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City of Prince Rupert

Preparing for Growth

January 20, 2015

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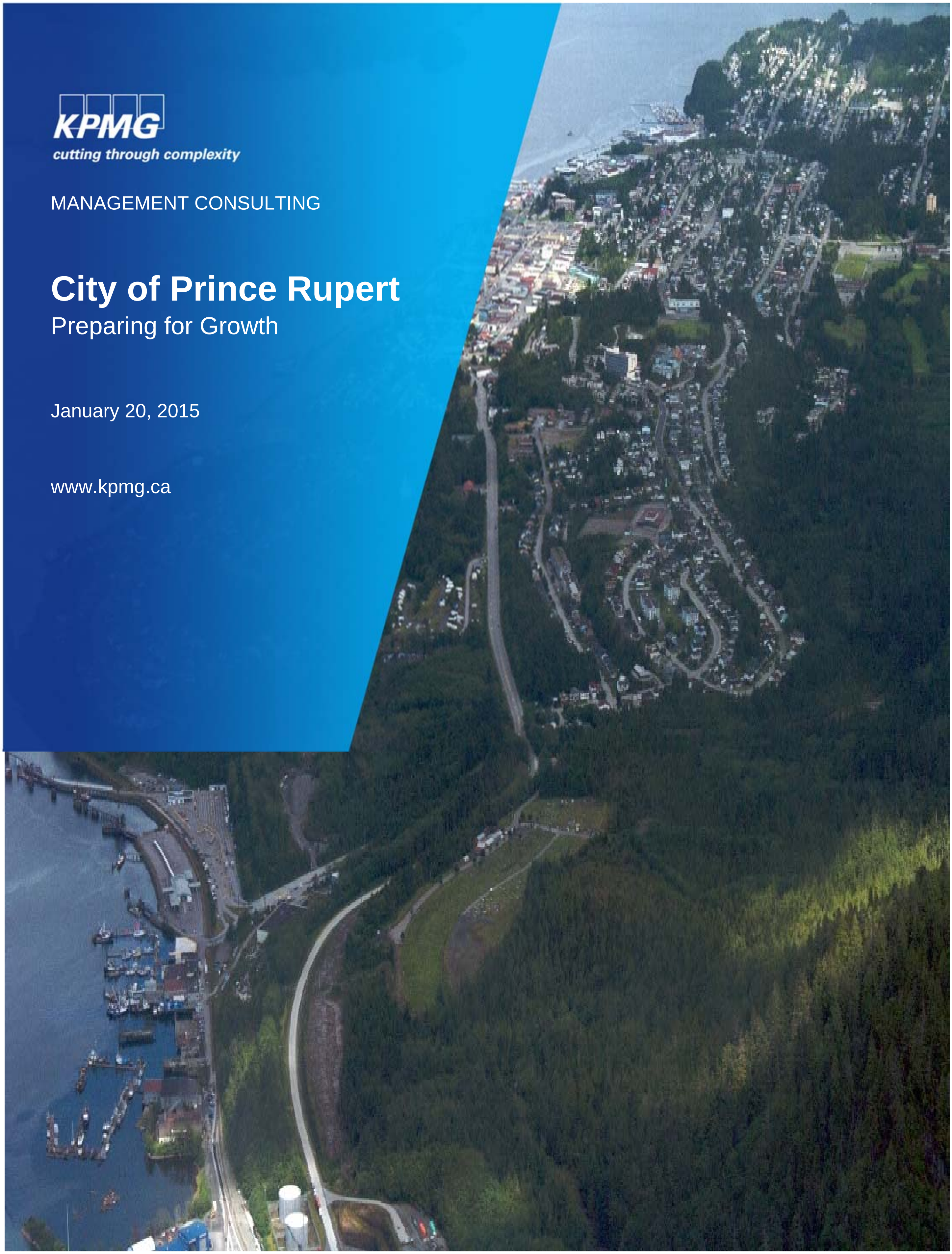

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Executive Summary

This document has been prepared by KPMG LLP for the City pursuant to the terms of our engagement agreement with Client dated October 20, 2014 (the "Engagement Agreement"). The purpose of this document is to outline certain matters that came to our attention during our work and to offer our comments for the City's consideration. These comments, by their nature, are critical as they relate solely to opportunities for enhancement and do not address the many strong features of the City's current activities and undertakings.

Our procedures consisted of inquiry, observation, comparison and analysis of City-provided information. Such work does not constitute an audit. Accordingly, we express no opinion on financial result or other information.

A number of global oil and gas multi-national firms have expressed interest in developing large scale liquefied natural gas (LNG) facilities near the City of Prince Rupert (the City). The City has expressed a desire to welcome the LNG industry to their region with a focus keenly on ensuring that the City emerges with improved social and financial conditions. This document focuses on the present financial conditions and the impact that the LNG industry may have on the City during an initial growth period.

The City has faced considerable financial pressure for some time. The City's population has declined from about 18,500 in 1998 to about 13,700 today. Two key events that have limited the City's ability to increase revenue through industrial taxes have included the Skeena Mill closure (2001) and Provincial Industrial Tax Caps (2004). As a result of these events, the City has historically deferred capital spending and has been required to reduce its operating expenses. Operating expenses were found to be in line with other remote British Columbia municipalities of similar size. Financial pressures from reduced industrial taxes caused the City to significantly raise residential and commercial property tax. The City now has among the highest rates of residential property tax (per assessed value) in British Columbia. The tight fiscal situation that has been going on for some time has led to a significant infrastructure deficit.

This deficit is separated into planning and infrastructure. To sustain existing operations, the City estimates about $2.9M for planning, design, and engineering services as well as about $284M for physical infrastructure (see section 4.1). In addition to this deficit, there will be additional financial pressures that an LNG industry would place on the City. The City estimates that it will require an additional $2.9M in planning and $61M in infrastructure (see section 4.2). These items represent basic city services: waste management, water access, sewers, fire protection, police, road infrastructure, and transportation including transport to the Prince Rupert airport located on Digby Island.

There are few viable options currently available at Prince Rupert's disposal to close this funding gap. With a large shadow population during construction, as few as 200-300 new temporary residents during construction and 350 new long-term residents during operations as a direct result of an LNG facility, there may not be a large increase to the residential or commercial assessed value (see section 5.1). With qualified port activities industrial tax rates capped, the option to increase industrial tax rates is not available to fill the gap (see section 3.1.1).

Prince Rupert finds itself in a situation where the City would like to welcome a new industry to the region but realizes that this would come with incremental investments on top of an already depleted local infrastructure and the currently funding options are not viable for the existing scenario. Other sources of funding will be necessary to close this gap and ensure that both industry and the City mutually benefit over the long-term.

1. Introduction

1.1. Looking forward to LNG Development and Future Growth

The City is a provincial and federal strategic export location for goods from British Columbia and other parts of Canada. The City is therefore ideally positioned for future growth from the LNG sector, but to attract, accommodate and maximize the economic benefit of the industry for all stakeholders, significant infrastructure and planning investments are needed. Infrastructure and planning investments are also essential for the productivity and profitability of potential LNG operations in the region.

With this opportunity, the City of Prince Rupert is committed to ensuring the long-term sustainability and quality of services provided to its community and its potential LNG partners. The City is also looking to contribute to BC and national trade through its growing importance as an international trading hub. Planning for and investing in infrastructure at this key juncture will be essential in ensuring the financial sustainability of Prince Rupert through the life-cycle of the LNG operations and beyond.

1.2. Current State of Infrastructure and Financial Reserves

Regardless of the forthcoming LNG industry needs, the City estimates that it currently has an infrastructure deficit of $284 million (see section 4.2) and the City recognizes that it currently has limited options to meet this deficit. Many aspects of Prince Rupert's infrastructure – such as the City's sanitary system and road network system – are in urgent need of investment and renewal.

Faced with the establishment of LNG projects in the region, Prince Rupert's ability to meet the additional needs posed by these developments is at risk. Prince Rupert's current residential tax base, capped industrial revenue and financial commitments to supporting existing operations within the City has meant that the options to self-fund key preparation activities and infrastructure projects are severely limited. The City is accomplishing as much as possible with the financial resources available and with alternative funding models, for example, loaning the airport $7 million for desperately needed renovations, but further investment may require support from senior government and industrial proponents.

2. Leading Practices for Cities Expecting Rapid Growth

Comprehensive planning and investment in infrastructure is crucial for small cities like Prince Rupert expecting to undergo rapid growth. Looking to similar municipalities and regions for successes and failures provide important learnings which inform the City's strategy in preparing for LNG development. Through KPMG's global experience and understanding of Prince Rupert, British Columbia and Canada, the following leading practices have been identified to support the City's initiatives in building a sustainable community.

- **Significant Pre-Development Stakeholder Engagement:** Early discussions and collaboration between stakeholders leads to efficient decision-making, easier dispute resolution, investment in key infrastructure and social planning to accommodate for increased populations' needs.

- **Comprehensive Planning to Support Industry:** Effective planning for utilities, transport networks, housing, and social services have been key to the effectiveness and productivity of industrial operations, by improving employee retention and reducing transport-related costs.

- **Comprehensive Planning to Support the Community:** Developing a short and long-term comprehensive community plan for the city helps to focus investment in meeting the needs arising from industrial growth as well as develop the City's long-term sustainability.

- **Investment in Physical and Social Infrastructure from Key Private and Public Stakeholders:** Local governments rarely have all of the funding or the capabilities for preparing for industrial growth independently. Investment from key stakeholders such as proponents and the provincial/national government are essential in ensuring that the needs arising from development are met.

- **Investment in Capacity to Accommodate Diverse Industries:** Early investment in programs and physical infrastructure that encourages the development of a sustainable community has strong impacts in reducing challenges of economic growth, as well as improving the City's long-term sustainability[1] after core industrial operations have ceased.

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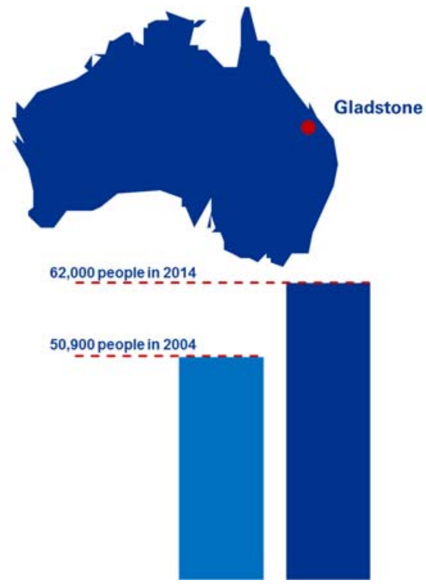
[1] Greg Halseth, Investing in Place

2.1. Benefits of Comprehensive Preparation and Investment

2.1.1. Significant Proponent Investment and Community Planning in Gladstone, QA, Australia



An example is Gladstone region in Australia which has a population of around 62,000 residents with a number of LNG projects in place, including Australia Pacific and Gladstone LNG. The area experienced a 20% population increase in the last decade,[2] and has a history of industrial development due to aluminum mining and other industries. Although the region has experienced significant housing shortages and other infrastructure pressures, it has also managed to secure significant investment in social infrastructure.

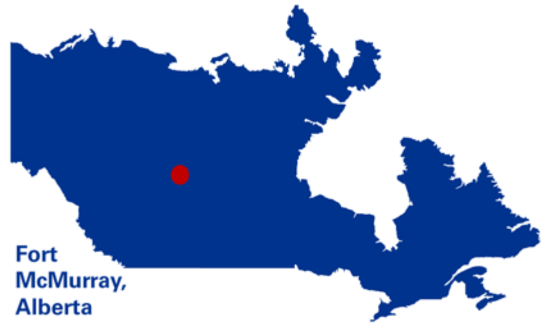
Key proponent companies have recognized the impact of infrastructure in improving their own productivity. LNG firms contributed $10.5 million in improving the regional transportation airport.[3] LNG proponents have also invested significantly in improving social and physical infrastructure. Rio Tinto Alcan has invested more than $ 3 million in community outreach initiatives (education, training etc.) through the Rio Tinto Alcan Communities Fund.[4] For the first time in Australia, LNG proponents, Australia Pacific LNG, GLNG and QGC's Queensland Curtis LNG Project have signed a landmark $19.8 million funding agreement to create Gladstone Affordable Housing, a not-for-profit company designed to respond to shortages in affordable housing in the Gladstone region.[5]

Gladstone has also used its recent learnings to collaborate with stakeholders to develop The Western Downs 2050 Community Plan, an ambitious 40 year plan that outlines the local government's vision in attracting future businesses, achieving balanced growth, and increasing accessibility to social services.[6]

[2] Gladstone Regional Council, Population and Dwelling Profile, April 2012.
[3] Iain Marlow and Brent Jang, "The LNG Race: The Lessons Canada can Learn from Australia," April 12, 2014.
[4] Rio Tinto Alcan, Gladstone Sustainable Development Report 2010.
[5] QGC, "LNG Partnership to Build Affordable Housing in Gladstone News Release, April 23, 2012.
[6] Western Downs Regional Council, Western Downs 2050 Community Plan, March 17, 2011.

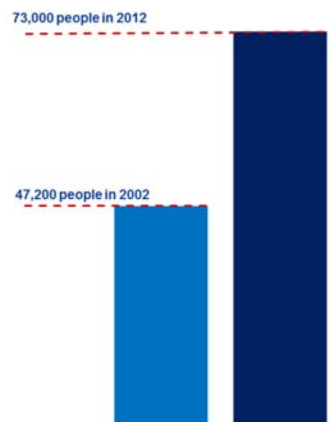
2.2. Risks of Limited Preparation and Investment

2.2.1. Infrastructure Gaps in Fort McMurray, Alberta



As a result of oil sands development, Fort McMurray in Alberta experienced more than a 50% population increase within a decade.[7] The rapid growth of industrial operations has resulted in extreme pressures on infrastructure and housing that has led to persistent socio-economic issues such as homelessness.

In 2005, the sanitary system which was originally designed to service 62,000 people, was dealing with an excess of almost 2,500 users, while the City continued to expect significant future growth.[8] The strain on the waste water system was exacerbated by the waste water associated to proponents' activities, which was carried in by trucks and made use of the city's existing waste water infrastructure.



In 2007, as a consequence of the lack of planning, a shortage of accommodations made housing unaffordable for low-income earners. Shortages have driven up house prices to the extent that even individuals with $72,000 annual earnings (more than double the national average) required housing assistance from the Province of Alberta in order to rent property.[9] Housing prices were also the highest in the country, as per a CMHC survey in 2013.[10]

The shortage of labor in Fort McMurray was exacerbated by the lack of infrastructure and housing capacity to receive the required inflow of labor. The effects were particularly felt in the public sector. Turnover rates for municipality staff were at 10%, while the school system experienced a turnover rate of close to 30% in 2006.[11]

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[7] 2012 and 2008 Wood Buffalo Census, Regional Municipality of Wood Buffalo, 2012 Census, January 2013 and Regional Municipality of Wood Buffalo, 2008 Census, June 1, 2009.
[8] Alberta Energy Oil Sands Secretariat Publications,"Investing in our Future: Responding to the Rapid Growth of Oil Sands Development" (The 2006 Radke Report), December 29, 2006, p. 72.
[9] Ministry of Alberta, "Managing Growth Pressures" February 26, 2007.
[10] Andrew Bates, "McMurray Renting Prices Highest in Nation," Fort McMurray Today, July 4, 2013.
[11] Alberta Energy Oil Sands Secretariat Publications, "Investing in our Future: Responding to the Rapid Growth of Oil Sands Development" (The 2006 Radke Report), December 29, 2006, p. 92.

As a result of these challenges, the Province of Alberta provided substantial funding in an attempt to mitigate the infrastructure and housing pressures. In response to the Radke Commission's findings in "Responding to the Rapid Growth of Oil Sands Commitment" the Province of Alberta has invested more than $140 million in expanding waste water facilities and $52 million in housing development and shelter operations.[12] Enhancing regional transportation networks required another $300 million.[13] Additional health investments by the Province of Alberta have totaled more than $200 million.[14]

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12 Alberta News Releases: Alberta Energy News Release, "Allocations to Capital Projects in For McMurray," January 31, 2008, and Alberta Energy News Release, "Funding for Fort McMurray Helps Meet Urgent Needs Brought on by Oil Sands Growth," February 26, 2007.

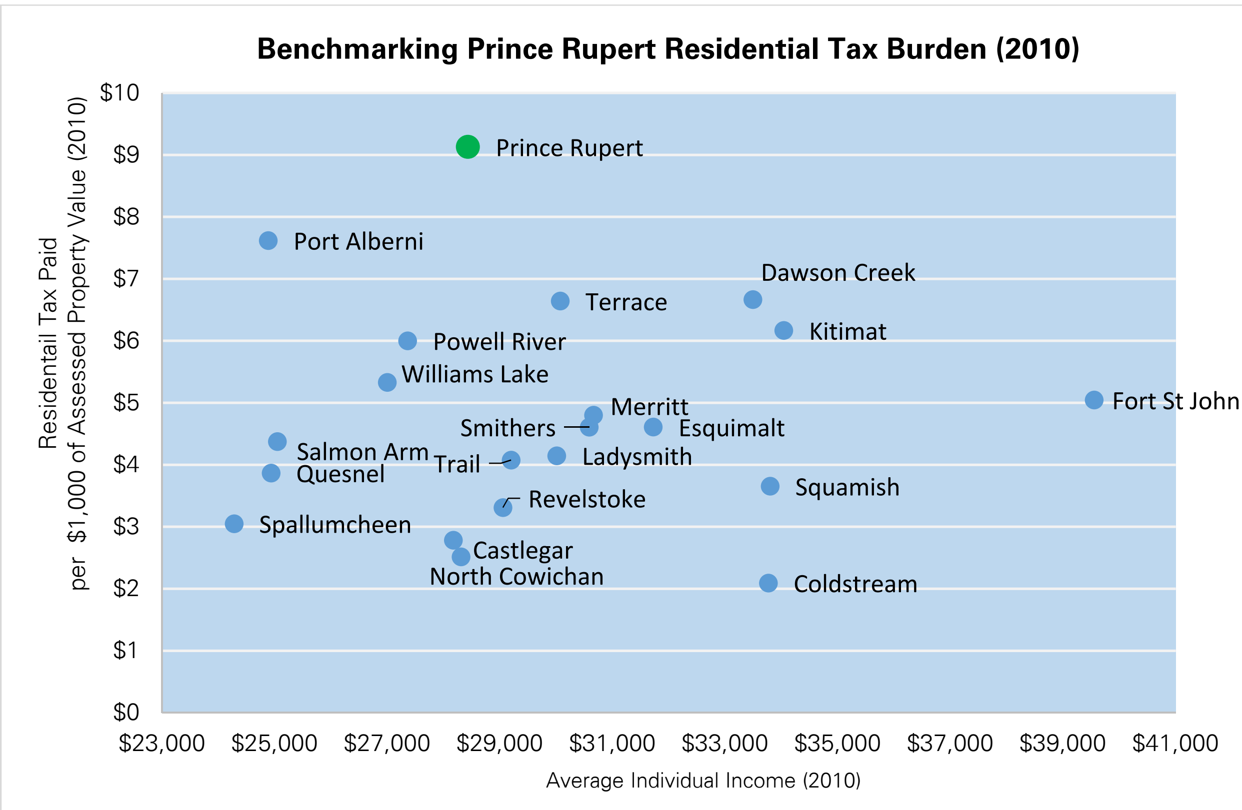
13 Alberta Energy News Release, "Allocations to Capital Projects in For McMurray," January 31, 2008.

14 Alberta Energy News Release, "Funding for Fort McMurray Helps Meet Urgent Needs Brought on by Oil Sands Growth," February 26, 2007.

3. Financial Summary

3.1. Introduction

The City is challenged to fund their existing planning and infrastructure needs through traditional revenue sources, nor can they fund the additional needs to prepare for LNG-related growth. Major industry tax revenue has fallen to levels less than half their 2003 peak. With infrastructure designed for significantly more industry and a population of 25,000, the City's current residents and businesses have made up for the decline in industrial tax revenue, even as the population fell year-over-year for a decade, to below 14,000. As a result, Prince Rupert residents and business are already in the upper range of taxes for comparable cities with comparable industrial composition.

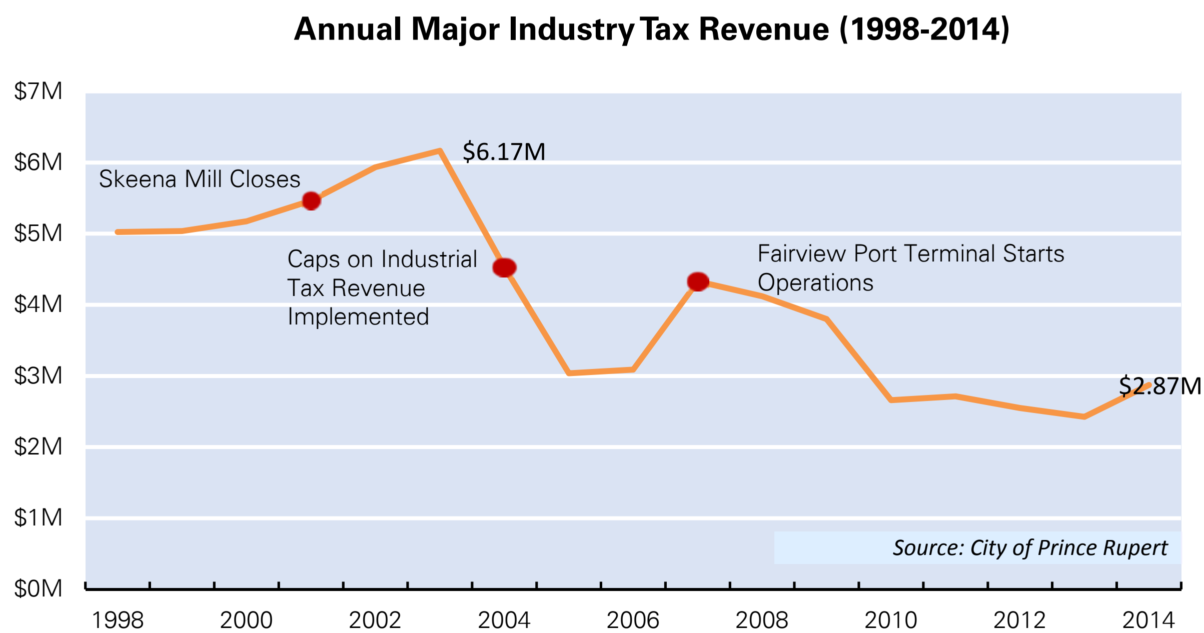


Source: Residential Tax, http://www.cscd.gov.bc.ca/lgd/infra/tax_rates/tax_rates2010.htm
Source: Average Individual Income, http://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/index.cfm?Lang=E

Compared to other B.C. municipalities with major industry and a population between 5,000 and 30,000 people, Prince Rupert residents are paying a higher amount of residential tax based on the value of their homes, even when compared to cities with higher individual incomes. This impact is increased further by the already high and the rapidly increasing cost of local housing.

3.1.1. Decline in Major Industrial Tax Revenue

The decline in tax revenue from Major Industry has been a primary driver for the City's long-term financial challenges. A number of factors have contributed to this trend: the closure of the Skeena Paper Mill and most of the local canneries, the tax caps on Major Industry put in place in 2004, the Payments in Lieu of Tax (PILT) policy, and depreciating values of Major Industry assessments. The impact of reduced industrial revenue has been a shift of the tax burden to the shrinking residential tax base.



3.1.1.1. Closure of Major Industries

When the Skeena Cellulose Pulp Mill closed down in 2001, it resulted in a drop in taxes levied, as well as a reduction in the collection of taxes which had been levied. Mill owners failed to pay taxes in the following years. The Mill was purchased by a third party in 2006 and the City offered tax relief to the new owners if re-opened by 2007. When the new owner failed to re-open the Mill or pay back taxes, the City took ownership of the Mill in 2009, which has incurred approximately $75,000 per month[15] in holding costs, adding to the City's operating expenses and financial burden. This series of events the municipality into significant long-term borrowing to meet operating expenses,[16] and was a key contributor to the City's long-term reliance on debt.

[15] City of Prince Rupert financial records
[16] The British Columbia Ministry of Community, Sport and Cultural Development, "Municipal Revenue Sources Review: An Analysis of Revenue Makeup," August 2012.

The City has also experienced a decline of the cannery business—which once was the main employer in the City. Canneries such as BC Packers started operations in the early 1900's and closed down in the late 1990's due to declining profitability in operations.[17] These closures had a significant impact on industrial tax revenue and residential tax revenue, as the loss of employment sparked significant population decline.

3.1.1.2. Caps on Industrial Tax Revenue

Long-term caps on industrial tax revenue have exacerbated the City's ability to offset their debt obligations and meet their infrastructure needs. In 2004, the Province's Port Property Tax Act placed a capped tax rate on industrial activities that are 'qualified Port activities', further reducing the City's total Major Industry tax revenue. A Provincial Competitiveness Grant was provided by the Province to compensate for the loss in revenue but this compensation only applied to properties that were built before 2004. In addition, the newer industrial properties are capped at a lower rate ($22.5 M) than the pre-2004 properties ($ 27.5 M), and the assessed values of all existing properties continue to depreciate. Currently, all Major Industry within the City of Prince Rupert qualifies for tax caps.

3.1.1.3. Reduced Revenue due to Payments In Lieu of Tax (PILT) Policy

For several years, the City was receiving lower than budgeted revenue from the Port due to the Payments In Lieu of Tax (PILT) policy. The Port's assessed value, as determined by a third party, has tended to be lower than the BC tax assessment value, partly because the assets are restricted to port-related purposes.[18] Over the 2007-11 period, the Port's tax assessment valued Port assets at 35% - 42% of the equivalent BC Tax Assessment value[19]. Recently, in October 2014, a settlement was finally established between the Port and City to increase the Annual Payments so that they now amount to approximately 81% of the BC Tax Assessment value[20] for 2007 through 2012, however 2013 and 2014 are yet to be settled.

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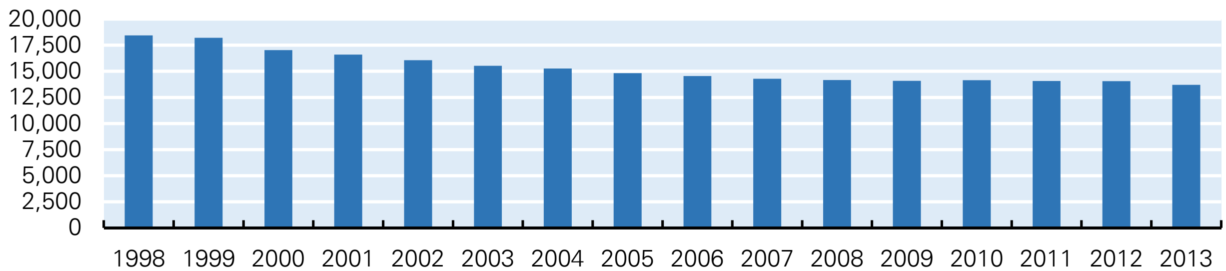
[17] City of Richmond, "In Their Words: The Story of BC Packers."
[18] www.rupertport.com/news/releases/port-property-taxation-backgrounder.
[19] City of Prince Rupert, Internal Document based on BC Assessment data
[20] Press Release from City of Prince Rupert, http://www.princerupert.ca/node/263

3.1.2. Decline in Residential Population and Increased Tax Burden

Over the last two decades, the City has experienced a marked decline in population.

Beginning with the closure of canneries in the late 1990's, as well as the closure of the Skeena Cellulose Pulp Mill in 2001 during which hundreds of paper mill jobs were lost. Attempts to resell and start the paper mill have failed, and with the accompanying decline in basic infrastructure and city services, the City has failed to attract new residents to help offset the decline.

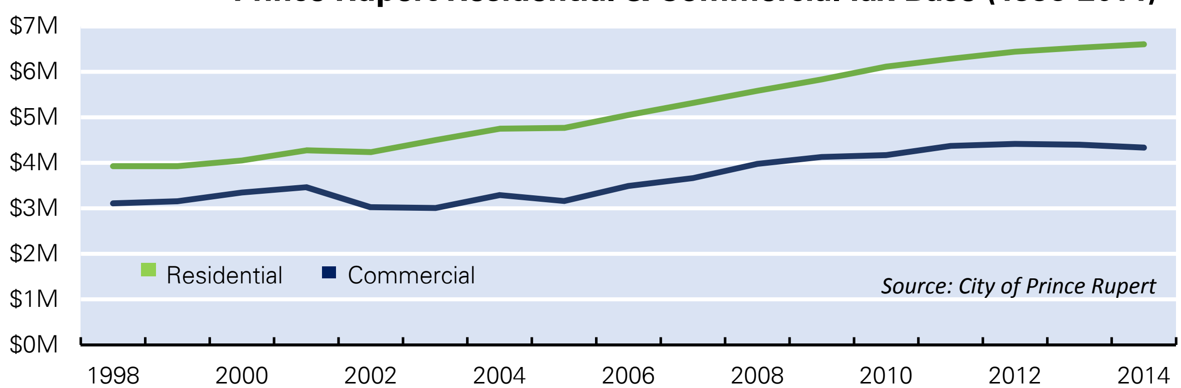
Prince Rupert Population (1998-2013)



Source: BC Stats[21]

The decline in the City's residential population has resulted in a reduced residential tax base. Compounded with the downward pressure on industrial tax revenue, this has meant that the declining City population has had to bear an increasing tax burden through both residential and commercial taxes.

Prince Rupert Residential & Commercial Tax Base (1998-2014)

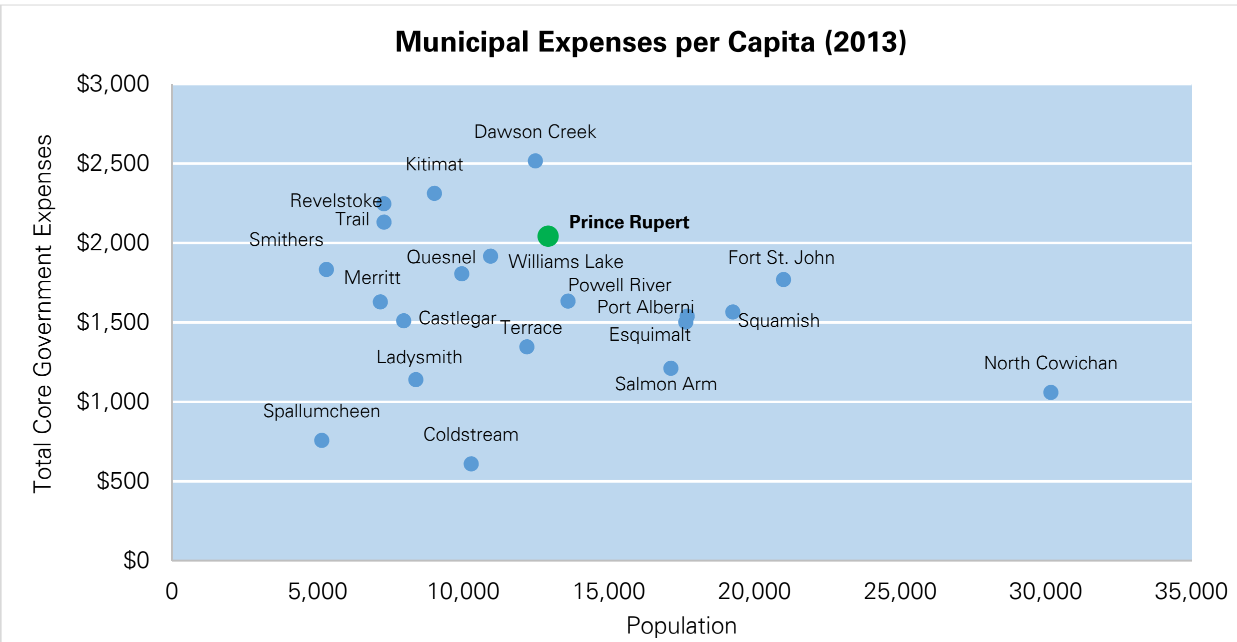


[21] http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx

3.1.2.1. Managing Expenses

Over the same timeline of reduced revenue from the Major Industry Tax base and declining populations, the City has managed a balanced budget through a reduction in operating expenditures. While the costs of some key services have grown over time due to inflation, constituent needs and other reasons, the City has deferred spending in key infrastructure areas such as Sewer and Water infrastructure, dropping from a peak of $4.4M in 1998 to a low of $1.6M in 2002. The average spend on Water and Sewer from the past 5 year has been $2.5M, a 42% reduction.[22]

As seen in the graph below, when compared to other municipalities with similar populations, the City's expenses per capita are above average, but not outside of the expected range.



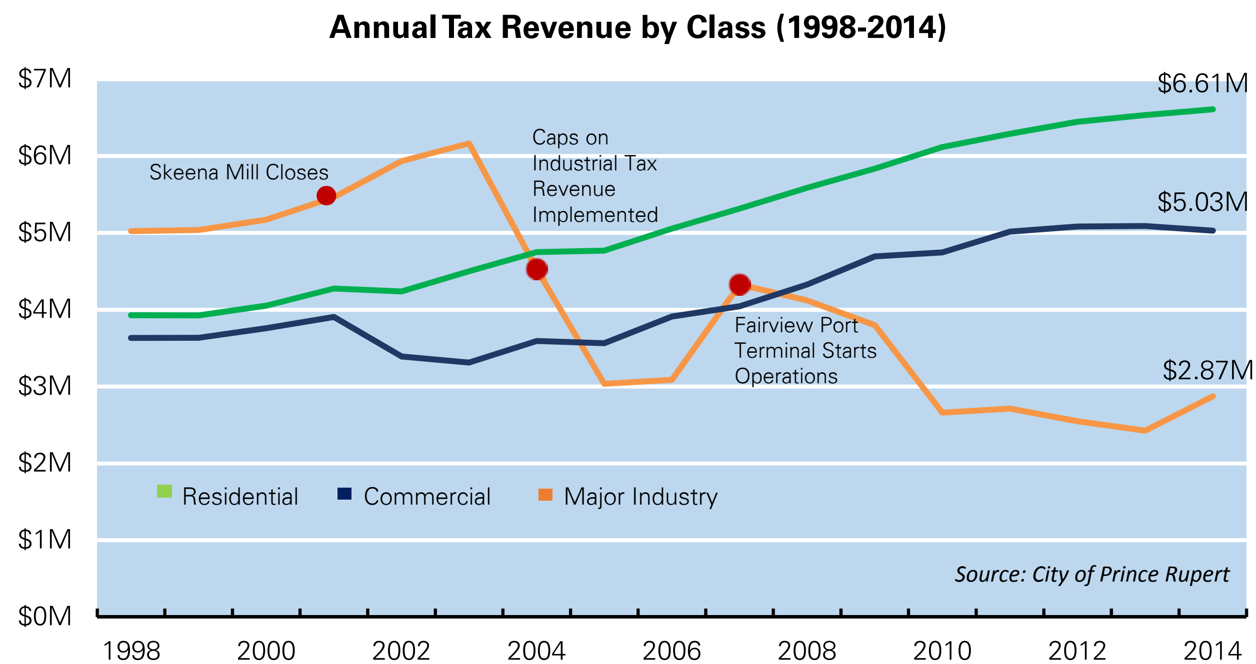
Note: *Core Government Expenses include; "General Government", "Protective Services", "Solid Waste Mgmt and Recycling", "Development Services", "Health, Social Services and Housing", "Transportation and Transit", "Parks, Recreation and Culture", "Water Services" and "Sewer Services". Expenses exclude "Other Services" and "Amortization".*

Source: Local Government Statistics, http://www.cscd.gov.bc.ca/lgd/infra/municipal_stats/municipal_stats2013.htm

[22] Data from 1998-2006 provided by City of Prince Rupert finance department. Data from 2007 to 2013 available from http://www.cscd.gov.bc.ca/lgd/infra/

3.1.2.2. Relative Contribution of Revenue from Different Property Tax Classes

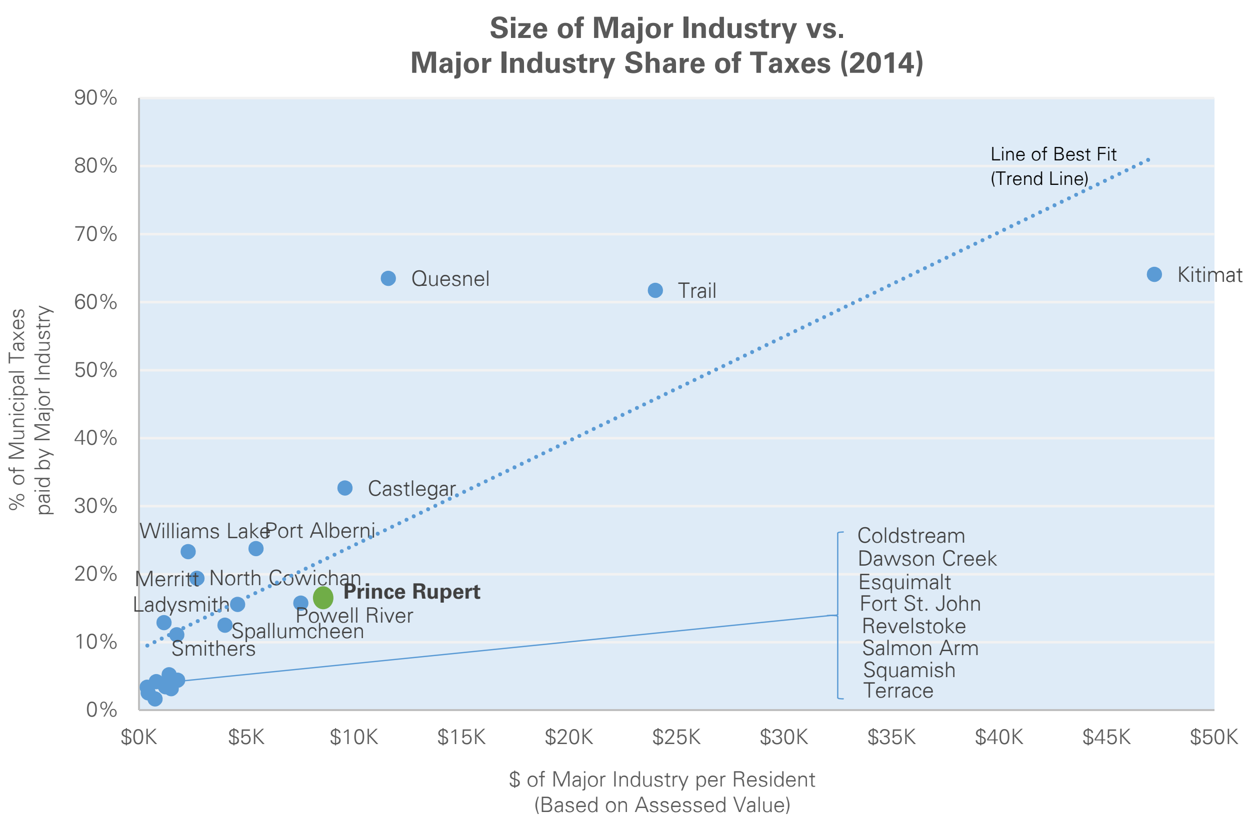
The cumulative effect of key industry closures in Prince Rupert has had a long-term effect on the City's revenue. Despite significant recent industrial development at the Port, Residential Property Tax continues to rise and remains the largest property tax revenue source for the City.



3.1.2.3. Benchmarking City's Residential Tax Burden with other Comparable BC Jurisdictions

For comparative cities, there is an expectation that as the amount of Major Industry increases (measured by value of Major Industry Assessment per Resident), the amount of total taxes paid by Major Industry would increase as well. Based on the graph below, a line of best fit shows the trend to validate the expectation; a group of cities with very little Major Industry received very little contribution to their total tax base, while cities like Trail and Kitimat with large Major Industry bases receive a substantial contribution to their total tax base.

Benchmarking B.C. municipalities with major industry and a population between 5,000 and 30,000 people, shows that for the City, Major Industry pays a relatively low percentage of tax for its comparative size. Cities like Quesnel and Castlegar, while bearing some of the additional costs associated with Major Industry are receiving a higher proportion of their tax revenues compared to Prince Rupert from their Major Industry tax base.



Note: *The values in the chart above do not include Special Tax Payments, Payments in Lieu of Tax or Provincial competitiveness grants.*

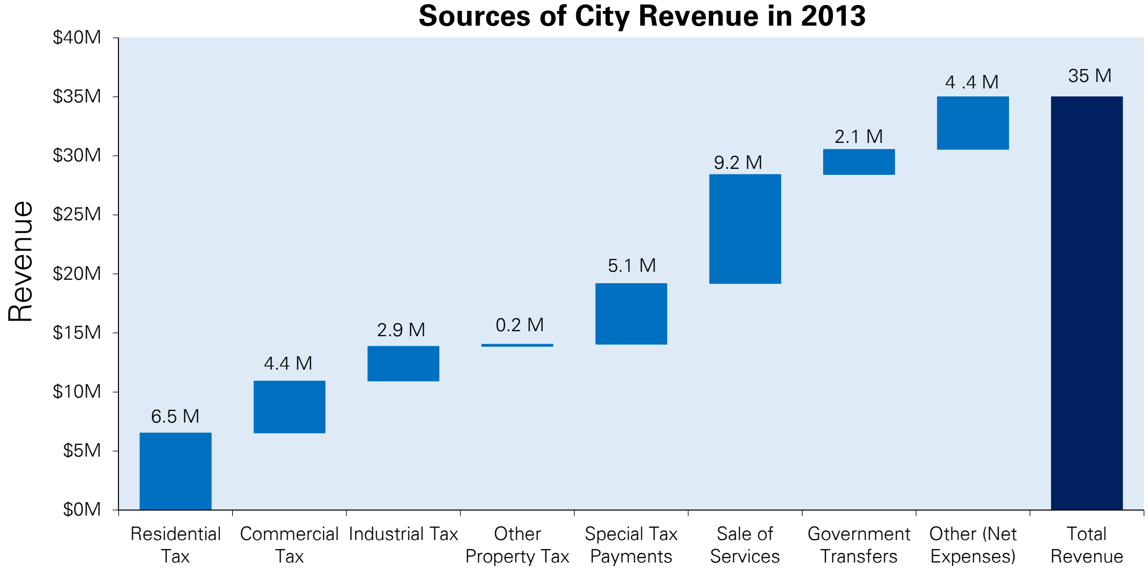
Source: Complete data available at http://www.cscd.gov.bc.ca/lgd/infra/tax_rates/tax_rates2014.htm

3.1.3. Overall Revenue Outlook

3.1.3.1. Components of Total Revenue

In addition to the tax base, the City has multiple sources of additional revenue, the largest of which is Sale of Services of $9.2M. However, despite having multiple sources of additional revenue, there is limited control or ability to grow the total revenue without additional revenue from government agencies and industrial proponents.

Sources of City Revenue in 2013



Source: Prince Rupert 2013 Audited Financial Statements[23]

In 2013, the City had revenue of approximately $35 million, with the Residential Tax Class contributing the majority of the City's Property Tax Revenue. The Payment In Lieu of Tax (PILT) payment from the port is included under the "Special Tax Payments" category and amounted to $ 2.36 million in 2013. Currently, the largest source of revenue for the City is the Sale of Services, which includes payments made for Utilities (sewer, water, landfill), Transportation, Recreational and Protective (RCMP) services, as well as special grants for upgrading and maintaining the solid waste, water, and sanitary (sewer) systems.

The majority of the City's Sale of Services is either composed of income to renew outdated infrastructure or residents use of existing infrastructure—which highlights the importance of investing in the City's infrastructure in order to reduce its future reliance on grants and its ability to earn additional income from the sale of services to the influx of new people expected to arrive in the area due to LNG development.

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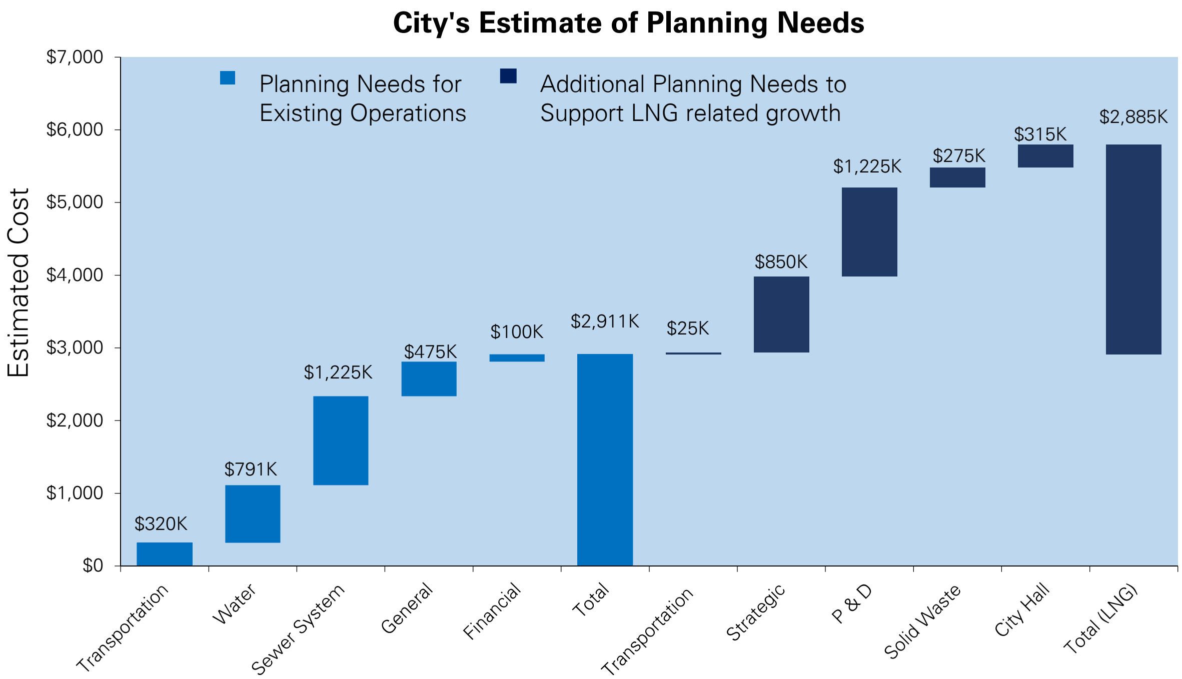
[23] The City of Prince Rupert, "2013 Audited Financial Statements," May 12, 2014.

4. High-Level Needs Assessment

4.1. Planning Needs

Facing a significant infrastructure deficit, and potential rapid growth with the arrival of the LNG industry, the City needs a clear understanding of the current state of its community, its infrastructure and its service capacity, with focused strategies to support the growth. Investment in long-term planning will allow the City to be ready for future needs, by putting processes in place to avoid the accumulation of large infrastructure deficits and developing plans to deal with the lifecycle of industrial development.



Source: Data table, section 4.1.1

Planning activities related to existing City operations, regardless of LNG related growth, is estimated at $2.91M, while planning activities to support LNG related growth is expected to cost an additional $2.89M. The studies to support LNG operations include studies on enhancing the transport network, managing solid waste and extending community services for the increased population. The identification of these needs has come from multiple sources, including City leadership, internally commissioned reports, KPMG leading practices and a report commissioned by a potential LNG proponent. Details of planning activities can be found in the following sections. These planning needs estimates are based on vendor estimates conducted by the City of Prince Rupert as of November 2014. The estimates should be seen as the median value, for which the range is defined in the source reports.

4.1.1. Planning Needs for Sustaining Existing Operations

The City's needs for planning activities are vast, regardless of the arrival of additional major industry. A number of key infrastructure assets have been uninspected for an extended period of time, and the City does not know the current physical state of these assets or their remaining useful life. In addition, the City recognizes that it is currently in an undesirable financial position and would like to develop a comprehensive plan; first to understand the effort it will take to execute the vision for Prince Rupert as well as to develop a Capital Plan for the long term, ensuring the City does not return to a similar situation in the future.

City's Estimate of Planning Costs for Sustaining Existing Operations

Planning Area	Brief Description	Estimated Cost[24]
Transportation *(Engineering)*	▪ Complete the analysis of current Roadway Conditions and Bridge Conditions ▪ Develop a Bridge Re-routing Plan ▪ Retaining Wall Analysis & Replacement Plan ▪ Sidewalk and Gutter Analysis & Replacement Plan ▪ Roadway Marking and Signage Study & Plan	$ 320 K
Water System *(Engineering)*	▪ Water Master Plan, Water Distribution Model Upgrades ▪ Dam Upgrades, Analysis & Plan ▪ Shawatlans Pump Station Upgrades, Analysis & Plan ▪ Fredrick Pump Stations Upgrades, Analysis & Plan ▪ Reservoir Upgrades, Analysis & Plan ▪ Chlorine Residual Upgrades, Analysis & Plan ▪ Filtration Deferral, Initial Assessment	$ 791 K
Sewer System *(Engineering)*	▪ Outfall Monitoring, Analysis & Plan ▪ Liquid Waste Management Plan ▪ Harbour Monitoring Plan ▪ Separation of Sewer & Sanitary Plan ▪ Treatment Implementation Plan ▪ Piping Condition Analysis & Plan ▪ Sewer Pump Station, Analysis & Plan ▪ Industrial Treatment Facility, Analysis & Plan ▪ SCADA System, Analysis & Plan	$ 1.225 M
General	▪ Civic Building Assessment & Rehabilitation Plan ▪ Public Works Rehabilitation Plan ▪ Airport Transportation Study ▪ Fire Underwriters Study ▪ City Bylaw Review and Update	$ 475 K
Financial	▪ Asset Management Planning – Long Term Capital Needs	$100 K
	Total	**~$ 2.91 M**

[24] Estimates sourced from internal City of Prince Rupert estimates and internal documentation. See Glossary for source information.

4.1.2. Planning Needs to Anticipate/Support LNG-related Operations

It is critical for the City to be pro-active in planning for the arrival of LNG-related industry and growth, and thorough planning will benefit all stakeholders. Planning for structural and community needs will provide more clarity for proponents, clearer guidelines for developers and faster timelines for approvals. Above all else, the City recognizes through experience that a local industrial base may not last forever, and Long Term Strategic Community Planning is key to establishing a sustainable community. Investing in these planning activities should be done as soon as possible, prior to any proponent investment decision. Additionally, the City is committed to the social well-being of its citizens and requires planning activities to assess the social impacts of industrial growth and to develop strategies to mitigate those impacts.

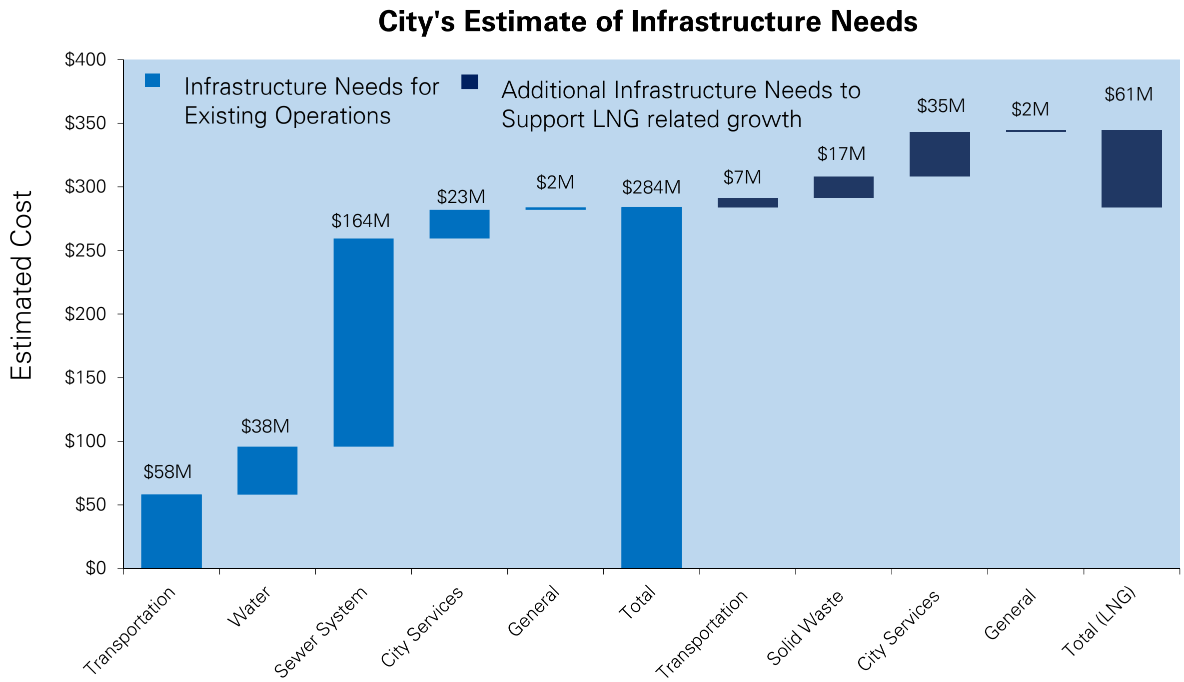
City's Estimate of Planning Costs to Support LNG-related Operations

Planning Area	Brief Description	Estimated Cost[25]
Transportation (*Engineering*)	▪ Major Road Network Plan	$25 K
Strategic Community Planning	▪ Long Term Planning - Identify Sustainable Initiatives for the Community ▪ Scenario Planning - Local Inflation, Effects and Mitigation ▪ Population Survey ▪ Housing Strategy – Increasing Low-cost housing & Rentals ▪ Recreation & Community Services – Benchmarking and Community Needs ▪ Parks – Trail and Recreational Planning ▪ Direct Bridge to Digby Island – Re-visit ▪ Tsimshian Access Plan – Re-visit	$1.05 M
Planning & Development	▪ Implementation of a modern Planning & Development tracking system ▪ Comprehensive Developer Guidelines, aligned to Strategic Plans ▪ Land Use Planning Study ▪ Environmental Land Use & Identification Study ▪ Waterfront Land Use Plan ▪ Parkland & Green Space Study ▪ Parking Availability Study	$1.23 M
Solid Waste Management	▪ Expansion Planning ▪ Leachate Lagoon Expansion ▪ Long Term Solid Waste Plan	$275 K
City Hall, Human Resources	▪ Internal Resource Management Planning ▪ Staff Compensation Analysis ▪ Staff Retention Study ▪ Job Description Gap Analysis ▪ LNG Negotiations Support	$ 315 K
	Total	**~ $2.89 M**

[25] Estimates sourced from internal City of Prince Rupert estimates and internal documentation. See Glossary for source information.

4.2. Infrastructure Needs

Over the course of several decades, the City has deferred spending on a number of core infrastructure assets. As a result, recent reports, studies and mandates have sized the City's current infrastructure spending needs over $280M. Over and above the existing needs, there is a need for additional infrastructure to support and accommodate LNG proponents. While planning needs to support LNG should be made immediately, infrastructure spending can be delayed until investment decisions from proponents. However, there is a risk that the total costs will increase the longer investment decisions are delayed.



Source: Data table, section 4.2.1

The infrastructure costs are derived primarily from a City mandated report from Stantec, completed in November 2014, as well as a CitySpaces report mandated by Pacific Northwest LNG. Additional estimates were provided by internal City estimators. The estimates should be seen as the median value, for which the range is defined in the source reports.

4.2.1. Infrastructure Needs for Sustaining Existing Operations

City's Estimate of Infrastructure Investment for Sustaining Existing Operations

Infrastructure Area	Brief Description	Estimated Cost[26]
Transportation *(Engineering)*	▪ Road Network; 58% of the roads are more than 25 years old. Roads in poor to average condition (as identified in the 2004 condition report) will require partial reconstruction - $22 M ▪ Bridge Replacement; The City's 3 wooden bridges are 70 years old and beyond original life expectancy - $ 9.4 M ▪ Retaining Walls; Retaining walls are made of stacked stone and do not meet current safety standards - $ 5 M ▪ Airport Ferry & Docks: Ferry docks are in poor condition and have exceeded their estimated useful lives- $21.6M	$58 M
Water System *(Engineering)*	▪ Woodworth Dam; The dam is 100 years old and requires complete replacement - $4M ▪ Woodworth Dam; Access road to dam – $6M ▪ Montreal Circle Reservoir; Reservoir is past useful life and requires replacement - $3M ▪ Submarine Line; Current line to dam is past useful life and requires replacement - $2.4M ▪ Fire Hydrants; Installed in 1968 and require significant upgrade and replacement - $1.9M ▪ Water Distribution & Supply Pipe; 85km of Line requires replacement - $20.5 M	$37.8 M
Sewer System *(Engineering)*	▪ Catch Basins / Manholes; Assets are past their useful life and require replacement - $0.2M ▪ Sewage Collection System Pipes, Outfalls; Approximately 25% of the main trunk water system is pre 1925 lines - $10.9 M ▪ Sewage Treatment Facility; Current conditions do not meet Federal Wastewater Regulations - $150M ▪ Shawatlans Lake and Chlorine Pump House; Assets are past their useful life and require replacement - $2.5M	$163.6 M
City Services	▪ Firehall and Truck; Replace existing Firehall, new pumper truck and additional equipment - $10.6M ▪ RCMP Facility - $12M	$22.6 M
General	▪ City owned operations equipment, including fleet - $2M	$2 M
	Total	**$284 M**

[26] Estimates sourced from internal City of Prince Rupert estimates and internal documentation. See Glossary for source information.

4.2.2. Infrastructure Needs Anticipating/Supporting LNG-related Development

City's Estimate of Infrastructure Investment to Support LNG-related Operations

Infrastructure Area	Brief Description	Estimated Cost[27]
Transportation *(Engineering)*	▪ Additional Maintenance from Increased Use - $5M annually ▪ Additional Bridge Maintenance from Increased Use - $1.6M annually ▪ Modified Ferry Route; Shift Ferry Route to Tobey Point to reduce time - $28.7M ($7.2M higher than Sustaining Existing Operations option)	$7.2M one-time $6.6M annually
Utilities	▪ New Waste Cell: Includes development cost and closure costs - $16.9 M ▪ Lagoon Expansion; Estimate Unavailable ▪ Increased operational expenses for increased asset base - $2.4M annually	$16.9 M one-time $2.4M annually
City Services	▪ Secondary Fire Protection to District of Port Edward; Capital costs - $10M, Annual Operating $1.4M ▪ Increased Policing; Annual Operating $ 3.2 M ▪ Affordable Housing; 300 additional affordable housing units are required to offset expected shortage - $25M ▪ Public Transit; Cost for additional riders and extended service - $0.2M annually ▪ Recreational facilities: cost for additional use of recreational services - $0.7M annually	$35M one-time $5.5M annually
General	▪ Asset Management System; Implementation of a modern, GIS system - $1.5M	$1.5 M
	Total	**$60.6 M one-time** **$14.5 M annually**

[27] Estimates sourced from internal City of Prince Rupert estimates and internal documentation. See Glossary for source information.

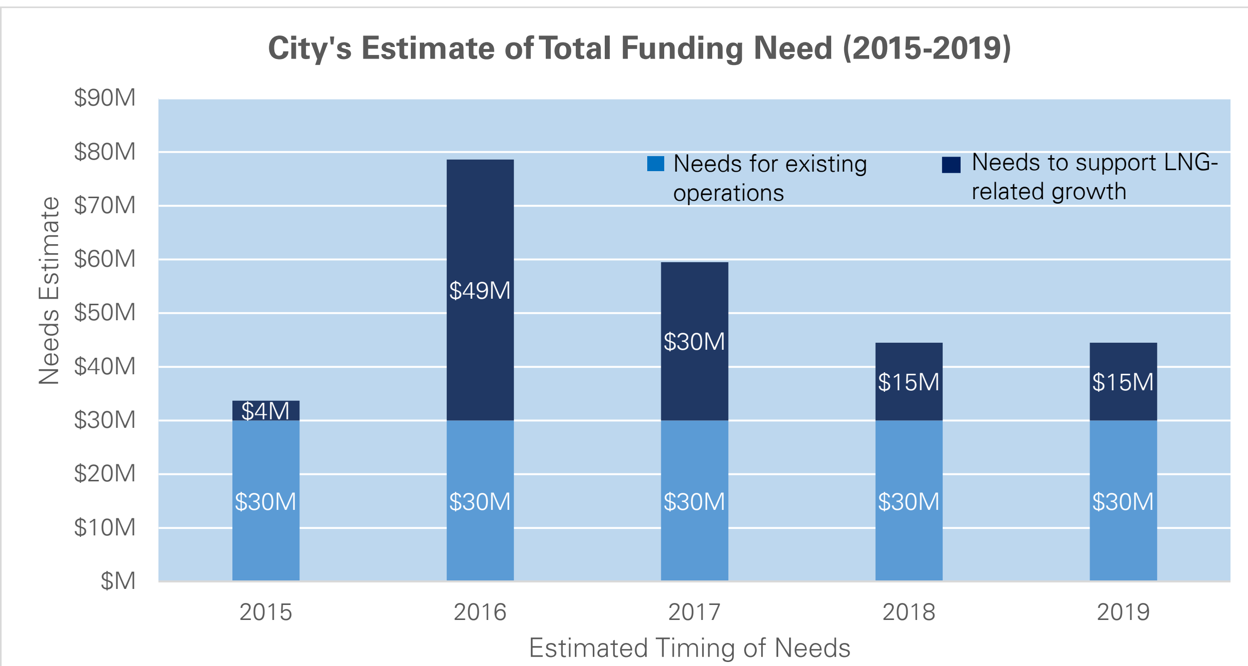
5. Gap Analysis

5.1. Financial Gap Analysis

As explored in the High-Level Needs chapter, LNG-operations will pose significant additional infrastructure and planning costs to the City. It is important to highlight that, in order to meet the needs posed by growth, most of this infrastructure will need to be in place prior to LNG facilities becoming operational.

The chart below shows the incremental spending required by the City of Prince Rupert to facilitate the construction and operation of one LNG facility. It is important to note that the base non-LNG related infrastructure needs of the City are not included in this analysis, which focuses exclusively on the incremental costs resulting from LNG development.

For the purposes of this chart, it has been assumed that LNG construction would begin in 2016 and that the capacity of the LNG operation is approximately 2-4 million tonnes daily. The population increase estimates used were estimated in the CitySpaces Report. In cases in which the Stantec report did not provide estimates for key infrastructure, the report analysis relied on the City's estimates of expected costs, assuming a maximum arrival of 5,000 people during the construction of one LNG facility.



The City is planning to eliminate its infrastructure deficit needed to support existing operations over the course of 10 years, which would require funding and spending of $25M to $30M annually, beginning in 2015. All planning needs are assumed to be upfront short-term costs, and are allocated in 2015. Infrastructure spending supporting LNG-related development is expected to begin in 2016, with cost allocation assumptions found in the table below.

City's Estimate of Investment Timeline

Year	Item & Description	Estimated Cost [28]
2015	▪ All LNG related Planning Activities should be completed as soon as possible; $2.9M	$2.9M
2016	▪ Transportation; $7.2M ▪ Solid Waste Management; $16.9M ▪ City Services, Fire Protection; $10M ▪ Increased Annual Operating Costs: $14.5M	$48.6M
2017	▪ Affordable Housing; $15M (of $25M total) ▪ Increased Annual Operating Costs: $14.5M	$29.5M
2018	▪ Affordable Housing; $10M (of $25M total) ▪ Increased Annual Operating Costs: $14.5M	$14.5M
2019	▪ Increased Annual Operating Costs: $14.5M	$14.5M

5.1.1. Anticipated LNG-Related Revenue

The list below itemizes the potential revenue sources available to the City of Prince Rupert arising from LNG development.

1. Sale of City Services:

Sale of City Services include items such as transportation (airport, transit), cemetery trust, utilities, parking and paid recreational activity. The successful sale of services is contingent on the capacity and current asset utilization available. Currently, around $ 9.2 million[29] in revenue is generated from a population of around 13,700. The potential addition of 350 permanent employees and the occasional expenditure by 3,000 -5,000 construction workers will improve the overall receivables in this category. Based on an aggressive estimate of 25% growth, this would provide the City an additional $2.3M in revenue.

2. Municipal Residential Tax Revenue

In 2013, the City's residential tax revenue was approximately $ 6.5 million from a population base of about 13,700. In October 2013, Prince Rupert had one of the highest vacancy rates in BC, at 11.1%.[30] City staff believe that most housing needs for the 350 anticipated permanent jobs and the additional 200-300 temporary employees are already available. There may be a need to renovate and repair some of these houses, but the need for large scale housing

[28] Source: KPMG Research, City Spaces Report, City of Prince Rupert Internal Report. See section 4 for additional detail
[29] City of Prince Rupert, 2013 Annual Report, p.45.
[30] The Canadian Mortgage and Housing Corporation, Rental Market Report BC, p.7.

developments is limited. With limited new residential home starts, the opportunities to increase revenue through residential tax may be limited to tax increases.

3. Commercial Tax Revenue

Tax revenue generated from commercial property was approximately $ 4.4 million in 2013 from a base population of about 13,700 residents. There is the possibility for expansion of commercial services resulting in an influx of LNG employees. However, the increase would likely be incremental and track the long-term population increases estimated at approximately 5% by the CityScapes report.

4. Share of Municipal Industrial Tax Revenue

LNG operations in the region are expected to generate approximately $33.3 million in revenue (according to 2013 rates)[31] but there is uncertainty on whether Prince Rupert will receive this revenue as the LNG operations reside outside of the city's jurisdiction, despite many of the costs falling to the City.

5. Other Tax Revenue Streams

Other revenue streams to the City include, but are not limited to Government Transfers, Sharing of Provincial LNG Tax Revenue, Income from City West and other miscellaneous revenue. $1.2 million of Government transfers are "conditional" and a significant amount of these transfers, including casino and hotel revenue, are passed on to the relevant entities. It remains unclear how the introduction of LNG would affect these revenue streams.

5.2. Financial Review Results

There are few viable options available at Prince Rupert's disposal to close this funding gap. With as few as 200-300 new temporary residents and 350 long term residents, there may not be a large increase to the residential or commercial assessed value. With qualified port activities industrial tax rates capped, the option to increase industrial tax rates is not available to fill the gap.

Prince Rupert finds itself in a situation where the City would like to welcome a new industry to the region but realizes that this would come with incremental investments on top of an already depleted local infrastructure. Other sources of funding may be necessary to close this gap and ensure that both industry and the City mutually benefit over the long-term.

[31] KPMG LNG Advisory, "Insights and Updates on Proposed BC LNG Tax Regime," 2014, p.7.

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