Key Performance Indicator Roadmap:

A PATH FORWARD FOR MEASURING FORT CALGARY'S IMPACT

PRODUCED BY:

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Contents

Introduction

The aim of this document is to outline how the Fort Calgary Society (Fort Calgary or the Fort) can implement key performance indicators (KPIs) that align with both the objectives of the Fort and the directives of the City of Calgary. The Fort can use these KPIs in its annual submissions to the City of Calgary and to support its fundraising efforts.

We propose six different thematic KPIs for Fort Calgary in this report: heritage, reconciliation, tourism impact, seniors, interaction, and affordability. These KPIs are indexes that consolidate the Fort's administrative data and survey data collected by the Fort.

Along with the six KPIs, we have also created a logic model that depicts all the activities of the Fort and the outputs and outcomes of those activities. We have inserted each of the KPIs in Fort Calgary's logic model to demonstrate the link between the KPIs and the Fort's activities. By highlighting these links, we can clearly articulate the relationship between the activities of Fort Calgary and the KPIs.

Clearly articulating the links between the Fort's activities and the KPIs through the logic model is critical for two reasons. First, these links guide our decisions to include certain data in the KPI measures. Many of the outcomes that Fort Calgary wants to measure through the KPIs are difficult (if not impossible) to measure directly (e.g., reconciliation). Therefore, we rely on the logic model to determine how we can indirectly measure these outcomes through administrative data, in conjunction with survey data that aims to measure these outcomes directly. Second, articulating the links between the KPIs and Fort Calgary's activities empowers the Fort's team with a clear understanding of precisely how certain activities enhance the KPIs, which can guide effective decision making.

The work we have presented here provides Fort Calgary with the foundation necessary to calculate the six KPIs we propose. However, to calculate these KPIs Fort Calgary will need to collect the necessary administrative and survey data. In the last section of this report, we suggest some next steps for developing an automated system for collecting, managing, and reporting this data. In the appendix, we provide dashboard templates that outline the data included in each KPI measure.

1. The Logic Model

A logic model is a diagram that maps out the relationships between a program's or organization's inputs, outputs, and outcomes (impacts). The logic model representing all Fort Calgary's activities is presented in the pdf document included in this package.

The logic model we have created is not a perfect representation of how Fort Calgary's activities create the outcomes it strives for (as the adage goes, no model is perfect, but some are useful). Rather, the linkages presented in the model represent what we theorize to be the relationship between Fort Calgary's activities and the outputs and outcomes of those activities. Our assumptions are based on current research and our understanding of Fort Calgary's activities. We expect the model to change over time as the Fort's activities change and new research becomes available.

There are six key categories within the logic model: inputs, activities, outputs, and short-, medium-, and long-term outcomes. Fort Calgary's inputs consist of staff and volunteers, community partners, exhibit space, and funds. These inputs are used by the five different classes of activities: exhibitions, community engagement, school programs, virtual programs, and public learning. These activities create various outputs and related short-term outcomes with respect to visitors and their satisfaction, public visibility and engagement (media and social media), exhibitions, programs, partnerships, and the finances of the organization. The outputs and short-term outcomes of Fort Calgary's activities in turn generate medium- and long-term outcomes.

In the model, we connect the outcomes of Fort Calgary's programs with the higher-level objectives of the Fort, the City of Calgary (specifically the Council Directives and Citizen Priorities presented in *One Calgary: 2019-2022 Service Plans and Budget*) and the Truth and Reconciliation Commission (TRC). These linkages are identified in the model with icons representing each organization.

The logic model converges on four key outcomes. Fort Calgary 1) strengthens the link between the community and its cultural heritage; 2) makes neighbourhoods in the City more inspiring; 3) makes Calgary more prosperous; and 4) advances reconciliation. Each of these outcomes are described in further detail in the sections below.

Strengthening the link between the community and its cultural heritage
In the medium-term, Fort Calgary's activities increase community engagement, increase organizational capacity, increase knowledge of the site, and elevate the Fort's profile. These outcomes create a sense of 'Place' in the community by strengthening the link between the members of the community and its cultural heritage, which is associated with the City's Council Directive N3 (City of Calgary, 2019, p.38). This long-term outcome aligns with the first KPI we propose that aims to measure Fort Calgary's contribution to heritage.

Inspiring neighbourhoods
Fort Calgary's exhibitions contribute to the Calgary Citizen's priority, *A city of safe and inspiring neighbourhoods* by making the social and cultural life of the City more inclusive and accessible and strengthening the link between the community and its cultural heritage (City of Calgary, 2019, p.6).

Fort Calgary makes Calgary more accessible and inclusive by delivering programming that allows Seniors to participate in the social and cultural life of the City. Increasing inclusion and accessibility is a core concept of Council Directive N1 and is rooted in the vision of a *city of safe and inspiring neighbourhoods* (City of Calgary, 2019, p.6). Through participating in the Fair Entry program (run by the City of Calgary), Fort Calgary also makes its facilities accessible to people with lower incomes, satisfying Council Directive P4 under the *prosperous city* priority.

Fort Calgary also creates a sense of 'Place' in the community, grounding the community members in its rich history, creating a sense of shared culture and heritage, which further contributes to the City's vision.

A more prosperous Calgary

Fort Calgary contributes to the diversification of the local economy by increasing tourism (Council Directive P2), which is part of the Calgary Citizen's priority *a more prosperous Calgary* (City of Calgary, 2019, p.5). A short-term outcome of Fort Calgary's exhibitions is to increase the number of tourist visitors. Increasing tourism generates medium-term economic benefits to the City which in turn contributes to a more prosperous Calgary[1].

Advancing reconciliation

Advancing reconciliation is a core value and guiding principle of Fort Calgary (Fort Calgary Preservation Society, 2020, p. 4). Fort Calgary's programs contribute to reconciliation through two mechanisms. First, Fort Calgary's Indigenous-lead exhibitions directly contributes to the TRC Principle 8, Supporting Aboriginal peoples' cultural revitalization (Truth and Reconciliation Commission, 2015, p. 4). Second, Fort Calgary's programs aim to increase knowledge of the site, which increases knowledge of Indigenous people and cultures as the two are deeply connected. Increasing knowledge of Indigenous people and cultures through museum education has been found to increase respect and empathy for Indigenous people (Basalou and Baxter 2007). Increasing respect and empathy is an explicit objective of the TRC in and of itself (Truth and Reconciliation Commission, 2015, p. 4) and further, increased respect and empathy has been found to increase support for reconciliatory policies (Balcells et. al. 2018).

2. KPIs

Within the logic model we have highlighted the six KPIs we propose for Fort Calgary: heritage, reconciliation, tourism impact, seniors, interaction, and affordability.

We selected these six KPIs because they align with both the directives of the City as outlined in *One Calgary: 2019-2022 Service Plans and Budgets* and the goals and

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[1] We note that 'Cultural Attraction Visitors' is a KPI for the City making the connection between the Fort's operations and the City's objectives even more explicit (City of Calgary, 2019, p. 117).

activities of Fort Calgary. Importantly, Fort Calgary is not limited to reporting only these six KPIs. The logic model as well as the next steps outlined in the last section provide Fort Calgary with resources to develop other KPIs that are not tied to the City's goals. For the purposes of this project our focus is on identifying and developing KPIs that speak to both Fort Calgary's and the City's goals.

In the table below, we highlight how Fort Calgary's and the City's goals intersect on these six KPIs. This information summarizes what is presented in the logic model. Within the sections that follow, we describe each of the KPIs and how they would be calculated.

Table 1: proposed KPIs by City Directive and Fort Calgary's goals and activities

KPI	City Directive	Fort Calgary goals and activities
1. Heritage	Council Directive (N3): **Cherishing and protecting our heritage** will enrich the sense of place in our communities.	FC Strategic Plan Priority 3 - Place

2. Reconciliation	Council Directive (W5): The City must develop a **positive, strong and enduring relationship with Treaty 7 First Nations, Métis Nation of Alberta Region 3, and all urban Indigenous Calgarians**.	Reconciliation as a guiding principle.
		
		Adoption of the TRC guiding principles.
		
		FC Strategic Plan Priority 1 – Programs
		
		  o Objective 1: Exhibitions and Programs
		  o Objective 2: Cultural Program Framework
		  o Objective 4: Partners and Partnerships

3. Tourism impact	Council Directive (P2): Recently Calgary Economic Development identified six potential industries that will drive economic growth and spur job creation. [...] For example, one of those growth industries, **travel and tourism, needs to move to a new level with an enhanced focus on**	International community as a target audience.
		
		  o deep cultural learning experience
		  o tourist packages

	arts, culture, festivals, and winter activities.	
4. Seniors	Council Directive (N1): Calgarians want neighbourhoods and public spaces that are safe, accessible and inclusive for all Calgarians, **including seniors** and the disabled.	Senior's discounts for admission
5. Interaction	Council Directive (H4): We must also develop strategies to create communities that **support healthy lifestyles and interaction amongst residents** (walkability, pedestrian, bike and public transit connections) **to reduce and prevent social isolation**.	Outdoor and community events that encourage interaction amongst residents. o Canada Day o Walk for Reconciliation/National Indigenous People's day o Heritage/Historic Calgary week o Remembrance Day
6. Affordability	Council Directive (P4): Many Calgarians continue to struggle with housing, income, and food instability. […] Enhancing our partnerships with other orders of government, the non-profit sector and businesses, will be critical to fully implement this initiative, and **provide equitable access to services for all Calgarians**.	Participation in the City's Fair Entry program

HERITAGE

Three elements constitute heritage: *Fabric* - or the physical remains that exist today; *Stories* – the stories that explain the history, and *Culture* – the connection between the people and historic place (Government of New Zealand, 2021). Fort Calgary's very existence embodies the *Fabric* of heritage (e.g., the physical place, the artifacts on display). Therefore, measuring Fort Calgary's existence through a KPI would be redundant and not provide meaningful measures to share with the City or guide Fort Calgary's decision making. But the *Stories* Fort Calgary tells and the *Culture* it stewards are demonstrated in the Fort's actions, and the impact of these actions can be measured over time. Therefore, we propose that the heritage KPI focus on the *Stories* and *Culture* aspects of heritage.

Computation

We propose that Fort Calgary use both administrative and survey data it collects to develop an index for this KPI. Of Fort Calgary's administrative data, we suggest that the Fort collect the metrics listed below. These data reflect the outputs that feed to the long-term outcome to which this KPI is tied:

- Number visitors/attendees
- Number of repeat visitors/attendees
- Number of partnerships (corporate, universities, etc.)
- Number of collaborations with partners/guests
- Percent of satisfied visitors/attendees
- Number of social media shares/engagements
- Average duration of time spent at the exhibit
- Number of Indigenous-lead exhibitions
- Average sweep rate
- Number of webinars
- Number of online courses
- Number of digital to physical conversions
- Revenue generated
- Number of media mentions

We suggest that the elements listed above be added together to create a composite index that can be tracked over time[2]. As Fort Calgary collects data, and

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[2] An important step for adding these metrics together is to modify them so that they share a common unit of measurement. Once the Fort has a clear sense of what data can be collected and the nature of that data, we can explore the best way to do this for the specific data.

we gain more familiarity with these different variables and how they track over time, it may be necessary to modify how the different elements of the index are weighted.

With respect to survey data, Fort Calgary has a few options. Ideally, Fort Calgary would regularly undertake in-depth surveys with visitors to assess how their experience at Fort Calgary has shaped their understanding of the Fort's history and the role it has played in the history of Calgary. However, this approach may not be feasible in terms of both budget and time. An alternative approach would be to add questions to Fort Calgary's visitor satisfaction survey. This approach would be less burdensome to visitors and may also provide more timely data. The results of the survey could be added to the index previously described to create one comprehensive KPI for heritage.

Below, we provide some preliminary questions that could be added to the visitor satisfaction survey.

Table 2: question matrix for heritage KPI

After my visit today…	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I have a better understanding of the Fort's history. (*Stories*)					
2. I have a better sense of the Fort's role in the history of Calgary (*Culture*)					

RECONCILIATION

The Office of the Treaty Commissioner (OTC) has developed a helpful conceptual framework for measuring reconciliation. The OTC deconstructs reconciliation into four elements; a shared understanding of our history; authentic relationships; vibrant cultures and worldviews; and systems that benefit us all (Office of the Treaty Commissioner, 2019, p.3). Fort Calgary's mandate is most closely related to the first of these elements– *a shared understanding of our history*. We recommend that Fort Calgary's measure of reconciliation focus on this element.

Computation

Our proposed index for reconciliation is like that of the heritage KPI. We recommend that Fort Calgary use both administrative data and data collected from targeted questions in Fort Calgary's visitor satisfaction survey to construct the index.

From the administrative data, we suggest that Fort Calgary report on the metrics listed below. In particular, reporting on the number of Indigenous-lead exhibitions and

the number of visitors to these exhibitions ties directly to the TRC's Principle of Reconciliation 8 - Supporting Aboriginal peoples' cultural revitalization.

▸ Number of Indigenous-lead exhibitions

▸ Number visitors/attendees

▸ Number of repeat visitors/attendees

▸ Number of social media shares/engagement

▸ Number of media mentions

▸ Number of event attendees (Walk for Reconciliation/National Indigenous People's day)

The questions we propose for the visitor-satisfaction survey will assess whether Fort Calgary is successful at creating a shared understanding of history and fostering knowledge of Indigenous people and cultures. We can demonstrate that Fort Calgary is creating a shared understanding of history by building on the second heritage KPI question ("I have a better sense of Fort Calgary's role in the history of Calgary..."). Further, we can also demonstrate Fort Calgary's contribution to reconciliation through the pathway established in the literature described previously (i.e., increased knowledge leads to increased respect and empathy, which then leads to respect and empathy, which is a principle of reconciliation).

Table 3: question matrix for reconciliation KPI

After my visit today...	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
3. I have a deeper understanding of Indigenous culture (*knowledge*).					
4. I have a better understanding of the Fort's place in Indigenous history (*Shared History*)					

TOURISM IMPACT

Fort Calgary's goal of building its international audience and attracting international tourists aligns with the City's vision of a Prosperous Calgary. For this KPI, we propose that Fort Calgary estimate the direct economic benefit that it helps generate for the City through tourism.

To estimate the direct economic impact of increased tourism for the city, we can take the number of tickets sold through tourist packages and multiply that by the

total average daily spending for international tourists. As of 2018, the average per day spending of international tourists in Alberta was $147.49 (based on our calculations) (Government of Alberta, 2021). That number would then be multiplied by the average stay in the city. We do not have data on the average duration of stay for international tourists, but we do know that the average duration for domestic tourists outside of Alberta is 4.3 days (Government of Alberta, 2019).

As the data collection and Fort Calgary's KPI tracking evolves, we can build on this metric by adding indirect economic impacts from increased tourism. However, adding indirect impacts would require more in-depth analysis, possibly including a custom order from Statistics Canada.

It is also worth noting that these numbers are likely underestimates, since tourists that travel to see heritage sites may spend more than other tourists. A 2009 survey undertaken by the U.S. Cultural & Heritage Tourism Marketing Council found that "[c]ultural and heritage travelers spent an average of $994 on their most recent leisure trip versus $611 spent by non-cultural and heritage travelers." (McCormick, 2010, p. 6).

Therefore, it would be helpful to get additional information from the tour agent selling Fort Calgary's tourist packages. Specifically, it would be useful to get more detailed information on what these specific tourists spend on average, which is likely higher than the average we have calculated here. For example, perhaps the tourists purchase the ticket as part of an all-inclusive package. We could use the cost of that package to estimate the direct tourism impacts.

SENIORS, INTERACTION, AND ACCESSIBILITY

For these KPIs, we suggest that Fort Calgary use administrative data to track its performance. We propose a much simpler calculation for these KPIs compared to the heritage, reconciliation, and tourism impact KPIs previously discussed. Specifically, we suggest that Fort Calgary simply report the numbers listed in the table below.

Table 4: Data for KPIs 4, 5, and 6

Seniors	Interaction	Accessibility
Number of seniors-priced admissions	Number of attendees at public events	Number of Fair Entry tickets sold

3. Next Steps

In the previous sections we outline 1) the logic model we have developed in collaboration with Fort Calgary and 2) how Fort Calgary could calculate six KPIs that align with both the objectives and activities of Fort Calgary and the goals of the City. In this section, we aim to provide Fort Calgary with a high-level plan for developing a

system to collect, manage, and report KPI data. We also discuss future evaluation work that could enhance the monitoring activities of Fort Calgary.

DATA COLLECTION, MANAGEMENT, AND REPORTING

To generate KPIs, Fort Calgary will need to develop a system for collecting and storing administrative data and the survey data it collects from its visitor satisfaction or other surveys. The specifics of this system will depend on what software solutions Fort Calgary chooses to use for its ticketing and point-of-sale system, its social media management system, its visitor satisfaction survey, and other key activities.

Once Fort Calgary has established what software solutions it plans to use for its key operations, we propose that Fort Calgary develop a data collection system that automates, as much as possible, the collection, management and reporting of this data. We envision a system where data are gathered and input into a central database using either an automated process tied to the software that generates the data or through manual entry. Once the data are collected and stored, Vivic Research could develop custom automated reports using the programming language R to calculate the six KPIs we propose here, as well as other KPIs Fort Calgary may want.

For example, earlier this month we had a conversation with Formstack, which creates a software solution for doing visitor satisfaction surveys. Vivic Research could work with Formstack to develop a solution that automatically collects the data from the Formstack survey system, reformats the data so it can be analyzed, and enters that data into a database such as Microsoft Access. Vivic Research could then develop an automated reporting system that draws the survey data directly from the Access database to create the KPIs and associated dashboards. We could work with Fort Calgary and other software providers to create similar systems for other types of data, such as ticket sale and social media data. The figure below illustrates the system we envision.
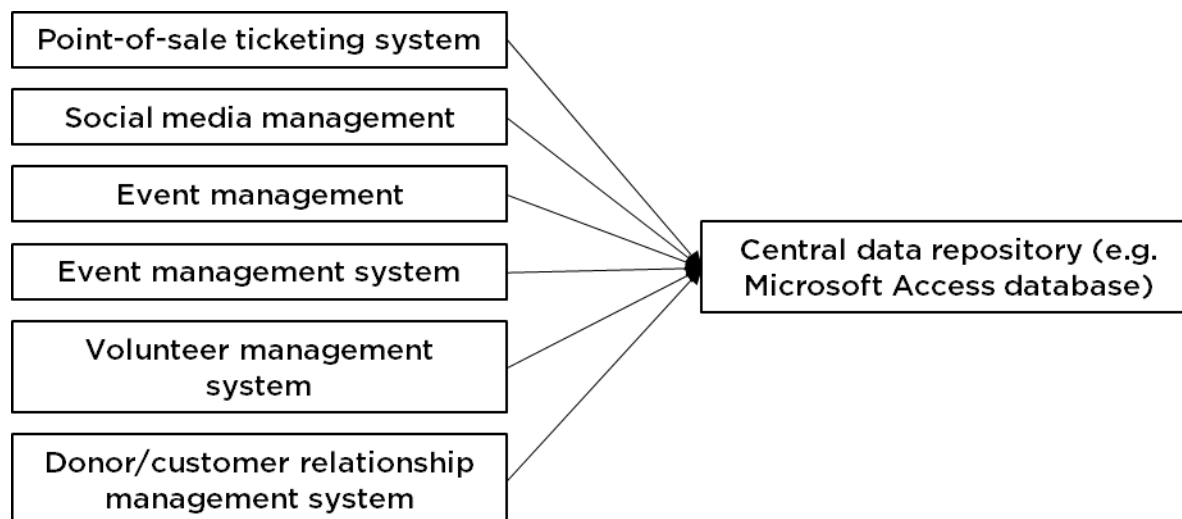
Once Fort Calgary has established a system for collecting, managing, and reporting both administrative and survey data, it can unlock the capacity to develop detailed reports on many aspects of Fort Calgary's performance without being burdened with the task of manually calculating KPIs.

FUTURE EVALUATION WORK

As Fort Calgary reopens after the pandemic and begins collecting and analyzing its administrative and survey data, it may be appropriate to modify both the logic model and the KPIs. The work we have presented here provides Fort Calgary with a solid foundation to evolve its monitoring processes.

We believe that a good next step for Fort Calgary in its efforts to create exhibits and programs that meet its strategic goals is to undertake an evaluation of a specific program or activity. The benefit of an evaluation targeted at a specific slice of the organization is that Fort Calgary can gain even deeper insight into how specific activities support its strategic goals and the precise impact these activities have on the broader community. This insight, in turn, would allow Fort Calgary to create more KPIs or further refine the ones it has, making them even more useful.

Another area where Fort Calgary could continue to evolve its program monitoring is in the sphere of reconciliation. In our research, we discovered that the Office of the Treaty Commissioner has been doing ground-breaking and highly innovative work on evaluating and monitoring reconciliation. We had a conversation with them in early February and learned that they are developing professional-service offerings that will help organizations better align their mandates and activities to reconciliation. Their work is still in progress, but when it becomes available Fort Calgary may benefit from this expertise in refining the reconciliation KPI or making new KPIs.

Conclusion

In this report, we propose and describe six KPIs that Fort Calgary can use to promote its relevance and impact to the City of Calgary. Along with these six KPIs, we also present a detailed logic model, developed in collaboration with Fort Calgary, that outlines all Fort Calgary's activities and how they contribute to both the KPIs and Fort Calgary's broad strategic objectives. We conclude with suggestions for next steps.

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Appendix

Table A1: Dashboard for KPI#1 – Heritage

Measure	Value	month-over-month % change	year-over-year % change	value 1 month ago	value 2 months ago	value 3 months ago
Number visitors/attendees						
Number of repeat visitors/attendees						
Number of partnerships (corporate, universities, etc.)						
Number of collaborations with partners/guests						
Percent of satisfied visitors/attendees						
Number of social media shares/engagements						
Average duration of time spent at the exhibit						
Number of Indigenous-lead exhibitions						
Average sweep rate						
Number of webinars						
Number of online courses						
Number of digital to physical conversions						

Revenue generated						
Number of media mentions						
Average response to heritage question 1						
Average response to heritage question 2						
Composite index						

Table A2: Dashboard for KPI#2 – Reconciliation

Measure	Value	month-over-month % change	year-over-year % change	value 1 month ago	value 2 months ago	value 3 months ago
Number of Indigenous-lead exhibitions						
Number visitors/attendees						
Number of repeat visitors/attendees						
Number of social media shares/engagement						
Number of media mentions and reach						
Number of event attendees (Walk for Reconciliation/National Indigenous People's day)						
Composite index						

Table A3: Dashboard for KPI#3 – Tourism Impact

Measure	Value	month-over-month % change	year-over-year % change	value 1 month ago	value 2 months ago	value 3 months ago
Number of international tourists						
Average amount spent per day by tourists						
Average days spend in Calgary						
Total direct impact of tourism						

Table A4: Dashboard for KPI#4, 5, and 6 – Seniors, Interaction, and Affordability

Measure	Value	month-over-month % change	year-over-year % change	value 1 month ago	value 2 months ago	value 3 months ago
KPI 4: number of seniors-priced admissions						
KPI 5: number of attendees at public events						
KPI 6: number of Fair Entry tickets sold						