Kaili City (凯里市) is a central regional city of eastern China’s Guizhou province. Known as the Pearl of the Miaoling Mountain, it is also the epicentre of the Guizhou economic zone and the capital of Miao and Dong autonomous prefecture. The city attracts throngs of local and international tourists each year charmed by the scenic landscape, ancient architecture and colorful mix of Chinese ethnic minorities, predominantly the Miao group.

Kaili is traditionally one of the leading rice producers in China. To the south of the city is the Guizhou-Kaili Economic Development Zone which was established in 2000 to catalyze industrial development for the region. The construction of railways, high-speed rail, airport and water transport significantly improved regional connectivity, positioning Kaili to be the main gateway connecting Guizhou province to eastern and southern China, catapulting economic development of the city in recent years.

Sustainable profile
Kaili City established the “Sustainable City and Green Development” strategy, to improve air quality and urban health. One of the critical interventions is the creation of public squares and green parks. The city increased 260,000 square meters (m²) of green areas through 43 urban greening projects, including beautifying riverside landscapes, the creation of nine public squares and parks, vegetating mountains, and others. Today, Kaili maintains a total of 1,577 hectares of urban green space, with 36.68 percent of green area rate at built-up areas, 40.71 percent of the green coverage area, and 13.98 m² of green space per capita. Furthermore, the city relocated and strengthened inspections on polluting industries; phased out motor vehicle exhaust; and is continuously replacing energy source from coal to gas or electricity. Kaili’s urban ambient air quality compliance rate reached 100 percent in 2017, of which more than 85 percent are excellent days.

Thematic areas
Improving rural and regional connectivity
Due to the undulating terrain of the city, accessibility has been a fundamental challenge area for the residents in the past, often relying on walking and where possible, traditional trishaws and bicycles, making access the key focuses of the municipality. Since 2008, the city focused on improving rural access through the construction of road networks, including highways (1722 kilometres, km), county roads (258 km), township roads (422 km), and village roads (680 km) implemented over four phases. Since 2017, the goal of reducing travel time between the capital of the autonomous prefecture, urban areas, and surrounding villages to 30 minutes was achieved, benefiting the rural poor to have faster access to job opportunities and social facilities through better quality and safer road network.

In recent years, the city government has been working together with the regional and national governments to further enhance regional connectivity by developing long rail, air and water network. Since 2018, the Shanghai-Kunming Railway (Xiangyu Line) and Shanghai-Kunming Highspeed railway line also pass through Kaili City, significantly reducing travel time to the western metropolitans. There are also two main waterway routes in
Kaili with two docks, namely the Kaili Wharf and the Bypass pier. The Kaili Huangping Airport is operational since 2013, serving flights daily to other bigger Chinese cities. The airport serves districts around the province with the long distance bus routes provided by nine private transport companies.

An intelligent and clean public bus system

Kaili City is named as the “Priority Demonstration City of Guizhou Province” for public bus system as it is the main public transportation for Kaili City although there are plans to develop the Kaili-Dudu tram system. Public transport is a strategic development for the city. Managed and operated by the municipality, there are currently 28 bus lines in Kaili City with 522 stops and 62 bus platforms, with an annual passenger volume of 76.16 million passengers and 19 million km of annual operating mileage. Under the “one city and 14 districts system”, Kaili’s public buses have expanded to serve all districts within the province with 715 buses and 71 lines.

The city leverages on big data and technology to improve operational efficiency, integration and convenience of commuters. The Municipal Public Transport Corporation researched and invested in a Kaili Intelligent Bus Management System which consists of three key components: (1) smart card system to support seamless transfer and integrated payment within the province; (2) 3G video real-time monitoring system to enhance safety; and (3) intelligent dispatching system to provide timely and efficient service.

This system results in the creation of a mobile app which provides real-time information and payment system. Since 2018, the system is also fully integrated with the popular social messaging app, WeChat, using scan code system for cashless payment. The frequency of bus service within the urban area increased to every three to five minutes and commuters are allowed free transits within one hour upon analysis of commuters’ travel patterns. Furthermore, free bus services are offered to retired military personnel, people with reduced mobility, and elderly above 70.

In 2019, 151 electric buses started operations in Kaili City and expect to transport 33.7 million passengers per year. It is envisaged that it will reduce 11,290 tonnes/ annum of carbon emissions, marking a new achievement in the city’s public transport industry. It does not stop here. Some of the strategic public transport targets by 2020 are: 100% public transport coverage within 500 meters; 85% passenger satisfaction; and public transport trips account for 60% of the modal split. Kaili City’s exciting development demonstrates how a developing city leverages on technology to leapfrog and provide an inclusive, efficient and clean public bus system.