

---

## **Pittsburgh: from Steel Town to City of Creativity**

Among the major cities of the United States, one stands alone as unique. Once the most seriously polluted city in the country, today she is replete with beauty and is the most livable city in the US. Amid the birth pangs of industrial transformation, she was once the city with the most transients, yet today, she is once more attracting a new generation of permanent residents. She is the hub of the Rust Belt in America's northeast, and a noted town of culture and art. She is none other than Pittsburgh, the second-largest city in the state of Pennsylvania. The rise and fall of Pittsburgh testifies to the history of economic development in the United States. She has adapted to major shifts and changed her development strategy to morph from a failed industrial base into a rich, innovative and vital new city. At the same time, Pittsburgh also provides a valuable reference for the urbanization of Chinese cities.

### **The Rise and Fall of “the American Dream”**

Pittsburgh is a city rich in stories, as is evident from the rich stock of nicknames she bears. Situated at the confluence of three mighty rivers -- the Ohio, the Allegheny and the Monongahela, Pittsburgh has taken on the title of the "Golden Triangle". The 440 bridges spanning these waterways has earned the city a reputation as the "City of Bridges". Although the town has long left its polluted past behind, together with the steel industry, the earliest moniker of “Steel Town” has stuck, and the 256 meter tall US Steel Tower is still one of the highest landmarks in the city. Pittsburgh is still one of the greenest cities in the United States, with the most golf courses, and has been named the cleanest city in the US ten years in a row by *Forbes* magazine.

The history of the city's development shows why Pittsburgh, with the 252 years of history that make her one of America's oldest cities, still enjoys an excellent reputation today even as the city continues to change. From the perspective of the economic evolution of Pittsburgh, the city is home to just 330,000 people and is in fact merely a medium-sized American city. However, in terms of business and manufacturing, as well as cultural enterprises and the green economy, Pittsburgh's development can be said to be the history of American industrialization in microcosm. The city has been the birthplace of many global enterprises still widely renowned today, such as Heinz, Westinghouse, and US Steel.

In the mid-18<sup>th</sup> century, Pittsburgh was settled by French *voyageurs*. In 1758, the city was formally established by the British. The outbreak of the War of 1812 between Britain and the US gave impetus to the rise of industry in the United States. Starting in the 1820s, Pittsburgh became an industrial base, producing steel, brass, zinc and glass, and the Civil War further spurred Pittsburgh's economic development. In the mid- and late-19<sup>th</sup> century, Andrew Carnegie, the King of Steel, set up the Carnegie Steel Company, and in the early 20<sup>th</sup> century, Pittsburgh's steel industry continued its large-scale development. At the same time, however, the billowing smoke emerging from the stacks brought Pittsburgh a new nickname – the “City of Smoke” - with some even going so far to dub it "hell with the lid off."

---

The Second World War was a major turning point for Pittsburgh's development. In the 60-odd years following, the town has begun to cast off some of its more unfair reputation, and has been through three major transitions, emerging with new vitality and a new nickname: "thrice revived." Today, Pittsburgh's economy relies primarily on medicine, education, technology, robotics and financial services.

Pittsburgh's first renaissance began shortly after the conclusion of the Second World War, when then-Mayor David Lawrence began to deal with the city's pollution. This turned around the city's earlier image as the "City of Smoke", one which had arisen from the development of steel and other heavy industries. At that time, the city's pollution standards were raised, and many steel plants were asked to move out.

The second renaissance took place in the 1970s. The mayor of the city, Richard Caliguiri, began to build large buildings and PPG skyscrapers, and placed further emphasis on culture and community construction. In the 1970s and 1980s, many steel mills closed down and laid off workers.

In the 1980s and 1990s, the city experienced its third renaissance. During this time, Pittsburgh's economic base shifted toward education, tourism and service industries, particularly medicine and high-tech industries such as robotics. The mayor at that time, Thomas Murphy, began to stress green construction, building the PNC park and the David Lawrence Convention Center.

### **Successful Transition**

In the fall of 2009, the former "Steel Town" of Pittsburgh successfully transitioned from a traditional industrially-based city into a green technology city of culture, catching the eye of US president Barack Obama, who selected the city as the site for the third meeting of the G20. In his statement, Obama stressed that "with the transformation of the declining traditional steel industry base to a modern city utilizing a new model of economic growth, Pittsburgh provides a successful model for many cities and regions around the US and the world that have fallen upon economic and financial crises and urgently require industrial transformation."

In the 1970s, Pittsburgh experienced a serious economic crisis and a wave of unemployment due to hard times in the US steel industry. During the next four decades, Pittsburgh rebooted itself, moving down the pathway of reform, and attracting over 300 multinational companies to establish their headquarters in the city. In terms of the city's industrial structure, there was a gradual shift from relying solely on steel to integrating new technologies, medical and health care, education and financial services. In terms of building the city, new, modern residential communities and business centers were constructed in abandoned industrial zones. Pittsburgh also leaned on two of its advantages, high-quality education and a green environment, which added to the city's attractiveness.

Today, a young mayor, Luke Ravenstahl, is stressing technology and new energy industries, energetically building a green economy. Pittsburgh residents emphasize the advantages of their city in culture and the arts, education, technology, medical care, and sports.

---

President Obama holds great expectations for this city, hoping that Pittsburgh's "transformation into beauty" will serve as a model to reinvigorate manufacturing in the US.

The area's economic structure has experienced huge transformations, and technological development has played an outstanding role in this phase. Local government has accordingly enlarged investment into technological R&D, investing about US\$2 billion per year, of which half goes directly to alternative energy research. The hope is that by 2020, alternative energy sources will account for approximately 18% of energy consumption.

Within the 150 square kilometer city limits of Pittsburgh are nearly 10 universities, including the famous University of Pittsburgh and Carnegie-Mellon University. Pittsburgh was also home to artist Andy Warhol, considered to be one of the most important artists of the 20<sup>th</sup> century. The art gallery that bears his name is the largest art museum in the country dedicated to a single artist.

When the financial crisis hit the US, almost no city escaped its ravages. Pittsburgh was impacted to a certain extent, but Ravenstahl says that the prior economic transformation set up a solid model for economic growth, and Pittsburgh was not seriously damaged. The city's unemployment rate was lower than the national average, and the real estate market also remained relatively stable.

Over the last several years, Pittsburgh's overseas trade and economic cooperation has experienced vigorous development. Emphasis has been on developing cooperation with China and other newly emerging economies.

However, Pittsburgh also faces problems and challenges today. For example, the city has an average income level below the national average, and this has resulted in an outflow of young people from the city. In the 1950s, the population of Pittsburgh peaked at 680,000. Today, however, the population is only about half that number. Young people want to move to a bigger city to seek opportunities to advance, and how to maintain population and attract talent back to Pittsburgh is a major challenge that Mayor Ravenstahl must face.

Franklin Toker, author of "Pittsburgh, a New Portrait", believes that the solution to Pittsburgh's population outflux cannot lie solely in the efforts of the city itself. Rather, the issue should also be taken up by neighboring areas. Only if America's "Rust Belt" areas form a new energy technology industry cluster and renew their vitality as an integrated whole to help America's manufacturing sector take off once more can the cities in this region truly experience a renaissance.

### **Revelations of urbanization**

Moving toward the development of high-end industries: industrial upgrade and replacement is an eternal issue in urban industrial development. During this process, first of all, emphasis must be placed on the financial sector, innovative industries, and recreation and tourism to construct a diversified industrial structure and move toward the development of high-end industries. The strategy for the move in this direction by Pittsburgh's industry involves taking the steel industry, formerly the only game in town, and transform it to manufacturing, new high-tech industries, modern service industries, and emerging industries, to provide a situation suited to the concurrent development of diverse industries.

---

Second, focus must be shifted from being an "industrial base" to a "headquarters base", and capital- and technology-intensive high-end industries must be developed to achieve a leap forward in the quality of the economy. Through the development of new high-tech industries, modern service industries and other high-end industries, as well as other links in the industrial value chain such as research and development and marketing, while relocating certain traditional low-end industries or industrial links located at the low end of the value chain to developing nations or regions at the appropriate time and to the appropriate extent, the city's industrial transformation and functional upgrade can be brought about.

Moreover, Pittsburgh has paid special attention to updating and creating industries that develop creativity, thus improving the city's soft power. In the process of updating the city and of recreating its old districts, cultural elements have been brought in and the development of creative industries, the creation of public spaces and the renovation of older buildings melded together so that the entire city is packed with vitality and the face of the humanistic environment has been completely transformed.

Transformation of city spaces: Pittsburgh had many aging factories that have been transformed into commercial zones, for uses such as supermarkets, hotels and other service functions. At the same time, through remediation of river pollution, greening and preservation and utilization of historic and cultural items, humanistic elements have been brought in combined with the attractive areas on the water's edge that are rich with local color. This has caused the vitality of the riverside areas to take off. The Pittsburgh airport is home to artists who use glass bottles, waste automotive parts and other found items to create stunning murals that depict the rebirth of Pittsburgh as it rose from industrial wasteland to a highly livable place of blue skies, sparkling waters, and clean air.

Internationalization of facilities: Pittsburgh has constructed public facilities and cultural buildings that are internationally influential. These have improved the city's image and created an attractive urban environment. The PNC Park and the David Lawrence Convention Center are good examples of this.