



## Cross-ministerial Strategic Innovation Promotion Program (SIP) Phase Two - Automated Driving (Expansion of Systems and Services)/Implementation of FOTs in the Tokyo Waterfront Area

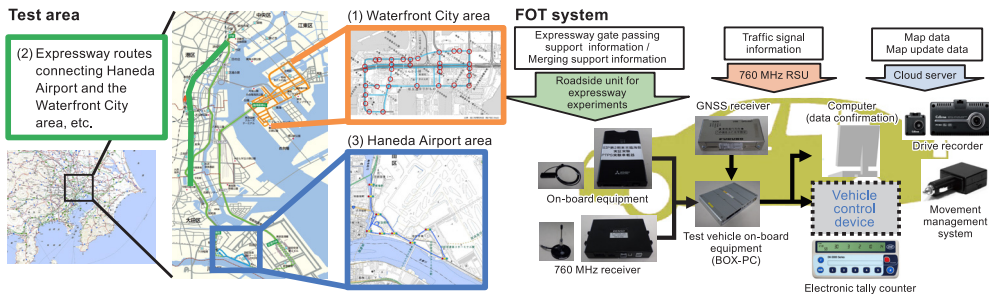
### 1. Objective

We performed cooperative FOTs of cooperative automated driving in the Tokyo Waterfront City area using traffic environment information (traffic signal information, ETC gate passing support information and merging support information) provided by minimal essential roadside infrastructure with the aim of expanding the ODD\* of autonomous vehicles in mixed transportation environments such as general roads and the Metropolitan Expressway.

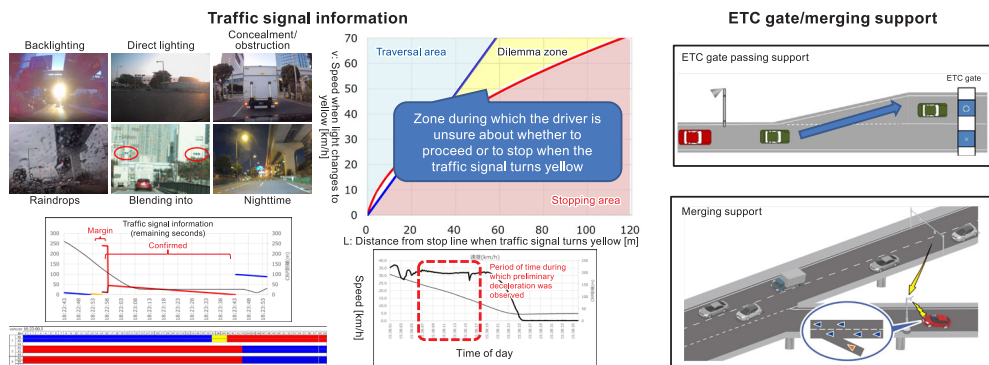
\* Operational Design Domain

### 2. Schedule and test area for FOTs in the Tokyo Waterfront City area

Item	Contents	2019		2020			2021			2022					
		Apr-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
V2I FOTs	Traffic signal information														
	ETC gate/merging support														
Event	SIP-adus WS		★					★							★



### 3. FOT situations



- ✓ Traffic signal information can be used periodically through communication in environments where determining the traffic signal color is difficult for vehicles relying only on independently detected information
- ✓ Dilemma zones can be avoided by using remaining seconds information

- ✓ Select cruising lane before ETC gate is within visual range
- ✓ Determine which vehicles are in the cruising line before reaching the merging area

### 4. Results of FOTs in the Tokyo Waterfront City area

- \* We confirmed the effectiveness of traffic signal information and determined that information should be provided over an even wider area
- \* We achieved safe, smooth traversal of ETC gates and are continuing with SIP research and development aimed at handling cruising line vehicle speed changes for merging areas