



**CENTRAL COAST REGIONAL DISTRICT**

**DATE:** June 01, 2017  
**TO:** Chair Alison Sayers and Board of Directors  
**FROM:** Donna Mikkelson, Acting CAO  
**SUBJECT:** Bella Coola Airport Master Plan

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**RECOMMENDATION:**

That the CCRD board of directors endorse the final draft of the Bella Coola Airport Master Plan dated February 2017.

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The regional district commissioned the Bella Coola Airport Master Plan in early 2016. It was finalized in February 2017 and presented to the board of directors for endorsement at the March 2017 board meeting. At that time, the board requested that the Master Plan be brought back to the June meeting for further consideration.

Attached is the final plan report as well as the report from Operations Manager, Ken McIlwain which were both presented to the March board meeting.

Respectfully Submitted,

Donna Mikkelson, Acting CAO

Board Meeting  
JUN 08 2017  
CCRD ITEM C(9)



## CENTRAL COAST REGIONAL DISTRICT

DATE: March 2, 2017

TO: Donna Mikkelson, Interim CAO  
CC: Board Chair Alison Sayers and Board Members

FROM: Ken McIlwain, Operations Manager

SUBJECT: **Bella Coola Airport Master Plan**

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### RECOMMENDATION

**THAT the CCRD Board of Directors endorses the final draft of the Bella Coola Airport Master Plan dated February 2017.**

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### BACKGROUND

The Bella Coola Airport is owned and operated by the CCRD. The airport facilitates vital year round transportation in and out of the Bella Coola Valley.

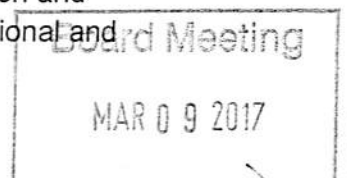
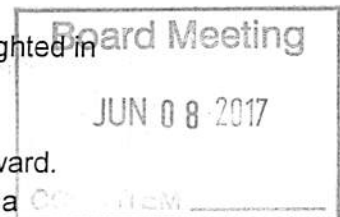
The Central Coast Regional District Strategic Plan 2015-2019, adopted and endorsed March 12, 2015, identifies Goal 2 as "Investment and Support for Public Infrastructure and Services". Objective 2.1 states "Plan and/or manage reliable and cost effective mandated service that meet current and future requirements". One of the strategies for achieving this objective is to "Complete a long-term Development Plan for the Bella Coola Airport, inclusive of capital and operating budgets".

Community Works Funding was used to advance the project through 2016 and the final draft of the Bella Coola Airport Master Plan (BCAMP) has now been submitted by consultant Tetra Tech (attached).

### DISCUSSION

Tetra Tech has succeeded in addressing the following challenges and objectives highlighted in the project Terms of Reference:

**Financial Planning** – Currently revenues are insufficient to meet basic costs going forward. Over the last decade, a drastic increase in regulatory burden by Transport Canada and a transition from volunteer management to CCRD employee/contractor management has left the airport unable to support operations with existing revenues. Identification, prioritization and costing of future capital projects is also an important deliverable. Sustainable operational and



capital budgets, and associated recommendations on how to achieve these, were key components to be addressed in the plan. This included a comprehensive review of comparable aerodrome rates and charges. Recommended increases in rates and charges are provided. Different funding scenarios were looked at. Currently the airport is fully funded through user fees. One scenario looked at the required increase in user fees if the airport is to remain fully self-funded. A second scenario looked at funding through a combination of user fees and a municipal service agreement with the Nuxalk Nation. Both scenarios demonstrate the need for large increases in landing fees and terminal fees.

**Aircraft Safety** – Safety of aircraft operations is of paramount importance. Certification is also critical to sustainable airport operation and long term service delivery. Both are achieved by compliance with Transport Canada regulations. Updating safety system and operations manuals, as well as planning for change are required to maintain certification. Tetra Tech has reviewed and identified required updates to the airport's Safety Management System, the Airport Operations Manual, the Wildlife Management Plan, and the Emergency Response Plan. The need for an airport attendant is identified as a priority.

**Airport Development** – The plan outlines phased development of the airport property to address current and future capacity issues, safety of operations and to capitalize on economic opportunities over the next 10-20 years.

**Airport Condition Assessment** – The plan includes an assessment of airport infrastructure and estimated costs for maintaining or replacing this infrastructure into the future. These estimates inform the proposed long term capital budget.

**Recommendations** – The plan provides recommendations and priorities for the initial 10 year planning period. The focus of these recommendations is around airport safety and maintaining the aerodrome to the standard required by Transport Canada.

## **FINANCIAL IMPLICATIONS**

Tetra Tech completed a detailed analysis of operations and expenses. Based on these findings, significant budgetary changes are recommended. If the status quo is maintained with respect to how the airport is funded, (i.e. through user fees), large increases in fees are required to fund operations going forward. Decisions need to be made around implementation and scheduling of fee increases. This should be supported by further analysis.

Long term capital requirements were also examined. The plan concludes that CCRD is not currently in a position to fund large future capital projects and will rely on access to grant funding through the Federal Airport Capital Assistance Program (ACAP) or BC Air Access Program (BCAAP).

## RISK MANAGEMENT

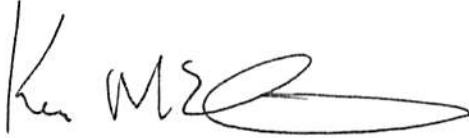
The airport is currently at risk of losing certification if deficiencies noted by Transport Canada are not corrected. This will impact access to capital funding through Transport Canada's ACAP grant program. It will also restrict scheduled service to the airport. Additional financial and staffing resources are required in order to meet Transport Canada's certification requirements.

Recommended budgetary changes from the report need to be actioned as soon as possible to ensure continued short term service delivery. Sustainable long term service delivery requires implementation of the CCRD Asset Management Investment Plan and integrating the plan with long term financial planning around airport infrastructure replacement or renewal.

## CONCLUSION AND RECOMMENDATION

Staff recommends the Board of Directors endorse the Bella Coola Airport Master Plan and progress with implementation as resources allow.

Respectfully submitted,



Ken McIlwain, RPF  
Operations Manager

Board Meeting

JUN 08 2017

CCRD ITEM \_\_\_\_\_

# BELLA COOLA AIRPORT MASTER PLAN



PRESENTED TO  
**Central Coast Regional District**

FEBRUARY 2017  
ISSUED FOR USE  
FILE: TRN.AIRP03084

Board Meeting  
JUN 08 2017  
CCRD ITEM C(r)

## EXECUTIVE SUMMARY

The Bella Coola Airport is located 13 km from the town site of Bella Coola on Highway 20, which connects Bella Coola to Williams Lake; located 479 km to the east. The highway is subject to closure in winter months and during periods of heavy rain and, as such, the airport is a key transportation asset for the community. Different airlines have provided service to the airport since 1966, with Pacific Coastal Airlines (purchasing Wilderness Airlines) continuing regular scheduled service to the community since that time.

The necessity for a viable airport was made abundantly clear in 2010, when flooding resulted in the community being largely isolated due to disrupted road service and the airport being temporarily closed. The Central Coast Regional District (CCRD) will need to encourage the province to undertake the necessary modifications to the dike system at the airport so that the airport can maintain the vital link to essential services outside the community in times of emergency.

The CCRD owns the airport and the Official Community Plan (OCP) guides land use planning and zoning at the airport. The OCP serves as a guide for local elected government officials when they make decisions regarding development, providing the required guidance to accommodate growth. Although portions of the Bella Coola Airport lands are designated Agricultural Land Reserve and are therefore subject to the provisions of the Agricultural Land Commission Act, the airport lands on the south side of the runway are designated for industrial land uses. Private individuals or corporations own a large number of lots at the airport.

The region has a relatively small population that declined by approximately 1.0% between 2005 and 2015. A number of factors likely contributed, including the decline in forestry operations, the 2008 recession, and the loss of ferry service to the region. By comparison, the Province of British Columbia's population grew by almost 12% during this period.

For continued, long-term success at the Bella Coola Airport, the CCRD stated the following objectives to be integral to the Master Plan.

- **Aircraft Safety** – The safety of aircraft operations is paramount. Transport Canada standards and the Bella Coola Airport Operations Manual (AOM) are key references for facility development.
- **Airport Capacity** – Increases in aircraft movements, passengers, and freight will determine the requirement for the expansion of facilities such as aprons/taxiways, terminals, support facilities, vehicle parking, ground access, and other associated infrastructure.
- **Forecast Demand** – There are no official aviation forecasts; therefore, a well-defined forecasting methodology identifies current drivers and aviation demands. The forecasts provide future projections for passenger growth, which, in turn, determine terminal, airside, and landside infrastructure sizing and the suitability of existing aircraft for the Bella Coola Airport.
- **Regional Planning** – The Master Plan is, in principle, a guiding document that will assist the CCRD in making investment decisions over the plan period. The planning philosophy projects the aviation needs of the region for the long term. The development of the Bella Coola Airport should be consistent with regional development, which requires taking the community impacts of air transport growth into account. Factors like aircraft noise, airspace protection, and the hazards of aircraft operations are essential to the plan to ensure that the airport meets the region's air service expectations. The Master Plan also identifies the required lands for practical development during the master planning period.
- **Comparable Aerodrome Rates and Charges Review** – A comparison of current rates and charges issued by other comparable local and regional aerodromes allows the CCRD to review its current rate structure in order

to better capitalize on revenue potential (First Nation contribution agreement). The final recommendations will provide analysis with respect to the delivery of aerodrome services.

- Groundside Activities – The plan identifies potential land uses and alternate sources of revenue for the airport. Opportunities and trends prompted by the stakeholders' consultation assisted the team in determining both aviation and non-aviation land uses.
- Land Uses – Aviation (requiring airside access) and non-aviation land uses (not requiring airfield access).

## Existing Infrastructure

The airport runway, taxiways, and aprons are in relatively good condition, although the pavements will require rehabilitation within the master plan timeframe (20 years). Fortunately, the airport is eligible for funding under the Transport Canada Airport Capital Assistance Plan, which provides 100% funding for airports with less than 50,000 annual passengers. At present, the Bella Coola Airport provides service to approximately 11,000 passengers, with forecasts showing a range of 13,500 to 17,900 passengers in the 20-year period.

One challenge for aircraft operations is that the overall topography surrounding the airport limits aircraft landings. The airport runway is not equipped with runway lighting and approach lighting systems and, as such, all aircraft must follow visual flight rules. The lack of lighting limits nighttime operations, even for essential services (e.g., medical evacuations by air). There was consideration for hazard beacons positioned on nearby "high points" to guide pilots to the airport during the night; however, the cost of the installations and the limited potential net benefit negated this option, as the overall landing limits and increased safety risk would remain. An immediate requirement is for the airport to remove obstacles (trees) on the approaches and a gravel pile that is encroaching on the runway strip transitional zoning.

The groundside access road and terminal parking lot require rehabilitation. The Province of British Columbia is responsible for Airport Road and Phoenix Road and, as such, the CCRD must communicate with the province so that the road rehabilitation can be included in the province's road rehabilitation program. The terminal access road and parking lot are CCRD responsibility and rehabilitation should be coordinated with the terminal expansion project.

## Stakeholder Consultations

To support the development of the Master Plan and obtain insight from residents and stakeholders, there were two rounds of consultation. The intent of the consultation was to understand what is working well and what opportunities exist for site development. Those interviewed emphasized how important the airport is to the valley and how valuable improvements would be to the region. Key opportunities/issues arising from the interviews include:

- There is growing tourism and a limited capacity to provide adequate services for visitors.
- The Air Terminal Building and surrounding area is beyond capacity now when a 19-seat Beech 1900 arrives. For example, the terminal is difficult to walk through from apron to exit without literally bumping into people.
- The outside baggage area appears to have safety issues because arriving passengers stand on a road waiting for their baggage and motor vehicles are backed up to the same area where passengers stand to await their baggage.
- There has been no work on the dike since the 2010 failure. The danger of future flooding to safe aircraft operations therefore remains a concern.
- People interested in tourism development asked if, in the future, the CCRD would construct a longer and wider runway to accommodate larger aircraft (more passengers).

- People concerned with air services to support health wanted to see improvements made to the site to make night operations possible.
- Some interviewees suggested that the airport area would be a good place to develop commercial and light industrial development in the Hagensborg area.

## Terminal Building

The ATB was constructed in 1978 and further expanded in 1982 to the current size (3,314 ft<sup>2</sup> (308 m<sup>2</sup>)). A covered baggage shelter is located at the west end of the building (constructed in 1989). The terminal serves many functions: arrival and departure services, offices, freight/baggage storage, ticket counter space, concessions, and Nav Canada. The arrival of a 19 seat aircraft and the mix of both departing and arriving passengers results in a very poor level of service. Air travel is important to the region and the air terminal building is an essential component of the traveller experience. The terminal concept expansion will increase the terminal size by approximately 50%. The cost for the expansion will be divided between the Province of British Columbia and the CCRD. The expanded terminal will provide an adequate level of service well into the future.

## Land Use Plan and Development

The Land Use Plan (LUP) provides a framework that the airport can use to guide future development at the airport over the long-term (e.g., 20 years). The LUP:

- Identifies land use requirements for each airport subsystem in the plan. Common designations include airside commercial, airport operations, air terminal reserve, runway and taxiway system, airport reserve, groundside commercial, and aviation support.
- Assigns areas on the airport for use by specific facilities, based on priority. The priority approach requires a listing of airport facilities in order of priority.
- Ensures future developments proposed in the LUP will not conflict with safe airport operations. All of the work undertaken at the airport will be in conformance with Transport Canada Aerodrome Standards and Recommended Practices (TP 312-5<sup>th</sup> Edition). Transport Canada's "Land Use in the Vicinity of Airports (TP1247)" is a reference when considering appropriate land uses near airports. Electronic zoning requirements are also considered.
- Reserves land for future expansion or redevelopment (e.g., operational facilities). Lands are identified to ensure those needs are met in consideration of safe and efficient airport activities.
- Provide sufficient land for access.

Land use classifications define airport land use. Characteristics such as surrounding topography, proximity to airport services, and adjacent properties determine the most efficient use for each parcel of land. Land reserves include key aviation services, passenger, and administrative needs. Auxiliary lands are those lands not reserved for key aviation services, or lands that could serve an alternate and temporary purpose until required within the 20-year plan. Suitable guidelines for development are integral to the plan.

There are four proposed airport development scenarios:

- Existing hangar line (Phase 1) – four lots are available for development. Groundside access is from Phoenix Road. The development area requires an extended taxiway and electrical and water services.
- Commercial/Industrial Lots – there are two lots near the terminal suitable for development. Access is from Phoenix Road and Airport Road. The lots will require clearing and servicing.



- Southwest Development Area (Phase 2) – this area will provide an additional six lots for aviation-related development. The lots will require an extension to the existing taxiway, area clearing and servicing, and construction of a common apron for users. Access is from Phoenix Road.
- East Development Area (Long-term) – the east development area will provide three lots for aviation-related business development. The area will require extensive logging and clearing and will require a new taxiway, access road, and services.

The overall cost to rehabilitate existing infrastructure and develop a new terminal and development lots is \$7,576,000 (2017) of which \$4,127,000 will be funded through federal and provincial funding programs. It is essential that the CCRD take a proactive approach in submitting funding applications so that the projects are completed in the prescribed timeframes.

Based on priorities, the CCRD investment will total \$1,746,000 over the next 10 years.

## Recommendations

The following recommendations are important components of the CCRD's initial 10-year planning period. In some cases, the funding required for a particular recommendation is external to the CCRD and, therefore, subject to external funding timelines. Longer term developments identified as Phase 2 or future would be challenging to predict at this time and the need for a particular expenditure will be entirely demand driven.

1. To maintain certification, it is essential that the CCRD immediately submit the updated Airport Operations Manual, Safety Management System, Airport Wildlife Management Plan, and Emergency Plan for Transport Canada approvals.
2. Obstacles on the approaches (trees) are compromising airport safety and must be removed immediately. In addition, a large pile of stockpiled gravel encroaches on airfield zoning and must be removed or reconfigured to meet zoning standards.
3. The terminal building is constrained and the CCRD, in partnership with the province, should expand the terminal building to meet long-term passenger needs. The CCRD must contract an architect to finalize the ATB expansion design drawings and contract specifications.
4. The terminal parking lot must be properly constructed to accommodate the travelling public. Of particular concern is the passenger drop-off/pick-up area.
5. Advise Pacific Coastal Airlines of the requirement to contract an environmental engineer to investigate regulatory compliance with the existing fuel tank contamination area.
6. The 2010 flood of airport lands showed the necessity for a dike rehabilitation program to ensure the long-term viability of airport operations. The dike requirement is unique to this site and it is recommended that the CCRD Board of Directors lobby the Province to seek funding to improve the dike. The potential for the dike to fail when the community most needs the airport is real and acute. This is a unique safety and emergency situation.
7. The CCRD should begin submitting funding applications to Transport Canada for all airfield pavements so that these projects are programmed into the ACAP funding queue.
8. Reconstruct the closed airfield tie-down area so that pilots have an optional area to park airplanes overnight or long-term.

9. Initially four lots will be available for development. The infrastructure required to support the lot development would be entirely demand driven.
10. To meet Transport Certification requirements on a sustainable basis, it is recommended that the airport provide at least the equivalent of 0.5 FTEs to ensure that maintenance systems and reporting are addressed in an ongoing, sustainable manner.
11. Increase fees in line with the recommended by-law in this report to generate sustainable funding.

The Bella Coola Airport Master Plan will guide CCRD investment and development over the next 10 to 20 years. Stakeholder consultations were an integral component of the plan. For a plan to be successfully implemented, it is essential local knowledge is included in the plan, particularly as related to resident and business needs.

It is apparent that the Bella Coola region is experiencing increased demand from tourism opportunities and therefore more immediate needs (e.g., a terminal building expansion and terminal parking) are forecast in the near term. Other immediate costs (e.g., access road rehabilitation) are also necessary in support of the terminal development.

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**LIMITATIONS OF REPORT**

This report and its contents are intended for the sole use of the Central Coast Regional District and their agents. Tetra Tech Canada Inc. (operating as Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than the Central Coast Regional District, or for any Project other than the subject site. Any such unauthorized use of this report is at the sole risk of the user.

## ACRONYMS & ABBREVIATIONS

Acronyms/Abbreviations	Definition
<b>Government/Organizations/Programs</b>	
ACAP	Airport Capital Assistance Program
ACI	Airports Council International
ACRP	Airport Cooperative Research Program
BCFCC	British Columbia Funding Community Component
BCAAP	British Columbia Air Access Program
CCRD	Central Coast Regional District
FAA	Federal Aviation Administration
HID	Hagensborg Improvement District
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
PCA	Pacific Coast Airlines
<b>Generic Terms</b>	
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
LUP	Land Use Plan
MP	Master Plan
OCP	Official Community Plan
ROW	Right-of-Way
VPH	Volatile Petroleum Hydrocarbon
<b>Airport/Aeronautical Acronyms</b>	
AIF	Airport Improvement Fee
AGN	Aircraft Group Number
AOM	Airport Operations Manual
ATB	Air Terminal Building
AVGAS	Aviation Gasoline
FOD	Foreign Object Damage
GPS	Global Positioning System
HAPI	Hazard Beacon Vertical Guidance Lighting
IAP	Instrument Approach Procedure
LOS	Level of Service
MTOW	Maximum Takeoff Weight



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OIS	Obstacle Identification Surface
OLS	Obstacle Limitation Surface
POFZ	Precision Obstacle Free Zone
VFR	Visual Flight Rules

## EXECUTIVE SUMMARY

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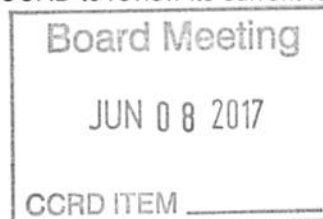
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- **Comparable Aerodrome Rates and Charges Review** – A comparison of current rates and charges issued by other comparable local and regional aerodromes allows the CCRD to review its current rate structure in order



to better capitalize on revenue potential (First Nation contribution agreement). The final recommendations will provide analysis with respect to the delivery of aerodrome services.

- Groundside Activities – The plan identifies potential land uses and alternate sources of revenue for the airport. Opportunities and trends prompted by the stakeholders' consultation assisted the team in determining both aviation and non-aviation land uses.
- Land Uses – Aviation (requiring airside access) and non-aviation land uses (not requiring airfield access).

## Existing Infrastructure

The airport runway, taxiways, and aprons are in relatively good condition, although the pavements will require rehabilitation within the master plan timeframe (20 years). Fortunately, the airport is eligible for funding under the Transport Canada Airport Capital Assistance Plan, which provides 100% funding for airports with less than 50,000 annual passengers. At present, the Bella Coola Airport provides service to approximately 11,000 passengers, with forecasts showing a range of 13,500 to 17,900 passengers in the 20-year period.

One challenge for aircraft operations is that the overall topography surrounding the airport limits aircraft landings. The airport runway is not equipped with runway lighting and approach lighting systems and, as such, all aircraft must follow visual flight rules. The lack of lighting limits nighttime operations, even for essential services (e.g., medical evacuations by air). There was consideration for hazard beacons positioned on nearby "high points" to guide pilots to the airport during the night; however, the cost of the installations and the limited potential net benefit negated this option, as the overall landing limits and increased safety risk would remain. An immediate requirement is for the airport to remove obstacles (trees) on the approaches and a gravel pile that is encroaching on the runway strip transitional zoning.

The groundside access road and terminal parking lot require rehabilitation. The Province of British Columbia is responsible for Airport Road and Phoenix Road and, as such, the CCRD must communicate with the province so that the road rehabilitation can be included in the province's road rehabilitation program. The terminal access road and parking lot are CCRD responsibility and rehabilitation should be coordinated with the terminal expansion project.

## Stakeholder Consultations

To support the development of the Master Plan and obtain insight from residents and stakeholders, there were two rounds of consultation. The intent of the consultation was to understand what is working well and what opportunities exist for site development. Those interviewed emphasized how important the airport is to the valley and how valuable improvements would be to the region. Key opportunities/issues arising from the interviews include:

- There is growing tourism and a limited capacity to provide adequate services for visitors.
- The Air Terminal Building and surrounding area is beyond capacity now when a 19-seat Beech 1900 arrives. For example, the terminal is difficult to walk through from apron to exit without literally bumping into people.
- The outside baggage area appears to have safety issues because arriving passengers stand on a road waiting for their baggage and motor vehicles are backed up to the same area where passengers stand to await their baggage.
- There has been no work on the dike since the 2010 failure. The danger of future flooding to safe aircraft operations therefore remains a concern.
- People interested in tourism development asked if, in the future, the CCRD would construct a longer and wider runway to accommodate larger aircraft (more passengers).

- People concerned with air services to support health wanted to see improvements made to the site to make night operations possible.
- Some interviewees suggested that the airport area would be a good place to develop commercial and light industrial development in the Hagensborg area.

## Terminal Building

The ATB was constructed in 1978 and further expanded in 1982 to the current size (3,314 ft<sup>2</sup> (308 m<sup>2</sup>)). A covered baggage shelter is located at the west end of the building (constructed in 1989). The terminal serves many functions: arrival and departure services, offices, freight/baggage storage, ticket counter space, concessions, and Nav Canada. The arrival of a 19 seat aircraft and the mix of both departing and arriving passengers results in a very poor level of service. Air travel is important to the region and the air terminal building is an essential component of the traveller experience. The terminal concept expansion will increase the terminal size by approximately 50%. The cost for the expansion will be divided between the Province of British Columbia and the CCRD. The expanded terminal will provide an adequate level of service well into the future.

## Land Use Plan and Development

The Land Use Plan (LUP) provides a framework that the airport can use to guide future development at the airport over the long-term (e.g., 20 years). The LUP:

- Identifies land use requirements for each airport subsystem in the plan. Common designations include airside commercial, airport operations, air terminal reserve, runway and taxiway system, airport reserve, groundside commercial, and aviation support.
- Assigns areas on the airport for use by specific facilities, based on priority. The priority approach requires a listing of airport facilities in order of priority.
- Ensures future developments proposed in the LUP will not conflict with safe airport operations. All of the work undertaken at the airport will be in conformance with Transport Canada Aerodrome Standards and Recommended Practices (TP 312-5<sup>th</sup> Edition). Transport Canada's "Land Use in the Vicinity of Airports (TP1247)" is a reference when considering appropriate land uses near airports. Electronic zoning requirements are also considered.
- Reserves land for future expansion or redevelopment (e.g., operational facilities). Lands are identified to ensure those needs are met in consideration of safe and efficient airport activities.
- Provide sufficient land for access.

Land use classifications define airport land use. Characteristics such as surrounding topography, proximity to airport services, and adjacent properties determine the most efficient use for each parcel of land. Land reserves include key aviation services, passenger, and administrative needs. Auxiliary lands are those lands not reserved for key aviation services, or lands that could serve an alternate and temporary purpose until required within the 20-year plan. Suitable guidelines for development are integral to the plan.

There are four proposed airport development scenarios:

- Existing hangar line (Phase 1) – four lots are available for development. Groundside access is from Phoenix Road. The development area requires an extended taxiway and electrical and water services.
- Commercial/Industrial Lots – there are two lots near the terminal suitable for development. Access is from Phoenix Road and Airport Road. The lots will require clearing and servicing.

- Southwest Development Area (Phase 2) – this area will provide an additional six lots for aviation-related development. The lots will require an extension to the existing taxiway, area clearing and servicing, and construction of a common apron for users. Access is from Phoenix Road.
- East Development Area (Long-term) – the east development area will provide three lots for aviation-related business development. The area will require extensive logging and clearing and will require a new taxiway, access road, and services.

The overall cost to rehabilitate existing infrastructure and develop a new terminal and development lots is \$7,576,000 (2017) of which \$4,127,000 will be funded through federal and provincial funding programs. It is essential that the CCRD take a proactive approach in submitting funding applications so that the projects are completed in the prescribed timeframes.

Based on priorities, the CCRD investment will total \$1,746,000 over the next 10 years.

## Recommendations

The following recommendations are important components of the CCRD's initial 10-year planning period. In some cases, the funding required for a particular recommendation is external to the CCRD and, therefore, subject to external funding timelines. Longer term developments identified as Phase 2 or future would be challenging to predict at this time and the need for a particular expenditure will be entirely demand driven.

1. To maintain certification, it is essential that the CCRD immediately submit the updated Airport Operations Manual, Safety Management System, Airport Wildlife Management Plan, and Emergency Plan for Transport Canada approvals.
2. Obstacles on the approaches (trees) are compromising airport safety and must be removed immediately. In addition, a large pile of stockpiled gravel encroaches on airfield zoning and must be removed or reconfigured to meet zoning standards.
3. The terminal building is constrained and the CCRD, in partnership with the province, should expand the terminal building to meet long-term passenger needs. The CCRD must contract an architect to finalize the ATB expansion design drawings and contract specifications.
4. The terminal parking lot must be properly constructed to accommodate the travelling public. Of particular concern is the passenger drop-off/pick-up area.
5. Advise Pacific Coastal Airlines of the requirement to contract an environmental engineer to investigate regulatory compliance with the existing fuel tank contamination area.
6. The 2010 flood of airport lands showed the necessity for a dike rehabilitation program to ensure the long-term viability of airport operations. The dike requirement is unique to this site and it is recommended that the CCRD Board of Directors lobby the Province to seek funding to improve the dike. The potential for the dike to fail when the community most needs the airport is real and acute. This is a unique safety and emergency situation.
7. The CCRD should begin submitting funding applications to Transport Canada for all airfield pavements so that these projects are programmed into the ACAP funding queue.
8. Reconstruct the closed airfield tie-down area so that pilots have an optional area to park airplanes overnight or long-term.

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9. Initially four lots will be available for development. The infrastructure required to support the lot development would be entirely demand driven.
10. To meet Transport Certification requirements on a sustainable basis, it is recommended that the airport provide at least the equivalent of 0.5 FTEs to ensure that maintenance systems and reporting are addressed in an ongoing, sustainable manner.
11. Increase fees in line with the recommended by-law in this report to generate sustainable funding.

The Bella Coola Airport Master Plan will guide CCRD investment and development over the next 10 to 20 years. Stakeholder consultations were an integral component of the plan. For a plan to be successfully implemented, it is essential local knowledge is included in the plan, particularly as related to resident and business needs.

It is apparent that the Bella Coola region is experiencing increased demand from tourism opportunities and therefore more immediate needs (e.g., a terminal building expansion and terminal parking) are forecast in the near term. Other immediate costs (e.g., access road rehabilitation) are also necessary in support of the terminal development.

## 1.0 INTRODUCTION

The town site of Bella Coola is at the mouth of the Bella Coola River, which flows to the North Bentinck Arm, a short inlet about 17 km (10.6 mi) in length in the Central Coast region of British Columbia (BC). The North Bentinck Arm is a side water of Burke Channel and is linked via that waterway and Labouchere Channel to Dean Channel, which is one of the largest inlets on the BC Coast.

The Bella Coola Airport is located 13 km from the town site of Bella Coola on Highway 20. Highway 20 connects Bella Coola to Williams Lake, located 479 km to the east. Hagensborg is located 4 km east of the airport. The highway is subject to closure in winter months and during periods of heavy rain and, as such, the airport is a key transportation asset for the community. In 2010, flooding resulted in the community being largely isolated due to disrupted road service and the airport closure resulting from portions of the airport flooding.

The airport is located on the south bank of the Bella Coola River in a narrow valley and surrounded by mountains exceeding 1,800 m in height.

The Bella Coola Valley Flying Club constructed the airport in the summer of 1966 with the first commercial charter (Harrison Airway) landing in September of that year. In 1978, airport improvements included paving the runway and taxiway and construction of a new air terminal building (ATB). Additions to the ATB followed in 1982 and 1988.

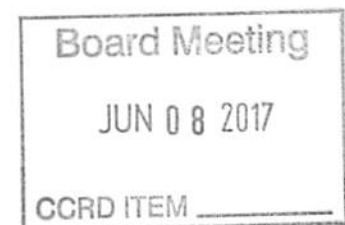
Different airlines have provided service to the airport since 1966, with Pacific Coastal Airlines (PCA) (purchasing Wilderness Airlines) continuing regular scheduled service to the community since that time.

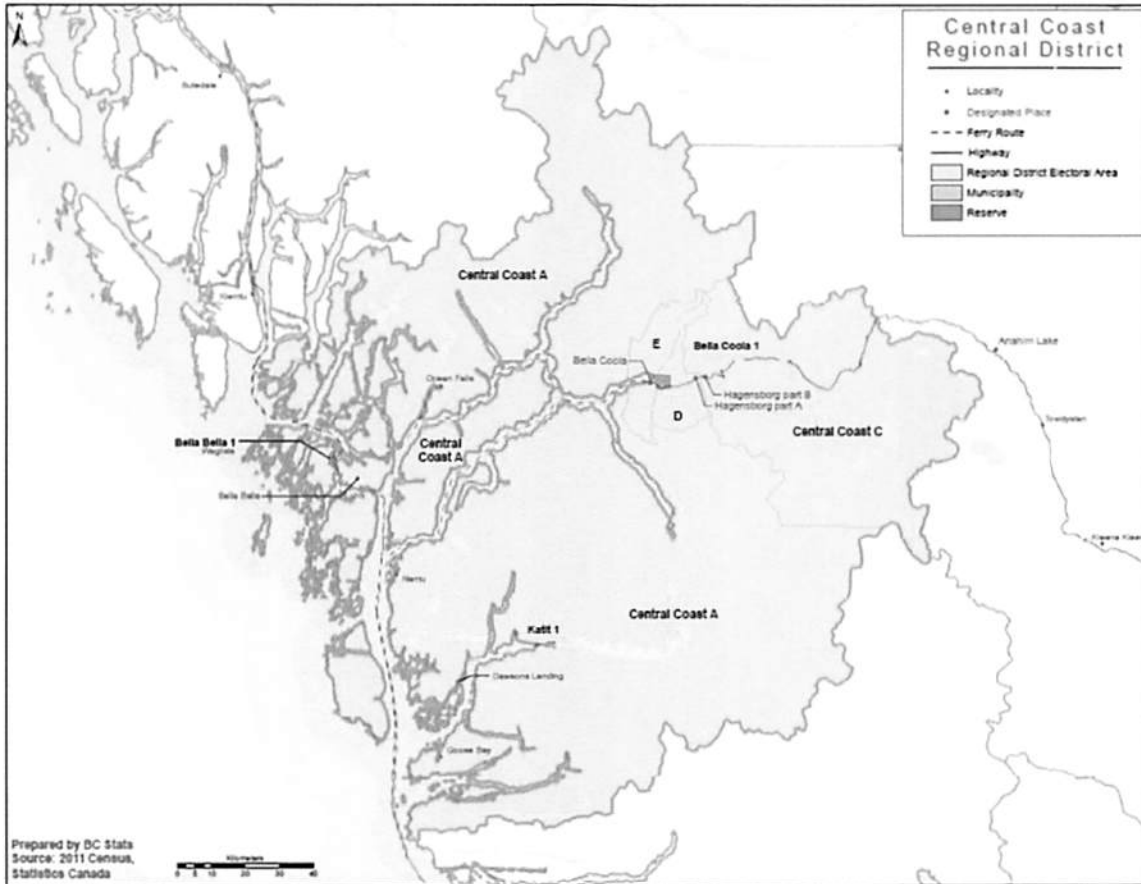


View to East

### 1.1 Regional Profile

The Bella Coola Airport is in the Central Coast Regional District (CCRD), the smallest regional district in BC when measured by population. As Figure 1-1 shows, it is a remote region of the Central Coast bordered by the Pacific Ocean to the west, the Chilcotin Plateau to the east, and mountains to the north and south. There is no incorporated municipality in this regional district; it is the only regional district in BC without one. The population of the CCRD in 2015 was approximately 3,200 people.





Source: BC Statistics

Figure 1-1: Map of Central Coast Regional District

## 1.2 Planning and Development Legislative Framework

The CCRD owns the airport and the CCRD Official Community Plan (OCP) guides land use planning and zoning at the airport. The OCP serves as a guide for local elected government officials when they make decisions regarding development, providing the required guidance to accommodate growth. In BC, OCPs are prepared and adopted within the statutory provisions of the Local Government Act. The Local Government Act prescribes the general content of OCP and sets out a formal procedure for adopting a Plan.

Although portions of the Bella Coola Airport lands are designated Agricultural Land Reserve, and are therefore subject to the provisions of the Agricultural Land Commission Act, the airport lands on the south side of the runway are designated for industrial land uses.

Private individuals or corporations own a large number of lots at the airport. Figure 1-2: CCRD Drawing: PWM17-01 shows lands owned by the CCRD and those owned by others. As shown, the BC Ministry of Transportation and Infrastructure owns the Right-of-Ways (ROW) for Airport Road and Phoenix Road and is responsible for the road upkeep.

The CCRD sets the airports fees via a Local Government by-law.