

Traffic Tables

The data contained in the traffic tables comes from standard reports generated from the AMHS Reservations Management System (RMSII and RMSIII). Following is a brief explanation of the terms used, and a description of the reports.

- A “passenger” is any individual who got on or off the vessel, including drivers, infants, partial-fare travelers, and anyone traveling on a pass.
- A “vehicle” is any passenger or cargo conveyance transported on the vessel, including construction equipment, container vans, motorcycles, unaccompanied cars shipped by dealers, and employee cars traveling on a space available basis. The vehicle count is not related to size; i.e. a 40-foot van is counted as one vehicle as is a 15-foot compact car.

The count of passengers, vehicles and cabins is derived from reservation information for specific vessels. A traveler who must transfer vessels to reach a destination—or who is traveling on vacation and stopping to visit several communities—is counted more than once. For example, the resident of Hollis who traveled to Bellingham will show up in the passenger count as one who embarked at Hollis and disembarked at Ketchikan. This person will also be counted as one who embarked at Ketchikan and disembarked at Bellingham.

Passenger and Vehicle Traffic Summary by Month and Port (pgs. 30–51)

These tables provide the monthly total of embarking and disembarking passengers and vehicles by port. This summary gives an overview of seasonal travel trends, and allows the reader to easily identify the busiest and slowest ports and travel months. Information is provided for the total system by geographic area (Southeast and Southwest) and by vessel.

Summary of On/Off Passenger and Vehicle Traffic by Port (pgs. 52–65)

These tables summarize inter-port passenger and vehicle traffic. They provide origin-destination information for analyzing through-traffic movements on the vessels. Information is provided for the total system for the year by geographic information (Southeast, Southwest, and Cross-Gulf) and by vessel. The report also includes summary tables for the summer season by geographic area. These

tables show zeros where there was no inter-port traffic. A dash indicates that there were no sailings with this pair of cities on the route. To determine the relative significance of either low or high numbers, see the table of *1998 Sailings by City Pair*, pg. 25.

Note: The On/Off tables do not reflect the origin-destination of passengers and vehicles that transferred to another vessel. They show where all of the traffic that boarded a vessel at each port traveled to on that particular vessel.

When the schedule allows, the AMHS offers excursion trips. These are passenger-only day trips that begin and end at the same port. During 1998 one excursion trip was offered to the Misty Fjords National Monument departing from Ketchikan. Excursion trips in prior years have also included day trips to Glacier Bay from Juneau.

Link Volume Summary Reports of Passengers and Vehicles (pgs. 66–83)

The link volume summary reports are used to establish a measure of capacity utilized relative to the capacity provided. This report shows the traffic and capacity on each “link” of the system. A “link” is defined as a departure from one port and an arrival at the next. A complete trip usually consists of several links. For example, a passenger going from Juneau to Skagway in one trip would typically travel on two links—“Juneau to Haines” and “Haines to Skagway”. This passenger would be counted as one on each of these links. Consequently, the link volume count includes both the through-traffic and the traffic embarking from the first port in the link pair.

The link volume for each pair of ports is directional, with the port of origin appearing first. The link volume for “Bellingham-Ketchikan” indicates the total traffic northbound between Bellingham and Ketchikan with no intermediate stops.

Information is provided for the total system by geographic area (Southeast and Southwest) and by vessel. Cross-gulf links are included in the region of the departure port; i.e. Juneau-Valdez is listed in the report for the southeast region.

Monthly link volume data, in an abbreviated form, is also provided. In these tables, totals only are given for passengers, vehicles and number of trips. The fuller reports also show the number of miles and capacity ratios.

The link volume data is useful because of the finite capacity of the vessels and the variation in size from vessel to vessel. 125 passengers on the M/V Aurora traveling from Petersburg to Kake would have the same passenger link volume capacity ratio, 50%, as 225 passengers traveling on the M/V Taku. Where the link volume ratios are high, this is an indication that additional service may be warranted.

The link length in the table is given in nautical miles. (Statute miles for each link are shown on the diagrammatic maps, pgs. 90–91). The “vessel miles” is the total number of nautical miles traveled over each link during the year, and is determined by multiplying the number of trips by the link length.

Passenger capacity. As the Vessel Information Table on page 5 shows, each vessel not only has functional booking limits, but also has a maximum capacity as authorized by the U.S. Coast Guard. Furthermore, both categories can be different for the summer and winter seasons. While the AMHS occasionally increases the capacity on “full” sailings to accommodate additional passengers, it never goes beyond the U.S.C.G. limit.

The 1998 report, following the example set with the 1996 report and continued in 1997, uses the functional booking limit set for each sailing to calculate capacity ratios. Prior year reports used a number closer to the U.S.C.G. limit. This change results in a higher capacity ratio on most links, but more accurately reflects the percentage of usable passenger space actually being utilized.

Vehicle Capacity. This report continues to use linear feet to measure vehicle capacity. Vehicle capacity ratios are calculated by dividing the total linear feet sold on the car deck by the vehicle capacity in linear feet. The capacities used in the 1994 and 1995 reports were based on an analysis of fiscal year 1994 sailings. For the 1996 and subsequent reports, the vehicle capacity used has been changed to reflect the amount of space used for booking purposes.

The actual amount of “saleable” space on the car deck depends on the amount of open space between vehicles, needed for maneuvering vehicles on the car deck, and for pathways for people entering or exiting their vehicles. The mix of vehicles can affect this non-saleable space, as well as the number of vans being carried.

Prior to 1994, the vehicle car deck capacity was defined as one vehicle per twenty foot length with a lane width of eight feet. The total number of 20' × 8'

lengths on the car deck was the “vehicle capacity”. The actual number of vehicles on the car deck was divided by the “vehicle capacity” to obtain the vehicle capacity ratio. This methodology inaccurately reported the vehicle capacity ratio.

When comparing multi-year data it is important to note the differences in vehicle capacity ratio calculations or the results will indicate an artificial change. The number of vehicles per link and the number of trips per link can be used to evaluate whether increases or decreases in link volume capacity ratios are significant or just reflect a change in the methodology.

Link Volume Summary of Stateroom Usage Tables (pgs. 84–89)

These reports focus on stateroom usage and are similar to the Link Volume Summary Reports of Passengers and Vehicles. They show the percent of cabins used on each link. One report sorts the links in alphabetical order by embarking port, and a second report sorts the data by capacity ratio. Individual vessel tables provide the link volume ratio for each month. Of the nine vessels in the AMHS fleet, six have staterooms: the M/V Columbia, the M/V Kennicott, the M/V Taku, the M/V Malaspina, the M/V Matanuska, and the M/V Tustumena.