



# The Economic Impacts of the Pullman-Moscow Airport and Realignment Project

And Contribution to the Regional Economy

*Sponsored by  
Pullman-Moscow  
Regional Airport*

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## And Contribution to the Regional Economy

### Executive Summary

- This report is an economic impact study of the Pullman-Moscow Regional Airport (PUW) and airport realignment. It was sponsored by the PUW and completed in March, 2016. The author of the study was Steven Peterson, Research Economist and Clinical Assistance Professor, Economics, College of Business and Economics, University of Idaho.<sup>1</sup>

### Why is the Realignment Project Necessary?

- The PUW airport will lose commercial air service from noncompliance with FAA standards from inadequate airport infrastructure and face the possible long run decline of the PUW airport to a general aviation airport due to infrastructure decay and the loss of federal funding.
- The runway and taxiway are too close together for the primary Horizon/Alaska Air commercial airplane: The 76 seat (ARC) C-III Bombardier Q-400. In addition the runway together is too short (6,731 feet long) and too narrow (100 feet wide) for larger aircraft.
- The region will lose approximately \$2.5 million per year in federal grants and contracts that are tied to commercial air service.
- The current airport alignment causes an average of 124 average annual commercial flight (in and out) and 160 charter flight cancellations/diversions per year due to poor weather conditions.
- PUW reliability in the winter is an important impediment to airport use and future growth.
- The total realignment cost is \$119 million (including a 25% contingency fund) and the project is expected to take five years to complete (2015 to 2019).
- Most of the construction is being funded by the federal government and represents an infusion of funds into the local economy (approximately \$109 million) with a local match of about \$9.66 million (including a contingency fund).
- Most of the local match has been achieved including a \$2 million (+) commitment from Schweitzer Engineering Laboratories (SEL) and Ed and Beatriz Schweitzer.

### Why does the Regional Economy need PUW Air Service?

- In the 21st Century, airports have emerged as a regional economy's most prominent, if not the most important, transportation network. Airports, even more than modern computer networks, tie the modern world together. In the Palouse region (Moscow, Idaho - Pullman, Washington), air travel is especially important.
- The Palouse is transportation constrained, located in a rural, geographically isolated and hard to reach region of Idaho and Washington states, respectively, situated about nearly 90 miles south from the

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<sup>1</sup> This analysis as well as its conclusions is solely those of the author and do not necessarily represent the views of the University of Idaho or any other individuals or organizations.

nearest urban center (Spokane, WA). The highways are underdeveloped, especially in Idaho, passenger rail service is unavailable, and public transportation is limited.

- Airports today are much like the railroads of the old “Wild West.” Communities connected to the railroads usually thrived and prospered while those that did not have a rail connection often died. They are a necessity for modern economic development, especially in rural regions of the U.S.
- The global market place for large employers (such as Schweitzer Engineering Laboratories) and professional employees is fiercely competitive. The PUW airport increases regional competitiveness for the attraction and retention of both employers and professional employees.
- Air travel improves the quality of life of the region, promotes tourism, increases market access to start-up firms, provides access to emergency healthcare services, and promotes arts, recreation, and entertainment.

## **Higher Education: A Key Regional Industry Supported by PUW Air Service**

- Higher education is the largest regional industry and especially dependent on air transportation which is essential for university research support, attracting and retaining world class faculty and staff, student recruitment, and support for sports teams.
- Approximately 26,199 university related flights occurred in 2015. (WSU: 15,499, UI: 10,700) costing approximately \$9.0 million. About, 11,000 of these flights originated from the PUW airport (42%).
- The Palouse (Whitman County and Latah County) has two major land grant universities (Washington State University and University of Idaho) with 32,000 students (36,294 students including Lewis-Clark State College-LCSC).
- The regional economy is highly dependent on the three universities (WSU, UI, and LCSC) which directly employ 13,946 people locally and attracts \$441 million direct research dollars annually.
- Factoring in the multiplier effects, the universities create 25,935 local jobs with a \$1.6 billion in gross regional product contribution annually.
- The presidents of the Palouse universities (WSU and UI) fly frequently to their respective state capitals (Olympia, Boise) and rely on air travel nationally for their official activities.
- The PUW airport provides support for over 40 charter flights per year for sports teams.

## **High Technology Manufacturing and Services (M&S): An emerging Key Industry Supported by PUW Air Service**

- Schweitzer Engineering Laboratories (SEL) forms the epicenter of a new emerging high technology manufacturing and service sector producing living wage jobs. This rapidly growing industry was in its infancy 25 years ago (effectively) and it is highly dependent on air transportation. SEL, for example, has five jets, four of them stationed at the PUW airport with its corporate headquarters in Pullman. Many of the other smaller technology firms are also dependent on PUW air transportation as their gateway to national and international markets and suppliers.
- The high technology industry (M&S) consists of over two dozen firms and directly creates 3,650 jobs in the Palouse Region (or 4,285 jobs in the Quad County).

- Factoring in the multiplier effects, M&S industries creates 6,107 local jobs with a \$374 million in gross regional product contribution to the Palouse economy.
- PUW air service is essential for the future high technology manufacturing (and services) cluster growth.

### Economic Impacts of the Realignment Construction Project

- PUW construction realignment project will add nearly 50% (\$23.8 million per year for five years) to the average annual private Palouse construction expenditures (which averages \$49 million per year).
- PUW construction realignment project will create 93 *direct* jobs annually for five years.
- Factoring in the multiplier effects, the project will create 226 total jobs, contribute \$20.1 million to gross regional product to the Washington State economy (mostly in Whitman County), and add \$3.0 million in local and state taxes coffers annually.

### Economic Impacts of the PUW Annual Operations

- The PUW airport annually creates 212 direct jobs in the regional Quad County economy.
- Factoring in the multiplier effects, the PUW airport creates 300 local jobs, contributes \$17.4 million in gross regional product, and adds \$2.72 million in local and state taxes annually.

### PUW Growth

- PUW enplanement increased 20% from 2014 to 2015 (41,525 to 49,830) exceeding recent forecasts and expectations. There were over 100,000 passengers (both ways) at the PUW in 2015 including charters.
- PUW airport has increased its approximate catchment (i.e. regional market share) from 26% to 37% based on the previous Mead and Hunt (M&H) forecast assumption of 135,164 catchment enplanements in 2015.
- If the PUW airport captured all the airline travelers in this market region, the economic impacts of the PUW airport would increase from 300 jobs to 814 jobs (including the multiplier effects) and contribute \$47.2 million in gross regional product.
- Future Growth: The M&H baseline forecast (after adjustments for current enplanement growth) is projected to reach nearly 100,000 enplanements or double the 2015 level by year 2038. The M&H unconstrained forecast exceeds 150,000 PUW enplanements by 2038.
- Future Growth: If the adjusted baseline projection occurs, the PUW economic impacts will increase from 300 jobs impacts in 2014 to 744 jobs (including the multiplier effects) in 2038 and gross regional product will increase from \$17.4 million to \$43.1 million (in constant 2014 dollars).

### Taxpayer Rate of Return on Assessment

- Annual taxpayer rate of return is estimated to be 6.41 as measured by year 2014. The local annual taxpayer and institutional support for the PUW airport is \$130,711 (from Pullman, Moscow, WSU, UI, and Whitman County). The annual local tax revenues (mostly property taxes) generated (including the multiplier effects) is \$838,394 from PUW operations. For every one dollar of tax payer support, a total of 6.41 dollars are created by the PUW operations.

### Palouse Region Economic Integration

- Total full and part-time 2015 Quad County employment was 80,383 jobs of which 25,975 jobs were in the Nez Perce County, Whitman County (25,677), Latah County (20,194), and Asotin County (8,537).

- Whitman County employment grew 20% cumulatively from 2001 to 2015, Asotin County (9.6%), Latah County (6.4%), and Nez Perce County (3.1%)
- Whitman County is projected to exceed Nez Perce County in total employment in 2016/2017.
- Whitman County has become a job leader with manufacturing and high technology employment increasing 228% cumulatively from 2001 to 2015. WSU also increased student enrollments by nearly 3,000 students over the same time period.
- Moscow and Latah County benefit nearly equally from Whitman County economic growth due to east-west economic integration. Moscow is the retail trade hub of the Palouse and the “home” of the Palouse. There is substantial spillover growth from Pullman to Moscow. As Pullman grows, so does Moscow.
- Latah County is a job importer. In 2013 there were 2,152 (net) residents who lived in Latah County but worked outside the county (mostly in Pullman).
- Whitman County is a net job exporter. Approximately 2,171 (net) Whitman County workers lived outside the county (mostly in Moscow and Latah County).
- These income inflows from commuting patterns bring in approximately \$152 million per year to Latah County which creates an approximate 800 jobs and \$41 million in gross regional product. (There is also a Whitman County net economic outflow of \$138 million).

### **Loss of the PUW Airport: Impacts of the Status-Quo --no Realignment**

- The immediate loss of 226 jobs due to the construction, \$20.1 million in gross regional product and \$3.0 million in state and local taxes (including the multiplier effects).
- Short-term: The loss of commercial air service that will reduce 3/4ths of the PUW’s current operation as it transforms to a general aviation airport, costing 225 jobs, \$13 million in gross regional product, and \$2 million in local and state taxes.
- Intermediate-term: An *additional* loss of general aviation services and a reduction of high technology industry employment related to air transportation and general company transportation services. It will cause an estimated reduction in Palouse employment of 200 total jobs and \$12 million in gross regional product including the multiplier effects.
- Long-term (*possible impacts*): The potential loss of one or more major high technology employers creating an additional 3,347 jobs and \$204 million in gross regional product, including the multiplier effects.
- Long-term (*Possible impacts*): Loss of regional competitiveness, greater difficulty in attracting new firms, and to the regional economy, reduction in regional attractiveness for professional employees and researchers, slowing of university growth, and reduced tourism and visitor spending.

## Conclusions and Observations

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In the 21st Century, airports have emerged as a regional economy's most prominent, if not the most important, transportation network. Airports, even more than modern computer networks, tie the modern world together. In the Palouse region (Moscow, Idaho - Pullman, Washington), air travel is especially important.

The PUW airport is an essential infrastructure component to the Palouse economy:

Construction Realignment Impacts: The PUW airport construction activities will directly employ 93 workers for five years, increasing to 226 workers when the multiplier effects are included, adding \$20.1 million to gross regional product, and \$2.5 million in state and local taxes each year.

Current Operational Impacts: The PUW airport operations and activities directly employs 212 workers, increasing to 300 workers when the multiplier effects are included, adding \$17.4 million to gross regional product, and \$2.7 million in state and local taxes annually.

Expected Future Growth of Operations: The PUW airport has two major sources of potential growth: 1) Future growth and expansion of the Palouse regional economy, and 2) Greater capture of market share from its catchment region:

- Palouse Regional Growth: The operational impacts increase to 744 workers including the multiplier effects (for the baseline forecast in 2038), and will add \$43.1 million to gross regional product, and \$6.7 million in state and local taxes.
- Capturing Market Share: At *current* full market share, the operational impacts would increase to 814 workers including the multiplier effects (for 100% market capture), and will add \$47.2 million to gross regional product, and \$7.4 million in state and local taxes at that time.
- Capturing Both: Proportionally, future impacts will include both future Palouse economic growth and capturing greater market share, so these impacts could increase further.

Loss of the PUW Airport: Impacts of the Status-Quo --no Realignment:

- The immediate loss of 226 jobs due to the construction, \$20.1 million in gross regional product and \$3.0 million in state and local taxes (including the multiplier effects). Longer term: The loss of commercial air service that will reduce 3/4ths of the PUW's current operation as it transforms to a general aviation airport, costing 225 jobs, \$13 million in gross regional product, and \$2 million in local and state taxes.
- Long-term (*possible impacts*): Loss of regional competitiveness, greater difficulty in attracting new firms, and to the regional economy, reduction in regional attractiveness for professional employees and researchers, slowing of university growth, and reduced tourism and visitor spending.