

Guemes Island Ferry Technical Advisory Group (TAG)

January 12, 2025 Meeting

Anacortes Public Library

5:30-7:30 PM

Draft Summary Notes

Attendees

In-Person

TAG Members

Allen Bush, Becca Fong, Corey Joyce, Sandy McKean

Skagit County Staff

Rachel Rowe, Ferry Operations Division Manager; Michael See, Public Works Director

Other Attendees

Hilary Wilkinson, Maul Foster & Alongi, Facilitator; Gabe Murphy

Online:

TAG Members

Jonah Petrick, Tom Fouts, Ryan Monahan

(TAG members Adam Paull and Paul Bieker were not present).

Skagit County Staff

Marie Lambert, Public Works Assistant Director/Controller

Other Attendees

Claire Moerder, Maul Foster & Alongi

Welcome and Introductions

Recap of Meeting #2 and Tonight's Agenda

Sandy McLean called the meeting to order. He introduced the topic of revisiting the TAG charter to ensure members understand their scope of work.

Hilary Wilkinson reminded TAG members of the outcomes of the January meeting and asked for the TAG to adopt the summary notes. She invited TAG members to share if there was anything else key to note from last month's meeting, but there were no comments.

- **TAG members accepted the summary notes from Meeting #2 as final.**

Hilary Wilkinson introduced tonight's agenda after circulating printed copies. She reminded TAG members of this meeting's objectives:

1. Review outcomes and status of action items from Meeting #2.
2. Revisit TAG mission and its relationship to the Value Engineering (VE) study.
3. Discuss TAG communication needs/requests (internal and external).
4. Review/agree to ferry service options for TAG consideration.
5. Review/agree to evaluation criteria to be used to analyze the different options.
6. Review next steps for evaluation framework on which a Board recommendation will be based.

TAG Operations

Ferry Service Options

Hilary Wilkinson shared the TAG charter onscreen (and around the room) to remind TAG members of their chartered scope to review the various propulsion options.

TAG members discussed that, regardless of their ultimate recommendation, it's still important to develop evaluation metrics for the Board of Commissioners to use at whatever point they decide to replace or upgrade the current ferry vessel.

Rachel Rowe introduced the current list of ferry replacement options, noting that they did their best to include all feasible options in a starting list.

- **TAG members discussed and agreed to remove LNG** from the list of propulsion system options considered as there are not currently any viable projects for LNG marine-ready engines.

- **TAG members discussed and agreed to remove** hydrogen from the list of propulsion system options considered due to a lack of available fuel sources in the region.

TAG members discussed how the all-electric system may not be feasible due to a lack of shoreside charging.

Rachel Rowe shared that a lot of agencies have eliminated all-electric ferry projects due to a lack of shoreside charging, noting that many agencies have successfully advocated to keep their funding contingent on an all-electric system by moving forward with a hybrid system. She further clarified that the available grants for the Guemes Island Ferry Replacement project total about \$30M and are contingent on an all-electric ferry. She noted that this is a lot of money, and that it is worth asking grant agencies whether or not it could be applied to a hybrid propulsion system, particularly given that other similar agencies have successfully asked for and been granted this change.

- **TAG members discussed and agreed to** leave all-electric on the list, noting it may fall to the bottom due to the various challenges of shoreside charging.

TAG members discussed partnering with Whatcom County, not as a separate propulsion system but as another option to consider. TAG members discussed the significant cost savings that could be achieved by going to a shipyard with Whatcom County and asking for two of the same vessels.

Rachel Rowe shared that she met with Whatcom County to discuss their current ferry replacement project. Whatcom County staff shared they will utilize their \$25M Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant funding to move forward with a 20-vehicle diesel-electric battery hybrid ferry. Batteries in this system are used for “peak shaving” meaning they will provide extra power when more is needed, so diesel generators can maintain a constant pace. No shoreside charging is required for this propulsion option. This will be “very similar to a Prius.”

The vessel will have a raised center house with a walk-through passenger cabin on the main deck. They will also do some ferry terminal improvements on the Lummi Island side, which is a scale-down of their original plan to build and accommodate a larger vessel. Their new plan will maintain the current footprint of the existing ferry.

Rachel Rowe shared that Skagit County is already committed to a systems integrator because the County selected with them via a competitive process in the past design. This could be a question mark for aligning with Whatcom County as they could potentially go with another systems integrator. Timing would also be an issue to consider for alignment

with Whatcom County, as would vessel size (the original understanding of the Guemes Island community need was for a 28-car vessel).

TAG members discussed sizing of the ferry, mentioning the Glosten traffic study which found the Guemes Island Ferry needs to maintain half-hour runs. One TAG member noted that it might be worth revisiting the Glosten traffic study with relation to vessel size (to see if a 20-car ferry would be sufficient).

- **TAG members discussed but did not reach consensus** on removing the Whatcom County collaboration option from the list. Therefore, the collaboration option will remain, with TAG members noting studying this option could yield important information on the evaluation criteria.
- **Rachel Rowe** later shared that all propulsion systems proposed can maintain 30-minute runs and meet traffic demands studied in the Glosten reports.

Rachel Rowe suggested calling the current design what it is—a plug-in hybrid—rather than an all-electric option. TAG members discussed how there are multiple types of hybrid propulsion (including series hybrid and parallel hybrid, and plug-in vs. non plug-in).

TAG members discussed how this point supports continuing to consider the Whatcom County study, to support evaluating the feasibility of a similar, non-plug-in, series hybrid propulsion system to the vessel they are designing (see below). Rachel updated the list of options to reflect the new terminology and remove duplicates.

- **TAG members discussed and agreed to remove** geared electric from the list of propulsion system options considered because none of the project's existing funding would work for an all-diesel option.
- **Discussion on this topic included** the potential maintenance savings of the different options.

TAG members discussed and narrowed down an adjusted list of propulsion system options to be considered. Hilary Wilkinson asked for another show of support or voiced objections to the new list. TAG members supported the new list, which includes:

1. All electric
2. Plug-in hybrid
3. Diesel electric
4. Preserve current ferry
5. Mimic Whatcom County Lummi Island design and/or propulsion system (diesel electric battery hybrid)

Framework for Evaluation of Options

Hilary Wilkinson reminded TAG members of their charge to develop evaluation criteria and shared an initial draft list, noting which criteria are stipulated by the County resolution. A summary of TAG discussion and decisions is included below.

- **System Weight and Airborne Noise (removed):**
 - TAG members discussed and agreed to remove system weight and airborne noise from the starting list of criteria, noting that airborne noise will be addressed in SEPA and other permitting processes.
- **Reliability and Availability (adjusted):**
 - TAG members discussed reliability and availability as a criterion, noting the difference between parts availability and having the boat be “available and reliable.” TAG members agreed to remove “availability” from this criterion as the term is confusing, and the metric is really about ferry reliability.
- **Passenger and Loading Crew Safety (discussed, not added):**
 - TAG members discussed passenger and loading crew safety, noting it’s not affected by the propulsion system. Members agreed not to add operational safety as a criterion as that’s the responsibility of the County and not dependent on propulsion system.
- **Funding Sources (added):**
 - TAG members discussed funding sources as a criterion, noting the importance of asking funders if all-electric funding can be transferred to a hybrid option. Members discussed whether this would include costs as well as potential funding sources. Members also discussed the politicization of this criterion and suggested leaving it as a consideration but not as a weighted metric. TAG members agreed to add available funding sources to the list of criteria but to circle back on how this criterion is prioritized.
- **Terminal Impacts (added):**
 - TAG members discussed terminal impacts, noting the importance of this to islanders. TAG members also noted it could be out of scope for the TAG and could be treated similarly to funding sources.

The remaining criteria not discussed are required by Resolution R2025207.

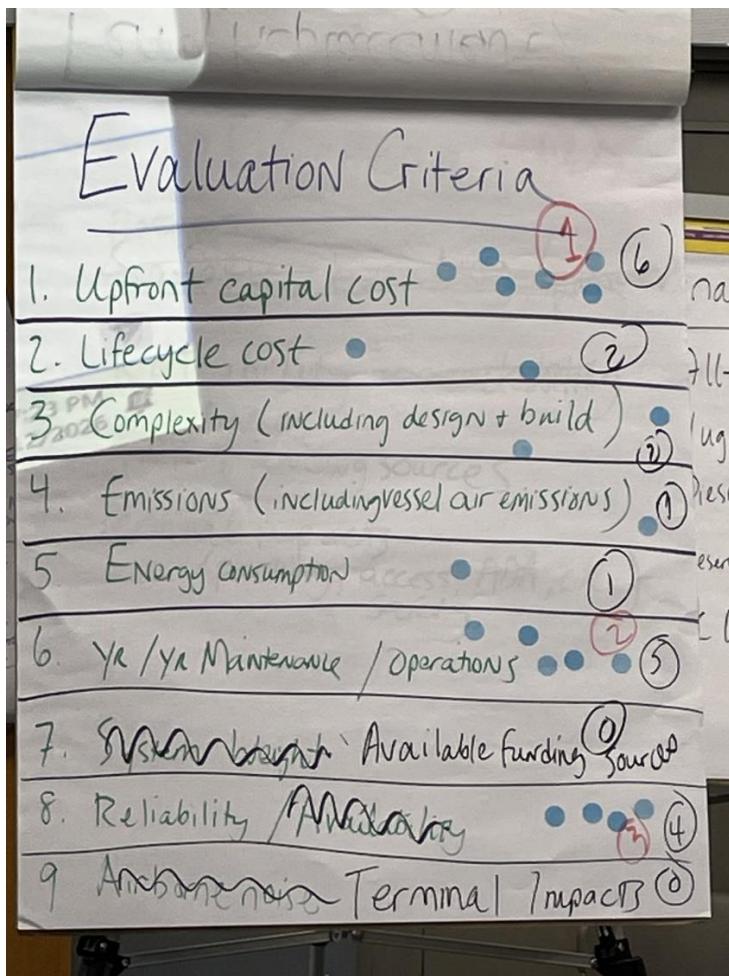
TAG members agreed unanimously to 9 total evaluation criteria, shown in Table 1.

Hilary Wilkinson asked TAG members to share their top three criteria (including instructions for members attending in person and online). Using these inputs, the order of

importance has been updated in the list of criteria below. A picture of the prioritization activity is included with the meeting minutes.

Table 1 – Prioritized List of Selected Evaluation Criteria

Prioritized List of Selected Evaluation Criteria		Notes
1	Upfront capital cost	
2	Year-over-year maintenance costs and intervals	Per Resolution R2025207, Section V., operational management of the ferry is not the responsibility of the TAG.
3	Reliability	
4	Lifecycle cost	Tied for 4 th .
5	Complexity (including design and build)	Tied for 4 th .
6	Emissions (including vessel air emissions)	Tied for 5 th .
7	Energy consumption	Tied for 5 th .
8	Terminal impacts	Tied for 6 th .
9	Available funding sources	Tied for 6 th .



Evaluation criteria prioritization activity results (including virtual voting)

TAG members discussed whether or not it made sense to invite Glosten to update their evaluation of the selected propulsion options using the selected criteria, or to do the work themselves. Members decided that they preferred to take the lead on the evaluation.

Hilary Wilkinson adjourned the meeting and asked TAG members to send the names of people with relevant expertise they'd like to invite to future meetings via email.

Decisions

- TAG members discussed and adjusted the list of considered propulsion options.
- TAG members discussed, adjusted, and prioritized the list of evaluation criteria.

Action Items

Skagit County will

- Distribute the meeting summary and Zoom link for the next TAG meeting.

TAG members will

- Send Rachel Rowe any contacts they'd like to invite to future meetings.

MFA will

- Draft summary notes.
- Prepare a revised evaluation tool for TAG use.