

## Intelligent traffic signal control

Taipei City has developed 143 intersections which using intelligent traffic control system since 2019, including 103 dynamic control intersections and 40 traffic-responsive signal control intersections. The intelligent traffic control system significantly improve traffic efficiency on the congested road networks.

- Dynamic control system : Adjusting signal timings in response to variations in traffic demand and system capacity.

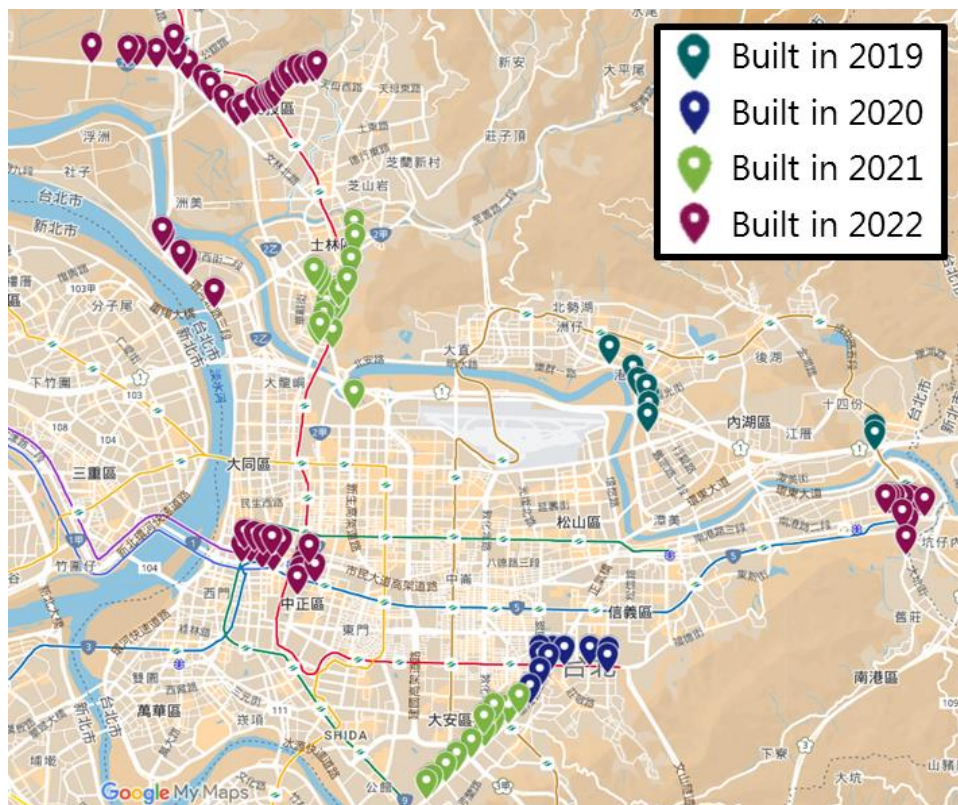


Figure 1. 103 Dynamic control intersections

- Traffic-responsive signal control system : Use AI image recognition detector to identify vehicles and pedestrians in real-time, calculate and adjust signal timing at intersection.

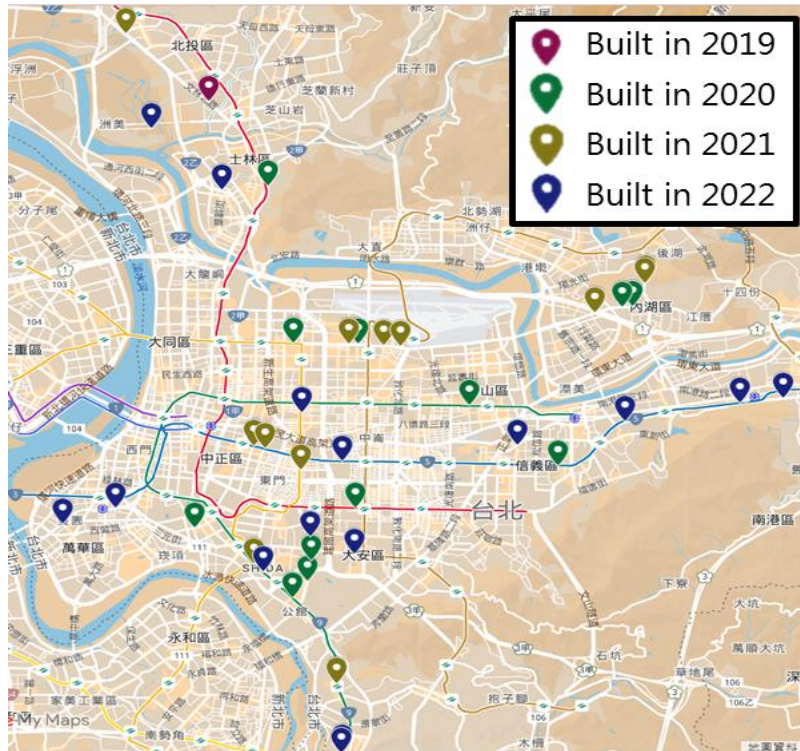


Figure 2. 40 Traffic-responsive signal control intersections

For those road corridors who have applied dynamic control system, travel time reduced by 9%. For those road corridors who have applied traffic-responsive signal control system, cars idling time on main roads has been reduced by 32%

In response to the development of Intelligent Transportation System technology. Taipei City will expand dynamic control systems to 29 congested road during 2023-2025.