

Question #	Questions	Response from Port of Tacoma
1	Can we get layout understanding of a typical terminal showing – wait area of truck (indicating queuing before terminal entry), entry gate, exit gate, internal road distance)? The layout map is available in the Rfi. But we are looking for additional information like wait area, entry / exit gate and the distance between these gates/terminals.	Some of this is more detail that we are prepared to compile for an RFI. We are not looking for a firm proposal for making a purchase decision at this time. We are looking for information on potential solutions that could meet our high-level capabilities and some budgetary planning information. However, there are maps of the truck flow for each terminal as referenced in Attachment B of the RFI "Seattle and Tacoma Terminals Trucker Routes". Some terminals (such as Terminal 5) do not have a queueing area outside of the terminal. Some terminals (such as Husky) do have a queueing area outside the terminal. The in-terminal areas are shaded blue on the maps.
2	Are all areas of port where truck tracking is required open or combination of open and close areas?	The Port has access to install equipment in all areas where we need to monitor truck movement.
3	Can we get information on current infra set-up and its workflow	Please see Attachment A and Attachment B in the RFI.
4	Are there human operated gates for entry? Do they do other processes like document / id verifications during the entry for the trucks? RFIDs are given (fixed or temporary) to each truck driver at entry of terminal or at waiting area ?	The terminals are operated by private terminal operators that may have varying procedures for how they process trucks within the terminals. For the purposes of the RFI for this solution we are primarily interested in the movement of trucks prior to entering the terminals and at the point they exit the terminals. We are not looking to monitor movement within a terminal for this solution.
5	How is RFID and truck information linked ?	For experience monitoring, we are not concerned with linking an RFID tag to a specific truck since it is just aggregated experience information we are seeking. There are other uses for the RFID information, such as enforcing environmental clean engine requirements for trucks visiting our terminals. For those purposes the RFID tag is linked to a specific VIN for a truck engine using a 3rd party database. That use would be a secondary consideration for the solution options we are seeking information for in this RFI.
6	Where are the all RFID Scanners located – Wait area, entry gate, inside the terminal, exit gate, etc?	There are currently RFID exciters or measurement points at locaitons that are applicable for truck experience measurement based on the layout of each terminal. As referenced above, some terminals have queueing lots and some don't. But in general we measure at 1: Terminal Entry, 2: Terminal Exit. For some terminals we also measure at 3: Queue start and 4: Queue end.
7	Is there LAN or WiFi infrastructure for the current RFID scanner connect to server?	RFID Location Sensors are mounted to poles that receive signals from the RFID tags. These Location Sensors are typically connected by fiber-optic and/or point-to-point microwave network connection to the network that allows data to be sent to the RFID servers for each terminal.
8	What capabilities/features in the existing system are mandatory to have in the new solution?	See "Desired Solution Capabilities" in the RFI document. Optional capabilities are indicated with the word "Optionally".
9	Are there any restriction on putting cameras?	A camera-based solution is something we could consider.
10	Are there any restrictions on putting detachable GPS tracking devices on trucks? - We understand that the solution desires not to attach any device in the truck. This question is to check if portable device can be given to the truck only for the time it will be in terminal in stead of any permanent attachment.	There would be logistical issues to work through but we would be open to hearing ideas you have.
11	Are there any restrictions on using public network – 4G/NBLoT or existing available network in terminal?	If there is coverage then this is something that could be considered.
12	Does the terminal have a well covered network set-up (WiFi and/or LAN) or another reusable network infrastructure like LoRA?	An assessment would need to be made to determine coverage and suitability in the terminal areas in our gateway. WiFi coverage that is consistent in all areas does not currently exist.
13	Can we add more devices(fixed but migratable) additional to the current infrastructure to improve visibility and network strength like wifi extenders additional cameras?	Adding additional equipment is possible.
14	Can you share current general information on truck volume and turnaround time to calculate optimal tracking device requirements?	For the current system volumes, we process approximately 21,000 RFID transacions per day on a weekday and about 110,000 transactions per week.
15	Is real-time tracking of vehicle inside the premise required (if no, any plan to have this feature requirement for future)?	The current requiriment for updating experience times is to update at least every 15 minutes. More real-time information could be of potential interest in the future.
16	Is real-time tracking required in wait areas?	See Question 15
17	Can the designed system interact with other systems to get Truck Characteristics from Number plate?	We would be open to hearing what ideas you have.
18	Can you provide any additional details on how much data will need to be ingested, stored, and analyzed (terabytes, pedabytes, etc.)?	For the current system volumes, we process approximately 21,000 RFID transacions per day on a weekday and about 110,000 transactions per week.
19	Average number of trucks moving through all terminals per day?	It varies. The transaction volumes in the previous question can give a good indication. A truck will have multiple transactions for each visit to the gateway as it passes different RFID sensors. A truck may make multiple trips to pick up or drop off a load in a single day. Generally 5,000 trips per day
20	What is the total data volume currently being captured per day (in GB; the xml files from the terminals)?	Each XML file is < 1k in size. We currently receive an XML file for each transaction. See Question 18 for transaction volumes.

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