

SAN FRANCISCO BAY AREA WATER EMERGENCY TRANSPORTATION AUTHORITY

REQUEST FOR PROPOSALS FOR A REAL-TIME TRANSIT INFORMATION SYSTEM RFP #21-026

ADDENDUM NO. 1

November 5, 2021

SCOPE

This Addendum No. 1 includes WETA's response to requests for clarifications from potential proposers.

QUESTIONS AND ANSWERS

1. In reference to the "interface to download a historical archive of vehicle location information": Our historical vehicle location archives are available through an API that can be queried and pulled into database tools such as Power-BI or Tableau. Does WETA have tools like this to be able to archive data?
 - a. WETA does have tools to download and access data via an API.

2. Can you provide the make/model for any destination signs, interior signs, automatic annunciators, automatic passenger counters, or electronic fare systems that you are hoping to integrate with?
 - a. Proposers will not be responsible for signage. WETA will provide signage that is compatible with the real-time data provided by the proposers.

3. How often does the AIS system report GPS location information?
 - a. AIS data is broadcast every 2-10 seconds while the vessel is underway and less often while it is docked. Some APIs that provide AIS data limit requests to once per minute.

4. Does the AIS system provide any vehicle assignment information (what block the vehicle is assigned to for the day, or what trip the vehicle is making)?
 - a. Not currently, but this could be added. Proposers should identify all AIS data inputs and AIS equipment (make/model) required to support their proposed systems if they want to rely on AIS.

5. Does WETA have cellular routers onboard its vehicles?
 - a. Yes, all vessels have cellular routes.

6. If so, do the routers provide Wifi connectivity to onboard devices?
 - a. Yes (via Wifi Access Points).

7. What is the make/model of the routers?
 - a. 9 boats have Peplink MAX BR1. 8 boats have Sierra GX400 and GX440

8. Are they [routers] capable of sending GPS information in TAIP or NMEA formats?
 - a. Yes, both formats.

9. Are there cellular dead spots along WETA's routes? If so, how much of the time is cellular service available vs. unavailable?
 - a. WETA does not have detailed information to offer at this time concerning cellular service availability along its routes. In general, cellular service is consistently available at and near WETA terminals and in close proximity to the shoreline. Along portions of most routes that are more distant from the shoreline, cellular service is typically degraded or potentially unavailable at times.

10. Is there a cellular carrier that is most reliable along WETA's routes?
 - a. WETA does not have detailed information to offer at this time concerning cellular service availability along its routes.

11. What is the budget for this contract?
 - a. WETA has not set a specific budget range for this project. A determination of whether a Proposer's cost is reasonable will depend on the features and value offered by the Proposer.

12. Given that WETA is in the process of expanding its fleet, how many vessels should the proposed system include?
 - a. 17 vessels.

13. Which of the following power supply/ports are available onboard WETA's vessels in the Pilothouse (or crew stations) where hardware could be mounted? *J1962/OBD II, *J1939 (9 pin), *J1708 (6 pin), *USB power, *Standard 120v outlet, *other?
 - a. Only Standard 120v outlet is universally, readily available.

14. Does WETA have the ability to hardwire a device to a 12V or 24V power source?
 - a. 12VDC is also available on all boats but would require a marine electrician to run wires and potentially add circuit breakers.

15. There is no requirement listed for dispatchers to be able to see the locations of all vessels on a map. Is this required?
 - a. This is not required. Please note, WETA dispatchers will need the ability to manually enter predicted delay information on a per-trip basis to be published immediately as trip updates in GTFS-Realtime format, per Part B of the RFP.

16. Will you allow a proposal that uses a public AIS feed as the source for vessel locations?
 - a. Yes.

17. Will WETA provide access to the AIS feed for all vessels? Or will the vendor need to procure access to an AIS feed for all vessels?
 - a. WETA will provide access to AIS data for all vessels via an API. WETA prefers to use AIS for the real-time system, if feasible, to leverage existing equipment. However, if using AIS data for the real-time information system is not feasible, then WETA is also open to using other methods for vessel tracking.

18. The block_id field in your GTFS trips.txt is blank for all trips. Will this field be populated for use by this new real-time transit information system? Or is there another source of data that you will provide that will show all GTFS trips that will be operated by the same vessel on each service day?
 - a. The block_id field in trips.txt in WETA's GTFS will be populated for use prior to implementation of the Real Time Transit Information system.

19. Is WETA using a third-party consultant for this RFP and if so can you share who that consultant is?
 - a. WETA is utilizing its on-call consultant (BlinkTag) to provide technical support to staff for this project.

20. In Part A: Instructions, 14. PROPOSAL CONTENT AND FORMAT, G. All Required Forms it states "Proposers must submit all the required forms listed in the RFP". There aren't any forms attached to the RFP or available to download on the procurement site, are there specific forms that are missing from the RFP that are to be submitted with proposals?
 - a. There are no forms required for submittal for this RFP.

21. We respectfully request a two-week extension to the date of when proposals are due.
 - a. The deadline to submit proposals for this RFP will be extended by two weeks. The new deadline to submit proposals is December 2, 2021.

22. Does the existing AIS offer an API to retrieve vehicle location data from? Can we have more information on what is currently available? How is it sent?
- Yes. More information can be found at <https://www.aishub.net/> or <https://www.marinetraffic.com>
23. How often is the information from AIS being updated?
- AIS data is broadcast every 2-10 seconds while the vessel is underway and less often while it is docked. Some APIs that provide AIS data limit requests to once per minute.
24. Does the existing AIS data include an identifier that is usable as a reference to the GTFS schedule (trip ID or block ID) in addition to a vehicle ID?
- Not currently, but this could be added. Proposers should identify all AIS data inputs and AIS equipment (make/model) required to support their proposed systems if they want to rely on AIS.
25. Is 3g/4g possible on all of the routes?
- WETA does not have detailed information to offer at this time concerning cellular service availability along its routes. In general, cellular service is consistently available at and near WETA terminals and in close proximity to the shoreline. Along portions of most routes that are more distant from the shoreline, cellular service is typically degraded or potentially unavailable at times.
26. Could you please clarify what this means exactly? "The chosen vendor must provide open access to APIs and downloadable reports. The API response data should be in the Javascript Object Notation (JSON) format."
- Reports covering historical logs of vessel locations and actual arrival/departure times should be programmatically retrievable via a JSON API.
27. Are there already personnel with Android smartphones / tablets aboard? If so, how many, what are their responsibilities and what other use cases are the devices used for?
- No, there are not currently personnel aboard with Android smartphones / tablets.
28. Is WETA able to share any guidance regarding allocated budget for this effort?
- WETA has not set a specific budget range for this project. A determination of whether a Proposer's cost is reasonable will depend on the features and value offered by the Proposer.

29. Will WETA entertain an extension of the proposal submission deadline?
- a. The deadline to submit proposals for this RFP will be extended by two weeks. The new deadline to submit proposals is December 2, 2021.
30. Can WETA share expected number of dispatcher users of this system?
- a. At present, there are 1-2 expected dispatch users of the system.
31. How far in advance are vessel assignment made? Do they change at the last minute, and if so, how often?
- a. Typically, vessel assignments are relatively consistent on a day by day basis. If a vessel is unavailable due to planned maintenance activities, an alternate vessel assignment will be typically made with at least 24 hours notice. If a vessel is unavailable due to unplanned maintenance activities, an alternative vessel assignment will be potentially made with less than 24 hours notice.
32. Is interlining fully reflected by block ids in WETA's GTFS?
- a. Yes, interlining will be fully reflected in the block_ids added to trips.txt in WETA's GTFS prior to implementation of the Real Time Transit System.
33. Would be it acceptable to include an outside proposal cover and would that count against the page limit?
- a. It would be acceptable to include an outside proposal cover, it will not count against the page limit.
34. On Page 9 of the RFP, Section G. All Required Forms, it mentions that Proposers must submit all required forms with the proposal, but no forms were included with the RFP. Can you please confirm that there are no forms to be completed?
- a. Confirmed, no forms required.
35. Is there a price proposal form to complete or can proposers submit the price proposal in their own format? If there is a price proposal form, can WETA please provide the form?
- a. Proposers to submit their own price proposal form.
36. Would it be acceptable to include the resumes in an appendix?
- a. Yes.
37. Would section/appendix dividers count against the page limit?

a. No.

38. Can WETA expand on the format of and desire to have export capabilities of "historical archive of vehicle location information, synced with current and historical agency GTFS feeds"? Would the ability to view/playback the vehicle location information against the then-current route/schedule data within the platform meet this requirement? Can WETA provide a sample export or more specifically define the needed data points?

a. WETA would like the ability to export actual arrival and departure times for each segment of each trip for any specific date rate. This would ideally be available programmatically via a JSON API and also as a downloadable CSV. Some of the fields needed include date, trip_id, origin_stop_id, destination_stop_id, scheduled_departure_time, scheduled_arrival_time, actual_departure_time and actual_arrival_time.

39. Are there specific APIs that WETA is requiring? Which data points are needed to be accessible via API?

a. No specific APIs are required, but WETA would prefer a system where all reports and data available to administrators is also programmatically accessible via an API. This type of data includes historical locations, historical arrival and departure predictions, historical service alerts.

40. What existing AIS hardware is already installed on the vessels?

a. Each vessel has either Furuno model FA-150 or FA-170.

41. Can WETA expand on the following requirement? Is it stating that on a given day, one trip being early/late should impact the next trip's ETA? Or is it stating that the system should base its arrival predictions on historical data? "Trip update prediction algorithms will need to consider previous trips to accurately estimate arrival times for upcoming trips."

a. Trip update prediction algorithms will likely need to consider the previous trips that the vessel was scheduled to make in order to estimate if the next trip will be delayed when most trips have only two stoptimes (an origin and a destination). This could be done using the block_id in GTFS to check what a delayed vessels next trips are scheduled to be.

42. WETA states the current system is unable to generate reliable real-time departure and arrival predictions. Can WETA expand on some of the shortcomings of the current system?

a. The previous Real Time Transit Information System developed by WETA is currently not in use. Several challenges of generating reliable predictions include: some routes have a different set of stops and order of stops during the course of the day, consistent updates based on service schedule changes that occur 2-4/times annually, interlining of vessels on multiple routes, changes to route vessel assignments, and user interface for WETA staff and dispatch access.

43. What model of ferries are there in the fleet?
- a. The WETA ferry fleet consists of 17 custom designed and built catamaran vessels ranging in capacity from 225 to 445 passengers.
44. Is there room on the ferries for additional AVL electronics to be added (existing electronics room, etc)?
- a. Yes. Proposers should identify any additional equipment or products that will be provided to support their proposed system.
45. Can WETA provide us with schematics diagram of the ferries?
- a. Schematic drawings will be made available by WETA, if necessary, to the successful proposer following contract award.
46. In section 14 (G) & Section 15, WETA has mentioned about the required forms & the price proposal form. Could WETA direct us to the forms/ send us the forms via email since they are not there in the RFP document?
- a. There are no forms required for submission as part of this RFP.
47. In order to present a complete & informative response to WETA's RFP, we request that WETA extends the page limit to at least 30 pages.
- a. It is expected that proposals should be clear, concise, and provide sufficient information to minimize questions and assumptions. Proposals should be limited to 15 pages, excluding cover letter, table of contents, resumes, required forms, and the price proposal.
48. In order to prepare a better response, we request 30 days extension to the submission deadline.
- a. The deadline to submit proposals for this RFP will be extended by two weeks. The new deadline to submit proposals is December 2, 2021.
49. Is there a separate router or modem from AIS? If so, could WETA provide us with the model# and if we would be able to access those?
- a. Yes. 9 boats have Peplink MAX BR1 cellular routers. 8 boats have Sierra GX400 and GX440 cellular routers
50. Is there an equipment cabinet to house hardware?

- a. At present, Proposer's should assume there are no available cabinets onboard WETA vessels to store additional equipment in. Any equipment cabinets required should be identified and provided by the Proposer.
51. Is there a data or voice radio present on these [AIS] units?
- a. Each vessel has either Furuno model FA-150 or FA-170. Proposers should check the specifications for Furuno model FA-150 or FA-170. Specification sheets are available at the manufacturer's website.
52. Can we get a datasheet from the AIS system or model #?
- a. Each vessel has either Furuno model FA-150 or FA-170. Proposers should check the specifications for Furuno model FA-150 or FA-170. Specification sheets are available at the manufacturer's website.
53. Will WETA allow technicians onsite for install training and/or system commissioning post install?
- a. Yes, if necessary.
54. Reference Page 15 (Required Specifications). If a proposer's system automatically determines delays and predicts arrival times, will there still be a requirement for a dispatcher to manually enter predicted delay information?
- a. Dispatchers will need to be able to enter information when trips are cancelled. WETA would prefer a system that also allows dispatchers to manually enter delay predictions to override algorithmic delay predictions for scenarios where dispatchers know in advance that a trip will be delayed due to weather, medical emergencies, staffing issues or other reasons that can't be algorithmically predicted.
55. Is it the operator's plan to maintain a consistent course during any given trip and route? If not, how much variation is expected and what would determine the course the vessel takes?
- a. In general, WETA vessels maintain a consistent course on any given trip and route. Typically, courses do not vary between origin and destination points by time of day, day of the week, or season. Minor variation does occur in instances where weather, wave, in-water debris, or vessel traffic conditions require.
56. Does WETA intend to keep existing cellular routers that provide on-board Wi-Fi? If yes, what is the make and model of existing cellular routers?
- a. Yes. 9 boats have Peplink MAX BR1 cellular routers. 8 boats have Sierra GX400 and GX440 cellular routers

57. Can the existing cellular connection via the router be used by a proposer's real-time hardware?
- a. Yes.
58. Reference Page 16, Section 2 (Equipment). Can WETA provide more information about the existing AIS hardware on board each vessel?
- a. Each vessel has either Furuno model FA-150 or FA-170. Proposers should check the specifications for Furuno model FA-150 or FA-170. Specification sheets are available at the manufacturer's website.
59. What is the make and model of existing AIS hardware?
- a. Each vessel has either Furuno model FA-150 or FA-170. Proposers should check the specifications for Furuno model FA-150 or FA-170. Specification sheets are available at the manufacturer's website.
60. Does WETA intend to keep this [see question above] existing AIS hardware?
- a. Yes.
61. Can the existing AIS hardware share GPS information with the real-time vendor through either a hardwire connection, or API/feed?
- a. Yes.
62. If an API/feed is available, can WETA share an example of this?
- a. More information can be found at <https://www.aishub.net/> or <https://www.marinetraffic.com>
63. Reference Page 6, Section 14 (Proposal Content and Format). The requirements state that proposals shall be limited to 15 pages, excluding cover letter, table of contents, resumes, required forms, and the price proposal. Are appendices allowed that would not count against the 15 page limit?
- a. Yes, appendices are allowed and won't count against the 15-page limit.
64. Reference Page 21, Section 9 (Ownership of Work). Requirement states, "Any and all rights, title, and interest (including without limitation copyright and any other intellectual property or proprietary right) to materials prepared under this Agreement are hereby assigned to WETA. The Contractor agrees to execute any additional documents which may be necessary to evidence such assignment". Please clarify.
- a. WETA is open to accommodating reasonable revisions to this provision of the contract. Proposers should indicate any changes requested per instructions in the RFP.

RFP REVISIONS

The RFP is amended as follows:

- RFP Page 2, Item 2 Solicitation Timeline. The proposal due date has been changed from November 18, 2021 to December 2, 2021 at 5:00PM PT.

ACKNOWLEDGMENT BY PROPOSERS

Each proposer is required to acknowledge receipt of all Addenda, including this Addendum No. 1 as specified in the RFP.

ISSUED BY:



Michael Gougherty
Project Manager

November 5, 2021

Date