Sink or Swim:

Examining the Current Impacts & Future Challenges of Publicly Funded Swimming Venues in Prince Edward Island

ADAM ROSS

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Name of Author: Adam Ross

Department: School of Business

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Name of Supervisor(s): Susan Graham

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Address:

UPEI School of Business
550 University Avenue
Charlottetown, PE C1A 4P3

Abstract

Swimming has deep-roots on Prince Edward Island. Through examining secondary data from a variety of sources including swim clubs, pool owners and operators, provincial sport organizations, and national sport organizations the intentions for this study is to determine what impacts publicly funding swimming pools have on Prince Edward Island. With public tax dollars being contributed to the operations of these facilities, the facilities are often subject to scrutiny of the return on investments through the eyes of the tax payers. By compiling, analyzing, and describing the data obtained in this study, the researcher hopes that the impact these facilities make on Prince Edward Island will be clearer for all those interested parties. Through the analysis of longitudinal data, trends pertaining to participation in swimming sports, employment opportunities, and the number certified potential employees will be described. Key learning outcomes from the study will be available as well as recommendations to address these outcomes and trends within the industry.

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Chapter 1: Introduction

The act of swimming dates back to 2000 BC. Swimming was once one of the seven agilities of knights during the medieval times (Swim Canada, 2016). In the early 1800's swimming started to gain popularity with the first construction of an indoor pool. Swimming has since grown to be a popular activity for people of all ages worldwide. In 1992, Statistics Canada reported that swimming was the most frequented activity among Canadians for physical activity - only later to fall to third place in 2005 to soccer and ice hockey (Statistics Canada, 1992). In 2016, swimming is still popular amongst Canadians offering a way of being physically active, competing, and recreating.

What makes swimming unique is that it can be much more than just an activity, past time, or way to keep physically fit. Swimming can also be a skill that could save a person's life. In 2014, the World Health Organization released the first World Drowning Report bringing the facts of the global drowning problem to the forefront (WHO, 2014). Drowning has become the third leading cause of unintentional injury death worldwide. Globally, an estimated 372 000 people drown each year; however, this number is expected to be significantly underestimated due insufficient record keeping in many third-world countries. The key to drastically reducing drowning is simple: members of society as a whole need to learn how to swim. Thus, swimming is more than just a skill required to participate in sport or physical activity, but an essential skill for any person who is exposed to open water (WHO, 2014).

Swimming takes a variety of forms, is done for different purposes, and takes place in a variety of settings. In relation to sport, the Federation Internationale De Natation (FINA), which is the internationally governing body for the sport of swimming, defines seven disciplines for competitive swimming: speed swimming, spring board diving, high diving, synchronized

swimming, open water, water polo, and masters. Of these seven disciplines, only speed swimming and synchronized swimming are active in Prince Edward Island and have provincial sport organizations and clubs that have athletes training and competing. Two other active sport groups on Prince Edward Island which require swimming as part of their sport are Triathlon and Lifesaving Sport. Both of these sports require participants to be able to swim in order to compete (Lifesaving Society, 2016; Triathlon Canada 2016).

Most importantly, in order for individuals to be able to swim, there is a need for appropriate facilities. Public swimming venues are widely available across Canada in towns, cities, and communities. Prince Edward Island has two publicly funded indoor swimming venues (located in Charlottetown and Summerside) that are open year round (City of Charlottetown, 2016; City of Summerside 2016). In addition, Prince Edward Island has miles of beachfront and waterfront venues for swimming during the summer months (Tourism PEI, 2016). Publicly funded swimming facilities are often scrutinized due to high cost of operation and struggle to be used to the communities' full potential. This study was completed in an attempt to show the importance of these venues, the opportunities they provide, and the impacts of these facilities in communities throughout the province.

Background

In Prince Edward Island, swimming has deep roots. Evelyn Cudmore of Prince Edward Island was a founding member of the water safety program offered by the Canadian Red Cross which is still in existence today across Canada (University of Prince Edward Island, 2016). Mrs. Cudmore was single-handedly responsible for teaching thousands of Islanders how to swim (University of Prince Edward Island, 2016). Prince Edward Island is also known regionally and nationally for the beaches and waterfronts where tourists and locals are able to swim during the

summer months. Beach visits are often one of the top attractions for visitors to Prince Edward Island. According to the Tourism Industry Association of Prince Edward Island (2014), during the peak tourism season, beaches were the top attraction for travelers to Prince Edward Island in 2014.

Problem

In 2016, the problem that exists is that the public indoor pools on Prince Edward Island are part of multiplexes where other amenities are present under one roof. Often pools are twinned with arenas, fitness centres, or other similar attractions. No publicly available data or reports exist that examine the functions and impacts of publicly funded swimming facilities that are housed within these multiplexes. Publicly available reports examined all amenities that exist within the multiplex facilities and published results without segmenting the impact of each amenity or facility. Thus publicly funded pools are subject to scrutiny when tax payers feel as though they are paying for a costly operation without readily seeing the return on investment.

Scope

The scope of this project will include analysis of the impact that publicly funded swimming venues have on the province of Prince Edward Island and attempt to identify some of the challenges and trends that may occur going forward. With public tax dollars being allocated to assist in the operations of publicly funded swimming facilities, stakeholders in these facilities need to gain a better understanding of the impact publicly funded swimming facilities have in communities and be able to showcase the value that is derived from the public dollars. For segments of this study, the scope of the research was broadened to include some data from local swim clubs, provincial sport organizations, and national sport organizations. This data are not regularly shared or made available to publicly funded facilities. These swim clubs act as anchor

user groups for indoor swimming pools and the researcher determined it was important to include them in this study since they strongly influence the impact the publicly funded swimming facilities make in their communities by providing athletes with competition venues.

Purpose

This project aims to provide an understanding of the impact that swimming venues have in Prince Edward Island in addition to identifying trends and challenges that the publicly funded swimming facilities may face in the future. The summary of the reports' findings may assist swim clubs in understanding the impact they make in the community, provide a status report on the industry to facility operators, and showcase evidence of trends within the publicly funded swimming facility industry. The findings may also identify gaps within the publicly funded swimming facility industry that are not presently being addressed and provide insight as to the opportunities for facility operators to provide more obvious value to tax payers. The report may also be used in similar communities, provincially or regionally, to justify constructing publicly funded swimming pools and how it would benefit the surrounding community.

Research Questions

Research questions were developed to identify the impact of publicly funded swimming venues on Prince Edward Island. In 2016, there was no evidence-based tool to assess the direct economic and social impacts that publicly funded swimming facilities have on communities; thus multiple research questions were crafted to allow the researcher to identify the different types of impact that publicly funded swimming facilities have in Prince Edward Island. The research questions to be answered in this study include:

1. How much are public swimming pools costing Prince Edward Island tax payers?

2. How many athletes are participating in swimming sports at publicly funded swimming pools on Prince Edward Island? Are swimming sports growing?
3. How do publicly funded swimming venues contribute to employment on Prince Edward Island?
4. What is the employment outlook for publicly funded swimming facilities?

Nature of the Study

The nature of this study is to examine the impact that publicly funded swimming facilities have on Prince Edward Island. This study is a descriptive research project focusing on past data acquired from sources on Prince Edward Island and national organizations for comparative purposes. This study does not attempt to answer how, when, or why the impacts, issues, or trends are occurring; the research focuses solely on identifying these characteristics for interested persons or organizations. The study focuses solely on swimming facilities that are publicly funded and excluded those which are privately owned and operated.

Assumptions and Limitations

Assumptions

In the course of completing this study some assumptions were made. With minimal research being conducted in this field on Prince Edward Island, the researcher was required to make some assumptions to provide a foundation for this research study. The assumptions for this research include:

1. The data provided by the sources were accurate and complete.

2. The sources of data adhered to the parameters and measures that the researcher identified. Where possible, numbers were verified with publicly available financial statements and reports; however, not all data could be verified.
3. The sport of swimming takes place in publicly funded swimming venues and no organized swim clubs use private pools.

Limitations

In order to ensure the study could be completed with accuracy and be relevant to the intended population, limitations needed to be established for this study. This study was limited to the province of Prince Edward Island. All sources for secondary data had to operate the entirety of their operations within the province in order to be included in the study. The study also was limited to those sports which are affiliated with Federation Internationale De Natation (FINA); this excluded two sports which involve swimming (Triathlon & Lifesaving Sport). For data obtained from publicly funded swimming facilities, the study was limited to Class A public pools as defined by the provincial government of Prince Edward Island (specifically the Department of Health & Wellness). Semi-private (Class B), semi-private (Class C), waterparks, and residential pools were not included (Prince Edward Island Government, 2016).

Conclusion

The intentions of this research is to show the economic impacts that publicly funded swimming venues have in the province of Prince Edward Island. The selected method for determining these impacts is through the collection of secondary data, providing analysis of this data, and making it readily available to pool owners and operators, swim clubs, and other interested parties. This research is being conducted in hope that the findings will provide insight into the

impact that public swimming venues have in Prince Edward Island, as well as provide an understanding of some of the trends and challenges that may affect the operations of these venues in the future. Chapter Two will situate the study by exploring existing literature that will provide a foundation for this study. Chapter Two will also identify gaps in the available literature for swimming venues and the impact competitive sport (such as swimming) has in communities.

Chapter 2: Literature Review

The purpose of this study is to better understand the impact that publicly funded swimming venues has in the province of Prince Edward Island. In order to better understand the impact within the province of Prince Edward Island, the researcher conducted a thorough search of what practitioners and academics were suggesting about the impacts that have already been studied. Literature regarding the topic was widely accessible; however, many referenced sport or physical activity programs in general rather than swimming specifically. Literature on sport infrastructure and swimming venues in general was also explored and incorporated into this literature review.

Throughout the literature review five main themes emerged which will be expanded upon throughout this chapter: the role of sport in public health, sport in communities, sport economics, sport infrastructure, and successful swimming venues. The objective was to compile external information that has been published elsewhere in the world (other than Prince Edward Island) on the impacts, benefits, and trends that have occurred and to provide a foundation for examining the impacts made locally on Prince Edward Island.

Search Strategy

The literature review process began with general searches using the following EBSCO databases: Business Source Complete, SportDiscus, and OneSearch. A variety of key words and phrases were used in each database to find relevant research to this study. These key words included: *swimming, swim, pools, aquatics, physical activity, active living, community development, impact, community, public health, sport, sport development, community impact, and health*. Articles in all databases were filtered to only review scholarly peer-reviewed articles and those articles published after 1990. It was evident early in the literature review that articles

published before 1990 were outdated and rarely used in the industry any longer. Articles were then reviewed based on title and abstract to determine if the article would relate to the nature of this study. If the article was deemed to have merit and could add value to the study, the article was cited and collected for more extensive review.

In addition to scholarly peer-reviewed articles, Google Scholar and Google were used to search for recent reports, news articles and industry reports that provided added value to the report. These reports were critically appraised for relevance, validity and creditability, and they were used only when they were deemed to be relevant to the study. Where possible, findings from non-academic research articles or news articles were searched for in academic research journals to verify the findings to ensure validity.

The role of Sport in Public Health

From as far back as 1980, evidence suggested the impacts that sport has on society include positive changes in regards to health, education, crime, and social capital (Cox, 2012; Oughton & Tacon, 2007). Society widely knows and has accepted that being physically active often results in having improved health; however, sport is rarely looked at as a preventive health measure nor acknowledged for its role in public health (Gotva, 2015). In addition to improved physical health, sport assists in emotional and personal development. Sport is an integral part of a full and healthy life; sport is a tool of choice by many for not only for the prevention of diseases, but for improving the quality of life in a multitude of dimensions (Gotva, 2015).

One of the greatest impacts sport consistently makes is the drastic reduction in health care costs for individuals who participate in sports and physically activity (Bullough, Davies, & Barett, 2013; Vail 2007). In a recent article, Gotva (2015) explained the range of impacts that sport can

physically have on a participant including improved breathing, heart activity, endurance, flexibility and obesity. Sport is a mechanism for people to be physically active. The World Health Organization estimated that over 3.3 million people die around the world each year due to physical inactivity. Pratt et al. (2012) suggested that approximately 1 percent to 2.6 percent of total healthcare costs are attributed to physical inactivity. According to the publicly available provincial budget for Prince Edward Island, the estimated expenditure for 2015-2016 healthcare costs are approximately $587 million dollars. Therefore, using this projection the healthcare costs directly related to physical inactivity in Prince Edward Island are between $5.9 and $15.3 million dollars per year. That equates to between 0.3 percent and 0.9 percent of the total expenditures for the entire province being related directly to physical inactivity.

Many sport organizations have filled the void of sport not being recognized in formal health policies and encouraged mass participation in their sport for the betterment of society (through being physically active). However, there has been an increased pressure on sport organizations to produce high performance athletes which has repressed the focus on mass participation (Berg, Warner, & Das, 2015). This has created a gap which needs to be filled for ensuring sport participation rates continue to rise for all ages.

Sport in Communities

To achieve a healthier citizenry, society needs to better understand how to sustain neighbourhoods, communities, workplaces, and recreational facilities. In order to preserve these assets adequately (specifically recreation facilities), community development needs to occur (Anderson, Ramos, & Middlestadt, 2014). In order for community development to occur, there needs to first be a defined community. A community does not need to be based on a geographic

location; it is often defined as a place where solidarity, participation and coherence can be found; it could simply be a special interest group. Once a community is defined, participation, and engagement of the members needs to occur. Members of the community need to be committed to making decisions in collaboration with each other for the betterment of the community. Engaged members of a community will see enhanced individual and collective capacities, improve efficacy, address inequities, and promote social and economic justice and well-being within the community (Schulenkorf, 2010).

Sport in itself can be a form of community development. Sport has been credited for many decades as a contributor for community identity, social cohesion, and communal pride (Schulenkorf, 2010) which all positively influence the healthy development of communities. There can be a variety of different approaches that sport can take; sport can occur through community associations and clubs, or through private sport clubs. Reid and van Dreunen (1996) concluded that "the community development approach to community work and organizations is perhaps the most appropriate strategy" when speaking about recreation, leisure, and sport.

Another key aspect of sports' positive influence is the development of communities through volunteerism. Volunteers are required in many sport organizations, specifically in community level programs. A study conducted by Hallmann (2015) concluded that a variety of determinants exist to explain why individuals volunteer, including demographics (age, gender etc.), economic indicators (income, working time, etc.), sociological indicators (social interaction), and psychological indicators (motives, membership, engagement, etc.). The same study determined that having membership to a club or organization rendered a much higher possibility of an individual volunteering with the organization going forward. Therefore, wider participation in sport would mean an increase in volunteering within communities. This would positively

influence communities because volunteering has positive outcomes for all those involved – the volunteers, the organization, and the community (Hallmann, 2015). Many volunteers have stronger feelings of belonging, connectedness, and purpose when they are active volunteers with an organization (Darcy, Maxwell, Edwards, Onyx, & Sherker, 2014). As community sport organizations grow, so will the need for volunteers; thus, a high social capital will exist within the community with the increase in volunteering.

Sport Economics

In addition to the impact sport has in communities regarding community development and public health in general, an economic impact of sport and sport facilities exists as well. Siegfried and Zimbalist (2006) discussed some of the unrealized economics that sport and sport facilities contribute to the economy by breaking them into three distinct categories. The first economic impact is consumer surplus, which suggested if residents attend a sport event and paid thirty dollars for a ticket, but the value to them in attending the game was fifty dollars, a consumer surplus of twenty dollars is created. Secondly, externalities allow consumers to benefit from an activity or good that they do not actually purchase. This could be in the form of community pride when a local sport team wins a championship. The third area is public goods which means one person's consumption does not take away the opportunity for another person's ability to consume the same product. Many people can consume sports, and consumption exists in a variety of forms.

In 2015, Sierra Planning and Management was commissioned to complete a complete economic impact study of the economic impact of the CARI Complex, a non-profit charitable recreation facility located in Charlottetown, Prince Edward Island. This recreation facility is collaboratively owned by the City of Charlottetown, the Town of Stratford, and the University of

Prince Edward Island. The mandate of the CARI Complex is to provide recreational opportunities for the capital area of Prince Edward Island. A summary of the report findings are listed below:

- Annually, the CARI Complex has approximately $2.7 million in direct spending, which boosts direct and indirect (all provinces) industry output by $5.6 million.
- The economic activity of the CARI Complex supported 79 full-time equivalent jobs.
- Events hosted within the CARI Complex had a total direct and indirect expenditure (in province) of $11.6 million.

The CARI Complex is a multiplex facility that combines various amenities and sport facilities. The economic impact of just the swimming pool was not separated for the purpose of the report. However, this report does provide great insight as to how multiplex facilities can provide significant economic impact to communities.

Household spending on sport has a significant impact on the Canadian economy (Bloom, Grant & Watt, 2005). As a nation, sport infrastructure must be maintained in order to provide a venue for sport participation to occur, which will continue to positively impact the Canadian economy. Without infrastructure, sport participation would decrease and thus the economic and social impacts of sport participation would be lost for communities and society as a whole.

Sport Infrastructure

Sport participation levels have been researched and determined to be based on a variety of factors including time for children/relatives, education, age, migration background, employment status, and a variety of other factors. However, sport infrastructure plays a key role in sport participation. A study conducted by Wicker, Hallmann, and Breuer (2013) concluded that proximity to sport infrastructure, specifically swimming pools, makes a person more likely to

participate in sport in general. Therefore, the availability to sport infrastructure to residents and strategically placed throughout the province of Prince Edward Island is a key factor in the sport participation rates for residents of the province.

The Canadian Infrastructure Report Card was released in 2016 and clearly outlined that sport and recreation facilities reinvestment levels will result in a decline in the condition of sport and recreation facilities in the future. The reinvestment rate needed to increase to the target rate of 1.7 percent to 2.5 percent compared to the current reinvestment rate of 1.3 percent in order to maintain the infrastructure. This includes all recreation facilities. For swimming pools, the reinvestment rate in 2016 is significantly higher at 2.7 percent. However, the same report in 2016 indicated that swimming pools and community recreation centres/multiplexes are overall in good condition. Many of these swimming facilities are aging and have high replacement costs. Swimming pools in Canada alone have a collective replacement cost of upwards to $900-million, and Community Recreation/Multiplexes (which could host swimming pools) have a collective replacement cost of $3.5-trillion. Replacement of the country's existing infrastructure is important to the overall economy and sport participation rates. As previously noted, sport participation is reliant on having proper venues for participating in sport; without proper infrastructure the social and economic impacts from sport will decline.

Successful Swimming Venues

Effective facility management is key for the long-term success of publicly funded swimming facilities. Effective management exists when performance measures are related to both the facility and the customer (Loosemore & Hsin, 2001). More importantly, the performance measures relevant to revenue generation and operational costs must be in line with the customers'

perception of service quality (Howat, Murray, & Crilley, 2005). If customers are expecting high quality services as opposed to low-cost services, the performance measures need to be reflective of those expectations.

A study conducted by Howat, Murray, and Crilley (2005) examined financial and participation measures which yielded the greatest potential to predict key performance indicators that are key to the success of public pools: *expense recovery* and *total visits per year*. This study had significant findings and implications for the success of public swimming pools. The researchers found that the single greatest predictor of *total visits per year* was program opportunities per week. A greater likelihood of increasing the customer base in public swimming pools is present with more programs (including lane swims, open swims, and structured programs) offered by the public pools. Promotion also played a key role in increasing the *total visits per* year, however, not as significant of an indicator as program opportunities per week (Howat, Murray, & Crilley, 2005).

The same study found that expense recovery was strongly related to fees per visit, meaning the amount of money each customer spent per visit. Although this is a logical correlation that could be assumed, the performance measures that did not influence the predictors are much more significant for facility managers. The study found that catchment population (population surrounding the facility in a five kilometer radius), labour costs, secondary spend per visit, maintenance costs, and energy costs were not positively correlated with expense recovery performance measure. This information is of particular importance for publicly funded pools on Prince Edward Island which are expected to recover a certain percentage of the operating costs.

Gaps in the Literature

The researcher identified gaps in the available literature during the process of this literature review. The following gaps were identified in the literature:

1. Minimal research had been conducted in the field of swimming pool operations in relation to business models. A variety of models are being used, including privately-owned, publicly owned, non-profit owned (ie. YMCA), or partnerships amongst various stakeholders. Research in this area may provide insight to municipalities or governments which will be required to reinvest in infrastructure in the future.
2. Minimal research was available on management systems and strategy for public pools. The only relevant information available was discussed in the literature review however it was restricted to only being studied in Australia.
3. Minimal literature was available in respect to whether public pools are more successful as a part of a multiplex facility or as stand-alone facilities.
4. Minimal literature was available that examined the role and impact of facilities in relation to sport participation rates.
5. Minimal literature was available where collaborative initiatives of stakeholders in sport (ie. Facility operators, sport organizations, sport clubs etc.) were implemented and how these initiatives effected sport participation rates.

Much of the literature reviewed focused on sport in general, or sport facilities in general. There was limited literature that focused specifically on the sport of swimming or swimming facilities (either public or private). Although some synergies exist with the generic literature, there are unique aspects regarding the sport of swimming and swimming facilities which would require more specific research to have practical implications.

Conclusion

This literature review explored some of the impacts of having publicly funded swimming venues in communities. Although the literature review focused on sport in general, it is important to note that these impacts are due to the fact that sport infrastructure, such as swimming venues, is available for sport participation to happen. Chapter Three provides an overview of the methodology used for this study in answering the four research questions that form the basis of the study.

Chapter 3: Methodology

The purpose of this study is to examine the economic impact of publicly funded swimming venues within Prince Edward Island. Additionally, the study was conducted to provide industry insight into the trends and factors that may influence these facilities in the future. In order to adequately assess the impact, secondary data was collected from a variety of sources. These sources included publicly funded swimming venue operators, provincial sport organizations, national sport organizations, and government departments. Each of the key aspects of the research design are now discussed.

Data Collection

An apparent challenge from the start of this study was selecting a method of collecting, comparing, and analyzing data. The study relied solely on secondary data collected from local sources. These sources include publicly funded swimming venue operators, provincial sport organizations, national sport organizations, and government departments. To ensure the proper data were collected, the data fields were pre-selected by the researcher and a description of what the sources should include in the data fields was imperative to ensure that data from the sources could be compared and analyzed. These data fields were first discussed with all sources to ensure that data for the fields would be readily available prior to collection.

Regarding the first research question examining how much publicly funded swimming pools are costing tax payers, data were collected from publicly funded indoor public swimming pools. The sources were asked to complete an Excel Spreadsheet with revenues and expenses that were directly related to the swimming pools. Revenues and expenditures related to the public pools were decided to be used due to the fact that the research question needed to answer how

much pools are costing tax payers. To answer this question, the difference between revenues and expenses would equate to the cost (or in some cases, surplus of revenue) to taxpayers for these facilities. Sources were instructed to provide the information as consolidated or as detailed as they liked as long as it was clear what the operating revenues and operating expenses were for their facility. Some sources provided links to audited financial statements posted on their website while other sources provided the information in greater detail. A summary of the data collected is available in Appendix A.

The second research question examining the number of athletes participating in swimming sports in publicly funded swimming pools required gathering membership data from two provincial sport organizations. To answer this research question it was determined that the number of registered athletes with provincial sport organizations was an appropriate data point to collect. Registered athletes are those who train or compete with associated swimming clubs throughout the province. Provincial sport organizations were supplied with an Excel spreadsheet with the data points request, an area to describe the data, and clear indicators for each year requested. The same spreadsheets were supplied to the national sport organizations. When possible, membership data was verified using annual reports that were posted online on the organizations' website. Comparative analysis was completed for trends year over year, and overall increases and decreases in membership provincially compared to nationally.

For the third research question regarding how publicly funded swimming venues contribute to employment on Prince Edward Island, a spreadsheet was developed and provided to sources to collect position titles, and the annual number of labour hours for fiscal years 2013 through 2015. Labour hours was the key data point for answering this research question. In order to adequate gauge how publicly funded venues contribute to employment on Prince Edward Island the labour

hours were collected and full-time equivalent (FTE) positions were calculated for each venue. The sources included for this question were: Credit Union Place, CARI Complex, and Provincial Parks. The sources were asked to verify data with payroll records. Only data for employees who were directly involved in the operations of the venue were asked to be included in the data, whereas persons with shared responsibilities for other areas such as marketing, payroll, human resources, reception etc. were asked to be excluded.

For the fourth research question regarding the employment outlook for publicly funded swimming facilities, the number of annual certifications issued by the Lifesaving Society was examined. The annual number of certifications issued for lifeguard and instructor positions was determined to be the most adequate data as any person employed with any of the sources is required to complete the specific course of training through the Lifesaving Society in order to be employed as a lifeguard or instructor. The Lifesaving Society is the industry standard and only nationally recognized training provider for lifeguards and instructors who work in swimming pools. Examination of the the number of annual certifications issued provincially provided insight into the size of the pool of qualified candidates that are eligible to work. The data were obtained directly from the Lifesaving Society PEI Branch membership database. National data regarding certifications issued across Canada was used for comparative purposes. This data was obtained through the Lifesaving Society National Office which collects annual data from each of the provincial branches of the Lifesaving Society.

Sources of Data

The primary sources of data for this study included National Sport Organizations, Provincial Sport Organizations, publicly funded aquatic facility operators, and government departments. All sources were asked to voluntarily participate in sharing the data being requested for the study. Sources were asked to provide specific data relevant to the research question that was being answered. For some sources, the groups were asked to provide information for multiple research questions and were provided details on how the data would be used in the study.

Current & Past Data

When possible sources were requested to provide data for at least three to five years, starting with the most recent completed year. For public pools, all those included in the study used calendar years for their fiscal year which meant that the most recent 2015 audited financial statements were available at the time of this report. Swim clubs and sport organizations use September until August for their membership years, which meant the most recent complete year of data was from the 2014-2015 season.

Data Analysis

After data were collected and verified (when possible), analysis of each data set was completed to answer each of the research questions. For each data set increases and/or decreases were noted over the course of the time that the data was provided (three to five years for most data). Graphs and charts were created in Microsoft Excel to make visual comparisons over the years that the data was provided. Observations were noted for each data set collectively (data from all sources).

Where possible, data from each source were critically appraised and analyzed. Data obtained from each source were also graphed and increases and decreases were noted year over year. When possible trends were compared from each source to the collective trends that were initially observed. Connections between trends from the data from each source were compared to the overall trend within the province. If specific sources were the reason for the overall trends within the province, the source was reported as being a key contributor to the reason for the provincial trend.

Conclusion

This study will evaluate the data provided by the sources to answer the four research questions discussed in this chapter. Through the collection and analysis of the data, it is the intentions that this report will be able to provide insight into the impact publicly funded swimming venues have within the province of Prince Edward Island. In Chapter Four, the results of each research question will be discussed in length. Findings will be presented in Chapter Four using charts and graphs and describing trends found through the analysis of the data collected for each research question.

CHAPTER 4: RESULTS

The purpose of this study is to examine the economic impact of publicly funded swimming venues within Prince Edward Island. Date were collected from publicly funded swimming facilities to provide a general overview of the impacts that the facilities made within the province. Through the analysis of this data, the researcher was able to quantify impacts within the province as well as identify trends that could effect these venues in the future. By describing the results for each of the specified research questions this study will provide a foundation for quantifying past impacts and future trends for interested parties.

Research Question One

For the first research question examined (how much public swimming pools are costing tax payers in Prince Edward Island), financial data was compiled from two sources: Credit Union Place, Summerside, PEI; and the CARI Complex, Charlottetown, PEI. Since Credit Union Place is directly owned by the municipality of Summerside, their audited financial statements were available on their website. For the CARI Complex, this information had to be requested from senior management of the facility. Financial data was collected for five fiscal years from 2011 through 2015.

The main measurement used to answer this question was total excess funds (profit) or deficit (loss) at year end. Table 1 outlines the total excess and deficit from operations for both facilities for fiscal years 2011-2015. Evidently, the majority of the data shows an operating deficit which means that having the facility operate is costing tax payers money, above and beyond the revenue collected from operations. Swimming pools are not lucrative, and seldom profitable on Prince Edward Island. However, a considerable difference in the amounts of deficits between the two public swimming pool examined was identified. Credit Union Place has an average deficit of

$384,783 over the five-year period, whereas the CARI Complex has an average deficit of $42,987 over the five-year period. This could be due to Charlottetown's large population catchment; however, from the literature review, catchment population is not a major influence. A complete analysis with financial information collected is available in appendix A.

	2015	2014	2013	2012	2011
Credit Union Place, Summerside, PEI	$(392,298)	$(453,214)	$(319,012)	$(367,804)	$(391,587)
CARI Complex, Charlottetown, PEI	$(34,610)	$(89,299)	$4,445	$(8,423)	$(87,052)

Table 1: Deficit/Excess Funds from Operations of Swimming Pools

In 2011, the total cost of both facilities combined was $476,628. Using 2011 as a baseline, three of the four following years saw a decrease in total cost to tax payers while one year (2014) both facilities had an increase in cost to tax payers. From 2011 to 2012 there was a decrease in cost of 21% overall. Similarly, 2013 (compared to 2011) again had a decrease in the overall cost to tax payers by 34%. However, in 2014 there was a 13% increase to tax payers. Both facilities in 2014 had a decrease in revenues compared to the prior year in addition to an increase of expenditures. In the most recent year (2015), both facilities had a reduction in the cost to tax payers compared to the baseline year (2011) by 11%. Further details would be required to analyze what occurred in 2014 to affect both facilities having a decrease in revenues and increase in expenditures; however it is important to note that results would be different if 2014 were more in line with the previous trend of decreases in expenditures and increases in revenues compared to 2011. Table 2 shows the overall increases/decreases (both facilities combined) in cost to tax payers compared to the baseline year of 2011.

	2012	2013	2014	2015
Increase/decrease in cost to tax payers	-21%	-34%	+13%	-11%

Table 2: Increases/Decreases in cost to tax payers compared to 2011

To provide further analysis, the cost recovery percentage was also calculated for each of the facilities for years 2011 through 2015. Table 3 shows the percentage of cost recovery for both

facilities for the five fiscal years. Cost recovery is the process of having a user fee which covers the cost of operations. If a facility reaches 100 percent cost recovery, the facility does not cost the tax payers additional funds outside of those user fees in which are collected in the form of revenue. The data identified that considerable differences between the two facilities located on Prince Edward Island.

	2015	2014	2013	2012	2011
Credit Union Place, Summerside, PEI	61%	56%	65%	62%	53%
CARI Complex, Charlottetown, PEI	96%	91%	100%	99%	90%

Table 3: Percentage of Cost Recovery for Publicly Funded Pools

However, even though the two measurements yielded different results, the data showed some similarities as well. Each facility provided expenses in four categories: salaries and benefits, equipment and supplies, administrative, and building operations & maintenance. For both facilities, salaries and benefits was the largest expense category. For the CARI Complex, salaries and benefits had a five-year average 67.4 percent, and the Credit Union Place had a five-year average of 58 percent. Building operations and maintenance was the second largest expense for both facilities. The CARI Complex had a five-year average for building operations and maintenance of 26 percent, whereas the five-year average for Credit Union Place was slightly higher at 34.2 percent.

Provincially, the two facilities examined are costing tax-payers on average $427,770 per year. However, depending on which facility a tax-payer may be funding with their tax dollars their contribution would be different between Summerside and Charlottetown. In addition, although the 2014 shows differing results with decreases in revenues and increases in expenses for both facilities one would suspect that the average cost to tax payers is higher due to these data points form 2014. However, the median total cost to tax payers is very similar to the average at $424,893 for the five year period examined.

Research Question Two

The second research question examined the number of athletes participating in swimming sports on Prince Edward Island. To answer this question secondary data was collected from provincial sport organizations on Prince Edward Island and the national governing body for the sport as well (ie. Swim Canada, Synchro Canada). The secondary data collected was based on the membership numbers in total, the number of registered athletes, the number of registered coaches, and the number of registered officials. Data was collected for the past four consecutive seasons starting in 2011-2012. For both Synchro Canada and Swim Canada, the membership year runs from September – August which is congruent with the competitive season for athletes.

On average, there were 387 registered athletes each year between the two active provincial sport organizations on Prince Edward Island. The majority of these swimmers are with Swim PEI, competing in the sport of speed swimming. Synchronized swimming accounts for 11.8 percent of the registered athletes over the four years of data presented. The low percentage of athletes could be based on the fact that synchronized swimming is typically a female-dominated sport, thus has a smaller target market to choose from. Table 3 shows the total number of registered athletes for each of the provincial and national sport organizations examined for this research question.

	2011-2012	2012-2013	2013-2014	2014-2015
Swim PEI	309	369	342	345
Swim Canada	44,802	54,831	56,361	55,521
Synchro PEI	69	49	37	28
Synchro Canada	3,070	6,331	6,697	6,667

Table 3: Number of Registered Athletes

For speed swimming, using 2011-2012 as a baseline for the number of registered athletes, the 2012-2013 season had a significant increase in registered athletes. On Prince Edward Island there was a 19.42 percent increase from 2011-2012 to 2012-2013, whereas Swim Canada had a

22.39 percent increase. The registered athlete increase in 2012-2013, although not part of this research, is widely speculated to be due to fact that the season was immediately following the 2012 London Olympic Games (International Olympic Committee, 2016). Swim Canada continued to see a membership increase in the 2013-2014 season whereas Swim PEI saw a decrease in registered athletes by 7.32 percent. However, considering the decrease in registered athletes in 2013-2014, Swim PEI still had more registered athletes compared to the baseline year (2011-2012: 309 athletes; 2013-2014: 342 athletes). In 2014-2015, Swim Canada experienced a slight decline in registered athletes by 1.49 percent where Swim PEI had a marginal increase of less than 1 percent (increase of 3 registered athletes over 2013-2014). Figure 1 shows the annual changes (percent) in Registered Athletes for Swim PEI and Swim Canada using 2011-2012 as a baseline.

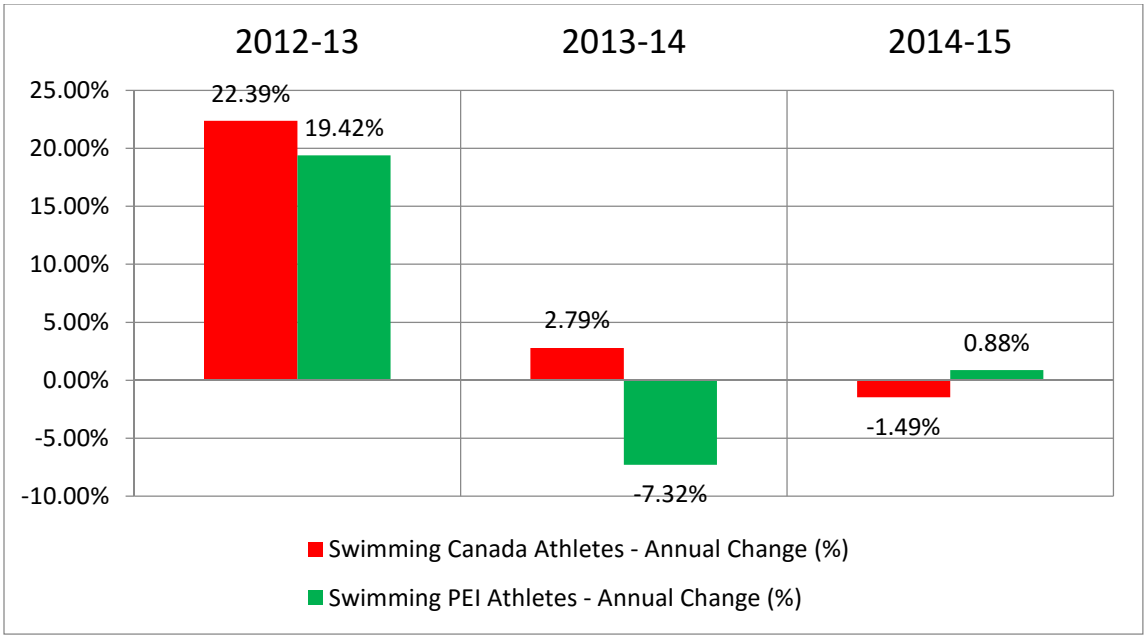

Figure 1: Annual Change in Registered Athletes for Swim PEI & Swim Canada

Using similar data from Synchro Canada and Synchro PEI, the national and provincial sport organizations for synchronized swimming, the results are much different from their speed swimming counterpart. Using 2011-2012 registered athletes as a baseline, similar to Swim

Canada, Synchro Canada saw a large increase in the 2012-2013 season of 106.22 percent - again widely thought to be due to the increased visibility of the sport during the 2012 London Olympic Games (International Olympic Committee, 2016). Unlike speed swimming, Synchro PEI saw a decline in the 2012-2013 season of 28.99%. Similarly in each subsequent year, Synchro PEI has continued to see decreases year over year there after of approximately 24 percent each year. Synchro Canada continued to increase the number of registered athletes in 2013-2014 marginally by another 5.78 percent and only saw a slight decline of 0.45 percent in the 2014-2015 season. Figure 2 shows the percent of annual change year after year for both Synchro Canada and Synchro PEI.

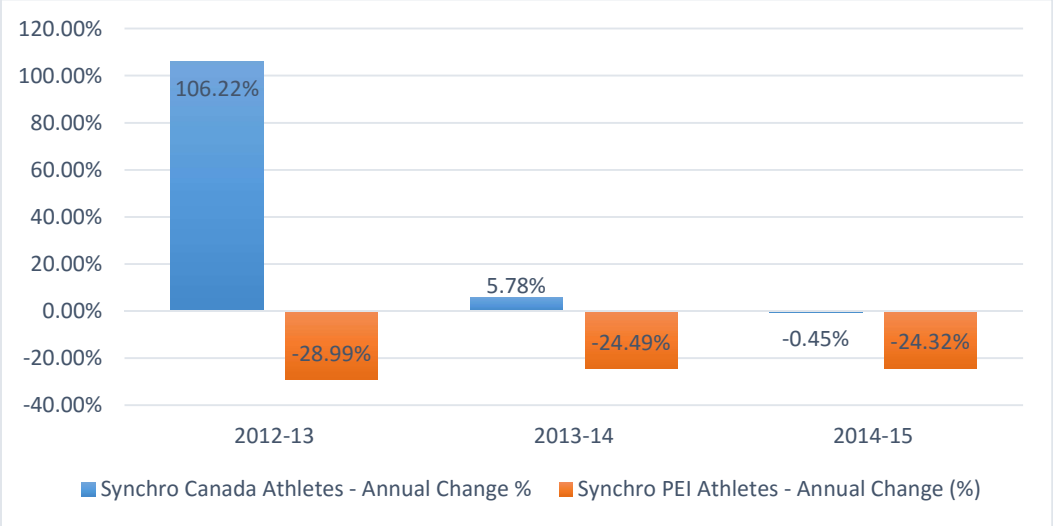

Figure 2: Annual Change in Registered Athletes for Swim PEI & Swim Canada

With speed swimming and synchronized swimming being the only two active sport organizations in Prince Edward Island, these results show that the combined swimming sports are in fact not presently growing based on the number of registered athletes with sport organizations. In 2011-2012, Swim PEI and Synchro PEI combined had a total of 378 registered athletes in Prince Edward Island. In the most recent season (2014-2015) the combined total number of registered athletes has in fact dropped slightly to 373 athletes. A drop in synchronized swimming registration

is the reason for the decline in total number of athletes falling from 69 registered athletes in 2011-2012, to 28 registered athletes in 2014-2015, and overall decrease of 59.4 percent. However, Swim PEI has experienced an increase over the course of the four-year period. In 2011, Swim PEI had 309 registered athletes and most recently had 345 in the 2014-2015 season. Full membership data is available in Appendix B of this report.

Research Question Three

The third research question asked how publicly funded swimming facilities contributed to employment in Prince Edward Island. For this question, three sources were used that are funded in part or in full by tax-payers and directly employed lifeguards and/or instructors at public swimming venues (beaches or pools): Credit Union Place, CARI Complex, and Provincial Parks (Department of Economic Development and Tourism, Province of Prince Edward Island). These sources were asked to provide the total number of labour hours for each position within their organization for the past three fiscal years. The data were then compiled, compared and analyzed to answer the research question.

To measure how publicly funded swimming venues contribute to employment, the reseacher determined that a full-time equivalent position would be 37.5 hours per week (of paid work, excluding mandatory deductions for breaks) for 52 weeks. Therefore, a full-time equivalent position would be 1,950 hours per annum. Therefore, a full-time equivalent position would be the best measure as to how these publicly funded venues contribute to employment on Prince Edward Island.

Collectively, from the 2013-2015 data collected, publicly funded swimming venues provided on average 37.3 full-time equivalent positions on Prince Edward Island. For the three-

year period examined, no major fluctuations in number of labour house were found. There was a slight increase in 2014 by 2.5 full-time equivalent positions, but this was followed by a decline of 1.2 full-time equivalent positions in 2015. Table 4 shows full-details of the number of labour hours and full-time equivalent positions for 2013-2015.

	2013	**2014**	**2015**
Credit Union Place	20,535	20,310	18,231
CARI Complex	31,308	34,773	32,430
Provincial Parks	18,480	20,057	22,084
Total:	70,323	75,140	72,745
FTE Positions:	**36**	**38.5**	**37.3**

Table 4: Number of Labor Hours at Public Swimming Venues

The CARI Complex accounts for approximately 45 percent of labour hours based out of one location in Charlottetown, Prince Edward Island being the largest employer for publicly funded swimming venues. Interestingly, Provincial Parks is the second largest publicly funded swimming venue 28 percent of labor hours over Credit Union Place which accounts for 27 percent of labour hours, however Provincial Parks is only a seasonal operation (beaches) which operates for 10-12 weeks per year. Provincial Parks also operates out of ten locations across the province, whereas Credit Union Place has one physical location for employees.

On average publicly funded swimming venues contribute the equivalent of 37.3 full-time, year round positions on Prince Edward Island. However, majority of the positions in the industry are part-time and a major portion of the labour hours are concentrated to the summer months of June through August. Although most positions are part-time or seasonal in nature, the venues do contribute significantly to student employment during the months when students are typically not in school.

Research Question Four

The fourth research question to be answered is in regards to the employment outlook for publicly funded swimming facilities in Prince Edward Island. Facility owners and operators of public swimming facilities rely on highly trained lifeguards and instructors in order to offer supervision of swimming patrons as well as deliver programs such as swim lessons. The industry standard in both Prince Edward Island and Canada is training programs that are provided by the Lifesaving Society of Canada. These programs provide participants with the skills and knowledge in order to fill the roles of lifeguards and instructors which are important for swimming venues to continue to offer services to the public.

In order to become a lifeguard, three separate training programs are required to be completed: Bronze Medallion, Bronze Cross, and National Lifeguard. National Lifeguard provides four options that are specific to environments (waterfront, surf, pool, and waterpark). For the purpose of this research all data was combined for these options to represent one category of data, "National Lifeguard". To become an instructor of programs, candidates must complete a similar process of taking: Bronze Medallion, Bronze Cross, and an instructor course. There are a variety of disciplines of instructor courses; however, for the purpose of this research all data were combined for the disciplines to represent one category of data labeled "Instructors".

Award statistics on the four categories of data related to employment for lifeguards and instructors were obtained from the Lifesaving Society and is presented in Figure 3. The data obtained provides important insights into a possible shortage of qualified staff for public swimming pools in Prince Edward Island. The entry level programs (Bronze Medallion and Bronze Cross) have seen overall decline from 2012 to 2015. Since 2012, Bronze Medallion certifications has decreased by 21.3 percent. This is particularly alarming since Bronze Medallion

is the foundational program required for both employment as a lifeguard and instructor. Similarly, Bronze Cross – the second level training program for employment as both a lifeguard and instructor - has seen a 30.1 percent decrease in annual certified candidates.

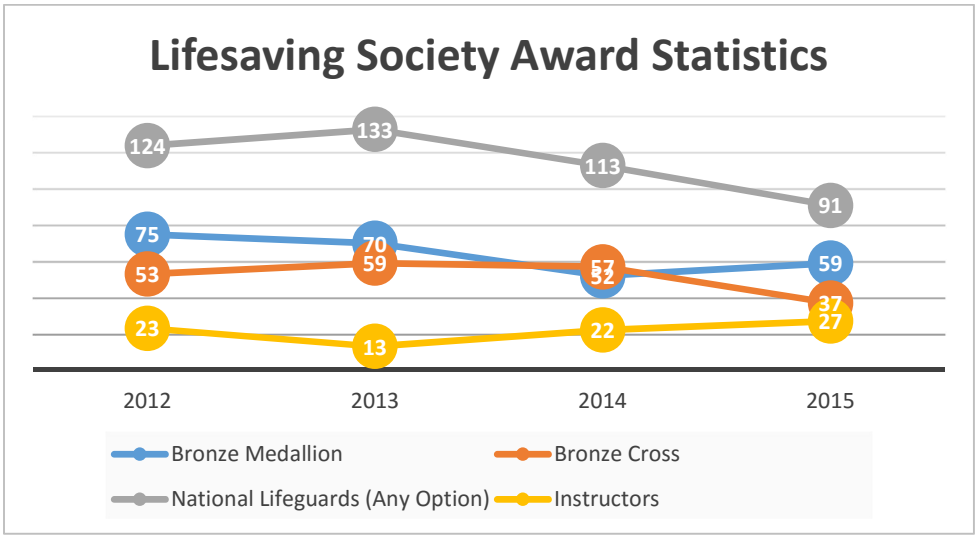

Figure 3: Lifesaving Society Award Statistics

For the specialized training programs which certified candidates to be employable as either lifeguards or instructors the results were opposing. Lifeguards, which account for the majority of employed persons in publicly funded swimming facilities, have seen a 26.6 percent decrease in annual certifications issued from 2012 to 2015. However, certifications are only valid for two years from the original date of issue. This means that those who are certified in 2011 are current and valid until 2013 at which time they are required to recertify. With the decrease in the number of certified persons each year a shortage of qualified staff for pool owners and operators could occur in the upcoming years.

For certified instructors, the number of annual certifications issued has remained relatively stable over the four-year period from 2012 to 2015 on Prince Edward Island. These instructor certifications, which are also current and valid for two years, have the competency of delivering specific training programs to members of the general public. Often these training programs are

important sources of revenue and staff training for public swimming facilities. On Prince Edward Island there was a slight decline in instructor certifications issued in 2013 to 13 certifications issued compared to 2012 when 23 certifications were issued. In the years following this decline, a slight increase was experienced from 2014 and 2015 to 22 and 27 certifications per year respectively.

Although instructor certifications have remained relatively stable over the four-year period, the decline in other training programs offered by the Lifesaving Society could be detrimental to swimming facilities. With fewer participants enrolling in the training programs taught by these instructors, less courses will be offered in the future. With less courses being offered there would be a reduced need for instructors which may become a deterrent for more individuals in the industry to become instructors in the future.

Data were obtained from the Lifesaving Society of Canada for comparative purposes as the training programs used in Prince Edward Island are nationally recognized and offered in all provinces and territories across the country. Figure 4 shows the number of certifications issued throughout Canada for 2012-2013 by the Lifesaving Society provincial branches. As shown, across Canada there has been an overall increase in each of the four categories over the three-year period examined. At the time of this report 2015 data was not collected or available for comparative purposes.

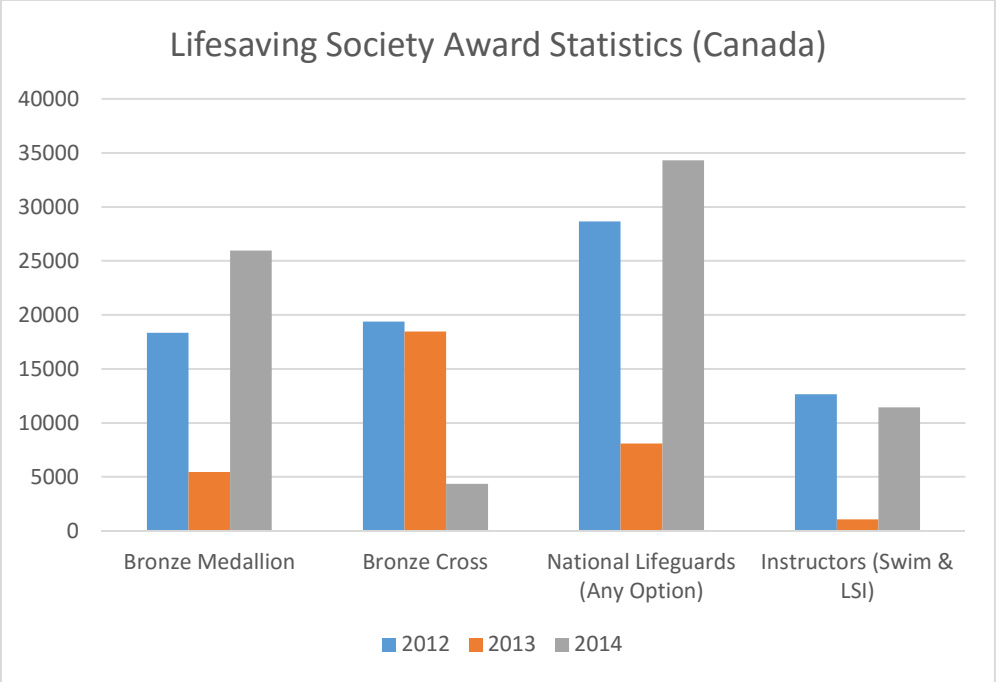

Figure 4: Lifesaving Society of Canada Award Statistics

As shown in Figure 4, a similar trend is occurring across Canada with a decline in participation in the training programs required to become a lifeguard or instructor. This provides insight into a potential for a shortage of qualified staff not only on Prince Edward Island, but across Canada as well. With public pools relying on having qualified staff to operate their facilities, the staff shortage could drastically effect their operations in the future.

Conclusion

In conclusion, the data acquired for this research has allowed the researcher to answer the four research questions outlined in Chapter One. The results of this research should be used to assist pool owners and operators, swim clubs, government and other interested parties to identify how publicly funded swimming facilities impact communities and some of the trends and challenges that publicly funded swimming pools may encounter in the future.

CHAPTER 5: CONCLUSION

As a direct result of this research it was determined that there are a number of critical trends and challenges that are facing publicly funded swimming facilities on Prince Edward Island. In the upcoming years, the facilities will need to identify strategies for overcoming the challenges and trends to ensure the long-term success, and hopefully growth, of the business aspects of these facilities. Through the analysis of the data, key learning outcomes and recommendations were found in this study and will be discussed in this chapter.

Summary of Findings

Through the collection of secondary data from a variety of sources, there were some significant findings for this report that both helps to quantify the impact that publicly funded swimming pools make in Prince Edward Island as well as some of the future challenges that publicly funded facilities may encounter in the future.

Prince Edward Island tax payers have contributed on average $427,770 annually to the operations of publicly funded swimming pools that were examined for this study. Considering the impacts sport and sport infrastructure can have in communities (as outlined in the literature review), there is value in contributing dollars to the operations of these venues. Additionally, publicly funded swimming venues offer the equivalent of (on average) 37 full-time employment positions on Prince Edward Island. By looking solely at the amount of tax dollars paid in, compared to the employment created in the industry, there is value in the investment.

There are, however, a variety of challenges in the future for these facilities. The number of registered athletes in swimming sports is declining on Prince Edward Island. With less athletes participating in the sports that require these facilities, there will be a reduction in the impacts in

the province. There is also a possibility of a staffing shortage of qualified persons to work at these publicly funded swimming facilities. Over the last number of years there is a reduced enrollment in the required courses to become employable in the industry. This could have significant impact on publicly funded swimming facilities' ability to operate efficiently and effectively in the future.

Key Learning Outcomes

Throughout the course of this research, there were a variety of key learning outcomes that may have practical implications for the intended audiences. The key learning outcomes are as follows:

1. Publicly funded swimming facilities in Prince Edward Island are operated at different levels of cost-recovery.
2. Data are presently not shared amongst stakeholders in publicly funded swimming facilities, nor between facilities on Prince Edward Island.
3. Sport participation in swimming sports is declining on Prince Edward Island.
4. The number of certified persons (lifeguards and instructors) eligible to work at publicly funded pools is declining.

These key learning outcomes are clear and concise for ease of communication to interested parties. To assist stakeholders and interested parties in acting on the key learning outcomes recommendations have been developed to address some of the trends and challenges that could potentially negatively affect publicly funded swimming facilities in the future.

Recommendations

Based on the key learning outcomes, a number of recommendations are presented to adequately address some of the problematic trends and challenges facing the industry and maximize the economic and social impacts that publicly funded swimming facilities have in communities on Prince Edward Island. The following recommendations are based on the opinions of the researcher:

1. Facilities should regularly share standard operating practices, operational procedures, and business models to reach a level of mutually-beneficial operating standards in an attempt to be a steward of maximizing use of public dollars.
2. Open-data and publicly sharing data is a strongly growing trend in many industries. For publicly funded swimming facilities, sharing data openly with each other may provide insight and benefits to all those involved. Open data could include: financial data, participation rates, employment information, training program numbers and other data points which are key for the operation and long-term sustainability for these facilities. This may also enhance the level of trust with tax-payers whom fund these facilities.
3. A recruitment strategy should be developed amongst all publicly funded swimming facilities on Prince Edward Island to encourage participation in the training programs required to be a certified lifeguard or instructor. Many provinces in Canada have already identified a staff shortage for swimming venues and have executed recruitment strategies that may be able to be recreated in Prince Edward Island.
4. Provincial sport organizations, swim clubs and publicly funded swimming facilities should regularly meet to discuss the status of the industry. Facility operators who were engaged in this study by the researcher were unaware that swimming sports were declining in

numbers. Regular symposiums with feedback from all stakeholders may increase the level of understanding between stakeholders and assist in dealing with challenges in the industry.

5. Member retention strategies should be initiated in all swimming related sport organizations on Prince Edward Island to ensure current athletes are retained moving forward.
6. A collaborative recruitment strategy amongst all swimming sport organizations and clubs should be developed and executed in an attempt to increase sport participation numbers for swimming sports on Prince Edward Island.

Future Research

As previously noted, there is a lack of research regarding ownership and business models for swimming pool and the benefits and challenges associated with the different models (ie. private, partnership, publicly funded, etc.). This research could provide insight for communities both in Prince Edward Island and across Canada who are exploring the possibility of constructing a swimming facility in their community.

Qualitative research regarding barriers to participating in swimming as a sport, swimming as an activity, or enrolling in training programs to become a lifeguard or instructor would also be beneficial to publicly funded swimming facilities and sport organizations on Prince Edward Island. If barriers, or in some cases, reasons for discontinuing participation in swimming sports, could be identified, stakeholders in the industry could work collaboratively to remove the barriers or deterrents for continuing to participate in the sport. This could result in increased retention for swim clubs, higher participation in swimming as an activity, and an increase of potential staff for publicly funded swimming venues.

More specific research in Prince Edward Island could be conducted to examine the programming opportunities offered by publicly funded swimming pools and usage related to these programs. This research would assist operators of publicly funded swimming facilities to ensure programming opportunities offered by the facilities are provided to maximize usage of the facility by the general public. It was evident in the literature review that the more program opportunities offered each week increased the total number of annual visits to the facility. Additional research could focus on what program opportunities are most popular, optimal time for these program opportunities, and target demographics.

Conclusion

Publicly funded swimming facilities do make a considerable impact on Prince Edward Island. Through job creation, economic impact, and providing infrastructure for sport participation these facilities play a key role in the healthy development of individuals and communities as a whole. There is, however, a number of alarming trends in Prince Edward Island specifically that could reduce the impact these facilities make in the future, or impede their operations as whole. The landscape for publicly funded swimming facilities is changing, and not in an overly positive manner.

Appendix A: Financial Analysis

Credit Union Place, Summerside PEI

	2015		2014		2013		2012		2011	
Revenues										
Revenue	$ 604,877		$ 587,698		$ 595,461		$ 593,846		$ 434,920	
Expenses		Total Expenses		Total Expenses		Total Expenses		Total Expenses		Total Expenses
Salaries and Benefits	612,736	61%	654,459	63%	527,924	58%	576,404	60%	404,588	49%
Equipment & Supplies	84,586	8%	59,762	6%	51,068	6%	58,233	6%	55,065	7%
Administrative	4,447	0%	10,067	1%	9,602	1%	11,419	1%	19,853	2%
Building Operation & Mainte	295,406	30%	316,623	30%	325,879	36%	315,594	33%	347,001	42%
Total	997,175		1,040,911		914,473		961,650		826,507	
Excess of Expenses over Reve	$ (392,298)		$ (453,214)		$ (319,012)		$ (367,804)		$ (391,587)	
% of Cost Recovery	**61%**		**56%**		**65%**		**62%**		**53%**	

CARI Complex, Charlottetown PEI

	2015		2014		2013		2012		2011	
Revenues										
Revenue	$ 905,197		$ 865,127		$ 907,941		$ 877,028		$ 761,278	
Expenses		Total Expenses		Total Expenses		Total Expenses		Total Expenses		Total Expenses
Salaries and Benefits	630,794	67%	648,154	68%	602,929	67%	600,329	68%	565,240	67%
Equipment & Supplies	16,204	2%	26,481	3%	16,292	2%	20,198	2%	29,620	3%
Administrative	44,390	5%	44,950	5%	42,955	5%	40,807	5%	24,745	3%
Building Operation & Mainte	248,419	26%	234,841	25%	241,320	27%	224,117	25%	228,725	27%
Total	939,807		954,426		903,496		885,451		848,330	
Excess of Expenses over Reve	$ (34,610)		$ (89,299)		$ 4,445		$ (8,423)		$ (87,052)	
% of Cost Recovery	**96%**		**91%**		**100%**		**99%**		**90%**	

Appendix B: Membership Data

Swimming Canada

	2011-2012	2012-2013	2013-2014	2014-2015
Members	47550	57688	59384	58524
Athletes	44802	54831	56361	55521
Coaches	2748	2857	3023	3003
Officials	24167	26109	27411	27915
Clubs	466	470	470	473

Swimming PEI

	2011-2012	2012-2013	2013-2014	2014-2015
Members	450	515	463	457
Athletes	309	369	342	345
Coaches	21	26	16	14
Officials	120	120	105	98
Clubs	3	3	3	3

Synchro Canada

	2011-2012	2012-2013	2013-2014	2014-2015
Members	12034	9473	9676	10412
Athletes	**3070**	6331	6697	6667
Coaches	808	899	1049	1023
Officials	296	355	461	508
Clubs	118	136	153	155

Synchro PEI

	2011-2012	2012-2013	2013-2014	2014-2015
Members	116	80	63	60
Athletes	69	49	37	28
Coaches	16	10	8	7
Officials	9	9	9	9
Clubs	1	2	1	1

Appendix C: Employer Labour Hours 2013-2015

Credit Union Place	2013 Hours Per Annum	2014 Hours Per Annum	2015 Hours Per Annum
Assistant Instructor	1,752.00	1,651.50	2,128.5
Non-Guard Adult Supervisor	2,351.00	2,612.00	1,880.5
Lifeguard / Instructor	11,252.00	10,561.00	9,175.0
Aquatic Team Lead	952.00	1,151.00	980.0
Assistant Manager	1,680.00	1,842.50	1,599.5
Aqua Fitness Instructor	468.00	412.00	387.0
Administration	2080	2080	2080
	20,535.00	20,310.00	18,230.5

CARI Complex	2013 Hours Per Annum	2014 Hours Per Annum	2015 Hours Per Annum
Assistant Instructor	1,582.50	2,354.00	2,662.5
Slide Attendant	2,286.00	1,951.00	1,328.5
Lifeguard	9,078.00	10,302.50	10,750.5
Instructor	4,912.00	5,307.00	5,907.5
Lead Lifeguard	1,901.00	2,775.00	1,769.5
Lead Instructor	464.00	261.00	101.5
Team Lead	4,249.00	5,055.50	3,093.0
Lesson Supervisor	808.00	765.00	724.0
Aqua Fitness Instructor	510.00	446.00	368.5
Aqua Zumba Instructor	187.00	155.00	188.5
Admin/Coordinators	1,170.50	1,240.50	1,376.0
	4160	4160	4160
	31,308.00	34,772.50	32,430.0

Tourism PEI	2013 Hours Per Annum	2014 Hours Per Annum	2015 Hours Per Annum
Lifeguard	17,224.00	18,571.00	20,804.0
Lifeguard Supervisor	1,256.00	1,486.00	1,280.0
	18,480.00	20,057.00	22,084.0

Appendix D: Lifesaving Society Award Statistics

Award Type	2012	2013	2014	2015
Bronze Medallion	75	70	52	59
Bronze Cross	53	59	57	37
National Lifeguards (Any Option)	124	133	113	91
Instructors	23	13	22	27

Table 1: Prince Edward Island Lifesaving Society Award Statistics

Award Type	2012	2013	2014
Bronze Medallion	18,355	5,465	25,953
Bronze Cross	19,375	18,464	4,361
National Lifeguards (Any Option)	28,656	8,078	34,308
Instructors	12,654	1,079	11,446

Table 2: National Lifesaving Society Award Statistics (All of Canada)

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