

# New Neighbors

## Chinese Investment in the United States by Congressional District

A Report by the National Committee on US-China Relations  
and Rhodium Group

May 2015



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*[www.ncuscr.org/fdi](http://www.ncuscr.org/fdi)*

# About this Report

## About the National Committee on US-China Relations

The National Committee on United States-China Relations is a private, nonpartisan, American non-profit organization that promotes understanding and cooperation between the United States and Greater China in the belief that sound and productive Sino-American relations serve vital American and world interests. Since its founding in 1966, the Committee has created opportunities for informed discussion and reasoned debate about issues of common interest and concern to the United States, Mainland China, Hong Kong and Taiwan. It currently organizes programs for private and public sector participants on politics and security, governance and civil society, economics and finance, education, and transnational issues such as energy and environment. It carries out its mission via conferences and forums, public education programs, professional exchanges and collaborative projects.

## About Rhodium Group

Rhodium Group (RHG) is an economic research firm that combines policy experience, quantitative economic tools and on-the-ground research to analyze disruptive global trends. It supports the investment management, strategic planning and policy needs of clients in the financial, corporate, non-profit, and government sectors. RHG has offices in New York, California and Washington, and associates in Shanghai and New Delhi. RHG's cross-border investment practice analyzes the rise of China and other emerging markets as trans-national investors. RHG senior staffs publish frequently on the growth and impact of Chinese outbound FDI in the United States, and maintain the China Investment Monitor, a unique database tracking Chinese investment in the US economy.

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# Contents

Foreword .....	5
Executive Summary .....	6
1. Introduction .....	9
2. Mapping Chinese FDI across the US .....	11
2.1 The Northeast .....	12
2.2 The Midwest .....	21
2.3 The South .....	34
2.4 The West .....	47
3. Assessment of Local Impacts .....	55
3.1 Investment .....	55
3.2 Employment .....	57
3.3 Innovation and Specialization .....	59
3.4 Linkages and Exports .....	61
4. Conclusions and Outlook .....	62
References .....	64
Data Appendix .....	66



# Foreword

A few months after the United States and China established diplomatic relations in 1979, I left the U.S. State Department – where I had worked on that breakthrough – and moved to Beijing. I spent the next few years representing, as a young lawyer, the first wave of foreign investors in China.

In those initial years of reform and opening, I learned that investing brings people together more than any other kind of business activity. You don't just sell a product and go home. Investment is like marriage: you propose, get married, and do your best to make it work no matter what the difficulties. Good investments are typically measured in years, or even decades. They are long-term commitments for both parties.

Those early investments by U.S. companies were the first exposure for many Chinese to American culture, business, history and traditions. My Chinese counterparts seemed as interested in learning about life in America as in the potential return on investment. Our daily lunches and dinners together were lively exchanges where I learned about China and they learned about the United States. This was true for many of those who went to China to make investments over the years. As a community, we have played a crucial role in building constructive relations between our two countries.

Today, the Sino-American relationship is at another inflection point with a wave of Chinese foreign direct investment (FDI) coming to the United States. Since 2000, Chinese FDI has grown rapidly, reaching nearly \$12 billion in 2014 alone. Chinese firms are engaged in areas as varied as construction, energy, entertainment, auto parts, chemicals, real estate, medical equipment, telecommunications and sportswear. Whether a new facility or the acquisition of an existing one, these local operations pay local, state, and federal taxes, provide jobs, push innovation, build trade linkages, and, in the process, touch and improve the lives of countless Americans. Just as we did 35 years ago, the Chinese and Americans involved in these investments are learning about each other, making contacts, and creating a new pillar for a more productive U.S.-China relationship.

The early results have often been transformative. A \$100 million copper plant near Thomasville, Alabama, where unemployment rates were among the highest in the state, has revived the surrounding area. “The Golden

Dragon Precise Copper Group currently employs over 200 people and is in the process of hiring an additional 110, lifting many families off of government assistance and changing the fabric of our community,” said Thomasville Mayor Sheldon Day, adding that a further expansion would eventually lead to as many as 500 total jobs. Fuyao Glass, which last year bought an idle General Motors plant outside Dayton, Ohio, promises to invest hundreds of millions and bring more than 1,500 jobs to the economically depressed area in the coming years.

And the job numbers don't stop there. These investments support construction jobs to build or re-tool the facilities, jobs at vendors in the supply chain, jobs at neighborhood businesses that benefit from a better local economy. While this report doesn't capture either these indirect jobs or any part-time positions at the firms themselves, if it did, we know that the total number of jobs provided would be greatly multiplied.

For almost fifty years, the National Committee on United States-China Relations has been building constructive relations between our two countries. We undertook this study, *New Neighbors*, in the belief that American citizens and leaders, at the national, regional, and local levels, all need to better understand the impact of Chinese investments in the United States.

With the report's release, American policymakers and the general public have a new window on the local realities of Chinese investment in the United States. *New Neighbors* offers, for the first time, a full estimation of the local investment, operations, and employment effects of Chinese FDI. As of today, Chinese firms directly employ more than 80,000 Americans across the country, and that number is poised to quadruple over the next five years. The personal relationships that develop and the understanding that each side derives from these investments help foster a more peaceful and prosperous Asia-Pacific region. Just as when American investors first went to China, peace and prosperity are enhanced when Chinese investors create jobs, improve infrastructure, and work side by side with Americans to build a better America, and a better world.

## Stephen A. Orlins

President, National Committee on United States-China Relations

# Executive Summary

Foreign direct investment (FDI) is a vital component of the United States economy today and has been throughout the nation’s history. Investors from abroad are a source of growth, employment, competitiveness, and innovation, and their presence is living proof of America’s commitment to openness, market competition, and putting the interests of consumers above the welfare of corporations.

Companies from China have not historically played a direct role in the US economy, and FDI was largely a one-way street from the US to China from the 1980s to the 2000s. In recent years, however, Chinese FDI into the US has taken off, bringing a growing number of firms from China face-to-face with US communities; new corporate neighbors are moving in.

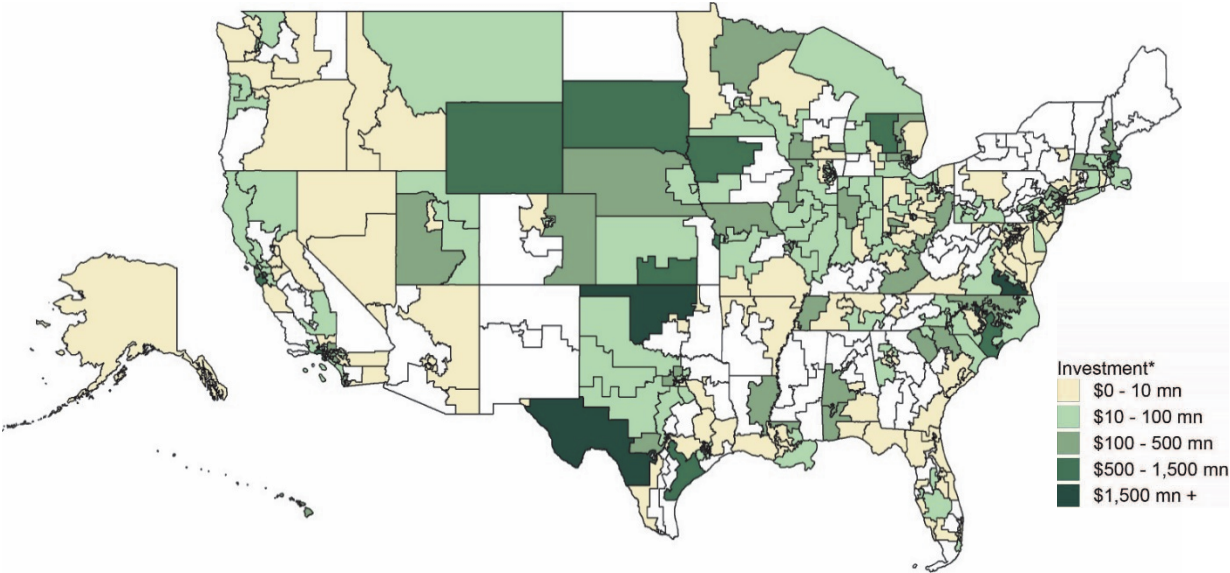
This report details – for the first time – Chinese commercial investment in the US down to the congressional district level, using a unique dataset in development since 2009. With that granular information

the report describes the picture so far in terms of investment value, operations, and associated employment.

The key findings are:

**(1) The recent wave of Chinese FDI has brought new Chinese neighbors to towns across America:** From 2000 to 2014, Chinese firms spent nearly \$46 billion on new establishments and acquisitions in the US, most of it in the past five years. As of the end of 2014, we count 1,583 establishments by Chinese firms in the US, stretching across all regions of the country. Importantly, while investments in perceived trophy assets such as the Waldorf Astoria Hotel dominate the headlines, Chinese firms are clearly interested in the value of American workers and manufacturing in some of the areas with the lowest per capita incomes in the United States as well. The benefits of Chinese capital are distributed nationwide, not just in high-income parts of the country.

**Figure E.1: Chinese FDI in the US by Congressional District**  
Color indicates cumulative investment 2000-2014



Source: Rhodium Group. \*Cumulative Value of Chinese FDI Transactions, 2000-2014. See Data Appendix for more details.



**(2) Local economies benefit from greater levels of investment:** The biggest recipients in terms of cumulative investment from 2000-2014 were districts in North Carolina, Illinois, New York, Virginia, and Texas. While acquisitions (which account for the majority of investment) mostly represent change in ownership, many Chinese takeovers have generated local investment as the new owners have saved firms from bankruptcy and provided new financing lines. In most cases, acquisitions have led to expansions, and examples of downsizing are rare. Greenfield projects have already generated billions in local investment and investments in big manufacturing and service sector projects have accelerated significantly in the past 18 months.

**Table E.1: Top 15 Recipient Districts of Chinese FDI in the US**

District	Investment (\$ million)	Metro Area	Representative
NC-04	3,360	Raleigh-Durham Triangle	David Price
IL-07	3,210	Chicago	Danny K. Davis
NY-12	2,250	New York City	Carolyn Maloney
VA-04	1,980	Eastern Virginia	J. Randy Forbes
TX-07	1,780	Houston	John Culberson
TX-23	1,640	SW Texas	Will Hurd
OK-03	1,580	NW Oklahoma	Frank Lucas
KS-03	1,380	Kansas City	Kevin Yoder
MA-06	1,270	NE Massachusetts	Seth Moulton
NC-07	1,250	Southern NC	David Rouzer
CA-17	1,040	San Jose	Mike Honda
CA-12	1,020	San Francisco	Nancy Pelosi
TX-27	920	Corpus Christi	Blake Farenthold
NY-10	920	New York City	Jerrold Nadler
IA-04	870	NW Iowa	Steve King

Source: Rhodium Group. See Data Appendix for more details.

**(3) Chinese-affiliated companies now directly employ more than 80,000 Americans:** The recent US expansion of Chinese companies means more than 80,000 Americans are on Chinese company payrolls, up from fewer than 15,000 five years ago. These figures do not include indirect employment during construction or at suppliers, which would add tens of thousands of additional jobs. The top districts in terms of jobs are home to Chinese-affiliated companies in manufacturing and services sectors, which have higher employment intensity than energy or real estate investments. Fears that Chinese acquirers could systematically move acquired assets and related jobs back to China have not materialized. Instead, new Chinese owners have, in most cases, sustained and expanded local employment after they acquired US assets. Job creation through greenfield

FDI is approaching the 10,000 mark, with significant further growth imminent from projects already in the pipeline.

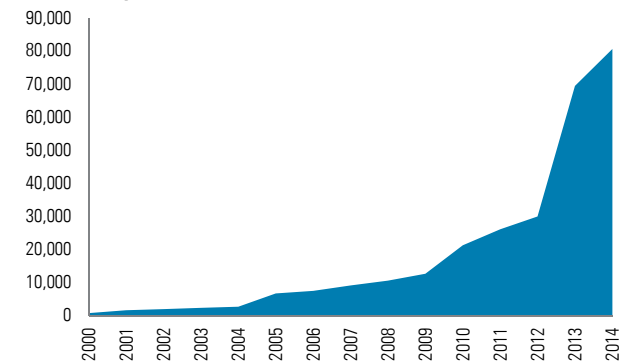
**Table E.2: Top 15 Districts in Terms of Direct Jobs Provision by Chinese Companies in the US**

District	Jobs	Metro Area	Representative
NC-07	7,640	Southern NC	David Rouzer
MI-05	5,230	Central Michigan	Dan Kildee
NC-04	4,120	Raleigh-Durham Triangle	David Price
VA-04	3,800	Eastern Virginia	J. Randy Forbes
SD-01	3,400	South Dakota at-large	Kristi Noem
IA-04	3,290	NW Iowa	Steve King
MO-06	3,190	Northern Missouri	Sam Graves
NE-03	2,280	Western and Central NE	Adrian Smith
IL-07	2,110	Chicago	Danny K. Davis
IL-17	1,710	NW Illinois	Cheri Bustos
CA-17	1,450	San Jose	Mike Honda
KY-05	1,220	Eastern Kentucky	Hal Rogers
CA-12	1,110	San Francisco	Nancy Pelosi
NY-12	1,100	New York City	Carolyn Maloney
CA-33	1,100	Los Angeles	Ted Lieu

Source: Rhodium Group. See Data Appendix for more details.

**Figure E.2: Employment Provided by Chinese Companies in the US**

Number of full-time jobs directly provided by US subsidiaries of Chinese companies



Source: Rhodium Group. See Data Appendix for more details.

**(4) Chinese companies are contributors to American innovation and competitiveness:** There is no evidence that Chinese investors are moving high value-added activities back to China. Instead, US innovation clusters, strong protection of intellectual property rights, and the talent pool are major draws for Chinese companies, which now spend hundreds of millions of dollars every year on research and development activities in the US. Chinese companies also contribute to the training of

local workers, and technology investors such as Tencent and Alibaba have emerged as important sources of capital for startups and early stage growth companies.

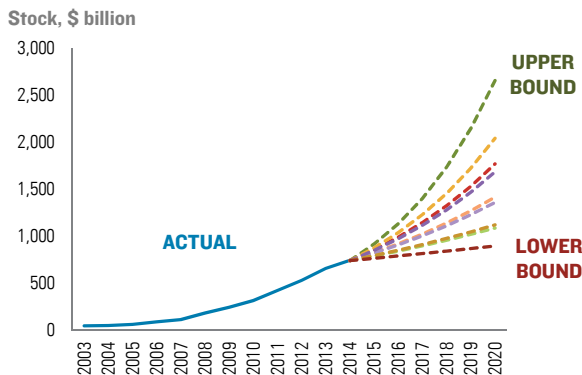
**Table E.3: Chinese-owned Companies with R&D Operations in the US**

Company	Location
A123 Systems	Massachusetts, Michigan
Baidu	California
Changan Automobile	Michigan
Cryptic Studios	California
Epic Games	North Carolina
Huawei	California
Lenovo	North Carolina
MiaSole	California
Riot Games	California
Suning Commerce	California
WuXi AppTec	Pennsylvania

Source: Rhodium Group

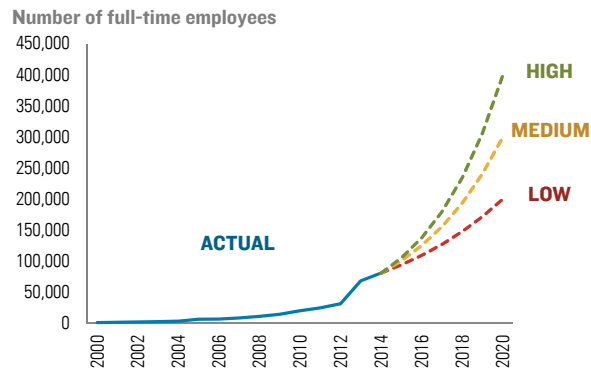
**(5) FDI can be a catalyst for greater exports of “Made in the US” goods and services to China:** Growing investment creates important linkages which can help local economies reach the Chinese market with their goods and services. There are already many success stories in advanced manufacturing and consumer goods and there is tremendous potential to expand US exports in those categories and new areas such as agriculture and food. FDI from China can also help to facilitate the export of US services – including entertainment, hospitality, and financial and business services – to Chinese consumers.

**Figure E.3: Projections for China’s Global Outbound FDI in 2020\***



Source: Rhodium Group. \*See page 62 for more details.

**Figure E.4: Projections for Employment at Chinese-affiliated Companies in the US to 2020\***



Source: Rhodium Group. \*Projections are based on three different scenarios for cumulative Chinese investment in the US in 2020 (\$100, \$150, \$200 billion) and the current employment intensity of investment.

**(6) Much is still to come:** Chinese FDI is only at the initial stage Japanese firms reached in the 1980s, and there is tremendous growth potential for Chinese investment, job creation, and other benefits. If the US continues to be a major recipient of China’s booming outward investment, it could receive between \$100-200 billion of investment by 2020. Based on past employment intensity, this would increase the number of full-time US jobs provided by Chinese US affiliates to somewhere between 200,000 and 400,000.

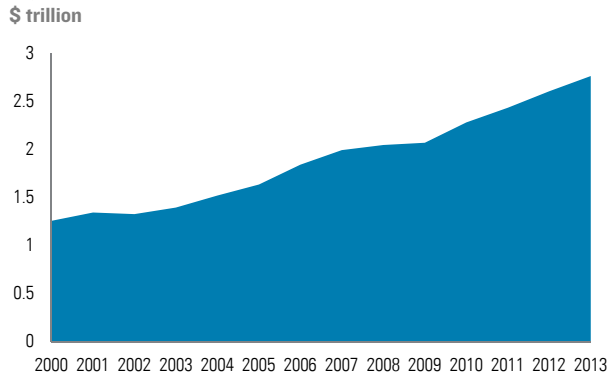
**(7) Greater Chinese FDI marks a new chapter in US-China economic relations:** Growing outbound FDI is a major channel through which the changes in the Chinese economic model will be felt in the US economy. Higher levels of investment mark the beginning of an era of US-China economic engagement that brings a wider array of mutual benefits rather than a limited set of winners and losers, as arose from the deepening of goods trade of the past two decades.

**(8) From local impacts to national interest:** The United States is competing with dozens of other attractive economies including Europe, Australia, Canada, and Brazil for these new capital flows. Recent years have seen greatly stepped-up local-level effort by mayors, governors, and other local officials to attract these new investors to the neighborhood. Greater awareness of the local benefits from Chinese investment should help to sustain recent progress in aligning local opportunities and national interests so the US will be successful in that competition.

# 1. Introduction

Foreign direct investment has been a critical component of the US economy throughout its history.<sup>1</sup> The US was by far the largest recipient of foreign investment globally for the past 50 years, with an inward FDI stock of around \$2.8 trillion at the end of 2013 (Figure 1.1).

**Figure 1.1: FDI Stock in the US Economy, 2000-2013**



Source: Bureau of Economic Analysis.

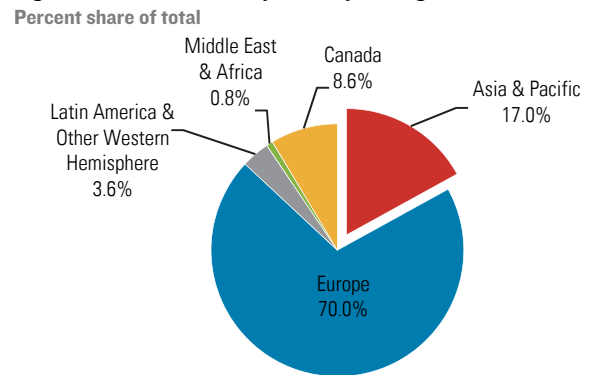
The exceptional openness to FDI in the United States is anchored in the strong belief that FDI is a critical source of growth, innovation, and long-term competitiveness for the nation. There is vast academic literature on the benefits derived from FDI, including greater competition, lower consumer prices, more efficient integration in global value chains, and greater specialization effects.<sup>2</sup> These benefits are generally accepted to exceed the known risks of FDI (such as national security or competition policy concerns), which is why the US and most other developed economies have well-established open FDI policies.

From the local perspective foreign firms have become critical contributors to many communities across the United States. Most visibly, these investments create and sustain much needed jobs, providing paychecks for millions of families. Foreign firms can also become important drivers of local innovation and competitive strength, through research and development spending in high-tech clusters such as Silicon Valley, but also through the basic training of workers related to auto

plants and other manufacturing operations. Finally, foreign direct investment is a critical driver of trade and most importantly often creates the necessary linkages to facilitate the export of local products to overseas markets.

Historically, most of the FDI stock in the United States originated in Europe. The United Kingdom, Germany, France, and other European nations accounted for more than two-thirds of the total FDI stock in the US as of 2013 (Figure 1.2). As a neighboring country with close economic ties, Canada naturally accounts for a very significant 8.6%.

**Figure 1.2: US FDI Stock by Country of Origin, 2013**



Source: Bureau of Economic Analysis.

Investors from Asia and the Pacific now account for 17%, largely due to the expansion of Japanese firms in the US economy since the 1980s. Despite initial resistance the growth of Japanese FDI has yielded tremendous benefits for the US economy and local communities: Toyota, Sony, and other Japanese firms now employ more than 700,000 American workers; spend \$6.2 billion every year on research and development locally; and account for \$69 billion worth of US exports.<sup>3</sup>

China, Asia's largest economy, barely registered as an investor in the US economy until recently. By 2012, China accounted for only 0.3% of the US FDI stock, vastly underperforming compared to its role in the global

<sup>1</sup> See Wilkins (1989 and 2004).

<sup>2</sup> See Dunning and Lundan (2008); Graham and Krugman (1995); and Moran and Oldenski (2013).

<sup>3</sup> From BEA's data set on Operations of Foreign Affiliates in the U.S., 2012 or latest available year.

economy and the size of US-China trade flows. However, in the past few years China has become one of the fastest growing sources of FDI for the United States, as Chinese companies have begun to expand into the US market. From 2000 to 2014, Chinese firms invested a combined \$46 billion in greenfield establishments and acquisitions in the US, the bulk of it in the past five years.<sup>4</sup>

This surge has already resulted in Chinese presence in a large number of American communities. However, gaps and long delays in official government data reporting prevent a timely assessment of this widening Chinese footprint. Most importantly, the current data situation does not permit a granular analysis of the impacts of Chinese FDI on those communities and the US economy as a whole.

While there is broad agreement about the positive effects of foreign investment in general, American officials and the general public remain wary of the impact of investment from China. China's economic and political systems still differ greatly from the realities in advanced economies, which account for more than 80% of the current US FDI stock. Moreover, economic engagement with China over the past two decades has been a mixed experience, often bringing painful adjustment pressures to affected industry clusters and their communities. Job losses related to the outsourcing of manufacturing activity counteracted the benefits of lower cost goods. Many Americans are understandably apprehensive about the impact of Chinese capital investment.

This combination of basic skepticism and a lack of clear data have produced a US debate on Chinese investment dominated by anxieties and misgivings, particularly the need to mitigate security and economic concerns. In short, the US has been playing defense despite being the globe's largest economy and the home of the world's most innovative companies. Members of Congress have been particularly vocal in opposition to a range of investments from China in recent years, including the aborted offering for California oil company Unocal in 2005, Wanxiang's bid for the assets of bankrupt battery

maker A123, and Shuanghui's acquisition of pork producer Smithfield Foods in 2013.

This study offers the detailed data on the US expansion of Chinese firms that has been missing. It includes an assessment of impacts on local communities, with a particular focus on associated jobs. This study in no way dismisses the need to screen for legitimate concerns about security and the national interest as they relate to investment from China – which are important and well-analyzed elsewhere<sup>5</sup> – but rather supplements that element of the conversation with objective analysis of the local impacts. That analysis has been largely unavailable on a systematic basis until now.

By adding this profile of FDI at the congressional district level, this report aims at contributing to a more balanced debate about the risks *and* benefits of Chinese investment, on Capitol Hill and elsewhere. A granular perspective on local investment trends enables members of Congress, governors, and mayors to better understand the location choices and needs of Chinese investors, which will help them in formulating strategies to attract Chinese companies to their communities. American localities are now in competition with officials around the world who are just as eager to bring economic growth and development to their constituents.

The next section of the report introduces the dataset used for this report and presents detailed snapshots on the presence of Chinese companies in each of the 50 US states broken down to the congressional district level, including estimates for investment, operations, and employment. The following section synthesizes these local profiles into an assessment of impacts considering investment, employment, innovation, and trade linkages. The concluding section provides an outlook for the future and puts the findings of the report in the context of broader US-China economic engagement and overall bilateral relations. The Data Appendix offers more information and context on the dataset used for this report.

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<sup>4</sup> This number refers to the gross value of Chinese FDI transactions, which is a different metric than the FDI stock in Figure 1.2. See Appendix for more details.

<sup>5</sup> See Rosen and Hanemann (2011)

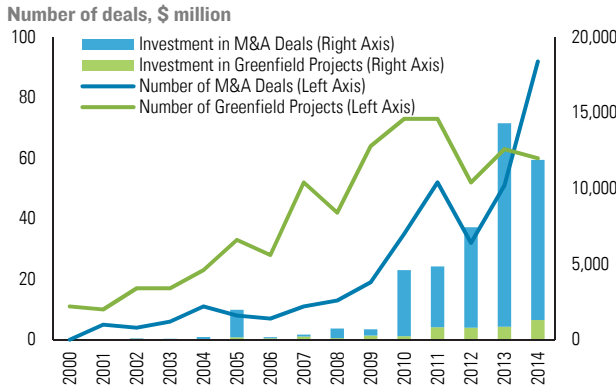
## 2. Mapping Chinese FDI across the US

Tracking the presence of Chinese companies in the US economy is a challenging task. The surge in Chinese investment is barely five years old, and official federal and state-level data do not provide sufficient information to assess investment patterns on a timely basis.

In order to provide a transparent tool for following the patterns of Chinese investment in the US, Rhodium Group maintains a dataset that tracks Chinese FDI transactions in the United States since 2000. The China Investment Monitor (CIM) dataset covers greenfield projects (newly built projects such as factories, warehouses or offices), acquisitions of existing US assets and stakes in companies of 10% or higher, and major expansions of existing facilities.

For the period from 2000 to 2014, the CIM dataset records 964 individual transactions: 346 acquisitions of existing companies; 566 greenfield projects; and 52 expansions of existing facilities. The aggregate value of those transactions was \$47.5 billion, and more than 90% of this investment occurred in the past 5 years (Figure 2.1).

**Figure 2.1: Chinese FDI Transactions in the United States**



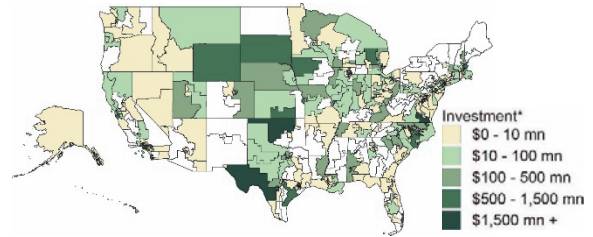
Source: Rhodium Group. See Data Appendix for more details.

For the purpose of this report, this transactions dataset was modified and augmented to retrieve a comprehensive picture of the individual operations of Chinese-owned entities in the US economy. The major tasks were to break down acquired companies into individual operations; add companies established before 2000; and delete operations that were closed or divested. Then for each subsidiary the correct geographic location needed to be identified, and both investment and

employment were estimated (for more details on data compilation and important disclosures, please see the Data Appendix at the end of this report).

**Figure 2.2: Chinese FDI in the US by Congressional District**

Color indicates cumulative investment 2000-2014



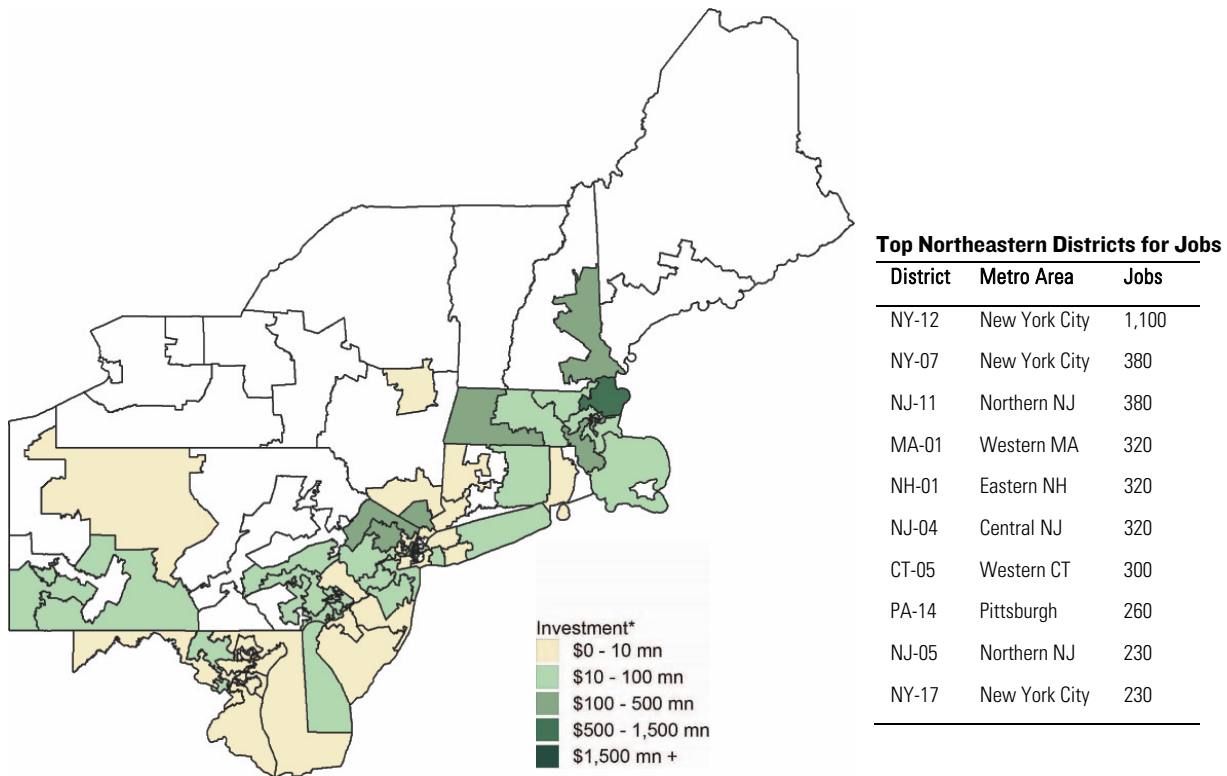
Source: Rhodium Group. \*Cumulative Value of Chinese FDI Transactions, 2000-2014. See Data Appendix for more details.

This exercise yielded a total of 1,583 individual operations of Chinese-owned firms in the United States at the end of 2014, stretching across 44 of the 50 US states (Figure 2.2).

Not surprisingly, most operations are concentrated in larger metropolitan areas (such as the greater New York City area, the Bay Area, and greater Chicago) and industrial clusters (such as the Great Lakes region for autoparts manufacturing, Texas for energy, or Maryland for pharmaceuticals). At the same time specific transactions, including the purchase of the biggest US pork producer and processor Smithfield Foods, have led to Chinese presence in many rural areas as well. Chinese investment is not limited to high-income urban centers on the coast, but distributed nationwide.

In short, the recent wave of Chinese FDI has led to the broad spread of Chinese-owned entities in communities across the US. The following pages present detailed snapshots of all 50 US states to illustrate how the arrival of these new neighbors has impacted local economies and how investment and jobs are distributed across the 435 congressional districts.

## 2.1 THE NORTHEAST



Source: Rhodium Group. See Data Appendix for more details. \*Cumulative value of Chinese FDI transactions, 2000-2014

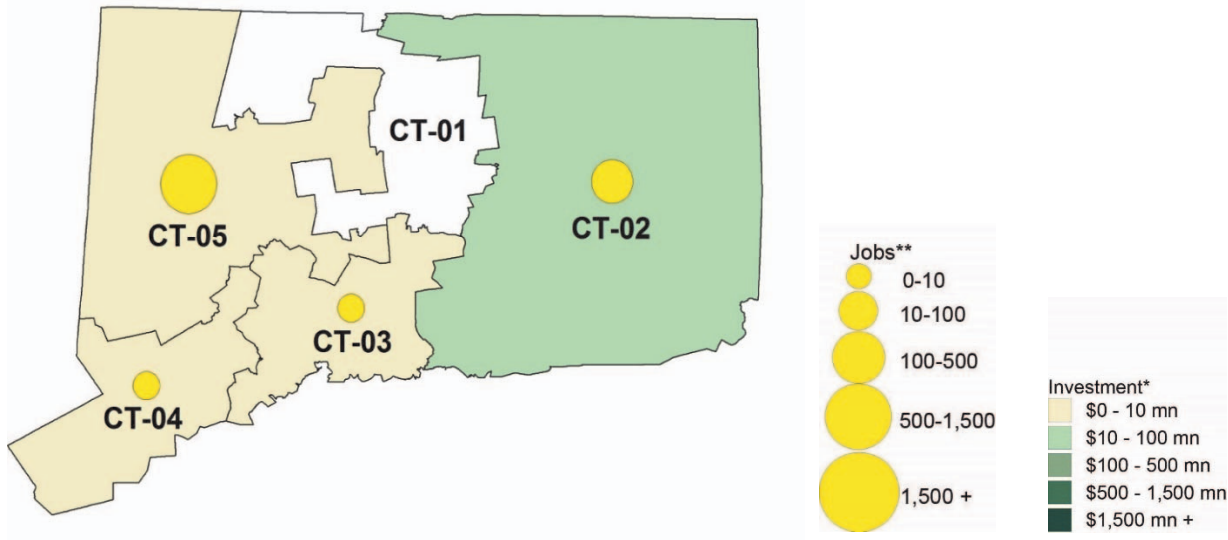
With cumulative investment of \$7.2 billion from 2000 to 2014, the Northeast received the lowest investment from China among the four US regions. The key sectors are financial and business services, real estate, high-tech, and pharmaceuticals, reflecting the region's economic strengths and clusters.

The top districts in terms of investment are in the New York City area (NY-10 and NY-12) and parts of Northern New Jersey (NJ-11). There are no significant investments yet in large stretches of the Northeast including Maine's two districts (ME-01 and ME-02) and Vermont's at-large district.

Almost 6,800 Northeasterners are currently employed by Chinese-affiliated companies, or roughly 8% of total employment provided by Chinese firms in the US. The majority of these employees came onto the payrolls of Chinese parent firms through acquisitions, but there is also growing job creation through greenfield investment, mostly in advanced service sectors such as finance or pharmaceuticals.

The most important Chinese affiliates in the Northeast are Smithfield subsidiaries (MA-01 and PA-14), Industrial and Commercial Bank of China (NY-06, and NY-07), Plaza Construction (NY-12), the International Vitamin Corporation (NJ-04), and various subsidiaries owned by Wuxi Pharmaceuticals (PA-01, PA-07, NJ-06, and NJ-12).

## 2.1.1 CONNECTICUT



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Connecticut attracted \$30 million in Chinese investment from 2000-2014, with seven establishments across its congressional districts. These provide more than 400 jobs and are focused on renewable energy and automotive parts manufacture.

The single largest operation is Global Steering Systems, a subsidiary of Chinese automotive parts maker Wanxiang. The company develops and manufactures steering technology in Watertown (CT-05). Since Wanxiang's investment in 2009, it has increased local staff count at its Connecticut facility from just over 100 to more than 300.

Two Chinese solar energy firms also have a presence in the state. The biggest employer is Zhenfa New Energy's subsidiary STR Holdings, with nearly 100 employees based in Enfield (CT-02). Zhenfa is a major Chinese producer of photovoltaic solar cells. Before its sale to Zhenfa in 2014, STR had considered liquidating its assets. New owner Zhenfa has helped revitalize the company,

utilizing its position in and knowledge of the Chinese solar market to sell STR's products to a wider Chinese customer base, while retaining expertise and know-how in Connecticut.<sup>6</sup>

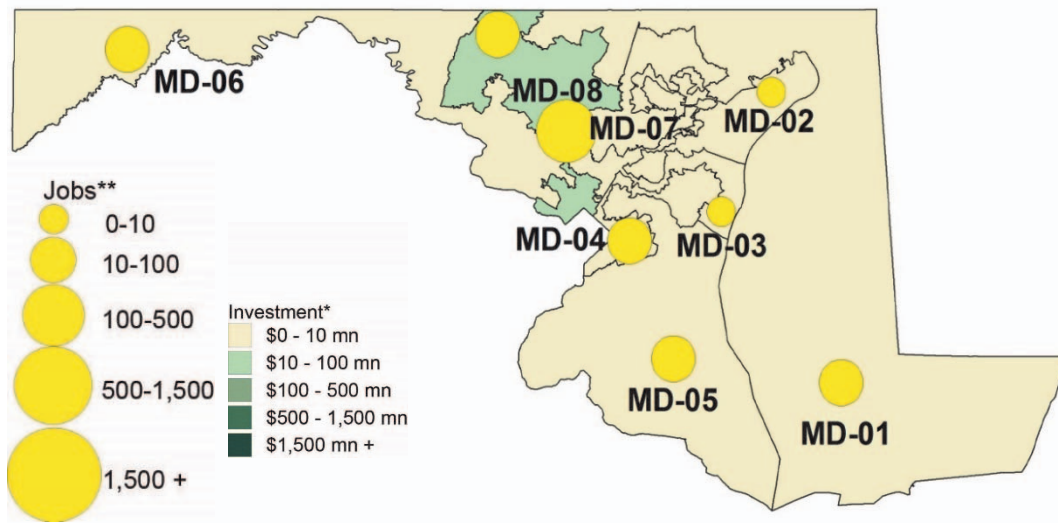
Connecticut has received more investment than most other New England states (Vermont, Maine, and Rhode Island). However, in light of its strong track record in attracting foreign enterprises, there is ample room for growth in securing investments from China.

Foreign-owned enterprises currently employ over 100,000 people in the state, more than twice as many as New Hampshire and second only to Massachusetts in New England. Urban areas in Connecticut like the greater Hartford area and the Bridgeport-Stamford-Norwalk area are the particular beneficiaries of jobs created and sustained by FDI. Going forward, Connecticut's cluster of financial and other advanced services could make it a destination for Chinese companies expanding in these sectors.

<sup>6</sup> See "STR Holdings To Sell Majority Stake To China Solar Company", *Hartford Courant*, August 13, 2014, <http://bit.ly/1FPCrjw>; "Before deal, STR couldn't find buyer,

considered liquidation", *Hartfordbusiness.com*, September 16, 2014, <http://bit.ly/1PoElUp>.

## 2.1.2 MARYLAND



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Maryland is home to 28 Chinese-owned enterprises. Half of these companies entered the state with greenfield projects and now provide nearly 230 jobs. In total, the state has garnered around \$90 million in investment. Activities are focused on Maryland's key innovation sectors including biotechnology, pharmaceuticals, and advanced energy technology. These take advantage of the strong research network at the state's universities and the National Institutes of Health (NIH).

Among these are Tasly Pharmaceuticals, a developer of traditional Chinese medicine, which established operations in Rockville (MD-08). Proximity to the Food and Drug Administration's (FDA) White Oak campus was key in the decision to move its offices to the area. Tasly's traditional Chinese medicine products are expected to be some of the first fully herbal drugs to be approved by the FDA.<sup>7</sup> Joynn is another greenfield pharmaceutical

operation in MD-06 that chose to locate close to the FDA campus to further its business in technical consulting for drug registration.

Though the magnitude of investment and job creation has been small thus far, there is strong potential for continued expansion as the Chinese pharmaceuticals industry grows quickly and looks for overseas markets in the coming decade.

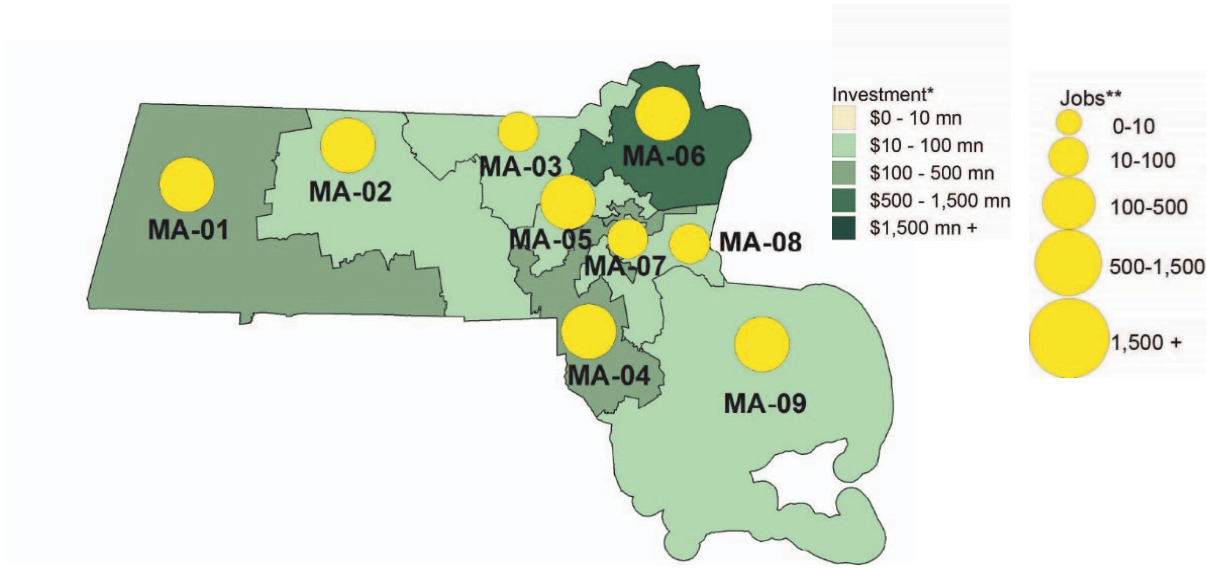
Supporting this outlook, Chinese real estate developer Greencourt announced plans in March 2014 to build a mixed office development in MD-08 aimed at small pharmaceutical and other professional service companies. This development will be the first major development in Montgomery County (MD-03, 06, 08) in recent years and provide contracting jobs throughout its construction.<sup>8</sup>

<sup>7</sup> See "Tasly Pharmaceuticals opens corporate office in US", *NAMSA Blog*, September 3, 2014, <http://bit.ly/1IgxUqP>; "A remedy for the US healthcare system", *China Daily*, April 6, 2012, <http://bit.ly/1EQIN1b>.

<sup>8</sup> See "Chinese developer to build spec office and data center in Rockville", *Washington Business Journal*, March 4, 2014, <http://bit.ly/1E9aIWv>. Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.



### 2.1.3 MASSACHUSETTS



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Massachusetts is one of the major locations for Chinese companies in the Northeast. The state has received nearly \$2 billion in investment from China. The majority of this investment can be attributed to Chinese utility company Huaneng’s stake in Massachusetts-based Interger, a power company with most of its assets and employees located outside the US. While this investment has very little local impact, the remainder is spread across the state and a wide number of industries. The state is home to 38 Chinese-owned enterprises employing over 1,200 people. One major focus is the high-tech sector in the Boston area, and there is also significant interest in manufacturing.

Massachusetts has multiple examples of Chinese investment jumpstarting struggling US high-tech firms. After its founding at a Massachusetts Institute of Technology (MIT) lab in 2001, battery maker A123 Systems struggled despite extensive venture capital support through the 2000s, filing for bankruptcy in 2012. It was later purchased by Chinese automotive parts maker Wanxiang, which has retained its operations in Waltham (MA-05) and Hopkinton (MA-04), as well as in Michigan. Because of growing domestic demand and better access to the booming Chinese electric vehicle market, the company is now profitable.<sup>9</sup>

Other high-tech investments include Sanan’s purchase of struggling LED component manufacturer Luminus; a

joint venture by Hangzhou CRON and Electronic Character Recognition Machinery (ECRM) in imaging technology; fuel seal maker Precix; and Lenovo EMC’s joint venture developing computer storage products.

While most high-tech investments are located in the greater Boston area, districts to the west like MA-01 have attracted significant investments in manufacturing. A Smithfield subsidiary in Springfield (MA-01), Carando Foods pork processing plant, provides more than 300 jobs. In the fall of 2014, CNR-MA – a subsidiary of China CNR Corporation, a major Chinese railway manufacturer – began work on a greenfield plant for producing subway cars in Springfield (MA-01). CNR-MA won a contract to produce hundreds of subway cars for the Massachusetts Bay Transportation Authority (MBTA) after committing to build a local assembly plant. Once completed, the facility could provide more than 150 manufacturing jobs.<sup>10</sup>

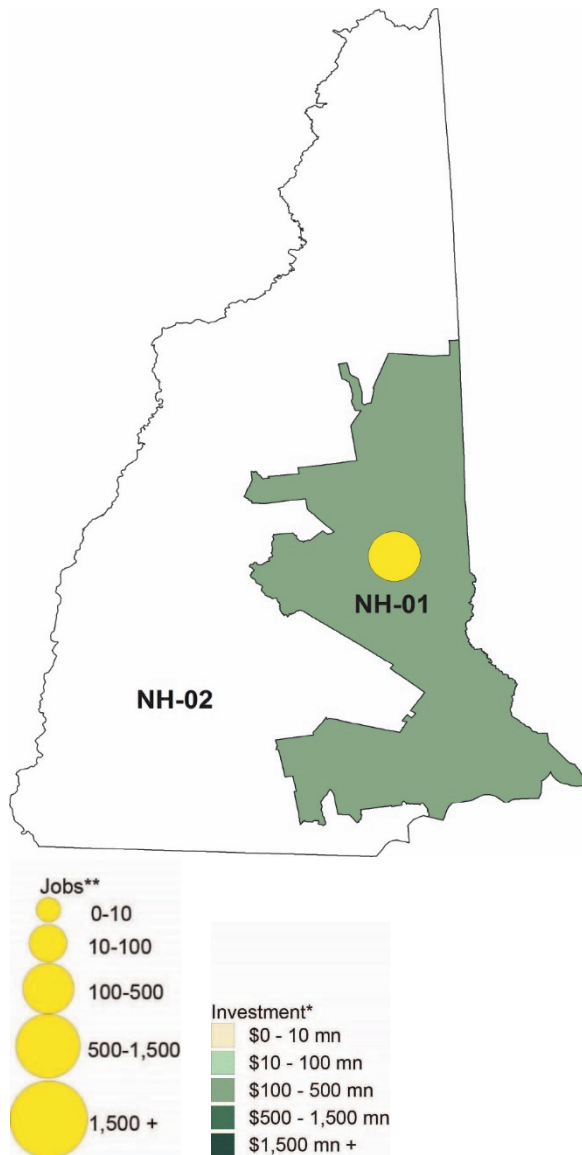
Biotechnology, one of the other characteristic strengths of the Massachusetts economy and a strong destination for cumulative FDI, has had less exposure to Chinese investors. There have only been a handful of minor transactions to date, which should open up opportunities for the future given the strong interest in US operations demonstrated by Chinese investment into other medical research clusters in greater Philadelphia and Maryland.

<sup>9</sup> See “Cash surge, lighter batteries power A123 comeback”, *Crain’s Detroit Business*, August 22, 2014, <http://bit.ly/VMGLf2>.

<sup>10</sup> See “Gov. Patrick Announces MBTA’s Recommended Company To Build New Subway Cars In Mass”, *Massachusetts*

*Bay Transportation Authority*, October 21, 2014, <http://bit.ly/1PoYQFd>.

## 2.1.4 NEW HAMPSHIRE



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

New Hampshire's diversified economy is attractive to foreign investors, particularly because of its focus on small-scale specialized manufacturing. More than 38,000 jobs in the Granite state depend on the subsidiaries and affiliates of foreign companies.

Investments from China has been limited to three transactions totaling over \$135 million. Two companies in precision manufacturing account for the majority of investment: Cooper Products and Goss International. These two companies are both located in NH-01 and they currently employ more than 300 people.

Goss International, headquartered in Durham, is an important company for the state. It manufactures and develops newspaper printing technology and was acquired by Shanghai Electric in 2010, a Chinese multinational with a large portfolio of specialized equipment manufacturers. While the structural challenges facing this industry are considerable, Goss has a strong advantage because of its access to the resources of Shanghai Electric and greater exposure to Asian markets, which has come to account for around a third of its customer base.<sup>11</sup>

Cooper Products, a precision parts maker, was acquired in 2011 by Anhui Zhongding, a diversified parts manufacturer. The move led to an expansion of the Laconia operation, which doubled in size over the past five years.<sup>12</sup>

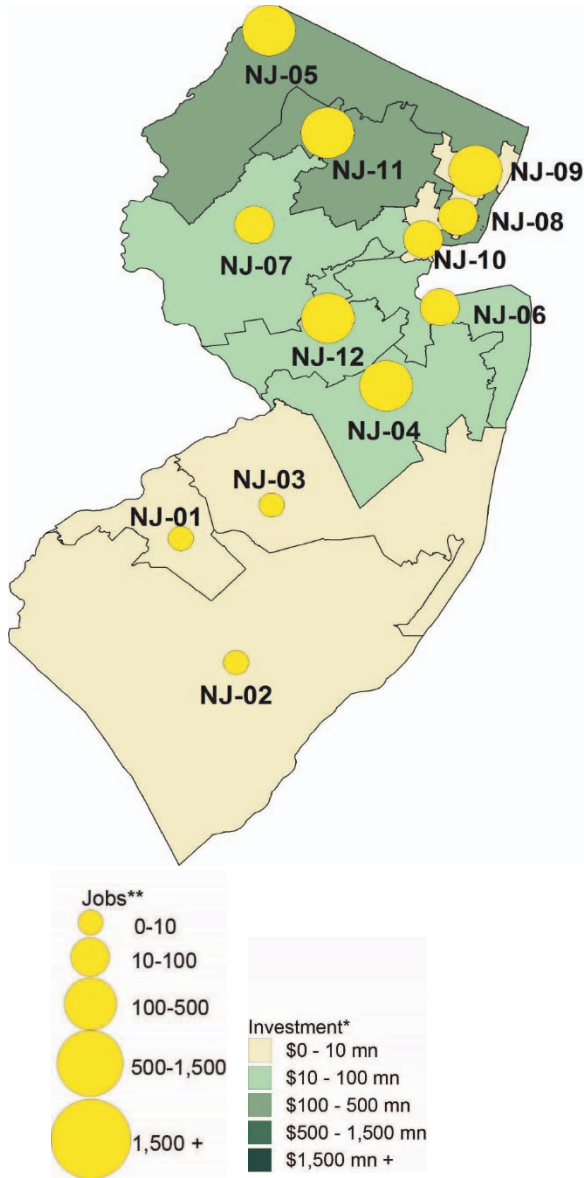
These two cases suggest that New Hampshire's high number of small- and medium-sized specialized manufacturers may provide an attractive entry point for Chinese firms into the state going forward. In April 2015 Chinese robotics firm Ninebot announced it was acquiring Bedford-based (NH-1) Segway, the maker of the two-wheel transportation gadget.<sup>13</sup>

<sup>11</sup> See "Goss International Company Overview 2014", *Goss International*, n.d., <http://bit.ly/1IgSIVU>.

<sup>12</sup> See "Cooper Products: History", *Cooper Products*, n.d., <http://bit.ly/1dNvpB8>.

<sup>13</sup> See "Segway Bought by Xiaomi-Backed China Transporter Startup Ninebot", *Bloomberg*, April 15, 2015, <http://bloom.bg/1b2XtA>.

## 2.1.5 NEW JERSEY



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

With more than \$770 million, New Jersey has received some of the highest investment within the Northeast region. The Garden State is home to 72 Chinese-owned companies employing more than 1500 people. They are highly concentrated in the Tri-State Area and focused on

pharmaceuticals and biotech, renewable energy, and shipping.

Pharmaceutical companies include the American subsidiaries of Wuxi PharmaTech (XenoBiotic Laboratories and AppTec Laboratory Services) and EnzymeRx. The medical device manufacturer Datascope Corp. also has facilities in New Jersey. The shipping industry is represented by subsidiaries of China Ocean Shipping Company (COSCO) in Secaucus and China Shipping Group in Montvale (NJ-09 and NJ-05).

New Jersey is a popular US headquarters location for major Chinese companies including COSCO, China Construction America (CCA) in Jersey City (NJ-08), and Haier in Wayne (NJ-11). The headquarters for Haier, an appliance manufacturer, is a greenfield investment that created more than 200 jobs in the district.

New Jersey is also home to a high number of ongoing greenfield projects creating temporary jobs for construction workers. Large real estate developments include CCA's 99 Hudson Street in Jersey City and Landsea Group's Weehawken residential development. Another industry for significant greenfield investments is renewable energy, fueled by the state's Renewable Energy Incentive Program. For example, one of the state's largest solar farms, Tinton Falls, was developed by Zongyi Solar, the US subsidiary of major Chinese solar energy company Jiangsu Zongyi.

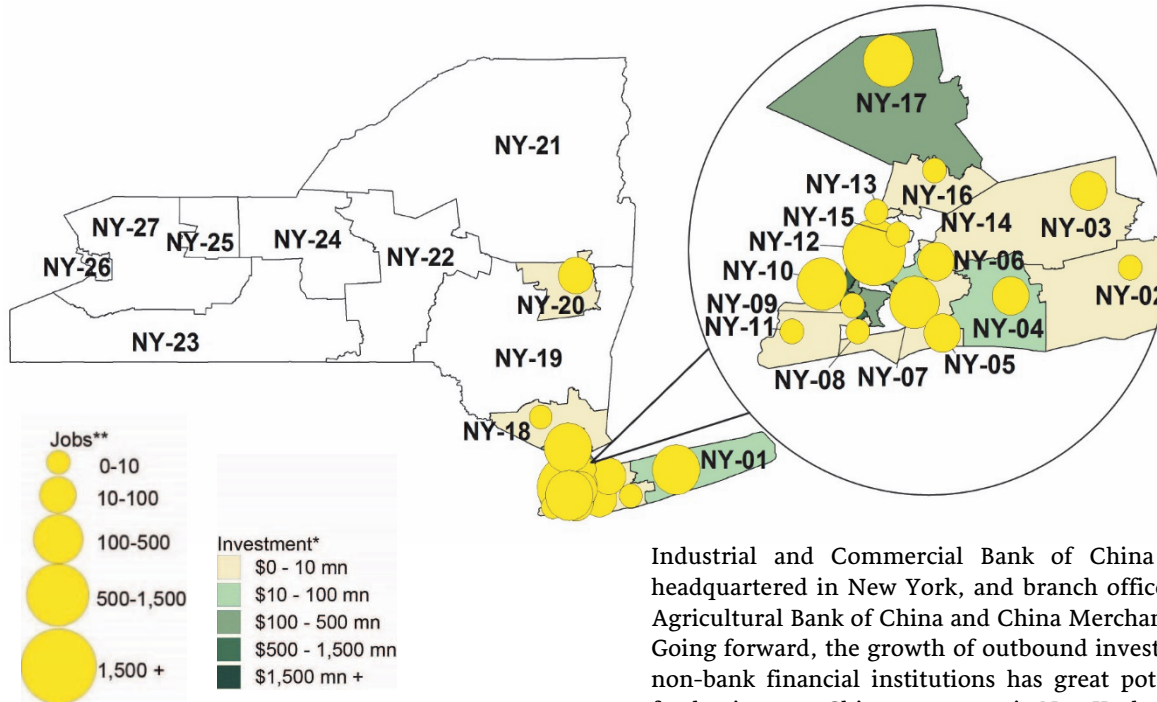
One of New Jersey's emerging success stories is the International Vitamin Corporation, a subsidiary of Aland Jiangsu Nutraceutical Group in Freehold (NJ-04). Before its purchase in 2010, it was neglected as a relatively unrelated division of medical device maker Inverness Medical (now Alere). Under new Chinese ownership, employment has increased from 280 to nearly 400. As of the end of 2013, it had become the second largest supplier of private-label vitamins and supplements in the US market, and it hopes to rapidly expand in China by taking advantage of its reputation as an American brand.<sup>14</sup>

Notwithstanding these operations, Chinese FDI is underrepresented in other major aspects of the New Jersey economy that are well represented in overall FDI, such as chemical manufacturing and financial services.

<sup>14</sup> See "Chinese Vitamin Firm Exports from US to China", CNBC, May 22, 2013, <http://cnb.cx/1FPEIAT>; "Vitamin maker finds new

health in New Jersey", *China Daily*, December 20, 2013, <http://bit.ly/1GZt67n>.

## 2.1.6 NEW YORK



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

New York State received more than \$3.8 billion in investment and is hosting 120 Chinese-owned establishments. These companies provide nearly 2,200 jobs.

Nearly all operations are concentrated in New York City and Long Island, reflecting the focus on corporate headquarters, financial and business services firms, and real estate investments in the area.

Service sector companies are the biggest employers. The importance of New York for the global financial industry drew financial institutions such as the Bank of China to Manhattan decades ago. Other Chinese banks have only recently expanded their presence in New York. These include the purchase of the Bank of East Asia USA by

Industrial and Commercial Bank of China (ICBC), headquartered in New York, and branch offices of the Agricultural Bank of China and China Merchants Bank. Going forward, the growth of outbound investment by non-bank financial institutions has great potential to further increase Chinese presence in New York and other financial centers. In May 2015, for example, conglomerate Fosun announced that it would purchase NY-based insurance group Ironshore for \$1.8 billion.<sup>15</sup>

The bulk of investment value in New York, however, is accounted for by capital-intensive real estate investments, which explains the relatively low employment to jobs ratio in New York. Prominent investments in commercial real estate include Greenland Group's involvement in the Pacific Park project, China Vanke's development of 610 Lexington Avenue, Fosun's purchase of the Chase Manhattan building and the Long Island Sheraton, and HNA's investment in 1180 Sixth Avenue. Some of these investments will create a significant number of construction jobs.<sup>16</sup>

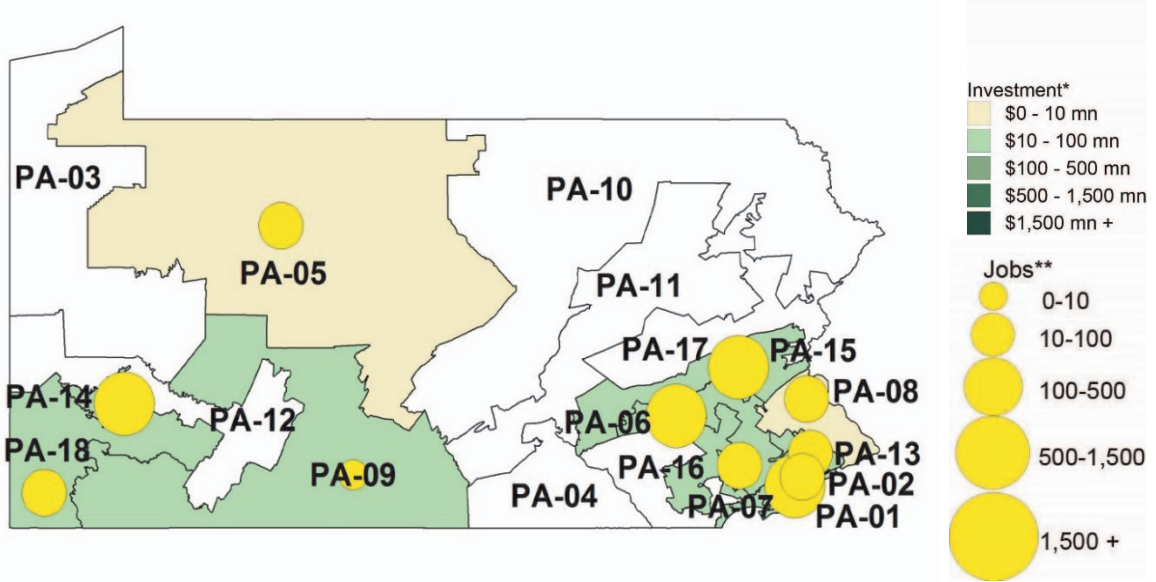
Outside of the NYC area, there are only few Chinese operations. Lenovo has an office of IBM's former PC division in Armonk (NY-17). Upstate metro areas such as Buffalo-Niagara Falls and Rochester have a high rate of foreign-owned enterprise (FOE) employment, but almost no Chinese presence.

<sup>15</sup> See "Guo's Fosun to Buy Ironshore in \$1.84 Billion Insurance Deal", *Bloomberg*, May 3, 2015, <http://bloom.bg/1jQrosA>. Future

expenditures and jobs of pending deals or projects currently under construction are not included in the data.

<sup>16</sup> Indirect employment is not included in the data.

## 2.1.7 PENNSYLVANIA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Pennsylvania received almost \$420 million in investment and is home to 32 Chinese-owned establishments. These currently employ more than 880 jobs.

The greater Philadelphia area is well-represented, with important investments in the traditional key sector of pharmaceuticals and biotechnology. Notable companies in the metro area in these fields are AppTec Laboratory Services, Frontage Laboratories, and Saladax Biomedical (PA-01, PA-06, and PA-15). These operations continue to grow. Last year, the Chinese investor in AppTec, a provider of lab development services to other firms developing pharmaceuticals, announced it was tripling the size of its Philadelphia facility and increasing its capabilities.<sup>17</sup>

Notable investments in the western part of the state include China Shenhua's major investment through joint

venture to pursue shale gas development in the Marcellus Shale (PA-09 and PA-18).

The Lehigh Valley (PA-15) attracted greenfield investment for the first American operation of Fuling Plastic, which is expected to create 75 full-time jobs when it begins manufacturing.<sup>18</sup>

While Chinese investment in Pennsylvania is not limited to a single sector, there are important areas such as agriculture and manufacturing which have not attracted Chinese FDI, despite being major foundations of the state economy and overall recipients of FDI. For other foreign countries' activity in the state, manufacturing alone accounts for nearly half of the 275,000 employees of foreign-owned enterprises (FOEs).

<sup>17</sup> See "WuXi PharmaTech Breaks Ground on New Cell Therapy Manufacturing Facility", *PR Newswire*, April 29, 2014, <http://prn.to/1DSnuHz>.

<sup>18</sup> See "China-Based Taizhou Fuling Plastics Co. To Open Lehigh County, Pennsylvania, Manufacturing Plant", *Area*

*Development*, May 29, 2014, <http://bit.ly/1E9eCP5>. Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

## 2.1.8 OTHERS

### Rhode Island

FDI in Rhode Island is small compared to other states and comes primarily from Europe. The Ocean State only received one small-scale investment from China between 2000 and 2014. It is located in the 2<sup>nd</sup> District and provides fewer than 10 jobs. Going forward, the state's strength in health services and tourism could help lure Chinese investors. The state's location in the corridor between the New York and Boston areas also has the potential to attract greater investment as Chinese activity in those nearby states grows.

### Delaware

While many Chinese companies utilize Delaware for incorporation purposes, there are currently only five companies with significant physical presence in the state. One of them is a former General Motors (GM) plant that Wanxiang purchased when it bought the assets of bankrupt electric car maker Fisker Automotive in 2014. This factory may be used toward restarting production of Fisker cars, but no concrete announcement has yet been made. Other areas that could attract Chinese investment going forward include chemical manufacturing and financial services. Another attractive value proposition is the state's proximity to major hubs in the greater Philadelphia, New York, and Washington, DC areas.

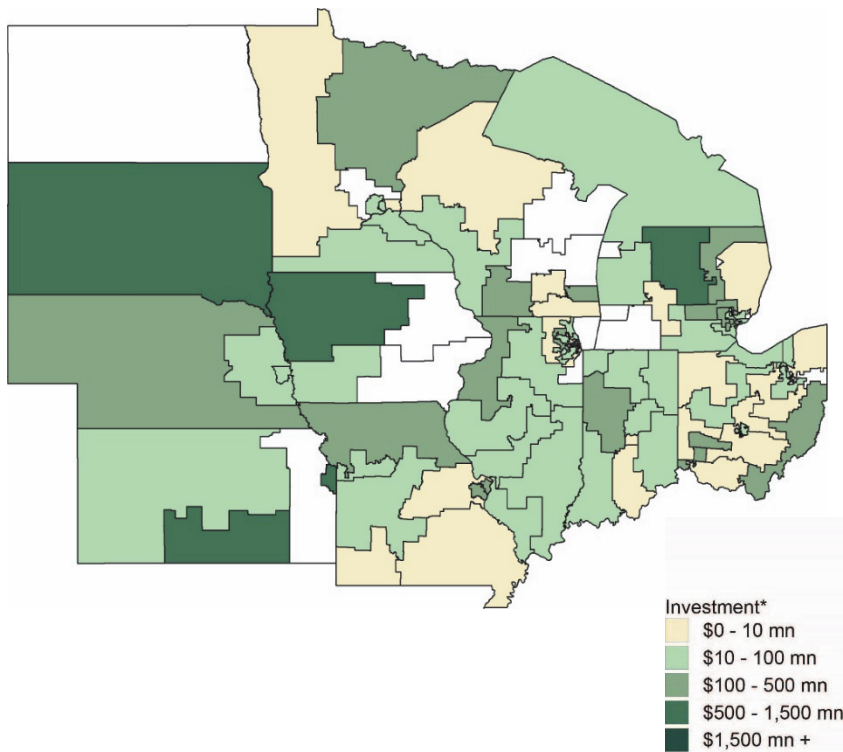
### Maine

No significant Chinese investments have been recorded in Maine to date. Historically the Pine Tree State has not been a big recipient of FDI, with nearly all foreign investment coming from its neighbor Canada and Europe. Given Maine's traditional strength in wood products, the state could explore opportunities from furniture-related investments from China, such as those in North Carolina and Virginia.

### Vermont

Chinese investment was similarly absent in Vermont, one of the smallest FDI hosts in the country. Vermont is, however, a major recipient of EB-5 visa investment from China, which could lead to greater recognition and more FDI activity in the future. Vermont's burgeoning aerospace and aviation industries could also attract Chinese interest, given its focus on civil applications and the demonstrated interest in this industry in other states.

## 2.2 THE MIDWEST



**Top Midwestern Districts for Jobs**

District	Metro Area	Jobs
MI-05	Central MI	5,230
SD-01	SD at-large	3,400
IA-04	NW Iowa	3,300
MO-06	Northern MO	3,190
NE-03	Western and Central NE	2,280
IL-07	Chicago	2,110
IL-17	Northwestern IL	1,710
WI-04	Milwaukee	1,010
MN-08	Duluth, Northeastern MN	800
OH-01	Cincinnati	650

Source: Rhodium Group. See Data Appendix for more details. \*Cumulative value of Chinese FDI transactions, 2000-2014.

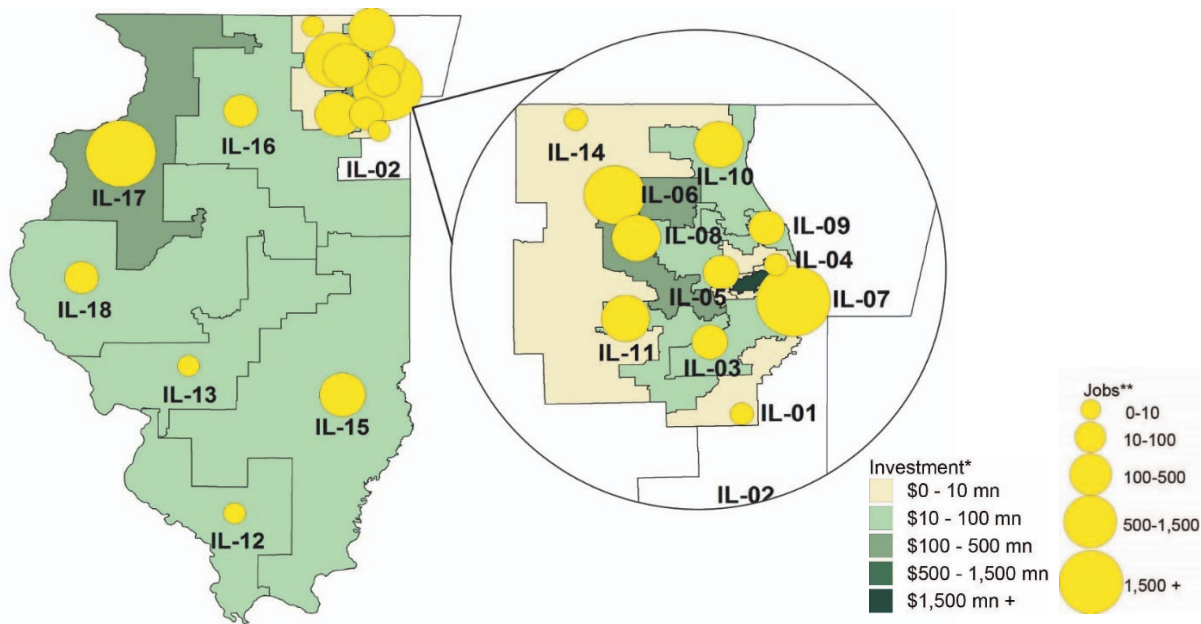
Total investment of nearly \$13 billion from 2000 to 2014 puts the Midwest second only to the South. The Great Lakes states are some of the strongest manufacturing areas in the country and have a high percentage of overall foreign-owned enterprise (FOE) employment. Chinese investment in the region is also focused on manufacturing, primarily in automotive parts and food processing.

The high level of investment in IL-07 reflects Chicago's importance as a key regional hub. It is host to investments in real estate, major buys in tech, and newly established branch offices of Chinese companies. Other important districts include KS-03, part of the greater Kansas City area, and northwestern Iowa (IA-04). While there are gaps in Chinese investment, such as two of Iowa's districts, and North Dakota's at-large district, Midwestern Chinese investment is spread relatively evenly across the region.

More than 33,000 jobs are provided by Chinese affiliates, accounting for more than 40% of the US total, which makes the Midwest the top region for employment in the US by jobs provided. Apart from significant acquisitions that brought workers onto the payrolls of Chinese parent companies, the Midwest is an important site for greenfield investment, primarily in manufacturing.

Key Chinese affiliates include Smithfield subsidiaries, spread widely across the region and notably in northeastern Iowa (IA-04), northern Missouri (MO-05, MO-06), eastern Nebraska (NE-01), and South Dakota's at-large district (SD-01). Wanxiang, an automotive parts conglomerate also has dispersed subsidiaries across the region, with clusters in central Michigan (MI-07) and northwestern Ohio (OH-05), as well as its North American headquarters in Elgin, Illinois (IL-06). Aviation Industry Corporation of China (AVIC) also has many subsidiaries across the region. The largest is automotive parts manufacturer Nexteer, primarily in Saginaw, Michigan (MI-05), and aircraft maker Cirrus, with its main operations in Duluth, Minnesota (MN-08). KS-03 is home to the headquarters of Dalian Wanda subsidiary AMC in Leawood, a suburb of Kansas City.

## 2.2.1 ILLINOIS



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Illinois is one of the main recipients of Chinese FDI in the United States, representing some of the most high-value and employment-intensive investment across a diverse span of industries. The state has received \$4 billion in investment and is host to 111 individual establishments by Chinese companies. These companies together provide more than 5,000 jobs. The major sectors are information technology, food processing, automotive components, as well as real estate.

The greater Chicago area, particularly IL-06, IL-07, and IL-11, are major recipients of Chinese investment. IL-06 and IL-11 are host to Smithfield subsidiaries in Lisle and Bolingbrook, respectively. IL-10 is home to Ruprecht, Chicago's oldest beef processor, which was acquired by Chinese investor New Hope in 2014.

The biggest investment in IL-07 was Lenovo's purchase of Motorola Mobility from Google for nearly \$3 billion. Motorola's headquarters in Chicago employ more than 2,000 workers. Lenovo is keen to expand the Motorola brand into China, where it markets Motorola's products separately from Lenovo's.<sup>19</sup> Chicago also received large real estate investments such as Cindat Capital Management's purchase of 311 South Wacker Drive and Wanxiang's purchase of 150 North Riverside Plaza. Dalian Wanda plans to invest \$900 million in a new tower

<sup>19</sup> See "Lenovo Expects Motorola to Lift Smartphone Revenue", *The Wall Street Journal*, February 2, 2015, <http://on.wsj.com/1EXMRNd>.

with a hotel and apartments that would be the third largest in the city. The Windy City is also home to offices of smaller Chinese companies and branch offices of major ones, such as Bank of China and Hainan Airlines.

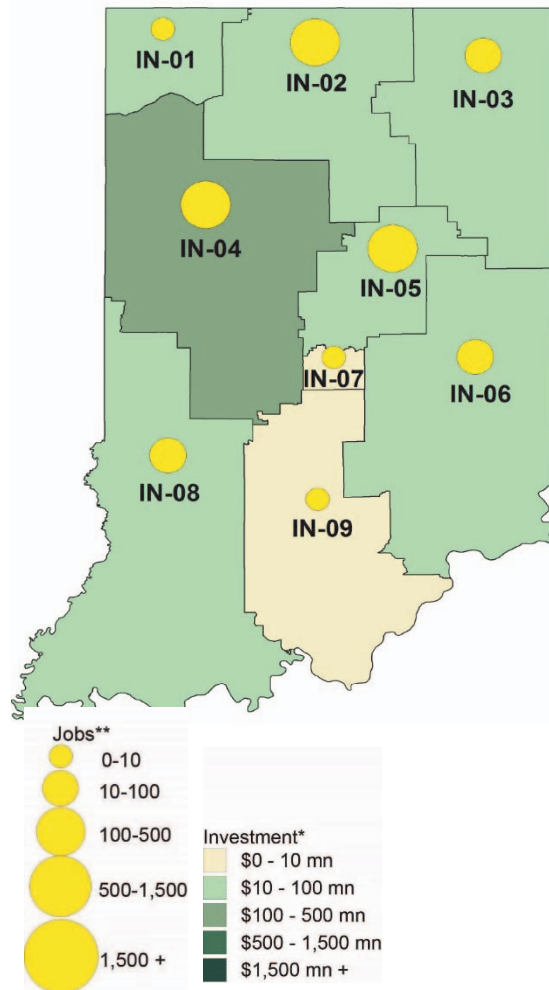
Illinois is also home to Wanxiang America, one of the biggest private Chinese companies in the US. Headquartered in Elgin, it has numerous investments across the state in automotive parts and other advanced manufacturing. It also has expanded into other sectors including real estate and renewables (with a greenfield solar facility in Rockford, IL-16). In IL-17 to the northeast, Monmouth hosts one of Smithfield's largest operations in the US, which provides nearly 1,500 jobs. The district is also home to Ingersoll, a Chinese-owned machine tool manufacturer in Rockford.

While the State's southern districts are currently not well represented, new projects are emerging. In IL-13, Fuyao, the world's largest producer of automotive glass, has bought a glass factory in Mount Zion and plans to retain the 200 workers at the plant. Fuyao's Chairman Cao Dewang has said that he hopes to contribute to the revitalization of the American car glass industry.<sup>20</sup>

<sup>20</sup> See "Cao Dewang, chairman of Fuyao Glass", *Financial Times*, May 25, 2014, <http://on.ft.com/1IgUouA>; "Fuyao chief sees



## 2.2.2 INDIANA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

With total investment of \$280 million from 2000 to 2014, the Hoosier State is a moderate recipient of Chinese investment compared to its Midwestern neighbors. In total, there are 35 Chinese establishments providing

more than 800 jobs. Investment and employment are well-spread out across the state, reflecting the diversity of the Indiana economy. The most important sectors are food processing, advanced manufacturing, and information technology.

In IN-02, a Smithfield subsidiary in Peru provides 250 jobs. Carmel, in IN-05, is home to Stoneware, a software company focused on cloud security that was acquired by Lenovo in 2012. In IN-04, Nanshan Aluminum has established its own factory for aluminum products in Lafayette. The plant currently employs more than 100 and hopes to employ at least 200 by the end of 2015. The company was drawn to Lafayette in part due to the US company head's time at nearby Purdue University over ten years ago.<sup>21</sup>

IN-04 is also home to Vanguard National Trailer Corporation in Monon, a subsidiary of China International Marine Containers (CIMC) Group. During the recession, Vanguard reduced shifts but did not cut jobs. Since 2013, it has returned to working at full capacity and now employs over 100 workers.<sup>22</sup>

In Evansville (IN-08), Haier, the Chinese appliance maker and first major Chinese greenfield investor in the US, announced plans in the fall of 2014 to build a new R&D Center, investing \$5 million and hoping to create 50 high-paying jobs in appliance development. Haier's investment marks new possibilities for the city, historically important to the appliance industry through the presence of Whirlpool. The American appliance maker closed its last operation there in 2010.<sup>23</sup>

Indiana's strength in precision manufacturing suggests high potential to attract more Chinese investment going forward. The state also has attractive service sector clusters. For example, one important Indiana cluster that has not yet received Chinese FDI is biopharmaceuticals. Demonstrated interest by Chinese companies in this sector elsewhere in the US, particularly in Pennsylvania and Maryland, suggest potential for growth.

much potential in Mount Zion glass facility", *Herald & Review*, October 1, 2014, <http://bit.ly/1RdeiId>.

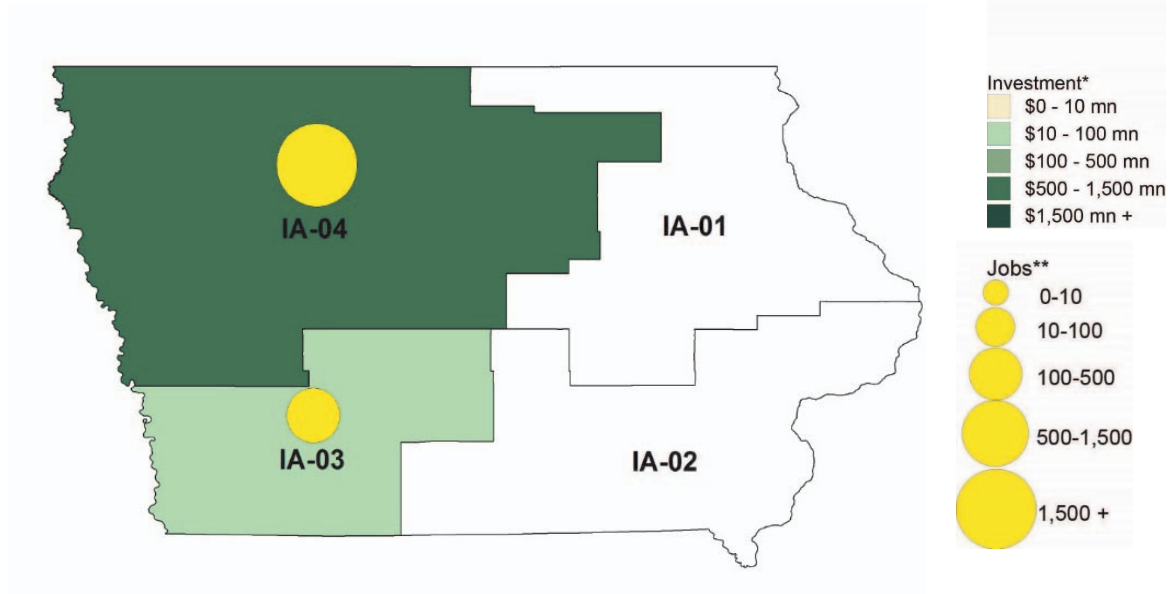
<sup>21</sup> See "China's Capitalist Road Reaches Indiana as Spending Soars", *Bloomberg*, March 19, 2014, <http://bloom.bg/1Jrct4N>.

<sup>22</sup> See "Slowing orders hit another trailer maker", *Indianapolis Business Journal*, February 13, 2008, <http://bit.ly/1EQoyj6>; "Top

25 Trailer Manufacturers Increase Output 20%" *Trailer Body Builders*, March 5, 2015, <http://bit.ly/1zM4zMI>.

<sup>23</sup> See "Haier America to open technical center in Evansville, hire 50" *Evansville Courier & Press*, September 8, 2014, <http://bit.ly/1dNyfWw>. Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

### 2.2.3 IOWA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

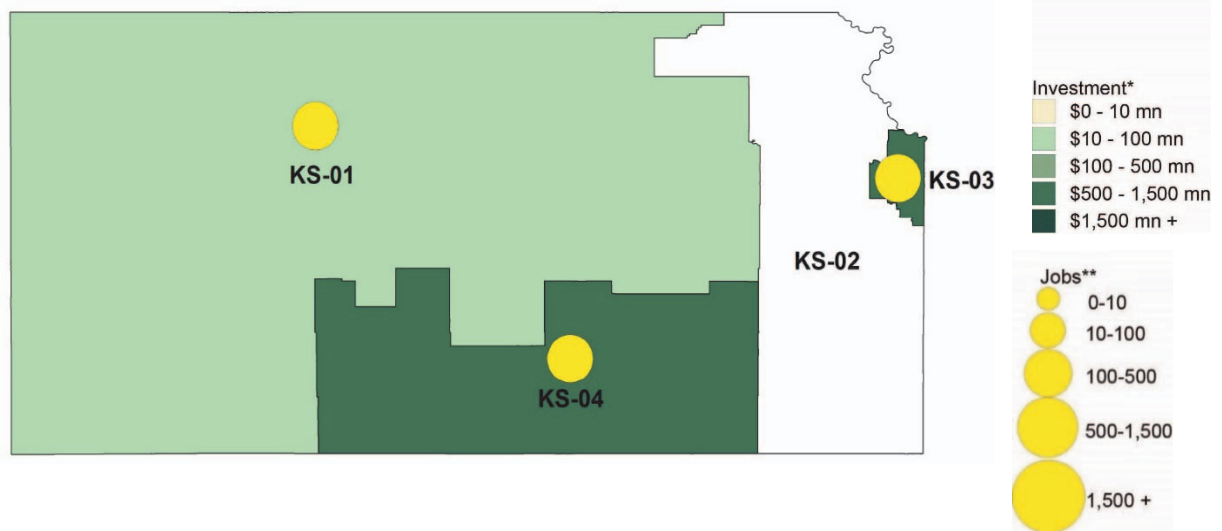
Iowa has received substantial Chinese investment of over \$950 million, primarily from the nine subsidiaries of Smithfield Foods, now part of WH Group. These operations, along with two others, provide nearly 3,800 jobs.

Eight of nine Smithfield operations in the state are in IA-04. Food processing is a major part of the Iowa economy and these Smithfield jobs represent over 2% of the state's manufacturing jobs. Smithfield Farmland has a facility in Denison and a packing plant in Carroll. Murphy-Brown has a manufacturing plant in Algona. John Morrell, the Smithfield subsidiary with the largest presence in the

state, has manufacturing operations in Mason City and Sioux Center, and three plants in Sioux City. Two of the Sioux City locations are part of Premium Pet Health, John Morrell's pet food manufacturing subsidiary.

While these operations are important investments, they do not represent diversified investment in Iowa. The Hawkeye State's importance for financial services, insurance, and other advanced services are areas that have received little Chinese investment. Other manufacturing sectors such as heavy machinery and agricultural chemicals could be opportunities for Chinese investment in the future.

## 2.2.4 KANSAS



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

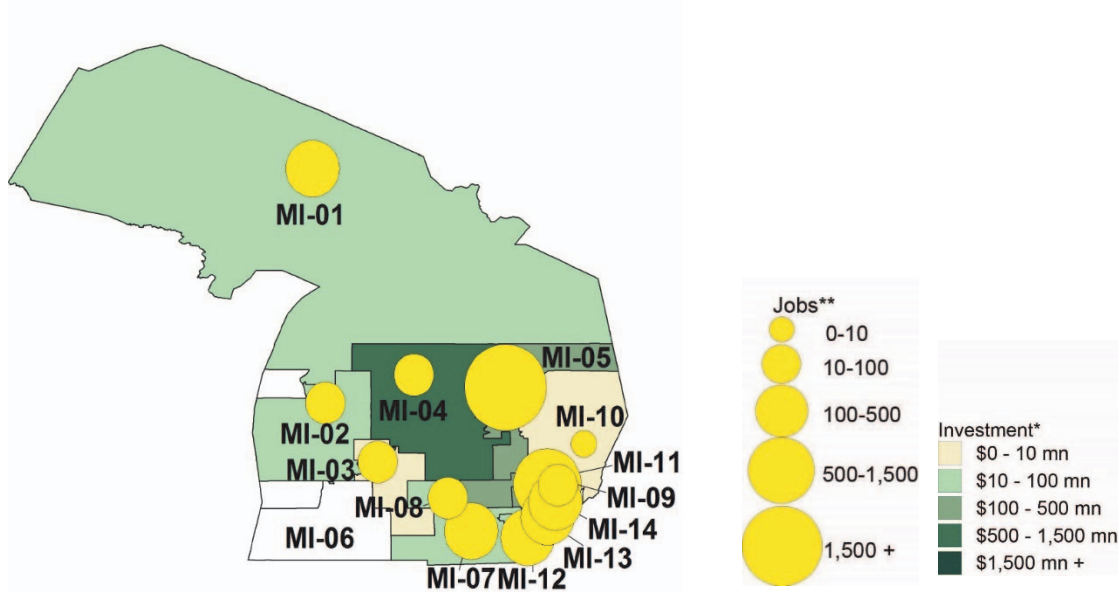
Chinese investment in Kansas from 2000 to 2014 totals \$2 billion, which can mostly be attributed to the operations of two acquired US companies, AMC Theatres and Smithfield Foods. In total, there are seven Chinese establishments in Kansas employing 1,300 workers.

The most visible establishment is the headquarters of AMC in Kansas City. AMC was acquired by Chinese conglomerate Dalian Wanda in 2012. Since then, Wanda has invested millions of dollars in upgrading facilities across the country. In 2013, AMC finished the construction of its Theatre Support Center in Leawood (KS-03).

The other acquisition that has brought hundreds of workers onto Chinese payrolls was Shuanghui's purchase of Smithfield Foods in 2013. Smithfield operates major subsidiaries in Junction City and Wichita (KS-01 and KS-04), employing more than 900 people.

Going forward, several other industry clusters in the Sunflower State could be interesting to Chinese investors. In particular, the oil and natural gas industry as well as civil aviation could attract Chinese interest.

## 2.2.5 MICHIGAN



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

The long history and skilled workforce in advanced manufacturing make Michigan one of the most important destinations for Chinese investment. The state has attracted investment of \$1.6 billion. There are 69 operations providing over 7,500 jobs. These are primarily focused in Michigan's traditional strength of automotive parts manufacturing.

In the Upper Peninsula (MI-01), helicopter manufacturer Enstrom was acquired by Chongqing Helicopter in late 2012. The purchase has helped to increase jobs from 60 to over 220, fund construction of an \$8 million expansion that doubled space under roof, develop a new prototype, and expand the client base in China.<sup>24</sup>

In Saginaw (MI-05), Nexteer Automotive, an automotive parts manufacturer, is a major employer. Originally part of GM, Nexteer was purchased by AVIC in late 2010. Since the change in ownership, AVIC has invested an additional \$150 million in Saginaw and created over 1,000 full-time jobs, bringing total employment to nearly 5,000.<sup>25</sup> AVIC also owns Hilite International, a

developer of automotive emissions reduction technology with an R&D center in Orion (MI-08) and a manufacturing facility in Whitehall (MI-02).

Wanxiang America is another auto parts supplier that plays an important role in the local economy. It has bought numerous struggling US companies and turned them back to profitability. Investments in Michigan include Neapco, a developer and manufacturer of driveline systems in Belleville (MI-12); Powers and Sons in Plymouth (MI-11); and A123 Systems in Livonia (MI-11) and Romulus (MI-13). Together Wanxiang-affiliated companies employ more than 1,500 workers in Michigan.

While most Chinese investments in the automotive parts industry were acquisitions, greenfield investment activity is on the rise. One recently announced greenfield project is a manufacturing facility in Madison Heights (MI-09) by STEC USA, which will create nearly 180 local jobs.<sup>26</sup>

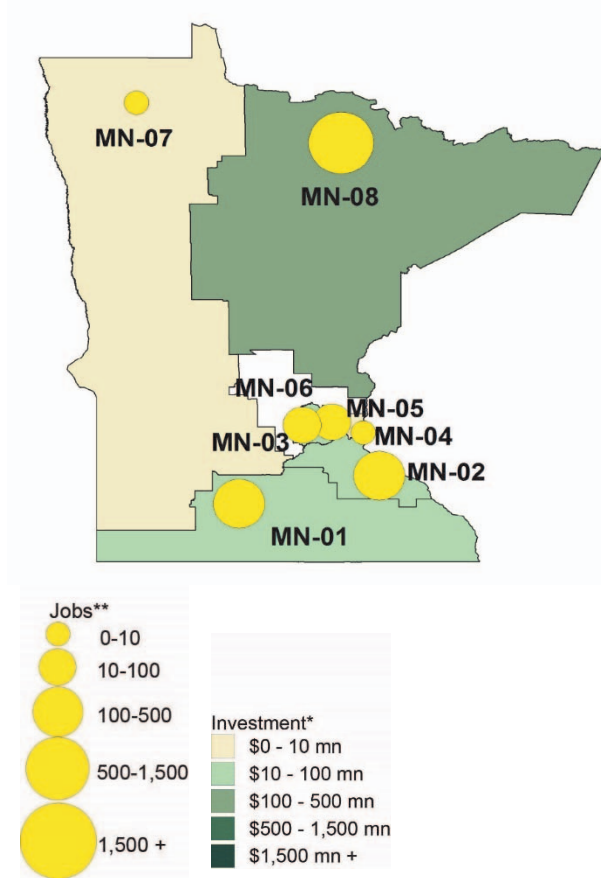
<sup>24</sup> See "Enstrom Continues Transformation", *AIN Online*, July 3, 2014, <http://bit.ly/1zMSiyo>; "Enstrom TH180 Makes First Flight", *AIN Online*, February 11, 2015, <http://bit.ly/1JrdFFp>.

<sup>25</sup> See "Saginaw Auto Supplier Thrives Under Chinese Ownership: Once Nearly Closed, Nexteer Adds Jobs as Global

Demand Grows", *The Detroit News*, September 12, 2012, <http://bit.ly/1FPHws1>.

<sup>26</sup> Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

## 2.2.6 MINNESOTA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014

Minnesota’s Chinese investment adds up to \$550 million and is spread well across sectors to reflect the diversity of the Gopher State’s economy. In total, there are 16 establishments employing over 1,500 workers.

Perhaps the most notable Chinese investment in the state is the purchase of Cirrus Industries in Duluth (MN-08) by AVIC. Cirrus is a manufacturer of small propeller planes and AVIC is a major company in the Chinese aerospace industry. AVIC saw an opportunity to leverage Cirrus’ expertise and brand in small civil aircraft in the fast-growing Chinese market for small planes. Since the 2011 deal, access to capital and Chinese businesses has allowed Cirrus to add 300 jobs, and it now provides over 800 in Duluth. It has also built a new assembling facility and announced plans in February this year to build a new \$10 million facility for its Vision jet.<sup>27</sup>

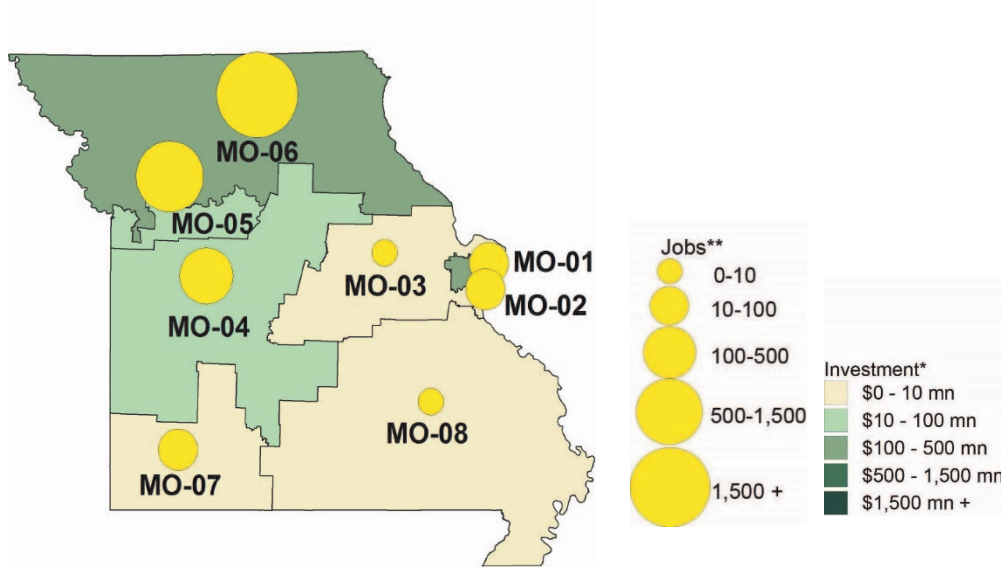
Other major Chinese-owned establishments include a Smithfield subsidiary in St. James (MN-01), which provides nearly 420 jobs; and a subsidiary of AppTec Laboratory Services in the greater Minneapolis-St. Paul area (MN-02), employing more than 100 people.

Other clusters of the Minnesota economy that have attracted foreign investors, such as information technology, have not yet received any investments from China.

<sup>27</sup> See “China to Buy U.S. Plane Maker”, *The Wall Street Journal*, March 3, 2011, <http://on.wsj.com/1IOepX5>; “Cirrus Plans \$10M Vision Jet Completions Facility”, *AIN Online*, February 18, 2015,

<http://bit.ly/1AFqZAU>; “Progress MN: Cirrus Aircraft”, *Finance & Commerce*, April 10, 2015, <http://bit.ly/1cn1jE9>.

## 2.2.7 MISSOURI



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

With more than \$860 million of investment from 2000 to 2014, Missouri is an important recipient of Chinese FDI. The state is home to 33 Chinese establishments, which are mostly located in the north (MO-06 and MO-05) and the St. Louis area. These companies provide nearly 4,000 jobs.

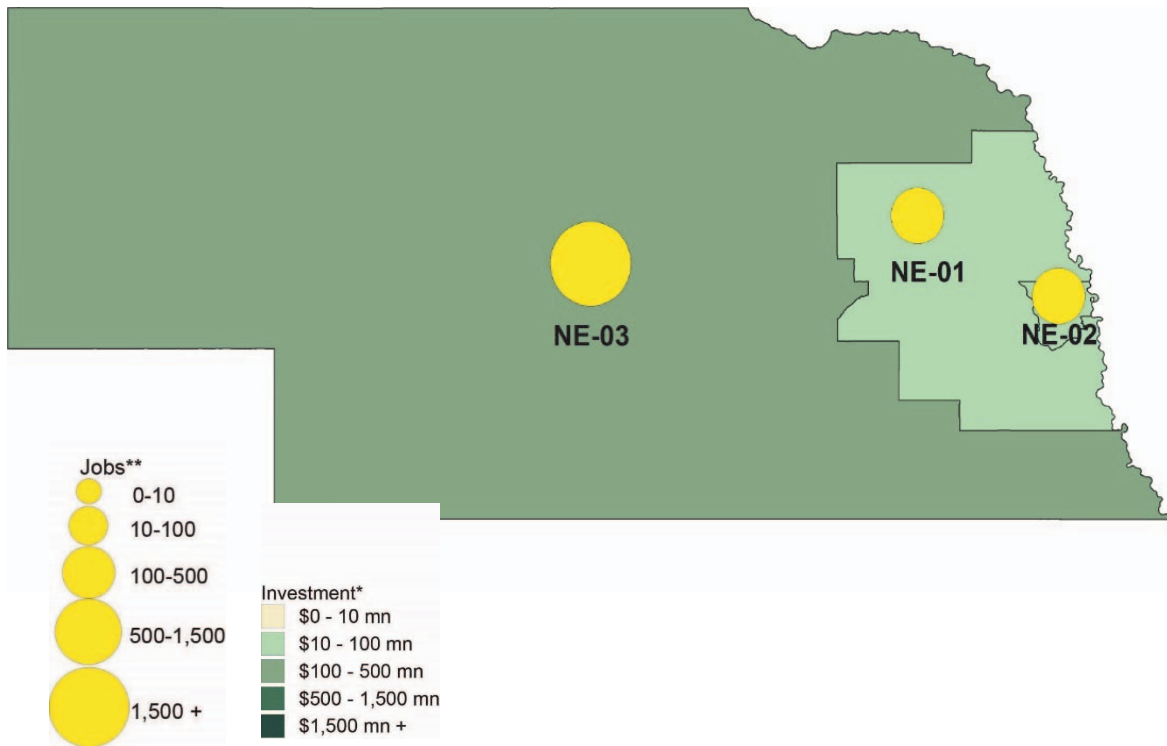
The St. Louis area (MO-01, MO-02) hosts a range of diverse investments. MO-02 is home to a division of Riot Games, a video game developer owned by Chinese tech firm Tencent. Missouri also hosts a number of Smithfield subsidiaries in the greater Kansas City area (MO-05) and in Maryland Heights (MO-02) and Milan and Princeton (MO-06). The Milan and Princeton operations are some of Smithfield's largest operations in the US. These together provide more than 3,000 jobs.

Another cluster with Chinese investment is the auto parts industry. Buckhorn Rubber Products in Hannibal (MO-06), owned by Anhui Zhongding, a Chinese conglomerate that manufactures primarily automotive parts and rubber components, provides more than 300 jobs. In Riverside (MO-06), Yanfeng USA is building a new facility to manufacture automotive trim systems for the nearby operations of Ford, GM, and Chrysler. The new facility provides more than 260 jobs and is part of the growth of northern Missouri's automotive industry.<sup>28</sup> The Chinese car manufacturer Geely Group purchased UK-based electric car manufacturer Emerald Automotive in 2014, which had made plans to build a plant in Hazelwood (MO-01). Geely has committed to staying in the area, providing over 300 jobs, investing a minimum of \$200 million, and delivering 4,000 vans by the end of 2017.<sup>29</sup>

<sup>28</sup> See "Riverside lands 263 new jobs with new auto supplier plant" *Kansas City Business Journal*, April 26, 2013, <http://bit.ly/1JQwYvj>.

<sup>29</sup> See "Emerald Automotive sold to China's Geely Group", *St. Louis Post-Dispatch*, February 28, 2014, <http://bit.ly/1drtbDE>.

## 2.2.8 NEBRASKA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

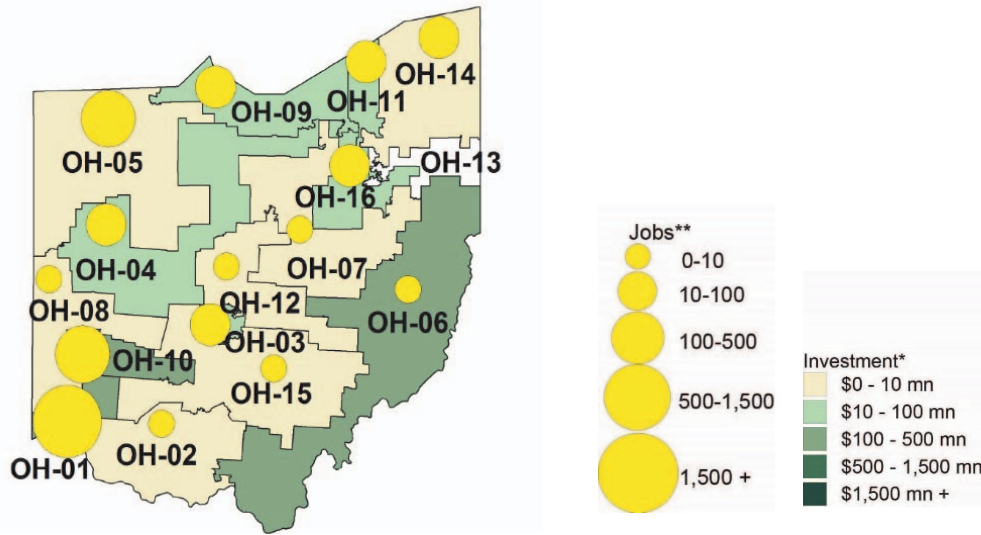
Nebraska is not a major host of FDI in general, but it has received \$450 million of investment from China. The state is home to nine Chinese-affiliated establishments employing nearly 3,000 workers.

The vast majority of this investment can be attributed to Shuanghui's acquisition of Smithfield Foods, which operates three subsidiaries in the greater Omaha-Lincoln area. Crete is home to a Smithfield Farmland facility (NE-03), one of Smithfield's largest operations in the US. Lincoln and Omaha are home to manufacturing facilities for Farmland Foods and John Morrell, respectively (NE-01 and NE-02). The more than 2,700 Smithfield jobs account for almost 4% of total manufacturing employment in Nebraska.

Aside from food processing, the auto industry has attracted Chinese investment as well. The most important establishment is Neapco Components in Beatrice (NE-03). The company, a subsidiary of auto conglomerate Wanxiang and headquartered in Michigan, produces driveline components. It employs more than 250 workers in the area.

The most promising areas for future Chinese investments are agriculture and energy. As one of the national leaders in agricultural biofuels, Nebraska could look to receive future Chinese investment in this area.

## 2.2.9 OHIO



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

The Buckeye State is an important destination for Chinese investment, attracting more than \$900 million from 2000 to 2014. Ohio is home to 39 Chinese companies that currently employ more than 1,600 workers. Like other Rust Belt states, Chinese investment has been focused on Ohio's expertise in automotive parts manufacturing.

Wanxiang Automotive, the automotive parts conglomerate, is an important employer across the state through its subsidiaries. Powers and Sons, a developer and manufacturer of steering linkages, has facilities in Montpelier and Pioneer (both OH-05). These together provide more than 300 jobs.

OH-10 is home to several significant manufacturing and R&D investments. In 2009 Beijing West Group acquired Delphi's brake systems business, which has research and testing centers in Moraine and Kettering. Fuyao is set to

be a major investor in OH-10 when it completes its refurbishment of a former GM glass plant in Moraine. Fuyao plans to invest \$360 million, increase the capacity of the plant, and hire up to 1,550 people. Raw glass will be made at Fuyao's Illinois plant, and then shipped to Moraine for processing and shaping.<sup>30</sup>

Another significant employer in Ohio is WH Group's Smithfield Foods, which operates food processing facilities in Cincinnati (OH-01) that employ more than 600 workers.

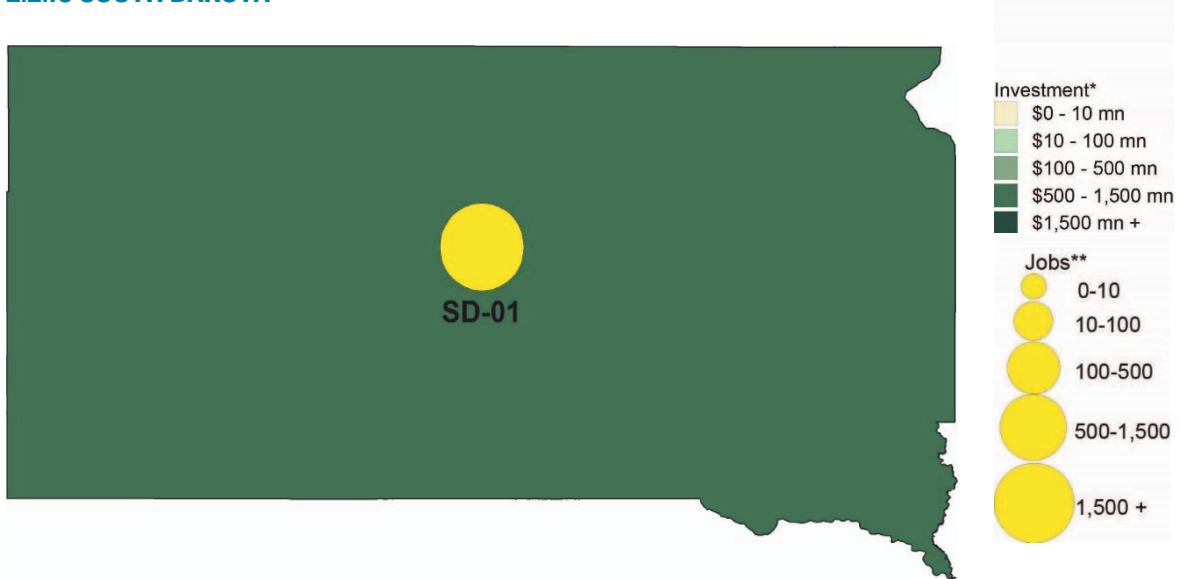
Going forward, automotive parts will likely remain the most important draw for Chinese investors in Ohio. However, the high productivity of workers and available human capital can make Ohio an interesting destination for Chinese manufacturing investments in other industries as well.

<sup>30</sup>See "Fuyao set to double hiring at Moraine plant to 1,500 jobs", *Dayton Daily News*, January 13, 2015, <http://bit.ly/1bydTig>.

Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.



## 2.2.10 SOUTH DAKOTA



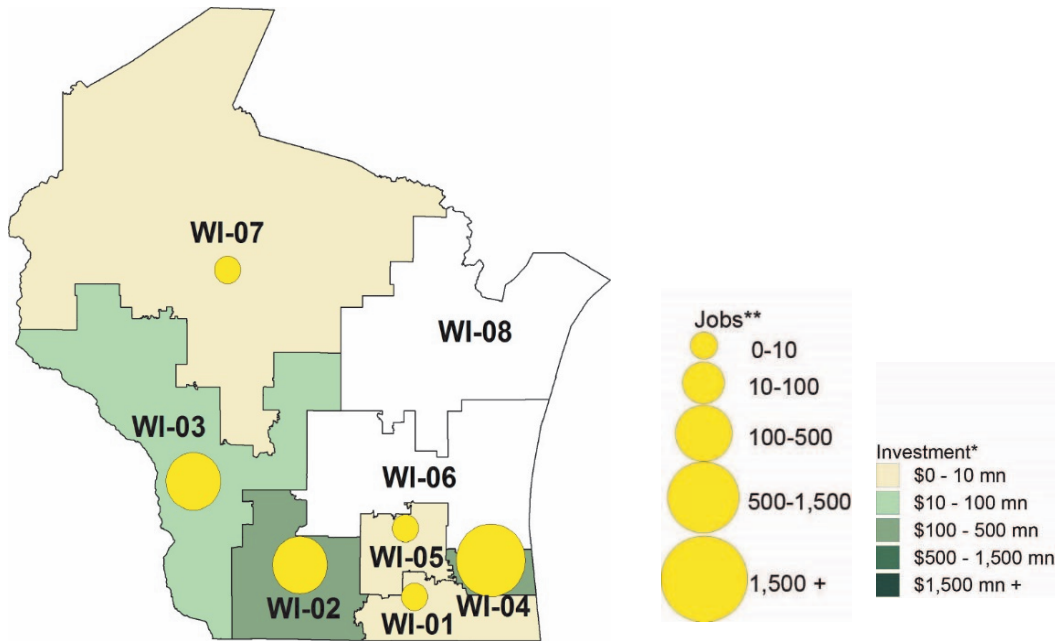
Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

South Dakota was not a major recipient of Chinese FDI to date. Yet two Smithfield subsidiaries in the state, both in Sioux Falls, expose the state to Chinese investors. Together these two facilities provide more than 3,400 jobs.

Some important sectors of the South Dakota economy are less relevant and accessible to Chinese investment,

such as government contracting and corporate back-office services, but other sectors including agriculture and alternative energy such as biofuels and wind could elicit Chinese interest.

## 2.2.II WISCONSIN



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Wisconsin has received almost \$600 million in Chinese investment from 2000 to 2014. The 14 Chinese-affiliated establishments provide more than 1,300 jobs and are concentrated in the southern districts of the state.

Waunakee (WI-02) is home to Scientific Protein Laboratories (SPL), which was acquired by Shenzhen Hepalink Pharmaceutical in 2013. SPL is producing heparin, an active ingredient for pharmaceuticals. After purchasing SPL, the new Chinese parent company has continued to add capital to the US operations of SPL, aiming at leveraging “Made in the US” quality control in China and other global markets.<sup>31</sup>

WI-04 in Cudahy is home to a Smithfield subsidiary and old Wisconsin enterprise, Patrick Cudahy, which employs several hundred people. Northern Engraving, headquartered in Sparta and with manufacturing facilities in Holmen, La Crosse, Spring Grove, and West Salem, is owned by Huaxiang Group (all WI-03).

Wisconsin is an important state for food processing and equipment manufacturing, as well as a center for healthcare and agriculture. These areas should be of great interest to Chinese investors in coming years, which could help to attract more Chinese investment to the state.

<sup>31</sup> See “Waunakee’s Scientific Protein Labs to be acquired by Chinese company for \$337 million”, *Wisconsin State Journal*, December 27, 2013, <http://bit.ly/1Ki6dN7>.

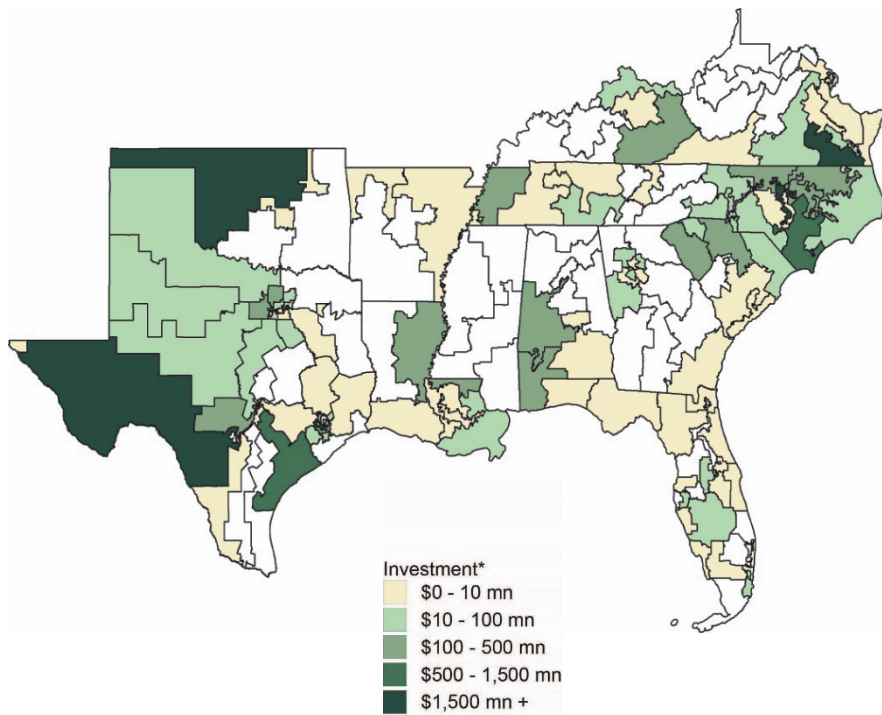
## 2.2.12 OTHERS

### North Dakota

North Dakota has received no significant Chinese investment to date. This is surprising, given demonstrated Chinese interests in many of the state's economic strengths, including, oil, gas, and wind power. Chinese companies have invested heavily in both

unconventional oil and gas production (Colorado, Wyoming) as well as renewable energy (Montana, New Jersey), which suggests good opportunities to attract investment in these and other areas.

## 2.3 THE SOUTH



**Top Southern Districts for Jobs**

District	Metro Area	Jobs
NC-07	Southern NC	7,640
NC-04	Raleigh-Durham Triangle	4,120
VA-04	Eastern Virginia	3,800
KY-05	Eastern Kentucky	1,220
TX-07	Houston	940
NC-01	Raleigh-Durham Triangle	870
VA-08	Washington, D.C.	660
OK-03	Western Oklahoma	480
NC-08	Central North Carolina	470
NC-09	Charlotte	470

Source: Rhodium Group. See Data Appendix for more details. \*Cumulative value of Chinese FDI transactions, 2000-2014

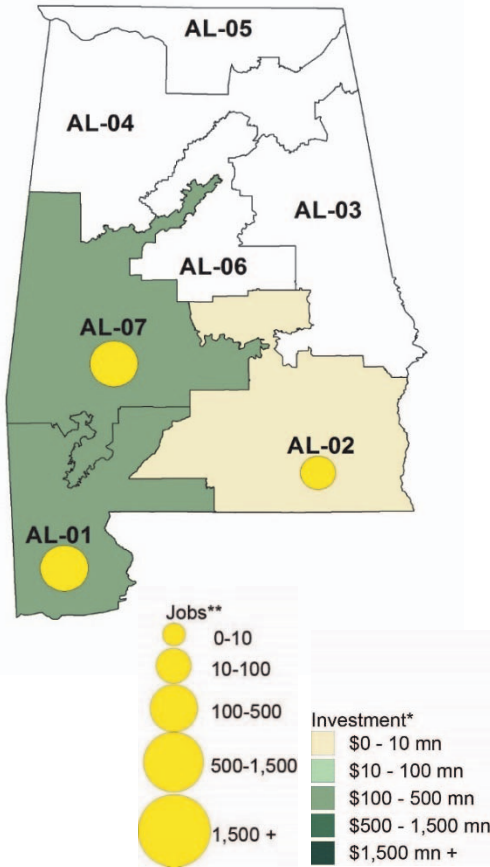
The South ranks first overall in Chinese investment with \$17.3 billion. It is home to some of the largest buys by Chinese companies in technology and food processing, as well as smaller greenfield investments in manufacturing and capital-intensive investments in the energy sector.

To the east, districts that form the Raleigh-Durham Research Triangle (NC-04 and NC-07) are major recipients of investment in manufacturing, technology, and food processing. VA-04, as headquarters of Smithfield, is also a major host of investment. To the west, TX-07 (part of Houston), TX-23 (southwestern Texas), and OK-03 (northwestern Oklahoma) has attracted investments in oil and gas. The Deep South is a major recipient of capital-intensive greenfield manufacturing investments, notably AL-01 (southwestern Alabama) and LA-05 (northeastern Louisiana). Compared to their competitiveness in attracting global FDI, Tennessee, Georgia, and Florida have received low levels of Chinese investment.

Chinese establishments provide more than 29,000 jobs in the South, roughly 36% of the national total. North Carolina is a major beneficiary of Chinese-provided employment in the region with a significant number of jobs in NC-01, NC-04, NC-07, NC-08, and NC-09. Other districts with high employment in the eastern South are in Virginia (VA-04 and VA-08), Kentucky (KY-05), Texas (TX-07) and Oklahoma (OK-03).

Some of the best-known Chinese-owned companies are located in the South. Haier's manufacturing facility in South Carolina (SC-05) was the first greenfield manufacturing investment by a Chinese company. Lenovo is an important employer in NC-04 and other districts after it acquired IBM's personal computer unit in 2005. Smithfield Foods is headquartered in VA-04 and has significant presence across the region. Important companies in the Deep South include Continental Motors in AL-01 and Golden Dragon Copper in AL-07.

### 2.3.1 ALABAMA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Alabama has received \$320 million in Chinese investment from 2000 to 2014. There are 11 operations with a total employment of more than 600 people.

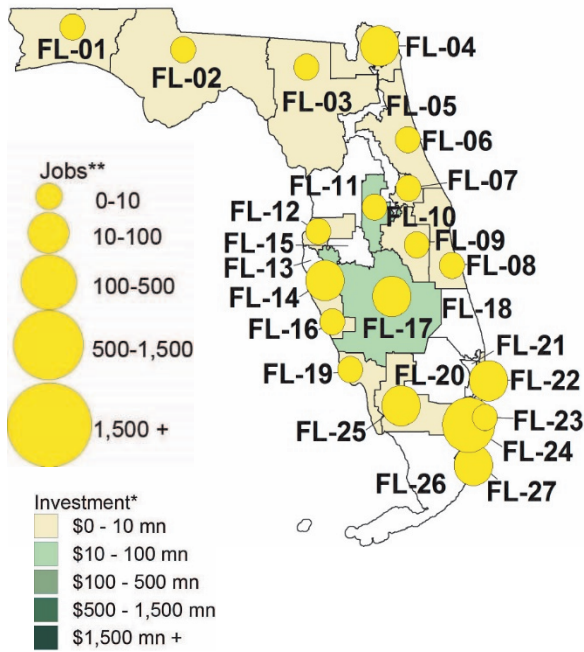
Alabama is home to several smaller greenfield investments in manufacturing, for example Shandong Swan USA, a manufacturer of cotton gin saws, based in Montgomery (AL-02). The most important manufacturing success story is GD Copper USA, a subsidiary of Golden Dragon Precise Cobber Tube. The Chinese manufacturer of precision copper components has chosen Pine Hill, Wilcox County, as location for its first US manufacturing plant. Wilcox County (AL-07) is one of the poorest areas in Alabama and the US at large. The Golden Dragon plant is the first major industrial operation to open in Wilcox in nearly 40 years. Apart from providing temporary jobs during construction of its 500,000 sq.-ft. facility, the plant has created nearly 150 jobs and hopes to expand eventually to 500.<sup>32</sup>

Another significant investment by a Chinese company is the purchase of Continental Motors, an airplane motor manufacturer based in Mobile (AL-01), by AVIC, a Chinese aviation conglomerate. Continental Motors now has five operations in AL-01, and has continued to expand employment as well as make acquisitions, since the change in ownership.<sup>33</sup> In total, Continental Motors provides more than 430 jobs.

<sup>32</sup> See “Alabama officials welcome Golden Dragon’s first U.S. Factory”, *Made in Alabama*, May 28, 2014, <http://bit.ly/1zMUPc1>. Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

<sup>33</sup> See “Mobile’s Continental Motors to acquire Danbury Aerospace operations in San Antonio”, *AL.com*, May 5, 2015, <http://bit.ly/1FQbixo>.

### 2.3.2 FLORIDA



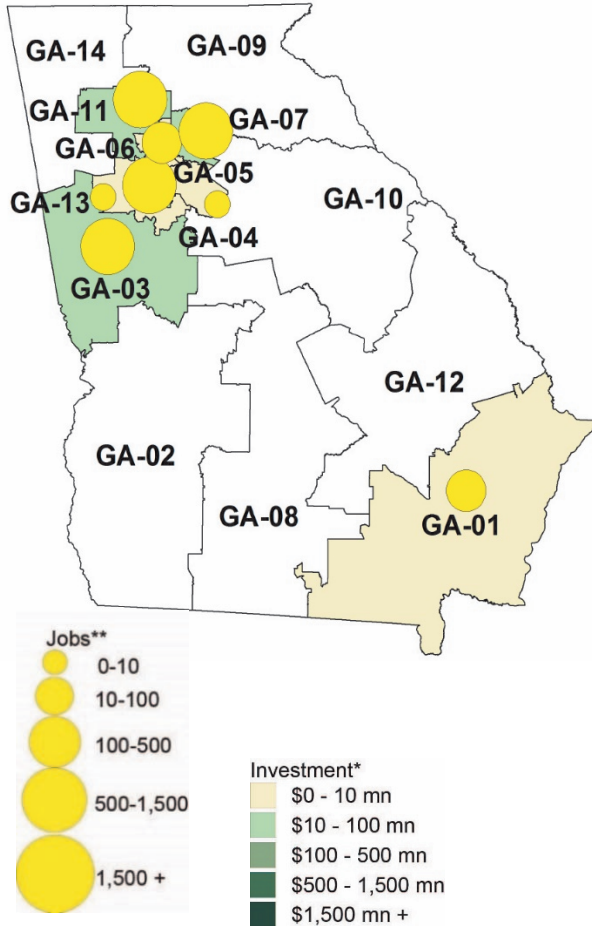
Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Florida is a major recipient of foreign investment in all major sectors such as tourism, real estate, finance, and agriculture. However, Chinese investors have only put a moderate amount of capital to work in the Sunshine State to date. From 2000 to 2014 Chinese companies only invested around \$230 million, resulting in 45 establishments employing 350 workers.

These establishments are broadly distributed across the state. The most important companies are DDS Lab, a laboratory developing custom dental equipment in Tampa (FL-14); and Plaza Construction, a subsidiary of China Construction America, in Miami (FL-24).

Tourism, real estate, and agriculture should be interesting sectors for Chinese investors aiming to expand their footprints in Florida.

### 2.3.3 GEORGIA



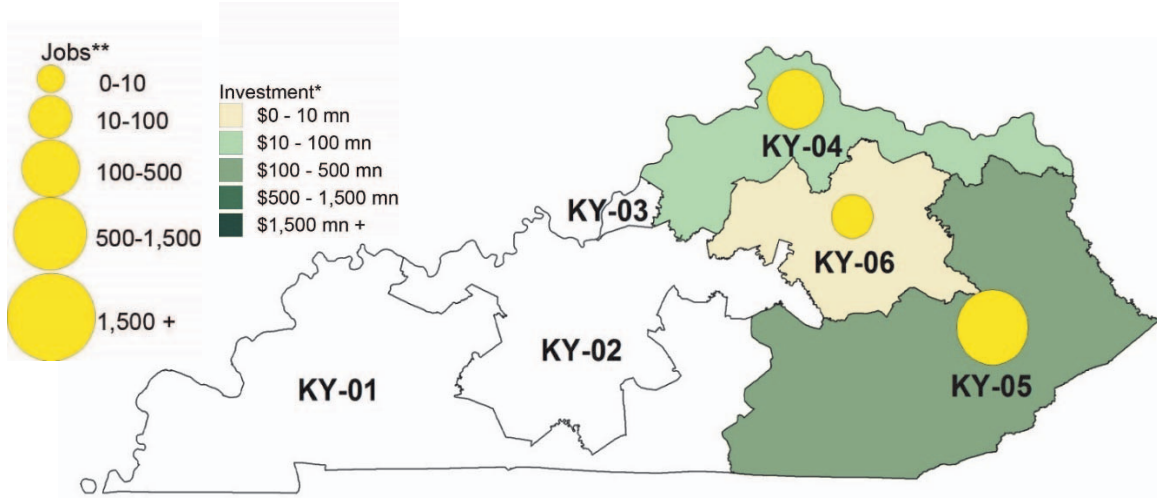
Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Georgia is home to 47 Chinese-owned entities, which employ more than 1,000 workers in the state. Total investment from 2000 to 2014 amounts to \$315 million. Most Chinese establishments are located in the Atlanta metro area.

One of the landmark Chinese investments is a greenfield manufacturing and distribution facility by construction machinery maker Sany in Peachtree (GA-03). The facility was geared towards serving US customers. After initial difficulties, Sany achieved its first profitable year in 2014. Other important Chinese-owned companies include Hirsch Bedner Associates, an interior design firm focused on hotels, as well as Noble Management Group, a hospitality management firm. These provide over 250 jobs. Other investments in Atlanta include the Hilton Atlanta Northeast hotel and a facility of AppTec Laboratory Services. Outside Atlanta, in Suwanee (GA-07), Chinese appliance company Hisense has established an R&D center.

Georgia's importance in the US economy and its exposure to overall FDI mean that there is room for growth in Chinese FDI. Examples of areas untapped by Chinese investment are the logistics and distribution industries in the Savannah area. Other important US shipping and logistics clusters in New Jersey, Oregon, Washington, and California have all attracted substantial Chinese investment.

### 2.3.4 KENTUCKY



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Kentucky attracted more than \$260 million from Chinese investors FDI. There are five operations in total, which are located in the eastern districts of the state. All five establishments are employment-intensive manufacturing operations, which together employ more than 1,400 people.

The most important employer is now Chinese-owned Smithfield Foods. Smithfield operations in Grayson and Middlesboro (KY-05) provide over 1,200 jobs together.

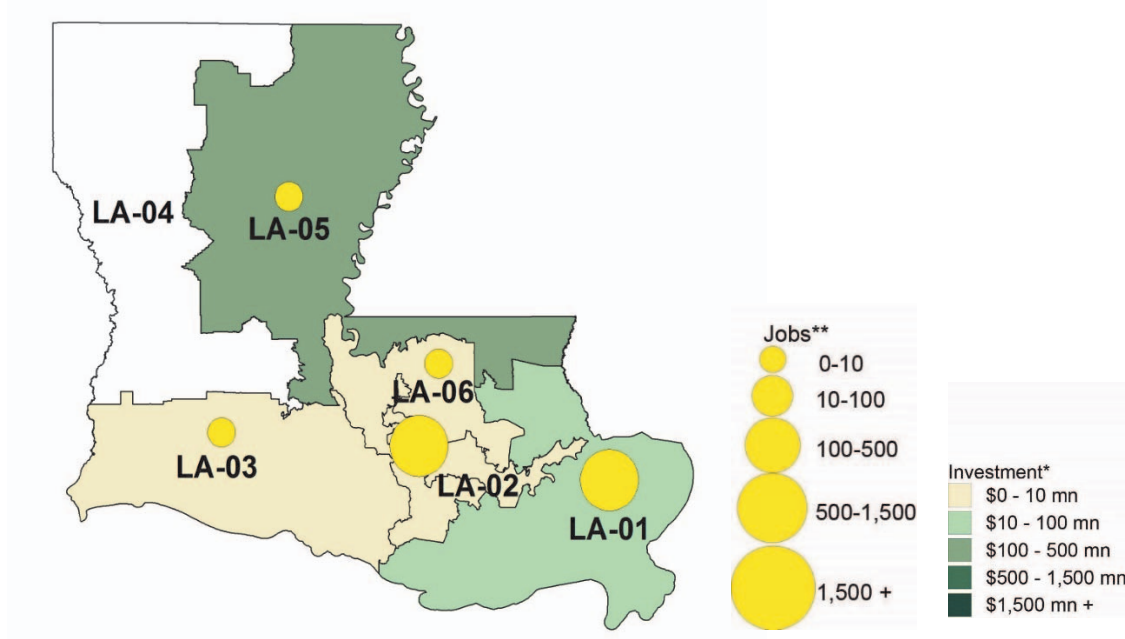
BOGE Rubber & Plastics produces industrial components in Hebron (KY-04) and employs 175. In 2013 Birtley, a

coal equipment processing manufacturer, was the first major greenfield investment from China in Kentucky's history. The facility in Lexington (KY-06) created over 30 jobs.

Considering Kentucky's overall economic profile, the state's automotive industry could be an important draw for future Chinese investors, given demonstrated interest in the sector in other parts of the country.



### 2.3.5 LOUISIANA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Chinese investment in the Pelican State totaled \$520 million from 2000 to 2014. There are 13 Chinese-affiliated companies in the state, providing 250 jobs.

The low employment to jobs ratio is largely due to Sinopec’s investment in the Tuscaloosa Marine Shale, which did not generate significant direct employment. However, exploration and future exploitation will provide contracting employment and other indirect benefits for the local economy.

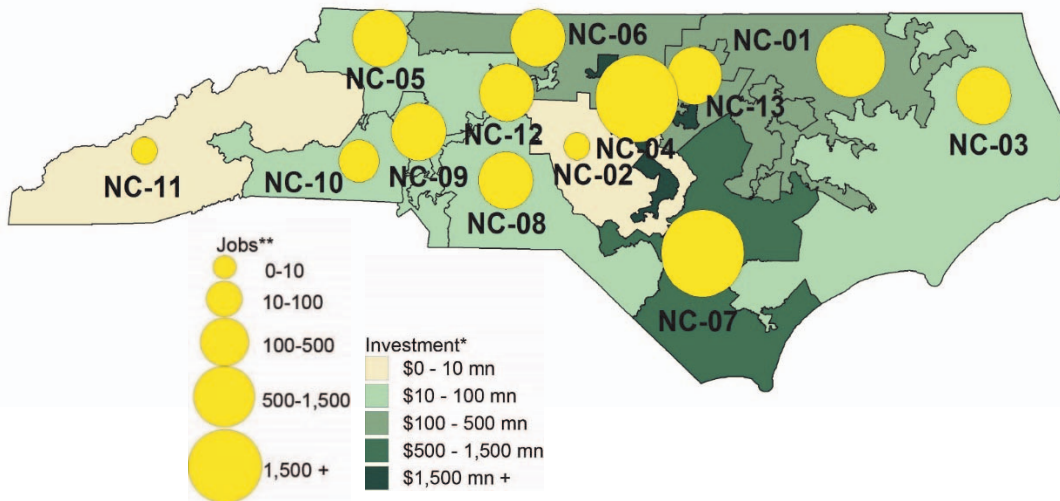
Another important investment is a stake by Chinese exploration company BGP in ION Geophysical, an oil and gas exploration and engineering firm. ION Geophysical has its marine imaging services division in Harahan (LA-01) with more than 100 employees. Chinese investors also own the Hilton Garden Inn in Baton Rouge (LA-02).

A major pending project is Shandong Yuhuang’s \$2 billion investment in a methanol plant in St. James Parish (LA-02). This investment would represent a massive capital investment in the local economy with significant construction jobs, but limited direct employment impact. The project is currently under review.<sup>34</sup>

Chinese interest in the Louisiana oil and gas sectors, as well as the chemical industry, reflect important sectors of the state economy. Other growth sectors include agribusiness and manufacturing, which as of yet have not attracted Chinese investment in the state.

<sup>34</sup> Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

### 2.3.6 NORTH CAROLINA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

With nearly \$5.5 billion invested, North Carolina is the third highest recipient of Chinese investment in the US. The more than 80 Chinese affiliates in the state currently provide over 15,000 jobs. This presence is in part the result of acquisitions of US firms located in North Carolina (IBM, Smithfield), but also strong organic growth of Chinese companies in the state in recent years.

One significant employer in North Carolina is Smithfield, which operates 14 facilities in the state with more than 8,000 employees. These are spread evenly through NC-01, NC-03, NC-08, and NC-09, and most importantly NC-07. The Tar Heel facility (NC-07) is the world's largest pork processing facility.

The second top employer in North Carolina is Lenovo, with a track record of 10 years and nearly 5,000 employees. In 2005, Lenovo acquired IBM's personal computing business including its operations in the Research Triangle (NC-04). Since 2008, Lenovo also operates a manufacturing facility in Whitsett (NC-06). In 2014, Lenovo completed the acquisition of IBM's x86 server business, which is also located in the Research Triangle. It also plans to move some server production from China to the US.<sup>35</sup>

Chinese companies have also invested in North Carolina's furniture industry, including Fine Furniture

and Design, a greenfield investment in High Point (NC-06); the acquisition of Schnadig Corporation in Greensboro (NC-12); and Talon Systems in Statesville (NC-05). Homestar Light Industrial Co., which acquired Talon, plans to add 40 jobs and retain all 120 currently at the operation.<sup>36</sup>

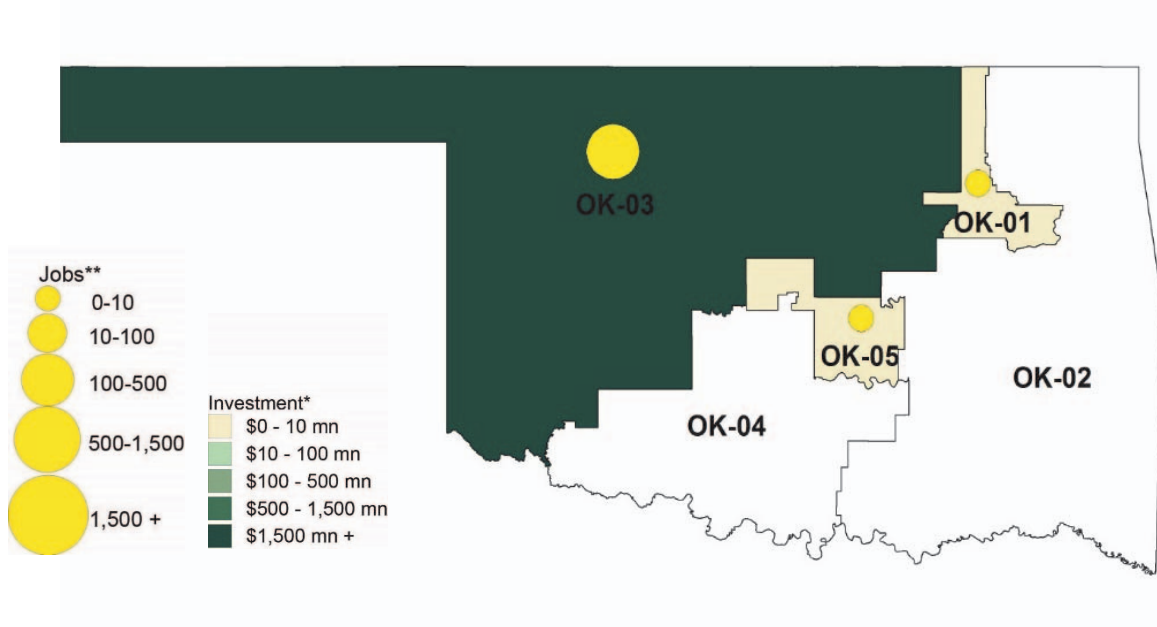
NC-09 is home to a large group of medium-sized companies such as Jetion Solar, a solar panel manufacturer, and NouvEON Technology Partners, both in Charlotte. NC-13 is home to another major Chinese subsidiary, Epic Games, which is famous for its game Gears of War. The video game developer is owned by Chinese internet giant Tencent and provides nearly 300 jobs in Cary.

After experiencing major structural adjustments from the reorganization of global value chains (for example, its historically important textile and furniture industries), North Carolina has become one the most important destinations for Chinese investment in the US. Opportunities for expanding Chinese capital inflows exist particularly in the state's high-tech sectors (including information technology and biotech) and other service industries.

<sup>35</sup> See "Lenovo in the United States", *Lenovo*, 2012, <http://lnv.gy/1lh2KRR>; "Unlike IBM, Lenovo to manufacture some System X servers in U.S.", *Computer World*, September 30, 2014, <http://bit.ly/YMg7nS>.

<sup>36</sup> Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

## 2.3.7 OKLAHOMA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

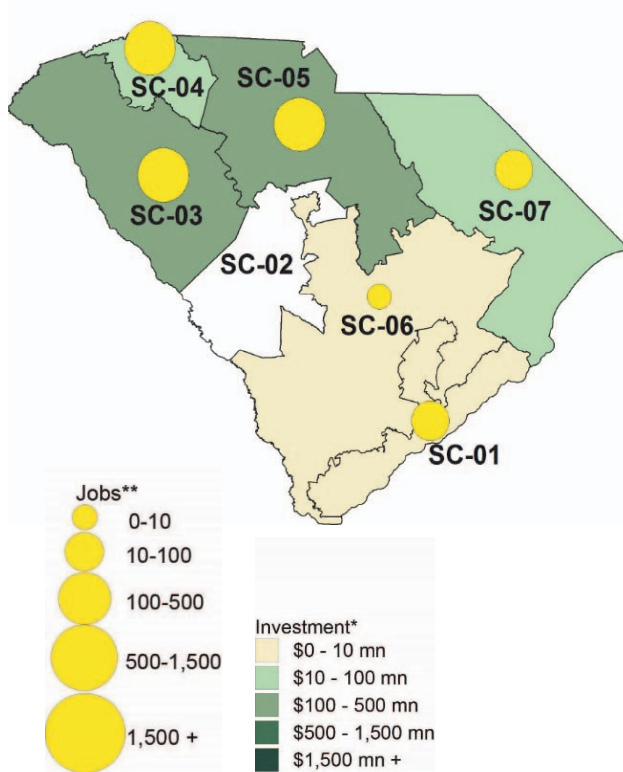
Chinese companies have invested \$1.6 billion in Oklahoma's economy since 2000. There are 13 Chinese establishments in the state, providing nearly 500 jobs.

The bulk of investment can be attributed to a capital-intensive joint venture between Chesapeake Energy and Sinopec to exploit the Mississippian Lime (OK-03). Sinopec has ownership of the Oklahoman portion of this deposit. However, there is no substantial direct employment associated with this investment.

Employment is primarily related to the operations of Smithfield subsidiary Murphy-Brown, which has extensive farming activities in OK-03 in Beaver, Ellis, Harper, and Laverne.

While these investments are few in number, the jobs provided by Smithfield and Sinopec's capital are important for Oklahoma, which is not otherwise a big recipient of foreign investment. Future opportunities continue to be in energy and potentially the civil aerospace industry.

### 2.3.8 SOUTH CAROLINA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

South Carolina is an important destination for Chinese investment (\$450 million since 2000). It is home to some of the earliest Chinese investments in the US, most notably Haier, the first Chinese company to invest in a greenfield manufacturing facility in America. Today

there are 27 Chinese establishments, providing nearly 1,000 jobs.

Haier first opened its \$40 million manufacturing facility in Camden (SC-05) in 2000. The company began by entering the market for dormitory mini-fridges and has grown steadily since. Now with its North American headquarters in New Jersey, Haier's Camden plant has grown to about 250 jobs. It has also started exporting refrigerators back to the Chinese market.<sup>37</sup>

Notable operations include American Yuncheng Gravure Cylinders (SC-04) and Greenfield Industries (SC-03). American Yuncheng Gravure Cylinders is a greenfield manufacturing operation producing plastic film that has benefited enormously from being closer to US clients, such as Coca-Cola. Greenfield Industries was part of Kennametal, the machine toolmaker, until its purchase in 2009. Due to a slowdown in business, its Seneca facility was in danger of shutting down and its workers furloughed. After being bought by Top Eastern Drill, a Chinese company, the entire workforce was rehired and the company has since added an additional 100 workers.<sup>38</sup> Bluestar Silicones has operated an R&D center in York (SC-05) since 2012.

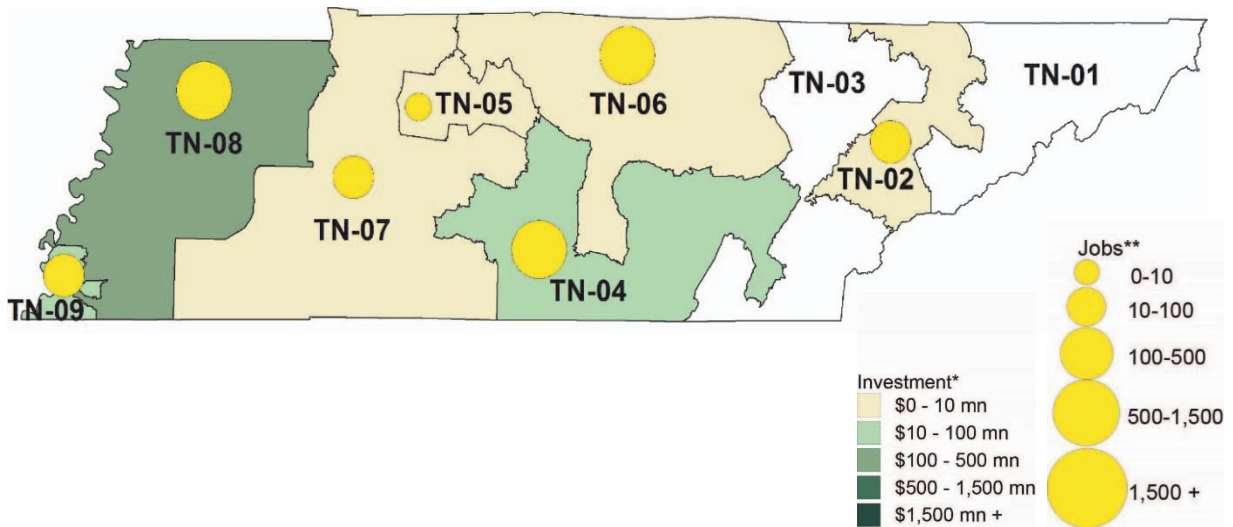
Keer Group, a textile manufacturer, has recently begun construction on a plant that will produce industrial yarn in Indian Land (SC-05). The company has pledged to invest \$218 million and hopes to begin operations in 2015, creating over 500 jobs.<sup>39</sup> Peak Corporation, a manufacturer of automotive lifts, announced in late 2014 its intention to build a facility in Manning.

<sup>37</sup> See "Home appliance maker Haier taking on America", *China Daily*, August 3, 2014, <http://bit.ly/1GPsNtn>.

<sup>38</sup> See "American Made... Chinese Owned", *Fortune*, May 7, 2010, <http://for.tn/1JrkmrD>.

<sup>39</sup> See "Keer Group To Build Facility In Indian Land, S.C., Create 501 Jobs", *Textile World*, 2014, <http://bit.ly/1H1pK6E>. Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

### 2.3.9 TENNESSEE



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Tennessee has attracted more than \$340 million of Chinese FDI in past 15 years. Today there are 12 Chinese establishments, which provide nearly 730 jobs across the state. The majority of jobs is in manufacturing.

In Fayetteville (TN-04), Copperweld Bimetallics was renamed Fushi Copperweld after its acquisition in 2007. The facility has a 40-year history and provides more than 100 jobs. In Gallatin (TN-06), ABC Group Fuel Systems, which manufactures automotive fuel systems, provides 200 jobs. Wright Medical Group's OrthoRecon division, with its headquarters in Arlington (TN-08), was acquired by MicroPort and employs more than 300 workers.

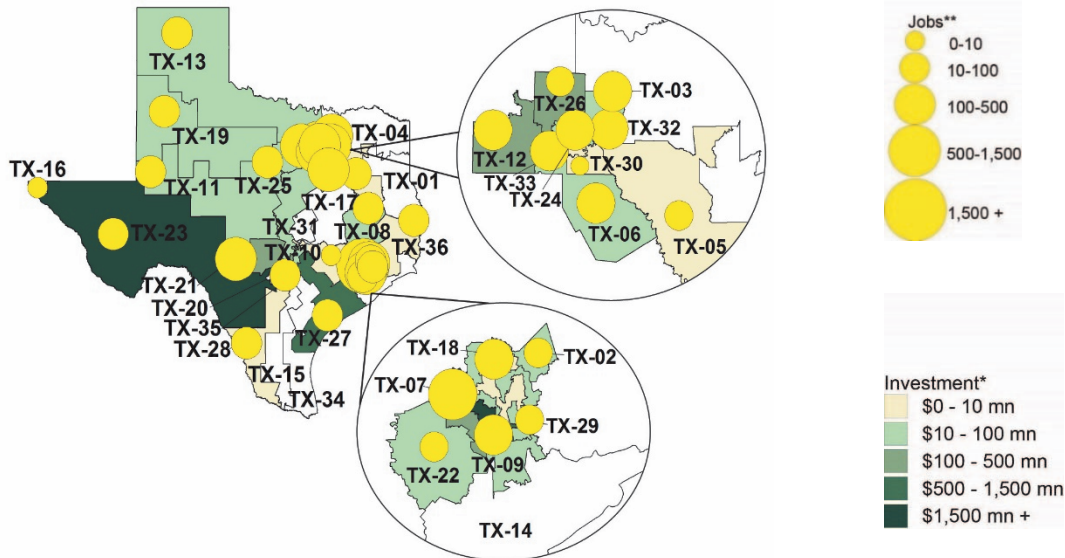
Yanfeng Auto USA, a Chinese subsidiary that produces automotive interior trim components, plans to build a new facility in Chattanooga to supply Volkswagen's new SUV, manufactured at the German car maker's nearby plant. Yanfeng's new facility could provide around 330 jobs to the area.<sup>40</sup>

Chinese presence in Tennessee is consistent with the state's commitment to advanced manufacturing. While Chinese investment has already covered a wide range of sectors, it is relatively small compared to Chinese investment in other states and to Tennessee's success in attracting global FDI, which suggests room for growth in the coming years.

<sup>40</sup> See "Chinese auto parts company eyes Chattanooga for plan to supply VW", *Times Free Press*, March 14, 2015, <http://bit.ly/1lh42Mr>. Future expenditures and jobs of pending

deals or projects currently under construction are not included in the data.

### 2.3.10 TEXAS



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Texas is one of the major sites of Chinese FDI in the US, with more than \$5.6 billion in investment from 2000 to 2014. 138 Chinese establishments employ more than 3,400 workers in Texas. Chinese investments cover a diverse set of sectors, from real estate and oil to advanced services. Western Texas districts have attracted capital-intensive investments in energy, while the employment-intensive investments can be found in the Houston and Dallas-Fort Worth areas.

Investments in the Houston area are primarily focused on energy. Nexen, a wholly-owned subsidiary of China National Offshore Oil Corporation (CNOOC), has a large regional office in Houston and offshore oil assets in the Gulf of Mexico (which are attributed to the headquarters). Other energy companies in the Houston area include Friede Goldman, leaders in drilling rig design (TX-09); INOVA, a geophysical engineering joint venture between ION Geophysical and BGP (TX-09); offices and real estate investments by Sinopec (TX-07); Sinochem's investment in the Wolfcamp Shale (TX-11); CNOOC's joint venture in the Eagle Ford Shale (TX-23); and Qingdao Kingking Group's investment in an oilfield (TX-27).

The Dallas/Fort Worth metro area is home to small- and medium-sized greenfield operations by Chinese

companies in TX-05, TX-06, and TX-24. Plano (TX-03) hosts an office of Chinese telecoms giant Huawei that employs more than 300.

San Antonio (TX-21) hosts an office of Catapult Systems, an IT consulting firm. Kerrville (TX-21) is home to Mooney Aviation, a private aircraft manufacturer acquired by Meijing Group in 2013. The manufacturer had been dormant since 2008, but has restarted production since being acquired. It hopes to move into the rapidly expanding Chinese private aviation market.<sup>41</sup>

One of the largest greenfield investments in Texas is Tianjin Pipe's American subsidiary TPCO America's plant for aluminum pipes in Gregory (TX-27). Construction is currently underway at the \$1 billion facility. Having begun the second phase of the project, it is expected to be operating by mid-2016 with an estimated job count of up to 800.<sup>42</sup>

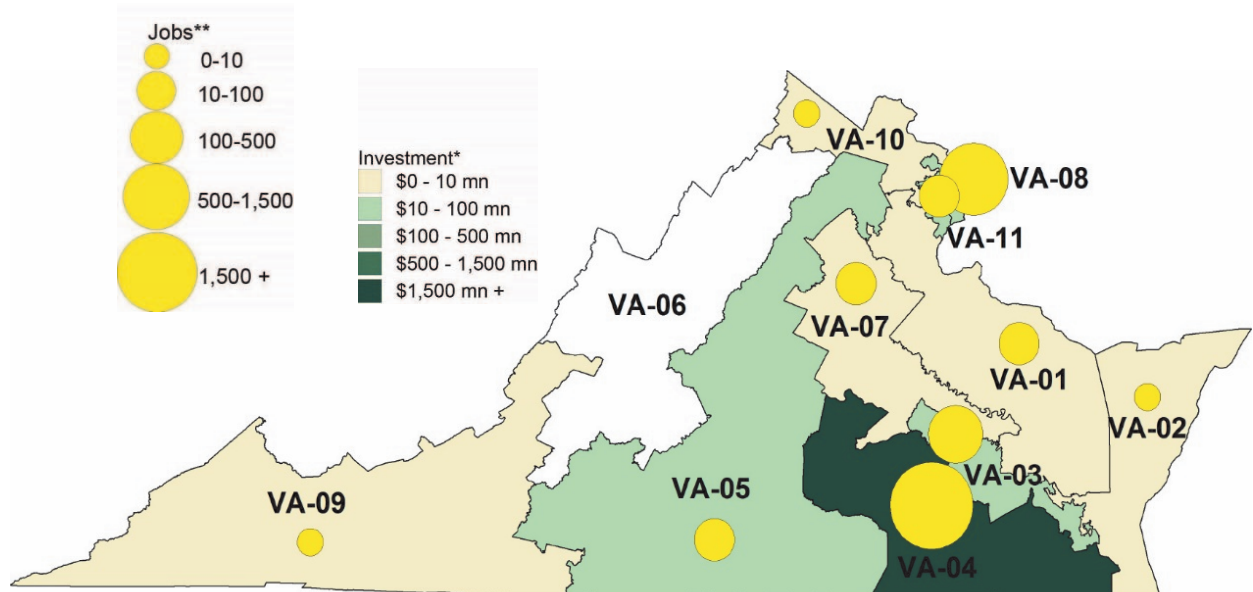
While Chinese FDI is well represented in the state's storied energy sector, there are major areas of the Texas economy largely untapped by Chinese investors. With few exceptions, there has not been much investment in technology or aerospace, which are both major draws for foreign companies.

<sup>41</sup> See "Chinese group buys Mooney to revive production: report", *Flightglobal*, October 9, 2013, <http://bit.ly/iZZpue>.

<sup>42</sup> See "Heavy rains not dampening TPCO America Mill", *AMM*, April 15, 2015, <http://bit.ly/1RdqJna>. Future expenditures and

jobs of pending deals or projects currently under construction are not included in the data.

## 2.3.II VIRGINIA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Since 2000, Virginia has received almost \$2.2 billion in Chinese investment. More than half of this investment is accounted for by the takeover of Smithfield Foods, which is headquartered in the state.<sup>43</sup> In total, there are 37 Chinese establishments in Virginia, employing nearly 5,000 people.

Smithfield Foods was acquired by Shuanghui (now WH Group) in 2013, in the largest Chinese US acquisition in history. Smithfield has its headquarters and six additional significant subsidiaries in VA-01, VA-03 and VA-04. Taken together, these subsidiaries employ nearly 4,000 people. Since the change of ownership, Smithfield has maintained its operations in Virginia and expanded business in China. WH Group, which is now listed on the Hong Kong stock exchange, hopes to utilize Smithfield's brand and technology to succeed in China's rapidly growing pork market. WH Group's access to the Chinese market has the potential to revitalize Smithfield's stagnant growth in recent years.

Another important Chinese investment is an announced paper processing plant in Richmond (VA-04) by Tranlin Paper. Tranlin plans to invest \$2 billion in a complex to house both its manufacturing capabilities and North American headquarters, which would mark the largest Chinese greenfield investment to date. The company hopes to employ 2,000 workers at its facility by 2020.<sup>44</sup> It will produce paper using straw purchased from local farmers, spending an estimated \$50 million a year on procurement of Virginia agricultural products.<sup>45</sup>

While host to the largest-ever Chinese US acquisition, Virginia has received comparatively little investment in other sectors. Chinese investors have been notably absent from Virginia's service and high-tech sectors, which otherwise attract foreign interest.

<sup>43</sup> Our data attributes certain assets of acquired companies to the headquarters location. For details, see Data Appendix.

<sup>44</sup> Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

<sup>45</sup>See "Chinese companies make major investments in Tri-Cities", *The Progress Index*, March 23, 2015,

<http://bit.ly/1zBRqfS>; "Chinese paper firm seals first land deal", *Richmond BizSense*, April 14, 2015, <http://bit.ly/1PoQTuV>. Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

### 2.3.12 OTHERS

#### Arkansas

The Natural State has recorded an investment of \$14 million since 2000, with five Chinese establishments today. These provide fewer than 20 jobs. The civil aspects of Arkansas's aerospace industry could attract Chinese investment in the future.

#### Mississippi

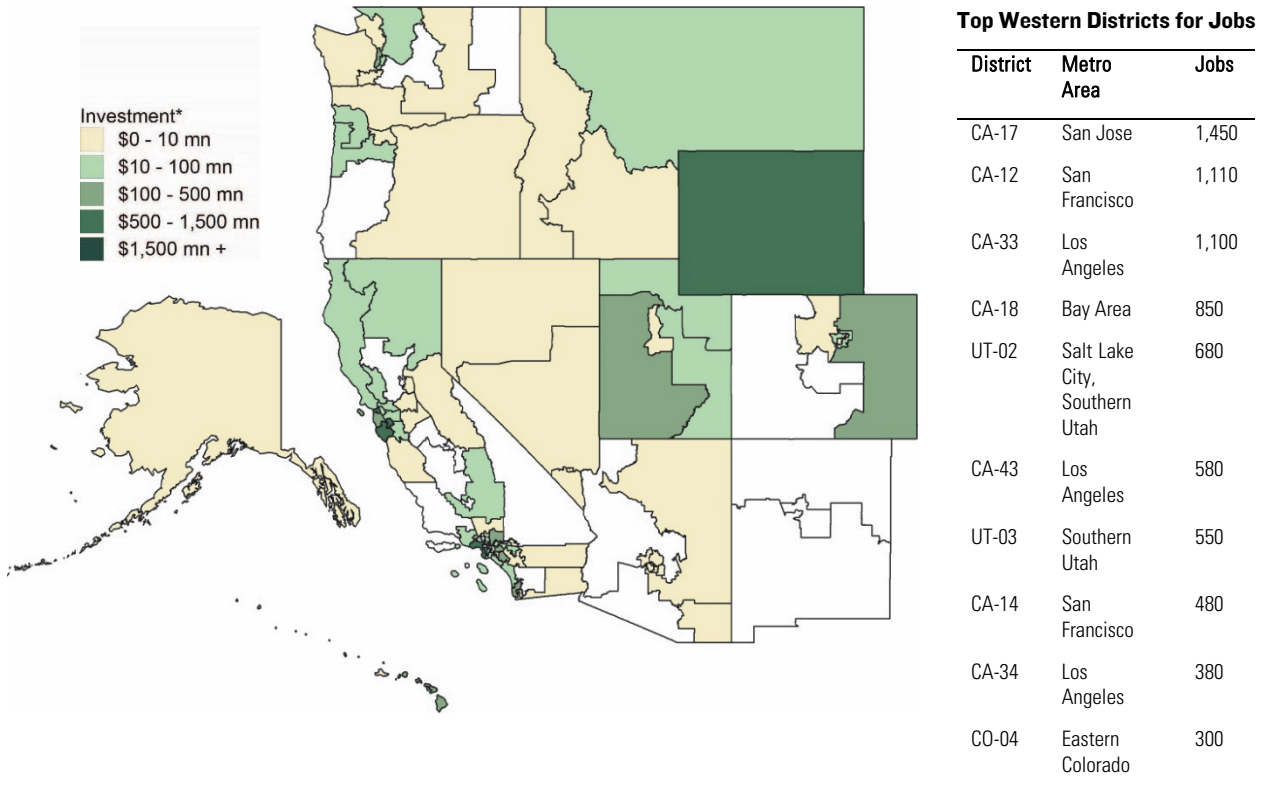
Mississippi currently has no significant Chinese-affiliated operations. It has overall low levels of foreign direct investment, but the low cost of doing business can be an advantage in attracting future investment from China.

#### West Virginia

West Virginia does not presently have any major Chinese-owned establishments. One potential area of interest to Chinese companies could be the Mountain State's coal resources and capabilities.



## 2.4 THE WEST



Source: Rhodium Group. See Data Appendix for more details. \*Cumulative value of Chinese FDI transactions, 2000-2014

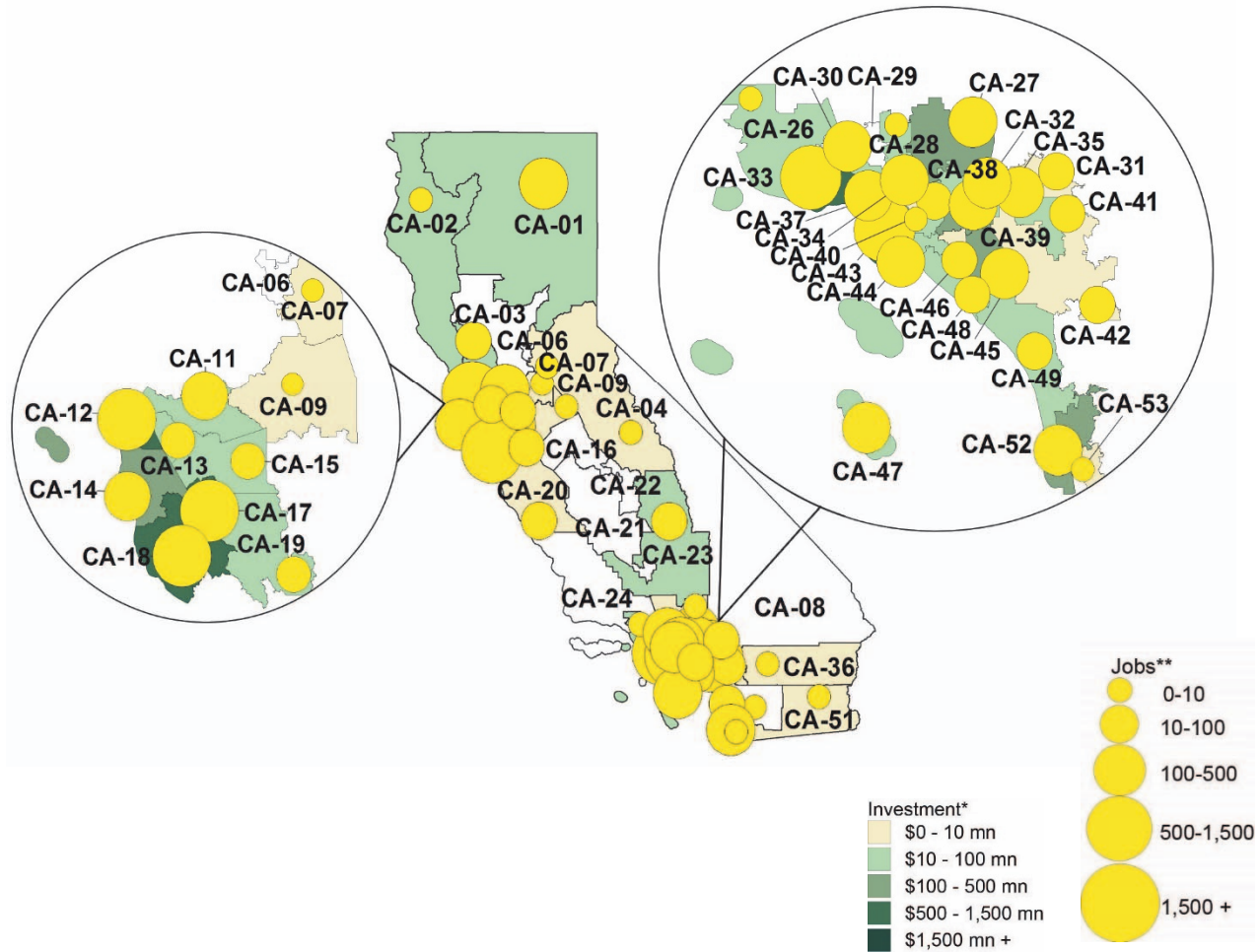
The West attracted almost \$8 billion of Chinese investment from 2000 to 2014, covering a wide range of sectors, from software development and biotech to real estate, energy, and some manufacturing. However, investments are spread less evenly compared to other regions and heavily concentrated in California.

Top districts in the West are primarily in California, including San Francisco (CA-12), San Jose and other parts of the southern Bay Area (CA-17), and parts of Los Angeles (CA-33 and CA-34). Investments are mostly focused on technology, renewable energy, biotechnology, and real estate. Eastern Colorado (CO-04) and Wyoming's at-large congressional district (WY-01) have attracted investments in the energy sector.

With regard to employment, California leads the ranking in the West. More than 8,300 Californians are on the payroll of Chinese employers, which is more than in any other state. The top districts are in the San Francisco Bay Area (CA-12, CA-14, CA-17, and CA-18) and Los Angeles (CA-33, CA-34, and CA-43). Other areas with strong job provision include Salt Lake City and southern Utah (UT-02 and UT-03) and Denver and eastern Colorado (CO-04).

Important companies include Chinese tech firms such as Baidu, Huawei, and Alibaba (CA-17, CA-17, and CA-14), Complete Genomics (CA-18), and real estate investors like Shenzhen New World Group (CA-30 and CA-34).

## 2.4.1 CALIFORNIA



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

California is the number one destination for Chinese investment in the US, with aggregate investment of \$5.9 billion since 2000. There are almost 370 Chinese establishments in California, providing more than 8,500 local jobs. These are focused geographically on the San Francisco Bay Area and greater Los Angeles. They are spread across a wide range of industries with a focus on high-tech and real estate.

To the north, online marketplace Alibaba operates an office for its American business, 11 Main, in Chico (CA-01). Alibaba is also an important investor in San Francisco Bay Area districts, with investments in video game developer Kabam (CA-12), smaller e-commerce companies like Shoprunner and Vendio (both CA-14),

and the messaging application TangoMe (CA-18). The headquarters of 11 Main are located in San Mateo.

CA-12 in San Francisco is home to a number of other medium-sized operations, primarily in technology. Deem, a business services operation, was acquired by ChinaSoft in 2014. San Francisco also received investments in financial services, mobile technology, and education companies. Real estate is also an attractive target, for example, 225 Bush Street.

The southern Bay Area districts of CA-17 and CA-18 are significant beneficiaries of Chinese investment both in terms of investment and employment. Chinese investors are attracted by the available talent pool and research clusters. Major establishments include Complete

Genomics (CA-18), a DNA sequencing firm in Mountain View acquired by Beijing Genomics Institute (BGI) in 2013, with over 250 jobs; and the thin-film photovoltaic (PV) solar cell manufacturer MiaSole (CA-17), which was acquired by Chinese solar giant Hanergy in 2013 and employs nearly 200 workers. Other high-tech companies in the area include solar power developer Alta (in CA-17, also acquired by Hanergy), medical software developer Zonare Medical Systems (CA-18), and video game developer Perfect World's subsidiary Cryptic Studios (CA-18). Chinese telecoms giant Huawei has an R&D center with more than 200 workers in CA-17. Baidu, the Chinese search engine giant, has opened an artificial intelligence laboratory in Sunnyvale. Taken together, Chinese firms provide more than 2,300 jobs in CA-17 and CA-18.

The other major cluster of Chinese FDI in the Golden State is in the Los Angeles metro area. It has attracted large real estate investments such as Dalian Wanda's purchase of the site of the former Robinsons-May department store in Beverly Hills and Shenzhen New World Group's purchase of the Sheraton Universal Hotel (CA-33 and CA-30). New World owns the Los Angeles Marriott in CA-34 as well. The district also hosts two major new Chinese real estate developments, Greenland

Group's Metropolis project and Oceanwide's Fig Central. Both are mixed retail-residential complexes with total investment of nearly \$2 billion.<sup>46</sup>

Other operations in the LA area include Tencent-owned Riot Games, the developer of League of Legends (CA-33). Wanxiang also purchased the assets of Fisker Automotive in Anaheim (CA-39). Fisker announced its luxury hybrid, the Karma, in 2011 to much fanfare but has struggled in the ensuing years. Wanxiang hopes to relaunch a rebranded Fisker as the Elux later in 2015, possibly bringing manufacturing of the car back to the United States.

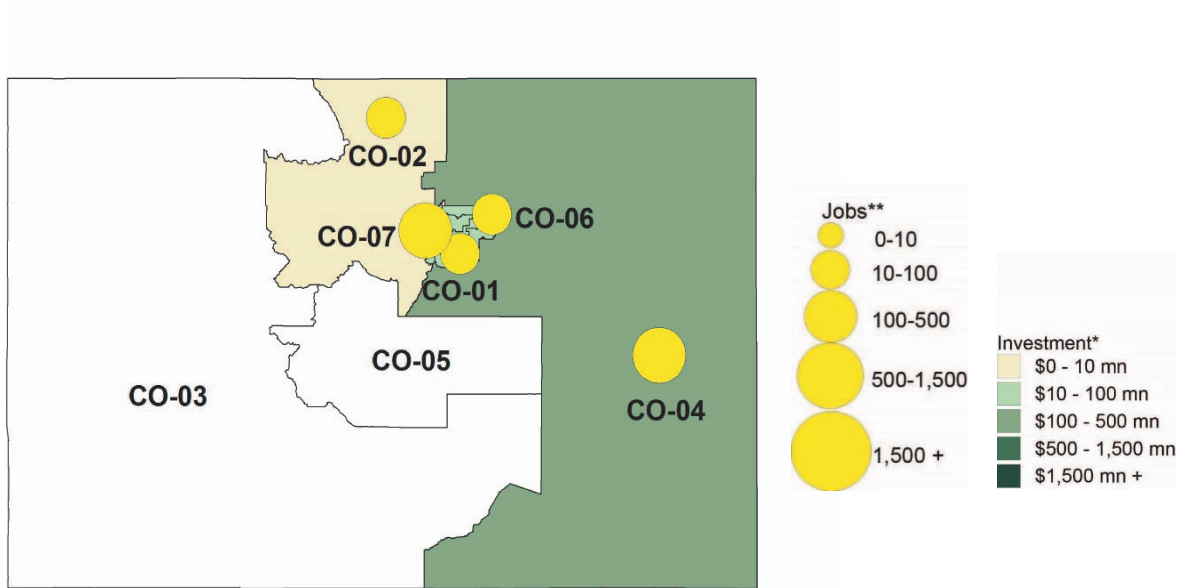
While California is already the top destination of Chinese capital, there are many opportunities for further growth. Notably, there is almost no investment outside the San Francisco Bay Area and greater Los Angeles. Chinese investors have not yet tapped California's huge agricultural sector and other industries of its highly diversified, mature economy. Aerospace and entertainment also promise to attract greater Chinese interest in the future.

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<sup>46</sup> See "Work gets underway on stalled Fig central complex L.A. Live" *Los Angeles Times*, December 24, 2014, <http://lat.ms/1Qni2W3>. Future expenditures and jobs of

pending deals or projects currently under construction are not included in the data.

## 2.4.2 COLORADO



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Colorado received over \$430 million of Chinese investment since 2000. The state hosts 23 Chinese establishments that are responsible for nearly 600 local jobs.

The majority of investment can be attributed to energy acquisitions, such as CNOOC's stakes in the Niobrara Shale. However, these investments are not very labor-intensive. Most of the employment associated with

Chinese investment stems from two Smithfield subsidiaries in Denver (CO-07) and Yuma (CO-04). Together those two operations provide over 370 jobs. Other significant companies in Colorado include IT consultancy Catapult Systems and oil and gas engineering firm ION Geophysical, both in greater Denver (CO-06 and CO-01, respectively).

### 2.4.3 HAWAII

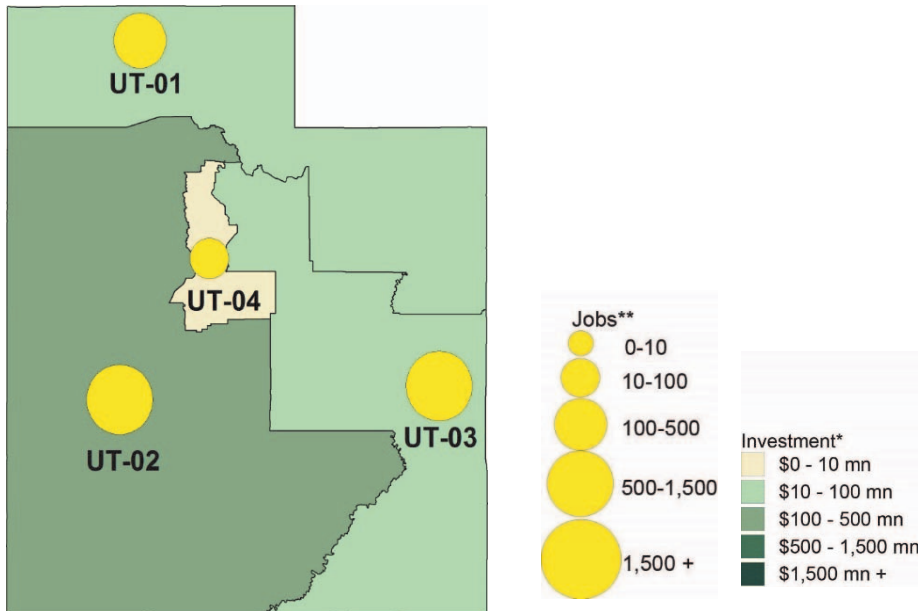


Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Hawaii is home to three Chinese establishments. Total investment from 2000 to 2014 exceeds \$200 million, providing 80 jobs. The major investment is a hospitality joint venture (Princeville Resort in HI-02).

While investment by Chinese companies in Hawaii has been low to date, it is an important destination for investment by Chinese individuals, which is not counted in our analysis. Growing Chinese tourism to Hawaii could help to boost hospitality investments and generate investments in other sectors as well.

## 2.4.4 UTAH



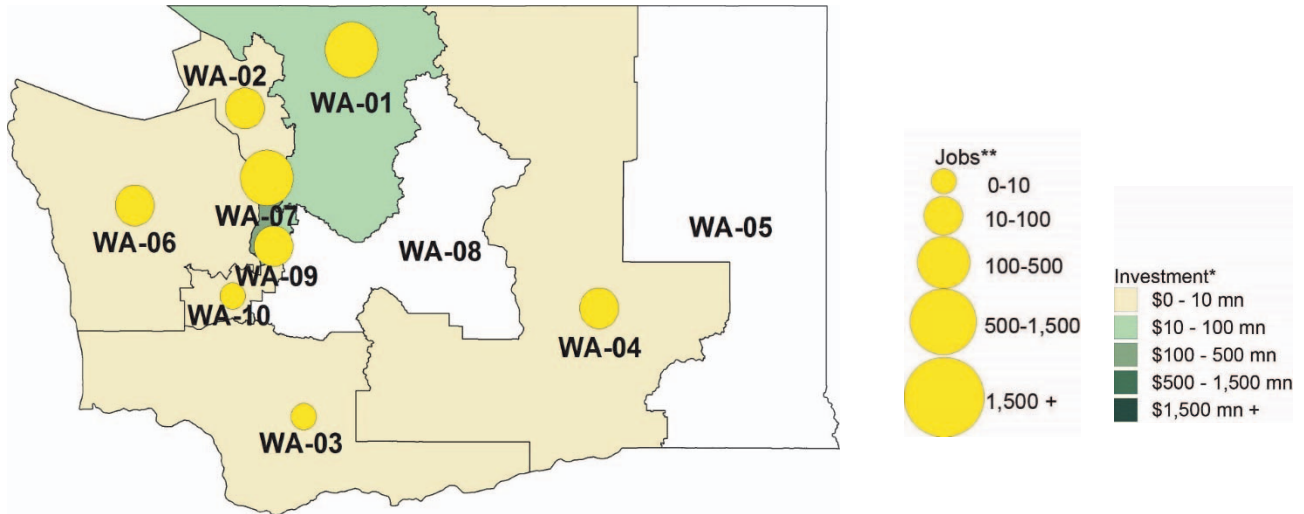
Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Utah has received over \$200 million in Chinese investment, resulting in 14 local establishments. Chinese activity is focused on employment-intensive manufacturing, providing more than 1,430 jobs.

UT-02 is home to two Smithfield subsidiaries, Circle Four Farms in Milford and Farmland Foods in Salt Lake City, which together provide over 600 jobs.

Fosun Pharma is an investor and partner of Nature's Sunshine Products, based in Lehi. The company's operations in Lehi and Spanish Fork employ 600. The partnership with Fosun will allow Nature's Sunshine Products to expand in the Chinese market.

## 2.4.5 WASHINGTON



Source: Rhodium Group. \*Cumulative value of Chinese FDI transactions, 2000-2014. \*\*Number of jobs provided by Chinese establishments as of 2014.

Washington has attracted \$250 million of Chinese investment since 2000. It is a particularly attractive state for small- and medium-sized companies. In 2014, Washington was home to 43 Chinese establishments providing nearly 500 jobs.

Most operations in the greater Seattle area are small-scale greenfield offices of Chinese technology firms, including software companies iSoftstone and ChinaSoft in Redmond and Kirkland (both WA-01), and medical device manufacturer Mindray in Redmond. Glasair Aviation, a manufacturer of recreational airplanes, has operations in Arlington (WA-02). Jilin Hanxing, the Chinese buyer, has kept Glasair in Arlington and retained all staff. In April 2015, a new model, the Merlin, took flight from their facility at Arlington Municipal Airport.<sup>47</sup>

Alibaba, the Chinese e-commerce company, is looking to add a regional office and will potentially choose Seattle as its US headquarters.<sup>48</sup> Another possible investment is a proposed methanol plant in Kalama (WA-03). This is an interstate project in the Columbia River valley with another plant in Clatskanie, Oregon, which would cost \$1 billion in each.<sup>49</sup>

Washington is home to many Chinese companies, but total investment remains comparably low. Washington's strength in aerospace, telecoms, and high-tech sectors should continue to make it an important destination for Chinese FDI in the future. Moreover, Washington is a popular destination for investment by Chinese individuals and households, which may help to boost FDI as well.

<sup>47</sup> See "Chinese firms buys Glasair aircraft builder", *Puget Sound Business Journal*, July 23, 2012, <http://bit.ly/1KMjYV4>; "Glasair's Merlin LSA Takes Flight", *Flying*, April 14, 2015, <http://bit.ly/1PoRhd1>.

<sup>48</sup> See "Alibaba 'likely' to choose Seattle for U.S. Headquarters", *Puget Sound Business Journal*, March 31, 2015, <http://bit.ly/1G47MuF>.

<sup>49</sup> See "Backers say twin \$1 billion methanol plants planned by China-backed joint venture would be safe and environmentally sound", *The Oregonian*, January 22, 2014, <http://bit.ly/1efVFDj>.

## 2.4.6 OTHERS

### Alaska

Alaska received less than \$10 million in investment from China, targeting two air cargo offices and a small oil asset. Resources and shipping could provide opportunities for expanding Chinese investment in the future.

### Arizona

The Grand Canyon State is a comparatively important destination for FDI but has not seen significant Chinese interest. The state recorded less than \$40 million in total investment since 2000 and is hosting 15 operations with fewer than 50 jobs. Promising sectors are aerospace, semiconductors, and renewable energy.

### Montana

Montana has attracted more than \$40 million in investment from Xinjiang Goldwind, one of China's largest wind power companies. Montana's energy sector (wind and coal) is interesting for prospective Chinese investors.

### Nevada

Nevada has received just over \$20 million in Chinese investment. The state hosts 12 Chinese subsidiaries providing around 50 jobs. Investors had to walk away from several mining investments due to national security concerns related to US military installations in Nevada. Going forward, entertainment and tourism could provide interesting opportunities to Chinese investors.

### New Mexico

New Mexico has so far not received any major Chinese investments, reflecting its overall weak position in attracting foreign investment.

### Wyoming

Wyoming records significant Chinese investment (\$770 million), but mostly limited to low-employment energy assets, CNOOC owns a stake in the Power River Basin oil project and Sinopec purchased a stake in the Niobrara Shale.

### Idaho

Idaho has four Chinese establishments, providing fewer than 10 jobs. While this reflects Idaho's weak position in overall FDI, the high productivity of the Idahoan workforce and competitive clusters in advanced manufacturing could provide opportunities for Chinese investment in the future.

### Oregon

Oregon is an important destination for overall FDI in the US, but it has only attracted \$70 million of Chinese investment to date. Five Chinese establishments provide fewer than 50 jobs. One pending project of importance to the Columbia River Valley is a proposed joint venture to build twin methanol plants in Washington and Oregon. The Oregon plant would be in Clatskanie, built with an investment of \$1 billion.<sup>50</sup> The project is currently in the proposal stage.

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<sup>50</sup> Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.



## 3. Assessment of Local Impacts

The previous section described the expansion of Chinese companies in the US and the benefits those communities receive from welcoming new Chinese neighbors. This section summarizes and analyzes these impacts, focusing on four areas: investment, jobs provision, innovation and specialization, and linkages and exports.

### 3.1 INVESTMENT

The first and most intuitive benefit from FDI is an increased level of investment in the local economy.

**Table 3.1: Top 15 Recipient Districts of Chinese FDI**

District	Investment (\$ million)	Metro area	Representative
NC-04	3,360	Raleigh-Durham Triangle	David Price
IL-07	3,210	Chicago	Danny K. Davis
NY-12	2,250	New York City	Carolyn Maloney
VA-04	1,980	Eastern Virginia	J. Randy Forbes
TX-07	1,780	Houston	John Culberson
TX-23	1,640	SW Texas	Will Hurd
OK-03	1,580	NW Oklahoma	Frank Lucas
KS-03	1,380	Kansas City	Kevin Yoder
MA-06	1,270	NE Massachusetts	Seth Moulton
NC-07	1,250	Southern NC	David Rouzer
CA-17	1,040	San Jose	Mike Honda
CA-12	1,020	San Francisco	Nancy Pelosi
TX-27	920	Corpus Christi	Blake Farenthold
NY-10	920	New York City	Jerrold Nadler
IA-04	870	NW Iowa	Steve King

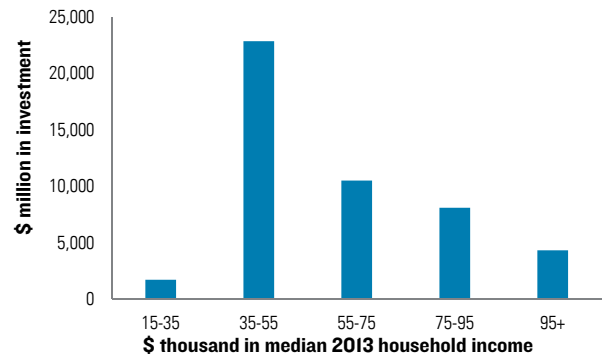
Source: Rhodium Group; See Data Appendix for more details.

Taking the aggregate value of Chinese FDI transactions from 2000 to 2014, the top recipient of investment from China is North Carolina’s 4<sup>th</sup> Congressional District (Raleigh-Durham Triangle), which is home to the main Lenovo campus in Research Triangle Park, including IBM’s former personal computing and x86 server divisions. Illinois’ 7<sup>th</sup> congressional district comes in second, hosting Motorola Mobility and a major commercial real estate investment. Next up is New York’s 12<sup>th</sup> congressional district, reflecting several large real estate investments in Manhattan. Other top districts are VA-04 (Smithfield headquarter and plants), TX-07 (Nexen Gulf of Mexico operations), TX-23 (CNOOC Eagle

Ford shale operations), OK-03 (Sinopec Mississippi Lime operations), KS-03 (AMC headquarter), MA-06 (Intergen headquarters), NC-07 (Smithfield plants), CA-17 (software and information technology investments), CA-12 (real estate investments), TX-27 (Tianjin Pipe plant), NY-10 (real estate investments), and IA-04 (Smithfield plants).

One important observation is that Chinese investment is broadly spread across the United States. While large investments in the big metropolitan areas in the East and West dominate the headlines, Chinese investment is spread across 44 states and there is no strong correlation with per capita household income. Chinese companies are interested in a broad range of US opportunities and they clearly find value in American workers and manufacturing, including in some of the lowest per capita income parts of the United States.

**Figure 3.1: Distribution of Chinese FDI by District Median Household Income, 2000-2014**



Source: Economic Census, Rhodium Group.

From a local impact perspective, it is important to further distinguish different types of FDI transactions. Most economists agree that FDI is most beneficial when it comes in the form of greenfield projects, as greenfield projects by definition generate *additional* spending that creates growth in the local economy. This is why local officials and investment promotion agencies are almost exclusively focused on chasing after greenfield investors.

Greenfield projects and expansions only account for a small share of Chinese FDI spending to date (\$5.1 billion,

or 11% of the total for 2000–2014).<sup>51</sup> At the same time, the value of greenfield projects in recent years has grown significantly. Instead of mostly investing in small-scale offices, Chinese companies have recently begun to build manufacturing plants, warehouses and other capital intensive projects.

Prominent examples of recent manufacturing investments of significant size are Tianjin Pipe’s \$1 billion steel pipe plant in Texas (in its 5<sup>th</sup> year of construction with Phase I already under operation); Golden Dragon’s copper plant in Alabama, with a total investment of more than \$100 million; and Nanshan Aluminum’s \$100 million facility in Indiana. Several large greenfield manufacturing projects are currently under construction, such as Tranlin Paper’s factory in Virginia (announced investment of \$2 billion), Fuyao Glass’s auto glass factories in Ohio and Illinois (more than \$360 million potential investment), and Keer Group’s cotton plant in South Carolina (\$218 million of announced investment).<sup>52</sup> Table 3.2 summarizes these investments.

**Table 3.2: Major Chinese Greenfield Investments in Manufacturing, Announced or Under Construction, 2014**

District	Chinese Operation	Investment * (\$ million)	Representative
VA-04	Tranlin Paper manufacturing plant and headquarters	2,000	J. Randy Forbes
TX-27	Tianjin Pipe manufacturing plant	1,000	Blake Farenthold
OH-10	Fuyao auto glass plant	360	Mike Turner
SC-05	Keer Group manufacturing plant	218	Mick Mulvaney
AL-07	GD Copper Tube manufacturing plant	100	Terri Sewell
MA-01	CNR subway car plant	60	Richard E. Neal

Source: Rhodium Group; \* Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

Recently Chinese investors have also announced billions of dollars in spending on large-scale real estate

<sup>51</sup> The greater share of M&A in total inbound FDI is principally in line with FDI from other economies. See BEA (2008) on outlays.

<sup>52</sup> Large greenfield projects spanning over multiple years are logged incrementally, where investment is evenly distributed

developments in coming years, including the Pacific Park project in New York, Fig Central in San Francisco, and Vanke’s joint venture with Tishman Speyer in San Francisco. Together, the announced investment value of these projects add up to more than \$4 billion (Table 3.3).

**Table 3.3: Top Chinese Greenfield Real Estate Investments**

District	Development (Chinese Company)	Investment * (\$ million)	Representative
NY-09	Pacific Park (Greenland Group)	1,300	Yvette Clarke
CA-34	Metropolis (Greenland Group)	1,300	Xavier Becerra
CA-33	9900 Wilshire Blvd. (Dalian Wanda)	1,200	Adam Schiff
CA-34	Fig Central (Oceanwide Real Estate Group)	600	Xavier Becerra
IL-07	Wanda Vista (Dalian Wanda)	900	Danny K. Davis
NJ-08	99 Hudson Street (China Construction America)	450	Albio Sires
CA-12	Lumina (Vanke)	440	Nancy Pelosi

Source: Rhodium Group; \*Future expenditures and jobs of pending deals or projects currently under construction are not included in the data.

For M&A transactions, the investment benefits are often less clear as they mostly represent a change in ownership and do not *necessarily* mean additional investment in the local economy. Moreover, the total investment value presented here often includes the purchase of intangible assets or assumption of debt, which also does not translate into local investment spending. Nonetheless, there are specific investment benefits for local communities related to M&A, which also appear to be true for Chinese acquisitions in the US.

For one, a new owner of an asset can provide better overall financing capabilities to save a company from bankruptcy and keep operations running, or bring new products to the market. Several Chinese M&A transactions illustrate that benefit. For example, Chinese auto parts maker Wanxiang has successfully acquired multiple insolvent companies, including battery maker

over the course of construction as oppose to all at the time of announcement. Future expenditures of pending deals or projects currently under construction are not included in the data.

A123, and provided them with the necessary funding to bridge difficult periods and eventually return to profitability. Another example is aircraft maker Cirrus Aviation, which used financing from its new parent AVIC to finalize the development of a new model and expand its facilities to produce the aircraft.

A second benefit is that takeovers can lead to the expansion of local facilities if the new owners put a greater emphasis on utilizing local factor endowments than the previous one. Chinese M&A in the US includes plenty of these cases. Nexteer Automotive's new Chinese parent AVIC, for example, provided nearly \$200 million that allowed the company to expand its local manufacturing facilities. Another example is Dalian Wanda, which invested more than \$100 million into struggling movie theatre chain AMC to build a new headquarter and upgrade locations with new equipment.

FDI and particularly M&A can negatively impact local investment levels if the new owner of an asset decides to shut down or restructure operations because of cost, management, performance, or other reasons. This remains a concern with respect to Chinese investment, given the low priority given to broader stakeholder interests around corporations back in China, and more fringe concerns that China is covertly seeking to undermine the US economy with these investments. However examples of post-acquisition closures in the US have been very rare, and there are no indications that political incentives or other non-commercial factors have influenced those decisions.<sup>53</sup>

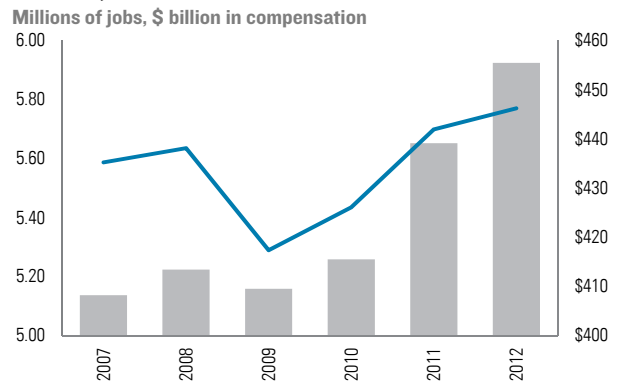
In the case of greenfield projects, local communities can be negatively impacted by sudden changes in investment levels triggered by industry cycles, macroeconomic volatility, or company-specific factors. While there are a few cases in which Chinese investors had to scale down or abandon their investment plans, these were all comparably small and therefore had limited impacts on local investment levels.<sup>54</sup> From the comparative assessment of Chinese FDI in the US over the past six years it does not appear that capital expenditure expectations involving Chinese investors – once a deal is

signed – are any more volatile than those involving other foreign investors or, for that matter, domestic investors.

### 3.2 EMPLOYMENT

While investment levels are important, the most tangible measure of local benefits from FDI is the employment generated by these investments. Foreign companies have become huge employers in the US economy in past decades: official data show that they employ almost six million Americans, with an annual payroll of \$450 billion (Figure 3.2). This is approximately 4% of total US employment, and where it is concentrated in certain metropolitan areas can account for as much as 13% of employment.<sup>55</sup>

**Figure 3.2 Employment and Payrolls of Foreign-Owned Firms in the US, 2007-2012**



Source: Bureau of Economic Analysis.

There are no *current* official estimates on US employment provided by Chinese-owned US subsidiaries, but the CIM dataset allows to estimate that number by aggregating employees of all 1,583 establishments identified as of the end of 2014. Considering only full-time jobs, Chinese firms today provide more than 80,000 direct jobs in the United States.<sup>56</sup> While this is still modest compared to the total number of jobs provided by foreign firms, it is a significant growth from less than 15,000 jobs five years ago (Figure 3.3).

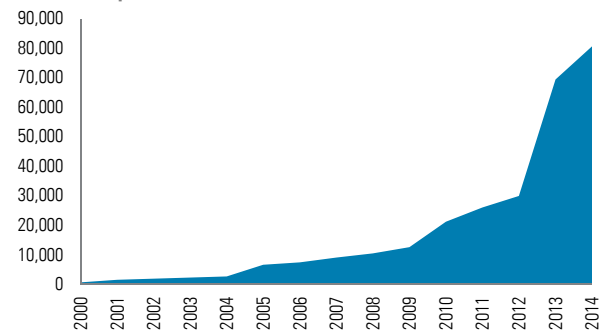
<sup>53</sup> Examples for post-M&A restructuring cases which led to the shutdown of US operations are Anhui Zhongding's acquisitions of Allied Baltic and Michigan Rubber Products, and ASIMCO's acquisition of Camshaft Manufacturing in Michigan.

<sup>54</sup> One prominent example is the closure of Suntech's solar PV assembly facility in Arizona after the company went into bankruptcy.

<sup>55</sup> See Saha, Fikri, and Marchio (2014).

<sup>56</sup> Employment estimates are based on company information, filings, media reports, commercial company databases, and other sources. For more information, please see the Data Appendix.

**Figure 3.3: Jobs Provided by Chinese Companies in the US**  
Number of full-time jobs directly provided by US subsidiaries of Chinese companies



Source: Rhodium Group. See Data Appendix for more details.

The geographic distribution of employment is similar to the distribution of investment, but districts with labor-intensive investments in manufacturing or services replace districts with large amounts of investment in energy and real estate (Table 3.4).

High investment and high employment districts include NC-07, NC-04, VA-04, IL-07, NY-12, CA-17, and CA-12. Lenovo’s PC and x86 server divisions in the Raleigh-Durham triangle provide nearly 4,100 jobs in NC-04. Lenovo is also a major provider of jobs in IL-07 through the recent purchase of Motorola Mobility. CA-17 and CA-12 are both diverse districts, where a mix of small and medium-sized firms provide 1,450 and 1,110 local jobs in advanced services, including companies such as Complete Genomics, MiaSole, TangoMe, Kabam and ZONARE Medical Systems. NY-12 is the host of large real estate, hospitality, and business services investments, such as Cassa Hotel, China Merchants Bank, and Plaza Construction.

Districts with higher employment and comparatively lower investment include MI-05, which is the home of Nexteer in Saginaw. The acquisition of Smithfield by Shuanghui (now WH Group) in 2013 was the largest Chinese investment ever in a US company and the single largest provider of employment in the dataset. Some districts have made it to the top 15 list because they host Smithfield operations with a significant headcount, including NC-07, VA-04, SD-01, IA-04, MO-06, NE-03, IL-17 and KY-05.

As previously mentioned, Chinese investment is broadly spread across the US and not only high-income parts of the country. This is also true for employment: Chinese companies are not just providing jobs in areas with high

unemployment. Of the top 10 districts for jobs provided by Chinese investment, six of these districts had higher unemployment rates than their state average and five had higher than the national average in March 2015.

**Table 3.4: Top 15 Districts in Terms of Jobs Provision by Chinese Companies in the US**

District	Jobs	Top Companies	Representative
NC-07	7,640	Southern NC	David Rouzer
MI-05	5,230	Central Michigan	Dan Kildee
NC-04	4,120	Raleigh-Durham Triangle	David Price
VA-04	3,800	Eastern Virginia	J. Randy Forbes
SD-01	3,400	South Dakota at-large	Kristi Noem
IA-04	3,290	NW Iowa	Steve King
MO-06	3,190	Northern Missouri	Sam Graves
NE-03	2,280	Western and Central NE	Adrian Smith
IL-07	2,110	Chicago	Danny K. Davis
IL-17	1,710	Northwestern Illinois	Cheri Bustos
CA-17	1,450	San Jose	Mike Honda
KY-05	1,220	Eastern Kentucky	Hal Rogers
CA-12	1,110	San Francisco	Nancy Pelosi
NY-12	1,100	New York City	Carolyn Maloney
CA-33	1,100	Los Angeles	Ted Lieu

Source: Rhodium Group. See Data Appendix for more details.

One important distinction is between acquired and created employment. The majority of those 80,000 jobs were “acquired”, which means that they shifted to the payrolls of Chinese parents through M&A transactions. Table 3.5 shows the most important Chinese employers in the United States, all of which are affiliated with M&A activity.

**Table 3.5: Top Chinese Companies by Employment**

Chinese Company	US Subsidiary	Jobs
WH Group	Smithfield	37,000
Lenovo	Lenovo United States	7,400
AVIC	Cirrus, Nexteer, Continental Motors	6,300
Wanxiang Group	Neapco, Great Point Energy, A123 Systems,	5,300
Tencent	Riot Games, Epic Games	1,470
Huawei	Huawei United States	1,200
Dalian Wanda	AMC	900

Source: Rhodium Group. See Data Appendix for more details.

The jobs impact of acquisitions is not as clear as for greenfield projects, and there were significant concerns that Chinese acquisitions could lead to the transfer of high value-added activity to China, resulting in large-scale layoffs of local workers. These concerns have thus far not materialized. To the contrary, Chinese M&A transactions in the US have had a positive impact on local employment to date. In the vast majority of cases in the dataset, the local workforce was sustained after the acquisition and in some cases expanded. Prominent examples include Smithfield Foods, IBM personal computing and x86 divisions, Nexteer in MI-05, Cirrus in MN-08 or Neapco Drivelines in MI-12.

Newly created jobs through greenfield projects account for more than 12% of total employment, or about 10,000 jobs. Examples for significant greenfield projects that created local jobs are Haier's facility in SC-05, Golden Dragon's manufacturing plant in AL-07, Sany's operations in GA-03, and Yanfeng's facilities in MO-06. Many of these greenfield investments have expanded over time and continue to expand. Yanfeng, for example recently announced the construction of another facility in MO-06 that will create over 260 new jobs.

Looking forward, there is a strong pipeline of large-scale greenfield projects that should create thousands of new positions. At the end of 2014, the dataset records more than 10 greenfield projects pending or announced with over 3,000 total jobs in the next few years (see Table 3.2).<sup>57</sup> The major recipients of newly created jobs are Virginia, Texas, and South Carolina. These include Tianjin Pipe's expansion in TX-27, Tranlin Paper's planned complex in VA-04, Keer Group's plant in SC-05, and CNR's facility in MA-01.

It is important to emphasize that the employment number is a conservative estimate that does not include part-time employees, indirect employment in the construction phase, or at US suppliers to these Chinese-owned subsidiaries.

Part-time jobs are difficult to quantify, but they are significant at Chinese-owned firms with large retail operations such as Jennifer Convertibles and services operations such as AMC theaters. In the case of AMC, the company employed approximately 19,700 people at the end of 2014, of which only 900 were full-time employees

and 18,800 were part-time employees (the latter of which are not included in the employment estimates).

Moreover, Chinese investment creates *indirect* jobs through backward linkages for a given operation, such as construction jobs during building of a facility or contracting jobs at a Chinese-owned operation. There is no significant direct employment resulting from Chinese energy deals, since drilling work is mostly contracted to another company. Similarly, most real estate investments have very low jobs figures attached to them, as overall employment is low and most employees are not on the payroll of the Chinese investor.

Chinese companies also create and sustain jobs at suppliers. Huawei, for example, has operations in only 14 states, but supplier relationships in 35 states with annual expenses of more than \$7 billion in 2014.<sup>58</sup> While it is too uncertain to estimate reliably, the indirect impacts of Chinese companies are significant and they are growing along with greater levels of investment.

Potential challenges for local communities from greater levels of employment at foreign-owned companies include tensions related to different labor standards and regulations in those companies' home market. This continues to be a particular concern in the case of Chinese companies, given the nature of their domestic labor market. However, fears that Chinese companies could "import" bad labor standards have not materialized. Chinese firms have to comply with local labor regulations as soon as they set up shop on US soil, and there is no evidence of frequent labor disputes or non-compliance with US law. While there are a few cases of labor disputes, the number is low and does not stand out as high compared to other foreign investors, or to local investors.<sup>59</sup>

### 3.3 INNOVATION AND SPECIALIZATION

FDI can also benefit communities by strengthening local know how and innovative capacity. In addition to the abstract benefits of fueling the overall level of competition in the marketplace (which is an important driver for innovation), there are three primary channels through which FDI can positively impact the know how and innovative capacity of local economies. First, foreign companies often train workers, nurturing a more qualified local workforce. Second, foreign firms settle down in existing research clusters, contributing to local

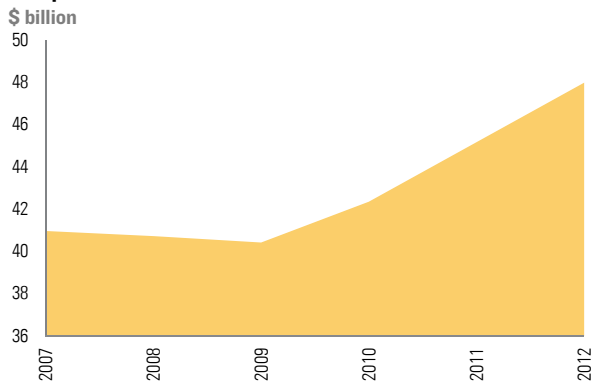
<sup>57</sup> It is worth cautioning that the number of jobs for new greenfield projects is often overstated at announcement.

<sup>58</sup> Numbers are based on company information that could not be independently verified.

<sup>59</sup> See for example of BYD's experience in California.

spending on research and development. The primary examples are the role of foreign firms in US R&D clusters such as Silicon Valley and Research Triangle Park for information technology or Maryland for biotech. Overall, foreign firms spend \$50 billion a year on R&D in the US (Figure 3.4). Third, foreign firms often bring technology and knowledge with them, leading to innovation and productivity spillovers to local economies. A famous historical example are production and management techniques that Japanese automakers brought with them in the 1980s, such as the “just in time” production model.

**Figure 3.4: R&D Expenditures by US Subsidiaries of Foreign Companies**



Source: Bureau of Economic Analysis.

The most apparent benefits of Chinese investment thus far are coming from the second channel. Chinese companies are attempting to move quickly up the global technology ladder, but face shortages of talent at home. One driver pushing those companies to the US market is that they have abundance of both: world-class industry clusters and companies with know-how and technology; and access to a well-educated, international, and diverse workforce. The strong protection of intellectual property rights under US law is another important factor attracting Chinese technology firms.

According to (lagging) BEA data, Chinese firms were already the biggest contributor to US R&D spending among emerging economies by 2012, with \$400 million annually. While difficult to quantify, it is fair to assume that this number has grown steeply since then, given the surge of investment in advanced sectors over the past three years.

Many high-profile M&A transactions were directed at gaining access to technology and know-how. In several cases, such as that of battery maker A123 or general

aviation firm Cirrus, they have provided lifelines to bankrupt firms with significant local R&D activities. In many cases, new Chinese owners have doubled down on local expertise by expanding R&D-related activities at their new subsidiaries. Examples include automotive technology (Hilite International), aviation (Enstrom Helicopter), biotech (Beijing Genomics Institute), and information technology (Lenovo EMC). In recent years Chinese firms have also emerged as strategic investors in early stage companies that provide them with capital to grow, mostly in the software and IT sector. Prominent investors include the venture capital arms of big Chinese internet companies such as Alibaba or Tencent.

More importantly, Chinese firms increasingly invest in greenfield operations in US innovation clusters to expand their R&D activities. Examples are Baidu’s artificial intelligence laboratory in California, Changan Automobile’s R&D center in Michigan, Suning Commerce’s R&D center in California, and Huawei and ZTE’s operations in Texas and New Jersey (Table 3.6).

**Table 3.6: Chinese-owned Companies with R&D Operations in the US**

Company	Location
A123 Systems	Massachusetts, Michigan
Baidu	California
Changan Automobile	Michigan
Cryptic Studios	California
Epic Games	North Carolina
Huawei	California
Lenovo	North Carolina
MiaSole	California
Riot Games	California
Suning Commerce	California
WuXi AppTec	Pennsylvania

Source: Rhodium Group.

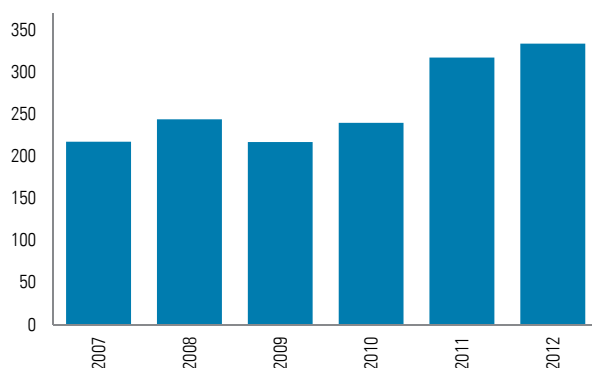
The potential downside for local communities in terms of innovative capacity is that Chinese investment could lead to a long-term decline in knowledge-intensive activities *if* firms acquire technology assets and then move related activity and jobs back to China (the so-called headquarters effect). While answering this question will only be possible with a longer track record, the dataset does not currently show any indication that Chinese firms are behaving differently than other multinationals after acquiring innovation-intensive assets in the US. On the contrary, in the vast majority of cases, firms have

ramped up local spending and employment precisely because they are lacking those capacities at home, or find the freedom, creativity and rule of law that define the American landscape to be essential ingredients for world class innovation.

### 3.4 LINKAGES AND EXPORTS

Another important benefit of FDI for local economies is that it is a channel for building linkages to overseas markets thus helping to facilitate exports and otherwise connect a community to the world economy. Affiliates of foreign companies are often producing “Made in the US” goods for export to their home market, or choose the US as a base for serving regional markets in the Americas. Taken together, affiliates of foreign companies are responsible for \$350 billion of US exports annually (Figure 3.5).

**Figure 3.5: Exports of Foreign-Invested Firms in the US**  
\$ billion



Source: Bureau of Economic Analysis.

In the past, Chinese FDI has played an important part in facilitating US exports to China, but mostly through the establishment of smaller scale offices. Now Chinese-owned companies are becoming significant drivers of exports themselves. The latest official data suggests that US affiliates of Chinese firms were alone responsible for about \$1 billion worth of exports in 2012.<sup>60</sup> One early example of a Chinese investment that spurred exports is Haier America’s facility in South Carolina, which has started marketing its larger American-made refrigerators for the high-end Chinese market, in addition to the US market.

This number should have grown significantly since 2012, as 2013 and 2014 were boom years for Chinese investment. Again, Wanxiang’s acquisition of battery maker A123 is an illustrative example. Struggling with weak US demand a few years ago, A123 reached full capacity utilization in 2014 partially because of demand from the booming Chinese electric vehicle market, facilitated by the new parent’s existing sales channels. Other recent examples include the food sector (Smithfield, International Vitamin Corporation), where firms are hoping to leverage US food safety standards and branding with Chinese customers; and aviation, where US production not only serves as an important brand but could also help fill gaps in markets where available technology and production capacity are not able to match booming demand (Enstrom, Cirrus).

Bringing new Chinese companies into regions with high export potential could help further expand those districts’ exports to the Chinese market. Access to Chinese customers who may also be eager to buy American products can harness the advantages of both Chinese and American businesses in a US operation. Moreover, the same export promotion programs, like ExIm Bank support, available to any other US producer are available to Chinese investors here, which could be an attractive proposition to private sector companies.

In addition to the export of goods, inward FDI could also help facilitate US exports of services and the flow of royalty income to US companies. One example is the recent interest by Chinese firms for investing in Hollywood movie production and other entertainment establishments in the US, with the intent to utilize that content in the booming Chinese media and entertainment market. Other highly competitive US service sectors also stand to gain significantly from greater FDI linkages back to China, including financial and business services and hospitality and tourism.

The major risks for local communities from such FDI export linkages is that they could be impacted by a sudden drop in demand for the exported goods or services. However, this is principally a question of global supply and demand; companies invested locally can often be as vulnerable as those that are foreign-affiliated.

<sup>60</sup> See BEA’s data set on Operations of Foreign Affiliates in the U.S., 2012.

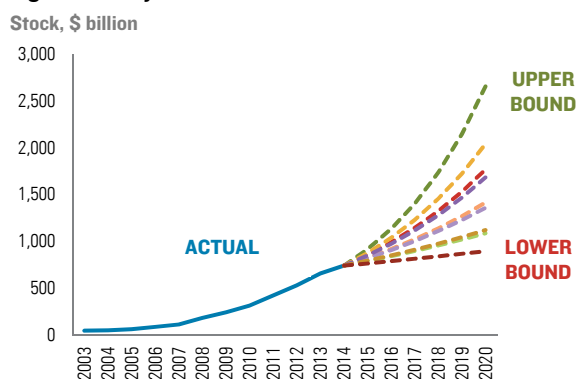
## 4. Conclusions and Outlook

This assessment has documented the rapid pace at which Chinese investment in the US has grown in recent years and how it is already impacting communities across the nation, as prior waves of FDI have in the past. These undertakings contribute to local investment expenditures, support tens of thousands of direct jobs and many more indirectly, and foster innovation and export opportunities.

### Outlook

What's even more exciting about this trend is that it is only in the early stages. While China is now the world's second largest economy, its per capita GDP is just \$7,600 and its outbound FDI (OFDI) stock to GDP ratio stands at 8%. This is still below the average of middle income economies (10%) and well below that of most advanced economies such as the United States (38%), Japan (20%), and Germany (46%).<sup>61</sup> In other words, most of China's outward FDI boom is still ahead. We expect China's global OFDI stock to grow from the current \$744 billion to \$1-2 trillion by 2020, propelled by the ongoing liberalization of investment rules and the implementation of a far reaching overhaul of China's growth model (Figure 4.1).<sup>62</sup>

**Figure 4.1: Projections for China's Global Outward FDI in 2020\***



Source: Rhodium Group; \*This chart combines three scenarios for GDP size (\$11.2, \$13.6, 17.7 trillion) and OFDI stock to GDP ratio (6%, 10%, 15%) to estimate the upper and lower bounds of China's outward FDI stock in 2020.

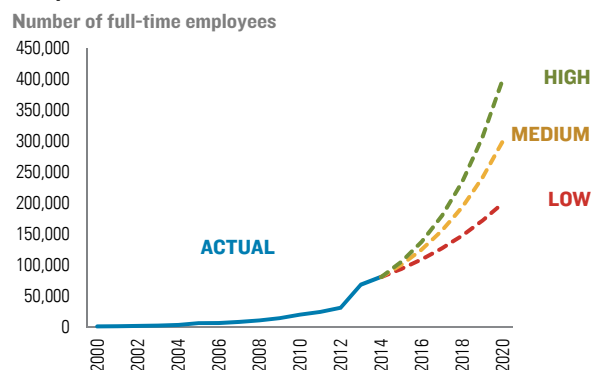
While the majority of past flows were directed at extractive assets in developing economies, that focus is

<sup>61</sup> All ratios are from 2013 and based on official national statistics and data points provided by UNCTAD.

shifting rapidly and the US is ideally positioned to be a major recipient of future flows in light of the emerging emphasis on technology, consumers, and brands. In the past decade, the United States received on average about 17% of global FDI flows. If the United States manages to attract a similar share of China's global OFDI (10-20%), it would land \$100-\$400 billion of Chinese investment between 2010 and 2020.

This would multiply the benefits for local communities, most importantly with regard to jobs. While an accurate projection of the employment impacts of future investment flows is impossible, one can extrapolate employment figures under different OFDI scenarios using today's parameters. Assuming a similar labor intensity of investment as in recent years, Chinese investment of \$100-\$200 billion would result in 200,000 to 400,000 US jobs through 2020 (Figure 4.2).

**Figure 4.2: Projections for Employment at Chinese-affiliated Companies in the US to 2020\***



Source: Rhodium Group. \*Projections are based on three different scenarios for cumulative Chinese investment in the US in 2020 (\$100, \$150, \$200 billion) and the current employment intensity of investment.

These calculations are only ballpark estimates, but they are not Pollyannaish. Take the expansion of Japanese firms in the 1980s and 1990s for comparison. Prior to the 1980s, Japanese companies provided practically no jobs in the US; today their US affiliates employ almost

<sup>62</sup> For an assessment of China's economic reform agenda, see Rosen (2014).



700,000 Americans, making them important contributors in many local economies.<sup>63</sup>

## US-China Economic Relations 2.0

China's shifting OFDI profile is a manifestation of how the Middle Kingdom's economic overhaul will be felt in the US. As Beijing turns to putting consumer interests above producer welfare, finally, its openness to imports should increase further, enhancing the potential to export back to China from US operations. We are already seeing the rise of that pattern in the wake of Chinese investment in US food industries (Smithfield), branded consumer goods (St. John), and high-tech products (A123). We are also seeing the "export" of US tourism and education services to Chinese travelers coming to America to use the facilities that their homegrown firms are buying into (such as the Waldorf Astoria hotel or the Sheraton Universal in Los Angeles). Royalty income flows from China are very likely to rise in the wake of Chinese FDI here as well, as they have with Japan since the 1980s.

In short, growing OFDI and its benefits mark the beginning of an era of US-China economic engagement that brings a wider array of mutual benefits, rather than the limited winners and losers story that came out of the deepening goods trade-only flows of the past two decades. This maturation of the relationship yields clear and tangible additional benefits for Americans, and it has the potential to give Americans a greater interest in economic integration with China, providing a positive anchor for better US-China relations overall.

### From Local Impacts to National Interest

The outlook for Chinese outward FDI is strong, but these flows do not happen in a vacuum. The United States is competing with dozens of other attractive economies in Europe, Australia, Canada, and Brazil for these new flows of capital. If the sense of local opportunities and national interests is not concordant, the US will lose that competition.

Recent years have seen greatly increased local level effort by mayors, governors and other local officials to attract these new investors to the neighborhood. And while the competition to host inward investments is ultimately won or lost at the local level, it *initially* depends on a clear statement of national enthusiasm. The White House has done a good job of communicating that enthusiasm in

recent years, correcting a tradition of relative indifference to the need to market the US.

Other critical national players, especially Congress, but also the national security community, harbor deeply divided opinions. Internationally, this discordance in Washington has been accepted in the past as a frustrating but inherent aspect of the world's largest economy in light of the special geostrategic responsibilities the US shoulders. But the world is changing and so is foreign investor tolerance for ambivalence toward billions of dollars in capital.

This report adds the local impacts perspective to the American conversation about Chinese investment. To date, reliable information on the district by district impacts of these new flows was not available and the debate was often driven by sentiment, anecdote, and suspicion. We can now do better, and sound data provide a foundation for better policymaking.

For Congress in particular, the data in this report show the urgency of finding the right accommodation of *both* legitimate national security interests and maximizing local economic benefits. The US screening system for national security concerns has worked well in the past two decades under the congressional oversight. Facing growing Chinese investment, Congress must now take care not to damage America's reputation for openness and not make the legislative branch a stumbling block to foreign investment. Representatives should respond to the mushrooming opportunities in their districts by emphasizing the benefits of America as an investment host - benchmarking themselves against the investment promotion successes of advanced economy peers - rather than asking how high a bar can be set.

The US enjoys an enviable number of advantages in the contest for Chinese capital flows, which are 80% private today: America has the world's largest consumer market, the best innovation clusters ever built, and a tradition of regulatory openness and efficiency that permit foreign investors to challenge the system when they feel mistreated. These are not just promises, but proven qualities of the American economy. The enhanced perspective on the local stakes in growing Chinese investment provided by this report should help to sustain recent progress in aligning local opportunities and national interests so the US will be successful in leveraging these advantages.

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<sup>63</sup> See BEA's data set on Operations of Foreign Affiliates in the U.S., 2012.

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# Data Appendix

## METHODOLOGY

This report is based on a proprietary dataset derived from Rhodium Group's China Investment Monitor (CIM), which provides comprehensive coverage of Chinese direct investment transactions in the United States. The following pages summarize the nature of the CIM dataset, the steps taken to derive the data used for preparing this report, and important caveats for interpreting and utilizing the data.

### The China Investment Monitor

The fast growth of China's outward FDI has elicited great public interest, and there is tremendous demand in the United States and elsewhere in the world for understanding the patterns of these new flows and the implications. Unfortunately, available official datasets do not allow for a detailed and timely analysis due to significant delays in their publication and the lack of granular breakdowns by sector and location. Moreover, the extensive use of pass-through locations such as Hong Kong can lead to significant distortions in official statistics, which often only track the immediate source of investment.

Since 2011, Rhodium Group's China Investment Monitor allows the public to track Chinese direct investment transactions in the United States in real time, providing data on variables such as industry distribution and location.<sup>64</sup> It tracks all investments by ultimately Mainland-Chinese-owned firms in the United States since 2000 with the investment value exceeding \$500,000. The dataset covers greenfield projects (new facilities), acquisitions that results in at least 10% stake (which is the common threshold for *direct* as opposed to portfolio investment), and the expansion of existing establishments.

The CIM data is compiled from a transactional approach, where single transactions are counted and then aggregated to quarterly or annual totals. The data compilation relies on a research strategy that includes a wide range of different channels, including company reports, regulatory filings, commercial databases, media reports, industry associations, investment promotion

agencies, industry contacts, and other sources. Each transaction is coded for a number of relevant variables including investment value, geographic location, industry, business activity, and investor characteristics. All information either comes from official company sources or is estimated based on the type of operation, revenue, number of employees and other criteria.

The data resulting from the transaction-based approach are not directly comparable to FDI statistics compiled according to Balance of Payments (BOP) principles. The transactions data capture the total value of investment projects by Mainland Chinese companies in the US, but do not distinguish between financing from China and domestic sources. They do not take into account any intra-company flows between Chinese parent and US subsidiary. As such, the transactions data cannot be used to analyze BOP-related problems and other issues that require a national accounting perspective.

Conversely, the transactions approach avoids the problems commonly related to BOP data, for example the distortions caused by the extensive use of pass-through locations. Moreover, it is able to avoid the significant time lags and gaps in official data and can support the public debate with real-time information on aggregate investment patterns, as well as the distribution of those investments by industry, modes of entry, geographical spread and ownership.

### New Neighbors Data

The *New Neighbors* report describes the local, operations-based perspective on growing Chinese investment in the US, with a particular focus on the 435 congressional districts. The dataset covers establishments in the US with at least 10% Mainland Chinese ownership or control. Investment by households and individuals, such as in residential real estate, is not covered. For each district, the study presents the aggregate investment from 2000-2014, the number of Chinese-affiliated companies at the end of 2014, and the number of jobs they directly provided at that point in time.

The first task was to break down all US companies that came under Chinese ownership by the way of

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<sup>64</sup> The China Investment Monitor is available at <http://rhg.com/interactive/china-investment-monitor>

acquisitions into individual subsidiaries. The CIM dataset already included detailed information on the geographic distribution of Chinese greenfield projects, but it previously logged each acquisition at the headquarters location of the acquired company. Breaking down each company to include all relevant US subsidiaries greatly expanded the dataset, as many Chinese-affiliated companies now have a truly national presence, such as Smithfield Foods or AMC theatres; and many companies have a significant regional footprint with a high number of local subsidiaries, such as Wanxiang in Illinois and Ohio or Lenovo in North Carolina, and AVIC in Michigan and Alabama.

In order to provide a comprehensive snapshot of Chinese establishments and employment at the end of 2014, the dataset also needed to be expanded to include major investments that took place *before 2000*, which mostly meant subsidiaries of large state-owned companies such as Bank of China or China State Construction Engineering Corporation, that were early investors in the United States. Conversely, the data were rectified to reflect closures and divestitures of assets. Closures mostly affected smaller-sized operations, but a few significant divestitures impacted the total investment amount, such as China Investment Corporation's sale of shares in the utility firm AES in 2013, which brought its control below the 10% direct investment threshold.

These two steps enlarged the dataset from less than 1,000 to more than 1,500 entries. The next task was then to geocode each of those 1,500 subsidiaries with an address in order to allocate them to one of the 435 districts. The most challenging cases were subsidiaries without detailed geographic information due to their small size, or non-disclosure of operations information. Other cases that caused problems were operations that extend into multiple districts, such as Smithfield-owned farms. These operations were split between districts. Another case were energy assets located in the ocean, such as Nexen's oil platforms in the Gulf of Mexico. In this case, the assets were logged at the company's headquarters location.

The next step was to allocate the aggregate value of investments (\$45 billion for 2000-2014) to individual subsidiaries. The value of each greenfield project and expansion was already available in the CIM dataset, so this mostly concerned total spending on acquisitions (\$35 billion). If applicable, the value of intangible assets, assumed debt or non-US assets was attributed to the headquarters location. The remaining value of each transaction was then split between each US subsidiary according to available proxies for size such as

employment, revenue and other criteria. Thus, the total investment value presented in this report is an estimate that reflects the approximate value of each operation derived from the valuation at the time of the acquisition, not necessarily the value of local assets or actual local capital expenditures.

The most important new set of data that this report provides is the direct employment that these 1,583 subsidiaries provide, resulting in more than 80,000 full-time jobs by the end of 2014. These are very conservative estimates, and the total number only includes direct full-time jobs. The number does not include announced future employment but only current jobs. It also does *not* take into account part-time staff or any indirect jobs supported by these subsidiaries, for example during construction phase or at suppliers, or announced jobs creations. The job estimates are based on a thorough review of every subsidiary. Whenever possible, the estimates are based on information disseminated by the companies themselves in regulatory filings and other materials. If not available, employment figures were conservatively estimates based on a wide range of channels including industry contacts, local journalists, labor unions, online profiles and other proxies. We also reached out to companies directly to verify our estimates if needed.

The resulting dataset offers the most comprehensive and detailed snapshot of Chinese-affiliated companies in the United States currently available. It provides a starting point for understanding and discussing the local impacts of Chinese FDI, and for tracking progress and new trends in the future. More granular data points including company names may be made available upon request to the National Committee on US-China Relations for members of Congress, journalists and academic researchers. Future data updates will be made available on [www.ncuscr.org/fdi](http://www.ncuscr.org/fdi).

## DETAILED DATA

District	Jobs	Investment (\$ mn)	Number of Operations	Representative (Affiliation)
<b>Alaska</b>				
AK-01	10	<50	<5	Don Young (R)
<b>Alabama</b>				
AL-01	450	210	6	Bradley Byrne (R)
AL-02	20	<50	<5	Martha Roby (R)
AL-03	0	0	0	Michael Rodgers (R)
AL-04	0	0	0	Robert Aderholt (R)
AL-05	0	0	0	Morris Brooks, Jr. (R)
AL-06	0	0	0	Gary Palmer (R)
AL-07	150	100	<5	Terrycina Sewell (D)
<b>Arizona</b>				
AZ-01	10	<50	<5	Ann Kirkpatrick (D)
AZ-02	<10	<50	<5	Martha McSally (R)
AZ-03	0	0	0	Raul Grijalva (D)
AZ-04	0	0	0	Paul Gosar (R)
AZ-05	<10	<50	<5	Matt Salmon (R)
AZ-06	<10	<50	<5	David Schweikert (R)
AZ-07	10	<50	<5	Ruben Gallego (D)
AZ-08	<10	<50	<5	Trent Franks (R)
AZ-09	<10	<50	<5	Kyrsten Sinema (D)
<b>Arkansas</b>				
AR-01	<10	<50	<5	Rick Crawford (R)
AR-02	0	0	0	French Hill (R)
AR-03	10	<50	<5	Steve Womack (R)
AR-04	0	0	0	Bruce Westerman (R)
<b>California</b>				
CA-01	230	<50	<5	Doug LaMalfa (R)
CA-02	<10	<50	<5	Jared Huffman (D)
CA-03	0	0	0	John Garamendi (D)
CA-04	<10	<50	<5	Tom McClintock (R)
CA-05	10	<50	<5	Mike Thompson (D)
CA-06	0	0	0	Doris Matsui (D)
CA-07	<10	<50	<5	Ami Bera (D)
CA-08	0	0	0	Paul Cook (R)
CA-09	<10	<50	<5	Jerry McNerney (D)
CA-10	<10	<50	<5	Jeff Denham (R)
CA-11	110	<50	<5	Mike DeSaulnier (D)
CA-12	1110	1020	38	Nancy Pelosi (D)
CA-13	30	<50	5	Barbara Lee (D)
CA-14	480	170	20	Jackie Speier (D)
CA-15	60	70	6	Eric Swalwell (D)
CA-16	0	0	0	Jim Costa (D)
CA-17	1450	1040	42	Mike Honda (D)
CA-18	850	560	18	Anna Eshoo (D)
CA-19	80	70	9	Zoe Lofgren (D)
CA-20	40	<50	<5	Sam Farr (D)
CA-21	0	0	0	David Valadao (R)
CA-22	0	0	0	Devin Nunes (R)
CA-23	60	<50	<5	Kevin McCarthy (R)
CA-24	0	0	0	Lois Capps (D)
CA-25	<10	<50	<5	Steve Knight (R)
CA-26	<10	<50	<5	Julia Brownley (D)
CA-27	150	140	19	Judy Chu (D)
CA-28	<10	<50	5	Adam Schiff (D)
CA-29	0	0	0	Tony Cardenas (D)
CA-30	210	100	<5	Brad Sherman (D)
CA-31	30	<50	6	Pete Aguilar (D)
CA-32	140	50	22	Grace Napolitano (D)
CA-33	1100	770	16	Ted Lieu (D)
CA-34	380	640	12	Xavier Becerra (D)
CA-35	170	60	14	Norma Torres (D)
CA-36	<10	<50	<5	Raul Ruiz (D)
CA-37	110	<50	11	Karen Bass (D)
CA-38	30	<50	6	Linda Sanchez (D)
CA-39	110	170	11	Ed Royce (R)
CA-40	<10	<50	<5	Lucille Roybal (D)
CA-41	70	<50	<5	Mark Takano (D)
CA-42	20	<50	<5	Ken Calvert (R)
CA-43	580	340	8	Maxine Waters (D)
CA-44	120	<50	7	Janice Hahn (D)
CA-45	250	110	17	Mimi Walters (R)
CA-46	20	<50	<5	Loretta Sanchez (D)
CA-47	150	<50	6	Alan Lowenthal (D)
CA-48	30	50	5	Dana Rohrabacher (R)
CA-49	90	<50	6	Darrell Issa (R)
CA-50	<10	<50	<5	Duncan D. Hunter (R)
CA-51	<10	<50	<5	Juan Vargas (D)
CA-52	180	140	14	Scott Peters (D)
CA-53	<10	<50	<5	Susan Davis (D)
<b>Colorado</b>				
CO-01	50	<50	<5	Dianna DeGette (D)
CO-02	30	<50	<5	Jared Polis (D)
CO-03	0	0	0	Scott Tipton (R)
CO-04	300	360	6	Ken Buck (R)
CO-05	0	0	0	Doug Lamborn (R)
CO-06	20	<50	5	Mike Coffman (R)
CO-07	180	<50	<5	Ed Perlmutter (D)
<b>Connecticut</b>				
CT-01	0	0	0	John B. Larson (D)
CT-02	100	<50	<5	Joe Courtney (D)
CT-03	<10	<50	<5	Rosa DeLauro (D)
CT-04	<10	<50	<5	Jim Himes (D)
CT-05	300	<50	<5	Elizabeth Esty (D)
<b>Delaware</b>				
DE-01	20	<50	5	John Carney (D)
<b>Florida</b>				
FL-01	<10	<50	<5	Jeff Miller (R)
FL-02	<10	<50	<5	Gwen Graham (D)
FL-03	<10	<50	<5	Ted Yoho (R)
FL-04	10	<50	<5	Ander Crenshaw (R)
FL-05	0	0	0	Corrine Brown (D)
FL-06	<10	<50	<5	Ron DeSantis (R)
FL-07	10	<50	<5	John Mica (R)
FL-08	<10	<50	<5	Bill Posey (R)
FL-09	<10	<50	<5	Alan Grayson (D)
FL-10	<10	<50	5	Dan Webster (R)
FL-11	0	0	0	Rich Nugent (R)
FL-12	<10	<50	<5	Gus Bilirakis (R)
FL-13	0	0	0	David Jolly (R)
FL-14	70	<50	5	Kathy Castor (D)
FL-15	0	0	0	Dennis A. Ross (R)
FL-16	<10	<50	<5	Vern Buchanan (R)
FL-17	20	<50	<5	Tom Rooney (R)
FL-18	0	0	0	Patrick Murphy (D)
FL-19	<10	<50	<5	Curt Clawson (R)
FL-20	0	0	0	Alcee Hastings (D)
FL-21	0	0	0	Ted Deutch (D)
FL-22	20	<50	<5	Lois Frankel (D)
FL-23	<10	<50	<5	D. Wasserman (D)
FL-24	110	<50	<5	Frederica Wilson (D)
FL-25	10	<50	<5	Mario Diaz-Balart (R)
FL-26	0	0	0	Carlos Curbelo (R)
FL-27	40	80	5	I. Ros-Lehtinen (R)
<b>Georgia</b>				
GA-01	30	<50	<5	Buddy Carter (R)

GA-02	0	0	0	Sanford Bishop (D)
GA-03	170	60	<5	L. Westmoreland (R)
GA-04	<10	<50	<5	Hank Johnson (D)
GA-05	260	80	9	John Lewis (D)
GA-06	20	<50	6	Tom Price (R)
GA-07	270	70	13	Rob Woodall (R)
GA-08	0	0	0	Austin Scott (R)
GA-09	0	0	0	Doug Collins (R)
GA-10	0	0	0	Jody Hice (R)
GA-11	330	70	9	Barry Loudermilk (R)
GA-12	0	0	0	Rick Allen (R)
GA-13	<10	<50	<5	David Scott (D)
GA-14	0	0	0	Tom Graves (R)
<b>Hawaii</b>				
HI-01	20	<50	<5	Mark Takai (D)
HI-02	60	200	<5	Tulsi Gabbard (D)
<b>Idaho</b>				
ID-01	<10	<50	<5	Raul Labrador (R)
ID-02	<10	<50	<5	Mike Simpson (R)
<b>Illinois</b>				
IL-01	<10	<50	<5	Bobby Rush (D)
IL-02	0	0	0	Robin Kelly (D)
IL-03	20	<50	6	Dan Lipinski (D)
IL-04	<10	<50	<5	Luis Gutierrez (D)
IL-05	30	<50	6	Mike Quigley (D)
IL-06	570	110	10	Peter Roskam (R)
IL-07	2110	3210	22	Danny K. Davis (D)
IL-08	120	<50	16	Tammy Duckworth (D)
IL-09	60	90	<5	Jan Schakowsky (D)
IL-10	130	70	7	Robert Dold (R)
IL-11	160	<50	7	Bill Foster (D)
IL-12	10	<50	5	Mike Bost (R)
IL-13	<10	60	<5	Rodney L. Davis (R)
IL-14	<10	<50	<5	Randy Hultgren (R)
IL-15	120	<50	<5	John Shimkus (R)
IL-16	40	<50	<5	Adam Kinzinger (R)
IL-17	1710	290	7	Cheri Bustos (D)
IL-18	20	<50	5	Aaron Schock (R)
<b>Indiana</b>				
IN-01	<10	<50	<5	Pete Visclosky (D)
IN-02	250	<50	<5	Jackie Walorski (R)
IN-03	20	<50	<5	Marlin Stutzman (R)
IN-04	310	110	<5	Todd Rokita (R)
IN-05	100	<50	7	Susan Brooks (R)
IN-06	70	<50	6	Luke Messer (R)
IN-07	<10	<50	<5	Andre Carson (D)
IN-08	40	<50	5	Larry Bucshon (R)
IN-09	<10	<50	<5	Todd Young (R)
<b>Iowa</b>				
IA-01	0	0	0	Rod Blum (R)
IA-02	0	0	0	David Loebsack (D)
IA-03	500	80	<5	David Young (R)
IA-04	3290	870	10	Steve King (R)
<b>Kansas</b>				
KS-01	450	70	<5	Tim Huelskamp (R)
KS-02	0	0	0	Lynn Jenkins (R)
KS-03	410	1380	<5	Kevin Yoder (R)
KS-04	480	570	<5	Mike Pompeo (R)
<b>Kentucky</b>				
KY-01	0	0	0	Ed Whitfield (R)
KY-02	0	0	0	Brett Guthrie (R)
KY-03	0	0	0	John Yarmuth (D)
KY-04	180	50	<5	Thomas Massie (R)
KY-05	1220	200	<5	Hal Rogers (R)
KY-06	30	<50	<5	Andy Barr (R)

<b>Louisiana</b>				
LA-01	130	<50	6	Steve Scalise (R)
LA-02	100	<50	<5	Cedric Richmond (D)
LA-03	10	<50	<5	Charles Boustany (R)
LA-04	0	0	0	John C. Fleming (R)
LA-05	<10	490	<5	Ralph Abraham (R)
LA-06	<10	<50	<5	Garret Graves (R)
<b>Maine</b>				
ME-01	0	0	0	Chellie Pingree (D)
ME-02	0	0	0	Bruce Poliquin (R)
<b>Maryland</b>				
MD-01	10	<50	<5	Andrew P. Harris (R)
MD-02	<10	<50	<5	D. Ruppertsberger (D)
MD-03	<10	<50	<5	John Sarbanes (D)
MD-04	10	<50	<5	Donna Edwards (D)
MD-05	10	<50	<5	Steny Hoyer (D)
MD-06	30	<50	5	John Delaney (D)
MD-07	100	<50	<5	Elijah Cummings (D)
MD-08	40	<50	<5	Chris Van Hollen (D)
<b>Massachusetts</b>				
MA-01	320	110	<5	Richard Neal (D)
MA-02	120	<50	<5	Jim McGovern (D)
MA-03	20	<50	<5	Niki Tsongas (D)
MA-04	200	230	<5	J. Kennedy III (D)
MA-05	130	50	6	Katherine Clark (D)
MA-06	220	1270	5	Seth Moulton (D)
MA-07	60	200	8	Mike Capuano (D)
MA-08	40	<50	<5	Stephen Lynch (D)
MA-09	110	80	<5	William Keating (D)
<b>Michigan</b>				
MI-01	250	60	<5	Dan Benishek (R)
MI-02	20	<50	<5	Bill Huizenga (R)
MI-03	20	<50	<5	Justin Amash (R)
MI-04	60	540	<5	John Moolenaar (R)
MI-05	5230	450	<5	Dan Kildeer (D)
MI-06	0	0	0	Fred Upton (R)
MI-07	260	<50	<5	Tim Walberg (R)
MI-08	80	180	<5	Mike Bishop (R)
MI-09	100	<50	5	Sander M. Levin (D)
MI-10	<10	<50	<5	Candice Miller (R)
MI-11	560	170	22	David Trott (R)
MI-12	480	<50	6	Debbie Dingell (D)
MI-13	310	120	6	John Conyers (D)
MI-14	110	<50	10	Brenda Lawrence (D)
<b>Minnesota</b>				
MN-01	450	90	<5	Tim Walz (D)
MN-02	180	60	<5	John Kline (R)
MN-03	30	<50	6	Erik Paulsen (R)
MN-04	<10	<50	<5	Betty McCollum (D)
MN-05	50	50	<5	Keith Ellison (D)
MN-06	0	0	0	Tom Emmer (R)
MN-07	<10	<50	<5	Collin Peterson (D)
MN-08	800	310	<5	Rick Nolan (D)
<b>Mississippi</b>				
MS-01	0	0	0	Vacant
MS-02	0	0	0	Bennie Thompson (D)
MS-03	0	0	0	Gregg Harper (R)
MS-04	0	0	0	Steven Palazzo (R)
<b>Missouri</b>				
MO-01	30	110	<5	William Clay Jr. (D)
MO-02	80	140	7	Ann Wagner (R)
MO-03	<10	<50	<5	B. Luetkemeyer (R)
MO-04	110	<50	<5	Vicky Hartzler (R)
MO-05	540	90	5	Emanuel Cleaver (D)

MO-06	3190	490	12	Samuel Graves (R)
MO-07	40	<50	<5	William Long (R)
MO-08	<10	<50	<5	Jason Smith (R)
<b>Montana</b>				
MT-01	<10	<50	<5	Ryan Zinke (R)
<b>Nebraska</b>				
NE-01	500	80	<5	Jeff Fortenberry (R)
NE-02	220	<50	5	Brad Ashford (D)
NE-03	2280	330	<5	Adrian Smith (R)
<b>Nevada</b>				
NV-01	10	<50	<5	Dina Titus (D)
NV-02	<10	<50	<5	Mark Amodei (R)
NV-03	30	<50	<5	Joe Heck (R)
NV-04	<10	<50	<5	Cresent Hardy (R)
<b>New Hampshire</b>				
NH-01	320	140	<5	Frank Guinta (R)
NH-02	0	0	0	A. McLane Kuster (D)
<b>New Jersey</b>				
NJ-01	<10	<50	<5	Donald Norcross (D)
NJ-02	<10	<50	<5	Frank LoBiondo (D)
NJ-03	<10	<50	<5	Tom MacArthur (D)
NJ-04	320	80	10	Chris Smith (D)
NJ-05	230	110	7	Scott Garrett (D)
NJ-06	50	<50	5	Frank Pallone (D)
NJ-07	90	<50	8	Leonard Lance (D)
NJ-08	80	140	9	Albio Sires (D)
NJ-09	180	<50	<5	William Pascrell (D)
NJ-10	10	<50	<5	Donald Payne, Jr. (D)
NJ-11	380	310	13	R. Frelinghuysen (D)
NJ-12	180	60	7	B. W. Coleman (D)
<b>New Mexico</b>				
NM-01	0	0	0	Michelle Lujan Grisham (D)
NM-02	0	0	0	Steve Pearce (R)
NM-03	0	0	0	Ben R. Lujan (D)
<b>New York</b>				
NY-01	130	<50	<5	Lee Zeldin (R)
NY-02	<10	<50	<5	Peter King (R)
NY-03	30	<50	<5	Steve Israel (D)
NY-04	20	<50	6	Kathleen Rice (D)
NY-05	30	<50	5	Gregory Meeks (D)
NY-06	50	<50	9	Grace Meng (D)
NY-07	380	170	<5	Nydia Velazquez (D)
NY-08	<10	<50	<5	Hakeem Jeffries (D)
NY-09	10	200	<5	Yvette Clarke (D)
NY-10	150	920	17	Jerrold Nadler (D)
NY-11	<10	<50	<5	Vacant
NY-12	1100	2250	49	Carolyn Maloney (D)
NY-13	<10	<50	<5	Charles B. Rangel (D)
NY-14	0	0	0	Joseph Crowley (D)
NY-15	<10	<50	<5	Jose Serrano (D)
NY-16	<10	<50	<5	Eliot Engel (D)
NY-17	230	200	8	Nita Lowey (D)
NY-18	<10	<50	<5	Sean Maloney (D)
NY-19	0	0	0	Chris Gibson (R)
NY-20	20	<50	<5	Paul Tonko (D)
NY-21	0	0	0	Elise M. Stefanik (R)
NY-22	0	0	0	Richard Hanna (R)
NY-23	0	0	0	Tom Reed (R)
NY-24	0	0	0	John Katko (R)
NY-25	0	0	0	Louise Slaughter (D)
NY-26	0	0	0	Brian Higgins (D)
NY-27	0	0	0	Chris Collins (R)

<b>North Carolina</b>				
NC-01	870	130	<5	George Butterfield (D)
NC-02	10	<50	<5	Renee Ellmers (R)
NC-03	110	<50	<5	Walter Jones Jr. (R)
NC-04	4120	3360	12	David Price (D)
NC-05	100	<50	<5	Virginia Foxx (R)
NC-06	440	240	<5	Mark Walker (R)
NC-07	7640	1250	15	David Rouzer (R)
NC-08	470	80	<5	Richard Hudson (R)
NC-09	470	60	11	Robert Pittenger (R)
NC-10	70	<50	6	Patrick McHenry (R)
NC-11	<10	<50	<5	Mark Meadows (R)
NC-12	370	80	15	Alma Adams (D)
NC-13	350	210	<5	George Holding (R)
<b>North Dakota</b>				
ND-01	0	0	0	Kevin Cramer (R)
<b>Ohio</b>				
OH-01	650	100	<5	Steve Chabot (R)
OH-02	10	<50	<5	Brad Wenstrup (R)
OH-03	20	<50	<5	Joyce Beatty (D)
OH-04	60	80	<5	Jim Jordan (R)
OH-05	320	<50	<5	Bob Latta (R)
OH-06	<10	490	<5	Bill Johnson (R)
OH-07	10	<50	<5	Bob Gibbs (R)
OH-08	<10	<50	<5	John Boehner (R)
OH-09	70	<50	<5	Marcy Kaptur (D)
OH-10	330	130	5	Mike Turner (R)
OH-11	70	<50	<5	Marcia Fudge (D)
OH-12	<10	<50	<5	Pat Tiberi (R)
OH-13	0	0	0	Tim Ryan (D)
OH-14	20	<50	<5	David Joyce (R)
OH-15	<10	<50	<5	Steve Stivers (R)
OH-16	100	<50	<5	Jim Renacci (R)
<b>Oklahoma</b>				
OK-01	<10	<50	<5	Jim Bridenstine (R)
OK-02	0	0	0	Markwayne Mullin (R)
OK-03	480	1580	8	Frank Lucas (R)
OK-04	0	0	0	Tom Cole (R)
OK-05	<10	<50	<5	Steve Russell (R)
<b>Oregon</b>				
OR-01	20	<50	<5	Suzanne Bonamici (D)
OR-02	<10	<50	<5	Greg Walden (R)
OR-03	<10	<50	<5	Earl Blumenauer (D)
OR-04	0	0	0	Peter DeFazio (D)
OR-05	10	50	<5	Kurt Schrader (D)
<b>Pennsylvania</b>				
PA-01	120	50	<5	Bob Brady (D)
PA-02	30	<50	<5	Chaka Fattah (D)
PA-03	0	0	0	Mike Kelly (R)
PA-04	0	0	0	Scott Perry (R)
PA-05	20	<50	<5	Glenn Thompson (R)
PA-06	170	<50	<5	Ryan Costello (R)
PA-07	60	<50	<5	Pat Meehan (R)
PA-08	10	<50	<5	Mike Fitzpatrick (R)
PA-09	<10	<50	<5	Bill Shuster (R)
PA-10	0	0	0	Tom Marino (R)
PA-11	0	0	0	Lou Barletta (R)
PA-12	0	0	0	Keith Rothfus (R)
PA-13	30	60	<5	Brendan Boyle (D)
PA-14	260	<50	<5	Michael Doyle (D)
PA-15	100	<50	<5	Charlie Dent (R)
PA-16	0	0	0	Joseph Pitts (R)
PA-17	0	0	0	M. Cartwright (D)
PA-18	80	70	<5	Tim Murphy (R)



<b>Rhode Island</b>				
RI-01	0	0	0	David Cicilline (D)
RI-02	<10	<50	<5	James Langevin (D)
<b>South Carolina</b>				
SC-01	10	<50	<5	Mark Sanford (R)
SC-02	0	0	0	Joseph Wilson (R)
SC-03	400	130	<5	Jeff Duncan (R)
SC-04	100	<50	7	Trey Gowdy (R)
SC-05	370	260	<5	Michael Mulvaney (R)
SC-06	<10	<50	<5	Jim Clyburn (D)
SC-07	100	<50	10	Tom Rice (R)
<b>South Dakota</b>				
SD-01	3400	550	<5	Kristi Noem (R)
<b>Tennessee</b>				
TN-01	0	0	0	Phil Roe (R)
TN-02	30	<50	<5	John Duncan Jr. (R)
TN-03	0	0	0	C. Fleischmann (R)
TN-04	130	<50	<5	Scott DesJarlais (R)
TN-05	<10	<50	<5	Jim Cooper (D)
TN-06	210	<50	<5	Diane Black (R)
TN-07	20	<50	<5	Marsha Blackburn (R)
TN-08	300	290	<5	Stephen Fincher (R)
TN-09	40	<50	<5	Steve Cohen (D)
<b>Texas</b>				
TX-01	0	0	0	Louis Gohmert (R)
TX-02	30	<50	6	Ted Poe (R)
TX-03	410	<50	5	Sam Johnson (R)
TX-04	0	0	0	John Ratcliffe (R)
TX-05	30	<50	<5	Jeb Hensarling (R)
TX-06	120	<50	5	Joe Barton (R)
TX-07	940	1780	16	John Culberson (R)
TX-08	50	<50	<5	Kevin Brady (R)
TX-09	340	290	11	Al Green (D)
TX-10	<10	<50	<5	Michael McCaul (R)
TX-11	40	<50	<5	Mike Conaway (R)
TX-12	100	230	<5	Kay Granger (R)
TX-13	100	<50	<5	Mac Thornberry (R)
TX-14	0	0	0	Randy Weber (R)
TX-15	0	0	0	Ruben Hinojosa (D)
TX-16	<10	<50	<5	Beto O'Rourke (D)
TX-17	0	0	0	Bill Flores (R)
TX-18	110	<50	<5	Sheila Jackson (D)
TX-19	30	70	<5	R. Neugebauer (R)
TX-20	0	0	0	Joaquin Castro (D)
TX-21	320	110	6	Lamar Smith (R)
TX-22	20	<50	6	Pete Olson (R)
TX-23	10	1640	<5	Will Hurd (R)
TX-24	160	90	14	Kenny Marchant (R)
TX-25	80	<50	5	Roger Williams (R)
TX-26	60	120	<5	Michael Burgess (R)
TX-27	80	920	<5	Blake Farenthold (R)
TX-28	20	<50	<5	Henry Cuellar (D)
TX-29	70	50	<5	Gene Green (D)
TX-30	<10	<50	<5	Eddie Bernice Johnson (D)
TX-31	0	0	0	John Carter (R)
TX-32	200	70	13	Pete Sessions (R)
TX-33	100	<50	<5	Marc Veasey (D)
TX-34	0	0	0	Filemon Vela Jr. (D)
TX-35	30	<50	<5	Lloyd Doggett (D)
TX-36	10	<50	<5	Brian Babin (R)
<b>Utah</b>				
UT-01	160	<50	6	Rob Bishop (R)
UT-02	680	130	6	Chris Stewart (R)
UT-03	550	<50	<5	Jason Chaffetz (R)

UT-04	50	<50	<5	Mia Love (R)
<b>Vermont</b>				
VT-01	0	0	0	Peter Welch (D)
<b>Virginia</b>				
VA-01	20	<50	<5	Rob Wittman (R)
VA-02	<10	<50	<5	Scott Rigell (R)
VA-03	260	60	8	Robert Scott (D)
VA-04	3800	1980	9	Randy Forbes (R)
VA-05	100	<50	<5	Robert Hurt (R)
VA-06	0	0	0	Bob Goodlatte (R)
VA-07	30	<50	<5	Dave Brat (R)
VA-08	660	80	5	Don Beyer (D)
VA-09	<10	<50	<5	Morgan Griffith (R)
VA-10	<10	<50	<5	Barbara Comstock (R)
VA-11	90	<50	8	Gerry Connolly (D)
<b>Washington</b>				
WA-01	130	<50	11	Suzan DelBene (D)
WA-02	40	<50	<5	Rick Larsen (D)
WA-03	10	<50	<5	James Herrera Beutler (R)
WA-04	20	<50	<5	Dan Newhouse (R)
WA-05	0	0	0	Cathy McMorris Rodgers (R)
WA-06	10	<50	<5	Derek Kilmer (D)
WA-07	210	120	11	Jim McDermott (D)
WA-08	0	0	0	Dave Reichert (R)
WA-09	70	70	12	Adam Smith (D)
WA-10	<10	<50	<5	Denny Heck (D)
<b>West Virginia</b>				
WV-01	0	0	0	David McKinley (R)
WV-02	0	0	0	Alex Mooney (R)
WV-03	0	0	0	Evan Jenkins (R)
<b>Wisconsin</b>				
WI-01	<10	<50	<5	Paul Ryan (R)
WI-02	170	340	<5	Mark Pocan (D)
WI-03	120	70	<5	Ron Kind (D)
WI-04	1010	170	<5	Gwen Moore (D)
WI-05	<10	<50	<5	J. Sensenbrenner (R)
WI-06	0	0	0	Glenn Grothman (R)
WI-07	<10	<50	<5	Sean Duffy (R)
WI-08	0	0	0	Reid Ribble (R)
<b>Wyoming</b>				
WY-01	10	770	<5	Cynthia Lummis (R)



