ADVISORY COMMITTEE MEETING #3

Meeting Summary

INTRODUCTION

The third meeting of the WSDOT Aviation Economic Impact Study Advisory Committee took place on September 27, 2011 at the Confluence Technology Center in Wenatchee, Washington. A total of nine Advisory Committee Members attended in person and eight participated via web conference. There were two additional attendees and seven members from the project team in attendance.

LIST OF ATTENDEES

Committee Members

Attending in Person

Craig Baldwin, Grant County Airport

Christina Bandaragoda, Save Our Communities

Todd Brunner, Brunner Construction

Amber Hansen, Port of Sunnyside

Sally Harris, Department of Commerce

Bob Isaman, Washington State Emergency Management Division

Mayor Joe Marine, City of Mukilteo

Jim Reinbold, City of Chelan

Mayor Mary Verner, City of Spokane

Participating by Teleconference

Peter Anderson, Galvin Flying

Tim Brooks, Kenmore Air

Lorrie Brown, Office of Financial Management

Jerry Litt, Washington Transportation Commission

Pat McClain (sitting in for Mayor Ray Stephenson), City of Everett

Page Scott, Yakima Valley Conference of Governments

David Sypher, City of Kelso, Kelso-Longview Regional Airport

Ryan Zulauf, Washington Airport Management Association

Other Attendees

Greg Figg, WSDOT Eastern Region

John Townsley, Participant

Project Team

Michael Hodgins, BERK

Kapena Pflum, BERK

Paul Roberts, BERK

Gary Simonson, BERK

Tristen Atkins, WSDOT Aviation

Nisha Marvel, WSDOT Aviation

John Shambaugh, WSDOT Aviation

MEETING PURPOSE

The purpose of the meeting was to:

- Present new findings from the industry and airport-level analysis.
- Provide an overview of Economic Calculator features and applications.
- Gather input prior to the writing of the draft report.

MEETING SUMMARY

Introductions and Welcome

Paul Roberts of BERK welcomed the Committee to the meeting. All attendees, remote participants, and project team members then introduced themselves to the group.

Paul provided a brief overview of the two previous meetings and reviewed the current agenda. He noted that the project team would be sharing more details about the development of the study's analytical components and tools, including the industry level analysis, the airport level analysis, and the economic calculator.

Industry-Level Preliminary Findings: Presentation and Discussion

Overview

Kapena Pflum of BERK presented several components of the industry level analysis. He began with an overview of the analysis and highlighted the key components:

- an activity analysis using five- and ten-mile buffers around airports,
- specific industry concentrations within five miles of airports,
- profiles of selected industries and their relationships with aviation, and
- an activity analysis using sub-state geographies (WSDOT regions).

Buffer Activity Analysis

For the buffer analysis, Kapena showed the percentage of State GBI captured within the buffers by airport classification; for all airports, 70% of State GBI is captured in the five-mile buffer and 97% in the ten-mile buffer. Kapena then discussed industry concentrations, highlighting the top ten industries within five miles of airports using an economic activity concentration index. This was followed by a breakout of industry concentration by airport and a look at the relationship between these industries and aviation. Generally, it was emphasized that the purpose of the industry-level analysis is to look at correlations and relationships between activity and airports, not to imply causation.

Selected Industry Profiles

Kapena then presented the selected industry profiles for several industries chosen for analysis: professional and business services, manufacturing (including aircraft manufacturing as a subset), agriculture, and tourism. The profiles included several components:

- a map showing 2010 activity concentration (including total jobs and GBI)
- a scatter-plot showing five-mile buffer concentration around airports,

- some key location decision factors,
- ways in which this industry uses aviation, and
- the overall importance of aviation to this industry.

Economic Activity by WSDOT Region

Kapena concluded the industry-level section with a brief look at roll-ups of economic activity by WSDOT region, showing total GBI by distance from the airport, as well as the distribution of economic activity within each region. The Northwest region had the highest GBI by a large margin and most regions (aside from the Olympic Region) had the majority of economic activity occur within five-miles of an airport.

Throughout the industry level presentation, Committee members offered various questions and comments. Key discussion points included:

- **Industry Definitions.** There were several questions about how industries were being defined for the analysis. The project team explained that they were relying primarily on DOR data and 3-digit NAICS codes, but were also using more specific codes (4-6 digit NAICS) if it was feasible and potentially more precise.

  In particular, Committee members asked specific questions about definitions for the following industries:

  - ***Aircraft Manufacturing.*** A couple of Committee members were concerned that manufacturing was under-represented in certain areas because the definition was too constrained. One Committee member noted that maintenance was likely not being captured by the NAICS codes applied to the analysis, while another highlighted that some manufacturing companies have expanded the scope of their operations so they no longer are classified under manufacturing NAICS codes and would not be captured. The project team stated that they would like to refine their definition to better capture the industry and welcome input from Committee members on how to do so. They also noted that the stakeholder interview process could potentially reveal some key case studies of businesses that are based around aviation but have expanded their scope.
  - ***Tourism.*** There were questions about whether restaurants or the wine industry were being included in the analysis, as well as a question regarding the differences between the tourism component of the industry-level analysis and the visitor spending component of the airport-level analysis. The project team responded that they were using a relatively narrow definition for tourism-based activity, and not including restaurants. They also noted the wine industry was likely not being captured, as the focus is on businesses that serve tourism, not attractions.

    In addition, they also explained that the tourism component of the industry-level analysis was from the perspective of businesses that cater to tourists within a certain distance of airports, while the visitor spending analysis was from the perspective of visitors coming through a particular airport.
  - ***Agriculture.*** One Committee member noted that basing the agriculture analysis on DOR data is problematic, as most agricultural activity is exempt from taxation. She offered to provide a different dataset from the State Department of Agriculture. The project team noted that they have applied an adjustment factor to DOR data to account for tax exemption issues but would appreciate any data that may be more accurate and incorporate it into the analysis if possible.

- **Buffer Analysis/Industry Concentration Limitations.** The Committee also noted several key limitations of the buffer analysis and industry concentration index:
  - ***Smaller Airport Communities.*** One limitation highlighted was that in some of the smaller airport communities, a 10-mile buffer captures all development and population in the area. Therefore, a strong industry concentration within that buffer does not reveal anything significant about the relationship between the industry and airport. The City of Sunnyside, where food manufacturing is a large portion of the economy, was provided as an example where the entire city is captured in the buffer. While this places food manufacturing high on the concentration index, it would be misleading to imply any type of correlation with the airport.

    The project team acknowledged that this was a limitation and also noted that, in some cases, widely dispersed activities occurring outside the buffer were being captured as one data point in an office within the buffer. They said they would continue to examine how to account for these limitations.
  - ***Concentration Index.*** One Committee member noted that, when an industry (such as aircraft manufacturing) has almost all of its activity statewide occurring near airports, the concentration index will be close to 1.0, which masks a very strong correlation. This makes it impossible to distinguish between industries that are evenly dispersed across the state (who may also be close to 1.0) and those that are concentrated almost entirely near airports. The project team agreed that this was a significant limitation and said they may incorporate an additional coefficient to account for these differences.
  - ***Aircraft Manufacturing Outside of the 10-mile Buffer.*** It was also noted that several aircraft manufacturing companies do not fall within the 5 or 10 miles buffers. The project team again noted that these businesses would hopefully be identified through the stakeholder interviews.
- **Questions about Correlation and Causation.** Several Committee members asked questions relating to the correlation analysis. Some were concerned that the analysis was implying that airports are a primary location decision factor for most businesses. They noted that establishing causation is not possible, and that other entities (such as ports) may have at least as much influence. Another Committee member suggested using a more nuanced word than "correlation" to describe the analysis, since it may imply a sense of causality.

  The project team re-emphasized that the study does not attempt to establish causation, but to highlight patterns and show relationships between activity and airports. They noted that airports and businesses often have similar location decision needs, and that this explains high concentrations of some industries near airports. They also highlighted that one of the biggest takeaways from the analysis so far is that, for most industries, airports are not a primary driver. However, on a meta-level, almost all of the activity is a reasonable distance from airports.

  In addition, the project team said they would consider using a word other than "correlation", and stressed that using the 'right' language in the report will be crucial to conveying the results effectively.

Revisiting the Airport-Level Analysis: Presentation and Discussion

Overview

Kapena Pflum and Michael Hodgins of BERK re-introduced the airport-level analysis, highlighting that that this component represents the more traditional economic impact analysis, focusing on jobs, wages, outputs, and multiplier effects. Unlike the industry analysis, which relies on buffers, this perspective

looks only at economic impacts occurring through: 1) aviation-related activity on the airport footprint or 2) visitor spending by those who travel through the airport.

Kapena then went through the airport footprint map to remind Committee members of the geographic constraints of the analysis, and also showed a draft airport profile. He noted that the project team is currently in the process of collecting and incorporating feedback from all 136 airports in the state, and that this feedback will affect the final economic impact numbers. He also noted that they are currently revisiting some assumptions regarding GBI and total output that may affect the final estimates. It was emphasized that the numbers being shown were in draft form and subject to revision.

To provide a broad perspective on how economic activity is distributed across the state's airports, Michael then showed a map highlighting "total output by airport." The state's top four airports (Paine Field, SeaTac, Boeing Field and Renton Municipal) all have total output that is exponentially higher than any of the other airports in the state. The project team cautioned against marginalizing the importance of smaller airports based on statewide comparisons, as they all likely have significant economic impacts on their respective local communities.

Economic Impact Roll-ups

Michael then presented a series of roll-ups of total economic impacts, based on different criteria. The first showed impact by WSDOT Region, with the Northwest Region accounting for 97% of total jobs and 98% of total output. Another graph showed the source of impacts by region, with businesses on the airport footprint accounting for most jobs and output in the state, and visitor spending accounting for a smaller percentage (except in the Eastern and Southwest Regions).

The second series of roll-ups showed impact by airport classification, with commercial and regional accounting for over 99% of total jobs and output. For most airport categories, visitor spending generates the large majority of jobs and output, but within the regional airports, it is outweighed by the presence of Boeing. The last series highlighted several key statewide impacts, including direct, indirect & induced, and a breakdown of impacts from businesses operating on the footprint and visitor spending. In total, the estimated direct impacts are: 129,530 direct jobs, $9.2 billion in direct labor income, and $32.7 billion in direct output.

Michael then briefly addressed the differences between the current study and the 2001 study, and noted that comparing the results is difficult because of difference in methodology. Key points are that unlike 2001, the new study: includes Boeing and other through-the-fence connections, limits economic activity on airport footprints to businesses that are aviation-dependent, and uses a consistent statewide methodology to estimate airport activity. The project team noted that comparisons with other airport studies will also be difficult as a result of different methodologies. These differences will be raised explicitly in the final report to prevent inaccurate comparisons between this study and other airport economic impact studies.

Fiscal Impacts

The airport level presentation concluded with a look at fiscal impacts. Michael noted that the current study goes beyond many traditional tax studies by looking at how airport-related activity generates tax revenue. He noted that this was based on an understanding of local and state tax structure, not national averages. After reviewing the types of taxes that would be incorporated, Michael showed a map highlighting total fiscal impacts by airport classification, with Commercial and Regional generating 99% of the fiscal impacts. He then reviewed the source of fiscal impacts by classification and a breakdown of fiscal impacts by tax type. Sales tax and B&O tax were noted as the largest sources.

Throughout the airport level presentation, Committee members offered various questions and comments. Key discussion points included:

- **Breaking out the Economic Impact Analysis in Different Ways.** Several Committee members offered different ways of breaking out the analysis to potentially bring out key findings that may be masked by the current assumptions. The project team was amenable to these suggestions, and agreed that pulling out or reconfiguring certain components of the analysis (i.e. "slicing and dicing") would better allow the full story to be told. Suggestions provided by the Committee included:
    - ***Creating a new 'Aircraft Manufacturing' Airport Classification***. Some Committee members suggested that the project team should pull the major aircraft manufacturing airports out of the regional category and into a separate classification. This would prevent the other regional airports from being overshadowed and distinguish the exclusive impacts of the manufacturing-oriented airports.
    - ***Pulling out the 'Big Four' Airports.*** Another suggestion was to conduct the analysis again without the 'big four' airports (SeaTac, Paine Field, Renton Municipal, and Boeing Field). As the scale of economic impacts at these airports is so much greater, it dramatically skews the data at a statewide level and in the Commercial and Regional classifications. Pulling them out would allow analysis of the differences between the remaining airports that are potentially being masked or overshadowed by the 'big four'.
    - ***Keeping the Airports but Breaking out the Manufacturing Components.*** Another variation suggested by Committee members was keeping the major aircraft manufacturing airports in the Regional category, but breaking out the manufacturing components and showing those separately. That way, other components of those airports could be preserved and directly compared to other Regional airports.
- **Capturing the Local Importance of Airports.** Some Committee members expressed concern that the significant impacts smaller airports have on their local community may be lost in the rolled-up findings. One Committee member suggested reporting airport output as a percentage of the given area's total output. Another suggested comparing the economic impact, on an airport-by-airport basis, to a specific standard. The project team said they would try and include some of those elements. They generally agreed that providing meaningful context for output estimates in smaller communities would be a critical component of the final report.
- **Capturing Intangible but Valuable Airport Contributions.** A couple of Committee members expressed concern that the airport level analysis is not capturing the intangible but valuable benefits of airports, such as medical evacuations or broader business attraction. The project team noted it would be impossible to quantify and capture these elements in the traditional economic impact section of the analysis, but that the user perspective analysis would be dealing directly with these types of contributions.
- **Questions about Fiscal Impact Analysis.** The Committee had a range of questions regarding the fiscal impacts analysis. One Committee member asked if the study could break out fiscal impact by industry (e.g. aircraft manufacturing, agriculture, etc.) to assist policy makers. The project team responded that this analysis was focused on the airport footprint, though it may be possible to show some industry break out.

  There were also questions about Boeing's overall tax structure, and if the study was capturing sales tax paid by Boeing when they purchase materials or equipment. The project team stated they were focusing on the taxes collected on spending and activity within the airport footprint and not on the

taxes paid by businesses when they make purchases elsewhere, which will likely understate the total tax impacts of the activity within the footprint. A Committee member offered to provide imputations of sales tax data from businesses when they make purchases.

Finally, there was a discussion around the differences in aviation fuel tax structure between Commercial and other types of airports. One Committee member asked why SeaTac's total is not higher, and the project team responded that commercial air carriers are exempt from the state aviation fuel tax, though all commercial carriers pay the federal aviation fuel tax.

Economic Calculator: Presentation and Discussion

Michael Hodgins of BERK then presented an overview of the Economic Impact Calculator, one of three technology tools being developed as part of the project. The Economic Calculator will be a tool for airport managers and other users around the State to run "what-if" scenarios for changes in airport activity and see estimated changes in economic impacts. Users will be able to change flight activity, business activity, visitor activity, and construction projects. Michael highlighted that the tool is not designed to measure costs or be an all-encompassing decision tool, but to utilize the study's findings regarding relationships and correlations between activities and impacts to the benefit of decision makers.

Michael then detailed a five-step guide outlining how users will be able to use the economic calculator, followed by a brief look at a draft interface for the calculator. Finally, he went through a specific example of how an airport manager would utilize the calculator: estimating changes in economic impacts from the addition of a new hangar.

After the calculator presentation, a Committee member asked the following question:

- **Individual Airport Context.** One Committee member asked how the calculator would address the specific needs and conditions of individual airports. He noted that the calculator would not account for the fact that every airport has its own unique context and could potentially allow users to estimate unrealistic scenarios. The project team explained that the user has to apply significant thinking and consider how the specific airport will be affected in order to understand the benefits. They stressed that the calculator was not all-knowing and appropriate usage of the tool will require local decision makers to do some research and preparations on their own.

Roundtable and Next Steps

The meeting concluded with a brief roundtable, where every committee member who wanted to contribute had a chance to speak. In general, Committee members expressed appreciation for the work being done, and it was noted that the products will be useful tools for decision-makers.

Paul Roberts then reminded the Committee of the various opportunities for continued feedback, and noted that meeting #4 (the final meeting) will be in Seattle on November 1. Michael provided a brief overview of the next meeting, noting that the project team will be asking for feedback on the report and prompting a discussion on key takeaways from the study.

Paul Roberts thanked all attendees and remote participants for their contributions and the meeting adjourned.