



## Gimcheon City Smart Town, Republic of Korea



### CLIENT

Gimcheon City

### CHALLENGE

- Citizen centric smart city service
- Implementation of big data analytics for road pavement and facility

### SOLUTION

- RaaS road analyzer installed in public vehicles
- Client-specific RaaS monitoring dashboard

### RESULT

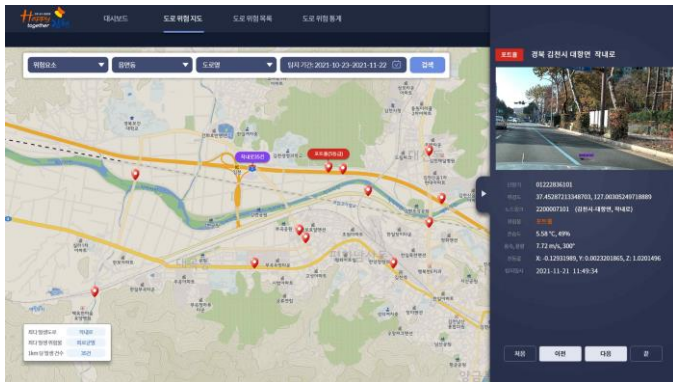
- Notification and monitoring of road hazards in real time
- Enablement of road safety insight through big data analytics

Gimcheon is a city in North Gyeongsang Province, South Korea. It is situated on the major land transportation routes between Seoul and Busan, namely the Gyeongbu Expressway and Gyeongbu Line railway.

Gimcheon City was selected for the 2021 Smart Town Challenge Project by the Ministry of Land, Infrastructure and Transport. Gimcheon City's goal was to carry out the road hazard detection solution project, which includes warning drivers hazards such as potholes through an integrated road management system.

## CHALLENGES

Gimcheon City wanted to provide citizen centric smart city service and implement big data analytics in managing road pavement and facilities. Their goal was to improve road safety for citizens in the most efficient way, while creating a consolidated data platform to monitor road hazards, analyze traffic volume, and predict road lifecycle for timely repair and maintenance.



Screenshots from Gimcheon City's road hazard monitoring system, custom-designed to show road hazard data at a glance.

## SOLUTION

Gimcheon City has installed Dareesoft's RaaS road analyzer in 100 public vehicles, which include taxis, buses, and garbage trucks. RaaS collects road hazard information real-time, then send the data to cloud for in-depth AI analysis. Finally, categorized data is sent to monitoring system on Gimcheon City's server, where they can easily view hazards on the map and as a list with hazard type, location, images and road information. The system also sends alerts for hazards that are classified to be highly dangerous and require a swift action. Dareesoft developed client-specific UI/UX dashboard and monitoring system to fit Gimcheon City's needs, and provided training to the personnel who will be accessing the system. Dareesoft also assigned dedicated engineers and customer service representatives to Gimcheon City project.



A screenshot from Gimcheon City's road hazard monitoring dashboard showing statistics

## RESULTS

With RiaaS, Gimcheon City was able to improve their city's safety and at the same time increase efficiency. This resulted in the city saving 5% in car accident cost and 10% in winter road maintenance spending. The city also improved on road safety index after implementing RiaaS. Moreover, through consolidated road hazard big data platform, Gimcheon City could gain insights on road safety, potentially contributing to relevant policy planning.

## CONTACT US

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