A data driven methodology for selecting the best locations of Hydrogen Refueling Stations

김수환, 류준형[†]
동국대학교
(jhryu@dongguk.ac.kr[†])

Recently, as the global warming issue has emerged as a major global issue through the Paris Agreement in 2015, hydrogen is attracting attention as a means of reducing greenhouse gas, which is environmentally friendly and has a new business aspect. As a result, the world's leading automobile companies are focusing on the development and commercialization of Fuel Cell Electric Vehicle (FCEV) technologies, and countries are strengthening their hydrogen refueling station(HRS) distribution strategies. In order to predict and respond to hydrogen demand in advance, it is necessary to build sufficient HRS for the successful distribution of FCEV. Considering the location of the existing HRSs, it was assumed that the distance from the hydrogen demand point for the newly installed HRS would be minimized. As the location of the case study, Ulsan Metropolitan City, where FCEV are currently actively disseminated, was considered based on the actual driving distance, population, number of vehicles, and number of FCEV. As a result, the location of the newly deployed charging station, the average distance, the allocated population, and the sum of distance will be presented.