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YORK REGION TRANSIT MOBILITY PLUS 2004 SYSTEM PERFORMANCE REVIEW

The Joint Transit Committee and Rapid Transit Public/Private Partnership Steering Committee recommends the adoption of the recommendation contained in the following report October 25, 2005, from the Commissioner of Transportation and Works:

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

The purpose of this report is to evaluate the 2004 performance of York Region Transit (YRT) Mobility Plus specialized transit service. The report will provide Transit Committee and Council with an overview of system performance based on commonly used indicators, and will also compare YRT's Mobility Plus performance with selected GTA and other Canadian specialized transit services.

3. BACKGROUND

In the fall of 2000, the Province announced the implementation of a Municipal Performance Measurement Program for all Ontario municipalities in nine core service areas: solid waste, water and wastewater, roads, transit, fire, police, local government administration, land use planning and social services. The program is intended to enhance accountability, provide a basis for continuous improvement initiatives and demonstrate to taxpayers how efficiently local governments deliver key municipal services.

The Municipal Performance Measurement Program is specifically designed to measure conventional transit performance only. However, performance monitoring of specialized transit services for persons with disabilities is no less critical for internal administration, strategic planning, system management, and budget development and compliance.

The concept of measuring performance is not new to the public transit industry. For many years prior to 1998, Ontario transit agencies were required to submit detailed financial and operational data in order to qualify for provincial subsidies. In addition, the Canadian Urban Transit Association (CUTA) collects and publishes detailed annual system statistics and performance measurements for all public transit agencies (conventional and specialized) in Canada. As a result, the public transit industry is well advanced in the development and monitoring of performance measures. It should be noted that specialized transit service performance is commonly monitored in terms of total operating data, and is also separated into dedicated and non-dedicated service categories. Dedicated refers to service provided in vehicles exclusively dedicated to the transport of persons with disabilities (e.g. minivans, small buses). Dedicated service can be provided internally or under contract. Non-dedicated refers to services available to persons with disabilities provided by non-exclusive vehicles (e.g. sedan taxis) which usually operate under contract and may also provide service to other than registered customers.

Some of the more common and relevant specialized transit performance indicators include:

- Financial Indicators – Revenue/Cost Ratio; Total Cost/Passenger; Cost/Passenger (Dedicated); Cost/Passenger (Non-dedicated); Cost/Hour (Dedicated)
- Utilization and Operating Performance Indicators – Registrants/Capita; Passenger Trips/Capita; Passenger Trips/Registrant; Passenger Trips/Hour (Dedicated); Km/Passenger Trip (Dedicated)

4. ANALYSIS AND OPTIONS

The York Region Transit Mobility Plus service commenced operations on January 1, 2001 with the amalgamation of the specialized transit systems formerly operated in the municipalities of Markham, Vaughan, Richmond Hill, Whitchurch-Stouffville, Aurora, Newmarket and Georgina. In May of 2001, the Region introduced specialized transit services to King and East Gwillimbury.

YRT's Mobility Plus service makes use of a variety of service delivery options including an in-house dedicated operation (YRT drivers using specialized transit vehicles – both small buses and minivans), non-dedicated contract services (e.g. sedan and small van taxis) and dedicated accessible minivan and small bus contract services (e.g. Dignity Transportation, and Simcoe Coach Lines).

For the purposes of this report, the YRT data for the year 2004 is compared to submissions made to CUTA by various municipal transit operations. It should be noted that some peer group comparisons are difficult because of the various differences in geographical service areas, rural/urban mix, population growth and age, medical trip status, extent and availability of contracted services, registrant eligibility and growth, ambulatory/non ambulatory registrant profile, trip generation and funding levels.

YRT's Mobility Plus service is a fairly unique operation. In 2004, York Region had a specialized transit service area population of 889,591, making Mobility Plus comparable to the Region of Peel Transhelp service (1,054,000) or Ottawa Para Transpo (597,396). However, due to its suburban type development, close proximity to a major metropolitan area and tremendous growth patterns, the service area is more akin to the situation that exists in the City of Laval, directly north of Montreal, Quebec. In terms of comparable service delivery models, the dedicated versus non-dedicated trip ratio for Mobility Plus stands at 29% vs. 71%, which is well below the next comparative service provider, Hamilton, which has a 50%/50% ratio. TTC Wheel-Trans data is presented strictly for information since the scale of the operation is vastly different. Canada-wide data is also used for average comparative purposes.

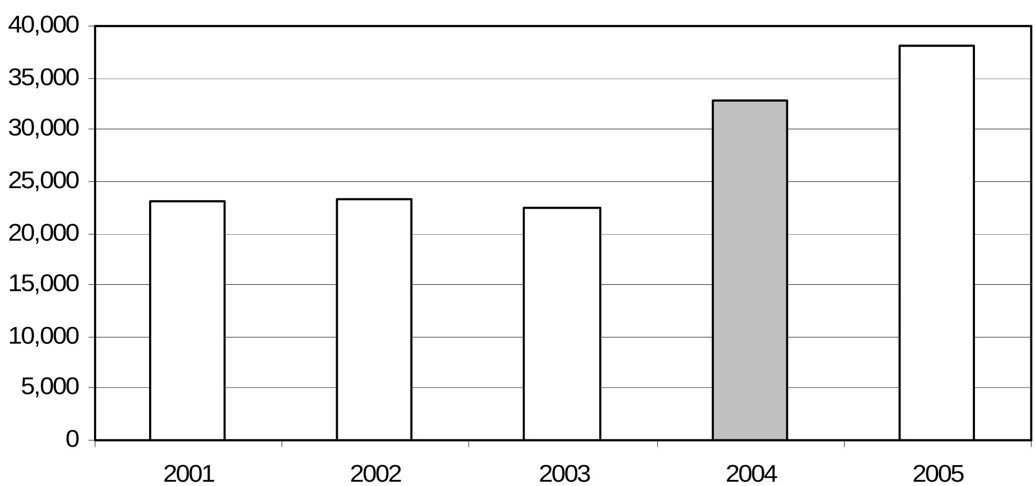
4.1 Specialized Transit Performance Indicators

Statistical information has been compiled for YRT's Mobility Plus service covering the actual performance from 2001 to 2004 and the budgeted performance for 2005. Along with this data, CUTA's peer group statistics are presented using 2004 data.

4.1.1 Amount of Service

The amount of service provided is most easily measured by *revenue vehicle hours*; however, this measure can only be used for the dedicated portion of the service. Exhibit 1 represents the annual dedicated vehicle hours operated by active "in-revenue" vehicles and does not include charters, deadheading, training, road tests or maintenance related travel.

Exhibit 1
Revenue Vehicle Hours (Dedicated Services)

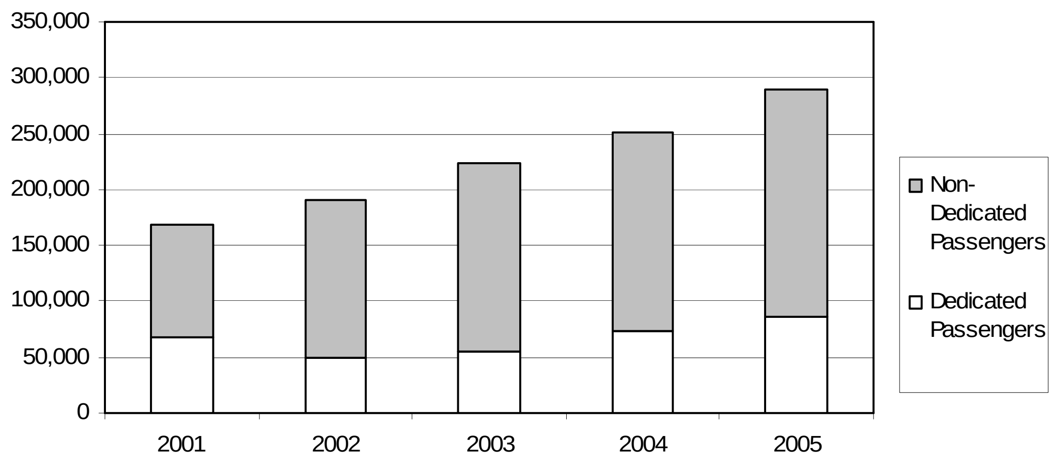


The 2003 bar reflects a reduction in dedicated revenue vehicle hours since 2001 due to improved bus scheduling productivity, scheduling adjustments to address bus reliability issues with an older bus fleet and the availability of larger contracted non-dedicated vehicles to handle increased non-ambulatory passenger demand. The increase in dedicated revenue vehicle hours for 2004 reflects the increased travel demand experienced in 2004 (19% over 2003). This ridership growth trend is projected to continue in 2005 resulting in the need to add additional dedicated revenue vehicle hours as illustrated in Exhibit 1.

4.1.2 Ridership

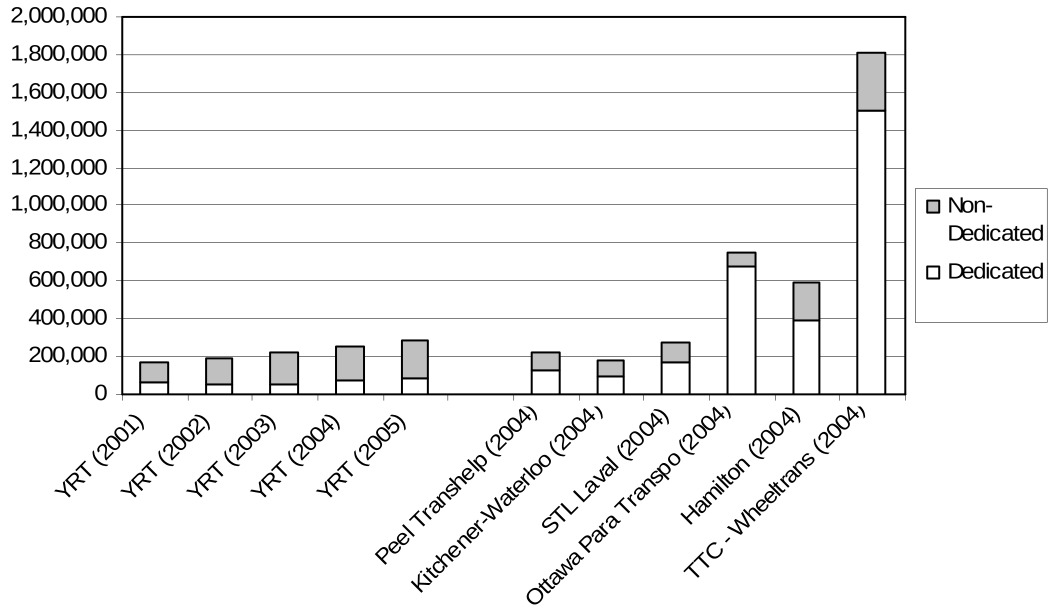
Ridership is measured by *revenue passenger trips* and does not include transfers or charter trip activity.

Exhibit 2
Ridership (York Region)



Ridership growth on the Mobility Plus service as illustrated in Exhibit 2 continues to grow at an impressive rate and is a direct reflection of population and employment growth within the Region. The changing population demographic profile (i.e. more seniors) also contributes to this growth rate. In 2003, ridership was approximately 10% above 2002, with 2004 ridership 19% above 2003. It is anticipated that this growth rate will continue in 2005 which will see Mobility Plus experience one of the highest growth rates in Canada for the geographical area and population served. The primary reasons for the continued increased rate of growth can be attributed to registrant base growth, increased registrant trip demand and the added trip growth created by the approved limited expansion of cross-boundary service into the City of Toronto. Exhibit 3 provides a peer group comparison showing Mobility Plus ridership already meeting Region of Peel Transhelp ridership levels and exceeding those of Kitchener-Waterloo.

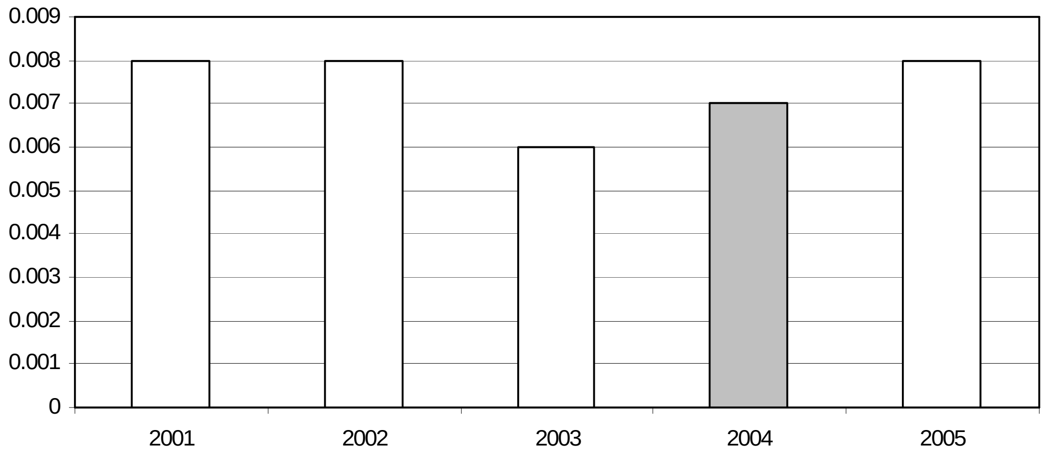
Exhibit 3
Ridership (Peer Group)



4.1.3 Service Utilization

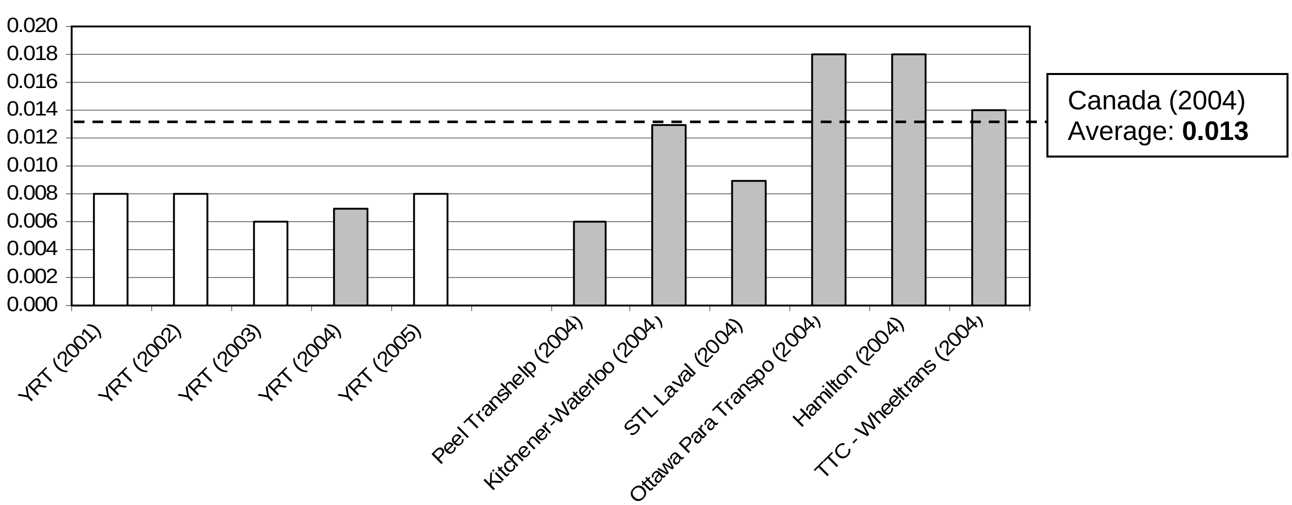
Service utilization is typically measured by two indicators; *registrants per capita* and *registrants per revenue hour*. *Registrants per capita* measures registrants divided by the service area population. *Registrants per revenue hour* measures the average number of registrants riding specialized transit during an hour of service (on average with no regard to time of day or day of week). Service utilization is a function of the growth in the registrant base. In 2003, YRT staff updated the active registrant base and removed all inactive registrants. These inactive registrants represent individuals who have moved, become deceased, etc. Since 2003, Mobility Plus *registrations per capita* continued to increase at a rate of approximately 200 applications per month with an 85% approval rate. This growth rate continued throughout 2004 and is expected to be at the same rate in 2005. The growth rate reflects a continued increase in the provision of medical and long-term care services and facilities as well as an increase in social service programming within the Region to address the needs of persons with disabilities.

Exhibit 4
Registrants per Capita (York Region)



As the growth in registrations continue, the registrants per capita figure will increase as noted in Exhibit 4 by the 2004 actual and 2005 projected figures. In comparison to the peer group, the Mobility Plus *registrants per capita* figure matches the Laval rate and is marginally below the Canadian average. This could be explained in part by the relatively younger population in the Region as is the experience in Laval. This is particularly evident when comparing more established communities that experience a higher rate such as Hamilton and Kitchener-Waterloo. The low registrants per capita figure for Peel Transhelp is a reflection of their eligibility criteria and a younger population base.

Exhibit 5
Registrants per Capita (Peer Group)



Passengers per capita reflects a continued growth in market penetration or trips taken. While population growth is occurring within the Region, Mobility Plus ridership is increasing at an even greater rate as illustrated in Exhibit 6. In addition, as more development occurs in the Region, *passengers per capita* will increase to more closely resemble the peer group as shown in Exhibit 7.

Exhibit 6
Passengers per Capita (York Region)

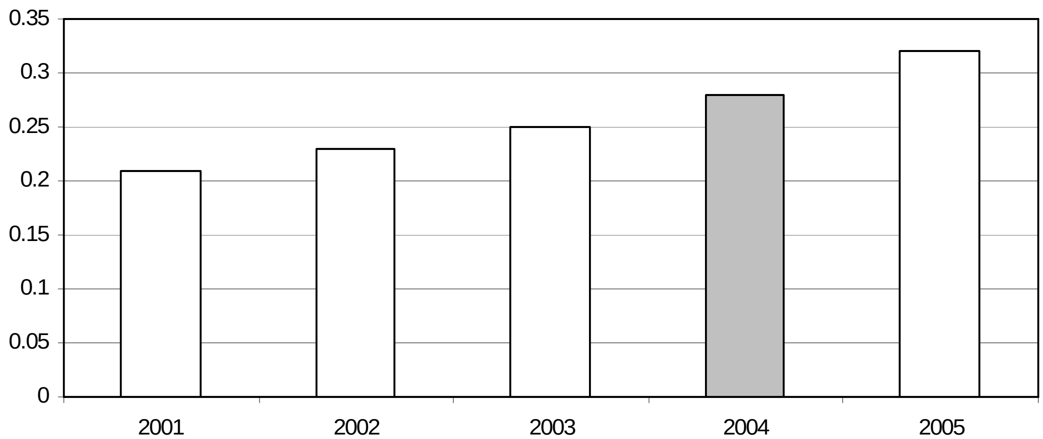
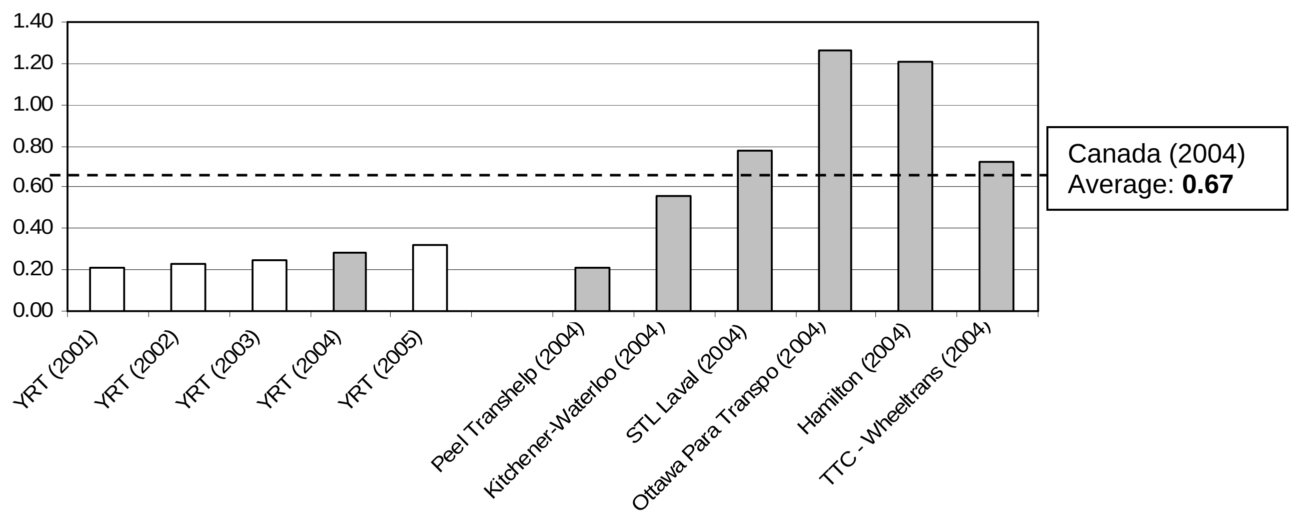


Exhibit 7
Passengers per Capita (Peer Group)



Dedicated passenger trips per hour in 2004 (Exhibit 8) continued to decrease reflecting the removal of local municipal operating boundaries, thus resulting in longer passenger trips. Efforts are underway in 2005 to further increase the efficiency of the scheduling software in order to improve dedicated vehicle productivity while addressing customer trip needs. As the Region becomes more urbanized thus providing more local services, the average trip distance will be reduced, resulting in a higher hourly dedicated productivity trip rate. Through increased vehicle capacity and scheduling efficiencies, Mobility Plus will move toward productivity figures which are more in line with the peer group as illustrated in Exhibit 9.

Exhibit 8
Dedicated Passenger Trips per Hour (York Region)

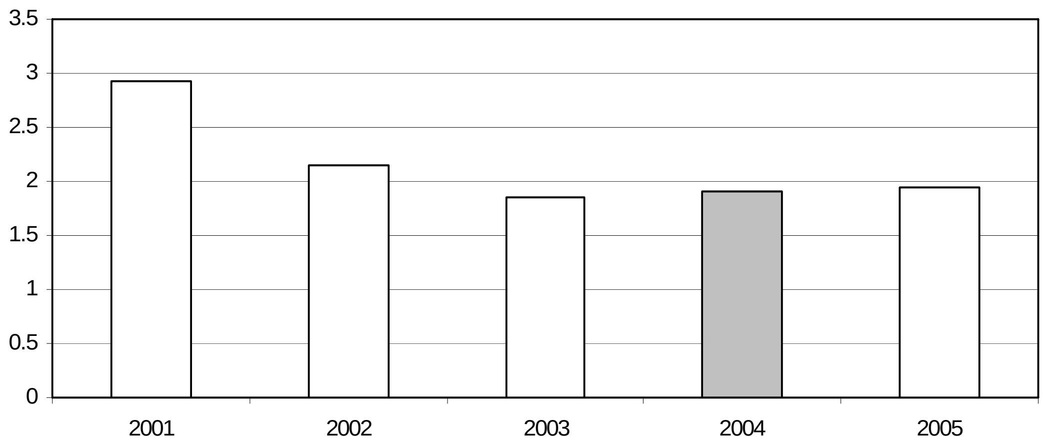
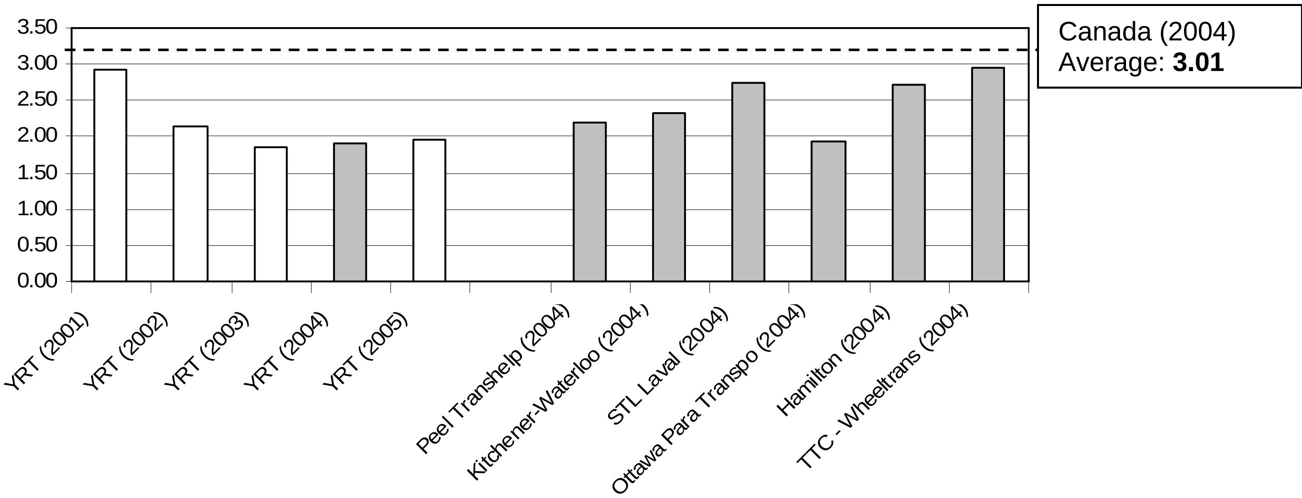
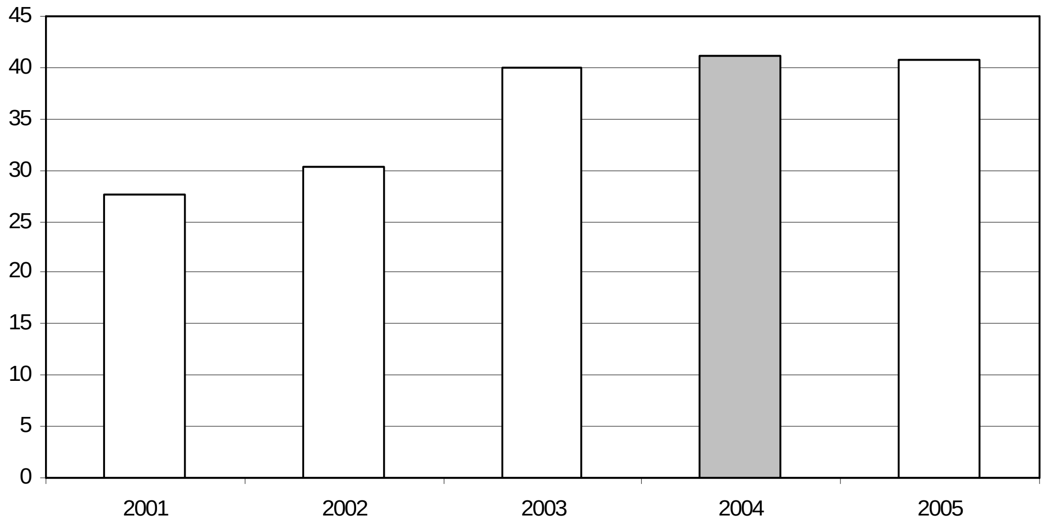


Exhibit 9
Dedicated Passenger Trips per Hour (Peer Group)



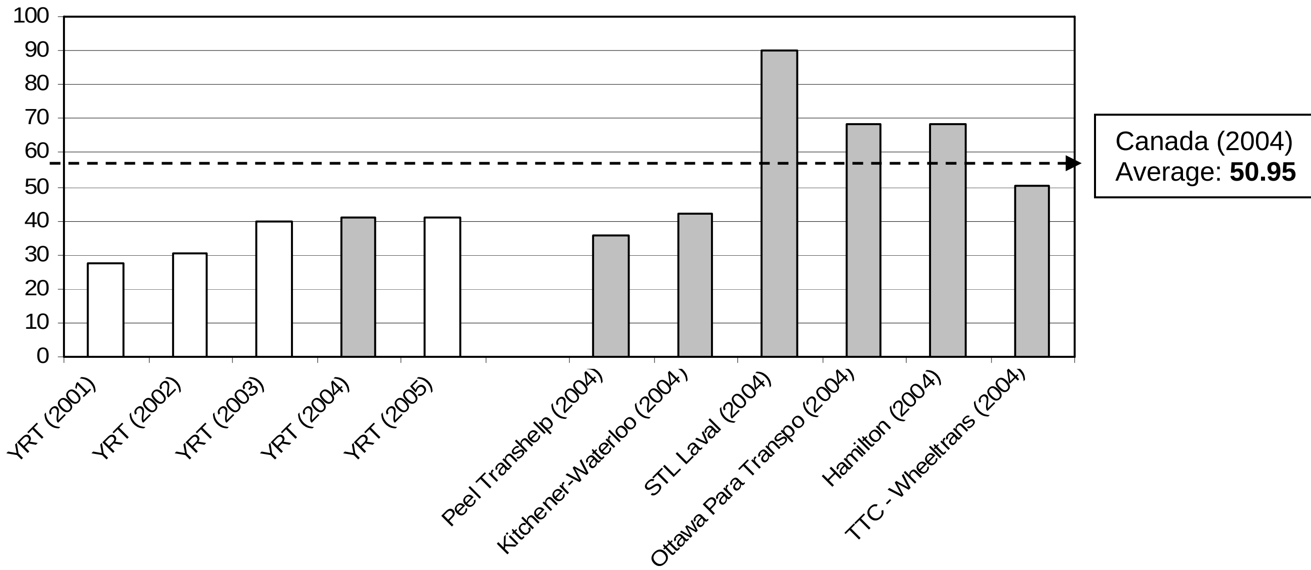
The availability of a Region-wide Mobility Plus service and the addition of services and facilities to serve persons with disabilities have resulted in a substantial increase in the volume of passenger trips per registrant in 2003 over 2002 as shown in Exhibit 10. This increased trip rate continued in 2004 not only with the current registrant base but also with new registrants added throughout the year. This trend is being closely monitored in an attempt to understand client trip making patterns. Almost 70% of the Mobility Plus registrant base is ambulatory, who generally take more trips adding to the increased trip rate.

Exhibit 10
Passenger Trips per Registrant (York Region)



Compared to the peer group (Exhibit 11), the Mobility Plus trip rate per registrant is relatively low. This could be the result of registrants limiting their trip travel in the evening and weekend periods, and their opportunities to access medical and social and other services. Also, the relatively large geographic size of the Region (which results in longer travel times) may discourage some registrants from taking additional trips.

Exhibit 11
Passenger Trips per Registrant (Peer Group)



The *dedicated kilometres per passenger trip* (Exhibit 12) has increased steadily with the opening of the municipal boundaries in 2002, reaching 13.90 kilometres per trip in 2004. It is now expected that levels will remain stable, as projected in 2005, through planned scheduling adjustments directed at improving linked or share-ride opportunities. These improvements will also improve vehicle productivity and reduce overall service costs. Through these efforts, the Mobility Plus dedicated kilometres per passenger trip will be more in line with the peer group in shown in Exhibit 13.

Exhibit 12
Dedicated Kilometres per Passenger Trip (York Region)

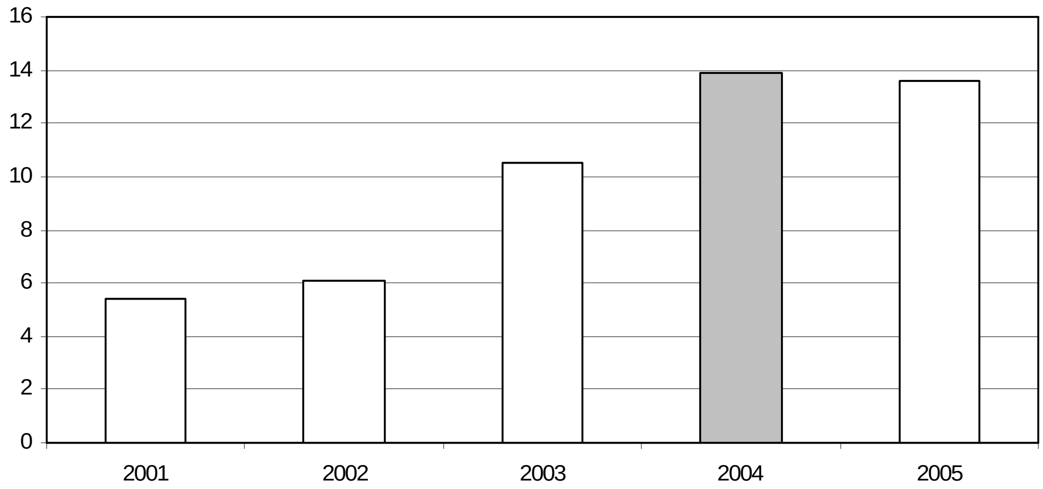
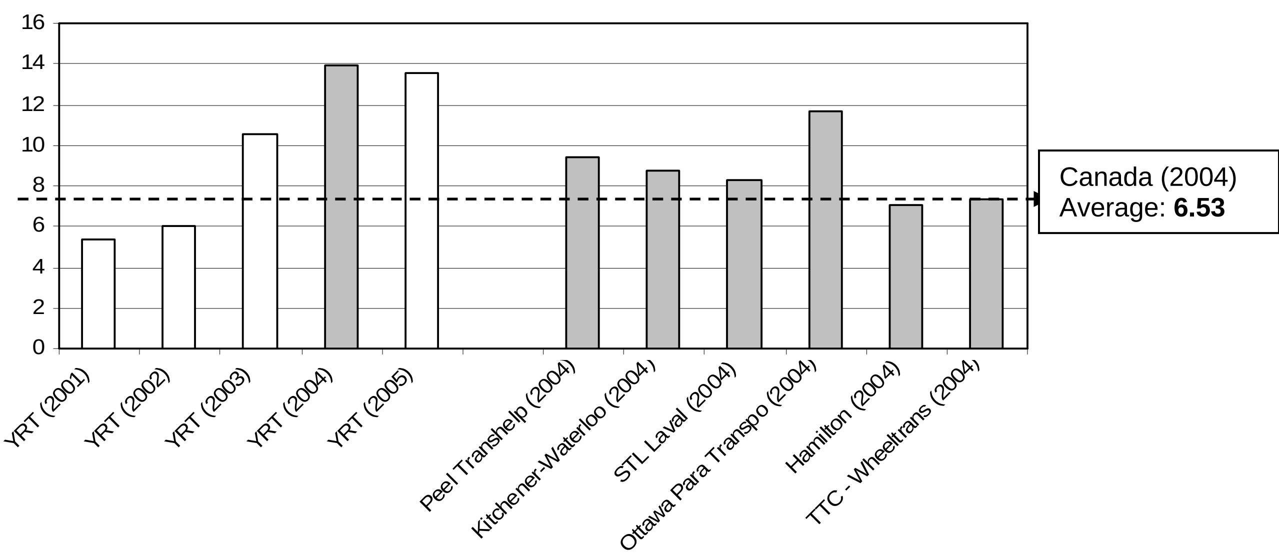


Exhibit 13
Dedicated Kilometres per Passenger Trip (Peer Group)



4.1.4 Financial Performance

Financial performance can be measured using a variety of indicators, including *revenue to cost ratio* (total operating revenues divided by total direct operating expenses not including capital). The *revenue cost ratio* for Mobility Plus in 2004 remains at the Canadian average (9%). The reduction shown in 2005 (8%) reflects the removal of the requirement for an attendant to pay a fare when required to accompany a registrant. Efforts will be made in future years to further improve the financial performance by more efficient scheduling practices, demand management and appropriate vehicle allocation.

Laval and Hamilton's higher revenue cost ratios (Exhibit 15) are likely due to higher fares and the extensive use of taxi scrip program (provides eligible users with coupons that are purchased at a discount rate and can be used on participating taxi services). Laval's adult cash rate is $2.85, while Hamilton's taxi scrip program allows for higher revenues.

Exhibit 14
Revenue Cost Ratio (York Region)

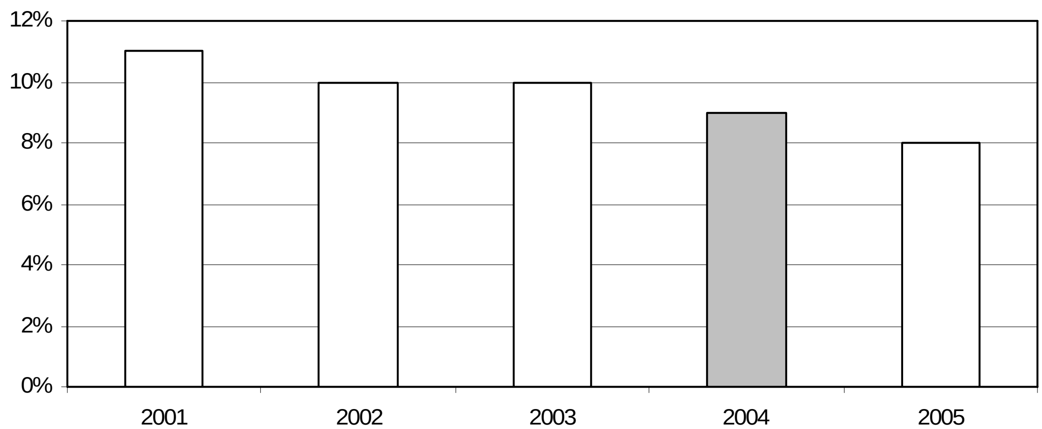
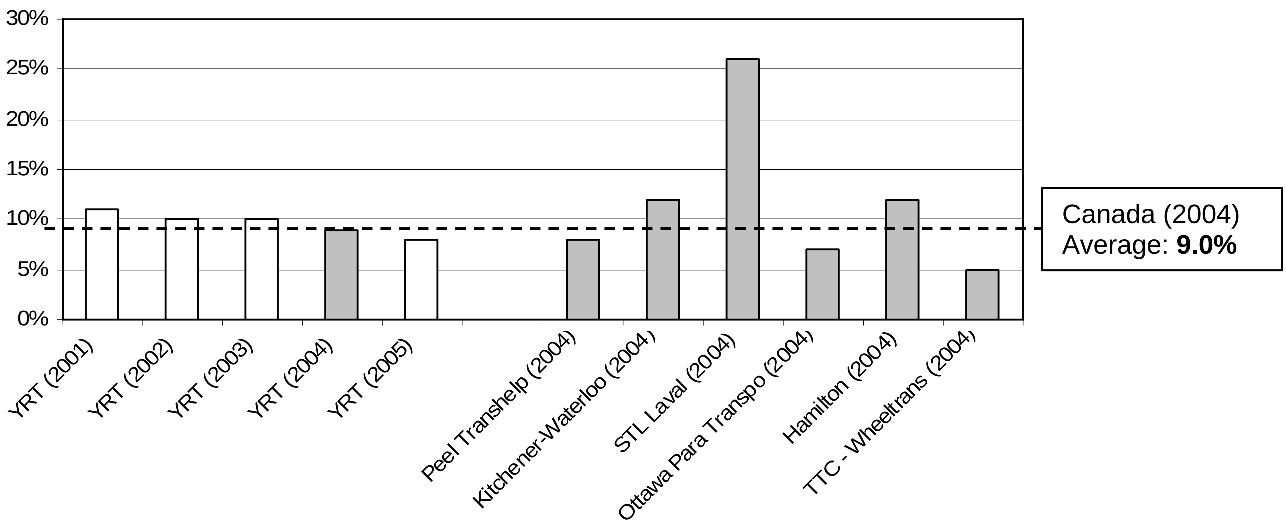


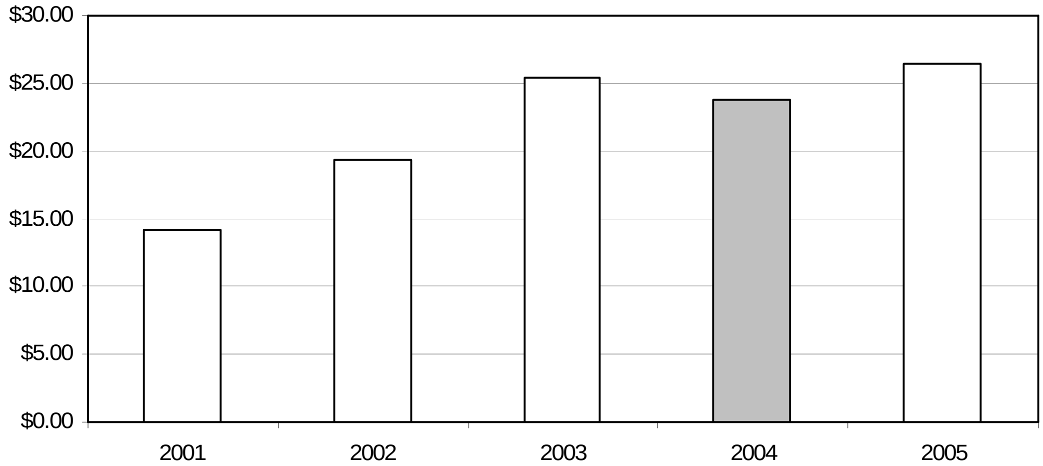
Exhibit 15
Revenue Cost Ratio (Peer Group)



4.1.5 Cost Effectiveness and Cost Efficiency

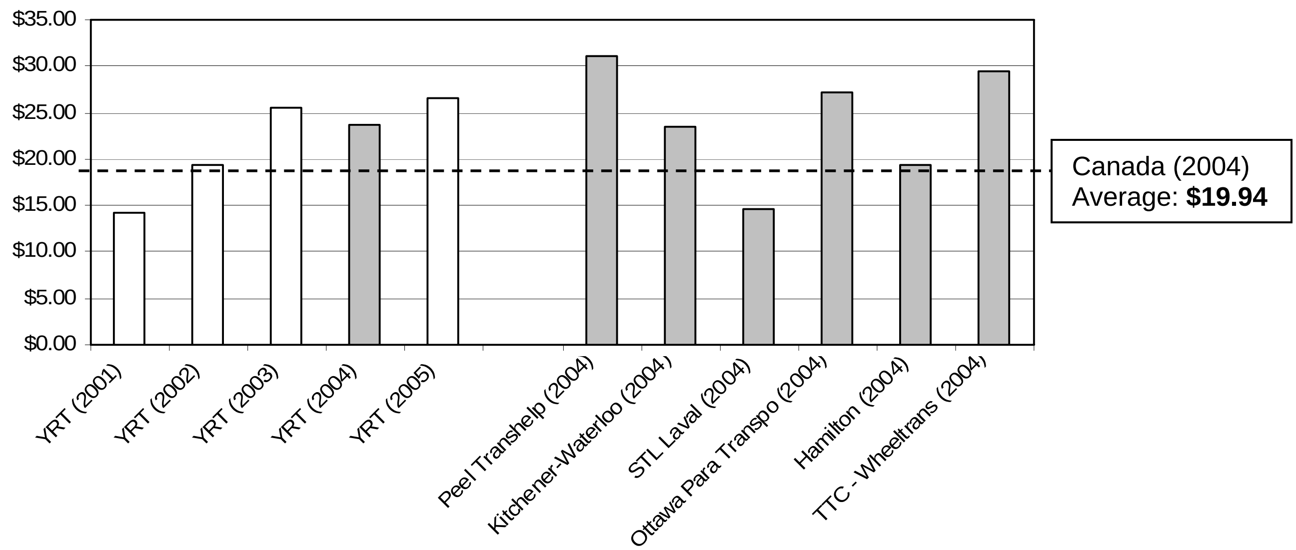
Cost effectiveness is measured by *total cost per passenger* which is calculated by dividing total direct operating expenses (gross) by passenger trips (ridership). The efficiency of financial resources is measured by *total cost per revenue hour*. The 2003 Mobility Plus cost per passenger was approximately $ 25.47, which reflected an increase over earlier years driven primarily by the removal of the municipal boundaries, thereby creating longer average trip lengths. Various scheduling and operating efficiencies in 2004 resulted in a cost per passenger reduction to $23.76. The increase in the 2005 estimate reflects service contract increases, and the increased cost associated with providing limited expansion of cross-boundary travel into the City of Toronto. After 2005, this cost figure is expected to decrease due to the implementation of various cost mitigation strategies, including the contracting out of the in-house bus operation, the introduction of new performance-based service contracts, placing service contractors on fixed remuneration rates, improving the trip scheduling software to improve share-riding opportunities, etc.

Exhibit 16
Total cost per total passenger (York Region)



In comparison to the peer group, the Mobility Plus total cost per total passenger rate is above the Canadian average but more closely aligned with the peer group. Laval and Hamilton both experience much lower total cost per total passenger rates due to shorter passenger trip lengths. The Mobility Plus trip length is 41% and 49% longer than Laval and Hamilton, respectively. The concentrated service areas in Laval and Hamilton result in improved share riding which effectively lowers the total cost per total passenger rate.

Exhibit 17
Total cost per total passenger (Peer Group)



Dedicated cost per passenger and *non-dedicated cost per passenger* (Exhibits 18 and 19 respectively) reflect the difference between in-house operation and contracted service rates. The 2004 dedicated cost per passenger was $25.35, while the non-dedicated cost was $20.89. This cost differential can be explained by the higher cost of dedicated bus maintenance (older bus fleet) and generally higher operating costs.

The 2003 dedicated cost per passenger reflects the high maintenance costs associated with maintaining older buses assumed from the local municipalities at the time of transit amalgamation. In addition, certain service contracts which were municipally-based resulted in added deadhead charges to facilitate cross boundary trip requests within the Region. Longer trip distances and minimum hourly contract service guarantees further added to the high dedicated cost per passenger.

For 2004, efforts were undertaken to bring the dedicated cost per passenger more in line with the peer group. These efforts included renegotiation of the contracted service hourly cost minimums, renegotiating fuel rates, improving shared-ride scheduling, reductions in bus maintenance costs through the addition of new dedicated buses and minivans, increasing contracted service billing audits, etc. Efforts continue in 2005 to reduce the cost per dedicated passenger through various operating strategies which include further reducing vehicle fleet contracted costs, adding new vehicles to improve service reliability and reducing repair costs, renegotiating fuel costs and improving the functionality/efficiency of the scheduling software, etc.

The non-dedicated costs per passenger for 2004 are higher for Mobility Plus in relation to its peer group. The increase in 2005 budgeted cost reflects the longer average customer trip lengths and the full year impact of a 20% increase in the taxi meter rate. Sedan taxi service represents approximately 70% of the contracted service employed by Mobility Plus. Efforts are underway to improve the scheduling and shared ride opportunities for non-dedicated service and the development of new performance-based contracts which will use a fixed kilometre rate rather than the current taxi meter rate.

Exhibit 18
Dedicated Cost per Passenger (Peer Group)

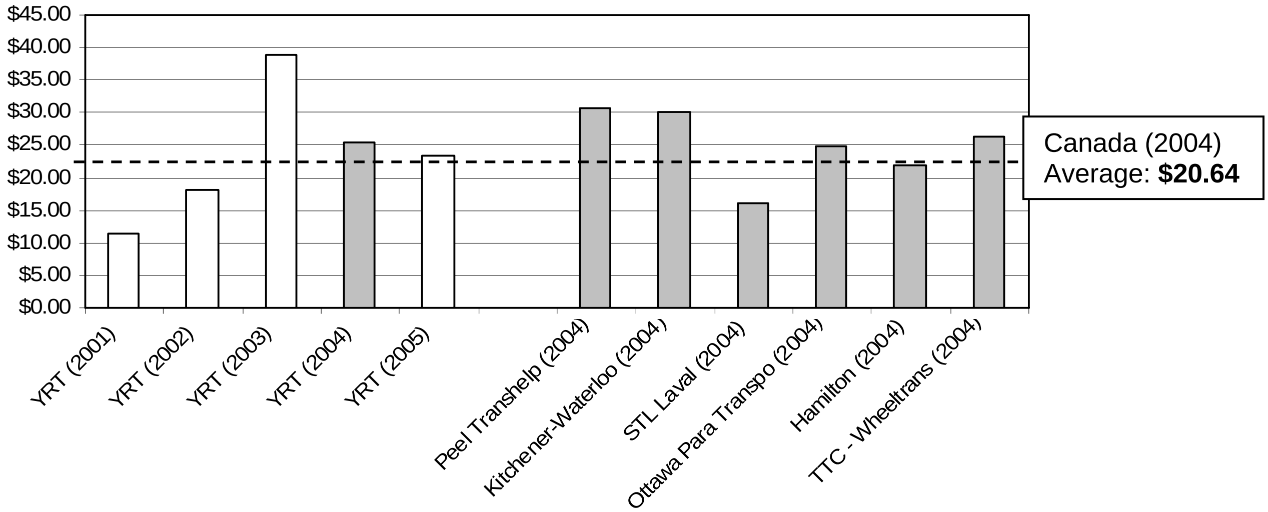
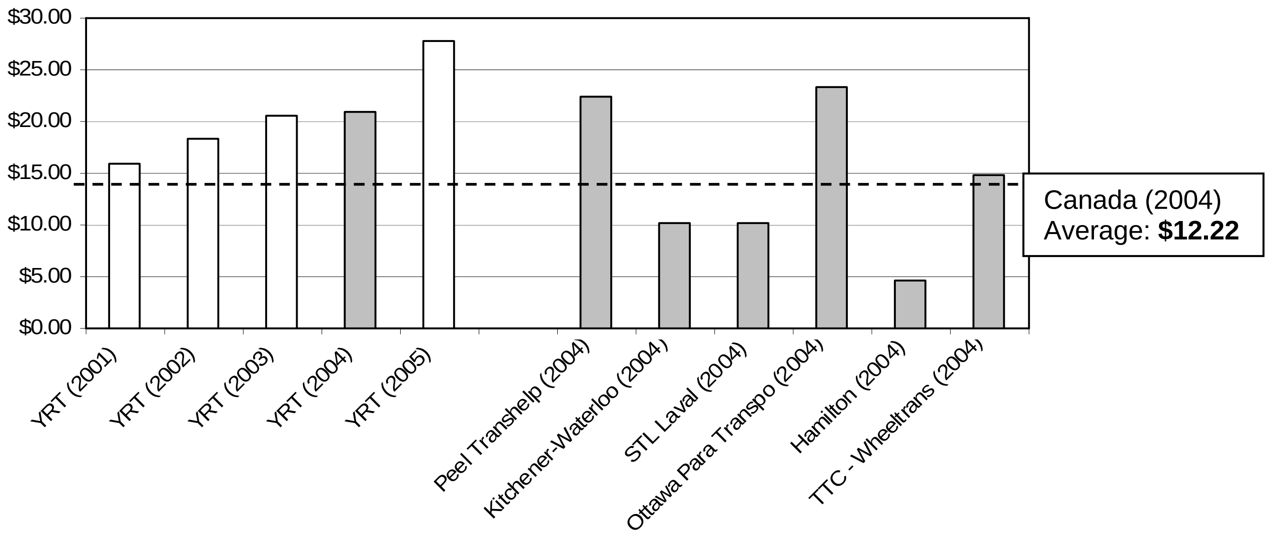
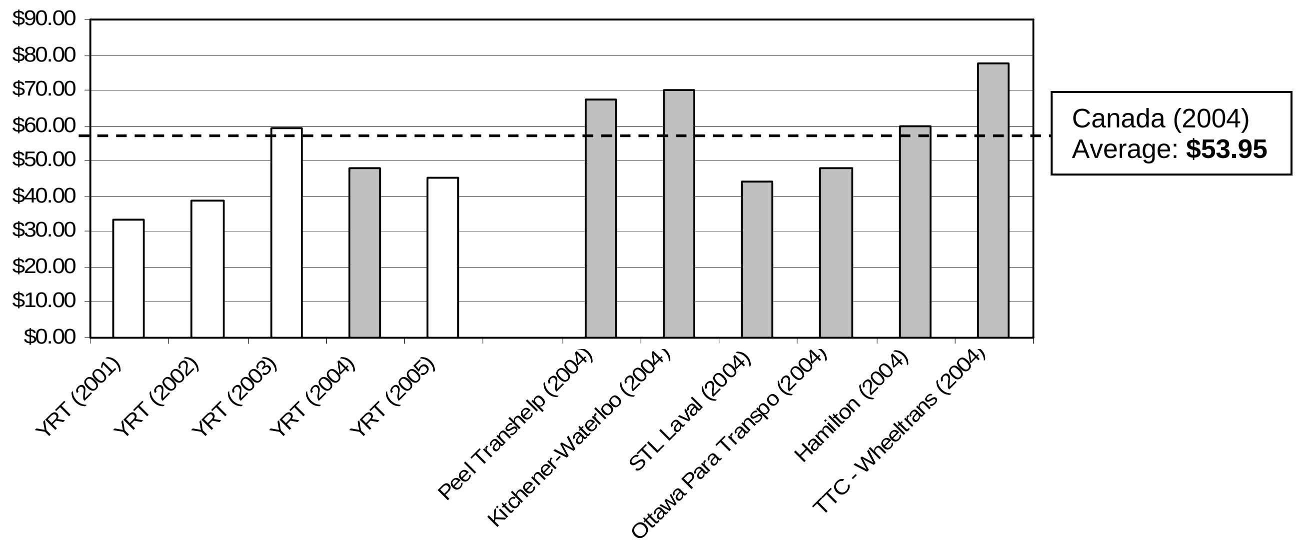


Exhibit 19
Non-Dedicated Cost per Passenger (Peer Group)



Dedicated Cost per Hour (Exhibit 20) is reflective of the overall cost to provide the service on an hourly basis. The cost decrease in 2004 for Mobility Plus over 2003 is reflective of the efforts to improve vehicle trip assignments, improve trip share-riding opportunities, renegotiating trip service rates, minimizing vehicle fleet maintenance costs, renegotiating fuel pricing, etc. This resulted in a dedicated hourly rate of $48.17 versus $59.54 in 2003. Through these continuing efforts, Mobility Plus is estimating a further reduction in 2005 to $45.43. The 2004 dedicated hourly rate is significantly below the Canadian average and a number of the peer group agencies as shown.

Exhibit 20
Dedicated Cost per Hour (Peer Group)



4.2 Relationship to Vision 2026

The primary reason for undertaking a performance review is to ensure the transit system's performance indicators are identifying trends and providing benchmarks for future strategic planning purposes. YRT's Mobility Plus Five-Year Plan (2002-2006) set specific goals and objectives and associated targets.

Vision 2026 includes a goal statement relating to the development of Infrastructure for a Growing Region, which states that:

"In 2026, York Region will have effective, efficient and environmentally sensitive transportation, waste management and water systems."

To support this goal, the Region has identified specific action areas. The following action areas have been considered for this report:

- Continuing to improve service and infrastructure for successfully integrated transit service.
- Developing an optimal mix of transit service types.

By measuring key indicators such as levels of investment (costs), returns (ridership and revenues) and various efficiency measures, York Region continues to develop a transit supportive and thus balanced transportation network.

5. FINANCIAL IMPLICATIONS

As part of YRT's continuous improvement process, the monitoring of performance measures provides YRT Mobility Plus management and staff with tools to evaluate both the efficiency and effectiveness of service delivery strategies. These measures and resulting trends can be used to develop short-term budget forecasts and longer-term strategic plans. For instance, increases in the number of registered users will directly translate into an increase in demand (the number of trips requested). This increase can be used to develop budgets and service delivery programs and options. Overall, Mobility Plus operates well within the average range of other Canadian systems, however, it is obvious that utilization rates will likely increase with the provision of higher levels of service, thereby resulting in higher operating costs.

Efforts will continue to be directed at maintaining a high level of service quality while operating within approved financial resources. YRT Mobility Plus is proceeding with the introduction of various approved cost mitigation strategies in 2005 and 2006 such as the contracting out of the in-house bus operation, the introduction of performance-based service contracts with fixed remuneration rates, further upgrades to the scheduling and trip booking system, etc., which will lay the foundation of service delivery over the next five years.

6. LOCAL MUNICIPAL IMPACT

Monitoring performance measures provides YRT Mobility Plus staff with the necessary tools to make informed decisions regarding service quality and delivery. As part of the municipal and agency consultation process, as outlined in the 5-Year Service Plan, stakeholder input will be sought to fully appreciate the transportation needs of the various communities.

7. CONCLUSION

Specialized transit performance indicators measure passenger registration, trips and financial performance. The following is a summary of the primary conclusions from the analysis of performance indicators:

- Mobility Plus has experienced double digit growth in ridership demand which is one of the highest rates of growth in Canada for the geographical area and population served.
- Service utilization continues to increase related to registrants per capita and passenger trips per capita.

- The availability of Region-wide Mobility Plus service and the addition of services and facilities to serve persons with disabilities have resulted in a substantial increase in the volume of passenger trips per registrant bringing it closer to the Canadian average.
- Dedicated kilometres per passenger trip have increased steadily with the opening of the municipal boundaries in 2002 and are almost double the Canadian average.
- Financial performance shows the revenue cost ratio near the Canadian average of 9%.
- Cost effectiveness as measured by total cost per passenger has improved from $25.47 in 2003 to $23.76 in 2004 through better scheduling and other operating efficiencies.
- The dedicated cost per hour to provide the service is significantly below the Canadian average and a number of the peer group properties.

Staff efforts will continue to be directed toward minimizing operating costs while improving trip availability and the quality and efficiency of service delivery within approved financial resources.

The Senior Management Group has reviewed this report.