

## 9. SUGGESTED UPDATE METHODOLOGY FOR FUTURE REPORTS

To continue improving the understanding among decision makers, local governments, the transportation planning community and the general public about the important linkages between Vermont's public-use airports and the State's economy and quality of life, five-year updates of this Economic Impact Study are recommended.

The methodology employed in the current report should be repeated in future reporting as a way of ensuring meaningful comparisons over time. Because a methodological foundation has already been laid by this Study, updates can be conducted inexpensively. Many tasks, completed once already, do not have to be repeated. For example, time and funds for survey development need not be expended a second time. Much of the explanatory text in this report, to which the State owns the rights, can simply be copied into updated versions. While VTrans personnel were active and indispensable participants in this Study, the State may opt to take a greater role in the actual conduct of work of an update, for example, sending out and processing surveys, in the interest of minimizing costs.

Every study has a way of being improved, whether to increase the breadth and quality of information gathered or to reduce expenses. In the case of this document, the opportunities present themselves in the introduction of the Study to airport managers, and in the data-gathering stage.

**Liasing with Airport Managers** – The importance of facility managers in the process is apparent: airport managers know their facilities better than anyone else. They are the most knowledgeable about how their airport is used, and how it is perceived by the surrounding community. It is critical that they understand the State's reasons for conducting an update to the Study, and their role in that update.

This Study benefited enormously from the contributions and enthusiastic support of airport managers throughout Vermont. It is recommended that the State do even more to build awareness of the Study process among airport managers, and secure their active participation from the very beginning of an update process.

For example, at the outset of the update, VTrans might host a day-long seminar for airport managers to discuss the Study and its importance, and to introduce them to those who will be conducting the update. Airport managers are the most important source of local information, and a vital link to local aviation communities. Thus, it is recommended that particular effort be placed making them familiar with the update and those conducting it, so that information might flow freely and easily from the very start of the process. The investment in a short seminar will be recouped in terms of the time and redundancy of effort saved as the process of building rapport between those conducting the update and facility managers would be accelerated.

**Data-Gathering** – Two areas can benefit from data-gathering methods improved by insights gained during this Study process.

1. The State has a range of options available to improve data about counts of aircraft operations at individual facilities.
2. Improved techniques can also raise the response rate of off-airport establishments to the airport-dependent business survey.

*Counting aircraft operations* In Vermont as in every other state, the managers of small general aviation airports that do not have a tower on site must make educated estimates of the number of annual aircraft operations at their facilities. However, there are a variety of options for the State to explore in order to improve the accuracy of reporting at non-towered airports.

Acoustic counters are available that log aircraft operations by sensing the noise generated by arriving and departing planes. Acoustical counters have come a long way in the past two years and are now considered highly reliable, relatively inexpensive to purchase and maintain, easy to use, and the data is easy to download and analyze. In addition, some acoustical counters can make a distinction between various aircraft types.

This equipment offers reliable total operations counts at a reasonable price, and is a wise investment to gauge facility usage for planning purposes. For the purpose of economic impact modeling, however, counters pose a drawback in that they do not distinguish between local and itinerant (originating at least 20 miles away) operations. It is itinerant operations that

bring visitors and thus have an economic impact, while the impact of a touch-and-go, for example, is comparatively negligible. Thus, an itinerant-to-total operations ratio must be determined separately.

To supplement acoustic counter data, VTrans may wish to launch an operations survey effort. In this scenario, staff would be stationed at each public-use airport for a fixed amount of time each year or season to count the number and log the type of operations. For example, staff might spend two weeks at each airport per year or one week per season. The aircraft operations profiles resulting from the surveys could then be applied to total operations figures from acoustic counters.

This Study effort gained much from the expertise of a professional survey firm on the consultant team. However, the expense in deploying a private-sector firm for one or two weeks at each of seventeen public-use airports would simply be prohibitive. Thus, VTrans might hire a private-sector survey firm to train its own State personnel if the human resources are available, or temporary workers, for such an intensive survey effort. In each case, overhead expense will be avoided.

To add additional texture to the data, the State also has the option of purchasing instrument flight plan data. For nearly all operations by large and fast aircraft, such as jets and turboprops, pilots file a flight plan with the FAA and are tracked by the national air traffic control system. This flight plan and air traffic control data is gathered at a centralized facility and passed on to the private sector in the form of the Aircraft Situational Display to Industry (ASDI) feed.

Aircraft operational data for Vermont airports can be purchased from an ASDI vendor. For each operation, data includes the N-number or flight number, the aircraft type, the type of operation, and the time and date. The downside to this option is that it only captures instrument flight rule (IFR) operations. A majority of operations at small general aviation airports take place according to visual flight rules (VFR). However, VFR operations are more often conducted for recreational or instructional purposes, such as touch-and-go landings. IFR operations, because they include nearly all jet

and turboprop flights, account for a percentage of aviation-related economic impact much larger than their percentage of aircraft operations.

These options are not mutually exclusive, but complementary. Pursuing each will provide data on a facet of aircraft activity that the others cannot.

*Improving airport-dependent off-airport business survey response* The response rate for the airport-dependent off-airport business survey was nearly 13 percent; for a mail-out survey of this size, the total rate of response was above average. However, the response rate varied widely among different regions of the State. A focus on increasing the total response rate should particularly raise returns in areas with few responses in this first effort.

There is not an easy solution for achieving this objective. Many businesspeople are inundated with administrative tasks on a daily basis and simply do not have the time to fill out a survey. Still other firms are large enough that surveys often do not make it to the right person, who must be knowledgeable about the company's use of aviation. In this Study, the effort to gather information was made by the Study team through surveys and follow-up phone calls as well as by some airport managers with follow-up phone calls.

Going forward, an update to this Study will benefit from even more involvement by airport managers in gathering information about the businesses that rely on their airports. In some cases, local businesses may more likely to provide the information to their local airport manager than to a consultant with whom they are not familiar.

Another point of guidance is to work with and through local chambers of commerce. In this effort, surveys were sent out from the offices of the consultant team. If surveys were instead sent from local chambers of commerce and affixed with the signature of a local development official with whom the businessperson might be familiar, response rates would improve. Local chambers may also be convinced to aid in the follow-up efforts with phone calls. Again, co-opting the familiarity of businesspeople with local chamber officials will aid the data-gathering process.

Finally, instead of sending out paper surveys, a web-based system for data collection and reporting might be developed. Constructing such a system would require some investment of time and explicit budgeting, however, it may increase response rates and could save thousands of dollars in printing, postage, and hours spent preparing materials for mailing. VTrans may possess the necessary expertise in-house. For those without Internet access, alternative paper-based mailed surveys would still be employed.

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