Center *for an* Urban Future

GROWTH BY DESIGN

THE POWERFUL IMPACT & UNTAPPED POTENTIAL OF NYC'S ARCHITECTURE & DESIGN SECTORS
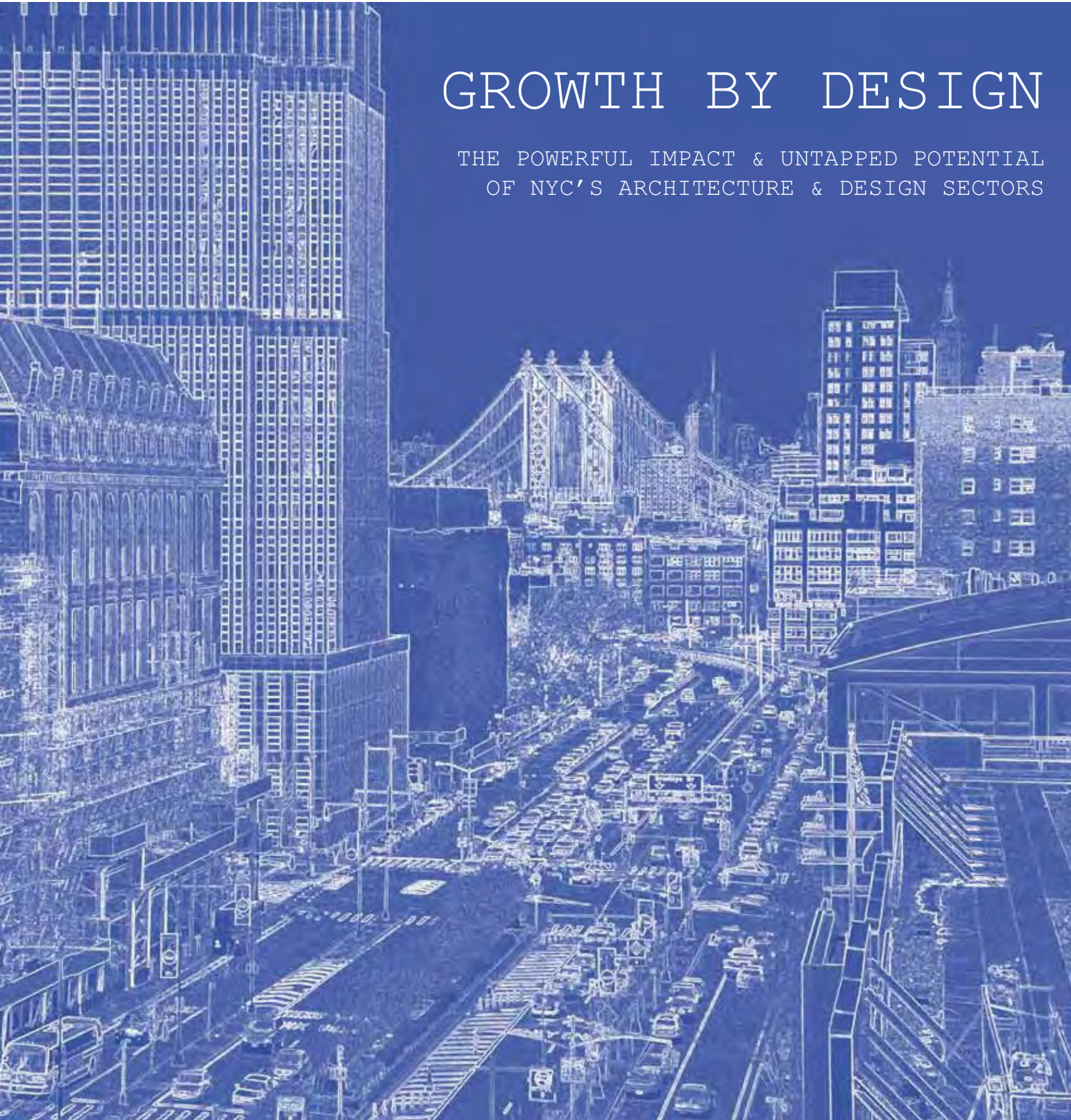
The **Center for an Urban Future** is a New York City-based think tank dedicated to independent, fact-based research about critical issues affecting New York's future, including economic development, workforce development, higher education and the arts. For more information or to sign up for our monthly e-mail bulletin, visit www.nycfuture.org.

Cover: Ahmad Dowla

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Facing the possibility that New York City's financial services sector will never again reach the job levels of 2007, city economic development officials are moving aggressively to identify ways to grow and diversify the economy. Policymakers have embraced sectors from digital media and biotechnology to clean tech. But thus far little attention has been paid to a part of the economy that has experienced phenomenal growth over the past decade and for which New York holds a significant competitive advantage: design.

Though fewer and fewer products are actually made in high-cost cities like New York, the Big Apple has cemented its status as one of the few global hubs for where things are designed. In 2009, the New York metro-region was home to 40,470 designers, which is far and away the largest pool of design talent in the country and among two or three of the largest in the world.[1] In addition, no other American city has strengths in so many design fields—from architecture to fashion design, graphic design, interior design, furniture design and industrial design.

The design sector has also been expanding at a rapid clip. Between 2000 and 2009, design sector jobs in the New York metro area grew by 75 percent, with especially large jumps in the number of interior designers (which increased by 223 percent), graphic designers (139 percent) and industrial designers (127 percent). Moreover, increasing numbers of the city's designers are now exporting their products, a huge plus for the city's economy. Fashion design may be the best example of this, but there has also been a significant growth in the number of New York-based architects working on major building projects in Dubai, Abu Dhabi, Shanghai, Beijing and other fast-growing international cities. A number of New York graphic designers, interior designers and landscape designers are working internationally as well.

There is tremendous potential for future growth in design, and New York is well positioned to capture this growth. Yet, the sector also faces real challenges and growing competition, particularly from overseas cities. And as we document in this report, city and state economic development agencies have thus far barely begun to think about how to strengthen and support New York's design industries.

The latest in a long line of Center for an Urban Future reports focusing on opportunities for New York City to grow and diversify its economy, this study documents the powerful and growing economic impact of a range of design fields in New York, including architecture, graphic design, fashion design, industrial design, interior design, and furniture design. The report concludes that design has become even more of a competitive advantage for New York in recent years and shows where New York stands in each design field among other leading cities. Based on interviews with more than two dozen designers, architects, representatives of design industry associations, academic leaders and government officials, as well as a focus group we held with seven young designers, the study also makes recommendations on what should be done to better support and grow this important, but often overlooked, part of the economy.

In some ways, technology has made geography less important for designers than it used to be. With the aid of the Internet and overnight courier services like FedEx, designers can now send mock-ups or floor plans to clients on the other side of the globe. They can build prototypes in their studios using sophisticated milling machines and 3D printers, and send the specifications to a manufacturer in China for mass production. However, in another sense, geography is just as important to designers and the design process as it has ever been.

Like other creative professionals, designers want to be near the production of art and culture in order to be inspired to produce new, cutting-edge ideas. They want to be near like-minded collaborators to join (or form) collectives, put on exhibitions, give lectures and teach at schools. Even completely informal gatherings at cafés and bars can turn into a future opportunity as Requests for Proposals (RFPs) are passed along or an unexpected brainstorming session leads to further collaboration. Economists have argued that such face-to-face interactions among creative professionals are an extremely important source of growth in a modern, post-industrial economy that depends heavily on innovation.

If so, New York has a lot to be optimistic about.

No other city in the country has as many leading firms in architecture, landscape architecture, fashion design, interior design, and graphic design. In 2009, for instance, the five boroughs of New York had 40 percent more architectural firms than the next closest U.S. city (Los Angeles) and two thirds as many as the third closest (Chicago).[2] In *Architectural Record*'s annual list of top architecture firms by revenue, New York had more high grossing companies than any other U.S. city in the last five years. In 2010, New York had 18 firms in the top 250, while Chicago had 12 firms, Houston 11, Atlanta 9, and San Francisco 7. And that's just measuring firms that are headquartered here; many of the largest firms that are based elsewhere have major offices here; for instance, Gensler, the number 2 firm on the list, is based in San Francisco but has its largest office in New York.

Similarly, over 800 fashion companies are headquartered in New York, more than double its next closest competitor (Paris).[3] New York also has 50 percent more interior design firms than Los Angeles, and nearly three times as many members in AIGA (formerly known as American Institute of Graphic Arts), an industry association for graphic design.

Landscape design is an area where New York lags in terms of its overall number of practitioners, but in this case the city is a clear leader in terms of innovation and influence. Several of the country's most accomplished landscape design firms are headquartered in New York, including Thomas Balsley Associates, Michael Van Valkenburgh Associates, and Field Operations.

"New York is probably the global center for architecture, urban planning, urban design and landscape architecture," says Tom Balsley, who has been practicing in New York for 35 years. "A friend of mine is a talent agent for Korean developers looking for New York-based architects. A lot of his clients may interview someone from Chicago or someone from San Francisco or L.A., but those places haven't established themselves as global centers for architectural design like New York has."

Top U.S. Cities by Number of Design Firms: 2009

Legend: ■ Architecture ■ Landscape ■ Interior ■ Industrial ■ Graphic ■ Fashion
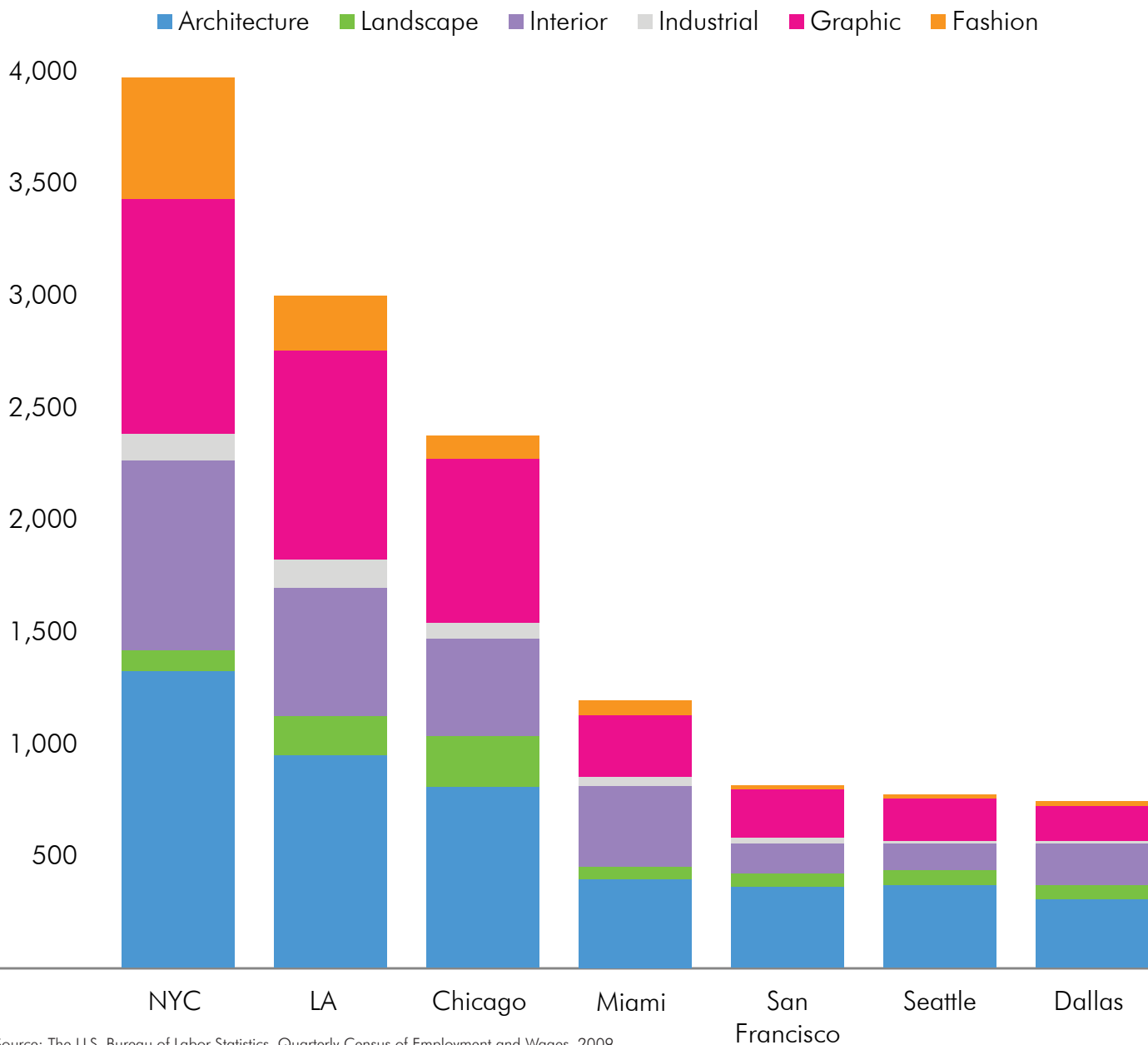
Source: The U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2009

New York doesn't just have more design firms than any other U.S. city; it has far and away more designers. Not all designers work at design firms. In fact, the number of practicing designers working in the city far exceeds the sector's industry employment. In 2009, for example, New York City's design firms employed 21,586 people—including office staff—while in the same year there were 33,780 designers working at a variety of different companies in the five boroughs.[4] New York's 1,049 graphic design firms employed 4,484 people, but during the same period there were approximately 13,000 graphic designers working not just at

design firms but ad agencies, publishing houses, magazines, and even financial companies.[5] Architects commonly work at engineering firms, while industrial designers and fashion designers are often employed in the design departments of larger manufacturing companies.

"There's not a single publishing house in New York that doesn't have a designer on staff. Random House, Knopf, FSG, and several others have a lot of them," says Bill Drenttel, a partner at Winterhouse, a design consultancy, and co-founder of *Design Observer*. "Every magazine in the Condé Nast stable has at least five

designers. The *New York Times* has around 40 or 50 designers. But also every finance firm has a marketing department with five or ten financial designers in it. For instance, Citibank has a huge design staff. Someone designs every store, every bank. It's huge when you put it all together."

New York's design sector has never received as much attention as other key parts of the city's creative economy, such as advertising, film, music or the performing arts. But, as we show in this report, there are actually more firms in the city's applied design sector (2,554, not including architecture) than in any of the eight other sectors in the city's creative core, a designation that includes publishing (1,028), film and video (1,855), music production (442), broadcasting (299), architecture (1,415), advertising (1,417), performing arts (1,048) and visual arts (805).

Perhaps even more importantly, design has been growing over the past decade. Both industry employment and occupational employment in design saw big gains during New York's boom years between 2003 and 2008. Employment at design firms increased 45 percent in that time. But the growth in the number of designers working in the city was even greater (and more resilient in the face of the downturn that followed). In 2000, according to the U.S. Bureau of Labor Statistics' Occupational Employment Survey, there were an estimated 23,143 designers working in the New York metropolitan area. By 2008, that number had almost doubled to 44,400.

The number of design occupations decreased in 2009 due to a weak economy, but even with that drop the city still saw a 75 percent gain in the period from 2000 to 2009, an astronomical increase by any measure.[6]

U.S. Metro Areas with High Concentrations of Designers

Source: The U.S. Bureau of Labor Statistics, Occupational Employment Survey, 2009
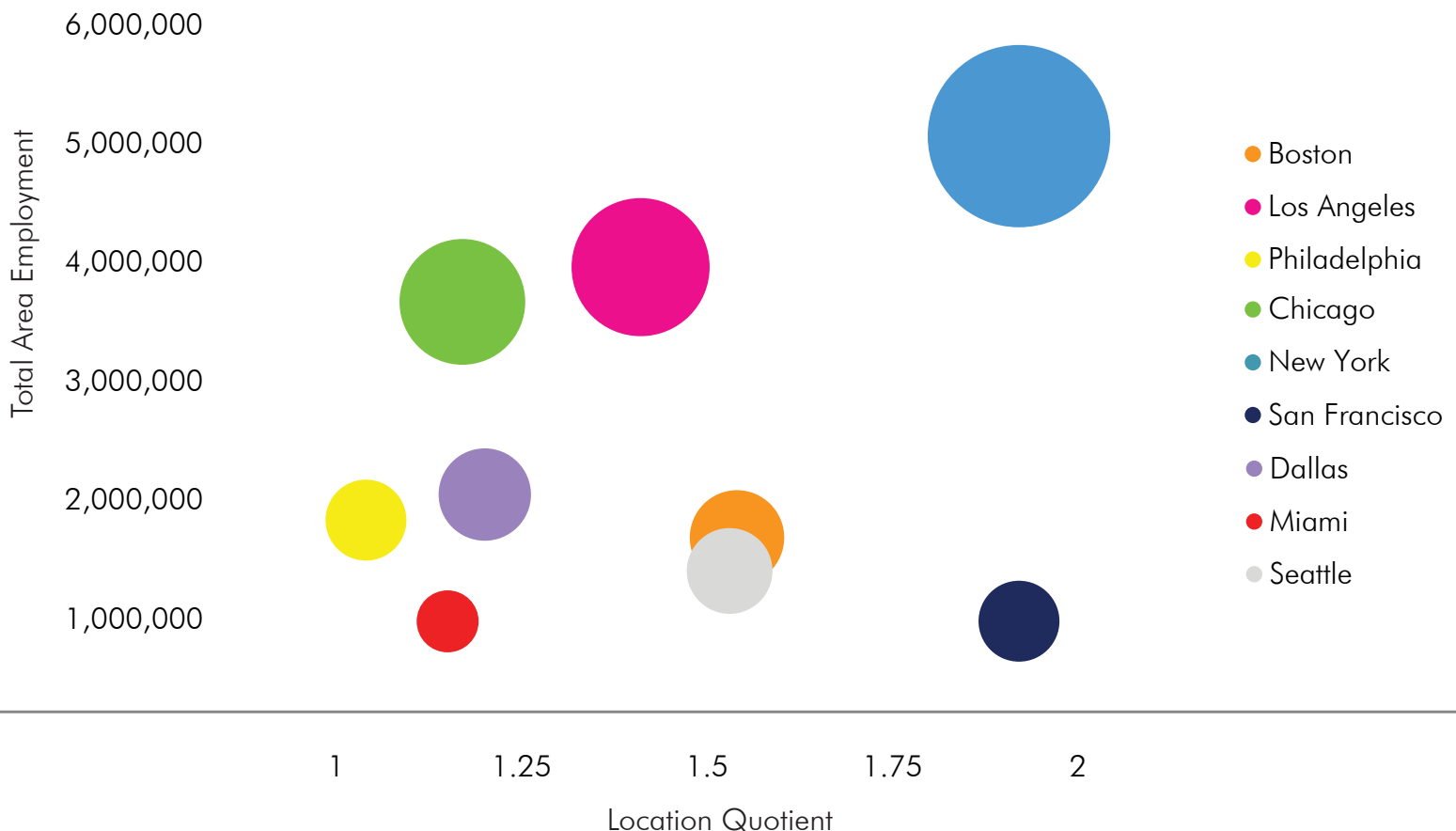
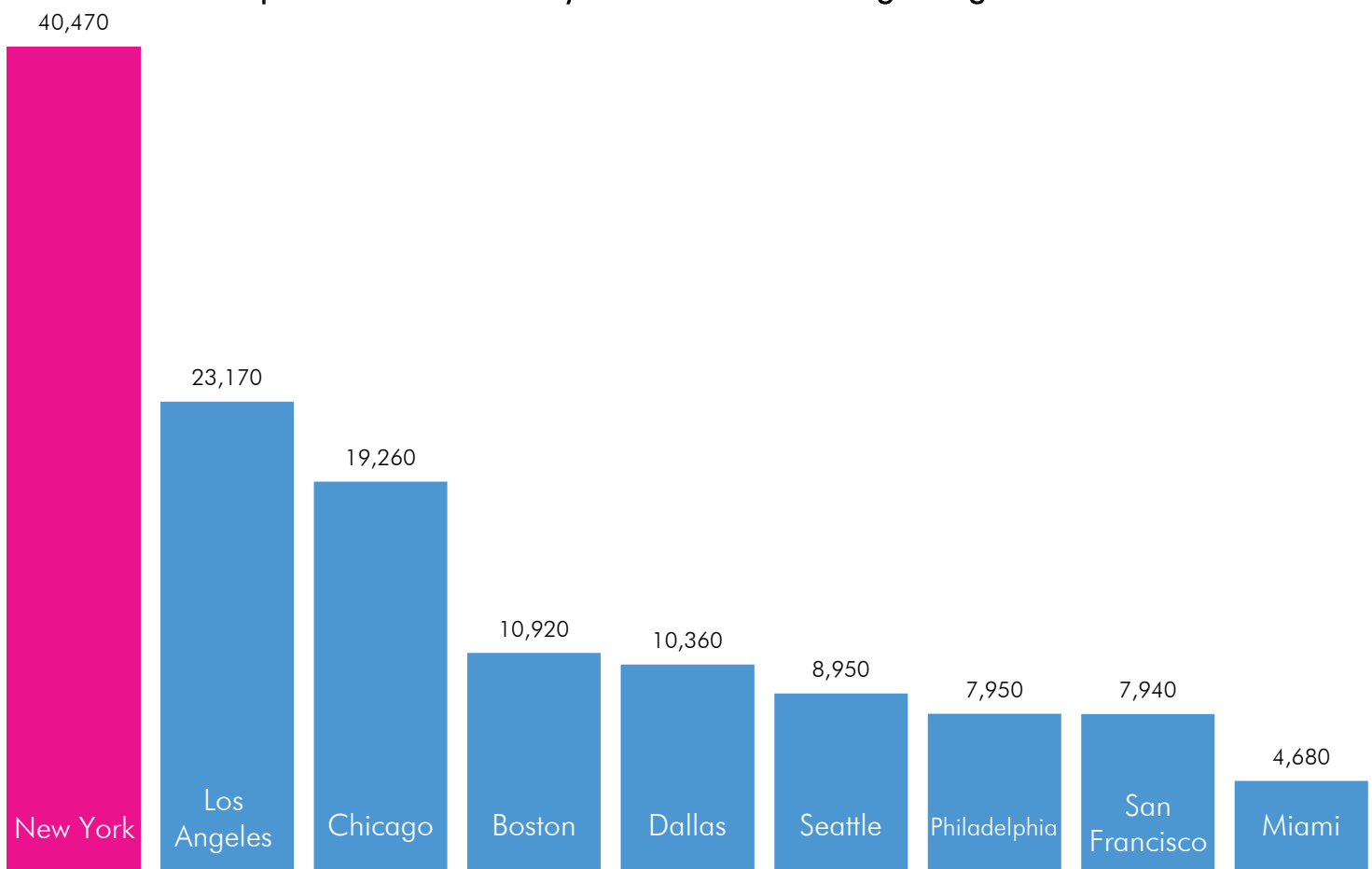Although total employment closely tracked the broader city economy—there was a steady decrease after the tech bubble burst in 2001, a steep increase during the building boom, followed by a precipitous drop in 2008—the growth in the number of design firms in the city also showed surprising resilience, with a 19 percent gain between 2003 and 2008 and less than one percent loss thereafter.

When the design industries begin to pick up steam again, there's little doubt that New York will be at the center of the recovery. Simply put, no other place has the concentration of design jobs as New York. This is clear when examining New York City's location quotient, which measures the relative strength of a region's industry cluster compared to the nation. A location quotient of 1.00 shows that an industry makes up the same share of a local economy as it does of the national economy. High location quotients (for instance, Las Vegas has a high location quotient in the hospitality and entertainment sector) show that a local area has a much greater share of workers in a particular sector than the nation, indicating a competitive advantage. The data shows that the New York metro area has a particularly strong industry cluster in design.

When looking at all design fields, New York has a higher location quotient (1.92) than any other major metro area with the exception of San Francisco, which has an equivalent location quotient but a much smaller pool of designers. Boston (1.5) and Los Angeles (1.4) have the next highest location quotients. (See graph on page 6) New York is also a clear leader in architecture and graphic design, but its greatest comparable

Top U.S. Metro Areas by Number of Practicing Designers: 2009

Metro Area	Number
New York	40,470
Los Angeles	23,170
Chicago	19,260
Boston	10,920
Dallas	10,360
Seattle	8,950
Philadelphia	7,950
San Francisco	7,940
Miami	4,680

Source: The U.S. Bureau of Labor Statistics, Occupational Employment Survey, 2009

advantage is in fashion design—the city's location quotient in this field is 10.8, compared to 5.8 for Los Angeles and 2.3 for San Francisco.[7]

The numbers suggest that New York design firms are not only serving clients locally, but nationally and internationally. This was confirmed in our interviews. Even furniture designers and interior designers, who rely to an uncommon degree on wealthy local clients, exported their services to other parts of the country—in the case of Brooklyn's budding furniture design community, for instance, Southern California is an important and growing consumer market. Graphic designers who work at New York-based publishing houses and media companies are more often than not developing products meant for a national audience.

Increasingly, New York-based architects are finding the fastest growing markets for their services to be in Asia and the Middle East. Among New York's top grossing architecture firms, more than a third of their almost $1 billion in revenue in 2009 came from overseas clients. New York-based Kohn Pedersen Fox (#22 on *Architectural Record*'s list of top firms by revenue), for example, designed the Shanghai World Financial Center, the tallest building in China, and is currently working on designs for a new airport for Tianjin—China's fourth largest city—in addition to four skyscrapers in Marina Bay, Singapore. Rafael Viñoly (#24) is the principal designer behind three major new developments in Abu Dhabi, including the master plan for a New York University's new campus there.

Pentagram, which is working in nearly a dozen countries, is just one of many New York-based graphic design firms that have experienced an increase in global projects. And a number of industrial design firms we spoke to said they were getting work from overseas manufacturers. For example, Smart Design, a large firm with 150 employees, recently completed hardware designs for a new laptop computer for Acer Inc., desktop organizational software for Toshiba, and a new MP3 player for a South Korean electronics company called iriver. Pensa, a comparatively tiny Brooklyn-based firm, has partnered with a variety of large multinational companies like Samsung and Pepsi to do consumer experience research and identify opportunities for product development and innovation.

Typically, overseas companies will look to New York-based designers for ideas and strategies on how to tap the U.S. market, but not always. New York's pool of fashion design talent, for example, is unrivaled anywhere in the world, so it's not uncommon for foreign companies to open studios here to capitalize on the city's deep pool of talented designers even when they're marketing to consumers on the other side of the globe. For example, according to Tim Marshall, provost of The New School, a South Korean holding company called SK Networks recently opened a studio in Chelsea to produce fashion brands meant for Chinese consumers. "A fashion studio for the building of these Chinese brands," marvels Marshall. "They didn't have the talent there."

New York isn't the only city to have experienced significant growth in the design fields over the last decade, but in nearly every field New York's growth outpaced the nation's, in some cases by large measures.[8] While it only has 3 percent of the nation's total occupations, New York has 42 percent of its fashion designers, 8 percent of architects, 8 percent of graphic designers, and 6 percent of industrial designers.

Many of the experts we interviewed say there are good reasons for that dominance. New York has an unparalleled number of universities and museums that serve as important venues for the circulation and exchange of ideas, including Parsons The New School for Design, the School of the Visual Arts, the Fashion Institute of Technology, the Pratt Institute, the Museum of Modern Art, and the Smithsonian's Cooper-Hewitt Museum, to name only a few of the most prominent. Moreover, the city's deep pool of talent is a huge draw for design studios and other companies that employ designers, which leads not only to job opportunities but the chance to apprentice with established, cutting-edge firms. Also, a large congregation of creative talent

supports a wide variety of specialized services that are important—and in some cases pivotal—to the design process. Fashion designers in the Garment District, for instance, will sometimes work with pattern makers to come up with designs that look and feel right on the fit models; architects will work with engineers to make use of new materials and create complicated surfaces; industrial designers will work with product photographers to create promotional materials; and so on. Other big cities offer similar services, but not many can offer the sheer number and variety that New York does.

While the design industries offer incredible promise for New York, the city's future growth in this area is not guaranteed, especially since global competition will only increase in the years ahead. Yet, to a large extent, this part of the economy has floated under the radar of local economic development officials.

While the Bloomberg administration has admirably launched several new initiatives to support the city's fashion industry, the city's economic development agencies have not devoted any meaningful attention to other design industries. And the city has also done little to promote the city's designers. Other cities like London and Milan go to great lengths to brand their products at both local and foreign trade shows. London's nine-day long design festival is a huge event with over 350,000 visitors from all over the world; the city's tourism agency promotes the event in other countries, and the UK Trade and Investment does significant outreach to foreign clients (see London's Design Initiatives, page 27). Yet New York's chief economic development agency (the New York City Economic Development Corporation) and the main tourism agency (NYC & Company) have only partnered to promote Fashion Week, leaving the city's architects, interior designers, furniture designers and industrial designers to fend for themselves during their local trade shows.

A vast majority of the designers we interviewed thought New York was far too complacent about its status as a design hub. "New York has become a much friendlier place for design in the last decade," says Vishaan Chakrabarti, an architect and former executive vice president at The Related Companies, a major New York City real estate development company. "But I still think we have a long way to go in terms of having a true design sensibility in this city. Cities like London and Tokyo have a far greater respect for design and each could make their own claim about being a design capital."

As it is, there are clear obstacles to the continued strength of New York's design sector. One is high real estate and living costs. Young designers, like young artists and writers, are fleeing to other creative hubs where studio and living spaces can be had for a fraction of the cost. Also, compared to Boston or Silicon Valley, New York has very little venture capital funding for design and technology teams developing new products in electronics and digital media. Industrial designers on the West Coast have started to play a much larger role at the beginning of the development process for new technologies, designers say. But, in New York, start-ups find it more difficult to connect with locally-based designers.

While some of the best opportunities for growth in New York's design sector lie overseas, in fast-growing emerging markets, the city has no real export assistance strategy, and the state's export promotion programs have focused almost exclusively on assisting manufacturers—not designers and architects, and other service providers.

In the years ahead, as consumer markets in Brazil, India, and China continue to heat up, New York's cutting-edge design firms could prove to be a huge competitive advantage. But for New York to capitalize on this opportunity—and help diversify its economy—policymakers at the city, state, and even federal level will need to develop a strategic plan to harness New York's one-of-a-kind design expertise, evaluate the potential of design as a growing service export, and connect firms with new clients abroad.

DESIGNING NEW YORK

With rapidly growing consumer markets overseas, the demand for professional design services is growing—and with it New York's importance as a center of innovative design

Looking at job growth trends over the last ten to 15 years, one thing has become abundantly clear: Although less is now actually made in New York City, much more is getting designed here than ever before.

The city's once vaunted manufacturing sector has declined by nearly 50 percent since the start of the decade. During the same period, New York's design industries have grown at a phenomenal rate. In just nine years, the number of designers working in the city grew by 75 percent, despite a historically bad economy for the last two years. The number of graphic designers grew from 6,690 in 2000 to 16,000 in 2009, a 139 percent increase; architects grew from 6,410 to 8,200, a 28 percent increase; fashion designers grew from 4,550 to 6,590, a 45 percent gain, and so on. Though there are no labor statistics measuring furniture designers, the growth in New York City's furniture design industry has been so strong over the last ten years that, along with interior design and to a lesser extent architecture, it has fueled a resurgence in small scale, high-end manufacturing in the Brooklyn Navy Yard and pockets of Greenpoint and Bushwick in northern Brooklyn.[9]

Between 2004 and 2008, the number of design firms in the five boroughs increased from 3,366 to 4,058 (a 21 percent gain), with a very slight decrease between 2008 and 2009. A vast majority of the city's design firms are located in Manhattan, but, the number of companies in Brooklyn has exploded in recent years. Overall, the number of Brooklyn-based firms grew from 257 in 2001 to 430 in 2009, a 67 percent increase. The number of graphic design firms in Brooklyn grew by 62 percent in that time, from 86 to 139, and the number of architectural firms nearly doubled, from 65 to 129.
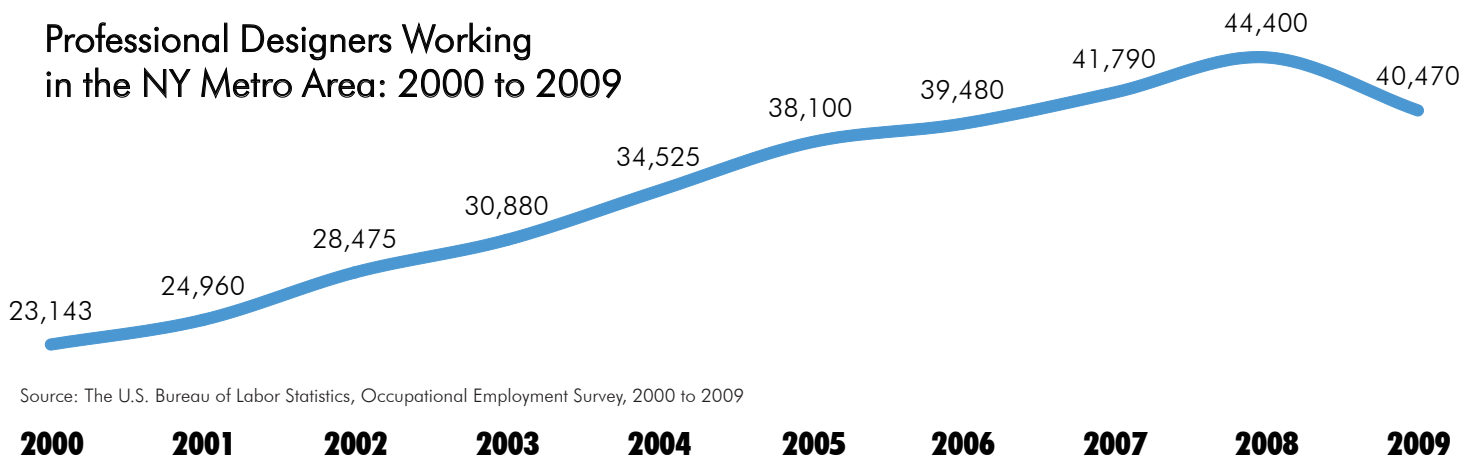
When evaluating the whole of the last decade, the employment picture citywide was considerably less sanguine. The housing crash in 2008 wiped out the huge gains during the boom years, leading to a net loss of 17 jobs across all design sectors for the decade. However, considering that 2000 was a record employment year in New York and the city lost a total of 41,000 jobs—across all sectors of the economy—by the end of the decade, a decline of 17 jobs is better than most other industries fared. Architectural services lost 3,000 jobs between 2008 and 2009, though judging by the first three quarters of 2010 the labor market has now settled down considerably. As would be expected, total wages mirrored employment. At the industry's height in 2008, total wages across all design sectors was approximately $2.3 billion—up from $1.3 billion in constant dollars in 2003—but then wages dropped again in 2009 to $1.9 billion.[10]

Despite the recent slump, most of the designers and economic forecasters we spoke to thought that growth in the design fields would continue in the years ahead and that New York's importance to design would continue to grow. "The fact that you've got all type of designers in the same area creates a synergy that likely does not exist in other cities," says Christopher Cyphers, president of the New York School of Interior Design. "The sheer number of resources for designers makes this the place to be if you are going to study and practice design."

As more and more firms get work from overseas clients, the importance of basing a practice in a global city like New York appears to be growing. As a result, designers and design students from across the country and globe are coming to New York to start their practices, or else already established firms and companies are opening up satellite offices here in order to draw from the city's talent pool. For example, architects and industrial designers say that it is much more common now than it was even five or six years ago for younger, smaller firms to land contracts

Professional Designers Working in the NY Metro Area: 2000 to 2009

23,143 24,960 28,475 30,880 34,525 38,100 39,480 41,790 44,400 40,470

Source: The U.S. Bureau of Labor Statistics, Occupational Employment Survey, 2000 to 2009

2000   2001   2002   2003   2004   2005   2006   2007   2008   2009

Number of NYC Design Firms: 2001 to 2009

3,465 3,364 3,340 3,366 3,454 3,578 3,848 4,058 3,969

Source: The U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2001 to 2009
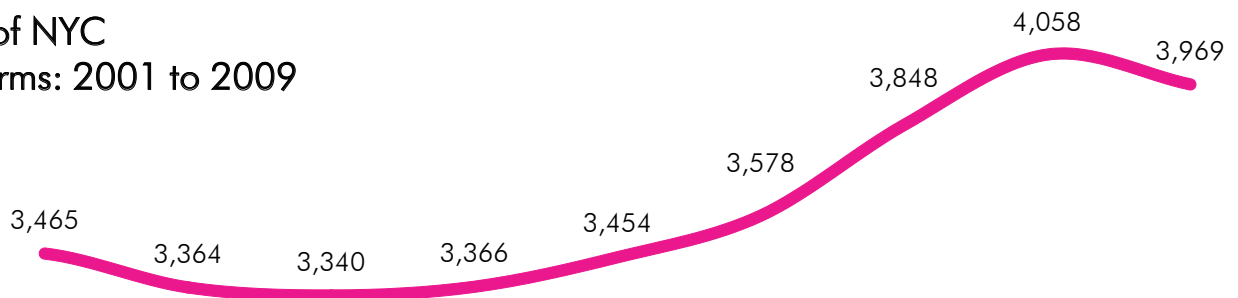
with big international clients. In the 1980s, larger corporate firms did a lot of work abroad, but at the time those were the only fir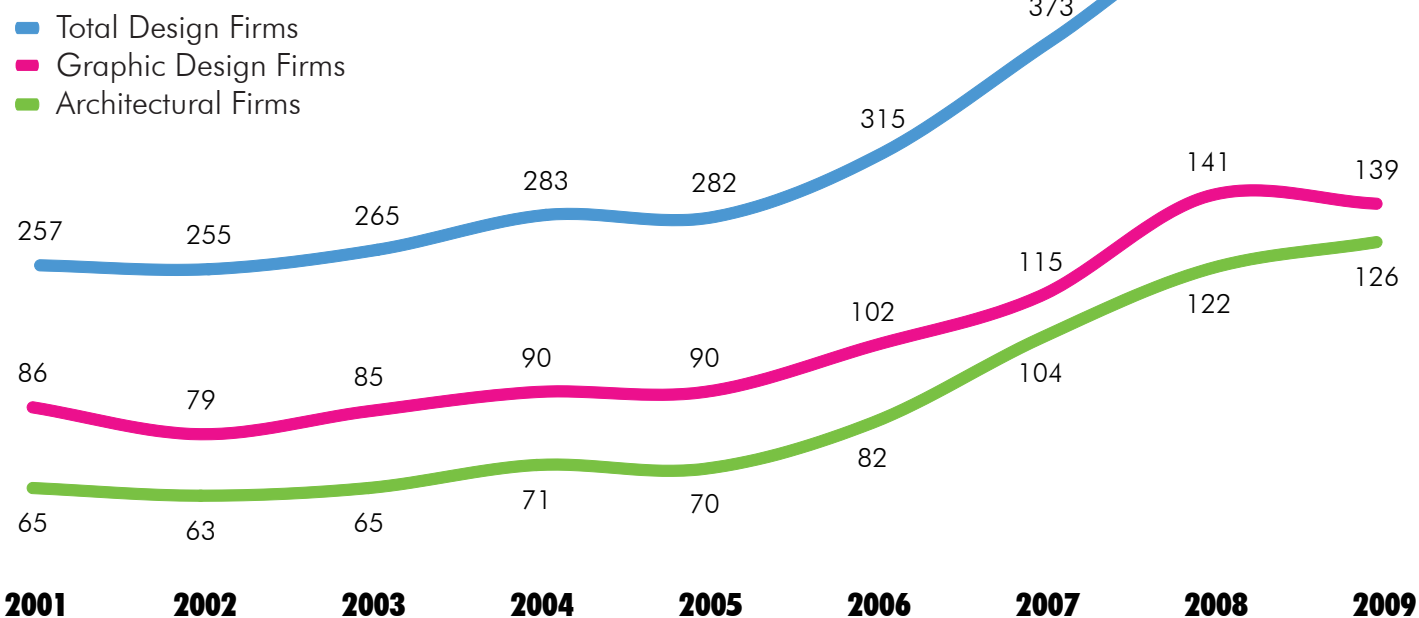ms that could afford to open up regional offices and maintain a large staff during times when contracts were scarce so that they could scale up quickly and efficiently when they were abundant. But now even four-person design firms have little trouble taking on large, international contracts. Prototyping machinery such as 3D printers have become more affordable and easier to warehouse in small studio spaces, and designers can Skype into conferences and then fly over on direct flights for important meetings. Perhaps most importantly of all, they also have a much easier time accessing extra labor and expertise when they need it.

A lot of the design firm principals we spoke to said they depended heavily on temporary workers during peak production periods, so having a lot of talented, ambitious freelancers living in the same city was a critical advantage. "[In design] there is a culture of working for free to begin with," says Michael Sorkin, an architect who is founder of Michael Sorkin Studio and director of the graduate program in urban design at City College,

"then working part time or without benefits. It's a really flexible economy, and it's only possible if you have a large pool of surplus labor as well as a large number of potential employers. Obviously, New York has both."

Another broad trend driving future growth in the design sector appears to be a rising global demand for design services, which gives young designers a good reason to stay in the profession and design schools an incentive to expand their enrollments. For example, as a number of industry insiders told us, the huge increases in the number of graphic designers, not just in New York but many cities across the country, is almost certainly due to the large number of clients who need web designers. In 2000, most businesses were still trying to figure out the Internet and at most building shallow websites that functioned like calling cards or billboard advertisements. Ten years later, nearly every business in existence has a website of some kind, and more and more are developing new ways to expand their web traffic and keep visitors on their site for longer. For example, retail businesses are offering their catalogs online, museums are developing virtual

Growth of Design Firms in Brooklyn: 2001-2009

- Total Design Firms
- Graphic Design Firms
- Architectural Firms

Total Design Firms: 257, 255, 265, 283, 282, 315, 373, 430, 430

Graphic Design Firms: 86, 79, 85, 90, 90, 102, 115, 141, 139

Architectural Firms: 65, 63, 65, 71, 70, 82, 104, 122, 126

2001 2002 2003 2004 2005 2006 2007 2008 2009

exhibitions, and universities are offering online courses. All of this requires a designer or, more likely, a team of designers.

Another big driver of growth is the increasing awareness of design's capacity to increase market share for a number of different kinds of products. This is perhaps most obvious in the consumer electronics market, where Apple has built its brand on the way its products look and feel, and cell phone manufacturers are starting to produce a wider array of designs for ever narrower market segments. "Now it isn't enough for you to like your cell phone," says one design executive, "they want you to fall in love with it."

That mentality is starting to extend to a number of other markets as well, including kitchen supplies (such as the popular OXO-brand utensils) and health information technology. The health care services, medical device, and pharmaceutical industries are three of the fastest growing sectors in the U.S. economy, and increasingly companies in all three sectors are turning to product designers to re-think everything from thermometers and glucose monitors to the insides of ambulances. Many large industrial design firms like IDEO, which was founded in the San Francisco Bay Area but recently opened a New York office, have whole departments dedicated to servicing health-related companies.

Finally, yet another big contributor to the growth of design is the economic and cultural liberalization of countries like China, India, and the United Arab Emirates. These countries are growing rapidly and investing heavily in their cities. Their rapidly expanding middle classes are looking to Western designers for fashion, consumer products, and housing and infrastructure. According to Fredric Bell, the executive director of the New York chapter of the American Institute of Architects, this has contributed enormously to the growth in revenue among American architectural firms in particular. Between 2002 and 2008, total revenue among American architectural firms was rising 9 percent or more per year; in 2006-2007 it rose 25 percent in a single year. Revenue dipped in 2009, as the domestic housing market finally took its toll, but amazingly, even in the face of a global economic slowdown, the level of revenue coming from overseas clients remained stable.[11] "Globalization has made it easy to work from anywhere," says Bell, "but it has also led to a psychology where people don't have artificial boundaries, they don't say this is our turf and we don't want a Nouvel [or another outside architect] to work here."

EXPORTING DESIGN

One couldn't find a better advertisement for design's explosive export potential than the Chinese city of Shenzhen. In a little more than 30 years, the city has transformed itself from a tiny fishing village just north of Hong Kong into one of Asia's most dynamic urban economies. With an estimated population of more than 14 million people, Shenzhen is now a global center of high-tech manufacturing, finance, and culture. And partly as a result of this quick transformation, the city has become a huge importer of design.

Two relatively small New York architectural offices, for example, are currently remaking entire swaths of the city. WORKac, a boutique firm with under 15 architects, is designing a skyscraper linked to an underground bus station and subway, a kilometer-long section of Shenzhen's premier shopping district, and the master plan for an important industrial complex on the city's perimeter. Meanwhile, Steven Holl Architects, a slightly larger firm with 29 architects, recently completed a huge mixed-use "horizontal skyscraper" that is as long as the Empire State Building is tall, and is now working on the master plan for a financial center consisting of four interlocking skyscrapers.

The scale and speed of Shenzhen's development may be unusual, but it is hardly the world's only big design importer. Governments and real estate developers across China, South Korea, Singapore, Indonesia, India, the United Arab Emirates, and Brazil are investing heavily in architecture and urban design. Their growing middle classes are buying cell phones, furniture, and fashions, whose designs—often imported from the U.S. and Europe—set them apart from other run-of-the-mill consumer goods. Based on a recent survey of Chinese consumer spending, for example, Credit Suisse, a financial services company, expects China's share of global consumption to increase from 5.2 percent ($1.7 trillion) in 2009 to 23.1 percent ($15.9 trillion) in 2020, which would be enough to overtake the U.S. as the largest consumer market in the world.[12]

Until fairly recently, the biggest markets for design were in countries with relatively high levels of homegrown design talent. As a result, clients in those countries could afford to be a lot more insular and inward looking; French cities wanted French architects, for example, and outside designers and design concepts were viewed skeptically. The designers who worked most often across these cultural boundaries were also the biggest and most famous, whether they were furniture designers from Milan or corporate architectural firms from Chicago. Needless to say, that era has ended.

"In the mid-2000's, there was a change in the size of the firms that were starting to get work abroad," says Rosalie Genevro, executive director of the Architectural League, a New York-based nonprofit. "It used to be that only the biggest corporate firms got work in Asia, but in the middle part of the decade five-person firms were getting calls from clients in China to come and do stuff. That was a big shift."

New York, in particular, is full of architecture offices that do more work abroad than at home, says Genevro. Fashion houses and industrial design firms also work regularly with foreign clients. Even graphic design studios are increasingly getting into the export game.

During the recent recession, foreign clients have been a big source of stability for American designers, but unlike in other places they get very little help from the federal and local governments. According to Marco Perry of the Industrial Designer Society of America (IDSA), for example, during Chinese President Hu Jintao's state visit to Washington D.C. in January 2011, a Chinese official wanted to meet with someone in the federal government to discuss design imports, but he quickly discovered that he had no American counterpart to address and went to the IDSA instead. At foreign trade shows, expos, and international design conferences, other countries (or cities) with strong design sectors will have a big presence, but the U.S. never does. "The U.S. is absent at all the international meetings," says Jay Corless, an expert on design policy. "If American designers are represented at all it is through an industry association like the IDSA or AIGA."

In fact, very little is even known about the contribution of designers to the country's total export. Although engineering and architectural services count toward the U.S.'s export totals, the value of other specialized design services tend to get lost in a woefully outdated methodology for calculating trade statistics. A recent study by the Asian Development Bank Institute, for instance, found that China gets credit for 100 percent of the iPhone's export value (a product assembled in Shenzhen), even though American engineers and product designers contribute by far the most value to the final product. Largely because of the way trade statistics are assessed, iPhone sales in 2009 ended up contributing $1.9 billion to the U.S.'s trade deficit with China.[13]

SNAPSHOTS OF NYC'S DESIGN FIELDS

From architecture and graphic design to interior design and furniture design, a look at several of New York's design fields

New York has by far the largest concentration of designers in the country. As shown in the table on page 22, applied design has more firms in New York than any other sector in the city's creative core. But the numbers don't tell the whole story. In terms of innovation and prestige, the city is a clear leader in a number of design fields, including fashion, architecture, landscape architecture (in which the city lags numerically), interior design, and a multidisciplinary specialty called exhibition design.

New York's furniture designers don't have the international reputation of Milan's, but in the last five years or so a group of designers in Brooklyn have been building a strong, internationally recognized brand for innovative, high-end furniture. Similarly, industrial design has been a traditional weakness for New York, but, according to a number of industry insiders, this has started to change, as cutting-edge firms like Pensa, ECCO, IDEO, and Smart Design go beyond traditional product design and turn themselves into sophisticated consumer research and business strategy think tanks. Described below are six of New York's most important and fastest growing design fields.

Architecture

New York has the largest collection of architecture firms of any city in the U.S., and dozens, if not hundreds, of those practices, such as Viñoly Architects, Pei Cobb Freed & Partners, and Studio Daniel Libeskind are known and respected all over the world. In *Architectural Record*'s annual listing of top architectural firms by revenue, New York City had more firms in the top 250 than any other U.S. city in the last five years.[14]

In the 2010 ranking (based on 2009 revenues), New York had 18 firms in the top 250; Chicago had 12 firms; Houston had 11; Atlanta 9; Philadelphia 7; San Francisco 7; LA 5; and Boston 5. For New York's top firms, total annual revenue exceeded $913 million, $580 million coming from domestic clients and $330 million from international clients. During the recent economic slowdown, international projects have provided much needed stability for many New York-based firms. As the graph on page 15 shows, in 2009, international revenues for New York's top grossing firms dropped significantly from their 2008 high, but much less than domestic revenues did. And unlike domestic revenues, international revenues are still much larger than they were in 2006 and 2005.

In the 2010 rankings, Skidmore, Owings & Merrill (#10) had $216 million in revenue, $94 million of that coming from domestic projects and $123 million coming from international ones. Perkins Eastman (#20) had $110 million in revenue, with $88 million coming from domestic projects and $22 million from international ones. Kohn Pedersen Fox (#22), Rafael Viñoly Architects (#24) and the STV Group (#30) were also highly ranked.

The disciplinary boundaries in architecture have grown fuzzier over the years, with more and more firms branching out into different fields like landscape architecture and urban design. At the same time, architectural firms often find it necessary to specialize. For instance, there are firms that specialize in libraries, hospitals, municipal buildings, and public infrastructure. New York-based Parsons Brinckerhoff is perhaps

the world's largest architectural and engineering firm devoted to public infrastructure projects such as bridges, tunnels, and airports. Other firms will specialize in facades, interiors, or public plazas. For instance, New York-based SHoP Architects first came to prominence for their East River Waterfront design in Lower Manhattan.

In addition to prestigious firms, New York boasts a number of world-class schools of architecture, including Cooper Union, Columbia University, the Pratt Institute, and Parsons The New School for Design. Yale and Princeton also have architecture schools with a number of New York-based faculty and students who gravitate to the city after graduation. An official at Harvard's Graduate School of Design says that New York is "a prime destination" for graduating students. "It's not where all the jobs are," he says, "but it's where the firms they're interested in are located."

Similarly, according to Vishaan Chakrabarti, who teaches at Columbia's Graduate School of

Architecture, Planning and Preservation, a third of Columbia's architecture students are from abroad, but a lot of them stay in New York to practice. They'll catch on with a prestigious firm for a while, he says, and then start their own practice here.

Fashion

As home to 42 percent of the nation's fashion designers, New York City's status as a leader in fashion design is apparent. But New York isn't just a leader in the United States; the city's fashion design industry is the largest in the world. Approximately 800 fashion companies have their headquarters here, which is more than double that of Paris, the city's next closest competitor. Many of the world's largest fashion brands are headquartered in the city, including Liz Claiborne, Polo Ralph Lauren, Donna Karan and Calvin Klein.

Domestic and International Revenues for
New York's Top Ten Architecture Firms: 2005-2009

■ International   ■ Domestic

Year	International	Domestic
2005	164	427
2006	212	477
2007	372	569
2008	408	658
2009	301	471

Source: Architectural Record
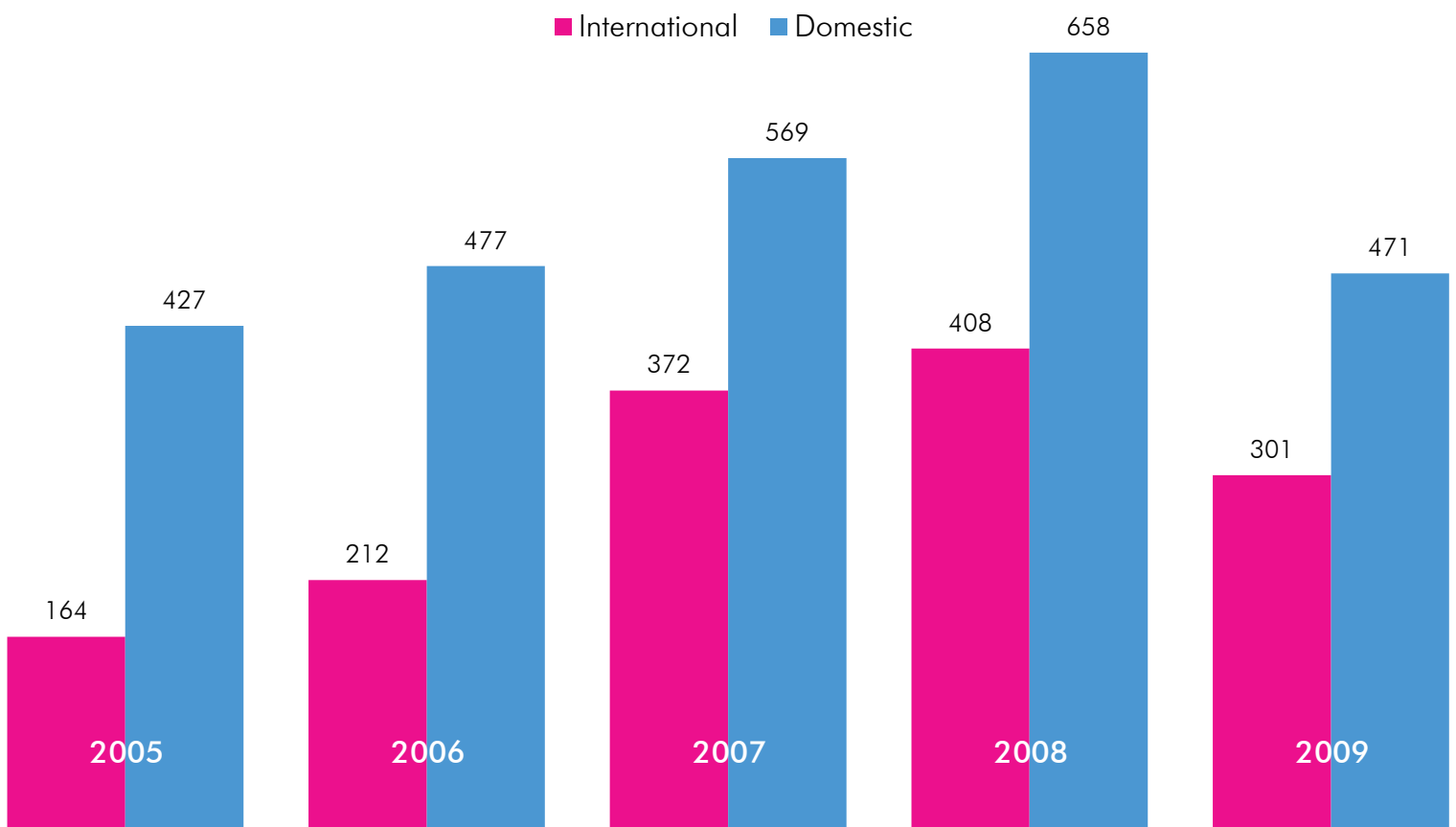
"New York has been a fashion design center for well over 100 years," says Tim Marshall, provost of The New School. "Parsons is one of three or four premier fashion schools in the world, not just in the U.S. From Donna Karan to Marc Jacobs, there's been a long lineage of designers who have gone in and reinvigorated these existing brands like Liz Claiborne. Some of those brands wouldn't still exist if it weren't for New York designers."
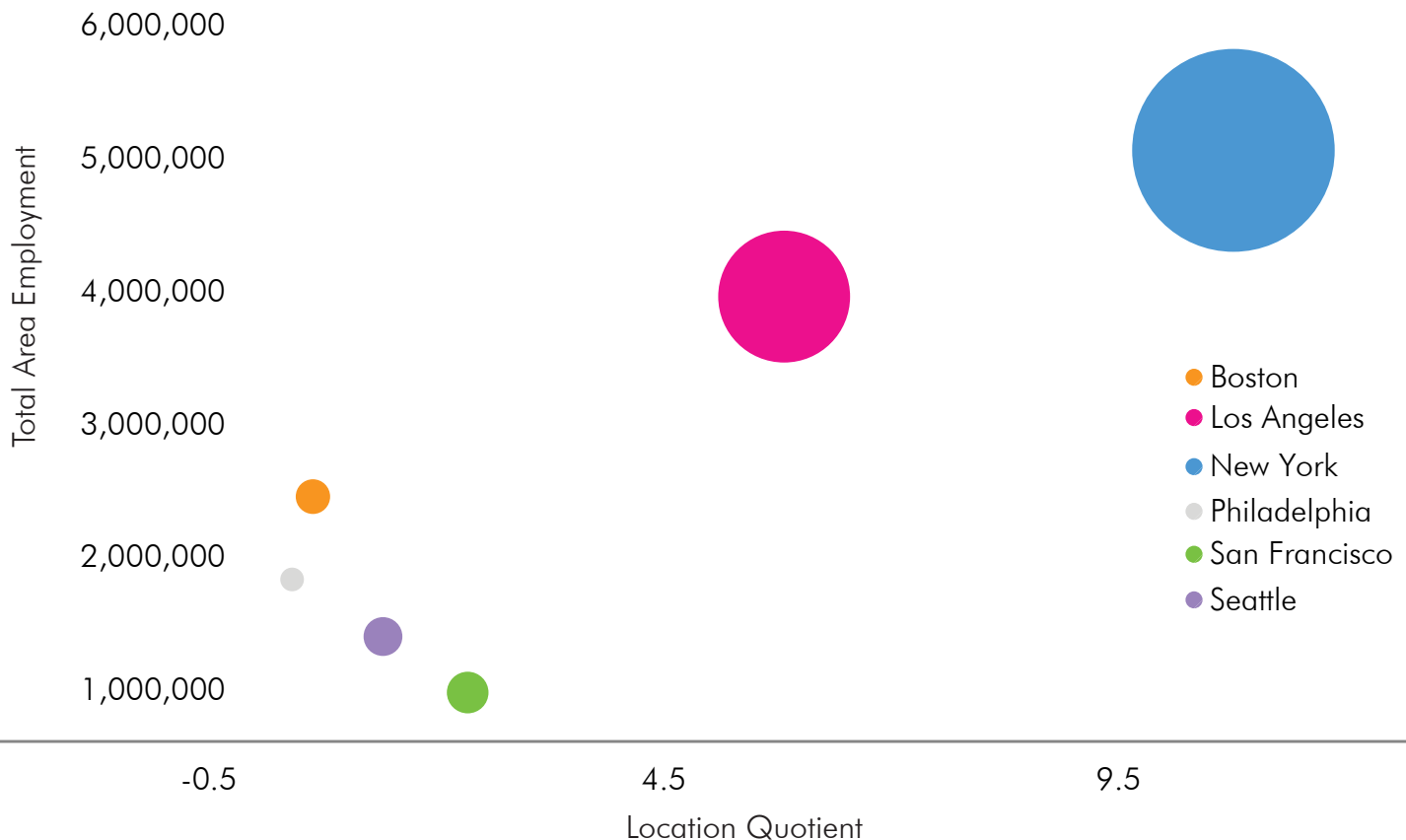
While New York has been a fashion design capital for generations, many of those we spoke with say that the city has strengthened its position in recent years. Applications to the city's fashion design programs have soared in recent years, high profile reality television shows like Project Runway have showcased New York as a leading fashion center and the city's annual fashion shows have continued to grow in prominence, bringing more than 200,000 visitors to New York. And unlike Paris, London, and Milan, New York's fashion industry has also been extremely supportive and open to emerging design entrepreneurs, which in the recent past have included Kate Spade and Nanette Lepore.

The city's dominance clearly begins with talent. Arguably, no other city in the world has as much fashion design talented concentrated in one place. New York has several of the world's top universities for fashion design, including Parsons, FIT and Pratt. "NYC is the center of the fashion world because of the talent and the passion of the people centered here," says Elizabeth Marcuse, president of LIM College, a Manhattan-based four-year institution which offers programs on the business end of fashion. "Talented, smart people attract more talented and smart people willing to experiment and innovate. That is what keeps an industry like fashion so exciting and alive and continues to attract people."

Beyond the schools, New York offers an unparalleled infrastructure to support fashion designers. The concentration of everything

U.S. Metro Areas with Highest Concentrations of Fashion Designers

Legend:
- Boston
- Los Angeles
- New York
- Philadelphia
- San Francisco
- Seattle

Y-axis: Total Area Employment (1,000,000 to 6,000,000)
X-axis: Location Quotient (-0.5, 4.5, 9.5)

Source: The Bureau of Labor Statistics, Occupational Employment Survey, 2009

from pattern makers and fabric shops to design showrooms and leading fashion publications such as *Vogue* and *WWD* creates a nurturing ecosystem for design that can't be found anywhere else. Much of this is centered in the Garment District in Midtown. "New York City and the Garment Center in particular provide all the resources necessary for designers to launch their fashion brands," says Andrew Ward, acting executive director and director of sourcing and designer development of the Garment Industry Development Corporation (GIDC). "I work with over 400 designers a year locating production resources and New York City is the only place where you can find the fabrics, trims, high end tailoring and low minimums necessary to launch a collection business."

Although the number of garment manufacturers in the garment district has declined in recent years—and most large scale manufacturing is now based overseas—the manufacturers that remain play a hugely important role in the design process, many designers say. For instance, Nanette Lepore, now a prestigious high-end fashion designer, says that she doubts she would have been able to establish her own brand at all if it weren't for the Garment Center manufacturers she worked with as a young up-and-coming designer. "The manufacturing resources in the Garment Center, and the clustering of creative communities, is a pull for emerging designers from all over the world," says Lepore.

For younger designers, in particular, Lepore says, it is important to be able to work one-on-one with a pattern maker and to see early prototypes on models. "The Garment District really functions like a Research and Development hub," says Jerome Chou, director of programs at the Design Trust, which has been working to preserve the Garment District. "In Paris, they don't have a Garment District and you don't see as much entrepreneurial activity."

In fact, garment manufacturers will sometimes front young designers the money to produce short run clothing lines, because they see it as an investment in an up-and-coming designer that will pay off in terms of continued loyalty later on. For instance, Iris Perez and Irene Ramos,

two young fashion designers who studied at Parsons, recently won a space at Fashion Week, a potentially huge break for their business, and a manufacturer in the Garment District agreed to produce some of their designs for free. "They had faith in our ability," says Ramos.

Graphic Design

In the 1950s and 60s, when public relations firms, advertising agencies, and publishers were the predominant clients and employers for graphic designers, New York wasn't just an important focal point for the industry, it was the center of the universe. According to Richard Grefe, executive director of the American Institute of Graphic Arts (AIGA), New York is no longer the only place to practice but it is still a clear leader in the field. Fourteen percent, or 3,000 out of 22,000 AIGA members, are based in New York City; Chicago is next among cities with 1,200 members and Los Angeles has 1,100.

The industry is also much bigger than it used to be. The number of graphic designers working in cities across the country has spiked over the last ten years. In New York, the number of practicing graphic designers has increased by 139 percent in that time; the New York metro area is now home to an estimated 16,000 graphic designers, many times more than practiced here during the city's mid-century heyday.

The biggest single driver of growth has been the Internet. It is now mandatory for businesses, large and small, to have a web presence of some kind, a web address with a description and phone number being the minimum required. But a lot of clients, including nonprofits, media organizations, retail stores, museums, and universities, are developing much deeper sites with a wide variety of features and services. As a result, a lot of formerly print-oriented graphic designers have had to move into a different medium, while a new generation of designers have hardly worked in anything else. Michael Bierut, a principal at Pentagram, says that something similar may be happening all over again with the advent of mobile applications for the iPhone and iPad. "A lot of smaller graphic design firms," Bierut

says, "have invented new genres of practice and created projects that were made possible through technology. They're things that wouldn't have existed before."

Bill Drenttel, president emeritus of the American Institute of Graphic Arts, agrees that mobile applications has created huge opportunities for New York. "The biggest developers of iPad apps in America are all in Brooklyn, in about a 10 block radius," he says. "They're all designed in Brooklyn. There's hundreds of companies there doing it."

At the same time, graphic designers are still working with—and at—PR firms, advertising agencies, and publishers to develop the same sorts of things they always have, including logos and brand identities for companies, advertisements for print and television, books and magazines. Graphic designers are also frequently called in to work on museum exhibitions, designing everything from the typography of the title to printed brochures to exhibition catalogs. Increasingly, the visibility and wide reach of a firm's local work will lead to opportunities abroad. Leading firms like Pentagram, 2X4, and Open work for clients all over the world, including those in the Middle East, Europe, and South America.

Industrial Design

Industrial designers develop designs for a wide variety of products, including hand tools, kitchen supplies, medical devices, computers, software platforms, institutional interiors, and more recently—particularly among the larger firms like IDEO—management structures and supply chain logistics. New York-based Smart Design first came to prominence through an exclusive partnership with OXO International, a New York-based manufacturer of kitchen tools that was founded in 1989. Through Smart's innovative Good Grip designs, OXO's collection of kitchen products rocketed to prominence in the 1990s and 2000s; in fact, they were so successful that the company recently started to expand the concept to medical supplies like thermometers.

IDEO, a huge design firm with offices in San Francisco, London and New York, has recently developed a portable blood-glucose meter for Bayer, a new mobile gaming platform for Nokia, and a low-cost desktop computer for the Brazilian manufacturer Positivo Informatica, among a wide range of other design projects, including a variety of nontraditional projects like supply chain logistics and customer service overhauls.

However, unlike architecture or fashion design, New York has not traditionally been an internationally renowned center for industrial design—at least not since Walter Teague and Henry Dreyfuss were coming out with popular streamlined camera and telephone designs in the 1920s and 30s. According to Marco Perry, who, in addition to running a New York-based design firm, is the northeast vice president at the IDSA, a trade organization, designers in San Francisco, Boston, and Chicago have been the clear leaders over the last several decades. Designers in San Francisco and Boston benefited from the technology boom in the early 2000s, he says, and a lot of the design firms in both places have become dominant in consumer electronics and software interfaces for products like the iPhone. Chicago, meanwhile, is a traditional powerhouse for the design of appliances.

There was a time toward the end of the 1990s when the only major New York-based industrial design firm was Smart Design. But recently that has begun to change. Industrial design firms are starting to specialize a lot more in ethnographic research and business strategy, and with that new focus New York has become much more important to design firms. Today, the New York metro area is home to more industrial designers (1,660) than anywhere else in the country. Foreign manufacturers like to call on New York-based firms to help them develop strategies for breaking into the lucrative American market.

Moreover, according to Eric Chan, the founder and principal of ECCO, New York's strengths in media and digital technology could be a huge source of future growth. "New York's technology sector is more media-centric, more relationship-centric than on the West Coast," says Chan. "They're less tangible, less product-oriented and more digital." Designers, he says, should team up

> "The fact that you have my institution of about 760 students, Parsons, the School of Visual Arts, FIT, and the New York Institute of Technology all teaching interior design suggests that there is tremendous demand not only among New Yorkers but people worldwide."

with start-ups in that sector to do the research and prototyping work behind a well-targeted product, whether it's a hand-held device like the flip cam, a social networking platform, or something else entirely. But they have to start partnering with technology start-ups earlier in the process, he says, and they need more funding and social infrastructure to support those kinds of partnerships.

Interior Design

Over the past decade, the number of interior designers practicing in the New York metro region increased by 223 percent, from 830 practicing designers in 2000 to 2,680 in 2009. Meanwhile, the number of interior design firms increased from 710 to 850. No other city comes even close to those numbers. Los Angeles has the second largest cluster, with 1,772 designers and 572 firms.

Specialties in interior design include office, residential, hospitality, retail, transportation, health care, education, and government.

Nationally, residential and office design are the most practiced specialties, and New York City easily leads the way in the residential design market. According to *Interior Design Magazine*'s Top 100 Giants of 2010, New York is home to five of the top ten residential design firms in the country. In addition, it has two firms in the top ten Office Design category, matched only by San Francisco. Also, perhaps the country's most prolific designer of hospital interiors, Perkins Eastman, is based in the city.

Interior design relies heavily on an affluent clientele, making New York City a hub for influential firms like Roman and Williams, and Peter Marino, who first gained prominence for designing Andy Warhol's East Side townhouse. New York based interior designer Kitty Hawks sees proximity to clients as a big advantage. "We do our job more easily than someone in Topeka," says Hawks. "We have showrooms for pretty much everything, and you want to be able to visit."

Furthermore, the top so-called "shelter" magazines (*Architectural Digest*, *Elle Décor*, *Traditional Home*, *Veranda*, *House Beautiful*) are headquartered in New York City, allowing for opportunities for designers to make contacts and gain exposure. "They're more likely to know who we are being here than if I cold called from Atlanta," says Hawks. "As a young designer it's probably harder if you're not in one of the major cities."

Most interior design firms—about eight in ten nationally—are made up of five or fewer employees. Forty-two percent of all interior design firms are located in major metro areas. Although many prominent interior designers never trained formerly or, like Kitty Hawks, trained in neighboring disciplines such as architecture, the field has become much more professionalized in the last few years, with undergraduate and graduate degree programs proliferating at universities across the country. New York is home to several top programs. The Pratt Institute's interior design program was recently ranked number one by both *U.S. News and World Report* and *Design Intelligence*, and

both Parsons and the New York School of Interior Design have highly ranked programs as well.

"The lion's share of those who graduate from our institution stay in the New York metropolitan area," says Christopher Cyphers, president of the New York School of Interior Design. "Up until this recession, roughly 92 percent of those who graduated from our program were working actively in the field. The fact that you have my institution of about 760 students, Parsons, the School of Visual Arts, FIT, and the New York Institute of Technology all teaching this discipline suggests that there is tremendous demand not only among New Yorkers but people worldwide."

Furniture Design

In 1995, when furniture designer Jonah Zuckerman first joined Furniture New York, a local trade organization, there were only 20 members. Today, the organization has over 80 members and New York has become well-known all over the world as a center for innovative custom furniture. "The number of furniture designers has really exploded over the last ten years," says Zuckerman, "particularly over the last three or four."

In 2003, the Brooklyn Chamber of Commerce recognized the growing number of furniture companies in the borough and launched a trade show called Brooklyn Designs. Although the show started with a robust 30 vendors—all Brooklyn based companies that either design their products in the borough or design and manufacture them there—the goal was originally quite modest: to attract high-end customers from Manhattan. But as the show's popularity has grown over the years, Brooklyn Designs has become an internationally recognized venue for cutting-edge, high-end furniture. The jury that selects the show's vendors now includes museum directors and other celebrity designers. And the event gets regular coverage by international publications like Italian Vogue. "People come from all over the world to see it," says the show's organizer Karen Auster.

For many of the edgier Brooklyn designers like Matt Gagnon, who builds sculptural form-shifting lamps out of overlapping teak strips, or Redstr, a studio that handcrafts crocheted

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Empire chandeliers, one major source of revenue is Southern California, where several prominent high-end furniture stores have been stocking their work in great quantities. In a 2006 *Los Angeles Times* article, one owner estimated that more than a third of his merchandise originated in Brooklyn.[15]

However, like interior designers, furniture designers still depend heavily on wealthy, local clients. In the New York metro area, there has been a surge of interest in locally made products and short run designs. At the height of the economic boom in 2007, it was not uncommon for bankers to drop in at Jonah Zuckerman's studio and buy $10,000 in new furniture. That happens less often now, but Zuckerman and others believe that the huge local market for high-end furniture will be an important source of future growth.

Unlike New York City's mass market furniture manufacturers of the last century, most of

today's furniture makers run fairly small studios with at most 15 employees. Dozens of small manufacturers have studios at the Greenpoint Manufacturing and Design Center or in one of the Brooklyn Navy Yard buildings. In Bushwick, a furniture design collective called 3rd Ward, founded four years ago, offers studio spaces and courses in design. However, although a select few Brooklyn designers own high-end furniture stores in SoHo, finding enough showroom space in Manhattan, where the bulk of their local client base is located and tourists congregate, is a big impediment to future growth, designers say.

Other Design Fields

There are many design specialties that we have not explicitly considered in this report, things like animation design, crafts, floral design, event, and automotive design. And with the exception of automotive design, which is still concentrated in Detroit and to a lesser extent northern California, New York is well represented in each of these fields. Martha Stewart Living, for example, works with dozens of artists to produce crafts for their television and print media outlets, while Etsy.com has become a major hub for the sale of handmade jewelry, ceramics, and home furnishings. An Etsy "street team" called the New New sells a wide variety of handmade goods at local markets like the Hester Street Market and the Union Square Holiday Market.

Three more design fields deserving of more attention are set design, exhibition design, and sustainable design. Set designers supply scenery and props for plays, TV shows, film, and fashion photography, all big industries in New York, but increasingly they have started to build backgrounds and lighting for corporate events, outdoor concerts, trade shows, and exhibitions too. The burgeoning field of exhibition design encompasses many of those same projects, but exhibition designers also build complex set-like environments for museums, zoos, visitor centers, and even occasionally retail stores. According to Ed Schlossberg, the two largest exhibition design firms in the country are based in New York City: Schlossberg's own ESI Design and Ralph

Appelbaum Associates, both with 40 to 60 full-time employees.

ESI Design has designed exhibitions for the Brooklyn Children's Museum, the Whitney Museum, the Shanghai Pavilion at the most recent World Expo, Sony's Wonder Technology Lab, and stores for Best Buy. The firm employs an interdisciplinary team of set designers, scenic artists, industrial designers, graphic designers, software engineers, video game developers and writers. Increasingly, some of the best talent in the field is coming out of NYU's Interactive Telecommunications Program (ITP), says Schlossberg. "We employ maybe 15 people who came out of that program," he says.

Finally, as LEED certification has gained traction over the last ten years, many practicing architects, landscape architects, city planners, and interior designers have acquired additional training in sustainable design, and nearly all of them have integrated sustainable components in their everyday projects.

New York City is also ahead of most other U.S. cities in promoting more sustainable development. The City Council passed a law several years ago that requires many city-funded buildings to pass stringent efficiency requirements; the Bloomberg administration recently upgraded the building code; and several programs at the state and local level have been expanded to incentivize energy efficiency retrofits. As a result, the city's building culture has changed significantly over the last several years to include a growing number of engineers and other consultants who specialize in sustainable building methods. A handful of pioneering firms are even building houses that are so well insulated and air-tight they need little more than the sun and their human occupants to stay warm in the winter, though some of those we interviewed believe New York trails other cities in this emerging design discipline.

Total Creative Employers in NYC by Industry (2009)

	NAICS Code	Industry	Number of Firms
Publishing	51111	Newspaper publishers	182
	51112	Periodical publishers	497
	51113	Book publishers	280
	51119	Other publishers	69
		Total	1,028
Film and Video	51211	Motion picture & video production	1,487
	51212	Motion picture & video distribution	61
	51219	Post-production & other movie & video industries	307
		Total	1,855
Music Production	51221	Record production	79
	51222	Integrated record production, distribution	47
	51223	Music publishers	106
	51224	Sound recording studios	149
	51229	Other sound recording industries	61
		Total	442
Broadcasting	51511	Radio Broadcasting	67
	51512	Television broadcasting	97
	5152	Cable networks & program distribution	72
	51911	News syndicates	63
		Total	299
Architecture	54131	Architectural services	1,323
	54132	Landscape architectural services	92
		Total	1,415
Applied Design	54141	Interior design services	846
	54142	industrial design services	119
	54143	Graphic design services	1,049
	54149	Other specialized design services	540
		Total	2,554
Advertising	54181	Advertising agencies	1,109
	54185	Display advertising	85
	54186	Direct mail advertising	68
	54189	Other services related to advertising	155
		Total	1,417
Performing Arts	71111	Theater companies & dinner theaters	533
	71112	Dance companies	101
	71113	Musical groups & artists	379
	71119	Other performing arts companies	35
		Total	1,048
Visual Arts	45392	Art dealers	622
	71211	Museums	183
		Total	805
Other	7115	Independent artists	1,665
		Total Creative Employers in New York City	**23,391**
		Total New York City Employers	232,608

MADE FOR DESIGN

From museums and universities to cultural non-profits and influential publications,
New York has an unmatched number of assets that help attract and keep designers

Clearly, on one level, designers choose to live in New York for the lifestyle. They want to take part in a fast paced, culturally intense environment and take advantage of the city's world-class museums, galleries and restaurants. They seek out inspiring experiences and intellectually stimulating relationships. Moreover, like actors, artists, and writers, most designers work at their own pace, often at unconventional times of the day, and therefore rarely distinguish between their personal ambitions and professional ones. As one graphic designer in our focus group put it, "You are your work."

However, living and working in New York is not just a lifestyle choice but an economic one. Being close to other designers and design services, for example, is important for testing out new ideas and forming new impromptu collaborations. In fact, merely being in the same city is oftentimes not enough—designers want to be in the same neighborhood or, if possible, the same building. The canonical example of a productive design-oriented ecosystem in New York is the Garment District in Midtown, where, despite a shrinking mass market manufacturing base, fashion designers can still work with a variety of specialists to come up with designs that drape right on the fit models. Manufacturers will also oftentimes suggest changes to help speed up production and cut costs.

The Garment District is also far from being the only design ecology in New York. DUMBO, for example, is full of designers and other service providers who collaborate with one another every day, whether they are architects working with graphic designers or industrial designers working with software developers. "All the services are right there," says Marco Perry, whose industrial design firm is located on Jay Street in DUMBO. "I have a product photographer down the hall from me who does the photography for MoMA's exhibition catalogs. I have four web designers in the building, and if I need an iPhone application guy, he's upstairs."

Other design clusterings include: The Starrett-Lehigh Building in Chelsea, New York Designs in Long Island City, 3rd Ward in Bushwick, the Navy Yard in downtown Brooklyn, the Pratt Design Incubator, and the Old American Can Factory in Brooklyn's Gowanus neighborhood. Encouraging—and where possible, preserving—productive adjacencies like these will be an important part of maintaining New York's status as a creative hub going forward.

New York has an unparalleled number of universities and museums that are attentive to design, and these organizations not only help foster a broader R&D culture that is pivotal to the creation of new design concepts, they are an important source of economic stability for thousands of designers. Because designers often work as freelancers and are more likely to start their own businesses, they can be left without enough income when the economy sours and contracts dry up. In such cases, an adjunct professorship at a design school can provide designers with a chance to continue meaningful research while offering a much needed source of income. "Schools are a lifeline for lots of architects," says Michael Sorkin, the founder of Michael Sorkin Studio and director of the graduate program in urban design at City College. "And there are lots of schools extending up and down the East Coast. A lot of people will commute to Princeton or Yale or even Harvard from New York City."

In addition to providing jobs and fostering an intellectually stimulating environment, museums, schools, and cultural nonprofits also put on contests and exhibitions that can provide the visibility and recognition designers need in order to compete for contracts in other parts of the world.

For example, Obra Architects, a small Manhattan-based architectural firm, was chosen by MoMA to design and build a pavilion at PS1 for their summer Warm Up music series in 2006; articles and pictures quickly followed in magazines like *Metropolis* and *Time Out New York*. It was a big break for a young firm and, according to principal Pablo Castro, directly led to several contracts and even more high-profile exhibitions in other parts of the world. Less than five years later, the firm is planning to open a second office in Beijing. "I don't think our work would have been as visible if we weren't based in New York," says Castro. "We're trying to establish a truly international practice, and I think there are only a few places you can do that—New York is one."

Counterintuitive as it may seem in an era of video conferencing, proximity to two major international airports with a large number of direct flights abroad is another huge advantage to being in New York. It used to be that the big design firms who got international contracts, particularly among architects, sent a team of designers to work locally. Now they can keep their New York desk and Skype into conferences abroad, but face-to-face interactions are still necessary, whether for site inspections, important client meetings, conferences, exhibitions, or lectures. "It sounds kind of crazy," says Marco Perry, co-founder of the industrial design firm Pensa, "but the airports are really important for what we do. From New York I can get to almost anywhere in the world in about 12 hours. If I have a meeting in Korea, I can get a direct flight and be there in about 14 hours. If I were based somewhere else, I probably couldn't do that."[16]

New York's large number of promotional events and trade shows provide yet another important boost to designers. Fashion Week started out in 1943 as a way to generate publicity for American fashion designers. In fact, it was called Press Week. It has evolved into a huge biannual spectacle with over 250 separate events throughout the city and 70 shows at the main tent at Lincoln Center, but, unlike other trade shows, it is still primarily a tool to generate excitement and project a sense of glamour for designers' upcoming collections. As such, New York-based newspapers and fashion magazines have a big role in both organizing the event and promoting it. Other trade shows serve the more modest purpose of connecting designers to wholesale and individual buyers, but New York is home to several of the most visited and prominent design trade shows in the world.

- The New York International Gift Fair, for instance, features 3,000 exhibitors, including home furnishings, textiles, jewelry, appliances, and toys. The fair occurs every January and attracts an estimated 36,000 buyers, including distributors, importers, wholesalers, and manufacturers' representatives.

- The International Contemporary Furniture Fair features 550 exhibitors of contemporary furniture and interior design. During four days in the spring, the event draws more than 23,000 interior designers, architects, retailers, wholesalers, manufacturers, distributors, and real-estate developers.

- The American International Toy Fair, the longest running trade show in the city, features 1,200 exhibitors of dolls, action figures, children's books, board games, science and discovery kits, designer toys, video games, electronics, and a variety of other merchandise for children. The event is still one of the most influential trade shows for toys in North America and regularly draws 20,000-plus visitors.

Other important design shows include the International Sculpture Objects and Functional Art Fair in the Park Avenue Armory; the Brooklyn Designs Furniture Show in the St. Ann's Warehouse in DUMBO; and the Architectural Digest Home Design Show on Pier 94.

FASHIONING A FUTURE

Design holds incredible potential for New York, but the city needs to develop a comprehensive strategy to support the sector's future growth

New York's design industries will undoubtedly grow as global demand for design continues to increase. No other city in the country—and very few internationally—can compete with New York in terms of the number and quality of its designers. But, if the city hopes to capitalize on this natural asset, there are a number of important challenges to address. Unlike other internationally renowned design hubs like Milan, London, Berlin, Seoul, and Tokyo, New York does very little to either support or promote its designers.

In the last two years, the Bloomberg administration has started to take note of the city's fashion industry, launching an incubator in the Garment District for 12 young designers, helping to relocate Fashion Week to a bigger venue at Lincoln Center, and more recently unveiling a fellowship program and financial literacy workshops for fashion entrepreneurs. However, while these are all worthwhile accomplishments, they are extremely limited compared to what other cities are doing. "Anyone serious about design would want to be in New York," says Tim Marshall at The New School, "but I do think there is a risk that it's taken for granted. Most other global cities do more to promote their design sector."

One obvious place to begin a promotional strategy is New York's high-profile trade shows. New York's big furniture fair at the Javits Center every spring attracts buyers from all over the world, but the city does nothing to brand the exhibitors from New York, much less promote them abroad. By contrast, Milan brands its furniture designers, not only during its own furniture fair, but during New York's fair and other fairs across the globe. Both Cologne and Milan go to much greater lengths to incorporate other city events and showrooms during all of their own furniture and fashion fairs. According to Marshall, Cologne creates and distributes a map with information on all of the other events, including exhibitions

at galleries and custom furniture stores. New York already has a powerful global brand for creativity. A citywide festival that traded on that brand and provided a bridge between prominent design shows in the spring or fall would not only serve to magnify the influence of those shows but, if done right, promote economic development in neighborhoods across the city. The London Design Festival, which has grown to incorporate a number of different neighborhoods and themes, is an obvious model. But so is Miami's Art Basel fair. Miami lured a franchise of the prominent Swiss art fair in 2002, and each year since then the event has attracted more and more visitors (40,000 in 2009 alone) while helping to spur the revitalization of South Beach and the Lynwood District.[17]

As was stressed in our focus group with designers, the city could also follow London or Seoul, South Korea's lead and become a much smarter client of design, doing more to connect individual city departments—from the Department of Transportation to the Health and Hospitals Corporation—with innovative designers with a proven track record. They could build a vendor list and create a forum to disseminate best practices for design. This could be as simple as answering the question, Who was the graphic designer for the TKTS booth? and sharing it not only with city purchasers but Business Improvement Districts (BIDs) or Local Development Corporations (LDCs). Even if city contracts went to designers based somewhere else, the result of a collective effort to implement better design citywide—including everything from street signs and bus stops to informational brochures and questionnaires—could help raise the profile of design and increase the value of the work designers do. "With recognition, design becomes more valuable and opportunities

increase," says Eric Lee, a publisher and designer based in Long Island City.

Another obstacle to growth is the lack of contact between designers and technology start-ups. Design firms like ECCO, fuseproject, and Smart have been increasingly willing to produce prototypes for promising tech start-ups or other young firms and, instead of charging a consulting fee upfront, take an investment position in the company or earn royalties off product sales once it goes to market. On the West Coast, designers are already playing a much larger role at the development stage for new products, says ECCO's Eric Chan, and VC groups are oftentimes willing to invest in the development of prototypes. But in New York, tech entrepreneurs just aren't finding designers as much, and VC groups are less involved in helping them to make those connections. However, both designers and investors say that design schools could also play a much larger role in this regard. NYU's Interactive Telecommunications Program, they say, is the only local program to actively encourage entrepreneurial partnerships between technologists, business people, and designers.

The city, state, and federal governments could be doing a lot more to recognize and promote design's export potential. Right now, the city's Economic Development Corporation has no program to promote or support exporting by local businesses, and to the extent that programs at the federal and state level help with export assistance (both are badly underfunded) they focus overwhelmingly on manufactured goods and agricultural products rather than services like architecture and industrial design. The Federal Bureau of Economic Analysis first started keeping track of service exports in architecture and engineering in 2006, and still has no category for other design service exports. Yet foreign corporations and governments are increasingly looking to partner with American designers, an area where the country has a big competitive advantage unlike manufacturing.

Other challenges are harder to address but no less important to the future viability of the

"Anyone serious about design would want to be in New York, but I do think there is a risk that it's taken for granted. Most other global cities do more to promote their design sector."

industry. For example, there is anecdotal evidence that, like other artists, a number of designers have been moving to cities like Philadelphia and Austin, where studios and living spaces can be had for a fraction of the cost. Design-friendly ecosystems like the Garment District, DUMBO, and Williamsburg have been recently threatened by developers who want to take advantage of those districts' desirability among wealthier professionals. Even more intractable, high real-estate costs drive away designers—a flexible and often underpaid class of worker as it is—for the same reasons it does other middle class professionals: Last summer, for example, Jonah Zuckerman moved his successful furniture design business City Joinery to Provincetown, Massachusetts, saying that it was just too hard raising kids in Brooklyn.

"I lose people all the time," says landscape architect Tom Balsley. "They come from Indiana or Kansas and are so happy they landed a job with me because they get to work on these exciting projects, but a year or two later they say they can't live in a crappy apartment with five strangers anymore. Others say they can't afford child care. New York is just such a hard place to live and it comes down to rent."

LONDON'S DESIGN INITIATIVES

A number of international cities, including Milan, Cologne, Seoul, and Tokyo have already recognized the economic importance of their designers and initiated efforts to promote their local design sectors. But few cities have done as much to take advantage of growing markets abroad and boost their international reputations as London has.

In 2003, the British Design Council teamed up with the London Development Corporation and the Arts and Cultural Commission to start what is arguably the most ambitious citywide design festival in the world. Today, more than 350,000 visitors attend at least one event during the festival's nine days, and journalists from over 22 countries report on the more than 250 different shows, exhibitions, and lectures.

According to Jay Corless, a consultant who has worked with the festival, neighborhood groups are encouraged to create local hubs with their own idiosyncratic styles. Some neighborhoods put on street events and parties, and others build site-specific installations like toothpick cathedrals and giant chessboards. Participating design firms, nonprofits, museums, galleries, and shops are given a marketing toolkit, which includes a red cone, stickers, a page on the website and a flag on maps distributed by the city. However, despite the festival's grassroots character and a fair amount of private sponsorships, none of it would have happened had the city and national government not furnished an initial grant and formed a small organization to provide citywide coordination and marketing. The London Design Festival is advertised all over Europe, and the organizing nonprofit provides an interactive website with information on all the participants and events. Visitors are invited to use the site to create their own itineraries.

The London Design Festival is the central plank of the city's design promotion strategy, and most other national and local efforts piggyback on the event. For instance, in its effort to promote design as an export-based product, the British Design Embassy, an organization with support from the UK Trade and Investment (UKTI), actively encourages representatives from foreign companies to visit the festival and provides a venue for meetings and consultations. More recently, the organization opened a similar networking hub at the 2010 Milan Furniture Fair. Officials from UKTI use the festival as an opportunity to reach out to designers for export assistance.

Other independent design initiatives at both the city and national level include a mayoral advisory group that helps coordinate Mayor Boris Johnson's urban design policies and priorities, an initiative that brings together designers, health care experts and National Health Service staff to come up with design solutions for both clinical and nonclinical services and systems, and a business outreach program that works with local development organizations and business groups to provide advice on making strategic design investments. The last program, called Designing Demand, introduces participating businesses— typically start-ups or mature businesses looking for strategic change—to examples of successful design implementation, whether in product, packaging, or communications design, and helps interested businesses to locate appropriate design suppliers.

Corless says that London's ambitious efforts to promote design have led to significant foreign investments in the city by companies like Nokia and Samsung and encouraged other cultural organizations and schools to cooperate on design promotion initiatives of their own. The National Endowment for Science, Technology and the Arts (NESTA), one of the UK's largest seed-stage investors, has started to seriously incorporate design in its investment portfolio and in 2007 helped set up an ambitious business/ design incubator at three prominent post-graduate schools in London: the Royal Academy of Art, Imperial College Business School, and Imperial College Faculty of Engineering.

RECOMMENDATIONS

New York City already has one of the largest and most innovative pools of design talent anywhere in the world. But, outside of fashion, state and city economic development officials have done very little to even recognize the different design fields as a valuable economic asset. Obviously, what fashion designers in Midtown need in order to stay competitive and grow will not always overlap perfectly with the needs of furniture designers in Bushwick or architects in Chelsea, but we believe the design fields outlined in this report have enough similarities to warrant holistic treatment from economic development officials at both the city and state levels. Below are policies that could help New York City designers overcome existing obstacles and take advantage of a recent global surge in demand.

Create a desk at EDC to support and grow the design sector. The Bloomberg administration deserves credit for pursuing new strategies to diversify New York's economy. But while the city now has units to focus on sectors ranging from film and fashion to media and maritime, there is no comprehensive effort to support the design sector. As we note in this report, there are more firms in the city's design sector than in any other creative industry. And this is a sector with a huge competitive advantage for New York, and real potential for growth. The city's Economic Development Corporation should set up a desk dedicated to helping this important part of the economy grow.

Help establish a high-profile design festival to promote New York City's designers. The city should look to the London Design Festival as a model and think about developing a citywide platform for the promotion of design, one that could bridge the city's many prominent trade shows in the spring or fall and capitalize on their visitors. A design festival like London's could spur New York's design schools and museums to start collaborating on their own promotion efforts and

it could galvanize neighborhoods across the city where design is already being created on a large scale.

Help New York-based designers export their services and reach new markets. Much of the growth potential in design lies overseas, where developers and manufacturers often employ western architects and designers. Recognizing this, many European governments are actively promoting their design sectors everywhere from Shanghai to Dubai. But not the U.S.: Whether at the national, state, or municipal level, U.S. governments have absolutely no presence at international trade shows and expos, and officials make no concerted effort to invite foreign manufacturers to invest in U.S.-based design studios. Given the size and reputation of New York City's design cluster, the city's Economic Development Corporation could and should take the lead on this issue.

Encourage entrepreneurial partnerships between designers, engineers, and tech entrepreneurs. Several of the industrial designers we interviewed for this report said that there is much less communication between designers and fledgling tech start-ups in New York City than in the San Francisco Bay area or Boston. With the exception of NYU's ITP, design schools in the city are not facilitating these partnerships, and so far funders have not picked up the slack. Taking a cue from NESTA, one of Great Britain's largest seed stage investors, EDC should encourage one of the city's business schools, engineering schools, and design schools to partner in the creation of a postgraduate incubator, or, failing that, they could help facilitate more cooperation between design schools and some of the city's existing tech incubators.

Develop a plan for helping city departments and neighborhood intermediaries (like BIDs and LDCs) become smarter about purchasing and

implementing quality design. City agencies work with architects, landscape architects, interior designers, web designers, graphic designs, and other design professionals all of the time, but there is very little emphasis placed on high-quality design and even less strategic coordination or information sharing. The Department of Design and Construction operates the Design Excellence program in which they preselect architectural firms for city contracts based on the quality of their past work, but the effort is tiny (only 28 firms are currently participating) and oftentimes being on the list never translates into work. In the case of architecture, many of the designers we spoke to thought competitions would be a fairer and more effective strategy. But, whatever the specifics, more direction and information sharing is badly needed. A mayoral commission could raise the profile of design and work to facilitate smarter purchasing of design by city agencies.

Facilitate outreach to businesses that could benefit from strategic design implementation. Young businesses and start-ups as well as more mature businesses that are looking for strategic change could benefit immensely from learning more about what designers could do to sharpen their brand or product and locate hidden market opportunities. The city's Department of Small Business Services could develop a new program much like the London Development Agency's

Designing Demand program or look for ways to integrate design outreach into their current programs.

Resurrect Brooklyn Designs. In 2003, the Brooklyn Chamber of Commerce created Brooklyn Designs, an exhibition for Brooklyn-based designers and manufacturers of contemporary furnishings, lighting, and accessories. The show has helped raise the profile of the city's growing furniture design sector, much of which is based in Brooklyn. However, after nearly a decade in operation, the show was shut down this year when the Chamber did not receive expected funding from the state. Given our findings about the incredible growth in the number of Brooklyn-based designers, city officials, philanthropic foundations and industry groups should make it a priority to ensure that Brooklyn Designs has the resources to make a comeback next year.

Develop University Partnerships. In several of the most prominent design capitals outside of the U.S., the local design universities come together to collaborate on design shows and other initiatives to support the design sector. That doesn't happen enough in New York. Schools from Parsons and Pratt to FIT and SVA should make it a priority to work together from time to time to bolster the city's design sector.

ENDNOTES

1. According to a 2009 survey by the United Kingdom's Design Council, London has an estimated 46,000 designers. The comparison to New York City is not perfect, however, since the Design Council study includes freelancers (while the Bureau of Labor Statistics data we rely upon does not) but excludes architects. See The Design Council, "Design Industry Research 2010." http://www.designcouncil.org.uk/our-work/Insight/Research/Design-Industry-Research-2010/ Accessed 5/24/2011.

2. In this report, the number of design firms and employees comes from the U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW). The numbers reflect county level estimates,

so New York City's estimates include Bronx, Kings, New York, Queens and Richmond counties. The other cities are defined as follows: Chicago (Cook County), Dallas (Dallas County), Los Angeles (Los Angeles County), Miami (Miami-Dade County), and San Francisco (San Francisco County). Only New York and San Francisco have counties that are co-extensional with the city; the other counties include larger areas.

3. This number comes from materials published by the New York City Economic Development Corporation and includes not only fashion design firms but service providers such as pleaters, pattern makers, embroiderers, manufacturers and others. According to

the QCEW for 2009, there are 540 fashion design firms in New York City.

4. Estimates of the number of designers come from the Bureau of Labor Statistics' Occupational Employment Survey and include all part-time and full-time workers who were paid a wage or salary. The survey does not include self-employed workers or the owners of unincorporated firms. Occupational Employment Estimates are available for New York City for 2009 only and come from the New York State Department of Labor. Estimates from earlier in the decade are for the New York-White Plains-Wayne Metropolitan Area, a division of the New York Metropolitan Statistical Area. When analyzing growth in design occupations (from 2000 to 2009), we rely on the numbers for the metro division and not the city.

5. According to the Occupational Employment Survey in 2009, 13,000 graphic designers are employed in the New York City limits, while 16,000 graphic designers are employed in the New York-White Plains-Wayne metro area. 20, 820 graphic designers are employed in the entire metropolitan statistical area, which includes counties in Long Island, the northern New York suburbs, New Jersey and Pennsylvania.

6. These numbers are of course approximate. Occupational estimates are gathered by a survey of employers by the Bureau of Labor Statistics, and because of changes in survey methodology and geographic definitions BLS does not encourage historical analyses of OES data. In New York's case, the geographic area was redefined in 2005 to include three additional New Jersey counties: Bergen, Hudson, and Passaic. As a result, some of the increase in designers between 2004 and 2005 will no doubt be due to the inclusion of those three additional counties. However, judging by the NYS Department of Labor's publication of the same estimates for 2009, the five boroughs of New York are home to more than 80 percent of the New York-White Plains-Wayne metro area's design occupations, which would appear to make the inclusion of design jobs in those three New Jersey counties fairly negligible.

7. The Bureau of Labor Statistics only publishes occupational estimates for metropolitan and non-metropolitan areas and states, so there is no easy way to compare counties or cities. For the purposes of this report, we have focused on metropolitan divisions, which are subsets of Metropolitan Statistical Areas (MSAs) as defined by the Office of Management and Budget. Since creative workers tend to cluster in metropolitan cores, focusing on the metro divisions containing the anchor city, as we have done here, tended to result in higher location quotients. The lone exception was Los Angeles, whose Metropolitan Statistical Area containing Orange County has a location quotient for designers and architects of 1.5 instead of 1.4. A list of the cities we analyzed and

their metro divisions follows: Boston (Boston-Quincy NECTA Division); Chicago (Chicago-Naperville-Joliet Metropolitan Division); Dallas (Dallas-Plano-Irving Metropolitan Division); Los Angeles (Los Angeles-Long Beach-Glendale Metropolitan Division); Miami (Miami-Miami Beach-Kendall Metropolitan Division); New York City (New York-White Plains-Wayne Metropolitan Division); Philadelphia (Philadelphia Metropolitan Division); San Francisco (San Francisco-San Mateo-Redwood City Metropolitan Division); Seattle (Seattle-Bellevue-Everett Metropolitan Division).

8. Overall New York's location quotient for designers increased from 1.65 in 2000 to 1.92 in 2009.

9. For more information on design-led manufacturing in the Brooklyn Navy Yard, see: Karrie Jacobs, "Made in Brooklyn," *Metropolis Magazine*, June 16, 2010.

10. The industry employment data presented in this paragraph comes from the New York State Department of Labor and is based on the 2009 QCEW.

11. Charles Linn FAIA, "2008 Revenues of Record's Top 250," Architectural Record, June 2009. The 2008-2009 domestic recession has had a big effect on total revenues since 2008, but, according to *Architectural Record*'s Top 250 firms for 2010, the level of foreign work has remained stable, allowing those firms with a lot of international work to weather the economic downturn.

12. "Credit Suisse Survey shows Chinese consumer spending jumps," Credit Suisse, January 12, 2010.

13. Yuqing Xing and Neal Detert, "How the iPhone Widens the United States Trade Deficit with the People's Republic of China," Asian Development Bank Institute, 2010. Chinese assembly plants contribute just 3.6 percent to the iPhone's total cost, while the largely intellectual work done by American engineers and product designers contributes 60 percent.

14. *Architectural Record*'s 2006 and 2007 rankings included only 150 firms.

15. David Keeps, "Nouveau Brooklyn," *The Los Angeles Times*, March 9, 2006.

16. The economist Edward Glaeser argues that the increasing availability of electronic communications increases rather than decreases the demand for face-to-face interactions. For example, over the last 20 years, as technological advances have made telecommunication cheaper and easier, business travel has soared. See Edward Glaeser, *The Triumph of the City*, Penguin Press, 2011, p. 36-37.

17. On Miami, see David Malmuth, "Investing in Arts Development," Urban Land, February 2, 2011.

33%

MORE DESIGN FIRMS THAN LA,
THE NEXT CLOSEST CITY

NYC IS HOME TO

3,969

FIRMS IN APPLIED DESIGN
AND ARCHITECTURE

[more than advertising, publishing
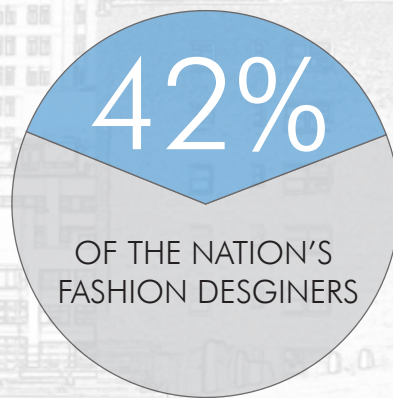and performing arts combined]

NEW YORK IS HOME TO

40,470

DESIGNERS, UP FROM
23,143 IN 2000

SINCE 2000, THE NUMBER OF
PRACTICING INTERIOR DESIGNERS
IN NY HAS JUMPED

↑223%

GROWTH BY DESIGN

NEW YORK HAS

42%

OF THE NATION'S
FASHION DESGINERS

16,000

GRAPHIC DESIGNERS ARE
EMPLOYED IN NY BUSINESSES

Center *for an* Urban Future

INTERNATIONAL
REVENUES ARE UP

↑84%

AMONG NY'S TOP
ARCHITECTURE FIRMS

14%

OF AIGA MEMBERS
ARE BASED IN NY

[more than Chicago and LA combined]

MORE THAN

300,000

VISITORS COME TO NY'S TOP
TRADE SHOWS EVERY YEAR

IN BROOKLYN

SINCE 2001, NUMBER
OF DESIGN FIRMS HAVE GROWN

↑68%

ARCHITECTURE FIRMS HAVE
DOUBLED

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