have backed the life sciences too; in 2007 they approved a constitutional amendment that authorised the state to issue \$3 billion in bonds to support cancer research and prevention.

Tom Kowalski, president of the Texas Healthcare and Bioscience Institute, reckons that life sciences are a good choice for public investment. The technology is complex, meaning that early support is crucial, and the sector is already growing strongly. His group estimates the industry's annual economic impact to the state at \$75 billion, and employment in biosciences in Texas, according to a study by Battelle, a non-profit group that promotes R&D, grew by 19% between 2001 and 2010. Further investments will be needed, in the state's community colleges as well as its universities. But the returns are already being seen.



**Upstate New York cities** 

## **Back in business**

BUFFALO AND ROCHESTER

## Hope grows in two cities more accustomed to disappointment

THERE is an eerie beauty to Buffalo's ■ waterfront. Long-abandoned buildings and unused grain elevators stand along Lake Erie's shore. General Mills is one of the few companies that still use it-the smell of Cheerios, a breakfast cereal, permeates the air. But newer life is springing up, too. Part of the harbour, near the centre of city, has been redeveloped as a 6.5-acre (2.6-hectare) spread of parks and monuments. Twenty-one more acres of harbour land will become shops and residential space with more development to come. Main Street, most of which was closed to traffic for three decades, is being opened up and will eventually connect the centre of town to the river. One of the newest additions to the city skyline, which is known for architectural gems, is the \$300m tenstorey Gates Vascular Institute/Clinical and Translational Research Centre. Things are changing for the second-biggest city in New York state.

Manufacturing in upstate New York has been declining since the 1940s. Buffalo, with its access to the Great Lakes and the St Lawrence seaway, was once an economic engine, not just for the region, but for the country. But when manufacturing began to leave, with the steel industry worst affected, the city was, until very recently, unable to cope.

Some 30% of the city's population now lives below the poverty line. Buffalo is the third-poorest big city in the country; only Detroit and Cleveland are in worse shape. The population has shrunk, while the urbanised sprawl beyond the city borders tripled between 1950 and 2000. Sprawl without growth is not helpful: it leaves too few taxpayers to support local government and infrastructure. The city, like many in the rustbelt, has vast amounts of abandoned property, more than any city except Detroit and New Orleans. Yet despite these problems, Bruce Katz, of the Brookings Institution in Washington, DC, says he is bullish on Buffalo. He believes the city can lead the next economic wave, one driven by advanced manufacturing, innovation and exports and powered by low carbon.

Rochester, which is about 75 miles east of Buffalo, also missed the boom times. Thirty years ago, Kodak, Xerox and Bausch & Lomb employed around 60% of the region's workforce. In 1982 Kodak, which is headquartered in Rochester, had 60,400 employees. Today it has around 5,000 and has filed for bankruptcy protection. The population of the city fell from a peak of 332,000 in 1950 to 210,600 in 2010. Almost a third of those who remain are poor.

Kodak's bankruptcy filing, in January, did not devastate Rochester only because the Kodak jobs had long left. The impact was more psychological than anything else. Most residents seem to have a grandfather who once worked at Kodak, but its effect is no longer as strong.

Nowadays, much has changed. Virtually all of the workforce is employed by companies of 100 employees or fewer, according to the Greater Rochester Enterprise, a public-private outfit which markets the city to businesses. The city leads the state in job growth since the end of the recession, recovering 98% of the jobs it lost then. Indeed, there are roughly 100,000 more jobs now than there were three decades

The Kodak name is still a draw. Monroe Community College will move into the old Kodak complex on State Street. Companies like ITT Exelis, which developed software used by Google Earth, have also taken space in old Kodak buildings. Economic diversity helped, too. Rochester has more than 100 food and drink companies, including Wegmans, a supermarket chain and the region's second-biggest employer. The University of Rochester is the biggest, with an economic impact of \$143m in sales tax, income tax and property taxes. Five of the top ten private-sector employers in the Finger Lakes region, where Rochester lies, are in higher education and health care.

Higher education is also a big employer in Buffalo; the University at Buffalo is the second-biggest employer. It has been moving its medical centre downtown, and changing a whole neighbourhood as it does so. Howard Zemsky, a local businessman, has had a similar impact. A decade ago he began to redevelop one of the city's oldest industrial areas, known as the Hydraulics district. Today, around 30 dilapidated or abandoned sites have been transformed into an office and residential space called the Larkin District. Even an old petrol station has been converted into a retro restaurant. Groups such as Partnership for the Public Good are working together to make vacant plots into community gardens. The Centre for Urban Studies at the University at Buffalo and the city's housing authority are combining to help a neighbourhood in need. Collaboration is essential, says Byron Brown, Buffalo's mayor. "Right people! Right place! Right time!"

And timing and place are both part of the reason that Andrew Cuomo, the governor, pledged \$1 billion earlier this year to help revive the economy of Buffalo and western New York state. Mr Katz is helping the region develop a plan to use that \$1 billion effectively. "This is about the long term," he says. "It will be the gift that keeps on giving."