

Introduction

In 2014, the City of Whitehorse invested \$3,417,867 to provide 29,878 hours of bus service to its residents. After taking into account passenger fares paid and other revenues, the net cost to taxpayers was \$2,400,450. This is significant for the 2014 population of 27,962 reported in the same year. Like other municipal services provided by the City, budgets are developed each year for approval and Council must make difficult decisions in setting municipal priorities based on information brought forward by staff.

In advance of the 2016 budget submission, staff of Whitehorse Transit set out to answer two questions, namely, “How well is transit doing?” and “Are we receiving value from our investment?” To answer these two questions, the City of Whitehorse retained the services of Wally Beck, President of Transit Consulting Network (TCN), to undertake an objective review of the Whitehorse Transit service performance over the last five years (2010-2014). Mr. Beck is well qualified, possessing over 40 years of transit experience with 23 years in the municipal sector and 17 years as a transit consultant. To provide additional perspective, TCN then looked at the Whitehorse Transit peer group and the transit industry in general across Canada, comparing 2014 with 2010 statistics. Collectively, the end result is presented in the form of a “report card” to better enable members of Council to ascertain their opinions on “value for money” relative to transit expenditures.

The Canadian Urban Transit Association (CUTA) has kept records of individual transit systems and their performance across Canada since the 1970’s when transit systems began reporting data annually. The data is summarized in the Canadian Urban Transit Fact Book. This mature database has evolved over the years, is consistent and contains many definitions, which are designed for industry professionals.

Exhibit 1: 2010-2014 Whitehorse Transit Performance Data quantifies the change in efficiency and effectiveness performance over the five-year period. Exhibit 2: 2014 Vs 2010 Peer Review Performance Data was provided to compare how Whitehorse Transit performed in relation to:

- Other transit systems in its peer group (the 43 CUTA member transit systems with a municipal population below 50,000) ; and
- Transit services across Canada in general regardless of dissimilar structure, size and service area when compared to Whitehorse.

2010-2014 Whitehorse Transit Performance Data

2010 - 2014 Whitehorse Transit - Canadian Urban Transit Association Statistics											
Year	Total Population	Service Area Population	Revenue Vehicle Hours	Revenue Passengers	Revenue Passengers per hour	Cost per Hour	Cost per Passenger	Average Passenger Fare	Net Cost Per Capita	Revenue Passengers per Capita	Revenue Vehicle Hours per Capita
2010	26,418	18,900	16,097	318,456	19.78	\$87.41	\$5.68	\$2.11	\$51.62	16.85	0.85
2011	27,129	21,773	16,845	340,265	20.20	\$115.52	\$7.28	\$1.97	\$81.81	15.63	0.77
2012	27,232	22,156	21,765	421,342	19.36	\$101.44	\$6.46	\$1.98	\$82.62	19.02	0.98
2013	27,773	22,493	22,484	471,232	20.96	\$102.83	\$6.11	\$1.95	\$87.15	20.95	1.00
2014	27,962	23,192	29,878	546,496	18.29	\$81.12	\$5.35	\$1.77	\$85.85	23.56	1.29
Change 2014 Vs 2010	1,544	4,292	13,781	228,040	-1.49	-\$6.29	-\$0.33	-\$0.34	\$34.23	6.71	0.44
% Change 2014 Vs 2010	6%	23%	86%	72%	-8%	-7%	-6%	-16%	66%	40%	52%

Exhibit 1: Whitehorse Transit 2010-2014 Performance Data



2014 Vs 2010 Peer Review Performance Data

2014 Vs 2010 Canadian Urban Transit Association Statistics Peer Review									
Jurisdiction	Revenue Vehicle Hours	Revenue Passengers	Revenue Passengers per Hour	Cost per hour	Cost per passenger	Average Passenger Fare	Net Cost Per Capita	Revenue Passengers per Capita	Revenue Vehicle Hours per Capita
Whitehorse 2010	16,097	318,456	19.78	\$87.41	5.68	\$2.11	\$51.62	16.85	0.85
Whitehorse 2014	29,878	546,496	18.29	\$81.12	5.35	\$1.77	\$85.85	23.56	1.29
<50,000 population 2010	711,206	16,589,521	23.33	\$93.64	4.50	\$1.84	\$24.07	15.10	0.73
<50,000 population 2014	709,558	14,957,114	21.08	\$91.96	4.91	\$1.54	\$25.14	14.07	0.69
Canada 2010	46,554,811	1,905,749,867	40.94	\$124.15	3.28	\$1.75	\$81.22	83.32	2.05
Canada 2014	49,494,802	2,068,590,109	41.79	\$136.27	3.60	\$1.92	\$96.42	92.14	2.22
% Change 2014 vs 2010									
Whitehorse	86%	72%	-8%	-7%	-6%	-16%	66%	40%	52%
<50,000 Pop	0%	-10%	-10%	-2%	9%	-16%	4%	-7%	-5%
Canada	6%	9%	2%	10%	10%	10%	19%	11%	8%

Exhibit 2: 2014 Vs 2010 Peer Review Performance Data

It should be noted that transit systems across Canada are difficult to compare directly with Whitehorse Transit since transit operating environments can vary significantly due to factors such as:

- Population density and demographics
- Labour costs
- Climate and topography
- Local bus fare policies
- School board transportation policies
- Availability of higher-level government funding
- Local financial commitment to transit

Regardless of the variability of the operating environments and funding challenges, Whitehorse Transit performed extremely well based on our findings as illustrated in the following Whitehorse Transit Report Card section.

Whitehorse Transit Report Card

The Transit Report Card consists of two sections, described as follows:

- Transit Service Performance: focus on ridership and service
- Transit Financial Performance: focus on costs efficiencies

Whitehorse Transit Service Performance

Annual Transit Ridership

Exhibit 3 illustrates the growth in transit use since 2010 and is compared to the peer group during the same period.

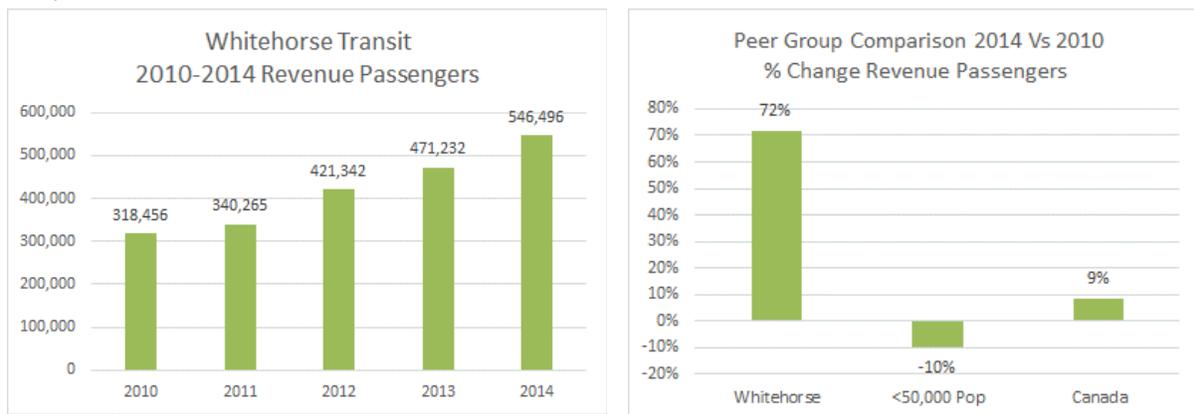


Exhibit 3: 2010-2014 Transit Ridership

Canada-wide transit ridership grew by 9% from 2010 to 2014 while Whitehorse Transit ridership grew by a very impressive 72% (from 318,456 passengers in 2010 to 546,496 passengers in 2014). In comparison, the peer group ridership dropped by 10% over the same period. The magnitude of the successful growth in transit use can be attributed to a number of Whitehorse Transit initiatives since 2010, namely:

- 2011:
 - There was extensive revamping and expansion of the transit system's route and schedules, which provided service to link new areas of the City together;
 - Ramp-up of marketing and communications to more reasonable levels
- 2012:
 - A group transit pass program was initiated
 - A pilot project with high school education transit passes was launched
 - The Arctic Winter Games took place where Transit played a strong role in transporting attendees, tourists, athletes, and volunteers
- 2013:
 - Evening service was introduced
 - A transit outreach program was focussed on large employers and Yukon College students to market the evening service and build on the group transit pass program launched in 2012
 - A universal pass (U-Pass) program was initiated for full time students at Yukon College
- 2014:



- A new route was introduced during peak service linking Copper Ridge, Granger, McIntyre, CGC, Takhini, Yukon College with Porter Creek and Whistle Bend
- High school passes increased from 320 passes per month to 500 passes per month

Based on year-to-date transit ridership to October 31, 2015 it is estimated that transit ridership will grow further by 15% over 2014 to approximately 630,000 this year. This represents a doubling of transit use since 2010.

Transit Service Hours

Exhibit 4, 2010-2014 Revenue Vehicle Hours, represents the annual number of hours that buses are in service when fares are collected. Exhibit 5, Revenue Vehicle Hours per Capita, represents the number of revenue hours of bus service each year in relation to the population served.

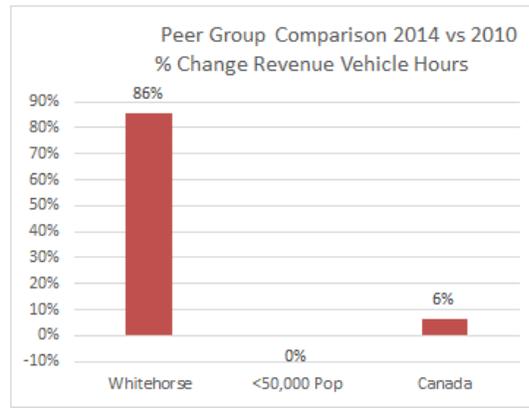
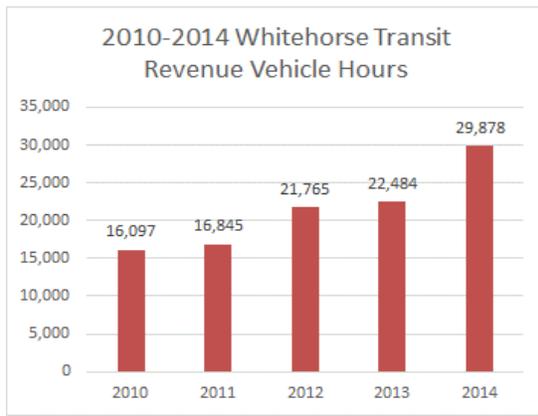


Exhibit 4: 2010-2014 Revenue Vehicle Hours

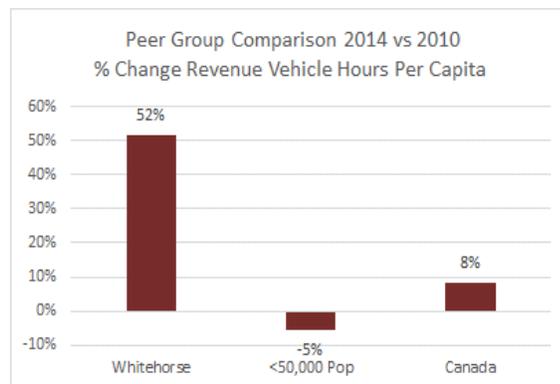
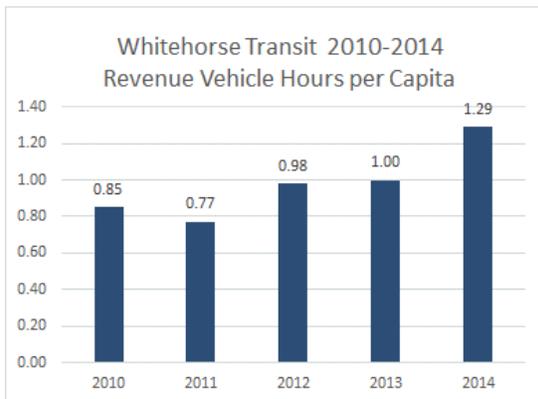


Exhibit 5: 2010-2014 Revenue Vehicle Hours per Capita

Between 2010 and 2014, Whitehorse Transit’s service hours grew by 86% while its peer group remained unchanged when compared to 2010. The 1.29 revenue vehicle hours of service per capita that was provided sets Whitehorse apart from the peer group average of 0.69 hours per capita, bearing in mind that much of the increase in service took place in 2014 when service was expanded to better accommodate Yukon College students and Transit’s support of the U-Pass program.



When Whitehorse Transit expanded its hours of operation into the evening periods and added peak service in 2014, three key benefits were realized:

- Existing transit users are now able to travel outside of normal work hours to access goods and services – this increases transit use and improves the quality of life for those that have no other means of travel
- Transit travel became more direct for many transit customers
- The need to own a vehicle or that second or third household vehicle was mitigated

While transit service growth in the rest of the country was relatively flat over the five year period covered in this report, Whitehorse Transit expanded considerably; however, the expansion was also enabled the City of Whitehorse to catch up in terms of coverage and hours of operation. The investment in service provides households with the opportunity to reduce auto ownership and related costs, which can go a long way to saving households several thousands of dollars annually. This helps the local economy since savings would likely be reinvested locally on goods and services. Although transit cannot compete with private automobiles in terms of comfort and speed, the City of Whitehorse made transit a more viable choice of travel for residents, particularly for those that have no other choice as well as those wishing to reduce their reliance on a private vehicle..

Passengers per Hour

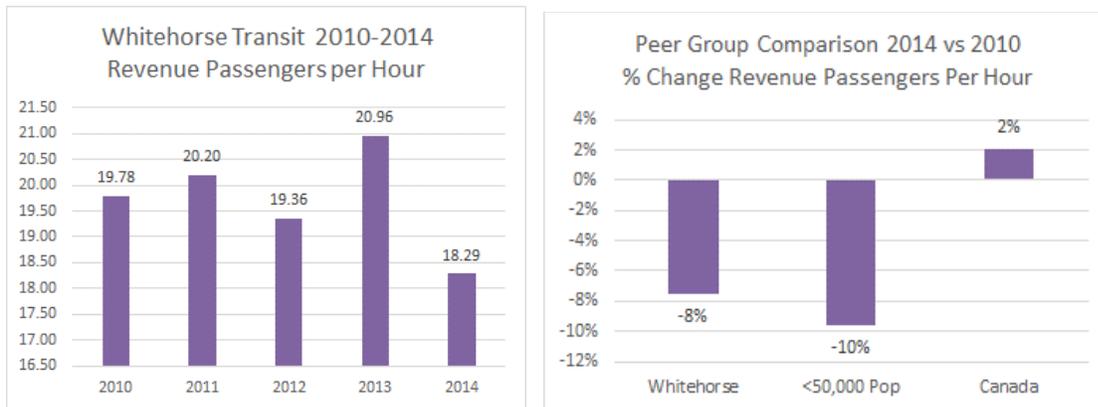


Exhibit 6: 2010-2014 Passengers per Hour

One measure of transit system efficiency is the number of revenue passengers carried per hour of service. In 2013, Whitehorse Transit carried an average of 21 passengers per hour and in 2014, even with adding approximately 7000 hours to its service routes, this figure had only declined by 2.5 passengers per hour. This remarkable achievement reflects the fact that between 2010 and 2014, Whitehorse Transit almost doubled its ridership. What this means is that, despite years of expanding hours of service to meet the current and future needs of a growing community, Whitehorse Transit essentially maintained its passenger per hour numbers, bettering its Canadian peer group performance by 2% overall. The door has been opened to future ridership growth.



The slight reduction in efficiency occurring between 2013 and 2014 is far outweighed by the 72% growth in transit use since 2010. It is expected that transit efficiency will return to 2013 levels as transit staff build on the success of the U-Pass program and continued outreach initiatives. As mentioned earlier, transit ridership is expected to increase by 15% in 2015 in comparison to 2014, which will improve transit system efficiency.

Revenue Passengers per Capita

Revenue Passengers per Capita represents the average number of revenue passengers carried based on the service area population and is a key “effectiveness” indicator of a transit system. The higher the increase in value, the more effective transit becomes.

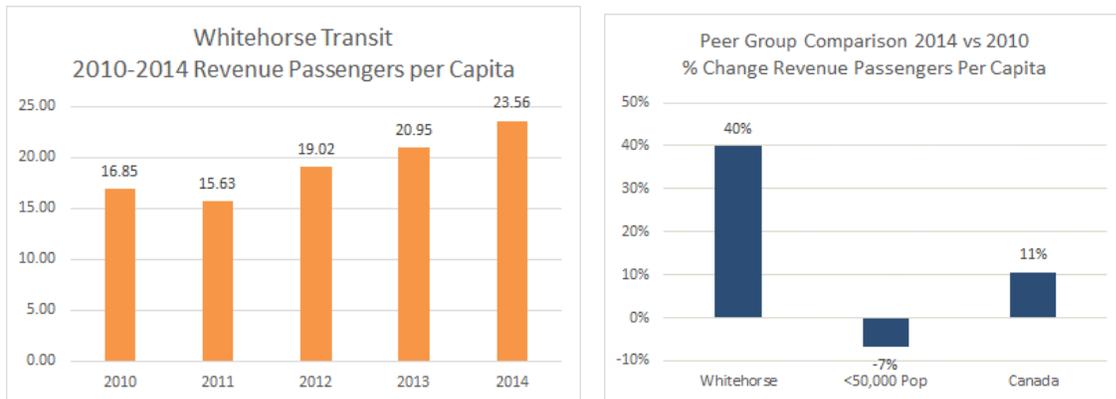


Exhibit 7: 2010-2014 Passengers per Capita

The 40% growth in the Revenue Passengers per Capita from 2010 to 2014 in Whitehorse is more than commendable. The 23.56 trips per capita in 2014 is also 67% higher than its peer group during the same year, which experienced an overall decline of 7% since 2010.

While population served by transit grew by 23% since 2010, the 40% increase in the trips per capita means that transit use is growing at a rate faster than the population served. From this observation, it is possible to suggest the following:

- Transit is becoming a more integral component of urban growth;
- Transit is reducing the carbon footprint of the City of Whitehorse;
- Transit is growing in popularity.

Summary of Transit Service Performance

Whitehorse Transit is doing what it was designed to do and more important, it has the ability to build on its successes and grow transit ridership further. Of course, the question remains “Are we receiving value for our money?”



Whitehorse Transit Financial Performance

Transit has evolved in developed countries from being privately operated businesses designed for profit into municipally supported services that operate at a loss – a ‘deficit’. This began in the late 1960s and early 1970s due to urban sprawl, which impacted transit efficiencies. For example, where one kilometre of bus route provided service to thousands of residents in the past, this is no longer the norm for all but the downtown areas of most major cities. The cost of providing transit service to more sparse developments eventually forced the private sector to relinquish transit to the public through local municipal ownership.

Given that transit operates at a loss, public transit is now designed to minimize deficits under municipal control rather than maximize profits under private sector control. This is what sets public transit apart from other important municipal services. For example, few question what the deficit of a roadway is; they just know it’s needed to get from point A to point B.

Whitehorse Transit is a municipal service that proactively measures transit service and financial performance on an ongoing basis. Fortunately, this translates to a high level of financial accountability, which is needed for political decision-makers when setting budgets. In this regard, a number of financial measures were investigated for the Transit Report Card review.

Cost per Hour

Cost per Hour is a financial measure, which is calculated using the total direct operating expense incurred divided by the total number of hours that buses travel in a year. Direct operating expenses cover wages and fuel that vary with the hours or kilometres of service provided (i.e. variable expenses), and fixed operating costs such as the transit garage and transit administration.



Exhibit 8: 2010-2014 Cost per Hour

The Whitehorse Transit cost per hour has dropped 7% between 2010 and 2014, which is notable given the Canada-wide average hourly cost rose by 10%. Although impressive, there were anomalies in the jump in cost from 2010 (\$87.41 per hour) to 2011 (\$115.52 per hour) and the significant drop from 2013 (\$102.83 per hour) to 2014 (\$81.12 per hour), explained as follows:

- In 2011, there were extensive changes to the transit system that required significant marketing and communications initiatives with the public, and the construction of many new bus stops for the new routes; these enhancements continued into subsequent years
- In 2014, service hours increased by 30% over 2013, while administrative and other costs remained stable. This reduced the hourly cost significantly.



Cost per Passenger

Cost per Passenger is calculated by using the total direct operating expense incurred divided by the total number or revenue passengers that travelled in the year. If the number of passengers carried increases by more than the cost, the cost per passenger will decrease, accordingly;

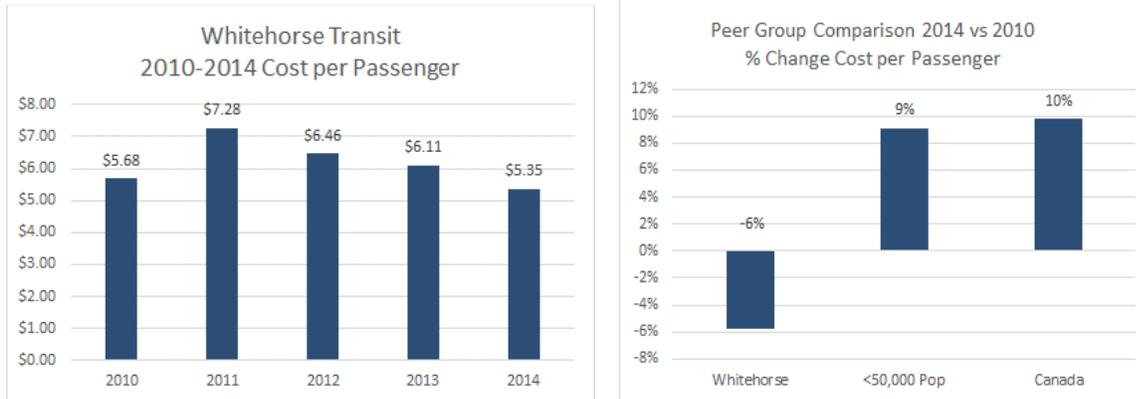


Exhibit 10: 2010-2014 Average Passenger Fare

The 6% drop in the cost per passenger between 2010 and 2014 is significantly lower than its peer group at +9% and Canada-wide (+10%). This significant cost efficiency improvement can be attributed to the 72% increase in transit demand while direct operating costs dropped by 7% during the same period. This is expected to improve further in 2015.

Average Passenger Fare

The Average Passenger Fare is the total fares collected (cash, tickets, passes) divided by the total number of revenue boardings in the year.



Exhibit 10: 2010-2014 Average Passenger Fare

The average fare collected by Whitehorse Transit in 2014 (\$1.77) was 16% lower (\$2.11) than five years earlier in 2010, which is similar to its peer group reduction (16%) but well below the Canada-wide average fare increase of 10%. Bus fare pricing policies vary between municipalities across Canada to reflect local hourly costs and inflation, service hours provided and concessions fares (e.g. seniors and students, and discounted tickets and passes).



Fortunately, the 72% increase in transit demand and reduced hourly costs during the same period help offset the impact of the average fare decrease and inflation; however, it does impact the cost to taxpayers (see Net Cost per Capita).

Net Cost per Capita

'Net Cost per Capita' is financial performance indicator, which is calculated using the annual municipal operating contribution on a per capita based on the total municipal population reported. The value of the indicator does not reflect the tax paid by individual taxpayers, rather, it is simply a value that is used for comparison purposes only.

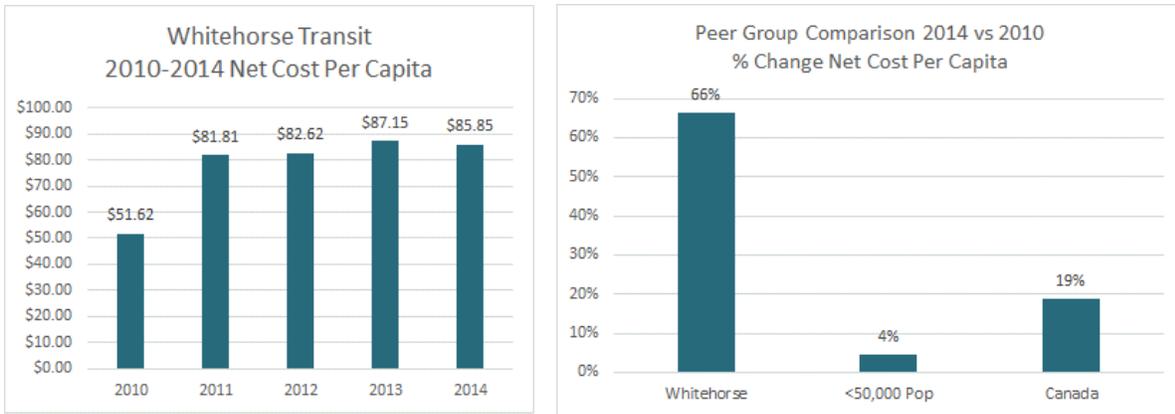


Exhibit 11: 2010-2014 Net Cost per Capita

The total operating cost of transit was reported at \$2.1 million in 2010 then increased by 38% to \$2.9 million in 2011. This is a result of the necessary service expansion that took place and is reflected in the jump in the Net Cost per Capita in 2011. The Net Cost per Capita is heavily influenced by local regional labour and fuel costs, the quantity of service provided, the total municipal population, transit demand, and average bus fare. You will note that between 2014 and 2010, the Net Cost per Capita increased by 86% from \$51.62 to \$85.85 yet when compared to 2011 (\$81.81), the Net Cost per Capita in 2014 (\$85.85) represents an increase of 5%, which is in line with the peer group 2010-2014 average of 4%.

Compared to its peer group, Whitehorse Transit expended \$85.85 per Capita versus the peer group average of \$25.14; however, this investment has translated to a far more effective transit service that carries an average of 23.56 Passengers per Capita in comparison to its peer group at 14.07 Passengers per Capita. This is indicative of previous and current Councils' commitment to meeting the needs of those that have no other means of affordable travel and to better enable transit to become a mode of choice.

Transit Report Card Summary

The 2010-2014 Report Card set out to answer two questions:

- "How well is transit doing?" in terms of service performance efficiency and effectiveness
- "Are we receiving value from our investment?" in terms of receiving a return on the municipal tax dollar

To answer these two questions, we looked at both the service performance and financial performance of Whitehorse Transit over the 2010 – 2014 five-year period then quantified the change from 2010 to 2014 in comparison to Whitehorse Transit's peer group and with all transit systems across Canada.

Whitehorse Transit's service performance was remarkable over the 2010-2014 five-year period and in comparison to its peer group and all transit systems across Canada. A key finding is that while the transit service area population grew by 23% through service expansion, transit ridership grew by 72% - more than 3 times as much. This has translated to a 40% more effective transit system, which is measured by the number of Revenue Passengers per Capita growing from 16.85 in 2010 to 23.56 in 2014. Transit effectiveness in the City of Whitehorse was also 67% higher than the peer group average of 14.07 Revenue Passengers per Capita.

This transit performance improvement trend is likely to continue into 2015 based on the expected year-to-date 15% transit ridership growth in 2015 over 2014 to approximately 630,000 this year. This represents a doubling of transit use since 2010, which suggests other service performance measures will improve further. In order to attain this success, investments were required in terms of working with the community to build ridership and setting aside the tax dollars to support the service.

From a financial investment perspective, the City of Whitehorse invested \$81.81 per capita in 2011, which increased by 5% to \$85.85 in 2014. The Whitehorse Transit peer group average investment per capita was 3.4 times higher than its peer group average of \$25.14 in 2014 but is more in line with the Canada-wide investment of \$96.42 per capita. This can be directly attributed to 1.29 Revenue Vehicle Hours per Capita of Whitehorse Transit service, which is 1.9 times that of the peer group and about 40% less than all transit systems in Canada in 2014. This helps explain why the effectiveness of Whitehorse Transit was 67% higher than the peer group.

"Are we receiving value for money" is not a question that can only be answered by the City of Whitehorse. The data suggests that the more a municipality invests in transit service delivery, the more effective transit will be. Since 2010, there is no doubt that Whitehorse Transit has improved the quality of life of City of Whitehorse residents by providing an affordable alternative to the automobile. Whether or not someone owns a vehicle, transit benefits all residents and will continue to do so as transit grows in popularity.

In the opinion of Transit Consulting Network, Whitehorse Transit staff should be commended for being proactive in addressing public transit needs through enhanced community engagement with the limited staff resources in place, and for improving transit system performance since 2010. The gains made by Whitehorse Transit; could only be attained because of the City of Whitehorse Council's continuing financial commitment to those that need transit to access employment, educational institutions, goods and other services within the community.