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**Whitehorse Transit
2004
Update
Conventional Service Review
May 25, 2005**

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1.0 Introduction

1.1 History

On July 1, 2003, the Transit Department implemented new service levels combined with a fare increase. The service level changes saw a 35% reduction on the total hours of service. The increase in fares saw Whitehorse Transit bring its fares more in line with those found in other Canadian Municipalities.

On February 25, 2004, administration presented a report on the impacts of these changes for the first six months of implementation (July to December 2003).

1.2 Scope

The information used in this report is from the internal Transit Ridership Data Base program and the financial analysis provided by the Finance Department. The scope for the ridership data will include a detailed analysis of 2003/ 2004 ridership by month, by route annually, as well as the 1st and 2nd half trends.

Additionally the report will provide a comparison of the ridership and performance indicators for 2003 and 2004, and a first quarter comparison using 2003/ 2004/ 2005 ridership data. These are used to show, what if any, trends are occurring in 2005.

The performance indicators will describe the effects on: Recovery to Cost Ratios, Cost Effectiveness, Municipal Operating Contribution Per Capita, Service Utilization, and Amount of Service.

In order to provide a context for the information contained in this report and to assist Council in any future decision on the levels of service, 2003 will be known as "*Year one of the performance cycle*".

The first half of 2003 will be used as the benchmark for ridership and financial performance comparison (pre-service level changes). The second half of 2003 will be used as the benchmark for any gains or losses after the change in service (post- service level changes).

A summary of the proposed changes to the Public Schedule will be provided including, the rationale for change, effects on service as well as other changes required.

1.3 Purpose

The purpose of this report is to provide Council with information on the effects of the July 1, 2003 service level changes after 18 months of service. It will also illustrate any changes from the February 25, 2004 information. In addition it will provide Council with important information to base any decisions on future changes to public service levels.

2.0 Ridership

The following analysis will look at the data annually, by 1st half, and by 2nd half. By doing so it will allow Council to see what the overall impacts are, when they happened, and what are some of the longer-term effects following the changes.

2.1 2003/ 2004 Annual Ridership by Month/ All Routes Combined.

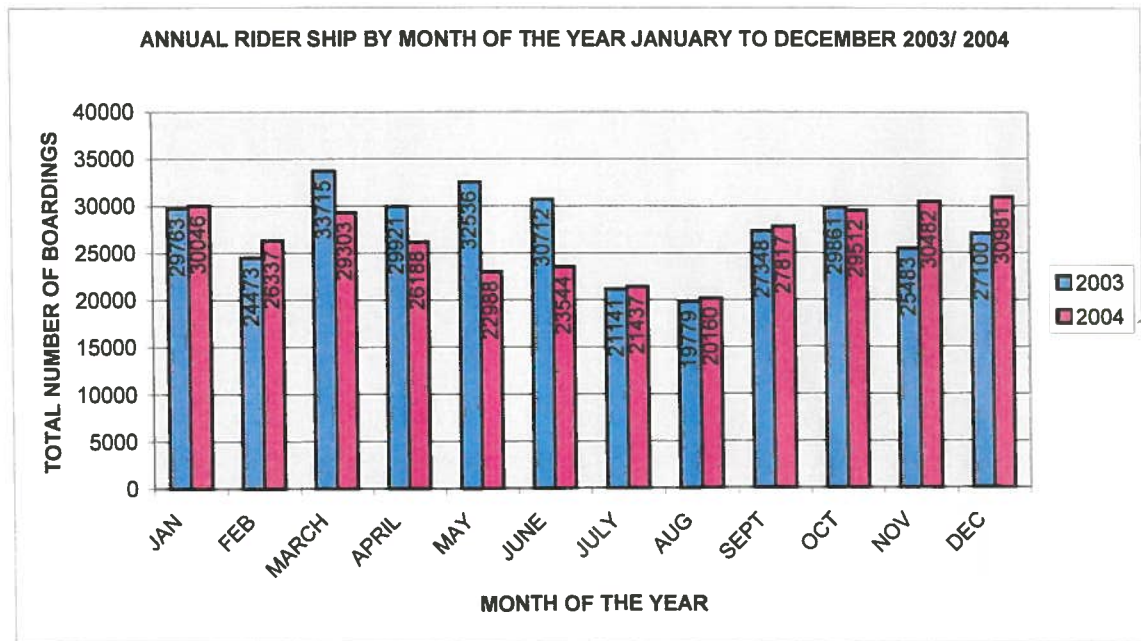


Figure 1. 0 - 2003/ 2004 Annual Ridership by Month of the Year/
All Routes Combined

Figure 1.0 shows that the overall ridership is down by 13,037 trips or 4% in 2004 compared to 2003. Further analysis shows a loss in ridership of

13% in the first half of 2004 while the second half shows an increase of 6%. This is largely due to service level changes reductions of 35%, which occurred in the 2nd half of 2003, the first half of 2003.

Using the second half of 2003 as a bench mark, the analysis indicates that ridership has increased by 6% in 2004 based on the same level of service.

2.2 2003/ 2004 Annual Ridership by Route.

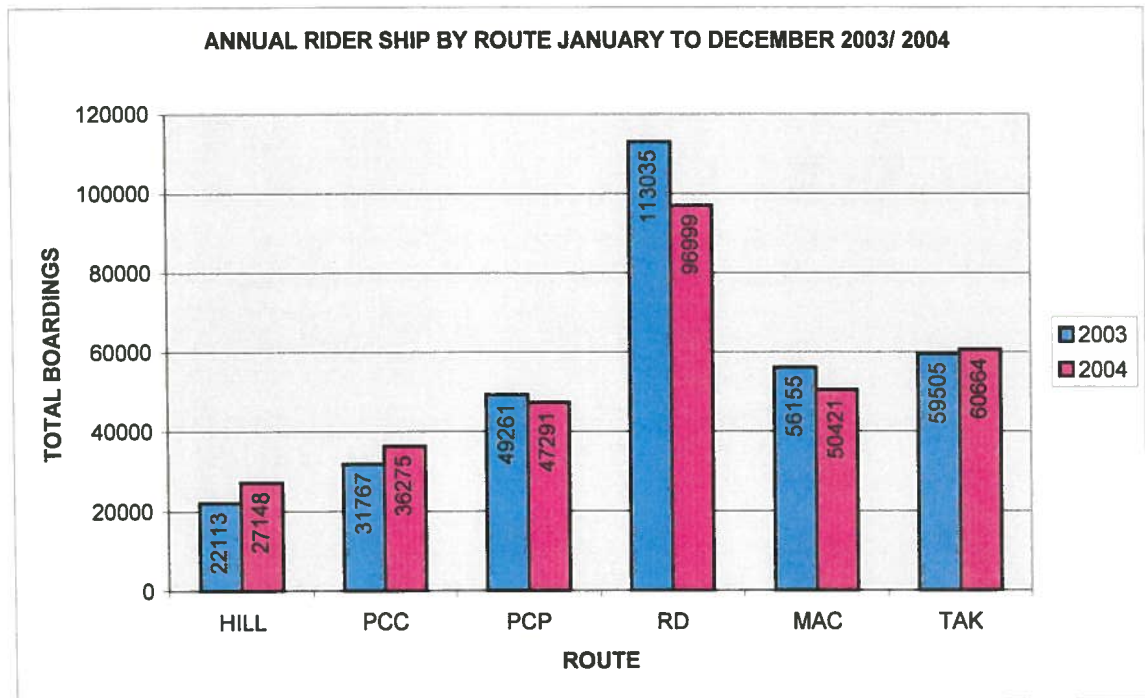


Figure 2.0 - 2003/ 2004 Annual Ridership by Route

Figure 2.0 illustrates the effects on ridership overall on a route-by-route basis. The data indicates that some routes benefited from the changes. The Hillcrest, Porter Creek Crestview and the Takhini are all showing an increase in ridership. The Porter Creek Ponderosa and the McIntyre/ Granger routes show minimal change.

The Riverdale route has seen the largest impact with a loss of 14%. This would indicate that this route is one that shows the most potential for increased ridership. As previously discussed, most of this loss is contributed to the first half of 2004 when compared to 2003 data. In the first half our, data indicated a ridership drop of 30%. Our data for the second half shows an increase of 14%.

The overall effect on the routes on an annual basis is as follows:

- Hillcrest/ Lobird up 23%
- Porter Creek Crestview up 14%
- Porter Creek Ponderosa down 4%
- Riverdale down 14%
- McIntyre/ Granger down 10%
- Takhini/ College up 2%

2.2.1 - 2003/ 2004 1st Half Ridership by Route.

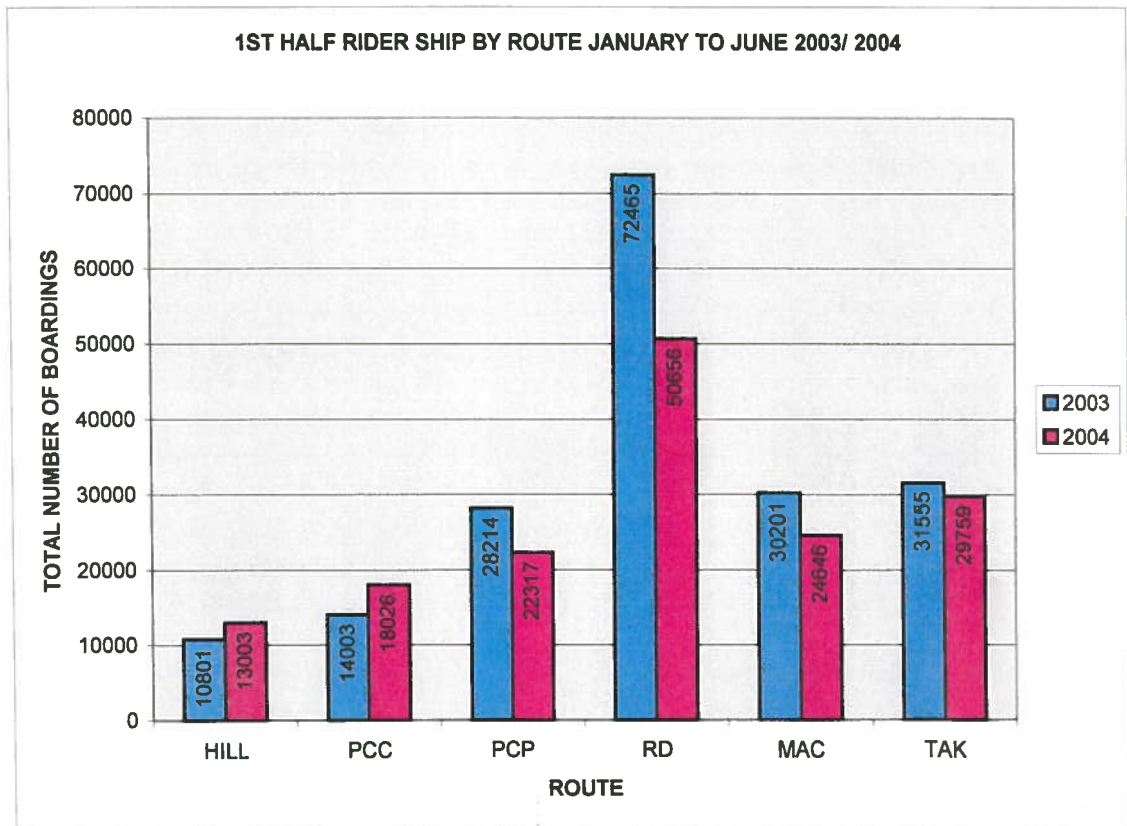


Figure 3.0 – 2003/ 2004 1st Half Ridership by Route.

Figure 3.0 illustrates what the impact of the reduction in service hours had on ridership. As previously discussed, some routes benefited, others such as Porter Creek Ponderosa, Riverdale, and the McIntyre/ Granger saw losses between 20 and 30%, while the Takhini shows a slight decline of 6%.

While the reduction of 35% in service hours had a significant impact, other factors may have also contributed such as weather, the negative publicity, and the perception of the loss of stability.

The effects on the routes in the 1st half are as follows:

- Hillcrest/ Lobird up 20%
- Porter Creek Crestview up 29%
- Porter Creek Ponderosa down 21%
- Riverdale down 30%
- McIntyre/ Granger down 18%
- Takhini/ College down 6%

2.2.2 - 2003/ 2004 2nd Half Ridership by Route.

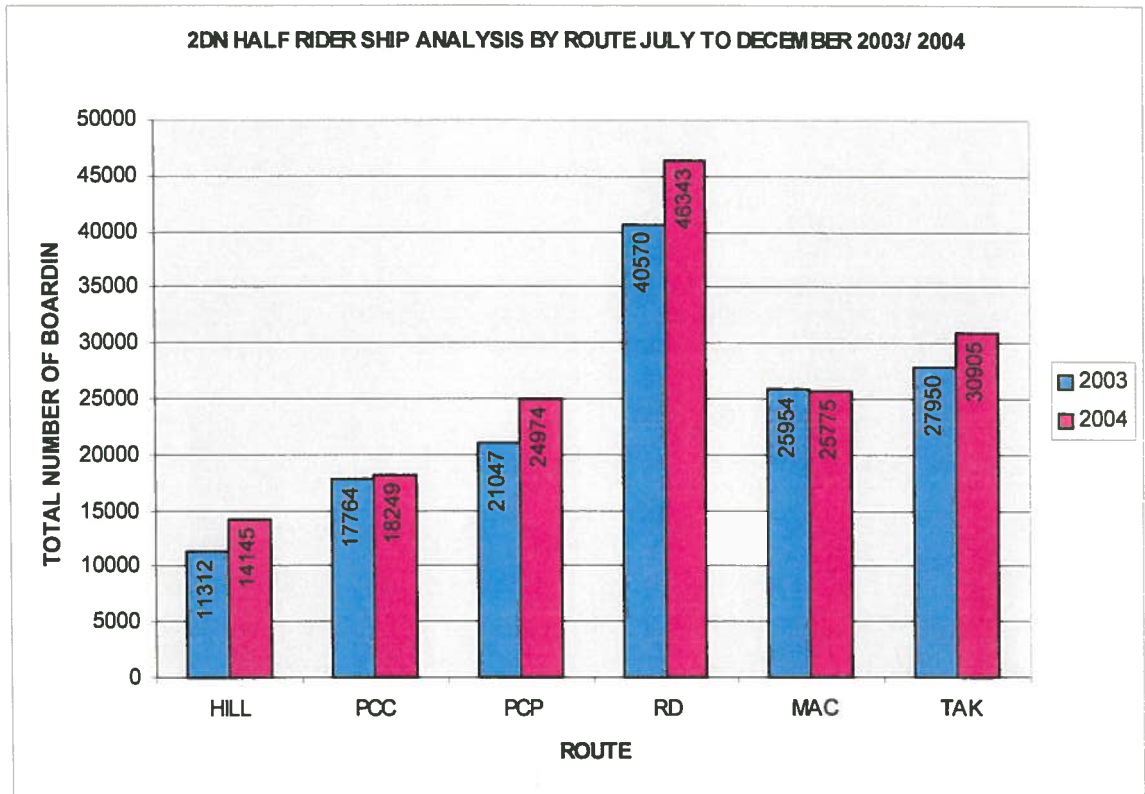


Figure 4.0 – 2003/ 2004 2nd Half Ridership by Route.

Figure 4.0 shows that ridership increased in 2004 for the 2nd half when compared to the same time, same service levels in 2003. While the 1st half saw a loss of 13% the 2nd half saw an increase of 6%.

An increase of 6% during the 2nd half is viewed as positive trend. Schedule stability is attributed as the major contributing factor.

The effects on the routes in the 2nd half are as follows:

- Hillcrest/ Lobird up 25%
- Porter Creek Crestview up 3%
- Porter Creek Ponderosa up 19%
- Riverdale up 14%
- McIntyre/ Granger (no change)
- Takhini/ College up 11%

2.3 2003/ 2004/ 2005 Ridership 1st Quarter Comparison/ All Routes Combined.

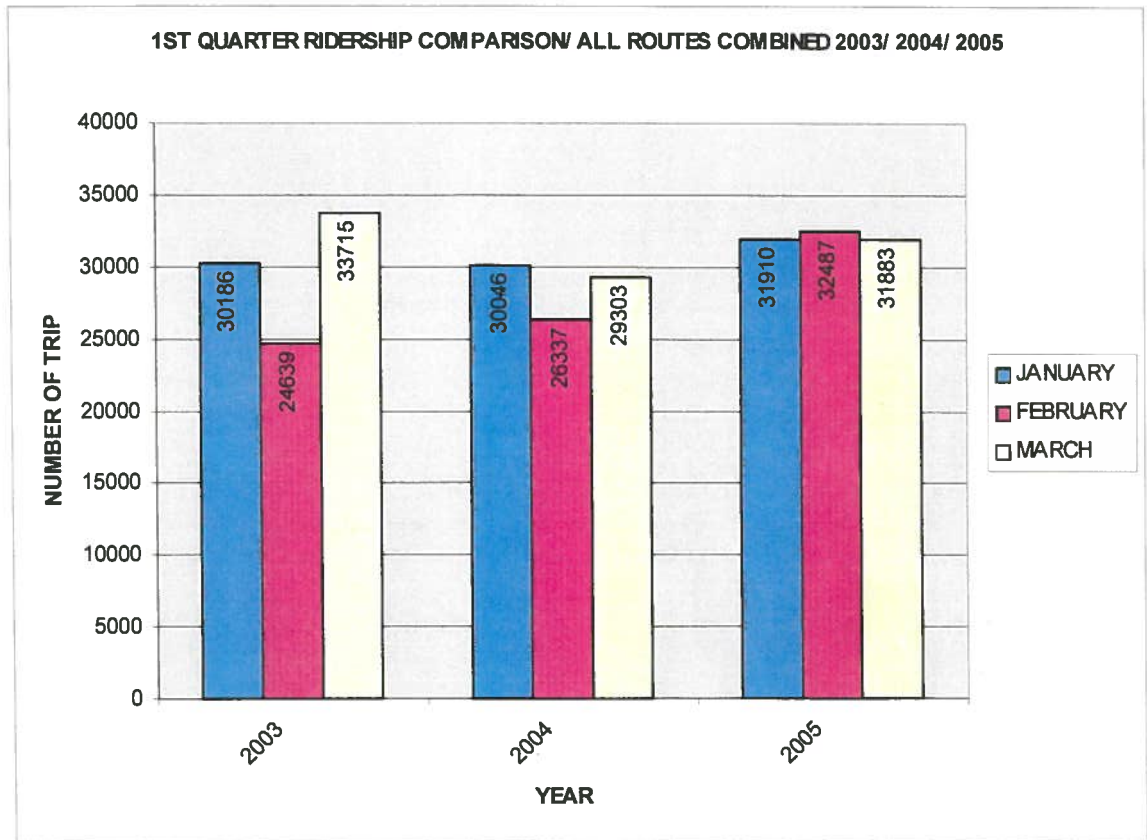


Figure 5.0 - 2003/ 2004/ 2005 Ridership 1st Quarter Comparison/ All Routes Combined.

Figure 5.0 illustrates ridership performance for the 1st quarter in each of the respective years. Using 2003 as the benchmark, the data shows that ridership in 2004 dropped by 2,854 or 3% and increased by 7,740 or 9% in 2005.

In viewing this data, consideration needs to be given to the fact that the 1st quarter in 2003 offered 35% more hours of service than each of the

following two years. A 3% drop in the first year following the changes is not considered to be significant. An increase of 9% in the second year however is a positive trend. Again schedule stability is likely one of the major contributing factors.

Comparing ridership data by quarter needs to be done with caution. There are many factors, such as weather, that can change trends over a twelve-month period.

3.0 Performance Indicators

The performance indicators provided in this report illustrate what impact the service level changes have had in the areas of: Recovery to Cost Ratio, Effectiveness, Efficiency, and Municipal Operating Contribution/ Capita.

The methodology used for measuring these indicators is taken from the Canadian Urban Transit Association (CUTA) facts book. These are the same indicators used by other Canadian municipalities to benchmark their performance. Whitehorse falls within the group known as Population Group # 4. This group consists of Canadian Municipalities with population of 50,000 and less. There are 40 municipalities included in this group.

In this section:

“Total Operating Revenues” means all regular service passenger revenues plus other operating revenues such as local charters and advertising.

“Total Direct Operating Expenses” means the total direct operating expenses such as wages/ benefits, licenses and registration, uniforms, insurance, fuel and energy, vehicle maintenance, plant maintenance, bus depreciation, debt servicing, and general administration.

“Regular Service Passenger” means all passenger trips for which the fare system applies, including those paying full fare, reduced fare, transfers, and those riding for free.

“Revenue Vehicle Hours” means the difference between the total drivers paid hour to the hours that a bus is in service picking up passengers.

“Revenue Vehicle Kilometres” means the difference between the total vehicle kilometres to the kilometres that a bus is actually on the road picking up passengers.

"Capita" means the total population of the City of Whitehorse as reported by the YTG Bureau of Statistics.

"Municipal Operating Contribution" means the total municipal operating contribution of the net operating costs.

3.1 Recovery to Cost Ratio.

Recovery to Cost (R/C) Ratio is described as total operating revenues divided by total direct operating expenses.

Year	Total Revenues	Total Expenses	R/C Ratio
2003	\$436,888	\$1,912,837	22.8%
2004	\$439,518	\$1,693,138	26.0%
2005 (Proj)	\$432,200	\$1,826,800	23.7%

Table 1.0 Revenue to Cost Ratio

Table 1.0 depicts the financial performance with respect to revenues to cost ratios from 2003 through to the projected R/C in 2005. The data shows that the R/C for 2004 reached its highest peak in over four years.

The 2005 projected revenues as a percentage of expenses show a slight decline on this trend by 2.3%. The major contributing factor for this change is an 8% increase in operating expenses. The increases in expenses are largely due to the economic impacts of the recently signed labour agreement. Other contributing factors such as higher fuel have also impacted on these expenses.

The 2005 projected revenues show a slight drop as well. The major contributing factor here is lower cash and ticket sales. The 2005 revenues for these fare media are based on the 2004 actuals. In 2004, both these fare medias came in 20% less than budgeted. This was offset by a 20% increase in pass sales; however, total sales were down by 4% overall.

In the absence of having historical data, projecting the revenues in the fares is difficult, however, one of the more positive trends we have seen is the large increase in the number of customers purchasing passes. Moving customers from cash to tickets to passes was one of the goals identified in the 2002 Operational Review. It is evident that we are succeeding at this goal.

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3.2 Cost Effectiveness.

This performance indicator is used to measure the cost effectiveness of a transit system based on cost per regular service passenger.

Year	Direct Operating Expense	Regular Service Passenger	Total Dir. Exp/ Re. Ser. Pass.
2003	\$ 1,912,837	331836	\$ 5.76
2004	\$ 1,693,138	318798	\$ 5.31
2005 (proj)	\$ 1,826,800	362000	\$ 5.05

Table 2.0 Total Direct operating Expenditure/ Regular Service Passenger

Table 2.0 illustrates that transit is moving in a positive direction with respect to lower cost per regular service passenger. The average for Canadian Municipalities with population of less than 50,000 is \$ 3.09. At \$ 5.31, Whitehorse is in the higher end of this group, however Clarington Ontario (population 30,000) has the highest at \$ 5.61. Others within the same range and population group include:

- Coboug Ontario, population 18,000 = \$ 4.98
- Corner Brook Newfoundland, population 20,000 = \$ 4.61
- Welland Ontario, population 46,000 = \$ 5.29
- Yellowknife, population 18,000 = \$ 4.06

With the exception of Welland Ontario, which is the second highest compared to Whitehorse, the statistics indicate that systems with populations of 20,000 or less have the highest cost per passenger.

The projected cost per passenger in 2005 is based on a 9% increase in ridership. The 9% is based on ridership data taken in the 1st quarter of 2005.

3.3 Municipal Contribution Per Capita.

Year	Net Municipal Operating Contribution	Population	Municipal Operating Contribution per Capita
2003	\$ 1,475,950	22,425	\$ 65.82
2004	\$ 1,235,620	23,205	\$ 53.25
2005	\$ 1,394,600	23,205	\$ 60.10

Table 3.0 Municipal Operating Contribution/ Capita

Table 3.0 shows that the contribution per capital dropped by \$12.57 or 19% in 2004 compared to 2003. Lower operating costs combined with an increase in the population contributed to this trend. The projected contribution per capita is expected to increase by \$ 6.85 or 13% in 2005. Higher operating costs are the major contributing factor.

When benchmarked against it's peer group, Whitehorse contributes the highest per capita at \$ 53.25. The average for the peer group is \$ 21.85. Although the Canadian average is \$65.32, only two other municipalities, in its peer group, come close to contributing as much as Whitehorse, they are:

- Cornwall Ontario, population 48,000 @ \$ 53.20
- Timmins Ontario, population 38,000 @ \$ 49.24

It can be said, that Municipal Operating Contribution is showing a favorable downward trend. The fact that Whitehorse contributes higher dollar amounts per capita is a strong indicator that this Council is committed to providing an above average service for a municipality of its size and population.

3.4 Service Utilization

Service utilization is described as Total Regular Service Passengers per Capita; the average for the peer group is 14.3. In 2003 Whitehorse was at 14.86; in 2004 it dropped to 13.74. With a projected increase in ridership of 9% for 2005, Whitehorse will be at 15.60. With the exception of

Stratford Ontario, Whitehorse provides more regular service trips per capita than all of the other municipalities between populations of 20,000 to 30,000.

Another way of measuring service utilization is by the number of Regular Service Passengers per Revenue Vehicle Hour. The average for the peer group is 20.75. In 2003 Whitehorse was 17.44, in 2004 that climbed to 21.31. The projected figure is expected to climb to 24.20 in 2005.

These two indicators alone show that Whitehorse Transit is well utilized based on a per capita basis.

3.5 Amount of Service

The amount of service is measured by the Total Revenue Hours per Capita. The average for the peer group is 0.71. In 2003 Whitehorse was at 0.85, in 2004 it dropped to 0.64. Again comparing Whitehorse to other municipalities of populations between 20,000 and 30,000, it provides the second highest levels of service per capita.

4.0 Proposed Changes to the Public Schedule.

4.1 Rationale for changes.

In the development of the Public Schedule, administration needs to consider what impacts the Collective Agreement may have on the final service to the customer. Driver's breaks are a major consideration in the development stage of a schedule. For the past several years these breaks have been a problem in terms of the time limits and when they provided.

During the last round of bargaining, both parties came to the agreement that driver's breaks should be moved out of peak service hours. The Transit Task Force recommended that the schedule be changed to take advantage of these changes. Administration has been working with the Transit Scheduling Committee to see how this could be done within the 2005 adopted budget.

4.2 Effects on Service.

Based on our ridership data, peak service times are identified as follows:

- **A.M. service** – 7:00am to 9:00am Monday through Friday
- **P.M. service** – 3:00pm to 6:00pm Monday through Friday

The current schedule has nine breaks occurring during these times, three in the a.m. and six in the p.m. During the current regular Monday to Friday service (6:15am to 7:05pm) the Public Schedule has:

- Total number of cycles per day = 86
- Number of peak cycles per day = 45
- Number of off- peak cycles per day = 41

The proposed schedule sees all breaks removed from the peak times and occur at various times during the off-peak service. This is in compliance with the Collective Agreement and does not incur any additional costs. The impacts to service are:

- Total number of cycles per day = 86 (no change)
- Number of peak cycles per day = 54 (increased by 9)
- Number of off- peak cycles per day = 32 (decreased by 9)

Basically the nine breaks that occur in the current schedule during the peaks are being replaced with serviced routes. The opposite occurs during the off-peak, nine less routes are being serviced. The following are the effects on a route-by-route basis:

Riverdale:

- Add new 9:10am
- Discontinue 2:25pm
- Discontinue 5:55pm
- Total loss of one cycle

McIntyre/ Granger:

- Add new 8:35am (**peak**)
- Discontinue 9:45am
- Add new 10:20am
- Add new 5:20pm (**peak**)
- Discontinue 5:55pm
- Total gain of one cycle

Takhini/ College:

- Add new 9:10am
- Discontinue 9:45am
- Discontinue 2:25pm
- Discontinue 5:55pm
- Add new 6:30pm
- Total loss of one cycle

Hillcrest/ Lobird:

- Add new 8:35am (**peak**)
- Discontinue 9:10am
- Discontinue 9:45am
- Add new 10:20am
- Discontinue 11:30am
- Add new 4:10pm (**peak**)
- Add new 5:20pm (**peak**)
- Discontinue 5:55pm
- Add new 6:30pm
- Total gain of one cycle

Porter Creek Ponderosa:

- Add new 9:10am
- Discontinue 9:45am
- Add new 10:20am
- Discontinue 10:55am
- Discontinue 12:05pm
- Discontinue 2:25pm
- Add new 4:10pm (**peak**)
- Discontinue 5:55pm
- Add new 6:30pm
- Total loss of one cycle

Porter Creek Crestview:

- Add new 8:35am (**peak**)
- Discontinue 9:45am
- Add new 4:10am (**peak**)
- Add new 5:20pm (**peak**)
- Discontinue 5:55pm
- Total gain of one cycle

The overall impact adds 9 new cycles during the peak times, offset by 9 less cycles during the off-peak times.

4.3 Anticipated Effects on Ridership.

Adding service to the peak times is expected to have a positive impact on ridership. Equally reducing the service during the off-peak will have a negative impact. Predicting what the overall impacts will be is difficult, however the increase during the peaks is expected to outweigh the decreases during the off-peak.

Based on current ridership data we know that the average number of passengers per cycle during peak times is 20. Adding nine more cycles should result in 180 riders each day. The average number of passengers per cycle during the off peak is 14, reducing the total number of cycles during off-peak should result in a decrease of 126 riders per day.

Based on this data, and assuming that 50% of the off-peak riders used the trip before or after, the net increase is projected to be 117 riders a day, 585 per week, and 30,420 annually.

4.4 Other Changes.

Over the past 18 months, minor changes have been made to some of the routes. An example would include the new stop added to the Super Store. To service this stop 2 of the current routes now travel down 3rd Avenue instead of 2nd. This change, along with any others, will be added to the new schedule.

In addition, all the routes have been re-timed to ensure the times we have posted in the schedule at key timing points are up to date.

4.5 Implementation.

With respect to implementation, the Transit Scheduling Committee feels that July 1st, 2005 would be a suitable date. One of the main reasons for this date is that it should have minimal impact on our current riders.

As our data indicates schedule stability is important to any transit system. From our ridership data we know that July is a time of transition with respect to ridership due to seasonal temperatures. Implementing any changes prior to this date may create confusion resulting in a loss of

ridership. In addition this date will provide enough time for advising and printing of the new schedules.