ESI ECONSULT SOLUTIONS INC.
economics | strategy | insight

Contact

Richard Voith: voith@econsultsolutions.com
Jing Liu: liu@econsultsolutions.com

Project Partners

ANBOUND

ARUP

Pelli Clarke Pelli Architects

swa

Chengdu Future Science and Technology City Fiscal and Economic Impact Analysis

Project Background

Richard Voith, Founding Principal and Jing Liu, Associate Director of Econsult Solutions, Inc. (ESI) partnered with ANBOUND, and teamed up with Pelli Clarke Pelli Architects (PCPA), SWA Group, and Arup to participate in and won the third place at the International Masterplan and Architectural Design Competition of Chengdu Future Science and Technology City in China. The competition received more than 100 participants from all over the world. The PCPA&ESI team was shortlisted with four other world renowned design firms: MAD, MVRDV, gmp, and OMA in the final design phase and placed third in the final round of competition.

Transit Oriented Development
A futuristic identity of the place is achieved by the animated and walkable outdoor TOD, formed with fairly simple individual buildings for speedy and economical construction.



Mixed-use
The terraced housing with mixed uses is built on the site's slopes, stepped form provides a stacked contemporary version of Sichuan hillside residences to attract top talent from around the world.



Waterfront Retail
East-West waterway park is a galaxy like spine that links the Transit Oriented Development with other land uses. It is lined with public artwork and retail use.



Architectural and Urban Design

The site for Chengdu Future Science and Technology City covers approximately 4.6 square kilometers, which will be home to two high-tech universities: Chengdu Electronic University and Sichuan University, one national research lab, and one TOD area connecting the new Chengdu Tianfu International Airport and City of Chengdu. PCPA team designed a powerful spatial order on the hexagonal grid that co-locate business, residential and academia to be highly connected in order to foster a community with symbiotic vitality, economic viability, and a civilized quality of life. The design promotes a livable, ecological, and futuristic city with more than 40% of the area dedicated to be green space, and an autonomous rapid transit (ART) system.

Innovation Ecosystem Concept

ESI's innovation ecosystem concept, economic development strategies, and smart city strategies set the guideposts for the land use plan, as well as for the detailed architectural and urban design concepts. ESI made suggestions for open, welcoming, and sustainable environments within smart, interconnected, mixed-use urban forms which are the future of successful innovation ecosystems.

Chengdu Future Science and Technology City Fiscal and Economic Impact Analysis

Economic and Fiscal Impact Analysis

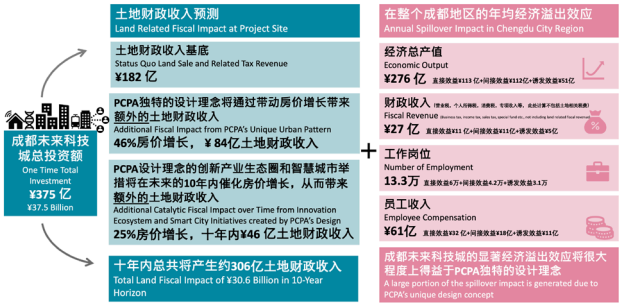
ESI and ANBOUND also conducted a thorough fiscal impact analysis and economic impact analysis for the project after the design was completed. The analysis was based upon abundant market research, qualitative policy research, and quantitative modeling. Econsult Solutions used the inter-sector data of China's economic output, employment, per capita income etc, and built an Input Output Model to analyze the direct, indirect and induced spillover impact from Chengdu Future Science and Technology City to the entire Chengdu City. The analysis supported that PCPA's design will make Chengdu Future Science and Technology City an important source of fiscal revenue for Chengdu government, and an economic engine for Chengdu-Chongqing Economic Circle.

Innovation Ecosystem Ring



Breaking out of the traditional value-chains, the innovation ecosystem fostered by the city synthesis provides co-located learning, research and collaboration facilities for academic institutions and business entities to work together to synthesize their diverse conceptions into the new possibilities for science and technology.

Economic and Fiscal Impact Ring



It is estimated that the City will create around ¥27.6 billion total annual economic output in Chengdu area and support around 133,000 jobs with around ¥6.1 billion employee compensation annually. It will also generate around ¥30.6 billion fiscal revenue to the local government in 10 years after completed.

ROI of Chengdu Future Science and Technology City



146% return of investment projected in 10 years.

Aerial View
The natural beauty of the local mound landform is enhanced with a series of organic, molecule-like clusters built on the sides of mounds linked by an ecological belt in the valley, achieving 40% open space.
The high connectivity in a synthesized ecosystem designed for people, would facilitate idea exchange between academic research and innovative business.

