



City and Borough of Juneau
City & Borough IT Dept.
155 Heritage Way
Juneau, Alaska 99801
Telephone: 907-586-5295

MEMORANDUM

TO:

FROM:

DATE:

RE: Public Wi-Fi in Marine Industry Zone

The increase in annual cruise ship passengers is causing heavy congestion on Juneau's local cellular networks (ATT, GCI, etc.). There are simply too many people with cellular devices trying to connect to the local cellular towers. This congestion is causing a negative experience for our visitors, citizens, businesses, and disruption of service in many of our CBJ-owned cellular devices. These networks are owned by private enterprises and are not subject to CBJ control. Communication with the major providers has yielded some assurances but the largest provider, ATT, does not acknowledge the extent of the congestion.

Providing publicly accessible Wi-Fi in areas with dense visitor populations will offload many of the users connected to the commercial cellular networks onto Wi-Fi. Splitting the user base between the commercial cellular networks and public Wi-Fi will relieve the current congestion issues.

Conceptually, this project mirrors the Marine Park Wi-Fi installation. Cruise ship passengers wishing to use the Downtown Library's free Wi-Fi were straining the occupancy capacity of the Library. By installing Wi-Fi in the Marine Park pavilion, the visitors looking for free Wi-Fi can enjoy the scenic views while freeing up space at the Library. Wi-Fi across the Maritime Industry Zone accomplishes the same goal, the only difference is network capacity instead of physical capacity.

An RFI (24-116) was issued in September 2024 to gather information and determine vendor interest in this project. The responses we received were positive.

Wi-Fi would be provided across the Maritime Industry Zone (see attached) via a series of interconnected wireless access points mounted on city facilities and light poles. This would provide Internet access across our most densely visited areas.

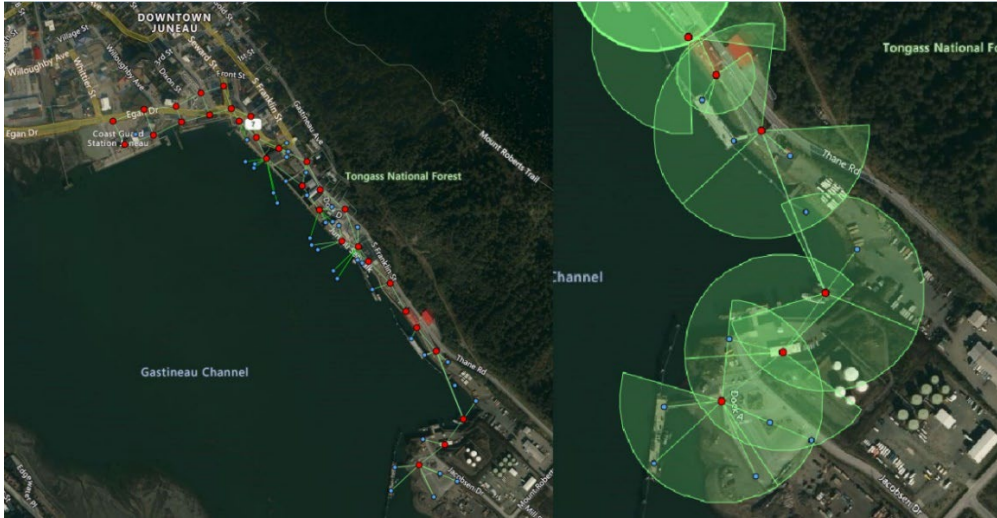
The wireless network would be configured to target cruise ship passengers:

- Broadcasting from April to October.
- Scheduled hours from 7AM to 9PM daily.
- Seamless service from dock to any part of the Maritime Industry Zone.
- Seamless authentication via PassPoint, OpenRoaming, or similar technology. *
- Service levels to allow basic Internet access.
- Public Wi-Fi will be independent of CBJ networks and operations.
- The RFP process will result in a vendor operating and maintaining the Public Wi-Fi

*These are newer technologies that allow cell phones to automatically use their built-in systems to authenticate to a Wi-Fi network without traditional usernames and passwords.

If funding becomes available an RFP will be issued to select an appropriate vendor. The summer of 2024 would be used for in-depth frequency analysis, site surveys, and topology design. To adequately design a reliable Wi-Fi network, those surveys and analyses must happen during Juneau's busiest tourist season. Deployment would happen over the winter, with go-live to coincide with the tourism season of 2025.

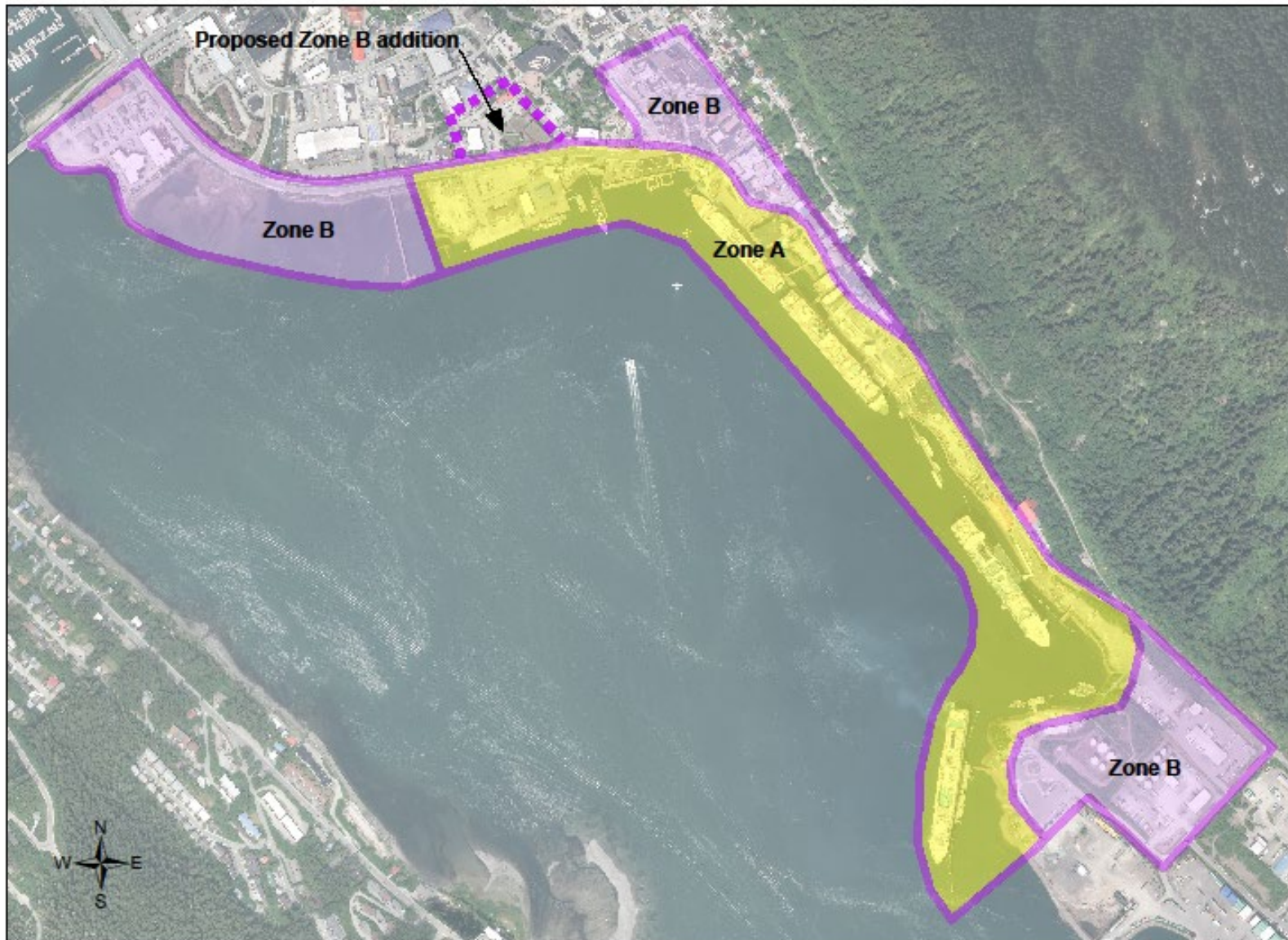
Questions can be directed to the CBJ IT Director, Chris Murray.



1 Concept map of Wi-Fi access point locations and coverage.



2 Example of a Wi-Fi access point mounted on a telephone pole.



Maritime Industry Zones

0 500 1,000 2,000 Feet