

Lake Superior Scheduler Assumptions

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Open-Water

The Lake Superior open-water creel clerk scheduler and bus route constructor is build upon the following premises and assumptions.

1. There are four creel clerks as identified below:
 - **Clerk A:** Ashland-Washburn (100% full-time)
 - **Clerk B:** Bayfield-Red Cliff-Little Sand Bay (50%) and Cornucopia-Port Wing (50%) (full-time)
 - **Clerk C:** Saxon (100% part-time)
 - **Clerk D:** Superior (100% full time)
2. Details for each clerk and route are in the “Schedule_Info_LS.xlsx” file.
3. Each clerk will conduct a survey on every weekend day and holiday during the “open-water” months. Holidays during the “open-water” months are Memorial Day, Independence Day (i.e., Fourth of July), and Labor Day.
4. Each clerk will have two consecutive weekdays off each week during the “open-water” months. The same two weekdays will not be off for consecutive weeks.
5. For the clerk responsible for two routes (i.e., B).
 - The route for a weekday is chosen by randomly selecting the route for the first weekday in a two-week period and then alternating routes after that for each weekday in the rest of the two-week period. Thus, same number of routes is run for the weekdays of each two-week period, but the routes will not be run on the same weekdays for more than two consecutive weeks.
 - The route for a weekend/holiday is chosen by randomly selecting the route for the first weekend day or holiday in a two-week period and then alternating routes for each weekend day or holiday after that for the rest of the two-week period. Thus, the same number of routes is run for the weekends, but the routes will not be run on the same weekend days for more than two consecutive weekends (except for some rare occasions in weeks with holidays).
6. Weekday shifts (am and pm) are chosen randomly with the constraint that there will be approximately equal numbers (within a day or two) of shifts per weekday for the MONTH.
7. Weekend/holiday shifts are chosen by randomly selecting the shift for the first weekday/holiday of the WEEK and then alternating shifts for the other weekend days and holidays such that each shift will appear on at least one weekend day or holiday for every WEEK.