

Connecting Sichuan

A landmark partnership to revitalize communities by transforming healthcare, education, and the workforce



Rebuilding Better, Together

The people of Sichuan suffered great losses when a massive earthquake devastated their province in May 2008. In addition to significant loss of life, the earthquake destroyed many schools and hospitals located in rural, hard to reach areas. Cisco, the Cisco Foundation, and our employees immediately responded by donating more than US\$2.6 million (about RMB 16.8 million) in grants and relief funds. But a longer-term response was needed to restore and revitalize the region. Cisco and the Chinese government saw an opportunity for renewal in the midst of the Sichuan destruction—an opportunity to rebuild better, together.

That vision for a better future resulted in the creation of a unique public-private partnership, a three-year Cisco corporate social responsibility program called Connecting Sichuan.

Connecting Sichuan was designed to systematically transform healthcare, education, and the workforce in the province through the use of information and communications technology (ICT). Never before had the People's Republic of China collaborated with a U.S.-based private sector company to undertake such an ambitious and wide-ranging project. The Connecting Sichuan partnership has been a springboard for innovation and an incubator for the development of sustainable, replicable, and scalable technology models in Sichuan and beyond.



“This remarkable partnership extended to all levels of government and represented a joint effort between Cisco and Sichuan to create healthier, more prosperous communities through the implementation of information and communications technologies. Connecting Sichuan is an inspiring example of how committed, well-managed public-private partnerships can transform economies and lives.”

—John Chambers, Cisco Chairman and CEO

Social Impact at a Glance

Indicator	Description	Metric as of June 2011
Community investment	Counties within Sichuan benefiting from the program	8 out of 10 of the hardest hit counties
Economic investment	Program social investment	US\$50 million
Building capacity through partners	Commercial, NGO, and government partners contributing to the program	40 partners*
21 st century ICT infrastructure	Number of network-enabled healthcare and education institutions	193
21 st century skills development	Investment in professional development and ICT skills	+9,900 healthcare and education professionals trained

* Excludes healthcare organizations and educational institutions

About Sichuan

Long known as China's Province of Abundance, Sichuan is one of the country's major agricultural and manufacturing areas, and is rich in mineral resources. Sichuan's ethnically diverse population of more than 87 million ranges from urban dwellers working in the global economy to farmers living in remote mountain villages.



After 3 years of continuous hard work, the Connecting Sichuan program is now successfully completed with the original goals met and exceeded. As a result of this program, advanced networked infrastructures were built to facilitate the post-quake reconstruction and sustainable development, especially in the areas of education and healthcare. To support ongoing development, a large number of IT professionals were also trained. Connecting Sichuan serves as role model for how a multinational company can successfully participate in post-quake reconstruction.

—Huang Xiaoxiang, Vice Governor of Sichuan



A Commitment to Improve Lives Through Innovation and Collaboration

By bringing together the right people, partners, processes, and technologies, Connecting Sichuan worked to restore and transform vital services in the region. Cisco initially committed US\$45 million (about RMB 292M) in manpower, networking expertise, cash grants, partner services, and equipment donations to the program, while China pledged full cooperation at every level of the public sector.

The Chinese government played a critical role at the provincial, county, and local levels in the execution of the Connecting Sichuan program, including the Central Government; the Ministry of Commerce; China Customs; the Sichuan Provincial Government; and the Sichuan Departments of Commerce, Health, and Education.

From the beginning, the program focused on designing and building models of 21st century healthcare and education delivered through ICT infrastructure, with an emphasis on access, quality, and sustainability. By using technology to connect communities, rural and remote areas in Sichuan gained equal access to higher-quality services in healthcare and education typical in urban areas. The program also focused on ICT skills training to help build a workforce capable of sustaining economic development and competitive advantage.

In addition to Chinese government partners, Cisco also enlisted the aid of U.S. government entities such as the U.S. Agency for International Development (USAID), and the services of many nongovernment and business organizations in China and elsewhere.

Connecting Sichuan projects were designed to align closely with the Chinese government's vision and reform policies. A key element for success was collaborating in innovative ways to generate synergies and pursue common aims. With energy, passion, and commitment, the partners together achieved goals that may not have been attainable otherwise.

Education

102 education organizations technology enabled

135,000 students served in 21st century schools

11,700 teachers supported through curriculum resource centers

Healthcare

66 healthcare organizations technology enabled

60 Million residents' rural cooperative medical insurance records managed

280,000 outpatient visits/month supported

ICT Capacity

25 Cisco Networking Academy sites funded

5,300 students trained with ICT skills

Delivering Holistic and Collaborative Healthcare

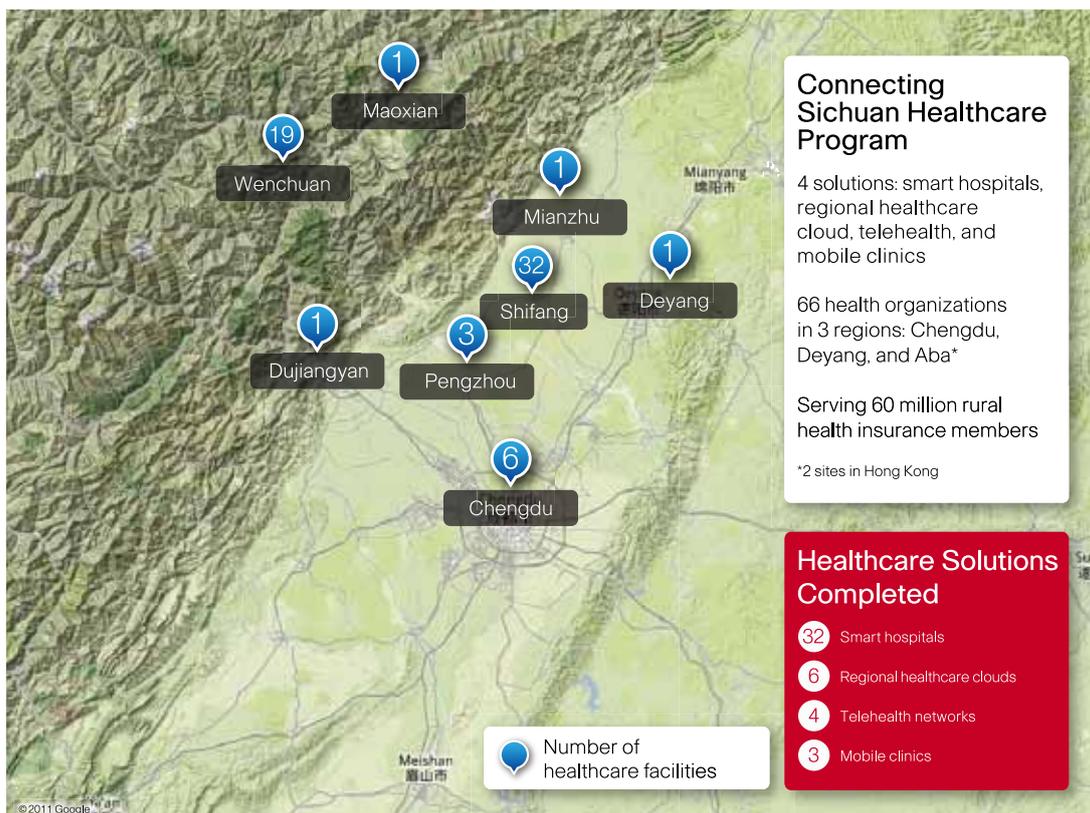
The Sichuan earthquake caused hundreds of thousands of injuries—both physical and psychological, yet treatment options were limited since a significant portion of regional healthcare facilities were destroyed. The disaster put tremendous pressure on a rural healthcare system that already faced challenges in delivering quality care to remote communities.

As the government attended to immediate needs, the Connecting Sichuan partners began to address long-term healthcare issues. These included a shortage of trained practitioners and limited access to affordable, quality care in rural communities. In alignment with the government's Healthy China 2020 reforms, Cisco focused on creating a 21st century medical delivery system that would bridge the gap between urban and rural healthcare with advanced communication and collaboration technologies.



Connecting Sichuan healthcare initiatives were all designed to work in concert with a collaborative delivery network. Unlike traditional delivery models, this multitiered network enables providers throughout the healthcare system to interact and share resources. For example, a remote local clinic can tap into patient records at a centralized data center, a doctor can share x-rays with a colleague thousands of miles away, and a village nurse can connect to specialists and diagnostic resources located at a regional hospital.

The collaborative delivery network promotes a more holistic approach to treating patients, ranging from preventive and wellness care to large-scale public health programs such as epidemic control. It also raises the level of care by enabling medical workers in rural areas to receive professional training and guidance from urban health centers.





Not all injuries inflicted by the Sichuan earthquake were physical. Many people suffered from post-traumatic stress disorder long after the ground stopped shaking. Among the victims was Jia, a Sichuan woman who lost her child to the earthquake and was having difficulty carrying a new pregnancy to term. A telehealth rehabilitation center set up by the partnership came to her aid. Using Cisco TelePresence, a high-definition video conferencing technology, Jia received psychological counseling in a mobile clinic, administered by a therapist located in Hong Kong. She later gave birth to healthy twin girls.

Connecting Sichuan has made infrastructure and technology investments in 66 healthcare organizations, six regional healthcare data centers, two operations centers, an emergency response center, and an ICT training center. Healthcare facilities equipped with Cisco technologies are used by more than 7000 practitioners, supporting approximately 15,000 in-patients and 280,000 out-patients each month. Data centers manage 60 million rural-cooperative medical insurance records and more than 400,000 electronic health records.

Cisco's healthcare investments resulted in the following solutions:

Smart hospitals: We installed high-bandwidth, medical-grade networking equipment in 32 newly built "smart" hospitals and community healthcare centers. Networked applications at these facilities help improve operational efficiency and hospital management. Caregivers, such as floor nurses at central stations, get quick access to patient status information such as laboratory tests and pharmacy services. Electronic health records help ensure continuity of care and reduce medical errors. Automated facilities management makes the buildings more energy efficient.

Regional healthcare cloud: We built data centers and implemented a wide area network, or "cloud," that connects townships and villages in rural areas to full-service hospitals and Department of Health resources across Sichuan. An interconnected collaborative

healthcare hierarchy extends from clinics and service centers up to county hospitals and provincial medical centers, giving patients who reside far from cities ready access to advanced care and treatment options.

Telehealth: Telehealth centers equipped with Cisco TelePresence® video conferencing technology allow doctors to examine and treat patients remotely, making care more timely and reducing travel and medical costs. This technology also enables caregivers to complete network-delivered training sessions.

Mobile clinics: We equipped mobile clinics with medical and networking technologies to enable healthcare service delivery in earthquake-devastated areas and to extend services to less-accessible regions of Sichuan. Networked handheld devices connected to the clinics also support disease surveillance and other ongoing public health operations.

"Our ability to accurately diagnose patients in rural locations is dramatically improved thanks to collaborative healthcare technologies. Remote access to expert care is truly saving lives."

—Dr. Wang Songbai, President, Wenchuan People's Hospital

Advancing Education and Equalizing Opportunities in Rural and Urban Communities

Chinese officials were quick to realize that rebuilding Sichuan would provide an excellent opportunity to transform local schools into models for 21st century education with networked, digitally enabled classrooms. Today, students are more engaged in interactive learning environments, teachers collaborate and mentor more effectively, and high-quality curricula and pedagogy is being developed and shared more quickly and efficiently.

Leveraging ICT technologies, Connecting Sichuan sought to bridge the gap between urban and rural schools and accelerate China's plan for modernizing their education system. Partners were especially focused on improving quality of education for children in the hardest hit rural communities through planning, collaboration, and coordination. These efforts led to the creation of a sustainable model for advancing education based on ICT-enabled multimedia classrooms, connecting urban expertise to rural communities in Sichuan and beyond.

Collaborative teams developed practical, appropriate solution sets that integrated Cisco networking capabilities along with personal computers, projectors, electronic whiteboards, handheld devices, and other classroom learning technologies. These teams built on classroom innovations that had proven successful during previous education-focused corporate social responsibility initiatives. The resulting solutions include the following:

21st century schools: The team designed and implemented 21st century learning prototypes for a

range of urban and rural education settings. More than 1140 multimedia classrooms were installed and 4500 teachers were trained to take advantage of the new environment, an environment capable of transforming the classroom into an intensive interactive learning experience. Access to ICT and Web 2.0 applications gives teachers the power to integrate more creativity into their courses, a good fit for "digital native" learners, and allows them to act as a facilitator or coach by adjusting instruction to suit individual needs. It also allows them to utilize collaborative resources in the cloud to create and share lesson plans and ideas with their peers. Borderless networks now link devices throughout the campuses, enabling teachers, students, and staff to communicate at any time, across any device.

Education cloud: Provincial- and county-level education clouds were established to connect schools with each other and with centralized resources and services. Six curriculum resource centers serve 16 counties in Sichuan, storing online instructional content customized to suit local needs. The cloud also enables teachers to download training materials and to collaborate with peers via a professional development network that includes 26 education sites utilizing Cisco TelePresence technology, putting teachers in close contact with mentors and senior educators.

Opening a Window to the Future

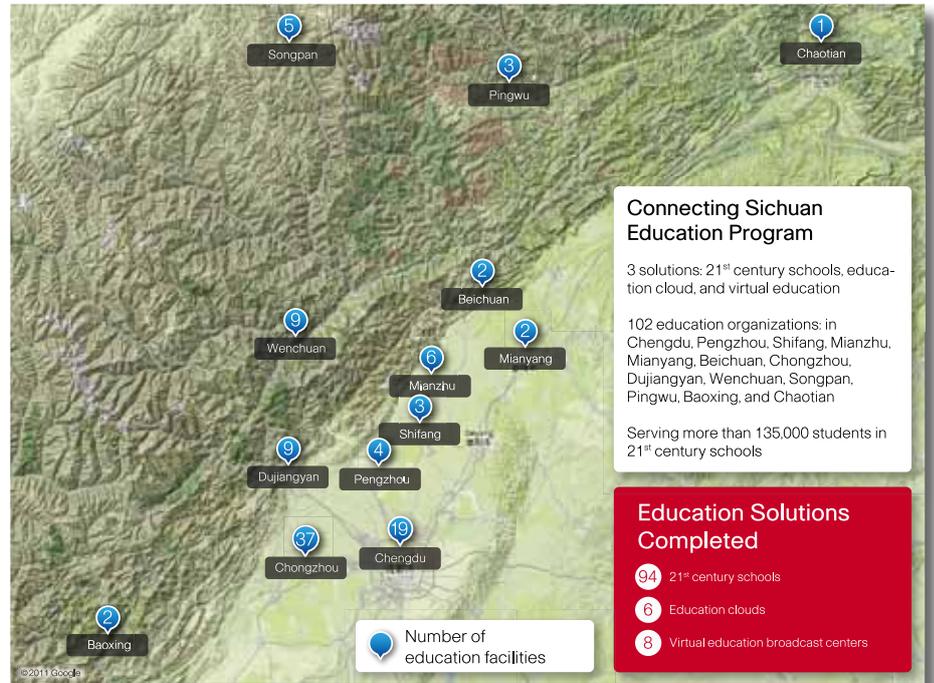
When the Connecting Sichuan team brought 21st century educational technology to Qingchengshan High School in Dujiangyan, Han Yu, an IT instructor, was delighted. "The new technology improved the way teachers teach, students learn, and administrators manage," she explains. "We increased our knowledge and class capacity, and our students are learning more effectively and efficiently. We also have a platform to share information with our colleagues."

The new learning environment inspired Han to design her own instructional courseware. The results were impressive. She was named a champion in the 2009 National Teaching New Media Courseware Contest, the only contestant in the region to receive that honor.

"I really appreciate not only the facilities and equipment, but also the partners' commitment and dedication," Han says. "They have influenced my way of working and my passion for teaching. A window opened for us here. Now we can see the sky and the future."



Virtual education: A chief objective of Connecting Sichuan is to help improve the quality of education in rural schools. Rural students can now receive instruction from expert teachers in city centers by attending virtual classes delivered over the network. For example, a rural school without an English teacher can now take advantage of English lessons broadcast from an urban school. Rural teachers also benefit from their exposure to the master instructors who teach these virtual classes.



Advantages of a Connected Classroom

In a connected classroom, instructors can leverage collaboration technology to develop their professional expertise and access the vast pedagogical resources available in the global learning community.

According to a study conducted by Sichuan Normal University, the Connecting Sichuan schools realized benefits beyond simple hardware improvements. Study findings noted that teachers do a better job of teaching, and students and teachers take more pride in their schools. Student performance also improved and students reported feeling a closer connection to the world around them and having greater interest in their communities and social institutions.

“We believe education needs to change for the 21st century. By shifting our focus toward collaboration technologies, we can dramatically improve learning and professional development without regard to physical boundaries.”

—Amy Christen, VP of Corporate Affairs, Cisco

“If you want one year of prosperity, grow grain. If you want 10 years of prosperity, grow trees. If you want 100 years of prosperity, grow people.”

—Ancient Chinese Proverb



Looking Forward, A Commitment to Collaboration

Although the program's three-year tenure has come to an end, the momentum—and Cisco's commitment to supporting the people of China and Sichuan—continue.

The partners helped ensure program continuity by implementing solutions that can be reproduced and adopted easily elsewhere. We also established ongoing, collaborative plans for support that involved government institutions and local leaders, with a focus on long-term impact and lasting change.

We also helped ensure continuity by:

- Encouraging Cisco employees to support programs through volunteerism and the China Civic Council
- Promoting Networking Academy courses to increase enrollment and ICT skills development
- Providing comprehensive solution guides to help transfer technologies and knowledge to other regions

- Establishing technical and leadership training programs, with a central leadership program at Peking University

The spirit that animated Connecting Sichuan is still being nurtured by many who brought the projects to fruition—medical practitioners and educators, government representatives, Cisco employees, NGOs, Networking Academy staff, volunteers, and leadership teams. They are all committed to helping ensure that solutions established through this transformative partnership continue to support the prosperity and well-being of the Chinese people.

We thank the people of Sichuan for their generosity and perseverance throughout the partnership. And we thank all the Chinese officials involved for their uncompromising vision and collaborative support.

Contributions from the Heart

Giving back to the community is a core Cisco value. Individual employees, Cisco Civic Councils, and other employee groups made significant contributions to Sichuan disaster relief and rebuilding, and more than 75 percent of Cisco's China-based employees donated time and financial resources.

Examples of compassion and generosity from Cisco Civic Councils, Cisco employees, and our partners include the following:

- Raising money to provide warm winter clothing, blankets, coats, and school supplies for students from disadvantaged families
- Organizing and funding a sightseeing trip for disabled students at Youai School, who were otherwise unable to leave campus
- Raising money to provide heaters for maternity wards in 13 township hospitals in Wenchuan
- Providing funds for the boarding and living expenses of 50 students enrolled in the Beichuan Middle School's advanced "pearl class" program
- Hosting a Mother's Day event over Cisco TelePresence that reunited Sichuan mothers with their children studying outside the province
- Organizing train-the-trainer workshops to provide counseling to teachers from Dujiangyan

The Cisco Foundation supports programs throughout the world that deliver long-lasting socioeconomic benefits. Immediately after the earthquake, the foundation provided grants to the American Red Cross in support of the Red Cross Society of China. Over the past three years, the foundation has contributed more than US\$800,000 (RMB 5.4 million) in grants to aid some of the hardest-hit communities in Sichuan. In addition, the foundation multiplies Cisco employees' giving with a matching gifts program.



Connecting Sichuan Partners

Connecting Sichuan would not have been possible without the combined resources and expertise of our partner organizations, including the following:

Chinese Government

Sichuan Provincial Government
Sichuan Department of Commerce
Sichuan Department of Health
Sichuan Department of Education
Sichuan Department of Information Industry (Health and Education)
Chengdu Customs
Hong Kong Economic and Trade Office in Chengdu
Government of the Hong Kong Special Administrative Region

US Government

United States Agency of International Development

Marketing and Operations

Beijing D & S Interactive Advertising Co., Ltd.
Beijing Fenggepiaochong Advertising Co., Ltd.
Expeditors Hong Kong Limited, Ltd.
Give2Asia (NGO)
Beijing Ogilvy & Mather Interactive Marketing Co., Ltd.
Walker
YongHua Technology Co., Ltd.

Healthcare

Chinese Center for Disease Control and Prevention
CNA China Co., Ltd.
ECCOM Network System Co., Ltd.
Health For All By All (NGO)

Hinacom Software
Sichuan Provincial Health Information Center
SkyVio Technology
StandTall (NGO)
The Youth Foundation (NGO)
WAFER Systems
West China Public Medical Information Services

Education

Beijing Aclass Technology, Ltd.
Beijing Huaxia Depu Sci-Tech Development Co., Ltd.
Beijing iMachines Technology Co., Ltd.
Beijing Really Sun Co., Ltd.
Beijing Sino Bridge Technology, Ltd.
Chengdu Eastedu Science & Technology, Ltd.
Chengdu QinZhi Digital Science & Technology Co., Ltd.
China Telecom Group Sichuan Corporation
Digital Opportunity Trust (NGO)
ECCOM Network System Co., Ltd.
Jetwind Development, Ltd.
North 22 Solutions, Ltd.
Promethean
Shanghai Jingcheng High-Tech Development Co., Ltd.
Shanghai Jingyi Industry Co., Ltd.
Total Streamingmedia Solution Co., Ltd.



Connecting Sichuan Site List

Below are the healthcare and education organizations implementing ICT solutions through the Connecting Sichuan program. Only the Cisco Networking Academy sites funded through Connecting Sichuan are listed here. Twenty-six additional academies in Sichuan were funded through other programs since 2008.

Healthcare Sites

Sichuan Provincial Department of Health
Sichuan Provincial People's Hospital
Huaxi (West China) Hospital
Hong Kong Prince of Wales Hospital
Hong Kong Youth Foundation

Chengdu Health Bureau
Chengdu Women's and Children's Medical Center
Chengdu Public Health Center
Dujiangyan Women's and Children's Hospital
Pengzhou People's Hospital
Pengzhou Traditional Chinese Medicine Hospital
Pengzhou Women's & Children's Hospital

Deyang Health Bureau
Shifang Health Bureau
Shifang People's Hospital
Shifang Traditional Chinese Medicine Hospital
Shifang Women's and Children's Hospital
Shifang No. 2 People's Hospital
Shifang No. 3 People's Hospital
Shifang No. 4 People's Hospital
Shifang Burns Hospital
Shifang Dermatitis Prevention Hospital
Shifang Yan Chai Hospital
Shifang Center for Disease Prevention and Control
Shifang Health Law Enforcement Authority
Shifang Health School
Shifang Schistosomiasis Prevention and Control Center
Shifang Bingchuan Township Health Center
Shifang Fangting Community Health Center
Shifang HeFeng Township Health Center
Shifang Hongbai Township Health Center
Shifang Huilan Township Health Center
Shifang Jiandi Township Health Center
Shifang Limin Road Community Health Center
Shifang Lingjie Township Health Center
Shifang Luoshui Township Health Center
Shifang Majing Township Health Center
Shifang Mazu Township Health Center
Shifang Nanquan Township Health Center
Shifang Shigu Township Health Center
Shifang Shuangsheng Township Health Center
Shifang Yinfeng Township Health Center
Shifang Yinghua Township Health Center
Shifang Yuanshi Township Health Center
Shifang Zaojiao Township Health Center

Wenchuan Health Bureau
Wenchuan People's Hospital
Wenchuan Traditional Chinese Medicine (TCM) Hospital
Wenchuan Women's and Children's Hospital

Wenchuan Center for Disease Prevention and Control (CDC)
Wenchuan Caopo Township Health Center
Wenchuan Gengda Township Health Center
Wenchuan Keku Township Health Center
Wenchuan Longxi Township Health Center
Wenchuan Miansi Township Health Center
Wenchuan Sanjiang Township Health Center
Wenchuan Shuimo Township Health Center
Wenchuan Qiang Orthopedics Hospital
Wenchuan Qipangou Community Health Center
Wenchuan Wolong Township Health Center
Wenchuan Xuankou Township Health Center
Wenchuan Yanmen Township Health Center
Wenchuan Yingxiu Township Health Center
Wenchuan Yinxing Township Health Center

Mianzhu People's Hospital
Miaoxian People's Hospital

Education Sites

Chengdu No. 7 High School
Chengdu No. 4 High School
Chengdu No. 9 High School
Chengdu No. 7 Middle School
Chengdu YanDaoJie Primary School
High School Affiliated to Sichuan Normal University
Middle School Affiliated to Sichuan Normal University
Chengdu YanDaoJie Middle School
Primary School Affiliated to Chengdu Normal College
TianYaShi Primary School
Chengdu TianJiaBing Middle School
Chengdu No. 7 YuCai Middle School XueDao Branch
Foreign Language School Affiliated to Sichuan Normal University
ShiShi Lian Zhong Middle School
Dujiangyan High School
Dujiangyan YouAi School
Dujiangyan JuYuan Middle School
Dujiangyan QingChengShan High School
Dujiangyan Foreign Language Experimental School
Dujiangyan XinJian Primary School
Dujiangyan BeiJie Foreign Language School
Chongzhou HuaiYuan Secondary School
Chongzhou Vocational School
Chongzhou Vocational School ShangYuan Campus
Chongqing High School
ShuCheng High School
XingZhi Middle School
Experimental School
BaiLi Middle School
LongXing Middle School
JiangYuan Middle School
SanJiang Middle School
BaiTou Middle School

LiaoJia Middle School
YuanTong Middle School
XiJiang Nine-year School
JiZi Middle School
QiQuanSiYuan Nine-year School
DaoMing Nine-year School
YangMa Nine-year School
SanLang Nine-year School
ChenJuLu Primary School
Experimental Primary School
ShuNan Primary School
XueFuJie Primary School
ShangYuan Primary School
YuanTong Primary School
HuaiYuan Primary School
LongXing Primary School
AnFu Primary School
DaHua Primary School
JiangYuan Primary School
SanJiang Primary School
TingJiang Primary School
ChongPing Primary School
LiaoJia Primary School
ZiTong Primary School
Pengzhou Vocational School
Pengzhou ShiShi BaiMa Secondary School
Pengzhou TongJi JinGuang Middle School
Pengzhou TongJi LanTian Primary School

ZunDao School
Mianzhu High School
Mianzhu NanXuan High School
Mianzhu JiuLong Primary School
Mianzhu HanWang Middle School
Shifang Secondary School
Shifang Foreign Language School

Beichuan High School
Beichuan XiYuan Middle School
Pingwu High School
Pingwu NanBa Middle School
Pingwu PingTong Primary School

Songpan MinJiang Primary School
Songpan ChuanZhuSi Primary School
Songpan ZangWen Middle School
Songpan High School
Wenchuan YanMen Primary School
Wenchuan No. 1 Primary School
Wenchuan No. 2 Primary School
Wenchuan No. 1 Secondary School
Wenchuan Special School
Yingxiu Secondary School
Yingxiu Primary School

Guangyuan ChaoTian Primary School
Baoxing FuXing Hope School
Baoxing Secondary School

Aba Teacher's College Temporary Campus
Aba Teacher's College Shuimo Campus
Chengdu Radio and TV University

Chengdu Neusoft University
Dujiangyan Administrative Management College
Chengdu Radio and TV University WenJiang Campus
Southwest University of Science & Technology
Mianyang Normal College

Songpan Educational Bureau Resource Centre
Sichuan Department of Education Data Centre
Chengdu Education Bureau Resource Centre
Shifang Education Research Bureau
Mianzhu Education Bureau Resource Centre
Chengdu JingJiang Education Bureau
Chongzhou Education Bureau

Networking Academy Sites (funded through Connecting Sichuan)

Aba Teacher's College
Chengdu Aeronautic Vocational and Technical College
Chengdu Electromechanical College
Chengdu Textile College
Chengdu University
Chengdu University of TCM
Chengdu Vocational & Technical College
Guangan Vocational and Technical College
Leshan Normal University
Mianyang Vocational and Technical College
Sichuan Areospace College of Vocational Technology
Sichuan College of Architectural Technology
Sichuan Engineering Technical College
Sichuan Information Technology College
Sichuan Normal University Chengdu College
Sichuan Post and Telecommunication College
Sichuan University of Arts and Science
Sichuan University Jingjiang College
Sichuan University of Science and Engineering
Sichuan Vocational and Technical College of Communications
Southwest Petroleum University
Southwest University of Science & Technology
Xihua University
Yaan Vocational College
Yibin Vocational and Technical College

About Cisco Corporate Social Responsibility

Cisco is the world leader in networking and Internet technologies that transform how people connect, communicate, and collaborate. Cisco's corporate social responsibility policies are designed with the goal of creating long-term, sustainable benefits for our business and the global community. We apply the principles of sustainability and our core business processes to all aspects of social responsibility, including our environmental efforts, social investments, corporate governance, and employee volunteering programs.

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For information about Cisco corporate social responsibility, visit www.cisco.com/go/csr

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