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Visually Analyzing the Impacts of Essential Air Service Funding Decisions

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ABSTRACT

Essential Air Service (EAS) is a U.S. government subsidy program which ensures maintenance of commercial airline services in small deregulated communities. The program's budget currently is around \$250 million annually, which is used as subsidy for airlines to maintain a minimal level of scheduled air service in relatively smaller airports. It is evident that 2% of the FAA budget is being spent to maintain air service in smaller communities, but there is not enough evidence to prove that all the current decisions made by Congress about EAS are advantageous. To understand these decisions, 15 years of data produced by the US Department of Transportation and Bureau of Transportation Statistics needs to be analyzed using an exploratory approach. The goal of our paper is to collect the EAS subsidy data produced by the US Department of Transportation and Bureau of Transportation Statistics and develop a multi-year and multi-location visual analytics tool which uses graphs and user-interaction to make it easier for decision makers to understand and analyze the data. We want to use this visual analytics tool to analyze the EAS funding decisions and determine its impact upon the funded airports, based on changes in factors like per passenger subsidy trends, total number of arriving and departing flights and total amount of freight being transported.

KEYWORDS

Visual Analytics, Essential Air Service, Efficient funding, Airports, Subsidy, Data