Smart parking in Taipei City

In order to enhance the parking environment with more convenience, safety and environmental protection, the Taipei City Parking Management and Development Office is committed to the establishment of smart parking systems, central monitoring and surveillance systems, electric vehicle charging devices, 3A smart access services in public parking lots and smart parallel parking.

「iTaipeiParking」APP and CMSs on the main arterials around the parking lots provide various information regarding Taipei’s public and private parking stations for automobiles, motorcycles and bicycles, including the name, address, total number of spaces, charging rate, etc. It also provides real-time information on vacant parallel spaces, with the available status shown in red, and the occupied status shown in green on Google Maps. The Automated Vehicle Identification Systems (AVI) and electronic label reading devices are fully built and combined with mobile payment functions to provide the "3A Smart Access Service", including the auto identification, auto opening and auto payment. Compared with the original access service by coins, the "3A Smart Access Service" greatly saves 66 seconds to entry and exit the parking lots and enhance more safety. The parking spaces detection systems and smart parking systems are built with high priority for the parking lots with more than 400 spaces and complex moving lines to save the time of finding parking spaces, reduce carbon emissions and air pollution. Besides, for the environmental protection policy, a total of 264 charging devices are constructed in 91 public parking lots to encourage people to use green transportation modes.

Since November 2018, 67 public parking lots provide the "3A Smart Access Service", and since September 2019, 6,623 real-time parallel spaces information are shown in ｢iTaipeiParking」APP. It is expected that the "3A Smart Access Service" will be available for the whole public parking lots in Taipei City in 2022, saving the time to entry and exit the parking lots and achieving a more diversified and convenient payment environment.

Key words:
3A Smart Access Service, Smart Parking System, Smart Parallel Parking, Charging Device