



**City of Vancouver  
Vancouver, Washington**

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**Pearson Airfield Business Plan  
March, 2005**





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## **Project Team**

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### City of Vancouver

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### Key Stakeholders

Aviation Advisory Committee

National Park Service

Vancouver National Historic Reserve Trust

## **Preface**

*This business plan is the exclusive property of the City of Vancouver, Washington. It is a combination of private and public sector work that includes significant research conducted by Century West Engineering, Inc. under contract, as well as original research and analysis by City staff. Significant staff contributions were provided by Ernie Vande Zande, Airport Manager; Jeanette Bader, Program & Policy Development Manager; and Tom Nosack, Performance Analyst.*

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## **Pearson Field Business Plan**

### **Executive Summary**

**Policy Statement:** The City of Vancouver recognizes Pearson Field as a valuable transportation, public service and economic asset of both historic and contemporary significance within the Vancouver National Historic Reserve. The City's long-term vision for Pearson Field is to maintain the airport's existing character and capabilities while balancing the needs to the historic district and surrounding community.

**Business Plan Objective:** Review the effectiveness of business operation of Pearson Field; identify the conditions affecting operations and recommend actions necessary to consistently meet the City's financial performance standards established for enterprise funds.

**Overview:** In early 2004, the City of Vancouver contracted with a multi-disciplined consulting team led by Century West Engineering to assist in the development of a business plan for Pearson Field. The consulting team efforts included a review of agreements, the current airport master plan, the Fort Vancouver National Historic Site draft and final General Management Plan, airport budgets, financial schedules and projections, and interviews with key stakeholders, including the National Park Service, National Historic Trust Reserve, Pearson Air Museum, Airport Advisory Committee representatives and City staff.

Through an extensive range of interviews with key stakeholders and the evaluation of available documents, several key conditions that currently affect, or have the potential to affect, the existing and future financial performance capabilities of Pearson Field were identified. These conditions fall into several categories:

- Airport Operational/Regulatory Issues
- Airport Financial Management
- Airport Management
- Market Factors
- Land Use and Zoning

Although the project was originally envisioned as a typical public facility business plan, it soon became apparent that the conditions affecting Pearson Field operations were very unique, complex, and politically sensitive. As a result, a significantly more detailed analysis was required in order to achieve the basic objectives of the business plan. Through an extended process, a variety of overlapping policy, regulatory and technical issues were identified and examined in great detail by the consultant team. This effort resulted in a simultaneous view of all critical issues within a common frame of reference. Only through this process were the critical interdependencies clearly recognized for their significance in affecting the financial performance of the airport.

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These factors represent the key issues for the City of Vancouver to consider when determining future actions to achieve the City's policy objectives and improve the financial performance of Pearson Field. A brief summary of conditions is provided in the executive summary and detailed evaluations are contained in the technical report that follows this summary.

## I. Airport Operational/Regulatory Issues

**Interest: Efficiently and effectively manage Pearson Field as a public facility in cooperation with stakeholders.**

Policy: Preserve continued operation of Pearson Field in a manner consistent with its complex surroundings which includes urban, residential, open space, historic land use and multi-modal transportation systems.

Challenges:

- a. The western half of Runway 8/26 is located on National Park Service (NPS) property and the eastern half of the runway is located on City-owned property. This condition requires formal agreements between the City and NPS for the ongoing management and operation of Pearson Field.
- b. The existing City-NPS agreement for the operation of Pearson Field extends through 2022, at which time a transition to historic aircraft use is anticipated. The remaining term of the agreement that specifies current operations (currently less than 18 years) presents a significant constraint in financing the City's capital facilities plan through the Federal Aviation Administration (FAA). The FAA requires a 20-year guarantee of continued operation as a public use airport in order to receive grant funds through the Airport Improvement Program (AIP). The Seattle Airports District Office of the FAA has previously informed the City of Vancouver that Pearson Field no longer meets this particular grant assurance. Without FAA funding (which currently provides 95% for eligible projects) capital improvements and major maintenance items will become increasingly difficult to finance. Historically, substantial political support for Pearson Field has resulted in obtaining federal funding through a variety of channels. While this option remains available to the City, it presents a level of uncertainty that makes long-term financial planning difficult. As a matter of policy, it would be preferable to eliminate this constraint by modifying the existing City-NPS agreements with a long-term or perpetual agreement that addresses the ongoing need for the City of Vancouver to consistently meet all FAA grant assurances.
- c. The limited term of the existing City-NPS agreement also constrains the City's ability to enter into long-term leases for aviation uses due to the uncertainty of future airport operation as a public use airport without restriction on types of aircraft usage. Long-term leases are generally required for tenants to secure commercial financing for hangar development.



## Staff Recommendations:

- a. Work with NPS to develop airport operational strategies that ensure City eligibility for FAA Airport Improvement Program (AIP) grants for Pearson Field (*Complete by December 2007*).
- b. Maintain an effective partnership with National Park Service (NPS) and the Historic Reserve Trust to define the desired balance among competing land uses within the local area (*On-going*).
- c. Explore the variety of potential options, such as land trades or long term leases, which could allow full City control of the land underlying the entire runway while maintaining a historically conducive environment consistent with NPS operations and the Historic Reserve (*Complete by December 2007*).
- d. Contract a feasibility study to determine if moving the portion of runway that is on NPS land to other land east of the existing runway is a reasonable option (*Complete by December 2006*).

## II. Airport Financial Evaluation

**Interest: Seek adequate and stable capital funding source to preserve and improve airport facilities; optimize current financial operating position through efficient management of airport revenues and operating expenses.**

Policy: Operate Pearson Field in a manner that promotes efficient use of City resources while adequately maintaining safe airport facilities.

### Challenges:

a. As stated in "Airport Operational/Regulatory Issues," the inability of the City to guarantee the future operation of Pearson Field to the FAA's satisfaction beyond 2022 threatens eligibility for capital improvement grants. The loss of FAA funds over the next 20 years could total over \$3.0 million, under current funding levels. Without FAA funds, the City's portion of the airport's capital improvement and major maintenance costs will increase above historic levels, significantly altering Pearson Field's financial performance and threatening the continued viability of airport operations. Options for offsetting lost FAA grant revenues, such as increasing user fees or securing funding from another source (City general fund, NPS, etc.) do not appear feasible.

b. Recent changes in the City's cost allocation methodology have resulted in a significant increase in indirect municipal support costs allocated to the airport. The indirect support costs appears higher when compared to other similar municipal airports and to what would be expected in the private sector. They represent a significant resource drain on the airport. If indirect costs continue to rise at a high rate, it may make sense to outsource some financial and administrative management functions.



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**Staff Recommendations:**

- a. Work with NPS to develop strategies that will help reduce uncertainty surrounding future operation of Pearson Field (*Complete by December 2007*).
- b. Review cost allocation plan annually to ensure it allocates cost as accurately as possible. A joint review by Airfield staff and Finance staff in mid 2004 resulted in significant reductions for Pearson Airfield. Continued work may yield further reductions (*Annually*).
- c. Maintain airport rates and fees schedule based on 100% cost recovery and periodic fair market evaluation; index to CPI or other economic indicator (*Annually*).
- d. Update the City's financial projection for the airport 2001 to reflect all costs associated with pavement maintenance, rehabilitation and reconstruction (*Complete by December 2005*).
- e. Continue to evaluate potential savings through debt restructuring as market conditions change. (*Periodic*).

**III. Airport Management**

**Interest: Manage Pearson Field efficiently and effectively.**

Policy: Create and maintain management structure for Pearson Field that supports the City's financial performance goals and the responsibilities associated with maintaining a safe airport facility.

Challenges:

The airport manager for Pearson retired in April 2004 and the City is currently considering options for staffing Pearson Field. For small airports, management duties are often assigned on a full-time or part-time basis with either dedicated airport staff, through use of shared staff with other departments, or through contracting with an outside firm or individual. Administrative functions such as rent collection and lease negotiations/renewals are often managed through finance departments, although these functions may also be contracted to reduce costs. Airport management also indicates that hangars are currently not accessible to City staff for routine safety, security or liability purposes. A dual lock or dual key system is not used.

**Staff Recommendations:**

- a. Based on the cost of staffing and desired level of service/function to be maintained, an internal city employee is recommended as our first choice of management options at the current time (*Completed*).
  
- b. Establish 20% as the minimum cost savings required to consider contracting the service.

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- c. Lock systems on hangars should be updated to provide access by City for safety, security, and liability purposes. Provisions for City access to airport-based facilities should be provided in all airport leases and hangar rental agreements *(Complete by December 2006)*.
- d. Performance Measures should be adopted and used at least semiannually to monitor performance. *(On-going)*

## IV. Market Factors & Land Use

**Interest: Maintain financial sustainability through prudent development of airport land base while maintaining consistency between airport planning and land use planning. Use must be consistent with its complex surroundings that include urban, residential, light industrial, open space and historic land use and multiple transportation systems.**

Policy: Promote development of vacant lands consistent with planned airport operation and surrounding land uses that contributes to the goal of increasing revenue generation. Protect Pearson Field with appropriate land use controls consistent with the long-term operation and development potential of the airport and its surroundings.

### Challenges:

- a. Non-aviation uses have the potential to bring in a higher level of revenue than aviation uses on remaining real estate. The vacant 2.5-acre parcel designated for non-aviation use on the airport appears to have the potential of generating approximately \$30,000 per year based on existing market conditions and demand for mixed-use commercial or light industrial sites. Interest has also been expressed in developing a vehicle parking facility for the Historic Reserve in this area.
- b. The vacant aviation-use parcels on the airport also appear to have revenue-generating potential. However, the cap of 175 based "air-worthy" aircraft defined in existing City-NPS agreements suggests that aircraft-related uses may be limited to those that do not increase the number of based aircraft. This could include aircraft related service businesses.
- c. The current CPX zoning does not provide clear use guidelines for potential non-aviation development on Pearson Field, as recommended in the current airport master plan. Clarification of permitted non-aviation uses within the existing "CPX" zoning is recommended before any marketing is implemented. City staff indicates that a portion of the northeast section of the airport is zoned "Light Industrial," which does not recognize aviation use as one of the allowable uses. Efforts to revise the existing ordinance to include aviation as a permitted use are planned. A rezone of the entire northeast parcel to "Light Industrial" may be pursued through future comprehensive plan amendments.

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## **Staff Recommendations: (Land Use/Zoning)**

- a. Review Pearson Field's existing "CPX" zoning and clearly identify aviation and non-aviation permitted uses (*Completed*).
- b. Consider rezoning all or portion of Pearson Field to allow aviation and limited non-aviation uses as "outright permitted" uses (*Complete by December 2006*).

## **Staff Recommendations: (Market)**

- a. Prioritize development of the northeast 2.5-acre non-aviation use parcel to increase airport revenues.
- b. Evaluate financial elements of public facility and private development proposals.
- c. Select and pursue preferred development option for the 2.5-acre site.
- d. Pursue development of remaining aviation-use parcels in a manner consistent with current airport planning and City-NPS agreements (*A-D Complete by December 2008*).
- e. Consider the market feasibility of adding new tie downs or reserving existing ones only for transient aircraft as a method to support tourism. Include consideration of building new hangars to accommodate the number of planes currently using leased tie down space. (*Market feasibility complete by June 2006*).



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## **Chapter One Overview**

### **A. Purpose**

The business plan's primary objective is to review the effectiveness of existing and future Pearson Field business operations, identify the conditions that affect those operations, and identify potential actions that could improve existing financial performance of the enterprise. The business plan is intended to be consistent with the City of Vancouver's vision of Pearson Field as a valuable transportation, public service and economic asset of both historic and contemporary significance, and the mission of the Vancouver National Historic Reserve, in which Pearson Field is located.

### **B. Process used in developing the business plan**

- i. Evaluation of existing documentation and processes
  - o Property appraisal & analysis
  - o Business operation analysis
  - o Comparisons
  - o Financial analysis
- ii. Interviews & input from stakeholders
- iii. Public feedback

### **C. Vision**

The City of Vancouver recognizes Pearson Field as a valuable transportation, public service and economic asset of both historic and contemporary significance within the Vancouver National Historic Reserve. The City's long-term vision for Pearson Field is to maintain the airport's existing character and capabilities while balancing the needs to the historic district and surrounding community.

### **D. Mission**

We will provide quality and safe aviation support services for both permanent residents and travelers at a competitive cost. We will service local recreational flying, business operations, and support Vancouver as a desirable tourist destination.

### **E. Guidance & Assumptions**

This plan is based on the following City of Vancouver guidance in January, 2004:

#### "Policy, General Management, and Land Use

1. Maintain and enhance partnership between City of Vancouver and National Park Service (NPS) to ensure overall compatibility and economic sustainability of facilities within the Vancouver National Historic Reserve.
2. Modify existing City-NPS agreements as needed, to guarantee continued operation of Pearson Field as a public-use general aviation airport in accordance with all Federal Aviation Administration (FAA) funding eligibility criteria.

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3. Revise existing Pearson Field zoning to be consistent with airport master plan and business plan recommendations for land use/development.
4. Define desired level of airport management staffing to be provided at Pearson Field based on assessment of required duties.
5. Update the 2001 Airport Master Plan 20-year capital improvement program (CIP) to reflect all costs associated with pavement maintenance, rehabilitation and reconstruction; submit revised CIP data to FAA to ensure consistency in project priorities for future funding consideration.

## Revenue Enhancement

1. Secure outright eligibility for Federal Aviation Administration grant funding through the Airport Improvement Program (estimated AIP grant revenue: up to \$150,000 per year).
2. Pursue development of vacant "non-aviation" parcel located near the northeast corner of the airport (estimated additional lease revenue: \$30,000 per year).
3. Pursue development of vacant aviation-use parcels defined on the current FAA-approved airport layout plan (estimated additional lease revenue: \$12,000-\$16,000 per year).
4. Periodically adjust leases and hangar rental agreements based on CPI or other inflation index.

## Expense Reduction

1. Conduct internal evaluation of indirect transfer cost allocation for City services being provided to airport; seek reduction of transfer costs or consider lower cost contracting options.
2. Evaluate staffing options and cost structure for providing airport management functions; consider contracting out some management functions.
3. Actively participate in WSDOT Aviation Division Pavement Maintenance and Management Program (PMMP) to reduce City expenditures for basic airfield pavement maintenance."

## F. Organization & Physical Description

### Airport Description and Background

The City of Vancouver is located in Southwest Washington with a population of 158,500 and an additional 250,000 residents in the surrounding unincorporated Clark County area (2004 OFM population estimate).

Vancouver is a full service city that owns and manages Pearson Field, a general aviation facility (FAA Designation "VUO"). Pearson Field has 150 T-hangars and twelve outside aircraft tie-down spaces, all city-owned. A maximum of 175 aircraft will be based at Pearson Field. One fixed base operator (FBO) provides a full range of aviation services. Those services include aircraft repair and maintenance, flight instruction, avionics, aircraft sales and rentals, sale of aviation fuel and aircraft storage. Pearson Field has a 3,200 foot long, 60 foot wide, hard surfaced runway with recently completed construction of a taxiway lighting system and lighted signs to compliment the existing runway lighting system.

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Pearson Field is also the home of the MJ Murdock Aviation Center/Pearson Air Museum, composed of four buildings. The museum is open to the public and features aircraft displays, aviation memorabilia, aircraft restoration, and hosts several fly-ins and many other special events during the year.

Vancouver City Council is the airport governing authority which has adopted a policy that directs the airport to be operated and managed as an enterprise fund, thus requiring all airport expenses to be covered by fees and charges generated and collected by the airport.

The major commercial airport for the region is Portland International Airport (PDX), located approximately two miles southeast, and within 15 minutes driving time of Vancouver's Pearson Field. In addition, one other small privately owned airport is located within 15 miles of Pearson Field. This airport, Evergreen Field (61S), provides FBO services, T-hangars and tie-down spaces and is transitioning to commercial non-aviation use.

In 1996, Congress created the Vancouver National Historic Reserve who's legislated partners include the National Park Service, the US Army, the City of Vancouver, the Washington State Office of Historic Preservation. The rich history of the immediate area incorporates an historically accurate reconstruction of Fort Vancouver operated by the National Park Service (NPS), Vancouver Barracks managed by the US Army, Officers Row and Pearson Field. Pearson Field is the oldest continuously operating airfield in the United States.

## Airport Management

Pearson Field is owned and managed by the City of Vancouver. Vancouver City Council has established a nine member citizen group, the Aviation Advisory Committee (AAC). The Aviation Advisory Committee provides technical assistance and advice to the City Council who is the policy making authority for Pearson Field. The AAC provides assistance to Council on rules, regulations, operations and plans pertaining to Pearson Field and how the airport can best relate to the citizens of Vancouver.

## Managerial Responsibility

The City Manager has assigned senior level policy staff from his office to represent the City interest in matters pertaining to the Vancouver National Historic Reserve. This includes oversight of most city-owned property that is part of the Historic Reserve, including Pearson Field

## The Airport Manager

Operation of the airport is carried out by the airport manager. The manager is a city employee who reports directly to the City Program & Policy Development Manager in the City Manager's Office. The airport manager is responsible for the day to day operations of the airport.

Vancouver City Council has directed that Pearson Field, unlike most other airports, operate on a self-sustaining basis. The airport receives no general funds to operate and revenues are generated exclusively from airport tenants and users. Funds are generated from five

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business units, lease of T-hangar, lease of tie-down, lease of land, lease of buildings and fuel flowage rate paid for each gallon of aviation fuel sold on the airport.

The airport manager is responsible for management of the budget; marketing and leasing the hangars, buildings and tie-down spaces; and providing customer service to each tenant. While billing and receivable operations are done by the Finance Department within the city government, the manager is responsible for coordination to insure proper billing is done and payments are received.

The manager is responsible for developing the leases, working with the legal department, as well as upholding all City requirements and insuring tenants are complying with all provision of the leases and airport operations.

Maintenance of grounds and buildings also are the responsibility of the manager. The manager contracts with private contractors as well as the cities operations department to provide these services. The manager supervises four part-time, non-city employees providing grounds and building maintenance.

The airport manager is on call 24/7 to assist with operational emergencies, aircraft accidents, Federal Aviation Administration aircraft location inquiries, safety concerns or other operational needs.

The manager works closely with the Federal Aviation Administration (FAA), who is the authority on aviation policy and procedures. Additionally, the manager maintains the capital facilities plan, makes application to the FAA for grants; receives funds; and oversees design, bidding process, contract award, construction and completion of construction projects. The FAA has provided \$3.3 million in funding to Pearson Field over the past 15 years.

The manager also works cooperatively with The Vancouver National Historic Reserve (VNHR), National Park Service (NPS) and other Reserve Partners on a variety of events and activities, and is the staff liaison to the Aviation Advisory Committee (AAC).

## **The Aviation Advisory Committee**

The AAC represent Pearson Field tenants and their issues to City staff and City Council. The Aviation Advisory Committee is composed of nine citizen members appointed by Vancouver City Council. Members may serve a maximum of three terms; each term is three years in length. The majority of AAC members are current or former aviators, having expertise in the field of aviation. The AAC works with staff to insure Pearson Field is operated in such a way as to promote public safety and provide operational oversight for the benefit of both aviation and public interests.

## **Committee Responsibilities**

- Provide operational oversight and to promote public safety.
- Review revenue sources and expenses generated from operations.
- Review rates and make rate change recommendations on an annual basis.
- Review noise and air traffic issues.



- Review tenant complaints.
- Make recommendation to City Council on policy matters for their action
- Review airport improvement needs and recommend grants to be applied for from the Federal Aviation Administration and Washington State Department of Transportation, Aeronautics Division.

## G. Recent Changes and Improved Business Practices

### Pearson Field Managerial Responsibilities Transfer

Municipal airports the size of Pearson Field are traditionally managed through either the Public Works Operations Center or the Parks & Recreation Department. The Operations Center had managerial responsibility for Pearson Field until approximately 1975. When City Council made the policy decision to close Pearson Field in 2002, the airport was zoned as part of Vancouver Central Park. The Parks & Recreation Department has traditionally managed city businesses such as municipal centers, pools, recreational centers and cemeteries. Managing the airport, with the understanding that the airport property would transition to other community park uses in 2002, made Parks & Recreation Department the logical department to oversee the operation of Pearson Field.

In 1994 a new agreement with the NPS allowed for the continued operation of Pearson Field. In 1996 Congress created the Vancouver National Historic Reserve (VNHR) which included historic Pearson Field. A Master Plan was developed for the VNHR and gradually the Reserve began to take shape. Management of the city's portion of the Reserve is handled by the City Manager's Office. With the conclusion of all demolition and construction projects at Pearson Field, a change in management responsibilities from the Parks & Recreation Department to the City Manager's Office was made. This allowed centralization of the most of the management functions for City property in the Historic Reserve.

### Airport Manager Changed to .75 Full Time Employee (FTE)

In 1972 the City Council had agreed to close the airport in 2002. However, a new agreement reached with the National Park Service (NPS) in 1994 provided Pearson Field Airport with indefinite life. As part of that agreement, all aviation related buildings and infrastructure were to be removed from land owned by the NPS with the exception of the runway, taxiway and related aviation lights and signs. The transition off of NPS property included two construction projects to erect T-hangar buildings, two demolition projects and an FAA facility upgrade. The facility transition process took ten years to achieve. Accomplishing these projects along with normal operations required a full-time airport manager. The work needs for the airport manager changed with the conclusion of those projects resulting in the FTE status changing to .75 FTE beginning in 2005. The airport manager position is funded solely by revenue generated by Pearson Field

### Reduction in Allocated Costs

Since Pearson Field is operated as an enterprise fund and receives no general fund support, recent changes in the way the City allocates indirect or overhead costs has had a significant negative impact on the airport's ability to operate as a self-sustaining business unit.

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The City of Vancouver uses a Full Cost Allocation Method to allocate all indirect overhead costs of the City government to all parts of the organization. The method is approved by the State of Washington and OMB. As a result, Pearson Field is charged for support costs associated with doing business that are not directly visible in daily operation of the facility. Examples of this are Finance, who bill, process, and receive payments monthly and the Legal Department to enforce collection of rents and eviction procedures. The services are used by the airport, but not charged directly to the airport at the time of service.

Airport use of services such as Finance (FMS) and Legal Services are captured by the City, and the cost of each service is allocated to the users based on indicators of usage level. The City annually refines how they allocate the costs and measure levels of use. As precision improves, costs can shift significantly between departments.

Through a detailed review of all allocated costs for Pearson Filed, some of the methods used to capture and distribute airport costs were found to incorporate expenses not attributable to airport operations. Adjustments to the cost allocation formulas were made and a reduction of approximately 37% was realized.

## H. Key Business Issues & Recommendations

Below is a chart that contains the major issues and recommendations for each issue. More detailed analysis is provided in the individual chapters.

### Consolidated List of Key Business Planning Issues & Recommendations

#### **Key Issue 1: (Airport Operation/Regulatory Issues) City of Vancouver - National Park Service (NPS) Agreement for Operation of Pearson Field**

Current Situation	Risk	Staff Recommendations
<p>Under current conditions, the City does not have a written agreement for use of National Park Service land currently utilized for aviation purposes. The FAA will not provide construction improvement grants without a written agreement assuring a twenty year land use for aviation purposes. The City cannot provide the FAA with a guarantee that the land will remain dedicated to the airport for at least twenty more years</p> <p>The based aircraft ceiling limits the City's ability to enter into long-term leases for new hangars.</p>	<p>1. A prolonged loss of FAA grants threatens the City's ability to maintain an economically sustainable facility.</p> <p>2. The City's ability to increase Pearson Field revenues through the development of remaining vacant aviation use land parcels is limited by the current City-NPS agreement.</p>	<p>a. Work with NPS to develop airport strategies that ensure City eligibility for FAA Airport Improvement Program (AIP) grants for Pearson Field.</p> <p>b. Maintain an effective partnership with National Park Service (NPS) and the Historic Reserve Trust to define the desired balance among competing land uses within the local area.</p> <p>c. Explore options, such as land trades or long term leases, which could provide the City with control of the land underlying the runway while maintaining a historically conducive environment consistent with NPS and the Historic Reserve.</p> <p>d. Contract a feasibility study to determine if moving the portion of runway that is on NPS land to other land east of the existing runway is a reasonable option.</p>

*Note:*  
 Current FAA AIP funding levels are up to \$150,000 per year (non primary general aviation entitlements only; discretionary grant

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*funds also available for larger projects). Additional ground lease revenue potential for remaining aviation use land areas (hangars) is estimated at \$12,320 per year (44,000 sf @ \$0.28 sf) by the consultant.*

## Key Issue 2: (Airport Financial Evaluation) Long Term Financial Viability

Current Situation	Risk	Staff Recommendations
<p>AIP funds are an essential element of Pearson Field's long-term financial sustainability. As noted above, the City is not currently able to meet standard FAA AIP grant assurances required to qualify for funding. Additionally, the City lacks an effective Capital Improvement Program (CIP) with a long term pavement management plan.</p> <p>The Airfield must operate as an effective business, providing 100% cost recovery and be a self-sufficient operation.</p>	<ol style="list-style-type: none"> <li>1. Airfield maintenance and improvement projects may need to be deferred due to lack of available funding. Extended periods of deferred maintenance will create potential safety and liability issues for City.</li> <li>2. The cost of maintenance and capital improvement projects for the City will eventually exceed the airport's ability to fund without use of AIP funds, requiring use of other funding sources to avoid deferring projects.</li> </ol>	<ol style="list-style-type: none"> <li>a. The Airport Manager must develop and the City adopt an appropriately detailed CIP that details annual pavement maintenance plan over the next 20 years, based on accepted metrics and actual wear history.</li> <li>b. Work with NPS to develop strategies that will help reduce uncertainty surrounding future operation of Pearson Field.</li> <li>c. Maintain airport rates and fees schedule based on 100% cost recovery and periodic fair market evaluation; index to CPI or other economic indicator.</li> </ol>

**Note:**

*As noted above, FAA AIP non-primary general aviation entitlement airport funding levels are currently established at up to \$150,000 per year. These dollars are specifically earmarked for the individual airport and may be rolled over for up to four years for use on eligible projects.*

*Pearson Field pavement maintenance and rehabilitation costs are estimated to range from \$1.2 million (W&H Pacific, Inc) and \$2.8 million (Century West) over the next twenty years, most of which (currently 95%) should be eligible for FAA AIP funding.*

## Key Issue 3: (Airport Financial Evaluation) City Overhead Costs & Debt

Current Situation	Risk	Staff Recommendations
<p>Indirect transfer charges are applied consistently throughout the city using a formula approved by Washington State auditors to distribute the cost of providing municipal government to all internal agencies.</p> <p>Although allowable, the amount "charged" to Pearson Field appears significantly higher than other airport operations chosen as comparable.</p> <p>The amount of indirect transfer charges (dollars and percentage of airport revenue) established for Pearson Field appears</p>	<ol style="list-style-type: none"> <li>1. The existing internal transfer cost allocation structure affects Pearson Field's current and future financial performance as an enterprise fund and affects the rates, fees, and charges paid by airport users.</li> <li>2. The option of contracting for services requires some delegation of responsibility and authority.</li> <li>3. Reducing indirect transfer costs</li> </ol>	<ol style="list-style-type: none"> <li>a. Review cost allocation plan annually to ensure it allocates cost as accurately as possible. A joint review by Airfield staff and Finance staff in mid 2004 resulted in significant reductions for Pearson Airfield. Continued work may yield further reductions.</li> <li>b. If contracting of services is pursued, the associated risks must be effectively managed to maintain adequate City control over costs and services provided.</li> <li>c. If the airport is managed externally under a contract, the contract must</li> </ol>

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<p>significantly higher than that reported by other comparable municipal airports.</p> <p>If interest rates decline to levels that make the 1998 bond issue economic to refund, the City's finance department will pursue issuing G.O. refunding bonds.</p>	<p>for the Pearson Field enterprise fund may affect other City departments, as fixed costs are redistributed.</p>	<p>perform to clearly defined standards consistent with all Historic Reserve partners.</p> <p>d. Debt has been restructured by the City and will continue to be evaluated for potential savings with other City bonds as market conditions change.</p>
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**Key Issue 4: (Airport Management) Management & Staffing**

Current Situation	Risk	Staff Recommendations
<p>In recent years, the management of Pearson Field has been performed by a full-time airport manager, with the expense divided between the airport and parks &amp; recreation budgets. The City is currently considering options for meeting staffing requirements. Current city airport management staffing projections are based on a 0.75 full time equivalent (FTE), based on the duties and responsibilities anticipated for the position. Options for contracting some airport management functions may be considered by City. Management oversight will be maintained by senior City staff.</p> <p>The National Park Service has indicated that management by the City with an internal employee is currently the best solution for their needs.</p>	<ol style="list-style-type: none"> <li>1. Decreased level of staffing or use of less experienced staff could decrease management effectiveness as defined by performance measures.</li> <li>2. The option of outsourcing airport management functions requires a significant level of delegation of responsibility and authority by the City. The associated risks of contracting must be thoroughly considered and effectively managed.</li> <li>3. Unanticipated expenses associated with contracting can alter projected financial benefits.</li> </ol>	<ol style="list-style-type: none"> <li>a. Based on the cost of staffing and desired level of service/function to be maintained, an internal city employee is recommended as our first choice of management options at the current time.</li> <li>b. Establish 20% as the minimum cost savings required to consider contracting the service.</li> <li>c. Lock systems on hangars should be updated to provide access by City for safety, security, and liability purposes. Provisions for City access to airport-based facilities should be provided in all airport leases and hangar rental agreements.</li> <li>d. Performance Measures should be adopted and used at least semiannually to monitor performance.</li> </ol>

**Key Issue 5: (Market Factors & Land Use) Land Use**

Current Situation	Risk	Staff Recommendations
<p>The existing zoning (CPX or Light Industrial) for Pearson Field does not provide clear use guidelines for potential development of non-aviation parcels depicted on the current approved airport layout plan (ALP).</p> <p>The City is reviewing the airport zoning to determine the most appropriate classification for their operation.</p>	<ol style="list-style-type: none"> <li>1. The absence of clear guidelines for permitted uses on CPX-zoned airport land is a significant constraint in marketing the property to potential tenants.</li> <li>2. The absence of defined airport-related uses as "outright permitted" within the City's Light Industrial zoning ordinance constrains future development potential.</li> <li>3. The zoning restricts the Airport's ability to establish leases and generate revenue for available land. This complicates the challenge of operating the airport as a self-sufficient enterprise fund.</li> </ol>	<ol style="list-style-type: none"> <li>a. Review Pearson Field's existing "CPX" zoning and clearly identify aviation and non-aviation permitted uses.</li> <li>b. Consider rezoning all or portion of Pearson Field to allow aviation and limited non-aviation uses as "outright permitted" uses.</li> </ol>

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**Key Issue 6: (Market Factors & Land Use) Land Development**

Current Situation	Risk	Staff Recommendations
<p>Pearson Field currently has approximately 2.5 acres of land suited for non-aviation or aviation-related development (no direct aircraft access due to terrain and other site constraints). There are also two 10,000 square foot hangar sites and another area identified for hangars (approximately 2 acres), which could be partially developed.</p> <p>These sites represent the remaining developable land on the airport capable of generating new airport revenues.</p>	<ol style="list-style-type: none"> <li>1. Pearson Field revenue generation potential and future financial performance is limited by ability to develop remaining vacant land.</li> <li>2. Development of existing aviation-use lands for aircraft hangars may conflict with existing City-NPS agreement to limit based aircraft count to 175.</li> <li>3. The zoning restricts the Airport's ability to establish leases and generate revenue for available land. This complicates the challenge of operating the airport as a self-sufficient enterprise fund.</li> </ol>	<ol style="list-style-type: none"> <li>a. Prioritize development of the northeast 2.5-acre non-aviation use parcel to increase airport revenues.</li> <li>b. Evaluate financial elements of public facility and private development proposals.</li> <li>c. Select and pursue preferred development option for the 2.5-acre site.</li> <li>d. Pursue development of remaining aviation-use parcels in a manner consistent with current airport planning and City-NPS agreements.</li> <li>e. Consider the market feasibility of adding new tie downs or reserving existing ones only for transient aircraft as a method to support tourism. Include consideration of building new hangars to accommodate the number of planes currently using leased tie down space.</li> </ol>
<p><i>Note:</i> Revenue from development of 2.5-acre non-aviation parcel is estimated to be up to \$30,000 annually. Additional ground lease revenue potential for remaining aviation use land areas (hangars) is estimated at \$12,320 per year (44,000 sf @ \$0.28 sf) by Century West Engineering.</p>		

**G. Performance Measures**

Consistent with the City's policy direction, Pearson Field is implementing the use of performance management to measure and communicate their level of success against established standards. Initial performance measures to be established and reported on at least an annual basis are included in the chart below.

Performance measures will be periodically reviewed for relevancy and accuracy as indicators of success for the Pearson Field.

The major outcomes that have been identified represent the main focus of Pearson Field as an enterprise business unit. The performance measures identified for each outcome are intended as concise indicators of success for the outcome; if accurate indicators of success for each outcome indicate success, then the field should be a successful business meeting the needs of the community.

The performance measures for Pearson Field are shown below:

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Outcomes and Performance Measures	Goal 2005	Actual 2005	Goal 2006	Actual 2006	
Outcome: The Airfield is operated as an effective business					
<ul style="list-style-type: none"> <li>Percent of operating expenditures from airfield revenues</li> <li>Variance from approved revenue budget</li> </ul>	100% + - 5%				
Outcome: Hangers are generating maximum possible revenue					
<ul style="list-style-type: none"> <li>Percent of T-hangars leased</li> <li>Length of time to fill t-hangar vacancy</li> <li>Pearson/Market T-hangar rates</li> </ul>	100% < 5 days Within 5% of market				
Outcome: The Airfield is well maintained					
<ul style="list-style-type: none"> <li>Variance from projected budget</li> <li>Runway and taxiway pavement maintenance level (Pavement Condition Indicator or equiv)</li> </ul>	Within 90% PCI of 70 or greater				
Outcome: Customers are satisfied with the operation					
<ul style="list-style-type: none"> <li>AAC rating of staff support</li> <li>Tenant evaluation of facility (survey)</li> </ul>	4 on a 5 point scale 3 on a 5 point scale				



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## Chapter Two Regulatory Issues/Constraints

Pearson Field operates under a unique regulatory framework that affects both airport operations and financial planning. The most significant regulatory elements affecting financial performance, which is the focus of this study, include:

- **The 1994 agreement between the City of Vancouver and the National Park Service (NPS) that defines the operation of Pearson Field in coordination with the Fort Vancouver Historic Reserve.** Although not anticipated at the time the agreement was drafted, some of the agreement's terms now prevent the City from obtaining Federal Aviation Administration (FAA) grants due to conflicts with federal grant assurances.
- **City of Vancouver Zoning Ordinance** for Pearson Field. The existing zoning ordinance does not provide clear direction regarding the acceptability of potential non-aviation uses on the airport, within the "CPX" zoning. City staff indicates that a small portion of the northeastern corner of the airport is zoned "Light Industrial," although aviation use is not currently included among permitted uses.

The City-NPS agreement was tailored to address specific conditions that existed at Pearson Field in the early 1990s. While the agreement represented a significant accomplishment that allowed the continued operation of Pearson Field, the uncertainty regarding airport operations beyond 2022 threatens the continued solvent operation of Pearson Field as a stand-alone enterprise fund of the City of Vancouver. The City is currently unable to meet a mandatory federal grant assurance that requires a guarantee of continuous operation as a public use airport without discrimination for at least twenty years. The inability to qualify for FAA funding - the largest source of funding for general aviation airports - will create a significant funding gap for future airport maintenance and improvement projects that would adversely affect the financial health and long-term viability of continued airport operations. The issues surrounding the airport's long-term capital needs, particularly pavement maintenance and rehabilitation, are discussed in **Chapter Five**.

### City of Vancouver and National Park Service

A Memorandum of Agreement<sup>1</sup> (MOA) between the City of Vancouver and National Park Service (NPS) was approved in 1994 that enabled the continued operation of Pearson Field through the use of NPS land (where the west half of the runway was located). The City-NPS agreement links the federal legislation that created the historic reserve and a study completed by the Historic Reserve Commission that was a primary reference document for the legislation.

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<sup>1</sup> Memorandum of Agreement Between the National Park Service and City of Vancouver, dated November 4, 1994.

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The MOA defined a process in which operational limits were to be created for Pearson Field through a transition to “historic” aircraft by 2022. A limit on the number of based aircraft (175) was subsequently defined through development of economic and management analyses that were approved by the City and NPS. However, the agreement provides no mechanism to guarantee the continued operation of Pearson Field as a public-use general aviation airport beyond 2022. The agreement indicates that a report will be submitted to the Director [NPS] “on or before 2022, regarding whether limited general aviation activities should continue at Pearson Airpark beyond 2022.”

Considerable effort and compromise by all stakeholders assisted in the efforts to establish the agreement and subsequently pass federal legislation (HR 3019, Section 334; March 1996) to extend the use of aviation facilities on NPS property and to come to agreement on several matters related to airport operations and development within the historic reserve (HR 4236, Section 502 of Omnibus Parks and Public Lands Management Act of 1996).

Given the unique circumstances associated with the airport and historic reserve, it may be appropriate for the City to consider seeking an exemption to the specific grant assurances that appear to conflict with the terms of the existing NPS agreement. Presumably, this type of approach would require unique conditions and perhaps congressional action, not unlike existing agreements. Under current conditions, the existing agreement contains three specific elements that affect the operation and financial performance of Pearson Field:

- The term of the agreement (< 18 years remaining)
- A ceiling of 175 based aircraft
- Transition to historic aircraft

## The Term of the Agreement

The future operation of Pearson Field beyond the intended transition to “historic aircraft” by 2022 is not specifically addressed. This creates uncertainty about the airport’s ability to serve all general aviation users without discrimination, as required for airports included in the National Plan of Integrated Airport Systems (NPIAS). The NPIAS is administered by the FAA and defines which public-use airports are eligible for FAA funding. The uncertainty that currently surrounds access to FAA funding directly affects the City’s stated goal of maximizing the financial operations of Pearson Field. Although the continued operation of Pearson Field beyond 2022 is generally thought to be likely, the airport’s “guaranteed” life as a public-use airport that meets all FAA public access criteria, as defined by formal agreement, is relatively short. The current arrangement creates three primary areas of concern:

1. The City must be able to guarantee at least a 20-year continuous operation of a public-use airport in order to qualify for FAA Airport Improvement Program (AIP) funding for eligible airport improvement and maintenance projects. Maintaining public access without discrimination among users is a specific provision in AIP grant assurance language.

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2. An extended (or permanent) loss of FAA funds would require use of alternative sources of funds, a significant increase in airport rates and fees, or a combination of both. The potential of completely replacing FAA funding with additional airport-generated revenues, City general fund transfers, or NPS funding is not considered highly feasible.
3. The uncertainty surrounding Pearson Field beyond 2022 is expected to adversely affect the City's ability to market vacant airport land to potential aviation tenants who may require longer-term leases in order to secure commercial financing for the development.

## Ceiling of Based Aircraft

The ceiling of 175 based aircraft currently established for Pearson Field was derived through the development of a 25-year financial plan by the City in 1995-1996 in response to the terms of prior agreements and subsequent legislation. However, it is noted that the ceiling does not reflect the physical development potential of the airport, as represented by the few remaining developable hangar sites depicted on the 2001 Airport Layout Plan, or current aircraft parking capacity. Establishing limits on activity that are unrelated to an airport's physical limitations (i.e. available tiedown space or developable hangar sites) raises questions about compliance with the FAA requirement to provide public access to publicly-funded airports, without discrimination.

Federal legislation such as the Airport Noise and Capacity Act of 1990, has severely limited the ability of local communities/airport owners to restrict airport activity through mandatory noise abatement procedures, curfews or other operational restrictions. Although the 1990 ANCA was specifically written to address local efforts to restrict jet noise at commercial and busy general aviation airports, the underlying legal rationale may also apply to general aviation airports. The Act determined that common (federal) noise rules should apply uniformly to other airports, rather than allowing a multitude of local, airport-specific operational restrictions to proliferate.

Despite these issues, it is recognized that Pearson Field's ability to expand beyond 175 based aircraft is largely controlled by a limited availability of land. Within the existing airport footprint, there are only two areas remaining that are capable of easily accommodating hangar construction. Even if these areas were fully built out, it appears that the net increase in based aircraft would be limited to approximately 10 to 15 percent above the current based aircraft totals. Although the ceiling of based aircraft is generally considered to be an effective mechanism to limit Pearson Field's activity levels, it appears that in the absence of a "cap," the physical site characteristics of the airport would effectively limit activity, assuming no expansion of airport facilities beyond currently boundaries.

In Spring 2004, it was estimated that Pearson Field was at the upper limit of the ceiling with a 176 aircraft. Under the existing agreement, the ceiling of 175 based aircraft will constrain the City's ability to market available aviation-use land and limit the airport's revenue generation potential for the foreseeable future.



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Transition to Historic Aircraft by 2022

Per the current agreement, a transition is to occur from “general aviation aircraft to historic aircraft” is to occur by 2022. However, the current definition of “historic aircraft” appears to capture the majority of general aviation aircraft currently in operation. The public access issues described above may also apply to a planned transition to a single subcategory of aircraft. As noted above, the existing agreement is unclear about continued general aviation “non-historic” use of Pearson Field beyond 2022.

City-NPS Agreement Impact on FAA Grants

When offering AIP grants, the FAA requires that an airport sponsor guarantee continued public airport operations (without discrimination) for at least twenty years. The Seattle Airports District Office (ADO) of the FAA recently informed the City of Vancouver that because of the inability to guarantee Pearson Field’s operation as a public-use airport beyond 2022, the required AIP grant assurance is not currently being met.

At current funding levels, the City of Vancouver would be eligible to receive up to \$3.0 million in AIP non-primary entitlement funds over the next twenty years. AIP funding can now be rolled over for up to four years for larger projects (up to \$600,000). Current legislation also reduces local match from the former 10-percent, to 5-percent. In addition, project eligibility guidelines have been revised to include most airfield pavement maintenance and rehabilitation projects.

Normally, AIP grants provide the majority of funding for future airfield improvement projects, including airfield pavement replacement, maintenance or rehabilitation. Without access to FAA funds, the City of Vancouver would assume 100 percent of these costs through the life of the airport.

It should also be noted that individuals familiar with Pearson Field and past successful efforts to secure FAA funding for individual airport improvements, suggest that adequate political support exists to overcome regulatory limitations associated with the AIP grant assurances. While there is ample historic evidence to support this contention, it creates two issues that make long-term financial planning difficult. First, politically derived solutions are vulnerable to external forces and political shifts that could produce uneven results as events or individuals change. Second, FAA funding programs for general aviation airports in recent years have evolved from funding large projects typically conducted several years apart, to providing annual entitlement funding (currently up to \$150,000) that are used for smaller projects or accumulated over several years to fund larger projects. Under this funding structure, the use of alternative strategies would essentially need to become an annual event in order to match the level of funding available through the FAA Seattle ADO.

Although Pearson Field is relatively mature in terms of its future development needs, the ongoing costs associated with maintaining more than 720,000 square feet of existing airfield pavement represents a significant investment over the next twenty years and beyond through the life of the

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airport. A review of the 2001 Airport Master Plan's 20-year Capital Improvement Program<sup>2</sup> indicates that long-term pavement maintenance and rehabilitation costs were largely understated or overlooked, and could conservatively exceed \$2.5 million. A detailed assessment of Pearson's 20-year pavement investment is provided in **Chapter Five**.

## Relocating the Runway

The City's focus for Pearson Field is to help it maintain viability as an airfield and for it to maintain financial stability as an enterprise activity. Since many of the limitations it currently experiences are related to use of NPS land, alternatives to using the NPS land should be explored. Specifically, moving the runway off of NPS land would solve this issue. The most potentially feasible solution would be to terminate the runway at the west end of City property and extend the runway to the east. Depending on the cost of acquiring the property, FAA participation and zoning issues, this could be a viable long range solution.

## Summary

The agreement between the City and the NPS for the operation of Pearson Field reflects a unique partnership that effectively defines current and future airport operational limitations based on the split ownership of land that the runway occupies. It is apparent that the unique site characteristics, property ownership and the historic significance of both the Fort Vancouver National Historic Reserve and Pearson Field make such an agreement necessary to balance competing interests and issues of concern within a very complex regulatory environment. However, the structure of the existing agreement creates a significant constraint in developing long-term airport financial and business planning strategies capable of improving existing performance and meeting the stated financial goals of the City of Vancouver.

Regardless of the outcome of continued talks between the City and NPS, a feasibility study should be initiated into the possibility of moving the runway to the east.

## **Zoning/Land Use**

Pearson Field is located within the City of Vancouver CPX zone (Vancouver Central Park Mixed Use) per City Ordinance Chapter 20.430 - Commercial and Mixed-Use Districts. City staff indicates that a small portion of the airport near the northeast corner of the property, is zoned "Light Industrial." However, airport uses are not currently included among the permitted uses defined for Light Industrial zones. Options for revising the ordinance to permit aviation-related uses as "permitted" will be considered by the City.

The CPX zone was formally adopted in 2004 as part of an overall update of city zoning ordinances. According to City planners, there were no significant revisions in the content of the CPX zone from the former Vancouver Central Park (VCP) zone in the 2004 update.

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<sup>2</sup> Pearson Field Airport Master Plan (URS, 2001)

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City of Vancouver Ordinance Chapter 20.430 - Commercial and Mixed-Use Districts provides the following description of the CPX zone:

*"The CPX zoning district is the base zone designation for all land located within the Vancouver Central Park Plan District that contains a number of existing parks and government, health, educational, and cultural facilities. The district also contains the Vancouver National Historic Reserve that includes Officers Row, Vancouver Barracks, Fort Vancouver and Pearson Airpark. The district is designed to enhance and protect existing facilities and permit new uses that are compatible in design and scale subject to requirements contained in "A Park for Vancouver: A Concept Plan" and related Vancouver Central Park Guidelines." The CPX zoning district was referred to as Vancouver Central Park (VCP) in the previous zoning code."*

Table 20.430-1, provides a list of uses on all commercial and mixed-use zones defined by Chapter 20.430. However, no uses are identified for the CPX zone. Footnote number 39 is located adjacent to the CPX zone designation in the table. Footnote 39 states: "See uses permitted in "A Park for Vancouver: A Concept Plan." (Ordinance M-2011"

At the request of the Consultant, the City of Vancouver provided a copy of the 1979 "A Park for Vancouver" study, referenced in the zoning ordinance. However, based on our review of the study, it was not clear a) what use limitations exist for Pearson Field; and b) what process or specific standard is used to determine whether proposed developments fall into one of the normal uses defined by City ordinance (e.g. permitted (P); limited (L); conditional (C); or prohibited (X).

Based on the recent and historic development on the airport since the 1979 park plan was prepared, it appears that most aviation related developments, including hangars and aviation-related uses have been approved within existing zoning. However, it is not known whether the airport master plan-recommended development of non-aviation facilities on one of the airport's vacant areas of land located adjacent East 5<sup>th</sup> Street, near the northeast corner of the airport, is compatible with the use conditions for CPX zones. The land located immediately east and west of the airport parcel is zoned light manufacturing (IL) and currently accommodates a variety of small-scale developments, including mini-storage warehouses, shops, and office space.

To effectively market the site for potential non-aviation purposes, as described in the Market Evaluation (**Chapter Four**), all zoning limitations need to be clearly defined before any substantive development options can be considered. If airport-based mixed use commercial or light industrial zoning is not compatible for CPX zone, the City may wish to consider a rezone of the 2.5-acre portion of Pearson Field designated for "Non-Aviation" use on the 2001 Airport Layout Plan drawing (adopted in 2002). Further clarification is also needed to determine whether the apparent "Light Industrial" Zoning on the airport should be revised to provide consistency with prior planning recommendations.



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## **Chapter Three**

### **Airport Management**

Until the recent retirement of the City's Airport Manager, Ernest Vande Zande, Pearson Field had a full-time manager overseeing the daily operation of the airport. In recent years, the airport experienced a period of activity that included construction of new hangars, demolition of older hangars, and a variety of airport planning, design and construction projects, most of which required administration of FAA grants. However, with these projects now completed and no pending development projects planned, the City is currently reassessing the staffing requirements associated with managing Pearson Field and the personnel options available.

Local governments often struggle with how best to manage smaller general aviation airports. Publicly owned general aviation airports are routinely managed by public-sector employees and through various types of private sector contracting. Staffing levels range from none to full time airport managers with support staff. The level of staffing is generally a reflection of the revenue generation capabilities of the facility - for both in-house staffing and contracting options. In cases where finances do not permit staffing of at least one full-time equivalent (FTE) position, staff is often "shared" between departments or a low-cost contract arrangement is established. These arrangements often involve an existing tenant overseeing the day-to-day activities at the airport, with the more substantive financial and facility management provided through an existing department.

General aviation airports are transportation facilities with unique technical and regulatory needs. They are capital intensive, they produce noise, and they are an important link in the community's transportation system. In addition to overseeing the safe operation of the airfield, airport managers respond to the needs of airport users, tenants, and the community at large. Airport managers are often called upon to work with local pilots to develop and enforce voluntary "fly-friendly" programs to make the airport a "good neighbor." General aviation airports also make significant contributions to the local economy through direct and indirect benefits. However, the degree of success that is realized in these areas is often directly related to the quality and level of airport management staffing provided. Airports, like most public facilities, quickly suffer from a lack of effective management or regular investment. The benefits of professional airport management are reflected in the current condition of Pearson Field's facilities. Maintaining a similarly high performance standard should be a priority when determining future management options in the context of potential cost savings.

#### **Privatization of Airport Management**

The privatization of general aviation airport management has existed in various forms for many years. Perhaps the most common arrangement involves an airport's fixed base operator (FBO) that also oversees airport operations. Professional firms specializing in management of general aviation airports began to appear in the early 1990s and continue in limited numbers today. The



practice of privatizing, or outsourcing the management of public facilities (airports, golf courses, waste management & collection, marinas, sports venues, etc.) has become increasingly common in an era of reduced local government funding.

The primary objective behind outsourcing is to provide a specific level of service at a lower cost than can be obtained through the existing internal management structure. The concept of providing public services through the private sector introduces competitive market forces into the cost side of management equation. In successful applications, this can result in costs savings for the facility owner that are sufficient to offset any increased risk associated with reducing government involvement in day-to-day operations. However, when contracting fails to meet expectations, there are often significant deficiencies in actual financial or operational performance (compared to plan). Staff turnover is also a common problem that can lead to inconsistent performance of contractors.

Based on required staffing levels, privatization of airport management activities at Pearson Field could be a viable option. However, this approach would require development of carefully drafted agreements that clearly establish respective areas of responsibility, performance measures, and cost controls.

## **Management Options**

The following airport management options are the most commonly used practices by small publicly owned airports. There are advantages and disadvantages with all options and there is anecdotal evidence to suggest that success is not limited to any single approach. Since Pearson Field is approaching full build-out, the primary management focus is expected to shift from the development mode to the maintenance mode. In addition to overseeing daily operations, facility maintenance, customer service and basic administrative functions (billing and collection) represent the areas that will require staff resources.

Based on these conditions, a redefinition of duties and responsibilities may reduce the staff experience and/or staffing level that is required to adequately oversee safe airport operations. If staffing is reduced from recent levels it may be possible to divide some tasks among other City staff in "non-airport" departments, or to contract out some management tasks to the private sector to reduce management expenses associated with the long-term operation of Pearson Field.

### **Option A – City Staff**

Maintaining full-time or part-time City staff assigned to the management of Pearson Field would be most comparable to the recent staffing arrangement. The costs associated with maintaining a full-time airport manager and limited part-time labor were estimated at \$67,000 for 2004. Another cost consideration associated with maintaining municipal staffing is the cost of obtaining services from other City departments.

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The City of Vancouver's 2004 budget for Pearson Field includes \$76,201 for transfers for indirect costs, i.e., budgeting, cash management, billing and collections, legal, administrative, lease management, and purchasing; \$58,603 for airport management staffing; and \$9,000 for temporary help. When combined with airport management labor, this amounts to more than \$143,000 or 28% of the operating revenues of the airport. Estimated amounts for the same costs in 2005 are \$78,900, \$36,640, and \$9,300, resulting in a decline to \$124,840 or 24% of operating revenue. Transfers and temporary help include increases of 4% and staffing is reduced to one half-time FTE. Future projections beyond 2005 reflect increases of 4% for each. Revenue is projected to increase approximately 3% annually going forward. Therefore, the ratio of airport management staffing and indirect costs to operating revenues is projected to increase above 24% going forward.

## **Option B – Contract with Airport Tenant**

A common management approach used at smaller general aviation airports is to contract with the airport's fixed base operator (FBO) or another established tenant to perform basic airport management duties. An airport manager's salary is not normally provided; compensation is typically incorporated into an existing lease or operating agreement and is often connected to a reallocation of airport-generated revenues such as fuel sales, tiedown rentals, and hangar rentals. In some cases, expenses such as land leases, building rentals, or other rentals (fuel systems, etc.) normally paid by the tenant are waived outright or reduced, in lieu of compensation for management services.

The specific responsibilities vary by airport, but generally include having a manager physically on the airport during normal business hours (which often coincides with the required hours of operation for the tenant's primary business activity) and available "on-call" to respond to emergencies or other after hours needs. A local operator that is tasked with overseeing day-to-day airfield operations is not typically involved in "municipal" activities such as financial management, lease renewals, negotiations, rent collection, etc. At Pearson Field, the local FBO and the Pearson Air Museum are two examples of tenants with an established presence that could potentially provide some level of on-site management in exchange for a modification of existing financial arrangements. For an example of this type of airport operation, see *appendix A, example 1: Prineville Airport, Oregon*.

## **Option C – Local Professional Services/Outsourcing Firm**

The management of airports includes several administrative elements that do not require extensive airport experience, including financial management and accounting items such as invoicing, collections and lease negotiations. As noted in the financial evaluation (**Chapter Six**), outsourcing some existing city-provided financial and administrative services may allow a savings over existing cost structure.

However, the ability to find an outsourcing firm that combines the required financial management expertise with airfield operations experience creates a unique challenge. It is unlikely that there is an existing company in the local area that is presently performing this type of work. However, the



possibility may exist for an established outsourcing firm to add airport management expertise. The development of comprehensive set of performance standards that can be easily and periodically assessed, could allow the City to explore this option in the “test mode” to determine its appropriateness for Pearson Field.

**Option D – National Airport Management Firm**

There are currently several firms that specialize in providing management services for airports. One of the larger firms is the California-based American Airports Corporation (AAC), formerly known as Comarco. Other firms providing contract management for U.S. airports include Lockheed Air Terminal and Johnson Controls, although these companies focus primarily on commercial service airports or large, high activity general aviation airports.

Contracting airport management through a larger national firm typically involves a substantial transfer of authority by the airport owner to the contractor for the day-to-day facility operations, marketing and development. The primary advantages promoted by these specialty firms are innovative facility management, airport property development expertise, access to private-sector development capital, and economy created by centralizing and automating administrative functions such as collection of hangar and tiedown rents, land leases, etc.

In most cases, the firms enter into a management agreement, reporting directly to an overseeing body (airport board, city council, etc.). The airport owner normally retains the right to set rates and fees and approve leases, although the operator is given considerable flexibility to implement innovative management techniques. In some cases, a firm will lease the entire airport for a fee, which usually accommodates pre-existing fixed costs such as debt service on hangars, then seeks its profit through effective management and enhancement of the facility. This strategy is similar to the “residual cost approach” commonly used at commercial service airports, where signatory airlines agree to keep the airport self-sustaining by making up any deficit (the residual cost), in exchange for retaining surplus revenues generated through airport operations. However, most general aviation airports do not have sufficiently diverse revenue streams to ensure consistent profitability through a variety of economic conditions. For examples of this type of management, see *appendix A, example 2: American Airports Corporation (AAC)* and *example 3: Tacoma Narrows Airport*

Airport Management Summary/Conclusions

Several options exist for managing Pearson Field. These range from full-time or part-time City staff to contracting with a private firm. Options for contracting with the private sector include basic (limited) agreements with an existing tenant to oversee day-to-day airfield activities and contracting all or a portion of the airfield and financial administration to a professional services outsourcing firm or airport management firm.

Although the City of Tacoma example illustrates the potential problems that can be encountered under full contract management, contracting all or a portion of management responsibilities either to a professional airport management firm or through local airport tenants is an option available to

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the City of Vancouver. It appears that the most common problems are associated with accountability and the contractors' ability to meet specific performance measures. The length of time and expense incurred by the City of Tacoma to terminate their contracting agreements would suggest a need for clear "termination with cause" provisions that do not require protracted litigation to defend.

It appears that professional airport management firms are drawn to airports with significant revenue growth potential, which would be realized through application of their specialized expertise (i.e., professional property management, commercial real estate development, etc.). Given the limited land base at Pearson Field combined with relatively modest revenues, the opportunity to significantly "grow" the revenue through innovative management techniques appears limited. Based on these factors, it appears that the feasibility of contracting the management of Pearson Field to a national airport management firm is not high.

However, the development of a "request for qualifications" (RFQ) that defines the desired services to be provided could help to clarify the financial feasibility of various contracting options in relation to the capabilities of actual firms/individuals and the current cost of providing services. Since cost savings is a primary motivator in contracting services, a reduction of 15 to 20 percent over current costs, while providing comparable or better service levels, would be a reasonable standard for which to define success in this area. The cost of providing equipment such as computers and airport vehicles should also be addressed in any contracting agreement.

A decision about the best possible option for the City of Vancouver will be partly determined by decisions about the specific tasks/responsibilities to be contracted. In *Appendix C*, a table of basic duties that would typically be assigned either to a contractor or City staff is provided for comparison of the requirements that must be met by any managing entity.



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## **Chapter Four**

### **Market Evaluation**

The evaluation of Pearson Field market conditions performed for this study included two specific items:

- Undeveloped (vacant) airport land
- Local market influences

#### **Market Analysis for Pearson Field Property**

##### **Introduction**

A market assessment was conducted for Pearson Field's vacant properties. The airport appears almost fully developed, with 150 recently built, city-owned T-hangars, two private hangars, and two buildings leased to the Fixed Base Operator (FBO). Occupancy is effectively at 100%. A very unique characteristic that affects market potential is that the underlying airport land base is co-owned by the City of Vancouver and the National Park Service (NPS). For Pearson Field, the boundary between City-owned and NPS land is located near the midpoint of the runway; with the exception of the air museum, all landside facilities (aircraft parking apron, hangars, FBO facilities, etc.) are located on the City-owned portion of the airport. This shared land ownership has created a very dynamic negotiation over time between the stakeholders about how the airport is developed.

##### **Defining Issues and Assumptions**

The airport is operating with an agreement in place between the City of Vancouver and National Park Service (NPS). This agreement extends to 2022 (less than 18-years from now), at which time a transition to "historic aircraft" is intended. Based on the City-NPS agreement and a subsequent financial study, a maximum ceiling of 175 based aircraft was established for Pearson Field. Interpretation of this ceiling has been much discussed, but the market evaluation assumes that the 175-based aircraft cap will remain in effect for the foreseeable future. The planned long-term transition to "historic aircraft" appears to accommodate the majority of existing aircraft users and types under the generally accepted definition of "historic." However, it is not clear how such a transition would affect Pearson's ability to continue operation as a public use airport, open to all users, as required by FAA. Secondly, the relatively short term remaining before the anticipated transition date may affect the City's ability to effectively market vacant aviation-use lands, since there is currently no provision that can guarantee long-term airport operations for all users.

Although the intent reflected in legislation and formal agreements appears to support the continued, long-term operation of Pearson Field, the absence of specific provisions regarding operational limitations beyond 2022 creates a degree of uncertainty and risk that affects the City of Vancouver's ability to formulate a long-term financial strategy for the airport. The ultimate risk

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to the sustainable operation of Pearson Field would be a situation where no permanent (or very long-term) agreement was in place to guarantee continued access and use of the portion of airside facilities (runway, taxiway and protected safety areas) located on NPS land. Without such an agreement, the City would need to consider the feasibility of eastward expansion in order to guarantee the continued viable operation of the Pearson Field site.

Without an assurance that the airport will continue in operation for all types of existing general aviation uses beyond 2022, it is anticipated that prospective tenants may be unwilling or unable to secure commercial financing for their development projects. Due to the substantial investment involved, it is common for prospective tenants to request longer lease terms - often 30 to 40 years, or more - for the development of aviation facilities such as a maintenance shop or larger hangars on leased land.

It appears that this would be a significant constraint in marketing the remaining aviation-use land parcels on the airport, which could be affected by potential restrictions of specific types of general aviation aircraft that would be authorized to use the airport beyond 2022. It is not believed that a similar constraint exists for the potential marketing of the designated 2.5-acre non-aviation land area, since its potential development would not be dependent on the continued operation of the airport. The northeast corner of the airport appears very well situated for producing revenue to support airport operations. It appears that about \$30,000 per year could be generated at this site alone based on existing market conditions and demand for mixed-use commercial or light industrial sites.

Interest has also been expressed in developing a vehicle parking facility for the Fort Vancouver and Historic reserve in this area. This option may provide an opportunity for collaboration between the City, NPS and the Historic Reserve Trust that could be compared with other development opportunities to evaluate revenue generation potential for the airport.

It is clear from meeting with the City and NPS staff that there is strong mutual interest in maintaining and improving this on-airport partnership. The greatest challenges to this relationship appear to be related to aircraft noise and the overall land use compatibility issues associated with adjacent facilities. Both parties indicate a desire to continue working to find an acceptable long-term strategy for the collective site, which will likely be the key to improving the partnership.

## **Established Vacant Properties**

The existing Airport Layout Plan, dated October 2001, and approved by the Federal Aviation Administration, shows available land on the airport at two locations:

- 2 - 10,000 square foot hangar sites immediately north of the Fixed Based Operator's buildings.



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- 4 1/2 acres of vacant land in the northeast corner of the airport along 5<sup>th</sup> street. The land slopes upward toward 5<sup>th</sup> Street, reaching an elevation of approximately 27-feet above the existing hangar floors to the south.

1. The southern 2-acres, immediately north of existing T-hangars, is a similar elevation as existing hangars and potentially usable by aircraft.
2. The northern portion of approximately 2 1/2 acres along 5<sup>th</sup> street is designated as 'future development' and widely understood to be for non-aviation uses. This land holds the most promise for non-aviation market-driven opportunity.

A review of zoning mapping indicated that all property within the airport boundary is zoned CPX by the City of Vancouver. However, City staff have more recently indicated that the eastern portion of the northeastern parcel is zoned "Light Industrial." Aviation uses are not currently listed among permitted uses within Light Industrial zoning. This issue will be further evaluated by City staff as part of the overall examination of airport zoning. In addition, any airport lands zoned "Light Industrial" should accommodate aviation-related uses as an "outright" permitted use.

It appears that based on the recent hangar construction, most aviation-related uses would be considered compatible with the CPX zoning. However, it is not immediately clear to what extent potential non-aviation uses (NE parcel) would be compatible with the CPX zone. The outright and permitted uses for all developable areas of the airport need to be clearly defined. Providing a clear picture of acceptable uses would benefit both City staff tasked with marketing the vacant land and prospective tenants expressing interest in leasing the land.

## **Market Opportunities**

### Aviation Use Land

The 20,000 square feet immediately north of the FBO buildings is designated on the FAA-approved Airport Layout Plan as 'future hangars.' Two 100 by 100-foot hangars meet this criterion, and the existing access to adjacent apron/taxiways makes this option readily developable. Some changes in vehicle access and parking immediately north of the FBO building may be required to provide unobstructed aircraft access to the western hangar space from the existing aircraft taxi lane and apron.

The second aviation-use area (approximately 2 acres) is located immediately north of the airport's eastern-most T-hangar rows. This area is identified as "hangar development" on the ALP. Although not specifically defined on the ALP, it appears that the area could accommodate either a single T-hangar building (requires additional site excavation to allow aircraft taxiing on the north side of the hangar) or a row of south-facing smaller conventional hangars. In either configuration, approximately 17,000 to 20,000 square feet of hangar space (building footprint) could be accommodated based on FAA taxiway clearance dimensional standards and site characteristics.

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As noted earlier, the ceiling of 175 based aircraft appears to directly affect development of additional hangar space. Data provided by the airport manager (March 2004) indicates that Pearson Field is currently at the upper limit of the ceiling. It appears that the construction of any new aircraft storage hangars would not be consistent with the current City-NPS agreement if it resulted in an increase in the number of based aircraft. Alternatively, if the prospective tenants were to relocate from existing city-owned hangar space on the airport, there could be a reduction in hangar rental revenue for the city. While it is possible that some of the aircraft currently parked in reserved spaces on the aircraft apron may be interested in hangar space, the constrained conditions appears to make future hangar construction problematic in most scenarios.

It appears that only future developments that do not increase the based aircraft count, such as aircraft maintenance or other service businesses would be consistent with the terms of the current agreement. Aircraft radio and electronic repair, upholstery, painting, and renovation shops are examples of typical airport tenants within the acceptable 'aviation-related' category. Adding these types of businesses would not necessarily affect the number of based aircraft at the airport. The existing FBO provides radio repair services, which is an important consideration in determining how to stimulate financial growth of existing businesses without significantly increasing market size.

One successful variation that may be a good choice for Pearson Field would be targeting hangar development on the two 10,000 square foot parcels for business owners looking for a small office and adjoining hangar space for their aircraft. This happens in varying degrees at many airports, and brings added vitality to an airport. Similar examples include Sky Research in Ashland, Packasport luggage racks at Bend Airport, and Flightline Composites at Columbia Gorge Regional Airport. These are small business owners who use their aircraft for business some portion of the time. These businesses have chosen an airport location for an office or other operational space, but the convenience of consolidating aircraft and administrative functions in a single location was a key factor in their investment decisions. The space requirements can generally be accommodated within a 100 by 100-foot office building/ hangar footprint, often with the office areas located on two floors, adjacent to hangar space. This type of "mixed" business use typically adds only one or two aircraft to an airport's based aircraft count. For Pearson Field, the types of businesses that would be interested in this option would be limited to those with aircraft capable of safely operating from the existing runway length.

## Aviation Development Potential

It is noted that the ceiling of 175 based aircraft was determined through the development of a 25-year financial plan by the City in the 1995-1996 time period. The ceiling does not reflect the physical development potential of the airport, as represented by the three remaining developable sites depicted on the 2001 Airport Layout Plan suitable for hangar construction. In effect, even without a negotiated ceiling on based aircraft, the airport's ability to expand significantly beyond the 175 number of based aircraft is limited by land availability. Within the existing airport footprint, as depicted on the current ALP, there are only two small areas remaining on the airport

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that could accommodate hangar construction. Even if fully built out, the Consultant estimates that the net increase in based aircraft would be in the range of 10 to 15 percent.

Under the current City-NPS agreement, it appears that the ability to increase revenue through development of the remaining vacant aviation use parcels is very limited. An alternative approach that could be considered in future negotiations about the long-term future of Pearson Field would be eliminate the ceiling of based aircraft in exchange for an agreement by the City not to expand the airport in other directions (such as closing the west end of the runway and extending the runway to the east). This type of compromise could provide a reasonable assurance to NPS that Pearson Field would continue to operate in its current configuration with only a marginal increase in activity, while allowing the City to optimize the airport's financial performance.

## Non-Aviation Use (or Aviation-Related) Land

The 2 1/2 acres along 5<sup>th</sup> Street offers a good opportunity for non-aviation developments that are compatible with airport operations. The parcel is physically separated from aircraft operational areas by elevation (approximately 27 feet above the nearest taxi lane) and is identified as a development area (rather than "hangars" as the other vacant parcels are designated) on the current airport layout plan. The land slopes upward toward 5<sup>th</sup> Street, and there is a 48-inch storm drain running along the eastern side of this property. The privately owned lands located immediately adjacent (east) are developed in mini-storage warehouse units, which also appear to be a reasonable option for the airport land.

A possible customer for this land was contacted and is interested in discussing a lease of this property. Their intended uses would include small warehouse with office space, mini-storage with possibility of RV and boat storage. The company has a successful history of collaborating with neighborhoods and nearby businesses assuring positive co-existence. Landscaping, for example, could be required to maintain visual screening and improve aesthetic appeal. The existing (CPX and Light Industrial) zoning needs to be clarified for this site to determine how this type of use would fit. This land could be leased with revenue dedicated to paying for airport maintenance and improvements.

An indication of the possible revenue to the City could be calculated in the following way:

### **Potential Lease Revenue from Vacant Land on 5th Street**

N.E. corner of airport, fronting 5 <sup>th</sup> Street	
2.5 acres	108,900 sq. feet
Estimated Market Rate / Sq. Foot	\$4.00
Lease calculated at 7% rate of return	\$0.28 per square foot per year
Lease Revenue per Year	\$30,492

Source: Leverton and Associates



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Specific terms are always negotiated, but the above example is based on current market pricing and rates of return. The market rate of \$4.00 per square foot was paid to the City for right-of-way last year by the new mini-storage business on the eastside of the target property. Checking with a local realtor for land to the east of the runway identified a range of \$3.00 - \$4.00 per square foot.

## **Other Market Influences**

### **Evergreen Airport Closure**

The long-anticipated closure of Evergreen Airpark continues to move toward its eventual outcome. Recently, the City of Vancouver approved a rezone of the airport property to accommodate industrial park development. According to local sources, the remaining based aircraft will be allowed to continue operations until the property can be sold to prospective developers. Although there is apparently no specific time frame established, it appears that the airport could close with minimal advance notice at any time.

The potential affects of the Evergreen Airport closure on Pearson Field appear to limited based on Pearson's current development constraints, particularly the ceiling of 175 aircraft and Pearson's limited ability to accommodate any significant growth within its current land base. Some changes in Pearson's itinerant aircraft activity (itinerant fuel sales, aircraft maintenance, flight training, etc.) could be experienced with the scattering of Evergreen's aircraft to many airports in the region, although that is difficult to quantify.

It is also possible that some of the displaced Evergreen aircraft may want to park on existing aircraft parking aprons or in grass areas designated for overflow parking at Pearson Field. This type of activity would not appear to be consistent with the based aircraft ceiling provision of City-NPS agreement, but under FAA grant assurances, it would be difficult to deny public access to existing parking spaces on a public airport.

### **Economic Impact**

Data generated by the Washington Department of Transportation Aviation Division estimates the total economic impact of Pearson Field at \$38.4 million on an annual basis. The overall economic impact includes direct, indirect, and induced effects. Data indicate that Pearson's tenants and its visitors in Clark County contribute to 603 jobs with a total payroll of \$11.3 million (1998 data).

In addition to a variety of general aviation and business aviation users, the Pearson Air Museum provides an historic aviation resource that contributes to local tourism economy.



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## **Chapter Five**

### **Capital Improvement Program**

Pearson Field has recently undertaken several capital projects to upgrade airfield facilities. The projects were partially funded through a \$1.0 million FAA grant (dated May 28, 2002). The FAA-funded project included improvements to the airport access road; pavement rehabilitation (apron, parallel taxiway and taxi lanes); apron construction; perimeter fencing; airport drainage; airfield lighting and signage; and obstruction removal.

In 2001, an updated airport master plan was completed that included a capital improvement program (CIP) for a twenty-year planning period (2000-2020). The master plan recommends only a limited number of new development projects beyond the work completed in 2002-03 and those projects could be deferred indefinitely in a “no-build” scenario without significantly affecting the airport’s financial performance.

However, the master plan CIP lists only one future “pavement rehabilitation” project through the 20-year planning period. The single project covers an area of 25,294 square yards (227,646 square feet), which represents less than 1/3 of the total airfield pavement at Pearson Field. The costs associated with the maintaining and rehabilitating airfield pavement represents a significant historic investment that will continue in the future. As a result, the CIP seriously understates the future cost of maintaining *existing* airfield pavements over the next twenty years. This significant omission needs to be corrected in the City’s financial planning for Pearson Field.

In order to approximate the significance of the life-cycle pavement costs for Pearson Field, the Consultant reviewed existing pavement condition data maintained by the Washington Department of Transportation – Aviation Division. The WSDOT pavement data available for Pearson Field is based on 1999 inspections, which makes it difficult to accurately determine current condition. Updated inspections will be conducted by WSDOT pavement consultants in 2005 as part of the statewide aviation system planning program. As noted above, several sections of airfield pavement were improved during the last FAA-funded project in 2002-03. However, a review of available city and FAA records indicates that the runway had an asphalt overlay applied in 1992. The runway pavement surface is now 12 years old and would be expected to require rehabilitation (overlay or reconstruct) within the next 8 to 10 years, based on normal useful life expectancies for airfield pavement.

For the purposes of evaluating the airport’s long-term pavement needs, the Consultant (Century West Engineering, Inc) has assumed that all airfield pavements are currently in good condition or better. Based on normal life expectancies of airfield pavement, the Consultant further assumes that all airfield pavements will require repeated periodic maintenance and at least one major rehabilitation project, such as an asphalt overlay within the next twenty years. Projections were developed both on a level assessment (1/20<sup>th</sup>) of the twenty year costs and on a staggered cost scenario for short, intermediate and long-term planning periods based on the following assumptions:

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**Pearson Field**

See notes in appendix D that significantly increase the expenditure requirements

**Projected 20-Year Pavement Maintenance Costs**

*Prepared by David Miller, AICP, Century West Engineering (5/04)*

**Total Airfield Pavement**

**Area:** **720,000 SF** *Source: WSDOT Aviation Pavement Maintenance Program Data*

*Assume: 55,000 linear feet of cracking on runway, taxiway and apron (pavement joints and transverse cracking)*

	<i>LF./SF Unit Cost</i>	<i>Subtotal Cost Items</i>	<i>20-Year Number of Cycles</i>	<i>20-Year Totals</i>
<i>Assume Crack Filling on 6-Year Intervals</i>	\$2.60	\$143,000	3.3	\$471,900
<i>Assume Slurry Seals on 6-Year Intervals</i>	\$0.40	\$288,000	3.3	\$950,400
<i>Assume Full Pavement Overlay or Rehab Within 20 Years</i>	\$2.00	\$1,440,000	1	<u>\$1,440,000</u>
			<b>Total</b>	<b>\$2,862,300</b>

**(20 Year Average Annual Expense)**

**\$143,115**

**Pearson Field**

**Projected 20-Year Pavement Maintenance Costs** *(Based on 2004 dollars)*

*Existing Airfield Pavement Area: 720,000 square feet (80,000 square yards)*

*Assumes that all existing pavement is in excellent condition in 2004*

*Assumes Slurry Seals performed on 6-Year intervals for all airfield pavements*

*Assumes Pavement Overlay or Rehab required for all airfield pavements within 20 years*

*Annual costs represent total projected expense divided equally over 20 years*

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Annualized Pavement Maintenance	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115

*(1/20th of total)*

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Annualized Pavement Maintenance	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$ 143,115	\$143,115

**Pavement Maintenance/Rehabilitation Unit Cost Assumptions (include 30% Eng & Conting.)**

*Crackfilling: \$2.60 per linear foot (to be done in conjunction or between slurry seal applications)*

*Slurry Seals: \$3.60 square yard (\$0.40 sf)*

*Asphalt Overlays: \$12 sy*

*Reconstruction/New Pavement: \$30 sy*

*Average Rehabilitation Cost: \$18 sy (\$2.00 sf) (assumes a combination of simple overlays and rehabilitation/reconstruct)*

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**Summary of Projected 20-Year Airfield Pavement Costs**  
**Pearson Field**

Period	Total Within Period	Average Annual Total	Projected Requirements
Short-Term (2004-2008)	\$431,000	\$86,200	assumes 1 cycle of crack filling and slurry seal
Intermediate-Term (2009-2013)	\$911,000	\$182,200	assumes 1 cycle of crack filling and slurry seal; 1/3 of 20-year projected rehabilitation cost
Long-Term (2014-2023)	\$1,520,300	\$152,030	assumes 1.3 cycles of crack filling and slurry seal; 2/3 of 20-year projected rehabilitation cost
<b>Total</b>	<b>\$2,862,300</b>		

CIP Summary

Based on the typical useful life of new airfield pavements, the repetitive maintenance schedules required to maximize useful life, and the substantial quantity of paved airfield surfaces at Pearson Field (more than 720,000 square feet), the costs associated with pavement maintenance and rehabilitation will be significant and ongoing.

Based on the assumed good condition of the existing pavement, the maintenance costs during the first five years are expected to be relatively low; however, the costs would then increase incrementally as the required rehabilitation projects are needed. Based on the large quantity of pavement, it would be difficult to accommodate an extended period of deferred maintenance (crack filling slurry seal or fog seals) without creating a correspondingly high backlog of work at a future point. Allowing longer-than-recommended intervals between maintenance projects will result in more deterioration, lower pavement condition index (PCI) ratings, and shorter life expectancy for the pavement. Since the pavements at Pearson Field are generally in good condition, the money spent on timely maintenance will maximize pavement life and minimize overall pavement expenditures in the future.

In the past, the City has used FAA grants (90% funding) to fund the majority cost of airfield improvement projects, including pavement. Under current funding criteria, the majority of the recommended pavement maintenance and rehabilitation costs are eligible for 95 percent FAA funding. It is evident that past use of FAA grants has been largely responsible for the current condition of Pearson Field; it also apparent that based on the limited resources of the City, it would be extremely difficult to maintain comparable facility condition without use of FAA funds.

Regardless of funding scenarios, the need to maintain airfield pavements will continue unabated and should be reflected in the City's capital expense projections for the airport. If funding limitations result in extended periods of deferred maintenance, the pavements will eventually require more expensive repairs, reconstruction or abandonment.

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## **Update to CIP Summary:**

Since the pavement analysis conducted by internal City of Vancouver resources and the analysis provided by Century West Engineering differed significantly, the City of Vancouver took the added measure of contacting an engineering firm with a long history of working with Pearson Field and which was familiar with the pavement condition over time. This final input would integrate Century West's projections with the actual pavement condition.

This Engineering firm provided analysis and recommendations (See Appendix D) that integrate the work of Century West with the detailed history of the Airfield's pavement condition to produce what we believe to be a highly accurate projection of pavement maintenance requirements. The essence is that Pearson Field will require significantly more work than initially estimated to maintain satisfactory pavement condition – reinforcing the need for FAA matching funds as essential to the field's future.

**Staff Recommendation:** The Airport Manager must develop and the City adopt an appropriately detailed CIP that details annual pavement maintenance plan over the next 20 years, based on accepted metrics and actual wear history.



## Chapter Six Financial and Organizational Assessment

### Financial Summary

***Note: All data analyzed by Century West Engineering in this plan used year end 2003 and first quarter 2004 datasets.***

The conditions described in previous chapters limit the ability to expand/alter the airport's financial base significantly through land development, airport expansion, or revenue growth derived through an increase in based aircraft. As a result, only incremental increases in revenue generation are considered feasible under the status quo operation of the airport.

The operating budget for Pearson Field is in an enterprise fund and is not part of any other city organization's operating budget. The budget shown below is as of early 2004 when the airfield was still part of the Parks & Recreation department; this changed later when it was moved to the City Manager's Office.

**Pearson Field Financial Summary**

Number of FTEs	General Fund Operating Budget	Category Breakdown
0.62 (all City)	\$44,691/year (all City)	Salaries/Benefits - \$44,691

  

Number of FTEs	Airport Fund Operating Budget (Fund 481)	Category Breakdown
0.50 (all City)*	\$479,811/year	Supplies/Services - \$60,334 Taxes/Debt Payments - \$253,221 Principal Payments - \$54,931 Interfund - \$111,325

\*Salary and benefits appear as an interfund line item in the Airport budget.

Pearson Field operates as an enterprise fund. Revenue from tenants, visitors and the FAA (capital and planning related grants) and NPS land refurbishment have been able to meet expenditure requirements without an operating subsidy from other City funds. FAA grant assurances require revenue generated by the airfield be used exclusively for airfield related expenditures. The City's past policy decisions to implement market rate charges and fees, consistent with FAA grant assurances, and control expenditures have the airfield in a stable financial operating position, isolated from potential cuts due to revenue shortfalls in other City operations. The airfield's positive financial position and lack of use of funds from other City operations is uncommon for smaller

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general aviation airports; however, the trend in the industry is for local government-owned general aviation airports to pursue revenue policies similar to those in place at Pearson Field.

Staff projections indicate that Pearson Field will maintain, over a multi-year basis, positive cash flows and when long-term debt matures in 2017, Pearson Field will generate substantial positive cash flow. The average projected annual cash flow for the five-year period 2004-2008 is \$46,770 on average annual revenue of \$ 542,985 (8.6%). The airfield began 2004 with a cash balance of \$235,570 (46.2% of budgeted expenses for 2004). Ending cash balance is projected to average \$418,582 during the five-year period, 2004 to 2008, with a year-end 2008 balance of \$469,422.

However, a key issue that can significantly negatively impact existing cash flow projections is the apparent omission of pavement maintenance costs and FAA revenue from the cash flow projections. A review of the existing airport master plan's capital improvement program revealed only minimal expenditures for pavement maintenance and rehabilitation projects through the 20-year planning period. However, based on the routine periodic maintenance schedules normally recommended for airfield pavements and the substantial quantity of pavement (more than 720,000 square feet), the costs are likely to be substantial. Under current funding criteria, the majority of the recommended pavement maintenance and rehabilitation costs are eligible for 95 percent FAA funding. Additional proforma financial projections were generated to reflect these cost elements and are presented at the end of this chapter. It is evident that when the life cycle costs of pavement maintenance and rehabilitation is considered, the ability to obtain FAA funding is critical to long-term financial health of Pearson Field.

## **Indirect Costs (internal transfers)**

The City has implemented an updated cost allocation methodology for general administrative and financial services. The updated methodology has resulted in significantly increased financial services costs to Pearson Field. The Consultants for this project were not engaged to review the methodology. However, upon review of the specific charges to Pearson Field, it appears that the costs of certain services provided may exceed the benefit received. City staff should review the methodology and services and ascertain how they can best reduce the costs to a more reasonable and appropriate amount.

We have researched the costs of indirect transfers typically found at similarly sized airports. Examples are provided below for other municipal airports providing similar services with significantly lower transfer amounts (in dollars and as a percentage of revenues).

Pearson Field's 2004 budget includes \$76,201 for transfers for indirect costs (i.e., budgeting, cash management, billing and collections, legal, administrative, lease management, and purchasing); \$58,603 for airport management staffing; and \$9,000 for temporary help. This amounts to \$143,804 or 28% of the operating revenues of the airport. Estimated amounts for the same costs in 2005 are \$78,900, \$36,640, and \$9,300, resulting in a decline to \$124,840 or 24% of operating revenue. Transfers and temporary help include increases of 4% and staffing is reduced to a half-time FTE. Future projections beyond 2005 reflect increases of 4% for each. Revenue is projected

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to increase approximately 3% annually going forward. Therefore, the ratio of airport management staffing and indirect costs is projected to increase above 24% going forward.

Given the anticipated status quo operation of the airport and the associated activities to provide necessary services to the customers of the airport and meet federal, state and local regulatory and business requirements the current and projected administrative costs including indirect transfers is greater than would normally be anticipated. Based on our experience with other communities, we have noted that the indirect transfers are often in the range of 5%-7% of operating revenues. If implemented, budgeted indirect transfers would be reduced to approximately \$25,471 - \$35,660 in 2004 and \$26,230 - \$36,722 in 2005. Total administration costs would be reduced to approximately \$93,074 - \$103,263 (18%-20% of operating revenue) in 2004 and \$72,170 - \$82,662 (14%-16% of operating revenue) in 2005. Examples of indirect costs as allocated by some other municipalities are in Appendix C.

**Staff Recommendation:** Continue to review plan to ensure it allocates cost as accurately as possible. A joint review by Airfield staff and Finance staff in mid 2004 resulted in significant reductions for Pearson Airfield. Continued work may yield further reductions.

The cost allocation methodology used by Vancouver is one of the standards approved by State of Washington auditors, and is appropriate for Federal grant accounting. The allocation measures are constantly under review to ensure we are using the best information possible to allocate costs where they truly belong.

## Debt

Pearson Field, as of December 31, 2003, has a balance due of \$2,990,832 in general obligation (G.O.) bonded debt. This is the result of two City of Vancouver G.O. bond issues, from which Pearson Field received a portion of the proceeds for T-Hangar construction, and a refunding G.O. bond issue. In 1996, the airfield received approximately \$1,750,000 in G.O. bond proceeds with a true interest cost (TIC) of 5.42%. The 1996 bond issue was partially refunded in 2002 with refunding G.O. bonds with a TIC of 4.08%. In 1998, the airfield received approximately \$1 million in G.O. bond proceeds with a TIC of 4.80%. Annual debt service requirements and estimated debt coverage ratios for the following five years are:

<u>Year</u>	<u>Amount</u>	<u>Debt Coverage Ratio *</u>
2004	\$233,915	.99
2005	231,579	1.26
2006	226,720	1.33
2007	302,890	1.03
2008	311,858	1.02

Required debt coverage ratios for revenue bonds issued for activities similar to those at Pearson Field would be 1.25 or greater. If the airpark life is to extend beyond 2022 and if possible, airpark

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management should attempt to restructure the airfield's debt repayment schedule as the assets that were funded, i.e., t-hangars, have a useful life considerably longer than the repayment period provides. If interest rates decline to levels that make the 1998 bond issue economic to refund, the City's finance department will pursue issuing G.O. refunding bonds.

**Staff Recommendation:** Debt has been restructured by the City and will continue to be evaluated for potential savings with other City bonds as market conditions change.

*\* Debt coverage ratio indicated is prior to any adjustment to financial proformas resulting from reducing operating expenses for administration and internal transfers to 15% of revenues or increasing pavement maintenance.*

## Airfield Activities and Staffing

The following activities are performed by staff assigned to operate Pearson Field:

- Lease management
- Airfield maintenance
- Construction
- Budget management
- Grant administration
- Complaint resolution
- Advisory committee support; coordination with Historic Reserve and NPS

Current staffing includes a three-quarter time mid-level management position reporting to and supervised by a senior policy manager in the City Manager's office. Pearson Field also receives financial, information technology and maintenance services through the City's finance, information technology and public works departments.

## Pearson Field Outsourcing (Financial Considerations)

Based on CWI's past experience in implementing outsourced solutions they have noted that there may be the potential to provide the required service delivery to the customers of the airport at a cost savings of 15% - 20% of the average budget (\$77,416) for 2005. The estimated total cost of outsourcing and remaining indirect transfers would need to be approximately \$61,900 - \$65,800 per year in 2005 to realize these savings.

Although the City can continue to provide airport administration through City staff, the service levels and ability to meet the service delivery expectations of customers may diminish over time if staffing levels are reduced too far or the airport becomes a lower priority within City government due to shifting responsibilities to mid-management or lower staff. An outsourced arrangement could provide targeted service delivery provided by the private sector that is performance based. Appropriate contractual requirements would be required to permit the City to maintain the necessary control to ensure the airport is in compliance with FAA and other agreements, is

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maintained at or better than agreed to standards, and enhances the public's perception of the airport.

There are two major caveats to this savings recommendation.

a. These potential savings would come at the risk of lower management participation and a change in the focus of the management team from the current "inclusive management" to a more strictly business focus on the profit and loss operation. This may not be the best fit for the airfield and should be approached with caution.

b. Cost of filling, managing, and auditing the contract operations will be a new expense to other departments

c. It is noted that the indirect transfers do pay for staff services and that if the amounts are reduced from the airport they may need to be made up from other sources.

d. If staff determines that indirect transfer amounts increase significantly, a stronger argument can be made for outsourcing.

**Staff Recommendation:** An experienced and dedicated airport manager should be hired as a permanent employee, and the City maintain direct management oversight of the operation. Reevaluation of this decision should be made biannually based on performance, allocated costs, and airport conditions.



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## **Appendix A – Examples of Airport Management Options**

*Compiled by Century West Engineering, 2004*

### Example 1: Prineville Airport, Oregon

Prineville Airport is a general aviation airport in central Oregon with moderate activity levels: 74 based aircraft; 9,000-14,000 annual operations in 2003. The 20-year activity forecasts project 124 based aircraft and 18,000 annual operations by 2020. Prineville is the corporate headquarters for the Les Schwab Tire Company, which bases two Cessna Citation business jets at the airport.

Prineville Airport is jointly owned and operated by the City of Prineville and Crook County, Oregon. In 1998, the current Airport Commission was created with five appointed commissioners, selected by the County Court and City Council. The Airport Commission reports directly to the County Court. The management of Prineville Airport is the responsibility of the Airport Commission, who entered into a long-term (10-year) management agreement with the airport's FBO, Prineville Aviation about five years ago. Prineville Aviation also has a separate agreement for the operation of the FBO on the airport.

The airport manager (FBO owner) is responsible for overseeing the day-to-day airport activities. Duties include performing basic maintenance on airport-owned hangars and buildings, regular inspection of the runways and taxiways, basic maintenance on airfield lighting (bulb replacement, minor repairs), and response to any accidents/incidents occurring on the airport. The airport manager has the authority to close a runway or the entire airport and issue "notice to airmen" (NOTAM) through the FAA when conditions warrant. The airport manager also has the authority to request city maintenance crews for runway sweeping, snow plowing and other related services.

The airport manager provides a formal report to the Airport Commission at regular meetings and coordinates other business with the chair of the Airport Commission, as required between commission meetings. The airport manager has the authority to spend up to \$250 per month without requiring additional approvals from the Airport Commission; expenditures above that amount must be authorized in advance by the Airport Commission.

### Compensation:

- 100% of revenues generated from airport-owned hangars and tiedowns. Airport-owned hangars consist of two WWII era conventional hangars containing 10 based aircraft that generate \$540 per month in space rental; the airport also has 55 newer privately-owned aircraft hangar spaces that are not included in the compensation formula. The airport currently has 7 reserved tiedowns generating monthly rental revenue.
- Space for the airport manager office is provided at no charge in the pilot lounge building, which also includes restrooms and a conference room.

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## Other Compensation (through separate FBO agreement):

- The FBO receives 50 percent of the profit from aviation fuel sales. The FBO is responsible for all fueling activities on the airport (no card lock is available for self-fueling). The airport owns and maintains the fuel storage tanks, pumps and fuel trucks; and purchases the fuel from the distributor.
- The FBO maintenance hangar is owned by the FBO with a ground lease. As part of the 10-year FBO agreement, ground rent for the hangar was waived for five years. The FBO currently pays \$0.10 per square foot (annually) for the footprint of the hangar.
- The FBO owner leases an area on the airport for \$1 per year to locate a manufactured home residence, which serves as a "caretaker residence" for the airport.

## **Example 2: American Airports Corporation (AAC)**

The following information was obtained from company data and other readily available sources. It is not intended to serve as an endorsement of the firm or the quality of its services. However, the information illustrates several common elements of contract airport management business models, which may be utilized by other airport management firms and airports.

AAC was founded in 1997 and, according to company information, is one of largest general aviation airport management companies in the United States. As recently as 2000, it was widely reported that AAC had 21 airports under management contracts. The company has undergone some changes in ownership, including being spun off from Comarco (a wireless communication company) in late 2000. AAC currently manages six airports, including five in southern California and one on Midway Island, Midway Atoll.

AAC company information defines the following "Acquisitions Criteria" for aviation facilities:

*"AAC owns, leases, operates, manages and develops airports, individual aviation facilities, fixed base operators (FBOs) in the United States. We look to upgrade underutilized assets and facilities, develop new building and FBO locations, and provide financing and development to potential joint venture partners.*

*Our primary focus is to: (1) enter into a long-term lease or management contract for an existing airport; (2) acquire individual land parcels and buildings at airports; and (3) acquire existing single and multi-location FBO facilities. We can do this by: (a) long-term lease arrangements; (b) operating agreements; or (c) outright purchase of the facility.*

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AAC is most interested in airports that fit into the following profile:

- *Reliever and general aviation airports in metropolitan areas with 50,000+ people*
- *Areas with demonstrated growth in population, business and/or aviation needs*
- *Resort areas with commuter or corporate aviation services*
- *Airport sizes of 100+ acres*
- *Runway lengths of 5,000 ft. or more, or the ability to acquire additional land to extend the runway*

Our individual property and FBO profile is as follows:

- *Long-term land leases for all types of aviation properties*
- *Terminal and FBO buildings, leased or vacant*
- *"T" , executive and corporate hangars, leased or vacant*
- *Maintenance and business-related hangars, leased or vacant*
- *Cargo and other aviation support facilities, leased or vacant*
- *Any development opportunities related to the above*

Our main goals are value enhancement through:

- *Rehabilitation/upgrades of existing structures*
- *Development of vacant or underutilized land*
- *Promotion of aviation and aviation services"*

AAC provides aviation management expertise in the following areas, depending on the needs of the airport:

- Airport Management
- Aircraft Fueling Operations
- Airport Fire Fighting and Rescue (ARFF)
- FBO Operations
- Hangar Rental
- Tie-Down Rental
- Land Development

A summary of the AAC-managed airports is provided in the following table for comparison to Pearson Field. It appears that the airports currently managed by AAC generally have higher activity levels and a larger land base, which would be expected to generate significantly higher revenues than Pearson Field would be capable of generating through the most common sources: hangar and tiedown rentals, fuel sales and land leases.

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**AAC Managed Airports (Characteristics)**

<b>Airport</b>	<b>Based Aircraft</b>	<b>Annual Operations</b>	<b>Runway Length</b>	<b>Land Area (Acres)</b>
Whiteman Airport Pacoima, CA	600	160,000	4,120 feet	184
Gen. Wm. Fox Airfield Lancaster, CA	198	90,000	7,200 feet	1,200
Brackett Field LaVerne, CA	482	252,400	4,839 feet	276
Compton/Woodley Airport - Compton, CA	275	60,000	3,670 feet	77
El Monte Airport El Monte, CA	365	165,000	3,995 feet	103
<b>5-CA Airport Avg. (median)</b>	<b>384</b>	<b>145,480</b>	<b>4,765 feet</b>	<b>368</b>
Henderson Field Midway Atoll, Pacific	N/A	N/A	7,900 feet	N/A
N/A: Data Not Available * FAA TAF data				
<b>Pearson Field Vancouver, WA</b>	<b>176</b>	<b>46,892*</b>	<b>3,725 feet</b>	<b>61.8 (city owned)</b>

**Example 3: Tacoma Narrows Airport**

One example of the pursuit of creative solutions is the City of Tacoma, owner of Tacoma Narrows Airport (170 based aircraft, including 20 corporate jets). The City has experimented with different ways of operating the airport. In the early 1990s, one of the corporate tenants, Crossing Aviation, was chosen to operate the airport for a fee. After a period of time, Crossings sold their contract to American Airports Corporation, a California firm that specializes in providing contract airport management services. This management arrangement lasted approximately nine years. However, during the course of the agreement, the City became increasingly concerned about the lack of maintenance being performed at the airport and began efforts to bring the airport back under city management. The process of regaining operational control began nearly five years ago, with full control being achieved about two years ago.

The current City of Tacoma management approach has a full-time airport manager with supervisory management from the Assistant Director of General Services. According to the Assistant Director, it is a very time-intensive job for her and the airport manager, managing FAA issues and grants, plus the daily issues of tenants, leases and neighbors.

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## Appendix B – Sample Airport Management Duties

*Compiled by Century West Engineering, 2004*

Task	City	Contractor
<b>Airfield Maintenance (Minor)</b>		
Program Development (tasks, schedules, budget)	TBD	TBD
Runway/Taxiway/Apron Sweeping	TBD	TBD
Snow Plowing/Removal	TBD	TBD
Airfield Lighting: bulb, fuse replacement, etc.	TBD	TBD
Buildings and Grounds	TBD	TBD
Landscaping (Grounds)	TBD	TBD
Mowing/Brush Removal (Airport Operations Areas)	TBD	TBD
Maintain Access Roads, Service Roads, Vehicle Parking Areas	TBD	TBD
Airfield Pavement Maintenance (vegetation control/removal)	TBD	TBD
Maintain Maintenance Log	TBD	TBD
Coordinate Vendor Services/Payments	TBD	TBD
<b>Airfield Maintenance (Major)</b>		
Pavement Maintenance (crack filling, seal coats, markings)	TBD	TBD
Building Repair, Renovation, Painting	TBD	TBD
Repair/Replacement: damaged hangar doors, fence/gates, airfield lighting components, etc.	TBD	TBD
<b>Financial Administration</b>		
Invoicing (hangar, tie down rentals, leases)	TBD	TBD
Lease Negotiations/Renewals/Contracts	TBD	TBD
Fuel Flowage Fees/Taxes (if not handled by FBO)	TBD	TBD
Property Management (land leases)	TBD	TBD
Vendor Services/Payments	TBD	TBD
Prepare Annual Operating and Capital Budgets	TBD	TBD
Manage FAA Grants	TBD	TBD
<b>Airport Operations</b>		
Monitor Compliance with FAA Regulations	TBD	TBD
Issue/Cancel Notice to Airmen (NOTAM)	TBD	TBD
Develop/Maintain Minimum Operating Standards Document; Code Enforcement	TBD	TBD
Airport Safety (accident response coordination; develop/maintain emergency plan)	TBD	TBD
Airport Security (incident response, law enforcement coordination; develop/maintain security plan)	TBD	TBD
Respond to Tenant and Itinerant User Needs	TBD	TBD
Noise Complaints	TBD	TBD
Maintain Operations Log/Generate "Event" Reports	TBD	TBD
Attend Airport Advisory Committee/City Council Meetings	TBD	TBD
<b>Economic Development</b>		
Market Vacant Land and Hangar Space	TBD	TBD
Public Relations/Community-Airport User Liaison	TBD	TBD



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## **Appendix C – Examples of Allocated Costs for Small Airports**

*Compiled by Century West Engineering, 2004*

### City of Corvallis, Oregon

Based aircraft:	approx. 150
Distance to international airport:	45 miles
Annual revenue:	\$470k
Annual operating expenses:	\$270k
Internal transfers:	\$16k (3.4% of revenue)

Internal transfers pay for finance and administrative functions including City Managers office, City Attorney, billing and collection, personnel and payroll, purchasing and accounts payable, accounting and budgeting, and treasury management.

Internal transfers are calculated based upon standard cost allocation methodologies that reflect a relationship between activity levels and appropriate measures, e.g., treasury management based upon proportion of dollars in airport fund relative to total City-wide dollars, personnel based upon FTE's, billing and collection on number of transactions, City Manager based upon budget, purchasing and accounts payable on activity levels, and accounting and budget on size of budget.

### City of Bend, Oregon

Based aircraft:	approx. 150
Distance to regional commercial airport:	15 miles
Annual operating revenue:	\$380k
Grants	\$743k
Annual operating expenses:	\$129k
Internal transfers:	\$24k (2.1% of revenues)

Internal transfers pay for finance and administrative functions including City Managers office, billing and collection, personnel and payroll, purchasing and accounts payable, accounting and budgeting, and treasury management.

Internal transfers are calculated based upon standard cost allocation methodologies that reflect a relationship between activity levels and appropriate measures, e.g., treasury management based upon proportion of dollars in airport fund relative to total City-wide dollars, personnel based upon FTE's, billing and collection on number of transactions, City Manager based upon budget, purchasing and accounts payable on activity levels, and accounting and budget on size of budget.

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City of Eugene, Oregon:

Based aircraft:	approx. 200+
Distance to regional commercial airport:	NA
Annual revenue:	\$6,060k
Annual operating expenses:	\$4,509k
Internal transfers:	\$295k (4.9% of operating revenue 6.5% of operating expenses)

Airport serves commercial and general aviation. Internal transfers pay for finance and administrative functions including City Managers office, City Attorney, billing and collection, personnel and payroll, purchasing and accounts payable, accounting and budgeting, and treasury management.

Internal transfers are calculated based upon standard cost allocation methodologies that reflect a relationship between activity levels and appropriate measures, e.g., treasury management based upon proportion of dollars in airport fund relative to total City-wide dollars, personnel based upon FTE's, billing and collection on number of transactions, City Manager based upon budget, purchasing and accounts payable on activity levels, and accounting and budget on size of budget.

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## **Appendix D – Pavement Management Analysis**

*Provided by W&H Pacific, Inc, 2005*

**From:** Anderson, Rainse [mailto:ReAnderson@whpacific.com]  
**Sent:** Sunday, February 27, 2005 2:36 PM  
**Subject:** Pearson Field

Per your request I've reviewed the Pavement Maintenance cost information you provided me from the City Engineer, Century West Engineering Corp. (CWEC) as well as the 2001 Master Plan update prepared by URS. Based on my association with Pearson Field since 1990 I offer the following recommendations.

### **General information:**

Overall the condition of the pavements at Pearson Field is very good. The Runway was overlaid in 1990, the main parallel Taxiway received a Slurry Seal in 2002 and many other pavement areas have either been built or reconstructed during projects in 1999 and 2002.

Currently the Aviation Division of WSDOT is undertaking an Airport Pavement Maintenance System Update, Pearson is a part of this study. The consultant will be conducting a visual inspection of the pavements and rating them per the FAA's Pavement Condition Index system. Then a maintenance/rehabilitation schedule will be outlined and cost estimates prepared for use by the Airport owner, State and FAA. This study should be completed within a year.

### **Comments:**

In my opinion the information prepared by CWEC is too conservative and doesn't accurately represent the Airport needs based on the existing condition of the pavements and the current and projected traffic. In addition the URS 2001 Master Plan update doesn't address pavement maintenance in its Financial Implementation Plan. I believe that the cost estimates prepared by the City Engineer is close to forecasting the needs at Pearson. I would offer the following modification to the recommendations:

- 1) In years 1-7 change the Slurry Seal to Crack Sealing and a Fog Seal. I don't believe the pavements identified are in need of a Slurry Seal until years 8-14. The Fog Seal will last between 4-6 years. This work should be completed within the next 2 years.
- 2) The estimate identifies an annualized cost of approximately \$40,000 for the airport budget. This number doesn't take into account the availability of FAA and WSDOT funds for this type of work. FAA's current grant participation rate is 95% and the State will split the local match or 2.5%. This would leave the local match at 2.5% or for a maintenance project of \$300,000 approximately \$7,500.
- 3) The City is eligible for funding by the FAA and State however the projects must be programmed in the Airports current Capital Improvement Plan (CIP). Since pavement maintenance wasn't included in the master plan, I strongly recommend that the CIP be updated immediately and submitted to the FAA and State. This information will be added to their records and identified for future funding.
- 4) I also recommend that the cycle of maintenance/CIP cost be changed to 1-5, 6-10 and 11-20 to match the FAA funding format. This would produce a CIP as follows:

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Years	Total Cost	FAA/State	City	
1-5	\$300,000	\$292,500	\$7,500	
6-10	\$300,000	\$292,500	\$7,500	
11-20	\$600,000	\$585,000	\$15,000	this includes a \$300,000 pavement project.

I hope this meets your needs regarding pavement maintenance at Pearson. Please contact me if you have any questions.

Best Regards

Rainse Anderson, PE  
Aviation Services Director  
W&H Pacific Inc.