



## DigitalGlobe Imagery Essential to Changchun Urban Planning Initiatives

At the center of China's automobile manufacturing industry and an important hub for the biopharmaceutical, high technology and energy sectors, Changchun is a rapidly growing metropolis in Northeast China. The Changchun Surveying and Mapping Institute, charged with keeping the municipality's geospatial database current, relies on DigitalGlobe high resolution imagery for the task.

### Balancing Growth and Green Space

Covering a total area of more than 20,000 square kilometers, the Changchun Municipality encompasses a diverse landscape, from the city's urban core, to rural mountainous areas and more than 200 rivers and lakes. Changchun is also one of four National Garden Cities in China, a distinction awarded by the Chinese Ministry of Construction due to its high urban greening rate.

"The annual refresh of the municipality's geospatial database is critical for the many applications used by the Changchun Planning Bureau," says Qiguang Shang, Beijing Gisuni Information Co. Ltd., a DigitalGlobe channel partner. "From urban and green space planning to identify illegal land use, the database is central to the municipality's urban planning efforts."

### A Longtime User of Satellite Imagery

Established in 1953, the Changchun Survey and Mapping Institute (CSMI) has long been responsible for surveying and mapping work in urban and rural Changchun Municipality. It is responsible for the municipality's basic geographic information database, geographic information public service platform, and construction of the digital Changchun geospatial framework. The organization has been using DigitalGlobe imagery since 2009.

*"CSMI has long realized the unique value of high resolution imagery. DigitalGlobe images have the best resolution at 50cm, as well as the best accuracy, especially when compared to resampled Pleiades images. DigitalGlobe imagery reveals more on-ground truth and better facilitates the work of the survey and mapping departments."*

QIGUANG SHANG, SALES DIRECTOR, BEIJING GISUNI INFORMATION CO., LTD

### Company information

A DigitalGlobe channel partner, Beijing Gisuni Information Co. Ltd. provides value-added GIS products and location intelligence solutions to government agencies and enterprises. GISUNI's data products include vector data, raster maps, navigation data and abundant thematic map data that can be fully integrated with DigitalGlobe image data to create solutions for a diverse array of industries.



www.gisuni.com

## DigitalGlobe Meets High Standards

For the 2014 annual update, CSMI issued an RFP requesting the tasking of 6,069 square kilometers. The RFP stated the images must be 50cm True, PAN images should have 0.5m resolution or better, and multispectral data should have 2m resolution or better and consist of at least four bands, red, green, blue and NIR. The request also specified that cloud coverage be less than 15% and the collection angle at zero to 20 degrees.

“After choosing another vendor for the 2013 update and receiving unsatisfactory resampled 50cm images, CSMI demanded the resolution has to be 50cm True,” Qiguang Shang explained. “Most importantly, in order to provide a total integrated solution and add value on top of the images we proposed imagery management tools based on ESRI ArcGIS technologies, giving CSMI the ability to easily search and browse data and share it within the organization.”

## A Complete Imagery Management Solution

With the collection of 6,069 square kilometers of high-resolution imagery in process, GISUNI is poised to deliver CSMI a complete, bundled solution that will give them more powerful planning tools than previously available. GISUNI is working with both DigitalGlobe and ESRI to create an integrated, imagery management solution that provides a detailed view of urban and rural areas, facilitating the municipality’s urban planning goals.

*“Because DigitalGlobe imagery offers the best resolution and the best accuracy at a very competitive price, it is clearly the ideal solution for CSMI. The imagery is easy to process and readily allows us to provide the imagery management tools CSMI is looking for to extend the decision-making capabilities of the geospatial database to everyone who needs it.”*

QIGUANG SHANG, SALES DIRECTOR, BEIJING GISUNI INFORMATION CO., LTD

### INDUSTRIES

- » Urban Planning
- » Survey and Land Management

### USES

- » Urban Geo-database
- » Change Detection
- » Image Management Solution based on ESRI ArcGIS

### PRODUCTS USED

- » 0.5m 4-band data

### Challenge

Develop a flexible solution to ensure the geospatial database of Changchun’s planning department remains current and readily accessible to all departments who need its decision-making data.

### Solution

DigitalGlobe channel partner Beijing Gisuni Information Co. Ltd. tasked 6,069 square kilometers of imagery for the 2014 update and integrated the images with ESRI ArcGIS

### Results

GISUNI was able to create a high-quality integrated imagery management solution that readily provides the browsing and information sharing capabilities its client requires, facilitating urban planning goals.



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