(1) Project name: Pilot public bicycle service in the city center;

(2) City Name: Danang, Vietnam

(3) Item of the study: C, E

*C) Feasibility study*

To review the feasibility or specifics of an individual smart city project

*E) Perform test*

To confirm the applicability of a particular solution or technology to a smart city project with the assistance of a Japanese solution provider

(4) The reason for the project

Da Nang city is a small city (with a population of about 1.2 million people), with a well-developed tourism service (the total number of visitors to Da Nang in 2019 is estimated at 8,692,421. , The average growth rate of total tourism revenue in the period 2015-2019 (before the Covid-19 epidemic) is estimated at 25.7%).

However, the public transport system has not yet developed, the situation of people using private vehicles, especially motorbikes, is common. The number of private vehicles is continuously increasing, leading to traffic congestion and environmental pollution, making it difficult for public transport development.

Currently, Da Nang City aims to develop public transport, "green transport" to overcome the above problems. Solution to develop public bicycle service (using management software) to gradually replace motorbikes, increase connectivity from home to public transport as well as facilitate travel. Migration of tourists in small cities is a solution that needs to be researched to achieve the above goal.

- Research proposal:

+ Research and analyze the advantages and disadvantages of using bicycles compared to motorcycles;

+ Research, survey, and evaluate the advantages and disadvantages of using bicycles as a means of transportation in Da Nang city conditions (travel distance; weather, climate; traffic infrastructure current state of public transport network, attractions of the trip; habits of local people, tourists, ...).

+ Research to analyze the causes of the success and failure of the bicycle service model in countries around the world, especially countries with similar characteristics with Vietnam / Da Nang city.

+ Research the need to use public bicycle services in the city center. Danang;

+ Research and propose technical options for traffic infrastructure for bicycle, parking, connecting with VTCC infrastructure, choose vehicle type and security, collect toll;

+ Choose a plan to invest and operate bicycle services.

+ Develop a plan to submit for approval for pilot implementation.

- Purpose (short-term goals)

+ Investing in bicycle systems and supporting traffic infrastructure to serve the needs of cycling in Hai Chau and Son Tra districts (areas with many traffic hubs, commercial centers, and transaction centers. tourism and entertainment services of the city);

+ Develop bicycle vehicle management software / tools / models to meet the requirements: vehicle selection, security against theft, toll collection function, and ability to connect to management software. management of other means of transport for multimodal transportation, ...).

- Objective (long-term goal) of the Study or the whole project

+ Encourage tourists and local people to use public bicycles as means of transportation, ” to realize and concretize the solution of combining VTCC services with bicycle and walking to promote development of transportation public transport, reducing environmental pollution from transportation in the city, contributing to reducing and preventing congestion and pollution caused by traffic, creating a reasonable structure between modes of transport. load, towards the sustainable development of Da Nang city.

+ Completing the system of advanced and modern intelligent traffic management and monitoring solutions, providing management tools to support city authorities in managing and operating efficiency. results of transportation and transport networks. At the same time, through the aggregate data and analysis of data from the system, the functional units will have the most reasonable traffic arrangement and organization plan.