

National Key Research and Development Programs of China (2017YFE0119200)

Context and Background

After the foundation of the P.R.China, the authorities tried to promote the national industrial development by establishing 156 key projects in the first five-year plan, among which, 17 projects were allocated in Xi'an City.

According to the first round of urban planning, 6 projects /factories were established in the Happiness Forest region, made the region one of the most vibrant region in Xi'an.

The Forest Belt was planned as isolation between the production and the living area, but didn't actually developed even though it was kept in every round of urban plan afterward. The Changle Park is the only open space nearby.

Urban villages and more than 70 small and medium-sized enterprises gradually occupied the belt.

With industrial structure adjustment and the worsening of the operational condition of the 6 factories, the region has declined from urban core to a deserted corner of Xi'an City.





Planning, Design, and Regeneration of the Happiness Road/Forest Region

In 2003, the city government proposed to "return the forest to people" and to initiate the construction of the Happiness Forest. Constrained by financial resources, the comprehensive regeneration of the region started in 2011, and several rounds of plan and design were developed since then.

In 2012, the Happiness Road Management Committee was established to promote the regeneration of the region. By the end of 2012, the city government approved the "Master Plan for Comprehensive Regeneration of the Happiness Road" and 17.63 sq.km were delimited for regeneration with the Happiness Forest Belt as the core area to lead the regeneration of the Happiness Road Region, where lived around 375K residents.

In the Plan, the region was positioned as a sub-center of commerce and trade for the development of international metropolitan of Xi'an, and will be a comprehensive area with headquarter economics, trade and commerce, ecological and residential functions to build an ecological and livable, intelligent and low-carbon town.

From 2013 to 2016, land expropriation, residents relocation, and structure

Brief Introduction of the Happiness Forest Belt

1.The Happiness Forest Belt is 5.85 km long and about 145 meters wide; the total width inside the redlines of the roads at both sides is 210 meters.

2.The total planned area for regeneration is 17.63 sq.km; within the 11.13 sq.km of the core area; about 15k mu land will be available for relocation, demolish, and expropriation, among them, 3k mu is now in the control of local government and available for industrial development.

3. The Happiness Road Management Committee held a series of international design competition and the notion of "urban green valley" was adopted.

4.The Forest has 5 vertical layers, the first layer on the surface is the park; the second layer underground provides spaces for commercial, sport, and cultural facilities/amenities; the third layer underground is garage, providing 7600 parking lots; the fourth layer for subways, with 4 lines will run through or interact in the region; the fifth layer utility tunnel.

5.The total underground space is about 920k sq.m. under the forest, among them, 420k sq.m are for commercial and public amenities.

6.The Forest is divided into 3 thematic regions: the north section is about sport and physical activities, providing basketball, football, badminton and other 10 playground that are freely opened to the public; the central section provide recreational and shopping spaces; the south section provides cultural and entertainment, including restaurants, libraries, meeting centers, etc..

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demolishment of the Happiness Road region were carried out; cultural relics investigation took more than 2 years. Costed 4.6 billion yuan RMB.

In 2014, the "Regulatory Detailed Planning and Urban Design for the Core Area of the Happiness Region" was proposed, coving 5.1 sq.km;

On Nov.2, 2016, the ceremony was held and the construction of the Happiness Forest Belt was officially launched;

On Jul.1, 2021, the Happiness Forest Belt finished construction and opened to the public. The costs of construction were about 20 billion yuan RMB, with PPP as the financing mode. The investor will have 21 years of operation.

In 2022, "Regulatory Detailed Planning and Urban Design for the Core Area of the Happiness Region" was amended to cover a larger area with a total area of 11.13 sq.km; the land usages and development proposals of the surrounding region were redesigned.

Typical Nature-based Solutions in the Happiness Forest Belt

