A Data Collection Scheme to Support Applications for Capacity Enhancements at Small Airports

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Abstract—This paper describes a proposed data collection scheme to support capacity estimation at small airports that serve primarily general aviation aircraft. Such airports do not have automated data collection systems, nor are they well represented in the existing suite of capacity estimation tools. Capacity estimation is an essential tool for applying for capacity enhancement funding. This paper describes the types of data that are necessary to participate in this process, as well as a scheme based on local, portable installations of Automatic Dependent Surveillance-Broadcast receivers to collect the raw aircraft type and trajectory data that would be necessary to generate these more refined data. The paper also outlines data processing steps that can be taken to deduce more sophisticated insights from the raw data.