

Nelson Airport

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1. Executive Summary

The future of Nelson's City-owned airport has recently been under public debate. In response, the City has struck an "Airport Lands Task Force" to study pertinent issues and develop recommendations on the best future use of the airport lands. Excepting "other possible uses", this document reports on the issues raised in the Terms of Reference, namely:

- historic and current airport operations;
- regional transportation planning;
- population requirements;
- emergency needs;
- economic impact;
- costs, funding expectations and sources.

Since 1947, the airport has been used for recreational and commercial flying, as a base for private and commercial aviation with their related businesses, and, importantly, to provide critical infrastructure for various emergency services such as MedEvac, forest fire fighting, and Search and Rescue.

Recreational and Tourism Uses

Over the last years, the very active ranks of Nelson's local recreational pilots have been joined by an increasing number of visiting pilots and their passengers. Every year, up to 400 private or chartered aircraft with tourists aboard come here for Nelson's unique combination of scenic surroundings and an airport within walking distance to a very attractive downtown area. These often well-heeled tourists spend money in local businesses on accommodation, food, ground transportation, gifts and fuel.

The airport provides convenient access for tourists to our city, alleviating our tourism industry's biggest challenge: remoteness and lack of efficient transportation infrastructure. With Cranbrook's airport – a short and scenic commuter flight away – slated to receive international tourists in the near future, this becomes an important consideration.

Business and Commercial Uses

Although somewhat curtailed after the recent departure of Nelson Mountain Air, a spectrum of commercial services has been available at the airport, including charter services, rental aircraft, flight training, repair and maintenance, courier and cargo services, and re-fuelling facilities. Typical users relying on these services are local professionals and business travellers, the forest and mining sectors, law enforcement, wildlife biologists, surveyors and government personnel. Commercial tourism operators are increasingly depending on these services. Access to ski and wilderness lodges, sightseeing flights, heli-skiing and hiking are only examples of this trend in our area.

Youth programs and flight training are other important aspects. Air Cadets, Young Eagles and student pilots are all passionate about the opportunity to fly. In addition,

Nelson has attracted many students and hobby pilots from overseas, offering a variety of flying opportunities in scenic surroundings, a hospitable small town, and an uncrowded airspace. Beyond aircraft rental and training, these visitors generate significant benefits to the local tourism sector for lodgings, restaurants, entertainment, etc.

Critical Community Services

Finally, the airport plays an important role in addressing the community's emergency needs. Forest fire fighting around Nelson, Search and Rescue for hapless backcountry skiers, disaster relief and medical evacuation (MedEvac) of over 100 persons annually would be a lot less timely and effective without the local airport as an operating base. In addition to the improved safety of lives and livelihoods, these services also contribute significantly to our economy. Last years' fire fighting efforts alone saw \$ 22 million spent in the Kootenay Lake Zone. Without an airport bringing in crews and operations, Nelson would lose access to such opportunities.

Economic Impact

The total economic impact including direct, indirect and induced effects of all the above-noted airport-related activities amounts to roughly \$ 6 to 10 million in terms of annual output, around \$ 1.3 to \$ 1.8 million in employment income and between 28 and 41 full time jobs.

Transportation Planning

The Nelson airport's significance relative to Castlegar's regional airport is increasing, due to population trends, the growing tourism sector here, and somewhat better weather. The ability to bring international tourists directly here by air from the future Cranbrook international airport is another important consideration.

Helicopters alone, as is sometimes suggested, cannot replace fixed-wing service. The reasons are their limited operating capabilities: low speed, short range, little capacity for passengers or cargo, high cost and the need for fixed-wing support in sustained operations. An isolated heli port adjacent to residential development would quickly face strong pressures to close because of noise, dust and traffic.

Finances

City taxpayers will want to know future financial requirements for the airport. Raised user fees and volunteer maintenance work by the Nelson Pilots Association have turned the losses of past years into a solid cash surplus in 2003. According to recent runway inspection work performed by Pennco Engineering, there is no need for significant capital improvements for another 10 years, may be longer. This will give the City time to apply for infrastructure grants as it has done successfully in the past or fill a capital fund from its operating surpluses.

Community Planning

Nelson's Official Community Plan succinctly articulates the benefits of the airport to the community and clearly recognizes it as an asset. Though alternate uses of the airport lands may be more compatible with future private developments in its approach path, they are very problematical due to the existing significant soil contamination on these lands. Thoughtful architectural design for adjacent buildings and noise abatement strategies may be the more appropriate response to developer concerns. Also, the lands surrounding the airport clearly deserve more urgent attention with respect to re-development than the airport as a valuable piece of fully functioning city infrastructure.

Opportunities

A number of untapped opportunities exist to better utilize resources and turn the airport into a vibrant hub for business and public services, to generate income for the City, and to contribute further to Nelson's social and economic development. With the assistance of the airport user groups, new technology developments and more efficient land use at the airport could help attracting a fixed base operator with flight school and ancillary services again, possibly a scheduled flights operator, and more tourists and tourist pilots.

Recommendations

To realize these opportunities, some recommendations are put forward to the City. Chief among them is the development of a forward-looking vision and revitalization concept including relevant objectives for the airport. The City should establish an Airport Advisory Committee representing stakeholders to aide in these tasks. A long-term commitment to the airport is recommended to create incentives for business to invest. Consequently, planning for the waterfront lands should integrate a fully operational airport into its vision. And finally, the present ownership and management structure of the airport should be reviewed.

2. Introduction

One hundred years ago the history of powered flight began. Wilbur and Orville Wright made that momentous first flight at Kitty Hawk, North Carolina. A mere 8 years later the very first airplane arrived in the City of Nelson. In his book "Barnstormers to Bush Pilots", Peter Corly-Smith recounts from a Nelson Daily News article of Sept. 30, 1912, that 'the aeroplane has arrived in Nelson and the airman is on his way'. Walter Edwards, an American pilot, and his airplane arrived on that day to participate in Nelson's annual Fruit Fair.

But Edwards was dismayed - he had not realized that the Fair Grounds from which he had to fly from was surrounded by power and telephone lines, as well as fences. "Had I known the lay of the land I never would have agreed to my manager signing the contract to fly here", he told a reporter. His skill, as it turned out was equal to his courage and he put on a 'brave and creditable performance'. From these humble beginnings aviation and the Nelson airport have become an economic asset and an important aspect of people's lifestyle.

However, the future of Nelson's City-owned airport land has recently been subject of controversial public debate. To provide a review of pertinent issues and make recommendations, City Council set up an "Airport Land Task Force". The task force's Terms of Reference (TOR, see appendix) contained a list of specific items on which to report. For this, it split up in two sub-committees, each to address selected items.

This report was prepared by the "Current Use and Impacts of the Airport" sub-committee, consisting of Donna Graychick, Wade Nearing, and Case Grypma. It reviews the following items of the TOR:

- historic and current airport operations;
- regional transportation planning;
- population requirements;
- emergency needs;
- economic impact;
- costs, funding expectations and sources.

Their report being a separate document, the "alternate uses" sub-committee was concerned mostly with one item of the Terms of Reference, namely:

- Other possible uses and development potential of the Airport lands.

The following Chapter 3 will provide a brief overview of the existing airport operations and its present facilities. This also includes a review of the City's current objectives with respect to the Airport lands. Chapters 4, 5 and 6 will describe the various uses, activities, purposes and functions the airport presently fulfills. Each of these chapters contains letters from stakeholders to further illustrate the points. An economic impact estimate of all these activities is provided in Chapter 7. This is followed by a brief summary on regional transportation planning and population requirements. Chapter 9 deals with financial aspects and implications for the City. Chapter 10 presents an outlook

on some of the airport's challenges and opportunities while recommendations are made in the final Chapter. Additional, more detailed material is included in the appendix.

3. The Nelson Airport – History, Facilities and Objectives

3.1 Airport History

The airport was built shortly after the Second World War on property purchased from CP Rail and the Ministry of the Environment. The City received a federal grant to purchase the land. Over the years, the city was successful in obtaining grants for airport improvements i.e. runway and apron paving, fencing, construction of the terminal building etc. from various levels of government. Recognizing the need for improvements and application for grants to a large extent have been initiated by the Nelson Pilots Association (NPA).

Traditionally, the city as landowner has provided administrative support, some equipment and labour for projects and routine maintenance, but little in the way of financial support (Avion Enterprises, 1997). Financing for capital works to a large extent has been obtained through grants.

3.2 Facilities

The airport is located on the City's western waterfront and accessed via Lakeside Drive off Hall Street. A short walkway along Cottonwood Creek connects it to the downtown area while a short drive to Highway 3A provides access to surrounding areas. Adjacent to the land aerodrome is a floatplane facility with a dock attached to the public wharf at the Prestige Hotel.

The single runway is 3100' long and 75' wide. A taxi way leads from the apron to the runway of which both ends 04 and 22 are used for both fixed wing and rotary wing (helicopter) operations. The runway was designed and built to Transport Canada Standards and recent (November 2003) testing by Pennco Engineering has found that the surface and subsurface still meet or exceed these standards (see Appendix).

There is also a City-owned aviation fuel-dispensing system. Along the southern edge of the apron, hangars, tie-downs and a terminal building are located and leased out by the City. The land area of the airport is small but adequate for existing purposes. There may be land available for some future expansion to the east of the apron.

3.3 Objectives

At present, the City has specific goals for the operation of the airport:

- To be financially self-supporting
- To be a compliant aerodrome operating facility

- To promote economic growth as an airport facility
- To promote a user-friendly environment

While these are all important aspects of potentially desirable airport functions, they are also quite limited in scope and narrowly defined. Because of this, they may not encourage the full realization of the facility's potential. Nelson's citizens may not receive adequate value that meets with their expectations from owning such a significant piece of land and transportation infrastructure.

Therefore, it is recommended the City establish more inclusive, broader and strategic objectives for its airport, for example:

- Opportunities for employment and economic activity.
- Base of operation for commercial and private aviation.
- Contributions to social and economic community development.
- Source of revenue for the City.

Based on objectives like these, the airport can be developed into a more relevant asset of the city and better serve community needs.

4. Recreational and Tourism Uses

The way various community members and groups interact both socially and recreationally will directly impact that community's inherent well-being. Flying for sheer pleasure and sharing the gift of flight is an important element in many people's lives.

Thousands of students and licensed pilots in Canada spend hundreds of hours each year at local airports. Part-owning a small airplane is less expensive than buying a new family car. Learning to fly is well within the capabilities of the average person. Even disabilities need not keep a person who really wants to fly out of the cockpit. Flying is not a passive sport. Pilots fly because they are doers. It takes initiative and energy to operate an airplane. Pilots are active people, in their sport, in their jobs, and in their community. Few activities match aviation's challenge. The same sense of adventure that drove the Wright Brothers to experiment with flight drives us with the urge to fly.

Flying has no barriers from wealth, race religion, education, occupation, age or gender. In fact aviation is a great equalizer and there is a great level of acceptance among aviators. Pilots leave the airport with a heightened sense of awareness of their surroundings and their capabilities.

There is a surprisingly large number of recreational airport users, mostly hobby pilots. In Nelson and area, approximately 100 licensed pilots use the airport at one time or another for recreational flying, either with their own or a rented plane. The Nelson Pilots Association (NPA) was formed in 1947 and enjoys a long history of providing volunteer support to the City of Nelson in the construction and operation of the airport - that tradition and commitment are maintained to this day by over 45 members and their

families. Some of them relocated here precisely for the unique opportunity that the combination of lifestyle amenities and local airport offers.

In addition to these “locals”, visiting pilots and tourists arrive in Nelson by air. For reasons that are grounded in both economics and efficiencies direct travel between smaller airports is a growing trend. There are several reasons for the increased popularity of ‘secondary airports’ throughout the nation, including improved services and reduced costs. The ability to fly direct (point-to-point) provides greater flexibility to travelers, and communities with local airports will greatly benefit from this important fact.

Records indicate that up to one thousand travelers visited Nelson in 2001 coming in 400 private and chartered aircraft and spending roughly \$300.00 per visit for an estimated total of 250 to 300 thousand new dollars (see appendix). There is potential for more: in excess of 30,000 general aviation aircraft are based within one day’s flying of the BC border.

There has been a considerable increase in revenue from tourism in the past few years and many experts consider that the trend has only just started. One of the major problems for Nelson’s tourism sector is the difficult access for potential visitors. The airport can clearly alleviate this problem, especially as it is only a short commuter flight away from Cranbrook’s future “Rocky Mountain International Airport”. In fact, without an airport, the expected international tourists may not come to Nelson at all but stay in the East Kootenays. Convenient access is a necessity for Nelson’s tourism sector.

5. Business and Commercial Uses

5.1 Aviation and Related Services

Typically, a spectrum of commercial services is available at community airports. These include charter services, rental aircraft for private or commercial pilots, flight training, aircraft repair and maintenance, courier and cargo services, and fuelling facilities. Nelson Mountain Air provided all of these services with its 8 airplanes and 7 full-time employees.

Typical users of these services are business travellers who require more flexibility or different destinations than regular scheduled services offer out of Castlegar. One local business reported an increase in sales of \$ 200,000 after it started utilizing air transportation for sales and marketing of its perishable products in and out of Nelson. Another firm, headquartered in Nelson, was able to branch out into several Okanagan locations only because the close-by Nelson airport allowed management flexible travel.

The forest sector requires these services to conduct their regular reconnaissance, survey and fire patrol flights or as a basis for heli-logging or fire fighting. The Forest Service with its Southeast Fire Centre reported:

"The 2003 fire season saw approximately \$22 million in direct fire expenditures in the Kootenay Lake Zone. In order for Nelson to maintain access to these opportunities, an airport would be critical."

Law enforcement agencies such as the RCMP or Conservation Officers also rely regularly on the availability of chartered flight for their activities. Land surveyors, wildlife biologists, and mining engineers are all examples of professions requiring readily available air service over, or into, remote locations only accessible by air.

Commercial tourism is a sector increasingly relying on air services. Heli-hiking and skiing, sightseeing flights over Kootenay Glacier or the Bugaboos, or fishing trips to remote lakes by floatplane are becoming as important as access to a rising number of remote ski or wilderness lodges and cabins.

5.2 Training and Education

Air Cadets, Young Eagles, - all student pilots come alive when they walk through the doors at our local airport. Their eyes sparkle, their voices raise, and their smiles widen. They are energized by the anticipation of another flight. Their friends would see them as different people when they are at the airport. The excitement is well founded. Few activities teach their participants to combine knowledge, skill, experience, coordination, logic, initiative and common sense to succeed in a three-dimensional environment. Learning to fly is like climbing a mini Mt. Everest. Few activities match aviation's challenge to learn and to accomplish. Nelson's community airport is often their first exposure to aviation, the pilots of the future will be from among their ranks.

Student pilots from the Selkirk College Aviation Program and other flight training schools regularly train at Nelson, Transport Canada puts on aviation seminars, the Nelson Pilots Association Scholarship helps young people with their studies. Learning to fly gives young people a structured environment, goals, responsibilities, discipline, and a sense of self-worth.

Nelson Mountain Air's flying school attracted not only local students but also many people from Britain and Europe. The unique combination of hospitable small town, attractive natural setting, and un-crowded airspace lured people from overseas to complete their basic training, learn how to fly floatplanes, build up hours, or just fly for fun. These students spent considerable moneys on the actual flying as well as accommodation, food, entertainment, and ground transportation in the city.

Take for example Hans Goppel, a German pharmacist and hobby pilot who used to come to Nelson every year for a whole month to rent and fly Nelson Mountain Air's floatplane, something that is impossible to do in most of Europe. He had travelled all over B.C. but chose Nelson for this. In fact, he liked it so much, he had both his sons attend LVR High School for a year and obtain their pilot's licence here. His family alone injected probably more than \$ 50,000 in school tuition (\$ 12,000 plus home stay each per year), flying lessons, plane rentals, accommodation, etc. into the local economy.

6. Critical Community Services

The airport serves a range of critical community needs, from law enforcement and forest fire protection to Search and Rescue and medical evacuation (Med-Evac).

6.1 Forest Fire Protection

The Nelson Airport provides a base of operations in times of high forest fire hazard, as evidenced this past summer. Fixed wing spotting and supply aircraft operating out of the airport are the first line of defence, and provide crews with logistic support in the battle to suppress and contain fires which may threaten communities in the nearby area. Without this local facility with its quick turnaround time for fuel and repairs, the problems that fire crews face in their efforts to save not only our forests and watersheds but homes and local business as well, would be greatly increased.

Transit times from Castlegar, Cranbrook or Creston would not only increase the cost of the battle but would undoubtedly result in a less than effective response to forest fires in the Nelson area. The nearness to lodgings, supplies, and quick access to other areas via fixed wing aircraft maximizes fire crews ability to provide fire protection as soon as conditions arise.

The fire fighting and support crews operating out of Nelson this past summer spent thousands of Dollars on accommodation, food, supplies and entertainment in town. One hotel alone reported 450 room-nights attributable to fire crews.

The Provincial Emergency Program aids the Forest Service by providing air transport for personnel from the Nelson Airport to anywhere in the province were they are needed - utilizing Civil Air Search and Rescue Aircraft (CASARA) and volunteers.

6.2 Search and Rescue / Disaster Relief

The Nelson airport provides a critical service in the provision of search and rescue services. The Provincial Emergency Program, Canadian Forces, Nelson Heli-Rescue and the Civil Air Search and Rescue Association utilize the airport for planning, training and execution of these services. Lives have been saved by volunteer crews in locating and in the subsequent rescue of missing persons and downed aircraft. Crews operating from the Nelson airport have often been first on scene and many remote areas have been successfully searched by air for missing hikers, boaters and others in the backcountry.

Fixed wing aircraft and crews based in Nelson form the backbone of the South East Area Zone of CASARA and train regularly with the Canadian Armed Forces Squadron 442 based in Comox BC. During the search for a missing aircraft in October 2003 the airport was the local headquarters for Nelson's CASARA unit and for the Canadian Forces involved in the search. In all, more than 40 personnel were stationed in Nelson during the search. With Nelson marketing itself as an ever more popular destination for backcountry tourists, this service is increasingly becoming vital to the City's tourism sector.

In addition, Nelson's airport plays a vital role in Emergency Preparedness and Disaster Relief Planning. These detailed plans utilize the airport in scenarios ranging from earthquakes to floods and fires.

6.3 Med-Evac

According to recent statistics, more than 100 patients per year require medical evacuation from the Kootenay Lake Hospital. According to David Martin, BC Ambulance Service Manager in Nelson, a high percentage of the patients were transferring to a higher level of care for complaints ranging from cardiac, respiratory, spinal, and head injury to complications from major trauma. The transfer of these patients is considered of a urgent nature.

The Nelson Municipal Airport is eminently suited to these flights. The King Air 200 aircraft is an all weather high performance turboprop able to take off and land in Nelson year-round and utilizes the instrument approach of the Castlegar non-directional beacon (NDB) to descend through cloud in poor weather allowing it to fly into Nelson even in adverse conditions.

With reduced services at Kootenay Lake Hospital and the travel distance to Trail, the importance of this service has increased sharply.

7. Economic Impact

In a speech to B.C.'s Chambers of Commerce, Transport Minister David Collette stated:

"The aviation sector is no small business here in British Columbia. There are more than 5,000 registered aircraft in the province, making up nearly 20 percent of the Canadian total. With more and more people flying each year, our goal of having the best, most efficient and safest transportation system for all Canadians, is increasingly important."

The estimated direct economic impacts of airports in BC in 2001 were 30,000 jobs, \$1.1 billion in wages and \$3.8 billion in economic output. Add in the indirect and induced impact and that number more than doubles.

The BC government has stated that they will ensure B.C.'s airports will become the regional, social and economic engines they should be. The citizens of Nelson will benefit from this activity as its airport is recognized as a vital community asset contributing to the stability and the future of the area's economy.

7.1 Method

The previously described uses and critical services created at the Airport provide a positive stimulus to the local economy. This chapter attempts to estimate the airport's annual economic impact on Nelson and area in terms of three criteria:

- total economic activity/output (as measured in sales \$/yr.);
- employment (number of jobs measured as full time equivalents – FTE);
- employment income (wages and salaries in \$ per year).

To estimate the total economic effect on these criteria, it is commonly broken down into three components: direct, indirect and induced effects. Direct impacts consist of all on-airport activities including, for example, businesses, fuel sales, hangar and office leases, plane rentals and charters, etc. During 2003, data on these effects were gathered through personal interviews with business owners/managers using a standard questionnaire (see appendix). The City provided additional detailed information on its direct activities.

Indirect impacts are usually associated with spending the income derived from direct activities (first round of spending). It includes for example all the airport businesses' purchases in town on supplies, fuel, parts, and services. It also, significantly, includes spending by itinerant airport users, such as visiting pilots, their passengers, tourists, temporary stationed forest fire fighting or search and rescue crews on accommodations, gifts, food, entertainment and local transportation (car rentals, taxi, etc).

Induced effects comprise the second and all subsequent rounds of spending as the direct and indirect dollars circulate in the community. Examples include spending of local businesses or hotels on wages or office supplies, their local employees spending these wages on rent, groceries and movies, etc.

Indirect and induced effects are difficult to measure directly. For this reason, a multiplier is commonly applied to the measured direct effect to arrive at the total impact. Choosing a reasonable multiplier involves consideration of the size and level of diversification of the local economy, the range of goods and services produced locally as opposed to those that are imported and thus create "leakage" – local dollars leaving town. Of course, it is also industry-specific. For community airports and small rural and un-diversified economies such as Nelson's, a multiplier of 2.2 appears quite reasonable according to comparable studies.¹

It should also be noted that the current 2003 snapshot of direct activity may not be very representative. For example, a significant airport business, Nelson Mountain Air with flying school, rentals, charter business, 7 employees and 8 airplanes plus operations in Nakusp, Kaslo and Revelstoke, left in 2002 and has not yet been replaced. Similarly, back in 2000, North Vancouver Air operated daily scheduled flights between Nelson, Creston and Vancouver. In 2001, Canadian Helicopters closed its base at the Airport.

¹ Wisconsin Bureau of Aeronautics 2001: Economic Impact Eagle River Union Airport, Eagle River, Wi.
Bekker, J.J. and B.E. Prentice, 2002: The Contribution of Commercial Aviation to the Economy of Manitoba: An Economic Impact Assessment. U of Manitoba.
Alberta Study

For this reason, data for 2001 were also compiled to provide some additional perspective of Nelson's potential.

7.2 Results

The following table gives an overview of the results. Refer to the appendix for more details.

Table 1: Total Economic Impact of the Nelson Airport

Year	2003	2001
Output (\$,000)	5,938	10,707
Jobs (FTE)	28	41
Wages and Salaries (\$,000)	1,280	1,760

The Nelson Airport's total economic output including direct, indirect and induced effects ranges from \$ 6 to 10 million annually, while it generates around \$ 1.3 to \$ 1.8 million in employment income and supports between 28 and 41 full time jobs.

It should also be noted that, although perhaps few in number, the jobs generated directly at the airport are quite high-paying. For reference, the total airport wages/ salaries would support 61 to 84 average-paying² jobs.

8. Regional Transportation Planning / Population Requirements

8.1 Castlegar and Nelson

Castlegar is presently the "Regional Airport" for the West Kootenays with regular scheduled flights to Calgary and Vancouver. However, Air Canada's covenant to serve Castlegar has expired, effectively ending any guarantees for this service.

While it will never be able to replace Castlegar, the relative significance of Nelson's airport is increasing for three reasons. First, Nelson and area's population of now 20,000 is growing while all other areas in the West Kootenays show declining population trends. Second, the tourism sector, relying on outside visitors to travel here, is growing particularly well in the Nelson area, placing increasing demands on air services for skiers and backcountry tourists. Third, while definitely weather-sensitive, Nelson usually provides better access to air traffic in bad weather than Castlegar. For these reasons, it

² Average employment income in Nelson is \$ 21,000 per year according to Nelson Chamber of Commerce Stats

appears quite likely that a charter airline may resume scheduled service to Nelson again in the near future.

Cranbrook's expanded airport is expected to receive direct flights from Europe and the U.S. A scenic and convenient commuter flight to Nelson will be more attractive for any tourist than a flight plus drive from Castlegar or a 3-hour bus ride over treacherous mountain highways. If the latter is the only option, she may decide to visit Kimberley, Fernie and Fort Steele instead.

8.2 Helicopter vs. Airplanes

Sometimes the notion is advanced that most of the essential airport benefits are delivered through the Heli base, and therefore, that the runway and associated fixed-wing facilities (hangars, apron, tie-down areas) could be converted to other uses without compromising critical community services or commercial tourism. Such thinking ignores the shortcomings of helicopter-only operations.

- Helicopters have a very limited range, are relatively slow, and have little capacity for passengers or cargo. This precludes their efficient use for long distance transport of passengers, cargo and emergency supplies, for example in MED-EVAC, fire patrol, search & rescue, fire fighters, wildlife tracking, etc.
- Single engine helicopters are constrained to Visual Flight Rules (VFR), meaning they cannot operate in conditions of low visibility or bad weather.
- Helicopter operations are vastly more expensive than fixed-wing aircraft. This will squeeze users out of currently affordable services at the airport.
- Maintaining effective heli services regularly requires fixed-wing support for quick transfer of crews, supplies, parts and services, for example, the Search and Rescue "Cormorant" helicopters would not have located in Nelson without fixed wing support by "Buffalo" airplanes.

Once the runway/hangar/apron lands are converted to residential use, pressures will mount to have directly adjacent heli operations curtailed due to noise, traffic, etc. In the end, promoting "higher" uses will eventually lead to the closing of the heli base as well.

9. Cost, Funding Expectations and Sources

9.1 Surplus, not Deficit?

The City incurred losses from its Airport operations in the range of \$ 8,500 over the past few years. In 2003, fees were increased substantially and some maintenance tasks were taken over by volunteers (NPA). As a result, the City has now almost tripled its revenues and reduced its cost, showing a sizable operating surplus as of Dec. 31, 2003. However, the City has also introduced depreciation of capital assets (runway, fencing, etc.) into its accounting practices, showing now a deficit where otherwise would be an actual surplus.

While using an accrual method is a progressive step in the City's accounting, it is incomplete in this case. The City received infrastructure grants to pay for airport capital projects in the past, such that the net capital expenses to the City are lower than shown. The accounting should reflect this. It would be correct to either also show the received grants as annualized revenue or remove the depreciation from the calculation of net surplus/deficit.

9.2 Capital Projects

Over the past six years, the City spent an average of \$ 8,700 per year on capital improvements.

In 2001, consulting company Pryde Schropp McComb, Inc. conducted an infrastructure assessment of the airport. They recommended minor repair to the runway and apron surfaces in 2003 plus complete asphalt overlay of all surfaces in 2007 at a total estimated cost of \$486,500.

By contrast, local company Pennco Engineering (Chief Engineer for the construction of a 3rd runway at Vancouver International Airport) inspected and tested the runway surface in 2003 and concluded that the asphalt pavement condition indicates life expectancy of a minimum 10 years before major repairs are required. Their report recommends regular and minor repairs of cracks and notes that it is possible to extend the runway life beyond 10 years with regular maintenance. (See appendix for the report summary.)

From the more recent Pennco report, it would appear capital expenditures may not be required before 2013, and probably later than that.

9.3 Funding Sources

Unfortunately, the federal grant program that supported the City's airport in the past has been discontinued. However, the Province has established a "BC Airports and Ports Grant Program" in 2003 with funds of \$ 10 million annually. Nelson has not applied.

Over the next ten years, additional funding sources, federal or provincial, will very likely become available as Nelson's situation is not unique and many small regional airports across the country are facing similar capital requirements to maintain their infrastructure over the longer term.

In addition or as an alternative, the City could begin to set up an airport infrastructure fund with annual contributions from its airport operating surpluses. There are significant untapped opportunities at the airport to generate the needed additional revenue for the City as will be discussed below in the following section.

10. Outlook: Challenges and Opportunities

The Airport has become controversial lately due to perceived conflicts with other interests and/or uses. The following will discuss some of these and suggest possible solutions.

10.1 Community Planning

The Official Community Plan (OCP), developed and approved with extensive public input, was adopted by Council in 1993 as bylaw 2600 and remains in effect today. The OCP (page 4) states clearly:

“Some [sites], such as the airport remain economically vital. (...) the airport will remain in the Waterfront Plan as an important component of the economic activity there [West Waterfront]. Its MED-EVAC facilities are important to the community; its air services play a part in tourism, and in servicing local business needs by making local conferences and meetings accessible. Airport operations in themselves provide visual interest to tourists and local residents using the proposed [now existing] pedestrian/cycling paths. (...) In short, the airport can work to stimulate the economic activity in the area, and because of its location, can help provide a more public, intriguing face to the industrial character of the West Waterfront”

Another paper, the *Visioning Document 2002* was presented to Council by the Waterfront Committee. The future of the Airport was discussed during this process and the report concludes:

“Presently, the airport seems to be a useful asset to the community. (...) Should the airport land be developed, there will never again be a space large enough to devote to an airstrip within the city of Nelson. Given the attractive nature of flying and its potential as a means of transportation in the future, a decision for elimination must be thoroughly studied.”

While Council is currently actively reviewing a recommendation to amend the OCP to include parts of this document, it has not been officially received or adopted by the City.

The existing Airport would restrict the legal height of new buildings in its approach path for runway 22 (northeast of the A/P) and thereby the potential value of future private developments. This seems to be at the heart of some airport criticism. Noise might also be a problem for the envisioned developments occurring adjacent to the Airport.

Aside from the fact that, at present, no such development is even approaching a concrete planning stage, both problems can be solved relatively easily through thoughtful architectural design and soundproof buildings. Noise abatement procedures in place at the airport already alleviate noise problems to a certain degree but may be improved upon. An option may be to have a fully operational airport become integral part of the vision, where its lands would house some of the light industrial uses with appropriate building designs.

It may be appropriate to revisit these issues once concrete development proposals are underway to determine the nature and extent of any conflict. But in the meantime, the existing Airport does not appear to interfere with this vision.

10.2 Alternate Uses and Surrounding Lands

At first blush, the sale and development of the airport lands for residential or other uses may appear attractive. The City may earn revenue from a sale and perhaps gain taxpayers. New construction would stimulate the local economy. However, there are some pitfalls associated with this scenario.

The airport is situated on a landfill, which produces a number of problems, such as settling, leaching, gas emissions, and others. One example is the Canadian Helicopter site, which remediation is estimated to cost \$ 2 million. Alternate land uses will have to face this issue, the scope of which is entirely unknown at present. Clean-up or building designs addressing this problem may well turn out cost-prohibitive in the short term for certain uses.

Any proposals to close the airport and subdivide the land for "higher and better uses" should also consider present and potential uses of adjoining lands on the Nelson Waterfront. Surely, there must be higher and better uses for the land of the City Works Yard, the Garbage Transfer Station, the School Works yard, the road gravel/salt storage site, the defunct CPR structures and so on. From this perspective, the airport land appears to have a higher and better use than the surrounding lands already. Would it not be prudent, then, to look at those lands first to improve and develop the waterfront?

10.3 Subsidy for a Handful of Wealthy Hobby Pilots?

Some community voices seem to look at the issue also under social justice aspects. They are concerned the City-owned and supported airport only benefits a precious few who are wealthy and can afford an expensive hobby. Considering the following facts clarifies that this preconceived notion is a myth, popular and politically convenient as it may be.

As this report has shown, hobby airplane owners or pilots are but a small group among the much larger and diverse group of actual airport users. Many activities surrounding the airport are accessible to anyone or of a commercial or critical nature. And all these user groups convey significant benefits, economic or otherwise, on the community as a whole.

Yes, some pilots are relatively wealthy. But aviation as a hobby is not as extravagant financially as some may think. For example, a recreational pilot's licence can be had for the equivalent of one year's college tuition. Airplane ownership is frequently shared or is partly for business purposes. All this is reflected in the NPA membership where many members are in fact of comparably modest means but as members can indulge their passion without having to pay a lot of money. As far as some visiting pilots and their passengers being wealthy, this should obviously be welcomed by all those that are promoting Nelson tourism.

The City routinely supports and subsidizes a number of worthy causes that benefit certain groups more than others. Examples range from the Kootenay School of the Arts to the waterfront soccer fields, Street Fest or the Museum. Here is an overview of expenditures (\$) per year:

Playing Fields	152,000
Civic Centre	278,000
Aquatic Centre	290,000
Library	385,000
Streetfest	11,000
Museum	45,000
Capitol Theatre	58,000

The Kootenay School of the Arts rents their City-owned building assessed at \$ 2.4 million for \$ 1 plus renovation expenses. By comparison, the Airport cost the City \$ 8,500 in 2002 and generated a cash surplus in 2003. These comparisons are not intended to discount the desirability of any of these valuable facilities but to provide some perspective when discussing “subsidies”.

Finally, the citizens of Nelson pride themselves in openly embracing a broad diversity of lifestyles in their town. One would hope that pilots, airplane owners, and all other airport users could be accommodated within this diversity. They too are entitled to enjoy a tolerant society without discrimination by those that may not agree with an aviator’s or Search and Rescuer’s lifestyle. It would reflect very unfavourably on Nelson, if the airport discussion degenerated into one motivated by social envy. These airport users have consistently shown their leadership in community service through a variety of regular and popular community events, volunteerism and other contributions.

10.4 Opportunities

In some discussions, the airport is viewed as a liability. In reality, it offers tremendous and presently untapped opportunities to contribute even more to Nelson’s economic and social development, as a revenue source for the City, and as a future vibrant hub for business and public service alike. Provided here is a list of some opportunities, which is by no means complete but gives a flavour of what is possible.

New technology, specifically a new generation of inexpensive light jets will make flying economically much more accessible and attractive for commercial and private uses. New computerized (GPS-based) flight management systems, allowing safe airplane operations under any weather or low visibility conditions will also result in a substantial increase in airport use, opening up opportunities for new, previously not viable services and business, particularly at the weather-sensitive Nelson airport.

There is still an excellent business opportunity for a fixed base operator like Nelson Mountain Air, providing charter, rentals, training, and other aviation services. The company’s departure was not grounded in business economics but a poor (rental) safety record and subsequently prohibitive insurance premiums. Again, the unique combination

of spectacular natural environment and small lifestyle town did, and will again, attract customers from all over the world. Actively marketing this business opportunity in Britain and Europe should be successful quickly.

Creston and Trail airports have lately received renewed interest in scheduled flight services from charter companies. Actively approaching these companies with the facts on the Nelson area's population base and the growing tourism sector (especially the international high-end powder skiers) should produce results for our airport.

Visiting recreational pilots and their passengers ("flying tourists") are a very attractive, potentially high-income tourism market segment that has not yet received specific attention from the City's marketers. The airport within easy walking distance to Nelson's historic downtown with shops and galleries is the unique feature that could attract many more visitors by air if properly marketed.

More efficient use of the airport lands is possible. Including the present overrun areas on either end would extend the runway to approx. 3500'. This is approved by Transport Canada and would allow a greater range of aircraft to utilize the Nelson Airport in times of decreased air density found on hot summer days. Re-routing of Lakeside Drive to include the land south of the airport presently owned by CPR is another option. The bend in Lakeside Drive around the old Canadian Helicopter hangar could be moved further east. This would allow additional land to be incorporated into the airport and further development could then occur.

It is not unreasonable to enlist the co-operation of the current user groups (NPA, S&R volunteers, and others). With their strong commitment to their local airport and their proven initiative, it should not be difficult to seize these opportunities.

11. Recommendations

1. Jointly with users, the City should conceive a forward-looking vision and a strategic revitalization concept for the airport to turn an underutilized public facility into a vibrant hub for business and public service alike. This process should be followed by setting appropriate objectives as discussed in section 3.3 and a business plan for the airport.
2. Community planning for the waterfront lands should ensure that a fully operational airport becomes an integral and attractive part of the development vision, where its lands could house some of the commercial, recreational or light industrial uses with appropriate building designs.
3. The City should establish an Airport Advisory Committee to provide valuable input and a focal point for ideas. Its mandate would be to:
 - Assist in conceiving a vision and revitalization concept;
 - Identify, and provide advice on, opportunities for the airport;
 - Provide advice on capital requirements;

- Serve as an interface between airport management and users;
- Provide advice on operational issues.

The committee should represent city council, airport management, Chamber of Commerce, community business, fixed base operators, and private pilots association.

4. The city should apply for infrastructure grants, in particular the provincial Ports and Airports Funding Program.
5. The City should commit to the airport for a period of not less than 15 years, and offer leases to tenants for periods of not less than 3 years. This would bring stability to the airport, allow business to plan ahead and invest in the community.
6. Accounting of revenues and expenditures at the airport should show received grants against capital depreciation to improve clarity and transparency.
7. The present ownership and management structure of the airport should be reviewed to identify and assess possibly more effective alternatives to the currently established sole city ownership and management.
8. As suggested in the 2002 Visioning Document, the City should conceive an Official Transportation Plan to link various modes of transportation (streetcar, boat, bicycle, aircraft, automobile, and walking) for the Waterfront.

12. Appendix

1. Terms of Reference
2. Tourism Stats, Movements
3. Economic Impact Analysis
4. Pennco Report Summary