanatus 35%
Cactaceae 40%	Curcuma longa L. 20%
Spinacia oleracea L. 40%	Vigna unguiculata (Linn.) Walp. 25%

SITE2 Blumenfeld

Population statistics analysis
 👤 **464.867/km²** Population Density (2021)
 📈 **156.000person** Emigration rate (2025)
Riparian buffer zone analysis

ZONE1	Arbor 65%	Shrub 35%
ZONE2	Native shrub 35%	Lilac 45%
ZONE3	Diospyros kaki Thunb 20%	Car
	House	Residential

SITE3 Savitsstraße

Population statistics analysis
 👤 **2007.731/km²** Population Density (2021)
 📈 **235.000person** Emigration rate (2025)
Plant planting analysis

Apr.	May.	Jun.	Jul.	Aug.	Sep.
Asparagus officinalis					
Fragaria × ananassa Duch					
Diospyros kaki Thunb					
Vigna unguiculata (Linn.) Walp					
Prunus					
Vaccinium ssp					
Pyrus					

SITE4 Altstadt-Lehel

Population statistics analysis
 👤 **2007.731/mile²** Population Density (2021)
 📈 **235.000person** Emigration rate (2025)
Plant planting analysis

Lactuca sativa var. capitata L. 45%	Fragaria × ananassa Duch 25%
Humulus lupulus 35%	Zea mays L 25%

SITE5 Berglaim

Population statistics analysis
 👤 **2341.657/mile²** Population Density (2021)
 📈 **264.000person** Emigration rate (2025)
Crop planting analysis

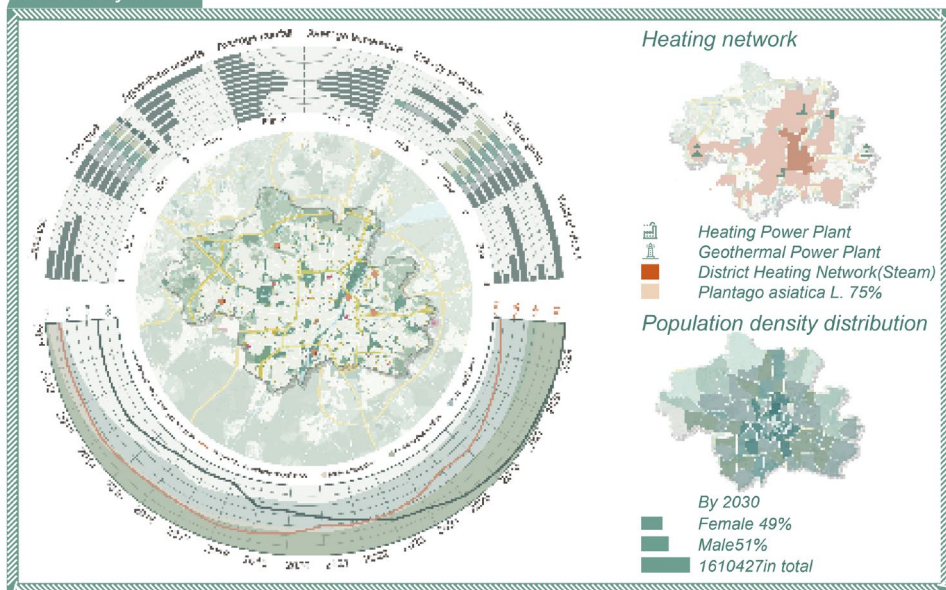
Fragaria × ananassa Duch 25%	Rubus idaeus L 25%	Malus domestica 45%
Fructus Mori 45%	Zea mays L 25%	Solanum tuberosum L. 65%

SITE6 Freiham

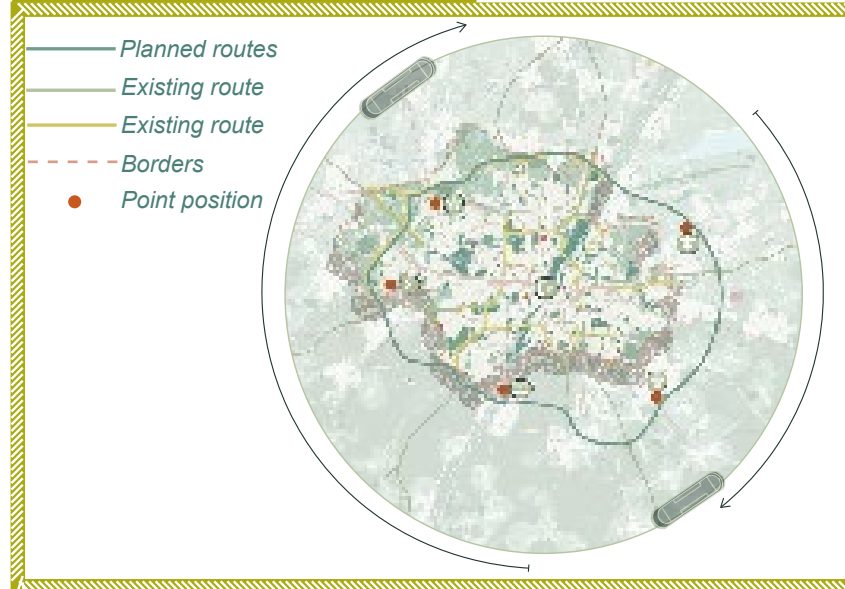
Population statistics analysis
 👤 **49.614/mile²** Population Density (2021)
 📈 **800 (swm-Netz)** District heating network
 ⚡ **13MWth** Heat output
Crop planting analysis

Brassica oleracea var. capitata Linnaeus 35%	Beta vulgaris 50%	Ribes nigrum 40%
Brassica oleracea L. var. botrytis L. 65%	Raphanus sativus L. 25%	Hazelnut 35%

Site analysis



EXPRESS 600 Traffic streamlines



Select the cause and current status of the point

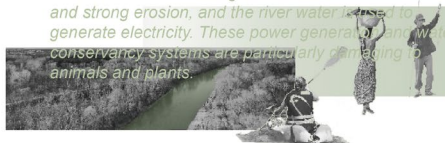
Emporary site

Near freiham are mainly construction sites to be developed, and some residential areas. The northern area is a large area of farmland and has geothermal energy.



River course

The Isar River has strong seasonal fluctuations and strong erosion, and the river water is used to generate electricity. These power generation and water conservancy systems are particularly damaging to animals and plants.



City centre

The building density in the city center is high, and there is a lack of available planting space. At the same time, as a market transaction center, a new urban agricultural model needs to be established.



Agricultural industrial park

There are many agricultural industrial parks near Savitsstraße, but due to the long distance from the city, most of the industrial parks are picked and sold locally, and there are not too many agricultural products shipped to the city.



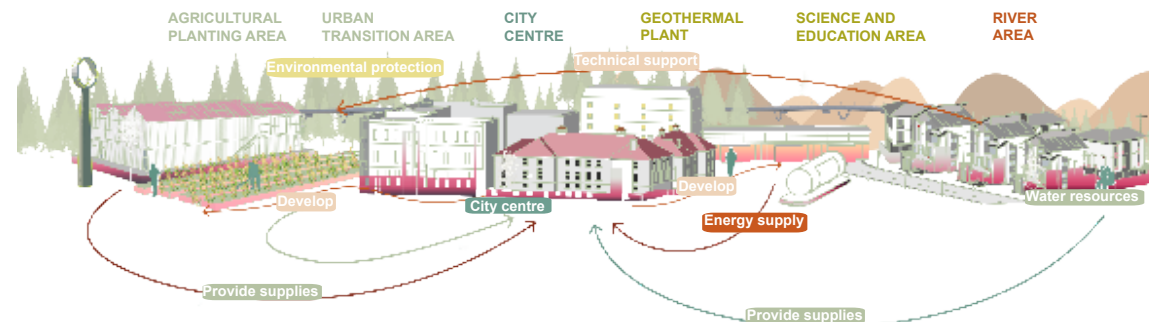
Education experience park

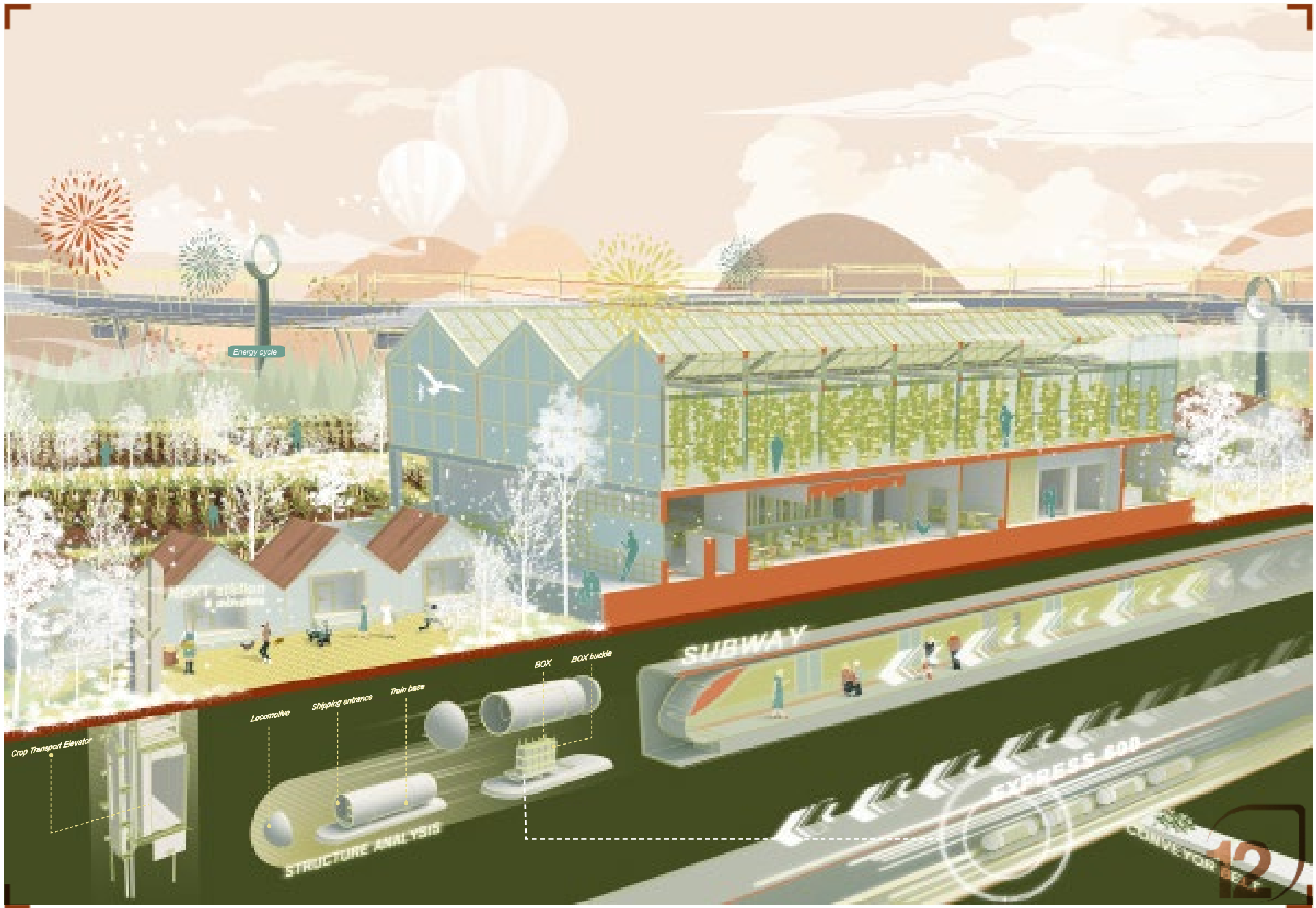
Bergamlaim has a rich nightlife, young people gather, and was once an industrial complex, with business parks and craft companies gathering.



Ecological transition zone

As a relatively scarce riparian forest today, the Arach Forest often suffers from traffic jams. However, the inability to build tunnels in the Arach Forest will destroy the existing beetle habitat.





Energy cycle

NEXT station

SUBWAY

EXPRESS 800

CONVEYOR BELT

Crop Transport Elevator

Locomotive

Shipping entrance

Train base

BOX

BOX buckle

STRUCTURE ANALYSIS

