

## Briefing Paper

### Aircraft Replacement (\$500.0)

#### Department of Natural Resources/Division of Forestry

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Aviation resources are an essential element of the Division's mission and statutory requirement to provide protection of life, property, and resource values from wildland fire. State-owned and maintained fixed wing aircraft are an integral part of the aviation fleet and combined with contracted aircraft, comprise the backbone of the Division of Forestry's (DOF) aviation firefighting capabilities. DOF airtankers and helicopters are procured through exclusive use contracts in which aircraft, pilots and mechanics are secured for the entirety of a 90-day contract. DOF also uses "call when needed" (CWN) aircraft which provides a service for a short-term contract although at a higher rate. CWN are available at the discretion of the leasing company and often in short supply as we compete with other industries for use.

The Division currently owns four fixed wing aircraft with the primary purpose of conducting wildland fire specific missions including Lead Plane, which directs the activities of the airtankers and Air Attack which coordinates aerial and ground resources strategy and tactics. Reconnaissance missions include mapping and detection of new starts. DOF aircraft also support logistical missions including the movement of firefighters and equipment to quickly mobilize resources to emerging incidents. These missions are amplified in the roadless Southwest Area where the McGrath fire base is totally dependent on air support.

DOF aircraft fly between 500 and 800 hours a year. Until the 2020 misfuelling accident, the Divisions aviation program has been accident free for the past nineteen years. That is a significant accomplishment given Alaska's flying environment and mission profiles. In May of 2020, the Division of Forestry's Shrike Commander was involved in an incident that caused an emergency off runway landing into a shallow pond. The result was injuries to the pilot and firefighters and a complete loss of the aircraft.

DOF developed a replacement plan with the end state of an optimal aircraft that would meet both tactical and logistical missions. Funds available for replacement include \$300.0 through Risk Management as well as a \$147.0 CIP that was provided for an engine replacement but has been modified to use for the aircraft replacement. Currently, DOF has \$447.0 available.

Our analysis concluded that a Cessna Caravan was the optimal and most cost-efficient alternative. Caravans are Instrument Flight Rules (IFR) capable, have nine passenger seats, and can carry approximately 2500 lbs. of cargo. Caravans have been in production for 35+ years and are still in production which makes parts readily available. Caravans are turbine-powered, and like our Commanders, use JET A fuel, giving us compatibility and greater availability of fuel in remote locations at a lower cost per gallon. Caravans have the speed to substitute for lead plane missions and are designed for remote unimproved airstrips which supports the logistical mission.

Procuring a Caravan 208 in the model year range of 1995/2005 with 3000-6000 hours total time airframe will cost approximately \$900k-\$1,100,00 million. To purchase this aircraft, the Division of Forestry requires an additional \$500.0 as submitted in SB 74 Governors Bond proposal. This support will fund our "optimal" replacement aircraft to meet the Divisions mission of protecting of life, property, and natural resources.